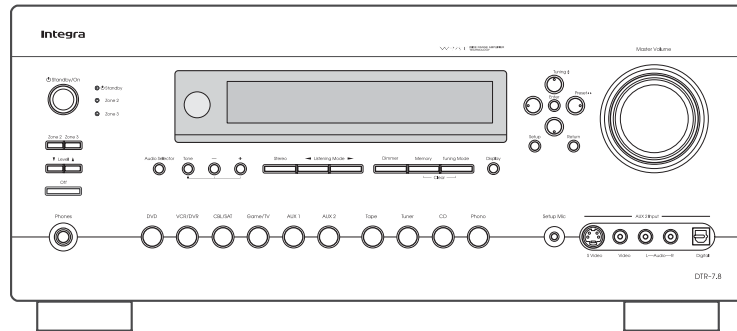


Integra SERVICE MANUAL

AV RECEIVER MODEL DTR-7.8




RC-691M

Black model

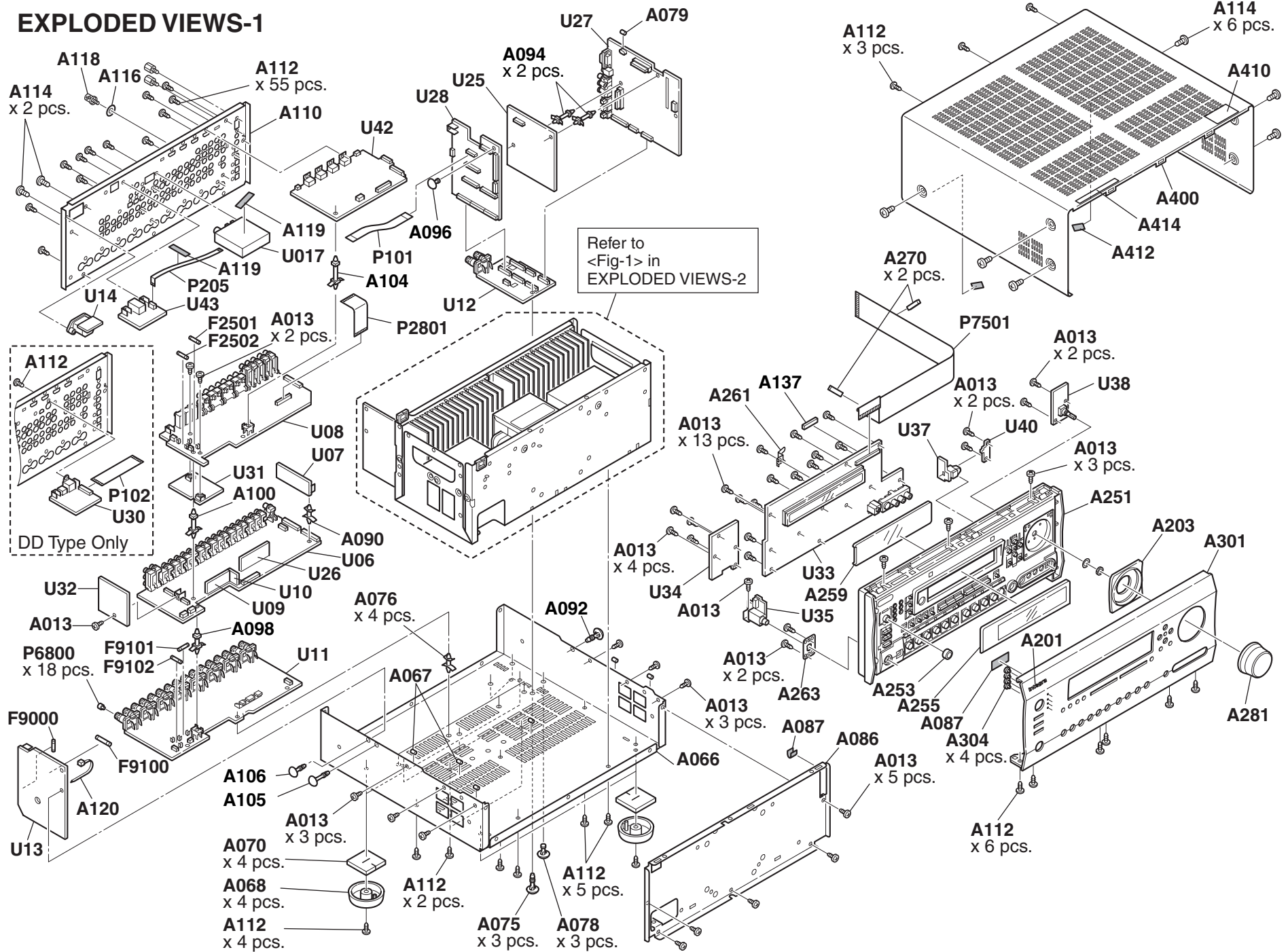
B UDD, B MDD	120V AC, 60Hz
B UMA, B MMA	220V~240V AC, 50Hz

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

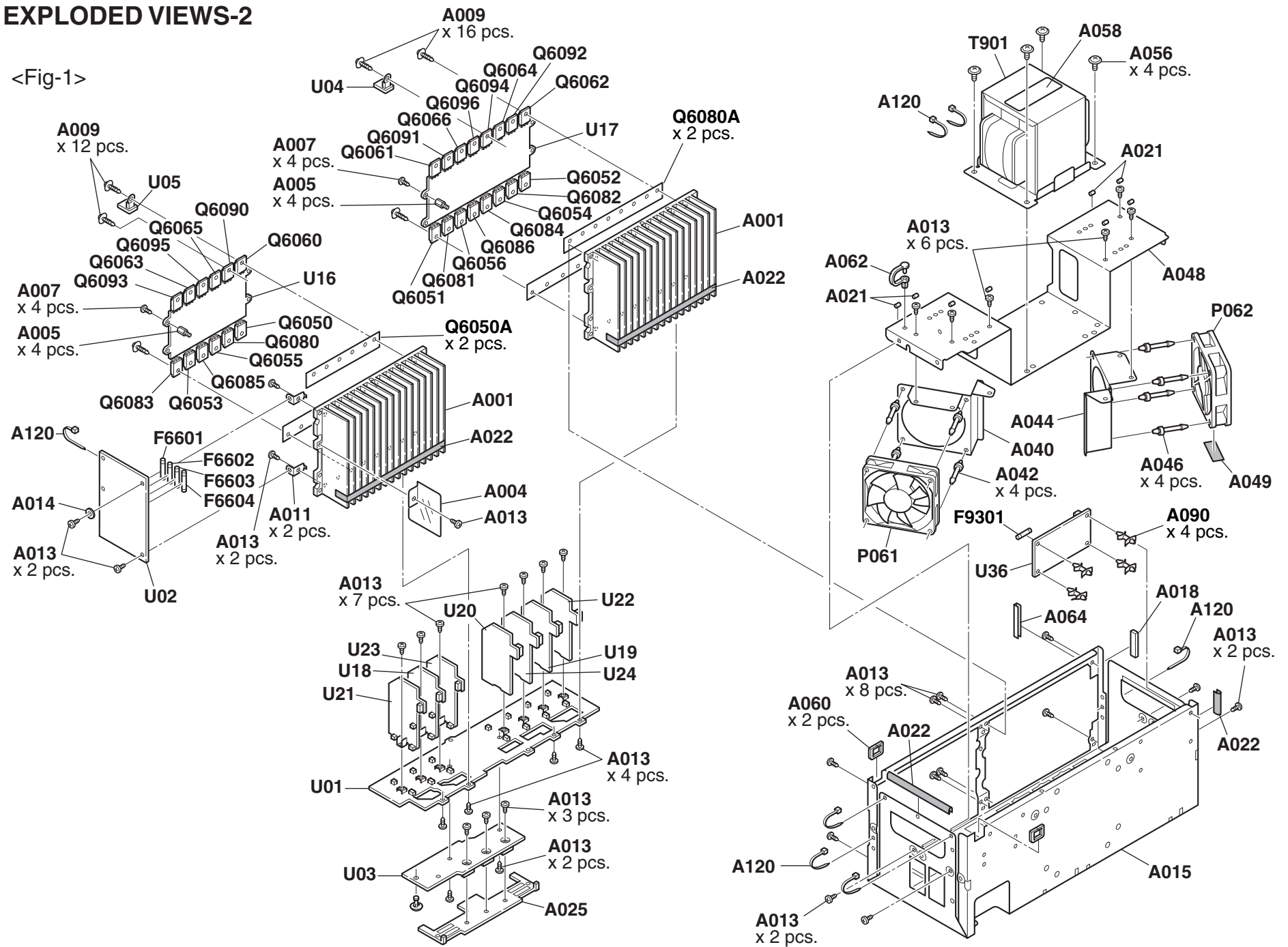
MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

EXPLODED VIEWS-1



EXPLODED VIEWS-2

<Fig-1>



A

B

C

D

BLOCK DIAGRAMS-1 AUDIO SECTION

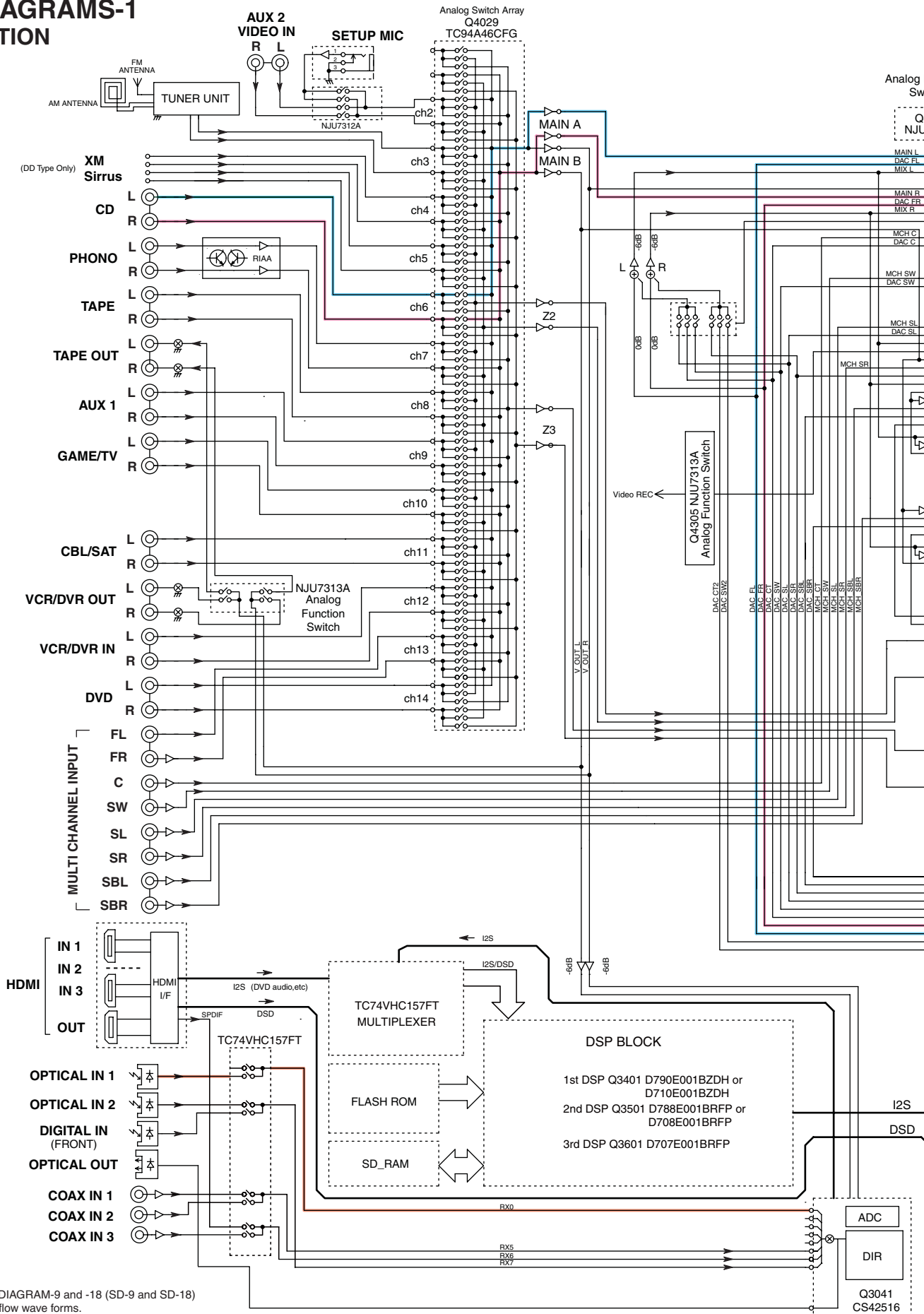
1

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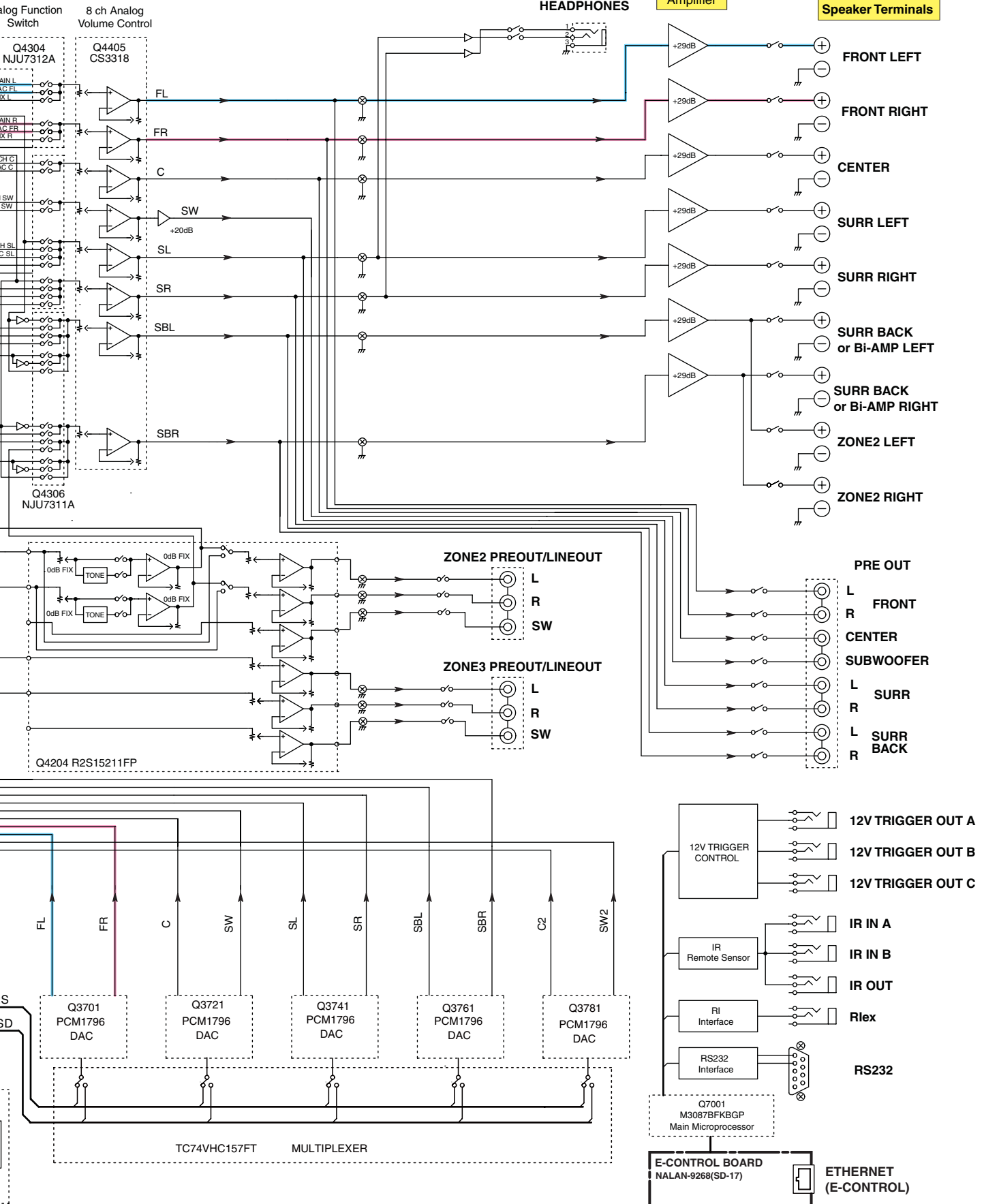
<Note>
Refer to SCHEMATIC DIAGRAM-9 and -18 (SD-9 and SD-18)
for digital audio signal flow wave forms.

E

F

G

H



BLOCK DIAGRAMS-1 AUDIO SECTION

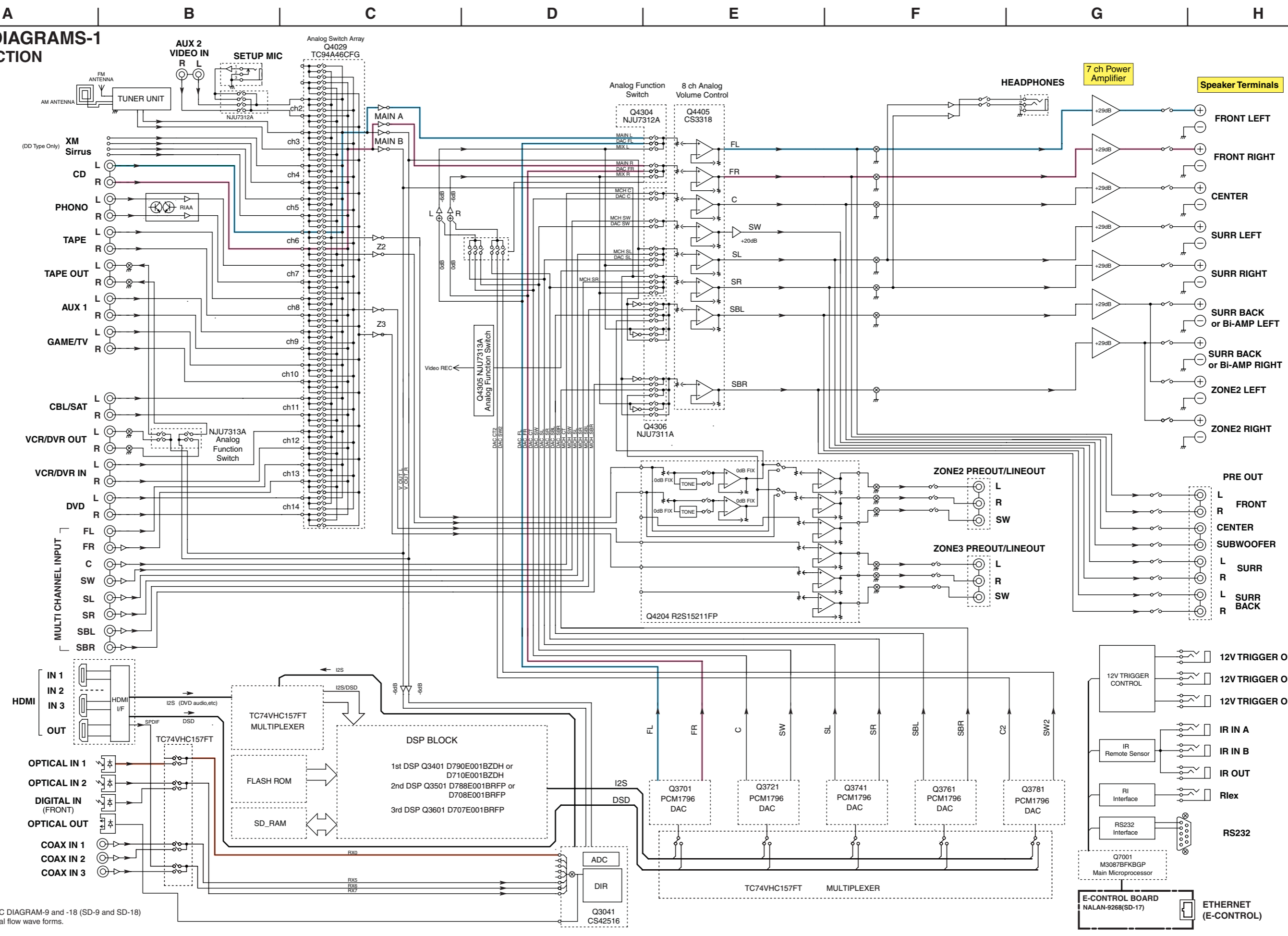
1

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<Note>
Refer to SCHEMATIC DIAGRAM-9 and -18 (SD-9 and SD-18)
for digital audio signal flow wave forms.

BLOCK DIAGRAMS-2
VIDEO SECTION

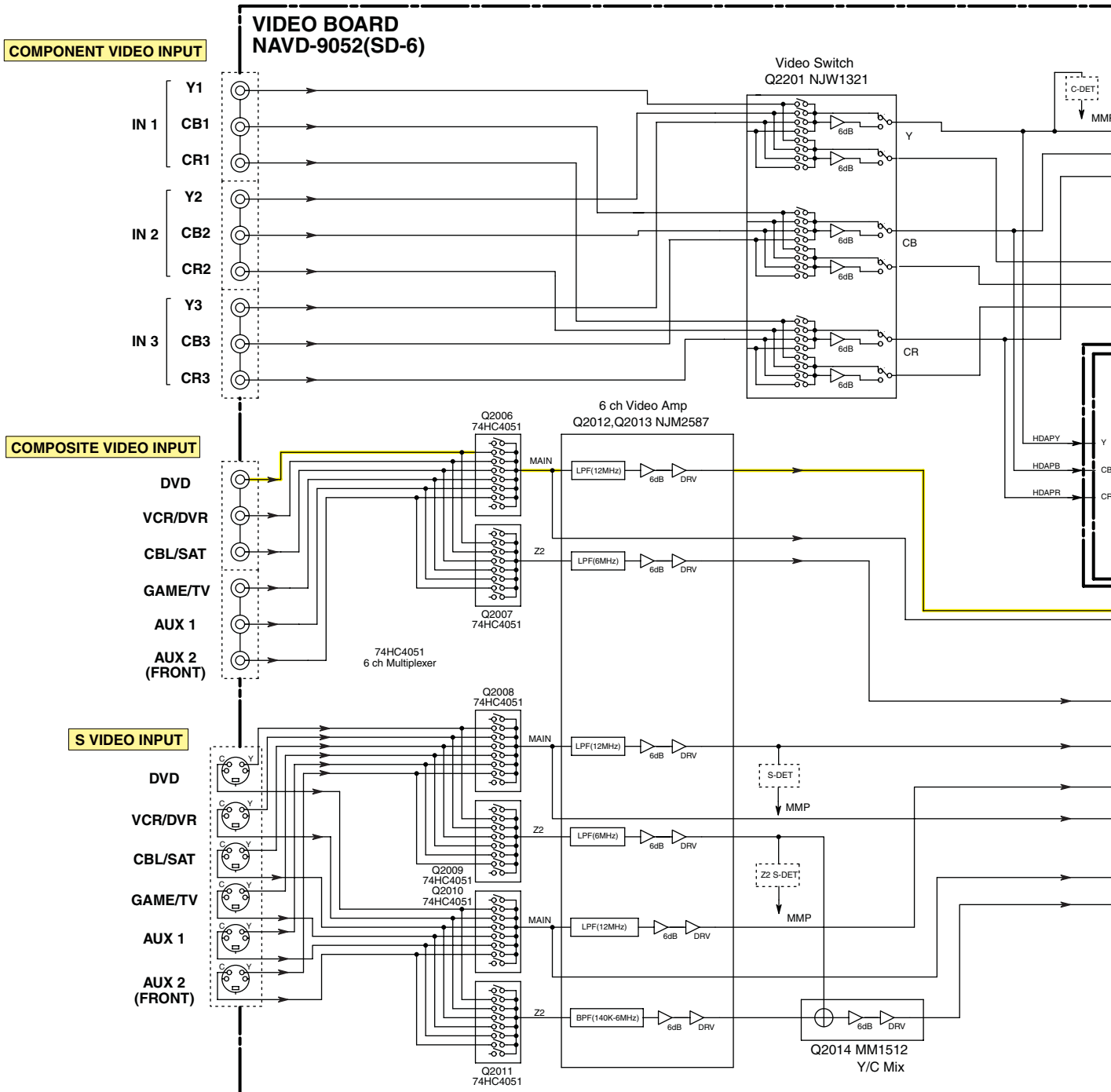
1

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NOTE
MMP is short for MAIN MICROPROCESSOR.

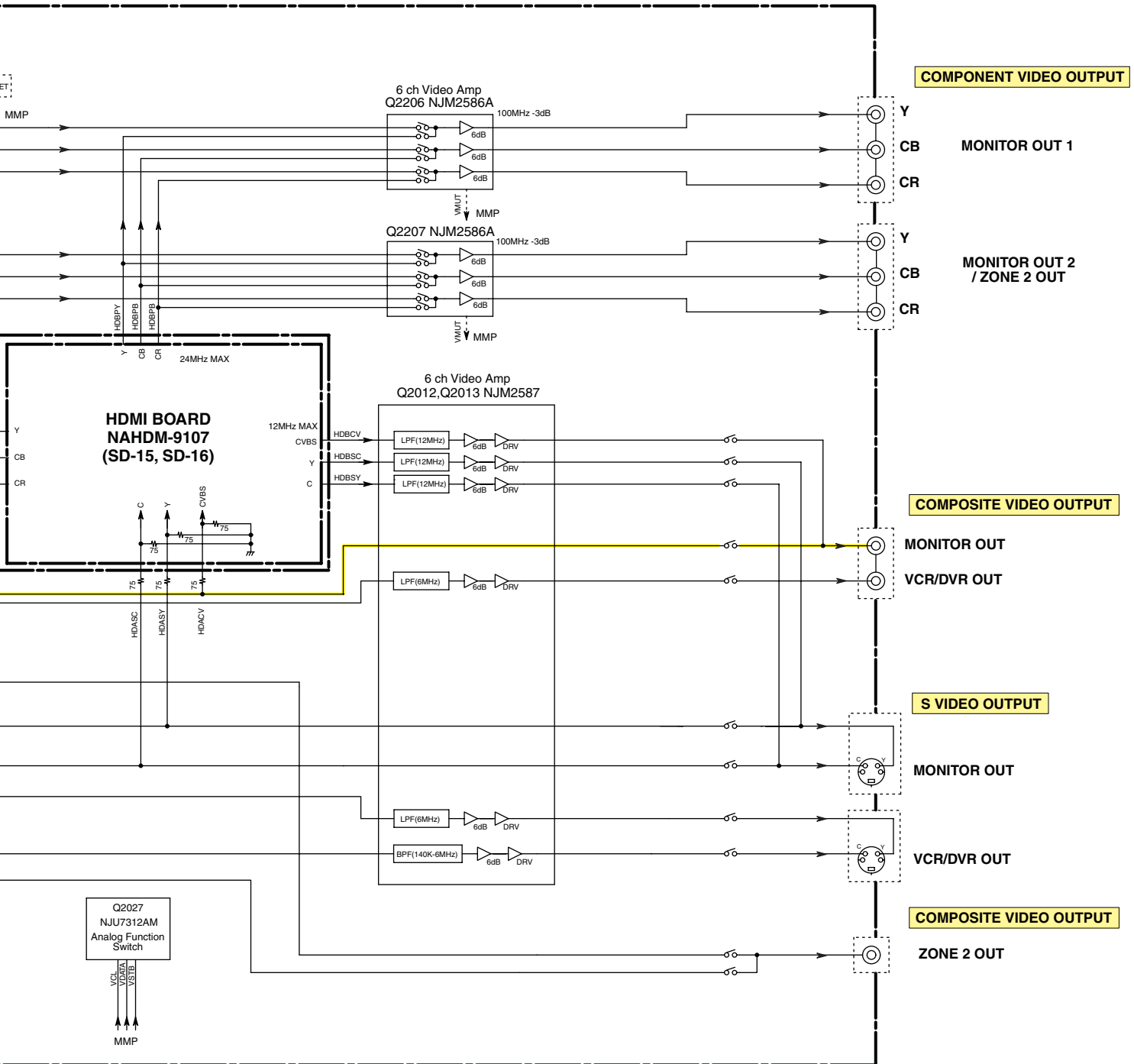
<Note>
Refer to SCHEMATIC DIAGRAM-6, -15 and -18 (SD-6, SD-15 and SD-18)
for video and HDMI signal waveforms.

E

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H



BLOCK DIAGRAMS-2
VIDEO SECTION

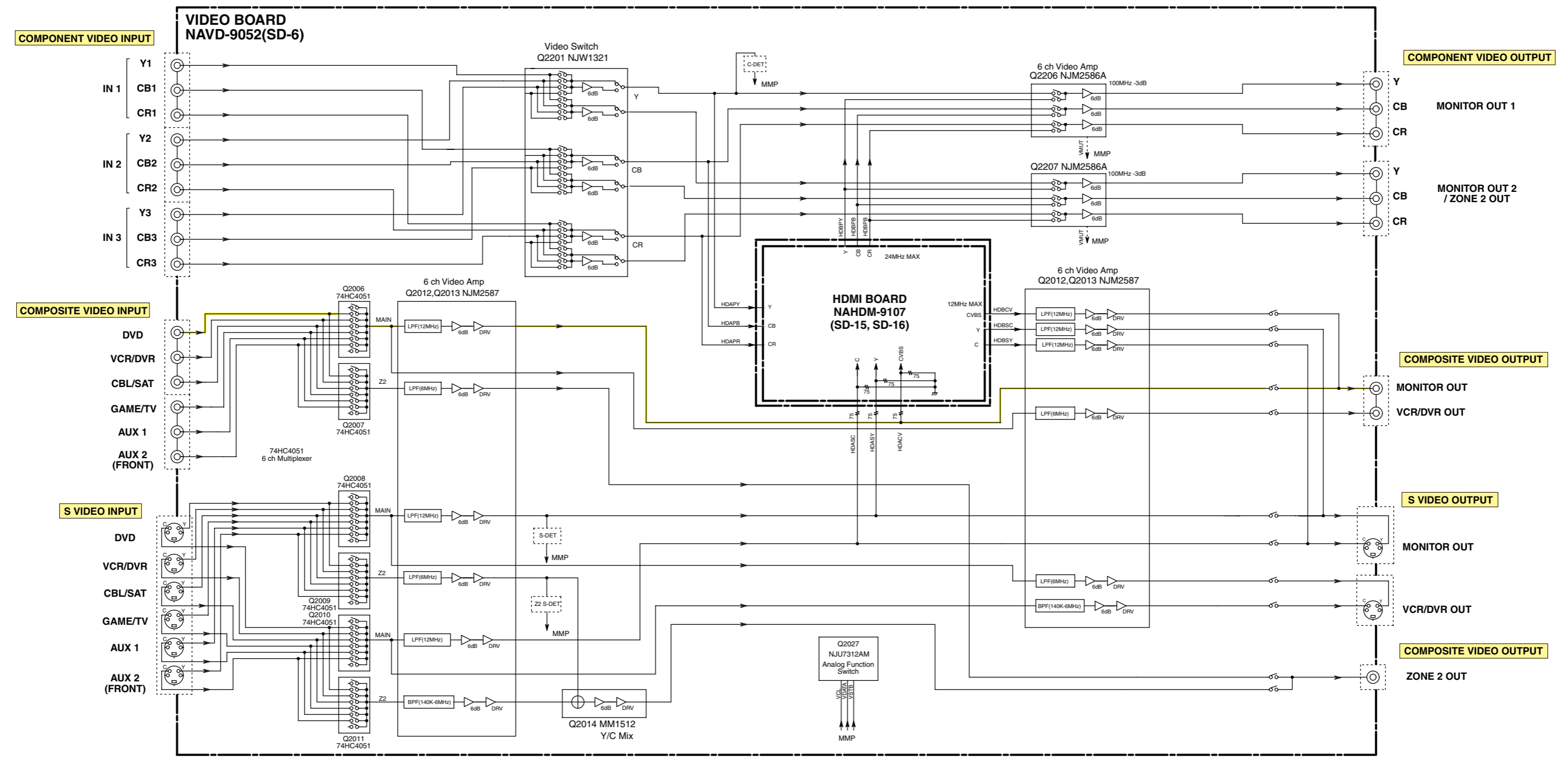
1

2

3

4

5



NOTE
MMP is short for MAIN MICROPROCESSOR.

<Note>
Refer to SCHEMATIC DIAGRAM-6, -15 and -18 (SD-6, SD-15 and SD-18)
for video and HDMI signal waveforms.

SCHEMATIC DIAGRAMS-1 (SD-1) AUDIO SECTION

1
2
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4
5

A B C D

MULTI CH INPUT

NAASP-9050(1/2) U06 AMPLIFIER PC BOARD

NAASP-9051 U07 PHONO P

CD
L
R

TAPE OUT
L
R

TAPE
L
R

AUX1
L
R

GAME/TV
L
R

CBL/SAT
L
R

VCR/DVR OUT
L
R

VCR/DVR IN
L
R

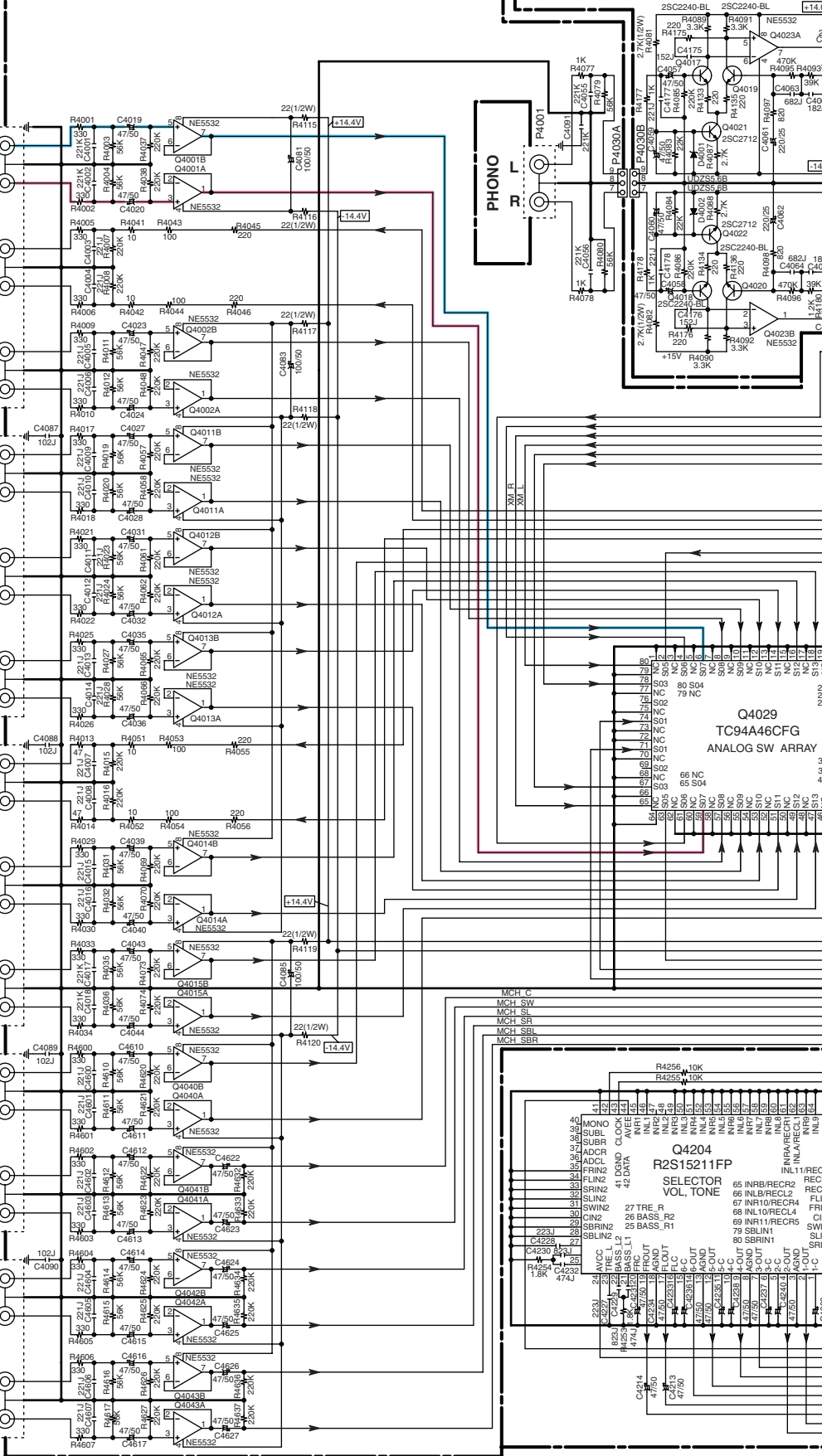
DVD
L
R

FRONT
L
R

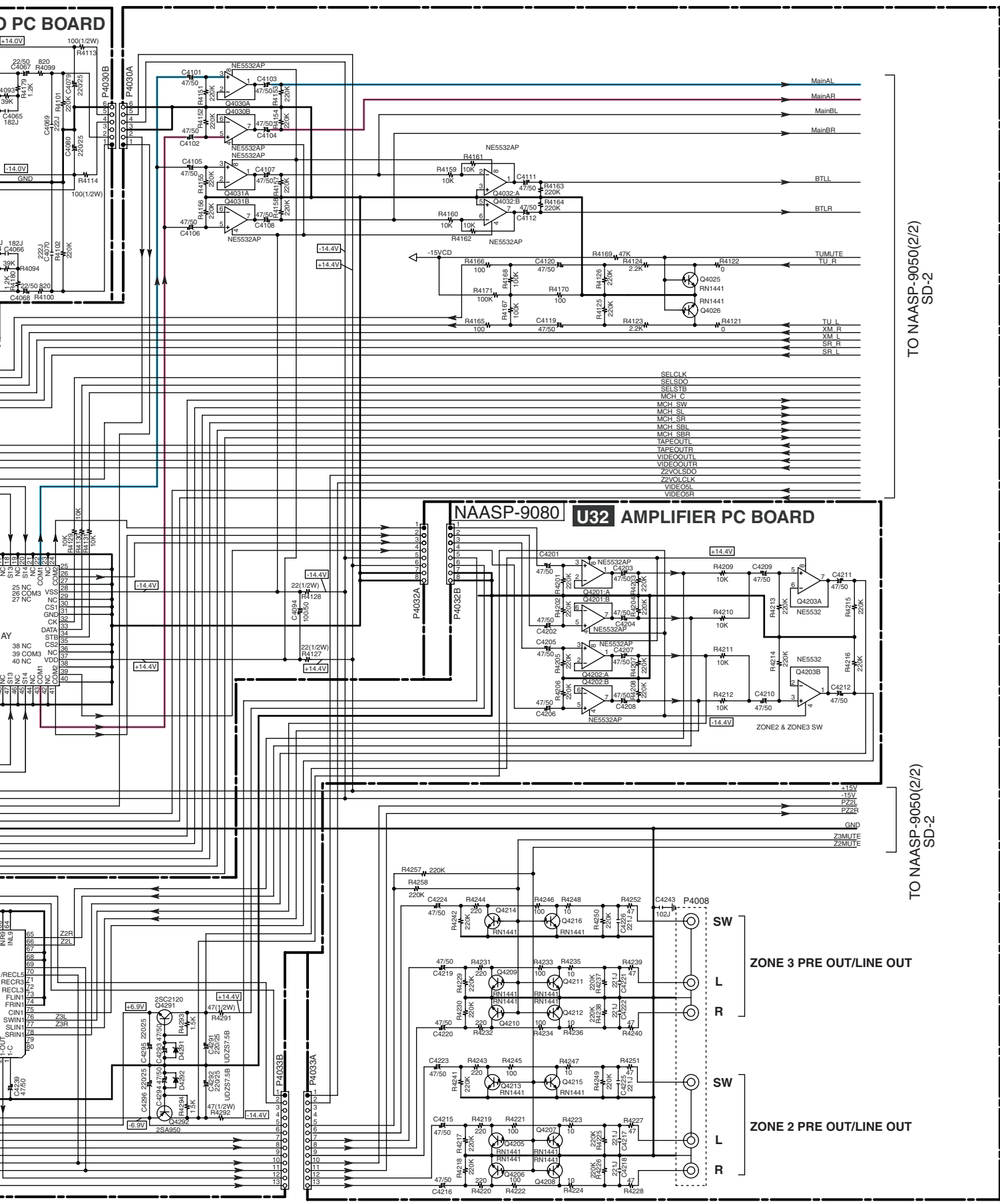
CENTER
SUB WOOFER

SURROUND
L
R

SURROUND
BACK
L
R



<Note>
SD-x:XY is short for Schematic Diagram-x and
each socket's location, X=A to H, Y=1 to 5.



TO NAASP-9050(2/2)
SD-2

TO NAASP-9050(2/2)
SD-2

ZONE 3 PRE OUT/LINE OUT

ZONE 2 PRE OUT/LINE OUT

SCHEMATIC DIAGRAMS-1 (SD-1) AUDIO SECTION

<Note>
SD-x:XY is short for Schematic Diagram-x and
each socket's location, X=A to H, Y=1 to 5.

1

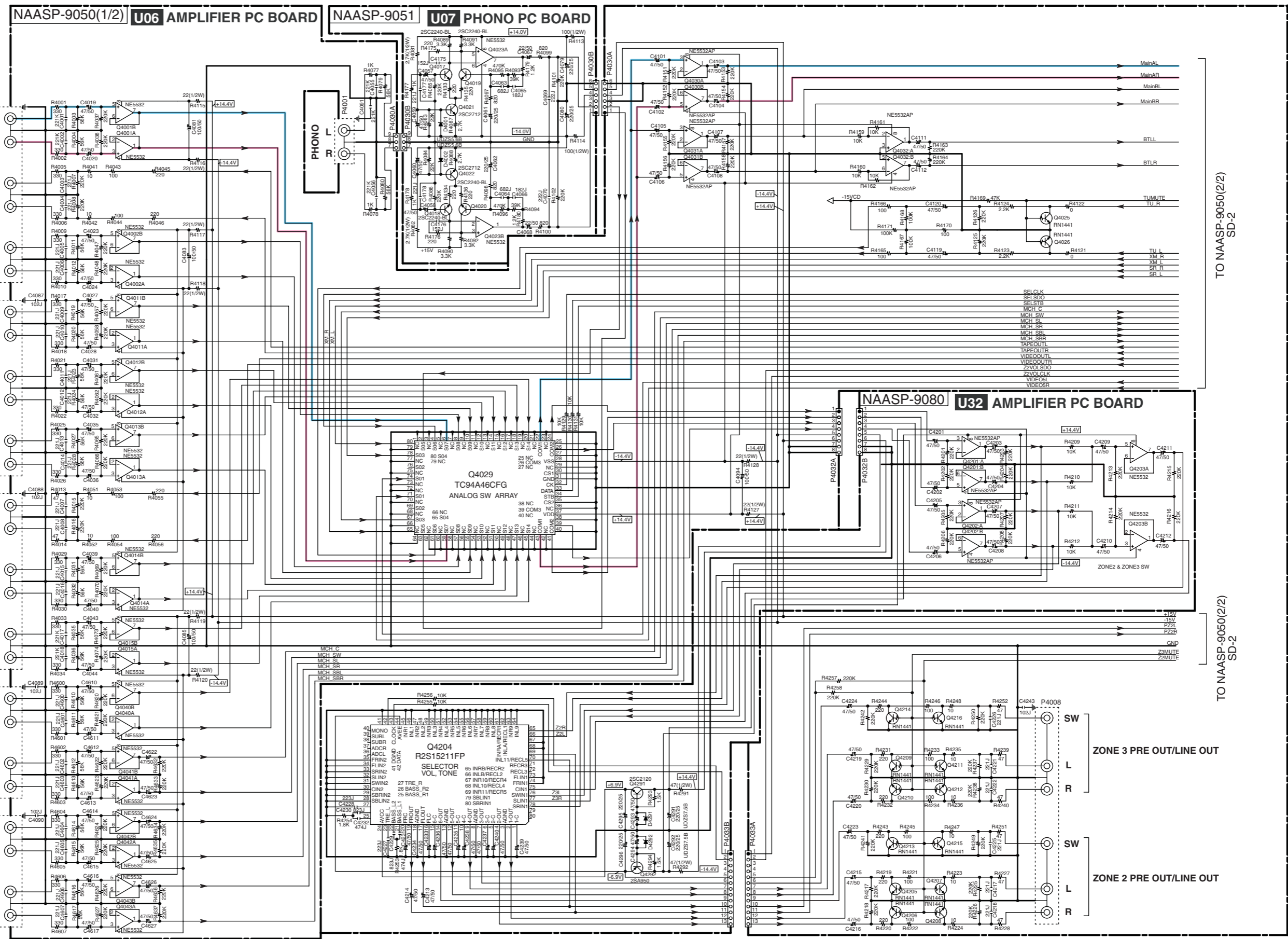
2

3

4

5

A B C D E F G H



TO NAASP-9050(2/2)
SD-2

TO NAASP-9050(2/2)
SD-2

ZONE 3 PRE OUT/LINE OUT

ZONE 2 PRE OUT/LINE OUT

A

B

C

D

SCHEMATIC DIAGRAMS-2 (SD-2) AUDIO SECTION

NAASP-9050(2/2) U06 AMPLIFIER PC BOARD

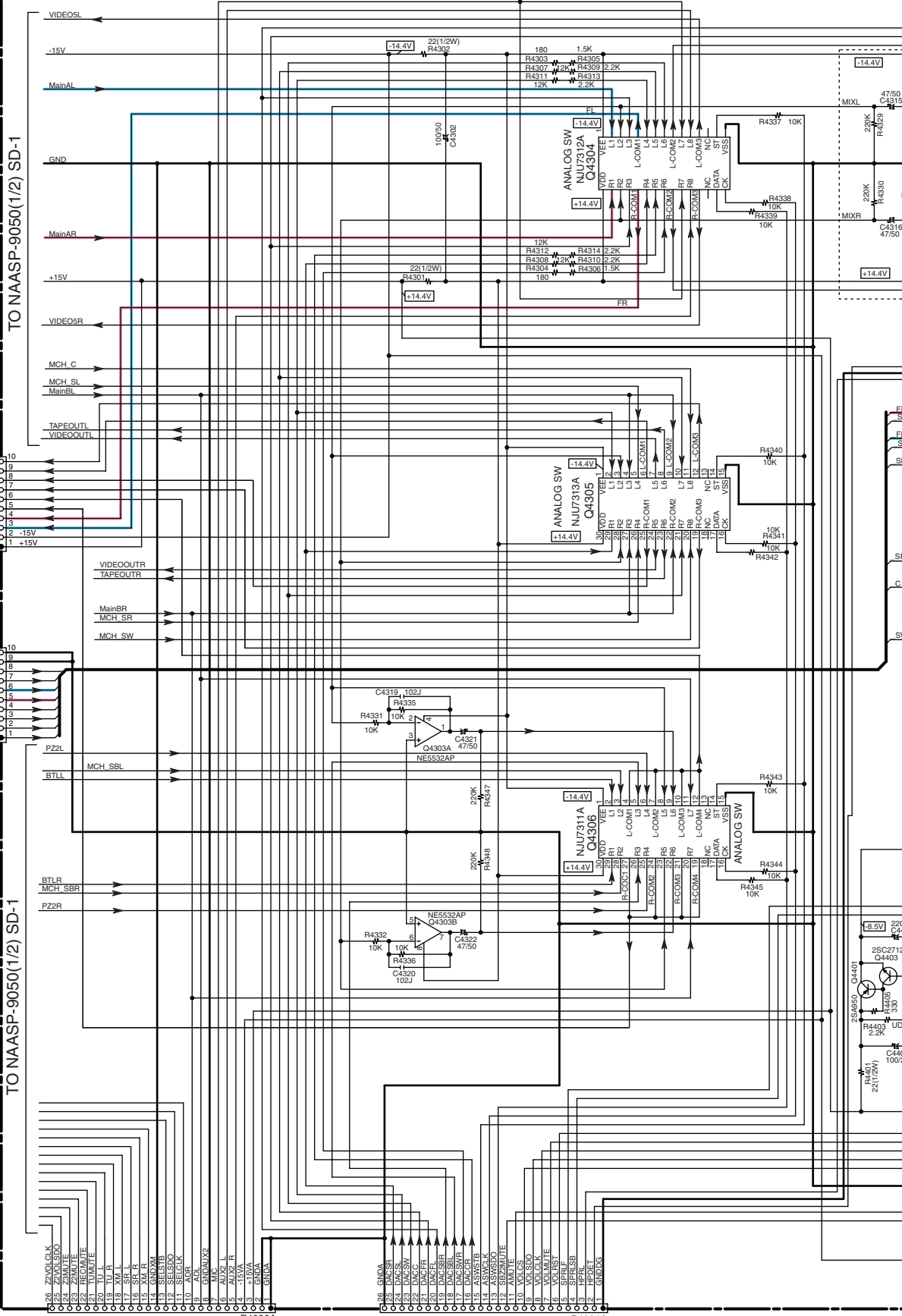
1

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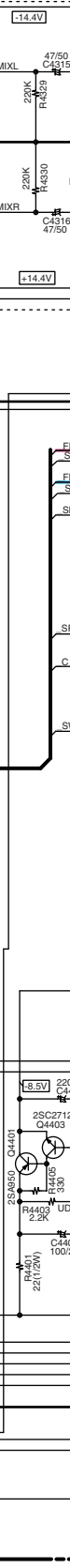


TO NAASP-9050(1/2) SD-1
TO NAETC-9073 SD-14:F2
TO NAETC-9073 SD-14:H2

TO NAASP-9050(1/2) SD-1

TO NAAR-9075 SD-8:F4

TO NAAR-9075 SD-8:G4



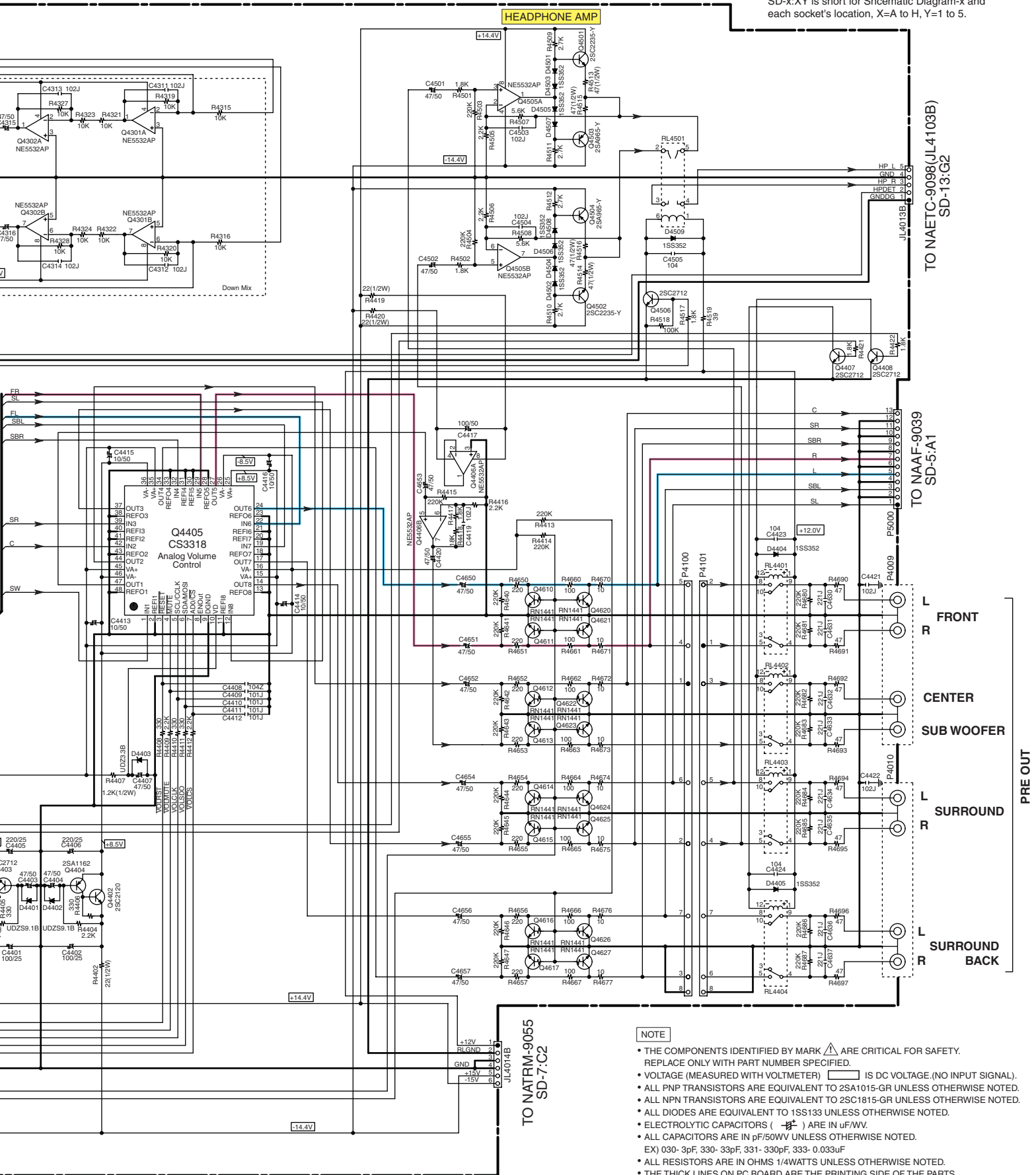
E

F

G

H

<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

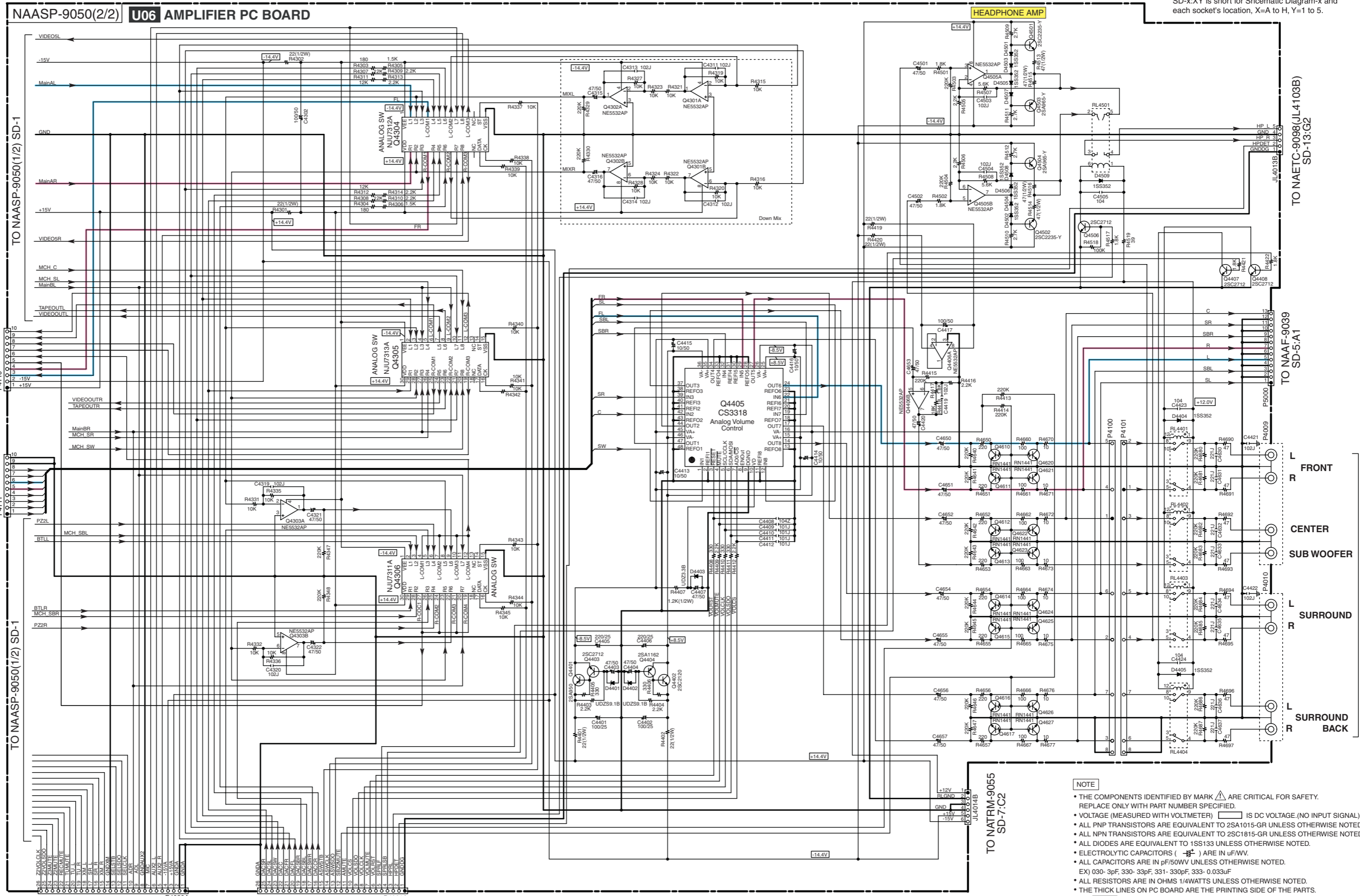


NOTE

- THE COMPONENTS IDENTIFIED BY MARK ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER) IS DC VOLTAGE.(NO INPUT SIGNAL).
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- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS () ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
- EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
- EX) PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

SCHEMATIC DIAGRAMS-2 (SD-2) AUDIO SECTION

<Notes>
SD-x:XY is short for Schematic Diagram-x and
each socket's location, X=A to H, Y=1 to 5.



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 - ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
 - ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
 - ELECTROLYTIC CAPACITORS () ARE IN uF/WV.
 - ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
EX) 030-3pF, 330-33pF, 331-330pF, 333-0.033uF
 - ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
 - THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
EX) PRINTING SIDE
 - CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

1
2
3
4
5

TO NAETC-9073 SD-14:F2
TO NAETC-9073 SD-14:H2

TO NAASP-9050(1/2) SD-1
TO NAASP-9050(1/2) SD-1

TO NAAR-9075 SD-8:F4

TO NAAR-9075 SD-8:G4

TO NATRM-9055 SD-7:C2

TO NAETC-9098(JL4103B) SD-13:G2

TO NAAF-9039 SD-5:A1

L FRONT
R
L CENTER
R
L SUB WOOFER
R
L SURROUND
R
L SURROUND BACK
R

A

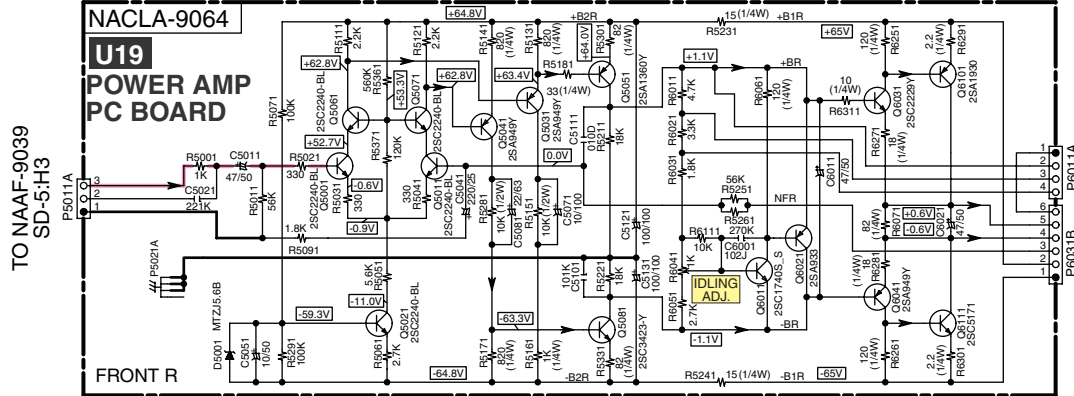
B

C

D

**SCHEMATIC DIAGRAMS-3 (SD-3)
POWER AMPLIFIER SECTION-1**

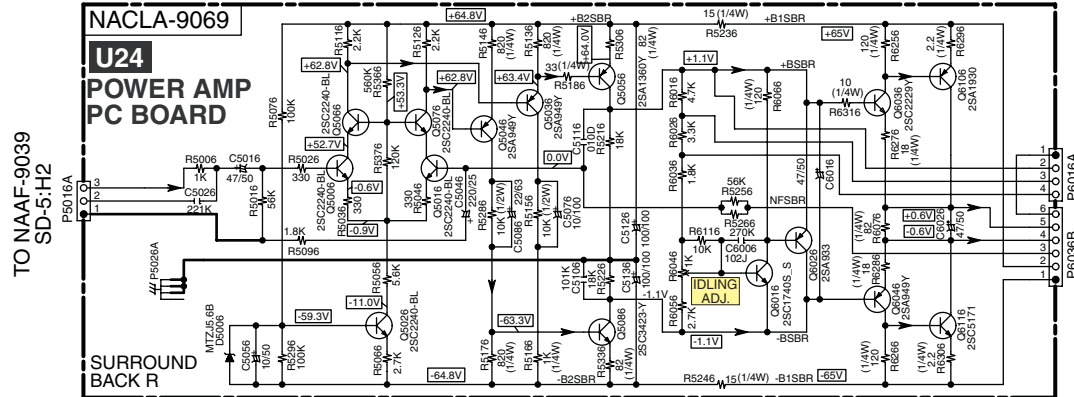
1



TO NAAF-9039
SD-5:H3
P5011A

TO NAAMP-9062 TO NAAF-9039
SD-4:B1 SD-5:H3

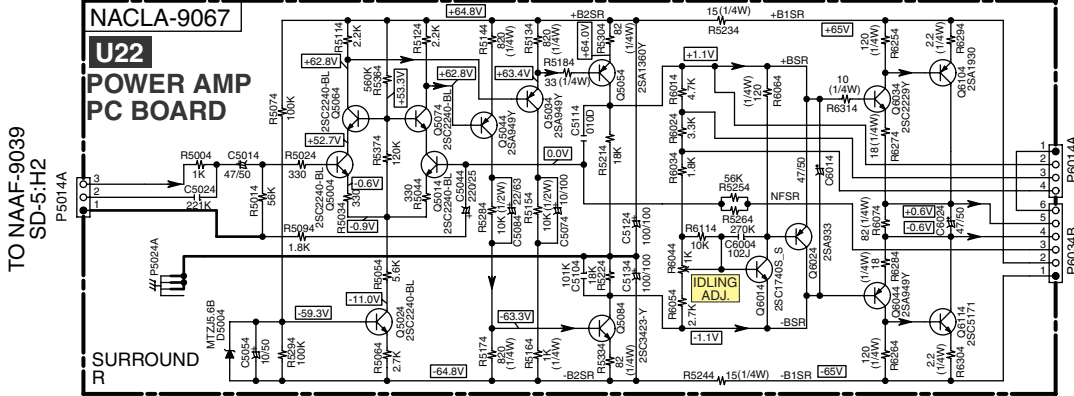
2



TO NAAF-9039
SD-5:H2
P5016A

TO NAAMP-9062 TO NAAF-9039
SD-4:B2 SD-5:H3

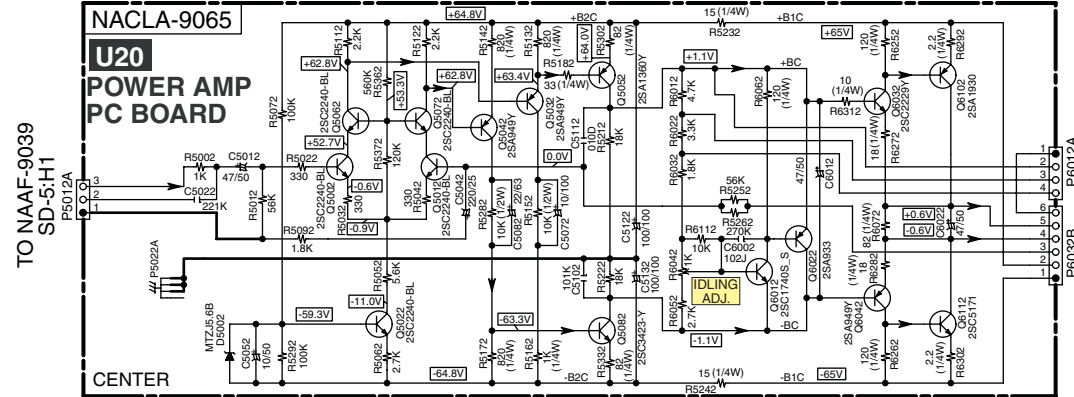
3



TO NAAF-9039
SD-5:H2
P5014A

TO NAAMP-9062 TO NAAF-9039
SD-4:B3 SD-5:H2

4



TO NAAF-9039
SD-5:H1
P5012A

TO NAAMP-9062 TO NAAF-9039
SD-4:B4 SD-5:H1

5

NACLA-9064,65,67,69 are fully compatible with each other.

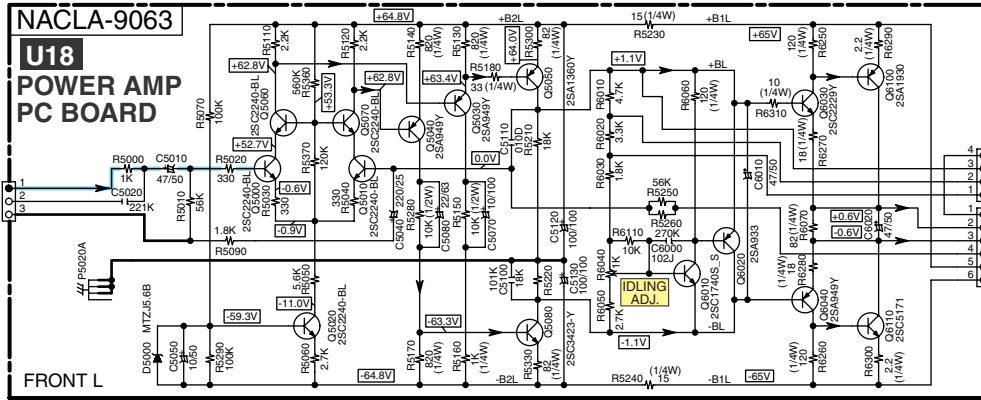
E

F

G

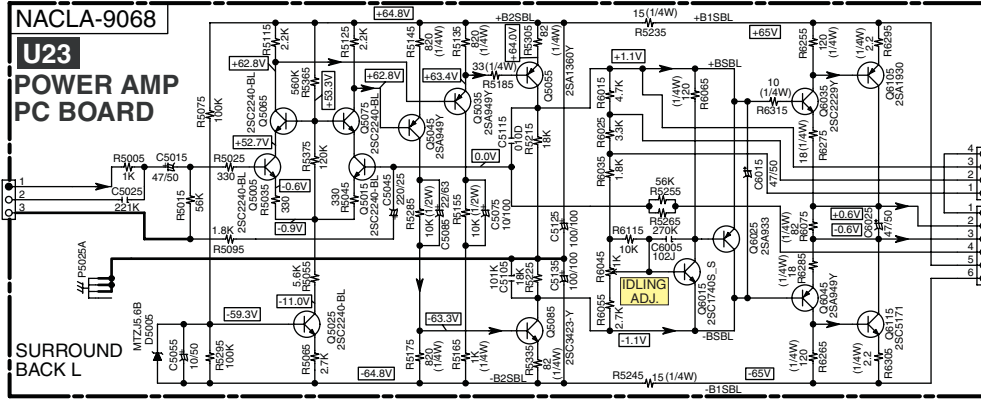
H

TO NAAF-9039
SD-5:H4



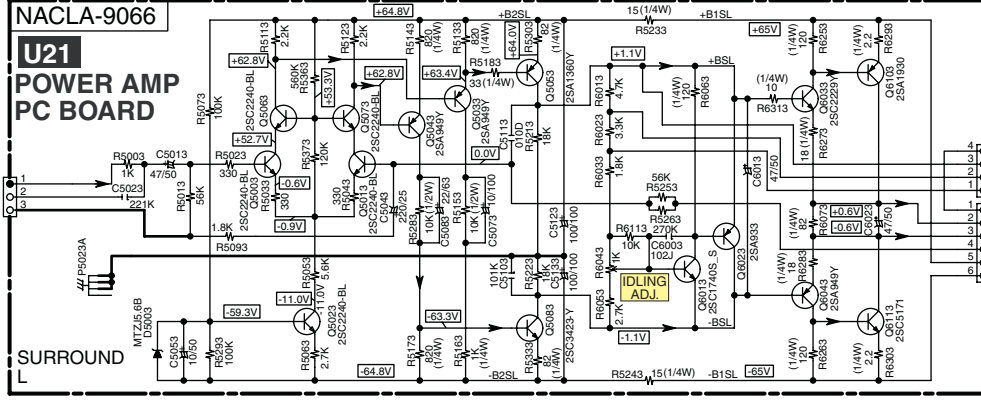
TO NAAMP-9061 TO NAAF-9039
SD-4:F1 SD-5:H4

TO NAAF-9039
SD-5:H4



TO NAAMP-9061 TO NAAF-9039
SD-4:F2 SD-5:H4

TO NAAF-9039
SD-5:H5



TO NAAMP-9061 TO NAAF-9039
SD-4:F3 SD-5:H5

NACLA-9063,66,68
are fully compatible with each other.

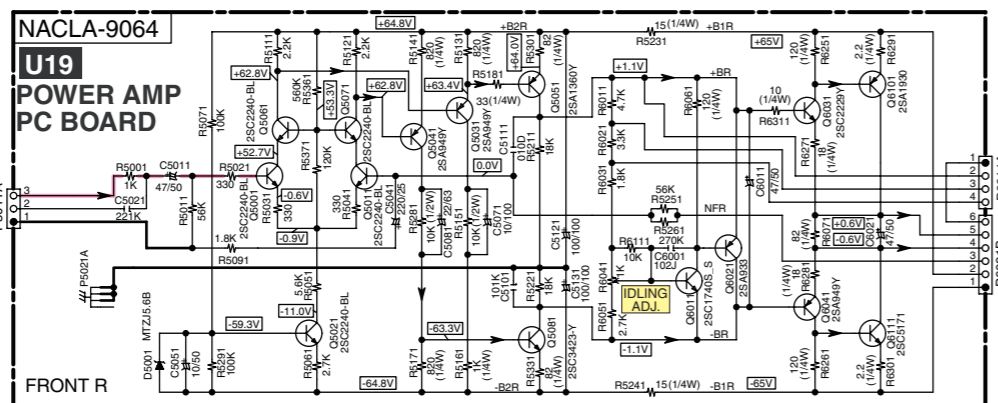
<Note>
SD-x:XY is short for Schematic Diagram-x and
each socket's location, X=A to H, Y=1 to 5.

NOTE

- THE COMPONENTS IDENTIFIED BY MARK \triangle ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
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- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS ($\text{---} \text{---} \text{---}$) ARE IN $\mu\text{F/WV}$.
- ALL CAPACITORS ARE IN pF/50VW UNLESS OTHERWISE NOTED.
EX) 030-3pF, 330-33pF, 331-330pF, 333-0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
EX) \square PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

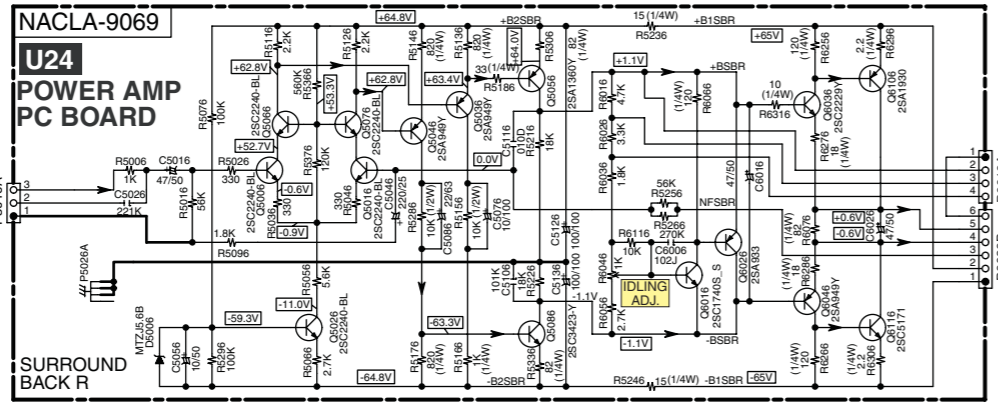
SCHEMATIC DIAGRAMS-3 (SD-3)
POWER AMPLIFIER SECTION-1

1
2
3
4
5



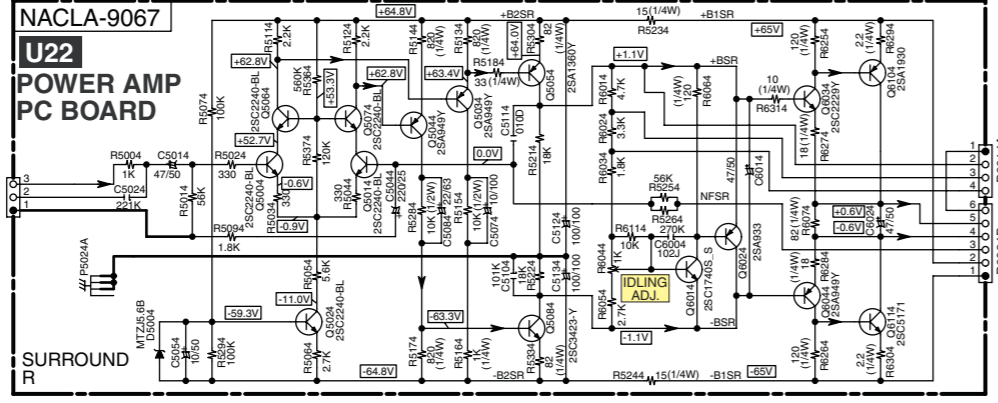
TO NAAF-9039
SD-5:H3
P5011A

TO NAAMP-9062 TO NAAF-9039
SD-4:B1
P6031B



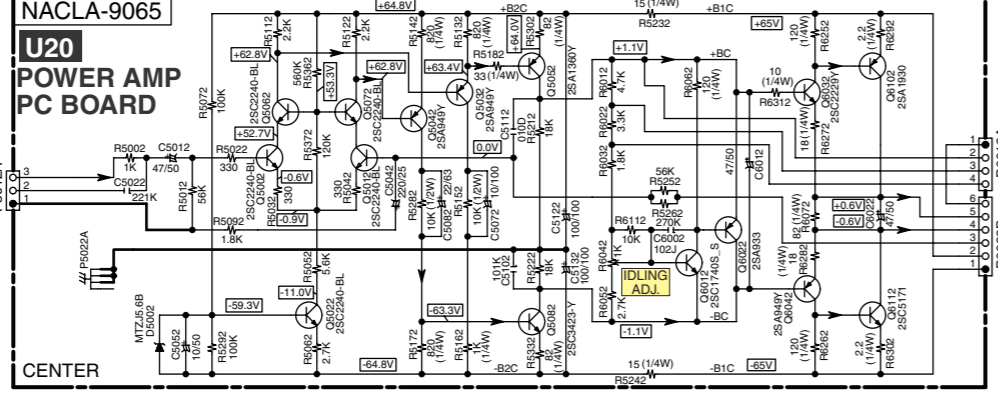
TO NAAF-9039
SD-5:H2
P5016A

TO NAAMP-9062 TO NAAF-9039
SD-4:B2
P6036B



TO NAAF-9039
SD-5:H4
P5014A

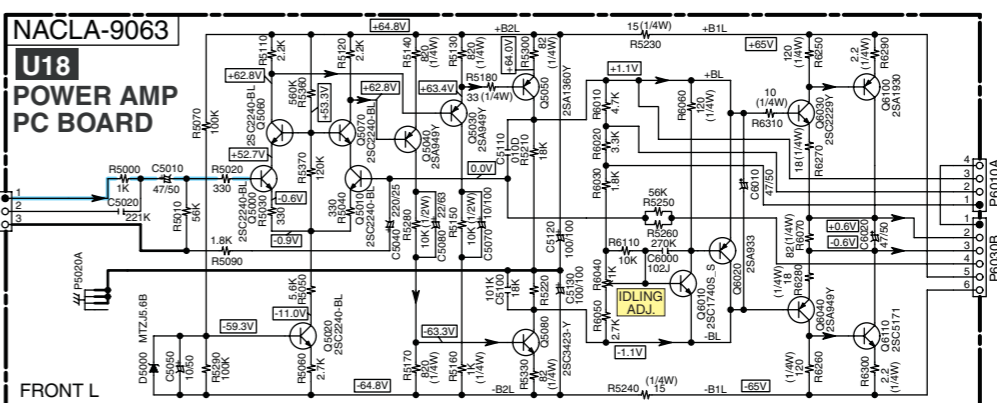
TO NAAMP-9062 TO NAAF-9039
SD-4:B3
P6034B



TO NAAF-9039
SD-5:H1
P5012A

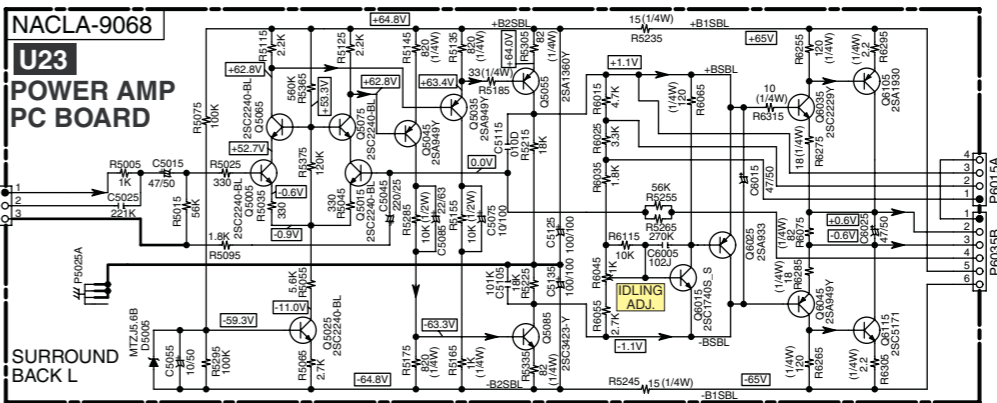
TO NAAMP-9062 TO NAAF-9039
SD-4:B4
P6032B

NACLA-9064,65,67,69
are fully compatible with each other.



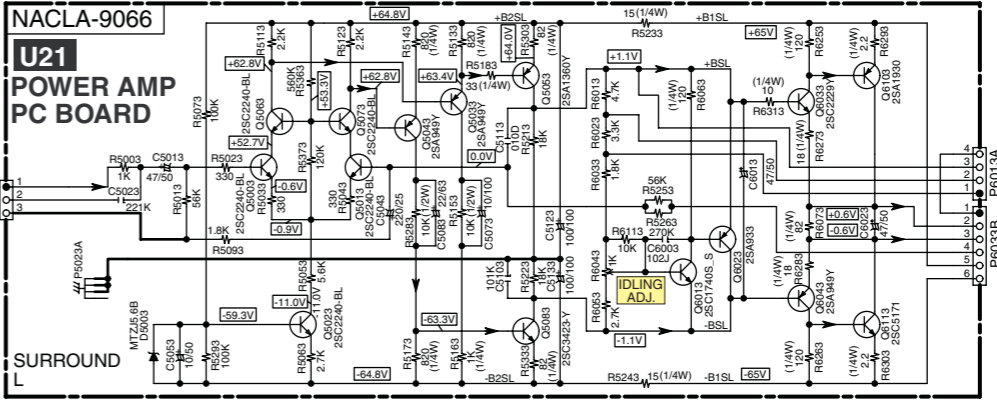
TO NAAF-9039
SD-5:H4
P5010A

TO NAAMP-9061 TO NAAF-9039
SD-4:F1
P6030B



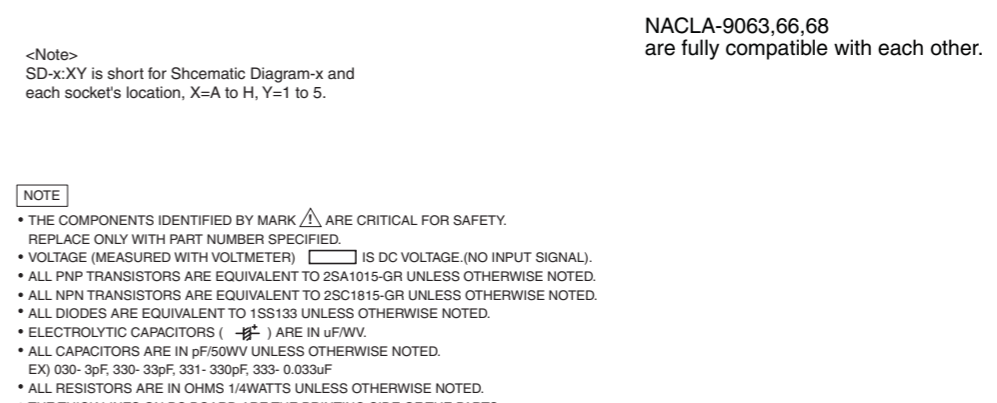
TO NAAF-9039
SD-5:H4
P5015A

TO NAAMP-9061 TO NAAF-9039
SD-4:F2
P6035B



TO NAAF-9039
SD-5:H5
P5013A

TO NAAMP-9061 TO NAAF-9039
SD-4:F3
P6033B



TO NAAF-9039
SD-5:H5
P5013A

TO NAAMP-9061 TO NAAF-9039
SD-4:F3
P6033B

NACLA-9063,66,68
are fully compatible with each other.

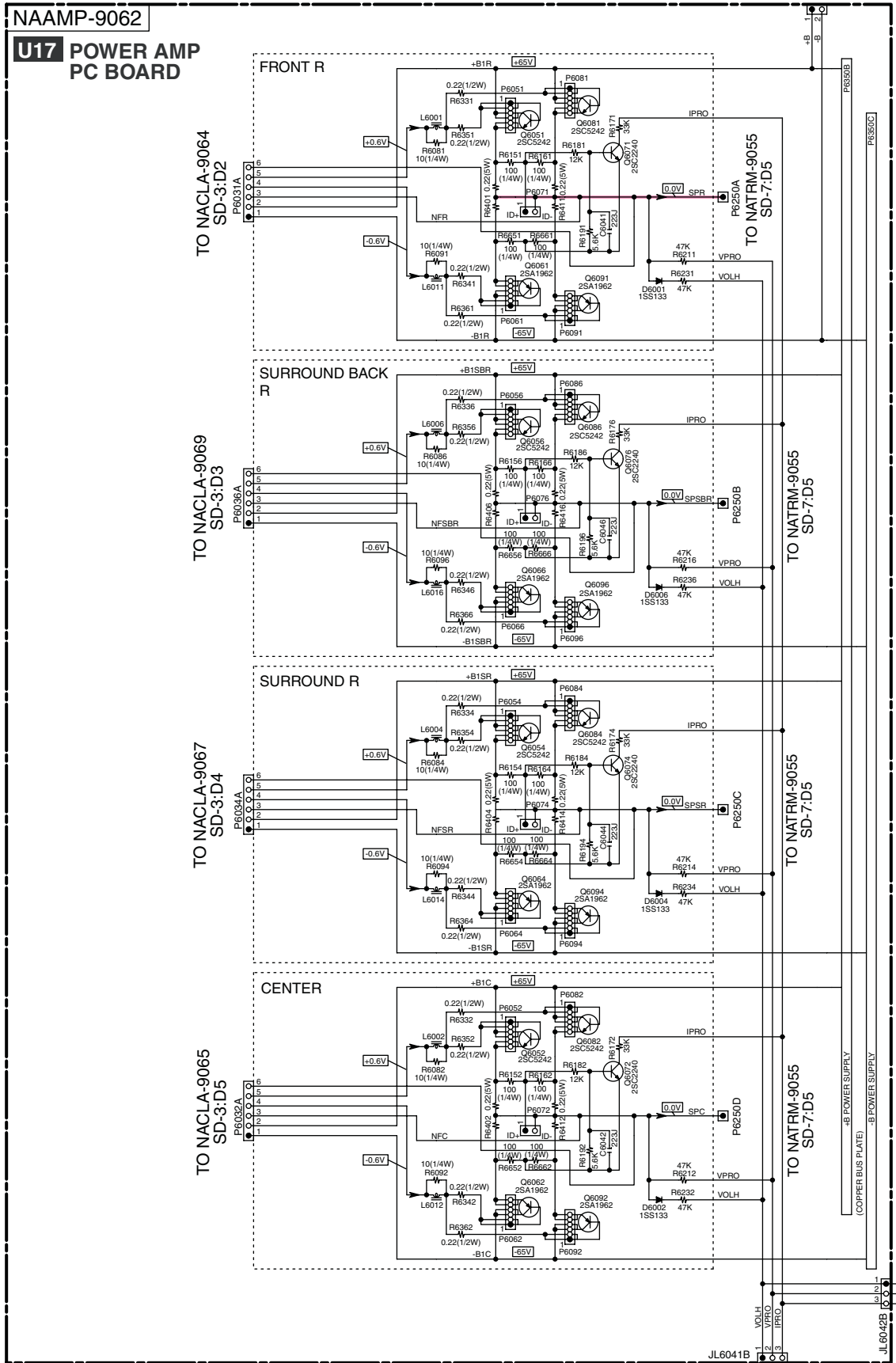
<Note>
SD-x:XY is short for Schematic Diagram-x and
each socket's location, X=A to H, Y=1 to 5.

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- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS () ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
- EX) 030-3pF, 330-33pF, 331-330pF, 333-0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
- EX) PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

SCHEMATIC DIAGRAMS-4 (SD-4)
POWER AMPLIFIER SECTION-2

TO NAAF-9039
SD-5:F3



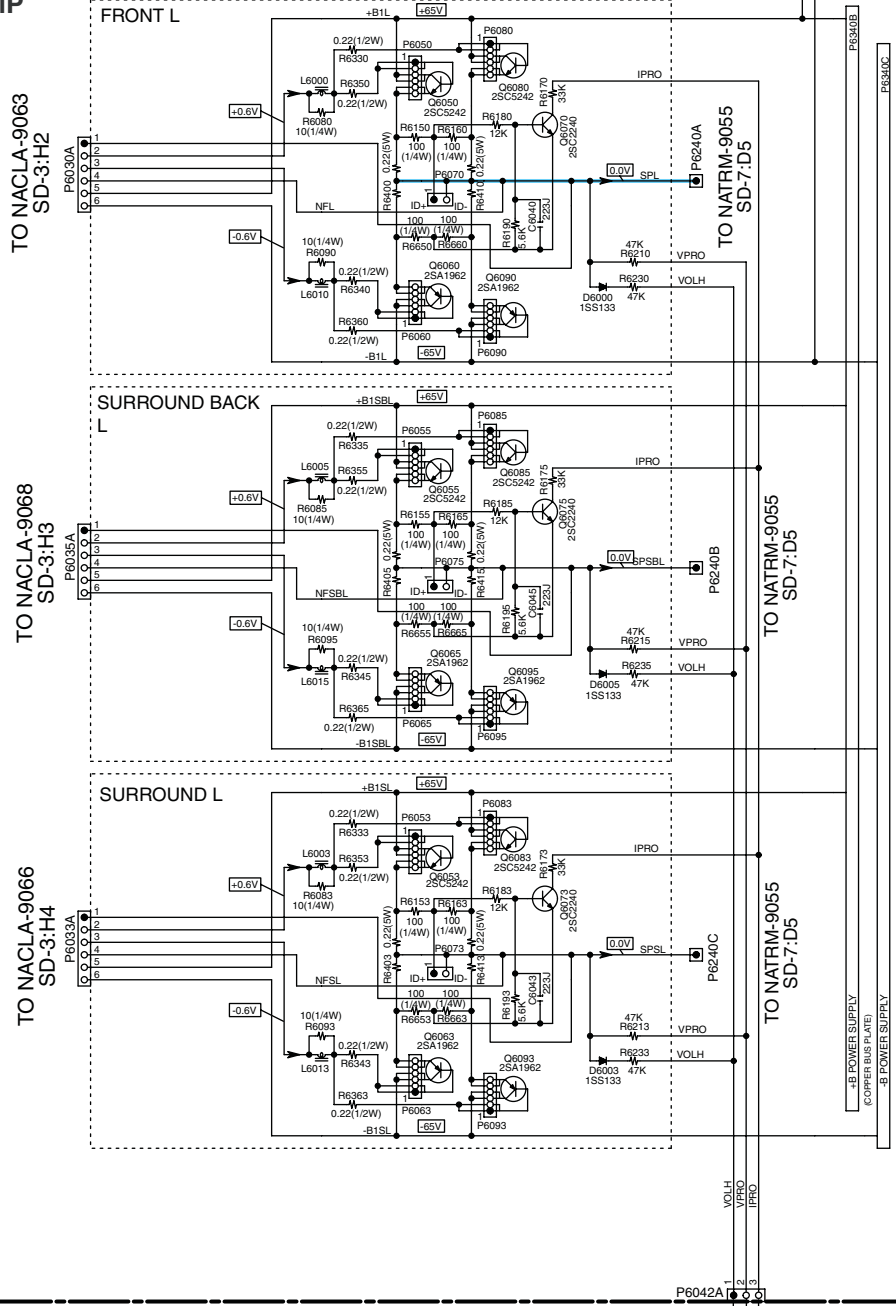
TO NAAF-9039
SD-5:E3

1
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3
4
5

TO NAAF-9039
SD-5:F3

NAAMP-9061

**U16 POWER AMP
PC BOARD**

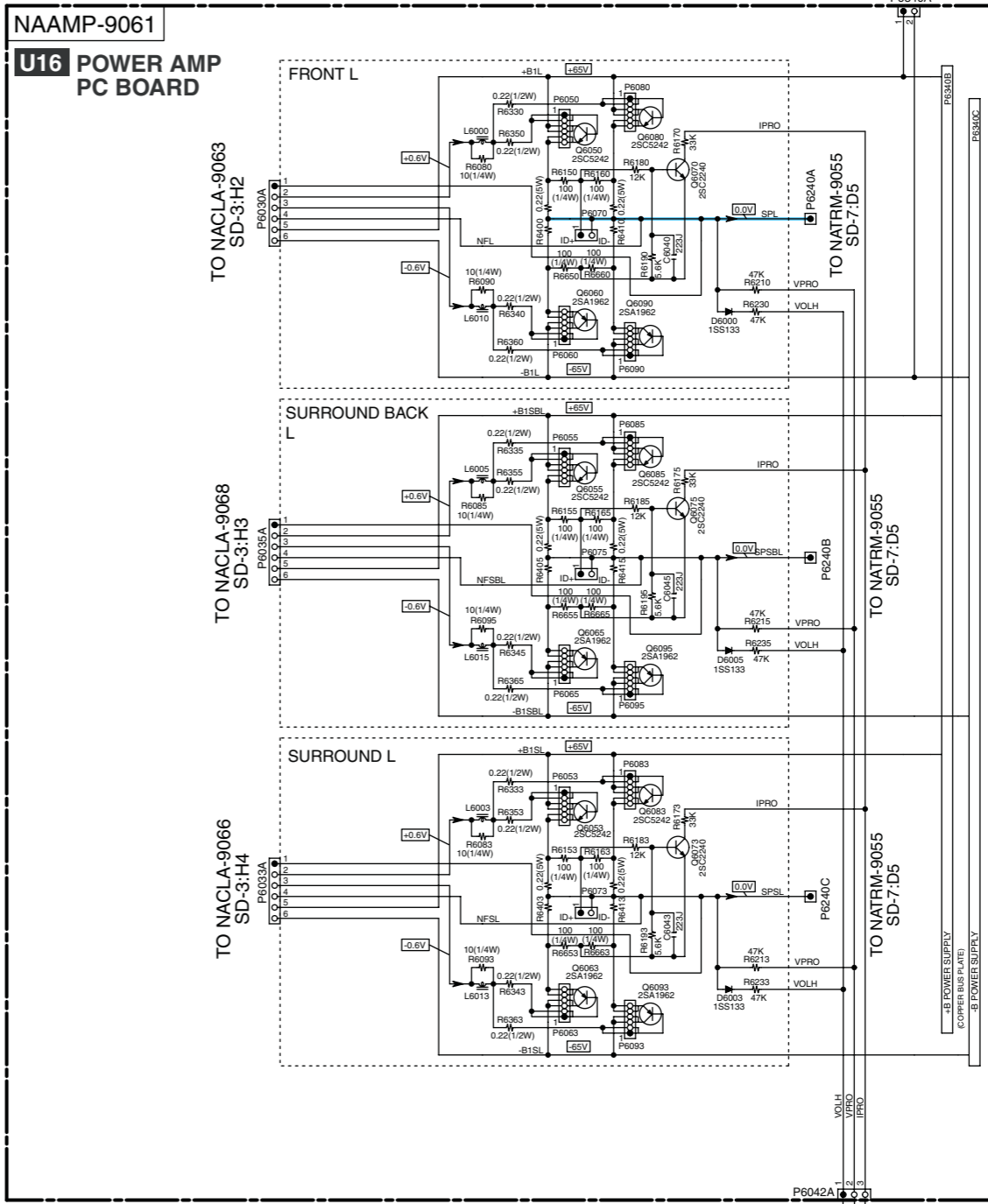
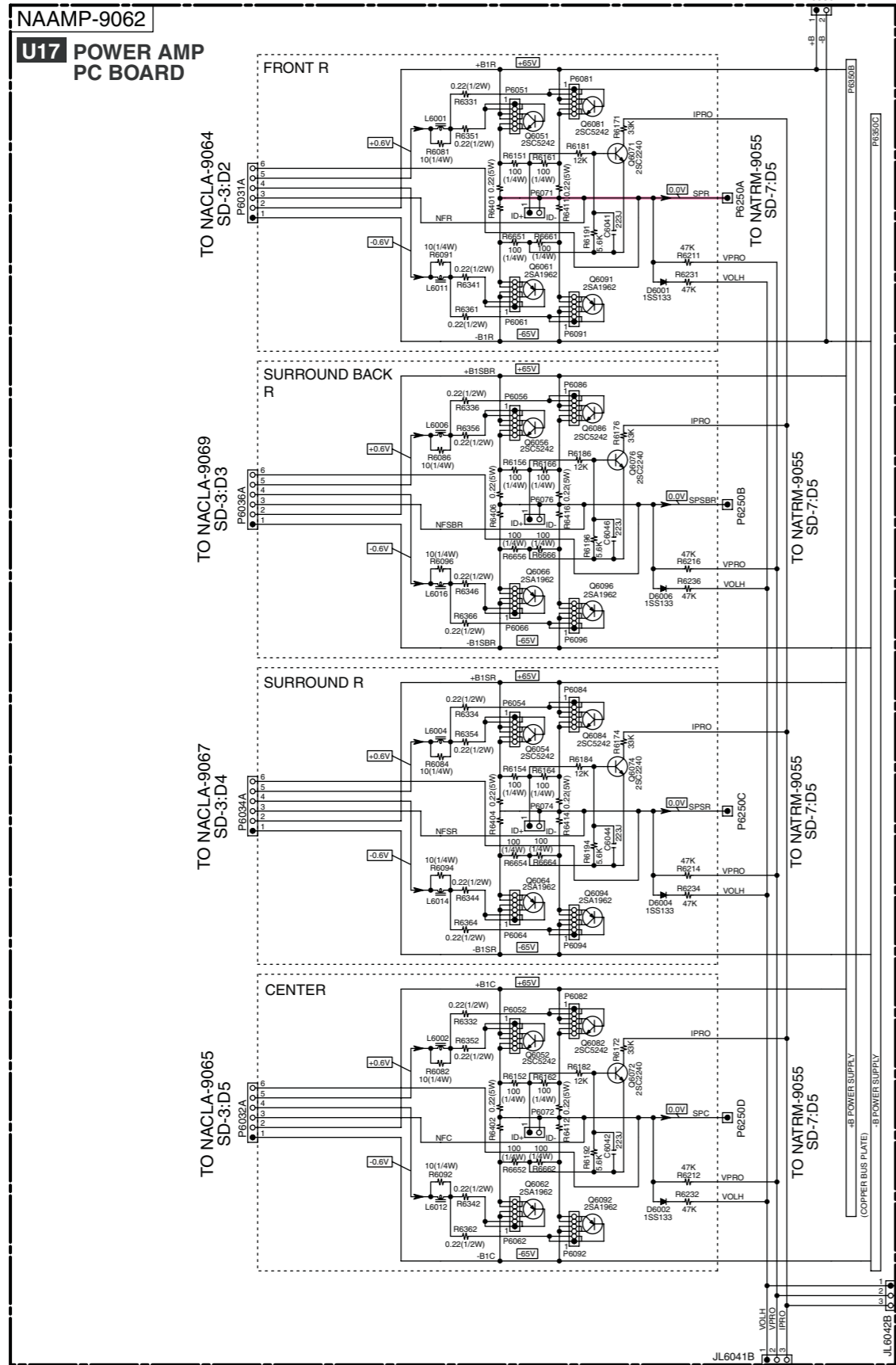


NOTE

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- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS () ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
EX) PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

SCHEMATIC DIAGRAMS-4 (SD-4) POWER AMPLIFIER SECTION-2



- NOTE**
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 - VOLTAGE (MEASURED WITH VOLTMETER) \square IS DC VOLTAGE. (NO INPUT SIGNAL).
 - ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
 - ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
 - ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
 - ELECTROLYTIC CAPACITORS ($\text{---}\text{||}\text{---}$) ARE IN μ FW.
 - ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
 - EX) 030-3pF, 330-33pF, 331-330pF, 333-0.033uF
 - ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
 - THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS. EX) \square PRINTING SIDE
 - CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

<Note>
SD-x:Y is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

SCHEMATIC DIAGRAMS-5 (SD-5) POWER SUPPLY SECTION

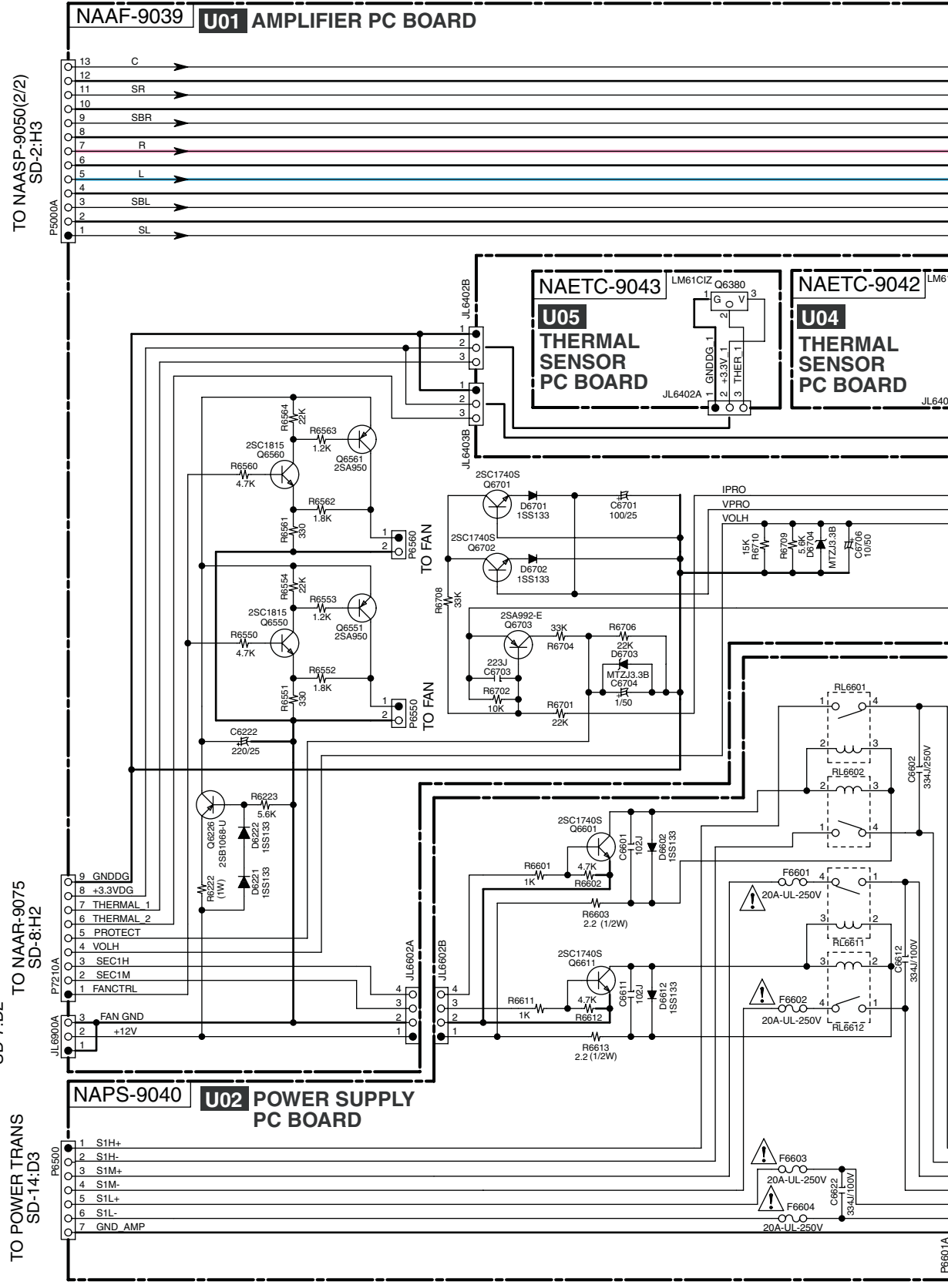
1

2

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5



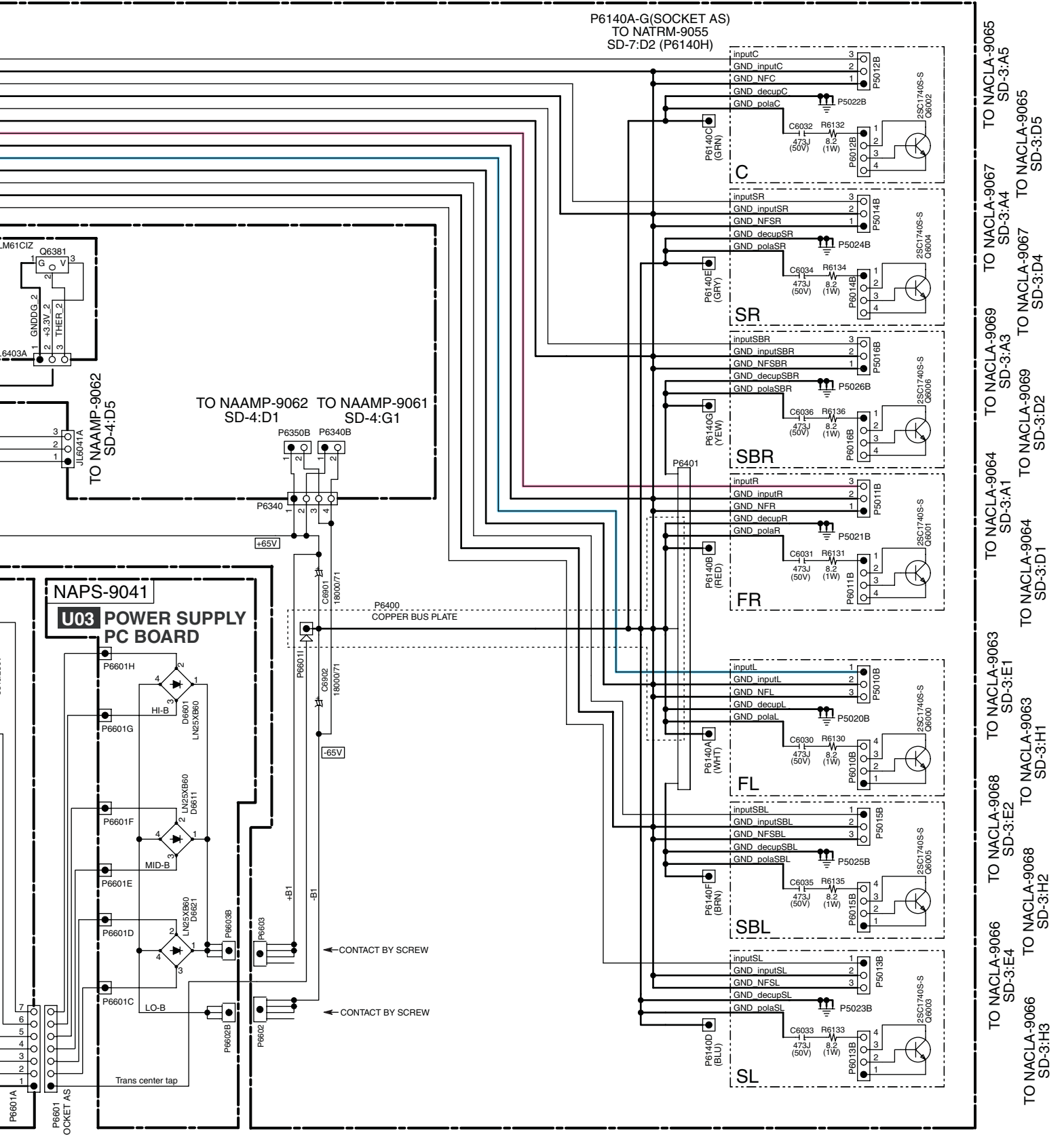
E

F

G

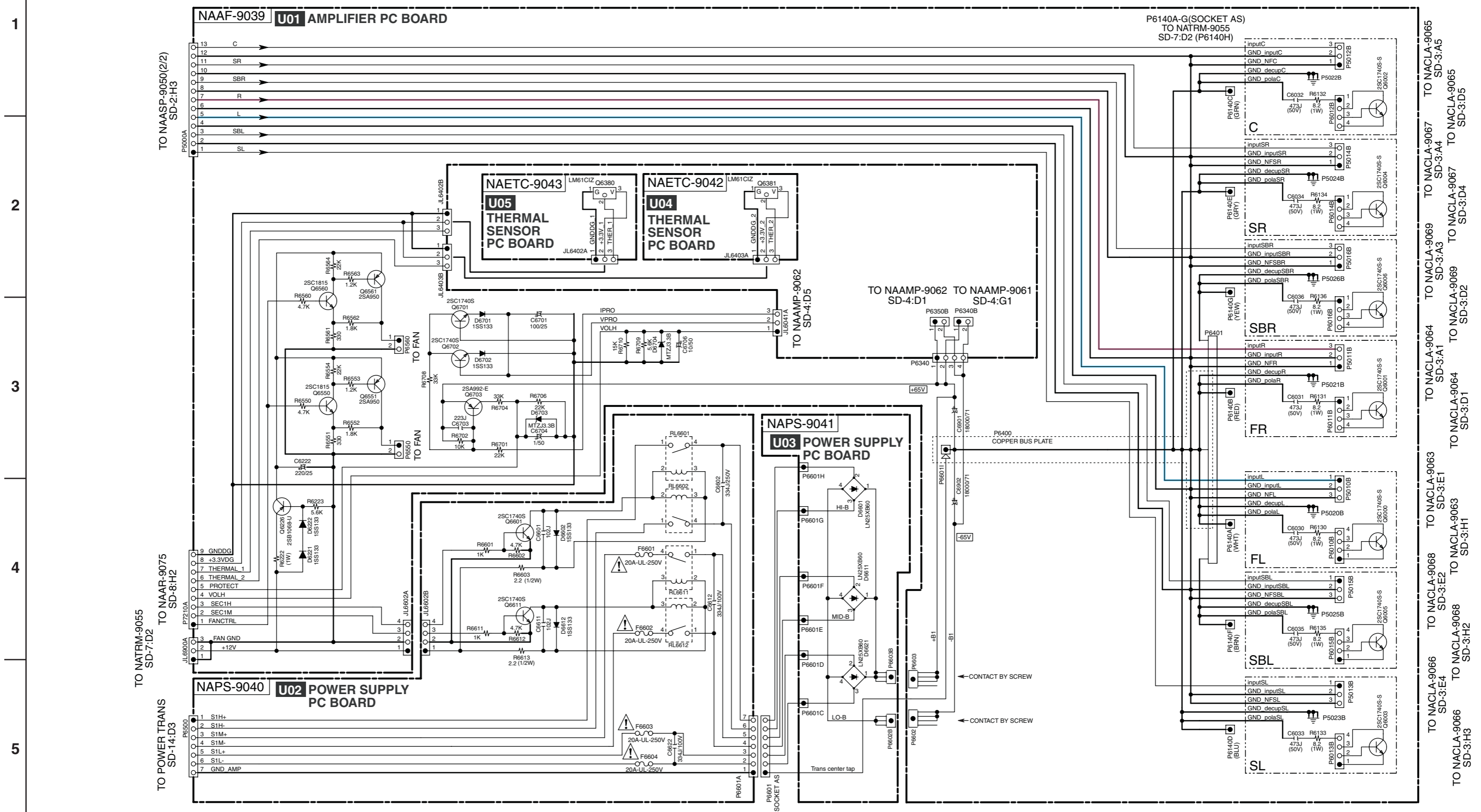
H

<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.



SCHEMATIC DIAGRAMS-5 (SD-5) POWER SUPPLY SECTION

<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.



NAAF-9039 **U01** AMPLIFIER PC BOARD

P6140A-G(SOCKET AS)
TO NATRM-9055
SD-7:D2 (P6140H)

NAETC-9043 **U05**
THERMAL
SENSOR
PC BOARD

NAETC-9042 **U04**
THERMAL
SENSOR
PC BOARD

NAPS-9041 **U03**
POWER SUPPLY
PC BOARD

NAPS-9040 **U02**
POWER SUPPLY
PC BOARD

TO NAASP-9050(2/2)
SD-2:H3

TO NATRM-9055
SD-7:D2

TO POWER TRANS
SD-14:D3

TO NAAR-9075
SD-8:H2

TO NATRM-9055
SD-7:D2

TO POWER TRANS
SD-14:D3

TO NAAMP-9062
SD-4:D5

TO NAAMP-9062 SD-4:D1
TO NAAMP-9061 SD-4:G1

P6400
COPPER BUS PLATE

← CONTACT BY SCREW

← CONTACT BY SCREW

TO NAELA-9065 SD-3:A5

TO NAELA-9067 SD-3:A4

TO NAELA-9069 SD-3:A3

TO NAELA-9064 SD-3:A1

TO NAELA-9063 SD-3:E1

TO NAELA-9068 SD-3:E2

TO NAELA-9066 SD-3:E4

TO NAELA-9066 SD-3:H3

TO NAELA-9067 SD-3:D4

TO NAELA-9069 SD-3:D2

TO NAELA-9064 SD-3:D1

TO NAELA-9063 SD-3:H1

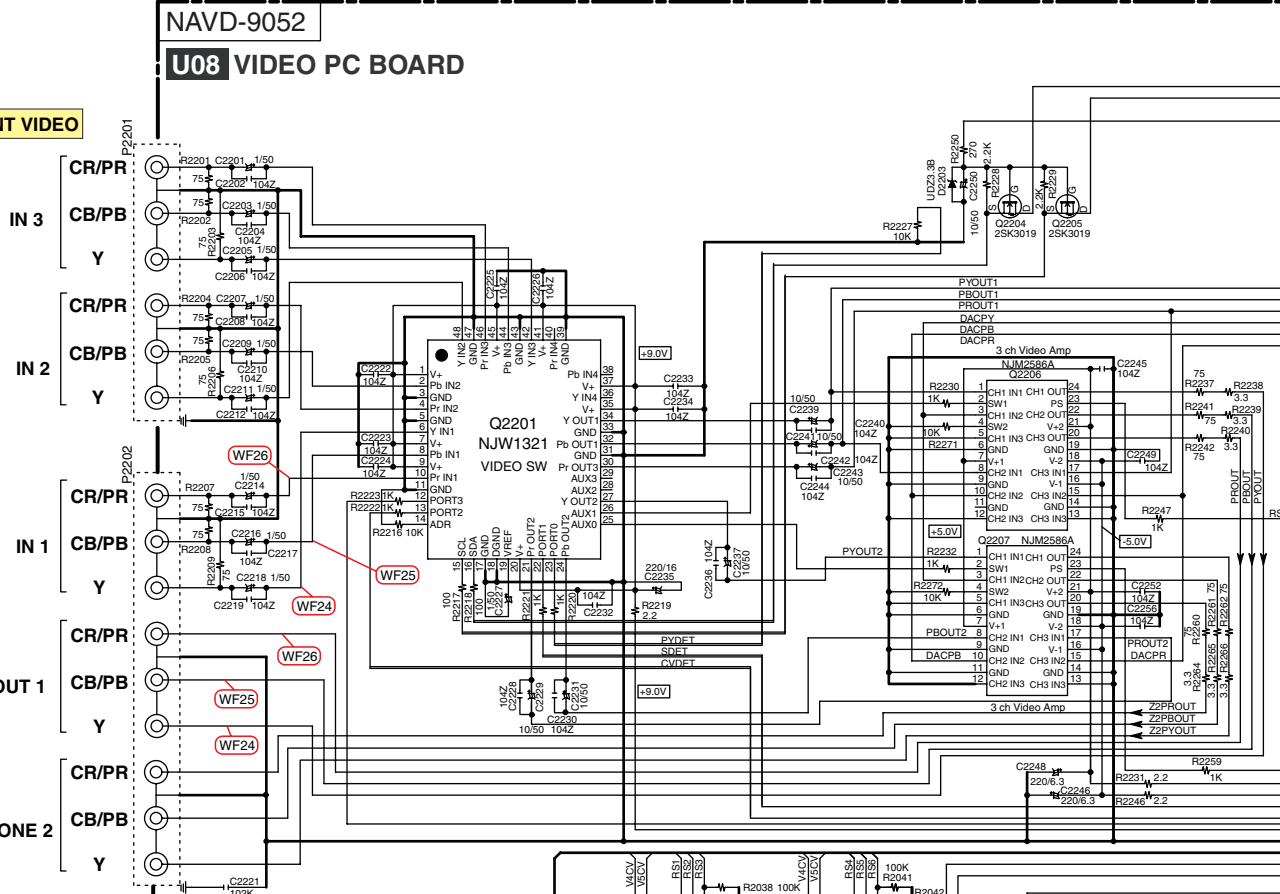
TO NAELA-9068 SD-3:H2

SCHEMATIC DIAGRAMS-6 (SD-6) VIDEO SECTION

A B C D

1

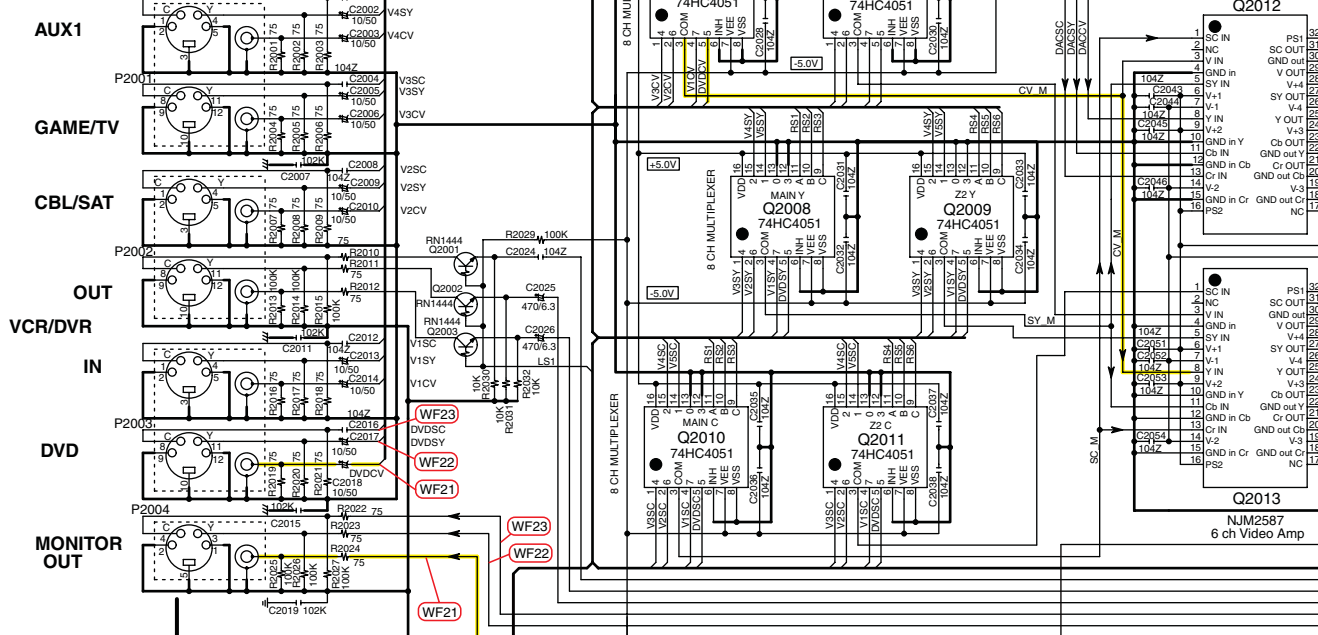
COMPONENT VIDEO



2

3

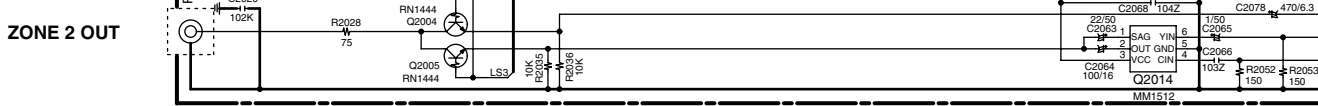
S VIDEO



4

5

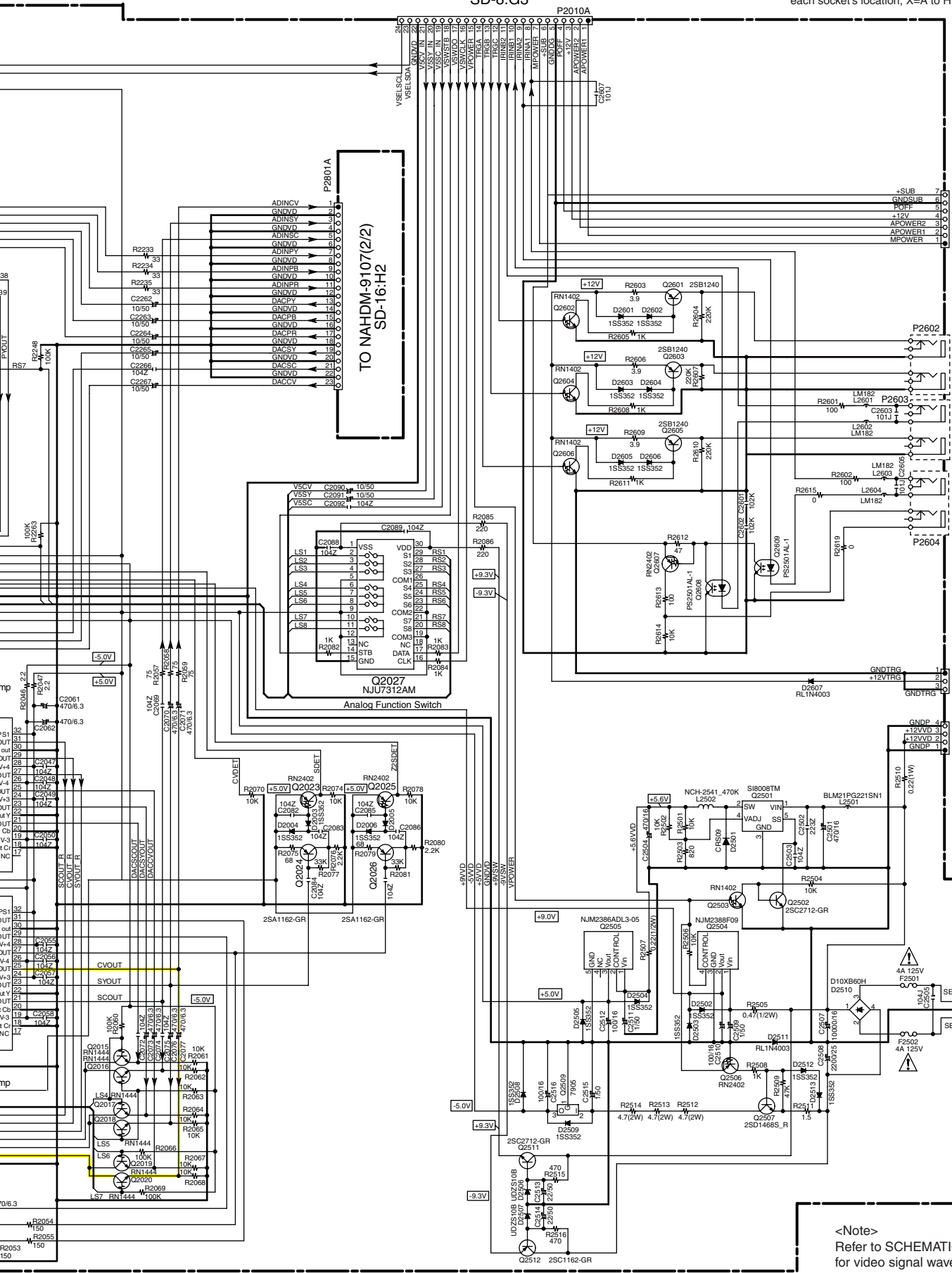
COMPOSITE VIDEO



E F G H

TO NADG-9075 SD-8:G3

<Note>
SD-x:XY is short for Shcematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.



TO NAASP-9057 SD-14:D2

12V TRIGGER C

12V TRIGGER B

IR IN B

12V TRIGGER A

IR IN A

IR OUT

TO NATRM-9055 SD-7:C2

TO HDM-9107(2/2) SD-16:H2

TO POWER TRANS SD-14:D4

<Note>
Refer to SCHEMATIC DIAGRAM-18 (SD-18) for video signal waveforms.

SCHEMATIC DIAGRAMS-6 (SD-6)
VIDEO SECTION

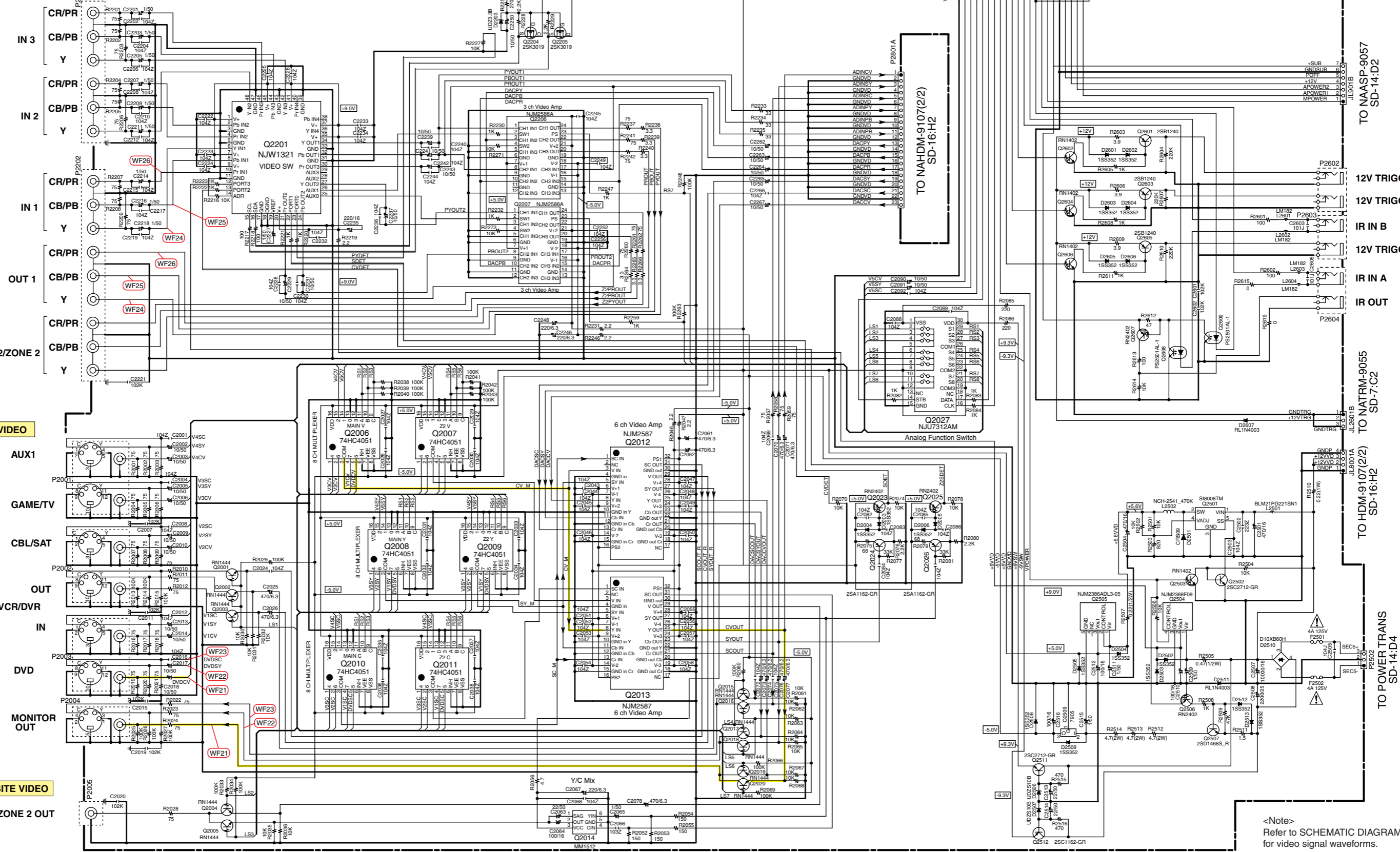
TO NADG-9075
SD-8:G3

<Note>
SD-x:XY is short for Schematic Diagram-x and
each socket's location, X=A to H, Y=1 to 5.

1
2
3
4
5

COMPONENT VIDEO

NAVD-9052
U08 VIDEO PC BOARD



S VIDEO

COMPOSITE VIDEO

<Note>
Refer to SCHEMATIC DIAGRAM-18 (SD-18)
for video signal waveforms.

SCHEMATIC DIAGRAMS-7 (SD-7)
SP TERMINAL SECTION

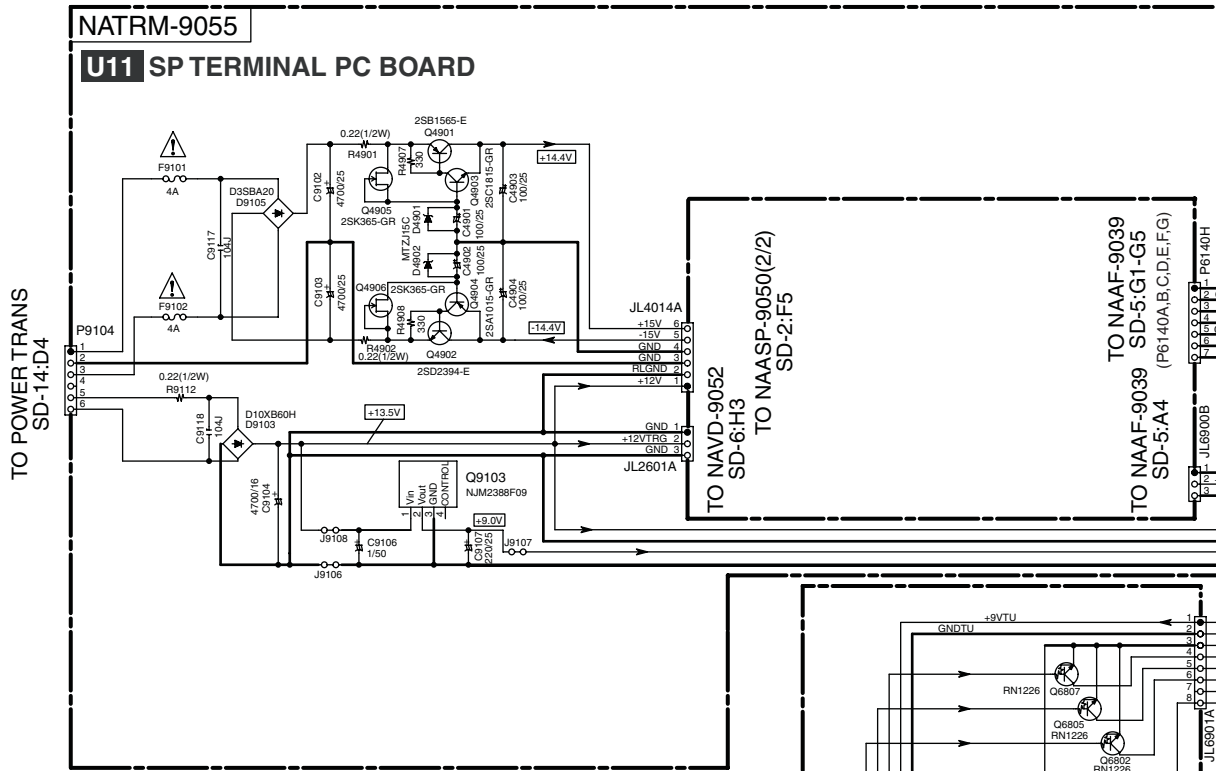
1

2

3

4

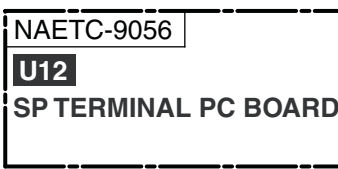
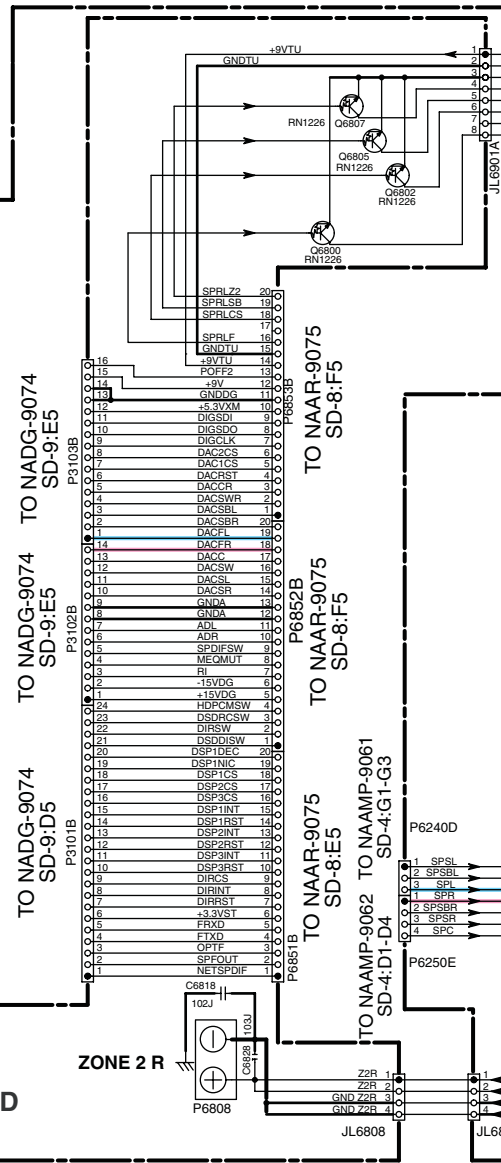
5



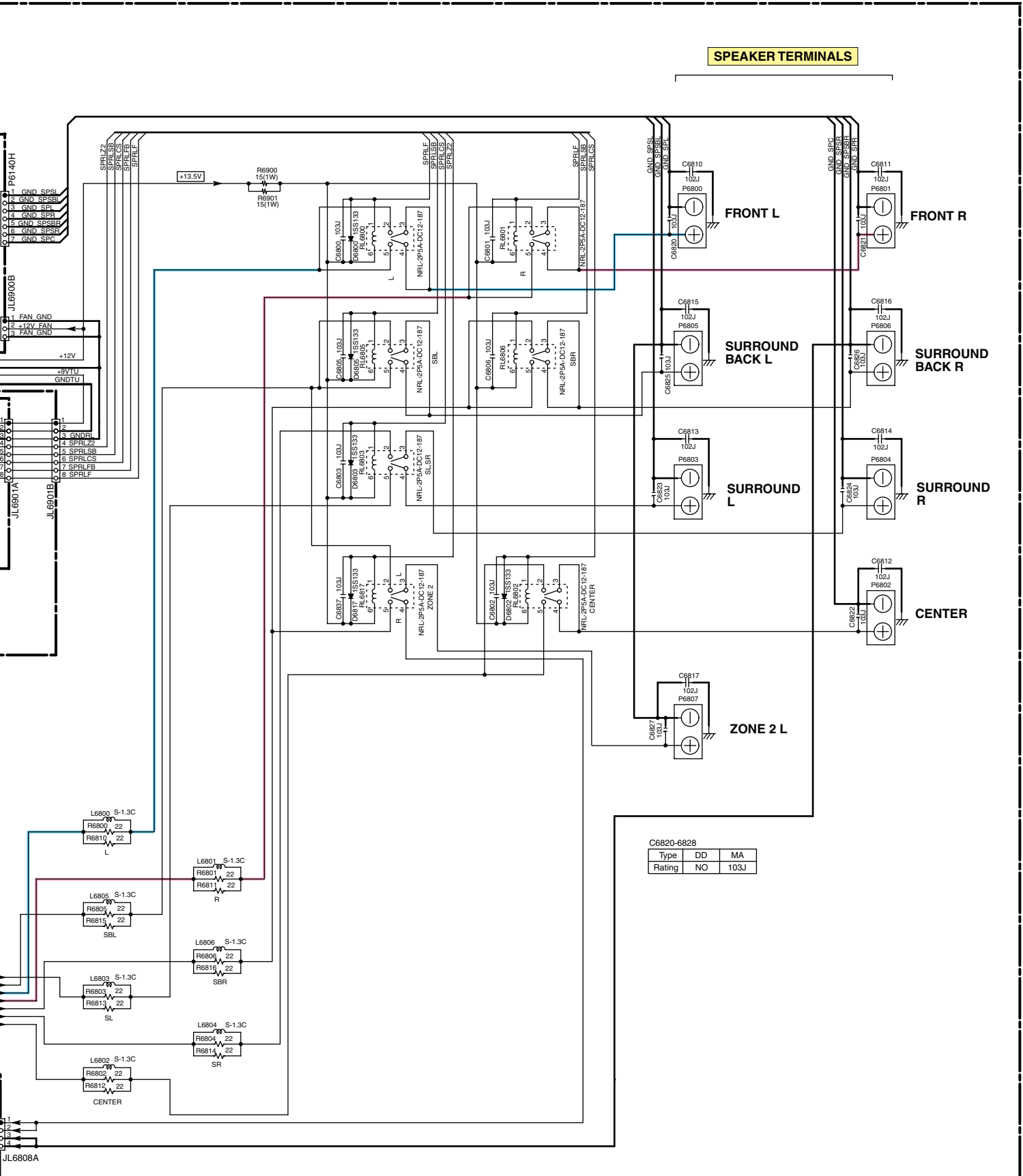
<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

NOTE

- THE COMPONENTS IDENTIFIED BY MARK ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER) IS DC VOLTAGE.(NO INPUT SIGNAL).
- ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS () ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50V UNLESS OTHERWISE NOTED.
EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033uF
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
EX) PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.



SPEAKER TERMINALS

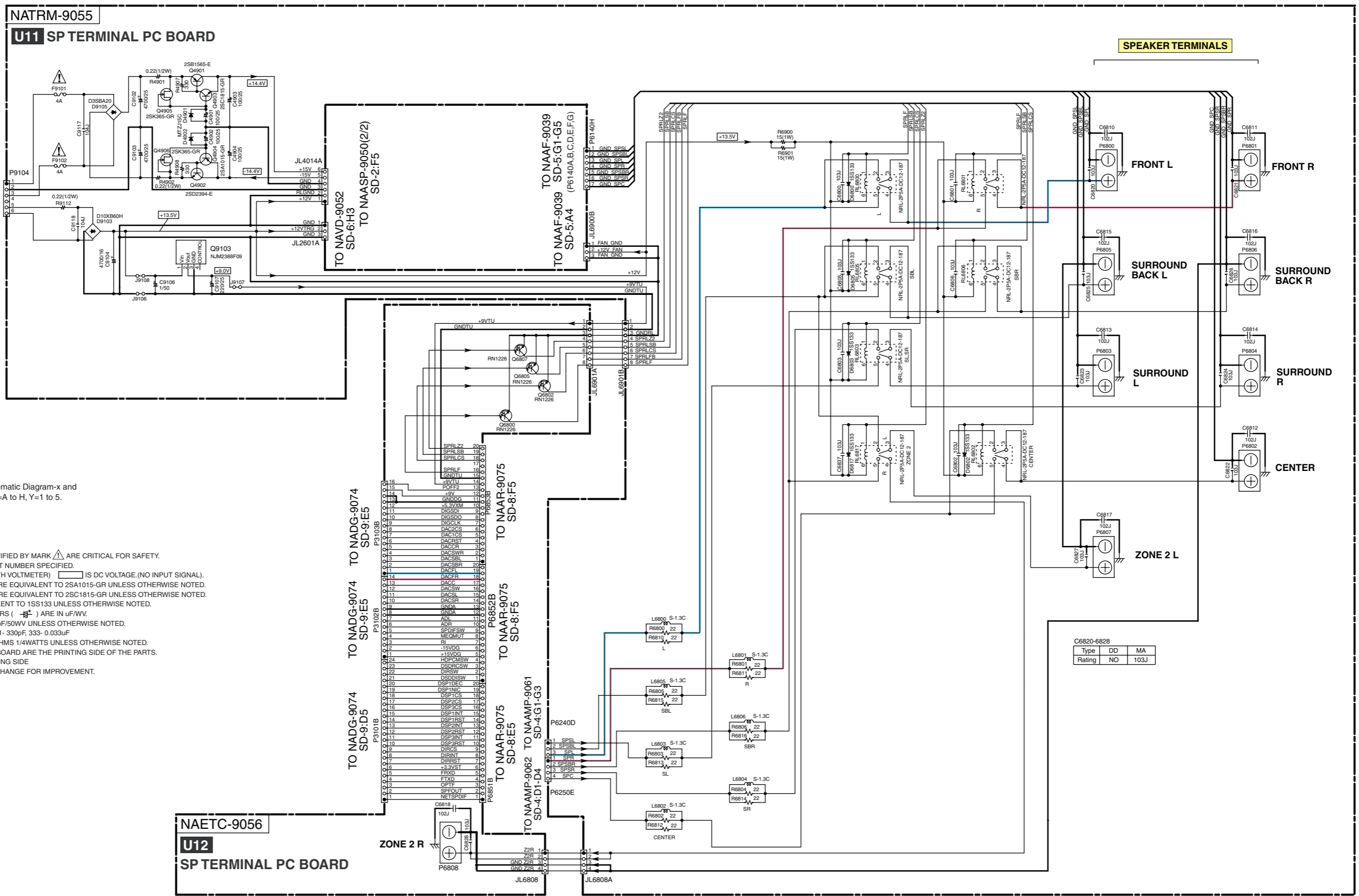


C6820-6828		
Type	DD	MA
Rating	NO	103J

SCHEMATIC DIAGRAMS-7 (SD-7)
SP TERMINAL SECTION

1
2
3
4
5

A B C D E F G H



<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

- NOTE**
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 - ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
 - ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
 - ELECTROLYTIC CAPACITORS () ARE IN uF/NV.
 - ALL CAPACITORS ARE IN pF/50V UNLESS OTHERWISE NOTED.
EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033uF
 - ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
 - THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
EX) PRINTING SIDE
 - CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

C6820-6828		
Type	DD	MA
Rating	NO	103J

A

B

C

D

SCHEMATIC DIAGRAMS-8 (SD-8) MICROPROCESSOR SECTION

NAAR-9075 U28 MICROPROCESSOR PC BOARD

1

2

3

4

5

TO FLASH WRITER
P7001

75% PWR3
DD Type Only

DD Type Only

DD Type Only

DD Type Only

DD Type Only

DD Type Only

DD Type Only

DD Type Only

DD Type Only

DD Type Only

DD Type Only

DD Type Only

DD Type Only

DD Type Only

DD Type Only

DD Type Only

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DD Type Only

DD Type Only

DD Type Only

DD Type Only

DD Type Only

DD Type Only

DD Type Only

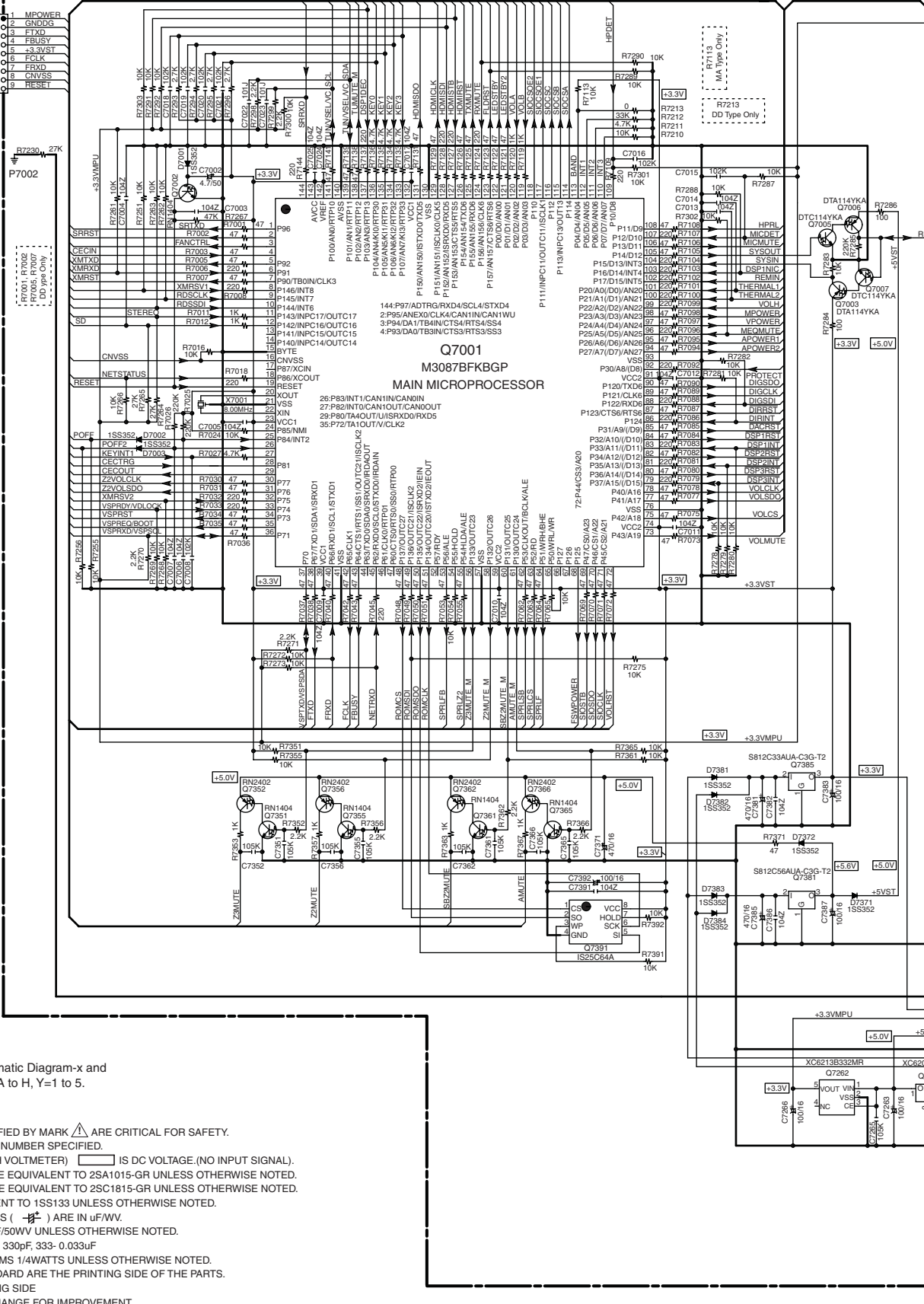
DD Type Only

DD Type Only

DD Type Only

DD Type Only

DD Type Only

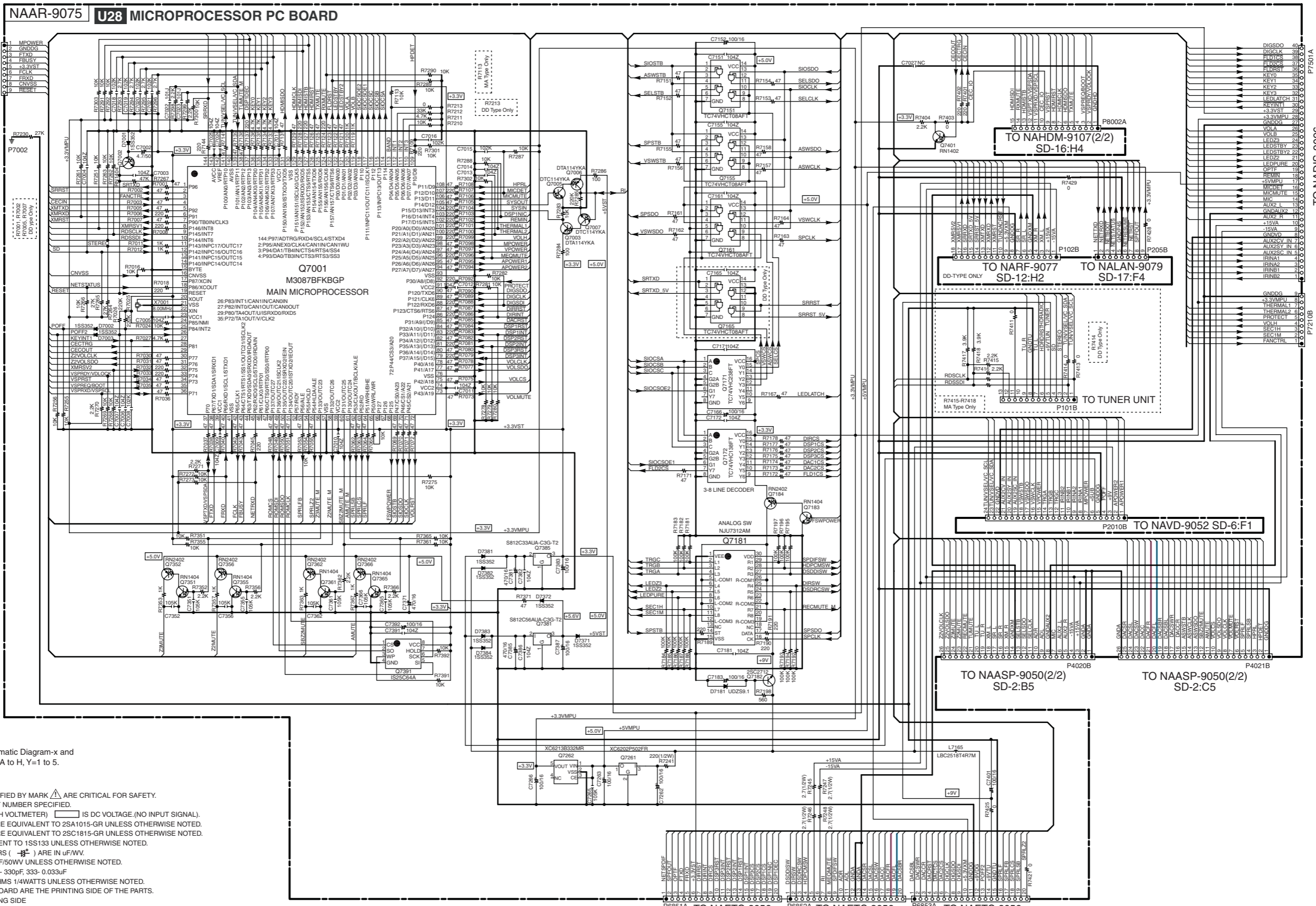


<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

NOTE

- THE COMPONENTS IDENTIFIED BY MARK ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
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- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS () ARE IN uF/MV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033uF
- ALL RESISTORS ARE IN OHMS /1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
- EX) PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

SCHEMATIC DIAGRAMS-8 (SD-8) MICROPROCESSOR SECTION



<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

- NOTE**
- THE COMPONENTS IDENTIFIED BY MARK Δ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
 - VOLTAGE (MEASURED WITH VOLTMETER) \square IS DC VOLTAGE. (NO INPUT SIGNAL).
 - ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
 - ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
 - ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
 - ELECTROLYTIC CAPACITORS (---) ARE IN $\mu\text{F/WV}$.
 - ALL CAPACITORS ARE IN pF/50V UNLESS OTHERWISE NOTED.
EX) 030-3pF, 330-33pF, 331-330pF, 333-0.033 μF
 - ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
 - THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
EX) \square PRINTING SIDE
 - CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

A B C D

SCHEMATIC DIAGRAMS-9 (SD-9) DAC SECTION

1

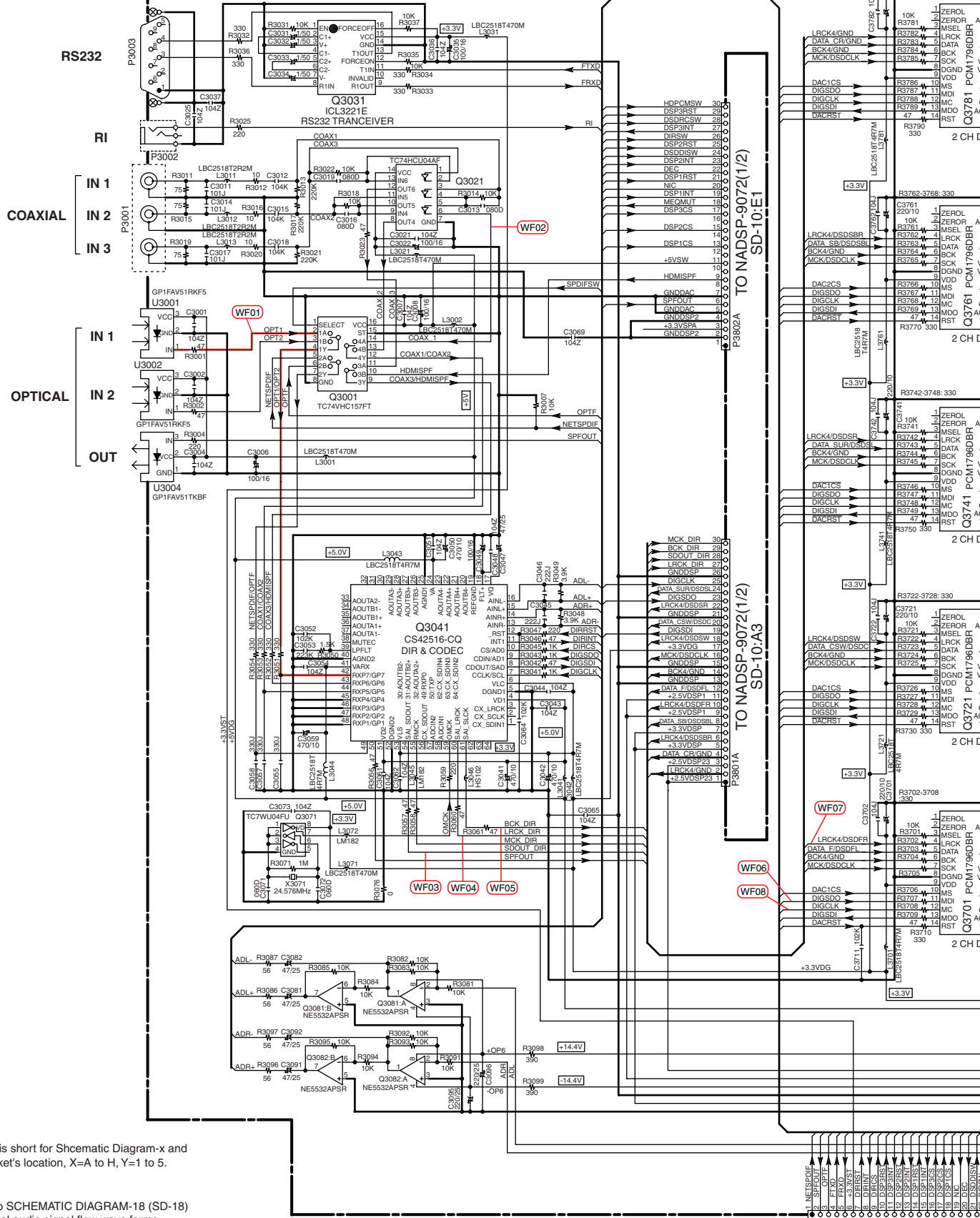
2

3

4

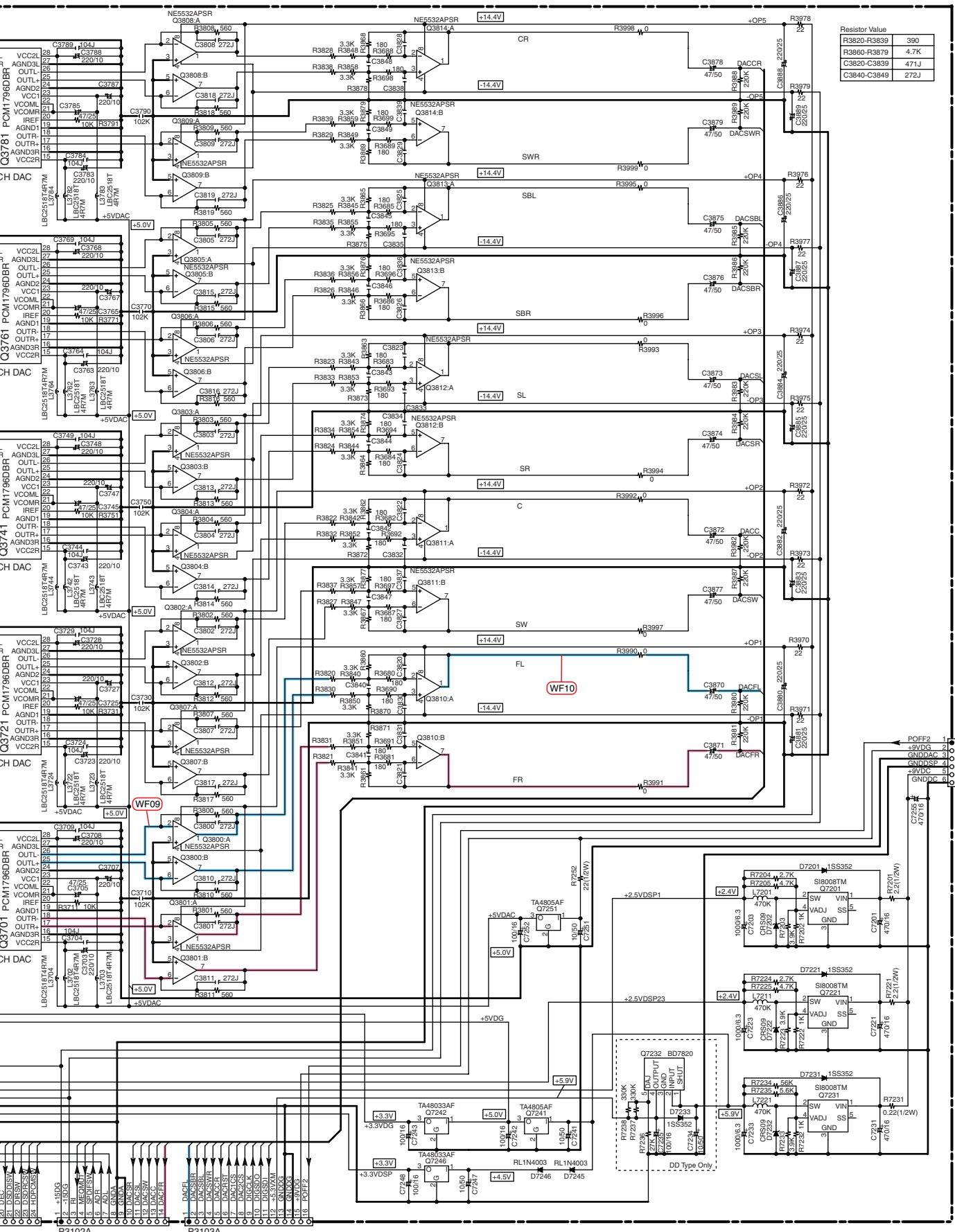
5

NADG-9074 U27 DAC PC BOARD



<Note>
SD-x:Y is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

<Note>
1. Refer to SCHEMATIC DIAGRAM-18 (SD-18) for digital audio signal flow wave forms.
2. (WF01) is short for (WaveForm01).



Resistor Value	Value
R3820-R3839	390
R3860-R3879	4.7K
C3820-C3839	471J
C3840-C3849	272J

TO NAPS-9099
SD-14:G4

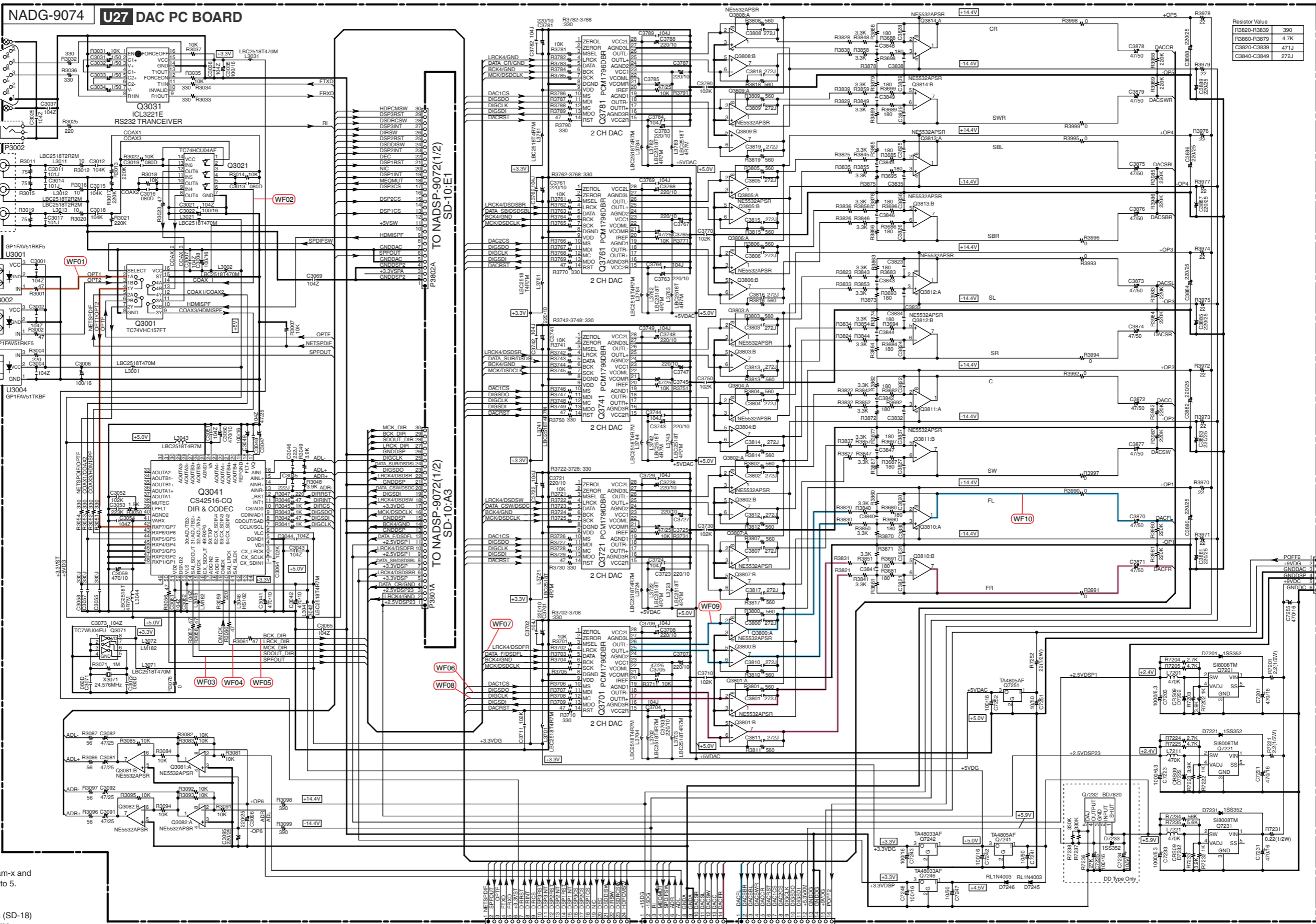
JL9501A

P3102A TO NAETC-9056 SD-7:C4
P3103A TO NAETC-9056 SD-7:C3

DD Type Only

A B C D E F G H

SCHEMATIC DIAGRAMS-9 (SD-9)
DAC SECTION



1
2
3
4
5

<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

<Note>
1. Refer to SCHEMATIC DIAGRAM-18 (SD-18) for digital audio signal flow wave forms.
2. (WF01) is short for (WaveForm01).

P3101A TO NAETC-9056 SD-7:C5
P3102A TO NAETC-9056 SD-7:C4
P3103A TO NAETC-9056 SD-7:C3

TO NAPS-9099 SD-14:G4
JL9501A

SCHEMATIC DIAGRAMS-10 (SD-10) DSP SECTION

TO NAHDM-9107(2/2)
SD-16:H4

TO M...

NADSP-9072(1/2)

U25
DSP PC BOARD

1

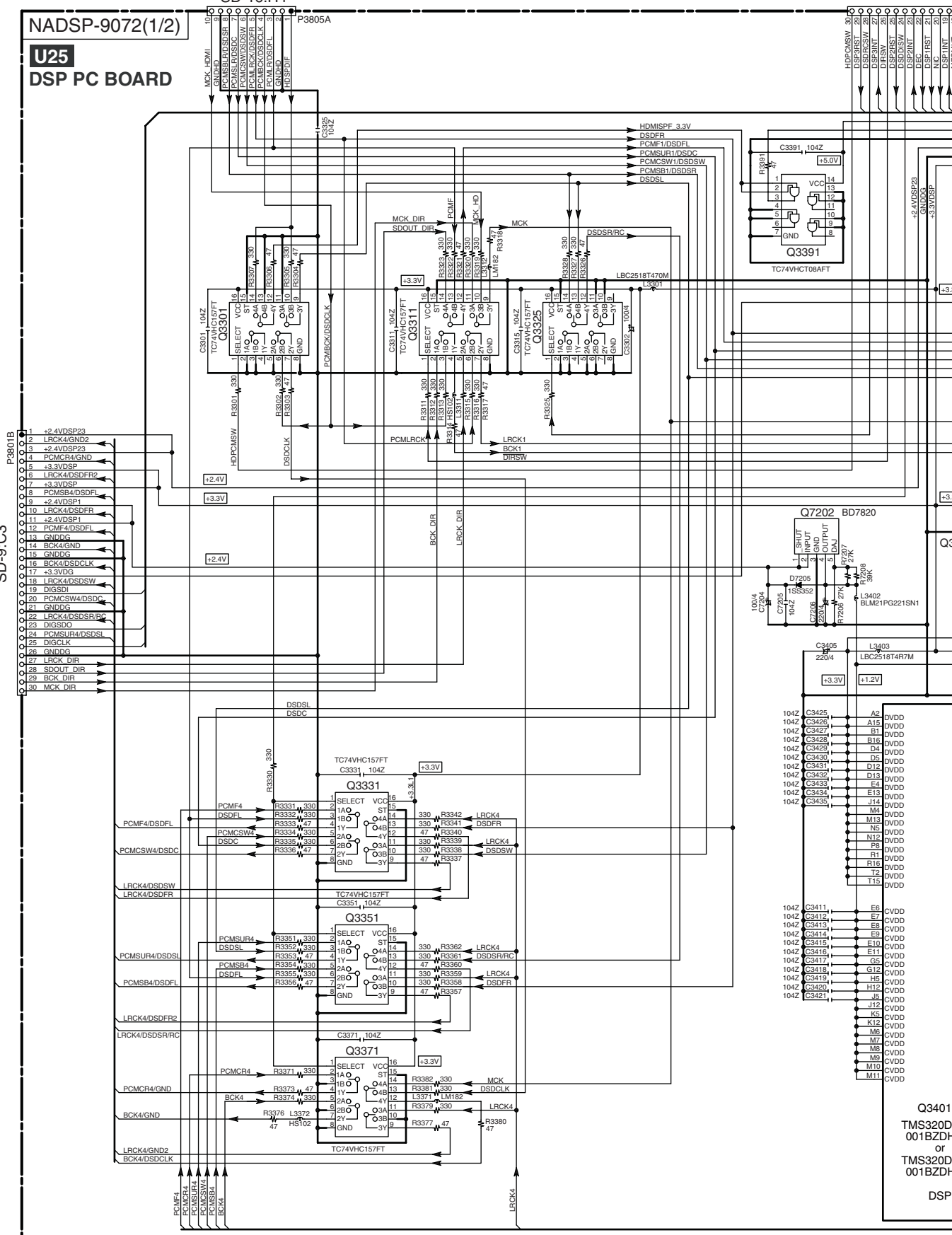
2

3

4

5

TO NADG-9074
SD-9:C3

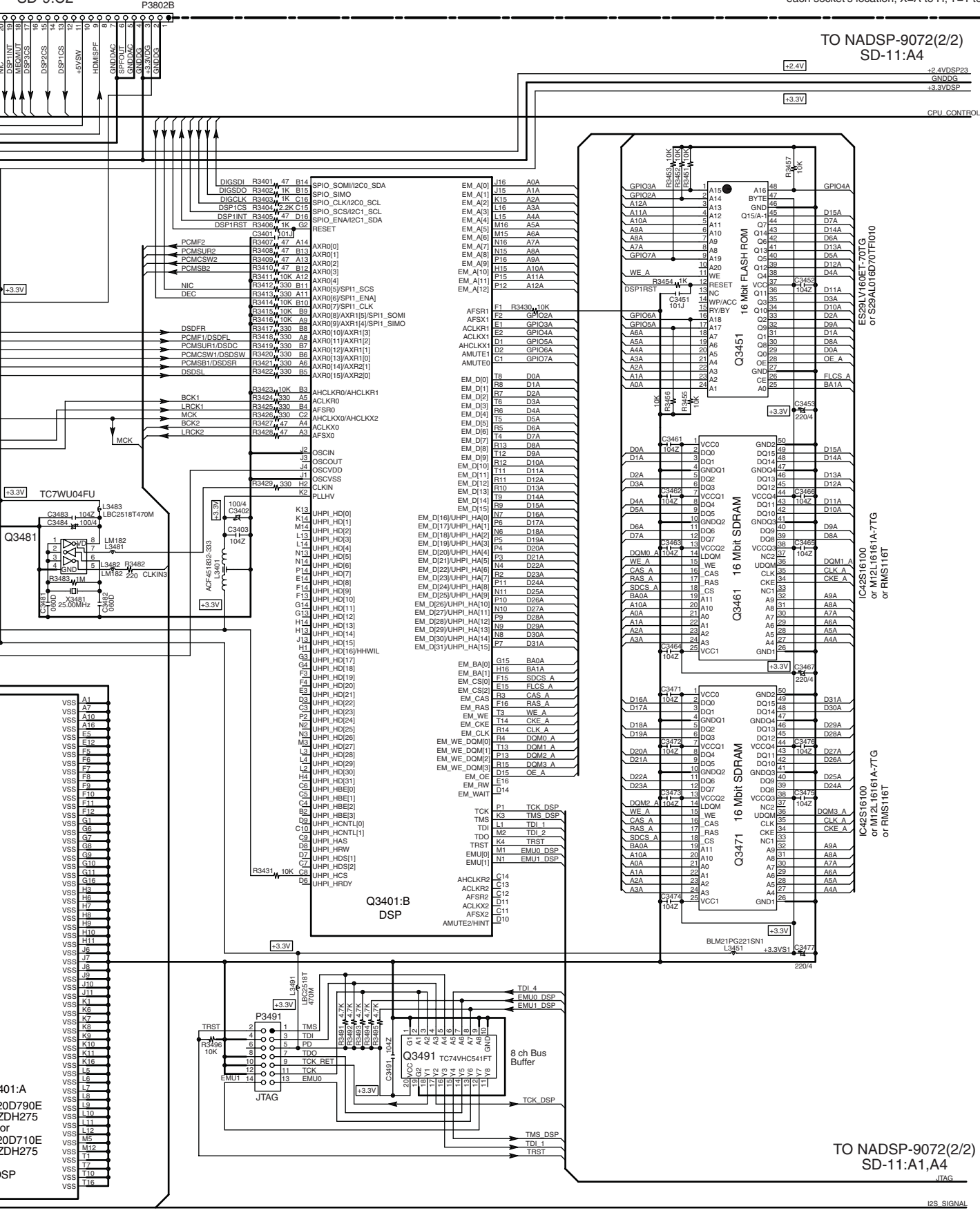


Q3401:
TMS320D7
001BZDH2
or
TMS320D7
001BZDH2
DSP

E F G H

TO NADG-9074 SD-9:C2

-Notes- SD-x:Y is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.



TO NADSP-9072(2/2) SD-11:A4

TO NADSP-9072(2/2) SD-11:A1,A4

I2S SIGNAL

SCHEMATIC DIAGRAMS-10 (SD-10)

DSP SECTION

<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

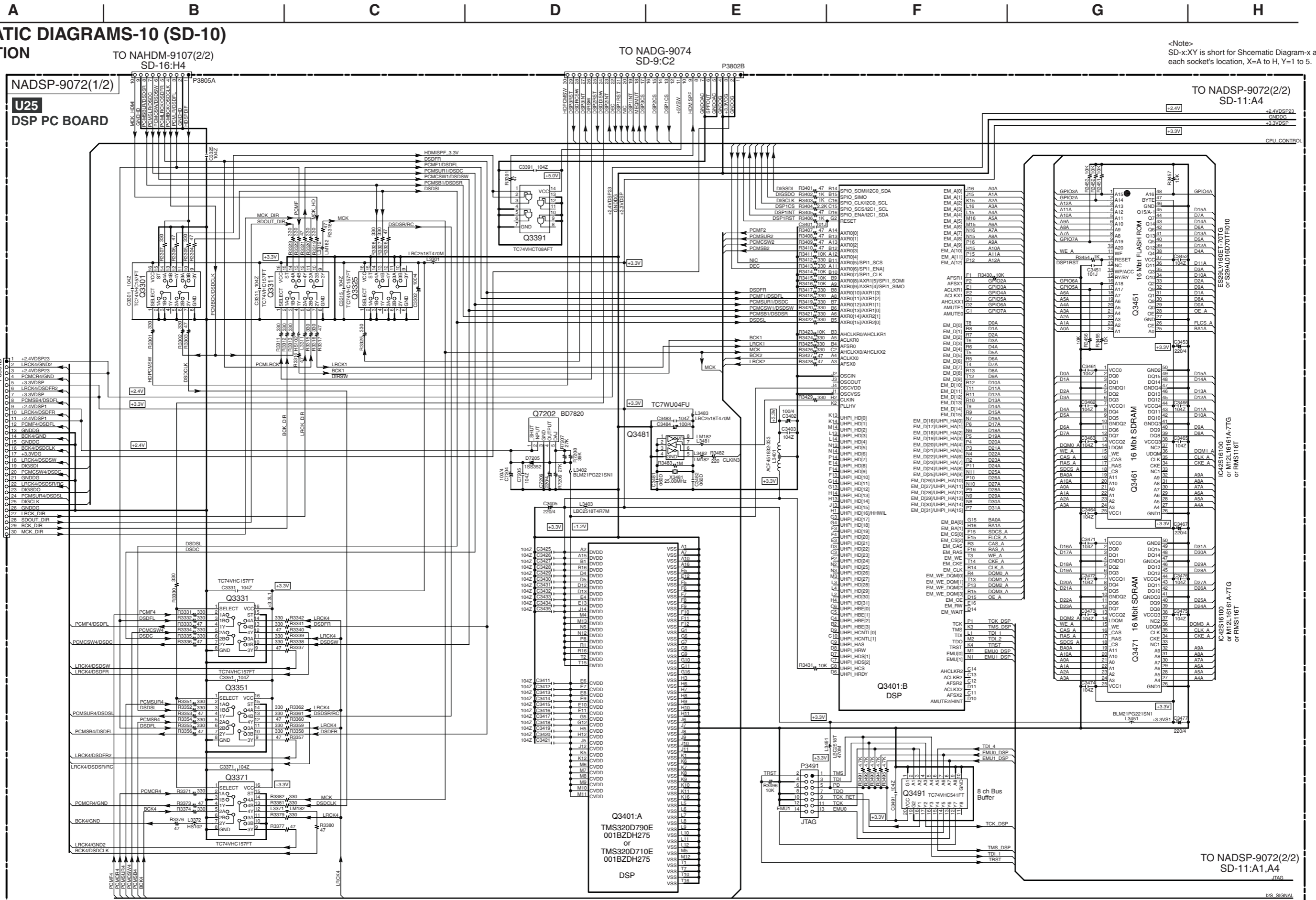
1

2

3

4

5



TO NADSP-9072(2/2)
SD-11:A1, A4

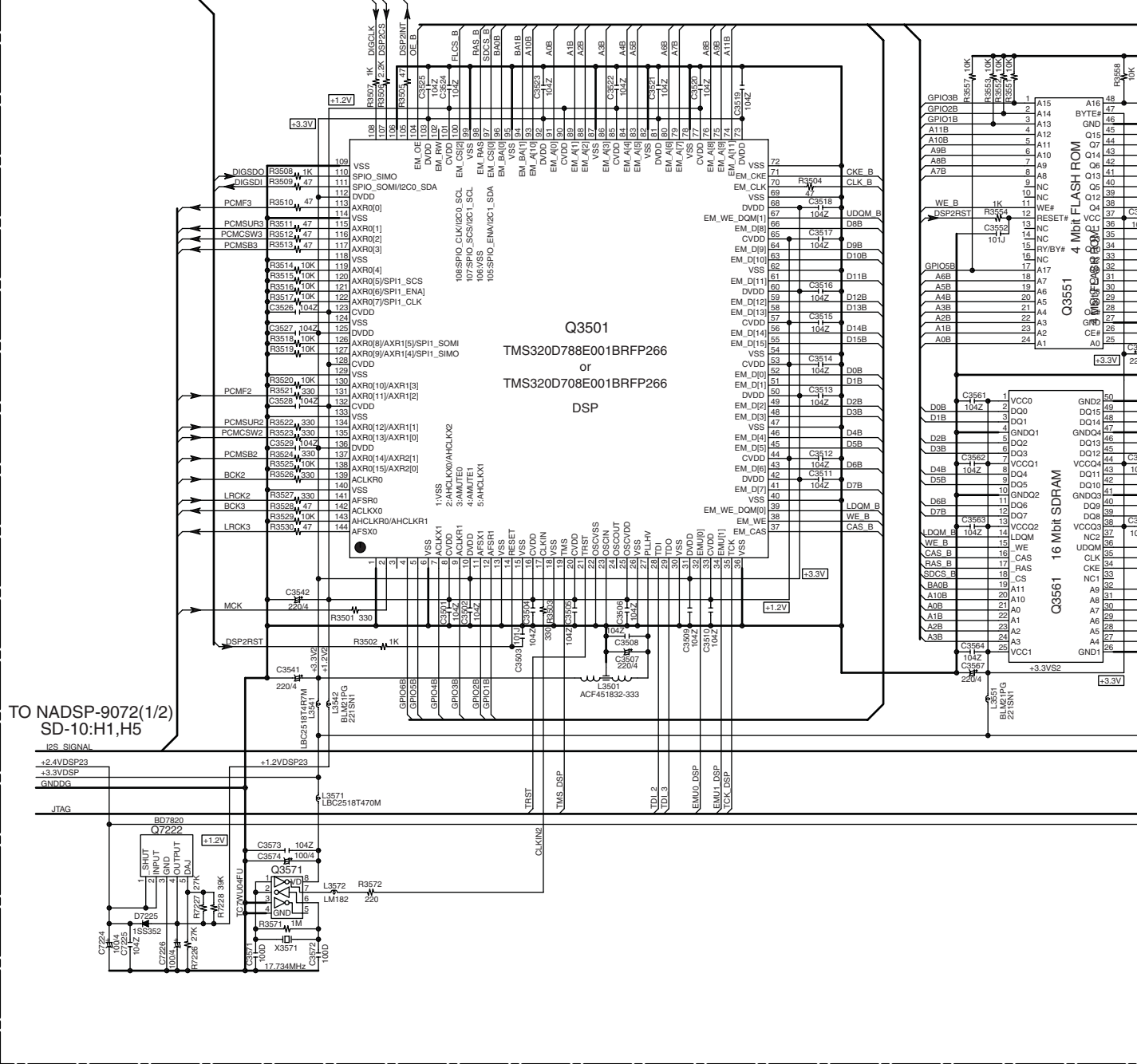
I2S SIGNAL

SCHEMATIC DIAGRAMS-11 (SD-11) DSP SECTION

NADSP-9072(2/2)

U25 DSP PC BOARD

TO NADSP-9072(1/2)
SD-10:H1
CPU_CONTROL



TO NADSP-9072(1/2)
SD-10:H1,H5

I2S_SIGNAL

+2.4V DSP23

+3.3V DSP

GNDDG

JTAG

+1.2V DSP23

L3571 LBC25187470M

L3572 LM182

L3573 R3572

L3574

L3575

L3576

L3577

L3578

L3579

L3580

L3581

L3582

L3583

L3584

L3585

L3586

L3587

L3588

L3589

L3590

L3591

L3592

L3593

L3594

L3595

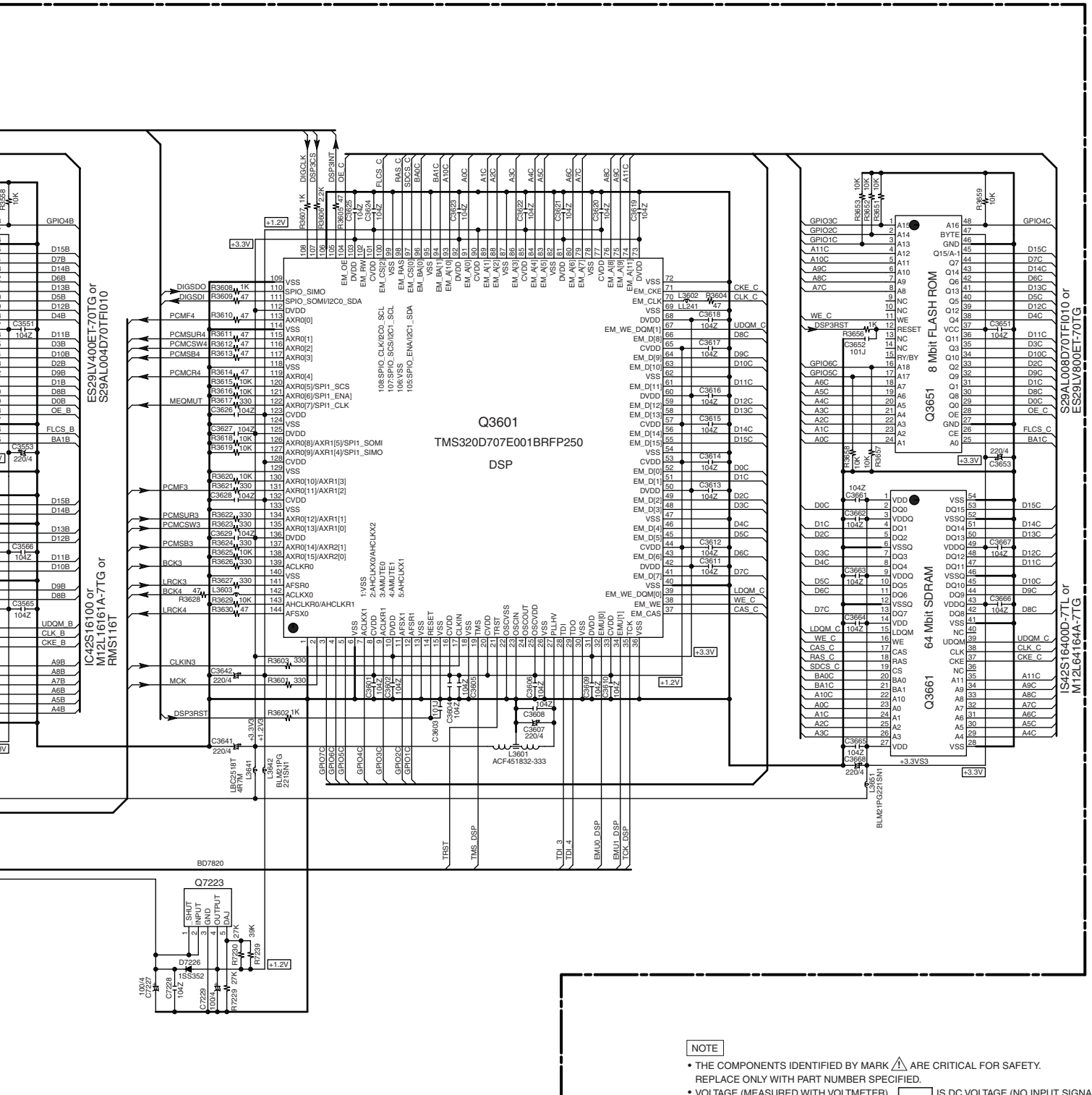
L3596

L3597

L3598

L3599

L3600



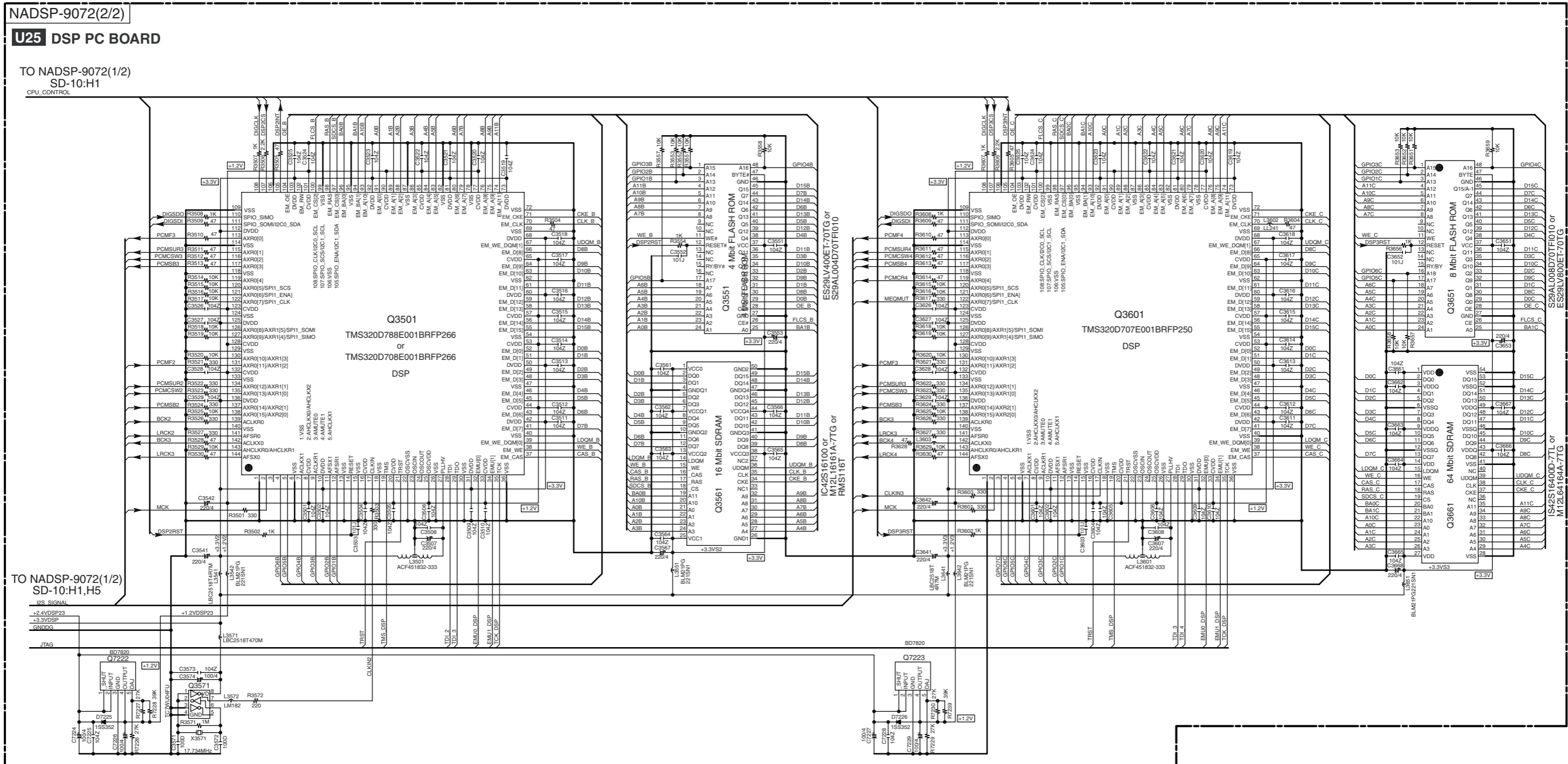
NOTE

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- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS () ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.03uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PCB BOARD ARE THE PRINTING SIDE OF THE PARTS.
EX) — PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

SCHEMATIC DIAGRAMS-11 (SD-11) DSP SECTION

1
2
3
4
5



- NOTE**
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 - ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
 - ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
 - ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
 - ELECTROLYTIC CAPACITORS () ARE IN uF/WV.
 - ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
 - EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033uF
 - ALL RESISTORS ARE IN OHMS 1/4Watts UNLESS OTHERWISE NOTED.
 - THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
 - EX) PRINTING SIDE
 - CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

A

B

C

D

SCHEMATIC DIAGRAMS-12 (SD-12) XM/SIRIUS SECTION

1

2

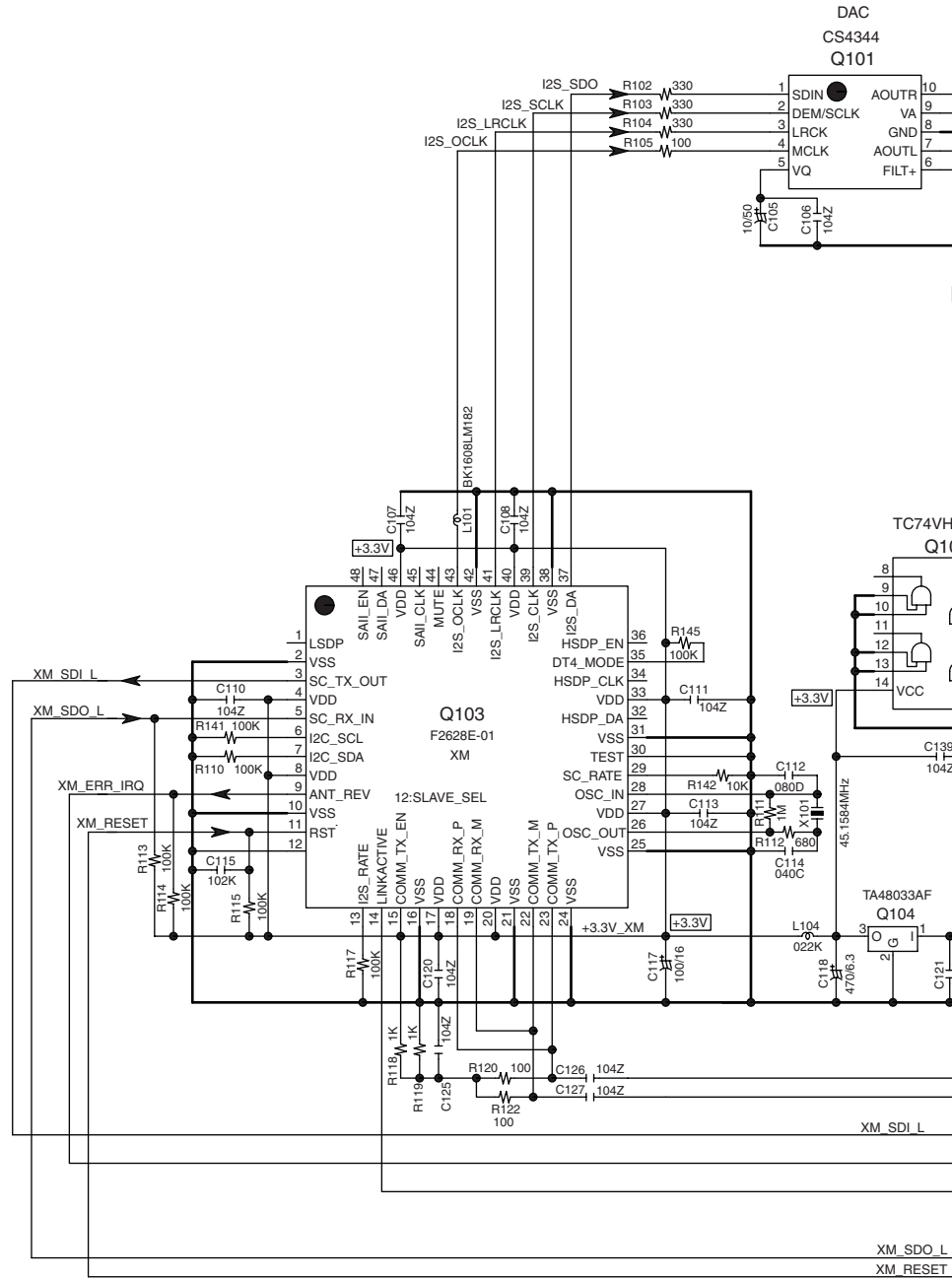
3

4

5

NARF-9077

U30 XM PC BOARD



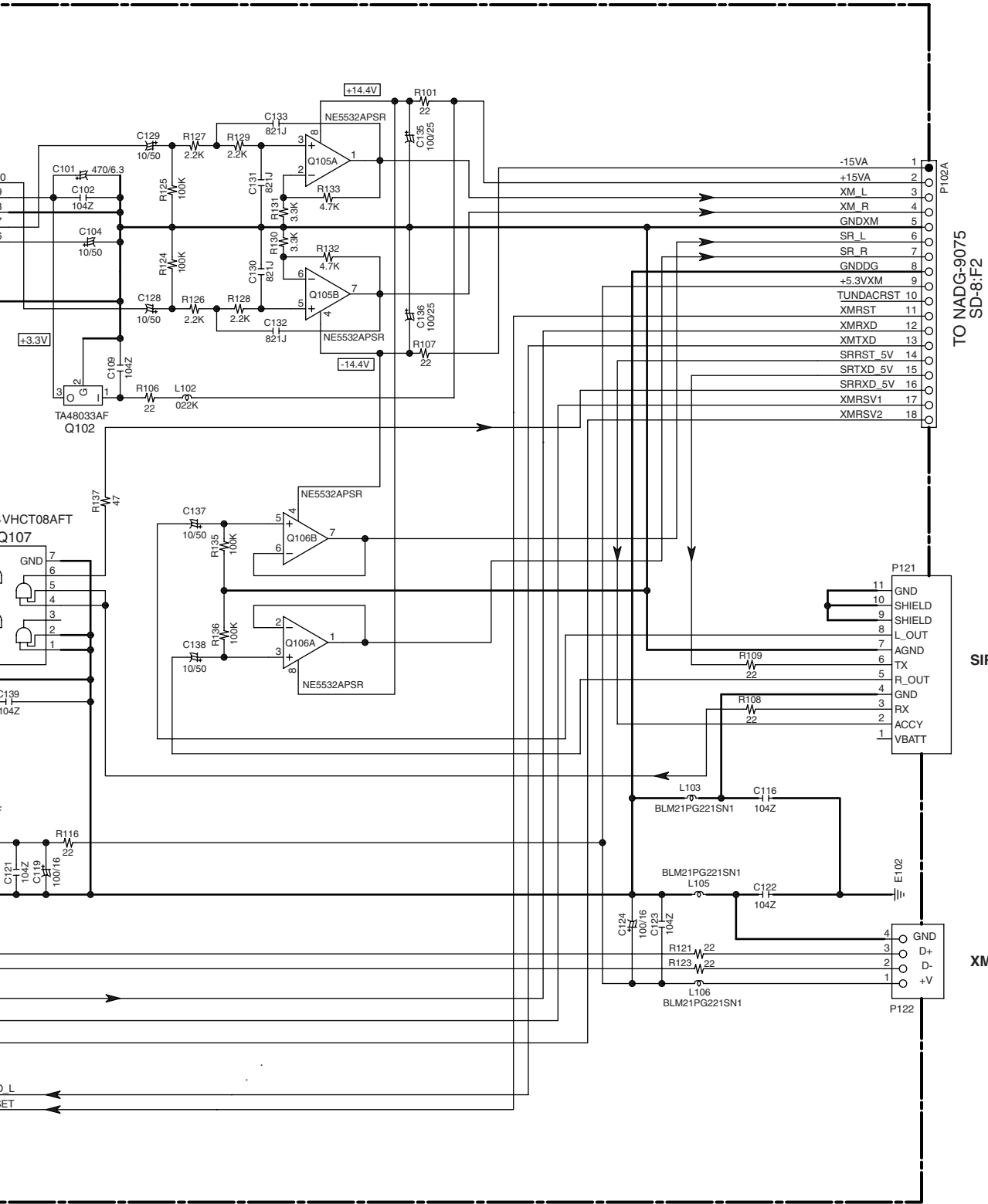
<Note>
SD-x:XY is short for Schematic Diagram-x and
each socket's location, X=A to H, Y=1 to 5.

E

F

G

H



SCHEMATIC DIAGRAMS-12 (SD-12)
XM/SIRIUS SECTION

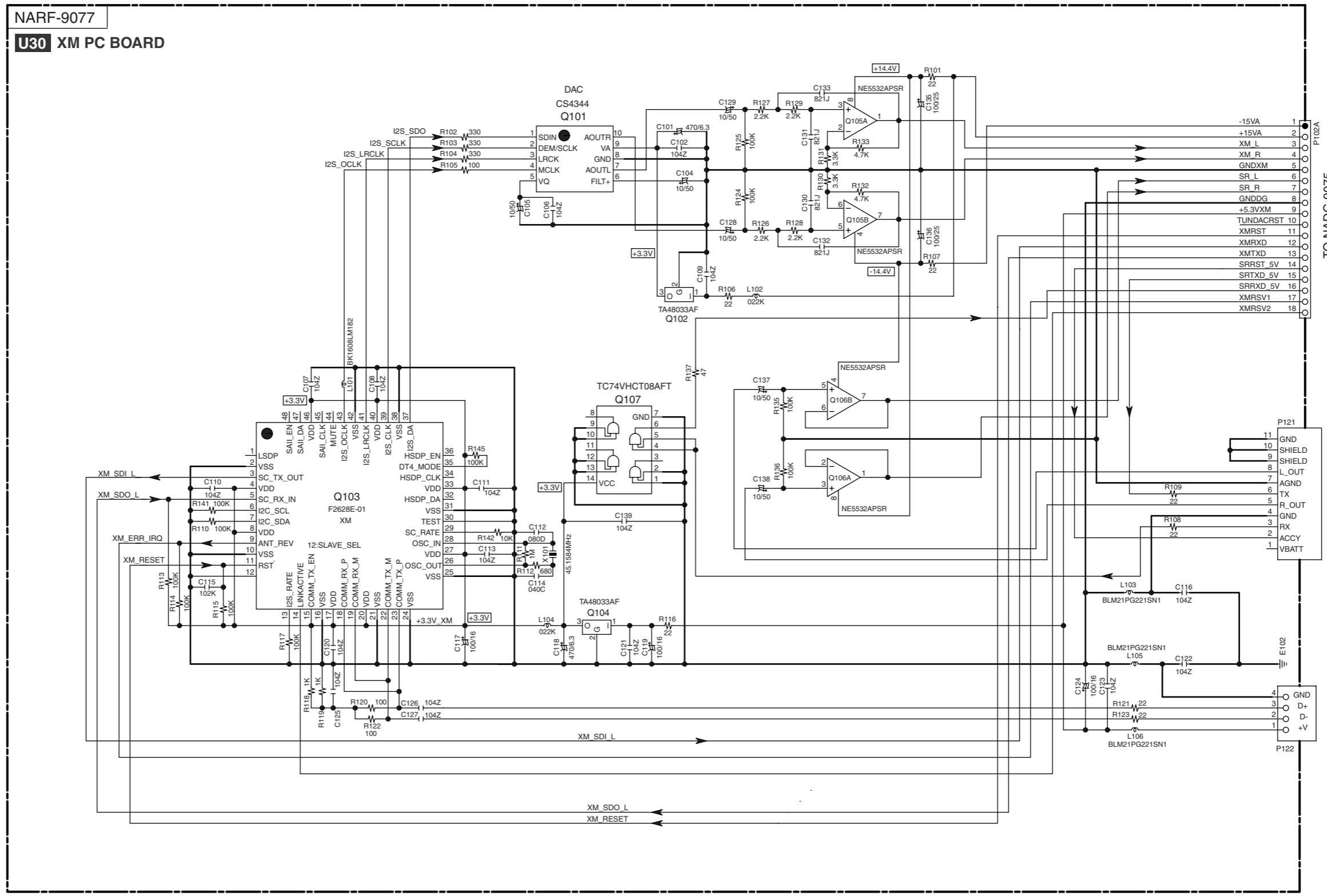
1

2

3

4

5



<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

SCHEMATIC DIAGRAMS-13 (SD-13) DISPLAY SECTION

A

B

C

D

1

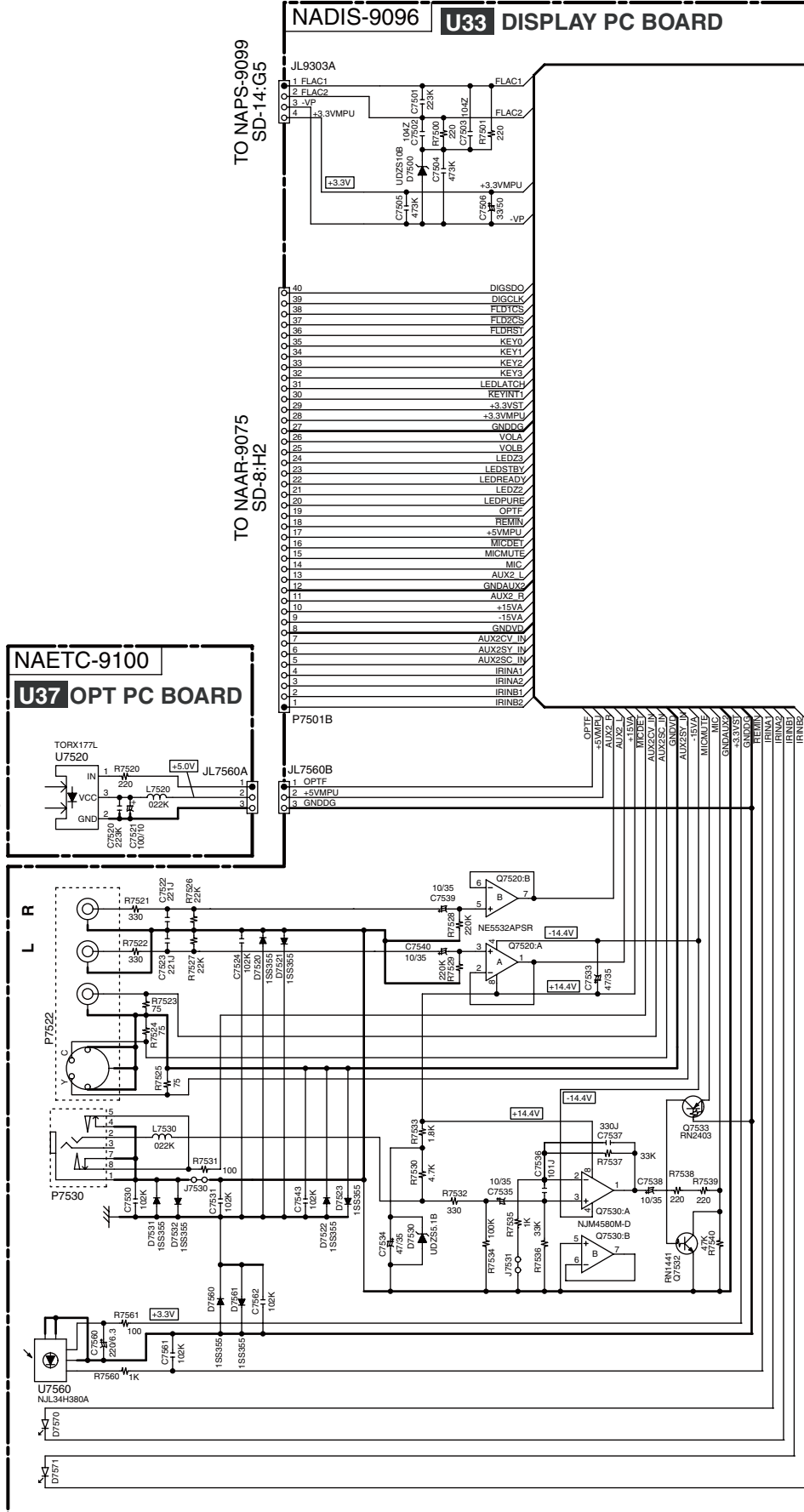
2

3

4

5

AUX 2 INPUT
(FRONT)
DIGITAL
AUDIO
VIDEO
S VIDEO
SETUP MIC

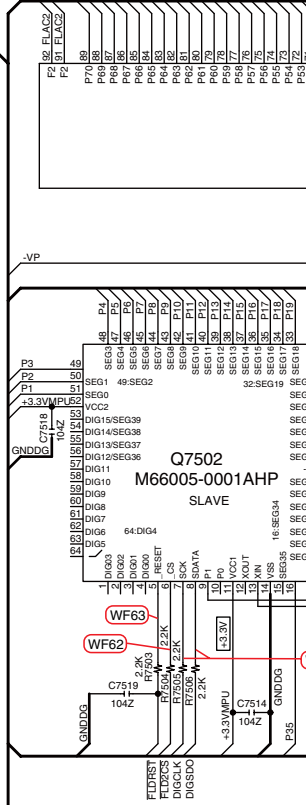
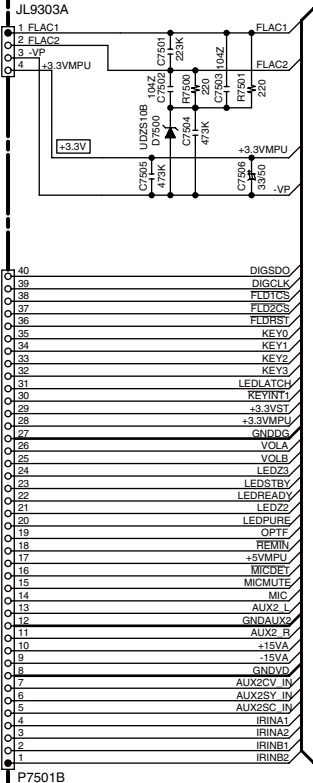


NADIS-9096 U33 DISPLAY PC BOARD

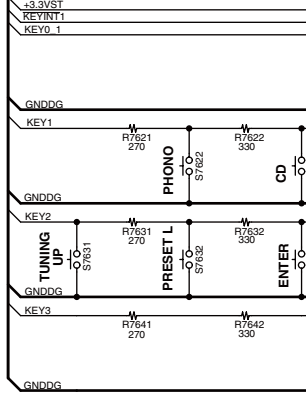
NAETC-9100 U37 OPT PC BOARD

TO NAPS-9099
SD-14:G5

TO NAAR-9075
SD-8:H2



<Note>
Refer to SCHEMATIC DIAGRAM-13
(SD-13)
for FL driver IC control waveforms.



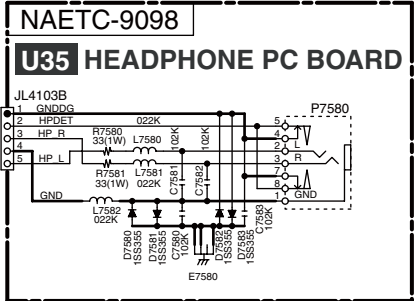
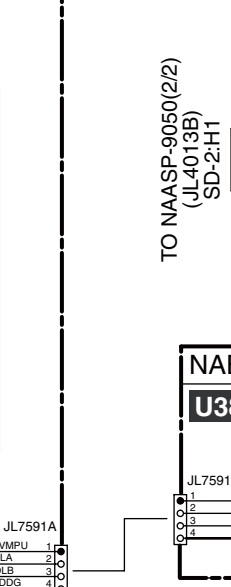
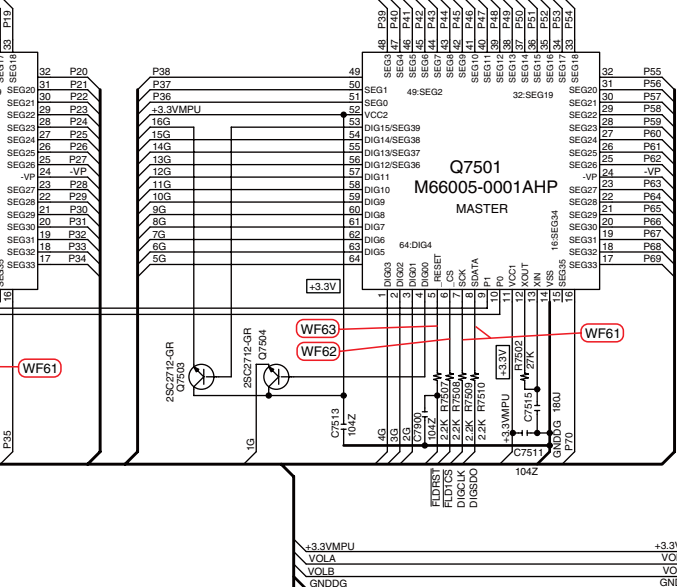
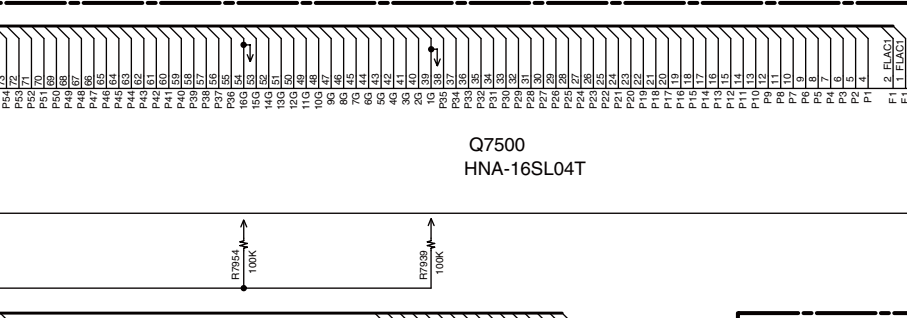
E

F

G

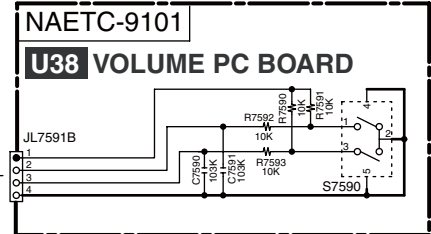
H

<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

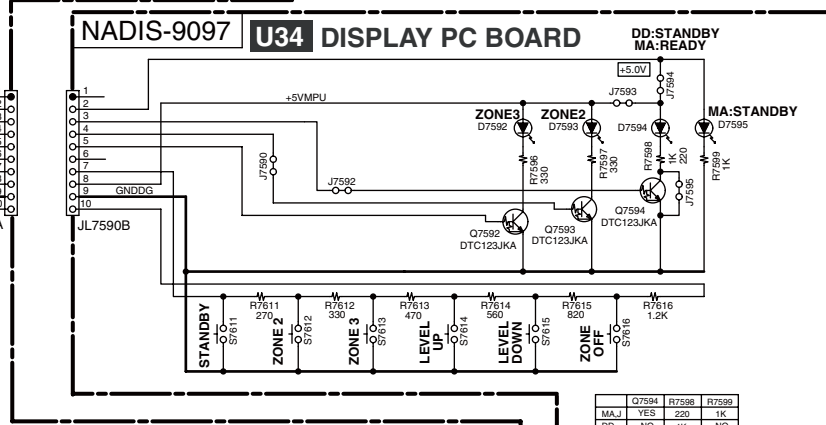


HEADPHONE

TO NAASP-9050(2)
(JL4013B)
SD-2:HI



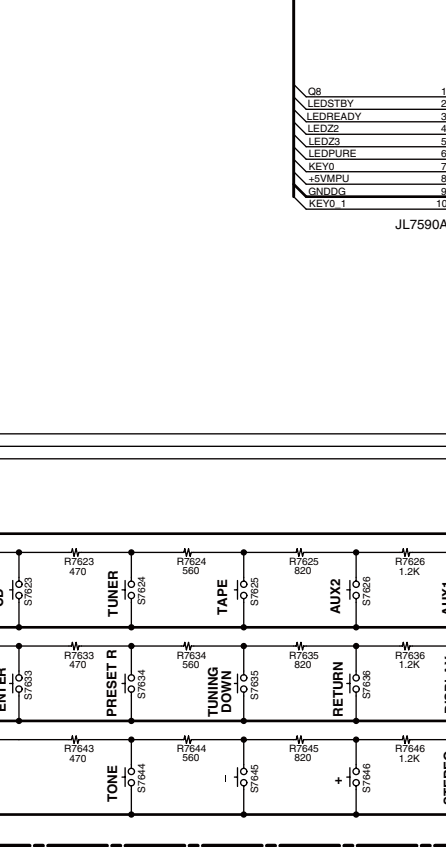
MASTER VOLUME



Q7594	R7598	R7599
MAJ	YES	220 1K
DD	NO	1K

D7594	D7595
MA	SEL4910D-D
DD	SLI-343JURC-TE7

J7592	J7593	J7594	J7595
MA	YES	YES	NO
DD	NO	NO	YES



NOTE

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- ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS () ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
- EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
- EX) PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

SCHEMATIC DIAGRAMS-13 (SD-13) DISPLAY SECTION

<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

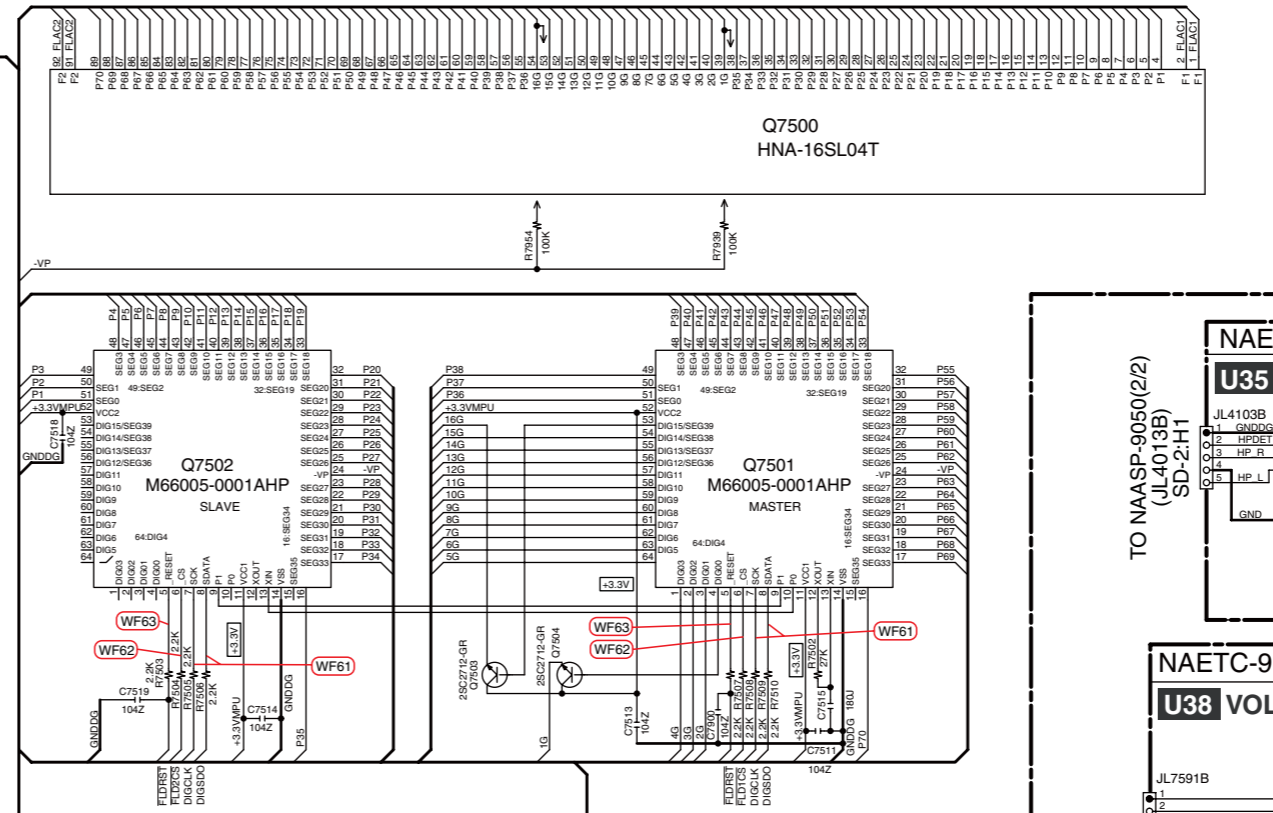
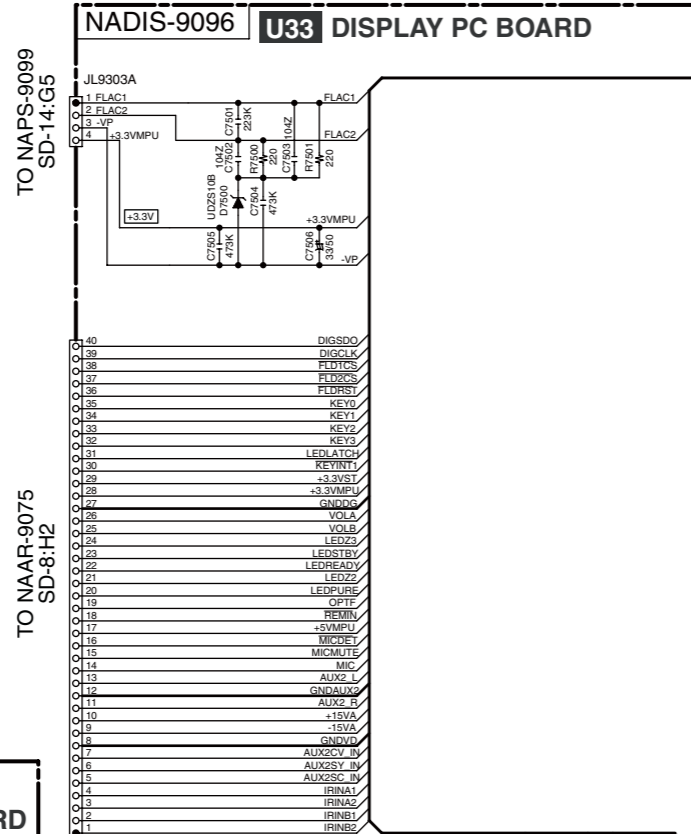
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2

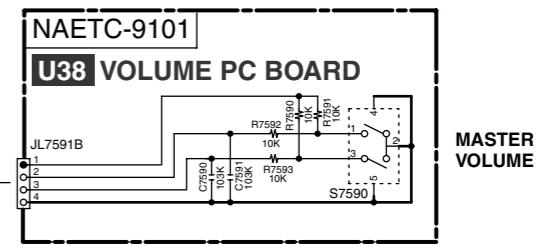
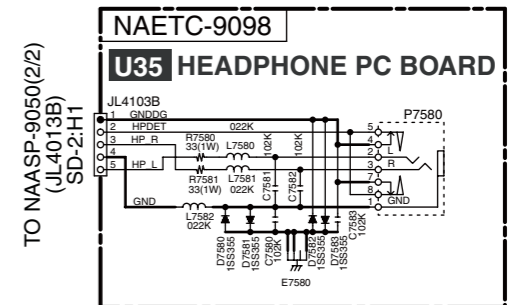
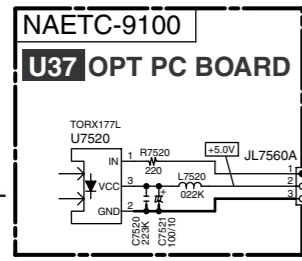
3

4

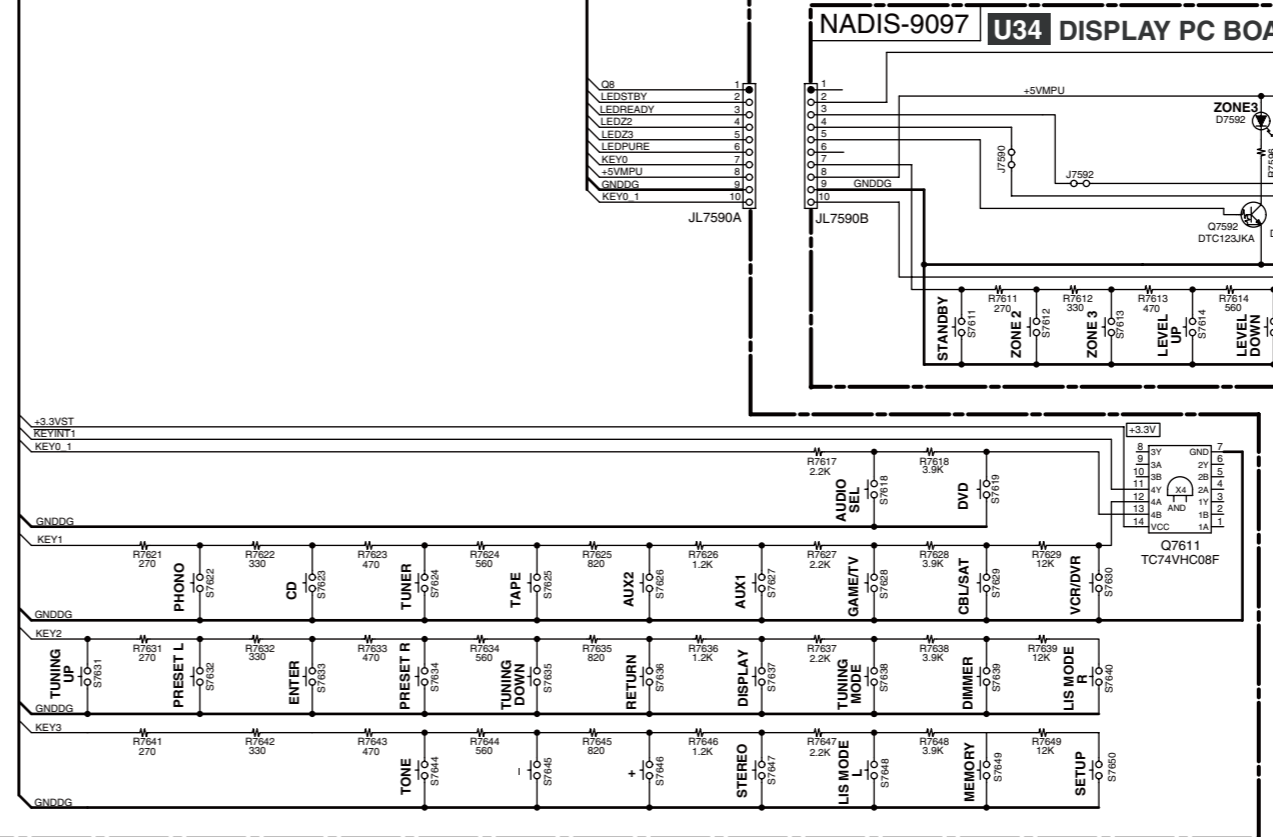
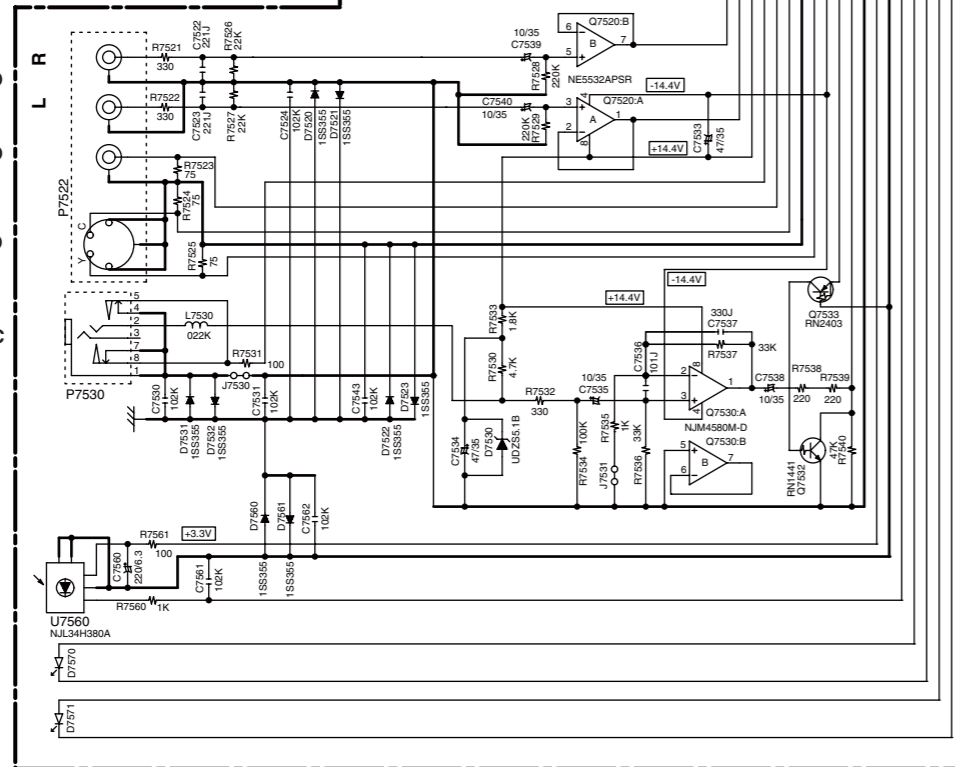
5



<Note>
Refer to SCHEMATIC DIAGRAM-13 (SD-13) for FL driver IC control waveforms.



AUX 2 INPUT (FRONT)
DIGITAL
AUDIO L R
VIDEO
S VIDEO
SETUP MIC



D7594	R7598	R7599	
MA J	YES	220	1K
DD	NO	1K	NO

D7594	D7595	
MA	SEL48100-D	SLI-343URC-TET
DD	SLI-343URC-TET	NO

J7592	J7593	J7594	J7595	
MA	YES	YES	NO	
DD	NO	NO	YES	YES

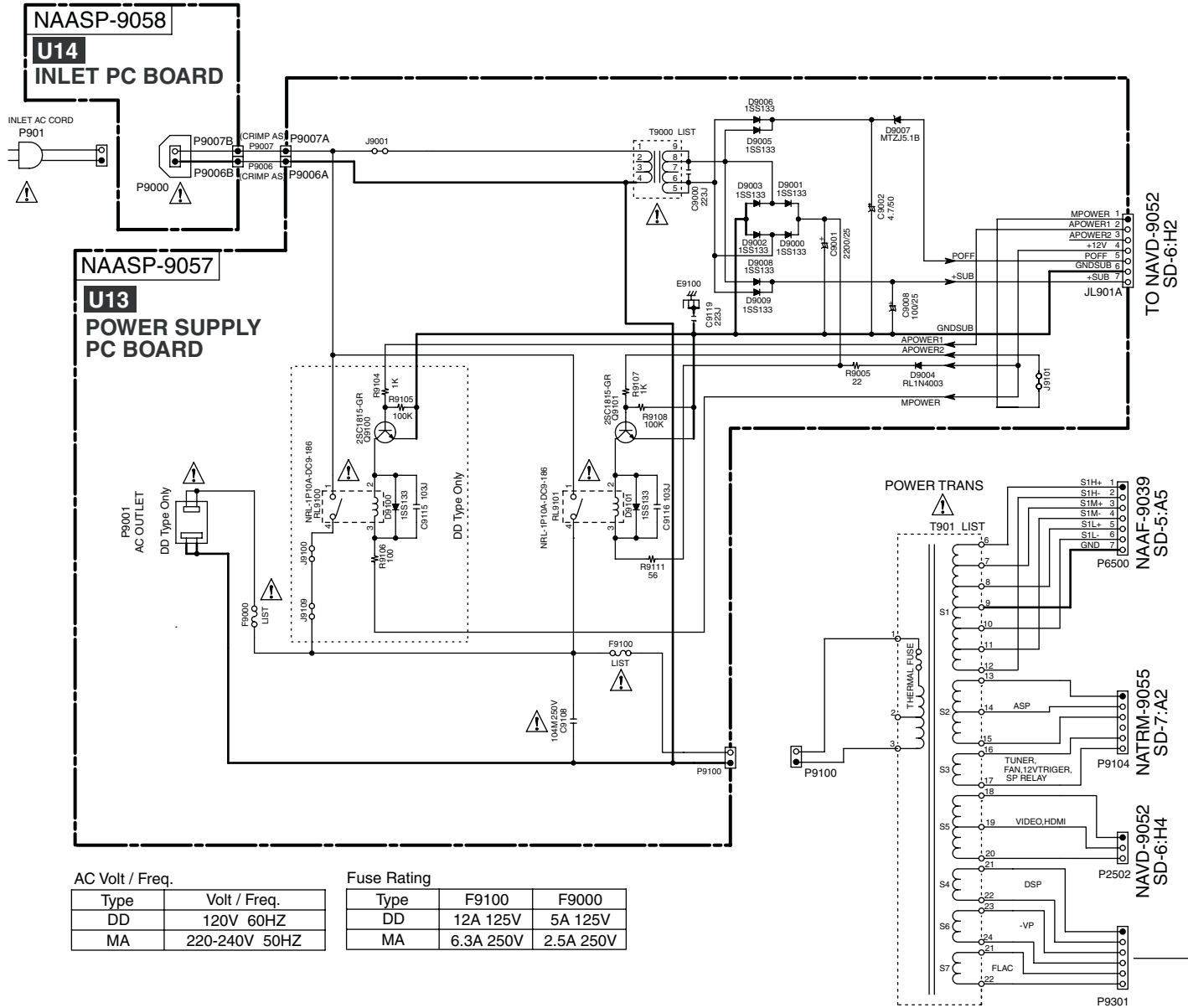
NOTE

- THE COMPONENTS IDENTIFIED BY MARK △ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER) □ IS DC VOLTAGE.(NO INPUT SIGNAL).
- ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS (⑆) ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED. EX) 030-3pF, 330-33pF, 331-330pF, 333-0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS. EX) □□□ PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

SCHEMATIC DIAGRAMS-14 (SD-14)
POWER SUPPLY SECTION

STBY Trans T9000

Type	Rating
DD	NPT-1520JQ
MA	NPT-1520GQ



AC Volt / Freq.	
Type	Volt / Freq.
DD	120V 60HZ
MA	220-240V 50HZ

Fuse Rating		
Type	F9100	F9000
DD	12A 125V	5A 125V
MA	6.3A 250V	2.5A 250V

<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

NOTE

- THE COMPONENTS IDENTIFIED BY MARK ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER) IS DC VOLTAGE.(NO INPUT SIGNAL).
- ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS () ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
EX) PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

Power Trans T901

Type	Rating
DD	NPT-1553D
MA	NPT-1553M

1

2

3

4

5

TO NAVD-9052
SD-6:H2

NAAF-9039
SD-5:A5

NATRM-9055
SD-7:A2

NAVD-9052
SD-6:H4



CAUTION

FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH FUSE OF SAME TYPE AND RATING INDICATED.



ATTENTION

AFIN D'ASSURER UNE PROTECTION PERMANENTE CONTRE LES RISQUES D'INCENDIE, REMPLACER UNIQUEMENT PAR UN FUSIBLE DE MEME TYPE ET CALIBRATION COMME INDIQUE.

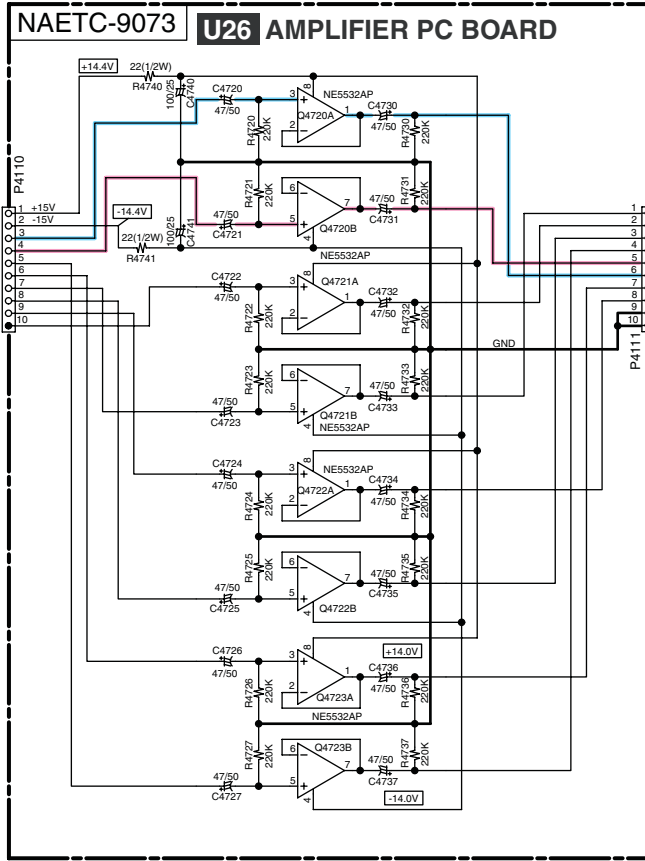


THIS SYMBOL LOCATED NEAR THE FUSE INDICATES THAT THE FUSE USED IS SLOW OPERATING TYPE FOR CONTINUED PROTECTION AGAINST FIRE FUSE HAZARD, REPLACE WITH SAME TYPE FUSE. FOR FUSE RATING REFER TO THE MAKING ADJACENT TO THE SYMBOL.

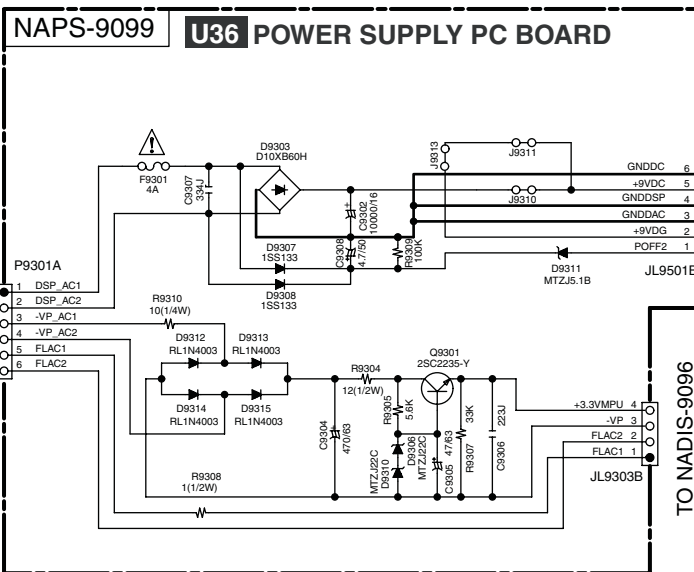


CE SYMBOLE INDIQUE QUE LE FUSIBLE UTILISE EST A LENT, E POUR UNE PROTECTION PERMANENTE, N'UTILISER QUE DES FUSIBLES DE MEME TYPE. CE DARNIER EST INDIQUE LA QU LE PRESENT SYMBOLE EST APPOSE.

TO NAASP-9050(2/2)
SD-2:A3



TO NAASP-9050(2/2)
SD-2:A3



TO NADG-9074
SD-9:H4

TO NADIS-9096
SD-13:B1

**SCHEMATIC DIAGRAMS-14 (SD-14)
POWER SUPPLY SECTION**

1

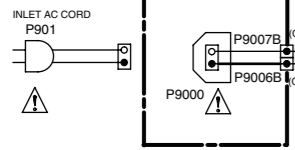
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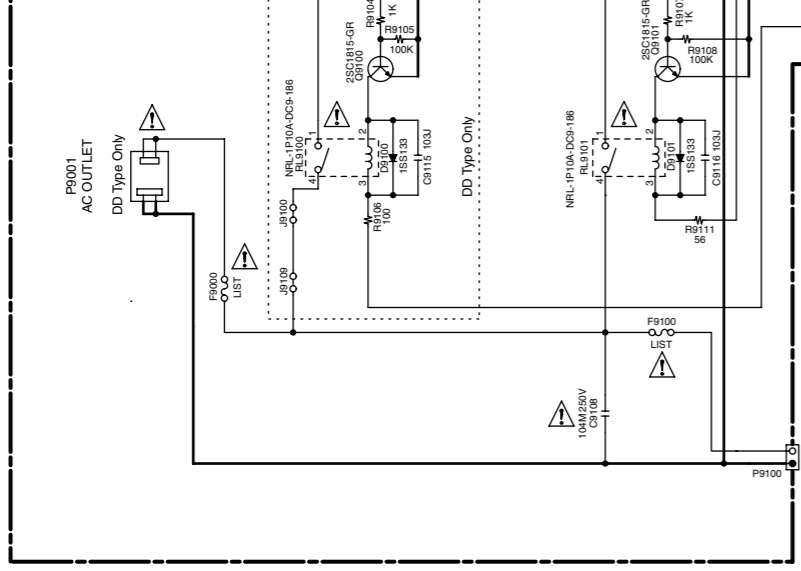
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5

NAASP-9058
U14
INLET PC BOARD



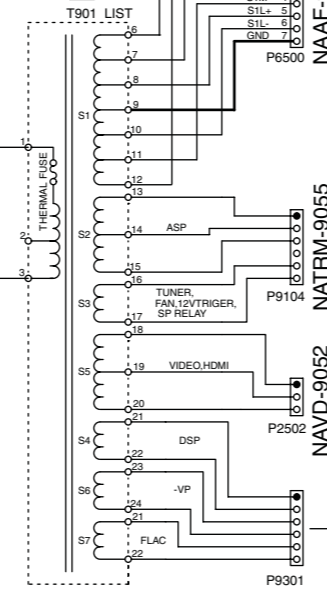
NAASP-9057
U13
POWER SUPPLY PC BOARD



STBY Trans T9000

Type	Rating
DD	NPT-1520JQ
MA	NPT-1520GQ

POWER TRANS
T901 LIST



Power Trans T901

Type	Rating
DD	NPT-1553D
MA	NPT-1553M

AC Volt / Freq.

Type	Volt / Freq.
DD	120V 60HZ
MA	220-240V 50HZ

Fuse Rating

Type	F9100	F9000
DD	12A 125V	5A 125V
MA	6.3A 250V	2.5A 250V

<Note>
SD-x:Y is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

- NOTE**
- THE COMPONENTS IDENTIFIED BY MARK ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
 - VOLTAGE (MEASURED WITH VOLTMETER) IS DC VOLTAGE.(NO INPUT SIGNAL).
 - ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
 - ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
 - ALL DIODES ARE EQUIVALENT TO 1S1133 UNLESS OTHERWISE NOTED.
 - ELECTROLYTIC CAPACITORS () ARE IN uF/VV.
 - ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033uF
 - ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
 - THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
EX) PRINTING SIDE
 - CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

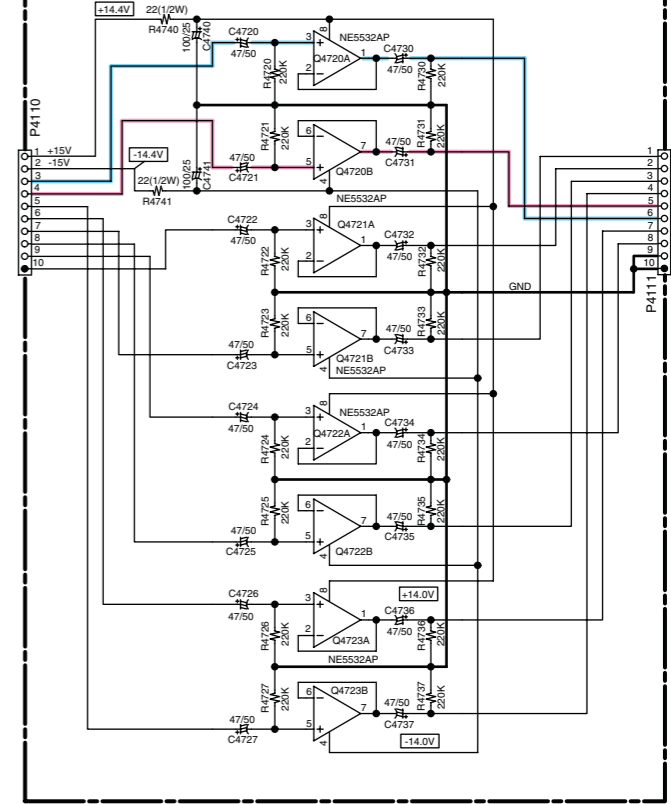
CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH FUSE OF SAME TYPE AND RATING INDICATED.

ATTENTION
AFIN D'ASSURER UNE PROTECTION PERMANENTE CONTRE LES RISQUES D'INCENDIE, REMPLACER UNIQUEMENT PAR UN FUSIBLE DE MEME TYPE ET CALIBRATION COMME INDIQUE.

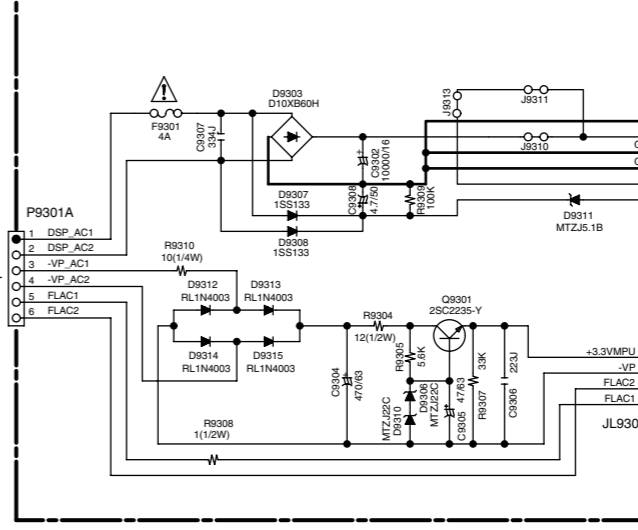
THIS SYMBOL LOCATED NEAR THE FUSE INDICATES THAT THE FUSE USED IS SLOW OPERATING TYPE FOR CONTINUED PROTECTION AGAINST FIRE HAZARD.REPLACE WITH SAME TYPE FUSE. FOR FUSE RATING REFER TO THE MAKING ADJACENT TO THE SYMBOL.

CE SYMBOLE INDIQUE QUE LE FUSIBLE UTILISE EST A LENT, E POUR UNE PROTECTION PERMANENTE.N'UTILISER QUE DES FUSIBLES DE MEME TYPE. CE DARNIER EST INDIQUE LA QU LE PRESENT SYMBOLE EST APOSE.

NAETC-9073 **U26** **AMPLIFIER PC BOARD**



NAPS-9099 **U36** **POWER SUPPLY PC BOARD**



TO NAASP-9050(2/2)
SD-2:A3

TO NAASP-9050(2/2)
SD-2:A3

TO NADG-9074
SD-9:H4

TO NADIS-9096
SD-13:B1

SCHEMATIC DIAGRAMS-15 (SD-15) HDMI SECTION

NAHDM-9107(1/2)
U42
HDMI PC BOARD

1

2

3

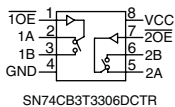
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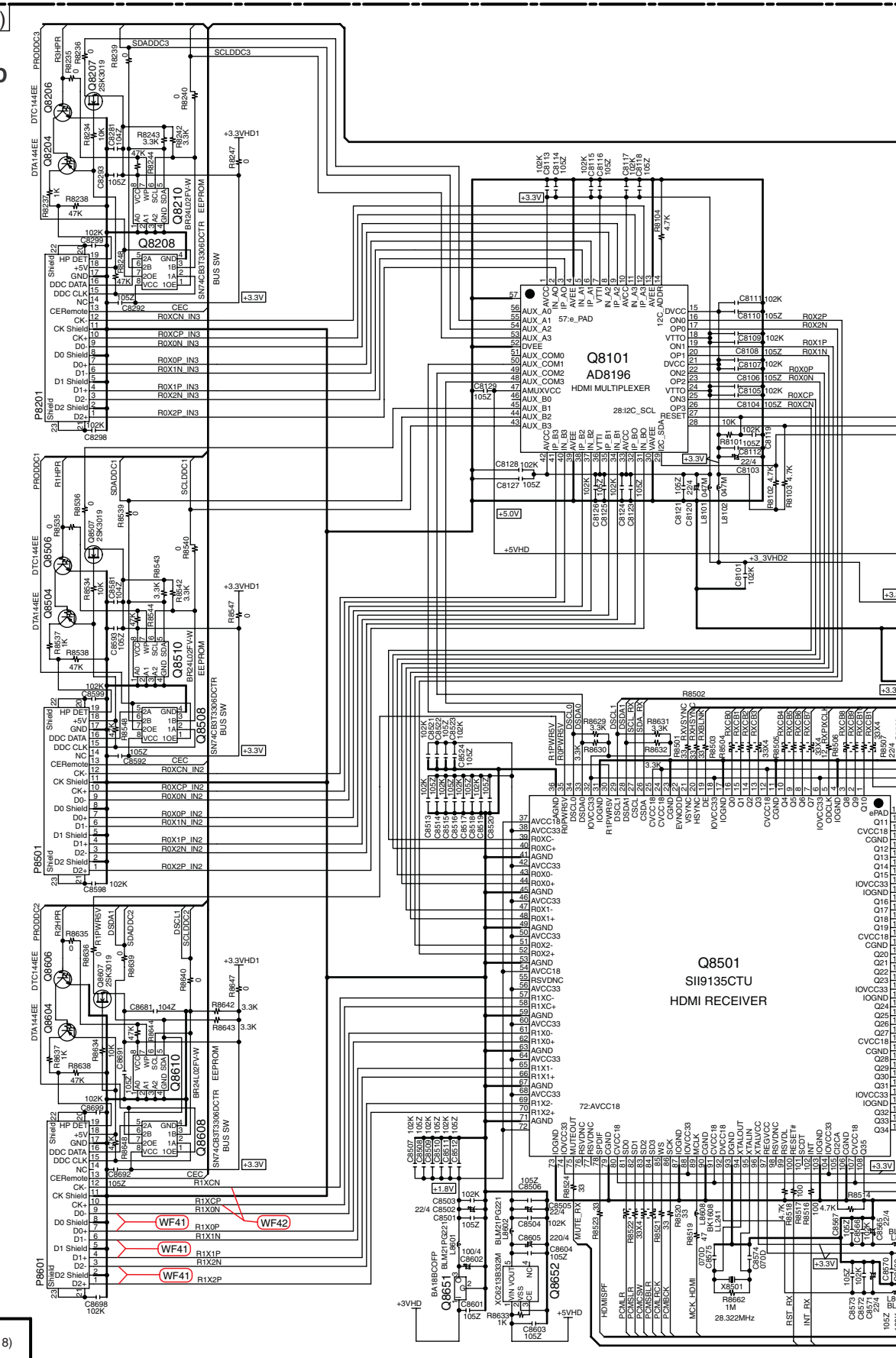
HDMI IN3

HDMI IN2

HDMI IN1

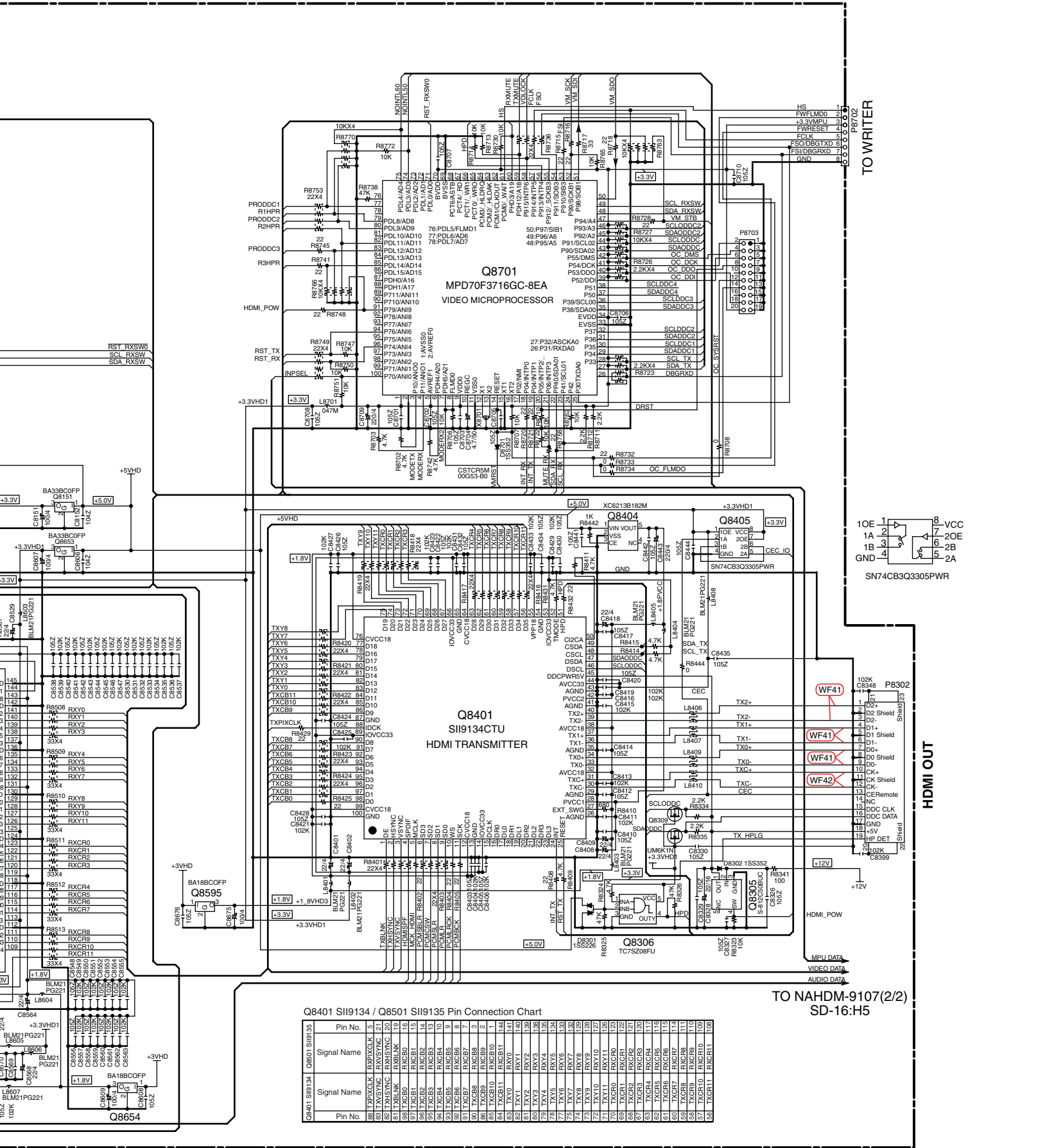


<Note>
Refer to SCHEMATIC DIAGRAM-18 (SD-18)
for HDMI signal waveforms.



Q8501
SI19135CTU
HDMI RECEIVER

<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.



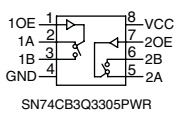
Q8401 SII9134 / Q8501 SII9135 Pin Connection Chart

Q8401 SII9134	Pin No.	Signal Name	Q8501 SII9135	Pin No.	Signal Name
88	TXPCLK	TXPCLK	5	TXPCLK	TXPCLK
89	TXNCLK	TXNCLK	6	TXNCLK	TXNCLK
90	TXDATA	TXDATA	7	TXDATA	TXDATA
91	TXDATA	TXDATA	8	TXDATA	TXDATA
92	TXDATA	TXDATA	9	TXDATA	TXDATA
93	TXDATA	TXDATA	10	TXDATA	TXDATA
94	TXDATA	TXDATA	11	TXDATA	TXDATA
95	TXDATA	TXDATA	12	TXDATA	TXDATA
96	TXDATA	TXDATA	13	TXDATA	TXDATA
97	TXDATA	TXDATA	14	TXDATA	TXDATA
98	TXDATA	TXDATA	15	TXDATA	TXDATA
99	TXDATA	TXDATA	16	TXDATA	TXDATA
100	TXDATA	TXDATA	17	TXDATA	TXDATA
101	TXDATA	TXDATA	18	TXDATA	TXDATA
102	TXDATA	TXDATA	19	TXDATA	TXDATA
103	TXDATA	TXDATA	20	TXDATA	TXDATA
104	TXDATA	TXDATA	21	TXDATA	TXDATA
105	TXDATA	TXDATA	22	TXDATA	TXDATA
106	TXDATA	TXDATA	23	TXDATA	TXDATA
107	TXDATA	TXDATA	24	TXDATA	TXDATA
108	TXDATA	TXDATA	25	TXDATA	TXDATA
109	TXDATA	TXDATA	26	TXDATA	TXDATA
110	TXDATA	TXDATA	27	TXDATA	TXDATA
111	TXDATA	TXDATA	28	TXDATA	TXDATA
112	TXDATA	TXDATA	29	TXDATA	TXDATA
113	TXDATA	TXDATA	30	TXDATA	TXDATA
114	TXDATA	TXDATA	31	TXDATA	TXDATA
115	TXDATA	TXDATA	32	TXDATA	TXDATA
116	TXDATA	TXDATA	33	TXDATA	TXDATA
117	TXDATA	TXDATA	34	TXDATA	TXDATA
118	TXDATA	TXDATA	35	TXDATA	TXDATA
119	TXDATA	TXDATA	36	TXDATA	TXDATA
120	TXDATA	TXDATA	37	TXDATA	TXDATA
121	TXDATA	TXDATA	38	TXDATA	TXDATA
122	TXDATA	TXDATA	39	TXDATA	TXDATA
123	TXDATA	TXDATA	40	TXDATA	TXDATA
124	TXDATA	TXDATA	41	TXDATA	TXDATA
125	TXDATA	TXDATA	42	TXDATA	TXDATA
126	TXDATA	TXDATA	43	TXDATA	TXDATA
127	TXDATA	TXDATA	44	TXDATA	TXDATA
128	TXDATA	TXDATA	45	TXDATA	TXDATA
129	TXDATA	TXDATA	46	TXDATA	TXDATA
130	TXDATA	TXDATA	47	TXDATA	TXDATA
131	TXDATA	TXDATA	48	TXDATA	TXDATA
132	TXDATA	TXDATA	49	TXDATA	TXDATA
133	TXDATA	TXDATA	50	TXDATA	TXDATA
134	TXDATA	TXDATA	51	TXDATA	TXDATA
135	TXDATA	TXDATA	52	TXDATA	TXDATA
136	TXDATA	TXDATA	53	TXDATA	TXDATA
137	TXDATA	TXDATA	54	TXDATA	TXDATA
138	TXDATA	TXDATA	55	TXDATA	TXDATA
139	TXDATA	TXDATA	56	TXDATA	TXDATA
140	TXDATA	TXDATA	57	TXDATA	TXDATA
141	TXDATA	TXDATA	58	TXDATA	TXDATA
142	TXDATA	TXDATA	59	TXDATA	TXDATA
143	TXDATA	TXDATA	60	TXDATA	TXDATA
144	TXDATA	TXDATA	61	TXDATA	TXDATA
145	TXDATA	TXDATA	62	TXDATA	TXDATA
146	TXDATA	TXDATA	63	TXDATA	TXDATA
147	TXDATA	TXDATA	64	TXDATA	TXDATA
148	TXDATA	TXDATA	65	TXDATA	TXDATA
149	TXDATA	TXDATA	66	TXDATA	TXDATA
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151	TXDATA	TXDATA	68	TXDATA	TXDATA
152	TXDATA	TXDATA	69	TXDATA	TXDATA
153	TXDATA	TXDATA	70	TXDATA	TXDATA
154	TXDATA	TXDATA	71	TXDATA	TXDATA
155	TXDATA	TXDATA	72	TXDATA	TXDATA
156	TXDATA	TXDATA	73	TXDATA	TXDATA
157	TXDATA	TXDATA	74	TXDATA	TXDATA
158	TXDATA	TXDATA	75	TXDATA	TXDATA
159	TXDATA	TXDATA	76	TXDATA	TXDATA
160	TXDATA	TXDATA	77	TXDATA	TXDATA
161	TXDATA	TXDATA	78	TXDATA	TXDATA
162	TXDATA	TXDATA	79	TXDATA	TXDATA
163	TXDATA	TXDATA	80	TXDATA	TXDATA
164	TXDATA	TXDATA	81	TXDATA	TXDATA
165	TXDATA	TXDATA	82	TXDATA	TXDATA
166	TXDATA	TXDATA	83	TXDATA	TXDATA
167	TXDATA	TXDATA	84	TXDATA	TXDATA
168	TXDATA	TXDATA	85	TXDATA	TXDATA
169	TXDATA	TXDATA	86	TXDATA	TXDATA
170	TXDATA	TXDATA	87	TXDATA	TXDATA
171	TXDATA	TXDATA	88	TXDATA	TXDATA
172	TXDATA	TXDATA	89	TXDATA	TXDATA
173	TXDATA	TXDATA	90	TXDATA	TXDATA
174	TXDATA	TXDATA	91	TXDATA	TXDATA
175	TXDATA	TXDATA	92	TXDATA	TXDATA
176	TXDATA	TXDATA	93	TXDATA	TXDATA
177	TXDATA	TXDATA	94	TXDATA	TXDATA
178	TXDATA	TXDATA	95	TXDATA	TXDATA
179	TXDATA	TXDATA	96	TXDATA	TXDATA
180	TXDATA	TXDATA	97	TXDATA	TXDATA
181	TXDATA	TXDATA	98	TXDATA	TXDATA
182	TXDATA	TXDATA	99	TXDATA	TXDATA
183	TXDATA	TXDATA	100	TXDATA	TXDATA

TO NAHDM-9107(2/2)
SD-16:H5

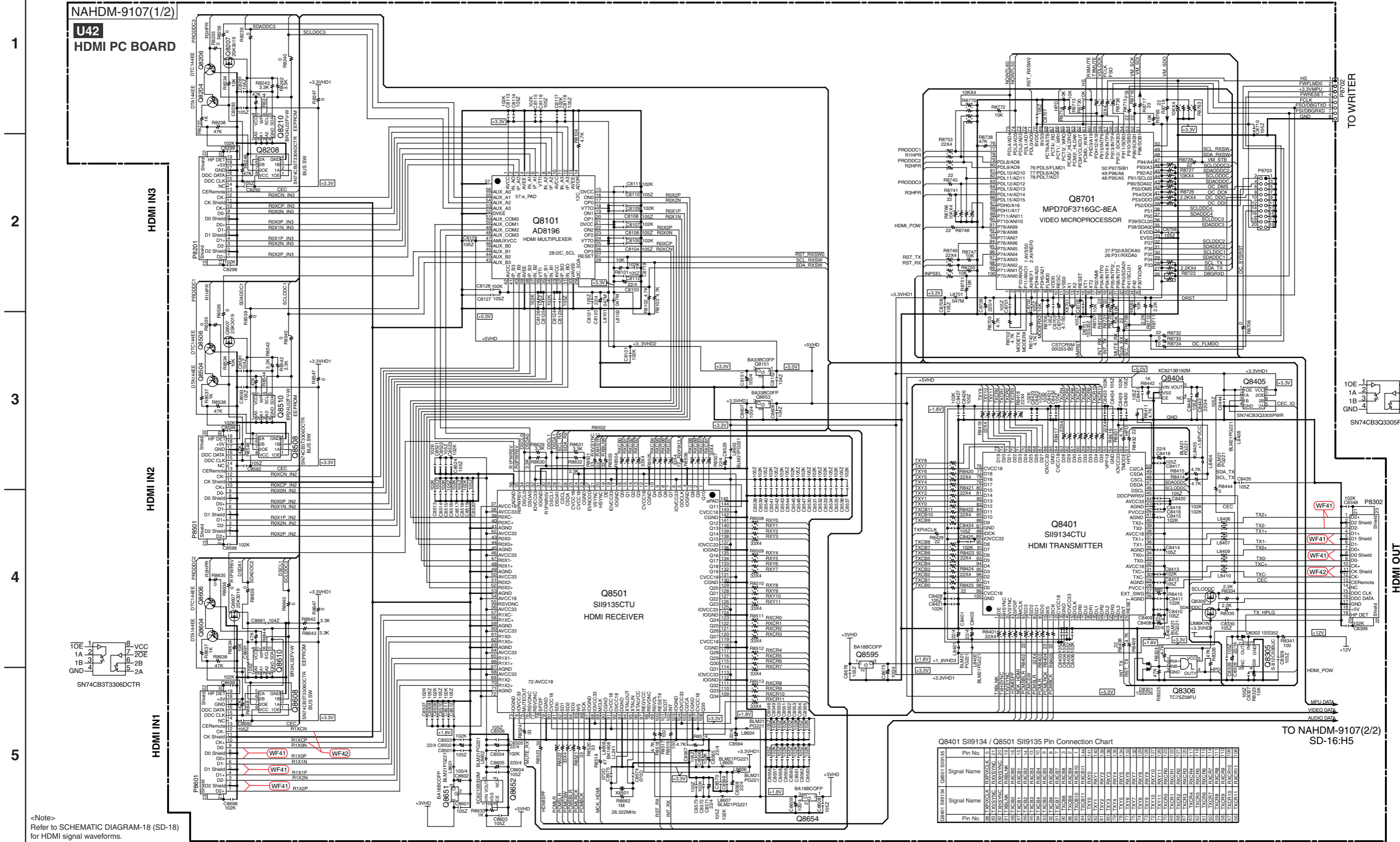
TO WRITER

HDMI OUT



SCHEMATIC DIAGRAMS-15 (SD-15) HDMI SECTION

<Note>
SD-x:XY is short for Schematic Diagram-x and
each socket's location, X=A to H, Y=1 to 5.



NAHDM-9107(1/2)
U42
HDMI PC BOARD

HDMI IN3

HDMI IN2

HDMI IN1

TO WRITER

HDMI OUT

TO NAHDM-9107(2/2)
SD-16:H5

Q8401 SII9134 / Q8501 SII9135 Pin Connection Chart

Q8401 SII9134	Q8501 SII9135	Signal Name	Pin No.
56	56	TXPCLK	1
57	57	TXNCLK	2
58	58	TXP0	3
59	59	TXN0	4
60	60	TXP1	5
61	61	TXN1	6
62	62	TXP2	7
63	63	TXN2	8
64	64	TXP3	9
65	65	TXN3	10
66	66	TXP4	11
67	67	TXN4	12
68	68	TXP5	13
69	69	TXN5	14
70	70	TXP6	15
71	71	TXN6	16
72	72	TXP7	17
73	73	TXN7	18
74	74	TXP8	19
75	75	TXN8	20
76	76	TXP9	21
77	77	TXN9	22
78	78	TXP10	23
79	79	TXN10	24
80	80	TXP11	25
81	81	TXN11	26
82	82	TXP12	27
83	83	TXN12	28
84	84	TXP13	29
85	85	TXN13	30
86	86	TXP14	31
87	87	TXN14	32
88	88	TXP15	33
89	89	TXN15	34
90	90	TXP16	35
91	91	TXN16	36
92	92	TXP17	37
93	93	TXN17	38
94	94	TXP18	39
95	95	TXN18	40
96	96	TXP19	41
97	97	TXN19	42
98	98	TXP20	43
99	99	TXN20	44
100	100	TXP21	45
101	101	TXN21	46
102	102	TXP22	47
103	103	TXN22	48
104	104	TXP23	49
105	105	TXN23	50
106	106	TXP24	51
107	107	TXN24	52
108	108	TXP25	53
109	109	TXN25	54
110	110	TXP26	55
111	111	TXN26	56
112	112	TXP27	57
113	113	TXN27	58
114	114	TXP28	59
115	115	TXN28	60
116	116	TXP29	61
117	117	TXN29	62
118	118	TXP30	63
119	119	TXN30	64
120	120	TXP31	65
121	121	TXN31	66
122	122	TXP32	67
123	123	TXN32	68
124	124	TXP33	69
125	125	TXN33	70
126	126	TXP34	71
127	127	TXN34	72
128	128	TXP35	73
129	129	TXN35	74
130	130	TXP36	75
131	131	TXN36	76
132	132	TXP37	77
133	133	TXN37	78
134	134	TXP38	79
135	135	TXN38	80
136	136	TXP39	81
137	137	TXN39	82
138	138	TXP40	83
139	139	TXN40	84
140	140	TXP41	85
141	141	TXN41	86
142	142	TXP42	87
143	143	TXN42	88
144	144	TXP43	89
145	145	TXN43	90
146	146	TXP44	91
147	147	TXN44	92
148	148	TXP45	93
149	149	TXN45	94
150	150	TXP46	95
151	151	TXN46	96
152	152	TXP47	97
153	153	TXN47	98
154	154	TXP48	99
155	155	TXN48	100

<Note>
Refer to SCHEMATIC DIAGRAM-18 (SD-18)
for HDMI signal waveforms.

A

B

C

D

SCHEMATIC DIAGRAMS-16 (SD-16) HDMI SECTION

NAHDM-9107(2/2)

U42 HDMI PC BOARD

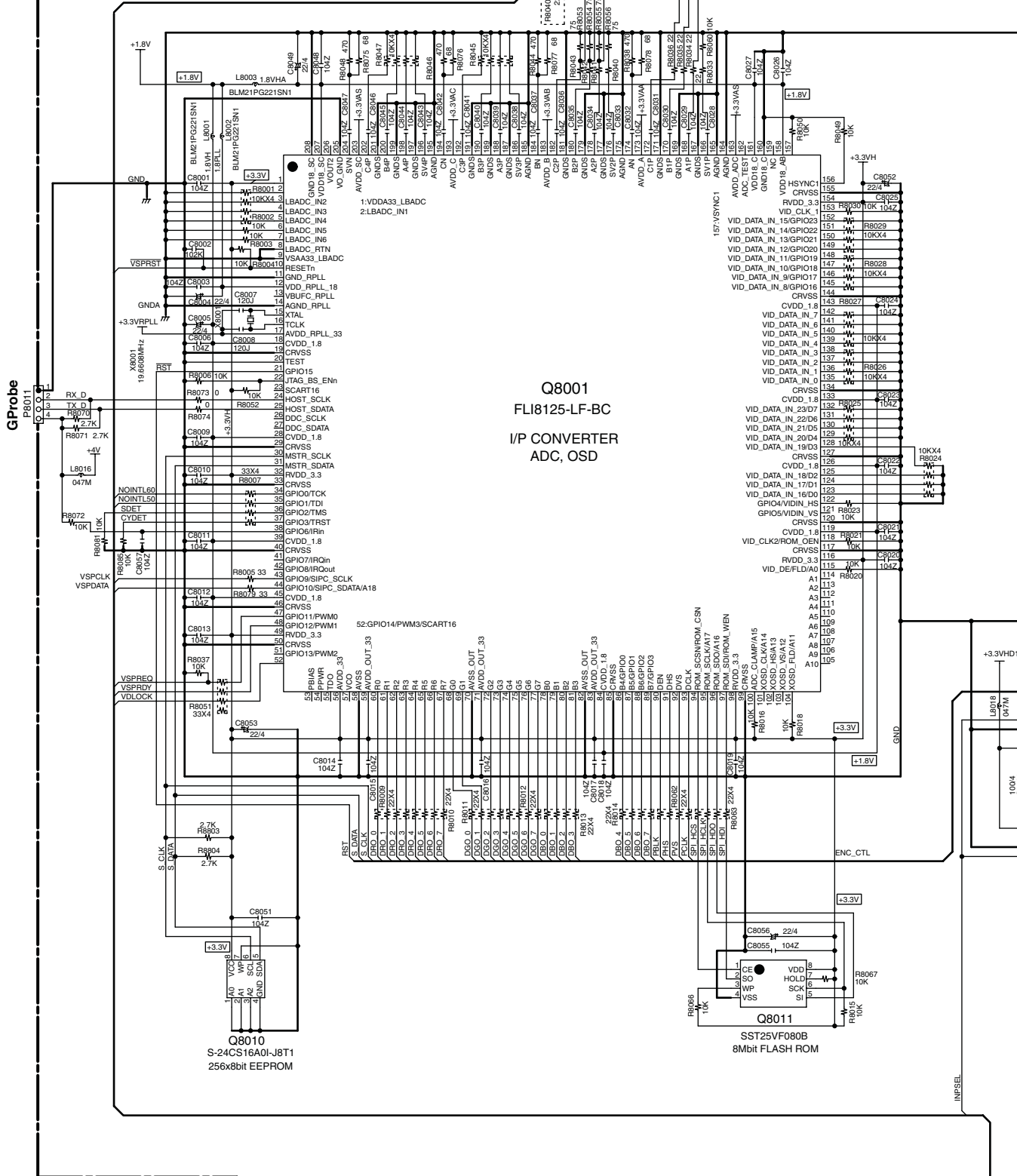
1

2

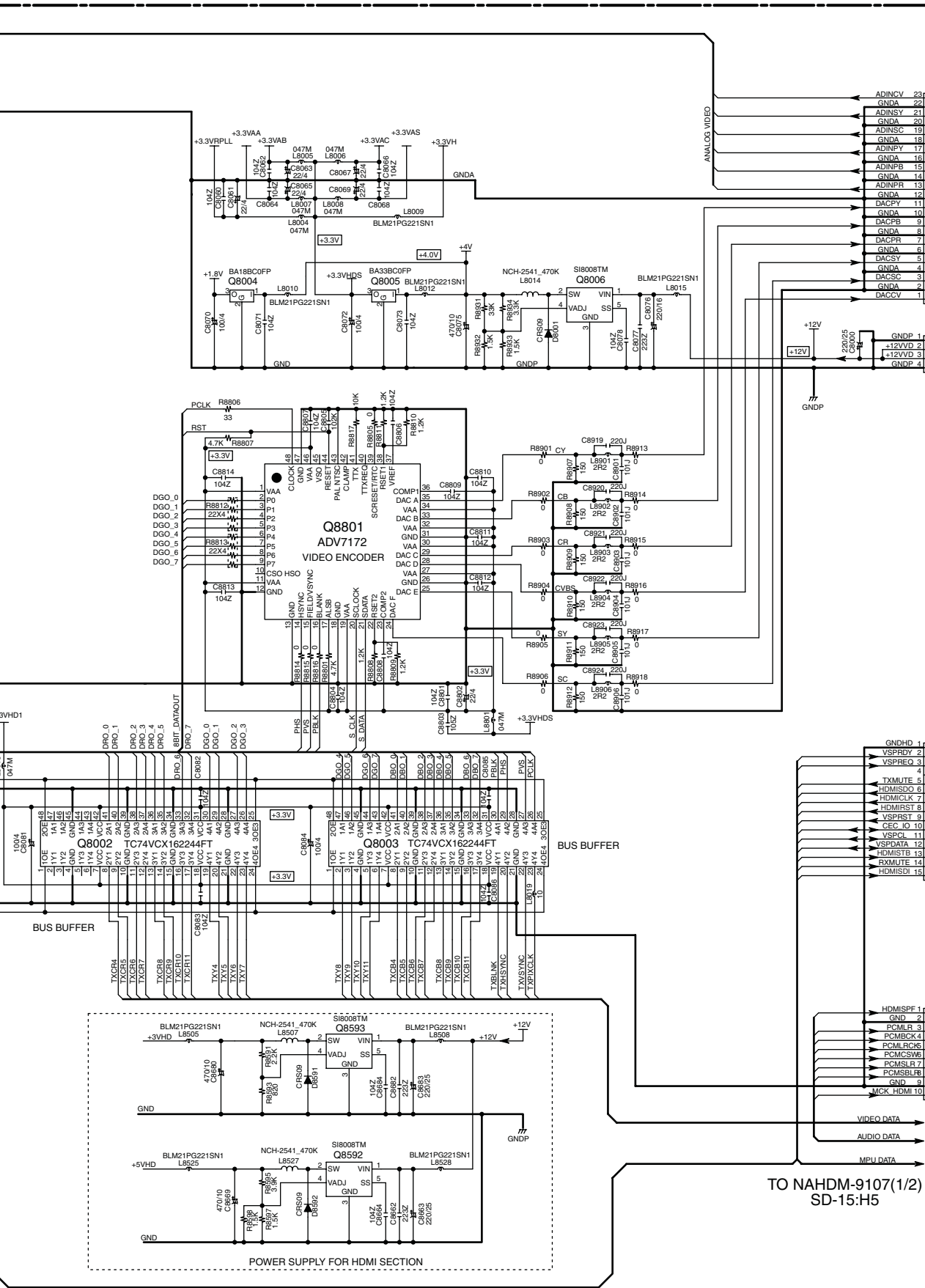
3

4

5



<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.



TO NAVD-9052
SD-6:F2

TO NAVD-9052
SD-6:H3

TO NAAR-9075
SD-8:G1

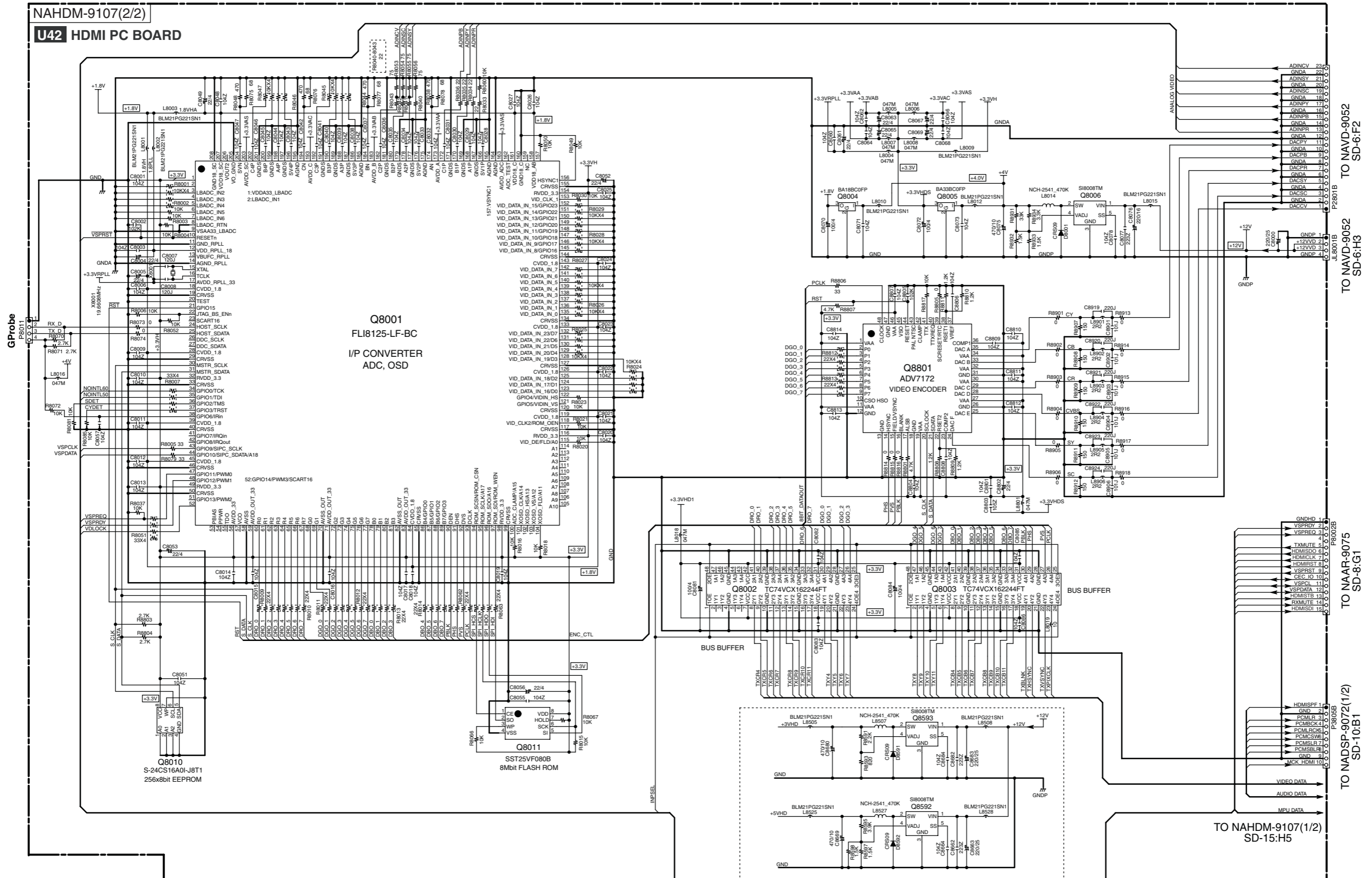
TO NADSP-9072(1/2)
SD-10:B1

TO NAHDM-9107(1/2)
SD-15:H5



SCHEMATIC DIAGRAMS-16 (SD-16) HDMI SECTION

1
2
3
4
5



<Note>
SD-x:XY is short for Schematic Diagram-x and
each socket's location, X=A to H, Y=1 to 5.

A

B

C

D

SCHEMATIC DIAGRAMS-17 (SD-17) E-CONTROL SECTION

1

2

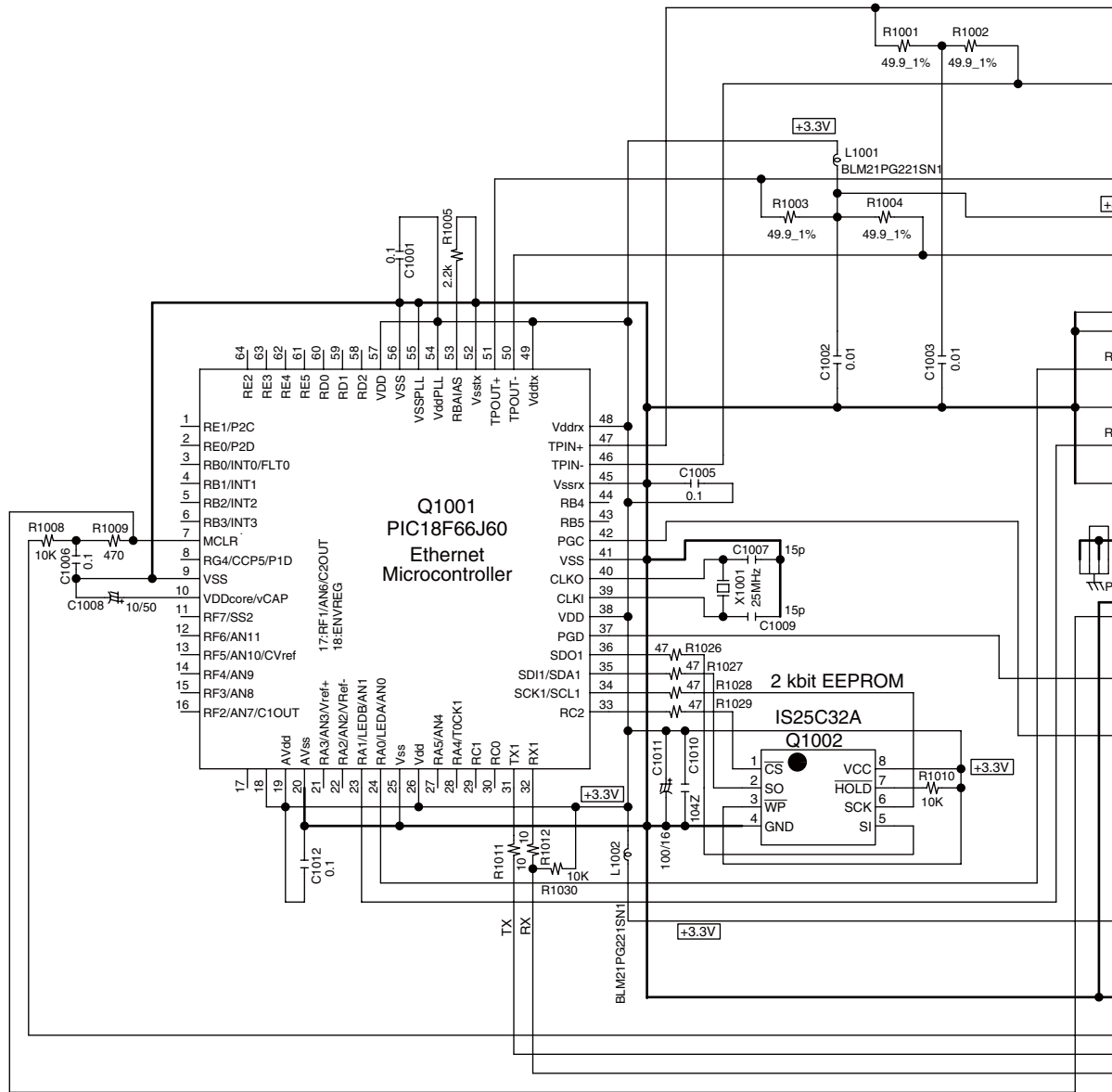
3

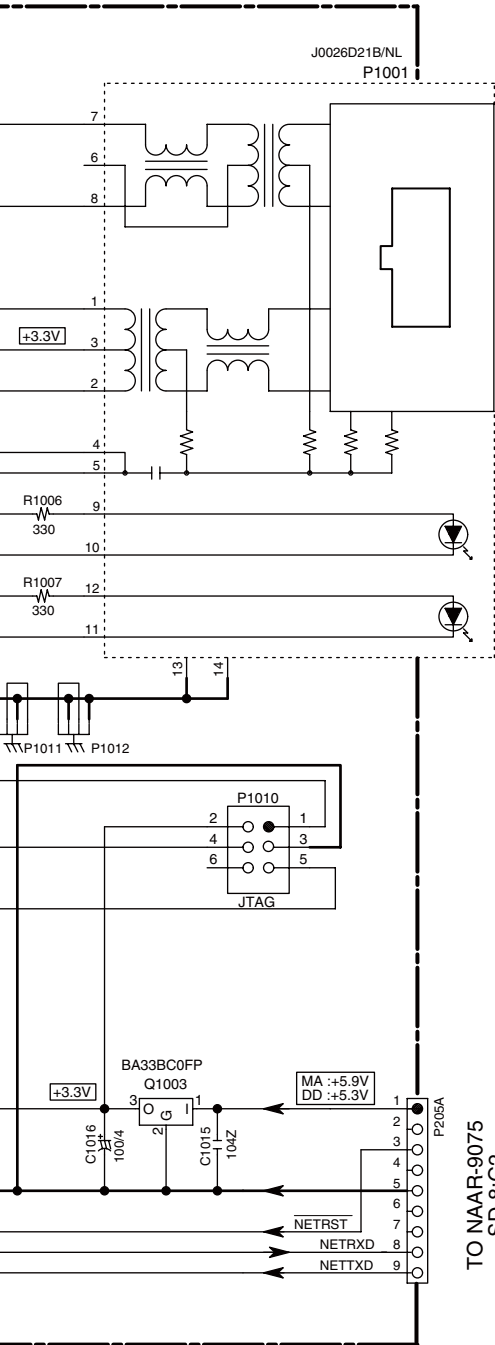
4

5

NALAN-9079

U43 E-CONTROL PC BOARD





**ETHERNET
(E-CONTROL)**

NOTE

- THE COMPONENTS IDENTIFIED BY MARK Δ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER) \square IS DC VOLTAGE.(NO INPUT SIGNAL).
- ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS (---) ARE IN $\mu\text{F/WV}$.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033 μF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
EX) \square PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

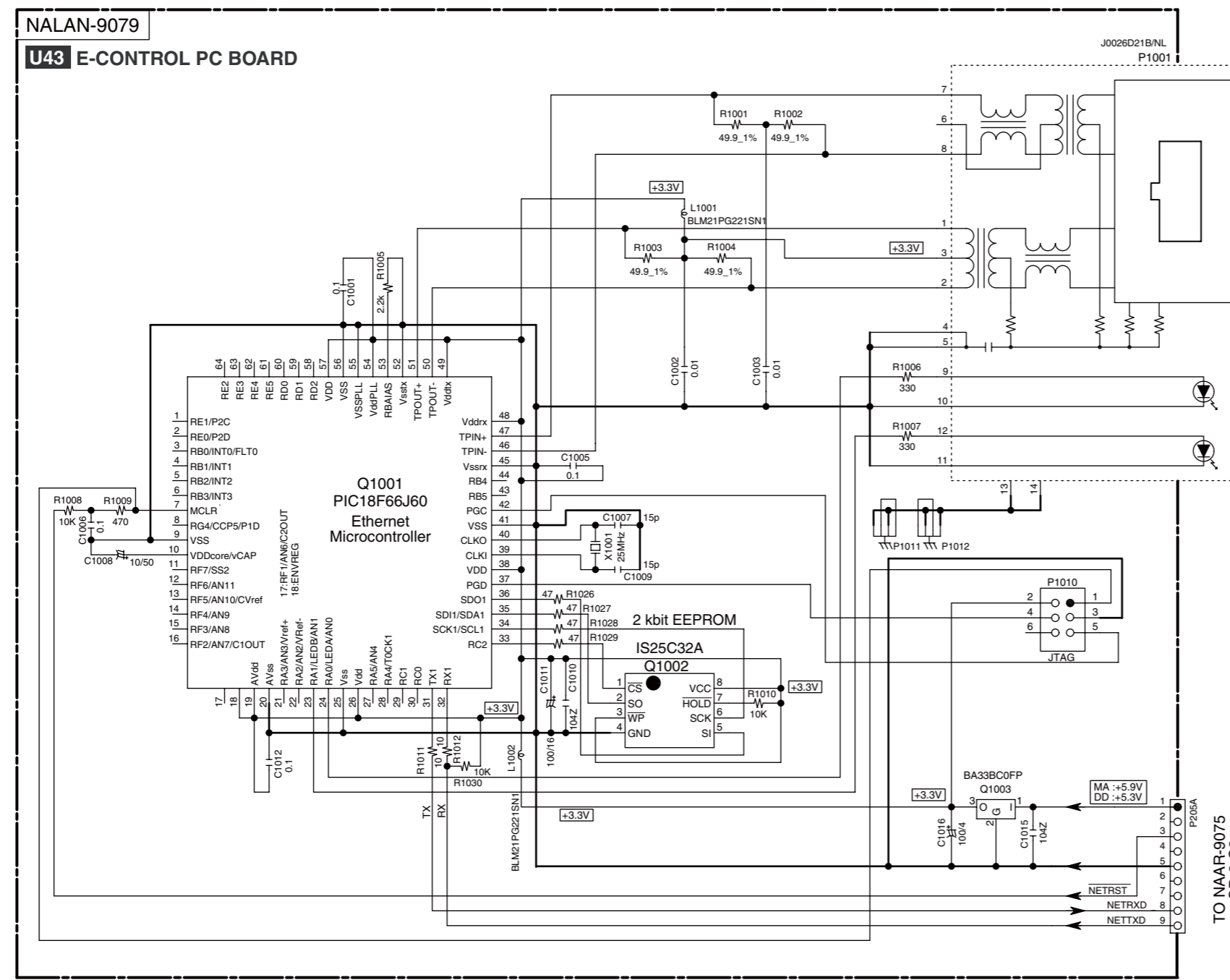
<Note>

SD-x:XY is short for Shcematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

TO NAAR-9075
SD-8:G2

SCHEMATIC DIAGRAMS-17 (SD-17)
E-CONTROL SECTION

1
2
3
4
5



- NOTE**
- THE COMPONENTS IDENTIFIED BY MARK Δ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
 - VOLTAGE (MEASURED WITH VOLTMETER) \square IS DC VOLTAGE (NO INPUT SIGNAL).
 - ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
 - ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
 - ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
 - ELECTROLYTIC CAPACITORS (---) ARE IN $\mu\text{F/WV}$.
 - ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033uF
 - ALL RESISTORS ARE IN OHMS 1/4WATT'S UNLESS OTHERWISE NOTED.
 - THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
EX) \square PRINTING SIDE
 - CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

A

B

C

D

SCHEMATIC DIAGRAM-18(SD-18) WAVEFORM SECTION

Digital Audio Waveform Part

1

NOTE:

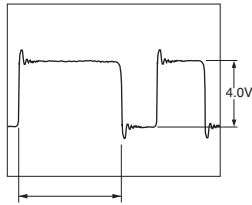
1. (WF01) is short for (Waveform01)
2. Refer to SD-9(SCHEMATIC DIAGRAM-9) for the location of each waveform on circuit.
3. SD-x:XY is short for Shcematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

LR CLOCK (SAI_LRCK, CX_LRCK)
Fs=48kHz : DVD, Clock width=20.8us
Fs=44.1kHz : CD, Clock width=22.7us

BIT CLOCK (SAI_SLCK, CX_SLCK)
64Fs=3072kHz : DVD, Clock width=325ns
64Fs=2822.4kHz : CD, Clock width=354ns

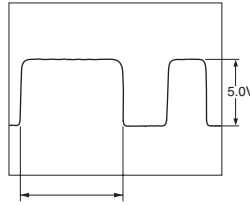
2

(WF01) OPT1 (SD-9:B2)



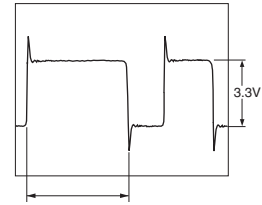
Duty varies according to audio data

(WF02) COAX1 (SD-9:C2)



Duty always varies according to audio data

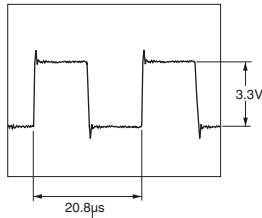
(WF03) SAI_SDOUT (SD-9:B4)



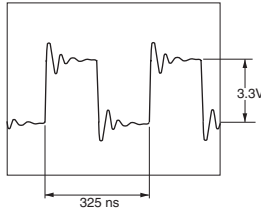
Duty varies according to audio data

3

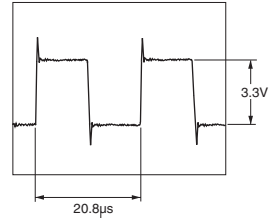
(WF04) SAI_LRCK (SD-9:B4)



(WF05) SAI_SLCK (SD-9:C4)

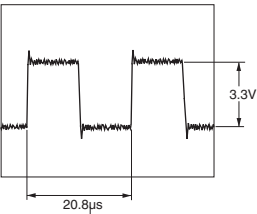


(WF06) CX_SDIN1 (SD-9:D4)

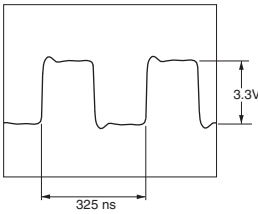


4

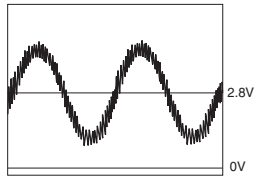
(WF07) CX_LRCK (SD-9:D4)



(WF08) CX_SCLK (SD-9:D4)



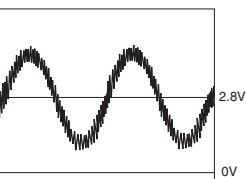
(WF09) DAC_OUT- (SD-9:E4)



Analog audio waveform with aliasing noise

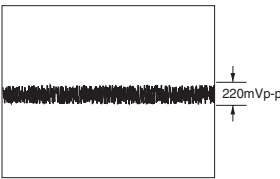
5

(WF10) AUDIO_FL (SD-9:F3)



Analog audio waveform with aliasing noise

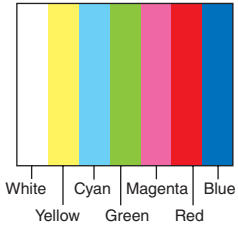
(WF10) AUDIO_FL (SD-9:F3)



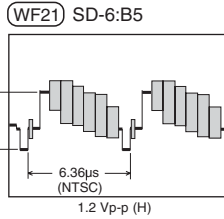
Aliasing noise in no audio data

Video Waveform Part

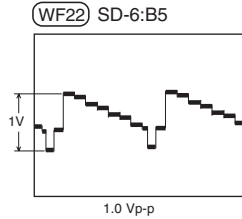
Video source color and pattern



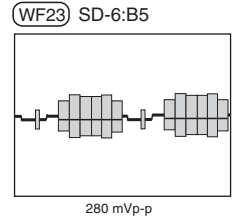
Composite waveform



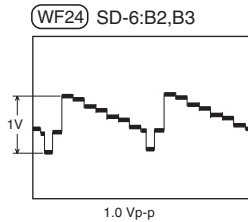
S-Video Y waveform



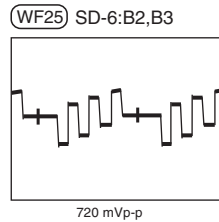
S-Video C waveform



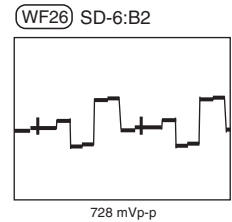
Component Y waveform



Component PB waveform



Component PR waveform



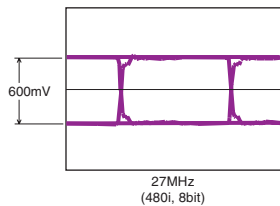
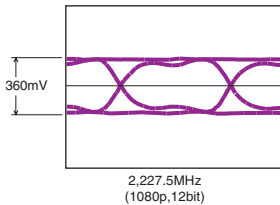
NOTE:

- (WF21) is short for (Waveform21)
- Refer to SD-6(SCHEMATIC DIAGRAM-6) for the location of each waveform on circuit.
- SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.
- In the case that video outputs are not connected to video devices, video signal output levels are doubled.

HDMI Waveform Part

HDMI D0,D1,D2 waveform

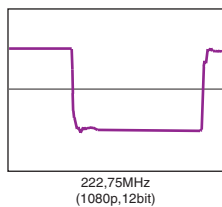
(WF41) SD-15:B5, H4



D0,D1,D2 Eye-pattern waveform, frequency and level vary according to video resolution, aspect and profile. Waveforms above are examples.

HDMI CK waveform

(WF42) SD-15:B5, H4

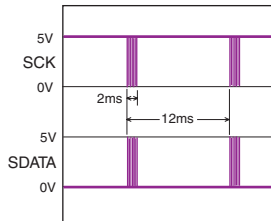


CK waveform, frequency and level differ according to video resolution, aspect and profile. D0,D1,D2 are just CK x10.

FL Driver IC Control Waveform Part

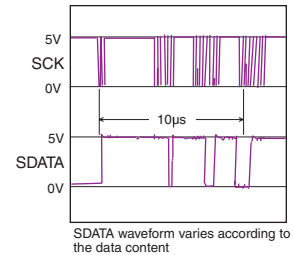
SCK/SDATA waveform

(WF61) SD-13:D2, F2



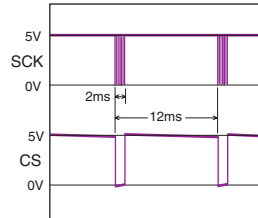
SCK/SDATA waveform

(WF61) SD-13:D2, F2



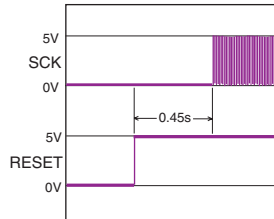
SCK/CS waveform

(WF62) SD-13:D2, F2



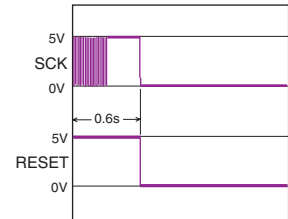
SCK/RESET waveform

(WF63) SD-13:D2, F2



SCK/RESET waveform

(WF63) SD-13:D2, F2



**SCHEMATIC DIAGRAM-18(SD-18)
WAVEFORM SECTION**

1

2

3

4

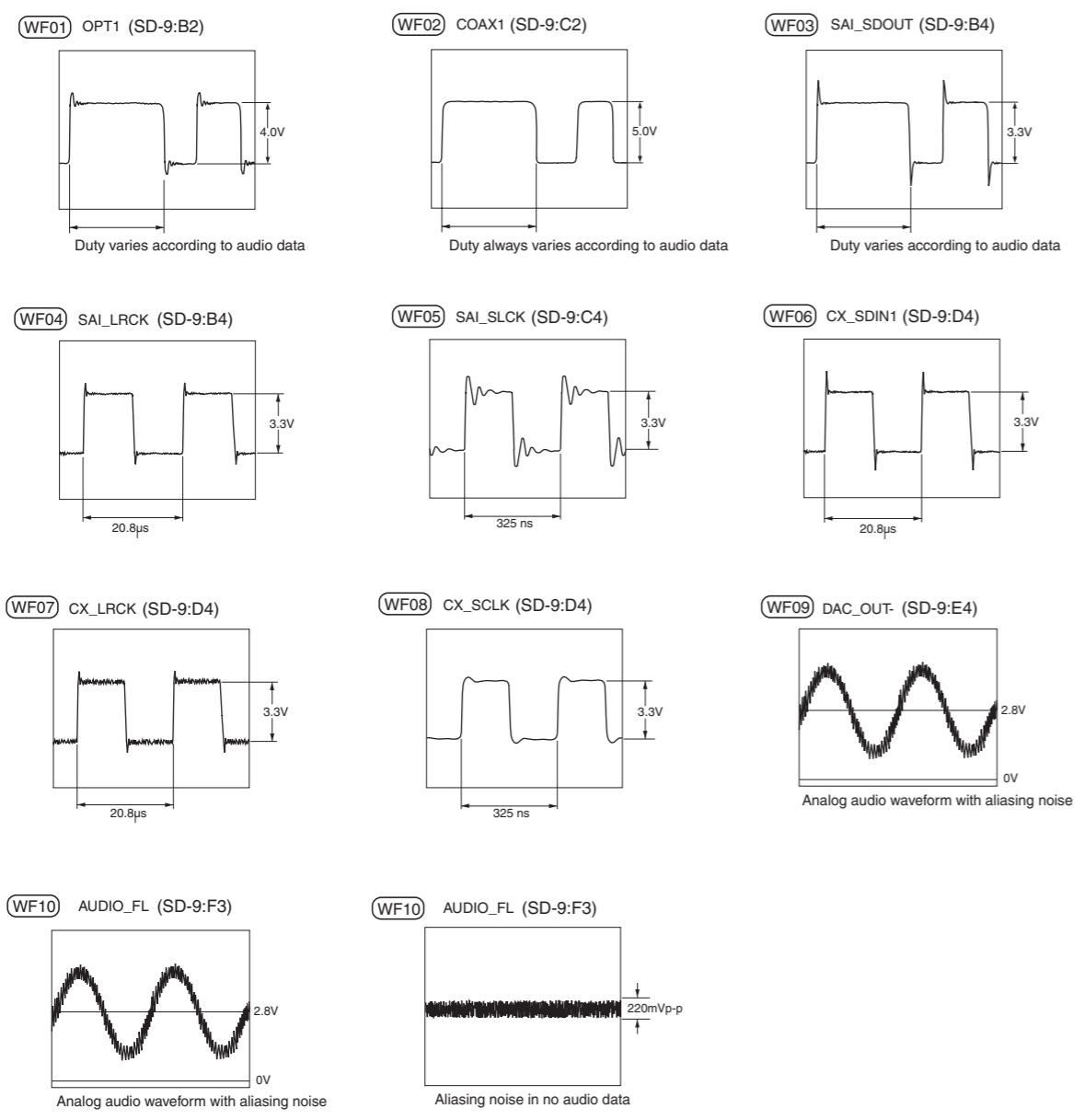
5

Digital Audio Waveform Part

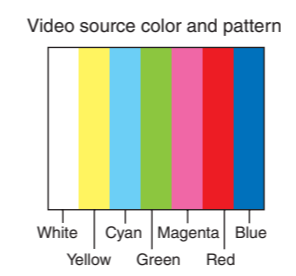
NOTE:
1. (WF01) is short for (Waveform01)
2. Refer to SD-9(SCHEMATIC DIAGRAM-9) for the location of each waveform on circuit.
3. SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

LR CLOCK (SAI_LRCK, CX_LRCK)
Fs=48kHz : DVD, Clock width=20.8us
Fs=44.1kHz : CD, Clock width=22.7us

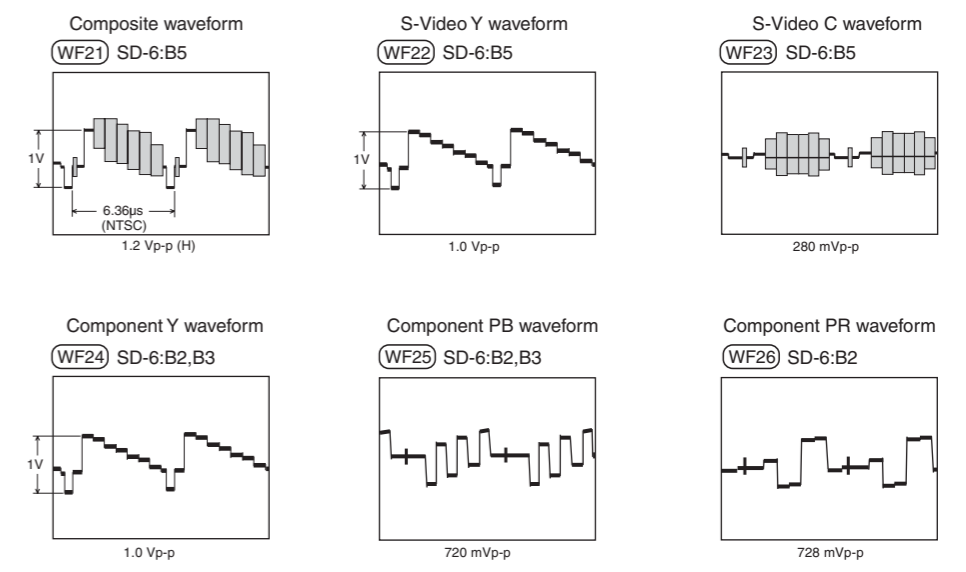
BIT CLOCK (SAI_SLCK, CX_SLCK)
64Fs=3072kHz : DVD, Clock width=325ns
64Fs=2822.4kHz : CD, Clock width=354ns



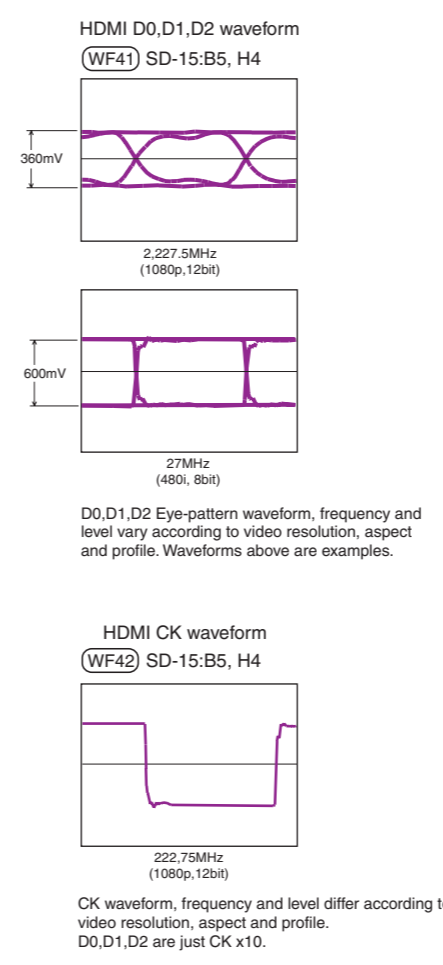
Video Waveform Part



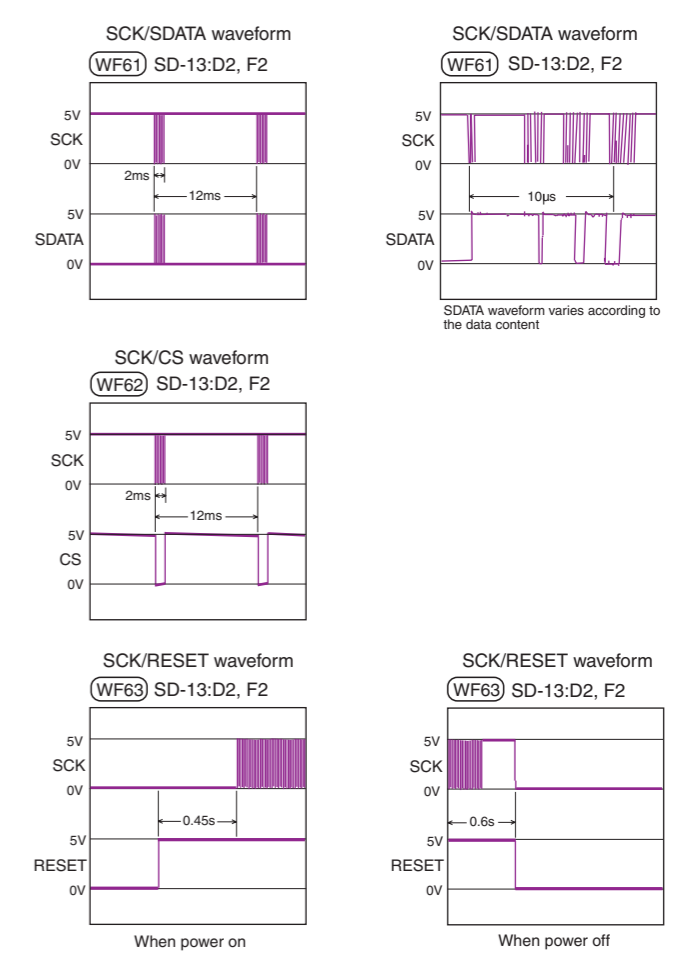
NOTE:
1. (WF21) is short for (Waveform21)
2. Refer to SD-6(SCHEMATIC DIAGRAM-6) for the location of each waveform on circuit.
3. SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.
4. In the case that video outputs are not connected to video devices, video signal output levels are doubled.



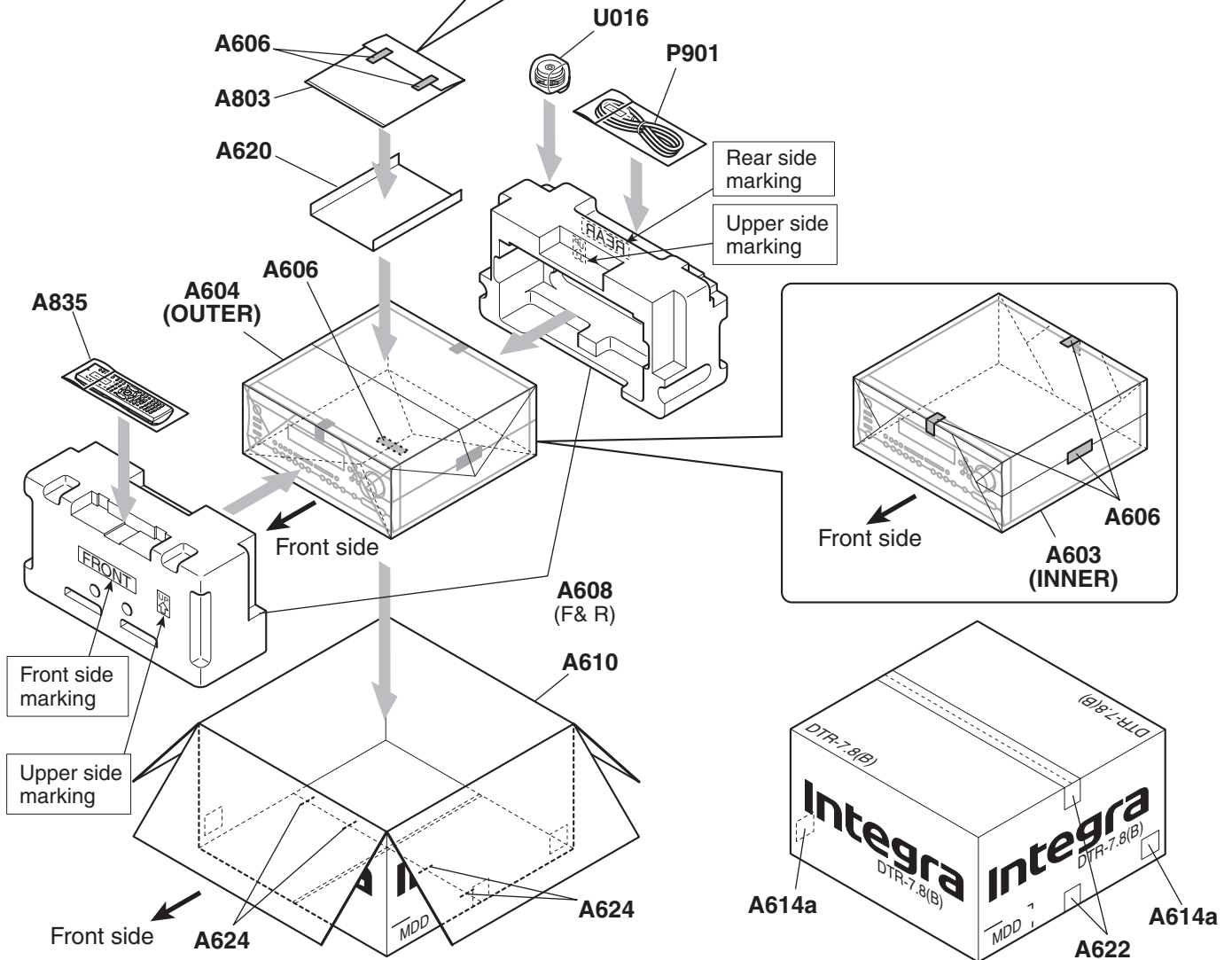
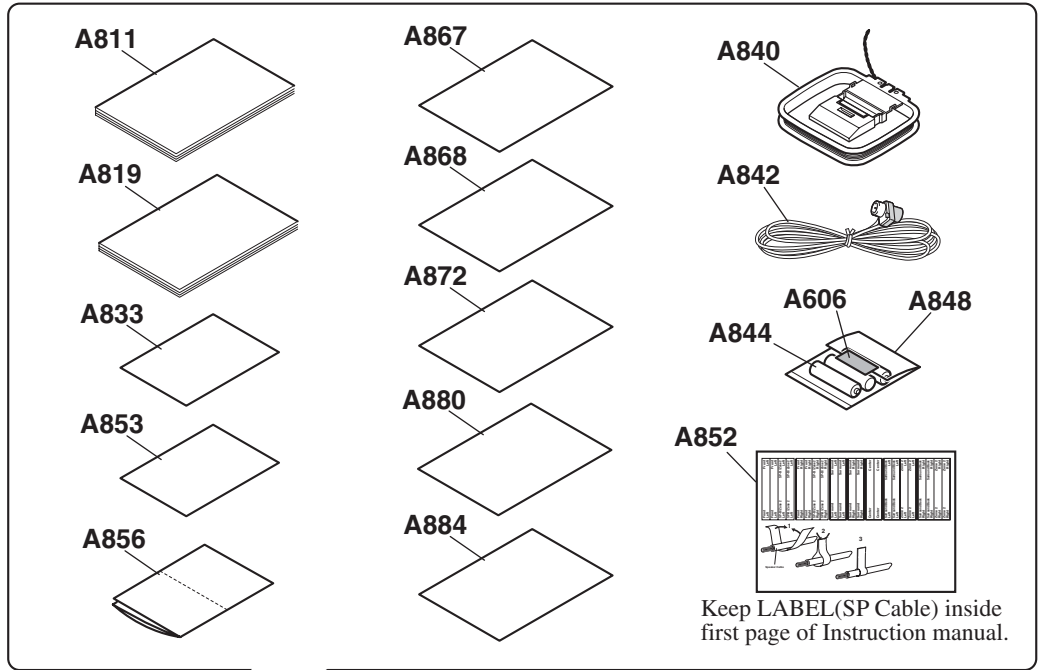
HDMI Waveform Part



FL Driver IC Control Waveform Part



PACKING PROCEDURE



A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-1

U01 AMPLIFIER PC BOARD (NAAF-9039)

Component side

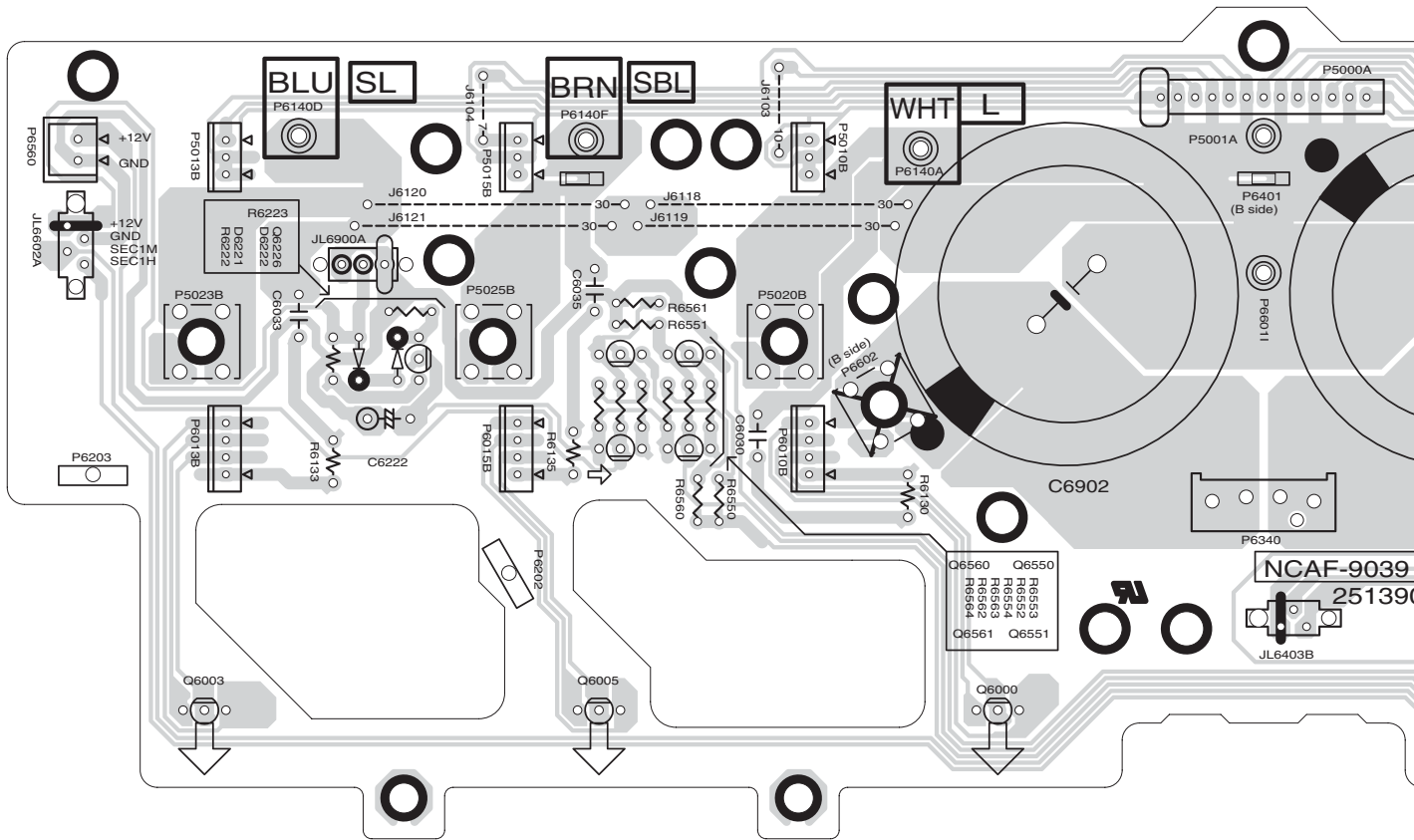
1

2

3

4

5

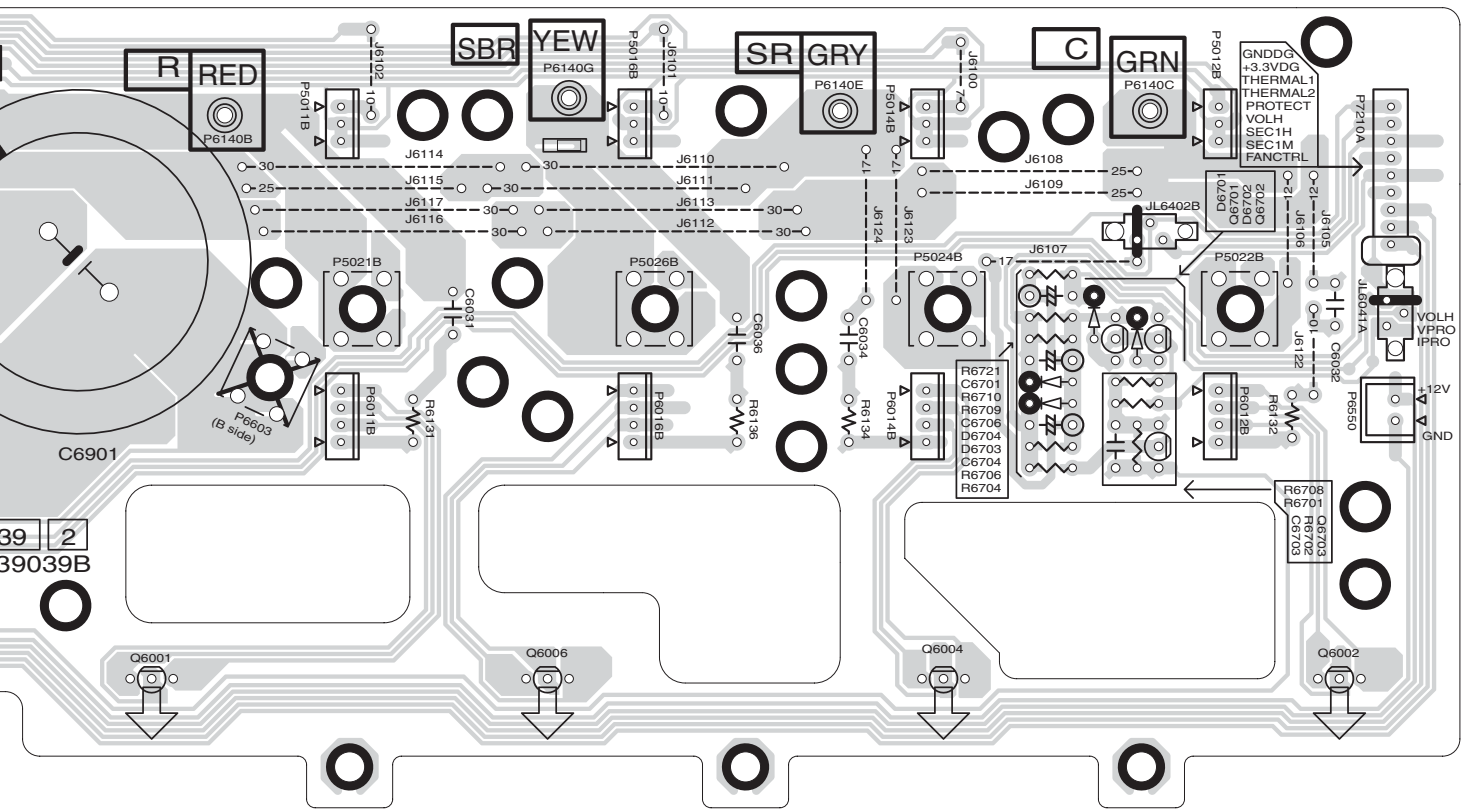


E

F

G

H

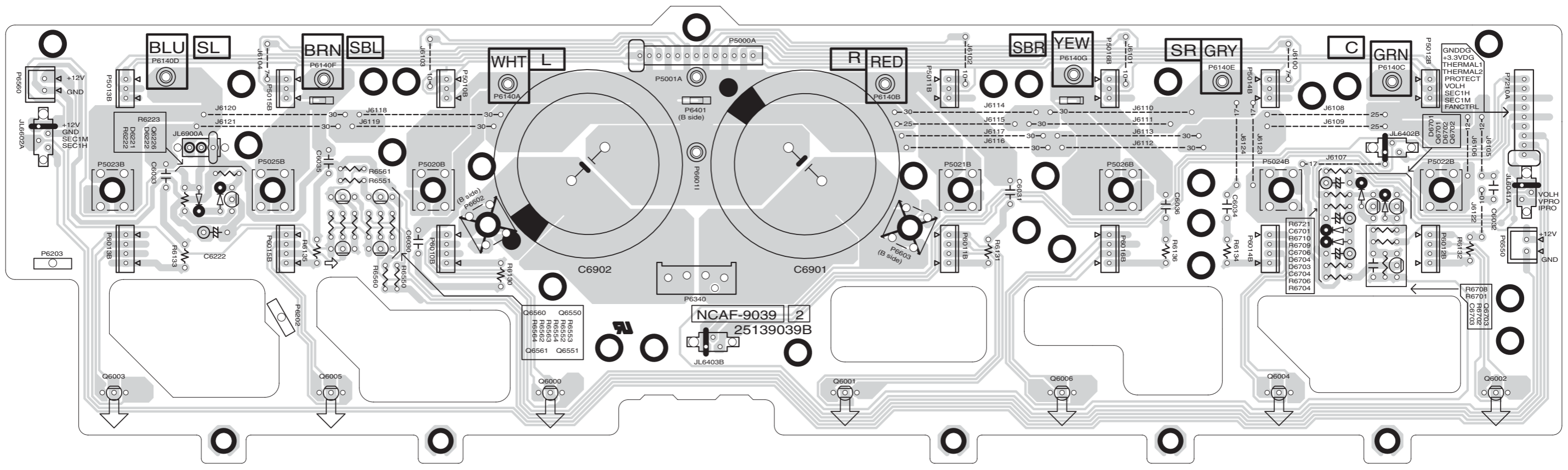


A B C D E F G H

PRINTED CIRCUIT BOARD VIEWS-1

U01 AMPLIFIER PC BOARD (NAAF-9039)
Component side

1
2
3
4
5



A

B

C

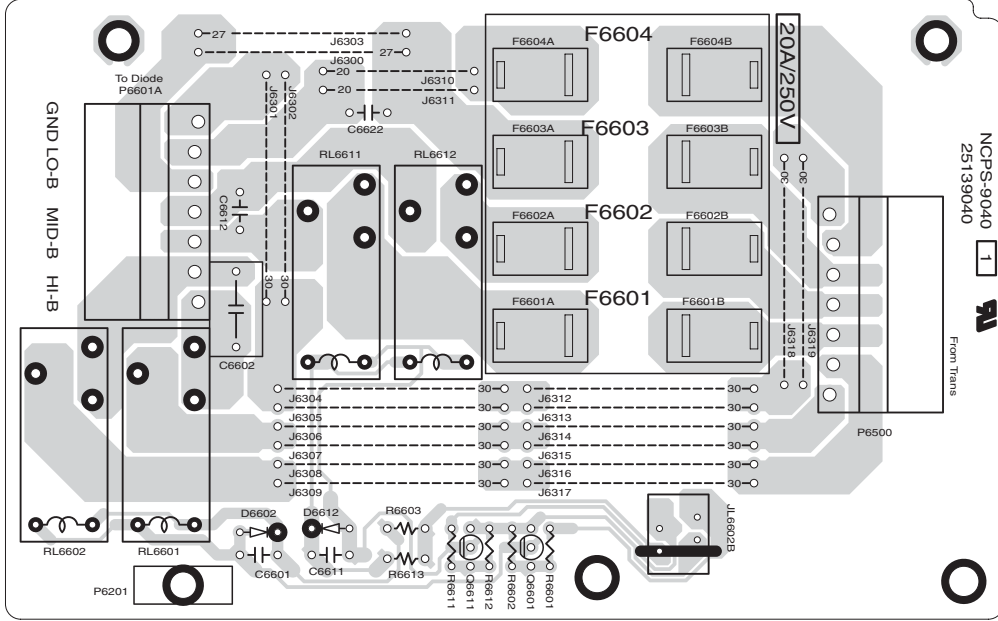
D

PRINTED CIRCUIT BOARD VIEWS-2

U02 POWER SUPPLY PC BOARD (NAPS-9040)

Component side

1

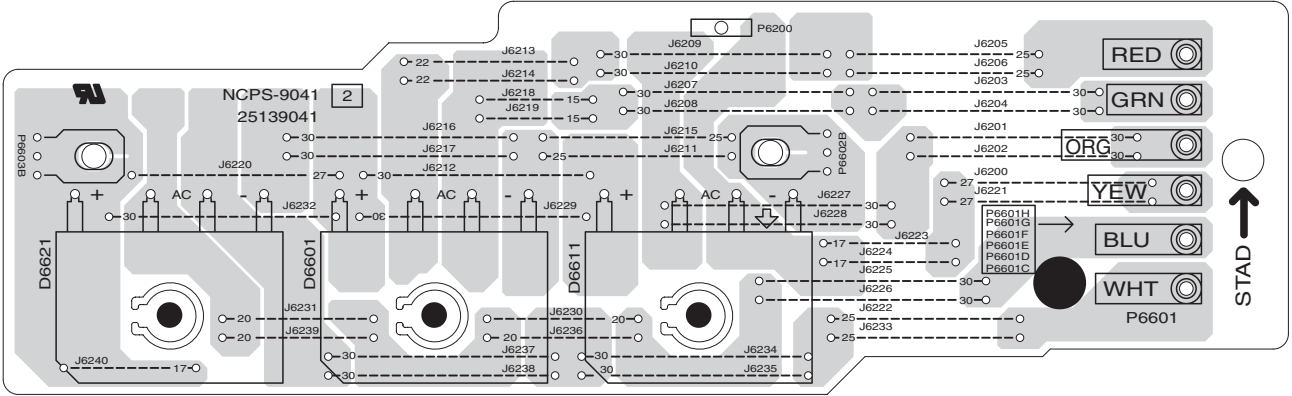


2

U03 POWER SUPPLY PC BOARD (NAPS-9041)

Component side

3

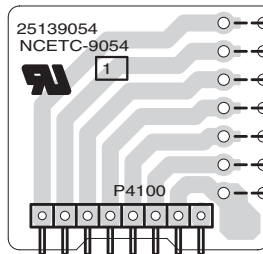


4

U10 CONNECTOR PC BOARD (NAETC-9054)

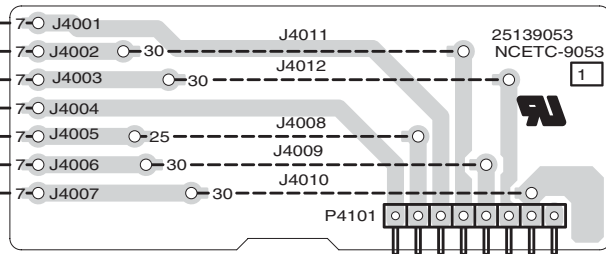
Component side

5



U09 CONNECTOR PC BOARD (NAETC-9053)

Component side



A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-3

U06 AMPLIFIER PC BOARD (NAASP-9050)

Side-A

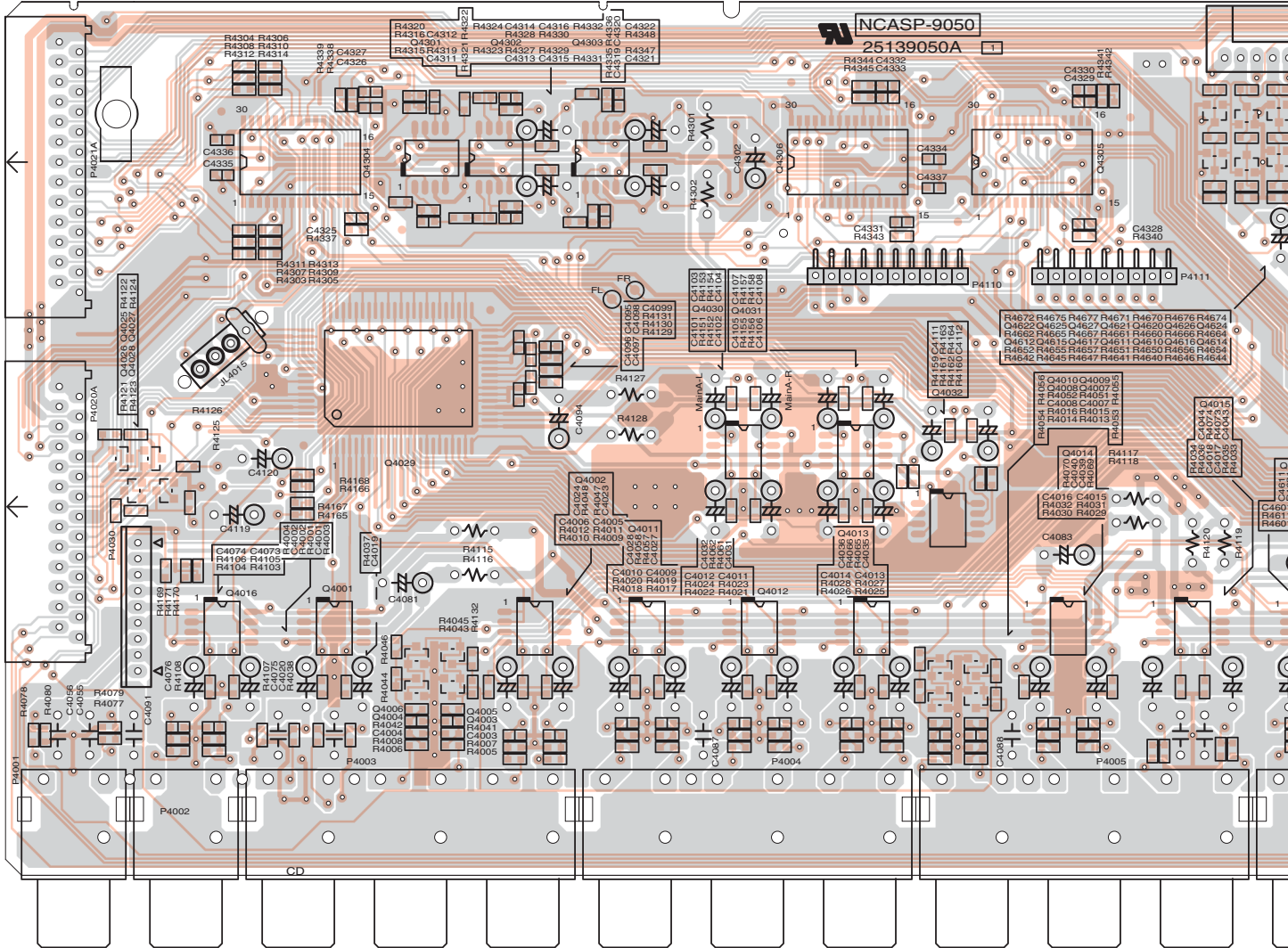
1

2

3

4

5

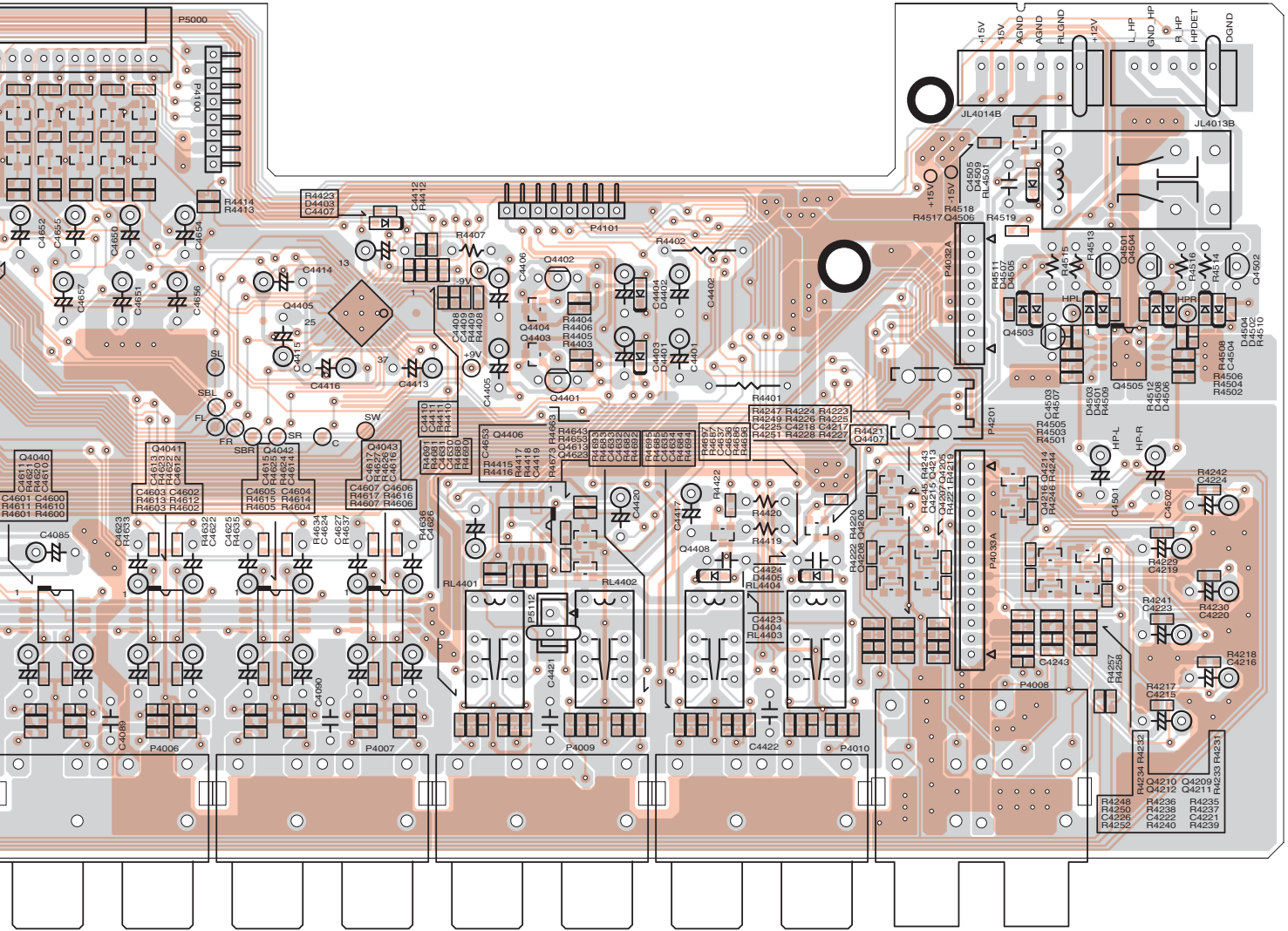


E

F

G

H



A B C D E F G H

PRINTED CIRCUIT BOARD VIEWS-3

U06 AMPLIFIER PC BOARD (NAASP-9050)

Side-A

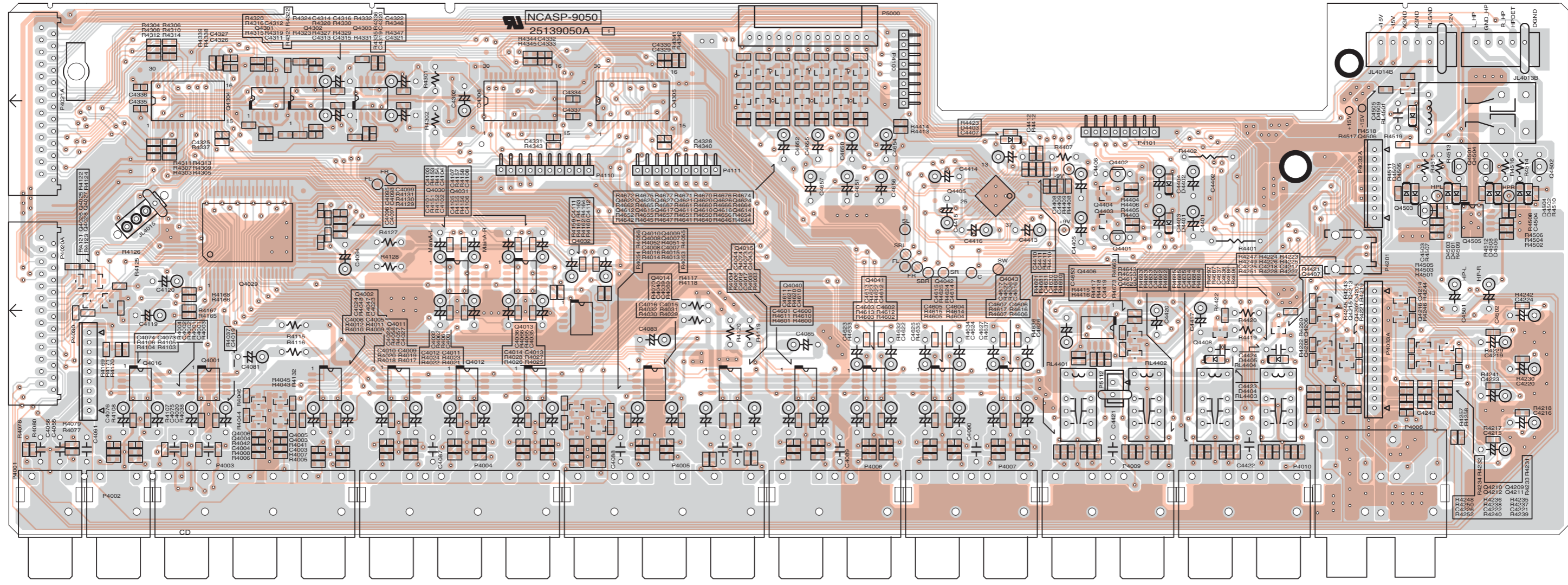
1

2

3

4

5



A B C D

PRINTED CIRCUIT BOARD VIEWS-4

U08 VIDEO PC BOARD (NAVD-9052)

Side-A

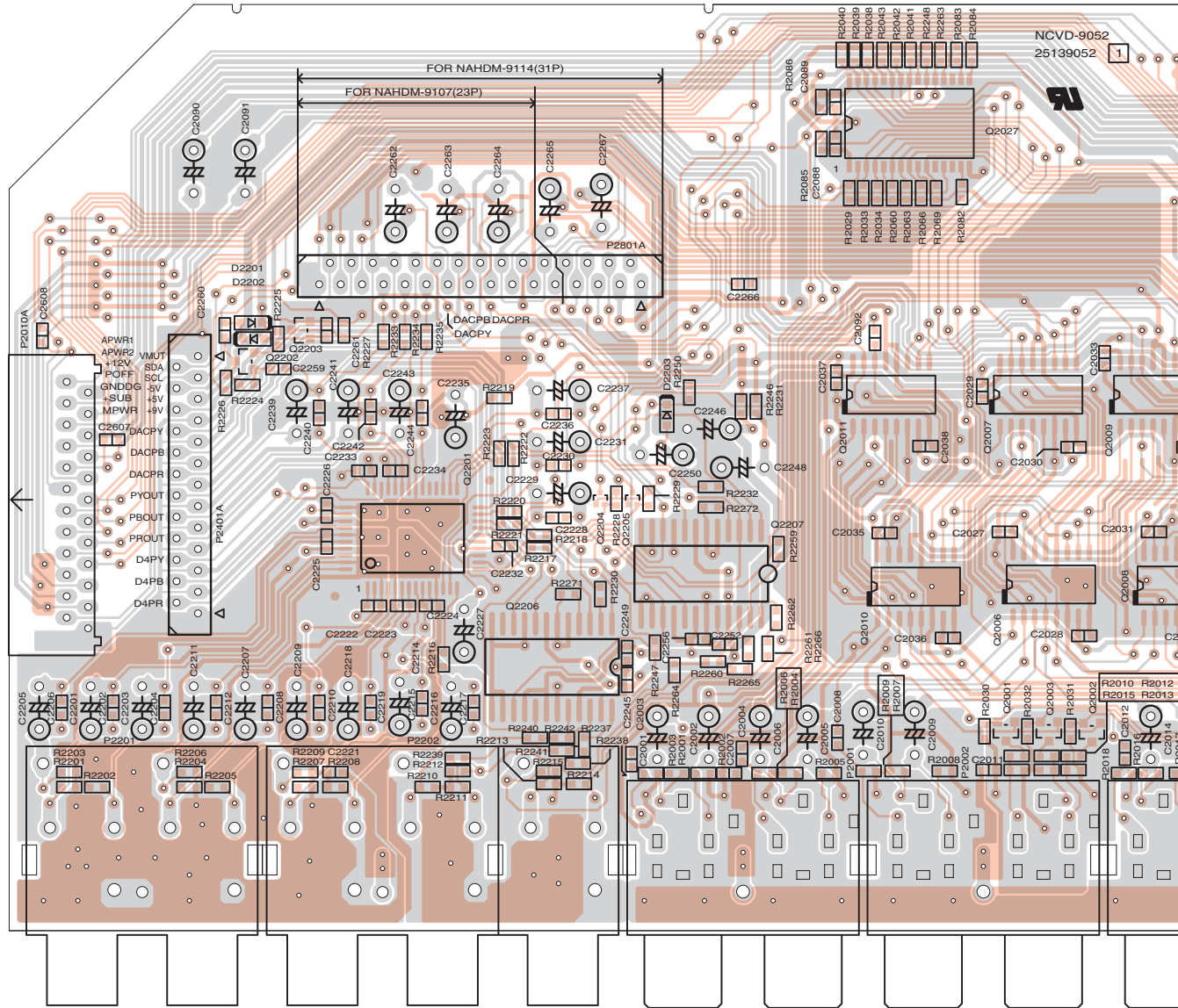
1

2

3

4

5

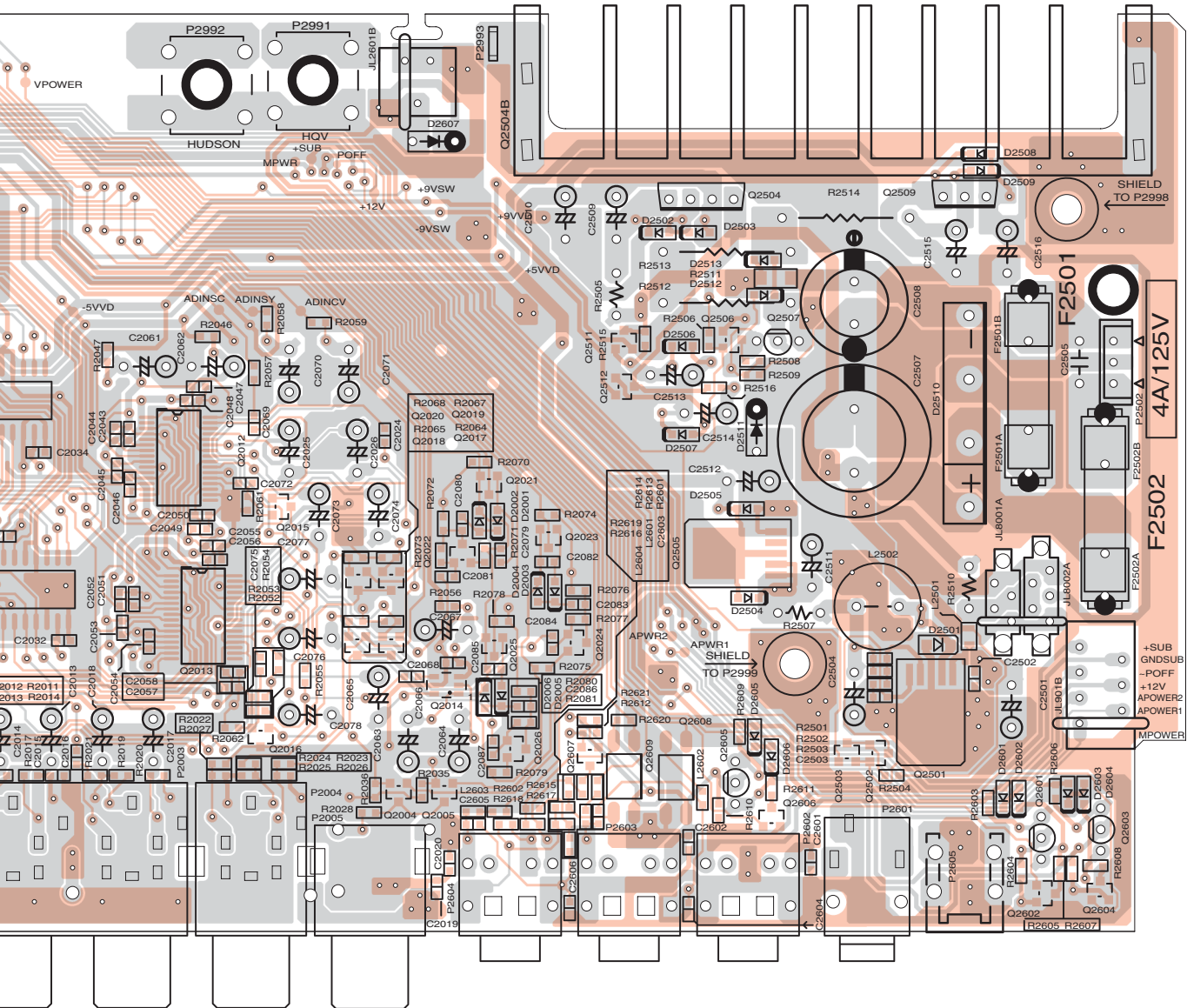


E

F

G

H



A B C D E F G H

PRINTED CIRCUIT BOARD VIEWS-4

U08 VIDEO PC BOARD (NAVD-9052)

Side-A

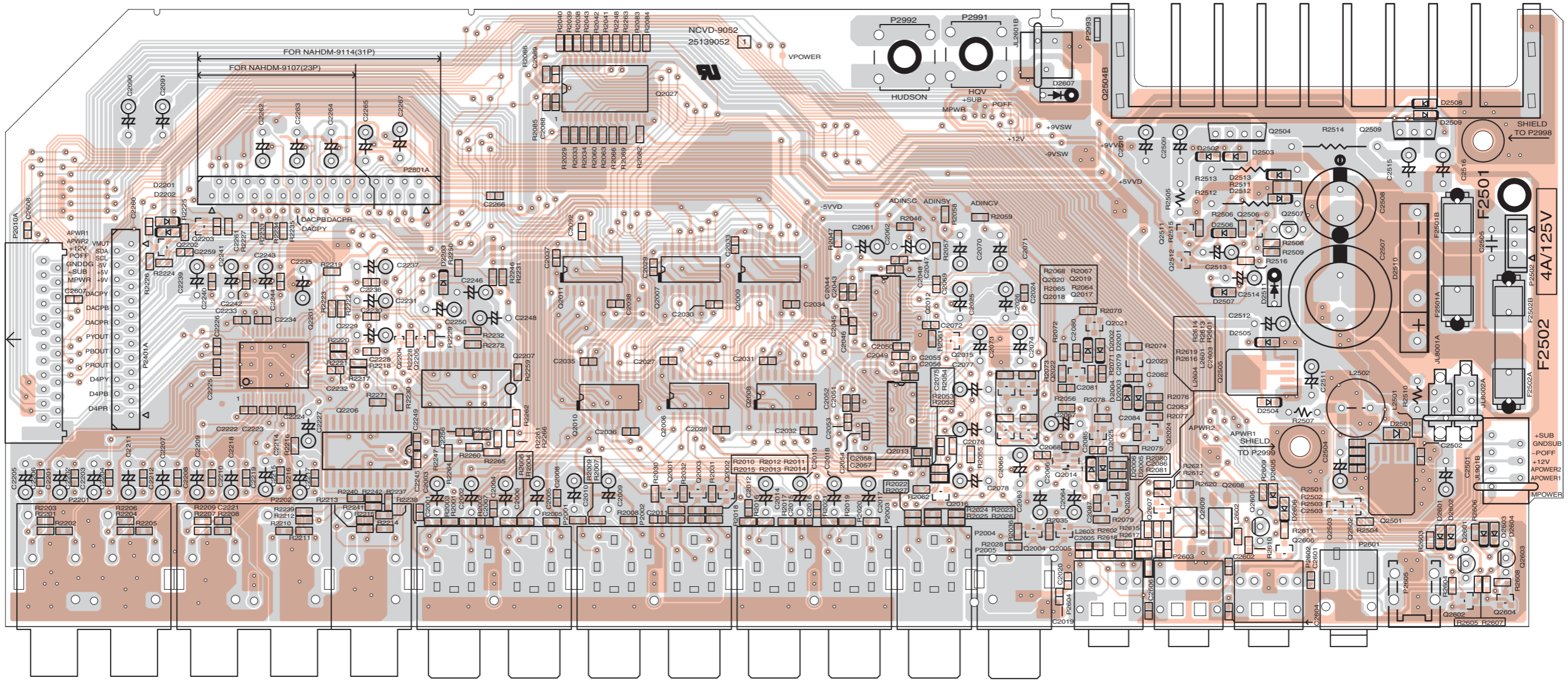
1

2

3

4

5



A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-5

U11 SP TERMINAL PC BOARD (NATRM-9055)

Component side

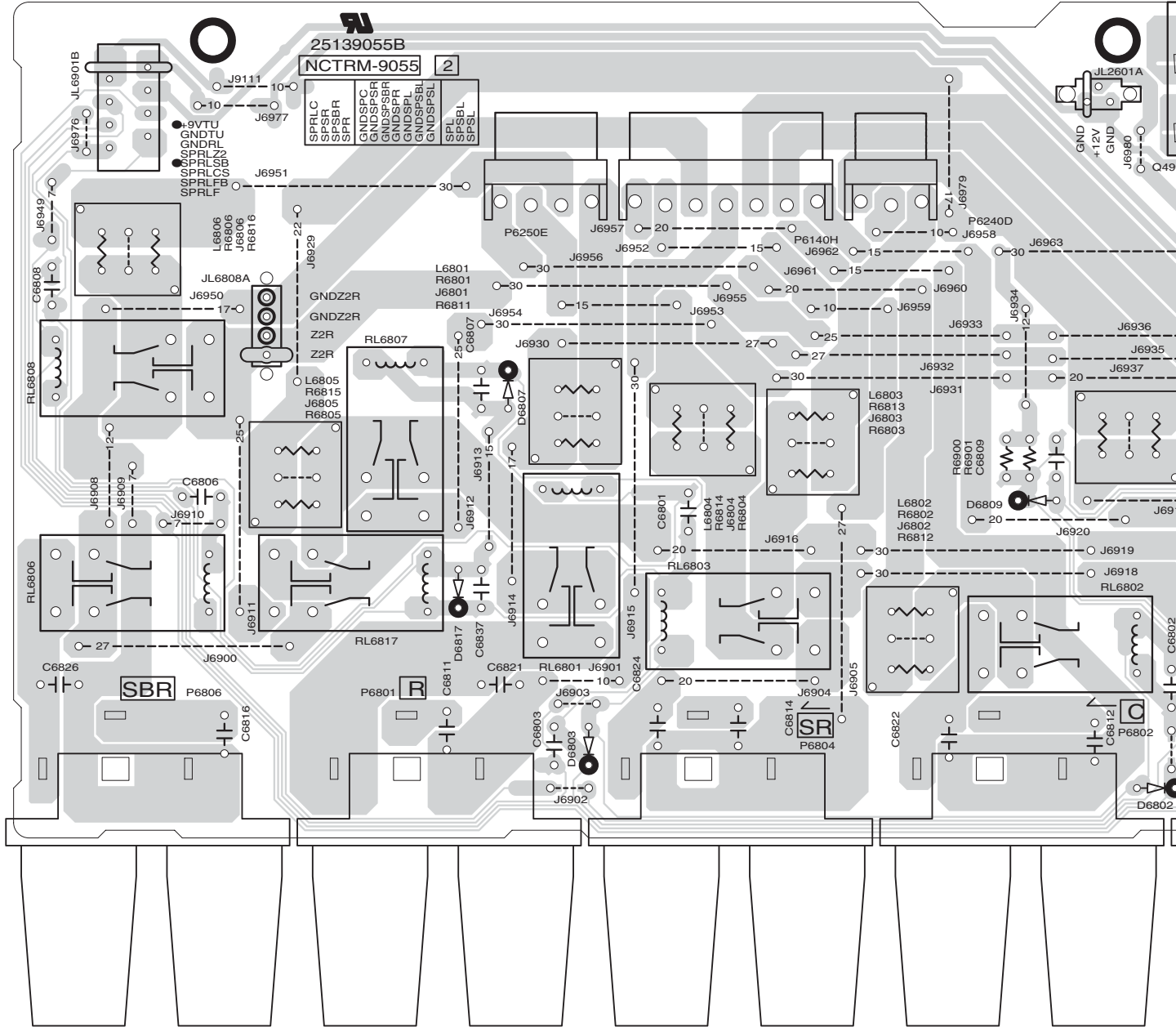
1

2

3

4

5

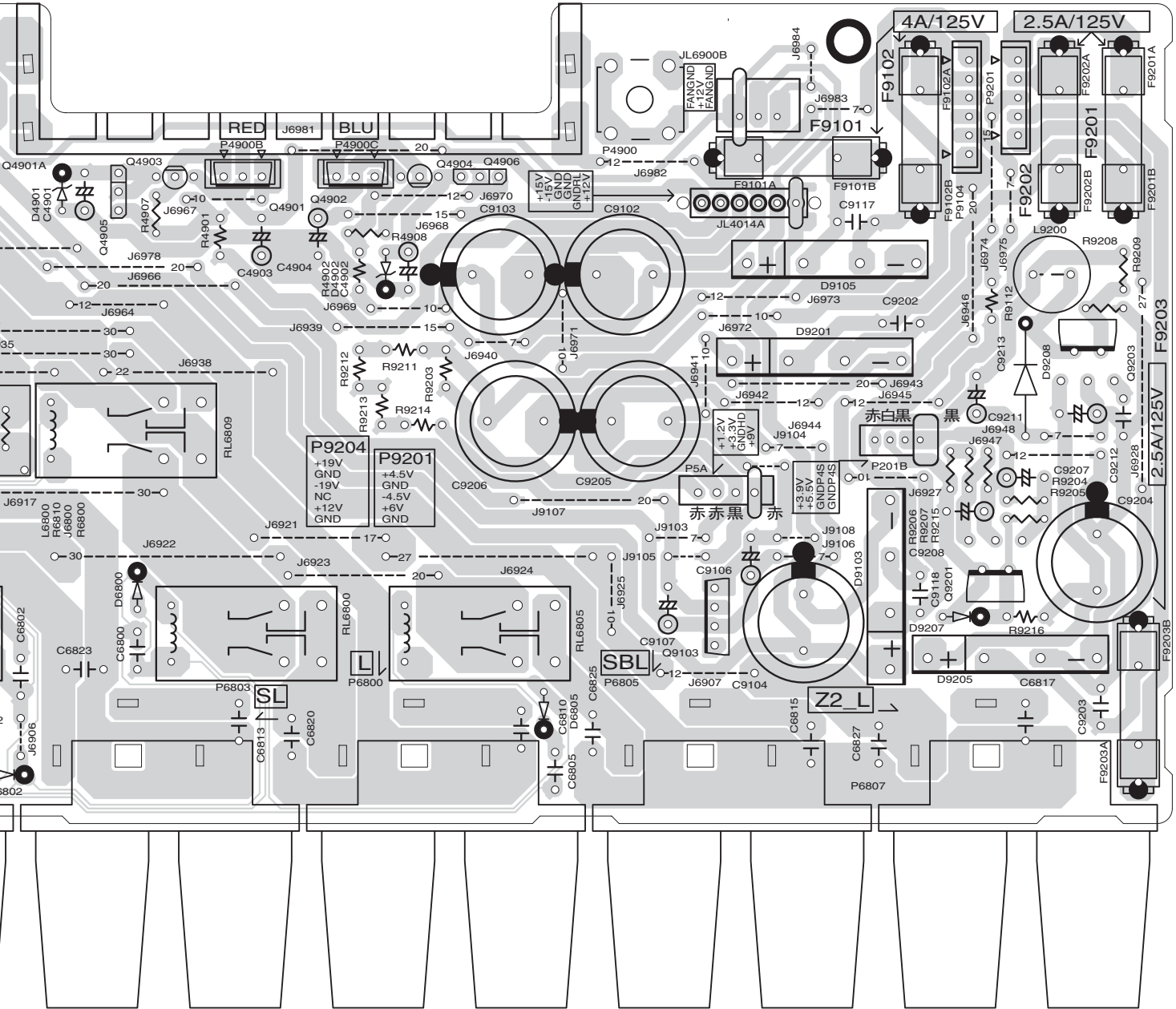


E

F

G

H



A B C D E F G H
PRINTED CIRCUIT BOARD VIEWS-5

U11 SP TERMINAL PC BOARD (NATRM-9055)

Component side

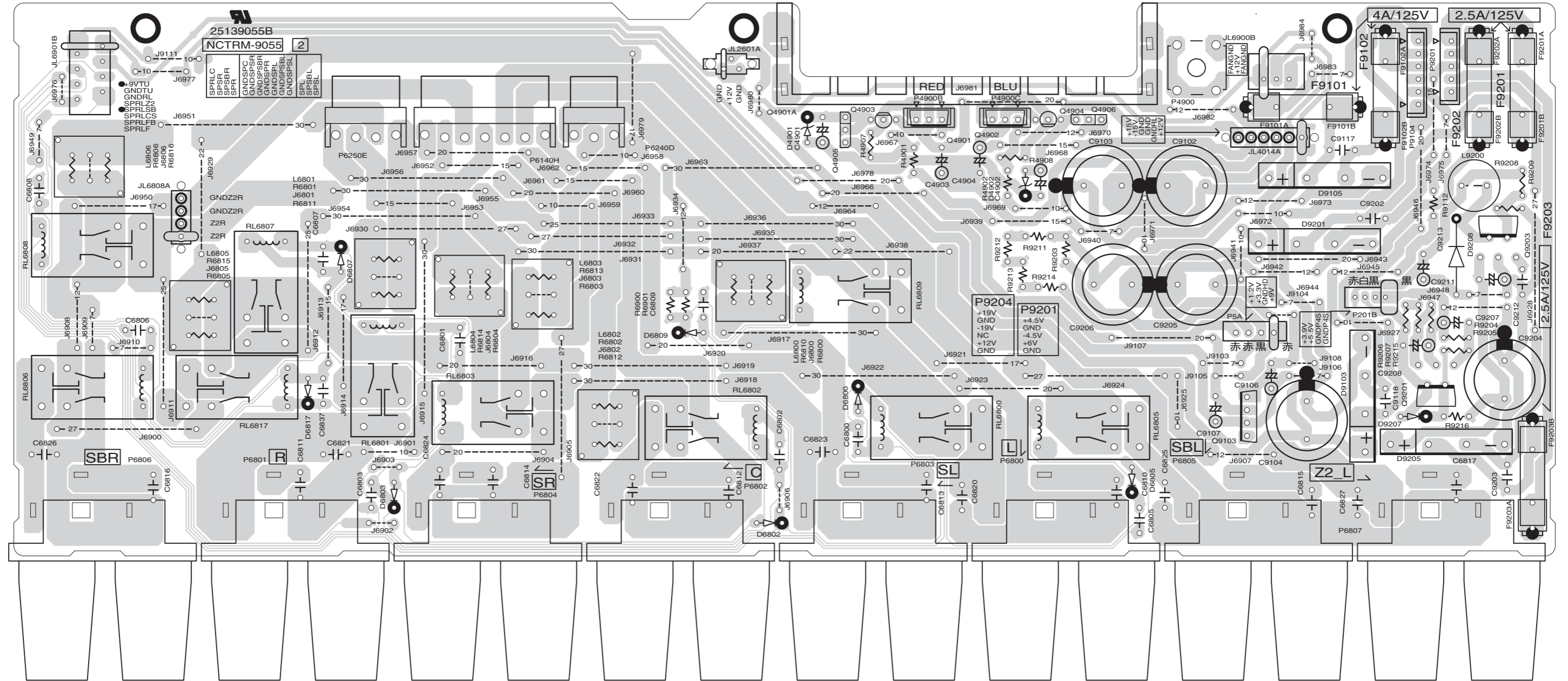
1

2

3

4

5



A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-6

U12 SP TERMINAL PC BOARD (NAETC-9056)

Component side

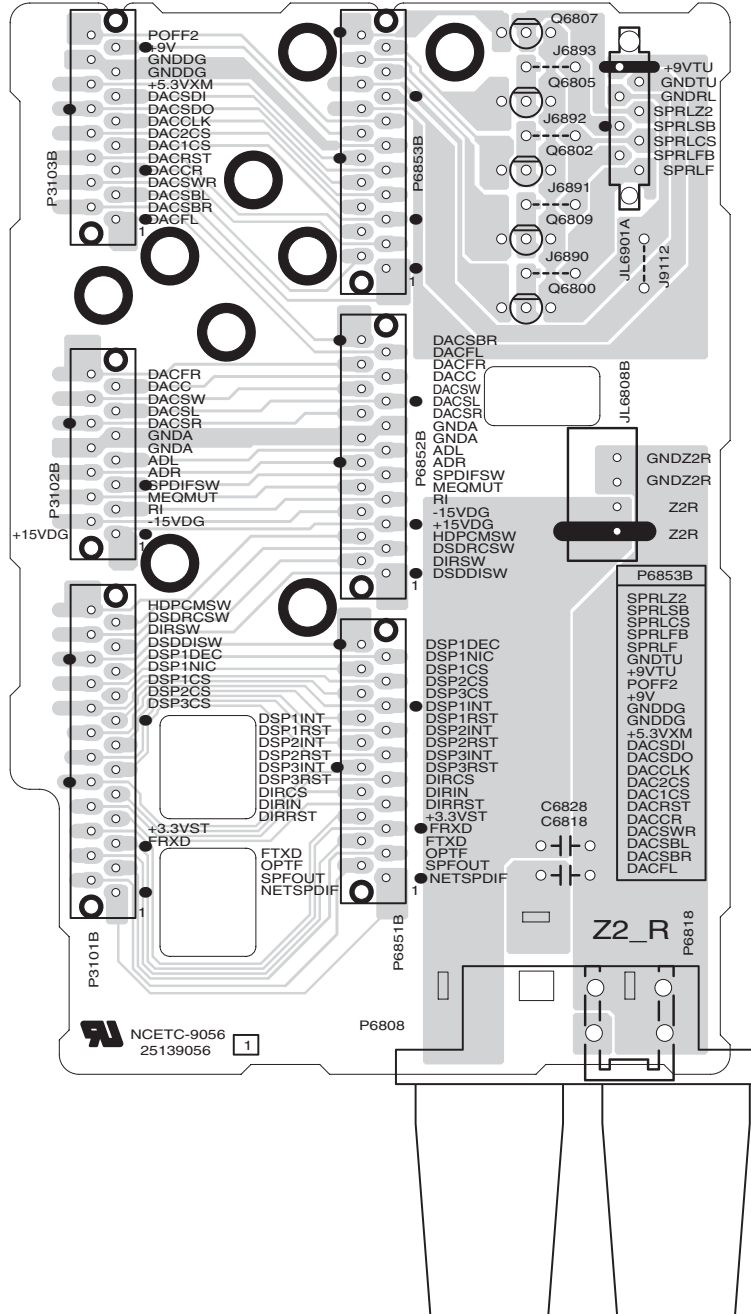
1

2

3

4

5



A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-7

U13 POWER SUPPLY PC BOARD (NAPS-9057)

Component side

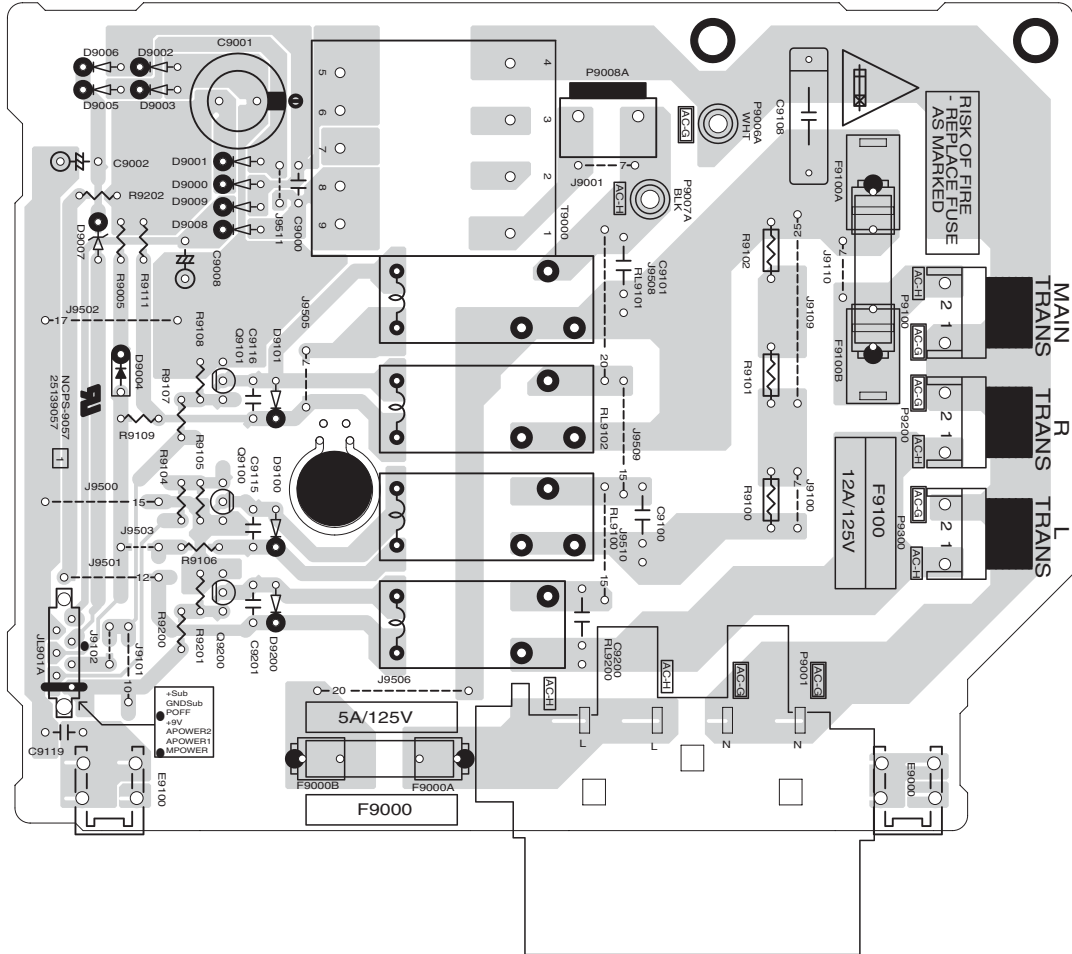
1

2

3

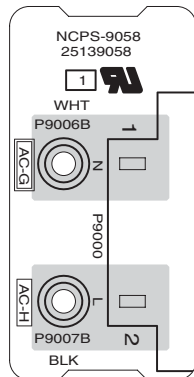
4

5



U14 INLET PC BOARD (NAPS-9058)

Component side



A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-8

U16 POWER AMP PC BOARD (NAAMP-9061)

Component side

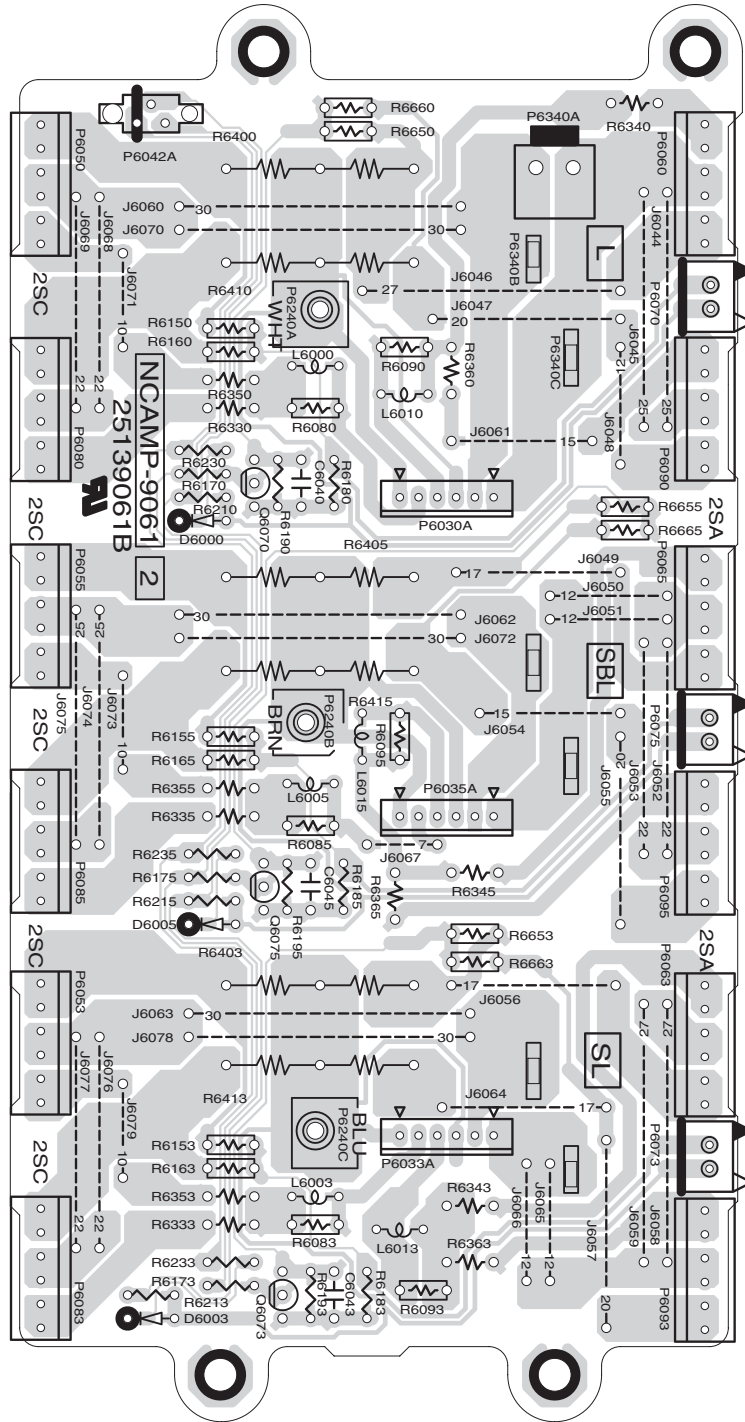
1

2

3

4

5



A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-9

U17 POWER AMP PC BOARD (NAAMP-9062)

Component side

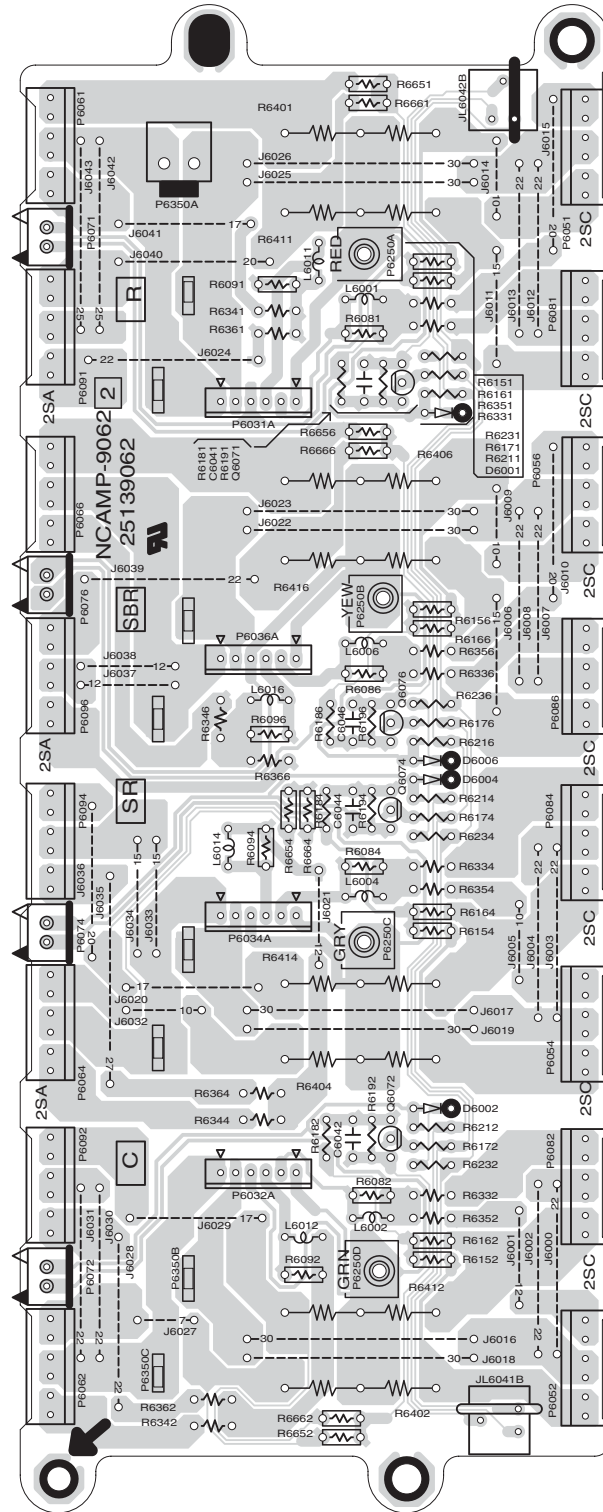
1

2

3

4

5



A

B

C

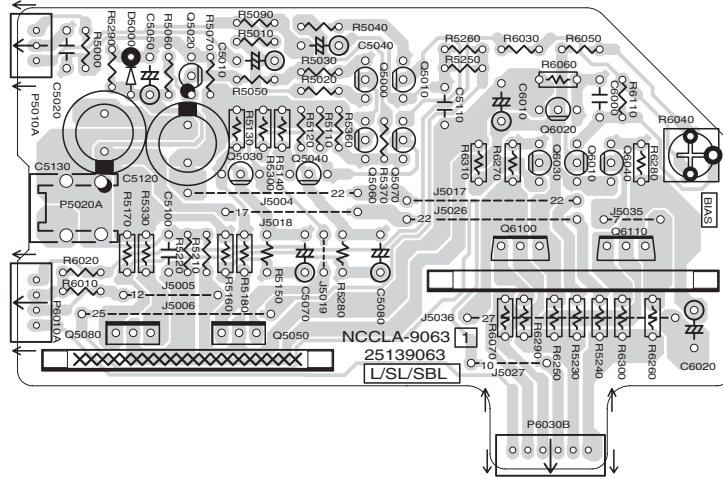
D

PRINTED CIRCUIT BOARD VIEWS-10

U18 POWER AMP PC BOARD (NACLA-9063)

Component side

1

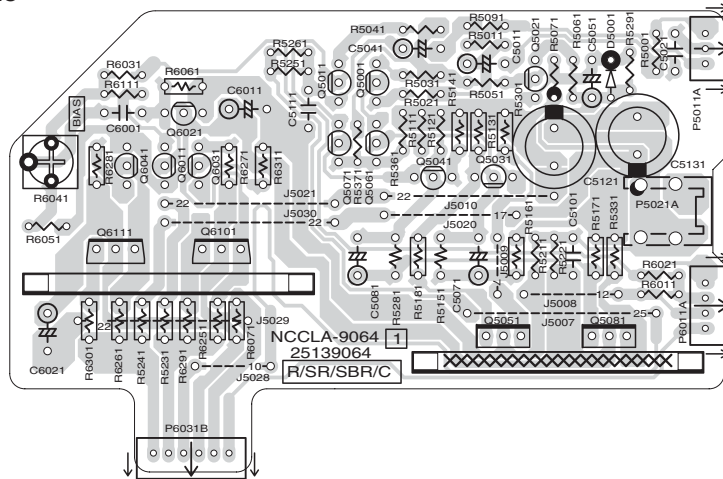


2

U19 POWER AMP PC BOARD (NACLA-9064)

Component side

3

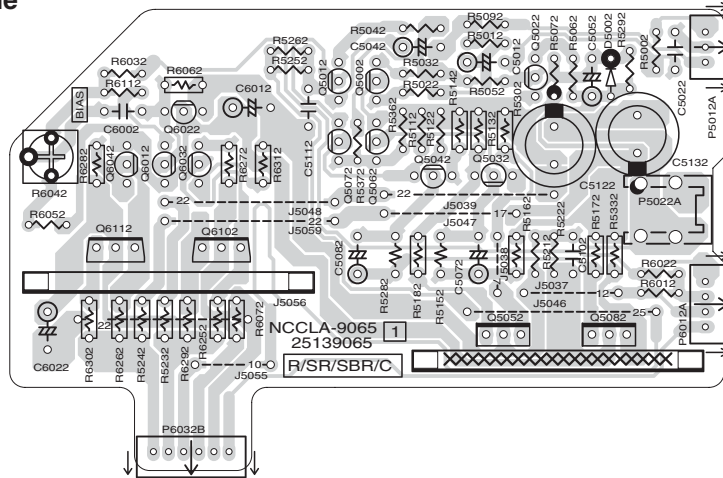


4

U20 POWER AMP PC BOARD (NACLA-9065)

Component side

5



A

B

C

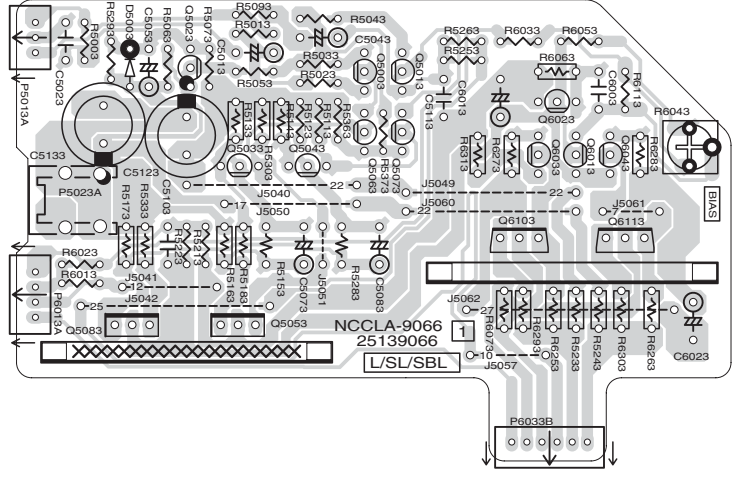
D

PRINTED CIRCUIT BOARD VIEWS-11

U21 POWER AMP PC BOARD (NACLA-9066)

Component side

1

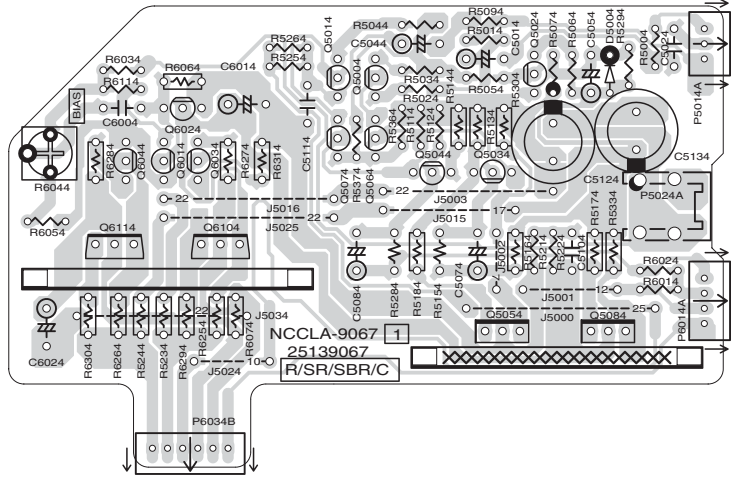


2

U22 POWER AMP PC BOARD (NACLA-9067)

Component side

3



4

5

A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-13

U25 DSP PC BOARD (NADSP-9072)

Side-A

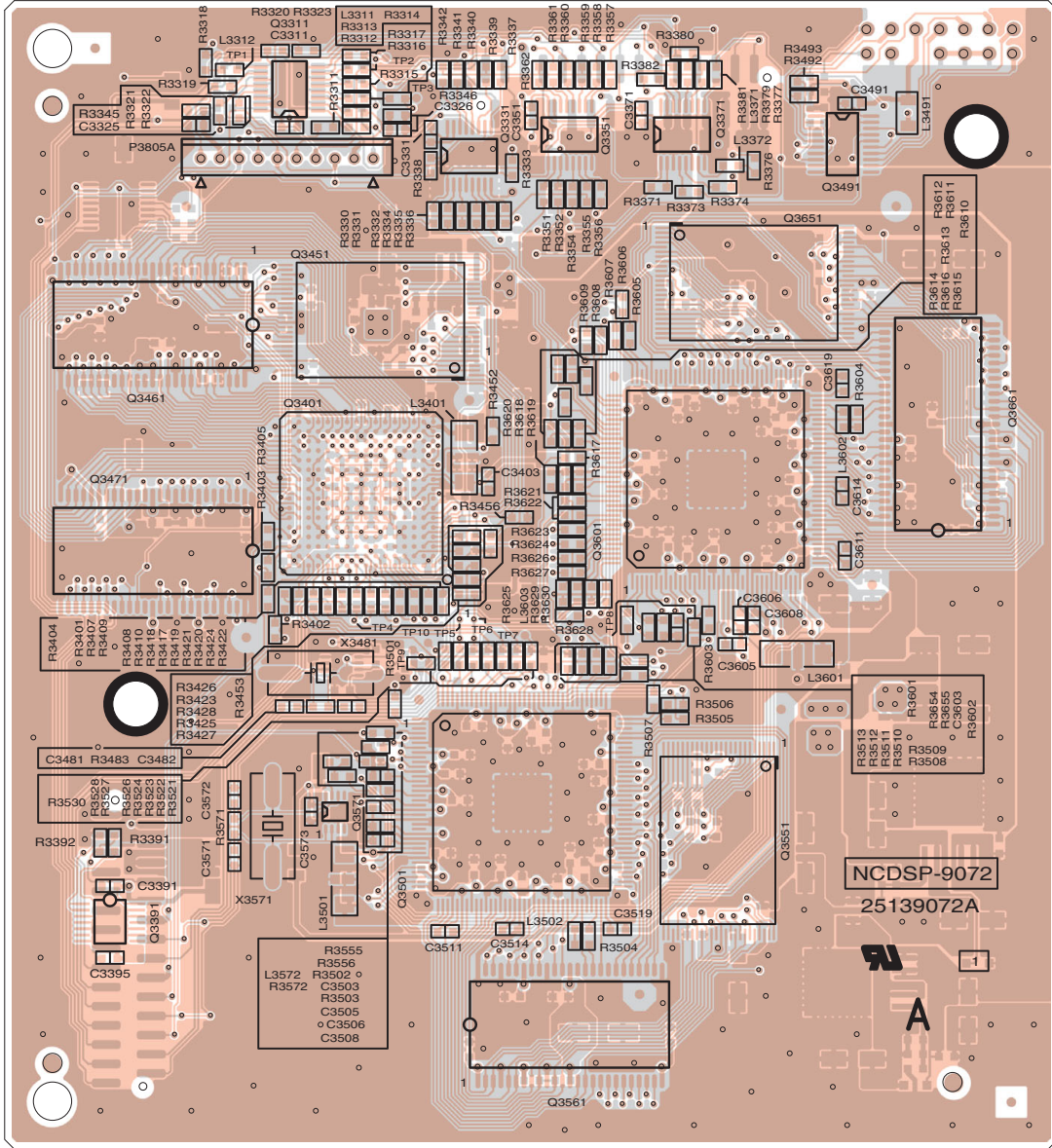
1

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A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-14

U25 DSP PC BOARD (NADSP-9072)

Side-B

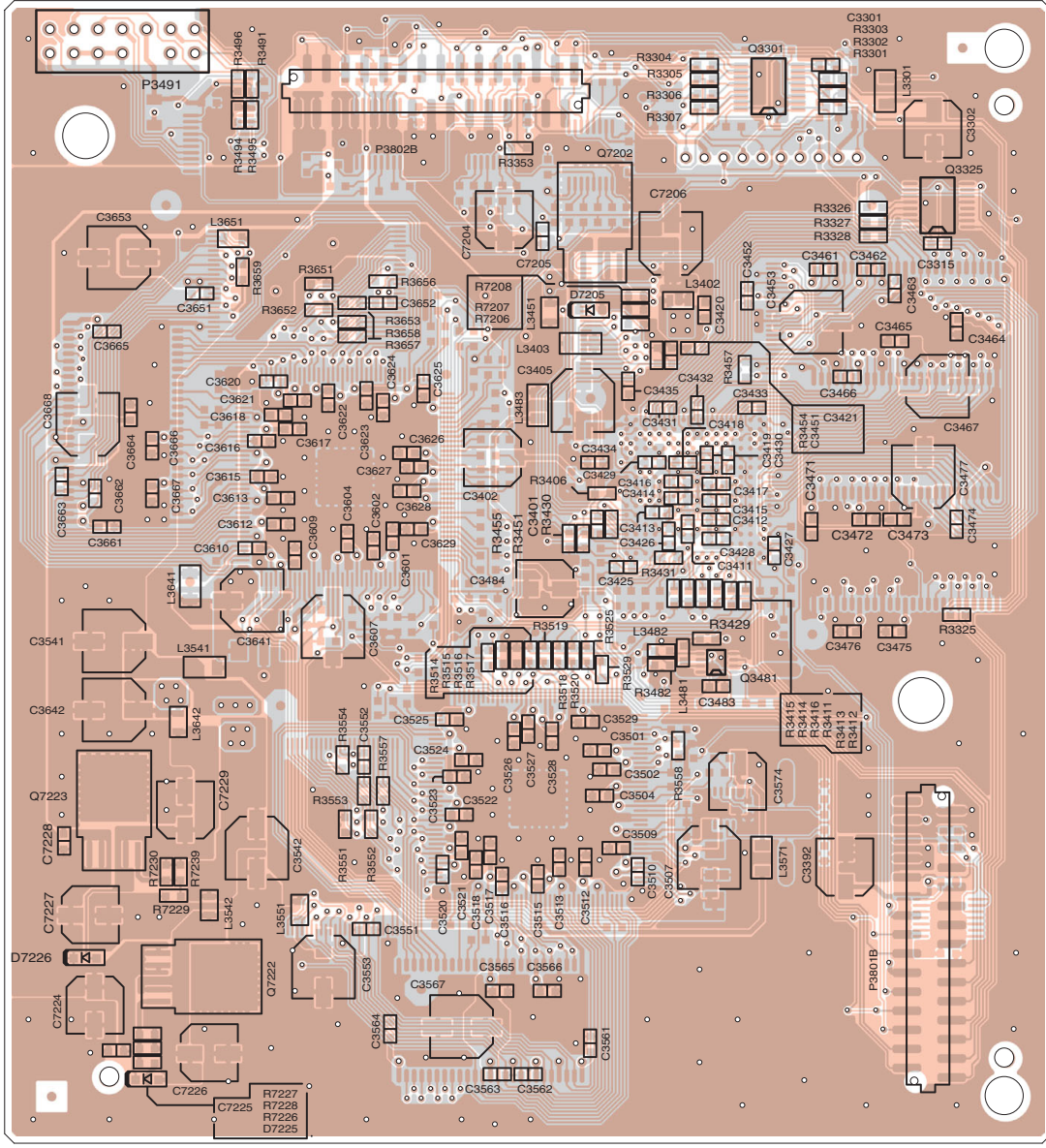
1

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A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-15

U27 DAC PC BOARD (NADG-9074)

Side-A

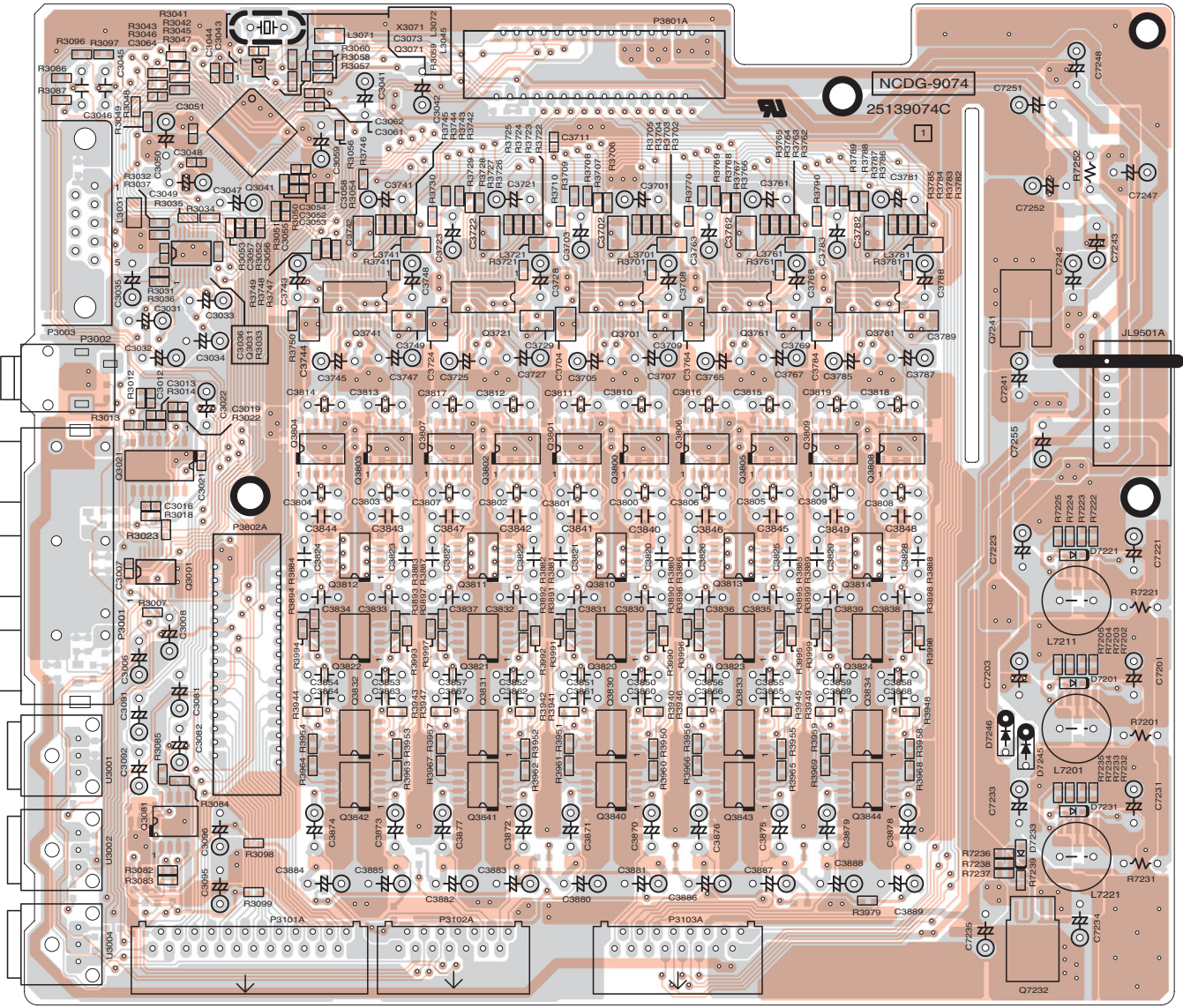
1

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A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-16

U27 DAC PC BOARD (NADG-9074)

Side-B

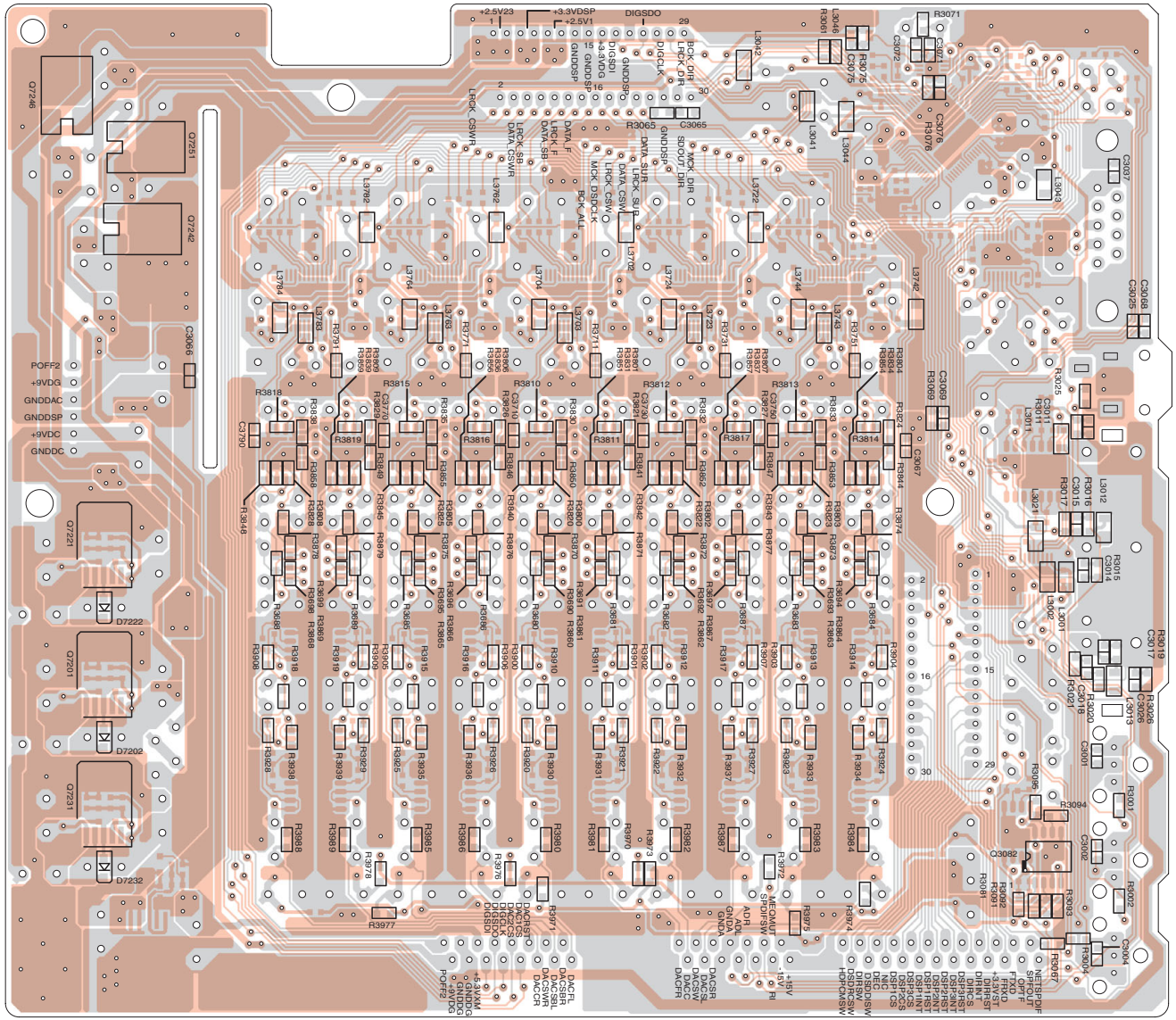
1

2

3

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5



A

B

C

D

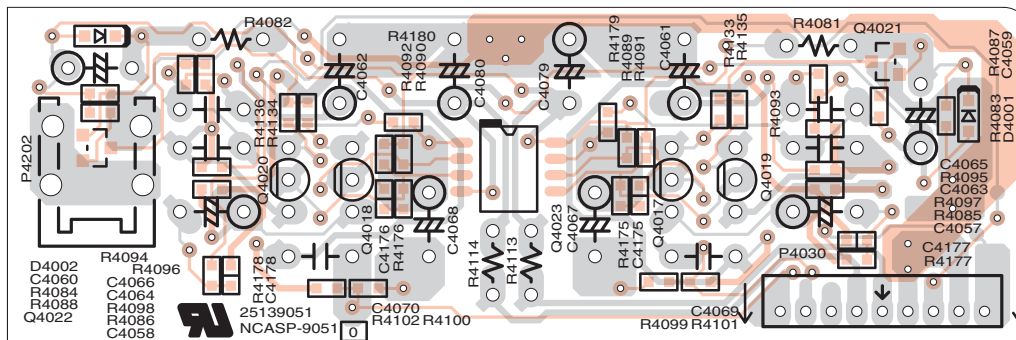
PRINTED CIRCUIT BOARD VIEWS-17

1

U07 PHONO PC BOARD (NAASP-9051)

Side-A

2

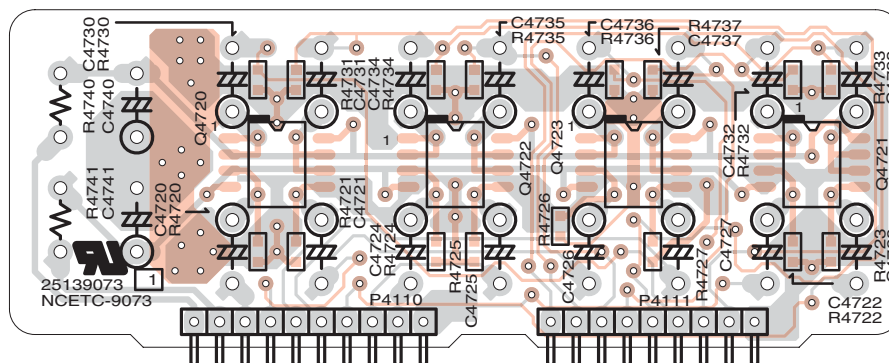


3

U26 AMPLIFIER PC BOARD (NAETC-9073)

Side-A

4



5

A

B

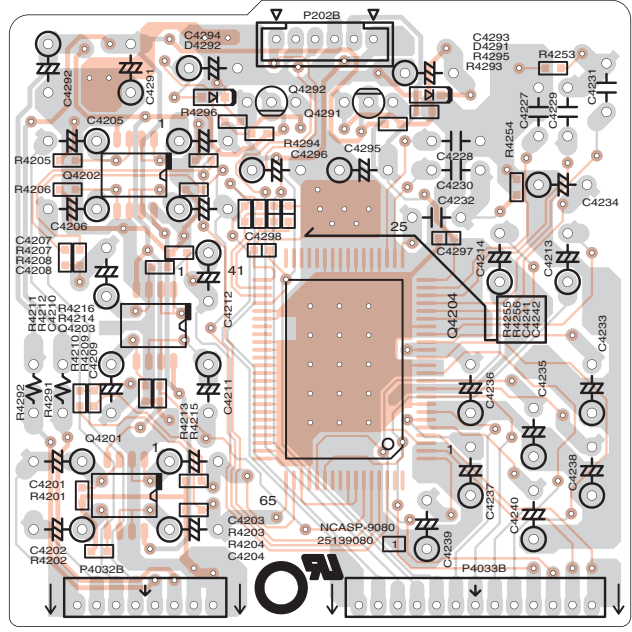
C

D

PRINTED CIRCUIT BOARD VIEWS-18

U32 AMPLIFIER PC BOARD (NAASP-9080)

Side-A



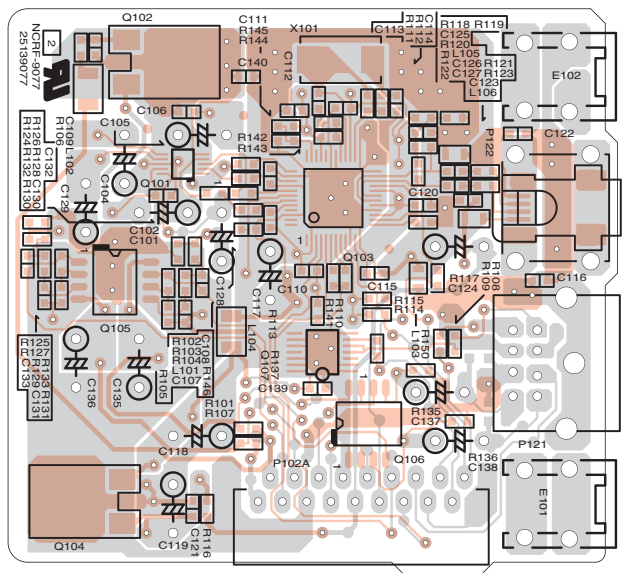
1

2

3

U30 XM PC BOARD (NARF-9077)

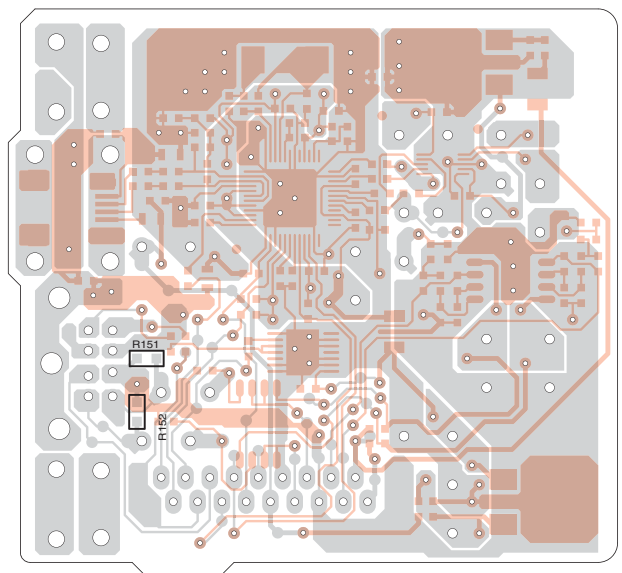
Side-A



4

5

Side-B



A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-20

U28 MICROPROCESSOR PC BOARD (NAAR-9075)

Side-B

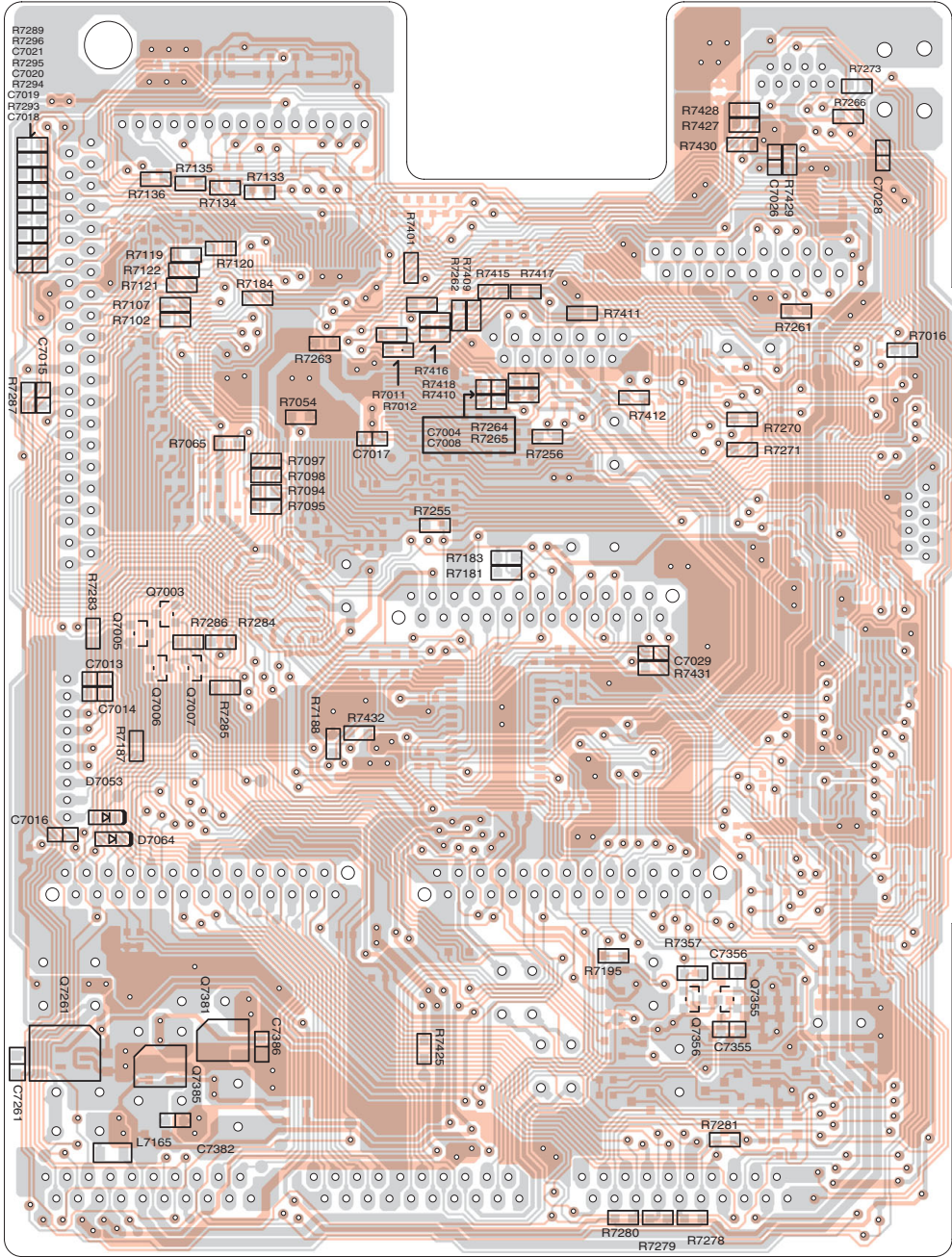
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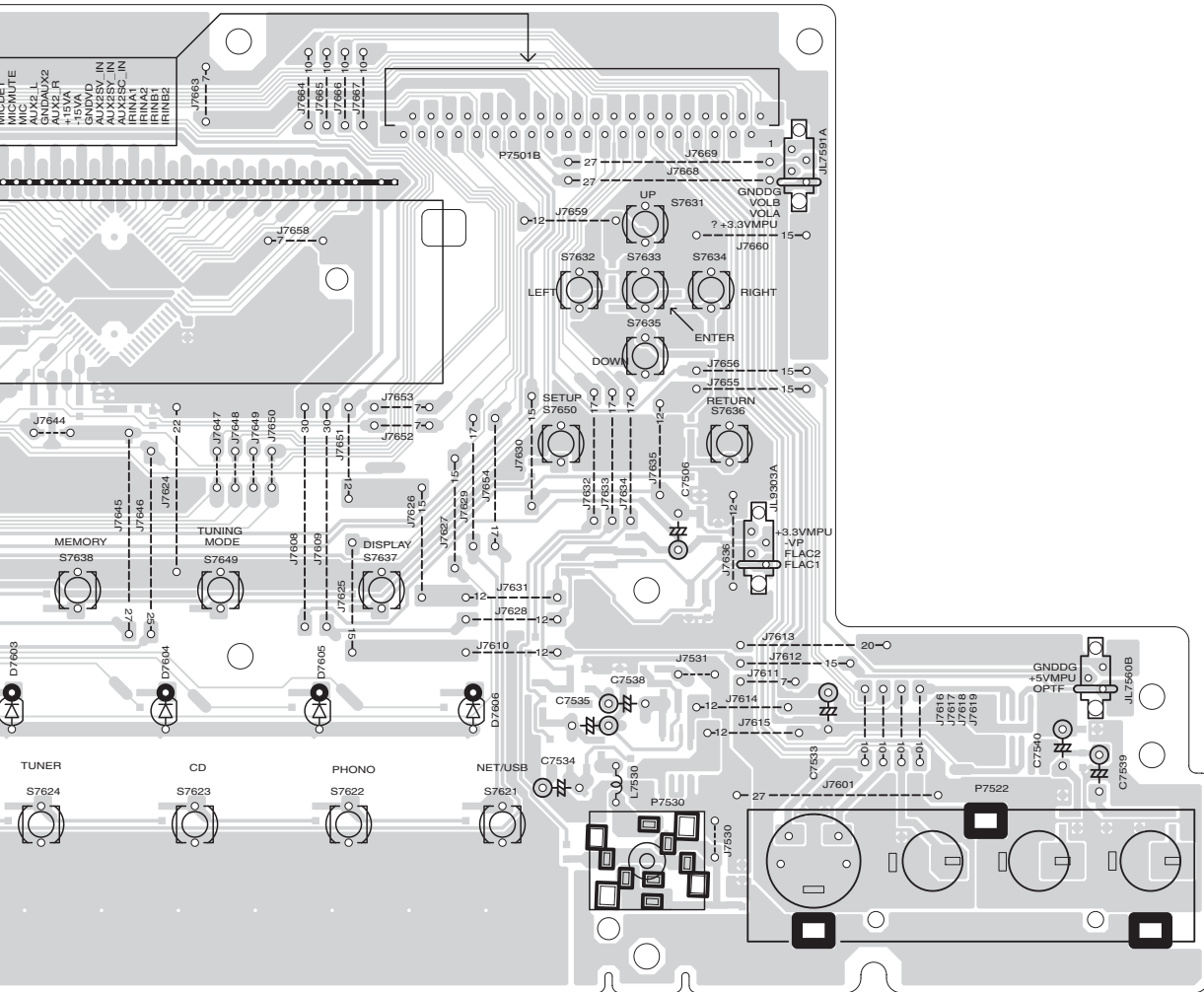
2

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5





A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-22

U33 DISPLAY PC BOARD (NADIS-9096)

Soldering Side

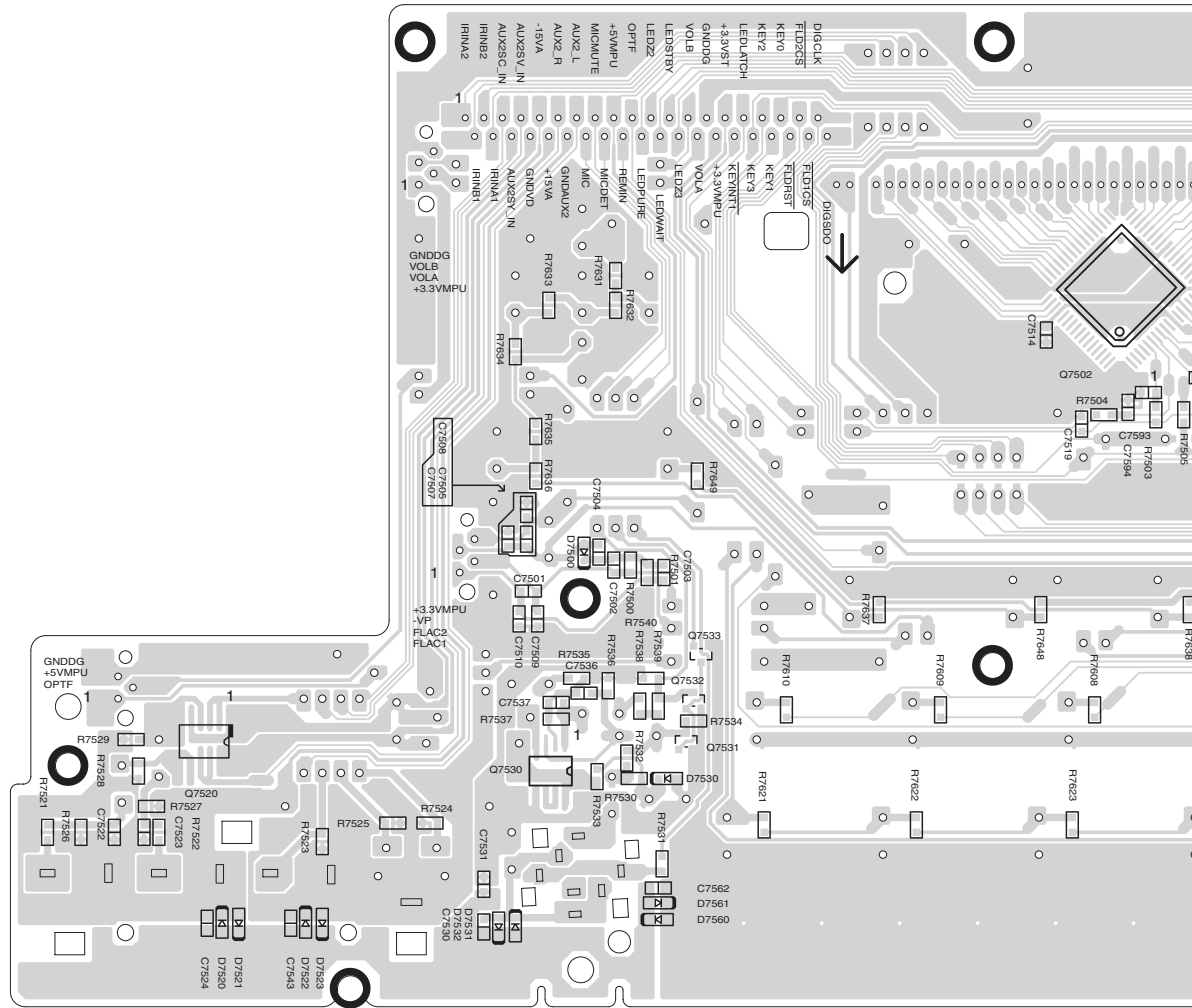
1

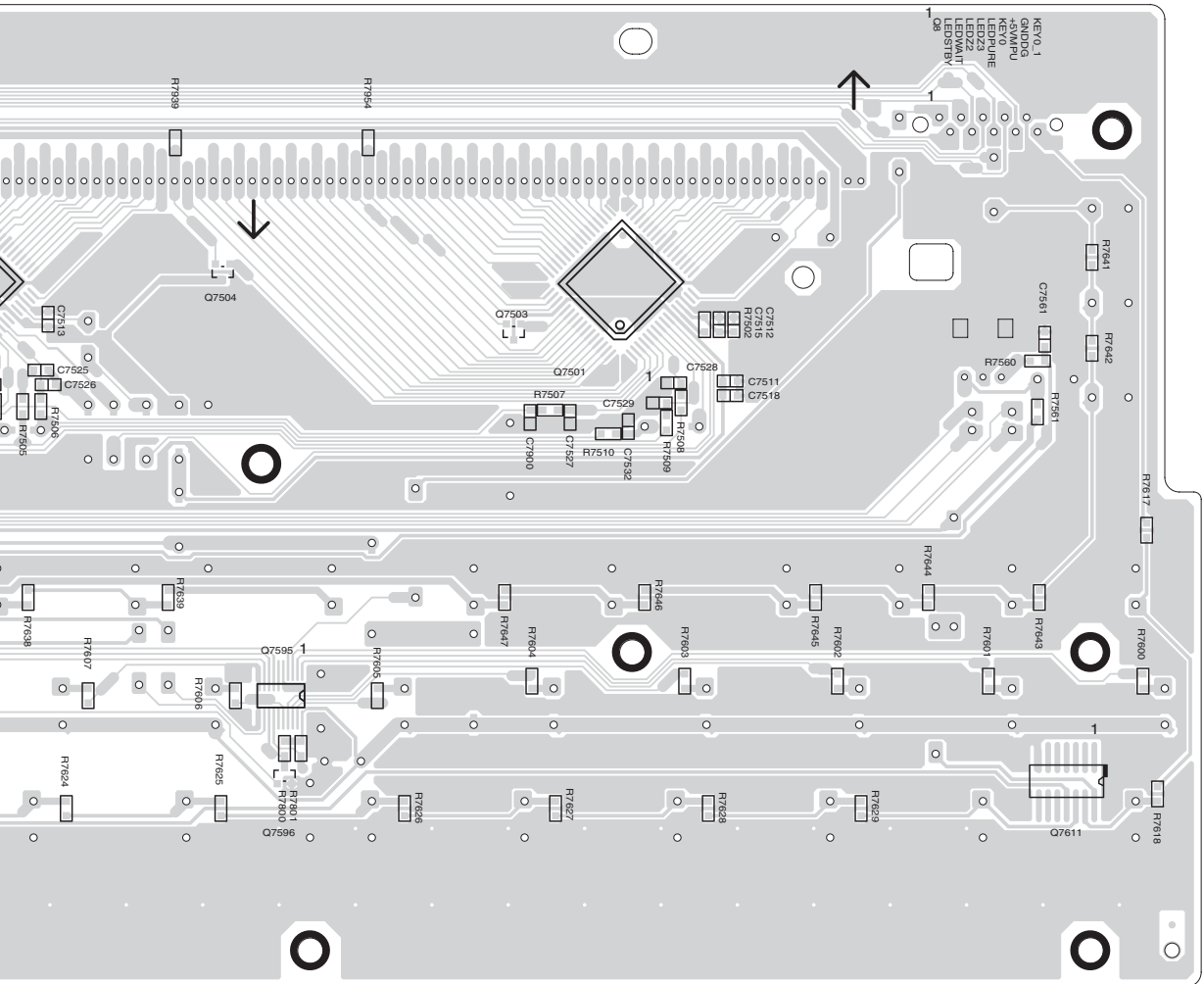
2

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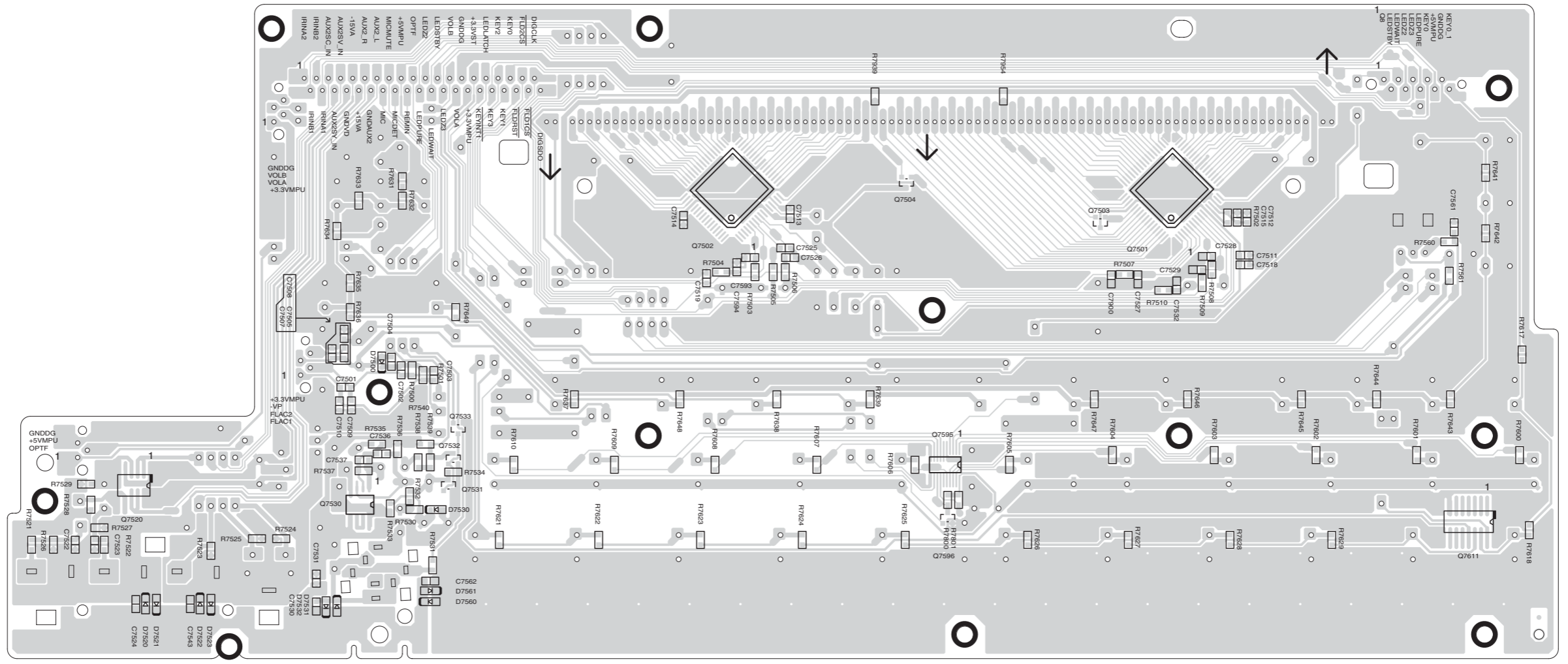


A B C D E F G H

PRINTED CIRCUIT BOARD VIEWS-22

U33 DISPLAY PC BOARD (NADIS-9096)
Soldering Side

1
2
3
4
5



A

B

C

D

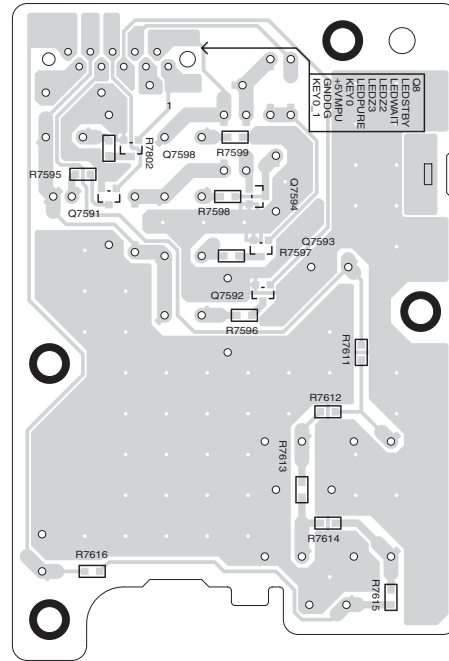
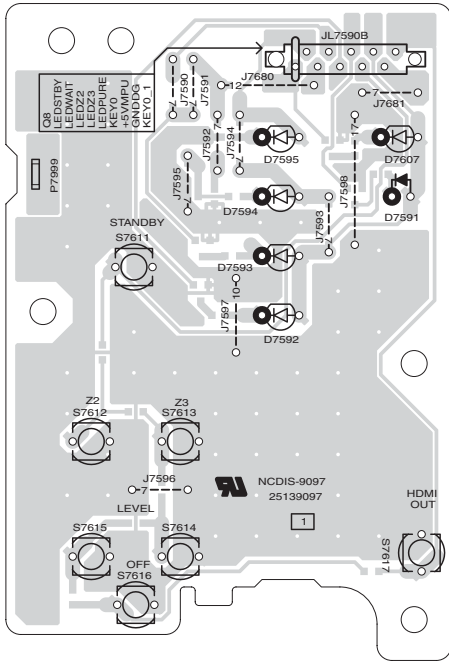
PRINTED CIRCUIT BOARD VIEWS-23

U34 DISPLAY PC BOARD (NADIS-9097)

Component side

Soldering side

1



2

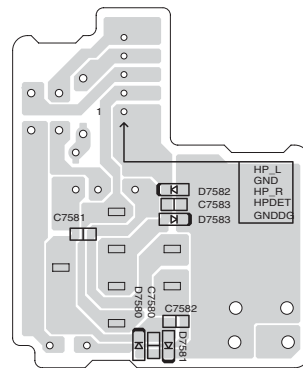
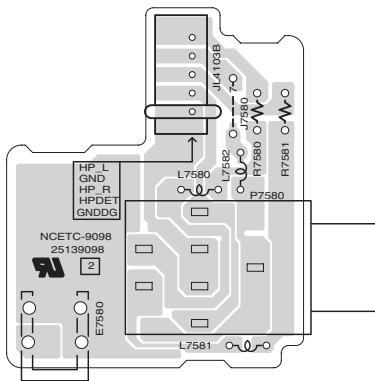
3

U35 HEADPHONE PC BOARD (NAETC-9098)

Component side

Soldering side

4



5

A

B

C

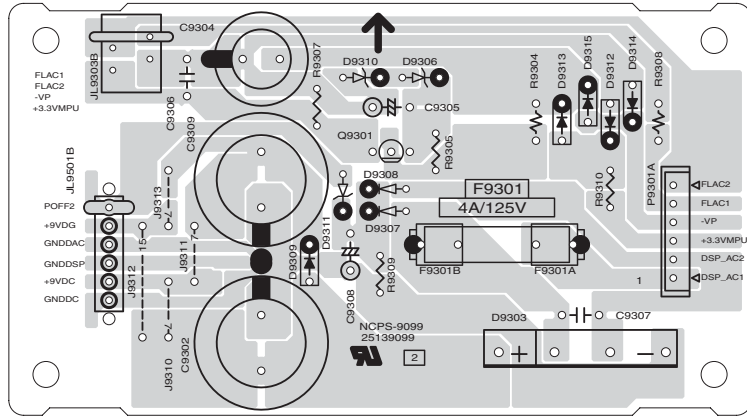
D

PRINTED CIRCUIT BOARD VIEWS-24

U36 POWER SUPPLY PC BOARD (NAPS-9099)

Component side

1



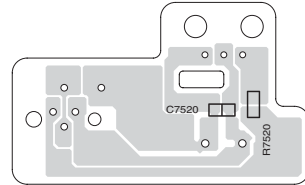
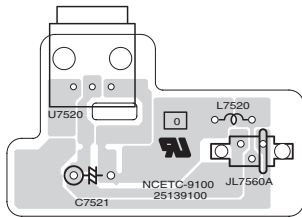
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U37 OPT PC BOARD (NAETC-9100)

Component side

Soldering side

3

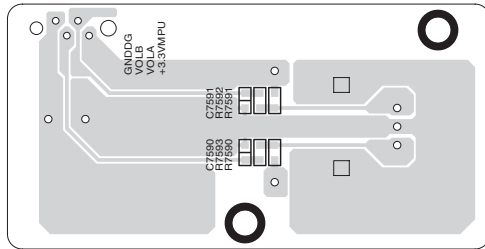
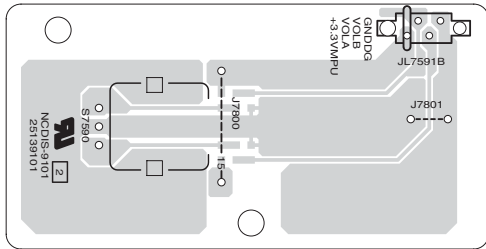


U38 OPT PC BOARD (NADIS-9101)

Component side

Soldering side

4

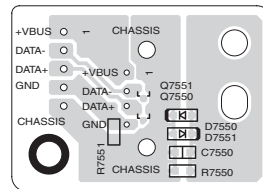
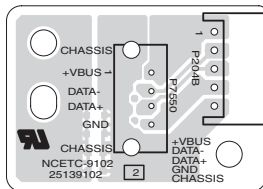


U39 XM PC BOARD (NAETC-9102)

Component side

Soldering side

5



A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-25

U42 HDMI PC BOARD (NAHDM-9107)

Side-A

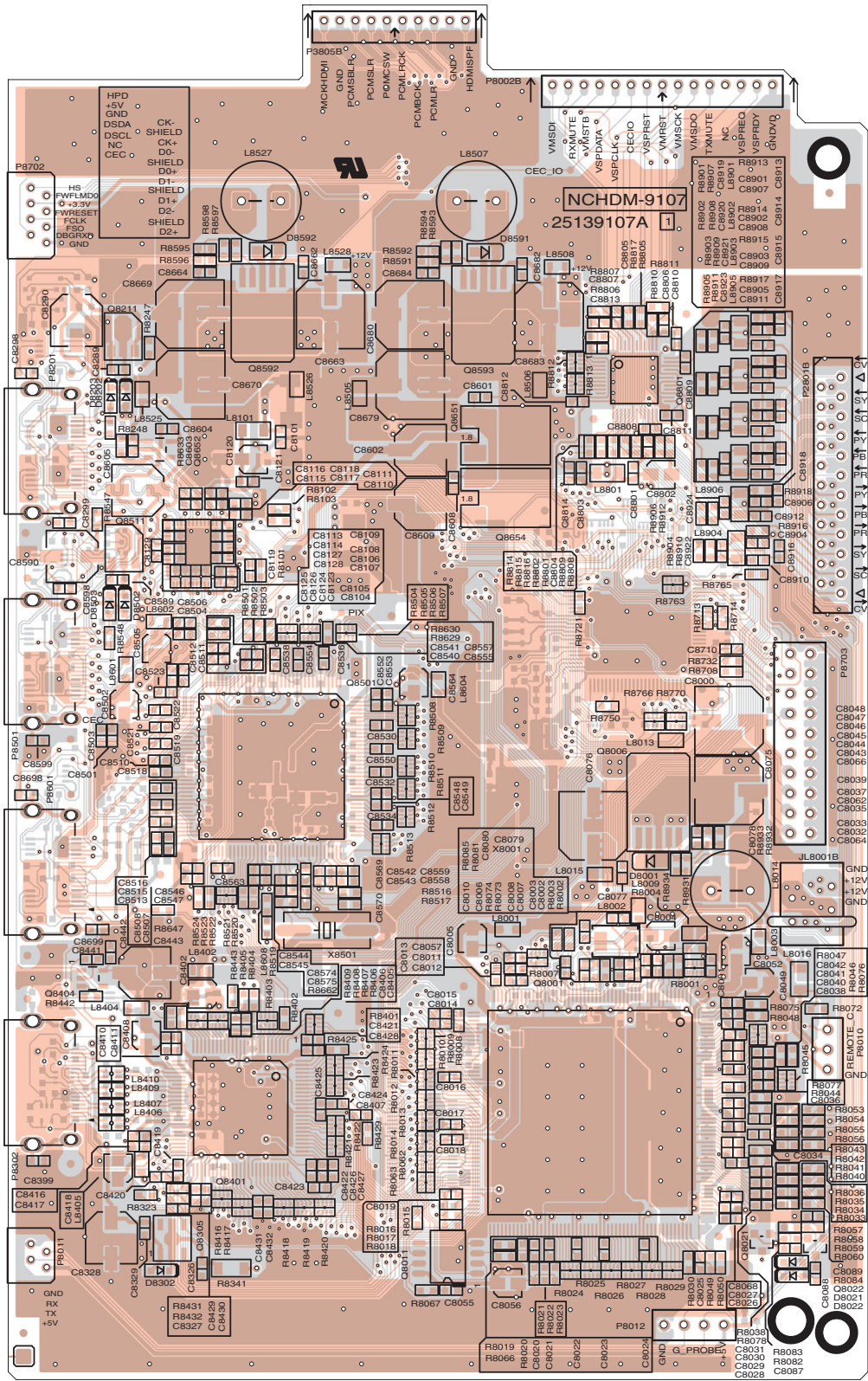
1

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A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-26

U42 HDMI PC BOARD (NAHDM-9107)

Side-B

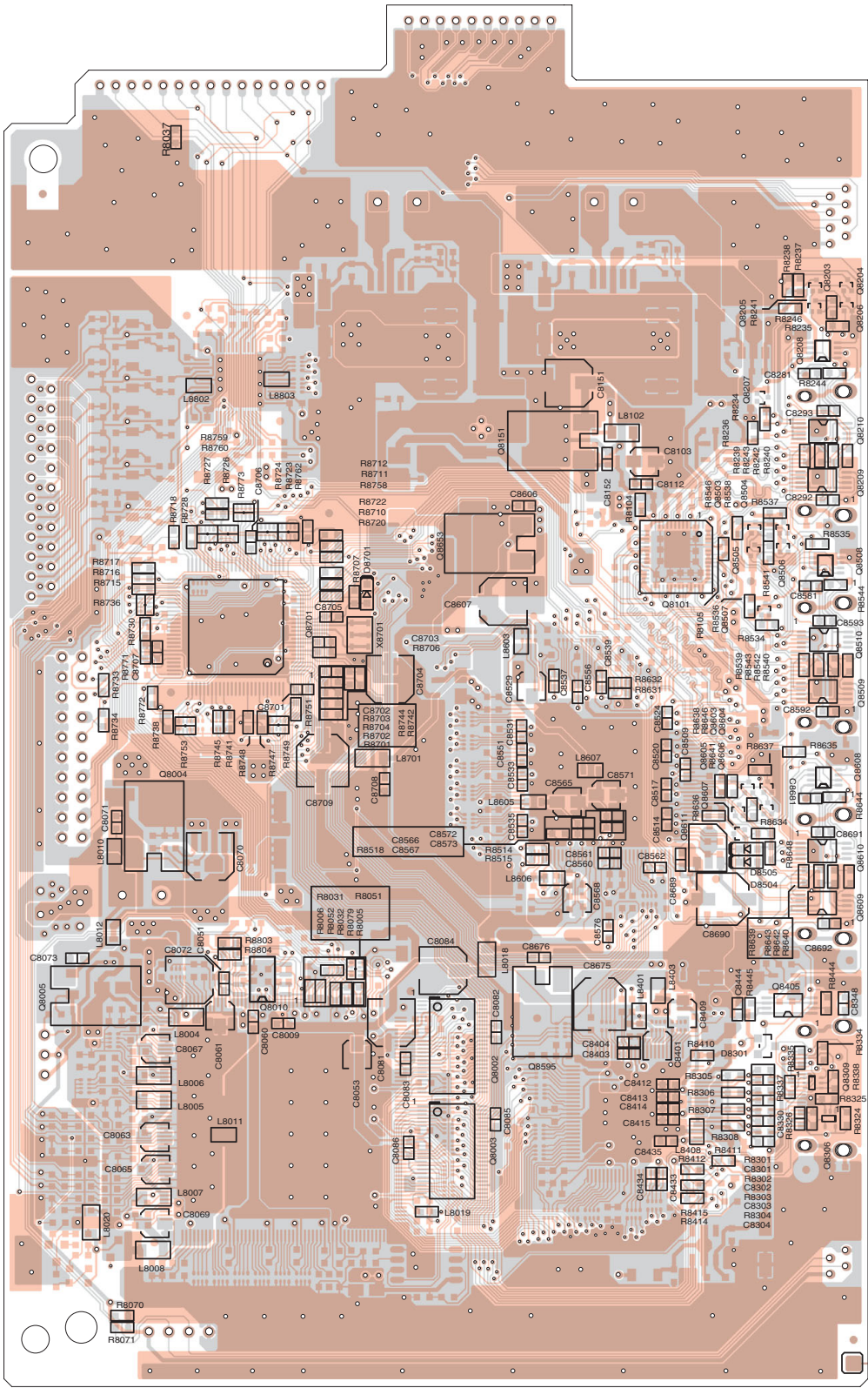
1

2

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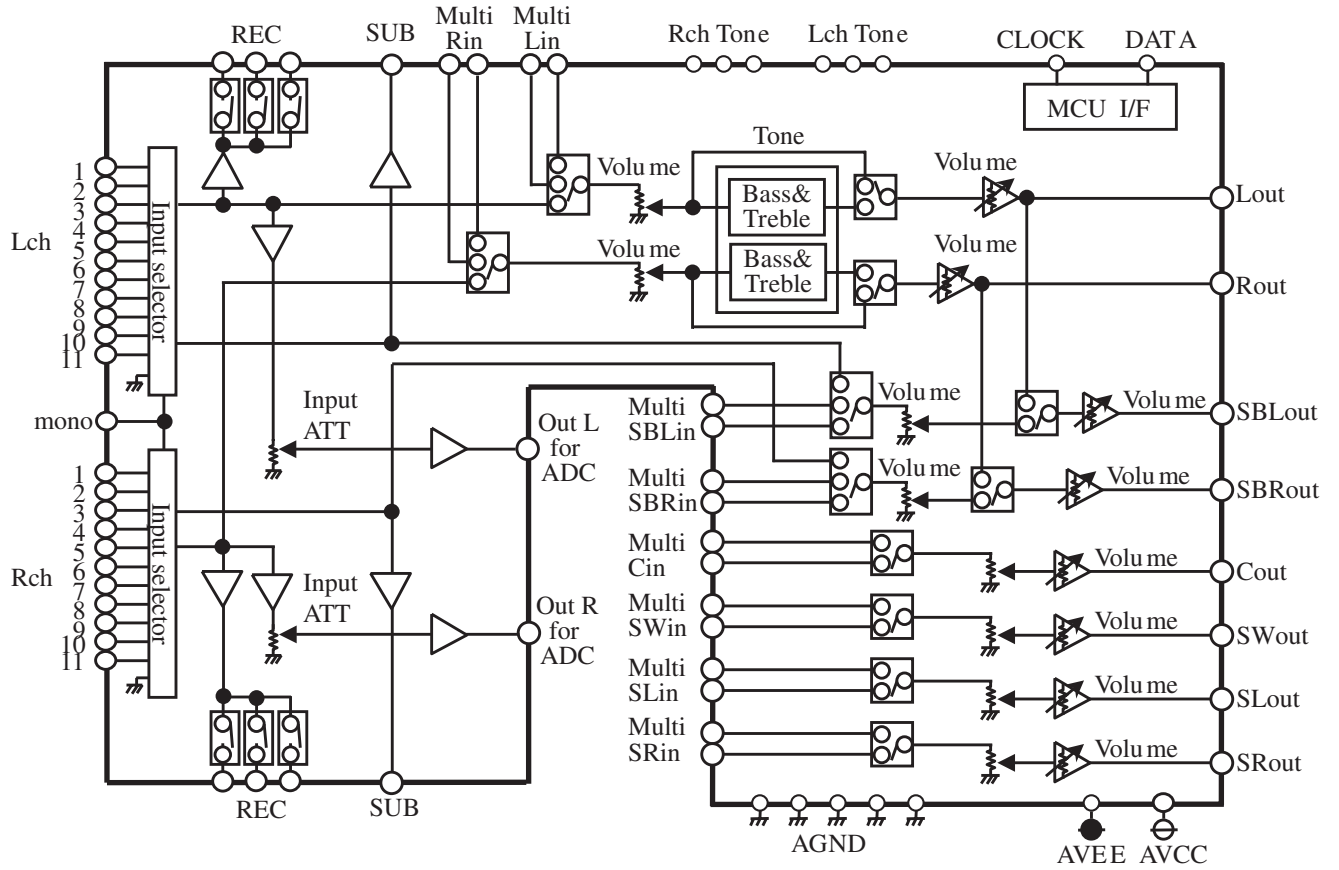
5



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -1

Q4204: R2S15211FP (8 ch Electronic Volume, 11 Input Selector and Tone Control)

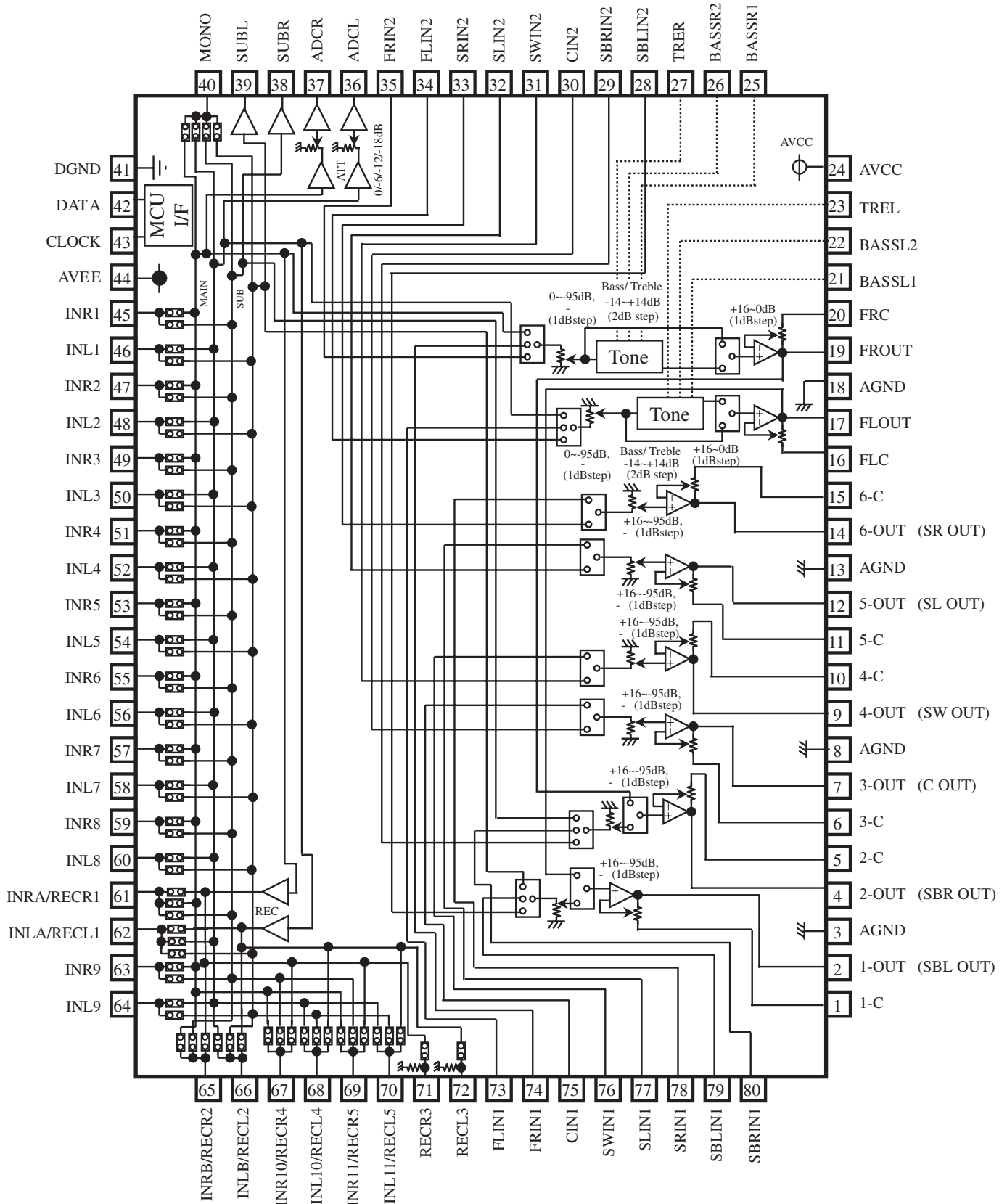
SYSTEM BLOCK DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -2

Q4204: R2S15211FP (8 ch Electronic Volume, 11 Input Selector and Tone Control)

BLOCK DIAGRAM AND PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -3

Q4204: R2S15211FP (8 ch Electronic Volume, 11 Input Selector and Tone Control)

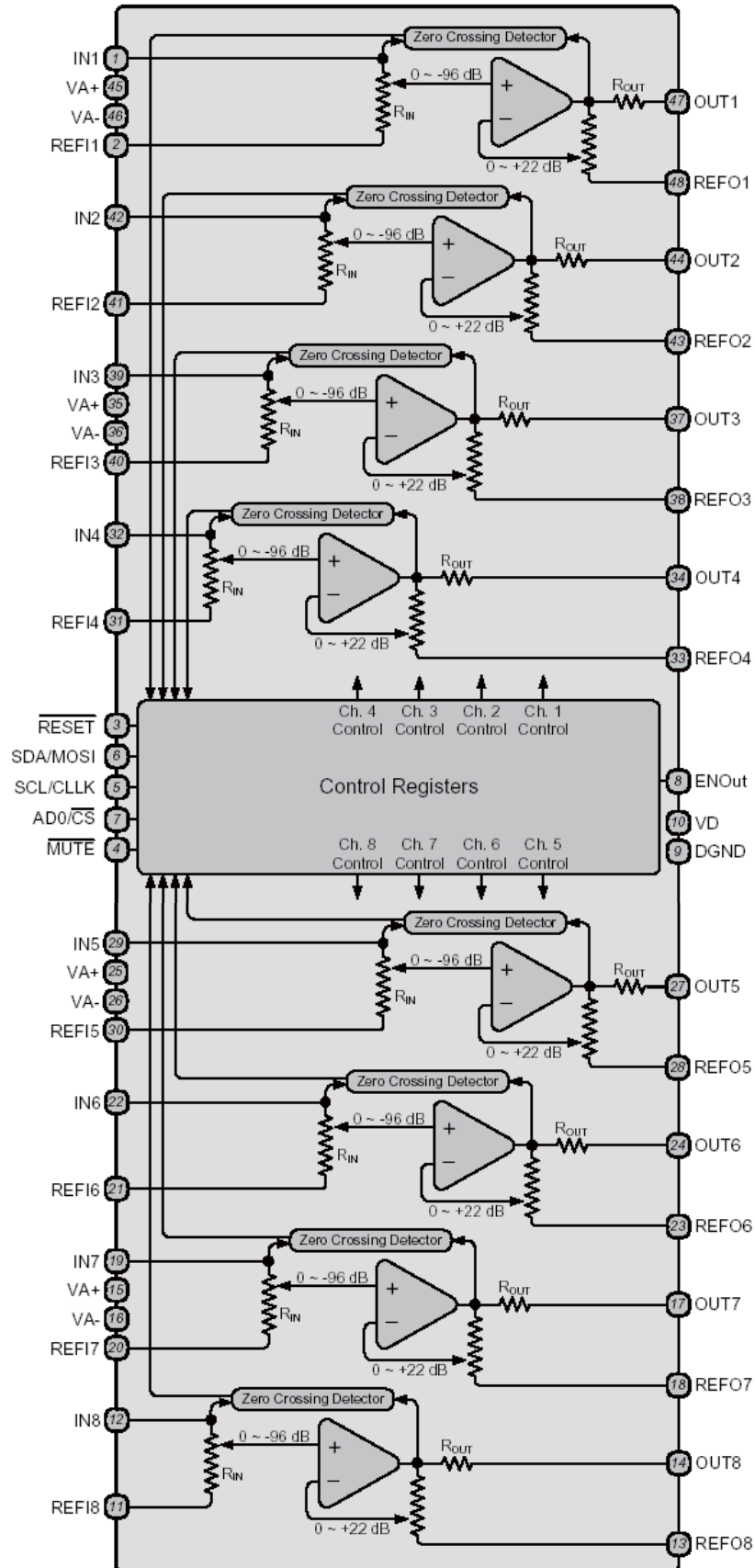
TERMINAL DESCRIPTION

PIN No.	Name	Function
19,17, 14,12, 9,7, 4,2	FROUT,FLOUT, 6-OUT,5-OUT, 4-OUT, 3-OUT, 2-OUT,1-OUT	Output pin of FL/FR/C/SW/SL/SR/SBL/SBR channel
20,16, 15,11, 10,6, 5,1	FRC,FLC, 6-C,5-C, 4-C,3-C, 2-C,1-C	Connects capacitor for reducing click noise of L/R/C/SW/SL/SR/SBL/SBR channel volume
3,8, 13,18	AGND	Analog ground of internal circuit
23,27	TREL, TRER	Frequency characteristic setting pin of L/R channel tone control (Treble)
21,22, 25,26	BASSL1,BASSL2 BASSR1,BASSR2	Frequency characteristic setting pin of L/R channel tone control (Bass)
24	AVCC	Positive power supply to internal circuit
35,34, 33,32, 31,30, 29,28	FRIN2, FLIN2, SRN2,SLIN2, SWIN2,CIN2, SBRIN2,SBLIN2	Input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
73,74, 75,76, 77,78, 79,80	FLIN1, FRIN1, CIN1,SWIN1, SLIN1,SRIN1, SBLIN1,SBRIN1	
41	DGND	Digital ground of internal circuit
42	DATA	Input pin of control data
43	CLOCK	Input pin of control clock
44	AVEE	Negative power supply to internal circuit
46,48,50, 52,54,56, 58,60,64	INL1,INL2, INL3, INL4,INL5,INL6, INL7,INL8,INL9	Input pin of L/R channel (Input Selector)
45,47,49, 51,53,55, 57,59,63	INR1,INR2, INR3, INR4,INR5,INR6, INR7,INR8,INR9	
40	MONO	Input pin of monaural (Input Selector)
38,39	SUBL,SUBR	Output pin for L/R channel SUB Output
36,37	ADCL, ADCR	Output pin for L/R channel ADC
72	RECL3	Output pin for L/R channel REC Output
71	RECR3	
61,62, 65,66, 67,68, 69,70	INRA/RECR1,INLA/RECL1, INRB/RECR2,INLB/RECL2, INR10/RECR4,INL10/RECL4, INR11/RECR5,INL11/RECL5	Input pin of L/R channel (Input Selector)/ Output pin for L/R channel REC Output

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -4

Q4405: CS3318-CQZR (8 Channel Analog Volume Control)

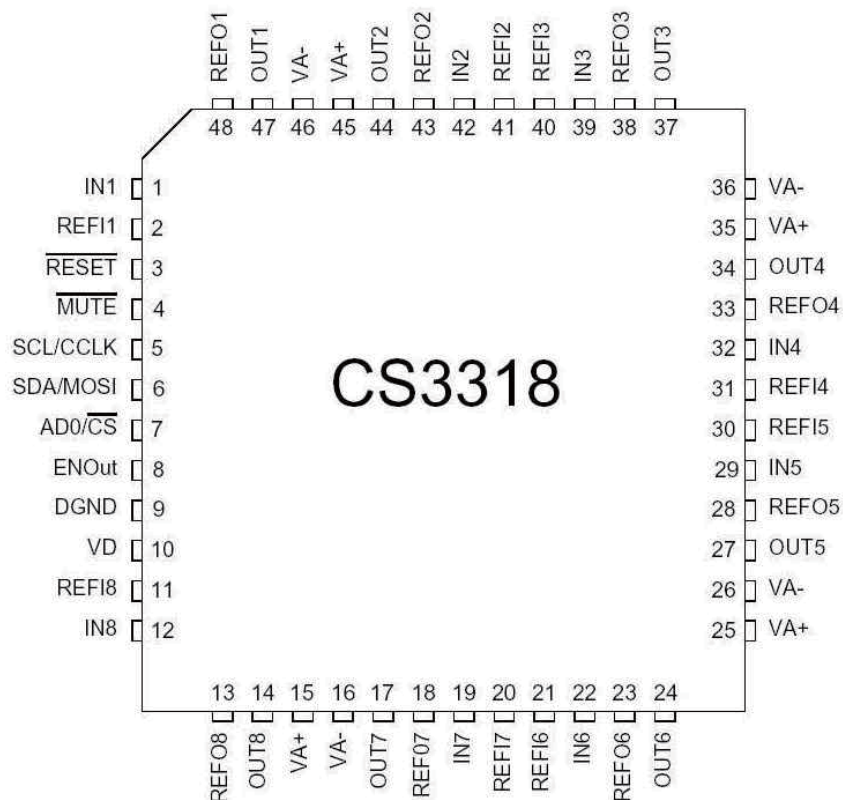
BLOCK DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -5

Q4405: CS3318-CQZR (8 Channel Analog Volume Control)

PIN CONFIGURATION



TERMINAL DESCRIPTION(1/2)

Pin Name	#	Pin Description
IN1	1	
IN2	42	
IN3	39	
IN4	32	Analog Inputs (Input) - The full-scale level is specified in the Analog Characteristics specification table.
IN5	29	
IN6	22	
IN7	19	
IN8	12	

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -6

Q4405: CS3318-CQZR (8 Channel Analog Volume Control)

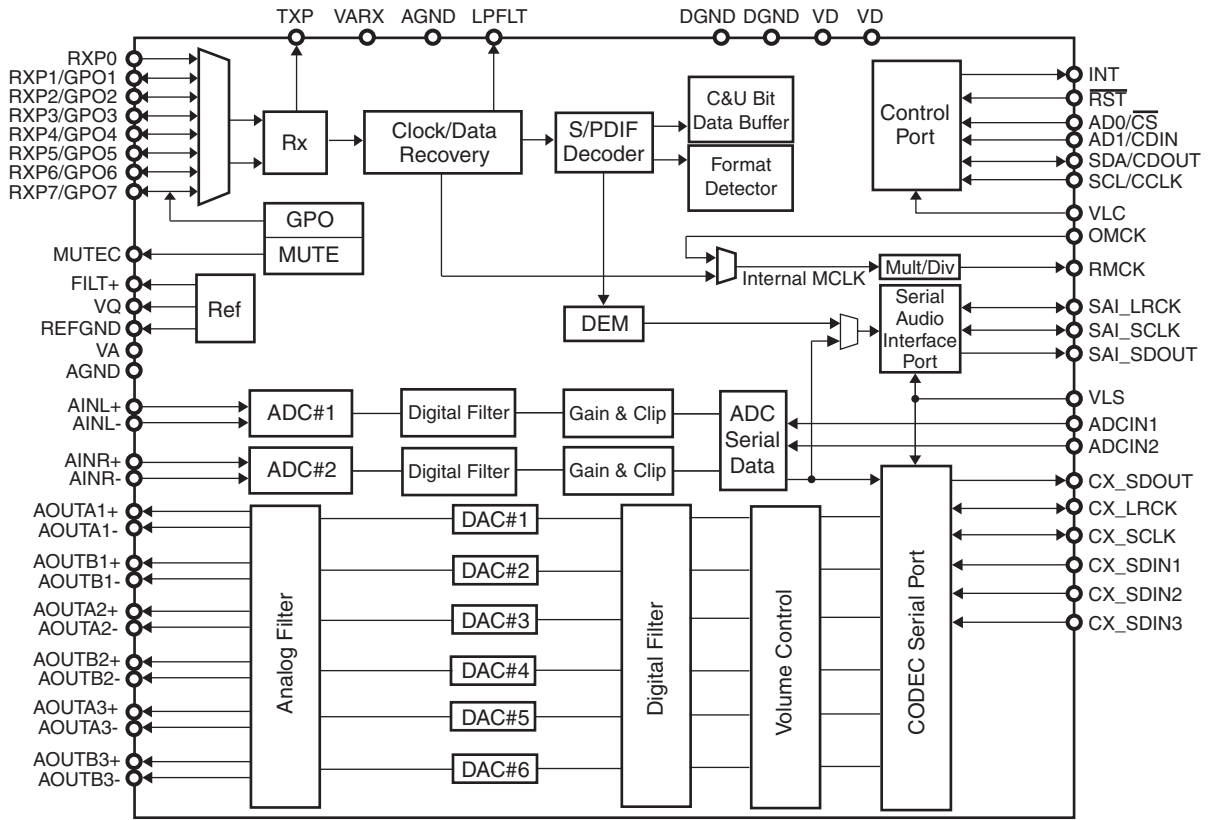
TERMINAL DESCRIPTION(2/2)

Pin Name	#	Pin Description
OUT1	47	
OUT2	44	
OUT3	37	
OUT4	34	Analog Outputs (Output) - The full-scale output level is specified in the Analog Characteristics specification table.
OUT5	27	
OUT6	24	
OUT7	17	
OUT8	14	
REF11	2	
REF12	41	
REF13	40	
REF14	31	Reference In (Input) - Analog reference pin.
REF15	30	
REF16	21	
REF17	20	
REF18	11	
REFO1	48	
REFO2	43	
REFO3	38	
REFO4	33	Reference Out (Output) - Analog reference pin.
REFO5	28	
REFO6	23	
REFO7	18	
REFO8	13	
VA+	15, 25, 35, 45	Positive Analog Power (Input) - Positive power for the internal analog section.
VA-	16, 26, 36, 46	Negative Analog Power (Input) - Negative power for the internal analog section.
$\overline{\text{RESET}}$	3	Reset (Input) - The device enters a low-power mode when this pin is driven low.
$\overline{\text{MUTE}}$	4	Mute (Input) - This pin defaults to an active low mute input, and may be configured as an active high mute input.
SCL/CCLK	5	Serial Control Port Clock (Input) - Serial clock for the serial control port.
SDA/MOSI	6	Serial Control Data (Input/Output) - SDA is a data I/O line for the control port interface in I ² C Mode. MOSI is the input data line for the control port interface in SPI Mode.
AD0/ $\overline{\text{CS}}$	7	Default Address Bit 0 (I²C) / Control Port Chip Select (SPI) (Input) - AD0 sets the LSB of the default chip address in I ² C Mode. $\overline{\text{CS}}$ is the chip-select signal for SPI format.
ENOut	8	Enable Output (Output) - Enable output signal for multi-device serial control chain configuration.
DGND	9	Digital Ground (Input) - Ground reference for the internal digital section.
VD	10	Digital Power (Input) - Positive power for the internal digital section.

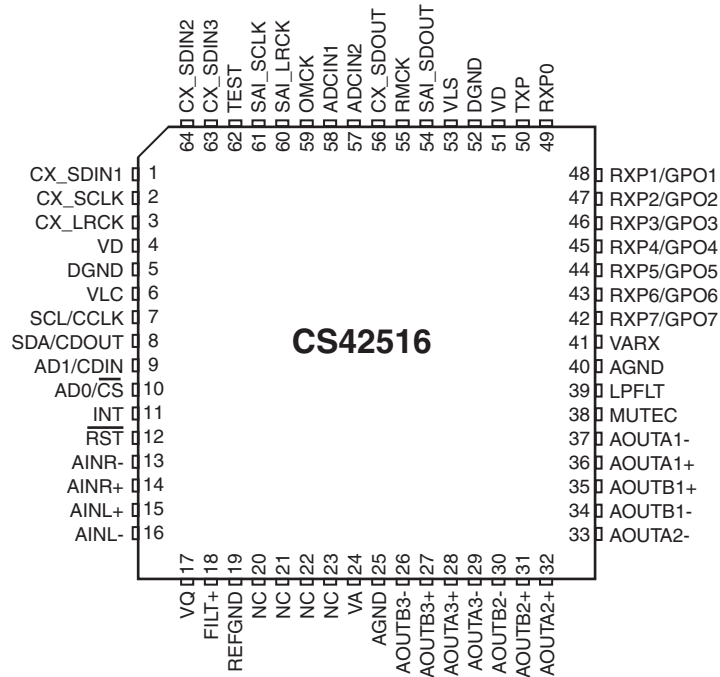
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -7

Q3041 : CS42516-CQZ (192 kHz, 6-Ch Codec with S/PDIF Receiver)

BLOCK DIAGRAM



PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -8

Q3041 : CS42516-CQZ (192 kHz, 6-Ch Codec with S/PDIF Receiver)

TERMINAL DESCRIPTION(1/2)

Pin Name	#	Pin Description
CX_SDIN1	1	
CX_SDIN2	64	Codec Serial Audio Data Input (Input) - Input for two's complement serial audio data.
CX_SDIN3	63	
CX_SCLK	2	CODEC Serial Clock (Input/Output) - Serial clock for the CODEC serial audio interface.
CX_LRCK	3	CODEC Left Right Clock (Input/Output) - Determines which channel, Left or Right, is currently active on the CODEC serial audio data line.
VD	4 51	Digital Power (Input) - Positive power supply for the digital section.
DGND	5 52	Digital Ground (Input) - Ground reference. Should be connected to digital ground.
VLC	6	Control Port Power (Input) - Determines the required signal level for the control port.
SCL/CCLK	7	Serial Control Port Clock (Input) - Serial clock for the serial control port. Requires an external pull-up resistor to the logic interface voltage in I ² C mode as shown in the Typical Connection Diagram.
SDA/CDOOUT	8	Serial Control Data (Input/Output) - SDA is a data I/O line in I ² C mode and requires an external pull-up resistor to the logic interface voltage, as shown in the Typical Connection Diagram. CDOOUT is the output data line for the control port interface in SPI mode.
AD1/CDIN	9	Address Bit 1 (I²C)/Serial Control Data (SPI) (Input) - AD1 is a chip address pin in I ² C mode; CDIN is the input data line for the control port interface in SPI mode.
AD0/ $\overline{\text{CS}}$	10	Address Bit 0 (I²C)/Control Port Chip Select (SPI) (Input) - AD0 is a chip address pin in I ² C mode; $\overline{\text{CS}}$ is the chip select signal in SPI mode.
INT	11	Interrupt (Output) - The CS42516 will generate an interrupt condition as per the Interrupt Mask register.
$\overline{\text{RST}}$	12	Reset (Input) - The device enters a low power mode and all internal registers are reset to their default settings when low.
AINR-	13	Differential Right Channel Analog Input (Input) - Signals are presented differentially to the delta-sigma modulators via the AINR+/- pins.
AINR+	14	
AINL+	15	Differential Left Channel Analog Input (Input) - Signals are presented differentially to the delta-sigma modulators via the AINL+/- pins.
AINL-	16	
VQ	17	Quiescent Voltage (Output) - Filter connection for internal quiescent reference voltage.
FILT+	18	Positive Voltage Reference (Output) - Positive reference voltage for the internal sampling circuits.
REFGND	19	Reference Ground (Input) - Ground reference for the internal sampling circuits.
	20	
NC	21 22 23	No Connect Pins - Do not make any connection to these pins.
AOUTA1 +,-	36,37	Differential Analog Output (Output) - The full-scale differential analog output level is specified in the Analog Characteristics specification table.
AOUTB1 +,-	35,34	
AOUTA2 +,-	32,33	
AOUTB2 +,-	31,30	
AOUTA3 +,-	28,29	
AOUTB3 +,-	27,26	
VA	24	Analog Power (Input) - Positive power supply for the analog section.
VARX	41	
AGND	25 40	Analog Ground (Input) - Ground reference. Should be connected to analog ground.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -9

Q3041 : CS42516-CQZ (192 kHz, 6-Ch Codec with S/PDIF Receiver)

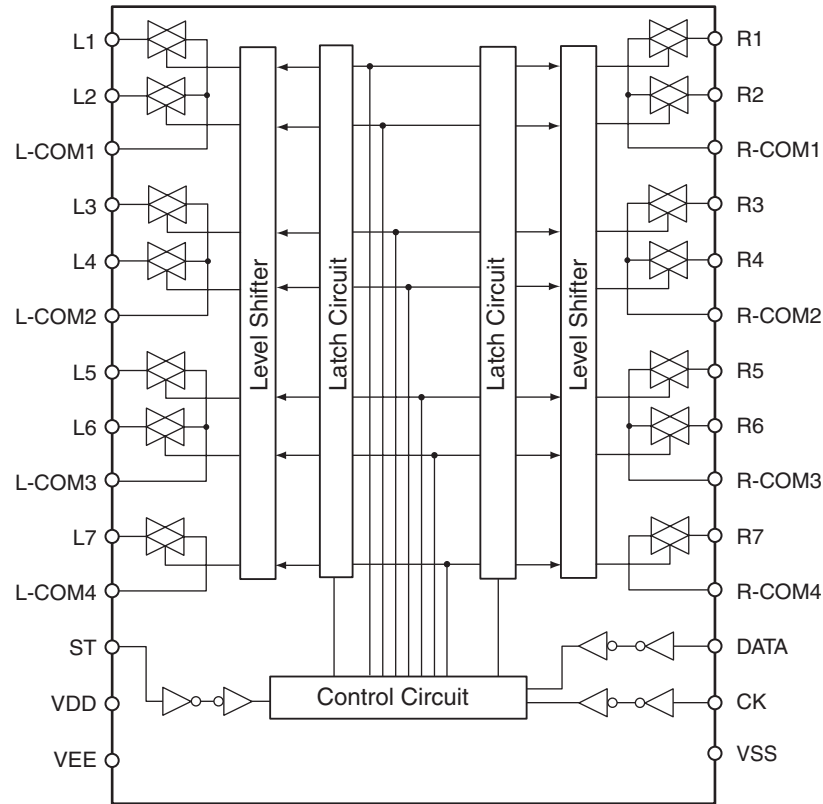
TERMINAL DESCRIPTION(2/2)

Pin Name	#	Pin Description
RXP7/GPO7	42	
RXP6/GPO6	43	S/PDIF Receiver Input/ General Purpose Output (Input/Output) - Receiver inputs for S/PDIF encoded data. The CS42516 has an internal 8:2 multiplexer to select the active receiver port, according to the Receiver Mode Control 2 register. These pins can also be configured as general purpose output pins, ADC Overflow indicators or Mute Control outputs according to the RXP/General Purpose Pin Control registers.
RXP5/GPO5	44	
RXP4/GPO4	45	
RXP3/GPO3	46	
RXP2/GPO2	47	
RXP1/GPO1	48	
RXP0	49	S/PDIF Receiver Input (Input) - Dedicated receiver input for S/PDIF encoded data.
TXP	50	S/PDIF Transmitter Output (Output) - S/PDIF encoded data output, mapped directly from one of the receiver inputs as indicated by the Receiver Mode Control 2 register.
VLS	53	Serial Port Interface Power (Input) - Determines the required signal level for the serial port interfaces.
SAI_SDOUT	54	Serial Audio Interface Serial Data Output (Output) - Output for two's complement serial audio PCM data from the S/PDIF incoming stream. This pin can also be configured to transmit the output of the internal and external ADCs.
RMCK	55	Recovered Master Clock (Output) - Recovered master clock output from the External Clock Reference (OMCK, pin 59) or the PLL which is locked to the incoming S/PDIF stream or CX_LRCK.
CX_SDOUT	56	CODEC Serial Data Output (Output) - Output for two's complement serial audio data from the internal and external ADCs.
ADCIN1	58	External ADC Serial Input (Input) - The CS42516 provides for up to two external stereo analog to digital converter inputs to provide a maximum of six channels on one serial data output line when the CS42516 is placed in One-Line Mode.
ADCIN2	57	
OMCK	59	External Reference Clock (Input) - External clock reference
TEST	62	Test Pin (Input) - This pin must be connected to DGND.
SAI_LRCK	60	Serial Audio Interface Left/Right Clock (Input/Output) - Determines which channel, Left or Right, is currently active on the serial audio data line.
SAI_SCLK	61	Serial Audio Interface Serial Clock (Input/Output) - Serial clock for the Serial Audio Interface.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -10

Q4306: NJU7311AM(Analog Function Switch)

BLOCK DIAGRAM



TERMINAL DESCRIPTION

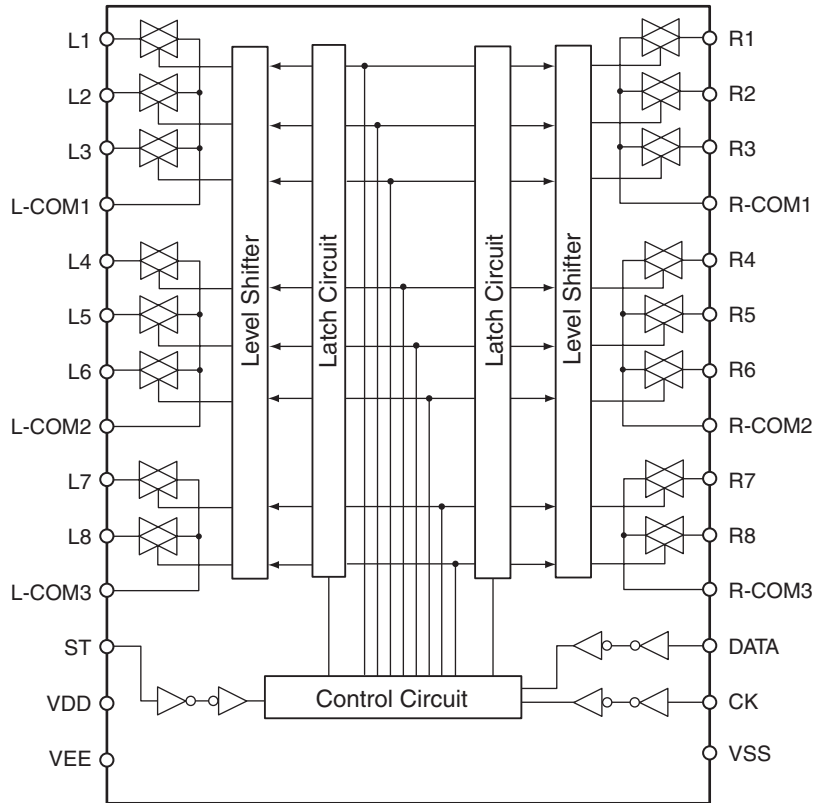
Pin No.	Pin Name	Description
1	VEE	Negative Voltage Supply
2	L1	Analog switch input/output
3	L2	Analog switch input/output
4	L-COM1	L1, L2, Common
5	L3	Analog switch input/output
6	L4	Analog switch input/output
7	L-COM2	L3, L4 common
8	L5	Analog switch input/output
9	L6	Analog switch input/output
10	L-COM3	L5, L6 Common
11	L7	Analog switch input/output
12	L-COM4	L7 Common
14	ST	Chip enable
15	VSS	GND

Pin No.	Pin Name	Description
16	CK	Clock input
17	DATA	Data input
19	R-COM4	R7 Common
20	R7	Analog switch input/output
21	R-COM3	R5, R6 Common
22	R6	Analog switch input/output
23	R5	Analog switch input/output
24	R-COM2	R3, R4 Common
25	R4	Analog switch input/output
26	R3	Analog switch input/output
27	R-COM1	R1, R2, Common
28	R2	Analog switch input/output
29	R1	Analog switch input/output
30	VDD	Positive voltage supply

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -11

Q2027, Q4304, Q7181: NJU7312AM(Analog Function Switch)

BLOCK DIAGRAM



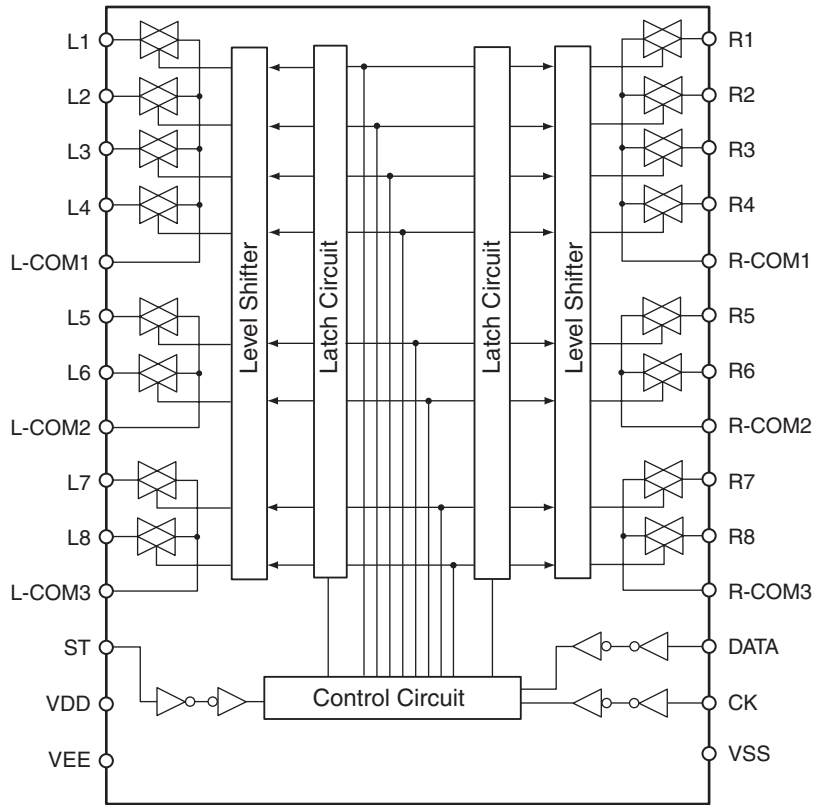
TERMINAL DESCRIPTION

Pin No.	Pin Name	Description	Pin No.	Pin Name	Description
1	VEE	Negative Voltage Supply	16	CK	Clock input/output
2	L1	Analog switch input/output	17	DATA	Data input
3	L2	Analog switch input/output	19	R-COM3	R7, R8 Common
4	L3	Analog switch input/output	20	R8	Analog switch input/output
5	L-COM1	L1, L2, L3 Common	21	R7	Analog switch input/output
6	L4	Analog switch input/output	22	R-COM2	R4, R5, R6 Common
7	L5	Analog switch input/output	23	R6	Analog switch input/output
8	L6	Analog switch input/output	24	R5	Analog switch input/output
9	L-COM2	L4, L5, L6 common	25	R4	Analog switch input/output
10	L7	Analog switch input/output	26	R-COM1	R1, R2, R3 Common
11	L8	Analog switch input/output	27	R3	Analog switch input/output
12	L-COM3	L7, L8 Common	28	R2	Analog switch input/output
14	ST	Chip enable	29	R1	Analog switch input/output
15	VSS	GND	30	VDD	Positive voltage supply

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -12

Q4305: NJU7313AM (Analog Function Switch)

BLOCK DI AGRAM



TERMINAL DESCRIPTION

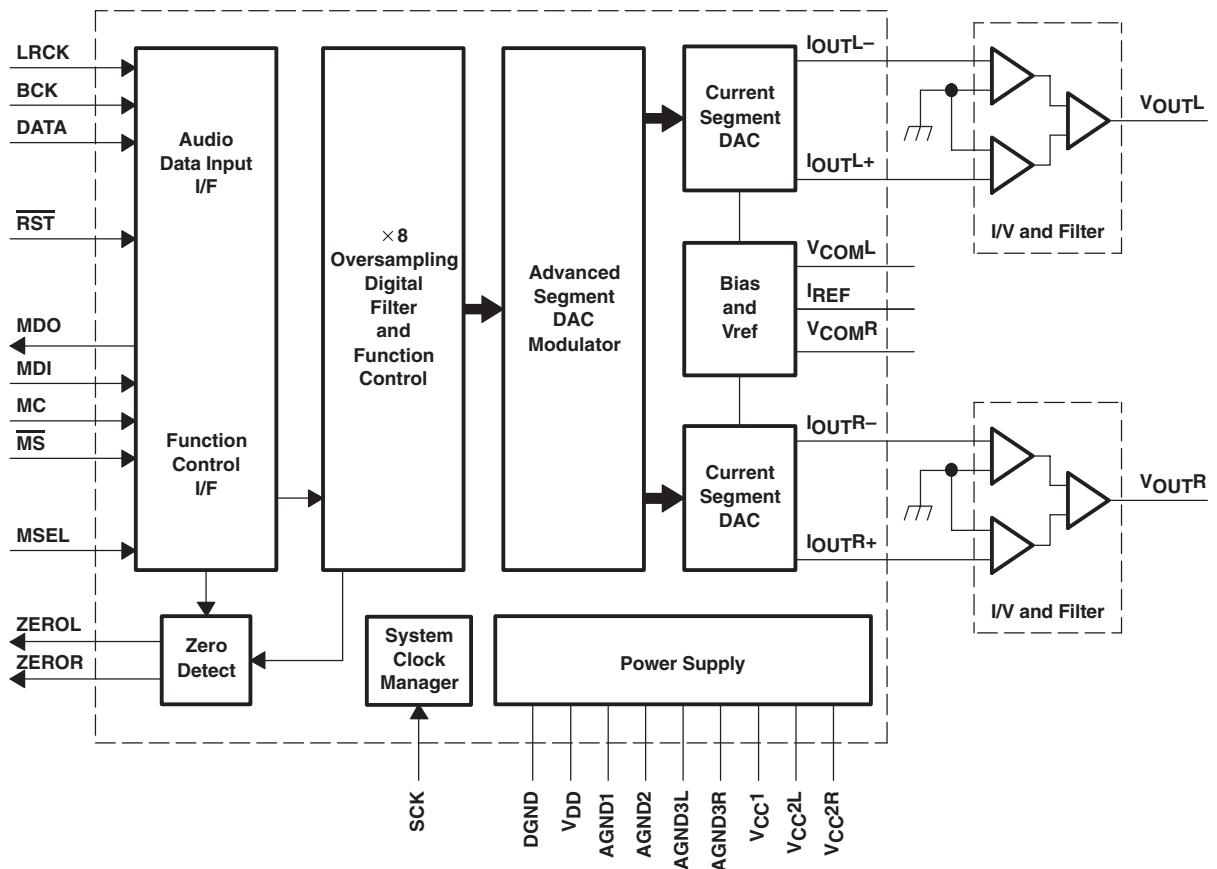
Pin No.	Pin Name	Description
1	VEE	Negative Voltage Supply
2	L1	Analog switch input/output
3	L2	Analog switch input/output
4	L3	Analog switch input/output
5	L4	Analog switch input/output
6	L-COM1	L1, L2, L3, L4 Common
7	L5	Analog switch input/output
8	L6	Analog switch input/output
9	L-COM2	L5, L6 common
10	L7	Analog switch input/output
11	L8	Analog switch input/output
12	L-COM3	L7, L8 Common
14	ST	Chip enable
15	VSS	GND

Pin No.	Pin Name	Description
16	CK	Clock input
17	DATA	Data input
19	R-COM3	R7, R8 Common
20	R8	Analog switch input/output
21	R7	Analog switch input/output
22	R-COM2	R5, R6 Common
23	R6	Analog switch input/output
24	R5	Analog switch input/output
25	R-COM1	R1, R2, R3, R4 Common
26	R4	Analog switch input/output
27	R3	Analog switch input/output
28	R2	Analog switch input/output
29	R1	Analog switch input/output
30	VDD	Positive voltage supply

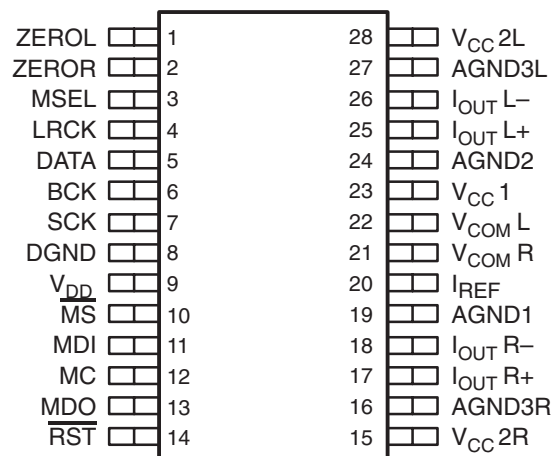
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -13

Q3701,Q3721,Q3741,Q3761,Q3781: PCM1796DBR (24 bit, 192 kHz, 2ch DAC)

BLOCK DIAGRAM



PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -14

Q3701,Q3721,Q3741,Q3761,Q3781: PCM1796DBR (24 bit, 192 kHz, 2ch DAC)

TERMINAL DESCRIPTION

TERMINAL NAME	PIN	I/O	DESCRIPTIONS
AGND1	19	–	Analog ground (internal bias)
AGND2	24	–	Analog ground (internal bias)
AGND3L	27	–	Analog ground (L-channel DACFF)
AGND3R	16	–	Analog ground (R-channel DACFF)
BCK	6	I	Bit clock input ⁽¹⁾
DATA	5	I	Serial audio data input ⁽¹⁾
DGND	8	–	Digital ground
I _{OUTL+}	25	O	L-channel analog current output+
I _{OUTL-}	26	O	L-channel analog current output–
I _{OUTR+}	17	O	R-channel analog current output+
I _{OUTR-}	18	O	R-channel analog current output–
I _{REF}	20	–	Output current reference bias pin
LRCK	4	I	Left and right clock (f _S) input ⁽¹⁾
MC	12	I	Mode control clock input ⁽¹⁾
MDI	11	I	Mode control data input ⁽¹⁾
MDO	13	I/O	Mode control readback data output ⁽³⁾
$\overline{\text{MS}}$	10	I/O	Mode control chip-select input ⁽²⁾
MSEL	3	I	I ² C/SPI select ⁽¹⁾
$\overline{\text{RST}}$	14	I	Reset ⁽¹⁾
SCK	7	I	System clock input ⁽¹⁾
V _{CC1}	23	–	Analog power supply, 5 V
V _{CC2L}	28	–	Analog power supply (L-channel DACFF), 5 V
V _{CC2R}	15	–	Analog power supply (R-channel DACFF), 5 V
V _{COML}	22	–	L-channel internal bias decoupling pin
V _{COMR}	21	–	R-channel internal bias decoupling pin
V _{DD}	9	–	Digital power supply, 3.3 V
ZEROL	1	I/O	Zero flag for L-channel ⁽²⁾
ZEROR	2	I/O	Zero flag for R-channel ⁽²⁾

(1) Schmitt-trigger input, 5-V tolerant

(2) Schmitt-trigger input and output. 5-V tolerant input and CMOS output

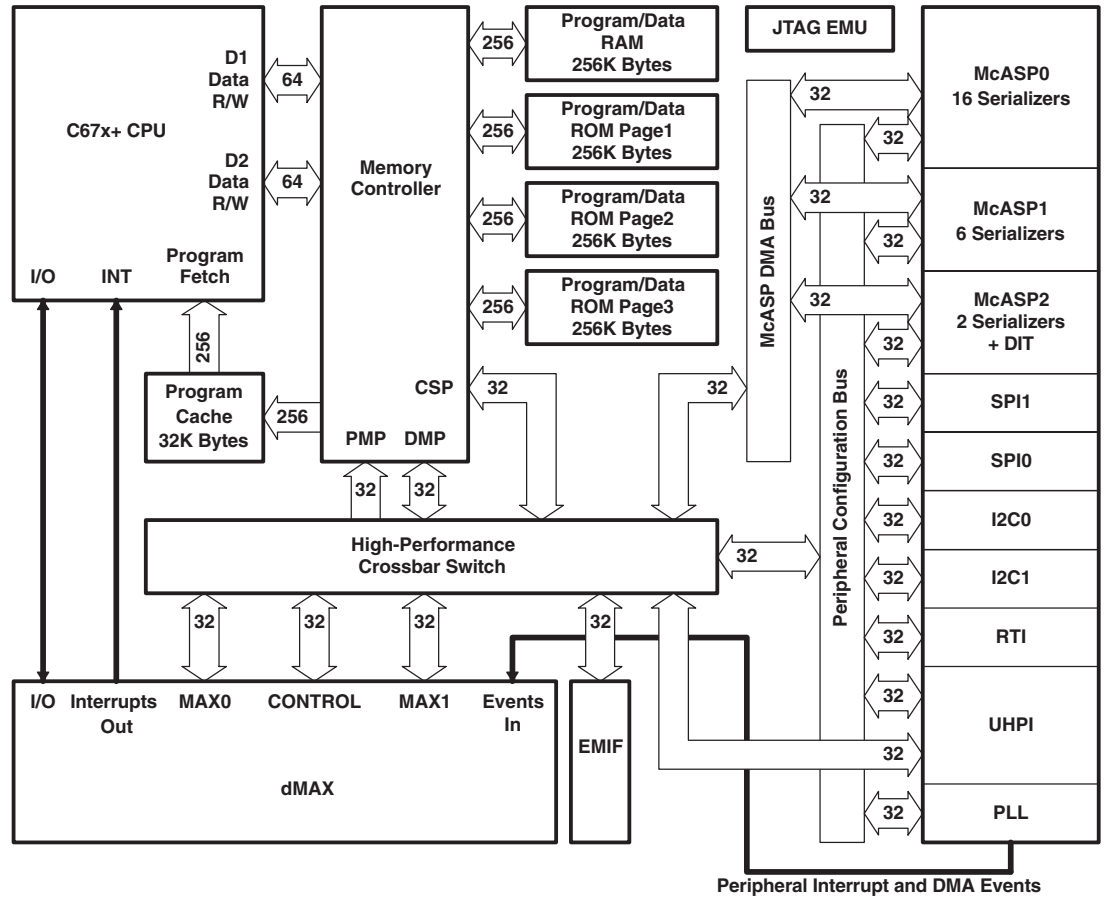
(3) Schmitt-trigger input and output. 5-V tolerant input. In I²C mode, this pin becomes an open-drain 3-state output; otherwise, this pin is a CMOS output.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -15

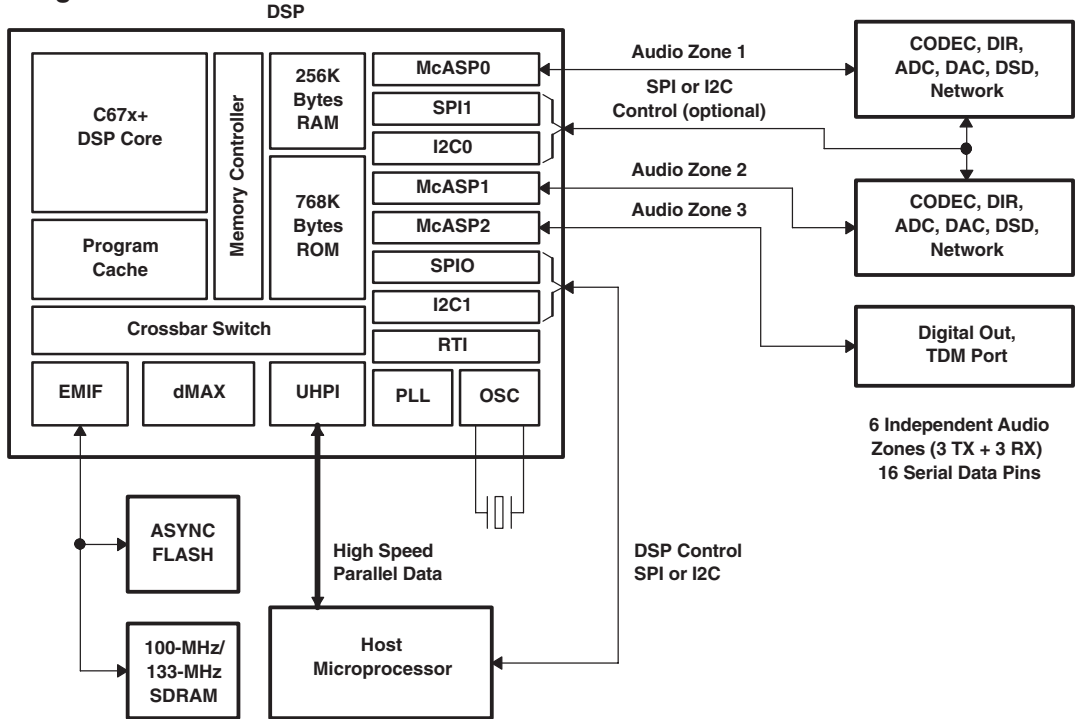
Q3401: D790E001BZDH275/D710E001BZDH275 (Audio DSP)

BLOCK DIAGRAM

Device Block Diagram



System Diagram



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -16

Q3401: D790E001BZDH275/D710E001BZDH275 (Audio DSP)

PIN CONFIGURATION(1/2)

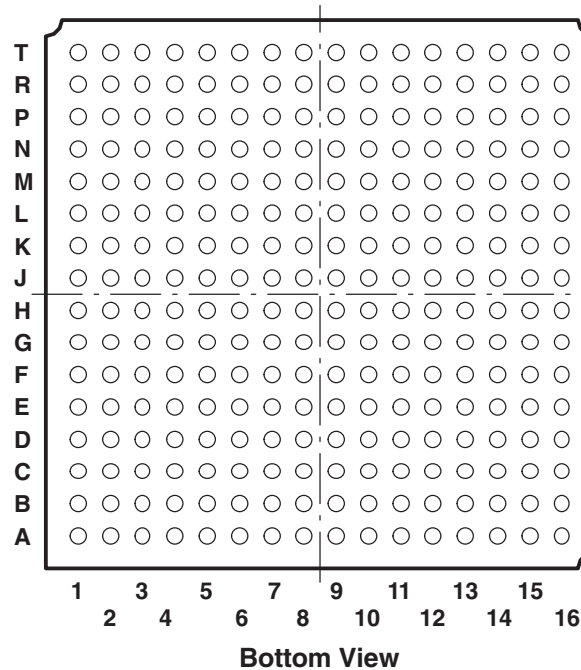
PIN MAP

T	V _{SS}	DV _{DD}	$\overline{\text{EM_WE}}$	EM_D[7]	EM_D[5]	EM_D[3]	V _{SS}	EM_D[0]	EM_D[14]	V _{SS}	EM_D[11]	EM_D[9]	EM $\overline{\text{WE}}$ _DQM[1]	EM_CKE	DV _{DD}	V _{SS}
R	DV _{DD}	EM_D[23] /UHPI_ HA[7]	$\overline{\text{EM_CAS}}$	EM $\overline{\text{WE}}$ _DQM[0]	EM_D[6]	EM_D[4]	EM_D[2]	EM_D[1]	EM_D[15]	EM_D[13]	EM_D[12]	EM_D[10]	EM_D[8]	EM_CLK	EM $\overline{\text{WE}}$ _DQM[3]	DV _{DD}
P	TCK	UHPI_ HD[24]	EM_D[21] /UHPI_ HA[5]	EM_D[20] /UHPI_ HA[4]	EM_D[19] /UHPI_ HA[3]	EM_D[17] /UHPI_ HA[1]	EM_D[31] /UHPI_ HA[15]	DV _{DD}	EM_D[28] /UHPI_ HA[12]	EM_D[26] /UHPI_ HA[10]	EM_D[24] /UHPI_ HA[8]	EM_A[12]	EM $\overline{\text{WE}}$ _DQM[2]	UHPI_ HD[7]	EM_A[11]	EM_A[9]
N	$\overline{\text{EMU}}[1]$	UHPI_ HD[25]	UHPI_ HD[26]	EM_D[22] /UHPI_ HA[6]	DV _{DD}	EM_D[18] /UHPI_ HA[2]	EM_D[16] /UHPI_ HA[0]	EM_D[30] /UHPI_ HA[14]	EM_D[29] /UHPI_ HA[13]	EM_D[27] /UHPI_ HA[11]	EM_D[25] /UHPI_ HA[9]	DV _{DD}	UHPI_ HD[5]	UHPI_ HD[6]	EM_A[8]	EM_A[7]
M	$\overline{\text{EMU}}[0]$	TDO	UHPI_ HD[27]	DV _{DD}	V _{SS}	CV _{DD}	CV _{DD}	CV _{DD}	CV _{DD}	CV _{DD}	CV _{DD}	V _{SS}	DV _{DD}	UHPI_ HD[2]	EM_A[6]	EM_A[5]
L	TDI	UHPI_ HD[30]	UHPI_ HD[28]	UHPI_ HD[29]	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	UHPI_ HD[3]	UHPI_ HD[4]	EM_A[4]	EM_A[3]
K	V _{SS}	PLLHV	TMS	$\overline{\text{TRST}}$	CV _{DD}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	CV _{DD}	UHPI_ HD[0]	UHPI_ HD[1]	EM_A[2]	V _{SS}
J	OSCV _{SS}	OSCIN	OSCOU	OSCV _{DD}	CV _{DD}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	CV _{DD}	UHPI_ HD[15]	DV _{DD}	EM_A[1]	EM_A[0]
H	UHPI_ HD[16] /HHWIL	CLKIN	V _{SS}	UHPI_ HD[31]	CV _{DD}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	CV _{DD}	UHPI_ HD[14]	UHPI_ HD[13]	EM_A[10]	EM_BA[1]
G	V _{SS}	$\overline{\text{RESET}}$	UHPI_ HD[17]	UHPI_ HD[18]	CV _{DD}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	CV _{DD}	UHPI_ HD[12]	UHPI_ HD[11]	EM_BA[0]	V _{SS}
F	AFSR1	AFSX1	UHPI_ HD[19]	UHPI_ HD[20]	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	UHPI_ HD[10]	UHPI_ HD[9]	$\overline{\text{EM_CS}}[0]$	$\overline{\text{EM_RAS}}$
E	ACLKR1	ACLKX1	UHPI_ HD[21]	DV _{DD}	V _{SS}	CV _{DD}	CV _{DD}	CV _{DD}	CV _{DD}	CV _{DD}	CV _{DD}	V _{SS}	DV _{DD}	UHPI_ HD[8]	$\overline{\text{EM_CS}}[2]$	EM $\overline{\text{RW}}$
D	AHCLKX1	AMUTE1	UHPI_ HD[22]	DV _{DD}	DV _{DD}	$\overline{\text{UHPI_HRDY}}$	$\overline{\text{UHPI_HDS}}[1]$	UHPI_ HRW	UHPI_ HCNTL[0]	AMUTE2/ HINT	ACLKX2	DV _{DD}	DV _{DD}	EM_WAIT	$\overline{\text{EM_OE}}$	SPI0_ENA /I2C1_ SDA
C	AMUTE0	AHCLKX0 /AHCLKX2	UHPI_ HD[23]	$\overline{\text{UHPI_HBE}}[2]$	$\overline{\text{UHPI_HBE}}[1]$	$\overline{\text{UHPI_HBE}}[0]$	$\overline{\text{UHPI_HDS}}[2]$	$\overline{\text{UHPI_HCS}}$	$\overline{\text{UHPI_HAS}}$	UHPI_ HCNTL[1]	AFSX2	AFSR2	ACLKR2	AHCLKR2	SPI0_SCS /I2C1_ SCL	SPI0_CLK /I2C0_ SCL
B	DV _{DD}	$\overline{\text{UHPI_HBE}}[3]$	AHCLKR0 /AHCLKR1	AFSR0	AXR0[15] /AXR2[0]	AXR0[13] /AXR1[0]	AXR0[12] /AXR1[1]	AXR0[10] /AXR1[3]	AXR0[8] /AXR1[5] /SPI1_ SOMI	AXR0[7] /SPI1_ CLK	AXR0[5] /SPI1_ SCS	AXR0[3]	AXR0[1]	SPI0_SOMI /I2C0_ SDA	SPI0_SIMO	DV _{DD}
A	V _{SS}	DV _{DD}	AFSX0	ACLKX0	ACLKR0	AXR0[14] /AXR2[1]	V _{SS}	AXR0[11] /AXR1[2]	AXR0[9] /AXR1[4] /SPI1_ SIMO	V _{SS}	AXR0[6] /SPI1_ ENA	AXR0[4]	AXR0[2]	AXR0[0]	DV _{DD}	V _{SS}
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -17

Q3401: D790E001BZDH275/D710E001BZDH275 (Audio DSP)

PIN CONFIGURATION(2/2)



TERMINAL DESCRIPTION(1/5)

SIGNAL NAME	BALL NO.	TYPE ⁽¹⁾	PULL ⁽²⁾	GPIO ⁽³⁾	DESCRIPTION
Clocks					
OSCIN	J2	I	-	N	1.2-V Oscillator Input
OSCOUT	J3	O	-	N	1.2-V Oscillator Output
OSCV _{DD}	J4	PWR	-	N	Oscillator 1.2-V V _{DD} tap point (for filter only)
OSCV _{SS}	J1	PWR	-	N	Oscillator V _{SS} tap point (for filter only)
CLKIN	H2	I	-	N	Alternate clock input (3.3-V LVCMOS Input)
PLLHV	K2	PWR	-	N	PLL 3.3-V Supply Input (requires external filter)
Device Reset					
RESET	G2	I	-	N	Device reset pin
Emulation/JTAG Port					
TCK	P1	I	IPU	N	Test Clock
TMS	K3	I	IPU	N	Test Mode Select
TDI	L1	I	IPU	N	Test Data In
TDO	M2	OZ	IPU	N	Test Data Out
TRST	K4	I	IPD	N	Test Reset
EMU[0]	M1	IO	IPU	N	Emulation Pin 0
EMU[1]	N1	IO	IPU	N	Emulation Pin 1
Power Pins					
Core Supply (CV _{DD})	E6, E7, E8, E9, E10, E11, G5, G12, H5, H12, J5, J12, K5, K12, M6, M7, M8, M9, M10, M11				
IO Supply (DV _{DD})	A2, A15, B1, B16, D4, D5, D12, D13, E4, E13, J14, M4, M13, N5, N12, P8, R1, R16, T2, T15				
Ground (V _{SS})	A1, A7, A10, A16, E5, E12, F5, F6, F7, F8, F9, F10, F11, F12, G1, G6, G7, G8, G9, G10, G11, G16, H3, H6, H7, H8, H9, H10, H11, J6, J7, J8, J9, J10, J11, K1, K6, K7, K8, K9, K10, K11, K16, L5, L6, L7, L8, L9, L10, L11, L12, M5, M12, T1, T7, T10, T16				

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -18

Q3401: D790E001BZDH275/D710E001BZDH275 (Audio DSP)

TERMINAL DESCRIPTION(2/5)

SIGNAL NAME	BALL NO.	TYPE ⁽¹⁾	PULL ⁽²⁾	GPIO ⁽³⁾	DESCRIPTION
External Memory Interface (EMIF) Address and Control					
EM_A[0]	J16	O	-	N	EMIF Address Bus
EM_A[1]	J15	O	-	N	
EM_A[2]	K15	O	-	N	
EM_A[3]	L16	O	-	N	
EM_A[4]	L15	O	-	N	
EM_A[5]	M16	O	-	N	
EM_A[6]	M15	O	-	N	
EM_A[7]	N16	O	-	N	
EM_A[8]	N15	O	-	N	
EM_A[9]	P16	O	-	N	
EM_A[10]	H15	O	-	N	
EM_A[11]	P15	O	-	N	
EM_A[12]	P12	O	IPD	N	
EM_BA[0]	G15	O	-	N	SDRAM Bank Address and Asynchronous Memory Low-Order Address
EM_BA[1]	H16	O	-	N	
EM_CS[0]	F15	O	-	N	SDRAM Chip Select
EM_CS[2]	E15	O	-	N	Asynchronous Memory Chip Select
EM_CAS	R3	O	-	N	SDRAM Column Address Strobe
EM_RAS	F16	O	-	N	SDRAM Row Address Strobe
EM_WE	T3	O	-	N	SDRAM Write Enable
EM_CKE	T14	O	-	N	SDRAM Clock Enable
EM_CLK	R14	O	-	N	SDRAM Clock
EM_WE_DQM[0]	R4	O	-	N	Write Enable or Byte Enable for EM_D[7:0]
EM_WE_DQM[1]	T13	O	-	N	Write Enable or Byte Enable for EM_D[15:8]
EM_WE_DQM[2]	P13	O	IPU	N	Write Enable or Byte Enable for EM_D[23:16]
EM_WE_DQM[3]	R15	O	IPU	N	Write Enable or Byte Enable for EM_D[31:24]
EM_OE	D15	O	-	N	SDRAM Output Enable
EM_RW	E16	O	-	N	Asynchronous Memory Read/not Write
EM_WAIT	D14	I	IPU	N	Asynchronous Wait Input (Programmable Polarity) or Interrupt (NAND)

- (1) TYPE column refers to pin direction in functional mode. If a pin has more than one function with different directions, the functions are separated with a slash (/).
- (2) PULL column:
IPD = Internal Pulldown resistor
IPU = Internal Pullup resistor
- (3) If the GPIO column is 'Y', then in GPIO mode, the pin is configurable as an IO unless otherwise marked.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -19

Q3401: D790E001BZDH275/D710E001BZDH275 (Audio DSP)

TERMINAL DESCRIPTION(3/5)

SIGNAL NAME	BALL NO.	TYPE ⁽¹⁾	PULL ⁽²⁾	GPIO ⁽³⁾	DESCRIPTION
External Memory Interface (EMIF) Data Bus / Universal Host-Port Interface (UHPI) Address Bus Option					
EM_D[0]	T8	IO	-	N	EMIF Data Bus [Lower 16 Bits]
EM_D[1]	R8	IO	-	N	
EM_D[2]	R7	IO	-	N	
EM_D[3]	T6	IO	-	N	
EM_D[4]	R6	IO	-	N	
EM_D[5]	T5	IO	-	N	
EM_D[6]	R5	IO	-	N	
EM_D[7]	T4	IO	-	N	
EM_D[8]	R13	IO	-	N	
EM_D[9]	T12	IO	-	N	
EM_D[10]	R12	IO	-	N	
EM_D[11]	T11	IO	-	N	
EM_D[12]	R11	IO	-	N	
EM_D[13]	R10	IO	-	N	
EM_D[14]	T9	IO	-	N	
EM_D[15]	R9	IO	-	N	
EM_D[16]/UHPI_HA[0]	N7	IO/I	IPD	N	EMIF Data Bus [Upper 16 Bits (IO)] or UHPI Address Input (I)
EM_D[17]/UHPI_HA[1]	P6	IO/I	IPD	N	
EM_D[18]/UHPI_HA[2]	N6	IO/I	IPD	N	
EM_D[19]/UHPI_HA[3]	P5	IO/I	IPD	N	
EM_D[20]/UHPI_HA[4]	P4	IO/I	IPD	N	
EM_D[21]/UHPI_HA[5]	P3	IO/I	IPD	N	
EM_D[22]/UHPI_HA[6]	N4	IO/I	IPD	N	
EM_D[23]/UHPI_HA[7]	R2	IO/I	IPD	N	
EM_D[24]/UHPI_HA[8]	P11	IO/I	IPD	N	
EM_D[25]/UHPI_HA[9]	N11	IO/I	IPD	N	
EM_D[26]/UHPI_HA[10]	P10	IO/I	IPD	N	
EM_D[27]/UHPI_HA[11]	N10	IO/I	IPD	N	
EM_D[28]/UHPI_HA[12]	P9	IO/I	IPD	N	
EM_D[29]/UHPI_HA[13]	N9	IO/I	IPD	N	
EM_D[30]/UHPI_HA[14]	N8	IO/I	IPD	N	
EM_D[31]/UHPI_HA[15]	P7	IO/I	IPD	N	

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -20

Q3401: D790E001BZDH275/D710E001BZDH275 (Audio DSP)

TERMINAL DESCRIPTION(4/5)

SIGNAL NAME	BALL NO.	TYPE ⁽¹⁾	PULL ⁽²⁾	GPIO ⁽³⁾	DESCRIPTION
Universal Host-Port Interface (UHPI) Data and Control					
UHPI_HD[0]	K13	IO	IPD	Y	UHPI Data Bus [Lower 16 Bits]
UHPI_HD[1]	K14	IO	IPD	Y	
UHPI_HD[2]	M14	IO	IPD	Y	
UHPI_HD[3]	L13	IO	IPD	Y	
UHPI_HD[4]	L14	IO	IPD	Y	
UHPI_HD[5]	N13	IO	IPD	Y	
UHPI_HD[6]	N14	IO	IPD	Y	
UHPI_HD[7]	P14	IO	IPD	Y	
UHPI_HD[8]	E14	IO	IPD	Y	
UHPI_HD[9]	F14	IO	IPD	Y	
UHPI_HD[10]	F13	IO	IPD	Y	
UHPI_HD[11]	G14	IO	IPD	Y	
UHPI_HD[12]	G13	IO	IPD	Y	
UHPI_HD[13]	H14	IO	IPD	Y	
UHPI_HD[14]	H13	IO	IPD	Y	
UHPI_HD[15]	J13	IO	IPD	Y	
UHPI_HD[16]/HHWIL	H1	IO/I	IPD	Y	UHPI Data Bus [Upper 16 Bits (IO)] in the following modes: <ul style="list-style-type: none"> • Fullword Multiplexed Address and Data • Fullword Non-Multiplexed UHPI_HHWIL (I) on pin UHPI_HD[16]/HHWIL and GPIO on other pins in the following mode: <ul style="list-style-type: none"> • Half-word Multiplexed Address and Data In this mode, UHPI_HHWIL indicates whether the high or low half-word is being addressed.
UHPI_HD[17]	G3	IO	IPD	Y	
UHPI_HD[18]	G4	IO	IPD	Y	
UHPI_HD[19]	F3	IO	IPD	Y	
UHPI_HD[20]	F4	IO	IPD	Y	
UHPI_HD[21]	E3	IO	IPD	Y	
UHPI_HD[22]	D3	IO	IPD	Y	
UHPI_HD[23]	C3	IO	IPD	Y	
UHPI_HD[24]	P2	IO	IPD	Y	
UHPI_HD[25]	N2	IO	IPD	Y	
UHPI_HD[26]	N3	IO	IPD	Y	
UHPI_HD[27]	M3	IO	IPD	Y	
UHPI_HD[28]	L3	IO	IPD	Y	
UHPI_HD[29]	L4	IO	IPD	Y	
UHPI_HD[30]	L2	IO	IPD	Y	
UHPI_HD[31]	H4	IO	IPD	Y	
Universal Host-Port Interface (UHPI) Control					
UHPI_HBE[0]	C6	I	IPD	Y	UHPI Byte Enable for UHPI_HD[7:0]
UHPI_HBE[1]	C5	I	IPD	Y	UHPI Byte Enable for UHPI_HD[15:8]
UHPI_HBE[2]	C4	I	IPD	Y	UHPI Byte Enable for UHPI_HD[23:16]
UHPI_HBE[3]	B2	I	IPD	Y	UHPI Byte Enable for UHPI_HD[31:24]
UHPI_HCNTL[0]	D9	I	IPD	Y	UHPI Control Inputs Select Access Mode
UHPI_HCNTL[1]	C10	I	IPD	Y	
UHPI_HAS	C9	I	IPD	Y	UHPI Host Address Strobe for Hosts with Multiplexed Address/Data bus
UHPI_HRW	D8	I	IPD	Y	UHPI Read/not Write Input
UHPI_HDS[1]	D7	I	IPU	Y	UHPI Select Signals which create the internal HSTROBE active when:
UHPI_HDS[2]	C7	I	IPU	Y	
UHPI_HCS	C8	I	IPU	Y	(UHPI_HCS == '0') & (UHPI_HDS[1] != UHPI_HDS[2])
UHPI_HRDY	D6	O	IPD	Y	UHPI Ready Output

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -21

Q3401: D790E001BZDH275/D710E001BZDH275 (Audio DSP)

TERMINAL DESCRIPTION(5/5)

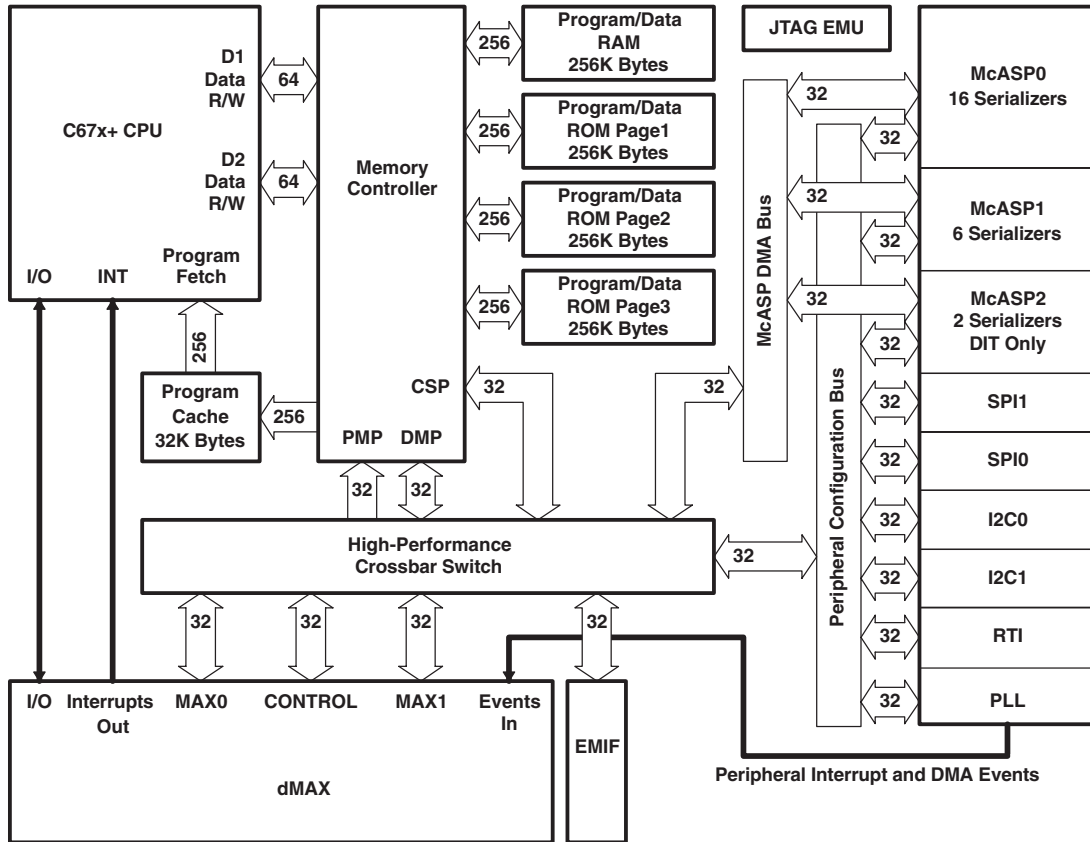
SIGNAL NAME	BALL NO.	TYPE ⁽¹⁾	PULL ⁽²⁾	GPIO ⁽³⁾	DESCRIPTION
McASP0, McASP1, McASP2, and SPI1 Serial Ports					
AHCLKR0/AHCLKR1	B3	IO	-	Y	McASP0 and McASP1 Receive Master Clock
ACLKR0	A5	IO	-	Y	McASP0 Receive Bit Clock
AFSR0	B4	IO	-	Y	McASP0 Receive Frame Sync (L/R Clock)
AHCLKX0/AHCLKX2	C2	IO	-	Y	McASP0 and McASP2 Transmit Master Clock
ACLKX0	A4	IO	-	Y	McASP0 Transmit Bit Clock
AFSX0	A3	IO	-	Y	McASP0 Transmit Frame Sync (L/R Clock)
AMUTE0	C1	O	-	Y	McASP0 MUTE Output
AXR0[0]	A14	IO	-	Y	McASP0 Serial Data 0
AXR0[1]	B13	IO	-	Y	McASP0 Serial Data 1
AXR0[2]	A13	IO	-	Y	McASP0 Serial Data 2
AXR0[3]	B12	IO	-	Y	McASP0 Serial Data 3
AXR0[4]	A12	IO	-	Y	McASP0 Serial Data 4
AXR0[5]/SPI1_SCS	B11	IO	-	Y	McASP0 Serial Data 5 or SPI1 Slave Chip Select
AXR0[6]/SPI1_ENA	A11	IO	-	Y	McASP0 Serial Data 6 or SPI1 Enable (Ready)
AXR0[7]/SPI1_CLK	B10	IO	-	Y	McASP0 Serial Data 7 or SPI1 Serial Clock
AXR0[8]/AXR1[5]/SPI1_SOMI	B9	IO	-	Y	McASP0 Serial Data 8 or McASP1 Serial Data 5 or SPI1 Data Pin Slave Out Master In
AXR0[9]/AXR1[4]/SPI1_SIMO	A9	IO	-	Y	McASP0 Serial Data 9 or McASP1 Serial Data 4 or SPI1 Data Pin Slave In Master Out
AXR0[10]/AXR1[3]	B8	IO	-	Y	McASP0 Serial Data 10 or McASP1 Serial Data 3
AXR0[11]/AXR1[2]	A8	IO	-	Y	McASP0 Serial Data 11 or McASP1 Serial Data 2
AXR0[12]/AXR1[1]	B7	IO	-	Y	McASP0 Serial Data 12 or McASP1 Serial Data 1
AXR0[13]/AXR1[0]	B6	IO	-	Y	McASP0 Serial Data 13 or McASP1 Serial Data 0
AXR0[14]/AXR2[1]	A6	IO	-	Y	McASP0 Serial Data 14 or McASP2 Serial Data 1
AXR0[15]/AXR2[0]	B5	IO	-	Y	McASP0 Serial Data 15 or McASP2 Serial Data 0
ACLKR1	E1	IO	-	Y	McASP1 Receive Bit Clock
AFSR1	F1	IO	-	Y	McASP1 Receive Frame Sync (L/R Clock)
AHCLKX1	D1	IO	-	Y	McASP1 Transmit Master Clock
ACLKX1	E2	IO	-	Y	McASP1 Transmit Bit Clock
AFSX1	F2	IO	-	Y	McASP1 Transmit Frame Sync (L/R Clock)
AMUTE1	D2	O	-	Y	McASP1 MUTE Output
AHCLKR2	C14	IO	IPD	Y	McASP2 Receive Master Clock
ACLKR2	C13	IO	IPD	Y	McASP2 Receive Bit Clock
AFSR2	C12	IO	IPD	Y	McASP2 Receive Frame Sync (L/R Clock)
ACLKX2	D11	IO	IPD	Y	McASP2 Transmit Bit Clock
AFSX2	C11	IO	IPD	Y	McASP2 Transmit Frame Sync (L/R Clock)
AMUTE2/HINT	D10	O	IPD	Y	McASP2 MUTE Output or UHPI Host Interrupt
SPI0, I2C0, and I2C1 Serial Port Pins					
SPI0_SOMI/I2C0_SDA	B14	IO	-	Y	SPI0 Data Pin Slave Out Master In or I2C0 Serial Data
SPI0_SIMO	B15	IO	-	Y	SPI0 Data Pin Slave In Master Out
SPI0_CLK/I2C0_SCL	C16	IO	-	Y	SPI0 Serial Clock or I2C0 Serial Clock
SPI0_SCS/I2C1_SCL	C15	IO	-	Y	SPI0 Slave Chip Select or I2C1 Serial Clock
SPI0_ENA/I2C1_SDA	D16	IO	-	Y	SPI0 Enable (Ready) or I2C1 Serial Data

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -22

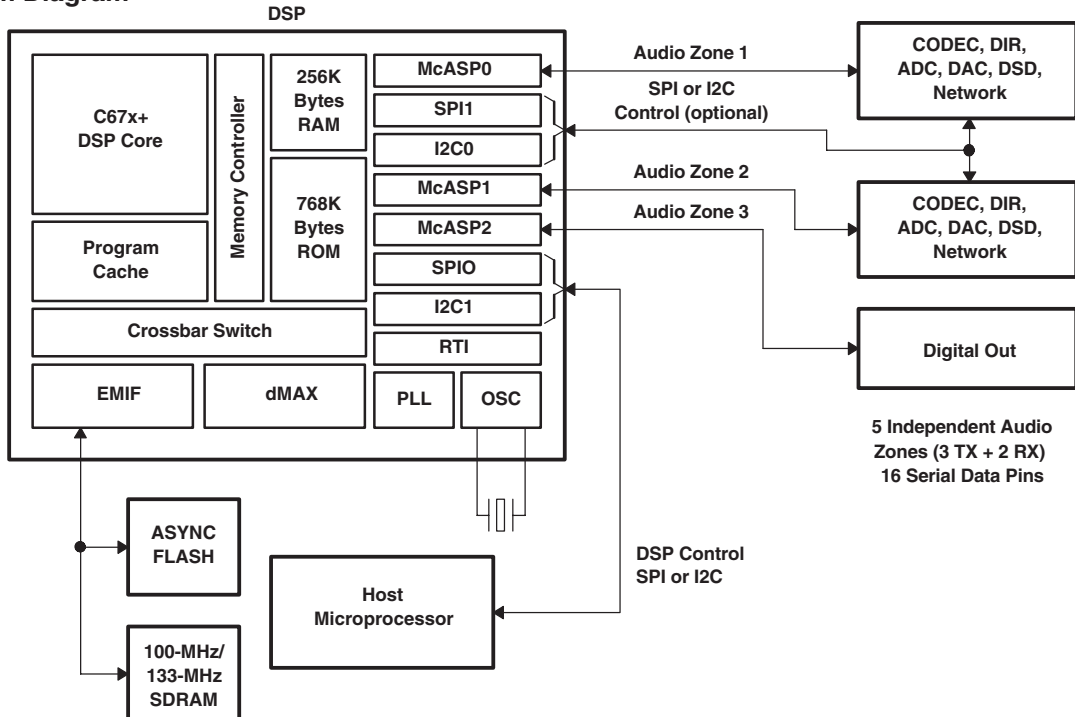
Q3501: D788E001BRFP266/D708E001BRFP266 (Audio DSP)

BLOCK DIAGRAM

Device Block Diagram



System Diagram

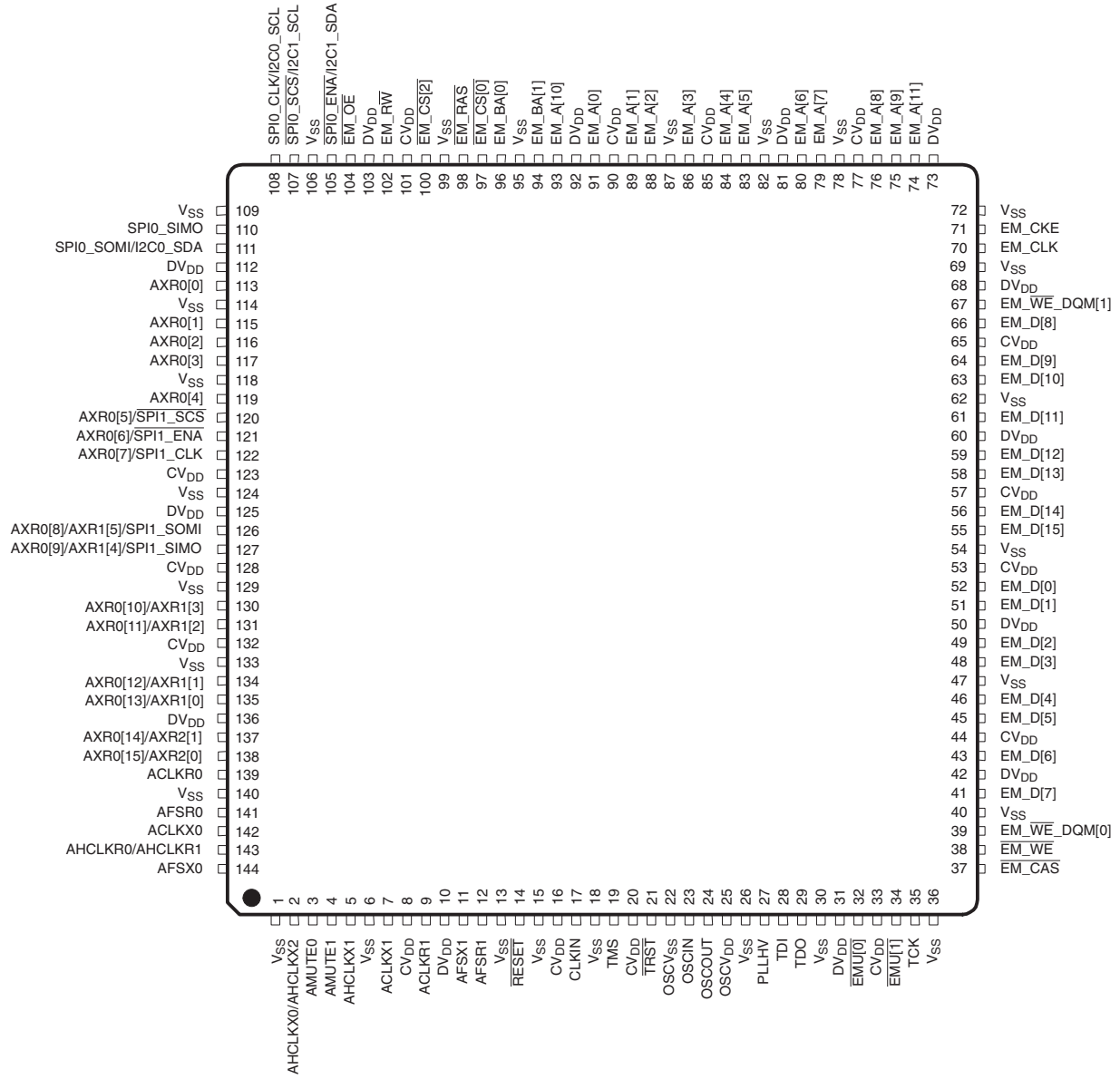


5 Independent Audio Zones (3 TX + 2 RX)
16 Serial Data Pins

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -23

Q3501: D788E001BRFP266/D708E001BRFP266 (Audio DSP)

PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -24

Q3501: D788E001BRFP266/D708E001BRFP266 (Audio DSP)

TERMINAL DESCRIPTION(1/3)

SIGNAL NAME	PIN NO.	TYPE ⁽¹⁾	PULL ⁽²⁾	GPIO ⁽³⁾	DESCRIPTION
External Memory Interface (EMIF) Address and Control					
EM_A[0]	91	O	-	N	EMIF Address Bus
EM_A[1]	89	O	-	N	
EM_A[2]	88	O	-	N	
EM_A[3]	86	O	-	N	
EM_A[4]	84	O	-	N	
EM_A[5]	83	O	-	N	
EM_A[6]	80	O	-	N	
EM_A[7]	79	O	-	N	
EM_A[8]	76	O	-	N	
EM_A[9]	75	O	-	N	
EM_A[10]	93	O	-	N	
EM_A[11]	74	O	-	N	
EM_BA[0]	96	O	-	N	SDRAM Bank Address and Asynchronous Memory Low-Order Address
EM_BA[1]	94	O	-	N	
EM_CS[0]	97	O	-	N	SDRAM Chip Select
EM_CS[2]	100	O	-	N	Asynchronous Memory Chip Select
EM_CAS	37	O	-	N	SDRAM Column Address Strobe
EM_RAS	98	O	-	N	SDRAM Row Address Strobe
EM_WE	38	O	-	N	SDRAM Write Enable
EM_CKE	71	O	-	N	SDRAM Clock Enable
EM_CLK	70	O	-	N	SDRAM Clock
EM_WE_DQM[0]	39	O	-	N	Write Enable or Byte Enable for EM_D[7:0]
EM_WE_DQM[1]	67	O	-	N	Write Enable or Byte Enable for EM_D[15:8]
EM_OE	104	O	-	N	SDRAM Output Enable
EM_RW	102	O	-	N	Asynchronous Memory Read/not Write

- (1) TYPE column refers to pin direction in functional mode. If a pin has more than one function with different directions, the functions are separated with a slash (/).
- (2) PULL column:
 IPD = Internal Pulldown resistor
 IPU = Internal Pullup resistor
- (3) If the GPIO column is 'Y', then in GPIO mode, the pin is configurable as an IO unless otherwise marked.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -25

Q3501: D788E001BRFP266/D708E001BRFP266 (Audio DSP)

TERMINAL DESCRIPTION(2/3)

SIGNAL NAME	PIN NO.	TYPE ⁽¹⁾	PULL ⁽²⁾	GPIO ⁽³⁾	DESCRIPTION
McASP0, McASP1, McASP2, and SPI1 Serial Ports					
AHCLKR0/AHCLKR1	143	IO	-	Y	McASP0 and McASP1 Receive Master Clock
ACLKR0	139	IO	-	Y	McASP0 Receive Bit Clock
AFSR0	141	IO	-	Y	McASP0 Receive Frame Sync (L/R Clock)
AHCLKX0/AHCLKX2	2	IO	-	Y	McASP0 and McASP2 Transmit Master Clock
ACLKX0	142	IO	-	Y	McASP0 Transmit Bit Clock
AFSX0	144	IO	-	Y	McASP0 Transmit Frame Sync (L/R Clock)
AMUTE0	3	O	-	Y	McASP0 MUTE Output
AXR0[0]	113	IO	-	Y	McASP0 Serial Data 0
AXR0[1]	115	IO	-	Y	McASP0 Serial Data 1
AXR0[2]	116	IO	-	Y	McASP0 Serial Data 2
AXR0[3]	117	IO	-	Y	McASP0 Serial Data 3
AXR0[4]	119	IO	-	Y	McASP0 Serial Data 4
AXR0[5]/SPI1_SCS	120	IO	-	Y	McASP0 Serial Data 5 or SPI1 Slave Chip Select
AXR0[6]/SPI1_ENA	121	IO	-	Y	McASP0 Serial Data 6 or SPI1 Enable (Ready)
AXR0[7]/SPI1_CLK	122	IO	-	Y	McASP0 Serial Data 7 or SPI1 Serial Clock
AXR0[8]/AXR1[5]/SPI1_SOMI	126	IO	-	Y	McASP0 Serial Data 8 or McASP1 Serial Data 5 or SPI1 Data Pin Slave Out Master In
AXR0[9]/AXR1[4]/SPI1_SIMO	127	IO	-	Y	McASP0 Serial Data 9 or McASP1 Serial Data 4 or SPI1 Data Pin Slave In Master Out
AXR0[10]/AXR1[3]	130	IO	-	Y	McASP0 Serial Data 10 or McASP1 Serial Data 3
AXR0[11]/AXR1[2]	131	IO	-	Y	McASP0 Serial Data 11 or McASP1 Serial Data 2
AXR0[12]/AXR1[1]	134	IO	-	Y	McASP0 Serial Data 12 or McASP1 Serial Data 1
AXR0[13]/AXR1[0]	135	IO	-	Y	McASP0 Serial Data 13 or McASP1 Serial Data 0
AXR0[14]/AXR2[1]	137	IO	-	Y	McASP0 Serial Data 14 or McASP2 Serial Data 1
AXR0[15]/AXR2[0]	138	IO	-	Y	McASP0 Serial Data 15 or McASP2 Serial Data 0
ACLKR1	9	IO	-	Y	McASP1 Receive Bit Clock
AFSR1	12	IO	-	Y	McASP1 Receive Frame Sync (L/R Clock)
AHCLKX1	5	IO	-	Y	McASP1 Transmit Master Clock
ACLKX1	7	IO	-	Y	McASP1 Transmit Bit Clock
AFSX1	11	IO	-	Y	McASP1 Transmit Frame Sync (L/R Clock)
AMUTE1	4	O	-	Y	McASP1 MUTE Output
SPI0, I2C0, and I2C1 Serial Port Pins					
SPI0_SOMI/I2C0_SDA	111	IO	-	Y	SPI0 Data Pin Slave Out Master In or I2C0 Serial Data
SPI0_SIMO	110	IO	-	Y	SPI0 Data Pin Slave In Master Out
SPI0_CLK/I2C0_SCL	108	IO	-	Y	SPI0 Serial Clock or I2C0 Serial Clock
SPI0_SCS/I2C1_SCL	107	IO	-	Y	SPI0 Slave Chip Select or I2C1 Serial Clock
SPI0_ENA/I2C1_SDA	105	IO	-	Y	SPI0 Enable (Ready) or I2C1 Serial Data

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -26

Q3501: D788E001BRFP266/D708E001BRFP266 (Audio DSP)

TERMINAL DESCRIPTION(3/3)

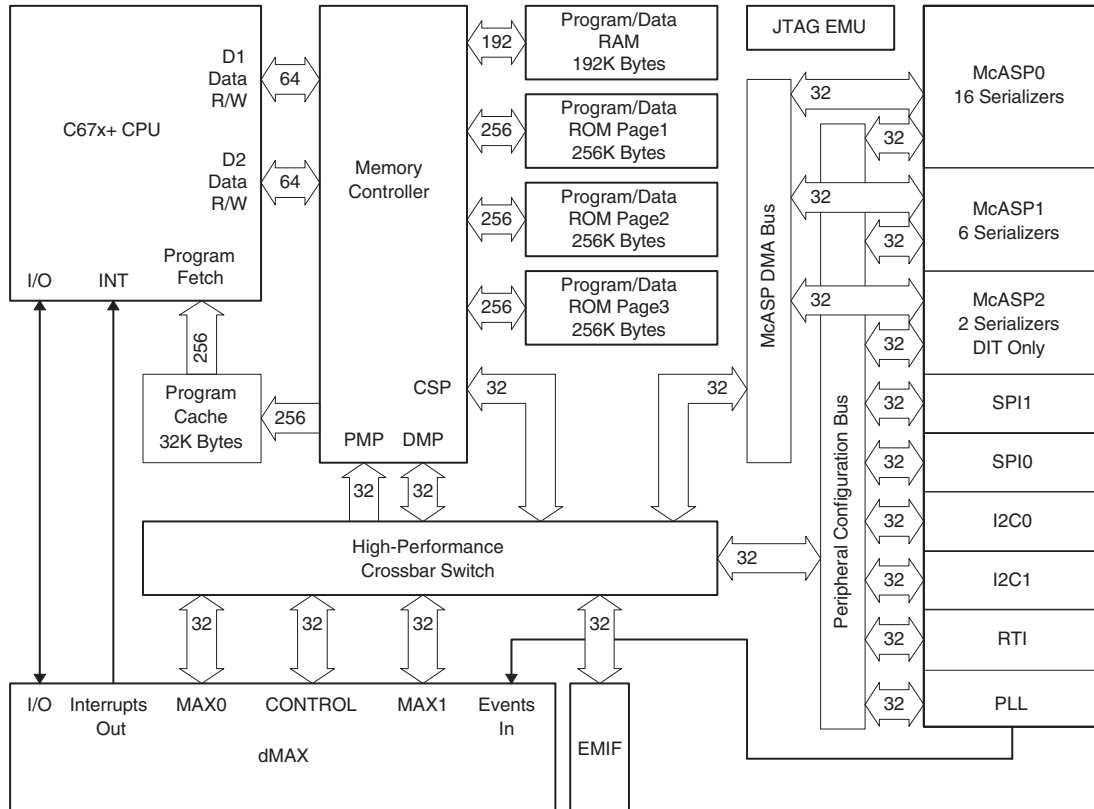
SIGNAL NAME	PIN NO.	TYPE ⁽¹⁾	PULL ⁽²⁾	GPIO ⁽³⁾	DESCRIPTION
External Memory Interface (EMIF) Data Bus					
EM_D[0]	52	IO	-	N	EMIF Data Bus [Lower 16 Bits]
EM_D[1]	51	IO	-	N	
EM_D[2]	49	IO	-	N	
EM_D[3]	48	IO	-	N	
EM_D[4]	46	IO	-	N	
EM_D[5]	45	IO	-	N	
EM_D[6]	43	IO	-	N	
EM_D[7]	41	IO	-	N	
EM_D[8]	66	IO	-	N	
EM_D[9]	64	IO	-	N	
EM_D[10]	63	IO	-	N	
EM_D[11]	61	IO	-	N	
EM_D[12]	59	IO	-	N	
EM_D[13]	58	IO	-	N	
EM_D[14]	56	IO	-	N	
EM_D[15]	55	IO	-	N	

SIGNAL NAME	PIN NO.	TYPE ⁽¹⁾	PULL ⁽²⁾	GPIO ⁽³⁾	DESCRIPTION
Clocks					
OSCIN	23	I	-	N	1.2-V Oscillator Input
OSCOUT	24	O	-	N	1.2-V Oscillator Output
OSCV _{DD}	25	PWR	-	N	Oscillator 1.2-V V _{DD} tap point (for filter only)
OSCV _{SS}	22	PWR	-	N	Oscillator V _{SS} tap point (for filter only)
CLKIN	17	I	-	N	Alternate clock input (3.3-V LVCMOS Input)
PLLHV	27	PWR	-	N	PLL 3.3-V Supply Input (requires external filter)
Device Reset					
RESET	14	I	-	N	Device reset pin
Emulation/JTAG Port					
TCK	35	I	IPU	N	Test Clock
TMS	19	I	IPU	N	Test Mode Select
TDI	28	I	IPU	N	Test Data In
TDO	29	OZ	IPU	N	Test Data Out
TRST	21	I	IPD	N	Test Reset
EMU[0]	32	IO	IPU	N	Emulation Pin 0
EMU[1]	34	IO	IPU	N	Emulation Pin 1
Power Pins					
Core Supply (CV _{DD})	8, 16, 20, 33, 44, 53, 57, 65, 77, 85, 90, 101, 123, 128, 132				
IO Supply (DV _{DD})	10, 31, 42, 50, 60, 68, 73, 81, 92, 103, 112, 125, 136				
Ground (V _{SS})	1, 6, 13, 15, 18, 26, 30, 36, 40, 47, 54, 62, 69, 72, 78, 82, 87, 95, 99, 106, 109, 114, 118, 124, 129, 133, 140				

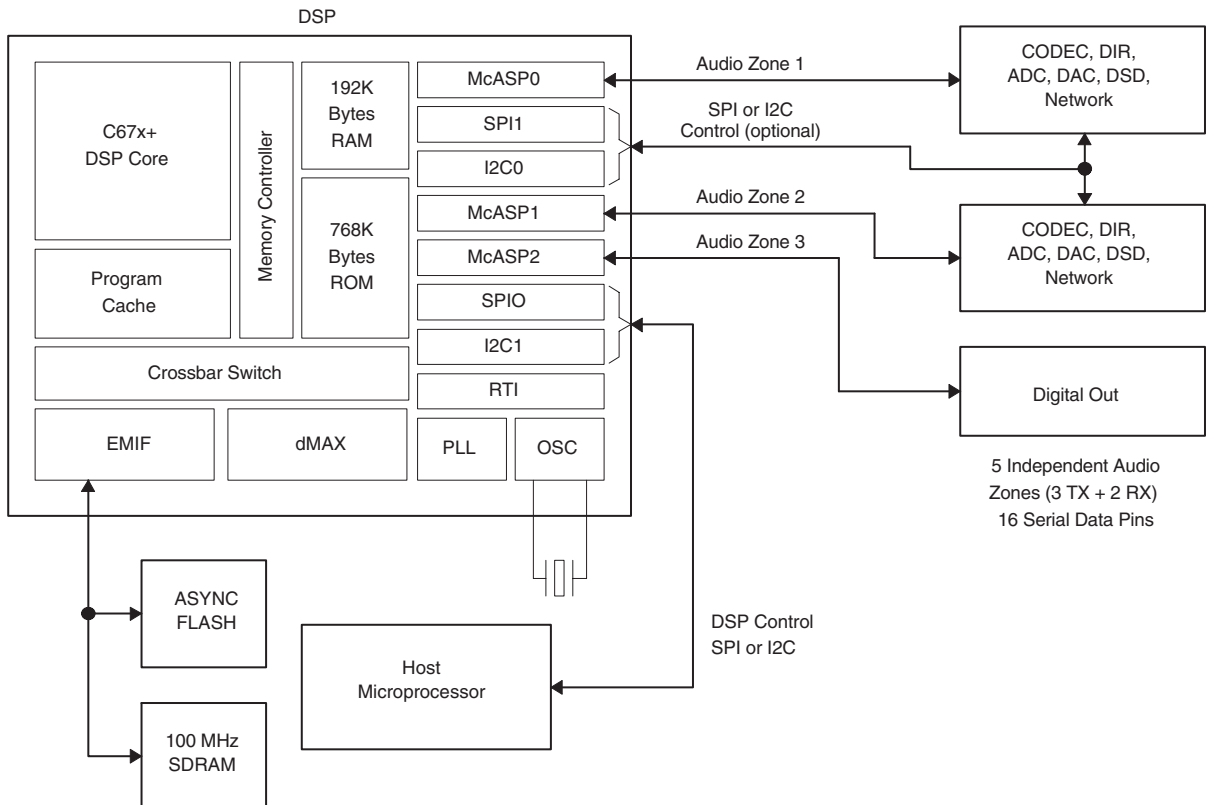
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -27

Q3601 : D707E001BRFP250 (32 bit Floating-Point Digital Signal Processor)

BLOCK DIAGRAM



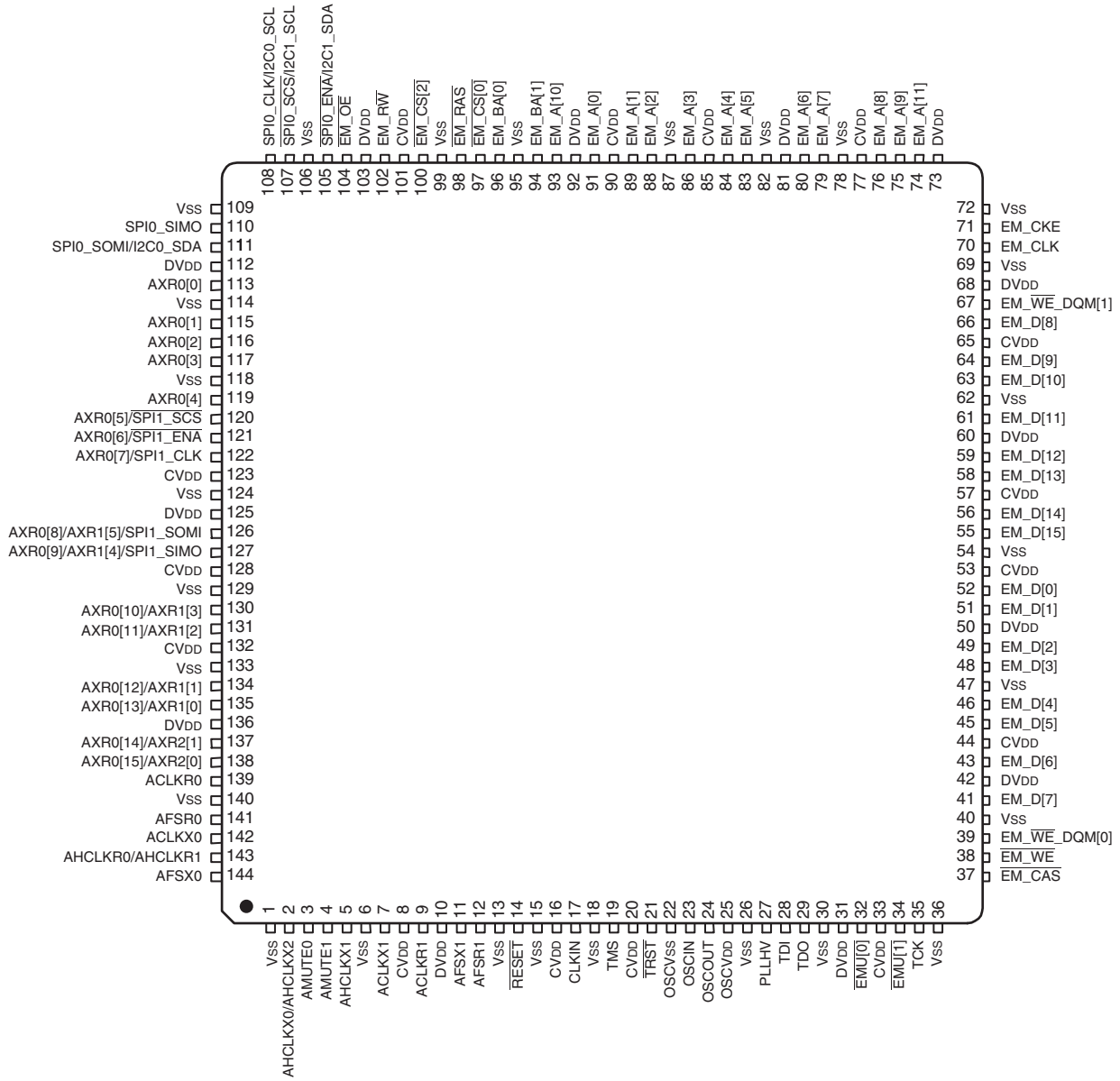
SYSTEM DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -28

Q3601 : D707E001BRFP250 (32 bit Floating-Point Digital Signal Processor)

PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -29

Q3601 : D707E001BRFP250 (32 bit Floating-Point Digital Signal Processor)

TERMINAL DESCRIPTION(1/3)

SIGNAL NAME	PIN NO.	TYPE	DESCRIPTION
External Memory Interface (EMIF) Address and Control			
EM_A[0]	91	O	EMIF Address Bus
EM_A[1]	89	O	
EM_A[2]	88	O	
EM_A[3]	86	O	
EM_A[4]	84	O	
EM_A[5]	83	O	
EM_A[6]	80	O	
EM_A[7]	79	O	
EM_A[8]	76	O	
EM_A[9]	75	O	
EM_A[10]	93	O	
EM_A[11]	74	O	
EM_BA[0]	96	O	SDRAM Bank Address and Asynchronous Memory Low-Order Address
EM_BA[1]	94	O	
EM_CS[0]	97	O	SDRAM Chip Select
EM_CS[2]	100	O	Asynchronous Memory Chip Select
EM_CAS	37	O	SDRAM Column Address Strobe
EM_RAS	98	O	SDRAM Row Address Strobe
EM_WE	38	O	SDRAM Write Enable
EM_CKE	71	O	SDRAM Clock Enable
EM_CLK	70	O	SDRAM Clock
EM_WE_DQM[0]	39	O	Write Enable or Byte Enable for EM_D[7:0]
EM_WE_DQM[1]	67	O	Write Enable or Byte Enable for EM_D[15:8]
EM_OE	104	O	SDRAM Output Enable
EM_RW	102	O	Asynchronous Memory Read/not Write
External Memory Interface (EMIF) Data Bus			
EM_D[0]	52	IO	EMIF Data Bus [Lower 16 Bits]
EM_D[1]	51	IO	
EM_D[2]	49	IO	
EM_D[3]	48	IO	
EM_D[4]	46	IO	
EM_D[5]	45	IO	
EM_D[6]	43	IO	
EM_D[7]	41	IO	
EM_D[8]	66	IO	
EM_D[9]	64	IO	
EM_D[10]	63	IO	
EM_D[11]	61	IO	
EM_D[12]	59	IO	
EM_D[13]	58	IO	
EM_D[14]	56	IO	
EM_D[15]	55	IO	

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -30

Q3601 : D707E001BRFP250 (32 bit Floating-Point Digital Signal Processor)

TERMINAL DESCRIPTION(2/3)

SIGNAL NAME	PIN NO.	TYPE	DESCRIPTION
McASP0, McASP1, McASP2, and SPI1 Serial Ports			
AHCLKR0/AHCLKR1	143	IO	McASP0 and McASP1 Receive Master Clock
ACLKR0	139	IO	McASP0 Receive Bit Clock
AFSR0	141	IO	McASP0 Receive Frame Sync (L/R Clock)
AHCLKX0/AHCLKX2	2	IO	McASP0 and McASP2 Transmit Master Clock
ACLKX0	142	IO	McASP0 Transmit Bit Clock
AFSX0	144	IO	McASP0 Transmit Frame Sync (L/R Clock)
AMUTE0	3	O	McASP0 MUTE Output
AXR0[0]	113	IO	McASP0 Serial Data 0
AXR0[1]	115	IO	McASP0 Serial Data 1
AXR0[2]	116	IO	McASP0 Serial Data 2
AXR0[3]	117	IO	McASP0 Serial Data 3
AXR0[4]	119	IO	McASP0 Serial Data 4
AXR0[5]/SPI1_SCS	120	IO	McASP0 Serial Data 5 or SPI1 Slave Chip Select
AXR0[6]/SPI1_ENA	121	IO	McASP0 Serial Data 6 or SPI1 Enable (Ready)
AXR0[7]/SPI1_CLK	122	IO	McASP0 Serial Data 7 or SPI1 Serial Clock
AXR0[8]/AXR1[5]/SPI1_SOMI	126	IO	McASP0 Serial Data 8 or McASP1 Serial Data 5 or SPI1 Data Pin Slave Out Master In
AXR0[9]/AXR1[4]/SPI1_SIMO	127	IO	McASP0 Serial Data 9 or McASP1 Serial Data 4 or SPI1 Data Pin Slave In Master Out
AXR0[10]/AXR1[3]	130	IO	McASP0 Serial Data 10 or McASP1 Serial Data 3
AXR0[11]/AXR1[2]	131	IO	McASP0 Serial Data 11 or McASP1 Serial Data 2
AXR0[12]/AXR1[1]	134	IO	McASP0 Serial Data 12 or McASP1 Serial Data 1
AXR0[13]/AXR1[0]	135	IO	McASP0 Serial Data 13 or McASP1 Serial Data 0
AXR0[14]/AXR2[1]	137	IO	McASP0 Serial Data 14 or McASP2 Serial Data 1
AXR0[15]/AXR2[0]	138	IO	McASP0 Serial Data 15 or McASP2 Serial Data 0
ACLKR1	9	IO	McASP1 Receive Bit Clock
AFSR1	12	IO	McASP1 Receive Frame Sync (L/R Clock)
AHCLKX1	5	IO	McASP1 Transmit Master Clock
ACLKX1	7	IO	McASP1 Transmit Bit Clock
AFSX1	11	IO	McASP1 Transmit Frame Sync (L/R Clock)
AMUTE1	4	O	McASP1 MUTE Output
SPI0, I2C0, and I2C1 Serial Port Pins			
SPI0_SOMI/I2C0_SDA	111	IO	SPI0 Data Pin Slave Out Master In or I2C0 Serial Data
SPI0_SIMO	110	IO	SPI0 Data Pin Slave In Master Out
SPI0_CLK/I2C0_SCL	108	IO	SPI0 Serial Clock or I2C0 Serial Clock
SPI0_SCS/I2C1_SCL	107	IO	SPI0 Slave Chip Selector I2C1 Serial Clock
SPI0_ENA/I2C1_SDA	105	IO	SPI0 Enable (Ready) or I2C1 Serial Data

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -31

Q3601 : D707E001BRFP250 (32 bit Floating-Point Digital Signal Processor)

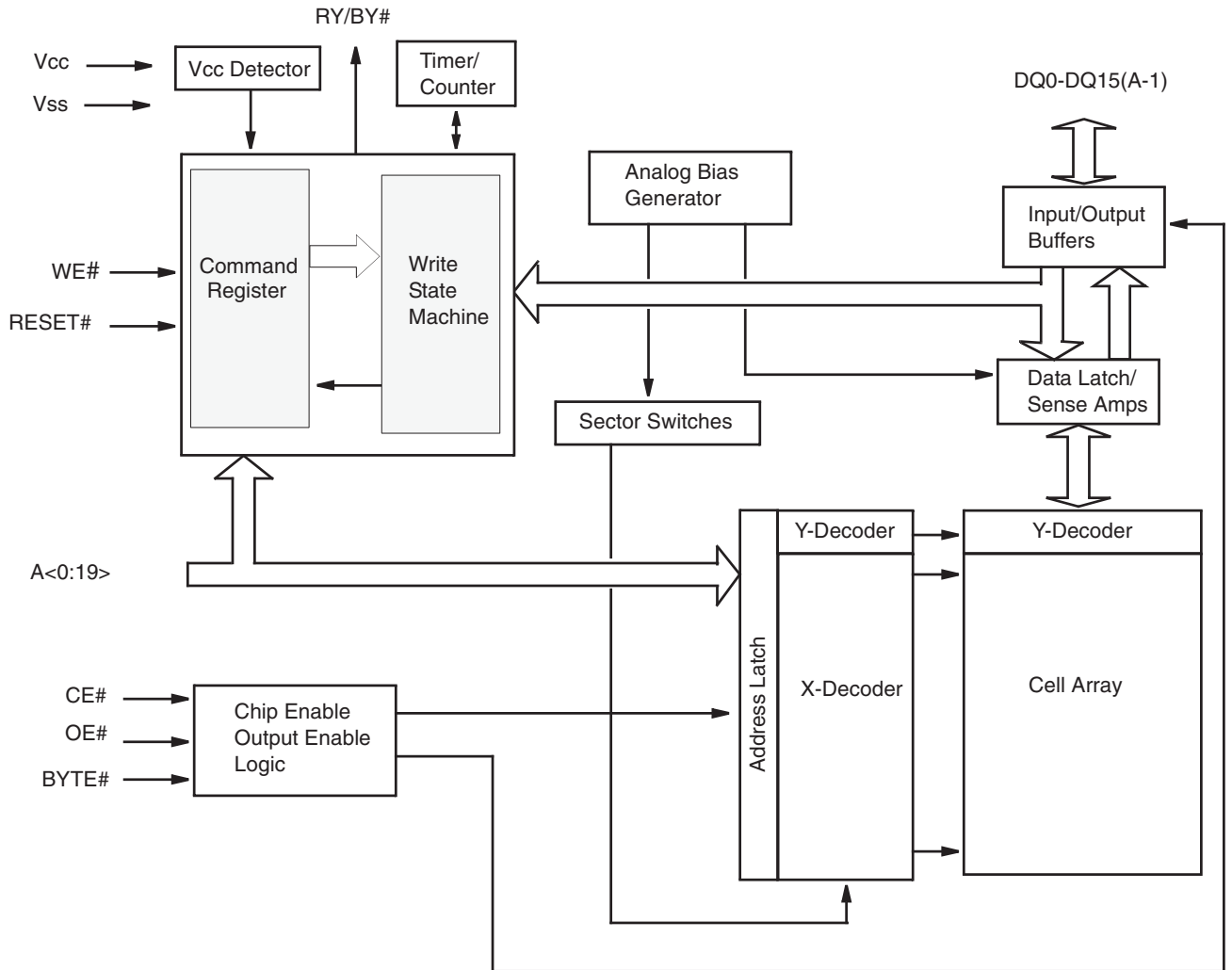
TERMINAL DESCRIPTION(3/3)

SIGNAL NAME	PIN NO.	TYPE	DESCRIPTION
Clocks			
OSCIN	23	I	1.2-V OscillatorInput
OSCOU	24	O	1.2-V OscillatorOutput
OSCVDD	25	PWR	Oscillator 1.2-V VDD tap point (for filter only)
OSCVSS	22	PWR	Oscillator VSS tap point (for filter only)
CLKIN	17	I	Alternate clock input (3.3-V LVCMOS Input)
PLLHV	27	PWR	PLL 3.3-V Supply Input (requires external filter)
Device Reset			
RESET	14	I	Device reset pin
Emulation/JTAG Port			
TCK	35	I	Test Clock
TMS	19	I	Test Mode Select
TDI	28	I	Test Data In
TDO	29	OZ	Test Data Out
TRST	21	I	Test Reset
EMU[0]	32	IO	Emulation Pin 0
EMU[1]	34	IO	Emulation Pin 1
Power Pins			
Core Supply (CVDD)	8, 16, 20, 33, 44, 53, 57, 65, 77, 85, 90, 101, 123, 128, 132		
IO Supply (DVDD)	10, 31, 42, 50, 60, 68, 73, 81, 92, 103, 112, 125, 136		
Ground (VSS)	1, 6, 13, 15, 18, 26, 30, 36, 40, 47, 54, 62, 69, 72, 78, 82, 87, 95, 99, 106, 109, 114, 118, 124, 129, 133, 140		

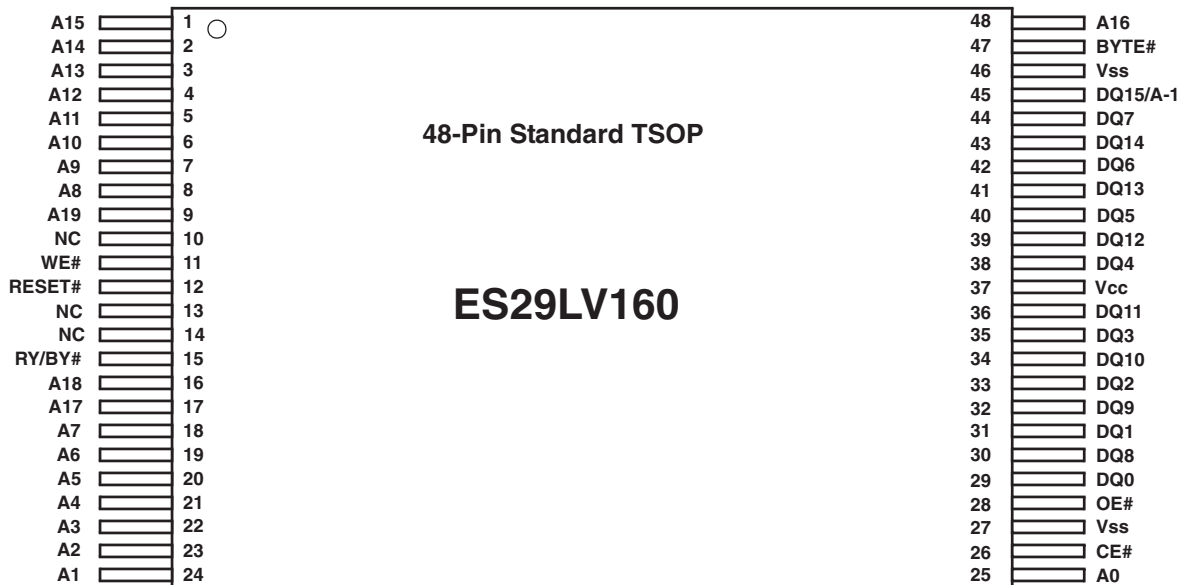
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -32

Q3451: ES29LV160ET-70TG (16 Mbit Flash Memory)

BLOCK DIAGRAM



PIN CONFIGURATION



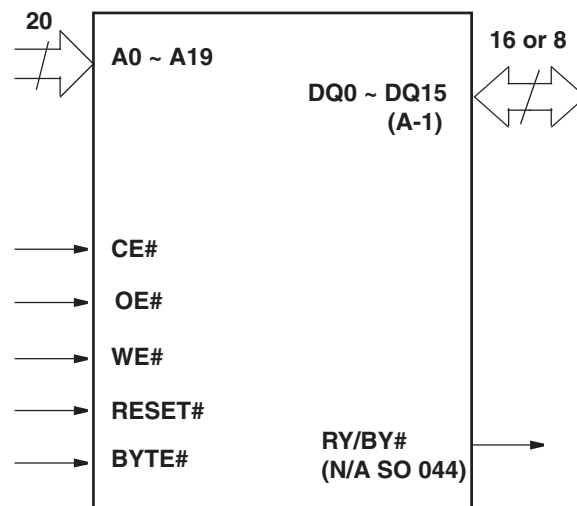
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -33

Q3451: ES29LV160ET-70TG (16 Mbit Flash Memory)

TERMINAL DESCRIPTION

Pin	Description
A0-A19	20 Addresses
DQ0-DQ14	15 Data Inputs/Outputs
DQ15/A-1	DQ15 (Data Input/Output, Word Mode) A-1 (LSB Address Input, Byte Mode)
CE#	Chip Enable
OE#	Output Enable
WE#	Write Enable
RESET#	Hardware Reset Pin, Active Low
BYTE#	Selects 8-bit or 16-bit mode
RY/BY#	Ready/Busy Output (N/A SO 044)
Vcc	3.0 volt-only single power supply (see Product Selector Guide for speed options and voltage supply tolerances)
Vss	Device Ground
NC	Pin Not Connected Internally

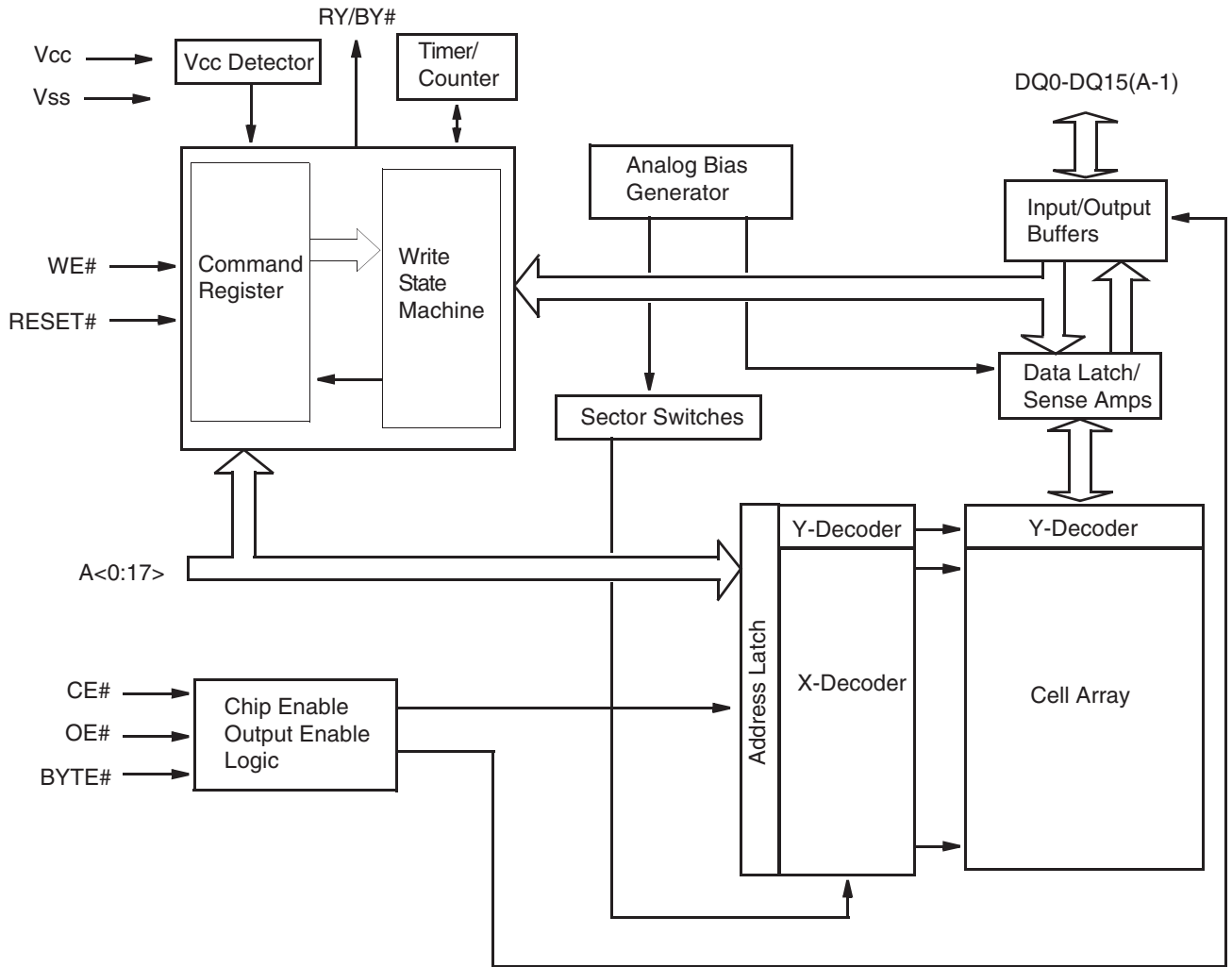
LOGIC SYMBOL



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -34

Q3551 : ES29LV400ET-70TG (4 Mbit Flash Memory)

BLOCK DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -35

Q3551 : ES29LV400ET-70TG (4 Mbit Flash Memory)

PIN CONFIGURATION



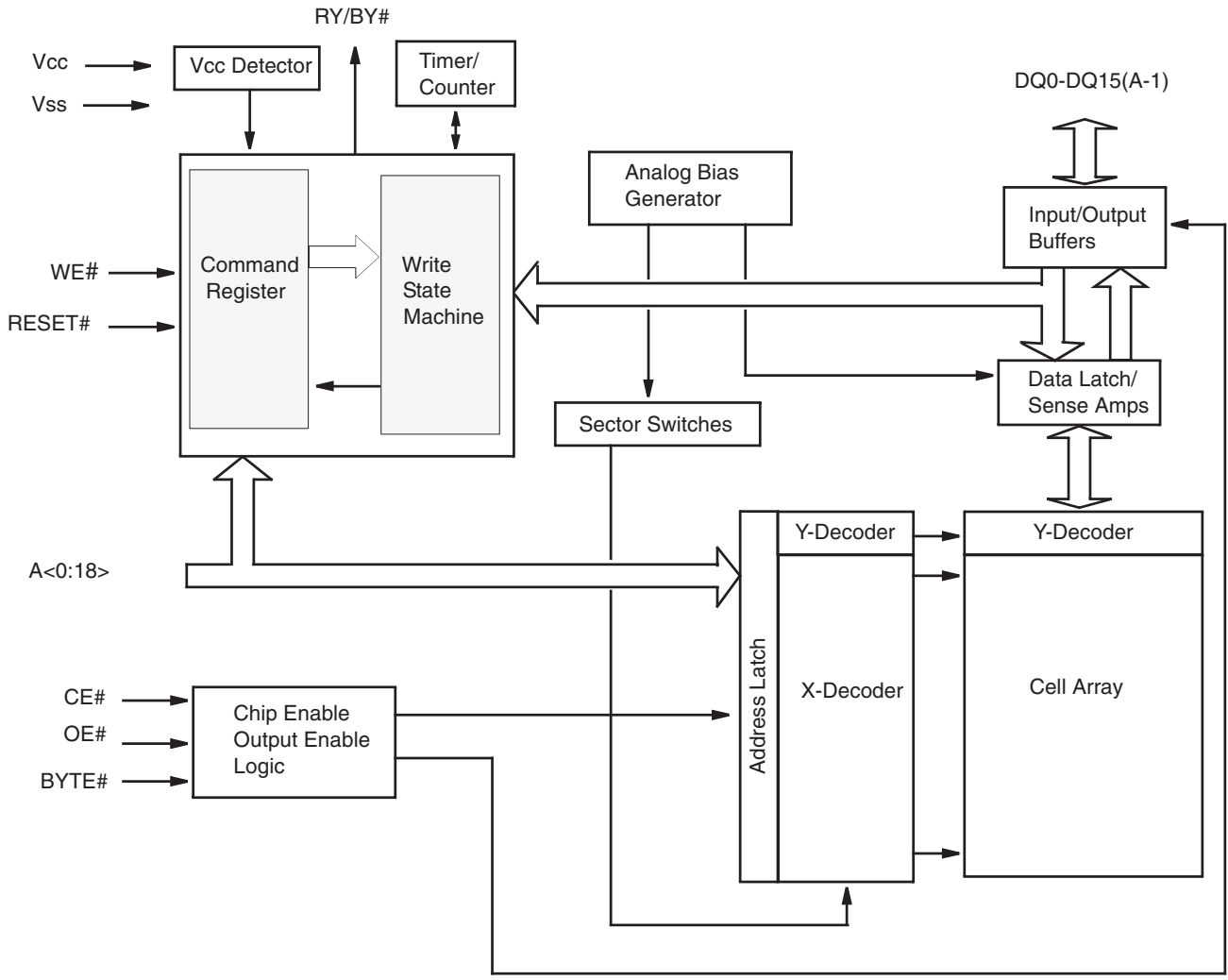
TERMINAL DESCRIPTION

Terminal	Description
A0-A17	18 Addresses
DQ0-DQ14	15 Data Inputs/Outputs
DQ15/A-1	DQ15 (Data Input/Output, Word Mode) A-1 (LSB Address Input, Byte Mode)
CE#	Chip Enable
OE#	Output Enable
WE#	Write Enable
RESET#	Hardware Reset Pin, Active Low
BYTE#	Selects 8-bit or 16-bit mode
RY/BY#	Ready/Busy Output
Vcc	3.0 volt-only single power supply (see Product Selector Guide for speed options and voltage supply tolerances)
Vss	Device Ground
NC	Pin Not Connected Internally

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -36

Q3651 : ES29LV800ET-70TG (8 Mbit Flash Memory)

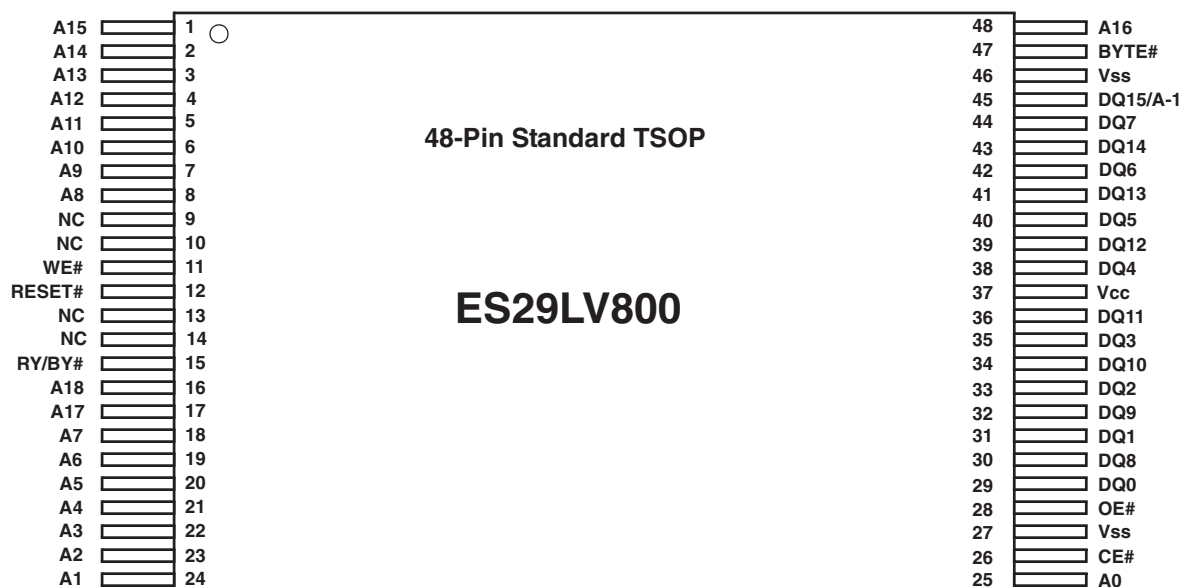
BLOCK DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -37

Q3651 : ES29LV800ET-70TG (8 Mbit Flash Memory)

PIN CONFIGURATION



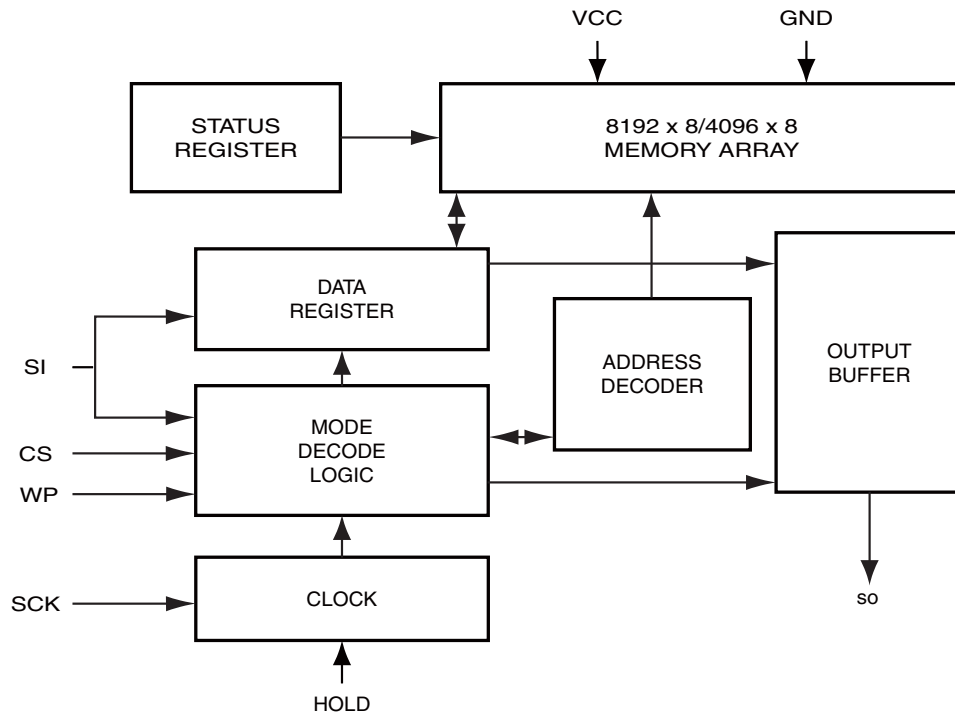
TERMINAL DESCRIPTION

Pin	Description
A0-A18	19 Addresses
DQ0-DQ14	15 Data Inputs/Outputs
DQ15/A-1	DQ15 (Data Input/Output, Word Mode) A-1 (LSB Address Input, Byte Mode)
CE#	Chip Enable
OE#	Output Enable
WE#	Write Enable
RESET#	Hardware Reset Pin, Active Low
BYTE#	Selects 8-bit or 16-bit mode
RY/BY#	Ready/Busy Output
Vcc	3.0 volt-only single power supply (see Product Selector Guide for speed options and voltage supply tolerances)
Vss	Device Ground
NC	Pin Not Connected Internally

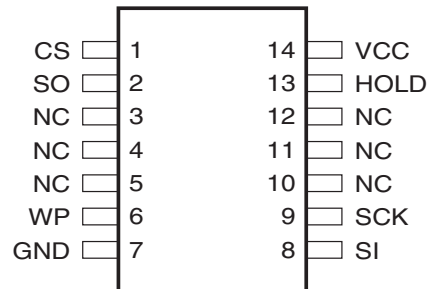
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -38

Q7391: IS25C64A(64 kbit EEPROM)

BLOCK DIAGRAM



PIN CONFIGURATION



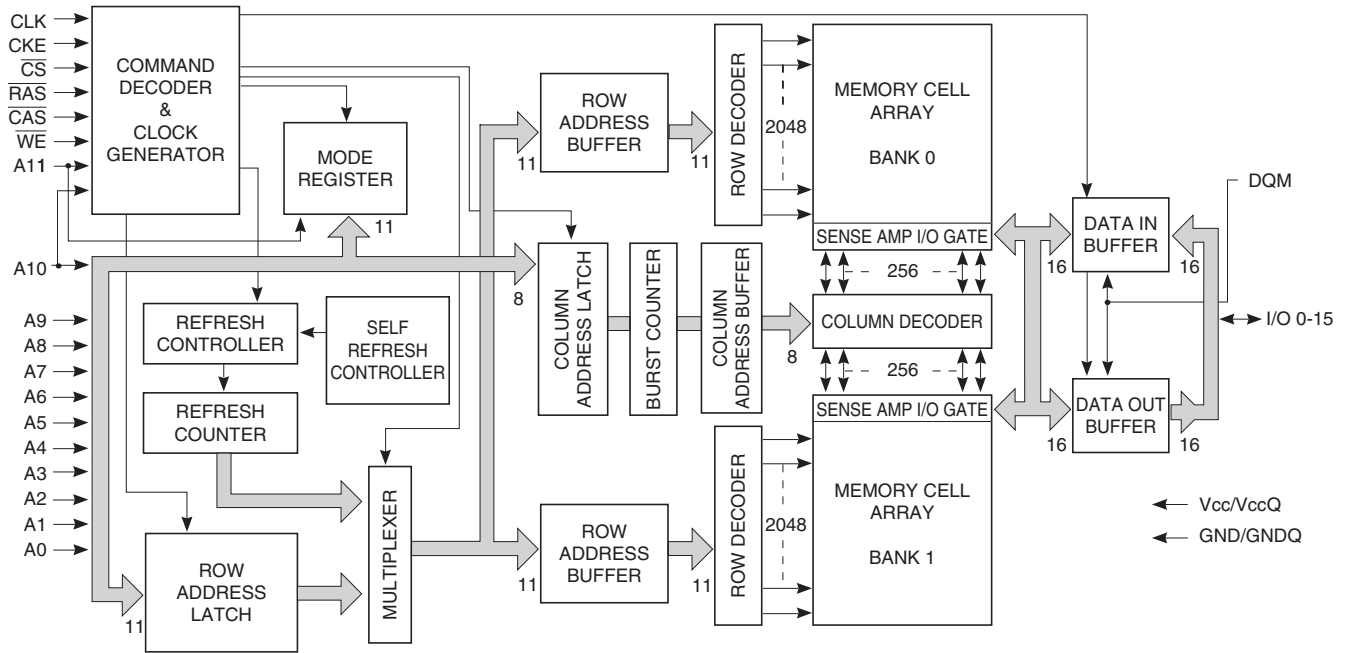
TERMINAL DESCRIPTION

CS	Chip Select
SCK	Serial Data Clock
SI	Serial Data Input
SO	Serial Data Output
GND	Ground
Vcc	Power
WP	Write Protect
HOLD	Suspends Serial Input
NC	No Connect

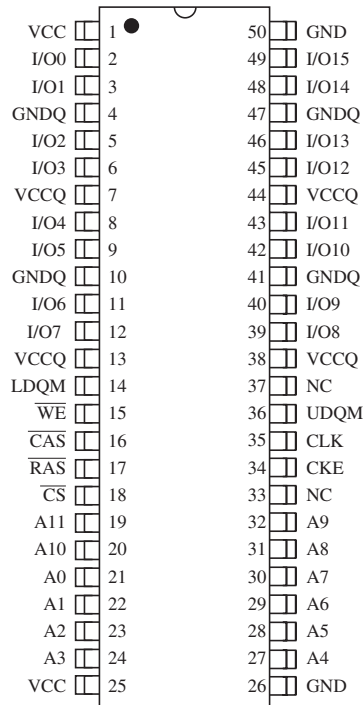
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -39

Q3461, Q3471, Q3561: IC42S16100 (16-Mbit Synchronous Dynamic RAM)

BLOCK DIAGRAM



PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -40

Q3461, Q3471, Q3561: IC42S16100 (16-Mbit Synchronous Dynamic RAM)

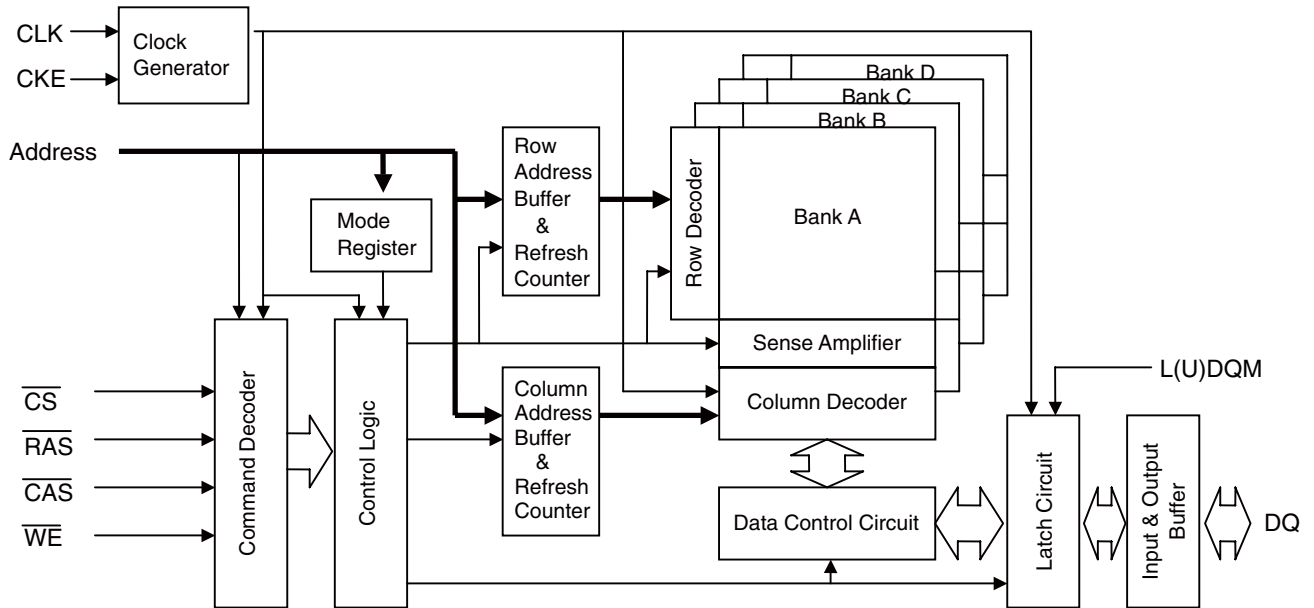
TERMINAL DESCRIPTION

Pin No.	Pin name	Function (In Detail)
20 to 24 27 to 32	A0-A10	A0 to A10 are address inputs. A0-A10 are used as row address inputs during active command input and A0-A7 as column address inputs during read or write command input. A10 is also used to determine the precharge mode during other commands. If A10 is LOW during precharge command, the bank selected by A11 is precharged, but if A10 is HIGH, both banks will be precharged. When A10 is HIGH in read or write command cycle, the precharge starts automatically after the burst access. These signals become part of the OP CODE during mode register set command input.
19	A11	A11 is the bank selection signal. When A11 is LOW, bank 0 is selected and when high, bank 1 is selected. This signal becomes part of the OP CODE during mode register set command input.
16	$\overline{\text{CAS}}$	$\overline{\text{CAS}}$, in conjunction with the $\overline{\text{RAS}}$ and $\overline{\text{WE}}$, forms the device command. See the "Command Truth Table" item for details on device commands.
34	CKE	The CKE input determines whether the CLK input is enabled within the device. When is CKE HIGH, the next rising edge of the CLK signal will be valid, and when LOW, invalid. When CKE is LOW, the device will be in either the power-down mode, the clock suspend mode, or the self refresh mode. The CKE is an asynchronous input.
35	CLK	CLK is the master clock input for this device. Except for CKE, all inputs to this device are acquired in synchronization with the rising edge of this pin.
18	$\overline{\text{CS}}$	The $\overline{\text{CS}}$ input determines whether command input is enabled within the device. Command input is enabled when $\overline{\text{CS}}$ is LOW, and disabled with $\overline{\text{CS}}$ is HIGH. The device remains in the previous state when $\overline{\text{CS}}$ is HIGH.
2, 3, 5, 6, 8, 9, 11, 12, 39, 40, 42, 43, 45, 46, 48, 49	I/O0 to I/O15	I/O0 to I/O15 are I/O pins. I/O through these pins can be controlled in byte units using the LDQM and UDQM pins.
14, 36	LDQM, UDQM	LDQM and UDQM control the lower and upper bytes of the I/O buffers. In read mode, LDQM and UDQM control the output buffer. When LDQM or UDQM is LOW, the corresponding buffer byte is enabled, and when HIGH, disabled. The outputs go to the HIGH impedance state when LDQM/UDQM is HIGH. This function corresponds to $\overline{\text{OE}}$ in conventional DRAMs. In write mode, LDQM and UDQM control the input buffer. When LDQM or UDQM is LOW, the corresponding buffer byte is enabled, and data can be written to the device. When LDQM or UDQM is HIGH, input data is masked and cannot be written to the device.
17	$\overline{\text{RAS}}$	$\overline{\text{RAS}}$, in conjunction with $\overline{\text{CAS}}$ and $\overline{\text{WE}}$, forms the device command. See the "Command Truth Table" item for details on device commands.
15	$\overline{\text{WE}}$	$\overline{\text{WE}}$, in conjunction with $\overline{\text{RAS}}$ and $\overline{\text{CAS}}$, forms the device command. See the "Command Truth Table" item for details on device commands.
7, 13, 38, 44	VccQ	VccQ is the output buffer power supply.
1, 25	Vcc	Vcc is the device internal power supply.
4, 10, 41, 47	GNDQ	GNDQ is the output buffer ground.
26, 50	GND	GND is the device internal ground.

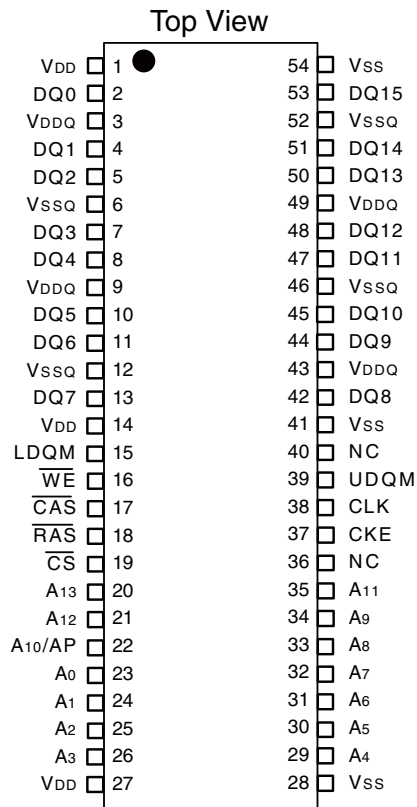
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -41

Q3661:M12L64164A-7TG (64 Mbit Synchronous DRAM)

BLOCK DIAGRAM



PIN CONFIGURATION



FEATURES

- JEDEC standard 3.3V power supply
- LVTTTL compatible with multiplexed address
- Four banks operation
- MRS cycle with address key programs
 - CAS Latency (2 & 3)
 - Burst Length (1, 2, 4, 8 & full page)
 - Burst Type (Sequential & Interleave)
- All inputs are sampled at the positive going edge of the system clock
- Auto & self refresh
- 15.6 μ s refresh interval

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -42

Q3661:M12L64164A-7TG (64 Mbit Synchronous DRAM)

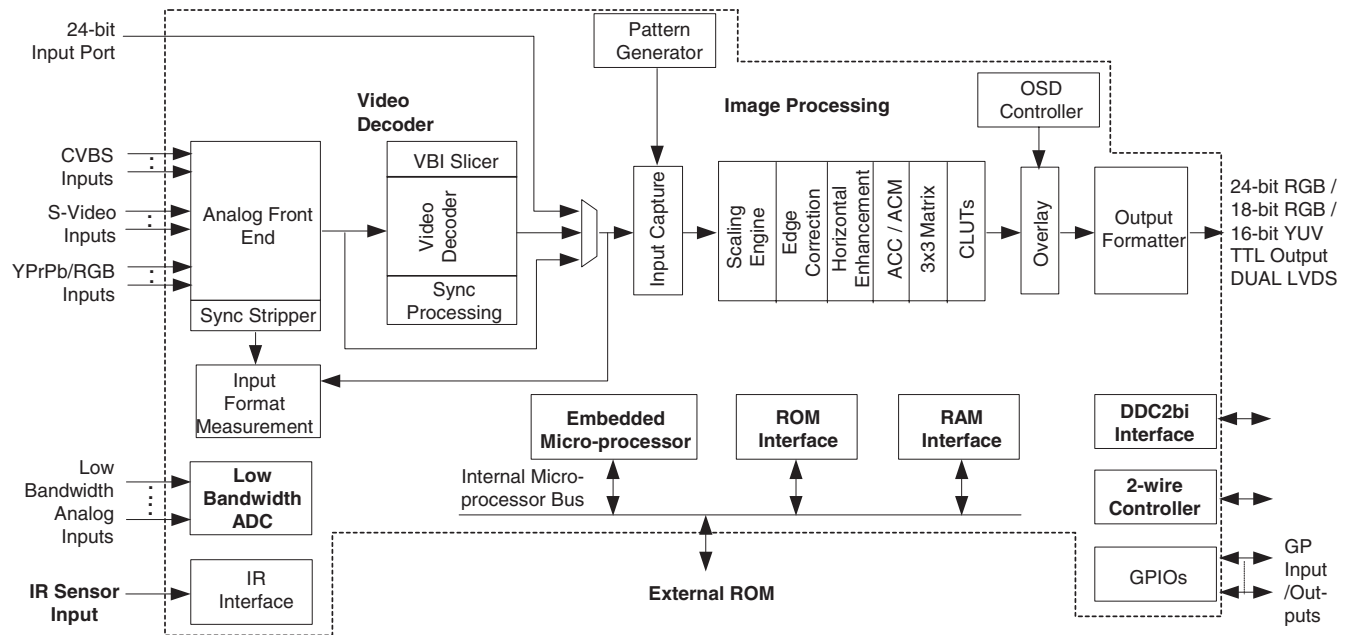
TERMINAL DESCRIPTION

PIN	NAME	INPUT FUNCTION
CLK	System Clock	Active on the positive going edge to sample all inputs
$\overline{\text{CS}}$	Chip Select	Disables or enables device operation by masking or enabling all inputs except CLK , CKE and L(U)DQM
CKE	Clock Enable	Masks system clock to freeze operation from the next clock cycle. CKE should be enabled at least one cycle prior new command. Disable input buffers for power down in standby.
A0 ~ A11	Address	Row / column address are multiplexed on the same pins. Row address : RA0~RA11, column address : CA0~CA7
A12 , A13	Bank Select Address	Selects bank to be activated during row address latch time. Selects bank for read / write during column address latch time.
$\overline{\text{RAS}}$	Row Address Strobe	Latches row addresses on the positive going edge of the CLK with $\overline{\text{RAS}}$ low. Enables row access & precharge.
$\overline{\text{CAS}}$	Column Address Strobe	Latches column address on the positive going edge of the CLK with $\overline{\text{CAS}}$ low. Enables column access.
$\overline{\text{WE}}$	Write Enable	Enables write operation and row precharge. Latches data in starting from $\overline{\text{CAS}}$, $\overline{\text{WE}}$ active.
L(U)DQM	Data Input / Output Mask	Makes data output Hi-Z, t_{SHZ} after the clock and masks the output. Blocks data input when L(U)DQM active.
DQ0 ~ DQ15	Data Input / Output	Data inputs / outputs are multiplexed on the same pins.
VDD / VSS	Power Supply / Ground	Power and ground for the input buffers and the core logic.
VDDQ / VSSQ	Data Output Power / Ground	Isolated power supply and ground for the output buffers to provide improved noise immunity.
NC	No Connection	This pin is recommended to be left No Connection on the device.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -43

Q8001: FLI8125-LF-BC (Video Processor)

BLOCK DIAGRAM



FEATURES

INTEGRATED TRIPLE ADC

- RGB / YPbPr support up to 135MHz
- SCART – RGB + Fast Blank support
- Interlaced and progressive scan
- External OSD support

DIGITAL INPUT PORT

- 24-bit re-configurable input port

INTEGRATED 2D VIDEO DECODER

- Worldwide NTSC/PAL/SECAM support
- Macrovision / VCR trick mode support

EMBEDDED MICROPROCESSOR

- Turbo 186 core
- Internal RAM / ROM
- Serial Flash / Parallel ROM support
- 2-wire slave controller, UART / JTAG support
- Internal RESET Controller
- GPIOs , Low Bandwidth ADC – 6 input
- Infra-red Interface

SCALING ENGINE

- Independent H & V scaling factors
- 4:2:2 YPbPr or 4:4:4 RGB scaling
- Anamorphic scaling (non-linear)

FAROUDJA DCDI – EDGE™

- Edge Correction
 - Eliminates objectionable stair casing
 - Enhances clarity and realism
- Horizontal Enhancement
- Adaptive Contrast and Color
- Active Color Management

DIGITAL OUTPUT

- 18/24-bit 85Mhz TTL output
- Dual LVDS up to SXGA
- Energy Spectrum Management for reducing EMI
- Programmable CLUT for gamma correction

OSD CONTROLLER

- Up to 4 windows: 1, 2 or 4-bits per pixel color
- Programmable Font scalar to meet Teletext requirements.

VBI SLICER

- V-Chip, Closed Captioning, XDS, CGMS, WSS decode
- Teletext 1.5 support

JTAG SUPPORT

- Boundary Scan support

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -44

Q8001: FLI8125-LF-BC (Video Processor)

PIN CONFIGURATION

VDDA33_LBADC	1	208	GND18_SC	53	PBIAS	156	HSYNC1
LBADC_IN1	2	207	VDD18_SC	54	FWR	155	CRVSS
LBADC_IN2	3	206	VOUT2	55	AVDD_LV_33	154	RVDD_3.3
LBADC_IN3	4	205	VO_GND	56	AVSS_LV	153	VID_CLK_1
LBADC_IN4	5	204	SVN	57	VCO_LV	152	VID_DATA_IN_15/GPIO23
LBADC_IN5	6	203	AVDD_SC	58	AVSS_LV	151	VID_DATA_IN_14/GPIO22
LBADC_IN6	7	202	C4P	59	AVDD_OUT_LV_33	150	VID_DATA_IN_13/GPIO21
LBADC_RTN	8	201	GND5	60	CH8P_LV_ER0	149	VID_DATA_IN_12/GPIO20
VSA33_LBADC	9	200	B4P	61	CH8N_LV_ER1	148	VID_DATA_IN_11/GPIO19
RESETn	10	199	GND5	62	CLKP_LV_ER2	147	VID_DATA_IN_10/GPIO18
GND_RPLL	11	198	A4P	63	CLKN_LV_ER3	146	VID_DATA_IN_9/GPIO17
VDD_RPLL_18	12	197	GND5	64	CH2P_LV_ER4	145	VID_DATA_IN_8/GPIO16
VBUFC_RPLL	13	196	SV4P	65	CH2N_LV_ER5	144	CRVSS
AGND_RPLL	14	195	AGND	66	CH1P_LV_ER6	143	CVDD_1.8
XTAL	15	194	CN	67	CH1N_LV_ER7	142	VID_DATA_IN_7
TCLK	16	193	AVDD_C	68	CH0P_LV_ER8	141	VID_DATA_IN_6
AVDD_RPLL_33	17	192	C3P	69	CH0N_LV_ER9	140	VID_DATA_IN_5
CVDD_1.8	18	191	GND5	70	AVSS_OUT_LV	139	VID_DATA_IN_4
CRVSS	19	189	GND5	71	CH3P_LV_OG2	138	VID_DATA_IN_3
TEST	20	188	GND5	72	CH3N_LV_OG3	137	VID_DATA_IN_2
GPIO15	21	187	GND5	73	CLKP_LV_OG4	136	VID_DATA_IN_1
JTAG_BS_Enn	22	186	A3P	74	CLKN_LV_OG5	135	VID_DATA_IN_0
SCART16	23	185	GND5	75	CH2P_LV_OG6	134	CRVSS
HOST_SCLK	24	184	AGND	76	CH2N_LV_OG7	133	CVDD_1.8
HOST_SDATA	25	183	AGND	77	CH1P_LV_OB0	132	VID_DATA_IN_23/D7/PD46
DDC_SCLK	26	182	AVDD_B	78	CH1N_LV_OB1	131	VID_DATA_IN_22/D6/PD45
DDC_SDATA	27	181	C2P	79	CH0P_LV_OB2	130	VID_DATA_IN_21/D5/PD44
CVDD_1.8	28	180	B2P	80	CH0N_LV_OB3	129	VID_DATA_IN_20/D4/PD43
CRVSS	29	179	GND5	81	AVSS_OUT_LV	128	VID_DATA_IN_19/D3/PD42
MSTR_SCLK	30	178	A2P	82	AVDD_OUT_LV_33	127	CRVSS
MSTR_SDATA	31	177	GND5	83	CVDD_1.8	126	CVDD_1.8
RVDD_3.3	32	176	SV2P	84	CRVSS	125	VID_DATA_IN_18/D2/PD41
CRVSS	33	175	AGND	85	PD20/B4/GPIO0	124	VID_DATA_IN_17/D1/PD40
GPIO0/TCK	34	174	AN	86	PD21/B5/GPIO1	123	VID_DATA_IN_16/D0/PD39
GPIO1/TDI	35	173	AVDD_A	87	PD22/B6/GPIO2	122	GPIO4/MIDIN_HS
GPIO2/TMS	36	172	C1P	88	PD23/B7/GPIO3	121	GPIO5/MIDIN_VS
GPIO3/TRST	37	171	GND5	89	DBN	120	CRVSS
GPIO6/IRin	38	170	B1P	90	DHS	119	CVDD_1.8
CVDD_1.8	39	169	GND5	91	DVS	118	VID_CLK2/ROM_OEN/PD24
CRVSS	40	168	A1P	92	DCLK	117	CRVSS
GPIO7/IRQin	41	167	GND5	93	DCLK	116	RVDD_3.3
GPIO8/IRQout	42	166	SV1P	94	ROM_SCSN/ROM_CSN	115	VID_DE/FLD/A0/PD24
GPIO9/SIPC_SCLK	43	165	AGND	95	ROM_SCLK/A17	114	A1/PD25
GPIO10/SIPC_SDATA/A18	44	164	AGND	96	ROM_SDO/A16	113	A2/PD26
CVDD_1.8	45	163	AVDD_ADC	97	ROM_SDI/ROM_WEN	112	A3/PD27
CRVSS	46	162	ADC_TEST	98	RVDD_3.3	111	A4/PD28
GPIO11/PWM0	47	161	VDD18_C	99	CRVSS	110	A5/PD29
GPIO12/PWM1	48	160	GND18_C	100	ADC_CLAMP/A15	109	A6/PD30
RVDD_3.3	49	159	NC	101	XOSD_CLK/A14/PD38	108	A7/PD31
CRVSS	50	158	VDD18_AB	102	XOSD_HS/A13/PD37	107	A8/PD32
GPIO13/PWM2	51	157	VSYNCT	103	XOSD_VS/A12/PD36	106	A9/PD33
GPIO14/PWM3/SCART16	52			104	XOSD_FLD/A11/PD35	105	A10/PD34



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -45

Q8001: FLI8125-LF-BC (Video Processor)

TERMINAL DESCRIPTION(1/8)

Analog Input Port

Pin Name	No.	I/O	Description
VDD18_AB	158	AP	Analog Power (1.8V) for A & B Channels. Must be bypassed with 0.1uF capacitor to the analog system ground plane.
NC	159		No Connection. Leave this pin open for normal operation.
GND18_C	160	AG	Analog Ground (1.8V Return) for C channel. Must be directly connected to the analog system ground plane on board.
VDD18_C	161	AP	Analog Power (1.8V) for C Channel. Must be bypassed with 0.1uF capacitor to the analog system ground plane.
ADC_TEST	162	O	Analog Front End Test O/P. Leave this Pin open. Used for factory testing purpose only.
AVDD_ADC	163	AP	Analog Power (3.3V) for ADC. Must be bypassed with 0.1uF capacitor to the analog system ground plane.
AGND	164	AG	Analog Ground. Must be directly connected to the analog system ground plane on board.
AGND	165	AG	Analog Ground. Must be directly connected to the analog system ground plane on board.
SV1P	166	AI	Positive analog sync input for channel 1. The input has to be AC coupled using a series 20 Ohm resistor and 0.1uF Capacitor network.
GNDS	167	AG	Analog Ground. Must be directly connected to the analog system ground plane on board.
A1P	168	AI	Positive analog input 'A' for channel 1. The input has to be AC coupled using a series 20 Ohm resistor and 0.1uF Capacitor network.
GNDS	169	AG	Analog Ground. Must be directly connected to the analog system ground plane on board.
B1P	170	AI	Positive analog input 'B' for channel 1. The input has to be AC coupled using a series 20 Ohm resistor and 0.1uF Capacitor network.
GNDS	171	AG	Analog Ground. Must be directly connected to the analog system ground plane on board.
C1P	172	AI	Positive analog input 'C' for channel 1. The input has to be AC coupled using a series 20 Ohm resistor and 0.1uF Capacitor network.
AVDD_A	173	AP	Analog Power (3.3V) for ADC of Channel-A. Must be bypassed with 0.1uF capacitor to the analog system ground plane.
AN	174	AI	Negative analog input 'A' for channels 1 through 4. This acts as the return Path for the Sources connected to Channel-A Inputs. This has to be AC coupled using a series 57.6 Ohm resistor and 0.1uF Capacitor network to Analog Ground Plane on board.
AGND	175	AG	Analog Ground. Must be directly connected to the analog system ground plane on board.
SV2P	176	AI	Positive analog sync input for channel 2. The input has to be AC coupled using a series 20 Ohm resistor and 0.1uF Capacitor network.
GNDS	177	AG	Analog Ground. Must be directly connected to the analog system ground plane on board.
A2P	178	AI	Positive analog input 'A' for channel 2. The input has to be AC coupled using a series 20 Ohm resistor and 0.1uF Capacitor network.
GNDS	179	AG	Analog Ground. Must be directly connected to the analog system ground plane on board.
B2P	180	AI	Positive analog input 'B' for channel 2. The input has to be AC coupled using a series 20 Ohm resistor and 0.1uF Capacitor network.
GNDS	181	AG	Analog Ground. Must be directly connected to the analog system ground plane on board.
C2P	182	AI	Positive analog input 'C' for channel 2. The input has to be AC coupled using a series 20 Ohm resistor and 0.1uF Capacitor network.
AVDD_B	183	AP	Analog Power (3.3V) for ADC of Channel-B. Must be bypassed with 0.1uF capacitor to the analog system ground plane.
BN	184	AI	Negative analog input 'B' for channels 1 through 4. This acts as the return Path for the Sources connected to Channel-B Inputs. This has to be AC coupled using a series 57.6 Ohm resistor and 0.1uF Capacitor network to Analog Ground Plane on board.
AGND	185	AG	Analog Ground. Must be directly connected to the analog system ground plane on board.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -46

Q8001: FLI8125-LF-BC (Video Processor)

TERMINAL DESCRIPTION(2/8)

Analog Input Port

Pin Name	No.	I/O	Description
SV3P	186	AI	Positive analog sync input for channel 3. The input has to be AC coupled using a series 20 Ohm resistor and 0.1uF Capacitor network.
GNDS	187	AG	Analog Ground. Must be directly connected to the analog system ground plane on board.
A3P	188	AI	Positive analog input 'A' for channel 3. The input has to be AC coupled using a series 20 Ohm resistor and 0.1uF Capacitor network.
GNDS	189	AG	Analog Ground. Must be directly connected to the analog system ground plane on board.
B3P	190	AI	Positive analog input 'B' for channel 3. The input has to be AC coupled using a series 20 Ohm resistor and 0.1uF Capacitor network.
GNDS	191	AG	Analog Ground. Must be directly connected to the analog system ground plane on board.
C3P	192	AI	Positive analog input 'C' for channel 3. The input has to be AC coupled using a series 20 Ohm resistor and 0.1uF Capacitor network.
AVDD_C	193	AP	Analog Power (3.3V) for ADC of Channel-C. Must be bypassed with 0.1uF capacitor to the analog system ground plane.
CN	194	AI	Negative analog input 'C' for channels 1 through 4. This acts as the return Path for the Sources connected to Channel-C Inputs. This has to be AC coupled using a series 57.6 Ohm resistor and 0.1uF Capacitor network to Analog Ground Plane on board.
AGND	195	AG	Analog Ground. Must be directly connected to the analog system ground plane on board.
SV4P	196	AI	Positive analog sync input for channel 4. The input has to be AC coupled using a series 20 Ohm resistor and 0.1uF Capacitor network.
GNDS	197	AG	Analog Ground. Must be directly connected to the analog system ground plane on board.
A4P	198	AI	Positive analog input 'A' for channel 4. The input has to be AC coupled using a series 20 Ohm resistor and 0.1uF Capacitor network.
GNDS	199	AG	Analog Ground. Must be directly connected to the analog system ground plane on board.
B4P	200	AI	Positive analog input 'B' for channel 4. The input has to be AC coupled using a series 20 Ohm resistor and 0.1uF Capacitor network.
GNDS	201	AG	Analog Ground. Must be directly connected to the analog system ground plane on board.
C4P	202	AI	Positive analog input 'C' for channel 4. The input has to be AC coupled using a series 20 Ohm resistor and 0.1uF Capacitor network.
AVDD_SC	203	AP	Analog Power (3.3V) for ADC of SYNC Channel. Must be bypassed with 0.1uF capacitor to the analog system ground plane.
SVN	204	AI	Negative analog sync input for channels 1 through 4. This acts as the return Path for the Sources connected to SV Channel Inputs. This has to be AC coupled using a series 57.6 Ohm resistor and 0.1uF Capacitor network to Analog Ground Plane on board.
VO_GND	205	AG	Analog Ground. Must be directly connected to the analog system ground plane on board.
VOOUT2	206	AO	Analog VOUT signal This is the Analog Video Output from the Decoder in the Composite Video format. This can be amplified and be fed to any video display device.
VDD18_SC	207	AP	Analog Power (1.8V) for SYNC Channel. Must be bypassed with 0.1uF capacitor to the analog system ground plane.
GND18_SC	208	AG	Analog Ground (1.8V Return) for SYNC channel. Must be directly connected to the analog system ground plane on board.

Low Bandwidth ADC Input Port

Pin Name	No	I/O	Description
VDDA33_LBADC	1	AP	Analog Power (3.3V) for Low Bandwidth ADC Block. Must be bypassed with 0.1uF capacitor.
LBADC_IN1	2	AI	Low Bandwidth Analog Input-1. The Input signal connected to this Pin, must be bypassed with a 0.1uF capacitor and could be in the range of 0V to 3.3V (peak to peak).
LBADC_IN2	3	AI	Low Bandwidth Analog Input-2. The Input signal connected to this Pin, must be bypassed with a 0.1uF capacitor and could be in the range of 0V to 3.3V (peak to peak).
LBADC_IN3	4	AI	Low Bandwidth Analog Input-3. The Input signal connected to this Pin, must be bypassed with a 0.1uF capacitor and could be in the range of 0V to 3.3V (peak to peak).
LBADC_IN4	5	AI	Low Bandwidth Analog Input-4. The Input signal connected to this Pin, must be bypassed with a 0.1uF capacitor and could be in the range of 0V to 3.3V (peak to peak).
LBADC_IN5	6	AI	Low Bandwidth Analog Input-5. The Input signal connected to this Pin, must be bypassed with a 0.1uF capacitor and could be in the range of 0V to 3.3V (peak to peak).

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -47

Q8001: FLI8125-LF-BC (Video Processor)

TERMINAL DESCRIPTION(3/8)

Low Bandwidth ADC Input Port

Pin Name	No	I/O	Description
			a 0.1uF capacitor and could be in the range of 0V to 3.3V (peak to peak).
LBADC_IN6	7	AI	Low Bandwidth Analog Input-6. The Input signal connected to this Pin, must be bypassed with a 0.1uF capacitor and could be in the range of 0V to 3.3V (peak to peak).
LBADC_RTN	8	AG	This Pin provides the Return Path for LBADC inputs. Must be directly connected to the analog system ground plane on board.
VSSA33_LBADC	9	AG	Analog Ground for Low Bandwidth ADC Block. Must be directly connected to the analog system ground plane on board.

RCLK PLL Pins

Pin Name	No	I/O	Description
GND_RPLL	11	DG	Digital GND for ADC clocking circuit. Must be directly connected to the digital system ground plane.
VDD_RPLL_18	12	DP	Digital power (1.8V) for ADC digital logic. Must be bypassed with capacitor to Ground Plane.
VBUFC_RPLL	13	O	Test Output. Leave this Pin Open. This is reserved for Factory Testing Purpose.
AGND_RPLL	14	AG	Analog ground for the Reference DDS PLL. Must be directly connected to the analog system ground plane.
XTAL	15	AO	Crystal oscillator output. Connect to external crystal.
TCLK	16	AI	Reference clock (TCLK) from the 19.6608 MHz crystal oscillator. Connect to external crystal/ oscillator.
AVDD_RPLL_33	17	AP	Analog Power (3.3V) for RCLK PLL. Must be bypassed with 0.1uF capacitor.

Digital Video Input Port

Pin Name	No	I/O	Description
VID_CLK_1	153	I	Video port data clock input meant for Video Input – 1. Up to 135Mhz [Input, 5V-tolerant]
VIDIN_HS	122	I	When Video Input – 1 is in BT656 Mode, this Pin acts as Horizontal Sync Input for Video Input – 2. OR when Video Input – 1 is in 16 Bit Mode this Pin acts as Horizontal Sync Input for Video Input – 1. OR this Pin acts as Horizontal Sync Input for 24 Bit Video Input
VIDIN_VS	121	I	When Video Input – 1 is in BT656 Mode, this Pin acts as Vertical Sync Input for Video Input – 2. OR when Video Input – 1 is in 16 Bit Mode this Pin acts as Vertical Sync Input for Video Input – 1. OR this Pin acts as Vertical Sync Input for 24 Bit Video Input
VID_DATA_IN_0 VID_DATA_IN_1 VID_DATA_IN_2 VID_DATA_IN_3 VID_DATA_IN_4 VID_DATA_IN_5 VID_DATA_IN_6 VID_DATA_IN_7	135 136 137 138 139 140 141 142	IO	Input YUV data in 8-bit BT656 of Video Input – 1 [Bi-Directional, 5V-tolerant] OR Input Y Data in case of 16 Bit Video Input (CCIR601) of Video Input – 1 OR Input Green Data in case of 24 Bit Video Input
VID_DATA_IN_8 VID_DATA_IN_9 VID_DATA_IN_10 VID_DATA_IN_11 VID_DATA_IN_12 VID_DATA_IN_13 VID_DATA_IN_14 VID_DATA_IN_15	145 146 147 148 149 150 151 152	IO	Input Pr / Pb Data in case of 16 Bit Video Input (CCIR601) of Video Input – 1 OR Input Blue/ Pb Data in case of 24 Bit Video Input
VID_DATA_IN_16 VID_DATA_IN_17 VID_DATA_IN_18 VID_DATA_IN_19 VID_DATA_IN_20 VID_DATA_IN_21 VID_DATA_IN_22	123 124 125 128 129 130 131	IO	Input Red / Pr Data in case of 24 Bit Video Input OR Video Input – 2 in 8-bit with Embedded Sync / Separate Sync

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -48

Q8001: FLI8125-LF-BC (Video Processor)

TERMINAL DESCRIPTION(4/8)

Digital Video Input Port

Pin Name	No	I/O	Description
VID_DATA_IN_23	132		
VID_CLK2	118	I	Video port data clock input meant for Video Input – 2. Up to 135Mhz [Input, 5V-tolerant]
VID_DE/FLD	115	I	Video Active Signal Input or the Field Signal Input from external Digital Video Source.

System Interface

Pin Name	No	I/O	Description
RESETn	10	I	Hardware Reset (active low) [Schmitt trigger, 5v-tolerant] Connect to ground with 0.01uF capacitor.
TEST	20	I	For normal mode of operation connect this Pin to Ground. Has an internal pulldown resistor of 50 K ohm.
GPIO15	21	IO	This pin is available as a general-purpose input/output port. Also it is optionally programmable to give out the external chip select signal meant for external SRAM. Connect pullup resistor to supply if external SRAM used. It is also address line A19 when 1MB parallel flash is used.
JTAG_BS_ENn	22	I	JTAG Boundary Scan enabling pin. Has an internal pulldown resistor of 50 K ohm. If this pin is left open or pulled down, Boundary Scan Mode is enabled. If this pin is pulled high, Boundary Scan functionality is not available, and pins 34~37 are available as GPIO 0~3
SCART16	23	I	This pin can be programmed to sense the Fast Blank Input signal from a SCART I/P source
HOST_SCLK	24	IO	Host input clock or 186 UART Data In or JTAG clock signal. [Input, Schmitt trigger, 5V-tolerant]
HOST_SDATA	25	IO	Host input data or 186 UART Data Out or JTAG mode signal. [Bi-directional, Schmitt trigger, slew rate limited, 5V-tolerant]
DDC_SCLK	26	IO	DDC2Bi clock for VGA Port
DDC_SDATA	27	IO	DDC2Bi data for VGA Port
MSTR_SCLK	30	O	Clock signal from Master Serial 2 Wire Interface Controller
MSTR_SDATA	31	IO	Data signal meant for Master Serial 2 Wire interface Controller
GPIO0/TCK	34	IO	This Pin accepts the Input Clock signal in case of Boundary Scan Mode. Else, this pin is available as General Purpose Input/output Port.
GPIO1/TDI	35	IO	This Pin accepts the Input Data signal in case of Boundary Scan Mode. Else, this pin is available as General Purpose Input/output Port.
GPIO2/TMS	36	IO	This Pin accepts the Input Test Mode Select signal in case of Boundary Scan Mode. Else, this pin is available as General Purpose Input/output Port.
GPIO3/TRST	37	IO	This Pin accepts the Boundary Scan Reset signal in case of Boundary Scan Mode. Else, this pin is available as General Purpose Input/output Port.
GPIO6/IRin	38	IO	Input from Infra Red Decoder can be connected to this Pin. Else, this pin is available as General Purpose Input/output Port.
GPIO7/IRQin	41	IO	Input Interrupt Request signal can be connected to this Pin. Else, this pin is available as General Purpose Input/output Port.
GPIO8/IRQout	42	IO	This Pin will give out the Interrupt Signal to interrupt external Micro. Else, this pin is available as General Purpose Input/output Port.
GPIO9/SIPC_SCLK	43	IO	This Pin accepts the Clock signal from External Serial 2 Wire interface Bus if FLI8125 is programmed to be in Slave mode. Else, this pin is available as General Purpose Input/output Port.
GPIO10/SIPC_SDATA/ A18	44	IO	This Pin acts as the Data I/O signal when used with External Serial 2 Wire interface Bus if FLI8125 is programmed to be in Slave mode. Or this Pin is programmable to give out Address line 18 from the Internal Micro when used with 512K External Memory. Else, this pin is available as General Purpose Input/output Port.
GPIO11/PWM0	47	IO	This Pin can be programmed to give out Pulse Width Modulated Output Pulses for external use. Else, this pin is available as General Purpose Input/output Port.
GPIO12/PWM1	48	IO	This Pin can be programmed to give out Pulse Width Modulated Output Pulses for external use. Else, this pin is available as General Purpose Input/output Port.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -49

Q8001: FLI8125-LF-BC (Video Processor)

TERMINAL DESCRIPTION(5/8)

System Interface

Pin Name	No	I/O	Description
GPIO13/PWM2	51	IO	This Pin can be programmed to give out Pulse Width Modulated Output Pulses for external use. Else, this pin is available as General Purpose Input/output Port.
GPIO14/PWM3/ SCART16	52	IO	This Pin can be programmed to give out Pulse Width Modulated Output Pulses for external use. Or it can be programmed to sense the Fast Blank Input signal from a SCART I/P source. Else, this pin is available as General Purpose Input/output Port.
TDO	55	O	This Pin provides the Output Data in case of Boundary Scan Mode.
HSYNC1	156	I	Horizontal Sync signal Input-1. Used when Analog RGB component signal carries separate HSYNC signal. Has programmable Schmitt trigger.
VSYNC1	157	I	Vertical Sync signal Input-1. Used when Analog RGB component signal carries separate VSYNC signal. Has programmable Schmitt trigger.
XOSD_CLK	101	O	Clock Output meant for External OSD Controller
XOSD_HS	102	O	Horizontal Sync Output meant for External OSD Controller
XOSD_VS	103	O	Vertical Sync Output meant for External OSD Controller
XOSD_FLD	104	O	Field Signal Output meant for External OSD Controller
PD20/B4/GPIO0	86	IO	These Pins provide the Panel Data as shown in the TTL Display Interface Table below. These are available as General Purpose Input / Output Pins when not used as Panel Data.
PD21/B5/GPIO1	87		
PD22/B6/GPIO2	88		
PD23/B7/GPIO3	89		

LVDS Display Interface

Pin Name	No	I/O	Description
PBIAS	53	O	Panel Bias Control (backlight enable) [Tri-state output, 5V- tolerant]
PPWR	54	O	Panel Power Control [Tri-state output, 5V- tolerant]
AVDD_LV_33	56	DP	Digital Power for LVDS Block. Connect to digital 3.3V supply.
VCO_LV	57	O	Reserved. Output for Testing Purpose only at Factory.
AVSS_LV	58	G	Ground for LVDS outputs.
AVDD_OUT_LV_33	59	DP	Digital Power for LVDS outputs. Connect to digital 3.3V supply.
CH3P_LV_E	60	O	These form the Differential Data Output for Channel – 3 (Even).
CH3N_LV_E	61		
CLKP_LV_E	62	O	These form the Differential Clock Output Even Channel.
CLKN_LV_E	63		
CH2P_LV_E	64	O	These form the Differential Data Output for Channel – 2 (Even).
CH2N_LV_E	65		
CH1P_LV_E	66	O	These form the Differential Data Output for Channel – 1 (Even).
CH1N_LV_E	67		
CH0P_LV_E	68	O	These form the Differential Data Output for Channel – 0 (Even).
CH0N_LV_E	69		
AVSS_OUT_LV	70	G	Ground for LVDS outputs.
AVDD_OUT_LV_33	71	DP	Digital Power for LVDS outputs. Connect to digital 3.3V supply.
CH3P_LV_O	72	O	These form the Differential Data Output for Channel – 3 (Odd).
CH3N_LV_O	73		
CLKP_LV_O	74	O	These form the Differential Clock Output Odd Channel.
CLKN_LV_O	75		
CH2P_LV_O	76	O	These form the Differential Data Output for Channel – 2 (Odd).
CH2N_LV_O	77		
CH1P_LV_O	78	O	These form the Differential Data Output for Channel – 1 (Odd).
CH1N_LV_O	79		
CH0P_LV_O	80	O	These form the Differential Data Output for Channel – 0 (Odd).
CH0N_LV_O	81		

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -50

Q8001: FLI8125-LF-BC (Video Processor)

TERMINAL DESCRIPTION(6/8)

LVDS Display Interface

Pin Name	No	I/O	Description
AVSS_OUT_LV	82	G	Ground for LVDS outputs.
AVDD_OUT_LV_33	83	DP	Digital Power for LVDS outputs. Connect to digital 3.3V supply.

TTL Display Interface

Pin Name	No	I/O	Description For 8-bit panels	For 6-bit panels
PBIAS	53	O	Panel Bias Control (backlight enable) [Tri-state output, 5V- tolerant]	
PPWR	54	O	Panel Power Control [Tri-state output, 5V- tolerant]	
AVDD_LV_33	56	DP	Digital Power for TTL Block. Connect to digital 3.3V supply.	
VCO_LV	57	O	Reserved. Output for Testing Purpose only at Factory.	
AVSS_LV	58	G	Ground for TTL outputs.	
AVDD_OUT_LV_33	59	DP	Digital Power for TTL outputs. Connect to digital 3.3V supply.	
R0	60	O	Red channel bit 0 (Even)	Not used.
R1	61	O	Red channel bit 1 (Even)	Not used.
R2	62	O	Red channel bit 2 (Even)	Red channel bit 0 (Even)
R3	63	O	Red channel bit 3 (Even)	Red channel bit 1 (Even)
R4	64	O	Red channel bit 4 (Even)	Red channel bit 2 (Even)
R5	65	O	Red channel bit 5 (Even)	Red channel bit 3 (Even)
R6	66	O	Red channel bit 6 (Even)	Red channel bit 4 (Even)
R7	67	O	Red channel bit 7 (Even)	Red channel bit 5 (Even)
G0	68	O	Green channel bit 0 (Even)	Not used.
G1	69	O	Green channel bit 1 (Even)	Not used.
AVSS_OUT_LV	70	G	Ground for TTL outputs.	
AVDD_OUT_LV_33	71	DP	Digital Power for TTL outputs. Connect to digital 3.3V supply.	
G2	72	O	Green channel bit 2 (Even)	Green channel bit 0 (Even)
G3	73	O	Green channel bit 3 (Even)	Green channel bit 1 (Even)
G4	74	O	Green channel bit 4 (Even)	Green channel bit 2 (Even)
G5	75	O	Green channel bit 5 (Even)	Green channel bit 3 (Even)
G6	76	O	Green channel bit 6 (Even)	Green channel bit 4 (Even)
G7	77	O	Green channel bit 7 (Even)	Green channel bit 5 (Even)
B0	78	O	Blue channel bit 0 (Even)	Not used.
B1	79	O	Blue channel bit 1 (Even)	Not used.
B2	80	O	Blue channel bit 2 (Even)	Blue channel bit 0 (Even)
B3	81	O	Blue channel bit 3 (Even)	Blue channel bit 1 (Even)
AVSS_OUT_LV	82	G	Ground for TTL outputs.	
AVDD_OUT_LV_33	83	DP	Digital Power for TTL outputs. Connect to digital 3.3V supply.	
PD20/B4	86	O	Blue channel bit 4 (Even)	Blue channel bit 2 (Even)
PD21/B5	87	O	Blue channel bit 5 (Even)	Blue channel bit 3 (Even)
PD22/B6	88	O	Blue channel bit 6 (Even)	Blue channel bit 4 (Even)
PD23/B7	89	O	Blue channel bit 7 (Even)	Blue channel bit 5 (Even)
DEN	90	O	Display Data Enable	
DHS	91	O	Display Horizontal Sync.	
DVS	92	O	Display Vertical Sync.	
DCLK	93	O	Display Pixel Clock	
PD24	115	O	Red channel bit 0 (Odd)	Not used.
PD25	114	O	Red channel bit 1 (Odd)	Not used.
PD26	113	O	Red channel bit 2 (Odd)	Red channel bit 0 (Odd)
PD27	112	O	Red channel bit 3 (Odd)	Red channel bit 1 (Odd)

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -51

Q8001: FLI8125-LF-BC (Video Processor)

TERMINAL DESCRIPTION(7/8)

TTL Display Interface

Pin Name	No	I/O	Description For 8-bit panels	For 6-bit panels
PD28	111	O	Red channel bit 4 (Odd)	Red channel bit 2 (Odd)
PD29	110	O	Red channel bit 5 (Odd)	Red channel bit 3 (Odd)
PD30	109	O	Red channel bit 6 (Odd)	Red channel bit 4 (Odd)
PD31	108	O	Red channel bit 7 (Odd)	Red channel bit 5 (Odd)
PD32	107	O	Green channel bit 0 (Odd)	Not used.
PD33	106	O	Green channel bit 1 (Odd)	Not used.
PD34	105	O	Green channel bit 2 (Odd)	Green channel bit 0 (Odd)
PD35	104	O	Green channel bit 3 (Odd)	Green channel bit 1 (Odd)
PD36	103	O	Green channel bit 4 (Odd)	Green channel bit 2 (Odd)
PD37	102	O	Green channel bit 5 (Odd)	Green channel bit 3 (Odd)
PD38	101	O	Green channel bit 6 (Odd)	Green channel bit 4 (Odd)
PD39	123	O	Green channel bit 7 (Odd)	Green channel bit 5 (Odd)
PD40	124	O	Blue channel bit 0 (Odd)	Not used.
PD41	125	O	Blue channel bit 1 (Odd)	Not used.
PD42	128	O	Blue channel bit 2 (Odd)	Blue channel bit 0 (Odd)
PD43	129	O	Blue channel bit 3 (Odd)	Blue channel bit 1 (Odd)
PD44	130	O	Blue channel bit 4 (Odd)	Blue channel bit 2 (Odd)
PD45	131	O	Blue channel bit 5 (Odd)	Blue channel bit 3 (Odd)
PD46	132	O	Blue channel bit 6 (Odd)	Blue channel bit 4 (Odd)
PD47	118	O	Blue channel bit 7 (Odd)	Blue channel bit 5 (Odd)

Parallel/Serial ROM/ SRAM Interface

Pin Name	No	I/O	Description
A19	21	O	Address Signal A19 for 1M X 8 PROM. This pin also acts as Chip select for external SRAM when PROM of 512KB or less is used. Else this pin acts as GPIO15.
A18	44	O	Address Signal A18 for 512K X 8 PROM / SRAM. Else this pin acts as GPIO10.
A17 A16 A15 A14 A13 A12 A11 A10 A9 A8 A7 A6 A5 A4 A3 A2 A1 A0	95 96 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115	O	256K x8 PROM /SRAM Address. Some of these pins also have bootstrap functionality. For serial SPI ROM interface: - ROM_ADDR17 will be Serial Clock (ROM_SCLK) - ROM_ADDR16 will be Serial Data Output (ROM_SDO)
D7 D6 D5 D4 D3 D2 D1 D0	132 131 130 129 128 125 124 123	IO	External PROM / SRAM data input.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -52

Q8001: FLI8125-LF-BC (Video Processor)

TERMINAL DESCRIPTION(8/8)

Parallel/Serial ROM/ SRAM Interface

ROM_OEN	118	O	External PROM / SRAM data Output Enable.
ROM_SDI/ ROM_WEN	97	O	External PROM / SRAM data Write Enable (for In-System-Programming of FLASH) or Serial Data Input (SDI) for SPI ROM interface.
ROM_SCSN/ ROM_CSN	94	O	External PROM / SRAM data Chip Select or Serial PROM Chip Select (ROM_SCSN) for SPI ROM interface.

Digital Power and Ground

Pin Name	No	I/O	Description
RVDD_3.3	32 49 98 116 154	P	Ring VDD. Connect to digital 3.3V.
CVDD_1.8	18 28 39 45 84 119 126 133 143	P	Core VDD. Connect to digital 1.8V.
CRVSS	19 29 33 40 46 50 85 99 117 120 127 134 144 155	G	Chip ground for core and ring.

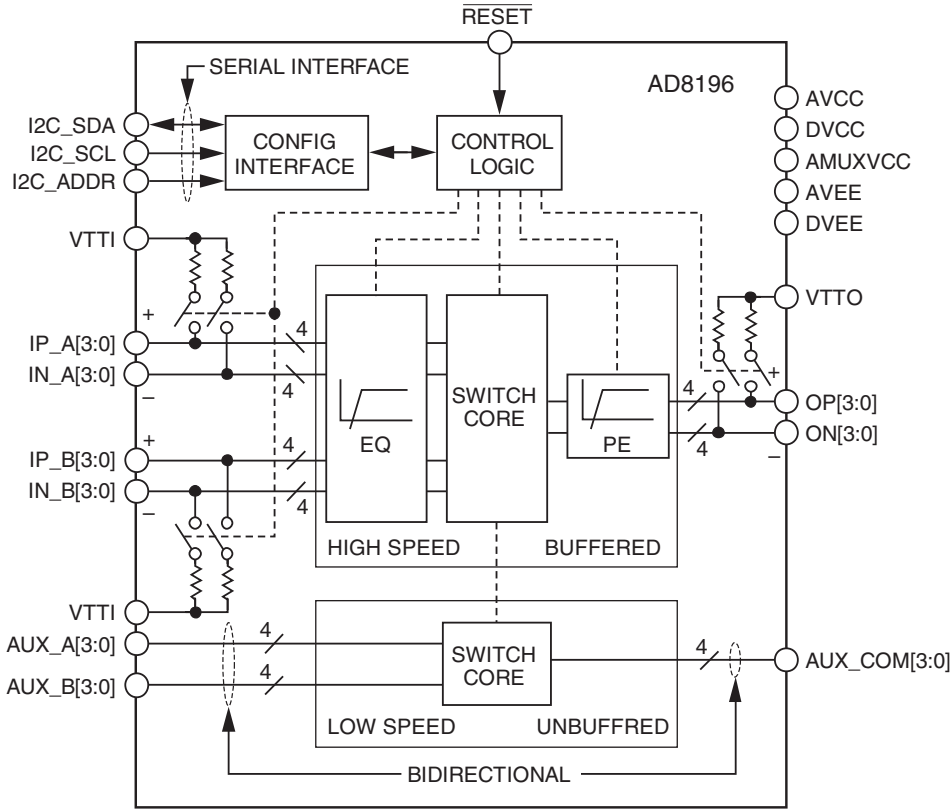
JTAG Boundary Scan

Pin Name	No	I/O	Description
TCK	34	I	JTAG Boundary Scan TCK signal
TDO	55	O	JTAG Boundary Scan TDO signal
TDI	35	I	JTAG Boundary Scan TDI signal. Pad has internal 50K pull-up resistor.
TMS	36	I	JTAG Boundary Scan TMS signal. Pad has internal 50K pull-up resistor.
TRST	37	I	JTAG Boundary Scan RST signal. Pad has internal 50K pull-up resistor.

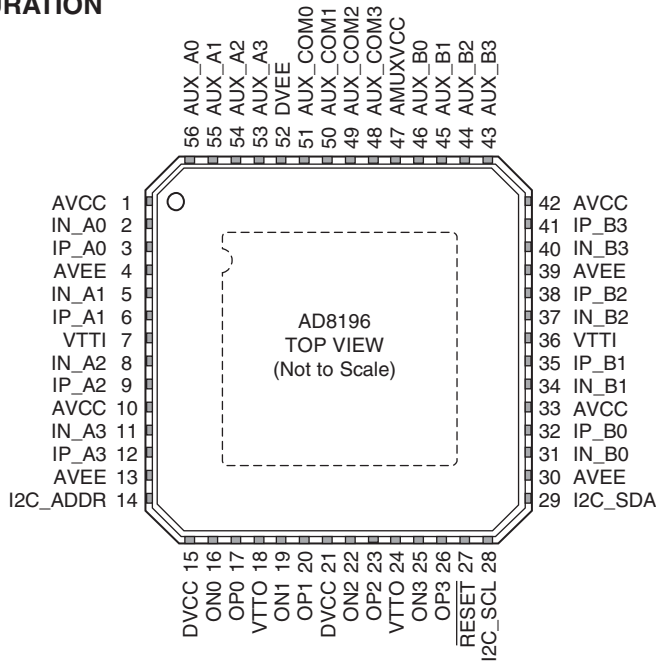
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -53

Q8101 : AD8196 (HDMI/DVI Switch with Equalization)

BLOCK DIAGRAM



PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -54

Q8101 : AD8196 (HDMI/DVI Switch with Equalization)

TERMINAL DESCRIPTION

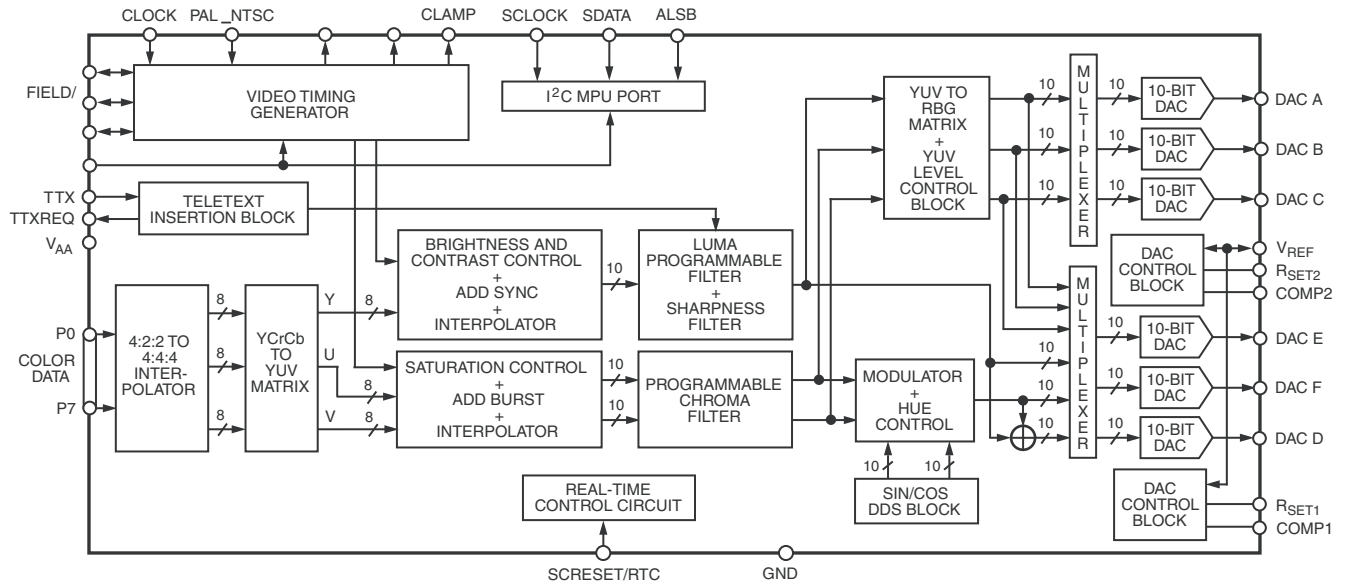
Pin No.	Mnemonic	Type	Description
1, 10, 33, 42	AVCC	Power	Positive Analog Supply. 3.3 V nominal.
2	IN_A0	HS I	High Speed Input Complement.
3	IP_A0	HS I	High Speed Input.
4, 13, 30, 39, ePAD	AVEE	Power	Negative Analog Supply. 0 V nominal.
5	IN_A1	HS I	High Speed Input Complement.
6	IP_A1	HS I	High Speed Input.
7, 36	VTTI	Power	Input Termination Supply. Nominally connected to AVCC.
8	IN_A2	HS I	High Speed Input Complement.
9	IP_A2	HS I	High Speed Input.
11	IN_A3	HS I	High Speed Input Complement.
12	IP_A3	HS I	High Speed Input.
14	I2C_ADDR	Control	I ² C Address LSB.
15, 21	DVCC	Power	Positive Digital Power Supply. 3.3 V nominal.
16	ON0	HS O	High Speed Output Complement.
17	OP0	HS O	High Speed Output.
18, 24	VTTO	Power	Output Termination Supply. Nominally connected to AVCC.
19	ON1	HS O	High Speed Output Complement.
20	OP1	HS O	High Speed Output.
22	ON2	HS O	High Speed Output Complement.
23	OP2	HS O	High Speed Output.
25	ON3	HS O	High Speed Output Complement.
26	OP3	HS O	High Speed Output.
27	RESET	Control	Configuration Registers Reset. This pin is normally pulled up to DVCC.
28	I2C_SCL	Control	I ² C Clock.
29	I2C_SDA	Control	I ² C Data.
31	IN_B0	HS I	High Speed Input Complement.
32	IP_B0	HS I	High Speed Input.
34	IN_B1	HS I	High Speed Input Complement.
35	IP_B1	HS I	High Speed Input.
37	IN_B2	HS I	High Speed Input Complement.
38	IP_B2	HS I	High Speed Input.
40	IN_B3	HS I	High Speed Input Complement.
41	IP_B3	HS I	High Speed Input.
43	AUX_B3	LS I/O	Low Speed Input/Output.
44	AUX_B2	LS I/O	Low Speed Input/Output.
45	AUX_B1	LS I/O	Low Speed Input/Output.
46	AUX_B0	LS I/O	Low Speed Input/Output.
47	AMUXVCC	Power	Positive Auxiliary Switch Supply. 5 V typical.
48	AUX_COM3	LS I/O	Low Speed Common Input/Output.
49	AUX_COM2	LS I/O	Low Speed Common Input/Output.
50	AUX_COM1	LS I/O	Low Speed Common Input/Output.
51	AUX_COM0	LS I/O	Low Speed Common Input/Output.
52	DVEE	Power	Negative Digital and Auxiliary Switch Power Supply. 0 V nominal.
53	AUX_A3	LS I/O	Low Speed Input/Output.
54	AUX_A2	LS I/O	Low Speed Input/Output.
55	AUX_A1	LS I/O	Low Speed Input/Output.
56	AUX_A0	LS I/O	Low Speed Input/Output.

HS = high speed, LS = low speed, I = input, O = output.

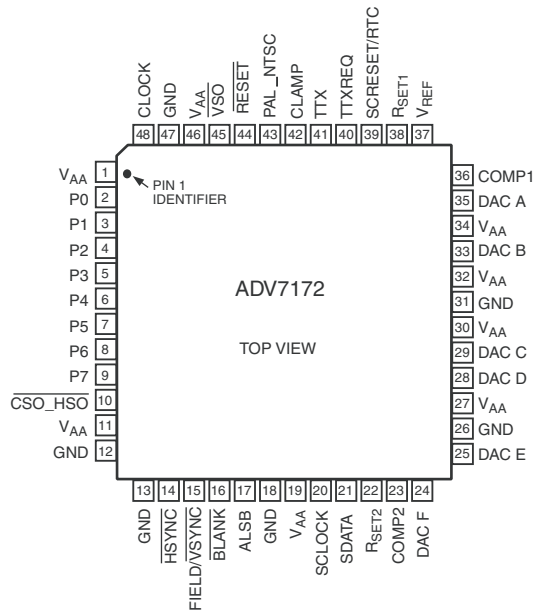
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -55

Q8801: ADV7172 (Digital PAL/NTSC Video Encoder with six DACs)

BLOCK DIAGRAM



PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -56

Q8801: ADV7172 (Digital PAL/NTSC Video Encoder with six DACs)

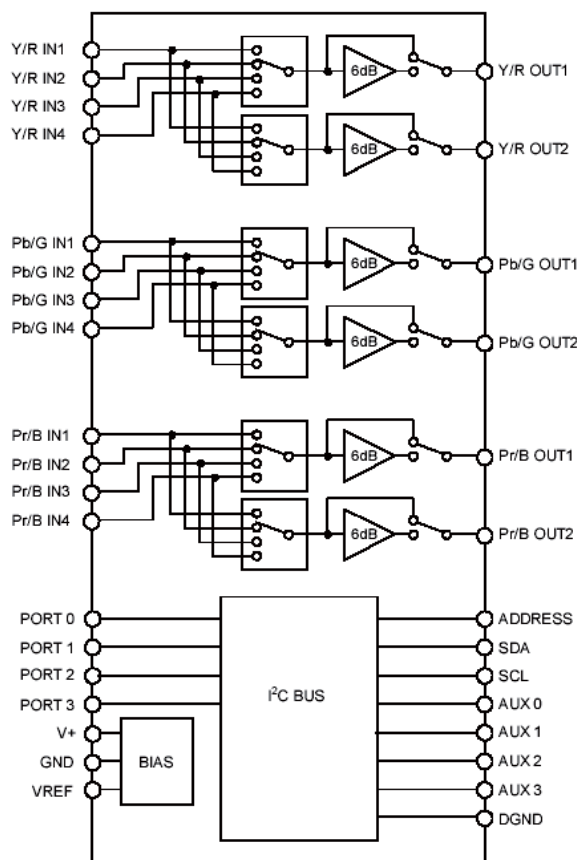
TERMINAL DESCRIPTION

Mnemonic	Input/Output	Function
P7-P0	I	8-Bit 4:2:2 Multiplexed YCrCb Pixel Port (P7DP0) P0 represents the LSB.
CLOCK	I	TTL Clock Input. Requires a stable 27 MHz reference clock for standard operation. Alternatively, a 24.5454 MHz (NTSC) or 29.5 MHz (PAL) can be used for square pixel operation.
HSYNC	I/O	HSYNC (Modes 1 and 2) Control Signal. This pin may be configured to output (Master Mode) or as an input and accept (Slave Mode) Sync signals.
FIELD/VSYNC	I/O	Dual Function FIELD (Mode 1) and VSYNC (Mode 2) Control Signal. This pin may be configured to output (Master Mode) or as an input (Slave Mode) and accept these control signals.
BLANK	I/O	Video Blanking Control Signal. The pixel inputs are ignored when this is Logic Level "0." This signal is optional.
SCRESET/RTC	I	This pin can be configured as an input by setting MR42 and MR41 of Mode Register 4. It can be configured as a subcarrier reset pin, in which case a low-to-high transition on this pin will reset the subcarrier phase to Field 0. Alternatively it may be configured as a Real-Time Control (RTC) Input.
V _{REF}	I/O	Voltage Reference Input for DACs or Voltage Reference Output (1.235 V).
R _{SET1}	I	A 150 Ω resistor connected from this pin to GND is used to control full-scale amplitudes of the Video Signals from DACs A, B, and C (the "large" DACs).
R _{SET2}	I	A 600 Ω resistor connected from this pin to GND is used to control full-scale amplitudes of the Video Signals from DACs D, E, and F (the "small" DACs).
COMP1	O	Compensation Pin for DACs A, B, and C. Connect a 0.1 μF Capacitor from COMP to V _{AA} . For Optimum Dynamic Performance in Low Power Mode, the value of the COMP1 capacitor can be lowered to as low as 2.2 nF.
COMP2	O	Compensation Pin for DACs D, E, and F. Connect a 0.1 μF Capacitor from COMP to V _{AA} .
DAC A	O	GREEN/Composite/Y Analog Output. This DAC is capable of providing 34.66 mA output.
DAC B	O	BLUE/S-Video Y/U Analog Output. This DAC is capable of providing 34.66 mA output.
DAC C	O	RED/S-Video C/V Analog Output. This DAC is capable of providing 34.66 mA output.
DAC D	O	GREEN/Composite/Y Analog Output. This DAC is capable of providing 8.66 mA output.
DAC E	O	BLUE/S-Video Y/U Analog Output. This DAC is capable of providing 8.66 mA output.
DAC F	O	RED/S-Video C/V Analog Output. This DAC is capable of providing 8.66 mA output.
SCLOCK	I	MPU Port Serial Interface Clock Input.
SDATA	I/O	MPU Port Serial Data Input/Output.
CLAMP	O	TTL Output Signal to external circuitry to enable clamping of all video signals.
PAL_NTSC	I	Input signal to select PAL or NTSC mode of operation, pin set to Logic "1" selects PAL.
VSO	O	VSO TTL Output Sync Signal.
CSO_HSO	O	Dual Function CSO or HSO TTL Output Sync Signal.
ALSB	I	TTL Address Input. This signal sets up the LSB of the MPU address.
RESET	I	The input resets the on-chip timing generator and sets the ADV7172/ADV7173 into default mode. This is NTSC operation, Timing Slave Mode 0, DACs A, B, and C powered OFF, DACs D, E, and F powered ON, Composite and S-Video out.
TTX	I	Teletext Data Input Pin.
TTXREQ	O	Teletext Data Request output signal used to control teletext data transfer.
V _{AA}	I	Power Supply (3 V to 5 V).
GND	G	Ground Pin.

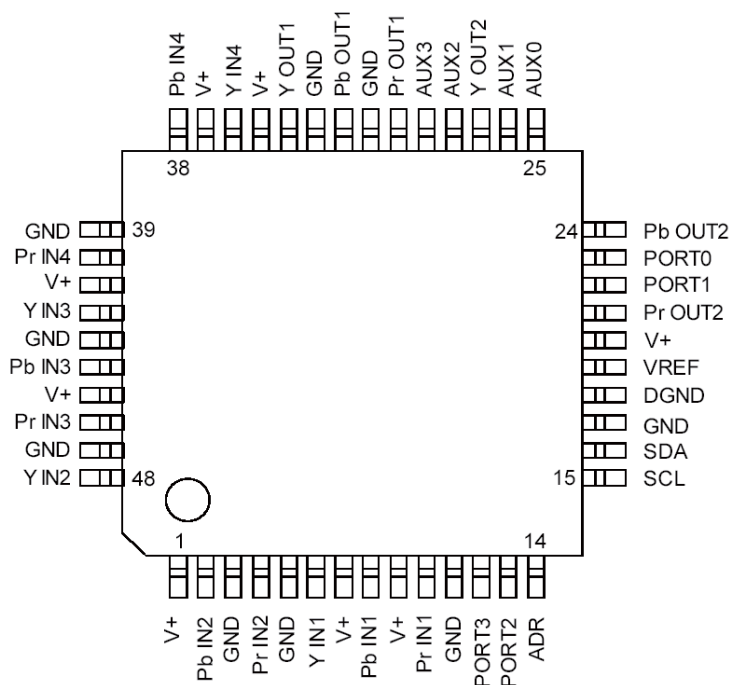
IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS -57

Q2201: NJW1321FP1 (Video Switch, 100MHz)

BLOCK DIAGRAM



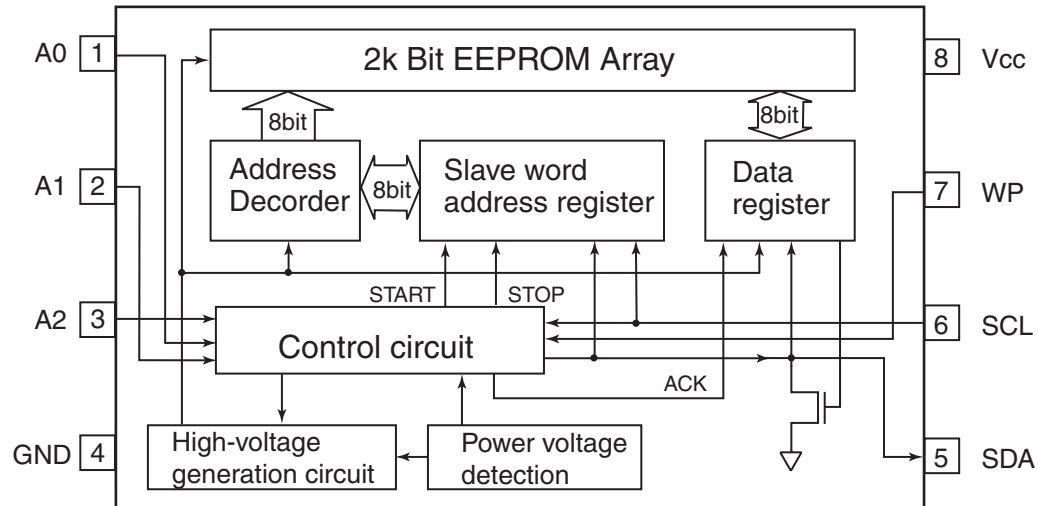
PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -58

Q8210, Q8510, Q8610: BR24L02FV-W(256x8 bit EEPROM)

BLOCK DIAGRAM AND PIN CONFIGURATION



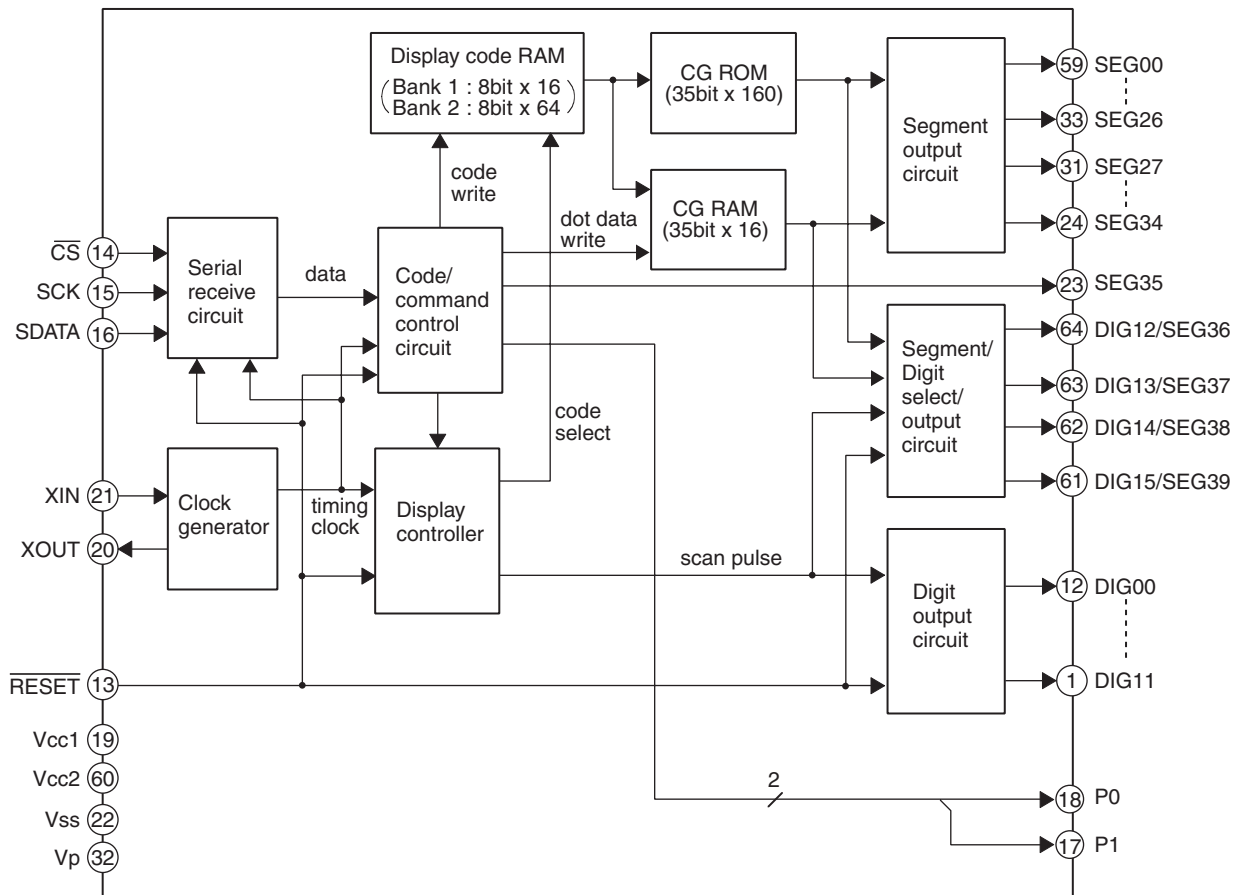
TERMINAL DESCRIPTION

Terminal	I/O	Function
Vcc	-	Apply a power source
GND	-	Ground terminal
A0,A1,A2	I	Slave address setting terminal
SCL	I	Serial clock input
SDA	I/O	Slave and word address. Serial data input and output
WP	I	Write protect terminal

IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS -59

Q7501, Q7502: M66005-0001AHP (FL Tube Driver)

BLOCK DIAGRAM



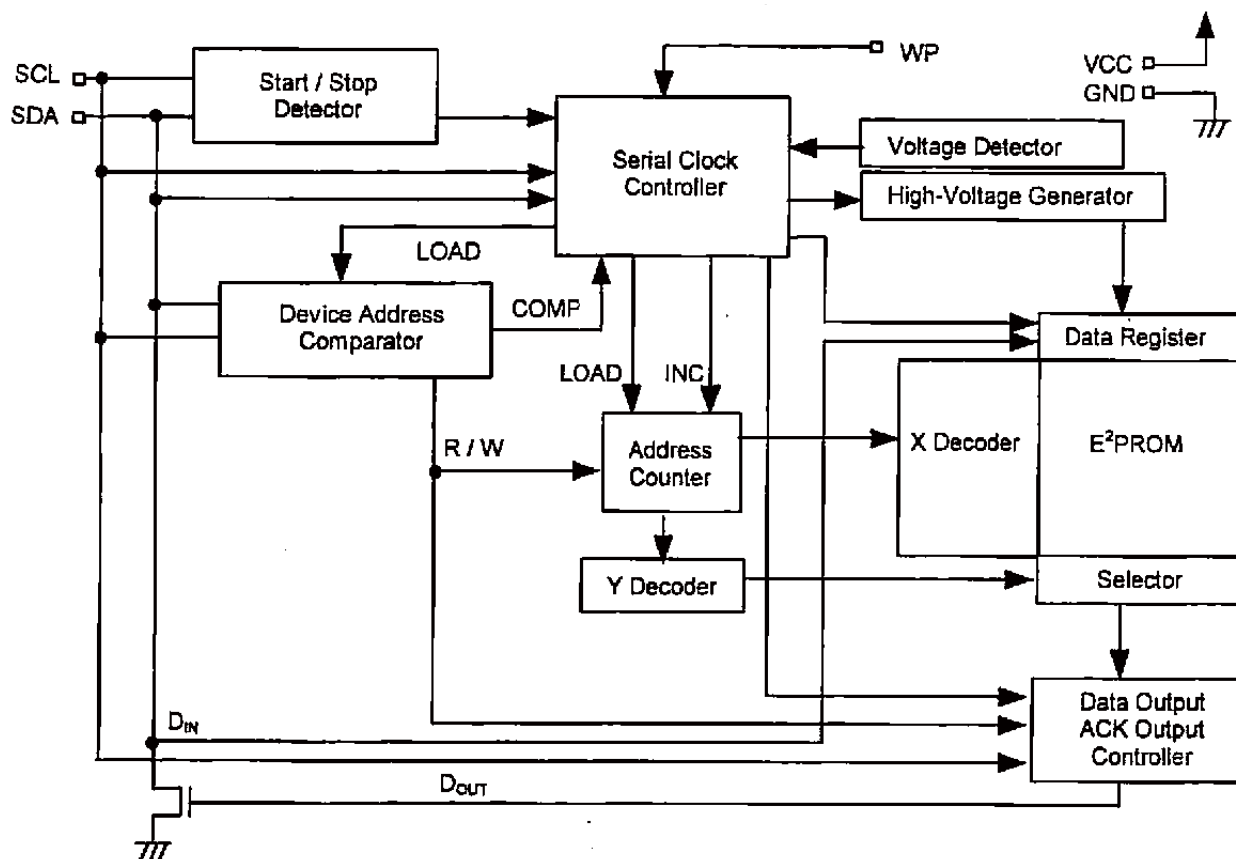
TERMINAL DESCRIPTION

PIN NO.	SYMBOL	PIN NAME	DESCRIPTION
13	$\overline{\text{RESET}}$	Reset input	This pin is used to initialize the internal state of the M66004.
14	$\overline{\text{CS}}$	Chip select input	"L" : Communication with the MCU is possible. "H" : Any instruction from the MCU is neglected.
15	SCK	Shift clock input	At the rising edge from "L" to "H", input data is shifted.
16	SDATA	Serial data input	Character code or command data to display is input from MSB.
21, 20	XIN, XOUT	Clock input Clock output	This pin is used to connect a resistor and a capacitor externally to set oscillation frequency.
1~12 61~64	DIG00 ~ DIG15	Digit output	These pins are used to connect to digit pins of VFD.
23~31 33~59	SEG00 ~ SEG39	Segment output	These pins are used to connect to segment pins of VFD.
17, 18	P0, P1		Output port (static operation)
19	VCC1		Positive power supply for internal logic.
60	VCC2		Positive power supply for high-pressure-resistant output port.
22	VSS		GND
32	VP		Negative power supply for VFD drive.

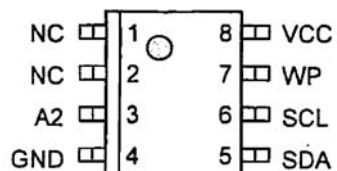
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -60

Q8010: S-24CS16A01 (16 kbit EEPROM)

BLOCK DIAGRAM



PIN CONFIGURATION



TERMINAL DESCRIPTION

Pin Number	Pin Name	Function
1	NC	No connection ^{*1}
2	NC	No connection ^{*1}
3	A2	TEST pin ^{*2}
4	GND	Ground
5	SDA	Serial data input / output
6	SCL	Serial clock input
7	WP	Write protection input Connected to V _{CC} : Protection valid Connected to GND: Protection invalid
8	VCC	Power supply

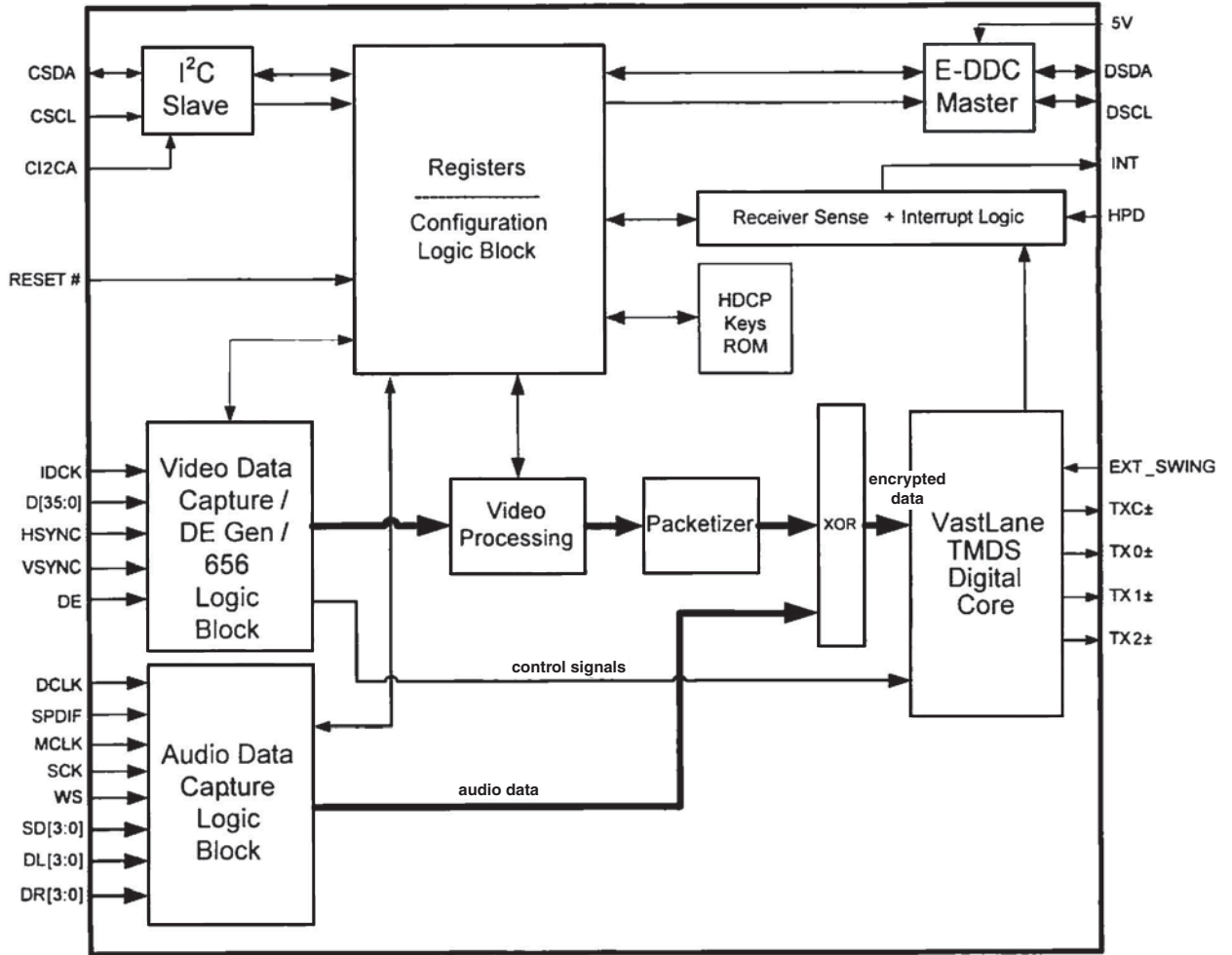
*1. Connect to GND or V_{CC}.

*2. Connect to GND.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -61

Q8401: SII9134CTU (HDMI TRANSMITTER)

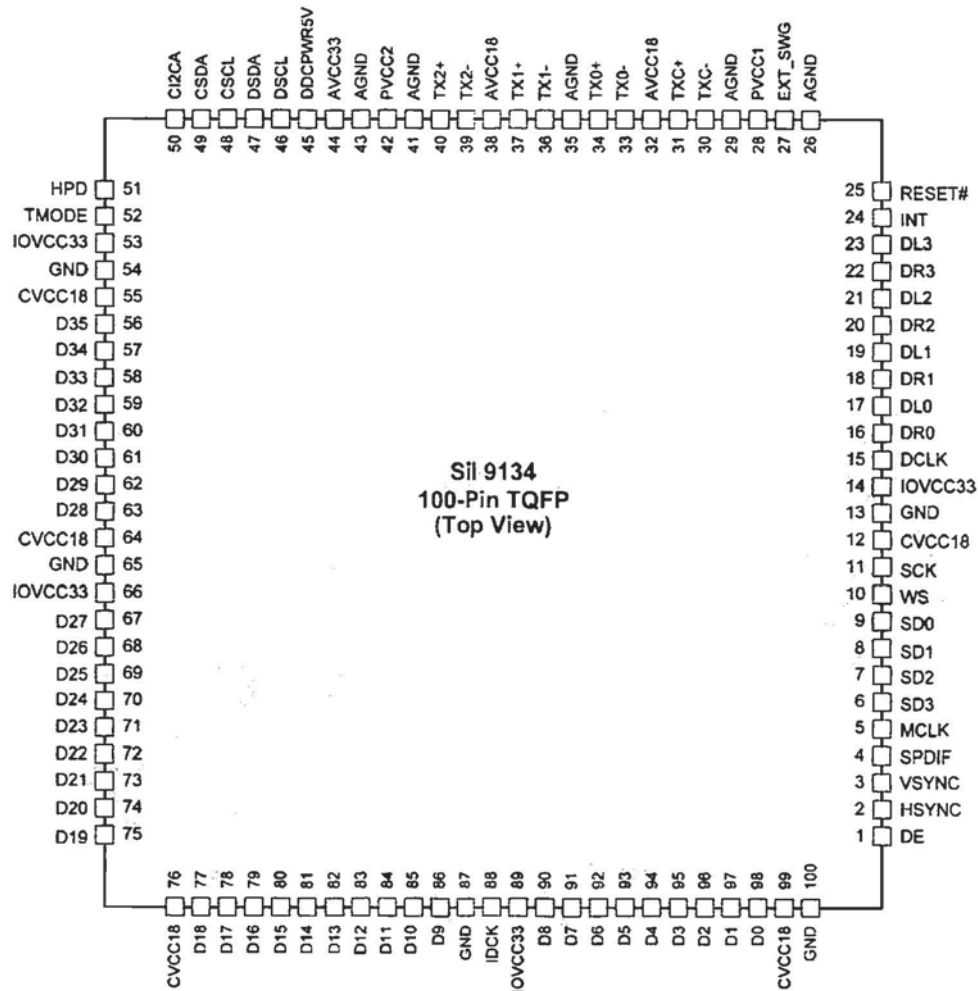
BLOCK DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -62

Q8401: SII9134CTU (HDMI TRANSMITTER)

PIN CONFIGURATION



TERMINAL DESCRIPTION(1/3)

Configuration/Programing Pins

Pin Name	Pin #	Type	Dir	Description
HPD	51	LVTTTL	Input	Hot Plug Detect Input
RSVDL	52	LVTTTL	Input	Reserved for use by Silicon Image and must be tied LOW.
INT	24	LVTTTL	Output	Interrupt Output.

Control Pins

Pin Name	Pin #	Type	Dir	Description
C12CA	50	LVTTTL	Input	I ² C device address select (see page 11)
RESET#	25	LVTTTL Schmitt	Input	Reset Pin (Active LOW) 5V Tolerant
CSCL	48	Schmitt	Input	I ² C Clock
CSDA	49	Schmitt- Open Drain	Bi-Di	I ² C Data (Open drain output.)
DSCL	46	Schmitt- Open Drain	Bi-Di	DDC Clock (Open Drain Output)
DSDA	47	Schmitt- Open Drain	Bi-Di	DDC Data (Open drain output.)

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -63

Q8401: SII9134CTU (HDMI TRANSMITTER)

TERMINAL DESCRIPTION(2/3)

Video and Audio Pins-1

Pin Name	Pin #	Type	Dir	Description
D0	98	LVTTTL	Input	These are the lower 12 bits of the 36-bit pixel bus. These pins are highly configurable, and support multiple RGB and YCbCr formats. See Data Bus Mappings on page 30 for complete information.
D1	97	LVTTTL	Input	
D2	96	LVTTTL	Input	
D3	95	LVTTTL	Input	
D4	94	LVTTTL	Input	
D5	93	LVTTTL	Input	
D6	92	LVTTTL	Input	
D7	91	LVTTTL	Input	
D8	90	LVTTTL	Input	
D9	86	LVTTTL	Input	
D10	85	LVTTTL	Input	
D11	84	LVTTTL	Input	
D12	83	LVTTTL	Input	These are the middle 12 bits of the 36-bit pixel bus.
D13	82	LVTTTL	Input	
D14	81	LVTTTL	Input	
D15	80	LVTTTL	Input	
D16	79	LVTTTL	Input	
D17	78	LVTTTL	Input	
D18	77	LVTTTL	Input	
D19	75	LVTTTL	Input	
D20	74	LVTTTL	Input	
D21	73	LVTTTL	Input	
D22	72	LVTTTL	Input	
D23	71	LVTTTL	Input	
D24	70	LVTTTL	Input	
D25	69	LVTTTL	Input	
D26	68	LVTTTL	Input	
D27	67	LVTTTL	Input	
D28	63	LVTTTL	Input	
D29	62	LVTTTL	Input	
D30	61	LVTTTL	Input	
D31	60	LVTTTL	Input	
D32	59	LVTTTL	Input	
D33	58	LVTTTL	Input	
D34	57	LVTTTL	Input	
D35	56	LVTTTL	Input	

Power and Ground Pins

Pin Name	Pin #	Type	Description
CVCC18	12, 55, 64, 76, 99	Power	Digital Core VCC. Connect to 1.8V supply.
IOVCC33	14, 53, 66, 89	Power	IO Pin VCC. Connect to 3.3V supply.
AVCC33	44	Power	Analog VCC. Connect to 3.3V supply.
AVCC18	32, 38,	Power	Analog VCC. Connect to 1.8V supply.
AGND	26, 29, 35, 41,43	Ground	Analog GND.
PVCC1	28	Power	TMDS Core PLL Power. Connect to 1.8V supply.
PVCC2	42	Power	Filter PLL Power. Connect to 1.8V supply.
DDCPWR5V	45	Power	Power reference signal. Used to supply power to the DDC I2C pads when chip is powered off. Connect to 5V supply.
Gnd	13, 54, 65, 87,100	Ground	Digital Ground

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -64

Q8401: SII9134CTU (HDMI TRANSMITTER)

TERMINAL DESCRIPTION(3/3)

Video and Audio Pins-2

Pin Name	Pin #	Type	Dir	Description
IDCK	88	LVTTTL	Input	Input Data Clock
DE	1	LVTTTL	Input	Data enable
HSYNC	2	LVTTTL	Input	Horizontal Sync input control signal
VSYNC	3	LVTTTL	Input	Vertical Sync input control signal
SCK	11	LVTTTL	Input	I ² S Serial Clock
WS	10	LVTTTL	Input	I ² S Word Select
SD0	9	LVTTTL	Input	I ² S Serial Data
SD1	8	LVTTTL	Input	I ² S Serial Data
SD2	7	LVTTTL	Input	I ² S Serial Data
SD3	6	LVTTTL	Input	I ² S Serial Data
DL0	17	LVTTTL	Input	One-bit Audio Data Left 0
DR0	16	LVTTTL	Input	One-bit Audio Data Right 0
DL1	19	LVTTTL	Input	One-bit Audio Data Left 1
DR1	18	LVTTTL	Input	One-bit Audio Data Right 1
DL2	21	LVTTTL	Input	One-bit Audio Data Left 2
DR2	20	LVTTTL	Input	One-bit Audio Data Right 2
DL3	23	LVTTTL	Input	One-bit Audio Data Left 3
DR3	22	LVTTTL	Input	One-bit Audio Data Right 3
DCLK	15	LVTTTL	Input	One-bit Audio Clock Input
MCLK	5	LVTTTL	Input	Audio Input Master Clock
SPDIF	4	LVTTTL	Input	S/PDIF Audio Input.

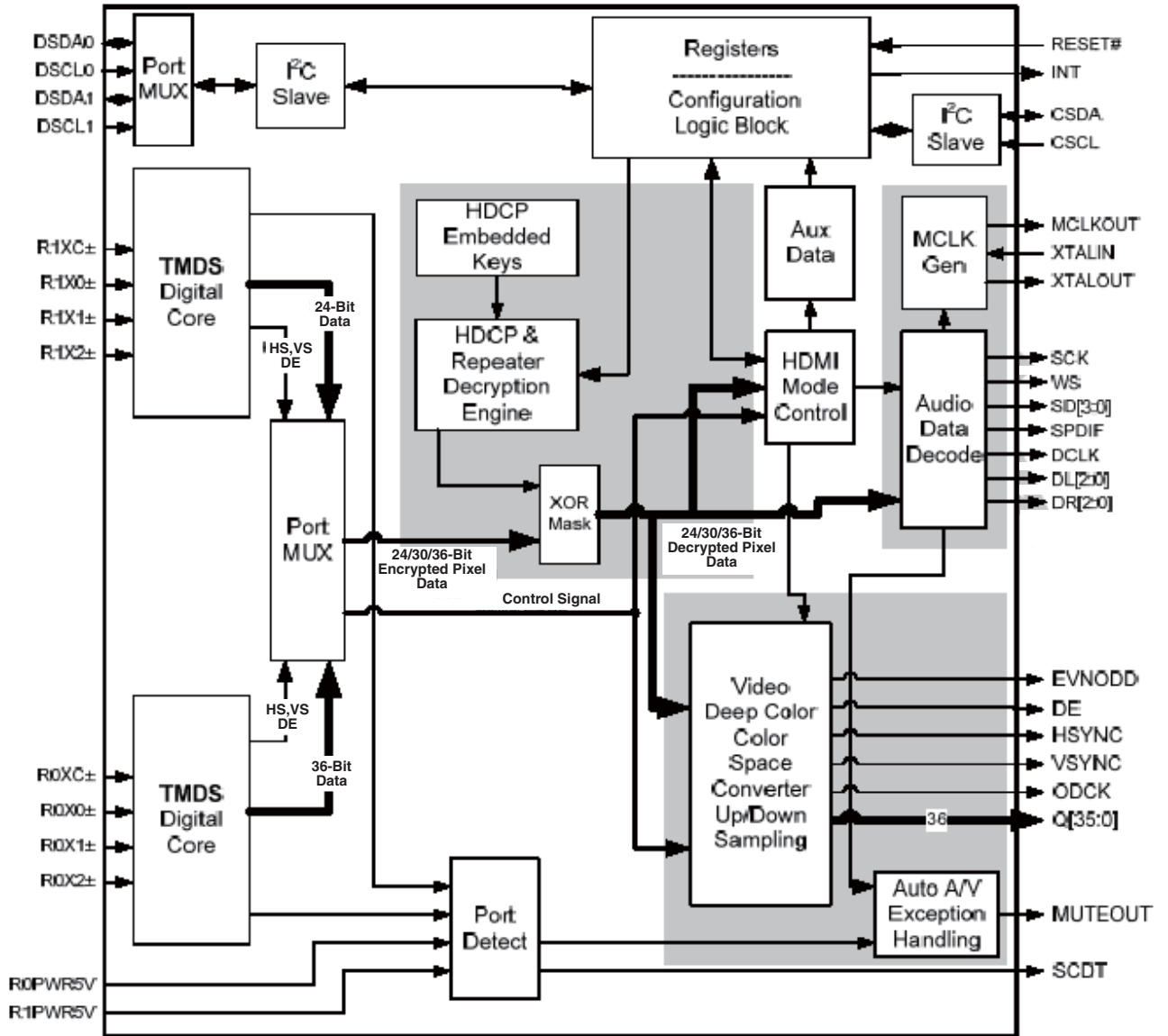
Differetial Signal Data Pins

Pin Name	Pin #	Type	Dir	Description
TX0+	34	TMDS	Output	TMDS output data pairs.
TX0-	33	TMDS	Output	
TX1+	37	TMDS	Output	
TX1-	36	TMDS	Output	
TX2+	40	TMDS	Output	
TX2-	39	TMDS	Output	
TXC+	31	TMDS	Output	TMDS output clock pair.
TXC-	30	TMDS	Output	
EXT_SWING	27	Analog	Input	Voltage Swing Adjust. A resistor is tied from this pin to AVCC. This resistor determines the amplitude of the voltage swing. Recommend 698 Ω 1% when source termination and leakage bias is on and 845 Ω 1% when source termination and leakage bias is off.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -65

Q8501: SII9135CTU (HDMI RECEIVER)

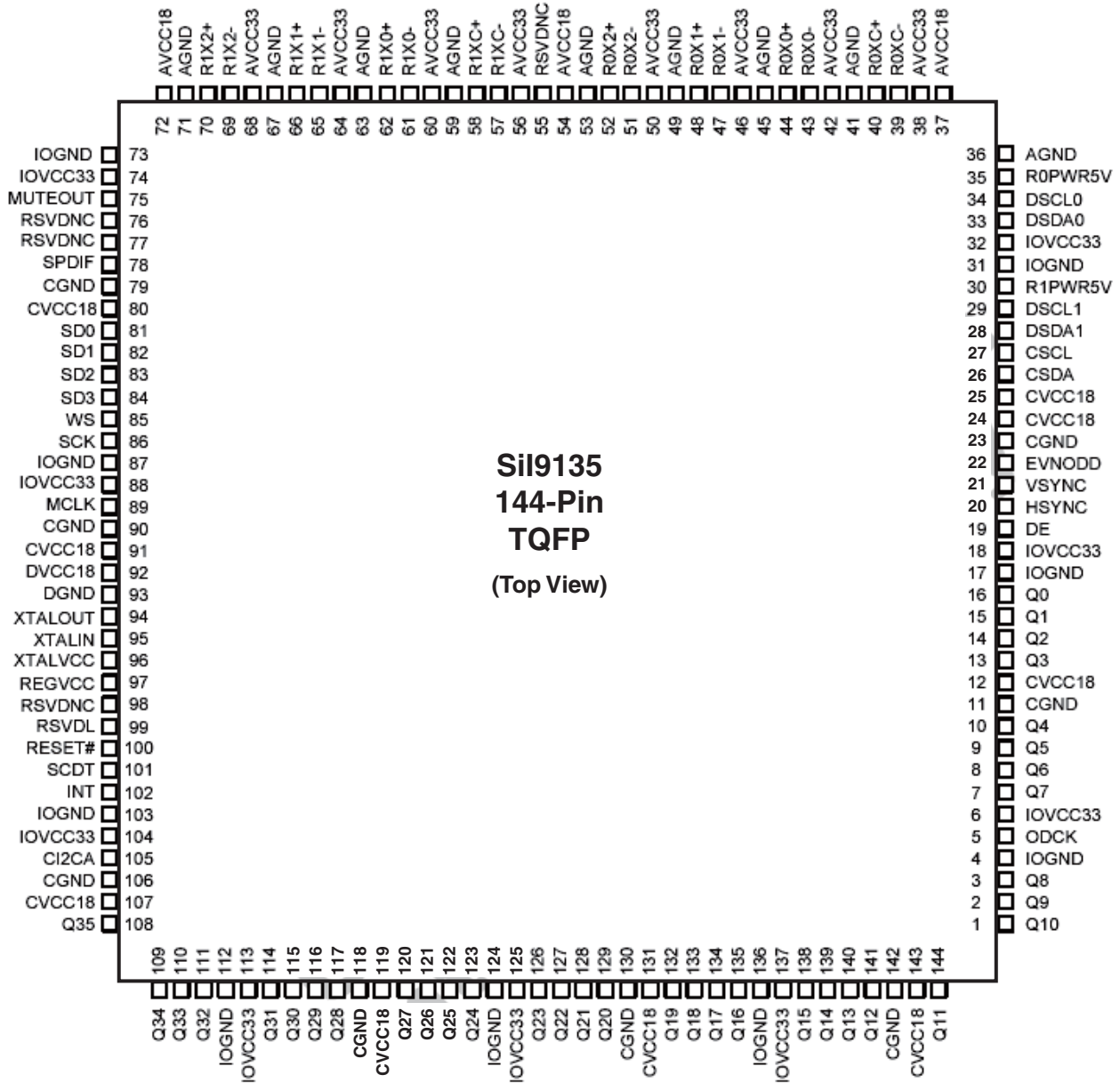
BLOCK DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -66

Q8501: SII9135CTU (HDMI RECEIVER)

PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -67

Q8501: SII9135CTU (HDMI RECEIVER)

TERMINAL DESCRIPTION(1/4)

Video and Audio Pins

Pin Name	Pin #	Strength	Type	Dir	Description
Q0	16	8 mA	LVTTL	Output	36-Bit Output Pixel Data Bus. Q35:0 is highly configurable using the VDD_CONFIG register. It supports a wide array of output formats, including multiple RGB and YCbCr bus formats. Using the appropriate bits in the PD register, the output drivers can be put into a high impedance (tri-state) mode. A weak, internal pull-down device brings each output to ground.
Q1	15		LVTTL	Output	
Q2	14		LVTTL	Output	
Q3	13		LVTTL	Output	
Q4	10		LVTTL	Output	
Q5	9		LVTTL	Output	
Q6	8		LVTTL	Output	
Q7	7		LVTTL	Output	
Q8	3		LVTTL	Output	
Q9	2		LVTTL	Output	
Q10	1		LVTTL	Output	
Q11	144		LVTTL	Output	
Q12	141		LVTTL	Output	
Q13	140		LVTTL	Output	
Q14	139		LVTTL	Output	
Q15	138		LVTTL	Output	
Q16	135		LVTTL	Output	
Q17	134		LVTTL	Output	
Q18	133		LVTTL	Output	
Q19	132		LVTTL	Output	
Q20	129		LVTTL	Output	
Q21	128		LVTTL	Output	
Q22	127		LVTTL	Output	
Q23	126		LVTTL	Output	
Q24	123		LVTTL	Output	
Q25	122		LVTTL	Output	
Q26	121		LVTTL	Output	
Q27	120		LVTTL	Output	
Q28	117		LVTTL	Output	
Q29	116		LVTTL	Output	
Q30	115		LVTTL	Output	
Q31	114		LVTTL	Output	
Q32	111		LVTTL	Output	
Q33	110		LVTTL	Output	
Q34	109		LVTTL	Output	
Q35	108	LVTTL	Output		
DE	19	8 mA	LVTTL	Output	Data Enable
HSYNC	20	8 mA	LVTTL	Output	Horizontal Sync Output
VSYNC	21	8 mA	LVTTL	Output	Vertical Sync Output
EVNODD	22	8 mA	LVTTL	Output	Indicates Even or Odd Field for Interlaced Formats
ODCK	5	12 mA	LVTTL	Output	Output Data Clock

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -68

Q8501: SII9135CTU (HDMI RECEIVER)

TERMINAL DESCRIPTION(2/4)

Digital Audio Output Pins

Pin Name	Pin #	Strength	Type	Dir	Description
XTALIN	95	---	5V Tolerant LVTTL	In	Crystal Clock Input. Also allows LVTTL input. Frequency required: 26-28.5 MHz
XTALOUT	94	4 mA	LVTTL	Out	Crystal Clock Output
MCLK	89	8 mA	LVTTL	Out	Audio Master Clock Output
SCK/DCLK	86	4 mA	LVTTL	Out	I2S Serial Clock Output. DSD Clock Out.
WS/DR0	85	4 mA	LVTTL	Out	I2S Word Select Output. DSD Serial Right Ch0 Data Output
SD0/DL0	81	4 mA	LVTTL	Out	I2S Serial Data Output / DSD Audio Output Configurable to be shared with DSD. SD0 = DSD Serial Left Ch0 Data Output SD1 = DSD Serial Right Ch1 Data Output SD2 = DSD Serial Left Ch1 Data Output
SD1/DR1	82	4 mA	LVTTL	Out	
SD2/DL1	83	4 mA	LVTTL	Out	
SD3/DR2	84	4 mA	LVTTL	Out	
SPDIF/DL2	78	4 mA	LVTTL	Out	S/PDIF Audio Output. Configurable to be shared with DSD DSD Serial Left Ch2 Data Output
MUTEOUT	75	4 mA	LVTTL	Out	Mute Audio Output. Signal to the external downstream audio device, audio DAC, etc. to downstream audio device, audio DAC, etc. to mute audio output.

Differential Signal Data Pins

Pin Name	Pin #	Type	Description	
R0XC+	40	Analog	TMDS Input Clock Pair	HDMI Port 0
R0XC-	39	Analog		
R0X0+	44	Analog	TMDS Input Data Pair	
R0X0-	43	Analog		
R0X1+	48	Analog	TMDS Input Data Pair	
R0X1-	47	Analog		
R0X2+	52	Analog	TMDS Input Data Pair	
R0X2-	51	Analog		
R1XC+	58	Analog	TMDS Input Clock Pair	HDMI Port 1
R1XC-	57	Analog		
R1X0+	62	Analog	TMDS Input Data Pair	
R1X0-	61	Analog		
R1X1+	66	Analog	TMDS Input Data Pair	
R1X1-	65	Analog		
R1X2+	70	Analog	TMDS Input Data Pair	
R1X2-	69	Analog		

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -69

Q8501: SII9135CTU (HDMI RECEIVER)

TERMINAL DESCRIPTION(3/4)

Configuration/Programming Pins

Pin Name	Pin #	Strength	Type	Dir	Description
INT	102	4 mA	LVTTTL	Out	Interrupt Output. Configurable polarity and pushpull output. Multiple sources of interrupt can be enabled through the INT_EN register. See Note 1.
RESET#	100	---	Schmitt	In	Reset Pin. Active LOW. 5V Tolerant
DSCLO	34	---	SchmittOD	In	DDC I2C Clock for Port 0. 5V Tolerant. HDCP KSV, An and Ri values are exchanged over an I2C port during authentication. True open drain, so does not pull to GND if R0PWR5V is not applied.
DSDA0	33	3 mA	SchmittOD	Bi-Di	DDC I2C Data for Port 0. 5V Tolerant. HDCP KSV, An and Ri values are exchanged over an I2C during authentication. True open drain, so does not pull to GND if R0PWR5V is not applied.
DSCL1	29	---	SchmittOD	In	DDC I2C Clock for Port 1. 5V Tolerant. 5V Tolerant. HDCP KSV, An and Ri values are exchanged over an I2C port during authentication. True open drain, so does not pull to GND if R1PWR5V is not applied.
DSDA1	28	3 mA	SchmittOD	Bi-Di	DDC I2C Data for Port 1. 5V Tolerant. 5V Tolerant. HDCP KSV, An and Ri values are exchanged over an I2C port during authentication. True open drain, so does not pull to GND if R1PWR5V is not applied.
CSCL	27	---	Schmitt	In	Configuration/Status I2C Clock. 5V Tolerant. Chip configuration/status, CEA-861 support and downstream HDCP repeater-specific registers are accessed via this I2C port. True open drain, so does not pull to GND if power is not applied.
CSDA	26	3 mA	Schmitt	Bi-Di	Configuration/Status I2C Data. 5V Tolerant. Chip configuration/status, CEA-861 support and downstream HDCP repeater-specific registers are accessed via this I2C port. True open drain, so does not pull to GND if power is not applied.
CI2CA	105		LLVTTL	In	Local I2C Address Select. 5V Tolerant. Low = Addresses 0x60/0x68 High = Addresses 0x62/0x6A
SCDT	101	12 mA	LLVTTL	Out	Indicates Active Video at HDMI Input Port. Sync detection indicator.
R0PWR5V	35	---	LLVTTL	In	Port 0 Transmitter Detect. 5V Tolerant. Used for MUTEIN function. See Note 2, 3.
R1PWR5V	30	---	LLVTTL	In	Port 1 Transmitter Detect. 5V Tolerant. Used for MUTEIN function. See Note 2,3.
RSVDNC	98,77,76,55				Reserved, must be left unconnected
RSVDL	99			In	Reserved, must be tied to ground

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -70

Q8501: SII9135CTU (HDMI RECEIVER)

TERMINAL DESCRIPTION(4/4)

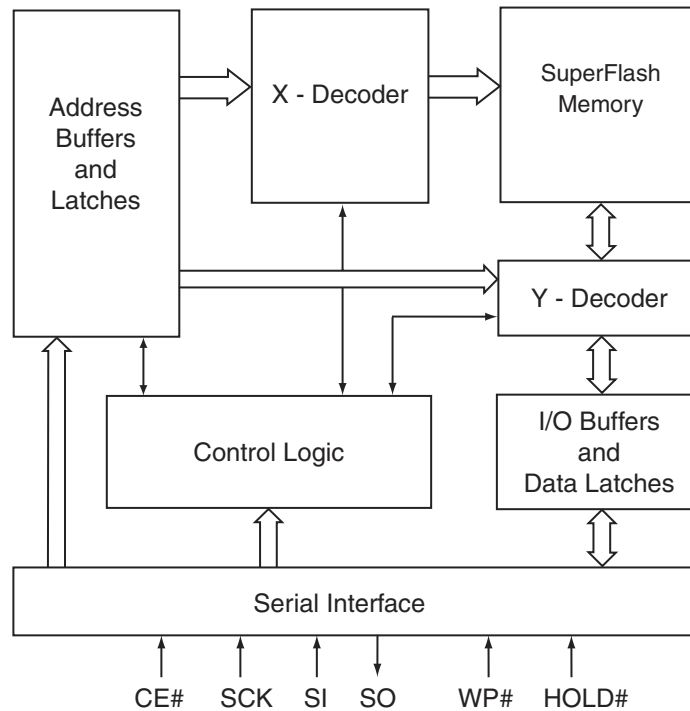
Power and Ground Pins

Pin Name	Pin #	Type	Description	Supply
CVCC18	12,24,25,80,91,107,119,131,143	Power	Digital Logic VCC	1.8V
CGND	11,23,79,90,106,118,130,142	Ground	Digital Logic GND	
IOVCC33	6,18,32,74,88,104,113,125,137	Power	Input/Output Pin VCC	3.3V
IOGND	4,17,31,73,87,103,112,124,136	Ground	Input/Output Pin GND	
AVCC33	38,42,46,50,56,60,64,68	Power	TMDS Analog VCC 3.3V	3.3V
AGND	36,41,45,49,53,59,63,67,71	Ground	TMDS Analog GND	
AVCC18	37,54,72	Power	TMDS Analog VCC 1.8V	1.8V
DVCC18	92	Power	Audio Clock Regeneration PLL Analog VCC. Must be connected to 1.8V	1.8V
DGND	93	Ground	Audio Clock Regeneration PLL Analog Ground	
XTALVCC	96	Power	Audio Clock Regeneration PLL Crystal Oscillator Power. Must be connected to 3.3V	3.3V
REGVCC	97	Power	Audio Clock Regeneration PLL Crystal Oscillator Power. Must be connected to 3.3V	3.3V

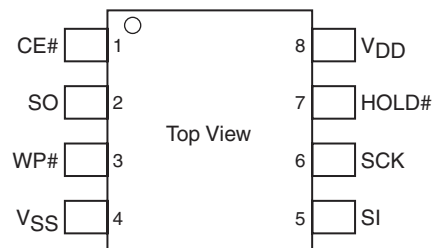
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -71

Q8011: SST25VF080B (8 Mbit Serial Flash Memory)

BLOCK DIAGRAM



PIN CONFIGURATION



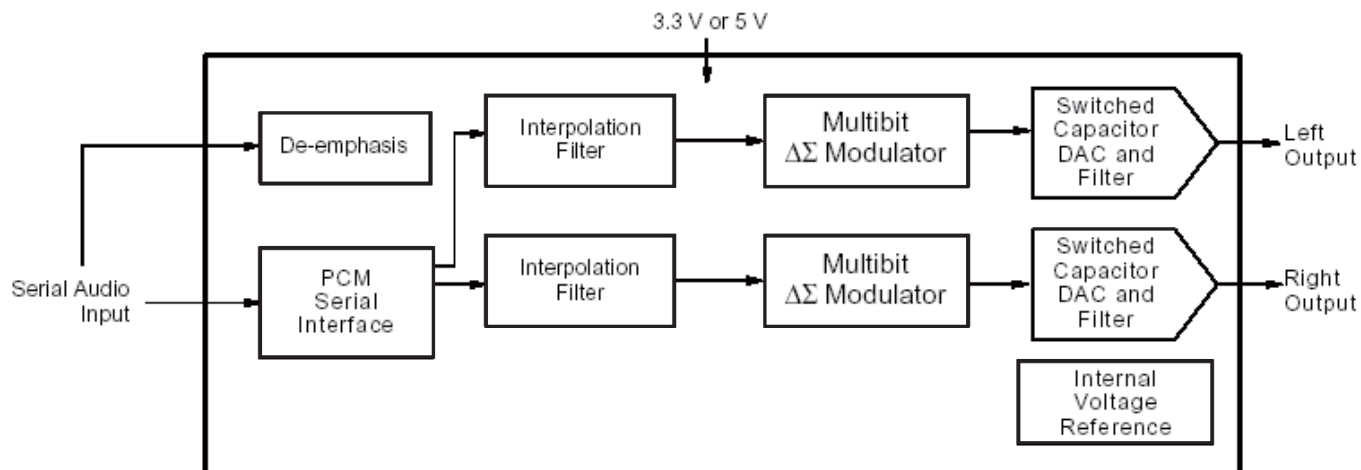
TERMINAL DESCRIPTION

Symbol	Pin Name	Functions
SCK	Serial Clock	To provide the timing of the serial interface. Commands, addresses, or input data are latched on the rising edge of the clock input, while output data is shifted out on the falling edge of the clock input.
SI	Serial Data Input	To transfer commands, addresses, or data serially into the device. Inputs are latched on the rising edge of the serial clock.
SO	Serial Data Output	To transfer data serially out of the device. Data is shifted out on the falling edge of the serial clock.
CE#	Chip Enable	The device is enabled by a high to low transition on CE#. CE# must remain low for the duration of any command sequence.
WP#	Write Protect	The Write Protect (WP#) pin is used to enable/disable BPL bit in the status register.
HOLD#	Hold	To temporarily stop serial communication with SPI flash memory without resetting the device.
V _{DD}	Power Supply	To provide power supply voltage: 2.7-3.6V for SST25VF080
V _{SS}	Ground	

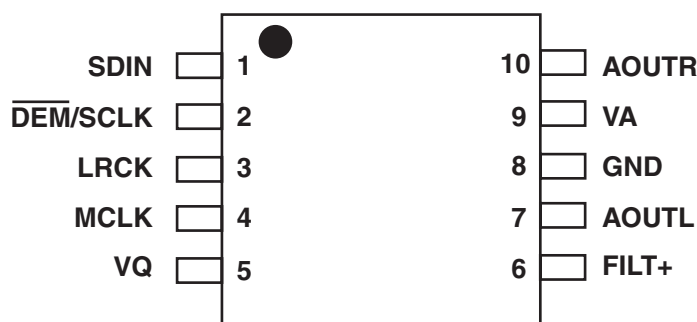
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -72

Q101: CS4344-CZZR (24bit, 192kHz, Stereo, DAC)

BLOCK DIAGRAM



PIN CONFIGURATION



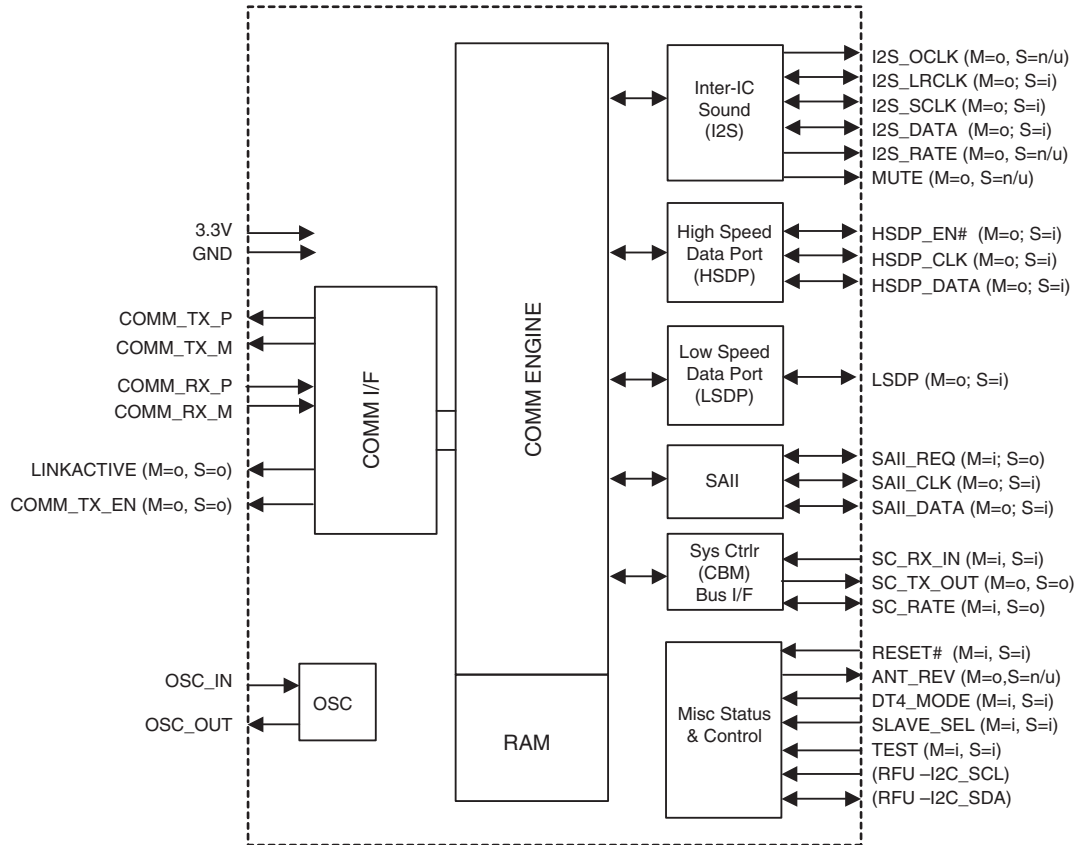
TERMINAL DESCRIPTION

Pin Name	#	Pin Description
SDIN	1	Serial Audio Data Input (Input) - Input for two's complement serial audio data.
$\overline{\text{DEM/SCLK}}$	2	De-Emphasis/External Serial Clock Input (Input) - used for de-emphasis filter control or external serial clock input.
LRCK	3	Left Right Clock (Input) - Determines which channel, Left or Right, is currently active on the serial audio data line.
MCLK	4	Master Clock (Input) - Clock source for the delta-sigma modulator and digital filters.
VQ	5	Quiescent Voltage (Output) - Filter connection for internal quiescent voltage.
FILT+	6	Positive Voltage Reference (Output) - Positive reference voltage for the internal sampling circuits.
AOUTL	7	Left Channel Analog Output (Output) - The full scale analog output level is specified in the Analog Characteristics specification table.
GND	8	Ground (Input) - ground reference.
VA	9	Analog Power (Input) - Positive power for the analog and digital sections.
AOUTR	10	Right Channel Analog Output (Output) - The full scale analog output level is specified in the Analog Characteristics specification table.

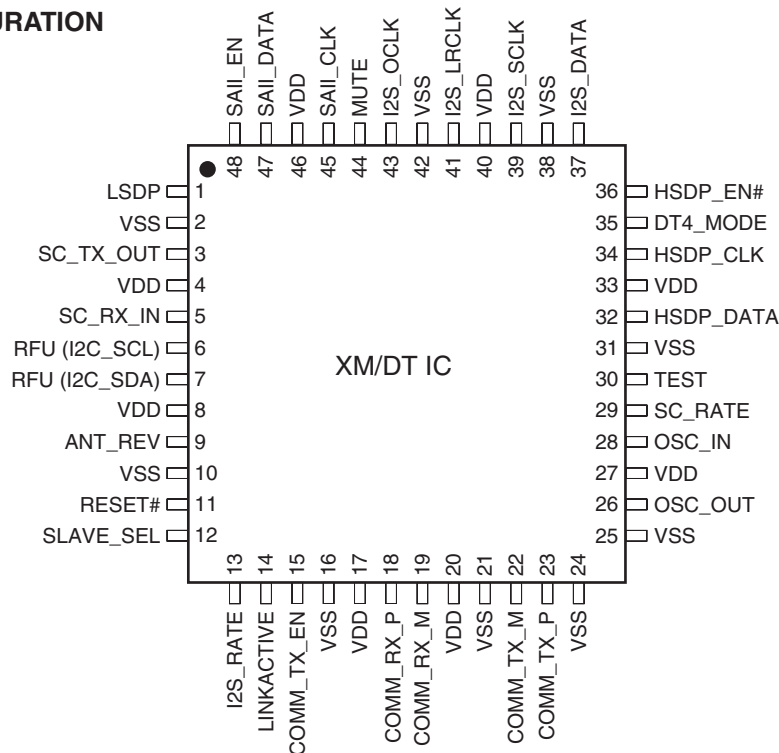
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -73

Q103 : F2628E-01 (XM Digital Transceiver)

BLOCK DIAGRAM



PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -74

Q103 : F2628E-01 (XM Digital Transceiver)

TERMINAL DESCRIPTION(1/2)

Pin No.	Pin Name	Direction	Function in Slave Mode	Function in Master Mode	Notes
1	LSDP	S=In M=Out	Low Speed Data Port Input	Low Speed Data Port Output	Out= 4mA, SLC In=LVTTTL S/T
3	SC_TX_OUT	S=Out M=Out	System Controller Bus (CBM) Transmit Data Out	System Controller Bus (CBM) Transmit Data Out	4mA, SLC
5	SC_RX_IN	S=In M=In	System Controller Bus (CBM) Receive Data In	System Controller Bus (CBM) Receive Data In	LVTTTL S/T
6	RFU (I2C-SCL)	S=In M=In	Reserved for Future Use (pull down with a 100k resistor to Ground)	Reserved for Future Use (pull down with a 100k resistor to Ground)	LVTTTL S/T
7	RFU (I2C-SDA)	S=In M=In	Reserved for Future Use (pull down with a 100k resistor to Ground)	Reserved for Future Use (pull down with a 100k resistor to Ground)	LVTTTL S/T
9	ANT_REV	S=n/u M=Out	Not used in Slave mode, leave unconnected	Indication of incompatible antenna (refer to section 4.3.2 for usage)	4mA, SLC
11	RESET#	S=In M=In	Asynchronous Reset In, (Active Low)	Asynchronous Reset In, (Active Low)	LVTTTL S/T
12	SLAVE_SEL	S=In M=In	Master/Slave Mode Select In (High = Slave Mode)	Master/Slave Mode Select In (Low = Master Mode)	LVTTTL S/T
13	I2S_RATE	S=Out M=Out	Output driven high, leave unconnected	Indicator of incoming I2S data rate (see section 4.4.2)	4mA, SLC
14	LINKACTIVE	S=Out M=Out	Link Active indicator (High = DT bus link is active and data is flowing)	Link Active indicator (High = DT bus link is active and data is flowing)	4mA, SLC
15	COMM_TX_EN	S=Out M=Out	DT Comm Bus External Transceiver Direction Control Output (0=Tx, 1=Rx)	DT Comm Bus External Transceiver Direction Control Output (0=Tx, 1=Rx)	4mA, SLC
18	COMM_RX_P	S=In M=In	DT Differential Comm Bus Internal Receiver Positive In	DT Differential Comm Bus Internal Receiver Positive In	LVDS in+
19	COMM_RX_M	S=In M=In	DT Differential Comm Bus Internal Receiver Negative In	DT Differential Comm Bus Internal Receiver Negative In	LVDS in-
22	COMM_TX_M	S=Out M=Out	DT Differential Comm Bus Internal Transmitter Negative Out	DT Differential Comm Bus Internal Transmitter Negative Out	LVDS out-
23	COMM_TX_P	S=Out M=Out	DT Differential Comm Bus Internal Transmitter Positive Out	DT Differential Comm Bus Internal Transmitter Positive Out	LVDS out+
26	OSC_OUT	S=Out M=Out	Crystal Driver Output	Crystal Driver Output	
28	OSC_IN	S=In M=In	Crystal/ Ext. Clock Input	Crystal/ Ext. Clock Input	
29	SC_RATE (Rev 4A only, pull down for rev 3B)	S=Out M=In	SC interface baud rate Output (High = DT4_MODE is high and the Master DTIC is operating at 115.2K baud)	SC interface baud rate select Input (High = 115.2K baud, Low = 9600 baud)	Out= 4mA, SLC In=LVTTTL S/T
30	TEST	S=In M=In	Factory Test Mode Select (1=Test, 0= Normal Oper.)	Factory Test Mode Select (1=Test, 0= Normal Oper.)	LVTTTL S/T

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -75

Q103 : F2628E-01 (XM Digital Transceiver)

TERMINAL DESCRIPTION(2/2)

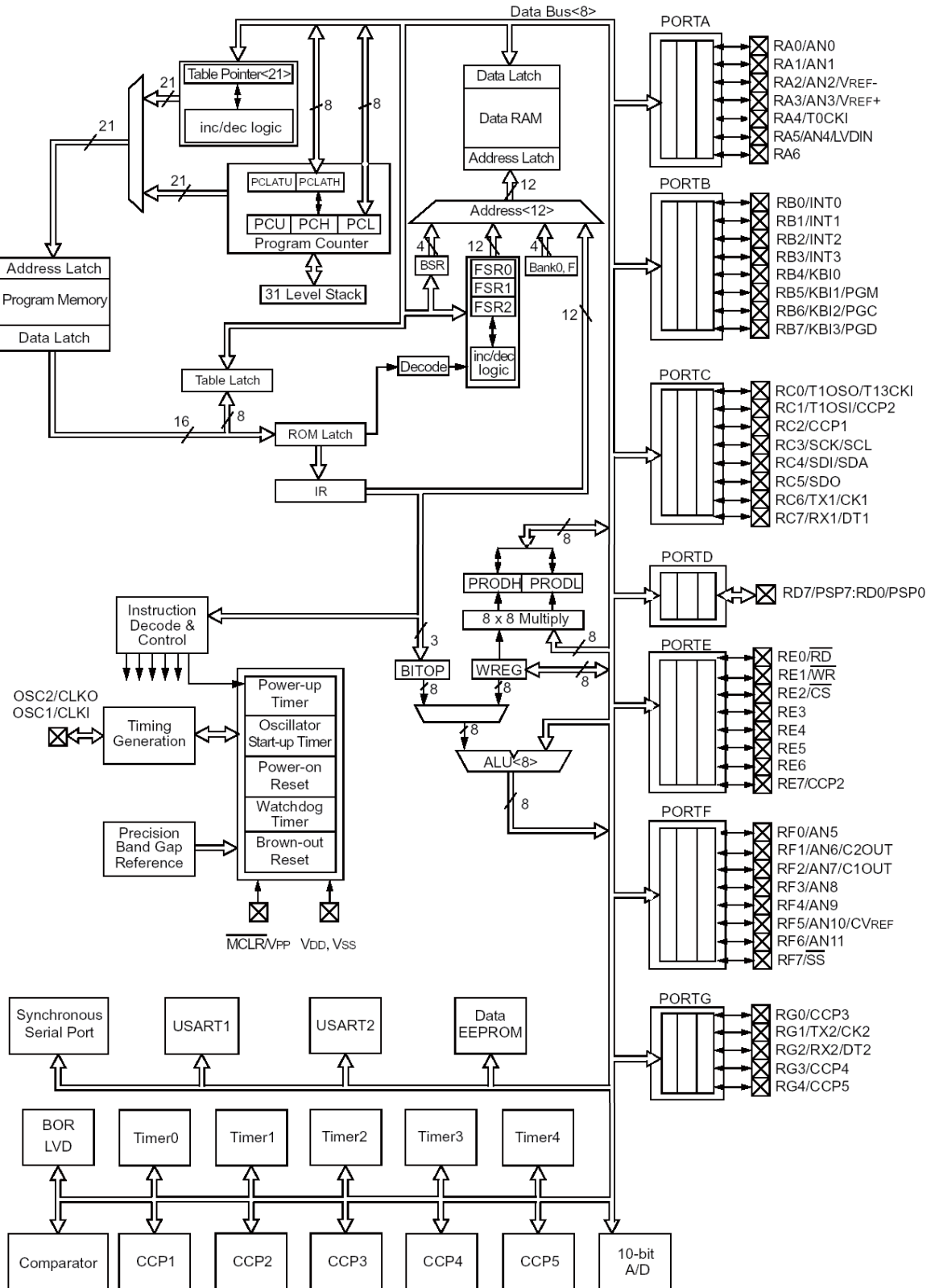
Pin No.	Pin Name	Direction	Function in Slave Mode	Function in Master Mode	Notes
32	HSDP_DATA	S=In M=Out	High Speed Data Port Data Input	High Speed Data Port Data Output	Out= 4mA, SLC In=LVTTL S/T
34	HSDP_CLK	S=In M=Out	High Speed Data Port Clock Input	High Speed Data Port Clock Output	Out= 4mA, SLC In=LVTTL S/T
35	DT4_MODE	S=In M=In	Enables/Disables driver on SC_RATE and ANT_REV (High = enable driver) This pin was VSS on rev 3 XM/DT IC	Enables/Disables drivers on MUTE and ANT_REV (High = enable drivers) This pin was VSS on rev 3 XM/DT IC	In=LVTTL S/T
36	HSDP_EN#	S=In M=Out	High Speed Data Port Enable Input (Active low)	High Speed Data Port Enable Output (Active low)	Out= 4mA, SLC In=LVTTL S/T
37	I2S_DATA	S=In M=Out	I2S Digital Audio Port Data In	I2S Digital Audio Port Data Out	Out= 4mA, SLC In=LVTTL S/T
39	I2S_SCLK	S=In M=Out	I2S Digital Audio Port Bit Clock In	I2S Digital Audio Port Bit Clock Out	Out= 4mA, SLC In=LVTTL S/T
41	I2S_LRCLK	S=In M=Out	I2S Digital Audio Port Left/Right Clock In	I2S Digital Audio Port Left/Right Clock Out	Out= 4mA, SLC In=LVTTL S/T
43	I2S_OCLK	S=In M=Out	I2S Digital Audio Port Oversample Clock (not used, leave unconnected)	I2S Digital Audio Port Oversample Clock Out	Out= 4mA, SLC
44	MUTE	S=n/u M=Out	Not used in Slave mode, leave unconnected	Provides a mechanism for muting the audio during an I2S rate change (High=mute)	Out= 4mA, SLC
45	SAII_CLK	S=Out M=In	SAII Port Clock Output	SAII Port Clock Input	Out= 4mA, SLC In=LVTTL S/T
47	SAII_DATA	S=Out M=In	SAII Port Data Output	SAII Port Data Input	Out= 4mA, SLC In=LVTTL S/T
48	SAII_REQ	S=In M=Out	SAII Port Request Input	SAII Port Request Output	Out= 4mA, SLC In=LVTTL S/T

Pin#	Pin Name	Type	Function in Slave Mode	Function in Master Mode	Notes
4, 8, 17, 20, 27, 33, 40, 46	VDD	PWR	+3.3V Supply Voltage	+3.3V Supply Voltage	
2, 10, 16, 21, 24, 25, 31, 38, 42	VSS	GND	Digital Ground	Digital Ground	

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -76

Q1001: PIC18F66(1 Mbit Flash Microcontroller with Ethernet)

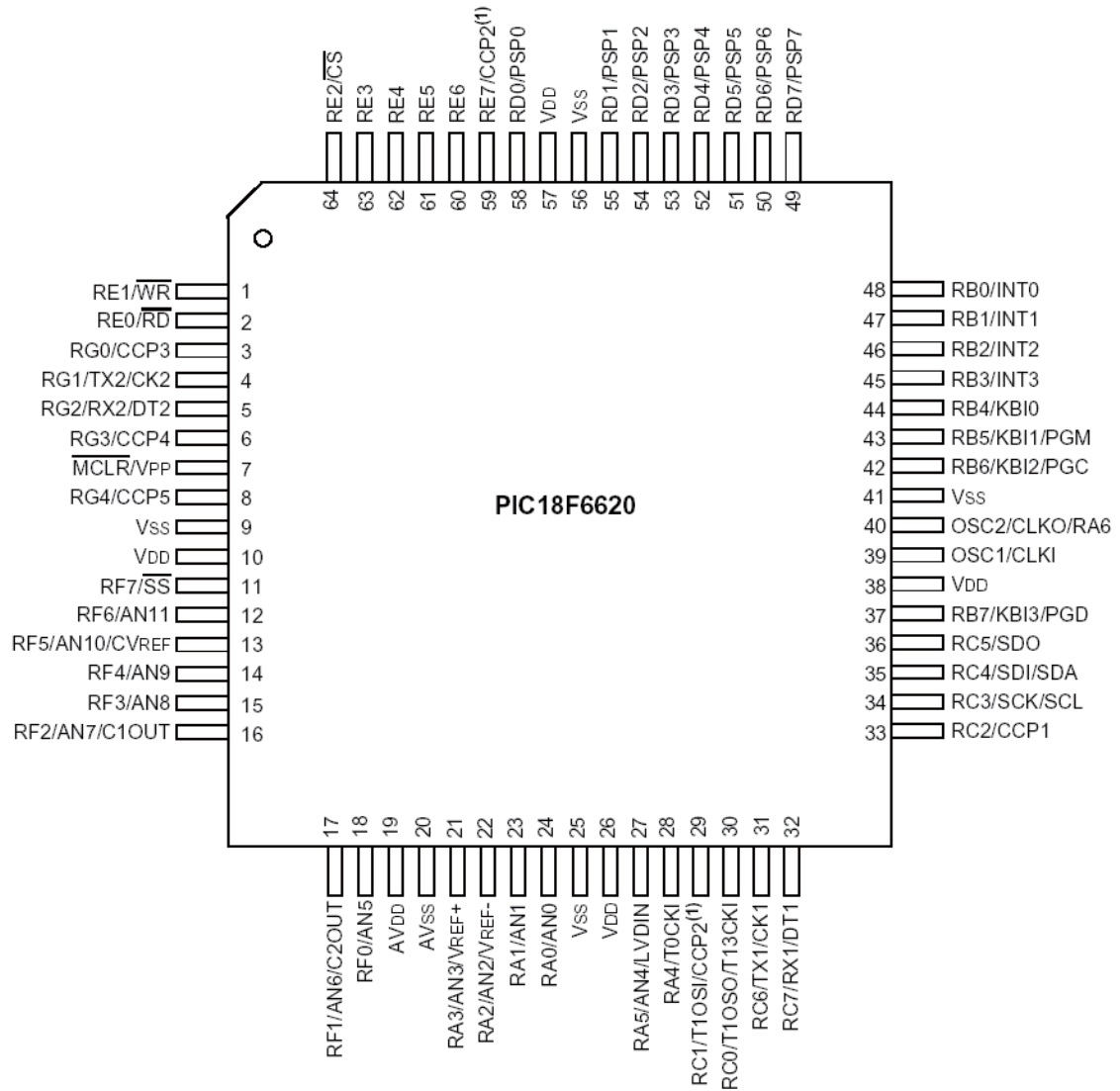
BLOCK DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -77

Q1001: PIC18F66(1 Mbit Flash Microcontroller with Ethernet)

PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -78

Q1001: PIC18F66(1 Mbit Flash Microcontroller with Ethernet)

TERMINAL DESCRIPTION(1/8)

Pin Name	Pin Number		Pin Type	Buffer Type	Description
	PIC18F6X20	PIC18F8X20			
MCLR/VPP MCLR VPP	7	9	I I P	ST	Master Clear (input) or programming voltage (output). Master Clear (Reset) input. This pin is an active-low Reset to the device. Programming voltage input.
OSC1/CLKI OSC1 CLKI	39	49	I I	CMOS/ST CMOS	Oscillator crystal or external clock input. Oscillator crystal input or external clock source input. ST buffer when configured in RC mode; otherwise CMOS. External clock source input. Always associated with pin function OSC1 (see OSC1/CLKI, OSC2/CLKO pins).
OSC2/CLKO/RA6 OSC2 CLKO RA6	40	50	O O I/O	— — TTL	Oscillator crystal or clock output. Oscillator crystal output. Connects to crystal or resonator in Crystal Oscillator mode. In RC mode, OSC2 pin outputs CLKO, which has 1/4 the frequency of OSC1 and denotes the instruction cycle rate. General purpose I/O pin.

Legend: TTL = TTL compatible input
ST = Schmitt Trigger input with CMOS levels
I = Input
P = Power
CMOS = CMOS compatible input or output
Analog = Analog input
O = Output
OD = Open-Drain (no P diode to VDD)

Pin Name	Pin Number		Pin Type	Buffer Type	Description
	PIC18F6X20	PIC18F8X20			
RA0/AN0 RA0 AN0	24	30	I/O I	TTL Analog	PORTA is a bidirectional I/O port. Digital I/O. Analog input 0.
RA1/AN1 RA1 AN1	23	29	I/O I	TTL Analog	Digital I/O. Analog input 1.
RA2/AN2/VREF- RA2 AN2 VREF-	22	28	I/O I I	TTL Analog Analog	Digital I/O. Analog input 2. A/D reference voltage (Low) input.
RA3/AN3/VREF+ RA3 AN3 VREF+	21	27	I/O I I	TTL Analog Analog	Digital I/O. Analog input 3. A/D reference voltage (High) input.
RA4/T0CKI RA4 T0CKI	28	34	I/O I	ST/OD ST	Digital I/O – Open-drain when configured as output. Timer0 external clock input.
RA5/AN4/LVDIN RA5 AN4 LVDIN RA6	27	33	I/O I I	TTL Analog Analog	Digital I/O. Analog input 4. Low-Voltage Detect input. See the OSC2/CLKO/RA6 pin.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -79

Q1001: PIC18F66(1 Mbit Flash Microcontroller with Ethernet)

TERMINAL DESCRIPTION(2/8)

Pin Name	Pin Number		Pin Type	Buffer Type	Description
	PIC18F6X20	PIC18F8X20			
RB0/INT0 RB0 INT0	48	58	I/O I	TTL ST	PORTB is a bidirectional I/O port. PORTB can be software programmed for internal weak pull-ups on all inputs. Digital I/O. External interrupt 0.
RB1/INT1 RB1 INT1	47	57	I/O I	TTL ST	Digital I/O. External interrupt 1.
RB2/INT2 RB2 INT2	46	56	I/O I	TTL ST	Digital I/O. External interrupt 2.
RB3/INT3/CCP2 RB3 INT3 CCP2 ⁽¹⁾	45	55	I/O I/O I/O	TTL ST ST	Digital I/O. External interrupt 3. Capture2 input, Compare2 output, PWM2 output.
RB4/KBI0 RB4 KBI0	44	54	I/O I	TTL ST	Digital I/O. Interrupt-on-change pin.
RB5/KBI1/PGM RB5 KBI1 PGM	43	53	I/O I I/O	TTL ST ST	Digital I/O. Interrupt-on-change pin. Low-Voltage ICSP Programming enable pin.
RB6/KBI2/PGC RB6 KBI2 PGC	42	52	I/O I I/O	TTL ST ST	Digital I/O. Interrupt-on-change pin. In-Circuit Debugger and ICSP programming clock.
RB7/KBI3/PGD RB7 KBI3 PGD	37	47	I/O I/O	TTL ST	Digital I/O. Interrupt-on-change pin. In-Circuit Debugger and ICSP programming data.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -80

Q1001: PIC18F66(1 Mbit Flash Microcontroller with Ethernet)

TERMINAL DESCRIPTION(3/8)

Pin Name	Pin Number		Pin Type	Buffer Type	Description
	PIC18F6X20	PIC18F8X20			
RC0/T1OSO/T13CKI	30	36			PORTC is a bidirectional I/O port.
RC0			I/O	ST	Digital I/O.
T1OSO			O	—	Timer1 oscillator output.
T13CKI			I	ST	Timer1/Timer3 external clock input.
RC1/T1OSI/CCP2	29	35			
RC1			I/O	ST	Digital I/O.
T1OSI			I	CMOS	Timer1 oscillator input.
CCP2 ⁽²⁾			I/O	ST	Capture2 input/Compare2 output/ PWM2 output.
RC2/CCP1	33	43			
RC2			I/O	ST	Digital I/O.
CCP1			I/O	ST	Capture1 input/Compare1 output/ PWM1 output.
RC3/SCK/SCL	34	44			
RC3			I/O	ST	Digital I/O.
SCK			I/O	ST	Synchronous serial clock input/output for SPI mode.
SCL			I/O	ST	Synchronous serial clock input/output for I ² C mode.
RC4/SDI/SDA	35	45			
RC4			I/O	ST	Digital I/O.
SDI			I	ST	SPI data in.
SDA			I/O	ST	I ² C data I/O.
RC5/SDO	36	46			
RC5			I/O	ST	Digital I/O.
SDO			O	—	SPI data out.
RC6/TX1/CK1	31	37			
RC6			I/O	ST	Digital I/O.
TX1			O	—	USART 1 asynchronous transmit.
CK1			I/O	ST	USART 1 synchronous clock (see RX1/DT1).
RC7/RX1/DT1	32	38			
RC7			I/O	ST	Digital I/O.
RX1			I	ST	USART 1 asynchronous receive.
DT1			I/O	ST	USART 1 synchronous data (see TX1/CK1).

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -81

Q1001: PIC18F66(1 Mbit Flash Microcontroller with Ethernet)

TERMINAL DESCRIPTION(4/8)

Pin Name	Pin Number		Pin Type	Buffer Type	Description
	PIC18F6X20	PIC18F8X20			
RD0/PSP0/AD0 RD0 PSP0 AD0 ⁽³⁾	58	72	I/O I/O I/O	ST TTL TTL	PORTD is a bidirectional I/O port. These pins have TTL input buffers when external memory is enabled. Digital I/O. Parallel Slave Port data. External memory address/data 0.
RD1/PSP1/AD1 RD1 PSP1 AD1 ⁽³⁾	55	69	I/O I/O I/O	ST TTL TTL	Digital I/O. Parallel Slave Port data. External memory address/data 1.
RD2/PSP2/AD2 RD2 PSP2 AD2 ⁽³⁾	54	68	I/O I/O I/O	ST TTL TTL	Digital I/O. Parallel Slave Port data. External memory address/data 2.
RD3/PSP3/AD3 RD3 PSP3 AD3 ⁽³⁾	53	67	I/O I/O I/O	ST TTL TTL	Digital I/O. Parallel Slave Port data. External memory address/data 3.
RD4/PSP4/AD4 RD4 PSP4 AD4 ⁽³⁾	52	66	I/O I/O I/O	ST TTL TTL	Digital I/O. Parallel Slave Port data. External memory address/data 4.
RD5/PSP5/AD5 RD5 PSP5 AD5 ⁽³⁾	51	65	I/O I/O I/O	ST TTL TTL	Digital I/O. Parallel Slave Port data. External memory address/data 5.
RD6/PSP6/AD6 RD6 PSP6 AD6 ⁽³⁾	50	64	I/O I/O I/O	ST TTL TTL	Digital I/O. Parallel Slave Port data. External memory address/data 6.
RD7/PSP7/AD7 RD7 PSP7 AD7 ⁽³⁾	49	63	I/O I/O I/O	ST TTL TTL	Digital I/O. Parallel Slave Port data. External memory address/data 7.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -82

Q1001: PIC18F66(1 Mbit Flash Microcontroller with Ethernet)

TERMINAL DESCRIPTION(5/8)

Pin Name	Pin Number		Pin Type	Buffer Type	Description
	PIC18F6X20	PIC18F8X20			
RE0/ $\overline{\text{RD}}$ /AD8 RE0 $\overline{\text{RD}}$ AD8 ⁽³⁾	2	4	I/O I I/O	ST TTL TTL	<p>PORTE is a bidirectional I/O port.</p> <p>Digital I/O. Read control for Parallel Slave Port (see $\overline{\text{WR}}$ and $\overline{\text{CS}}$ pins). External memory address/data 8.</p>
RE1/ $\overline{\text{WR}}$ /AD9 RE1 $\overline{\text{WR}}$ AD9 ⁽³⁾	1	3	I/O I I/O	ST TTL TTL	<p>Digital I/O. Write control for Parallel Slave Port (see $\overline{\text{CS}}$ and $\overline{\text{RD}}$ pins). External memory address/data 9.</p>
RE2/ $\overline{\text{CS}}$ /AD10 RE2 $\overline{\text{CS}}$ AD10 ⁽³⁾	64	78	I/O I I/O	ST TTL TTL	<p>Digital I/O. Chip select control for Parallel Slave Port (see $\overline{\text{RD}}$ and $\overline{\text{WR}}$). External memory address/data 10.</p>
RE3/AD11 RE3 AD11 ⁽³⁾	63	77	I/O I/O	ST TTL	<p>Digital I/O. External memory address/data 11.</p>
RE4/AD12 RE4 AD12	62	76	I/O I/O	ST TTL	<p>Digital I/O. External memory address/data 12.</p>
RE5/AD13 RE5 AD13 ⁽³⁾	61	75	I/O I/O	ST TTL	<p>Digital I/O. External memory address/data 13.</p>
RE6/AD14 RE6 AD14 ⁽³⁾	60	74	I/O I/O	ST TTL	<p>Digital I/O. External memory address/data 14.</p>
RE7/CCP2/AD15 RE7 CCP2 ^(1,4) AD15 ⁽³⁾	59	73	I/O I/O I/O	ST ST TTL	<p>Digital I/O. Capture2 input/Compare2 output/ PWM2 output. External memory address/data 15.</p>

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -83

Q1001: PIC18F66(1 Mbit Flash Microcontroller with Ethernet)

TERMINAL DESCRIPTION(6/8)

Pin Name	Pin Number		Pin Type	Buffer Type	Description
	PIC18F6X20	PIC18F8X20			
					PORTF is a bidirectional I/O port.
RF0/AN5	18	24	I/O	ST	Digital I/O.
RF0			I	Analog	Analog input 5.
AN5					
RF1/AN6/C2OUT	17	23	I/O	ST	Digital I/O.
RF1			I	Analog	Analog input 6.
AN6			O	ST	Comparator 2 output.
C2OUT					
RF2/AN7/C1OUT	16	18	I/O	ST	Digital I/O.
RF2			I	Analog	Analog input 7.
AN7			O	ST	Comparator 1 output.
C1OUT					
RF3/AN8	15	17	I/O	ST	Digital I/O.
RF1			I	Analog	Analog input 8.
AN8					
RF4/AN9	14	16	I/O	ST	Digital I/O.
RF1			I	Analog	Analog input 9.
AN9					
RF5/AN10/CVREF	13	15	I/O	ST	Digital I/O.
RF1			I	Analog	Analog input 10.
AN10			O	Analog	Comparator VREF output.
CVREF					
RF6/AN11	12	14	I/O	ST	Digital I/O.
RF6			I	Analog	Analog input 11.
AN11					
RF7/ \overline{SS}	11	13	I/O	ST	Digital I/O.
RF7			I	TTL	SPI slave select input.
\overline{SS}					

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -84

Q1001: PIC18F66(1 Mbit Flash Microcontroller with Ethernet)

TERMINAL DESCRIPTION(7/8)

Pin Name	Pin Number		Pin Type	Buffer Type	Description
	PIC18F6X20	PIC18F8X20			
RG0/CCP3 RG0 CCP3	3	5	I/O I/O	ST ST	PORTG is a bidirectional I/O port. Digital I/O. Capture3 input/Compare3 output/ PWM3 output.
RG1/TX2/CK2 RG1 TX2 CK2	4	6	I/O O I/O	ST — ST	Digital I/O. USART 2 asynchronous transmit. USART 2 synchronous clock (see RX2/DT2).
RG2/RX2/DT2 RG2 RX2 DT2	5	7	I/O I I/O	ST ST ST	Digital I/O. USART 2 asynchronous receive. USART 2 synchronous data (see TX2/CK2).
RG3/CCP4 RG3 CCP4	6	8	I/O I/O	ST ST	Digital I/O. Capture4 input/Compare4 output/ PWM4 output.
RG4/CCP5 RG4 CCP5	8	10	I/O I/O	ST ST	Digital I/O. Capture5 input/Compare5 output/ PWM5 output.

Pin Name	Pin Number		Pin Type	Buffer Type	Description
	PIC18F6X20	PIC18F8X20			
RH0/A16 RH0 A16	—	79	I/O O	ST TTL	PORTH is a bidirectional I/O port ⁽⁵⁾ . Digital I/O. External memory address 16.
RH1/A17 RH1 A17	—	80	I/O O	ST TTL	Digital I/O. External memory address 17.
RH2/A18 RH2 A18	—	1	I/O O	ST TTL	Digital I/O. External memory address 18.
RH3/A19 RH3 A19	—	2	I/O O	ST TTL	Digital I/O. External memory address 19.
RH4/AN12 RH4 AN12	—	22	I/O I	ST Analog	Digital I/O. Analog input 12.
RH5/AN13 RH5 AN13	—	21	I/O I	ST Analog	Digital I/O. Analog input 13.
RH6/AN14 RH6 AN14	—	20	I/O I	ST Analog	Digital I/O. Analog input 14.
RH7/AN15 RH7 AN15	—	19	I/O I	ST Analog	Digital I/O. Analog input 15.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -85

Q1001: PIC18F66(1 Mbit Flash Microcontroller with Ethernet)

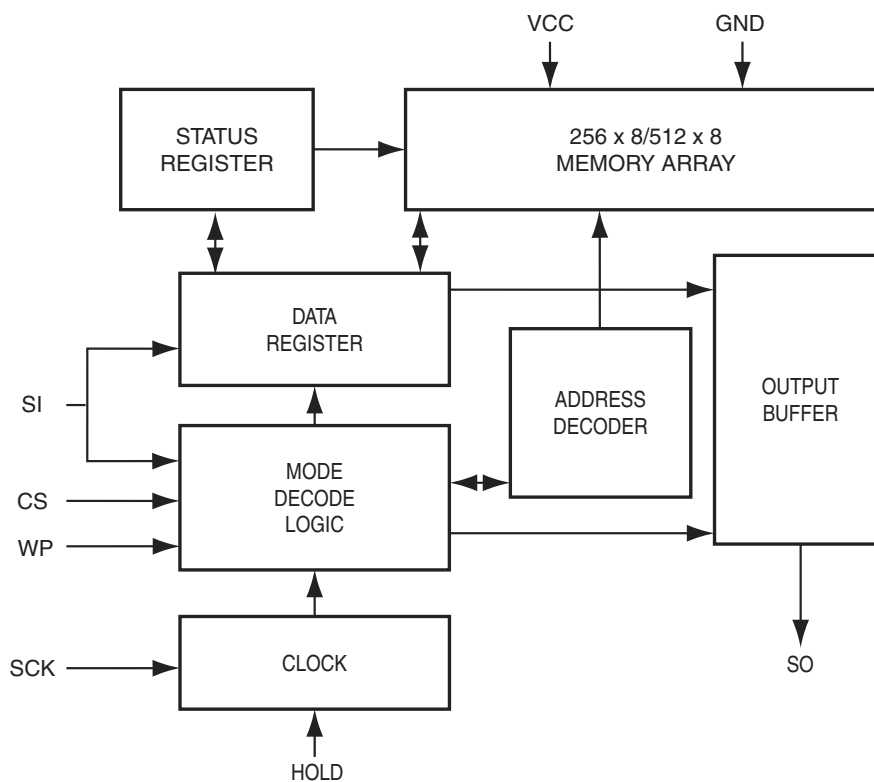
TERMINAL DESCRIPTION(8/8)

Pin Name	Pin Number		Pin Type	Buffer Type	Description
	PIC18F6X20	PIC18F8X20			
RJ0/ALE RJ0 ALE	—	62	I/O O	ST TTL	PORTJ is a bidirectional I/O port ⁽⁵⁾ . Digital I/O. External memory address latch enable.
RJ1/ \overline{OE} RJ1 \overline{OE}	—	61	I/O O	ST TTL	Digital I/O. External memory output enable.
RJ2/ \overline{WRL} RJ2 \overline{WRL}	—	60	I/O O	ST TTL	Digital I/O. External memory write low control.
RJ3/ \overline{WRH} RJ3 \overline{WRH}	—	59	I/O O	ST TTL	Digital I/O. External memory write high control.
RJ4/BA0 RJ4 BA0	—	39	I/O O	ST TTL	Digital I/O. External memory Byte Address 0 control.
RJ5/ \overline{CE} RJ5 \overline{CE}	—	40	I/O O	ST TTL	Digital I/O. External memory chip enable control.
RJ6/ \overline{LB} RJ6 \overline{LB}	—	41	I/O O	ST TTL	Digital I/O. External memory low byte select.
RJ7/ \overline{UB} RJ7 \overline{UB}	—	42	I/O O	ST TTL	Digital I/O. External memory high byte select.

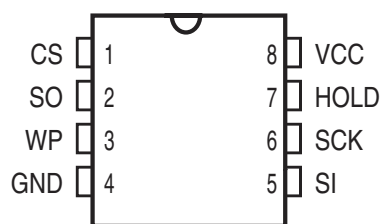
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -86

Q1002: IS25C02(2 kbit EEPROM)

BLOCK DIAGRAM



PIN CONFIGURATION



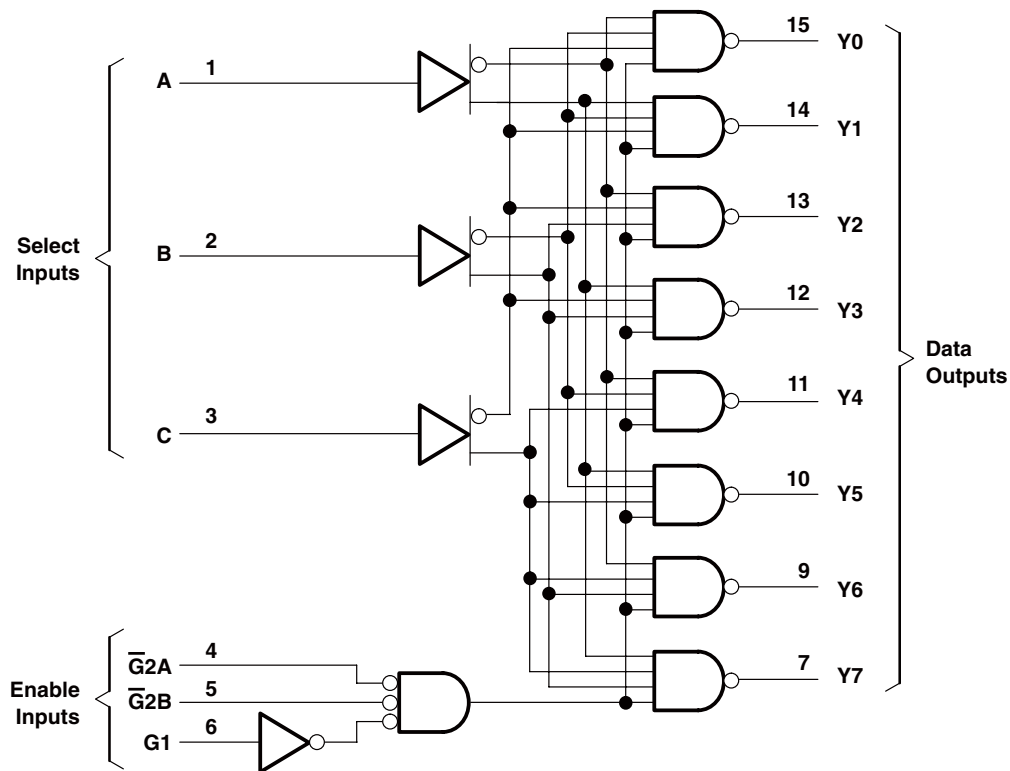
TERMINAL DESCRIPTION

CS	Chip Select
SCK	Serial Data Clock
SI	Serial Data Input
SO	Serial Data Output
GND	Ground
Vcc	Power
WP	Write Protect
HOLD	Suspends Serial Input

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -87

Q7172: TC74VHC138FT (3-8 Line Decoder)

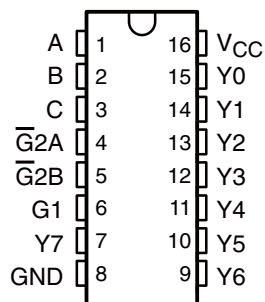
BLOCK DIAGRAM



Logic Diagram

ENABLE INPUTS			SELECT INPUTS			OUTPUTS							
G1	$\overline{G2A}$	$\overline{G2B}$	C	B	A	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7
X	H	X	X	X	X	H	H	H	H	H	H	H	H
X	X	H	X	X	X	H	H	H	H	H	H	H	H
L	X	X	X	X	X	H	H	H	H	H	H	H	H
H	L	L	L	L	L	L	H	H	H	H	H	H	H
H	L	L	L	L	H	H	L	H	H	H	H	H	H
H	L	L	L	H	L	H	H	L	H	H	H	H	H
H	L	L	H	L	L	H	H	H	H	L	H	H	H
H	L	L	H	L	H	H	H	H	H	H	L	H	H
H	L	L	H	H	L	H	H	H	H	H	H	L	H
H	L	L	H	H	H	H	H	H	H	H	H	H	L

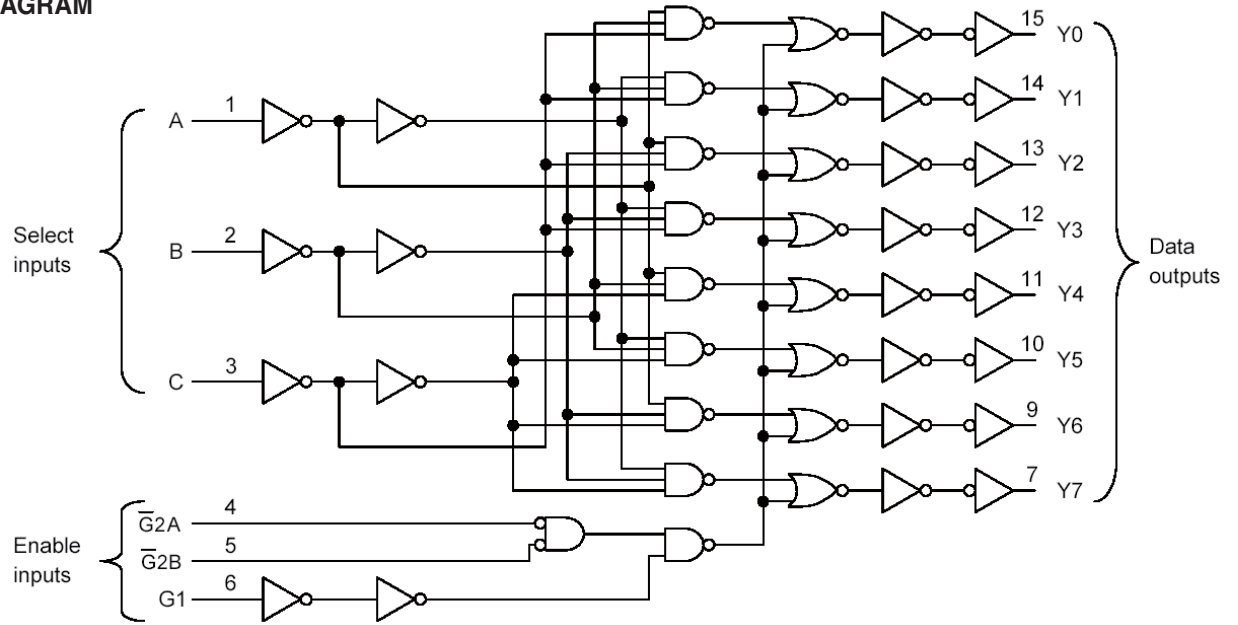
PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -88

Q7171: TC74VHC238FT (3-8 Line Decoder)

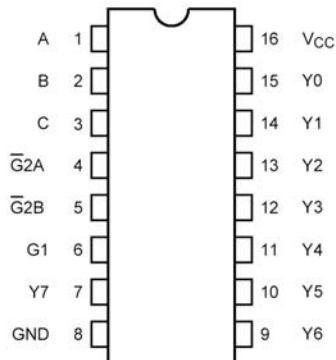
BLOCK DIAGRAM



Logic Diagram

Inputs						Outputs								Selected Output	
Enable			Select			Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7		
G1	$\overline{G2A}$	$\overline{G2B}$	C	B	A										
L	X	X	X	X	X	L	L	L	L	L	L	L	L	L	None
X	H	X	X	X	X	L	L	L	L	L	L	L	L	L	None
X	X	H	X	X	X	L	L	L	L	L	L	L	L	L	None
H	L	L	L	L	L	H	L	L	L	L	L	L	L	L	Y0
H	L	L	L	L	H	L	H	L	L	L	L	L	L	L	Y1
H	L	L	L	H	L	L	L	H	L	L	L	L	L	L	Y2
H	L	L	L	H	H	L	L	L	H	L	L	L	L	L	Y3
H	L	L	H	L	L	L	L	L	L	H	L	L	L	L	Y4
H	L	L	H	L	H	L	L	L	L	L	H	L	L	L	Y5
H	L	L	H	H	L	L	L	L	L	L	L	H	L	L	Y6
H	L	L	H	H	H	L	L	L	L	L	L	L	L	H	Y7

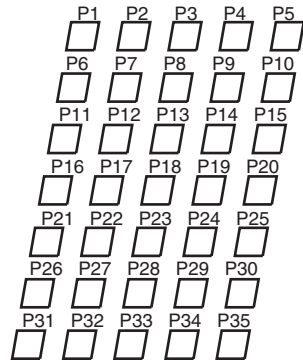
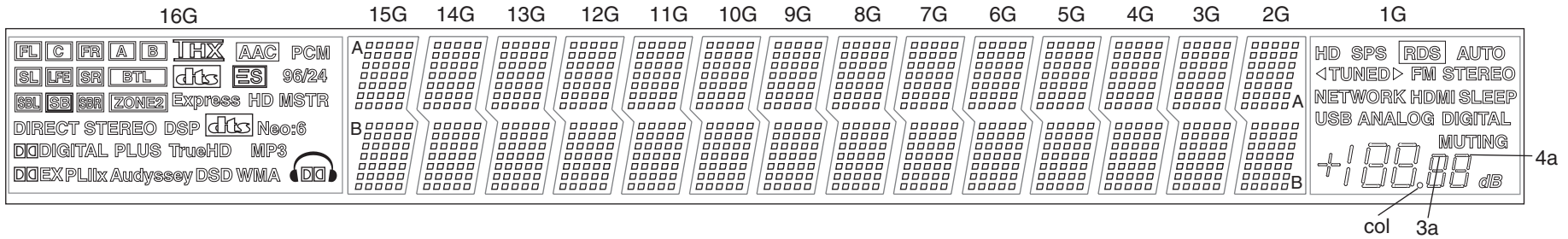
PIN CONFIGURATION



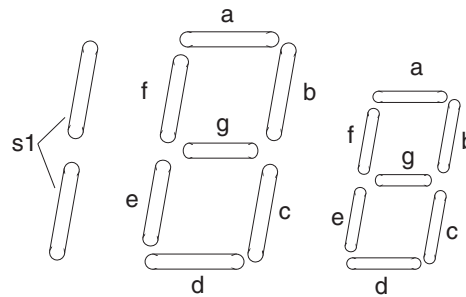
FL TUBE VIEWS -1

Q7500: HNA-16SL04T

GRID ASSIGNMENT



15G~2G
A: Upper line
B: Lower line



1G

FL TUBE VIEWS -2

Q7500: HNA-16SL04T

ANODE CONNECTION

	16G	15G-2G	1G
P1	—	1-1A	—
P2	—	2-1A	—
P3	—	3-1A	—
P4	—	4-1A	—
P5	—	5-1A	—
P6	—	1-2A	—
P7	—	2-2A	—
P8	—	3-2A	—
P9	—	4-2A	—
P10	—	5-2A	—
P11	—	1-3A	—
P12	—	2-3A	—
P13	—	3-3A	—
P14	—	4-3A	HD
P15	—	5-3A	SPS
P16	PCM	1-4A	RDS
P17	AAC	2-4A	AUTO
P18	THX	3-4A	FM STEREO
P19	B	4-4A	◀ ▶
P20	A	5-4A	TUNED
P21	(FR)	1-5A	SLEEP
P22	(F)R	2-5A	HDMI
P23	F(R)	3-5A	NETWORK
P24	(C)	4-5A	—
P25	C	5-5A	—
P26	(FL)	1-6A	—
P27	(F)L	2-6A	—

	16G	15G-2G	1G
P28	F(L)	3-6A	—
P29	SL	4-6A	—
P30	(SL)	5-6A	—
P31	LFE	1-7A	—
P32	(LFE)	2-7A	—
P33	—	3-7A	DIGITAL
P34	—	4-7A	ANALOG
P35	(SR)	5-7A	USB
P36	SR	1-1B	—
P37	BTL	2-1B	MUTING
P38	dtc	3-1B	2a
P39	ES	4-1B	2b
P40	96/24	5-1B	2g
P41	MSTR	1-2B	2f
P42	HD	2-2B	2c
P43	Express	3-2B	2e
P44	ZONE2	4-2B	2d
P45		5-2B	1a
P46	SBR	1-3B	1b
P47		2-3B	1g
P48	SB	3-3B	1f
P49		4-3B	1c
P50	SBL	5-3B	1e
P51	Neo:6	1-4B	1d
P52	dtc	2-4B	!
P53	DSP	3-4B	--
P54	STEREO	4-4B	s1

	16G	15G-2G	1G
P55	DIRECT	5-4B	col
P56	DD	1-5B	3a
P57	DIGITAL	2-5B	3f
P58	PLUS	3-5B	3b
P59	TrueHD	4-5B	3e
P60	MP3	5-5B	3g
P61		1-6B	3d
P62	DD	2-6B	3c
P63	WMA	3-6B	4a
P64	DSD	4-6B	4f
P65	Audyssey	5-6B	4b
P66	x	1-7B	4e
P67	III	2-7B	4g
P68	PL	3-7B	4d
P69	EX	4-7B	4c
P70	DD	5-7B	dB

MICROPROCESSOR TERMINAL DESCRIPTIONS -1

Q7001: M3087BFKBGP

Pin No.	Pin Name	I/O	Act.	Description
1	SRTXD	O	H	SIRIUS UART data output
2	SRRST	O	H	SIRIUS IC reset
3	FANCTRL	O	D/A	Fan control
4	CECIN	I	H	CEC input
5	XMTXD	O	H	XM UART data output
6	XMRXD	I	H	XM UART data input
7	~XMRST	O	L	XM IC reset
8	XMANT	I	L	XM IC 3B/4A input
9	~RDSCLK	I	CLK	RDS serial clock input
10	RDSSDI	I	H	RDS serial data input
11	~STEREO	I	L	FM STEREO detect
12	~SD	I	L	FM tuned detect
13	~TUNDACRST	O	L	XM/(HD Radio) DAC reset control
14	~HDRST	O	L	(HD Radio reset control)
15	BYTE	I	---	Connect to Vss
16	CNVss	I	---	Connect to Vss
17	~NETBOOT	O	L	NET BOOT mode output
18	~NETSTATUS	I	L	NET Status input
19	~RESET	I	L	Reset input
20	Xout	O	CLK	Oscillator output
21	Vss	I	---	GND
22	Xin	I	CLK	Oscillator input
23	Vcc	I	---	Power supply
24	~NMI	I	L	Connect to Vcc
25	~POFF	I	L	POFF input
26	~POFF2	I	L	POFF input
27	~KEYINT	I	L	Key interrupt input
28	CECTRG	I	H	CEC trigger input
29	CECOUT	O	H	CEC output
30	Z2VOLCLK	O	H	Clock output to Zone2/3 Volume IC
31	Z2VOLSDO	O	H	Data output to Zone2/3 Volume IC
32	XMLNK	I	H	3B/4A input from XM IC
33	VDLOCK/VSPINT	I/O	H	Request input from Hudson
34	~VSPRST	O	L	Hudson reset output
35	VSPBOOT/VSPREQ	O	H	Request output from Hudson
36	VSPRxD/VSPSCL	I/O	H	Hudson I2C clock output
37	VSPRxD/VSPSDA	I/O	H	Hudson I2C data input/output
38	RS232TxD/FTxD	O	H	RS232 data output/Flash rewrite pin
39	Vcc	I	H	Power supply
40	RS232RxD/FRxD	I	H	RS232 data input
41	Vss	I	H	GND
42	FCLK	O	H	Flash rewrite pin
43	FBUSY	O	H	Flash rewrite pin
44	NETTxD	O	H	NET data output
45	NETRxD	I	H	NET data input
46	~NETRST	O	L	NET reset output
47	~NETRESUME	O	L	NET Resume data output
48	~ROMCS	O	L	E2PROM chip select
49	ROMSDI	I	H	E2PROM data input
50	ROMSDO	O	H	E2PROM data output

MICROPROCESSOR TERMINAL DESCRIPTIONS -2

Q7001: M3087BFKBGP

Pin No.	Pin Name	I/O	Act.	Description
51	ROMCLK	O	CLK	E2PROM clock output
52	NETRSV	O	H	No use
53	SPRLFB	O	H	Front-B Speaker relay control
54	FEPM	I	H	Connect to Vss
55	SPRLZ2	O	H	Zone2 Speaker relay control
56	Z3MUTE	O	H	Zone3 mute control
57	Vss	I	H	GND
58	Z2MUTE	O	H	Zone2 mute control
59	Vcc	I	H	Power supply
60	SBZ2MUTE	O	H	Surround Back/Zone2 mute control
61	AMUTE	O	H	Main audio mute control
62	SPRLSB	O	H	Surround Back SP relay control
63	SPRLCS	O	H	Center/Surround SP relay control
64	SPRLF	O	H	Front SP relay control
65	FCS	I	H	Connect to Vcc
66	DAMPRSV	O	H	No use
67	DAMPINT	I	H	No use
68	~DAMPRST	O	L	No use
69	SELSTB	O	H	Audio input selector Strobe output
70	SELDAT	O	H	Audio input selector data output
71	SELCLK	O	CLK	Audio input selector clock output
72	~VOLRST	O	L	Volume IC reset control
73	~VOLMUTE	O	L	Volume IC mute control
74	Vcc	I	---	Power supply
75	~VOLCS	O	L	Volume IC chip select
76	Vss	I	---	GND
77	VOLSDO	O	H	Volume IC data output
78	VOLCLK	O	CLK	Volume IC clock output
79	~DSP3INT	I	L	3rd DSP BUSY detect input
80	~DSP3RST	O	L	3rd DSP reset
81	~DSP2INT	I	L	2nd DSP BUSY detect input
82	~DSP2RST	O	L	2nd DSP reset
83	~DSP1INT	I	L	1st DSP BUSY detect input
84	~DSP1RST	O	L	1st DSP reset
85	~DACRST	O	L	DAC reset
86	DIRINT	I	H	DIR Err detect input
87	~DIRRST	O	L	DIR reset
88	DIGSDI	I	H	DIR/DSP/DAC data input
89	DIGCLK	O	CLK	DIR/DSP/DAC/FLD clock output
90	DIGSDO	O	H	DIR/DSP/DAC/FLD data output
91	Vcc	I	---	Power supply
92	PROTECT	I	H	PROTECT detect input
93	Vss	I	---	GND
94	APOWER2	O	H	No use
95	APOWER1	O	H	No use
96	MEQMUTE	I	H	3rd DSP Audyssey mute detect input
97	VPOWER	O	H	Video power control output
98	MPOWER	O	H	Main Power trans control output
99	VOLH	I	A/D	Power Amp voltage switch control detect
100	THERMAL2	I	A/D	Thermal sensor input

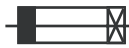
MICROPROCESSOR TERMINAL DESCRIPTIONS -3

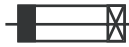
Q7001: M3087BFKBGP

Pin No.	Pin Name	I/O	Act.	Description
101	THERMAL1	I	A/D	Thermal sensor input
102	~REMIN	I	L	Remote control signal input
103	DSPINIC	I	H	1st DSP status change detect
104	SYSIN	I	H	RI input
105	~SYSOUT	O	L	RI output
106	MICMUTE	O	H	Setup Mic mute control
107	~MICDET	I	L	Setup Mic detect input
108	HPRL	O	H	Headphone relay control
109	HPDET	I	H	Headphone detect input
110	INIT3	I	A/D	Initial setup input 3
111	INIT2	I	A/D	Initial setup input 2
112	INIT1	I	A/D	Initial setup input 1
113	BAND	I	A/D	Initial setup input
114	SIOCSEA	O	H	DIR/DSP/DAC/FLD/etc chip select output
115	SIOCSEB	O	H	DIR/DSP/DAC/FLD/etc chip select output
116	SIOCSEC	O	H	DIR/DSP/DAC/FLD/etc chip select output
117	SIOCSEO1	O	H	DIR/DSP/DAC/FLD chip select output
118	SIOCSEO2	O	H	Selector etc chip select output
119	VOLB	I	H	Master volume data input
120	VOLA	I	H	Master volume data input
121	LEDSTBY2	O	H	STANDBY LED control output
122	LEDSTBY	O	H	STANDBY LED control output
123	~FLDRST	O	L	FL Driver IC reset control
124	RXMUTE	I	H	HDMI Receiver mute input
125	TXMUTE	O	H	HDMI Transmitter mute output
126	~HDMIRST	O	L	HDMI reset control
127	HDMISTB	I	H	HDMI Strobe input
128	HDMISDI	I	H	HDMI data input
129	HDMICLK	O	CLK	HDMI clock output
130	Vss	I	---	GND
131	HDMISDO	O	H	HDMI data output
132	Vcc	I	---	Power supply
133	KEY3	I	A/D	Selector Key voltage input
134	KEY2	I	A/D	Selector Key voltage input
135	KEY1	I	A/D	Selector Key voltage input
136	KEY0	I	A/D	Selector Key voltage input
137	~DSP1DEC	I	L	1st DSP decode status input
138	TUMUTE	O	H	Tuner mute output
139	TUNSDA/VSELSDA	I/O	H	Tuner PLL/Video Sel/I2C data input/output
140	AVss	I	---	GND
141	TUNSCL/VSELSCL	I/O	H	Tuner PLL/Video Sel/I2C clock output
142	Vref	I	---	Connect to Vcc
143	AVcc	I	---	Power supply
144	SRRxD	I	H	SIRIUS data input

SERVICE PROCEDURE-1

1. Replacing the fuses

 This symbol located near the fuse indicates that the fuse used is slow-blow type. For continued protection against fire hazard, replace with same type fuse. For fuse rating, refer to the marking adjacent to the symbol.

 Ce symbole indique que le fusible utilisé est à lent. Pour une protection permanente, n'utiliser que des fusibles de même type. Ce dernier est indiqué là où le présent symbole est apposé.

<Notes>

<DD> : DTR-7.8 USA and Canadian model

<MA> : DTR-7.8 Australian model

REF NO.	PART NAME	DESCRIPTION	PART NO.	REMARKS
F2501	FUSE	4A-UL/T-233	252325GR	!
F2502	FUSE	4A-UL/T-233	252325GR	!
F6601	FUSE	20A-UL-250V	252304GR	!
F6602	FUSE	20A-UL-250V	252304GR	!
F6603	FUSE	20A-UL-250V	252304GR	!
F6604	FUSE	20A-UL-250V	252304GR	!
F9000	FUSE	5A-UL/T-233	252326GR	!, <DD>
F9100	FUSE	12A-UL-ST6	252340GR	!, <DD>
F9100	FUSE	6.3A-SE-EAK	252079GR	!, <MA>
F9101	FUSE	4A-UL/T-233	252325GR	!
F9102	FUSE	4A-UL/T-233	252325GR	!
F9301	FUSE	4A-UL/T-233	252325GR	!

2. To initialize the unit

1. Press and hold down VCR/DVR button, then press STANDBY/ON button when the unit is powered on.
2. After "Clear" is displayed, the preset memory and each mode stored in the memory are initialized and will return to the factory settings, and turn to Standby mode.

3. Safety check out

(U.S.A. model only)

After correcting the original service problem, perform the following safety check before releasing the unit to the customer.

Leakage current Check

Measure the leakage current to a known earth ground (water pipe or conduct etc.) by connecting a leakage current tester between the earth ground and exposed metal parts of the unit (input/output ground terminals, screw heads or metal overlays etc.).

Plug the power supply cord directly into a 120Vac 60Hz wall socket and turn STANDBY/ON button on.

Any current measured must not exceed 0.5mA.

4. Memory Backup

This model uses a EE-PROM IC in order to retain radio presets and other settings. So, memory contents will be kept eternally with no care.

SERVICE PROCEDURE-2

5. Replacing Power Amplifier Parts

When a power amplifier of certain channel is broken and goes into Protect mode, the following parts in the channel must be replaced at the sametime, because these parts get damage in most cases.

Front L ch	Front R ch	Center ch	Surround L ch	Surround R ch	Surround Back L ch	Surround Back R ch
Q6010,Q6020 Q6030,Q6040 Q6050,Q6060 Q6080,Q6090 Q6100,Q6110	Q6011,Q6021 Q6031,Q6041 Q6051,Q6061 Q6081,Q6091 Q6101,Q6111	Q6012,Q6022 Q6032,Q6042 Q6052,Q6062 Q6082,Q6092 Q6102,Q6112	Q6013,Q6023 Q6033,Q6043 Q6053,Q6063 Q6083,Q6093 Q6103,Q6113	Q6014,Q6024 Q6034,Q6044 Q6054,Q6064 Q6084,Q6094 Q6104,Q6114	Q6015,Q6025 Q6035,Q6045 Q6055,Q6065 Q6085,Q6095 Q6105,Q6115	Q6016,Q6026 Q6036,Q6046 Q6056,Q6066 Q6086,Q6096 Q6106,Q6116
C6010,C6020	C6011,C6021	C6012,C6022	C6013,C6023	C6014,C6024	C6015,C6025	C6016,C6026
R6060,R6070 R6250,R6260 R6270,R6280 R6290,R6300 R6310,R6330 R6340,R6350 R6360,R6400 R6410	R6061,R6071 R6251,R6261 R6271,R6281 R6291,R6301 R6311,R6331 R6341,R6351 R6361,R6401 R6411	R6062,R6072 R6252,R6262 R6272,R6282 R6292,R6302 R6312,R6332 R6342,R6352 R6362,R6402 R6412	R6063,R6073 R6253,R6263 R6273,R6283 R6293,R6303 R6313,R6333 R6343,R6353 R6363,R6403 R6413	R6064,R6074 R6254,R6264 R6274,R6284 R6294,R6304 R6314,R6334 R6344,R6354 R6364,R6404 R6414	R6065,R6075 R6255,R6265 R6275,R6285 R6295,R6305 R6315,R6335 R6345,R6355 R6365,R6405 R6415	R6066,R6076 R6256,R6266 R6276,R6286 R6296,R6306 R6316,R6336 R6346,R6356 R6366,R6406 R6416

NACLA-9063, NACLA-9066 and NACLA-9068 are electrically and mechanically full compatible with each other, but idling readjustment is necessary.

NACLA-9064, NACLA-9065, NACLA-9067 and NACLA-9069 are also electrically and mechanically full compatible with each other, but idling readjustment is necessary.

These units include the following componets in each channel driver stage, which are extracted from components listed above.

NACLA-9063 (Front L ch)	NACLA-9066 (Surround L ch)	NACLA-9068 (Surround Back L ch)	NACLA-9064 (Front R ch)	NACLA-9065 (Center ch)	NACLA9067 (Surround R ch)	NACLA-9069 (Surround Back R ch)
Q6010,Q6020 Q6030,Q6040	Q6013,Q6023 Q6033,Q6043	Q6015,Q6025 Q6035,Q6045	Q6011,Q6021 Q6031,Q6041	Q6012,Q6022 Q6032,Q6042	Q6014,Q6024 Q6034,Q6044	Q6016,Q6026 Q6036,Q6046
C6010,C6020	C6013,C6023	C6015,C6025	C6011,C6021	C6012,C6022	C6014,C6024	C6016,C6026
R6060,R6070 R6250,R6260 R6270,R6280 R6290,R6300 R6310	R6063,R6073 R6253,R6263 R6273,R6283 R6293,R6303 R6313	R6065,R6075 R6255,R6265 R6275,R6285 R6295,R6305 R6315	R6061,R6071 R6251,R6261 R6271,R6281 R6291,R6301 R6311	R6062,R6072 R6252,R6262 R6272,R6282 R6292,R6302 R6312	R6064,R6074 R6254,R6264 R6274,R6284 R6294,R6304 R6314	R6066,R6076 R6256,R6266 R6276,R6286 R6296,R6306 R6316

SERVICE PROCEDURES-3

6. Replacing microprocessors and flash memories

These descriptions are about writing programs to a new IC which is replaced with broken one.

1. Main microprocessor

Target IC: Q7001

No need to write the program directly to a chip by a specific ROM writer. Mount the chip on pcb and the pcb on the unit.

Refer to **FIRMWARE UPDATE-2** for the way to write the program.

2. Video (HDMI) microprocessor

Target IC: Q8701

No need to write the program directly to a chip by a specific ROM writer. Mount the chip on pcb and the pcb on the unit.

Refer to **FIRMWARE UPDATE-3** for the way to write the program.

3. 1st DSP ROM

Target IC: Q3451

Must write the program directly to a chip by a specific ROM writer before mounting on pcb.

ROM writer example: AF9708 (Ando Electric) and compatibles.

4. 2nd DSP ROM

Target IC: Q3551

Must write the program directly to a chip by a specific ROM writer before mounting on pcb.

ROM writer example: AF9708 (Ando Electric) and compatibles.

5. 3rd DSP ROM

Target IC: Q3651

Must write the program directly to a chip by a specific ROM writer before mounting on pcb.

ROM writer example: AF9708 (Ando Electric) and compatibles.

6. Video processor (HUDSON)

Target IC: Q8011

No need to write the program directly to a chip by a specific ROM writer. Mount the chip on pcb and the pcb on the unit.

Refer to **FIRMWARE UPDATE-5** to **-10** for the way to write the program.

This procedure is through Gprobe socket P8011 on pcb: NAHDM-9265s.

7. Network (E-Control)

Target IC: Q1001, Q1002

No need to write the program directly to a chip. Mount the chip on pcb and the pcb on the unit.

Need the writer "PICKit 2 (MICROCHIP)" and PC application to write.

This procedure is through JTAG socket P1010 on pcb: NALAN-9079.

FIRMWARE UPDATE-1

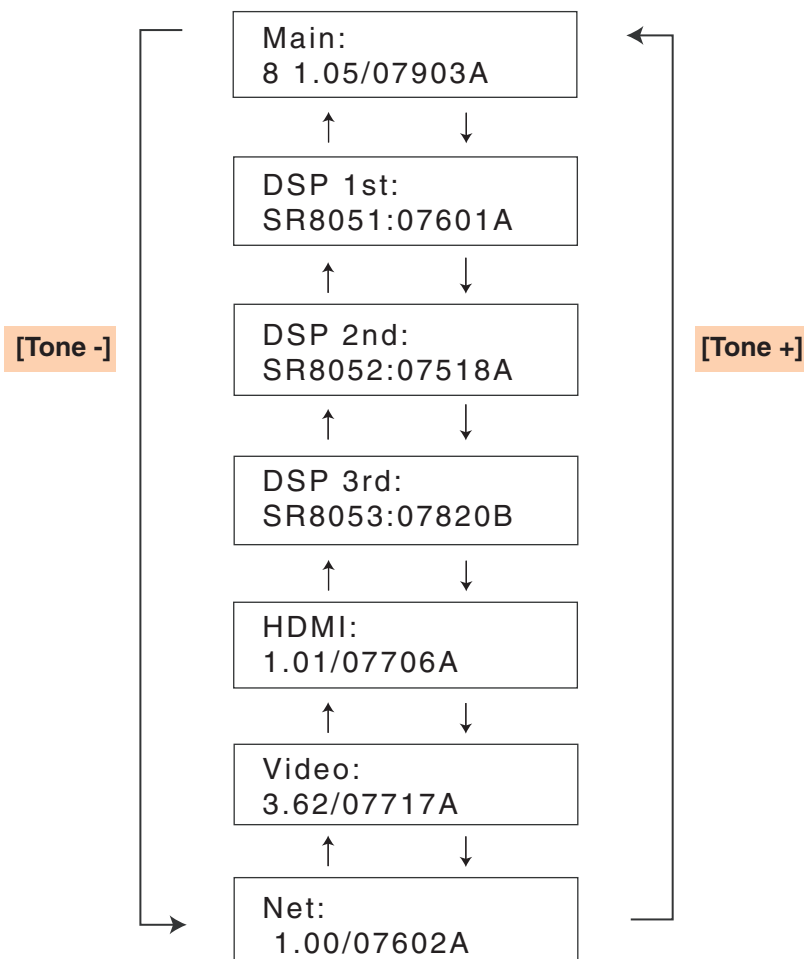
How to Check the Versions of Main, DSP(1st to 3rd), HDMI, Video and Network Firmware

1. Press and hold down **[DISPLAY]** button, then press **[STANDBY/ON]** button when the unit is powered on.
The main microprocessor version will be displayed on Front Display for about 3 seconds.

<e.g.>

Main: 8 1.05/07903A

2. Press **[Tone +]** button while the version is displayed. Then, "DSP 1st SR8051/07601A" will be displayed. Press **[Tone +]** button again while "DSPSR8051:07601A" is displayed. Then, "DSP 2nd: SR8052/07601A" will be displayed. In this way, as **[Tone +]** button is pressed while a version is displayed, the next information will be displayed. If **[Tone -]** button is pressed, the order will be reversed.



Note: These versions are the latest as of Sep. 19, 2007.

FIRMWARE UPDATE-2

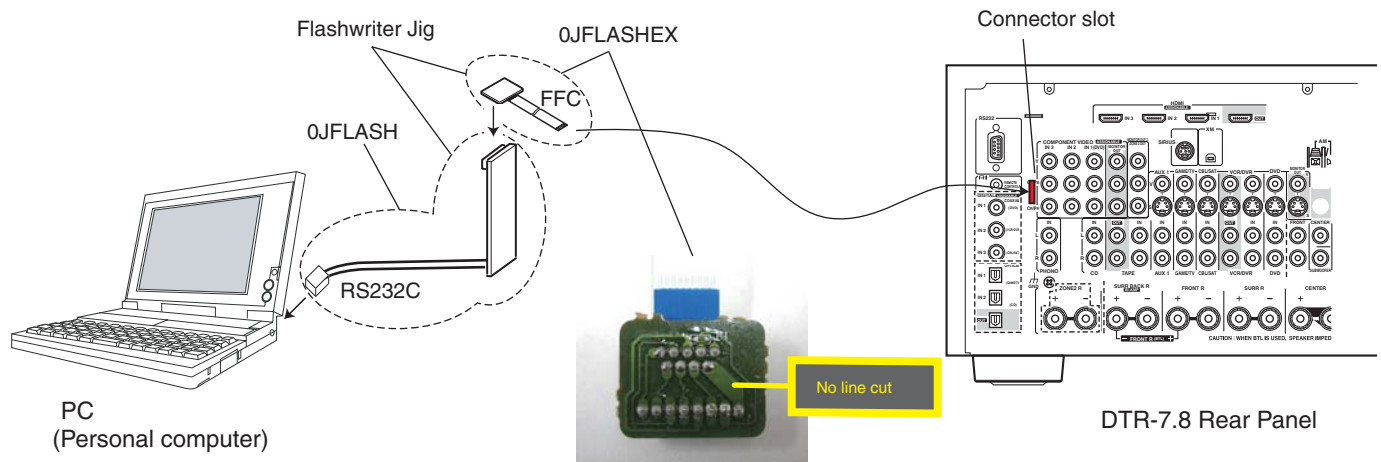
Preparation for Update (Main Microprocessor)

A: Hardware and Software

1. Personal computer(PC) with Windows XP or 2000
2. Flashwriter jig: 0JFLASH and 0JFLASHEX for Main
3. Writing soft: "flasta_exe.zip" and Manual: "Flash Writer M16 Manual.pdf"
Download and unzip "flasta_exe.zip" to extract "FlashSta.exe" etc. in advance.
4. Program & ID: Download the latest ".mot" and ".id" files for DTR-7.8 and store in the same folder as "FlashSta.exe."

B: Connection and Setup

1. While the target unit is off, connect 0JFLASH and 0JFLASHEX to RS232C port of the PC.
2. Connect the FFC of the jig to the connector slot on the rear panel of DTR-7.8.
3. Power on the unit.



Main Microprocessor Update Procedure

1. Start "FlashSta.exe" and update the unit referring to "Flash Writer M16 Manual.pdf." MCU Type is M16C/80 M32. It takes about 5 minutes.
2. After Program and Read Check are finished, click "Exit" button to end "FlashSta.exe".
3. Turn off the main power switch or pull the power cord off the wall socket.
Pay attention that pushing **STANDBY/ON** button to power off is not perfect.
4. Remove the jig from the unit and power on the unit again. Confirm the new version number.

FIRMWARE UPDATE-3

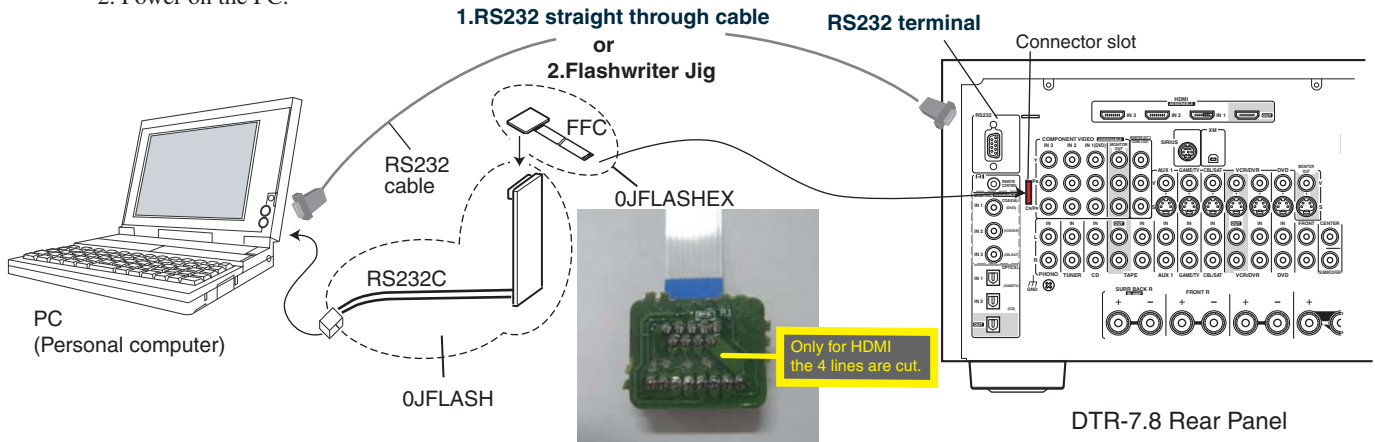
Preparation for Update (HDMI)

A: Hardware and Software

1. Personal computer(PC) with Windows XP or 2000
2. Cable: RS232 straight cable or Flashwriter jig: 0JFLASH and 0JFLASHEX for HDMI
3. Writing soft: "HDMIUpdater_SR805_07706A.zip" for HDMI microprocessor (File name depends on the version.)
Unzip "HDMIUpdater_SR805_07706A.zip" in advance.

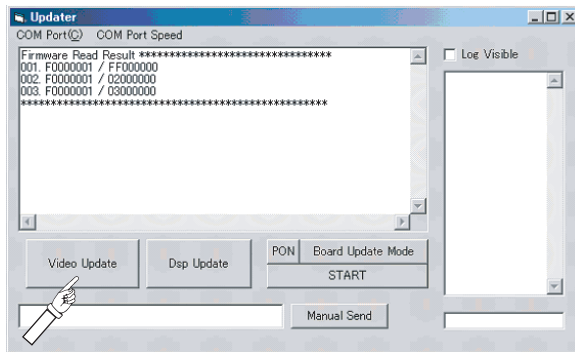
B: Connection and Setup

1. While the target unit is off, connect the unit and PC with RS232 straight through cable.
If RS232 cable is not available, connect 0JFLASH and 0JFLASHEX to RS232 port of the PC, and then connect the FFC of the jig to the connector slot on the rear panel of DTR-7.8.
2. Power on the PC.

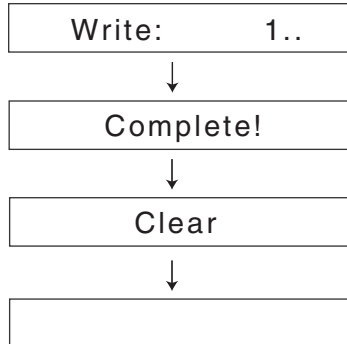


HDMI Update Procedure

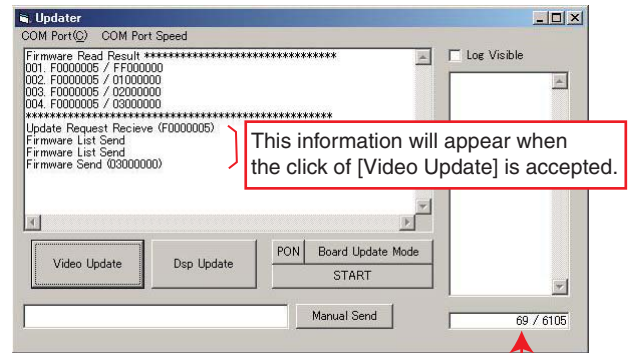
1. Double click "Update.exe" in the unzipped folder "HDMIUpdater_SR805_07706A" (Folder name depends on the version.)
The following window will appear.



2. Click "Video Update" button. The update takes about 5 minutes.
The message on Front Display will change as follows.



The unit is put into the Standby mode.



The number is going up as writing is proceeding.

3. After the update ends, turn off the unit's main power switch or pull the power cord off the wall socket.
4. Remove the jig from the unit and power on the unit again. Confirm the new version number.

FIRMWARE UPDATE-4

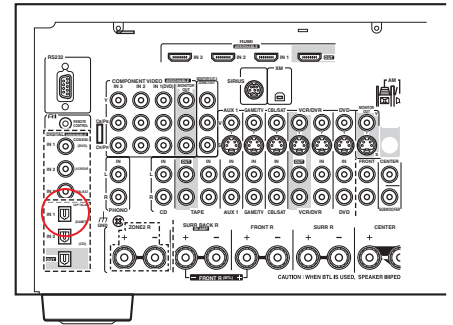
Preparation for Update (DSP, all in one)

A: Hardware and Software

1. Blank CD-R, PC, CD-R writing software
2. Writing soft: "CD_SR805123_07601A_07518A_07820B.wav"
(File name depends on the version.)
Store it in a blank CD-R as a music CD in advance.
3. CD player with Optical output terminal
Note: Some CD players and a lot of DVD players process audio signal before output. Such players cannot be used for this update.
4. Optical cable

B: First Procedure

1. Connect a CD Player with the target unit via Optical Input 1.
2. Power on the unit and wait for more than 10 seconds.



DTR-7.8 Rear Panel

DSP Update Procedure

1. Press and hold down [DISPLAY] button and then press [STANDBY/ON] button to show Main FW version when the unit is powered on.

<e.g.>

Main:
8 1.05/07903A

2. Press [Tone +] button while the Main version is displayed. Then, 1st DSP FW version will be displayed.

<e.g.>

DSP 1st:
SR8051:07601A

3. Press [Return] button while the target DSP version is displayed. Then, the following message will appear.

S/PDIF Update..

4. Play the DSP FW CD-R with the CD player. After playback starts, the messages will change as below.

Estimated Time in CD Player

0:15

Writing...
1st DSP

0:30

S/PDIF Update..

0:42

Writing...
2nd DSP

0:52

S/PDIF Update..

1:04

Writing...
3rd DSP

If playback is finished without the above message, please try again.

Note: Some DVD players are not suitable for this update. If writing results in failure, use another model of player.
DURING WRITING, DO NOT TURN OFF THE POWER and DO NOT DISCONNECT OPTICAL CABLE.

If writing is stopped in the middle, Flash IC may need replacing.

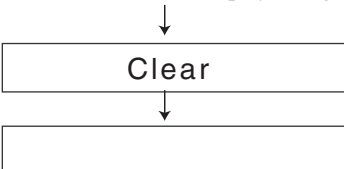
After writing of 3rd DSP ends, the message in Step 3 will appear again.

Make sure that no more "Writing..." will appear.

S/PDIF Update..

Check Points:

1. "Writing... 1st DSP" was shown.
 2. CD player has been playing for more than 1mins 4 secs and finishes playback.
5. Press [Standby/On] button and see Front Display change as below.



The unit is put into the Standby mode.

6. Turn on the unit and confirm the new version number.

FIRMWARE UPDATE-5

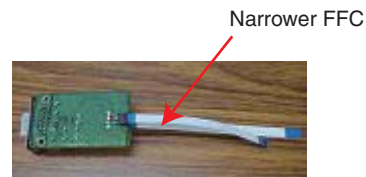
Preparation for Update (Video)

A: Hardware

1. PC with RS232 terminal
2. RS232 straight through cable
3. 0JHUDSON (Adaptor Jig)



OR



B: Software

GProbe 5[1].4.0.3.zip

Unzip it and install the software by clicking "GProbe5.4.0.3.exe" in advance referring to FIRMWARE UPDATE-9-10.

C: First Procedure

1. Create a folder in C drive and name it "Batch_File."

C:\Batch_File

2. Store 3 provided files in the folder.

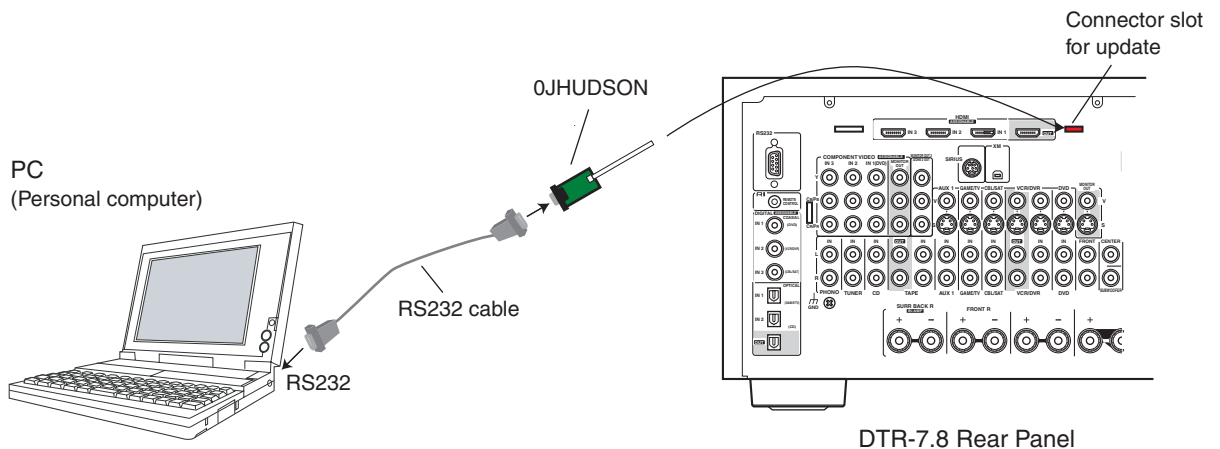
<e.g.>

C:\Batch_File		
	名前	サイズ
	ssst25vf080b_istemp_spi.hex	15 KB
	VD362_07717A_OSD07717A.bat	1 KB
	VD362_07717A_OSD07717A.hex	2,012 KB

ssst25vf080b_istemp_spi.hex : for communication
 VD***_*****_OSD*****.bat : Batch file
 VD***_*****_OSD*****.hex : Program file

D: Connection and Setup

1. While the target unit is off, connect 0JHUDSON & RS232 cable to RS232 port of the PC.
2. Connect the FFC of the jig to the connector slot on the rear panel of DTR-7.8.
3. Power on the unit.



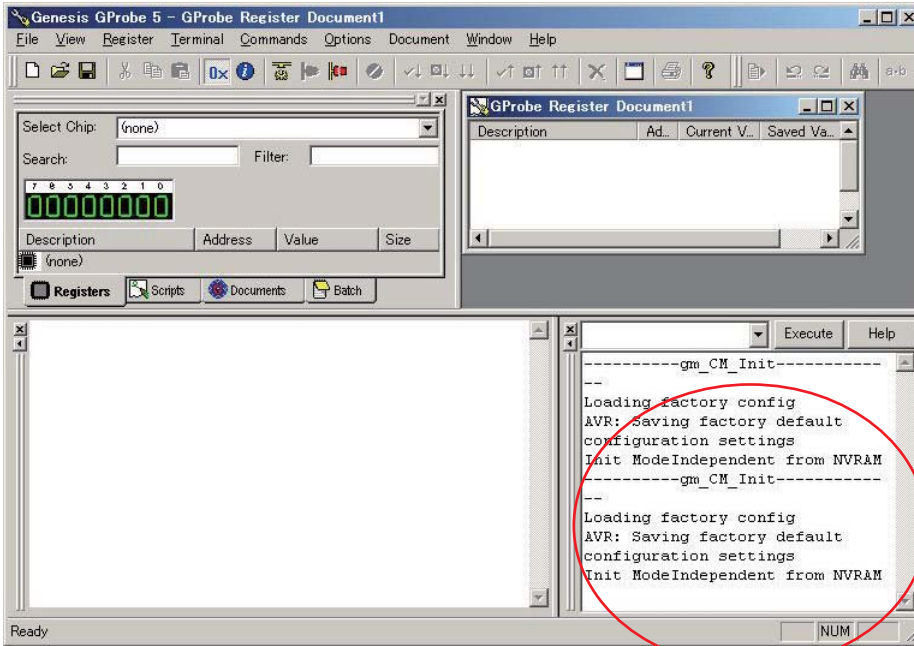
FIRMWARE UPDATE-6

Video Update Procedure

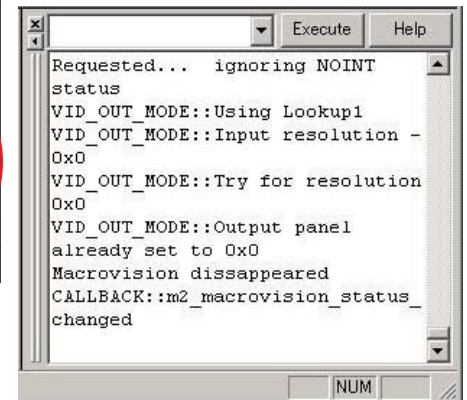
1. Start GProbe by clicking the icon.



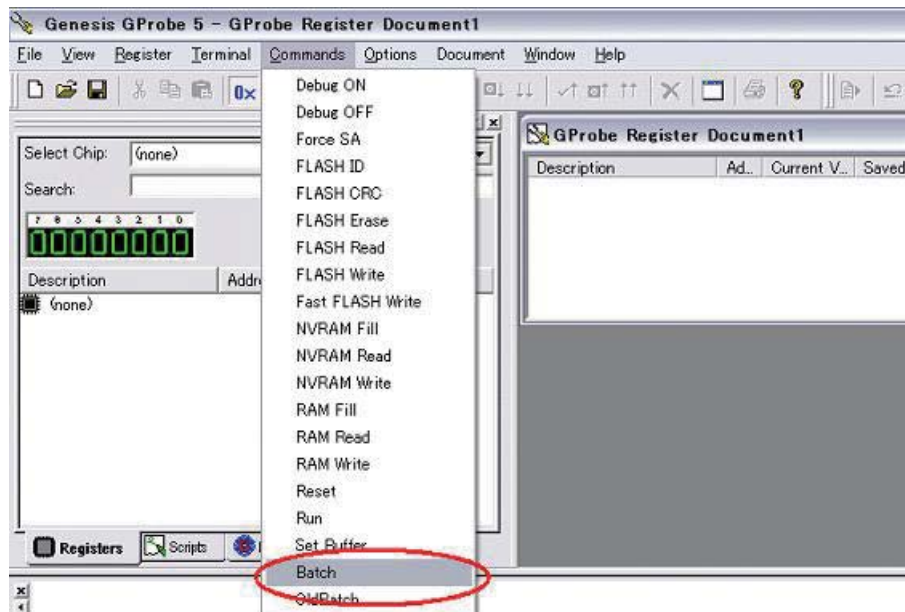
2. Turn on the unit and make sure that some information appears in the bottom right corner of the window. If nothing appears in this area, the PC does not communicate with the unit.



Wait until reading stops.



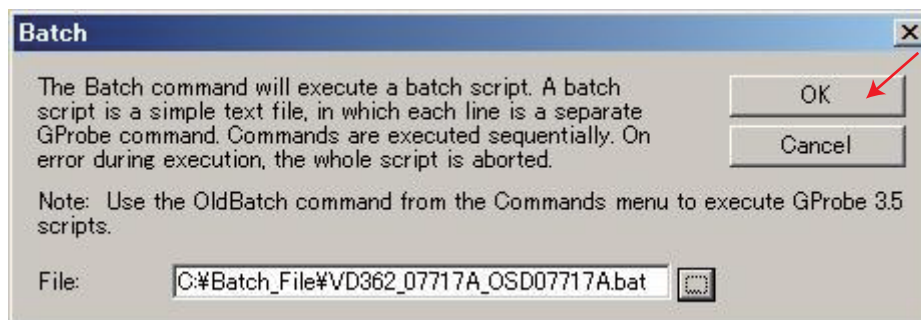
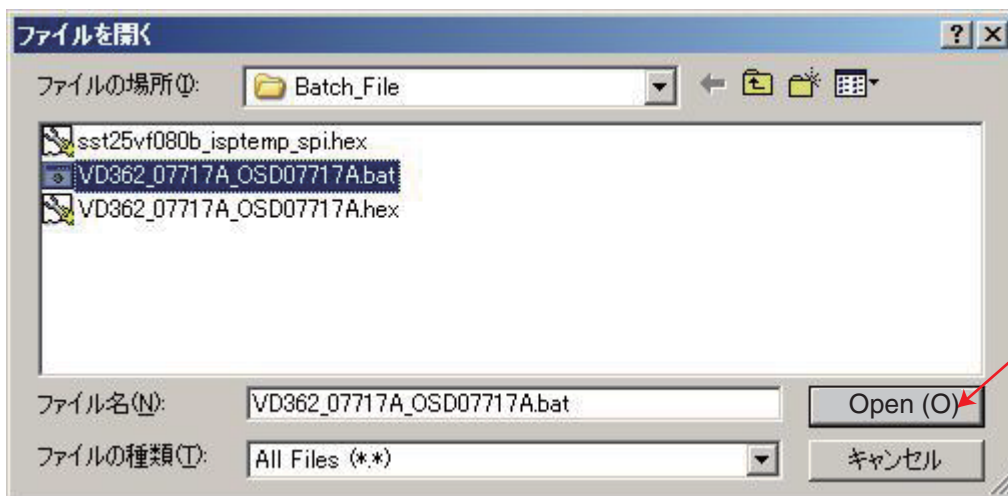
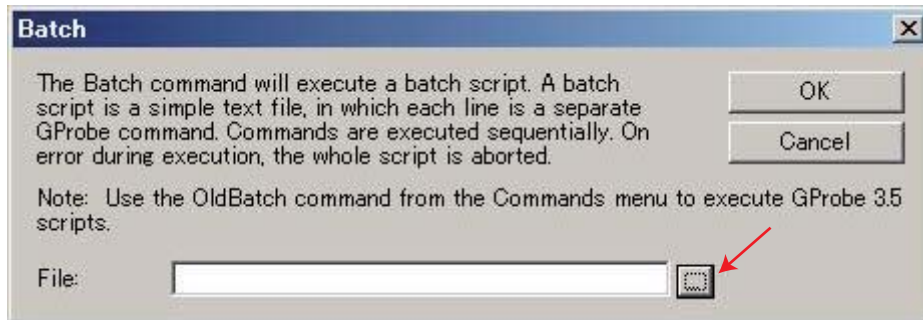
3. Click "Commands" in the menu bar and select "Batch."



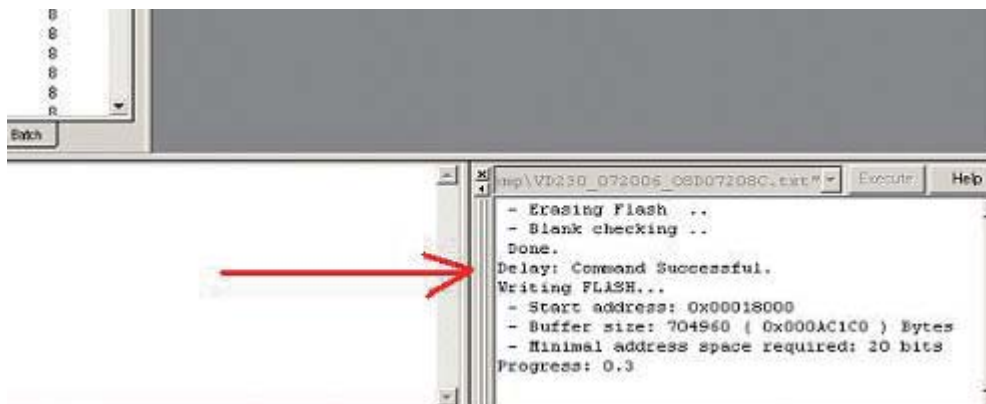
FIRMWARE UPDATE-7

Video Update Procedure(Continued)

4. Start Batch file by selecting the batch file stored in First Procedure.



5. Make sure that "Command Successful. Writing FLASH..." appears in the bottom right corner of the window.

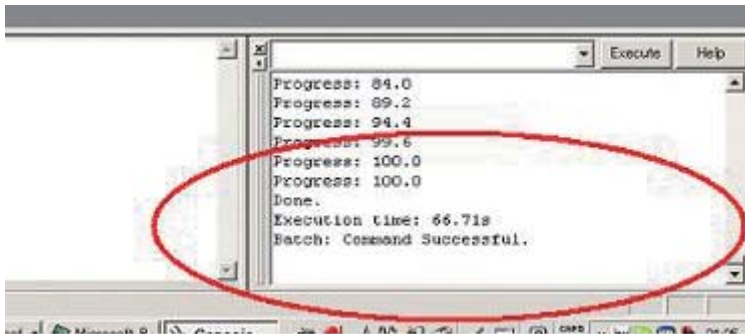


Note:
Front Display on the unit
will show no information
about writing but continue
to display what was shown
before.

FIRMWARE UPDATE-8

Video Update Procedure(Continued)

6. Make sure that “Progress: 100.0 Command Successful” is shown as below.



A screenshot of a Windows command prompt window. The window title is "Execute Help". The text inside the window shows the progress of a firmware update: "Progress: 84.0", "Progress: 89.2", "Progress: 94.4", "Progress: 99.6", "Progress: 100.0", "Progress: 100.0", "Done.", "Execution time: 66.71s", and "Batch: Command Successful.". A red oval is drawn around the text from "Progress: 100.0" to "Batch: Command Successful.".

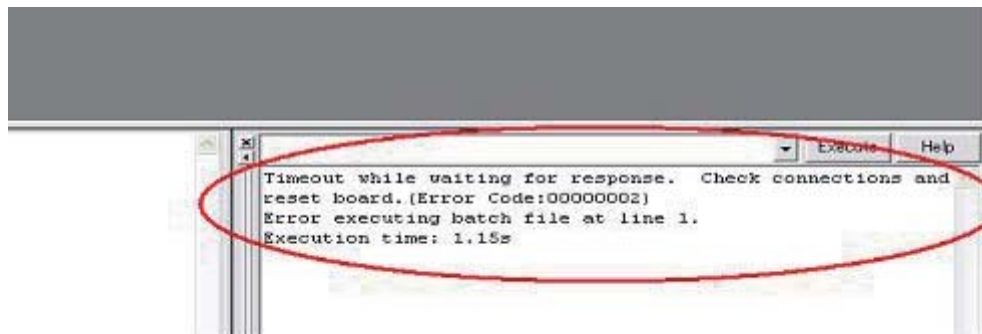
```
Progress: 84.0
Progress: 89.2
Progress: 94.4
Progress: 99.6
Progress: 100.0
Progress: 100.0
Done.
Execution time: 66.71s
Batch: Command Successful.
```

7. Turn off and on the unit.

8. Confirm the new version number.

NOTE:

If “Command Successful Writing FLASH...” does not appear, turn off and on the unit, and try again from Step 1.



A screenshot of a Windows command prompt window. The window title is "Execute Help". The text inside the window shows an error message: "Timeout while waiting for response. Check connections and reset board.(Error Code:00000002)", "Error executing batch file at line 1.", and "Execution time: 1.15s". A red oval is drawn around the error text.

```
Timeout while waiting for response. Check connections and
reset board.(Error Code:00000002)
Error executing batch file at line 1.
Execution time: 1.15s
```

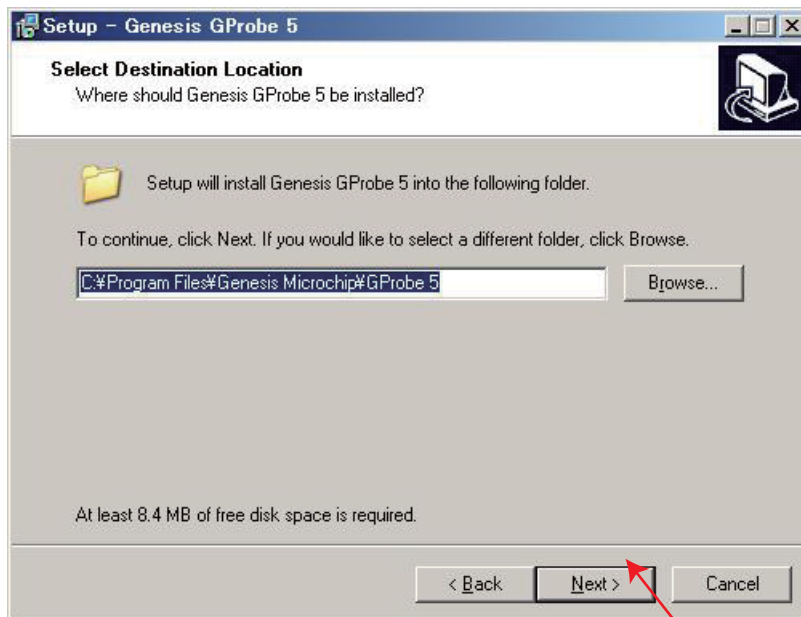
FIRMWARE UPDATE-9

How to install GProbe

This procedure is necessary to start Video Update (See FIRMWARE UPDATE -5)

1. Unzip “GProbe 5[1].4.0.3.zip” and double-click the extracted file “GProbe5.4.0.3.exe.”
2. Follow the instructions on the window as below.

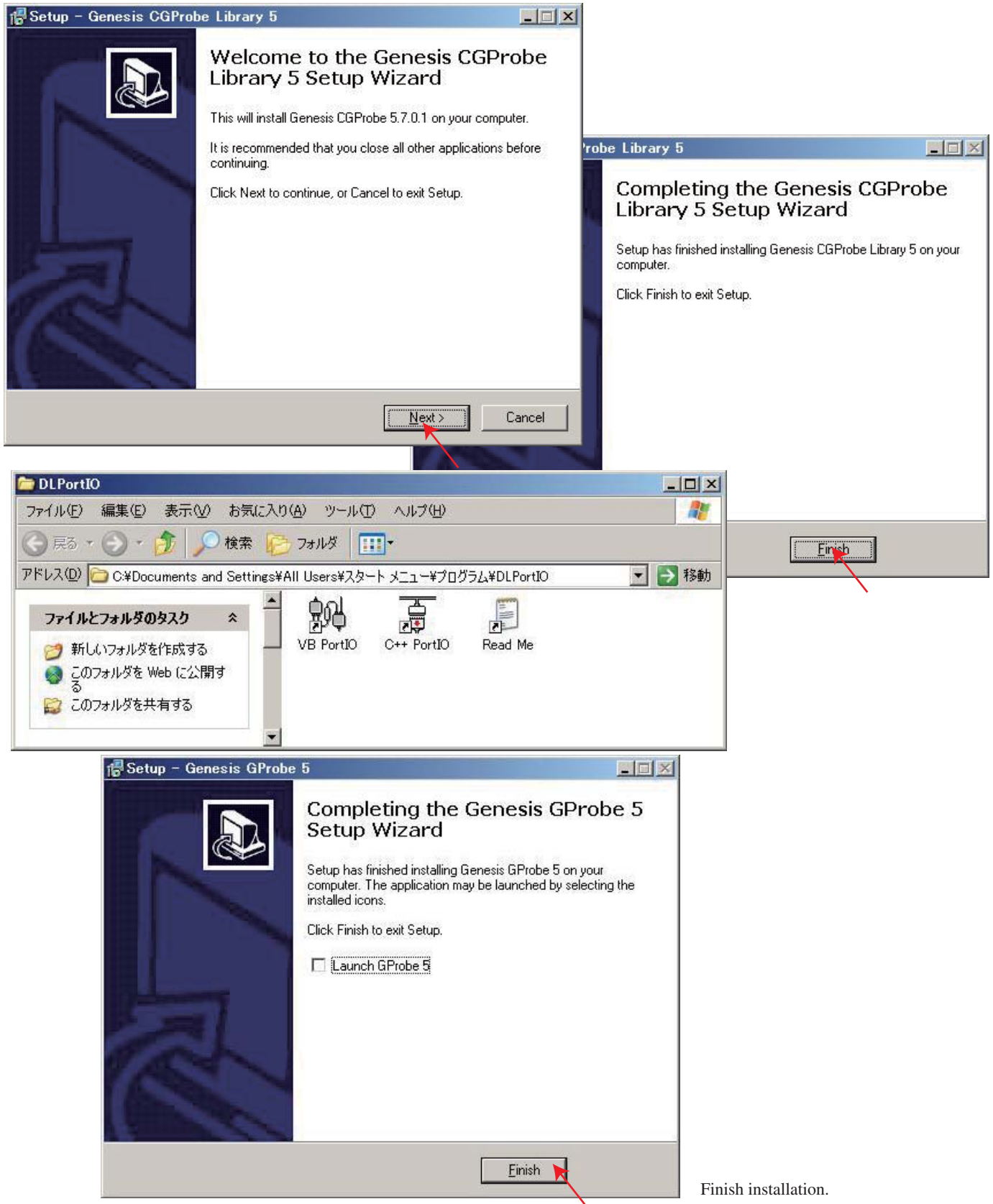
Note: Not all the windows are shown in this procedure.



FIRMWARE UPDATE-10

How to install GProbe(Continued)

3. Another Setup Wizard starts.



Finish installation.

OPERATION CHECK-1

SPEAKER PROTECT-1 (DC VOLTAGE DETECTION)

[When]

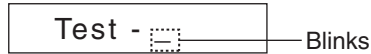
1. Exchange power transistors (Q6050 - 6056, Q6060 - 6066, Q6080 - 6086, Q6090 - 6096).
2. Exchange amplifier PC board ass'y (NAAMP-9061, 9062, NACLA-9063 - 9069).

[Procedure]

<Note>

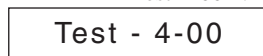
No load. No input.

1. Press and hold down CD button, then press STANDBY/ON button while the unit is powered on.
" Test - _ " is displayed only for 5 seconds.

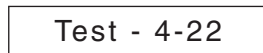


2. Press GAME/TV button, while the characters of " Test - _ " are displayed.

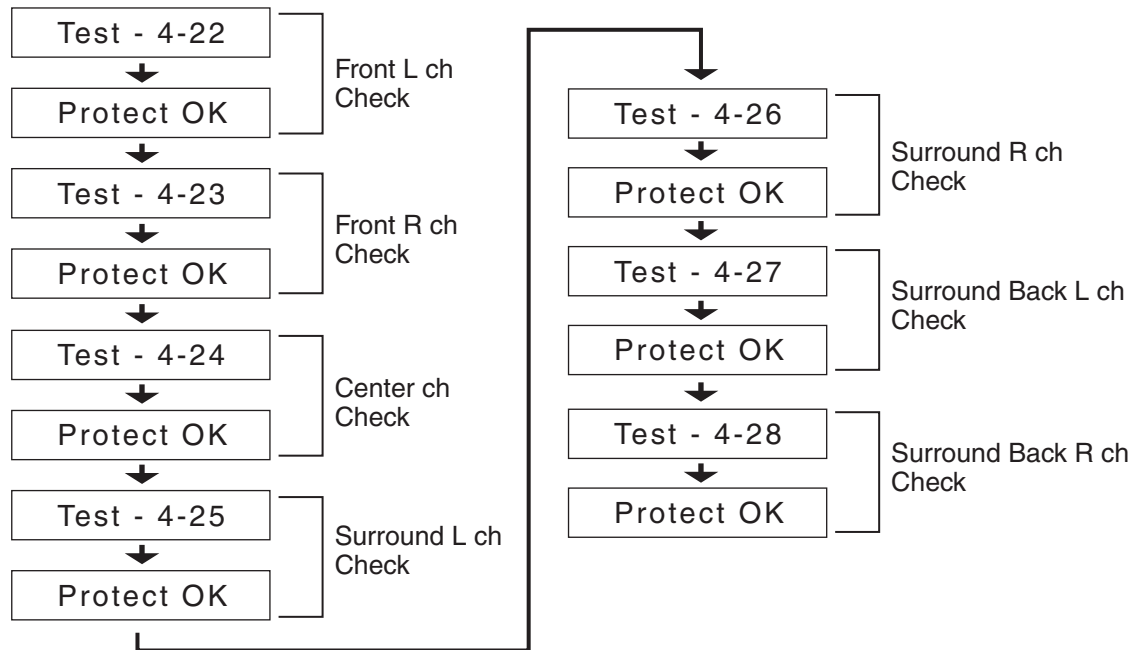
The unit will be in the state of " Test-4-00 ".



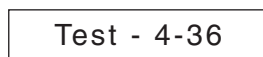
3. Repeatedly press TONE + button until the characters of " Test-4-21 " are displayed.



Check whether the operation starts and continues automatically as follows.



If all channels are OK, the characters of " Test - 4 - 36 " are displayed.



4. Press STANDBY/ON button.



OPERATION CHECK-2

SPEAKER PROTECT-2 (CURRENT DETECTION)

[When]

1. Exchange power transistors (Q6050 - 6056, Q6060 - 6066, Q6080 - 6086, Q6090 - 6096).
2. Exchange amplifier PC board ass'y (NAAMP-9061, 9062, NACLA-9063 - 9069).

[Procedure]


<Note>

No input.

Do not check two or more channels at the same time.

Do not connect a dummy load to speaker terminal longer than 2 seconds.

1. Press and hold down CD button, then press STANDBY/ON button while the unit is powered on.
"Test - _" is displayed only for 5 seconds.

Test -  Blinks

2. Press GAME/TV button, while "Test - _" is displayed.
The unit will be in the state of "Test-4-00".

Test - 4-00

3. Repeatedly press TONE + button until "Test-4-36" is displayed.

Test - 4-36

4. Connect the dummy load of 3 ohms to the Front L ch speaker terminal.
At this time, confirm that the speaker relay is not turned off.

Test - 4-36

5. Connect the dummy load of 1 ohm to the Front L ch speaker terminal.
At this time, confirm that the speaker relay is turned off and "Protect" is displayed.

Protect

Disconnect the dummy load immediately after checking the display of "Protect".

Test - 4-36

6. Check other channels according to the same procedure as 4 and 5.
Front R, Center, Surround L, Surround R, Surround Back L, Surround R

7. Press STANDBY/ON button.

Clear  Turn off

OPERATION CHECK-3

CONTROL OF POWER SUPPLY (OUTPUT SENSOR AND THERMAL SENSOR)

[When]

1. Exchange power transistors (Q6050 - 6056, Q6060 - 6066, Q6080 - 6086, Q6090 - 6096).
2. Exchange power amplifier PC board ass'y (NAAMP-9061, 9062, NACLA-9063 - 9069).
3. Exchange thermal sensor PC board ass'y (NAETC-9042, 9043).

[Procedure]

<Note>

No output. No input.

Output sensor

1. Press and hold down CD button, then press STANDBY/ON button while the unit is powered on.
"Test - _" is displayed only for 5 seconds.

Test - _ Blinks

2. Press GAME/TV button while "Test - _" is displayed.
The unit will be in the state of "Test-4-00".

Test - 4-00

3. Repeatedly press TONE + button until "Test-4-37" is displayed.

Test - 4-37

4. At this time, confirm that the red characters of "FM STEREO" is displayed.

Test - 4-37 FM STEREO

5. Press STANDBY/ON button.

Clear → Turn off

Thermal sensor

1. Press and hold down DISPLAY button, then press STANDBY button when the unit is powered on.
The main microprocessor version will be displayed only for 3 seconds.

<Ex.> Main:
8 1. 05/07903A

2. Press TONE button while the version is displayed. The temperatures of two thermal sensors(Q6380, Q6381) will be displayed.

<Ex.> T: 30/30 FAN: -
Unit is °C

3. Confirm that the displayed temperature is within +/-20 degree C from the ambient temperatures.

4. Press STANDBY/ON button.

Clear → Turn off

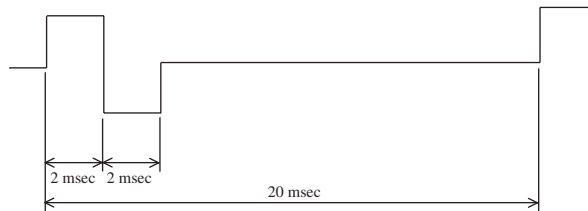
OPERATION CHECK-4

Condition of Protect Mode

The unit will go into Protect mode under the following conditions.
(T: Thermal sensor temperature)

1. Thermal condition
Immediately $T \leq -30\text{ }^{\circ}\text{C}$
or
Immediately $T > 110\text{ }^{\circ}\text{C}$
2. DC voltage condition
The sum of dc voltage of 7 channel speaker outputs is more than 7 V.
3. Current condition
Protect will be On if speaker output ac current $\geq 35\text{ A}$
Protect will not be On if speaker output ac current $\geq 11.7\text{ A}$
This condition is equivalent to OPERATION CHECK-2. Refer to the page 2.

Test wave form:



Condition of Power Supply Voltage Control

The power supply voltage(VH, VM or VL) for power amplifiers is changed by the relays: RL6601, 6602, 6611, 6612 on NAPS-9040.
 $VH > VM > VL$
 T : Thermal sensor temperature
 VOLH : Pin #99 input voltage of Main microprocessor: Q7001 (Refer to SD-4:D5 and SD-8:D2 of SCHEMATIC DIAGRAMS)

Conditions:

Speaker imp. = 6 or 8 ohm

VH: $0V < VOLH < 0.4V$
and
 $T < 85\text{ }^{\circ}\text{C}$
VM: $0.4V < VOLH < 2.0V$
and
 $T < 85\text{ }^{\circ}\text{C}$
VL: $2.0V < VOLH < 3.3V(V_{cc})$
and
 $T < 85\text{ }^{\circ}\text{C}$
VL: $T > 85\text{ }^{\circ}\text{C}$

Speaker imp. = 4 ohm or BTL

VM: $0V < VOLH < 0.4V$
and
 $T < 85\text{ }^{\circ}\text{C}$
VL: $0.4V < VOLH < 2.0V$
and
 $T < 85\text{ }^{\circ}\text{C}$
VL: $2.0V < VOLH < 3.3V(V_{cc})$
and
 $T < 85\text{ }^{\circ}\text{C}$
VL: $T > 85\text{ }^{\circ}\text{C}$

Condition of Cooling Fan Operation

The cooling fan will stop or rotate under the following conditions.

VOLH	Thermal Sensor Temperature(T)			
	60°C	70°C	80°C	
0V	STOP	STOP	LOW SPEED	MID SPEED
0.4V	STOP	MID SPEED	HIGH SPEED	HIGH SPEED
2.0V	MID SPEED	HIGH SPEED	HIGH SPEED	HIGH SPEED

Note:

“VOLH=0.4V” is equivalent to 0.8W(8 ohm, 7 ch)


“VOLH=2.0V” is equivalent to Max power(8 ohm, 3 ch)

DEBUG MODE-1

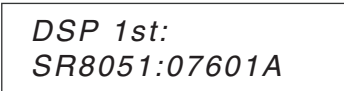
The operations of DSP and DIR etc are able to be checked by the information displayed on FL in this DEBUG MODE. This information may help to pursue the cause of trouble.

To set in DSP debug mode

1. Press and hold down DISPLAY button, then press STANDBY/ON button while the unit is powered on.
The version number of microprocessor will be displayed only for 3 seconds.

<Ex.> 

2. Press TONE+ button within 3 seconds above, the version number of 1st DSP will be displayed.

<Ex.> 

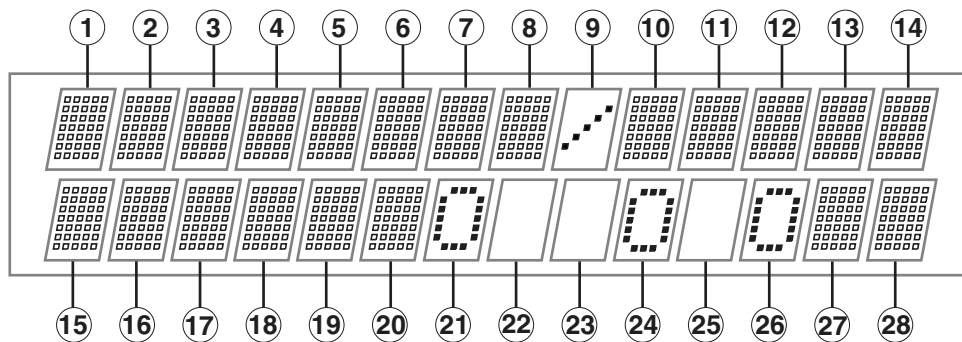
3. Press DISPLAY button while the 1st DSP version is displayed. The status of DSP and DIR will be displayed.

<Ex.> 

To exit

Press STANDBY/ON button.

Content of display



① DIR Input Lock

E = UNLOCK
= LOCK

② DIR Input RX

0 = None
1 = COAX1
2 = COAX2
3 = COAX3
4 = OPT 1
5 = OPT 2
6 = OPT 3(Not Used)
7 = OPT(FRONT)
8 = HDMI1
9 = HDMI2
A = HDMI3
B = HDMI4
C = NET(Not Used)

③ DIR/ADC

D = Digital(SPDIF)
A = Analog
M = Analog Multich
p = PCM Fixed
d = DTS Fixed
l = Digital(I2S_1)
S = Digital(I2S_4)
d = Digital(DSD)

⑦ DIR Detect Type

0 = Analog
1 = PCM
2 = Not PCM
3 = Data
4 = DTS CD (Not used)
5 = Multich
6 = Not Decided

④ - ⑥ Sampling Frequency and Emphasis

32K = 32 kHz without Emphasis
44K = 44.1 kHz without Emphasis
48K = 48kHz without Emphasis
64K = 64 kHz
88K = 88.2 kHz
96K = 96 kHz
176 = 176.4 kHz
192 = 192 kHz
32e = 32 kHz with Emphasis
44e = 44.1 kHz with Emphasis
48e = 48 kHz with Emphasis

DEBUG MODE-2

Content of display(Continued)

⑧ CODEC CLOCK MODE

N = Normal
 U = Up Sampling
 H = High Sampling (Double Rate)
 D = Down Sampling
 Q = Quad Rate

⑨ Not Used(Slash)

⑩ DSP Port

bit0 = NIC —(Normal state)
 bit1 = DEC
 bit2 = BUSY
 bit3 = Exec Wait } (Abnormal state)

⑪-⑫ DSP Sequence

26 = Not Free
 2F = Mute Control
 FF = Free

⑬ DSP Detect Format

P = PCM (Analog)
 D = Dolby Digital
 d = DTS
 A = AAC
 S = DSD
 p = Dolby Digital+
 T = TrueHD
 H = DTS-HD High Resolution
 M = DTS-HD Master Audio
 ? = UNKNOWN

⑭ DSP Decode

o = Decode OK
 x = Decode NG

⑮-⑯ 1st DSP Sequence

04-0D = Boot
 10-17 = Update Mode
 20-33 = DSP Setting
 FF = Free

⑰-⑱ 2nd DSP Sequence

04-0D = Boot
 10-17 = Update Mode
 20-33 = DSP Setting
 FF = Free

⑲-⑳ 3rd DSP Sequence

04-0D = Boot
 10-17 = Update Mode
 20-33 = DSP Setting
 E0-E2 = Auto Speaker Setup
 FF = Free

㉑-㉒ Not Used

⑲-⑳ MPU MUTE Output Cause

bit0 = Selector IC
 bit1 = Effector
 bit2 = DSP
 bit3 = DIR
 bit4 = HDMI
 bit5 = XM
 bit6 = Auto Speaker Setup
 bit7 = Speaker Config

Trouble Shooting by DEBUG MODE

This debug mode will help in digital audio no sound trouble.
 Check information on FL display and the related devices or circuits.

Note:
 MPU is short for Micro Processor: Q7001.
 1st DSP: Q3401, 2nd DSP: Q3501, 3rd DSP: Q3601
 DIR: Q3041
 DAC: Q3701, Q3721, Q3741, Q3761, Q3781
 Flash ROM: Q3451, Q3551, Q3651
 SDRAM: Q3461, Q3471, Q3561, Q3661
 Audio Selector: Q4029

Digit no on FL	Symptom on display	Cause	Check
①	"E" is displayed	No input signal to DIR.	Related devices from digital input to DIR.
④ - ⑥	Displayed freq. is different from input	No input signal to DIR.	Related devices from digital input to DIR.
⑦	Displayed format is different from input	No input signal to DIR.	Related devices from digital input to DIR.
⑬	Displayed format is different from input	Input signal to DSP is no good.	Related devices from DIR to DSP.
⑭	"x" is displayed	Interface between DSP and MPU is no good.	Related devices from MPU to DSP.

DEBUG MODE-3

Trouble Shooting by Debug Mode (Continued)

(Continued)

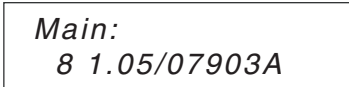
Digit no on FL	Symptom on display	Cause	Check
①9 - ②0	This identifies IC which outputs error	Some IC outputs error to MPU.	Audio Selector, DSP, DIR & related devices.
⑩	Continue to display "1"	Interface between DSP and MPU is no good.	Related devices from MPU to DSP.
	Continue to display "2"	Connection from DIR to DSP is no good.	Related devices from DIR to DSP.
	Continue to display "3" to "7"	Interface between DSP and MPU is no good.	Related devices from MPU to DSP.
	Continue to display "8" to "F"	DSP Sequence is no good.	Check ⑮ - ⑳ items.
⑮ - ⑳	Continue to display "03"	Communication between DSP and MPU is no good.	Check connection between DSP and MPU. Power supply pin, reset port and clock input of DSP. Flash ROM program may be no good. DSP or MPU is broken.
	Continue to display "05"	Writing from MPU to DSP is no good.	Flash ROM program is no good, upgrade. DSPSDO pin of MPU. Flash ROM or SDRAM is no good, replace. DSP or MPU is broken, replace.
	Continue to display "08"	DSP program is no good.	Flash ROM program is no good, upgrade. Flash ROM or SDRAM is broken, replace. Check connection between DSP and Flash ROM.
	Continue to display "09" to "0C"	DSP program is no good.	Flash ROM program is no good, upgrade. Flash ROM or SDRAM is broken, replace. Check connection between DSP and Flash ROM.
	Continue to display "17"	Powered off during DSP program update.	Press STANDBY/ON button while pushing. VCR/DVR button when the unit is powered on.
	Display "21", then return and signal format indicator is flashing	DSP program is no good.	Flash ROM program is no good, upgrade. Flash ROM or SDRAM is broken, replace. Check connection between DSP and Flash ROM. Clock freq. to DSP.
	Continue to display "22" to "24"	DSP program is no good or Audio clock to DSP is no good.	Flash ROM program is no good, upgrade. Flash ROM or SDRAM is broken, replace. Check connection between DSP and Flash ROM. Clock freq. to DSP or Audio clock to DSP.
	Continue to display "30" to "33"	DSP program is no good or Audio clock to DSP is no good.	Flash ROM program is no good, upgrade. Flash ROM or SDRAM is broken, replace. Check connection between DSP and Flash ROM.
	Continue to display "26" to "2F"	DSP setting is failed.	Flash ROM program is no good, upgrade. Flash ROM or SDRAM is broken, replace. Check connection between DSP and Flash ROM.

DEBUG MODE-4

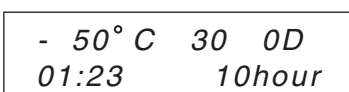
Trouble Shooting by displaying Service Information

This service information display system is helpful in analysing the status when the unit goes into Protect mode and is powered off. Pay attention that the status will change if a button is pushed.

1. Press and hold down **DISPLAY** button, then press **STANDBY/ON** button while the unit is powered ON.
The version number of microprocessor is displayed only for 3 seconds.

<Ex.> 

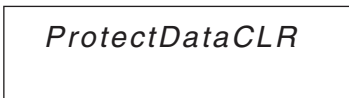
2. Press **SETUP** button within 3 seconds above, the following informations are displayed.

<Ex.>  Information displayed

Power off Cause : P : Protect
 : - : Other
Temperature : xxx °F or xxx °C
Volume Level : xx
Listening Mode : xx (Refer to the code list below)

Time after Power on : xx:xx
Time after Initialize : xxhour

4. Press **RETURN** button. The information will be cleared.

<Ex.> 

Listening Mode Code List

Listening Mode	Code	Listening Mode	Code	Listening Mode	Code	Listening Mode	Code
Pure Audio	01	PLII Music	21	Dolby Digital	30	+Neo:6	37
Direct	02	PLII Game	22	DTS	30	DTS Matrix	31
Stereo	03	PLIIX Movie	23	DTS96/24	3B	DTS Discrete	31
Mono	04	PLIIX Music	24	AAC	30	THX Cinema	50
Mono Movie	07	PLIIX Game	25	MultiCh	30	THX Surround EX	58
Orchestra	09	Neo:6 Cinema	26	Dolby Digital Plus	30	THX Ultra2 Cinema	5C
Unplugged	0A	Neo:6 Music	27	Dolby TrueHD	30	THX Music Mode	5D
Studio-Mix	0B	Neural Surround	28	DTS-HD High Resolution	30	THX Games	5E
TV Logic	0C	PLII Movie THX	40	DTS-HD Master Audio	30	+PLIIX Movie THX	59
All CH Stereo	0D	PLIIX Movie THX	41	DSD	30	+Neo:6 THX	57
Full Mono	0E	Neo:6 Cinema THX	42	+PLIIX Movie	39	+Neural-THX	3D
PLII Movie T-D	0F	PLII Movie THX Games	43	+PLIIX Music	3A	DTX Matrix THX	51
PLII Movie	20	Neo:6 Cinema THX Games	44	Dolby EX	38	DTS Discrete THX	52
		Neural-THX	29				

ADJUSTMENT PROCEDURES-1

IDLING CURRENT ADJUSTMENT

[When]

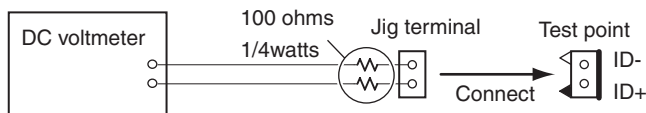
1. Exchange power transistors (Q6050 - 6056, Q6060 - 6066, Q6080 - 6086, Q6090 - 6096).
2. Exchange amplifier PC board ass'y (NAAMP-9061, 9062, NACLA-9063 - 9069).

[Procedure]

<Note> No load and No signal

Refer to <Fig-1, 2, 3> in " ADJUSTMENT PROCEDURE-2, 3, 4 " for the adjustment points and the test points.

1. Before idling adjustment, turn the trimming resistors to counter clockwise.
2. Connect the dc voltmeter to test points,
using two 100 ohm resistors between the poles of the jig terminal and the dc voltmeter terminals.



3. Connect the ac power cord to wall outlet.
4. Press STANDBY/ON button to turn the power on.
5. Adjust the trimming resistors as the following procedure immediately after power on.

Channel	Mark	Adjustment point (Trimming resistor)	Measuring point (Test point)	Adjustment value
Front Left	L	R6040	P6070	3.0 mV
Front Right	R	R6041	P6071	3.0 mV
Center	C	R6042	P6072	3.0 mV
Surround Left	SL	R6043	P6073	3.0 mV
Surround Right	SR	R6044	P6074	3.0 mV
Surround Back Left	SBL	R6045	P6075	3.0 mV
Surround Back Right	SBR	R6046	P6076	3.0 mV

6. Wait for 4 to 6 minutes for heat running.
7. Re-adjust the trimming resistors as the following procedure.

Channel	Adjustment point	Measured value	Adjustment value	Specifications (* In a stable state)
Front Left, Right and Center	R6040, R6041 and R6042	In case below 3 mV In case 3 - 4 mV In case over 4 mV	→ 3 mV → No re-adjustment → 4 mV	3 +/- 1 mV
Surround Left	R6043			
Surround Right	R6044			
Surround Back Left	R6045			
Surround Back Right	R6046			

8. Disconnect the dc voltmeter.
9. Press the STANDBY/ON button to turn the power off.
10. Disconnect the ac power cord of the unit from the wall outlet.

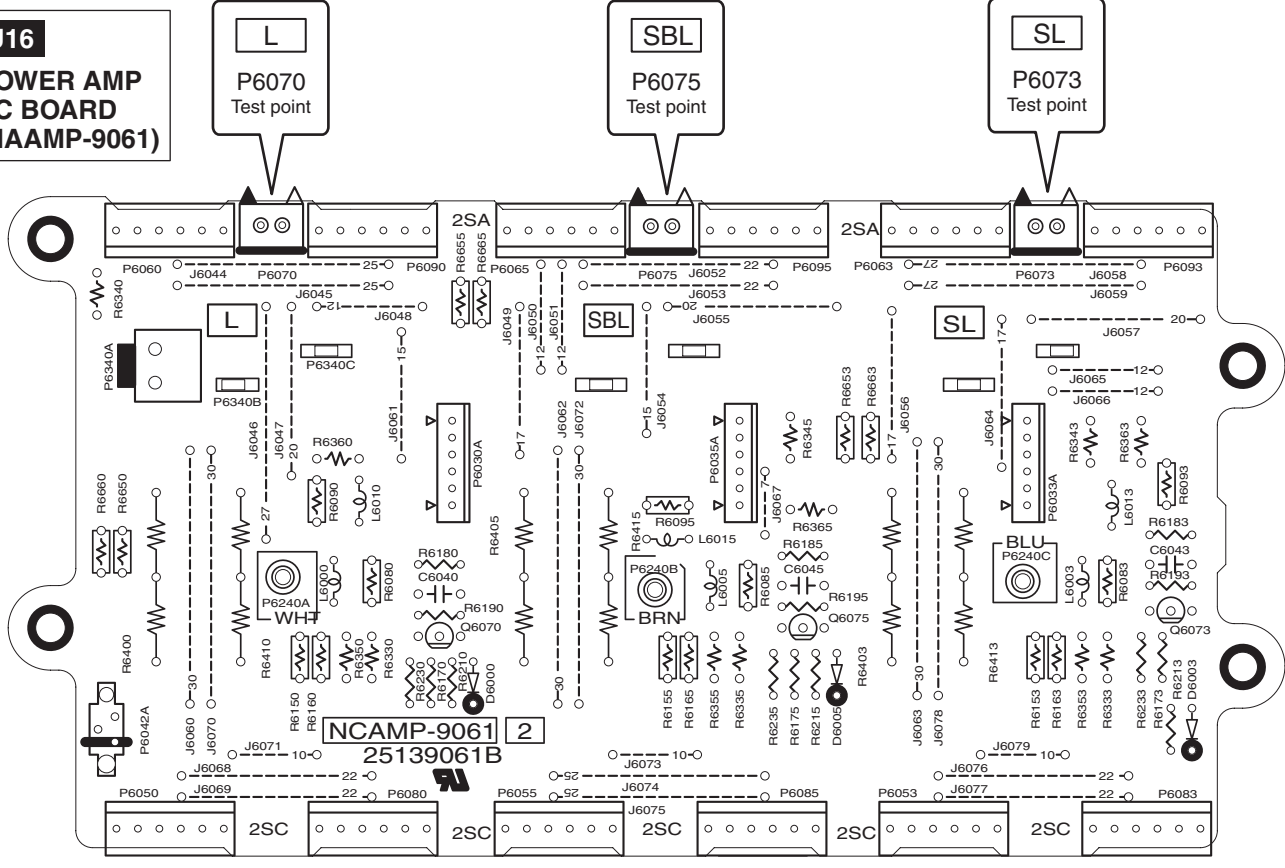
* Idling currents are stabilized in about 10 minutes after power on.

ADJUSTMENT PROCEDURES-2

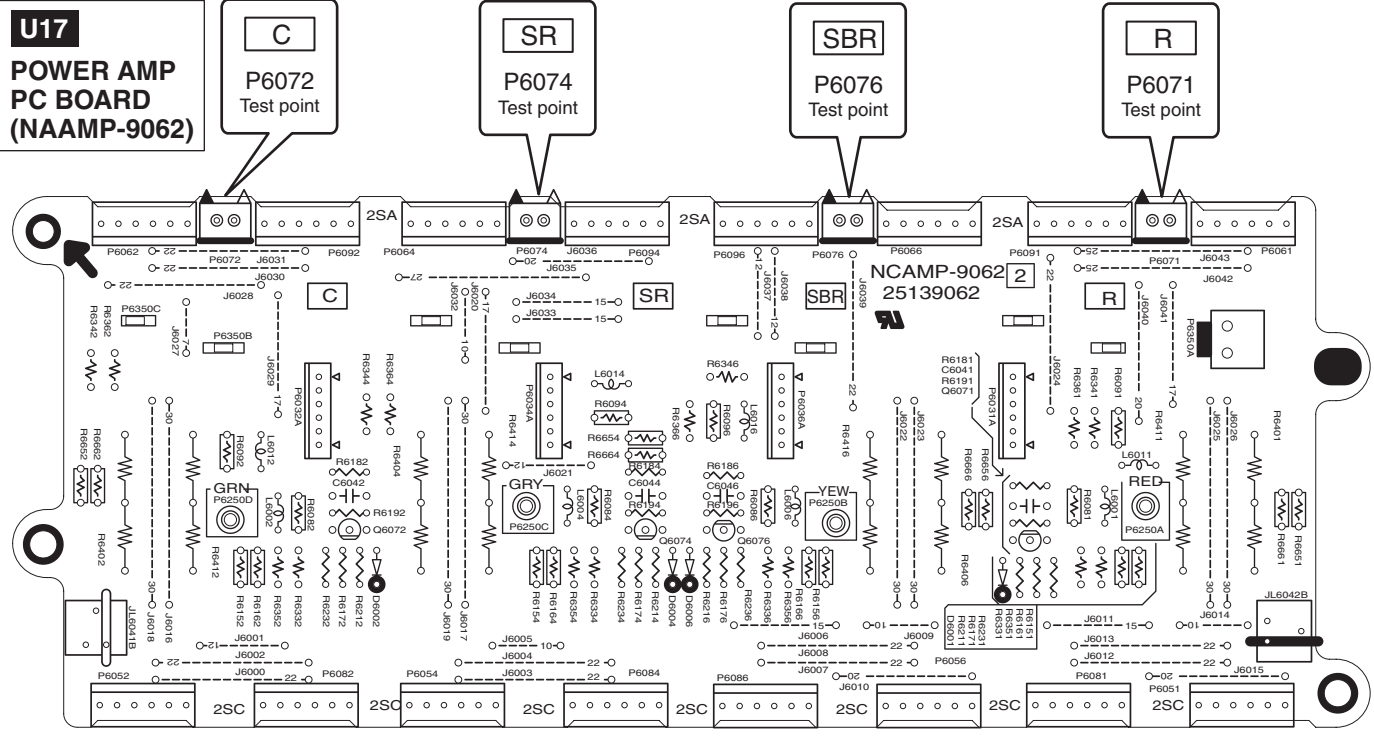
IDLING CURRENT ADJUSTMENT

<Fig-1>

U16
POWER AMP
PC BOARD
(NAAMP-9061)



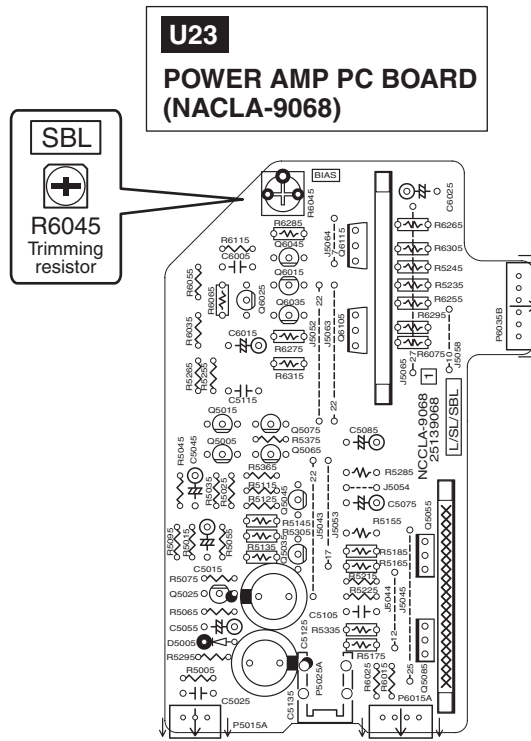
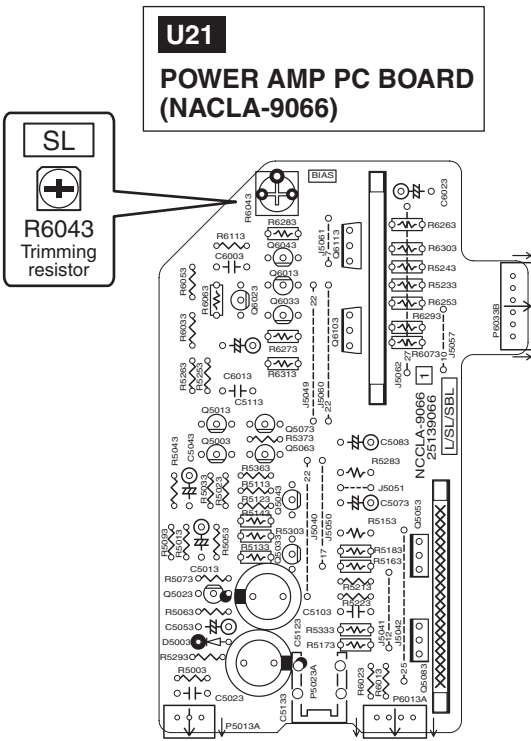
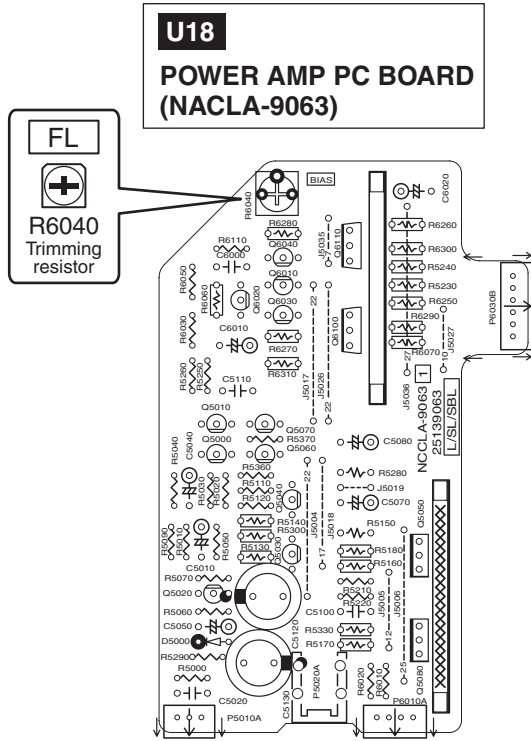
U17
POWER AMP
PC BOARD
(NAAMP-9062)



ADJUSTMENT PROCEDURES-3 IDLING CURRENT ADJUSTMENT

NACLA-9063, 9066, 9068
are electrically and mechanically full-compatible
with each other. But idling readjustment is
necessary.

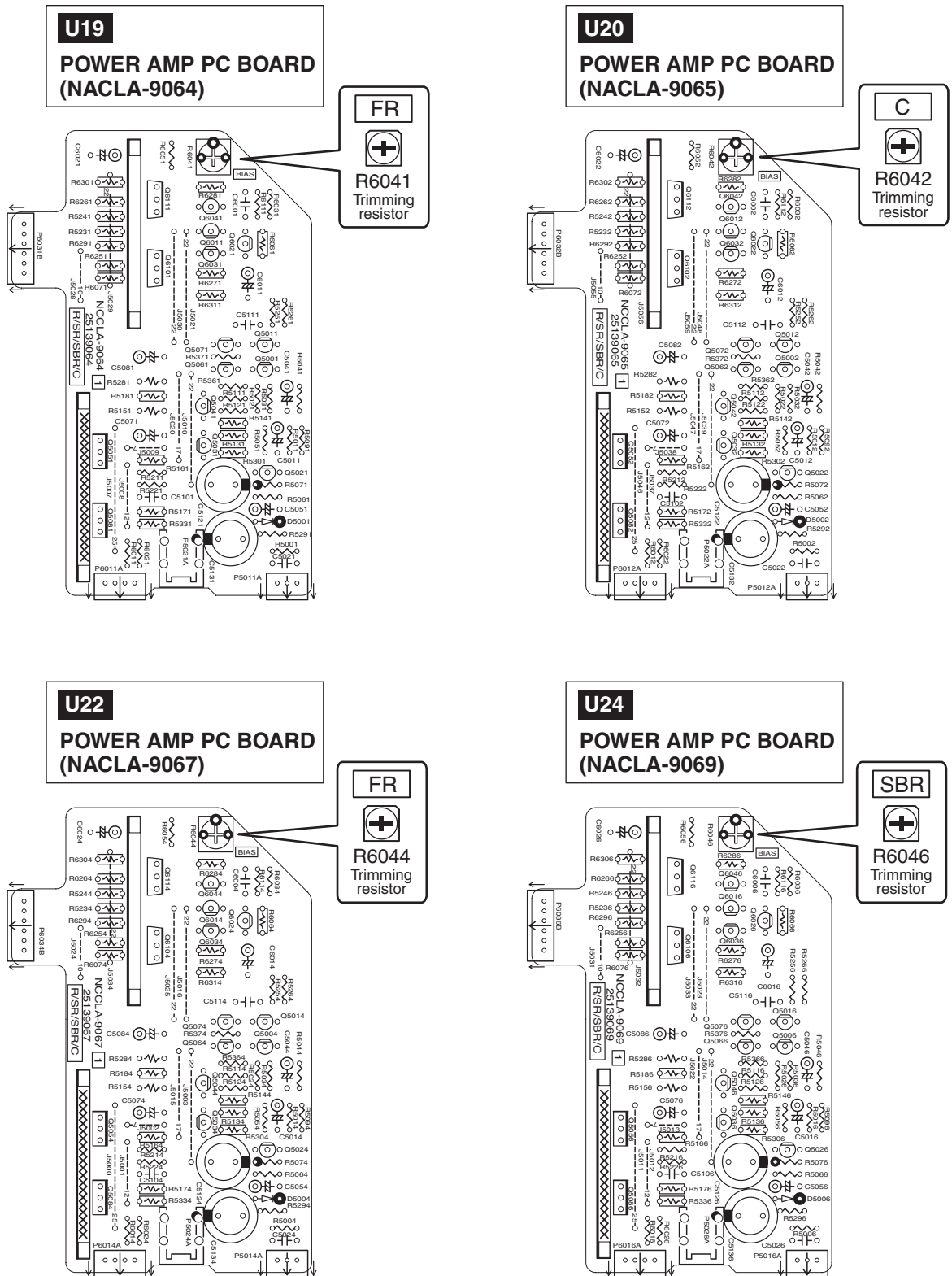
<Fig-2>



ADJUSTMENT PROCEDURES-4 IDLING CURRENT ADJUSTMENT

NACLA-9064,9065, 9067, 9069 are electrically and mechanically full-compatible with each other. But idling readjustment is necessary.

<Fig-3>



ADJUSTMENT PROCEDURES-5

VIDEO PROCESSOR CALIBRATION

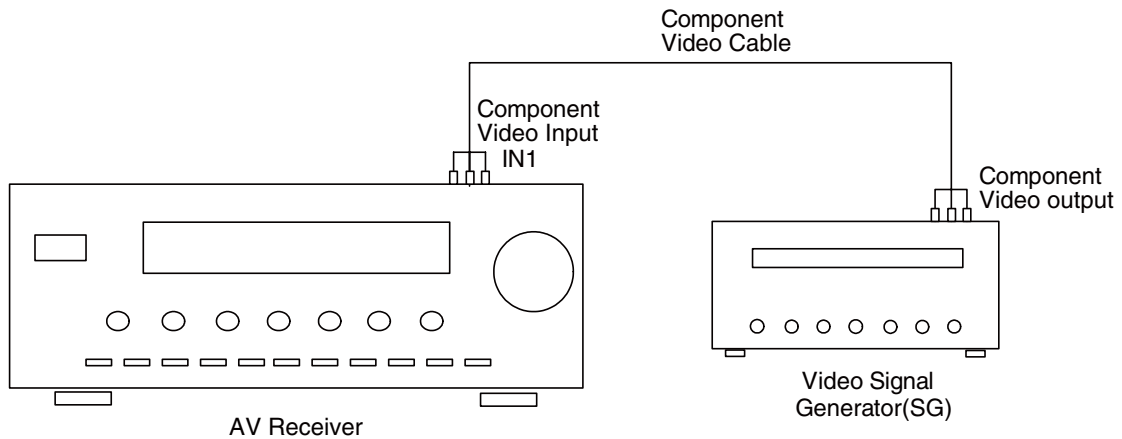
Video processor Q8001 must be calibrated before mounting on the unit.

[When]

1. Exchange Video processor IC (Q8001, FLI8125-LF-BC, HUDSON).
2. Exchange HDMI PC board ass'y (NAHDM-9107).

[Preparation]

1. Prepare a standard video signal generator(SG).
2. Set the SG to output 100% color bar of 8 colors and 480i at component video terminals.
3. Connect the unit(DTR-7.8) and SG as shown in the figure.



[Procedure]

1. Press and hold down CD button, then press STANDBY/ON button.
" Test - _ " will be displayed only for 5 seconds.
2. Press AUX button within 5 seconds above.
3. Press ENTER button.
4. Calibration of ADC part in Q8001 FLI8125-LF-BC starts and proceeds.
5. The unit will be powered off automatically when succeeds.
6. If failed, " Calibration Error " will be displayed.
Check SG and video signal, then return to Item 1.

DTR-7.8**<Note>**

- 1.Parts marked by "**NSP**" are generally unavailable because they are not in our Master Spare Parts List.
- 2.ICs marked by "**NRP**" are not replaceable because some pins on bottom are unable to see and solder..

NOTE : THE COMPONENTS IDENTIFIED BY THE MARK
! ARE CRITICAL FOR RISK OF FIRE AND
ELECTRIC SHOCK. REPLACE ONLY WITH PART
NUMBER SPECIFIED.

<Notes>

(B) : All black model <DD> : DTR-7.8 USA model
[U] : Made in Japan <MA> : DTR-7.8 Australian model
[M] : Made in Malaysia

EXPLODED VIEW PARTS LIST

REF. NO.	PART NAME	DESCRIPTION	Q'TY	PART NO(SN)	REMARKS
A001	HEAT SINK	.	2	27160603A	[U]
A001	HEAT SINK	.	2	27160603B	[M]
A004	ISO PLT	(HS)	1	28175334	
A005	SPACER	(PC)	8	27270485	
A007	SCREW	3P+6FN(3BC)	9	82143006GR	
A009	SCREW	3SMS8W.SW+14B(CU)	28	801634	
A011	RETAINER	(HS-2)	2	27141530A	
A013	SCREW	3TTB+8B(3CM)SR	79	801637	
A014	SPACER	t0.5x φ 8x φ 3.2	3	27270438	
A015	CHASSIS	(SUB)	1	-----	NSP
A018	CUSHION	(T3*W35*D10)	1	28141741	
A020	CUSHION	t10*10*100	1	28141746	
A021	BUTYL	3(5m)	1	WS3628	[U]
A021	CUSHION	(BUTYL)	1	28141748	[M]
A022	TAPE	TAPE(CLOTH-8U)	1	29110082	
A024	BUTYL	3(5m)	1	WS3628	[U]
A024	CUSHION	(BUTYL)	1	28141748	[M]
A025	HEAT SINK(S)	240	1	27160608	
A030	ISO PLT	(AMP2)	1	28175333	
A031	RIVET	P-RIVET NRP-345	2	880009	
A032	CUSHION	T5*8*8	2	28141742	
A033	ISO PLT	(AMP)	1	28175331A	
A038	ISO PLT	(FFC)	1	28175332	
A039	PLA RIVET	P3035B	2	880016	

A040	BRACKET	(FAN-L)	1	27131022A	
A042	HOLDER	(FAN)	4	27191307	
A044	BRACKET	(FAN-R)	1	27131023A	
A046	HOLDER	(FAN)	4	27191307	
A048	BRACKET	(MID)	1	27131021B	
A049	TAPE	TAPE(CLOTH-16U)	1	29110083	
A056	SCREW	4TTC+8C(3BC)	4	830440089GR	
A058	LABEL	(PT)	1	29364345	
A058 or	LABEL	(PT)	(1)	29363691	[U]
A060	HOLDER	(EDGE)	2	27191309	
A062	CLAMP	(NAD-09)	1	24840176	
A064	BUSHING	BUSHING	1	28170040	
A066	CHASSIS	.	1	-----	NSP
A067	BUTYL	3(5m)	1	WS3628	[U]
A067	CUSHION	(BUTYL)	1	28141748	[M]
A068	LEG	(AS)	4	27175438	
A070	CUSHION	.	8	28141637	
A075	HOLDER	KGLS-14RT	3	27190524	
A076	HOLDER	(SPD-6)	4	27191308	
A078	HOLDER	KGPS-10RF	3	27190813	
A079	BUTYL	3(5m)	1	WS3628	[U]
A079	CUSHION	(BUTYL)	1	28141748	[M]
A086	BRACKET	(F)	1	27131020B	
A087	TAPE	TAPE(CLOTH-16U)	1	29110083	
A089	TAPE	TAPE(CLOTH-8U)	1	29110082	
A090	HOLDER	SPM-4	5	27191154	
A092	HOLDER	KGLS-10RT	1	27190428A	
A094	HOLDER	KGLS-10S	2	27190896	
A096	HOLDER	KGPS-6RF	2	27191112	
A098	HOLDER	KGLS-12S	1	27190062	
A100	HOLDER	HOLDER KGLS-18S	1	27190470	
A104	HOLDER	KGLS-22S	1	27190369	
A105	HOLDER	KGLS-22RT	1	27190772	
A106	HOLDER	KGLS-12RT	1	27190266	
A110	REAR PANEL	DTR-7.8DD	1	27123715A	[U], <DD>
A110	REAR PANEL	DTR-7.8MA	1	27123716A	[U], <MA>
A110	REAR PANEL	DTR-7.8MDD	1	27123783	[M], <DD>
A110	REAR PANEL	MMA	1	27123849	[M], <MA>
A112	SCREW	3TTB+8B(3BC)	78	838430088GR	<DD>
A112	SCREW	3TTB+8B(3BC)	75	838430088GR	<MA>
A113	SCREW	3P+6FN(3BC)	1	82143006GR	<DD>
A114	SCREW	4TTB+8C(3BC)	8	838440089GR	
A116	WASHER	W3*10F(3BC)	1	87643010GR	
A118	TRM		1	25060151	
A119	TAPE	TAPE(CLOTH-8U)	1	29110082	

A120	WIRE TIE	BSK-1	15	260208	
A122a	LABEL	(E-CON)	1	29364978	
A134	RETAINER	(SIDE)	2	27142079	
A137	CUSHION	t5*30*5	2	28141562	
A139	BUTYL	3(5m)	1	WS3628	[U]
A139	CUSHION	(BUTYL)	1	28141748	[M]
A160	TAPE	TAPE(CLOTH-8U)	1	29110082	
A201	BADGE	.	1	28135278	
A203	GUIDE	(VOL)B	1	27268205	
A230	TAPE	TAPE(CLOTH-8U)	1	29110082	
A251	F BRACKET	(B)	1	27111486A	
A253	KNOB	(STANDBY)	1	28325756	
A255	CLEAR PLT	.	1	28192140	
A259	B PLATE	.	1	28133430	
A261	RETAINER	(PWB)	1	27142064	
A262	CUSHION	(T10*A40*B10)	2	28141747	
A263	RETAINER	(HP)	1	27141787	
A264	SNAP PLATE	SNAP PLATE	1	27301877	
A270	CUSHION	t5*30*5	2	28141562	
A271	TAPE	TAPE(CLOTH-8U)	1	29110082	
A281	KNOB	(VOL)AS	1	28326231	
A301	F PANEL	.	1	27213005A	<DD>
A301	F PANEL	.	1	27213006A	<MA>
A304	FACET	.	3	28198905	<DD>
A304	FACET	.	4	28198905	<MA>
A400	COVER	(B)	1	28184989A	
A410	LABEL	(CAUTION)	1	29363796	
A412	TAPE	TAPE(CLOTH-8U)	1	29110082	
A414	LABEL	HOOKUP-INTEGRA	1	29363195	<DD>
F2501	FUSE	4A-UL/T-233	1	252325GR	!
F2501 or	FUSE	4A-T/UL-ST2	(1)	252257GR	!
F2502	FUSE	4A-UL/T-233	1	252325GR	!
F2502 or	FUSE	4A-T/UL-ST2	(1)	252257GR	!
F6601	FUSE	20A-UL-250V	1	252304GR	!
F6602	FUSE	20A-UL-250V	1	252304GR	!
F6603	FUSE	20A-UL-250V	1	252304GR	!
F6604	FUSE	20A-UL-250V	1	252304GR	!
F9000	FUSE	5A-UL/T-233	1	252326GR	!, <DD>
F9000 or	FUSE	5A-T/UL-ST2	(1)	252258GR	!, <DD>
F9100	FUSE	12A-UL-ST6	1	252340GR	!, <DD>
F9100	FUSE	6.3A-SE-EAK FUSE	1	252079GR	!, <MA>
F9100 or	FUSE	6.3A-SE-TL250V	(1)	252279GR	!, <MA>
F9101	FUSE	4A-UL/T-233	1	252325GR	!
F9101 or	FUSE	4A-T/UL-ST2	(1)	252257GR	!
F9102	FUSE	4A-UL/T-233	1	252325GR	!

F9102 or	FUSE	4A-T/UL-ST2	(1)	252257GR	!
F9301	FUSE	4A-UL/T-233	1	252325GR	!
F9301 or	FUSE	4A-T/UL-ST2	(1)	252257GR	!
P061	FAN	D09A-12TG08(EX)	1	24502319	
P062	FAN	D09A-12TG08(EX)	1	24502319	
P101	FFC	NCFC7-132012	1	2047132012	
P102	FFC	NCFC7-181012	1	2047181012	<DD>
P205	FFC	NCFC5-092512	1	2045092512	
P2801	FFC	NCFC7-231012	1	2047231012	
P6800	P RIVET	JB-407A-C	18	880052	<MA>
P7501	FFC	NCFC7-405022	1	2047405022	
Q6050	TR	2SC5242-O	1	2202843	
Q6050 or	TR	2SC5242-R	(1)	2202842	
Q6050A	ISO SHEET	ISO SHEET(SR805_3CH)	2	223047	
Q6051	TR	2SC5242-O	1	2202843	
Q6051 or	TR	2SC5242-R	(1)	2202842	
Q6052	TR	2SC5242-O	1	2202843	
Q6052 or	TR	2SC5242-R	(1)	2202842	
Q6053	TR	2SC5242-O	1	2202843	
Q6053 or	TR	2SC5242-R	(1)	2202842	
Q6054	TR	2SC5242-O	1	2202843	
Q6054 or	TR	2SC5242-R	(1)	2202842	
Q6055	TR	2SC5242-O	1	2202843	
Q6055 or	TR	2SC5242-R	(1)	2202842	
Q6056	TR	2SC5242-O	1	2202843	
Q6056 or	TR	2SC5242-R	(1)	2202842	
Q6060	TR	2SA1962-O	1	2202833	
Q6060 or	TR	2SA1962-R	(1)	2202832	
Q6061	TR	2SA1962-O	1	2202833	
Q6061 or	TR	2SA1962-R	(1)	2202832	
Q6062	TR	2SA1962-O	1	2202833	
Q6062 or	TR	2SA1962-R	(1)	2202832	
Q6063	TR	2SA1962-O	1	2202833	
Q6063 or	TR	2SA1962-R	(1)	2202832	
Q6064	TR	2SA1962-O	1	2202833	
Q6064 or	TR	2SA1962-R	(1)	2202832	
Q6065	TR	2SA1962-O	1	2202833	
Q6065 or	TR	2SA1962-R	(1)	2202832	
Q6066	TR	2SA1962-O	1	2202833	
Q6066 or	TR	2SA1962-R	(1)	2202832	
Q6080	TR	2SC5242-O	1	2202843	
Q6080 or	TR	2SC5242-R	(1)	2202842	
Q6080A	ISO SHEET	ISO SHEET(SR805_4CH)	2	223048	
Q6081	TR	2SC5242-O	1	2202843	
Q6081 or	TR	2SC5242-R	(1)	2202842	

Q6082	TR	2SC5242-O	1	2202843
Q6082 or	TR	2SC5242-R	(1)	2202842
Q6083	TR	2SC5242-O	1	2202843
Q6083 or	TR	2SC5242-R	(1)	2202842
Q6084	TR	2SC5242-O	1	2202843
Q6084 or	TR	2SC5242-R	(1)	2202842
Q6085	TR	2SC5242-O	1	2202843
Q6085 or	TR	2SC5242-R	(1)	2202842
Q6086	TR	2SC5242-O	1	2202843
Q6086 or	TR	2SC5242-R	(1)	2202842
Q6090	TR	2SA1962-O	1	2202833
Q6090 or	TR	2SA1962-R	(1)	2202832
Q6091	TR	2SA1962-O	1	2202833
Q6091 or	TR	2SA1962-R	(1)	2202832
Q6092	TR	2SA1962-O	1	2202833
Q6092 or	TR	2SA1962-R	(1)	2202832
Q6093	TR	2SA1962-O	1	2202833
Q6093 or	TR	2SA1962-R	(1)	2202832
Q6094	TR	2SA1962-O	1	2202833
Q6094 or	TR	2SA1962-R	(1)	2202832
Q6095	TR	2SA1962-O	1	2202833
Q6095 or	TR	2SA1962-R	(1)	2202832
Q6096	TR	2SA1962-O	1	2202833
Q6096 or	TR	2SA1962-R	(1)	2202832

<Notes>

When replacing the following the transistors, use ones of the same Hfe rank as the original type.

Ref. No. : Q6050 - 6060, Q6051 - 6061, Q6052 - 6062, Q6053 - 6063, Q6054 - 6064, Q6055 - 6065, Q6056 - 6066

Ref. No. : Q6080 - 6090, Q6081 - 6091, Q6082 - 6092, Q6083 - 6093, Q6084 - 6094, Q6085 - 6095, Q6086 - 6096

T901	P TRANS	NPT-1553D	1	2301893	!, <DD>
T901	P TRANS	NPT-1553M	1	2301894	!, <MA>
U01	AMPLIFIER PC board ass'y	NAAF-9039-1C	1	1B170539-1C	<DD>
		NAAF-9039-1D	1	1B170539-1D	<MA>
U02	POWER SUPPLY PC board ass'y	NAPS-9040-1C	1	1B170540-1C	<DD>
		NAPS-9040-1D	1	1B170540-1D	<MA>
U03	POWER SUPPLY PC board ass'y	NAPS-9041-1C	1	1B170541-1C	<DD>
		NAPS-9041-1D	1	1B170541-1D	<MA>
U04	THERMAL SENSOR PC board ass'y	NAETC-9042-1C	1	1B170542-1C	<DD>
		NAETC-9042-1D	1	1B170542-1D	<MA>
U05	THERMAL SENSOR PC board ass'y	NAETC-9043-1C	1	1B170543-1C	<DD>
		NAETC-9043-1D	1	1B170543-1D	<MA>
U06	AMPLIFIER PC board ass'y	NAASP-9050-1C	1	1B170550-1C	
U07	PHONO PC board ass'y	NAASP-9051-1C	1	1B170551-1C	
U08	VIDEO PC board ass'y	NAVD-9052-1C	1	1B170552-1C	
U09	CONNECTOR PC board ass'y	NAETC-9053-1C	1	1B170553-1C	
U10	CONNECTOR PC board ass'y	NAETC-9054-1C	1	1B170554-1C	

U11	SP TERMINAL PC board ass'y	NATRM-9055-1A	1	1B170555-1A	<DD>
		NATRM-9055-1G	1	1B170555-1G	<MA>
U12	SP TERMINAL PC board ass'y	NAASP-9056-1A	1	1B170556-1A	<DD>
		NAASP-9056-1G	1	1B170556-1G	<MA>
U13	POWER SUPPLY PC board ass'y	NAASP-9057-1A	1	1B170557-1A	<DD>
		NAASP-9057-1G	1	1B170557-1G	<MA>
U14	INLET PC board ass'y	NAASP9058-1A	1	1B170558-1A	<DD>
		NAASP9058-1G	1	1B170558-1G	<MA>
U16	POWER AMP PC board ass'y	NAAMP-9061-1C	1	1B170561-1A	<DD>
		NAAMP-9061-1D	1	1B170561-1B	<MA>
U17	POWER AMP PC board ass'y	NAAMP-9062-1C	1	1B170562-1A	<DD>
		NAAMP-9062-1D	1	1B170562-1B	<MA>
U18	POWER AMP PC board ass'y	NACLA-9063-1C	1	1B170563-1A	<DD>
		NACLA-9063-1D	1	1B170563-1B	<MA>
U19	POWER AMP PC board ass'y	NACLA-9064-1C	1	1B170564-1A	<DD>
		NACLA-9064-1D	1	1B170564-1B	<MA>
U20	POWER AMP PC board ass'y	NACLA-9065-1C	1	1B170564-1A	<DD>
		NACLA-9065-1D	1	1B170564-1B	<MA>
U21	POWER AMP PC board ass'y	NACLA-9066-1C	1	1B170563-1A	<DD>
		NACLA-9066-1D	1	1B170563-1B	<MA>
U22	POWER AMP PC board ass'y	NACLA-9067-1C	1	1B170564-1A	<DD>
		NACLA-9067-1D	1	1B170564-1B	<MA>
U23	POWER AMP PC board ass'y	NACLA-9068-1C	1	1B170563-1A	<DD>
		NACLA-9068-1D	1	1B170563-1B	<MA>
U24	POWER AMP PC board ass'y	NACLA-9069-1C	1	1B170564-1A	<DD>
		NACLA-9069-1D	1	1B170564-1B	<MA>
U25	DSP PC board ass'y	NADSP-9072-1A	1	1B170572-1A	
U27	DAC PC board ass'y	NADG-9074-1E	1	1B170574-1E	<DD>
		NADG-9074-1F	1	1B170574-1F	<MA>
U28	MICROPROCESSOR PC board ass'y	NAAR-9075-1E	1	1B170575-1E	<DD>
		NAAR-9075-1F	1	1B170575-1F	<MA>
U30	XM PC board ass'y	NARF-9077-1E	1	1B170577-1E	
U31	HOLDER PC board ass'y	NAETC-9078-1E	1	1B170578-1E	<DD>
		NAETC-9078-1F	1	1B170578-1F	<MA>
U32	AMPLIFIER PC board ass'y	NAASP-9080-1E	1	1B170580-1E	<DD>
		NAASP-9080-1F	1	1B170580-1F	<MA>
U26	AMPLIFIER PC board ass'y	NAETC-9073-1E	1	1B170573-1E	<DD>
		NAETC-9073-1F	1	1B170573-1F	<MA>
U43	E-CONTROL PC board ass'y	NALAN-9079-1E	1	1B170579-1E	<DD>
		NALAN-9079-1F	1	1B170579-1F	<MA>
U33	DISPLAY PC board ass'y	NADIS-9096-1A	1	1B170596-1A	<DD>
		NADIS-9096-1B	1	1B170596-1B	<MA>
U34	DISPLAY PC board ass'y	NADIS-9097-1A	1	1B170597-1A	<DD>
		NADIS-9097-1B	1	1B170597-1B	<MA>
U35	HEADPHONE PC board ass'y	NAETC-9098-1A	1	1B170598-1A	<DD>

		NAETC-9098-1B	1	1B170598-1B	<MA>
U36	POWER SUPPLY PC board ass'y	NAPS-9099-1A	1	1B170599-1A	<DD>
		NAPS-9099-1B	1	1B170599-1B	<MA>
U37	OPT PC board ass'y	NAETC-9100-1A	1	1B170500-1A	<DD>
		NAETC-9100-1B	1	1B170500-1B	<MA>
U38	VOLUME PC board ass'y	NADIS-9101-1A	1	1B170501-1A	<DD>
		NADIS-9101-1B	1	1B170501-1B	<MA>
U40	HOLDER PC board ass'y	NAETC-9103-1A	1	1B170503-1A	<DD>
		NAETC-9103-1B	1	1B170503-1B	<MA>
U42	HDMI PC board ass'y	NAHDM-9107-1A	1	1B170507-1A	
U017	TUNER UNIT	ENG06507QFUS	1	240156	<DD>
U017 or	TUNER UNIT	FAE385-A11US	(1)	240152	<DD>
U017	TUNER UNIT	FAE485-E11EU	1	240154	<MA>

DTR-7.8

PC BOARD PARTS LIST

- U01** AMPLIFIER PC BOARD (NAAF-9039-1C/1D)
- U02** POWER SUPPLY PC BOARD (NAPS-9040-1C/1D)
- U03** POWER SUPPLY PC BOARD (NAPS-9041-1C/1D)
- U04** THERMAL SENSOR PC BORD (NAETC-9042-1C/1D)
- U05** THERMAL SENSOR PC BORD (NAETC-9043-1C/1D)

REF. NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
Q6000	TR	2SC1740S-S	1	2213285T	
Q6001	TR	2SC1740S-S	1	2213285T	
Q6002	TR	2SC1740S-S	1	2213285T	
Q6003	TR	2SC1740S-S	1	2213285T	
Q6004	TR	2SC1740S-S	1	2213285T	
Q6005	TR	2SC1740S-S	1	2213285T	
Q6006	TR	2SC1740S-S	1	2213285T	
Q6226	TR	2SB1068-U-AZ	1	2212855T	
Q6380	IC	LM61CIZ	1	22242212	
Q6380A	RETAINER	(PTH)	1	27141884-1	
Q6381	IC	LM61CIZ	1	22242212	
Q6381A	RETAINER	(PTH)	1	27141884-1	
Q6550	TR	2SC1815-GR	1	2211255T	
Q6551	TR	2SA950-O	1	2211503T	
Q6551 or	TR	2SA950-Y	(1)	2211504T	
Q6560	TR	2SC1815-GR	1	2211255T	
Q6561	TR	2SA950-O	1	2211503T	
Q6561 or	TR	2SA950-Y	(1)	2211504T	
Q6601	TR	KTC3199-GR	1	2215864T	
Q6601 or	TR	2SC1740S-R	(1)	2213284T	

Q6601 or	TR	2SC1740S-S	(1)	2213285T
Q6611	TR	KTC3199-GR	1	2215864T
Q6611 or	TR	2SC1740S-R	(1)	2213284T
Q6611 or	TR	2SC1740S-S	(1)	2213285T
Q6701	TR	2SC1845-F	1	2211732T
Q6701 or	TR	2SC1845-E	(1)	2211733T
Q6701 or	TR	KTC3200-BL	(1)	2215896T
Q6702	TR	2SC1845-F	1	2211732T
Q6702 or	TR	2SC1845-E	(1)	2211733T
Q6702 or	TR	KTC3200-BL	(1)	2215896T
Q6703	TR	2SA992-F	1	2211792T
Q6703 or	TR	2SA992-E	(1)	2211793T
D6221	DIODE	1SS133	1	223163T
D6222	DIODE	1SS133	1	223163T
D6601	DIODE	LN25XB60	1	22380345
D6602	DIODE	1SS133	1	223163T
D6611	DIODE	LN25XB60	1	22380345
D6612	DIODE	1SS133	1	223163T
D6621	DIODE	LN25XB60	1	22380345
D6701	DIODE	1SS133	1	223163T
D6702	DIODE	1SS133	1	223163T
D6703	ZENER D	MTZJ3.3B	1	224470332T
D6704	ZENER D	MTZJ3.3B	1	224470332T
C6030	TF C	ECQ-V100-473J	1	374734734T
C6031	TF C	ECQ-V100-473J	1	374734734T
C6032	TF C	ECQ-V100-473J	1	374734734T
C6033	TF C	ECQ-V100-473J	1	374734734T
C6034	TF C	ECQ-V100-473J	1	374734734T
C6035	TF C	ECQ-V100-473J	1	374734734T
C6036	TF C	ECQ-V100-473J	1	374734734T
C6222	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C6601	TF C	ECQ-B50V-102J	1	374721024T
C6602	PLA C	ECQE250V-334J	1	3700083S
C6611	TF C	ECQ-B50V-102J	1	374721024T
C6612	TF C	ECQ-V100-334J	1	374733344T
C6622	TF C	ECQ-V100-334J	1	374733344T
C6701	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C6703	TF C	ECQ-B50V-223J	1	374722234T
C6704	UTSP C	CE04W50V-1M(UTSP)	1	397580107T
C6706	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C6901	ELECT C	CE69W75V-1800M(Nipp-Int)	1	3504456
C6902	ELECT C	CE69W75V-1800M(Nipp-Int)	1	3504456
R6130	METAL R	RNU1WCJ-8.2	1	453630824T
R6131	METAL R	RNU1WCJ-8.2	1	453630824T
R6132	METAL R	RNU1WCJ-8.2	1	453630824T

R6133	METAL R	RNU1WCJ-8.2	1	453630824T	
R6134	METAL R	RNU1WCJ-8.2	1	453630824T	
R6135	METAL R	RNU1WCJ-8.2	1	453630824T	
R6136	METAL R	RNU1WCJ-8.2	1	453630824T	
R6222	METAL R	RNU1WCJ-1	1	453630104T	
R6223	CARBON R	R16J-5.6K	1	417345624T	
R6550	CARBON R	R16J-4.7K	1	417344724T	
R6551	CARBON R	R16J-330	1	417343314T	
R6552	CARBON R	R16J-1.8K	1	417341824T	
R6553	CARBON R	R16J-1.2K	1	417341224T	
R6554	CARBON R	R16J-22K	1	417342234T	
R6560	CARBON R	R16J-4.7K	1	417344724T	
R6561	CARBON R	R16J-330	1	417343314T	
R6562	CARBON R	R16J-1.8K	1	417341824T	
R6563	CARBON R	R16J-1.2K	1	417341224T	
R6564	CARBON R	R16J-22K	1	417342234T	
R6601	CARBON R	R16J-1K	1	417341024T	
R6602	CARBON R	R16J-4.7K	1	417344724T	
R6603	METAL R	RNU1/2WCJ-2.2	1	453530224T	
R6611	CARBON R	R16J-1K	1	417341024T	
R6612	CARBON R	R16J-4.7K	1	417344724T	
R6613	METAL R	RNU1/2WCJ-2.2	1	453530224T	
R6701	CARBON R	R16J-22K	1	417342234T	
R6702	CARBON R	R16J-10K	1	417341034T	
R6704	CARBON R	R16J-33K	1	417343334T	
R6706	CARBON R	R16J-22K	1	417342234T	
R6708	CARBON R	R16J-33K	1	417343334T	
R6709	CARBON R	R16J-5.6K	1	417345624T	
R6710	CARBON R	R16J-15K	1	417341534T	
F6601A	FUSE HOLDER	SN5051	1	250113	!
F6601B	FUSE HOLDER	SN5051	1	250113	!
F6602A	FUSE HOLDER	SN5051	1	250113	!
F6602B	FUSE HOLDER	SN5051	1	250113	!
F6603A	FUSE HOLDER	SN5051	1	250113	!
F6603B	FUSE HOLDER	SN5051	1	250113	!
F6604A	FUSE HOLDER	SN5051	1	250113	!
F6604B	FUSE HOLDER	SN5051	1	250113	!
JL6401A	WIRE HOL	NSCT-3P874	1	25051087	
JL6402A	WIRE TRAP	NPLG-3P586	1	25055624	
JL6402B	WIRE HOL	NSCT-3P874	1	25051087	
JL6403A	WIRE TRAP	NPLG-3P586	1	25055624	
JL6403B	WIRE HOL	NSCT-3P874	1	25051087	
JL6602A	WIRE HOL	NSCT-4P875	1	25051088	
JL6602B	WIRE TRAP	NPLG-4P587	1	25055625	
JL6900A	WIRE HOL	NSCT-3P894	1	25051107	

P4100	SOCKET	9210B-1-08Z140-PT1	1	25053243
P4101	SOCKET	9210B-1-08Z140-PT1	1	25053243
P5000A	SOCKET AS	NSAS-26P1612	1	2009991020UL
P5001A	CRIMP AS	CRIMP SR805_1	1	20799169UL
P5010B	PLUG	NPLG-3P0958	1	25056008
P5011B	PLUG	NPLG-3P0958	1	25056008
P5012B	PLUG	NPLG-3P0958	1	25056008
P5013B	PLUG	NPLG-3P0958	1	25056008
P5014B	PLUG	NPLG-3P0958	1	25056008
P5015B	PLUG	NPLG-3P0958	1	25056008
P5016B	PLUG	NPLG-3P0958	1	25056008
P5020B	TRM	NTM-1P232(M1700)	1	25060301
P5021B	TRM	NTM-1P232(M1700)	1	25060301
P5022B	TRM	NTM-1P232(M1700)	1	25060301
P5023B	TRM	NTM-1P232(M1700)	1	25060301
P5024B	TRM	NTM-1P232(M1700)	1	25060301
P5025B	TRM	NTM-1P232(M1700)	1	25060301
P5026B	TRM	NTM-1P232(M1700)	1	25060301
P6010B	PLUG	NPLG-4P0959	1	25056009
P6011B	PLUG	NPLG-4P0959	1	25056009
P6012B	PLUG	NPLG-4P0959	1	25056009
P6013B	PLUG	NPLG-4P0959	1	25056009
P6014B	PLUG	NPLG-4P0959	1	25056009
P6015B	PLUG	NPLG-4P0959	1	25056009
P6016B	PLUG	NPLG-4P0959	1	25056009
P6140	SOCKET AS	NSAS-7P1659	1	2009991063AUL
P6202	HOLDER	HOLDER(CLAMP)	1	27190540-1
P6203	HOLDER	HOLDER(CLAMP)	1	27190540-1
P6340	SOCKET AS	NSAS-8P1660	1	2009991064AUL
P6400	RETAINER	(BUS-3)	1	27142058A
P6401	RETAINER	(BUS-4)	1	27142059A
P6500	PLUG	NPLG-7P163	1	25055179
P6550	PLUG	NPLG-2P83	1	25055099
P6560	PLUG	NPLG-2P83	1	25055099
P6601	SOCKET AS	NSAS-7P1673	1	2009991071AUL
P6601A	PLUG	NPLG-7P163	1	25055179
P6602	TRM	NTM-1P243(M1699)	1	25060312
P6602B	RETAINER	MET37-0002	1	27142009T
P6603	TRM	NTM-1P243(M1699)	1	25060312
P6603B	RETAINER	MET37-0002	1	27142009T
P7210A	SOCKET AS	NSAS-18P1674	1	2009991072UL
RL6601	RELAY	NRL-1P16A-DC12V-189	1	25065694
RL6602	RELAY	NRL-1P16A-DC12V-189	1	25065694
RL6611	RELAY	NRL-1P16A-DC12V-189	1	25065694
RL6612	RELAY	NRL-1P16A-DC12V-189	1	25065694

U06	AMPLIFIER PC BOARD (NAASP-9050-1C)
U07	PHONO PC BOARD (NAASP-9051-1C)
U08	VIDEO PC BOARD (NAVD-9052-1C)
U09	CONNECTOR PC BOARD (NAETC-9053-1C)
U10	CONNECTOR PC BOARD (NAETC-9054-1C)

REF. NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
Q2001	TR	RN1444-A	1	2216031R2	
Q2001 or	TR	RN1444-B	(1)	2216032R2	
Q2002	TR	RN1444-A	1	2216031R2	
Q2002 or	TR	RN1444-B	(1)	2216032R2	
Q2003	TR	RN1444-A	1	2216031R2	
Q2003 or	TR	RN1444-B	(1)	2216032R2	
Q2004	TR	RN1444-A	1	2216031R2	
Q2004 or	TR	RN1444-B	(1)	2216032R2	
Q2005	TR	RN1444-A	1	2216031R2	
Q2005 or	TR	RN1444-B	(1)	2216032R2	
Q2006	IC	TC74HC4051AF(EL_F)	1	222740515R2	
Q2007	IC	TC74HC4051AF(EL_F)	1	222740515R2	
Q2008	IC	TC74HC4051AF(EL_F)	1	222740515R2	
Q2009	IC	TC74HC4051AF(EL_F)	1	222740515R2	
Q2010	IC	TC74HC4051AF(EL_F)	1	222740515R2	
Q2011	IC	TC74HC4051AF(EL_F)	1	222740515R2	
Q2012	IC	NJM2587V	1	22242380R2	
Q2013	IC	NJM2587V	1	22242380R2	
Q2014	IC	MM1512	1	22241849R2	
Q2015	TR	RN1441	1	2215410R2	
Q2016	TR	RN1441	1	2215410R2	
Q2017	TR	RN1444-A	1	2216031R2	
Q2017 or	TR	RN1444-B	(1)	2216032R2	
Q2018	TR	RN1444-A	1	2216031R2	
Q2018 or	TR	RN1444-B	(1)	2216032R2	
Q2019	TR	RN1444-A	1	2216031R2	
Q2019 or	TR	RN1444-B	(1)	2216032R2	
Q2020	TR	RN1444-A	1	2216031R2	
Q2020 or	TR	RN1444-B	(1)	2216032R2	
Q2023	TR	KRA102S	1	2216220R2	
Q2023 or	TR	RN2402	(1)	2214530R2	
Q2024	TR	KTA1504-GR	1	2216185R2	
Q2024 or	TR	2SA1162-GR	(1)	2214375R2	
Q2025	TR	KRA102S	1	2216220R2	
Q2025 or	TR	RN2402	(1)	2214530R2	
Q2026	TR	KTA1504-GR	1	2216185R2	
Q2026 or	TR	2SA1162-GR	(1)	2214375R2	

Q2027	IC	NJU7312AM	1	22242210R2
Q2201	IC	NJW1321FP1	1	22242381R3
Q2204	TR	2SK3019	1	2216520R2
Q2205	TR	2SK3019	1	2216520R2
Q2206	IC	NJM2586AM	1	22242420R2
Q2207	IC	NJM2586AM	1	22242420R2
Q2501	IC	SI8008TM	1	22242323R2
Q2502	TR	2SC2712-GR	1	2213145R2
Q2503	TR	RN1402	1	2214470R2
Q2504	IC	NJM2388F09	1	22242383
Q2504A	SCREW	3P+10FN(3BC)	1	82143010GR
Q2504B	HEAT SINK	RAD-196	1	27160545
Q2505	IC	NJM2386ADL3-05	1	22242382R2
Q2506	TR	RN2402	1	2214530R2
Q2507	TR	2SD1468S-R	1	2215024T
Q2509	IC	7905FA(NJM7905FA)	1	222790054JRC
Q2509A	SCREW	3P+10FN(3BC)	1	82143010GR
Q2511	TR	2SC2712-GR	1	2213145R2
Q2512	TR	2SA1162-GR	1	2214375R2
Q2601	TR	2SB1240-R	1	2213794T
Q2601 or	TR	2SB1240-Q	(1)	2213793T
Q2601 or	TR	2SB1240-P	(1)	2213792T
Q2602	TR	KRC102S	1	2216190R2
Q2602 or	TR	RN1402	(1)	2214470R2
Q2603	TR	2SB1240-R	1	2213794T
Q2603 or	TR	2SB1240-Q	(1)	2213793T
Q2603 or	TR	2SB1240-P	(1)	2213792T
Q2604	TR	KRC102S	1	2216190R2
Q2604 or	TR	RN1402	(1)	2214470R2
Q2605	TR	2SB1240-R	1	2213794T
Q2605 or	TR	2SB1240-Q	(1)	2213793T
Q2605 or	TR	2SB1240-P	(1)	2213792T
Q2606	TR	KRC102S	1	2216190R2
Q2606 or	TR	RN1402	(1)	2214470R2
Q2607	TR	RN2402	1	2214530R2
Q2608	PHT CP	PS2501AL-1	1	24120141R2
Q2609	PHT CP	PS2501AL-1	1	24120141R2
Q4001	IC	NE5532APSR	1	22242283R2
Q4002	IC	NE5532APSR	1	22242283R2
Q4011	IC	NE5532APSR	1	22242283R2
Q4012	IC	NE5532APSR	1	22242283R2
Q4013	IC	NE5532APSR	1	22242283R2
Q4014	IC	NE5532APSR	1	22242283R2
Q4015	IC	NE5532APSR	1	22242283R2
Q4017	TR	2SC2240-BL(TPE2_F)	1	2211406T

Q4018	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q4019	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q4020	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q4021	TR	2SC2712-GR	1	2213145R2
Q4022	TR	2SC2712-GR	1	2213145R2
Q4023	IC	NE5532APSR	1	22242283R2
Q4025	TR	RN1441	1	2215410R2
Q4026	TR	RN1441	1	2215410R2
Q4029	IC	TC94A46CFG	1	22242414R3
Q4029 or	IC	TC94A46FG	(1)	22242103R3
Q4030	IC	NE5532APSR	1	22242283R2
Q4031	IC	NE5532APSR	1	22242283R2
Q4032	IC	NE5532APSR	1	22242283R2
Q4040	IC	NE5532APSR	1	22242283R2
Q4041	IC	NE5532APSR	1	22242283R2
Q4042	IC	NE5532APSR	1	22242283R2
Q4043	IC	NE5532APSR	1	22242283R2
Q4205	TR	RN1441	1	2215410R2
Q4206	TR	RN1441	1	2215410R2
Q4207	TR	RN1441	1	2215410R2
Q4208	TR	RN1441	1	2215410R2
Q4209	TR	RN1441	1	2215410R2
Q4210	TR	RN1441	1	2215410R2
Q4211	TR	RN1441	1	2215410R2
Q4212	TR	RN1441	1	2215410R2
Q4213	TR	RN1441	1	2215410R2
Q4214	TR	RN1441	1	2215410R2
Q4215	TR	RN1441	1	2215410R2
Q4216	TR	RN1441	1	2215410R2
Q4301	IC	NE5532APSR	1	22242283R2
Q4302	IC	NE5532APSR	1	22242283R2
Q4303	IC	NE5532APSR	1	22242283R2
Q4304	IC	NJU7312AM	1	22242210R2
Q4305	IC	NJU7313AM	1	22242211R2
Q4306	IC	NJU7311AM	1	22242209R2
Q4401	TR	2SA950-Y	1	2211504T
Q4402	TR	2SC2120-Y	1	2211164T
Q4403	TR	2SC2712-GR	1	2213145R2
Q4404	TR	2SA1162-GR	1	2214375R2
Q4405	IC	CS3318-CQZR	1	22242404R2
Q4406	IC	NE5532APSR	1	22242283R2
Q4407	TR	2SC2712-GR	1	2213145R2
Q4408	TR	2SC2712-GR	1	2213145R2
Q4501	TR	2SC2235-Y(TPE6_F)	1	2211654T
Q4502	TR	2SC2235-Y(TPE6_F)	1	2211654T

Q4503	TR	2SA965-Y(TPE6_F)	1	2211644T
Q4504	TR	2SA965-Y(TPE6_F)	1	2211644T
Q4505	IC	NE5532APSR	1	22242283R2
Q4506	TR	2SC2712-GR	1	2213145R2
Q4610	TR	RN1441	1	2215410R2
Q4611	TR	RN1441	1	2215410R2
Q4612	TR	RN1441	1	2215410R2
Q4613	TR	RN1441	1	2215410R2
Q4614	TR	RN1441	1	2215410R2
Q4615	TR	RN1441	1	2215410R2
Q4616	TR	RN1441	1	2215410R2
Q4617	TR	RN1441	1	2215410R2
Q4620	TR	RN1441	1	2215410R2
Q4621	TR	RN1441	1	2215410R2
Q4622	TR	RN1441	1	2215410R2
Q4623	TR	RN1441	1	2215410R2
Q4624	TR	RN1441	1	2215410R2
Q4625	TR	RN1441	1	2215410R2
Q4626	TR	RN1441	1	2215410R2
Q4627	TR	RN1441	1	2215410R2
D2003	C-DIODE	1SS352	1	223234R2
D2003 or	C-DIODE	1SS355	(1)	223269R2
D2004	C-DIODE	1SS352	1	223234R2
D2004 or	C-DIODE	1SS355	(1)	223269R2
D2005	C-DIODE	1SS352	1	223234R2
D2005 or	C-DIODE	1SS355	(1)	223269R2
D2006	C-DIODE	1SS352	1	223234R2
D2006 or	C-DIODE	1SS355	(1)	223269R2
D2203	ZENER D	UDZ3.3B	1	224490330R2
D2501	C-DIODE	CRS09(TE85L_Q)	1	223274R2
D2502	C-DIODE	1SS352	1	223234R2
D2502 or	C-DIODE	1SS355	(1)	223269R2
D2503	C-DIODE	1SS352	1	223234R2
D2503 or	C-DIODE	1SS355	(1)	223269R2
D2504	C-DIODE	1SS352	1	223234R2
D2504 or	C-DIODE	1SS355	(1)	223269R2
D2505	C-DIODE	1SS352	1	223234R2
D2505 or	C-DIODE	1SS355	(1)	223269R2
D2506	ZENER D	UDZS10B	1	224551000R2
D2507	ZENER D	UDZS10B	1	224551000R2
D2508	C-DIODE	1SS352	1	223234R2
D2508 or	C-DIODE	1SS355	(1)	223269R2
D2509	C-DIODE	1SS352	1	223234R2
D2509 or	C-DIODE	1SS355	(1)	223269R2
D2510	DIODE	D10XB60H	1	22380337F

D2511	DIODE	RL1N4003	1	22380260T
D2512	C-DIODE	1SS352	1	223234R2
D2512 or	C-DIODE	1SS355	(1)	223269R2
D2513	C-DIODE	1SS352	1	223234R2
D2513 or	C-DIODE	1SS355	(1)	223269R2
D2601	C-DIODE	1SS352	1	223234R2
D2601 or	C-DIODE	1SS355	(1)	223269R2
D2602	C-DIODE	1SS352	1	223234R2
D2602 or	C-DIODE	1SS355	(1)	223269R2
D2603	C-DIODE	1SS352	1	223234R2
D2603 or	C-DIODE	1SS355	(1)	223269R2
D2604	C-DIODE	1SS352	1	223234R2
D2604 or	C-DIODE	1SS355	(1)	223269R2
D2605	C-DIODE	1SS352	1	223234R2
D2605 or	C-DIODE	1SS355	(1)	223269R2
D2606	C-DIODE	1SS352	1	223234R2
D2606 or	C-DIODE	1SS355	(1)	223269R2
D2607	DIODE	RL1N4003	1	22380260T
D4001	ZENER D	UDZS5.6B	1	224550560R2
D4002	ZENER D	UDZS5.6B	1	224550560R2
D4401	ZENER D	UDZS9.1B	1	224550910R2
D4402	ZENER D	UDZS9.1B	1	224550910R2
D4403	ZENER D	UDZ3.3B	1	224490330R2
D4404	C-DIODE	1SS352	1	223234R2
D4404 or	C-DIODE	1SS355	(1)	223269R2
D4405	C-DIODE	1SS352	1	223234R2
D4405 or	C-DIODE	1SS355	(1)	223269R2
D4501	C-DIODE	1SS352	1	223234R2
D4501 or	C-DIODE	1SS355	(1)	223269R2
D4502	C-DIODE	1SS352	1	223234R2
D4502 or	C-DIODE	1SS355	(1)	223269R2
D4503	C-DIODE	1SS352	1	223234R2
D4503 or	C-DIODE	1SS355	(1)	223269R2
D4504	C-DIODE	1SS352	1	223234R2
D4504 or	C-DIODE	1SS355	(1)	223269R2
D4505	C-DIODE	1SS352	1	223234R2
D4505 or	C-DIODE	1SS355	(1)	223269R2
D4506	C-DIODE	1SS352	1	223234R2
D4506 or	C-DIODE	1SS355	(1)	223269R2
D4507	C-DIODE	1SS352	1	223234R2
D4507 or	C-DIODE	1SS355	(1)	223269R2
D4508	C-DIODE	1SS352	1	223234R2
D4508 or	C-DIODE	1SS355	(1)	223269R2
D4509	C-DIODE	1SS352	1	223234R2
D4509 or	C-DIODE	1SS355	(1)	223269R2

F2501A	FUSE HOL	NSCT-1P2031	1	25052133T	!
F2501B	FUSE HOL	NSCT-1P2031	1	25052133T	!
F2502A	FUSE HOL	NSCT-1P2031	1	25052133T	!
F2502B	FUSE HOL	NSCT-1P2031	1	25052133T	!
JL4013B	SOCKET	NSCT-5P97	1	25050269	
JL4014B	SOCKET	NSCT-6P98	1	25050270	
JL901B	WIRE TRAP	NPLG-7P590	1	25055628	
L2501	CHOKE COIL	BLM21PG221SN1	1	230949R2	
L2502	CHOKE COIL	NCH-2541	1	231363K470	
L2601	EMIFIL	BK1608LM182-T	1	230958R1	
L2602	EMIFIL	BK1608LM182-T	1	230958R1	
L2603	EMIFIL	BK1608LM182-T	1	230958R1	
L2604	EMIFIL	BK1608LM182-T	1	230958R1	
C2001	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C2002	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C2003	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C2004	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C2005	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C2006	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C2007	C-CERA C	CK725B1H-102K1	1	332101025R1	
C2008	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C2009	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C2010	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C2011	C-CERA C	CK725B1H-102K1	1	332101025R1	
C2012	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C2013	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C2014	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C2015	C-CERA C	CK725B1H-102K1	1	332101025R1	
C2016	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C2017	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C2018	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C2019	C-CERA C	CK725B1H-102K1	1	332101025R1	
C2020	C-CERA C	CK725B1H-102K1	1	332101025R1	
C2024	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C2025	VR C	CE04W6.3V-470M(VR)	1	394624717T	
C2026	VR C	CE04W6.3V-470M(VR)	1	394624717T	
C2027	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C2028	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C2029	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C2030	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C2031	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C2032	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C2033	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C2034	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C2035	C-CERA C	CK725F1E-104Z1	1	332161040R1	

C2036	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2037	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2038	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2043	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2044	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2045	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2046	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2047	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2048	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2049	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2050	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2051	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2052	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2053	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2054	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2055	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2056	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2057	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2058	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2061	VR C	CE04W6.3V-470M(VR)	1	394624717T
C2062	VR C	CE04W6.3V-470M(VR)	1	394624717T
C2063	UTSP C	CE04W50V-22M(UTSP)	1	397582207T
C2064	VR C	CE04W16V-100M(VR)	1	394641017T
C2065	UTSP C	CE04W50V-1M(UTSP)	1	397580107T
C2066	C-CERA C	CK725B1H-103K1	1	332101035R1
C2067	VR C	CE04W6.3V-220M(VR)	1	394622217T
C2068	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2069	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2070	VR C	CE04W6.3V-470M(VR)	1	394624717T
C2071	VR C	CE04W6.3V-470M(VR)	1	394624717T
C2072	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2073	VR C	CE04W6.3V-470M(VR)	1	394624717T
C2074	VR C	CE04W6.3V-470M(VR)	1	394624717T
C2075	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2076	VR C	CE04W6.3V-470M(VR)	1	394624717T
C2077	VR C	CE04W6.3V-470M(VR)	1	394624717T
C2078	VR C	CE04W6.3V-470M(VR)	1	394624717T
C2082	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2083	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2084	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2085	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2086	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2087	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2088	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2089	C-CERA C	CK725F1E-104Z1	1	332161040R1

C2090	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C2091	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C2092	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2201	UTSP C	CE04W50V-1M(UTSP)	1	397580107T
C2202	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2203	UTSP C	CE04W50V-1M(UTSP)	1	397580107T
C2204	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2205	UTSP C	CE04W50V-1M(UTSP)	1	397580107T
C2206	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2207	UTSP C	CE04W50V-1M(UTSP)	1	397580107T
C2208	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2209	UTSP C	CE04W50V-1M(UTSP)	1	397580107T
C2210	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2211	UTSP C	CE04W50V-1M(UTSP)	1	397580107T
C2212	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2214	UTSP C	CE04W50V-1M(UTSP)	1	397580107T
C2215	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2216	UTSP C	CE04W50V-1M(UTSP)	1	397580107T
C2217	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2218	UTSP C	CE04W50V-1M(UTSP)	1	397580107T
C2219	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2221	C-CERA C	CK725B1H-102K1	1	332101025R1
C2222	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2223	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2224	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2225	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2226	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2227	UTSP C	CE04W50V-1M(UTSP)	1	397580107T
C2228	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2229	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C2230	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2231	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C2232	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2233	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2234	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2235	VR C	CE04W16V-220M(VR)	1	394642217T
C2236	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2237	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C2239	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C2240	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2241	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C2242	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2243	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C2244	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2245	C-CERA C	CK725F1E-104Z1	1	332161040R1

C2246	VR C	CE04W6.3V-220M(VR)	1	394622217T
C2248	VR C	CE04W6.3V-220M(VR)	1	394622217T
C2249	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2250	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C2252	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2256	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2262	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C2263	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C2264	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C2265	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C2266	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2267	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C2501	VR C	CE04W16V-470M(VR)	1	394644717T
C2502	C-CERA C	CK725B1H-223K1	1	332102235R1
C2503	C-CERA C	CK725F1E-104Z1	1	332161040R1
C2504	VR C	CE04W16V-470M(VR)	1	394644717T
C2505	TF C	ECQ-V50V-104J	1	374721044T
C2507	VR C	CE04W16V-10000M(VR)	1	394641037S
C2508	VR C	CE04W25V-2200M(VR)	1	394652227S
C2509	UTSP C	CE04W50V-1M(UTSP)	1	397580107T
C2510	VR C	CE04W16V-100M(VR)	1	394641017T
C2511	UTSP C	CE04W50V-1M(UTSP)	1	397580107T
C2512	VR C	CE04W16V-100M(VR)	1	394641017T
C2513	UTSP C	CE04W50V-22M(UTSP)	1	397582207T
C2514	UTSP C	CE04W50V-22M(UTSP)	1	397582207T
C2515	UTSP C	CE04W50V-1M(UTSP)	1	397580107T
C2516	VR C	CE04W16V-100M(VR)	1	394641017T
C2601	C-CERA C	CK725B1H-102K1	1	332101025R1
C2602	C-CERA C	CK725B1H-102K1	1	332101025R1
C2603	C-CERA C	CC725CH1H-101J1	1	342101014R1
C2605	C-CERA C	CC725CH1H-101J1	1	342101014R1
C2607	C-CERA C	CC725CH1H-101J1	1	342101014R1
C2608	C-CERA C	CC725CH1H-101J1	1	342101014R1
C4001	TF C	ECQ-B50V-221K	1	374722215T
C4002	TF C	ECQ-B50V-221K	1	374722215T
C4003	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4004	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4005	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4006	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4007	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4008	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4009	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4010	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4011	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4012	C-CERA C	CC725CH1H-221J1	1	342102214R1

C4013	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4014	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4015	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4016	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4017	TF C	ECQ-B50V-221K	1	374722215T
C4018	TF C	ECQ-B50V-221K	1	374722215T
C4019	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4020	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4023	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4024	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4027	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4028	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4031	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4032	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4035	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4036	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4039	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4040	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4043	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4044	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4055	TF C	ECQ-B50V-221K	1	374722215T
C4056	TF C	ECQ-B50V-221K	1	374722215T
C4057	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4058	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4059	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4060	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4061	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C4062	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C4063	TF C	ECQ-B50V-682J	1	374726824T
C4064	TF C	ECQ-B50V-682J	1	374726824T
C4065	TF C	ECQ-B50V-182J	1	374721824T
C4066	TF C	ECQ-B50V-182J	1	374721824T
C4067	UTSP C	CE04W50V-22M(UTSP)	1	397582207T
C4068	UTSP C	CE04W50V-22M(UTSP)	1	397582207T
C4069	TF C	ECQ-B50V-222J	1	374722224T
C4070	TF C	ECQ-B50V-222J	1	374722224T
C4079	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C4080	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C4081	UTSP C	CE04W50V-100M(UTSP)	1	397581017T
C4083	UTSP C	CE04W50V-100M(UTSP)	1	397581017T
C4085	UTSP C	CE04W50V-100M(UTSP)	1	397581017T
C4087	TRM(TEST PIN)	TP00509-3C	1	25060406T
C4088	TRM(TEST PIN)	TP00509-3C	1	25060406T
C4089	TRM(TEST PIN)	TP00509-3C	1	25060406T
C4090	TRM(TEST PIN)	TP00509-3C	1	25060406T

C4091	TF C	ECQ-B50V-221K	1	374722215T
C4094	UTSP C	CE04W50V-100M(UTSP)	1	397581017T
C4101	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4102	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4103	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4104	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4105	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4106	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4107	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4108	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4111	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4112	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4119	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4120	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4175	C-CERA C	CC725SL1E-152J1	1	342131524R1
C4176	C-CERA C	CC725SL1E-152J1	1	342131524R1
C4177	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4178	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4215	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4216	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4217	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4218	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4219	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4220	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4221	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4222	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4223	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4224	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4225	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4226	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4243	C-CERA C	CC725CH1H-102J1	1	342101024R1
C4302	UTSP C	CE04W50V-100M(UTSP)	1	397581017T
C4311	C-CERA C	CC725CH1H-101J1	1	342101014R1
C4312	C-CERA C	CC725CH1H-101J1	1	342101014R1
C4313	C-CERA C	CC725CH1H-101J1	1	342101014R1
C4314	C-CERA C	CC725CH1H-101J1	1	342101014R1
C4315	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4316	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4319	C-CERA C	CC725CH1H-101J1	1	342101014R1
C4320	C-CERA C	CC725CH1H-101J1	1	342101014R1
C4321	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4322	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4401	UTSP C	CE04W25V-100M(UTSP)	1	397551017T
C4402	UTSP C	CE04W25V-100M(UTSP)	1	397551017T
C4403	UTSP C	CE04W50V 47M(UTSP)	1	397584707T

C4404	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4405	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C4406	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C4407	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4408	C-CERA C	CK725F1H-104Z1	1	332151040R1
C4409	C-CERA C	CC725CH1H-101J1	1	342101014R1
C4410	C-CERA C	CC725CH1H-101J1	1	342101014R1
C4411	C-CERA C	CC725CH1H-101J1	1	342101014R1
C4412	C-CERA C	CC725CH1H-101J1	1	342101014R1
C4413	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4414	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4415	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4416	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4417	UTSP C	CE04W50V-100M(UTSP)	1	397581017T
C4419	C-CERA C	CC725CH1H-102J1	1	342101024R1
C4420	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4421	TRM(TEST PIN)	TP00509-3C	1	25060406T
C4422	TRM(TEST PIN)	TP00509-3C	1	25060406T
C4423	TF C	ECQ-V50V-104J	1	374721044T
C4424	TF C	ECQ-V50V-104J	1	374721044T
C4501	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4502	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4503	C-CERA C	CC725CH1H-101J1	1	342101014R1
C4504	C-CERA C	CC725CH1H-101J1	1	342101014R1
C4505	TF C	ECQ-V50V-104J	1	374721044T
C4600	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4601	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4602	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4603	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4604	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4605	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4606	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4607	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4610	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4611	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4612	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4613	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4614	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4615	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4616	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4617	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4622	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4623	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4624	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4625	UTSP C	CE04W50V 47M(UTSP)	1	397584707T

C4626	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4627	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4630	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4631	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4632	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4633	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4634	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4635	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4636	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4637	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4650	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4651	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4652	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4653	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4654	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4655	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4656	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4657	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
R2001	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2002	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2003	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2004	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2005	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2006	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2007	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2008	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2009	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2010	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2011	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2012	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2013	C-CARBON R	RN72K1J-104JE	1	435031044R1
R2014	C-CARBON R	RN72K1J-104JE	1	435031044R1
R2015	C-CARBON R	RN72K1J-104JE	1	435031044R1
R2016	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2017	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2018	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2019	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2020	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2021	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2022	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2023	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2024	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2025	C-CARBON R	RN72K1J-104JE	1	435031044R1
R2026	C-CARBON R	RN72K1J-104JE	1	435031044R1
R2027	C-CARBON R	RN72K1J-104JE	1	435031044R1

R2028	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2029	C-CARBON R	RN72K1J-104JE	1	435031044R1
R2030	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2031	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2032	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2033	C-CARBON R	RN72K1J-104JE	1	435031044R1
R2034	C-CARBON R	RN72K1J-104JE	1	435031044R1
R2035	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2036	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2038	C-CARBON R	RN72K1J-104JE	1	435031044R1
R2039	C-CARBON R	RN72K1J-104JE	1	435031044R1
R2040	C-CARBON R	RN72K1J-104JE	1	435031044R1
R2041	C-CARBON R	RN72K1J-104JE	1	435031044R1
R2042	C-CARBON R	RN72K1J-104JE	1	435031044R1
R2043	C-CARBON R	RN72K1J-104JE	1	435031044R1
R2046	C-CARBON R	RN72K1J-022JE	1	435030224R1
R2047	C-CARBON R	RN72K1J-022JE	1	435030224R1
R2052	C-CARBON R	RN72K1J-151JE	1	435031514R1
R2053	C-CARBON R	RN72K1J-151JE	1	435031514R1
R2054	C-CARBON R	RN72K1J-151JE	1	435031514R1
R2055	C-CARBON R	RN72K1J-151JE	1	435031514R1
R2056	C-CARBON R	RN72K1J-047JE	1	435030474R1
R2057	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2058	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2059	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2060	C-CARBON R	RN72K1J-104JE	1	435031044R1
R2061	C-CARBON R	RN72K1J-102JE	1	435031024R1
R2062	C-CARBON R	RN72K1J-102JE	1	435031024R1
R2063	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2064	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2065	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2066	C-CARBON R	RN72K1J-104JE	1	435031044R1
R2067	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2068	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2069	C-CARBON R	RN72K1J-104JE	1	435031044R1
R2070	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2074	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2075	C-CARBON R	RN72K1J-680JE	1	435036804R1
R2076	C-CARBON R	RN72K1J-222JE	1	435032224R1
R2077	C-CARBON R	RN72K1J-333JE	1	435033334R1
R2078	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2079	C-CARBON R	RN72K1J-680JE	1	435036804R1
R2080	C-CARBON R	RN72K1J-222JE	1	435032224R1
R2081	C-CARBON R	RN72K1J-333JE	1	435033334R1
R2082	C-CARBON R	RN72K1J-102JE	1	435031024R1

R2083	C-CARBON R	RN72K1J-102JE	1	435031024R1
R2084	C-CARBON R	RN72K1J-102JE	1	435031024R1
R2085	C-CARBON R	RN72K1J-221JE	1	435032214R1
R2086	C-CARBON R	RN72K1J-221JE	1	435032214R1
R2201	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2202	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2203	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2204	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2205	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2206	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2207	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2208	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2209	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2216	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2217	C-CARBON R	RN72K1J-101JE	1	435031014R1
R2218	C-CARBON R	RN72K1J-101JE	1	435031014R1
R2219	C-CARBON R	RN72K1J-022JE	1	435030224R1
R2220	C-CARBON R	RN72K1J-102JE	1	435031024R1
R2221	C-CARBON R	RN72K1J-102JE	1	435031024R1
R2222	C-CARBON R	RN72K1J-102JE	1	435031024R1
R2223	C-CARBON R	RN72K1J-102JE	1	435031024R1
R2227	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2228	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2229	C-CARBON R	RN72K1J-222JE	1	435032224R1
R2230	C-CARBON R	RN72K1J-102JE	1	435031024R1
R2231	C-CARBON R	RN72K1J-022JE	1	435030224R1
R2232	C-CARBON R	RN72K1J-102JE	1	435031024R1
R2233	C-CARBON R	RN72K1J-330JE	1	435033304R1
R2234	C-CARBON R	RN72K1J-330JE	1	435033304R1
R2235	C-CARBON R	RN72K1J-330JE	1	435033304R1
R2237	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2238	C-CARBON R	RN72K1J-033JE	1	435030334R1
R2239	C-CARBON R	RN72K1J-033JE	1	435030334R1
R2240	C-CARBON R	RN72K1J-033JE	1	435030334R1
R2241	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2242	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2246	C-CARBON R	RN72K1J-022JE	1	435030224R1
R2247	C-CARBON R	RN72K1J-102JE	1	435031024R1
R2248	C-CARBON R	RN72K1J-104JE	1	435031044R1
R2250	C-CARBON R	RN72K1J-271JE	1	435032714R1
R2259	C-CARBON R	RN72K1J-102JE	1	435031024R1
R2260	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2261	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2262	C-CARBON R	RN72K1J-750JE	1	435037504R1
R2263	C-CARBON R	RN72K1J-104JE	1	435031044R1

R2264	C-CARBON R	RN72K1J-033JE	1	435030334R1
R2265	C-CARBON R	RN72K1J-033JE	1	435030334R1
R2266	C-CARBON R	RN72K1J-033JE	1	435030334R1
R2271	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2272	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2501	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2502	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2503	C-CARBON R	RN72K1J-821JE	1	435038214R1
R2504	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2505	METAL R	RNU1/2WCJ-0.47	1	453534794T
R2506	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2507	METAL R	RNU1/2WCJ-0.22	1	453532294T
R2508	C-CARBON R	RN72K1J-102JE	1	435031024R1
R2509	C-CARBON R	RN72K1J-473JE	1	435034734R1
R2510	METAL R	RNU1WCJ-0.22	1	453632294T
R2511	C-CARBON R	RN72K2E-015JE	1	435220154R1
R2512	METAL R	RNU2WCJ-4.7	1	452730474F
R2513	METAL R	RNU2WCJ-4.7	1	452730474F
R2514	METAL R	RNU2WCJ-4.7	1	452730474F
R2515	C-CARBON R	RN72K1J-471JE	1	435034714R1
R2516	C-CARBON R	RN72K1J-471JE	1	435034714R1
R2601	C-CARBON R	RN72K1J-101JE	1	435031014R1
R2602	C-CARBON R	RN72K1J-101JE	1	435031014R1
R2603	C-CARBON R	RN72K1J-039JE	1	435030394R1
R2604	C-CARBON R	RN72K1J-224JE	1	435032244R1
R2605	C-CARBON R	RN72K1J-102JE	1	435031024R1
R2606	C-CARBON R	RN72K1J-039JE	1	435030394R1
R2607	C-CARBON R	RN72K1J-224JE	1	435032244R1
R2608	C-CARBON R	RN72K1J-102JE	1	435031024R1
R2609	C-CARBON R	RN72K1J-039JE	1	435030394R1
R2610	C-CARBON R	RN72K1J-224JE	1	435032244R1
R2611	C-CARBON R	RN72K1J-102JE	1	435031024R1
R2612	C-CARBON R	RN72K1J-470JE	1	435034704R1
R2613	C-CARBON R	RN72K1J-101JE	1	435031014R1
R2614	C-CARBON R	RN72K1J-103JE	1	435031034R1
R2615	C-CARBON R	RN72K1J-000JE	1	435030004R1
R2619	C-CARBON R	RN72K1J-000JE	1	435030004R1
R2621	C-CARBON R	RN72K1J-470JE	1	435034704R1
R4001	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4002	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4003	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4004	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4005	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4006	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4007	C-CARBON R	RN72K1J-224JE	1	435032244R1

R4008	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4009	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4010	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4011	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4012	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4013	C-CARBON R	RN72K1J-470JE	1	435034704R1
R4014	C-CARBON R	RN72K1J-470JE	1	435034704R1
R4015	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4016	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4017	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4018	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4019	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4020	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4021	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4022	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4023	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4024	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4025	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4026	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4027	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4028	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4029	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4030	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4031	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4032	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4033	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4034	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4035	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4036	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4037	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4038	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4041	C-CARBON R	RN72K1J-100JE	1	435031004R1
R4042	C-CARBON R	RN72K1J-100JE	1	435031004R1
R4043	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4044	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4045	C-CARBON R	RN72K1J-221JE	1	435032214R1
R4046	C-CARBON R	RN72K1J-221JE	1	435032214R1
R4047	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4048	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4051	C-CARBON R	RN72K1J-100JE	1	435031004R1
R4052	C-CARBON R	RN72K1J-100JE	1	435031004R1
R4053	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4054	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4055	C-CARBON R	RN72K1J-221JE	1	435032214R1
R4056	C-CARBON R	RN72K1J-221JE	1	435032214R1

R4057	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4058	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4061	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4062	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4065	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4066	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4069	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4070	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4073	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4074	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4077	C-CARBON R	RN72K1J-102JE	1	435031024R1
R4078	C-CARBON R	RN72K1J-102JE	1	435031024R1
R4079	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4080	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4081	METAL O R	RS1/2WBJ-2.7K	1	443522724T
R4082	METAL O R	RS1/2WBJ-2.7K	1	443522724T
R4083	C-CARBON R	RN72K1J-223JE	1	435032234R1
R4084	C-CARBON R	RN72K1J-223JE	1	435032234R1
R4085	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4086	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4087	C-CARBON R	RN72K1J-272JE	1	435032724R1
R4088	C-CARBON R	RN72K1J-272JE	1	435032724R1
R4089	C-CARBON R	RN72K1J-332JE	1	435033324R1
R4090	C-CARBON R	RN72K1J-332JE	1	435033324R1
R4091	C-CARBON R	RN72K1J-332JE	1	435033324R1
R4092	C-CARBON R	RN72K1J-332JE	1	435033324R1
R4093	C-CARBON R	RN72K1J-393JE	1	435033934R1
R4094	C-CARBON R	RN72K1J-393JE	1	435033934R1
R4095	C-CARBON R	RN72K1J-474JE	1	435034744R1
R4096	C-CARBON R	RN72K1J-474JE	1	435034744R1
R4097	C-CARBON R	RN72K1J-821JE	1	435038214R1
R4098	C-CARBON R	RN72K1J-821JE	1	435038214R1
R4099	C-CARBON R	RN72K1J-821JE	1	435038214R1
R4100	C-CARBON R	RN72K1J-821JE	1	435038214R1
R4101	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4102	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4113	NF CARBON R	R25J-100	1	415471014T
R4114	NF CARBON R	R25J-100	1	415471014T
R4115	METAL O R	RS1/2WBJ-22	1	443522204T
R4116	METAL O R	RS1/2WBJ-22	1	443522204T
R4117	METAL O R	RS1/2WBJ-22	1	443522204T
R4118	METAL O R	RS1/2WBJ-22	1	443522204T
R4119	METAL O R	RS1/2WBJ-22	1	443522204T
R4120	METAL O R	RS1/2WBJ-22	1	443522204T
R4121	C-CARBON R	RN72K1J-222JE	1	435032224R1

R4122	C-CARBON R	RN72K1J-222JE	1	435032224R1
R4123	C-CARBON R	RN72K1J-000JE	1	435030004R1
R4124	C-CARBON R	RN72K1J-000JE	1	435030004R1
R4125	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4126	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4127	METAL O R	RS1/2WBJ-22	1	443522204T
R4128	METAL O R	RS1/2WBJ-22	1	443522204T
R4129	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4130	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4131	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4133	C-CARBON R	RN72K1J-220JE	1	435032204R1
R4134	C-CARBON R	RN72K1J-220JE	1	435032204R1
R4135	C-CARBON R	RN72K1J-220JE	1	435032204R1
R4136	C-CARBON R	RN72K1J-220JE	1	435032204R1
R4151	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4152	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4153	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4154	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4155	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4156	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4157	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4158	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4159	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4160	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4161	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4162	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4163	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4164	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4165	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4166	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4167	C-CARBON R	RN72K1J-104JE	1	435031044R1
R4168	C-CARBON R	RN72K1J-104JE	1	435031044R1
R4169	C-CARBON R	RN72K1J-473JE	1	435034734R1
R4170	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4171	C-CARBON R	RN72K1J-104JE	1	435031044R1
R4175	C-CARBON R	RN72K1J-221JE	1	435032214R1
R4176	C-CARBON R	RN72K1J-221JE	1	435032214R1
R4177	C-CARBON R	RN72K1J-102JE	1	435031024R1
R4178	C-CARBON R	RN72K1J-102JE	1	435031024R1
R4179	C-CARBON R	RN72K1J-122JE	1	435031224R1
R4180	C-CARBON R	RN72K1J-122JE	1	435031224R1
R4217	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4218	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4219	C-CARBON R	RN72K1J-221JE	1	435032214R1
R4220	C-CARBON R	RN72K1J-221JE	1	435032214R1

R4221	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4222	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4223	C-CARBON R	RN72K1J-100JE	1	435031004R1
R4224	C-CARBON R	RN72K1J-100JE	1	435031004R1
R4225	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4226	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4227	C-CARBON R	RN72K1J-470JE	1	435034704R1
R4228	C-CARBON R	RN72K1J-470JE	1	435034704R1
R4229	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4230	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4231	C-CARBON R	RN72K1J-221JE	1	435032214R1
R4232	C-CARBON R	RN72K1J-221JE	1	435032214R1
R4233	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4234	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4235	C-CARBON R	RN72K1J-100JE	1	435031004R1
R4236	C-CARBON R	RN72K1J-100JE	1	435031004R1
R4237	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4238	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4239	C-CARBON R	RN72K1J-470JE	1	435034704R1
R4240	C-CARBON R	RN72K1J-470JE	1	435034704R1
R4241	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4242	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4243	C-CARBON R	RN72K1J-221JE	1	435032214R1
R4244	C-CARBON R	RN72K1J-221JE	1	435032214R1
R4245	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4246	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4247	C-CARBON R	RN72K1J-100JE	1	435031004R1
R4248	C-CARBON R	RN72K1J-100JE	1	435031004R1
R4249	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4250	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4251	C-CARBON R	RN72K1J-470JE	1	435034704R1
R4252	C-CARBON R	RN72K1J-470JE	1	435034704R1
R4257	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4258	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4301	METAL O R	RS1/2WBJ-22	1	443522204T
R4302	METAL O R	RS1/2WBJ-22	1	443522204T
R4303	C-CARBON R	RN72K1J-560JE	1	435035604R1
R4304	C-CARBON R	RN72K1J-560JE	1	435035604R1
R4305	C-CARBON R	RN72K1J-152JE	1	435031524R1
R4306	C-CARBON R	RN72K1J-152JE	1	435031524R1
R4307	C-CARBON R	RN72K1J-123JE	1	435031234R1
R4308	C-CARBON R	RN72K1J-123JE	1	435031234R1
R4309	C-CARBON R	RN72K1J-222JE	1	435032224R1
R4310	C-CARBON R	RN72K1J-222JE	1	435032224R1
R4311	C-CARBON R	RN72K1J-123JE	1	435031234R1

R4312	C-CARBON R	RN72K1J-123JE	1	435031234R1
R4313	C-CARBON R	RN72K1J-222JE	1	435032224R1
R4314	C-CARBON R	RN72K1J-222JE	1	435032224R1
R4315	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4316	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4319	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4320	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4321	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4322	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4323	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4324	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4327	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4328	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4329	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4330	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4331	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4332	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4335	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4336	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4337	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4338	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4339	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4340	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4341	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4342	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4343	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4344	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4345	C-CARBON R	RN72K1J-103JE	1	435031034R1
R4347	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4348	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4401	METAL O R	RS1/2WBJ-22	1	442522204F
R4402	METAL O R	RS1/2WBJ-22	1	442522204F
R4403	C-CARBON R	RN72K1J-222JE	1	435032224R1
R4404	C-CARBON R	RN72K1J-222JE	1	435032224R1
R4405	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4406	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4407	METAL O R	RS1/2WBJ-1.2K	1	443521224T
R4408	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4409	C-CARBON R	RN72K1J-222JE	1	435032224R1
R4410	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4411	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4412	C-CARBON R	RN72K1J-222JE	1	435032224R1
R4413	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4414	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4415	C-CARBON R	RN72K1J-224JE	1	435032244R1

R4416	C-CARBON R	RN72K1J-222JE	1	435032224R1
R4417	C-CARBON R	RN72K1J-182JE	1	435031824R1
R4418	C-CARBON R	RN72K1J-183JE	1	435031834R1
R4419	METAL O R	RS1/2WBJ-22	1	443522204T
R4420	METAL O R	RS1/2WBJ-22	1	443522204T
R4421	C-CARBON R	RN72K1J-182JE	1	435031824R1
R4422	C-CARBON R	RN72K1J-182JE	1	435031824R1
R4501	C-CARBON R	RN72K1J-182JE	1	435031824R1
R4502	C-CARBON R	RN72K1J-182JE	1	435031824R1
R4503	C-CARBON R	RN72K1J-473JE	1	435034734R1
R4504	C-CARBON R	RN72K1J-473JE	1	435034734R1
R4505	C-CARBON R	RN72K1J-223JE	1	435032234R1
R4506	C-CARBON R	RN72K1J-223JE	1	435032234R1
R4507	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4508	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4509	C-CARBON R	RN72K1J-272JE	1	435032724R1
R4510	C-CARBON R	RN72K1J-272JE	1	435032724R1
R4511	C-CARBON R	RN72K1J-272JE	1	435032724R1
R4512	C-CARBON R	RN72K1J-272JE	1	435032724R1
R4513	METAL O R	RS1/2WBJ-47	1	443524704T
R4514	METAL O R	RS1/2WBJ-47	1	443524704T
R4515	METAL O R	RS1/2WBJ-47	1	443524704T
R4516	METAL O R	RS1/2WBJ-47	1	443524704T
R4517	C-CARBON R	RN72K1J-182JE	1	435031824R1
R4518	C-CARBON R	RN72K1J-104JE	1	435031044R1
R4519	C-CARBON R	RN72K1J-390JE	1	435033904R1
R4600	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4601	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4602	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4603	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4604	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4605	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4606	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4607	C-CARBON R	RN72K1J-331JE	1	435033314R1
R4610	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4611	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4612	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4613	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4614	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4615	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4616	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4617	C-CARBON R	RN72K1J-563JE	1	435035634R1
R4620	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4621	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4622	C-CARBON R	RN72K1J-224JE	1	435032244R1

R4623	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4624	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4625	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4626	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4627	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4632	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4633	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4634	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4635	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4636	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4637	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4640	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4641	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4642	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4643	C-CARBON R	RN72K1J-223JE	1	435032234R1
R4644	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4645	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4646	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4647	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4650	C-CARBON R	RN72K1J-221JE	1	435032214R1
R4651	C-CARBON R	RN72K1J-221JE	1	435032214R1
R4652	C-CARBON R	RN72K1J-221JE	1	435032214R1
R4653	C-CARBON R	RN72K1J-221JE	1	435032214R1
R4654	C-CARBON R	RN72K1J-221JE	1	435032214R1
R4655	C-CARBON R	RN72K1J-221JE	1	435032214R1
R4656	C-CARBON R	RN72K1J-221JE	1	435032214R1
R4657	C-CARBON R	RN72K1J-221JE	1	435032214R1
R4660	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4661	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4662	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4663	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4664	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4665	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4666	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4667	C-CARBON R	RN72K1J-101JE	1	435031014R1
R4670	C-CARBON R	RN72K1J-100JE	1	435031004R1
R4671	C-CARBON R	RN72K1J-100JE	1	435031004R1
R4672	C-CARBON R	RN72K1J-100JE	1	435031004R1
R4673	C-CARBON R	RN72K1J-100JE	1	435031004R1
R4674	C-CARBON R	RN72K1J-100JE	1	435031004R1
R4675	C-CARBON R	RN72K1J-100JE	1	435031004R1
R4676	C-CARBON R	RN72K1J-100JE	1	435031004R1
R4677	C-CARBON R	RN72K1J-100JE	1	435031004R1
R4680	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4681	C-CARBON R	RN72K1J-224JE	1	435032244R1

R4682	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4683	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4684	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4685	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4686	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4687	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4690	C-CARBON R	RN72K1J-470JE	1	435034704R1
R4691	C-CARBON R	RN72K1J-470JE	1	435034704R1
R4692	C-CARBON R	RN72K1J-470JE	1	435034704R1
R4693	C-CARBON R	RN72K1J-470JE	1	435034704R1
R4694	C-CARBON R	RN72K1J-470JE	1	435034704R1
R4695	C-CARBON R	RN72K1J-470JE	1	435034704R1
R4696	C-CARBON R	RN72K1J-470JE	1	435034704R1
R4697	C-CARBON R	RN72K1J-470JE	1	435034704R1
JL2601B	WIRE TRAP	NPLG-3P586	1	25055624
JL8001A	WIRE HOL	NSCT-4P875	1	25051088
P2001	PIN JACK	NPJ-10PDSY628	1	25045849
P2001 or	PIN JACK	NPJ-10PDBY481	(1)	25045684
P2002	PIN JACK	NPJ-10PDSY628	1	25045849
P2002 or	PIN JACK	NPJ-10PDBY481	(1)	25045684
P2003	PIN JACK	NPJ-10PDSY628	1	25045849
P2003 or	PIN JACK	NPJ-10PDBY481	(1)	25045684
P2004	PIN JACK	NPJ-5PDSY629	1	25045850
P2004 or	PIN JACK	NPJ-5PDBY482	(1)	25045685
P2005	PIN JACK	NPJ-1PDY655	1	25045882
P2010A	PLUG	IMSA-9142B-24A	1	25056602
P2201	PIN JACK	NPJ-6PDGLR649	1	25045874
P2202	PIN JACK	NPJ-9PDGLR630	1	25045851
P2202 or	PIN JACK	NPJ-9PDGLR520	(1)	25045732
P2502	PLUG	NPLG-3P117	1	25055133
P2602	ST JACK	HSJ1002-01-6020	1	25045647
P2603	ST JACK	HSJ1002-01-6020	1	25045647
P2604	ST JACK	HSJ1002-01-6020	1	25045647
P2605	TRM(SCREW)	NEJITANSI M3	1	25065425
P2801A	SOCKET	NSCT-23P2116	1	25052219
P2992	RETAINER	(JOINT)	1	27142069
P4001	PIN JACK	NPJ-2PDWR583	1	25045803
P4001 or	PIN JACK	NPJ-2PDBL249	(1)	25045424
P4003	PIN JACK	NPJ-6PDRW665	1	25045894
P4003 or	PIN JACK	NPJ-6PDBL380	(1)	25045565
P4004	PIN JACK	NPJ-6PDRW665	1	25045894
P4004 or	PIN JACK	NPJ-6PDBL380	(1)	25045565
P4005	PIN JACK	NPJ-6PDRW665	1	25045894
P4005 or	PIN JACK	NPJ-6PDBL380	(1)	25045565
P4006	PIN JACK	NPJ-4PDGPRW659	1	25045888

P4006 or	PIN JACK	NPJ-4PDGPRW503	(1)	25045708
P4007	PIN JACK	NPJ-4PDELNT660	1	25045889
P4007 or	PIN JACK	NPJ-4PDELNT505	(1)	25045710
P4008	PIN JACK	NPJ-6PDPWR654	1	25045881
P4009	PIN JACK	NPJ-4PDGPRW659	1	25045888
P4009 or	PIN JACK	NPJ-4PDGPRW503	(1)	25045708
P4010	PIN JACK	NPJ-4PDELNT660	1	25045889
P4010 or	PIN JACK	NPJ-4PDELNT505	(1)	25045710
P4020A	PLUG	IMSA-9142B-26A	1	25056603
P4021A	PLUG	IMSA-9142B-26A	1	25056603
P4030A	PLUG	NPLG-9P661	1	25055705
P4030B	SOCKET	NSCT-9P1024	1	25051234
P4032A	PLUG	NPLG-8P660	1	25055704
P4033A	PLUG	NPLG-13P665	1	25055709
P4201	TRM(SCREW)	NEJITANSI M3	1	25065425
P4202	TRM	NTM-1P233(M1969)	1	25060302
P5000	PLUG	NPLG-13P360	1	25055377
P5001B	CRIMP AS	CRIMP SR805_2	1	20799170UL
RL4401	RELAY	NRL-2P2A-DC12-178	1	25065664
RL4402	RELAY	NRL-2P2A-DC12-178	1	25065664
RL4403	RELAY	NRL-2P2A-DC12-178	1	25065664
RL4404	RELAY	NRL-2P2A-DC12-178	1	25065664
RL4501	RELAY	NRL-2P5A-DC12-187	1	25065685

- U11** SP TERMINAL PC BOARD (NATRM-9055-1A/1G)
- U12** SP TERMINAL PC BOARD (NAASP-9056-1A/1G)
- U13** POWER SUPPLY PC BOARD (NAASP-9057-1A/1G)
- U14** INLET PC BOARD (NAASP-9058-1A/1G)

REF. NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
Q4901	TR	2SB1565-E	1	2202715	
Q4901 or	TR	2SA1488-Y	(1)	2203394	
Q4901A	HEAT SINK	RAD-165	1	27160500	
Q4901B	SCREW	3TTB+8B(3CM)SR	2	801637	
Q4902	TR	2SD2394-E	1	2202705	
Q4902 or	TR	2SC3851-Y	(1)	2203384	
Q4903	TR	2SC1815-GR	1	2211255T	
Q4904	TR	2SA1015-GR	1	2211455T	
Q4905	TR	2SK365-GR	1	2212445T	
Q4906	TR	2SK365-GR	1	2212445T	
Q6800	TR	RN1226	1	2214680T	
Q6802	TR	RN1226	1	2214680T	
Q6805	TR	RN1226	1	2214680T	
Q6807	TR	RN1226	1	2214680T	
Q9100	TR	2SC1815-GR	1	2211255T	<DD>

Q9101	TR	2SC1815-GR	1	2211255T	
Q9103	IC	NJM2388F09	1	22242383	
D4901	ZENER D	MTZJ15B	1	224471502T	
D4902	ZENER D	MTZJ15B	1	224471502T	
D6800	DIODE	ISS133	1	223163T	
D6802	DIODE	ISS133	1	223163T	
D6803	DIODE	ISS133	1	223163T	
D6805	DIODE	ISS133	1	223163T	
D6817	DIODE	ISS133	1	223163T	
D9000	DIODE	ISS133	1	223163T	
D9001	DIODE	ISS133	1	223163T	
D9002	DIODE	ISS133	1	223163T	
D9003	DIODE	ISS133	1	223163T	
D9004	DIODE	RL1N4003	1	22380260T	
D9004 or	DIODE	GP104003E	(1)	22380035T	
D9005	DIODE	ISS133	1	223163T	
D9006	DIODE	ISS133	1	223163T	
D9007	ZENER D	MTZJ5.1B	1	224470512T	
D9008	DIODE	ISS133	1	223163T	
D9009	DIODE	ISS133	1	223163T	
D9100	DIODE	ISS133	1	223163T	<DD>
D9101	DIODE	ISS133	1	223163T	
D9103	DIODE	D10XB60H	1	22380337F	
D9105	DIODE	D3SBA20	1	22380271F	
L6800	S COIL	S-1.3C	1	231176S	
L6801	S COIL	S-1.3C	1	231176S	
L6802	S COIL	S-1.3C	1	231176S	
L6803	S COIL	S-1.3C	1	231176S	
L6804	S COIL	S-1.3C	1	231176S	
L6805	S COIL	S-1.3C	1	231176S	
L6806	S COIL	S-1.3C	1	231176S	
T9000	P TRANS	NPT-1520JQ	1	2301812A	!, <DD>
T9000	P TRANS	NPT-1520GQ	1	2301813A	!, <MA>
C4901	UTSP C	CE04W25V-100M(UTSP)	1	397551017T	
C4902	UTSP C	CE04W25V-100M(UTSP)	1	397551017T	
C4903	UTSP C	CE04W25V-100M(UTSP)	1	397551017T	
C4904	UTSP C	CE04W25V-100M(UTSP)	1	397551017T	
C6800	TF C	ECQ-B50V-103J	1	374721034T	
C6801	TF C	ECQ-B50V-103J	1	374721034T	
C6802	TF C	ECQ-B50V-103J	1	374721034T	
C6803	TF C	ECQ-B50V-103J	1	374721034T	
C6805	TF C	ECQ-B50V-103J	1	374721034T	
C6806	TF C	ECQ-B50V-103J	1	374721034T	
C6820	TF C	ECQ-B50V-103J	1	374721034T	<MA>
C6821	TF C	ECQ-B50V-103J	1	374721034T	<MA>

C6822	TF C	ECQ-B50V-103J	1	374721034T	<MA>
C6823	TF C	ECQ-B50V-103J	1	374721034T	<MA>
C6824	TF C	ECQ-B50V-103J	1	374721034T	<MA>
C6825	TF C	ECQ-B50V-103J	1	374721034T	<MA>
C6826	TF C	ECQ-B50V-103J	1	374721034T	<MA>
C6827	TF C	ECQ-B50V-103J	1	374721034T	<MA>
C6828	TF C	ECQ-B50V-103J	1	374721034T	<MA>
C6837	TF C	ECQ-B50V-103J	1	374721034T	
C9000	TF C	ECQ-B50V-223J	1	374722234T	
C9001	VR C	CE04W25V-2200M(VR)	1	394652227S	<DD>
C9001	VR C	CE04W16V-2200M(VR)	1	394642227S	<MA>
C9002	UTSP C	CE04W50V-4.7M(UTSP)	1	397580477T	
C9008	UTSP C	CE04W25V-100M(UTSP)	1	397551017T	
C9102	VR C	CE04W25V-4700M(VR)	1	394654727S	
C9103	VR C	CE04W25V-4700M(VR)	1	394654727S	
C9104	VR C	CE04W16V-4700M(VR)	1	394644727S	
C9106	UTSP C	CE04W50V-1M(UTSP)	1	397580107T	
C9107	UTSP C	CE04W25V-220M(UTSP)	1	397552217T	
C9108	PLA C	MKP R46 104M	1	3800041S	
C9115	TF C	ECQ-B50V-103J	1	374721034T	<DD>
C9116	TF C	ECQ-B50V-103J	1	374721034T	
C9117	TF C	ECQ-V50V-104J	1	374721044T	
C9118	TF C	ECQ-V50V-104J	1	374721044T	
C9119	TF C	ECQ-B50V-223J	1	374722234T	
R4901	METAL R	RNU1/2WCJ-0.22	1	453532294T	
R4902	METAL R	RNU1/2WCJ-0.22	1	453532294T	
R4907	CARBON R	R16J-330	1	417343314T	
R4908	CARBON R	R16J-330	1	417343314T	
R6800	CARBON R	R16J-22	1	417342204T	
R6801	CARBON R	R16J-22	1	417342204T	
R6802	CARBON R	R16J-22	1	417342204T	
R6803	CARBON R	R16J-22	1	417342204T	
R6804	CARBON R	R16J-22	1	417342204T	
R6805	CARBON R	R16J-22	1	417342204T	
R6806	CARBON R	R16J-22	1	417342204T	
R6810	CARBON R	R16J-22	1	417342204T	
R6811	CARBON R	R16J-22	1	417342204T	
R6812	CARBON R	R16J-22	1	417342204T	
R6813	CARBON R	R16J-22	1	417342204T	
R6814	CARBON R	R16J-22	1	417342204T	
R6815	CARBON R	R16J-22	1	417342204T	
R6816	CARBON R	R16J-22	1	417342204T	
R6900	METAL O R	RS1WBJ-15	1	443621504T	
R6901	METAL O R	RS1WBJ-15	1	443621504T	
R9005	CARBON R	R16J-22	1	417342204T	

R9104	CARBON R	R16J-1K	1	417341024T	<DD>
R9105	CARBON R	R16J-100K	1	417341044T	<DD>
R9106	CARBON R	R16J-100	1	417341014T	<DD>
R9107	CARBON R	R16J-1K	1	417341024T	
R9108	CARBON R	R16J-100K	1	417341044T	
R9111	CARBON R	R16J-56	1	417345604T	
R9112	METAL R	RNU1/2WCJ-0.22	1	453532294T	
E9000	TRM(SCREW)	NEJITANSI M3	1	25065425	<MA>
E9100	TRM(SCREW)	NEJITANSI M3	1	25065425	
F9000A	FUSE HOL	NSCT-1P2031	1	25052133T	!, <DD>
F9000B	FUSE HOL	NSCT-1P2031	1	25052133T	!, <DD>
F9100A	FUSE HOL	NSCT-1P2031	1	25052133T	!, <MA>
F9100A	FUSE HOLDER	SN5051	1	250113	!, <DD>
F9100B	FUSE HOL	NSCT-1P2031	1	25052133T	!, <MA>
F9100B	FUSE HOLDER	SN5051	1	250113	!, <DD>
F9100C	LABEL	T6.3AL/250V	1	29361681	!, <MA>
F9101A	FUSE HOL	NSCT-1P2031	1	25052133T	!
F9101B	FUSE HOL	NSCT-1P2031	1	25052133T	!
F9102A	FUSE HOL	NSCT-1P2031	1	25052133T	!
F9102B	FUSE HOL	NSCT-1P2031	1	25052133T	!
JL2601A	WIRE HOL	NSCT-3P874	1	25051087	
JL4014A	WIRE HOL	NSCT-6P897	1	25051110	
JL6808A	WIRE HOL	NSCT-4P895	1	25051108	
JL6808B	SOCKET	NSCT-4P96	1	25050268	
JL6900B	SOCKET	NSCT-3P108	1	25050280	
JL6901A	WIRE HOL	NSCT-8P879	1	25051092	
JL6901B	WIRE TRAP	NPLG-8P591	1	25055629	
JL901A	WIRE HOL	NSCT-7P878	1	25051091	
P3101B	SOCKET	IMSA-9142S-24A	1	25053234	
P3102B	SOCKET	IMSA-9142S-14A	1	25053229	
P3103B	SOCKET	IMSA-9142S-16A	1	25053230	
P4900	RETAINER	(JOINT)	1	27142069	
P6140H	PLUG	NPLG-7P163	1	25055179	
P6240D	PLUG	NPLG-3P838	1	25055882	
P6250E	PLUG	NPLG-4P839	1	25055883	
P6800	TRM	NTM-2PDMCW403	1	25060475	
P6801	TRM	NTM-2PDMCR400	1	25060472	
P6802	TRM	NTM-2PDMCG404	1	25060476	
P6803	TRM	NTM-2PDMCL405	1	25060477	
P6804	TRM	NTM-2PDMCE406	1	25060478	
P6805	TRM	NTM-2PDMCN407	1	25060479	
P6806	TRM	NTM-2PDMCT408	1	25060480	
P6807	TRM	NTM-2PDMCW403	1	25060475	
P6808	TRM	NTM-2PDMCR400	1	25060472	
P6851B	SOCKET	IMSA-9142S-20A	1	25053232	

P6852B	SOCKET	IMSA-9142S-20A	1	25053232	
P6853B	SOCKET	IMSA-9142S-20A	1	25053232	
P9000	AC INLET	NPLG-2P913	1	25055960	!
P9001	AC OUTLET	AC-181-UL-11V	1	25053030	!, <DD>
P9006	CRIMP AS	CRIMP AS	1	206CC45159UL	
P9007	CRIMP AS	CRIMP AS	1	206CC45150UL	
P9100	PLUG	NPLG-2P632	1	25055676	!
P9104	PLUG	NPLG-6P120	1	25055136	
RL6800	RELAY	NRL-2P5A-DC12-187	1	25065685	
RL6800 or	RELAY	NRL-2P5A-DC12-155	(1)	25065607	
RL6801	RELAY	NRL-2P5A-DC12-187	1	25065685	
RL6801 or	RELAY	NRL-2P5A-DC12-155	(1)	25065607	
RL6802	RELAY	NRL-2P5A-DC12-187	1	25065685	
RL6802 or	RELAY	NRL-2P5A-DC12-155	(1)	25065607	
RL6803	RELAY	NRL-2P5A-DC12-187	1	25065685	
RL6803 or	RELAY	NRL-2P5A-DC12-155	(1)	25065607	
RL6805	RELAY	NRL-2P5A-DC12-187	1	25065685	
RL6805 or	RELAY	NRL-2P5A-DC12-155	(1)	25065607	
RL6806	RELAY	NRL-2P5A-DC12-187	1	25065685	
RL6806 or	RELAY	NRL-2P5A-DC12-155	(1)	25065607	
RL6817	RELAY	NRL-2P5A-DC12-187	1	25065685	
RL6817 or	RELAY	NRL-2P5A-DC12-155	(1)	25065607	
RL9100	RELAY	NRL-1P10A-DC9-186	1	25065683	!, <DD>
RL9101	RELAY	NRL-1P10A-DC9-186	1	25065683	!

- U16** POWER AMP PC BOARD (NAAMP-9061-1C/1D)
- U17** POWER AMP PC BOARD (NAAMP-9062-1C/1D)
- U18** POWER AMP PC BOARD (NACLA-9063-1C/1D)
- U19** POWER AMP PC BOARD (NACLA-9064-1C/1D)
- U20** POWER AMP PC BOARD (NACLA-9065-1C/1D)
- U21** POWER AMP PC BOARD (NACLA-9066-1C/1D)
- U22** POWER AMP PC BOARD (NACLA-9067-1C/1D)
- U23** POWER AMP PC BOARD (NACLA-9068-1C/1D)
- U24** POWER AMP PC BOARD (NACLA-9069-1C/1D)

REF. NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
Q5000	TR	2SC2240-BL(TPE2_F)	1	2211406T	
Q5001	TR	2SC2240-BL(TPE2_F)	1	2211406T	
Q5002	TR	2SC2240-BL(TPE2_F)	1	2211406T	
Q5003	TR	2SC2240-BL(TPE2_F)	1	2211406T	
Q5004	TR	2SC2240-BL(TPE2_F)	1	2211406T	
Q5005	TR	2SC2240-BL(TPE2_F)	1	2211406T	
Q5006	TR	2SC2240-BL(TPE2_F)	1	2211406T	
Q5010	TR	2SC2240-BL(TPE2_F)	1	2211406T	
Q5011	TR	2SC2240-BL(TPE2_F)	1	2211406T	

Q5012	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5013	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5014	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5015	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5016	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5020	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5021	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5022	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5023	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5024	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5025	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5026	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5030	TR	2SA949-O(TPE6_F)	1	2211353T
Q5030 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q5031	TR	2SA949-O(TPE6_F)	1	2211353T
Q5031 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q5032	TR	2SA949-O(TPE6_F)	1	2211353T
Q5032 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q5033	TR	2SA949-O(TPE6_F)	1	2211353T
Q5033 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q5034	TR	2SA949-O(TPE6_F)	1	2211353T
Q5034 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q5035	TR	2SA949-O(TPE6_F)	1	2211353T
Q5035 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q5036	TR	2SA949-O(TPE6_F)	1	2211353T
Q5036 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q5040	TR	2SA949-O(TPE6_F)	1	2211353T
Q5040 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q5041	TR	2SA949-O(TPE6_F)	1	2211353T
Q5041 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q5042	TR	2SA949-O(TPE6_F)	1	2211353T
Q5042 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q5043	TR	2SA949-O(TPE6_F)	1	2211353T
Q5043 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q5044	TR	2SA949-O(TPE6_F)	1	2211353T
Q5044 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q5045	TR	2SA949-O(TPE6_F)	1	2211353T
Q5045 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q5046	TR	2SA949-O(TPE6_F)	1	2211353T
Q5046 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q5050	TR	2SA1360-Y	1	2202094
Q5050 or	TR	2SA1360-O	(1)	2202093
Q5050A	HEAT SINK	RAD-177	1	27160517
Q5050B	SCREW	3P+6FN(3BC)	1	82143006GR
Q5051	TR	2SA1360-Y	1	2202094

Q5051 or	TR	2SA1360-O	(1)	2202093
Q5051A	HEAT SINK	RAD-177	1	27160517
Q5051B	SCREW	3P+6FN(3BC)	1	82143006GR
Q5052	TR	2SA1360-Y	1	2202094
Q5052 or	TR	2SA1360-O	(1)	2202093
Q5052A	HEAT SINK	RAD-177	1	27160517
Q5052B	SCREW	3P+6FN(3BC)	1	82143006GR
Q5053	TR	2SA1360-Y	1	2202094
Q5053 or	TR	2SA1360-O	(1)	2202093
Q5053A	HEAT SINK	RAD-177	1	27160517
Q5053B	SCREW	3P+6FN(3BC)	1	82143006GR
Q5054	TR	2SA1360-Y	1	2202094
Q5054 or	TR	2SA1360-O	(1)	2202093
Q5054A	HEAT SINK	RAD-177	1	27160517
Q5054B	SCREW	3P+6FN(3BC)	1	82143006GR
Q5055	TR	2SA1360-Y	1	2202094
Q5055 or	TR	2SA1360-O	(1)	2202093
Q5055A	HEAT SINK	RAD-177	1	27160517
Q5055B	SCREW	3P+6FN(3BC)	1	82143006GR
Q5056	TR	2SA1360-Y	1	2202094
Q5056 or	TR	2SA1360-O	(1)	2202093
Q5056A	HEAT SINK	RAD-177	1	27160517
Q5056B	SCREW	3P+6FN(3BC)	1	82143006GR
Q5060	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5061	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5062	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5063	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5064	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5065	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5066	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5070	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5071	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5072	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5073	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5074	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5075	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5076	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5080	TR	2SC3423-Y	1	2202104
Q5080 or	TR	2SC3423-O	(1)	2202103
Q5080B	SCREW	3P+6FN(3BC)	1	82143006GR
Q5081	TR	2SC3423-Y	1	2202104
Q5081 or	TR	2SC3423-O	(1)	2202103
Q5081B	SCREW	3P+6FN(3BC)	1	82143006GR
Q5082	TR	2SC3423-Y	1	2202104
Q5082 or	TR	2SC3423-O	(1)	2202103

Q5082B	SCREW	3P+6FN(3BC)	1	82143006GR
Q5083	TR	2SC3423-Y	1	2202104
Q5083 or	TR	2SC3423-O	(1)	2202103
Q5083B	SCREW	3P+6FN(3BC)	1	82143006GR
Q5084	TR	2SC3423-Y	1	2202104
Q5084 or	TR	2SC3423-O	(1)	2202103
Q5084B	SCREW	3P+6FN(3BC)	1	82143006GR
Q5085	TR	2SC3423-Y	1	2202104
Q5085 or	TR	2SC3423-O	(1)	2202103
Q5085B	SCREW	3P+6FN(3BC)	1	82143006GR
Q5086	TR	2SC3423-Y	1	2202104
Q5086 or	TR	2SC3423-O	(1)	2202103
Q5086B	SCREW	3P+6FN(3BC)	1	82143006GR
Q6010	TR	2SC1740S-S	1	2213285T
Q6011	TR	2SC1740S-S	1	2213285T
Q6012	TR	2SC1740S-S	1	2213285T
Q6013	TR	2SC1740S-S	1	2213285T
Q6014	TR	2SC1740S-S	1	2213285T
Q6015	TR	2SC1740S-S	1	2213285T
Q6016	TR	2SC1740S-S	1	2213285T
Q6020	TR	2SA933S-R	1	2213354T
Q6020 or	TR	2SA933S-S	(1)	2213355T
Q6020 or	TR	2SA1048-GR	(1)	2212125T
Q6020 or	TR	KTA1267-GR	(1)	2215995T
Q6021	TR	2SA933S-R	1	2213354T
Q6021 or	TR	2SA933S-S	(1)	2213355T
Q6021 or	TR	2SA1048-GR	(1)	2212125T
Q6021 or	TR	KTA1267-GR	(1)	2215995T
Q6022	TR	2SA933S-R	1	2213354T
Q6022 or	TR	2SA933S-S	(1)	2213355T
Q6022 or	TR	2SA1048-GR	(1)	2212125T
Q6022 or	TR	KTA1267-GR	(1)	2215995T
Q6023	TR	2SA933S-R	1	2213354T
Q6023 or	TR	2SA933S-S	(1)	2213355T
Q6023 or	TR	2SA1048-GR	(1)	2212125T
Q6023 or	TR	KTA1267-GR	(1)	2215995T
Q6024	TR	2SA933S-R	1	2213354T
Q6024 or	TR	2SA933S-S	(1)	2213355T
Q6024 or	TR	2SA1048-GR	(1)	2212125T
Q6024 or	TR	KTA1267-GR	(1)	2215995T
Q6025	TR	2SA933S-R	1	2213354T
Q6025 or	TR	2SA933S-S	(1)	2213355T
Q6025 or	TR	2SA1048-GR	(1)	2212125T
Q6025 or	TR	KTA1267-GR	(1)	2215995T
Q6026	TR	2SA933S-R	1	2213354T

Q6026 or	TR	2SA933S-S	(1)	2213355T
Q6026 or	TR	2SA1048-GR	(1)	2212125T
Q6026 or	TR	KTA1267-GR	(1)	2215995T
Q6030	TR	2SC2229-O(TPE6_F)	1	2211633T
Q6030 or	TR	2SC2229-Y(TPE6_F)	(1)	2211634T
Q6031	TR	2SC2229-O(TPE6_F)	1	2211633T
Q6031 or	TR	2SC2229-Y(TPE6_F)	(1)	2211634T
Q6032	TR	2SC2229-O(TPE6_F)	1	2211633T
Q6032 or	TR	2SC2229-Y(TPE6_F)	(1)	2211634T
Q6033	TR	2SC2229-O(TPE6_F)	1	2211633T
Q6033 or	TR	2SC2229-Y(TPE6_F)	(1)	2211634T
Q6034	TR	2SC2229-O(TPE6_F)	1	2211633T
Q6034 or	TR	2SC2229-Y(TPE6_F)	(1)	2211634T
Q6035	TR	2SC2229-O(TPE6_F)	1	2211633T
Q6035 or	TR	2SC2229-Y(TPE6_F)	(1)	2211634T
Q6036	TR	2SC2229-O(TPE6_F)	1	2211633T
Q6036 or	TR	2SC2229-Y(TPE6_F)	(1)	2211634T
Q6040	TR	2SA949-O(TPE6_F)	1	2211353T
Q6040 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q6041	TR	2SA949-O(TPE6_F)	1	2211353T
Q6041 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q6042	TR	2SA949-O(TPE6_F)	1	2211353T
Q6042 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q6043	TR	2SA949-O(TPE6_F)	1	2211353T
Q6043 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q6044	TR	2SA949-O(TPE6_F)	1	2211353T
Q6044 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q6045	TR	2SA949-O(TPE6_F)	1	2211353T
Q6045 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q6046	TR	2SA949-O(TPE6_F)	1	2211353T
Q6046 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q6070	TR	2SC2631-R	1	2214984T
Q6070 or	TR	2SC2631-S	(1)	2214985T
Q6071	TR	2SC2631-R	1	2214984T
Q6071 or	TR	2SC2631-S	(1)	2214985T
Q6072	TR	2SC2631-R	1	2214984T
Q6072 or	TR	2SC2631-S	(1)	2214985T
Q6073	TR	2SC2631-R	1	2214984T
Q6073 or	TR	2SC2631-S	(1)	2214985T
Q6074	TR	2SC2631-R	1	2214984T
Q6074 or	TR	2SC2631-S	(1)	2214985T
Q6075	TR	2SC2631-R	1	2214984T
Q6075 or	TR	2SC2631-S	(1)	2214985T
Q6076	TR	2SC2631-R	1	2214984T
Q6076 or	TR	2SC2631-S	(1)	2214985T

Q6100	TR	2SA1930(ONK_Q)	1	2203000
Q6100A	HEAT SINK	RAD-177	1	27160517
Q6100B	SCREW	3P+6FN(3BC)	2	82143006GR
Q6101	TR	2SA1930(ONK_Q)	1	2203000
Q6101A	HEAT SINK	RAD-177	1	27160517
Q6101B	SCREW	3P+6FN(3BC)	2	82143006GR
Q6102	TR	2SA1930(ONK_Q)	1	2203000
Q6102A	HEAT SINK	RAD-177	1	27160517
Q6102B	SCREW	3P+6FN(3BC)	2	82143006GR
Q6103	TR	2SA1930(ONK_Q)	1	2203000
Q6103A	HEAT SINK	RAD-177	1	27160517
Q6103B	SCREW	3P+6FN(3BC)	2	82143006GR
Q6104	TR	2SA1930(ONK_Q)	1	2203000
Q6104A	HEAT SINK	RAD-177	1	27160517
Q6104B	SCREW	3P+6FN(3BC)	2	82143006GR
Q6105	TR	2SA1930(ONK_Q)	1	2203000
Q6105A	HEAT SINK	RAD-177	1	27160517
Q6105B	SCREW	3P+6FN(3BC)	2	82143006GR
Q6106	TR	2SA1930(ONK_Q)	1	2203000
Q6106A	HEAT SINK	RAD-177	1	27160517
Q6106B	SCREW	3P+6FN(3BC)	2	82143006GR
Q6110	TR	2SC5171(ONK_Q)	1	2203010
Q6111	TR	2SC5171(ONK_Q)	1	2203010
Q6112	TR	2SC5171(ONK_Q)	1	2203010
Q6113	TR	2SC5171(ONK_Q)	1	2203010
Q6114	TR	2SC5171(ONK_Q)	1	2203010
Q6115	TR	2SC5171(ONK_Q)	1	2203010
Q6116	TR	2SC5171(ONK_Q)	1	2203010
D5000	ZENER D	MTZJ5.6B	1	224470562T
D5001	ZENER D	MTZJ5.6B	1	224470562T
D5002	ZENER D	MTZJ5.6B	1	224470562T
D5003	ZENER D	MTZJ5.6B	1	224470562T
D5004	ZENER D	MTZJ5.6B	1	224470562T
D5005	ZENER D	MTZJ5.6B	1	224470562T
D5006	ZENER D	MTZJ5.6B	1	224470562T
D6000	DIODE	1SS133	1	223163T
D6001	DIODE	1SS133	1	223163T
D6002	DIODE	1SS133	1	223163T
D6003	DIODE	1SS133	1	223163T
D6004	DIODE	1SS133	1	223163T
D6005	DIODE	1SS133	1	223163T
D6006	DIODE	1SS133	1	223163T
L6000	FR CORE	*	1	5597-45502
L6001	FR CORE	*	1	5597-45502
L6002	FR CORE	*	1	5597-45502

L6003	FR CORE	*	1	5597-45502
L6004	FR CORE	*	1	5597-45502
L6005	FR CORE	*	1	5597-45502
L6006	FR CORE	*	1	5597-45502
L6010	FR CORE	*	1	5597-45502
L6011	FR CORE	*	1	5597-45502
L6012	FR CORE	*	1	5597-45502
L6013	FR CORE	*	1	5597-45502
L6014	FR CORE	*	1	5597-45502
L6015	FR CORE	*	1	5597-45502
L6016	FR CORE	*	1	5597-45502
C5010	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5011	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5012	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5013	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5014	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5015	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5016	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5020	TF C	ECQ-B50V-471J	1	374724714T
C5021	TF C	ECQ-B50V-471J	1	374724714T
C5022	TF C	ECQ-B50V-471J	1	374724714T
C5023	TF C	ECQ-B50V-471J	1	374724714T
C5024	TF C	ECQ-B50V-471J	1	374724714T
C5025	TF C	ECQ-B50V-471J	1	374724714T
C5026	TF C	ECQ-B50V-471J	1	374724714T
C5040	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C5041	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C5042	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C5043	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C5044	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C5045	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C5046	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C5050	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C5051	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C5052	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C5053	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C5054	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C5055	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C5056	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C5070	VX C	CE04W100V-10M(VX_BLK)	1	397391007T
C5071	VX C	CE04W100V-10M(VX_BLK)	1	397391007T
C5072	VX C	CE04W100V-10M(VX_BLK)	1	397391007T
C5073	VX C	CE04W100V-10M(VX_BLK)	1	397391007T
C5074	VX C	CE04W100V-10M(VX_BLK)	1	397391007T
C5075	VX C	CE04W100V-10M(VX_BLK)	1	397391007T

C5076	VX C	CE04W100V-10M(VX_BLK)	1	397391007T
C5080	VX C	CE04W63V-22M(VX_BLK)	1	397372207T
C5081	VX C	CE04W63V-22M(VX_BLK)	1	397372207T
C5082	VX C	CE04W63V-22M(VX_BLK)	1	397372207T
C5083	VX C	CE04W63V-22M(VX_BLK)	1	397372207T
C5084	VX C	CE04W63V-22M(VX_BLK)	1	397372207T
C5085	VX C	CE04W63V-22M(VX_BLK)	1	397372207T
C5086	VX C	CE04W63V-22M(VX_BLK)	1	397372207T
C5100	TF C	ECQ-B50V-101K	1	374721015T
C5101	TF C	ECQ-B50V-101K	1	374721015T
C5102	TF C	ECQ-B50V-101K	1	374721015T
C5103	TF C	ECQ-B50V-101K	1	374721015T
C5104	TF C	ECQ-B50V-101K	1	374721015T
C5105	TF C	ECQ-B50V-101K	1	374721015T
C5106	TF C	ECQ-B50V-101K	1	374721015T
C5110	CERA C	CC45CH50V-010C	1	345340101T
C5111	CERA C	CC45CH50V-010C	1	345340101T
C5112	CERA C	CC45CH50V-010C	1	345340101T
C5113	CERA C	CC45CH50V-010C	1	345340101T
C5114	CERA C	CC45CH50V-010C	1	345340101T
C5115	CERA C	CC45CH50V-010C	1	345340101T
C5116	CERA C	CC45CH50V-010C	1	345340101T
C5120	VR C	CE04W100V-100M(VR)	1	394691017S
C5121	VR C	CE04W100V-100M(VR)	1	394691017S
C5122	VR C	CE04W100V-100M(VR)	1	394691017S
C5123	VR C	CE04W100V-100M(VR)	1	394691017S
C5124	VR C	CE04W100V-100M(VR)	1	394691017S
C5125	VR C	CE04W100V-100M(VR)	1	394691017S
C5126	VR C	CE04W100V-100M(VR)	1	394691017S
C5130	VR C	CE04W100V-100M(VR)	1	394691017S
C5131	VR C	CE04W100V-100M(VR)	1	394691017S
C5132	VR C	CE04W100V-100M(VR)	1	394691017S
C5133	VR C	CE04W100V-100M(VR)	1	394691017S
C5134	VR C	CE04W100V-100M(VR)	1	394691017S
C5135	VR C	CE04W100V-100M(VR)	1	394691017S
C5136	VR C	CE04W100V-100M(VR)	1	394691017S
C6000	TF C	ECQ-B50V-102J	1	374721024T
C6001	TF C	ECQ-B50V-102J	1	374721024T
C6002	TF C	ECQ-B50V-102J	1	374721024T
C6003	TF C	ECQ-B50V-102J	1	374721024T
C6004	TF C	ECQ-B50V-102J	1	374721024T
C6005	TF C	ECQ-B50V-102J	1	374721024T
C6006	TF C	ECQ-B50V-102J	1	374721024T
C6010	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C6011	UTSP C	CE04W50V 47M(UTSP)	1	397584707T

C6012	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C6013	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C6014	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C6015	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C6016	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C6020	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C6021	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C6022	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C6023	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C6024	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C6025	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C6026	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C6040	TF C	ECQ-B50V-223J	1	374722234T
C6041	TF C	ECQ-B50V-223J	1	374722234T
C6042	TF C	ECQ-B50V-223J	1	374722234T
C6043	TF C	ECQ-B50V-223J	1	374722234T
C6044	TF C	ECQ-B50V-223J	1	374722234T
C6045	TF C	ECQ-B50V-223J	1	374722234T
C6046	TF C	ECQ-B50V-223J	1	374722234T
R5000	CARBON R	R16J-1K	1	417341024T
R5001	CARBON R	R16J-1K	1	417341024T
R5002	CARBON R	R16J-1K	1	417341024T
R5003	CARBON R	R16J-1K	1	417341024T
R5004	CARBON R	R16J-1K	1	417341024T
R5005	CARBON R	R16J-1K	1	417341024T
R5006	CARBON R	R16J-1K	1	417341024T
R5010	CARBON R	R16J-56K	1	417345634T
R5011	CARBON R	R16J-56K	1	417345634T
R5012	CARBON R	R16J-56K	1	417345634T
R5013	CARBON R	R16J-56K	1	417345634T
R5014	CARBON R	R16J-56K	1	417345634T
R5015	CARBON R	R16J-56K	1	417345634T
R5016	CARBON R	R16J-56K	1	417345634T
R5020	CARBON R	R16J-330	1	417343314T
R5021	CARBON R	R16J-330	1	417343314T
R5022	CARBON R	R16J-330	1	417343314T
R5023	CARBON R	R16J-330	1	417343314T
R5024	CARBON R	R16J-330	1	417343314T
R5025	CARBON R	R16J-330	1	417343314T
R5026	CARBON R	R16J-330	1	417343314T
R5030	CARBON R	R16J-330	1	417343314T
R5031	CARBON R	R16J-330	1	417343314T
R5032	CARBON R	R16J-330	1	417343314T
R5033	CARBON R	R16J-330	1	417343314T
R5034	CARBON R	R16J-330	1	417343314T

R5035	CARBON R	R16J-330	1	417343314T
R5036	CARBON R	R16J-330	1	417343314T
R5040	CARBON R	R16J-330	1	417343314T
R5041	CARBON R	R16J-330	1	417343314T
R5042	CARBON R	R16J-330	1	417343314T
R5043	CARBON R	R16J-330	1	417343314T
R5044	CARBON R	R16J-330	1	417343314T
R5045	CARBON R	R16J-330	1	417343314T
R5046	CARBON R	R16J-330	1	417343314T
R5050	CARBON R	R16J-5.6K	1	417345624T
R5051	CARBON R	R16J-5.6K	1	417345624T
R5052	CARBON R	R16J-5.6K	1	417345624T
R5053	CARBON R	R16J-5.6K	1	417345624T
R5054	CARBON R	R16J-5.6K	1	417345624T
R5055	CARBON R	R16J-5.6K	1	417345624T
R5056	CARBON R	R16J-5.6K	1	417345624T
R5060	CARBON R	R16J-2.7K	1	417342724T
R5061	CARBON R	R16J-2.7K	1	417342724T
R5062	CARBON R	R16J-2.7K	1	417342724T
R5063	CARBON R	R16J-2.7K	1	417342724T
R5064	CARBON R	R16J-2.7K	1	417342724T
R5065	CARBON R	R16J-2.7K	1	417342724T
R5066	CARBON R	R16J-2.7K	1	417342724T
R5070	CARBON R	R16J-100K	1	417341044T
R5071	CARBON R	R16J-100K	1	417341044T
R5072	CARBON R	R16J-100K	1	417341044T
R5073	CARBON R	R16J-100K	1	417341044T
R5074	CARBON R	R16J-100K	1	417341044T
R5075	CARBON R	R16J-100K	1	417341044T
R5076	CARBON R	R16J-100K	1	417341044T
R5090	CARBON R	R16J-1.8K	1	417341824T
R5091	CARBON R	R16J-1.8K	1	417341824T
R5092	CARBON R	R16J-1.8K	1	417341824T
R5093	CARBON R	R16J-1.8K	1	417341824T
R5094	CARBON R	R16J-1.8K	1	417341824T
R5095	CARBON R	R16J-1.8K	1	417341824T
R5096	CARBON R	R16J-1.8K	1	417341824T
R5110	CARBON R	R16J-2.2K	1	417342224T
R5111	CARBON R	R16J-2.2K	1	417342224T
R5112	CARBON R	R16J-2.2K	1	417342224T
R5113	CARBON R	R16J-2.2K	1	417342224T
R5114	CARBON R	R16J-2.2K	1	417342224T
R5115	CARBON R	R16J-2.2K	1	417342224T
R5116	CARBON R	R16J-2.2K	1	417342224T
R5120	CARBON R	R16J-2.2K	1	417342224T

R5121	CARBON R	R16J-2.2K	1	417342224T
R5122	CARBON R	R16J-2.2K	1	417342224T
R5123	CARBON R	R16J-2.2K	1	417342224T
R5124	CARBON R	R16J-2.2K	1	417342224T
R5125	CARBON R	R16J-2.2K	1	417342224T
R5126	CARBON R	R16J-2.2K	1	417342224T
R5130	NF CARBON R	R25J-820	1	415478214T
R5131	NF CARBON R	R25J-820	1	415478214T
R5132	NF CARBON R	R25J-820	1	415478214T
R5133	NF CARBON R	R25J-820	1	415478214T
R5134	NF CARBON R	R25J-820	1	415478214T
R5135	NF CARBON R	R25J-820	1	415478214T
R5136	NF CARBON R	R25J-820	1	415478214T
R5140	NF CARBON R	R25J-820	1	415478214T
R5141	NF CARBON R	R25J-820	1	415478214T
R5142	NF CARBON R	R25J-820	1	415478214T
R5143	NF CARBON R	R25J-820	1	415478214T
R5144	NF CARBON R	R25J-820	1	415478214T
R5145	NF CARBON R	R25J-820	1	415478214T
R5146	NF CARBON R	R25J-820	1	415478214T
R5150	METAL O R	RS1/2WBJ-10K	1	443521034T
R5151	METAL O R	RS1/2WBJ-10K	1	443521034T
R5152	METAL O R	RS1/2WBJ-10K	1	443521034T
R5153	METAL O R	RS1/2WBJ-10K	1	443521034T
R5154	METAL O R	RS1/2WBJ-10K	1	443521034T
R5155	METAL O R	RS1/2WBJ-10K	1	443521034T
R5156	METAL O R	RS1/2WBJ-10K	1	443521034T
R5160	NF CARBON R	R25J-1.0K	1	415471024T
R5161	NF CARBON R	R25J-1.0K	1	415471024T
R5162	NF CARBON R	R25J-1.0K	1	415471024T
R5163	NF CARBON R	R25J-1.0K	1	415471024T
R5164	NF CARBON R	R25J-1.0K	1	415471024T
R5165	NF CARBON R	R25J-1.0K	1	415471024T
R5166	NF CARBON R	R25J-1.0K	1	415471024T
R5170	NF CARBON R	R25J-820	1	415478214T
R5171	NF CARBON R	R25J-820	1	415478214T
R5172	NF CARBON R	R25J-820	1	415478214T
R5173	NF CARBON R	R25J-820	1	415478214T
R5174	NF CARBON R	R25J-820	1	415478214T
R5175	NF CARBON R	R25J-820	1	415478214T
R5176	NF CARBON R	R25J-820	1	415478214T
R5180	NF CARBON R	R25J-33	1	415473304T
R5181	NF CARBON R	R25J-33	1	415473304T
R5182	NF CARBON R	R25J-33	1	415473304T
R5183	NF CARBON R	R25J-33	1	415473304T

R5184	NF CARBON R	R25J-33	1	415473304T
R5185	NF CARBON R	R25J-33	1	415473304T
R5186	NF CARBON R	R25J-33	1	415473304T
R5210	CARBON R	R16J-18K	1	417341834T
R5211	CARBON R	R16J-18K	1	417341834T
R5212	CARBON R	R16J-18K	1	417341834T
R5213	CARBON R	R16J-18K	1	417341834T
R5214	CARBON R	R16J-18K	1	417341834T
R5215	CARBON R	R16J-18K	1	417341834T
R5216	CARBON R	R16J-18K	1	417341834T
R5220	CARBON R	R16J-18K	1	417341834T
R5221	CARBON R	R16J-18K	1	417341834T
R5222	CARBON R	R16J-18K	1	417341834T
R5223	CARBON R	R16J-18K	1	417341834T
R5224	CARBON R	R16J-18K	1	417341834T
R5225	CARBON R	R16J-18K	1	417341834T
R5226	CARBON R	R16J-18K	1	417341834T
R5230	NF CARBON R	R25J-15	1	415471504T
R5231	NF CARBON R	R25J-15	1	415471504T
R5232	NF CARBON R	R25J-15	1	415471504T
R5233	NF CARBON R	R25J-15	1	415471504T
R5234	NF CARBON R	R25J-15	1	415471504T
R5235	NF CARBON R	R25J-15	1	415471504T
R5236	NF CARBON R	R25J-15	1	415471504T
R5240	NF CARBON R	R25J-15	1	415471504T
R5241	NF CARBON R	R25J-15	1	415471504T
R5242	NF CARBON R	R25J-15	1	415471504T
R5243	NF CARBON R	R25J-15	1	415471504T
R5244	NF CARBON R	R25J-15	1	415471504T
R5245	NF CARBON R	R25J-15	1	415471504T
R5246	NF CARBON R	R25J-15	1	415471504T
R5250	CARBON R	R16J-68K	1	417346834T
R5251	CARBON R	R16J-68K	1	417346834T
R5252	CARBON R	R16J-68K	1	417346834T
R5253	CARBON R	R16J-68K	1	417346834T
R5254	CARBON R	R16J-68K	1	417346834T
R5255	CARBON R	R16J-68K	1	417346834T
R5256	CARBON R	R16J-68K	1	417346834T
R5260	CARBON R	R16J-270K	1	417342744T
R5261	CARBON R	R16J-270K	1	417342744T
R5262	CARBON R	R16J-270K	1	417342744T
R5263	CARBON R	R16J-270K	1	417342744T
R5264	CARBON R	R16J-270K	1	417342744T
R5265	CARBON R	R16J-270K	1	417342744T
R5266	CARBON R	R16J-270K	1	417342744T

R5280	METAL O R	RS1/2WBJ-10K	1	443521034T
R5281	METAL O R	RS1/2WBJ-10K	1	443521034T
R5282	METAL O R	RS1/2WBJ-10K	1	443521034T
R5283	METAL O R	RS1/2WBJ-10K	1	443521034T
R5284	METAL O R	RS1/2WBJ-10K	1	443521034T
R5285	METAL O R	RS1/2WBJ-10K	1	443521034T
R5286	METAL O R	RS1/2WBJ-10K	1	443521034T
R5290	CARBON R	R16J-100K	1	417341044T
R5291	CARBON R	R16J-100K	1	417341044T
R5292	CARBON R	R16J-100K	1	417341044T
R5293	CARBON R	R16J-100K	1	417341044T
R5294	CARBON R	R16J-100K	1	417341044T
R5295	CARBON R	R16J-100K	1	417341044T
R5296	CARBON R	R16J-100K	1	417341044T
R5300	NF CARBON R	R25J-82	1	415478204T
R5301	NF CARBON R	R25J-82	1	415478204T
R5302	NF CARBON R	R25J-82	1	415478204T
R5303	NF CARBON R	R25J-82	1	415478204T
R5304	NF CARBON R	R25J-82	1	415478204T
R5305	NF CARBON R	R25J-82	1	415478204T
R5306	NF CARBON R	R25J-82	1	415478204T
R5330	NF CARBON R	R25J-82	1	415478204T
R5331	NF CARBON R	R25J-82	1	415478204T
R5332	NF CARBON R	R25J-82	1	415478204T
R5333	NF CARBON R	R25J-82	1	415478204T
R5334	NF CARBON R	R25J-82	1	415478204T
R5335	NF CARBON R	R25J-82	1	415478204T
R5336	NF CARBON R	R25J-82	1	415478204T
R5360	CARBON R	R16J-120K	1	417341244T
R5361	CARBON R	R16J-120K	1	417341244T
R5362	CARBON R	R16J-120K	1	417341244T
R5363	CARBON R	R16J-120K	1	417341244T
R5364	CARBON R	R16J-120K	1	417341244T
R5365	CARBON R	R16J-120K	1	417341244T
R5366	CARBON R	R16J-120K	1	417341244T
R5370	CARBON R	R16J-560K	1	417345644T
R5371	CARBON R	R16J-560K	1	417345644T
R5372	CARBON R	R16J-560K	1	417345644T
R5373	CARBON R	R16J-560K	1	417345644T
R5374	CARBON R	R16J-560K	1	417345644T
R5375	CARBON R	R16J-560K	1	417345644T
R5376	CARBON R	R16J-560K	1	417345644T
R6010	CARBON R	R16J-4.7K	1	417344724T
R6011	CARBON R	R16J-4.7K	1	417344724T
R6012	CARBON R	R16J-4.7K	1	417344724T

R6013	CARBON R	R16J-4.7K	1	417344724T
R6014	CARBON R	R16J-4.7K	1	417344724T
R6015	CARBON R	R16J-4.7K	1	417344724T
R6016	CARBON R	R16J-4.7K	1	417344724T
R6020	CARBON R	R16J-3.3K	1	417343324T
R6021	CARBON R	R16J-3.3K	1	417343324T
R6022	CARBON R	R16J-3.3K	1	417343324T
R6023	CARBON R	R16J-3.3K	1	417343324T
R6024	CARBON R	R16J-3.3K	1	417343324T
R6025	CARBON R	R16J-3.3K	1	417343324T
R6026	CARBON R	R16J-3.3K	1	417343324T
R6030	CARBON R	R16J-1.8K	1	417341824T
R6031	CARBON R	R16J-1.8K	1	417341824T
R6032	CARBON R	R16J-1.8K	1	417341824T
R6033	CARBON R	R16J-1.8K	1	417341824T
R6034	CARBON R	R16J-1.8K	1	417341824T
R6035	CARBON R	R16J-1.8K	1	417341824T
R6036	CARBON R	R16J-1.8K	1	417341824T
R6040	TRIM R	N06HR1KBB	1	5211401T
R6041	TRIM R	N06HR1KBB	1	5211401T
R6042	TRIM R	N06HR1KBB	1	5211401T
R6043	TRIM R	N06HR1KBB	1	5211401T
R6044	TRIM R	N06HR1KBB	1	5211401T
R6045	TRIM R	N06HR1KBB	1	5211401T
R6046	TRIM R	N06HR1KBB	1	5211401T
R6050	CARBON R	R16J-2.7K	1	417342724T
R6051	CARBON R	R16J-2.7K	1	417342724T
R6052	CARBON R	R16J-2.7K	1	417342724T
R6053	CARBON R	R16J-2.7K	1	417342724T
R6054	CARBON R	R16J-2.7K	1	417342724T
R6055	CARBON R	R16J-2.7K	1	417342724T
R6056	CARBON R	R16J-2.7K	1	417342724T
R6060	NF CARBON R	R25J-120	1	415471214T
R6061	NF CARBON R	R25J-120	1	415471214T
R6062	NF CARBON R	R25J-120	1	415471214T
R6063	NF CARBON R	R25J-120	1	415471214T
R6064	NF CARBON R	R25J-120	1	415471214T
R6065	NF CARBON R	R25J-120	1	415471214T
R6066	NF CARBON R	R25J-120	1	415471214T
R6070	NF CARBON R	R25J-82	1	415478204T
R6071	NF CARBON R	R25J-82	1	415478204T
R6072	NF CARBON R	R25J-82	1	415478204T
R6073	NF CARBON R	R25J-82	1	415478204T
R6074	NF CARBON R	R25J-82	1	415478204T
R6075	NF CARBON R	R25J-82	1	415478204T

R6076	NF CARBON R	R25J-82	1	415478204T
R6080	METAL O R	RS1/2WBJ-10	1	443521004T
R6081	METAL O R	RS1/2WBJ-10	1	443521004T
R6082	METAL O R	RS1/2WBJ-10	1	443521004T
R6083	METAL O R	RS1/2WBJ-10	1	443521004T
R6084	METAL O R	RS1/2WBJ-10	1	443521004T
R6085	METAL O R	RS1/2WBJ-10	1	443521004T
R6086	METAL O R	RS1/2WBJ-10	1	443521004T
R6090	METAL O R	RS1/2WBJ-10	1	443521004T
R6091	METAL O R	RS1/2WBJ-10	1	443521004T
R6092	METAL O R	RS1/2WBJ-10	1	443521004T
R6093	METAL O R	RS1/2WBJ-10	1	443521004T
R6094	METAL O R	RS1/2WBJ-10	1	443521004T
R6095	METAL O R	RS1/2WBJ-10	1	443521004T
R6096	METAL O R	RS1/2WBJ-10	1	443521004T
R6110	CARBON R	R16J-10K	1	417341034T
R6111	CARBON R	R16J-10K	1	417341034T
R6112	CARBON R	R16J-10K	1	417341034T
R6113	CARBON R	R16J-10K	1	417341034T
R6114	CARBON R	R16J-10K	1	417341034T
R6115	CARBON R	R16J-10K	1	417341034T
R6116	CARBON R	R16J-10K	1	417341034T
R6150	NF CARBON R	R25J-100	1	415471014T
R6151	NF CARBON R	R25J-100	1	415471014T
R6152	NF CARBON R	R25J-100	1	415471014T
R6153	NF CARBON R	R25J-100	1	415471014T
R6154	NF CARBON R	R25J-100	1	415471014T
R6155	NF CARBON R	R25J-100	1	415471014T
R6156	NF CARBON R	R25J-100	1	415471014T
R6160	NF CARBON R	R25J-100	1	415471014T
R6161	NF CARBON R	R25J-100	1	415471014T
R6162	NF CARBON R	R25J-100	1	415471014T
R6163	NF CARBON R	R25J-100	1	415471014T
R6164	NF CARBON R	R25J-100	1	415471014T
R6165	NF CARBON R	R25J-100	1	415471014T
R6166	NF CARBON R	R25J-100	1	415471014T
R6170	CARBON R	R16J-33K	1	417343334T
R6171	CARBON R	R16J-33K	1	417343334T
R6172	CARBON R	R16J-33K	1	417343334T
R6173	CARBON R	R16J-33K	1	417343334T
R6174	CARBON R	R16J-33K	1	417343334T
R6175	CARBON R	R16J-33K	1	417343334T
R6176	CARBON R	R16J-33K	1	417343334T
R6180	CARBON R	R16J-15K	1	417341534T
R6181	CARBON R	R16J-15K	1	417341534T

R6182	CARBON R	R16J-15K	1	417341534T
R6183	CARBON R	R16J-15K	1	417341534T
R6184	CARBON R	R16J-15K	1	417341534T
R6185	CARBON R	R16J-15K	1	417341534T
R6186	CARBON R	R16J-15K	1	417341534T
R6190	CARBON R	R16J-5.6K	1	417345624T
R6191	CARBON R	R16J-5.6K	1	417345624T
R6192	CARBON R	R16J-5.6K	1	417345624T
R6193	CARBON R	R16J-5.6K	1	417345624T
R6194	CARBON R	R16J-5.6K	1	417345624T
R6195	CARBON R	R16J-5.6K	1	417345624T
R6196	CARBON R	R16J-5.6K	1	417345624T
R6210	CARBON R	R16J-47K	1	417344734T
R6211	CARBON R	R16J-47K	1	417344734T
R6212	CARBON R	R16J-47K	1	417344734T
R6213	CARBON R	R16J-47K	1	417344734T
R6214	CARBON R	R16J-47K	1	417344734T
R6215	CARBON R	R16J-47K	1	417344734T
R6216	CARBON R	R16J-47K	1	417344734T
R6230	CARBON R	R16J-47K	1	417344734T
R6231	CARBON R	R16J-47K	1	417344734T
R6232	CARBON R	R16J-47K	1	417344734T
R6233	CARBON R	R16J-47K	1	417344734T
R6234	CARBON R	R16J-47K	1	417344734T
R6235	CARBON R	R16J-47K	1	417344734T
R6236	CARBON R	R16J-47K	1	417344734T
R6250	NF CARBON R	R25J-120	1	415471214T
R6251	NF CARBON R	R25J-120	1	415471214T
R6252	NF CARBON R	R25J-120	1	415471214T
R6253	NF CARBON R	R25J-120	1	415471214T
R6254	NF CARBON R	R25J-120	1	415471214T
R6255	NF CARBON R	R25J-120	1	415471214T
R6256	NF CARBON R	R25J-120	1	415471214T
R6260	NF CARBON R	R25J-120	1	415471214T
R6261	NF CARBON R	R25J-120	1	415471214T
R6262	NF CARBON R	R25J-120	1	415471214T
R6263	NF CARBON R	R25J-120	1	415471214T
R6264	NF CARBON R	R25J-120	1	415471214T
R6265	NF CARBON R	R25J-120	1	415471214T
R6266	NF CARBON R	R25J-120	1	415471214T
R6270	NF CARBON R	R25J-18	1	415471804T
R6271	NF CARBON R	R25J-18	1	415471804T
R6272	NF CARBON R	R25J-18	1	415471804T
R6273	NF CARBON R	R25J-18	1	415471804T
R6274	NF CARBON R	R25J-18	1	415471804T

R6275	NF CARBON R	R25J-18	1	415471804T
R6276	NF CARBON R	R25J-18	1	415471804T
R6280	NF CARBON R	R25J-18	1	415471804T
R6281	NF CARBON R	R25J-18	1	415471804T
R6282	NF CARBON R	R25J-18	1	415471804T
R6283	NF CARBON R	R25J-18	1	415471804T
R6284	NF CARBON R	R25J-18	1	415471804T
R6285	NF CARBON R	R25J-18	1	415471804T
R6286	NF CARBON R	R25J-18	1	415471804T
R6290	NF CARBON R	R25J-2.2	1	415470224T
R6291	NF CARBON R	R25J-2.2	1	415470224T
R6292	NF CARBON R	R25J-2.2	1	415470224T
R6293	NF CARBON R	R25J-2.2	1	415470224T
R6294	NF CARBON R	R25J-2.2	1	415470224T
R6295	NF CARBON R	R25J-2.2	1	415470224T
R6296	NF CARBON R	R25J-2.2	1	415470224T
R6300	NF CARBON R	R25J-2.2	1	415470224T
R6301	NF CARBON R	R25J-2.2	1	415470224T
R6302	NF CARBON R	R25J-2.2	1	415470224T
R6303	NF CARBON R	R25J-2.2	1	415470224T
R6304	NF CARBON R	R25J-2.2	1	415470224T
R6305	NF CARBON R	R25J-2.2	1	415470224T
R6306	NF CARBON R	R25J-2.2	1	415470224T
R6310	NF CARBON R	R25J-10	1	415471004T
R6311	NF CARBON R	R25J-10	1	415471004T
R6312	NF CARBON R	R25J-10	1	415471004T
R6313	NF CARBON R	R25J-10	1	415471004T
R6314	NF CARBON R	R25J-10	1	415471004T
R6315	NF CARBON R	R25J-10	1	415471004T
R6316	NF CARBON R	R25J-10	1	415471004T
R6330	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6331	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6332	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6333	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6334	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6335	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6336	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6340	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6341	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6342	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6343	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6344	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6345	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6346	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6350	METAL R	RNU1/2WCJ-0.22	1	453532294T

R6351	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6352	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6353	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6354	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6355	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6356	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6360	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6361	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6362	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6363	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6364	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6365	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6366	METAL R	RNU1/2WCJ-0.22	1	453532294T
R6400	METAL PR	MPR5W+5W 0R22	1	4000233S
R6401	METAL PR	MPR5W+5W 0R22	1	4000233S
R6402	METAL PR	MPR5W+5W 0R22	1	4000233S
R6403	METAL PR	MPR5W+5W 0R22	1	4000233S
R6404	METAL PR	MPR5W+5W 0R22	1	4000233S
R6405	METAL PR	MPR5W+5W 0R22	1	4000233S
R6406	METAL PR	MPR5W+5W 0R22	1	4000233S
R6410	METAL PR	MPR5W+5W 0R22	1	4000233S
R6411	METAL PR	MPR5W+5W 0R22	1	4000233S
R6412	METAL PR	MPR5W+5W 0R22	1	4000233S
R6413	METAL PR	MPR5W+5W 0R22	1	4000233S
R6414	METAL PR	MPR5W+5W 0R22	1	4000233S
R6415	METAL PR	MPR5W+5W 0R22	1	4000233S
R6416	METAL PR	MPR5W+5W 0R22	1	4000233S
R6650	NF CARBON R	R25J-100	1	415471014T
R6651	NF CARBON R	R25J-100	1	415471014T
R6652	NF CARBON R	R25J-100	1	415471014T
R6653	NF CARBON R	R25J-100	1	415471014T
R6654	NF CARBON R	R25J-100	1	415471014T
R6655	NF CARBON R	R25J-100	1	415471014T
R6656	NF CARBON R	R25J-100	1	415471014T
R6660	NF CARBON R	R25J-100	1	415471014T
R6661	NF CARBON R	R25J-100	1	415471014T
R6662	NF CARBON R	R25J-100	1	415471014T
R6663	NF CARBON R	R25J-100	1	415471014T
R6664	NF CARBON R	R25J-100	1	415471014T
R6665	NF CARBON R	R25J-100	1	415471014T
R6666	NF CARBON R	R25J-100	1	415471014T
JL6041B	WIRE TRAP	NPLG-3P586	1	25055624
JL6042A	WIRE HOL	NSCT-3P874	1	25051087
JL6042B	WIRE TRAP	NPLG-3P586	1	25055624
P5010A	SOCKET	NSCT-3P2183	1	25052286

P5011A	SOCKET	NSCT-3P2183	1	25052286
P5012A	SOCKET	NSCT-3P2183	1	25052286
P5013A	SOCKET	NSCT-3P2183	1	25052286
P5014A	SOCKET	NSCT-3P2183	1	25052286
P5015A	SOCKET	NSCT-3P2183	1	25052286
P5016A	SOCKET	NSCT-3P2183	1	25052286
P5020A	TRM	NTM-1P233(M1969)	1	25060302
P5021A	TRM	NTM-1P233(M1969)	1	25060302
P5022A	TRM	NTM-1P233(M1969)	1	25060302
P5023A	TRM	NTM-1P233(M1969)	1	25060302
P5024A	TRM	NTM-1P233(M1969)	1	25060302
P5025A	TRM	NTM-1P233(M1969)	1	25060302
P5026A	TRM	NTM-1P233(M1969)	1	25060302
P6010A	SOCKET	NSCT-4P2184	1	25052287
P6011A	SOCKET	NSCT-4P2184	1	25052287
P6012A	SOCKET	NSCT-4P2184	1	25052287
P6013A	SOCKET	NSCT-4P2184	1	25052287
P6014A	SOCKET	NSCT-4P2184	1	25052287
P6015A	SOCKET	NSCT-4P2184	1	25052287
P6016A	SOCKET	NSCT-4P2184	1	25052287
P6030A	PLUG	IMSA-9115B-06	1	25056336
P6030B	SOCKET	IMSA-9115S-06L	1	25052986
P6031A	PLUG	IMSA-9115B-06	1	25056336
P6031B	SOCKET	IMSA-9115S-06L	1	25052986
P6032A	PLUG	IMSA-9115B-06	1	25056336
P6032B	SOCKET	IMSA-9115S-06L	1	25052986
P6033A	PLUG	IMSA-9115B-06	1	25056336
P6033B	SOCKET	IMSA-9115S-06L	1	25052986
P6034A	PLUG	IMSA-9115B-06	1	25056336
P6034B	SOCKET	IMSA-9115S-06L	1	25052986
P6035A	PLUG	IMSA-9115B-06	1	25056336
P6035B	SOCKET	IMSA-9115S-06L	1	25052986
P6036A	PLUG	IMSA-9115B-06	1	25056336
P6036B	SOCKET	IMSA-9115S-06L	1	25052986
P6050	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614
P6051	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614
P6052	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614
P6053	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614
P6054	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614
P6055	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614
P6056	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614
P6060	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614
P6061	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614
P6062	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614
P6063	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614

P6064	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614	
P6065	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614	
P6066	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614	
P6070	PLUG	NPLG-2P645	1	25055689	
P6071	PLUG	NPLG-2P645	1	25055689	
P6072	PLUG	NPLG-2P645	1	25055689	
P6073	PLUG	NPLG-2P645	1	25055689	
P6074	PLUG	NPLG-2P645	1	25055689	
P6075	PLUG	NPLG-2P645	1	25055689	
P6076	PLUG	NPLG-2P645	1	25055689	
P6080	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614	
P6081	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614	
P6082	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614	
P6083	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614	
P6084	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614	
P6085	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614	
P6086	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614	
P6090	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614	
P6091	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614	
P6092	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614	
P6093	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614	
P6094	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614	
P6095	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614	
P6096	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614	
P6240	SOCKET AS	NSAS-3P1658	1	2009991062AUL	
P6250	SOCKET AS	NSAS-4P1657	1	2009991061IUL	
P6340A	PLUG	NPLG-2P149	1	25055165	
P6340B	RETAINER	(BUS-1)	1	27142056	
P6340C	RETAINER	(BUS-1)	1	27142056	
P6350A	PLUG	NPLG-2P149	1	25055165	
P6350B	RETAINER	(BUS-2)	1	27142057	
P6350C	RETAINER	(BUS-2)	1	27142057	

U25 DSP PC BOARD (NADSP-9072-1A)

REF. NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
Q3301	IC	TC74VHC157FT	1	22274157ER2TO	
Q3311	IC	TC74VHC157FT	1	22274157ER2TO	
Q3325	IC	TC74VHC157FT	1	22274157ER2TO	
Q3331	IC	TC74VHC157FT	1	22274157ER2TO	
Q3351	IC	TC74VHC157FT	1	22274157ER2TO	
Q3371	IC	TC74VHC157FT	1	22274157ER2TO	
Q3391	IC	TC74VHCT08AFT (EKJ)	1	22274008G1R2TO	
Q3391 or	IC	TC74VHCT08AFT	(1)	22274008GR2TO	

Q3401	IC	D790E001BZDH275	1	---	NRP
Q3401 or	IC	D710E001BZDH275	1	---	NRP
Q3451	IC(DSP1 ROM)	ES29LV160ET-70TG(0212)	1	222W0069R302126	
Q3451 or	IC(DSP1 ROM)	S29AL016D70TFI010(0212)	(1)	222W0063R302126	
Q3461	IC	RMS116T(LF)	1	22242340R3	
Q3461 or	IC	M12L16161A-7TG	(1)	22242278R3	
Q3461 or	IC	IC42S16100	(1)	22242123R2	
Q3461 or	IC	IC42S16100	(1)	22242123R3	
Q3471	IC	RMS116T(LF)	1	22242340R3	
Q3471 or	IC	M12L16161A-7TG	(1)	22242278R3	
Q3471 or	IC	IC42S16100	(1)	22242123R2	
Q3471 or	IC	IC42S16100	(1)	22242123R3	
Q3481	IC	TC7WU04FU(TE12L_F)	1	22240935R2	
Q3491	IC	TC74VHC541FT	1	22274541ER2TO	
Q3491 or	IC	TC74VHC541FT(EKJ)	(1)	22274541E1R2TO	
Q3501	IC	D788E001BRFP266	1	---	NRP
Q3501 or	IC	D708E001BRFP266	1	---	NRP
Q3551	IC(DSP2 ROM)	ES29LV400ET-70TG(0213)	1	222W0065R302137	
Q3551 or	IC(DSP2 ROM)	S29AL004D70TFI010(0213)	(1)	222W0061R302137	
Q3561	IC	RMS116T(LF)	1	22242340R3	
Q3561 or	IC	M12L16161A-7TG	(1)	22242278R3	
Q3561 or	IC	IC42S16100	(1)	22242123R2	
Q3561 or	IC	IC42S16100	(1)	22242123R3	
Q3571	IC	TC7WU04FU(TE12L_F)	1	22240935R2	
Q3601	IC	D707E001BRFP250	1	---	NRP
Q3651	IC(DSP3 ROM)	ES29LV800ET-70TG(0214)	1	222W0068R302148	
Q3651 or	IC(DSP3 ROM)	S29AL008D70TFI010(0214)	(1)	222W0062R302148	
Q3661	IC	IS42S16400D-7TL	1	22241910R3	
Q3661 or	IC	M12L64164A-7TG	(1)	22242441R3	
Q3661 or	IC	K4S641632K-UC60	(1)	22242462R2	
Q7202	IC	BD7820	1	22242300R2	
Q7222	IC	BD7820	1	22242300R2	
Q7223	IC	BD7820	1	22242300R2	
D7205	C-DIODE	1SS352	1	223234R2	
D7205 or	C-DIODE	1SS355	(1)	223269R2	
D7225	C-DIODE	1SS352	1	223234R2	
D7225 or	C-DIODE	1SS355	(1)	223269R2	
D7226	C-DIODE	1SS352	1	223234R2	
D7226 or	C-DIODE	1SS355	(1)	223269R2	
L3301	CHOKE COIL	LBC2518T470M	1	231364M470R2	
L3311	EMIFIL	BK1608HS102-T	1	230955R2	
L3312	EMIFIL	BK1608LM182-T	1	230958R1	
L3371	EMIFIL	BK1608LM182-T	1	230958R1	
L3372	EMIFIL	BK1608HS102-T	1	230955R2	
L3401	EMIFIL	ACF451832-333-T	1	230978R2	

L3402	CHOKE COIL	BLM21PG221SN1	1	230949R2
L3403	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L3451	CHOKE COIL	BLM21PG221SN1	1	230949R2
L3481	EMIFIL	BK1608LM182-T	1	230958R1
L3482	EMIFIL	BK1608LM182-T	1	230958R1
L3483	CHOKE COIL	LBC2518T470M	1	231364M470R2
L3491	CHOKE COIL	LBC2518T470M	1	231364M470R2
L3501	EMIFIL	ACF451832-333-T	1	230978R2
L3541	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L3542	CHOKE COIL	BLM21PG221SN1	1	230949R2
L3551	CHOKE COIL	BLM21PG221SN1	1	230949R2
L3571	CHOKE COIL	LBC2518T470M	1	231364M470R2
L3572	EMIFIL	BK1608LM182-T	1	230958R1
L3601	EMIFIL	ACF451832-333-T	1	230978R2
L3602	EMIFIL	BK1608LL241-T	1	230959R1
L3603	EMIFIL	BK1608HS102-T	1	230955R2
L3641	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L3642	CHOKE COIL	BLM21PG221SN1	1	230949R2
L3651	CHOKE COIL	BLM21PG221SN1	1	230949R2
X3481	CRYSTAL	HC-49USSMD25.00MHz	1	3010444R2
X3571	CRYSTAL	HC-49USSMD17.734MHz	1	3010442R2
C3301	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3302	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C3311	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3315	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3325	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3331	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3351	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3371	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3391	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3401	C-CERA C	CC725CH1H-101J1	1	342101014R1
C3402	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C3403	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3405	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C3411	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3412	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3413	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3414	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3415	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3416	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3417	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3418	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3419	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3420	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3421	C-CERA C	CK725F1E-104Z1	1	332161040R1

C3425	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3426	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3427	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3428	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3429	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3430	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3431	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3432	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3433	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3434	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3435	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3451	C-CERA C	CC725CH1H-101J1	1	342101014R1
C3452	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3453	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C3461	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3462	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3463	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3464	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3465	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3466	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3467	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C3471	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3472	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3473	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3474	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3475	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3476	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3477	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C3481	C-CERA C	CC725CH1H-090D1	1	342100902R1
C3482	C-CERA C	CC725CH1H-090D1	1	342100902R1
C3483	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3484	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C3491	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3501	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3502	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3503	C-CERA C	CC725CH1H-101J1	1	342101014R1
C3504	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3505	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3506	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3507	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C3508	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3509	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3510	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3511	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3512	C-CERA C	CK725F1E-104Z1	1	332161040R1

C3513	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3514	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3515	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3516	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3517	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3518	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3519	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3520	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3521	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3522	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3523	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3524	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3525	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3526	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3527	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3528	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3529	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3541	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C3542	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C3551	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3552	C-CERA C	CC725CH1H-101J1	1	342101014R1
C3553	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C3561	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3562	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3563	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3564	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3565	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3566	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3567	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C3571	C-CERA C	CC725CH1H-120J1	1	342101204R1
C3572	C-CERA C	CC725CH1H-120J1	1	342101204R1
C3573	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3574	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C3601	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3602	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3603	C-CERA C	CC725CH1H-101J1	1	342101014R1
C3604	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3605	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3606	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3607	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C3608	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3609	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3610	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3611	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3612	C-CERA C	CK725F1E-104Z1	1	332161040R1

C3613	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3614	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3615	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3616	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3617	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3618	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3619	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3620	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3621	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3622	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3623	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3624	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3625	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3626	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3627	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3628	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3629	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3641	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C3642	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C3651	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3652	C-CERA C	CC725CH1H-101J1	1	342101014R1
C3653	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C3661	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3662	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3663	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3664	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3665	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3666	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3667	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3668	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C7204	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C7205	C-CERA C	CK725F1E-104Z1	1	332161040R1
C7206	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C7224	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C7225	C-CERA C	CK725F1E-104Z1	1	332161040R1
C7226	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C7227	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C7228	C-CERA C	CK725F1E-104Z1	1	332161040R1
C7229	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
R3301	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3302	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3303	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3304	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3305	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3306	C-CARBON R	RN72K1J-470JE	1	435034704R1

R3307	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3311	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3312	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3313	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3314	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3315	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3316	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3317	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3318	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3319	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3320	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3321	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3322	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3323	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3325	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3326	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3327	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3328	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3330	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3331	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3332	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3333	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3334	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3335	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3336	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3337	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3338	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3339	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3340	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3341	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3342	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3345	C-CARBON R	RN72K1J-101JE	1	435031014R1
R3351	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3352	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3353	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3354	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3355	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3356	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3357	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3358	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3359	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3360	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3361	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3362	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3371	C-CARBON R	RN72K1J-331JE	1	435033314R1

R3373	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3374	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3376	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3377	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3379	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3380	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3381	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3382	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3391	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3401	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3402	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3403	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3404	C-CARBON R	RN72K1J-222JE	1	435032224R1
R3405	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3406	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3407	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3408	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3409	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3410	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3411	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3412	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3413	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3414	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3415	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3416	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3417	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3418	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3419	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3420	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3421	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3422	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3423	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3424	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3425	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3426	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3427	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3428	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3429	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3430	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3431	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3451	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3452	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3453	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3454	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3455	C-CARBON R	RN72K1J-103JE	1	435031034R1

R3456	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3457	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3482	C-CARBON R	RN72K1J-221JE	1	435032214R1
R3483	C-CARBON R	RN72K1J-105JE	1	435031054R1
R3491	C-CARBON R	RN72K1J-472JE	1	435034724R1
R3492	C-CARBON R	RN72K1J-472JE	1	435034724R1
R3493	C-CARBON R	RN72K1J-472JE	1	435034724R1
R3494	C-CARBON R	RN72K1J-472JE	1	435034724R1
R3495	C-CARBON R	RN72K1J-472JE	1	435034724R1
R3496	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3501	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3502	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3503	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3504	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3505	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3506	C-CARBON R	RN72K1J-222JE	1	435032224R1
R3507	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3508	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3509	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3510	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3511	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3512	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3513	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3514	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3515	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3516	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3517	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3518	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3519	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3520	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3521	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3522	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3523	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3524	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3525	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3526	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3527	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3528	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3529	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3530	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3551	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3552	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3553	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3554	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3557	C-CARBON R	RN72K1J-103JE	1	435031034R1

R3558	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3571	C-CARBON R	RN72K1J-105JE	1	435031054R1
R3572	C-CARBON R	RN72K1J-221JE	1	435032214R1
R3601	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3602	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3603	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3604	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3605	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3606	C-CARBON R	RN72K1J-222JE	1	435032224R1
R3607	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3608	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3609	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3610	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3611	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3612	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3613	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3614	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3615	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3616	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3617	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3618	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3619	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3620	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3621	C-CARBON R	RN72K1J-331JE	1	435033314R1
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R3624	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3625	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3626	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3627	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3628	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3629	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3630	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3651	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3652	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3653	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3656	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3657	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3658	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3659	C-CARBON R	RN72K1J-103JE	1	435031034R1
R7206	C-CARBON R	RN72K1J-273JE	1	435032734R1
R7207	C-CARBON R	RN72K1J-273JE	1	435032734R1
R7208	C-CARBON R	RN72K1J-393JE	1	435033934R1
R7226	C-CARBON R	RN72K1J-273JE	1	435032734R1
R7227	C-CARBON R	RN72K1J-273JE	1	435032734R1

R7228	C-CARBON R	RN72K1J-393JE	1	435033934R1
R7229	C-CARBON R	RN72K1J-273JE	1	435032734R1
R7230	C-CARBON R	RN72K1J-273JE	1	435032734R1
R7239	C-CARBON R	RN72K1J-393JE	1	435033934R1
P3801B	SOCKET	IMSA-9856S-30B-T	1	25053236R2
P3802B	SOCKET	IMSA-9856S-30B-T	1	25053236R2
P3805A	PLUG	NPLG-10P662	1	25055706

U27	DAC PC BOARD (NADG-9074-1E/1F)
U28	MICROPROCESSOR PC BOARD (NAAR-9075-1E/1F)
U30	XM PC BOARD (NARF-9077-1E)
U31	HOLDER PC BOARD (NAETC-9078-1E/1F)
U32	AMPLIFIER PC BOARD (NAASP-9080-1E/1F)
U26	AMPLIFIER PC BOARD (NAETC-9073-1E/1F)
U43	E-CONTROL PC BOARD (NALAN-9079-1E/1F)

REF. NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
U3001	PHT CP	GP1FAV51RK0F	1	24120129	
U3002	PHT CP	GP1FAV51RK0F	1	24120129	
U3004	PHT CP	GP1FAV51TKBF	1	24120132	
Q1001	IC(NETWORK MEMORY)	PIC18F66J60(0237)	1	222W0072R302374	
Q1002	IC	IS25C02-2GLI	1	222W0075R2	
Q1002 or	IC	BR25L020FJ-W	(1)	222W0076R2	
Q1003	IC	BA33BC0FP	1	22278033DR2RH	
Q101	IC	CS4344-CZZR	1	22242406R2	<DD>
Q102	IC	TA48033AF(TE16L_NQ)	1	22278033DR2TO	<DD>
Q102 or	IC	BA33BC0FP	(1)	22278033DR2RH	<DD>
Q103	IC	F2628E-01	1	22242436R2	<DD>
Q104	IC	TA48033AF(TE16L_NQ)	1	22278033DR2TO	<DD>
Q104 or	IC	BA33BC0FP	(1)	22278033DR2RH	<DD>
Q105	IC	NE5532APSR	1	22242283R2	<DD>
Q106	IC	NE5532APSR	1	22242283R2	<DD>
Q107	IC	TC74VHCT08AFT (EKJ)	1	22274008G1R2TO	<DD>
Q107 or	IC	TC74VHCT08AFT	(1)	22274008GR2TO	<DD>
Q3001	IC	TC74VHC157FT	1	22274157ER2TO	
Q3021	IC	74HCU04F	1	222740046R2	
Q3031	IC	ICL322IECVZ	1	22242268R2	
Q3041	IC	CS42516-CQZ(R)-D	1	22242294R2	
Q3071	IC	TC7WU04FU(TE12L_F)	1	22240935R2	
Q3081	IC	NE5532APSR	1	22242283R2	
Q3082	IC	NE5532APSR	1	22242283R2	
Q3701	IC	PCM1796DBR	1	22242403R2	
Q3721	IC	PCM1796DBR	1	22242403R2	
Q3741	IC	PCM1796DBR	1	22242403R2	
Q3761	IC	PCM1796DBR	1	22242403R2	

Q3781	IC	PCM1796DBR	1	22242403R2
Q3800	IC	NE5532APSR	1	22242283R2
Q3801	IC	NE5532APSR	1	22242283R2
Q3802	IC	NE5532APSR	1	22242283R2
Q3803	IC	NE5532APSR	1	22242283R2
Q3804	IC	NE5532APSR	1	22242283R2
Q3805	IC	NE5532APSR	1	22242283R2
Q3806	IC	NE5532APSR	1	22242283R2
Q3807	IC	NE5532APSR	1	22242283R2
Q3808	IC	NE5532APSR	1	22242283R2
Q3809	IC	NE5532APSR	1	22242283R2
Q3810	IC	NE5532APSR	1	22242283R2
Q3811	IC	NE5532APSR	1	22242283R2
Q3812	IC	NE5532APSR	1	22242283R2
Q3813	IC	NE5532APSR	1	22242283R2
Q3814	IC	NE5532APSR	1	22242283R2
Q4201	IC	NE5532APSR	1	22242283R2
Q4202	IC	NE5532APSR	1	22242283R2
Q4203	IC	NE5532APSR	1	22242283R2
Q4204	IC	R2S15211FP	1	22242297R3
Q4291	TR	2SC2235-Y(TPE6_F)	1	2211654T
Q4292	TR	2SA965-Y(TPE6_F)	1	2211644T
Q4720	IC	NE5532APSR	1	22242283R2
Q4721	IC	NE5532APSR	1	22242283R2
Q4722	IC	NE5532APSR	1	22242283R2
Q4723	IC	NE5532APSR	1	22242283R2
Q7001	IC(MAIN MICROPROCESSOR)	M3087BFKBBGP(0211)	1	222W0059R302110
Q7002	TR	RN1404	1	2214490R2
Q7002 or	TR	KRC104S	(1)	2216210R2
Q7003	TR	DTA114YKA	1	2216480R2
Q7003 or	TR	RN2407(TE85L_F)	(1)	2216360R2
Q7003 or	TR	KRA107S	(1)	2216350R2
Q7005	TR	DTC114EKA	1	2216250R2
Q7005 or	TR	RN1402	(1)	2214470R2
Q7005 or	TR	KRC102S	(1)	2216190R2
Q7006	TR	DTA114YKA	1	2216480R2
Q7006 or	TR	RN2407(TE85L_F)	(1)	2216360R2
Q7006 or	TR	KRA107S	(1)	2216350R2
Q7007	TR	DTC114EKA	1	2216250R2
Q7007 or	TR	RN1402	(1)	2214470R2
Q7007 or	TR	KRC102S	(1)	2216190R2
Q7151	IC	TC74VHCT08AFT (EKJ)	1	22274008G1R2TO
Q7151 or	IC	TC74VHCT08AFT	(1)	22274008GR2TO
Q7155	IC	TC74VHCT08AFT (EKJ)	1	22274008G1R2TO
Q7155 or	IC	TC74VHCT08AFT	(1)	22274008GR2TO

Q7161	IC	TC74VHCT08AFT (EKJ)	1	22274008G1R2TO	
Q7161 or	IC	TC74VHCT08AFT	(1)	22274008GR2TO	
Q7165	IC	TC74VHCT08AFT (EKJ)	1	22274008G1R2TO	<DD>
Q7165 or	IC	TC74VHCT08AFT	(1)	22274008GR2TO	<DD>
Q7171	IC	TC74VHC238FT	1	22274238ER2TO	
Q7172	IC	TC74VHC138FT(EK2M)	1	22274138ER2TO	
Q7181	IC	NJU7312AM	1	22242210R2	
Q7182	TR	2SC2712-GR	1	2213145R2	
Q7183	TR	RN1404	1	2214490R2	
Q7183 or	TR	KRC104S	(1)	2216210R2	
Q7184	TR	RN2402	1	2214530R2	
Q7184 or	TR	KRA102S	(1)	2216220R2	
Q7201	IC	SI8008TM	1	22242323R2	
Q7221	IC	SI8008TM	1	22242323R2	
Q7231	IC	SI8008TM	1	22242323R2	
Q7232	IC	BD7820	1	22242300R2	<DD>
Q7241	IC	TA4805AF(TE16L_NQ)	1	22278005DR2TO	
Q7241 or	IC	BA50BC0FP	(1)	22278005DR2RH	
Q7242	IC	TA48033AF(TE16L_NQ)	1	22278033DR2TO	
Q7242 or	IC	BA33BC0FP	(1)	22278033DR2RH	
Q7246	IC	TA48033AF(TE16L_NQ)	1	22278033DR2TO	
Q7246 or	IC	BA33BC0FP	(1)	22278033DR2RH	
Q7251	IC	TA4805AF(TE16L_NQ)	1	22278005DR2TO	
Q7261	IC	XC6202P502FR	1	22242331R2	
Q7262	IC	XC6213B332MR	1	22242277R2	
Q7351	TR	RN1404	1	2214490R2	
Q7351 or	TR	KRC104S	(1)	2216210R2	
Q7352	TR	RN2402	1	2214530R2	
Q7352 or	TR	KRA102S	(1)	2216220R2	
Q7355	TR	RN1404	1	2214490R2	
Q7355 or	TR	KRC104S	(1)	2216210R2	
Q7356	TR	RN2402	1	2214530R2	
Q7356 or	TR	KRA102S	(1)	2216220R2	
Q7361	TR	RN1404	1	2214490R2	
Q7361 or	TR	KRC104S	(1)	2216210R2	
Q7362	TR	RN2402	1	2214530R2	
Q7362 or	TR	KRA102S	(1)	2216220R2	
Q7365	TR	RN1404	1	2214490R2	
Q7365 or	TR	KRC104S	(1)	2216210R2	
Q7366	TR	RN2402	1	2214530R2	
Q7366 or	TR	KRA102S	(1)	2216220R2	
Q7381	IC	S-812C56AUA-C3K	1	22242207R2	
Q7385	IC	S-812C33AUA-C2N	1	22242222R2	
Q7391	IC	IS25C64A-2GLI	1	22242385R2	
Q7401	TR	DTC114EKA	1	2216250R2	

Q7401 or	TR	RN1402	(1)	2214470R2	
Q7401 or	TR	KRC102S	(1)	2216190R2	
D4291	ZENER D	UDZS7.5B	1	224550750R2	
D4292	ZENER D	UDZS7.5B	1	224550750R2	
D7001	C-DIODE	1SS352	1	223234R2	
D7001 or	C-DIODE	1SS355	(1)	223269R2	
D7002	C-DIODE	1SS352	1	223234R2	
D7002 or	C-DIODE	1SS355	(1)	223269R2	
D7003	C-DIODE	1SS352	1	223234R2	
D7003 or	C-DIODE	1SS355	(1)	223269R2	
D7064	C-DIODE	1SS352	1	223234R2	
D7064 or	C-DIODE	1SS355	(1)	223269R2	
D7181	ZENER D	UDZS9.1B	1	224550910R2	
D7201	C-DIODE	1SS352	1	223234R2	
D7201 or	C-DIODE	1SS355	(1)	223269R2	
D7202	C-DIODE	CRS09(TE85L_Q)	1	223274R2	
D7221	C-DIODE	1SS352	1	223234R2	
D7221 or	C-DIODE	1SS355	(1)	223269R2	
D7222	C-DIODE	CRS09(TE85L_Q)	1	223274R2	
D7231	C-DIODE	1SS352	1	223234R2	
D7231 or	C-DIODE	1SS355	(1)	223269R2	
D7232	C-DIODE	CRS09(TE85L_Q)	1	223274R2	
D7233	C-DIODE	1SS352	1	223234R2	<DD>
D7233 or	C-DIODE	1SS355	(1)	223269R2	<DD>
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D7245 or	DIODE	GP104003E	(1)	22380035T	
D7246	DIODE	RL1N4003	1	22380260T	
D7246 or	DIODE	GP104003E	(1)	22380035T	
D7371	C-DIODE	1SS352	1	223234R2	
D7371 or	C-DIODE	1SS355	(1)	223269R2	
D7372	C-DIODE	1SS352	1	223234R2	
D7372 or	C-DIODE	1SS355	(1)	223269R2	
D7381	C-DIODE	1SS352	1	223234R2	
D7381 or	C-DIODE	1SS355	(1)	223269R2	
D7382	C-DIODE	1SS352	1	223234R2	
D7382 or	C-DIODE	1SS355	(1)	223269R2	
D7383	C-DIODE	1SS352	1	223234R2	
D7383 or	C-DIODE	1SS355	(1)	223269R2	
D7384	C-DIODE	1SS352	1	223234R2	
D7384 or	C-DIODE	1SS355	(1)	223269R2	
L1001	CHOKE COIL	BLM21PG221SN1	1	230949R2	
L1002	CHOKE COIL	BLM21PG221SN1	1	230949R2	
L101	EMIFIL	BK1608LM182-T	1	230958R1	<DD>
L102	CHOKE COIL	NCH-1471	1	231237K022R2	<DD>
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L104	CHOKE COIL	NCH-1471	1	231237K022R2	<DD>
L105	CHOKE COIL	BLM21PG221SN1	1	230949R2	<DD>
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L3001	CHOKE COIL	LBC2518T470M	1	231364M470R2	
L3002	CHOKE COIL	LBC2518T470M	1	231364M470R2	
L3011	CHOKE COIL	LBC2518T2R2M	1	231364M022R2	
L3012	CHOKE COIL	LBC2518T2R2M	1	231364M022R2	
L3013	CHOKE COIL	LBC2518T2R2M	1	231364M022R2	
L3021	CHOKE COIL	LBC2518T470M	1	231364M470R2	
L3031	CHOKE COIL	LBC2518T470M	1	231364M470R2	
L3041	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3042	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3043	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3044	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3045	EMIFIL	BK1608LM182-T	1	230958R1	
L3046	EMIFIL	BK1608HS102-T	1	230955R2	
L3071	CHOKE COIL	LBC2518T470M	1	231364M470R2	
L3072	EMIFIL	BK1608LM182-T	1	230958R1	
L3701	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3702	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3703	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3704	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3721	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3722	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3723	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3724	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3741	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3742	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3743	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3744	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
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L3762	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3763	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3764	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3781	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3782	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3783	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L3784	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L7165	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L7201	CHOKE COIL	NCH-2541	1	231363K470	
L7211	CHOKE COIL	NCH-2541	1	231363K470	
L7221	CHOKE COIL	NCH-2541	1	231363K470	
X1001	CRYSTAL	HC-49USSMD25.00MHz	1	3010444R2	
X101	CRYSTAL	DSX840GA 45.1584MHz	1	3010420R2	<DD>
X101 or	CRYSTAL	FCX-02N 45.1584MHz	(1)	3010421R2	<DD>

X3071	CRYSTAL	HC-49US24.576MHz	1	3010423T	
X3071A	IB CUSHION	W15*3t TAPE	1	28141585	
X7001	CERA LOCK	CSTCE8M00G55-R0	1	3010416R2	
C1001	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C1002	C-CERA C	CK725B1H-103K1	1	332101035R1	
C1003	C-CERA C	CK725B1H-103K1	1	332101035R1	
C1005	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C1006	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C1007	C-CERA C	CC725CH1H-150J1	1	342101504R1	
C1008	VR C	CE04W50V-10M(VR)	1	394681007T	
C1009	C-CERA C	CC725CH1H-150J1	1	342101504R1	
CI01	VR C	CE04W6.3V-470M(VR)	1	394624717T	<DD>
CI010	C-CERA C	CK725F1E-104Z1	1	332161040R1	
CI011	VR C	CE04W16V-100M(VR)	1	394641017T	
CI012	C-CERA C	CK725F1E-104Z1	1	332161040R1	
CI015	C-CERA C	CK725F1E-104Z1	1	332161040R1	
CI016	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2	
CI02	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD>
CI04	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DD>
CI05	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DD>
CI06	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD>
CI07	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD>
CI08	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD>
CI09	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD>
CI10	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD>
CI11	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD>
CI12	C-CERA C	CC725CH1H-080D1	1	342100802R1	<DD>
CI13	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD>
CI14	C-CERA C	CC725CH1H-040C1	1	342100401R1	<DD>
CI15	C-CERA C	CK725B1H-102K1	1	332101025R1	<DD>
CI16	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD>
CI17	VR C	CE04W16V-100M(VR)	1	394641017T	<DD>
CI18	VR C	CE04W6.3V-470M(VR)	1	394624717T	<DD>
CI19	VR C	CE04W16V-100M(VR)	1	394641017T	<DD>
CI20	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD>
CI21	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD>
CI22	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD>
CI23	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD>
CI24	VR C	CE04W16V-100M(VR)	1	394641017T	<DD>
CI25	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD>
CI26	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD>
CI27	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD>
CI28	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DD>
CI29	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DD>
CI30	C-CERA C	CC725CH1H-821J1	1	342108214R1	<DD>

C131	C-CERA C	CC725CH1H-821J1	1	342108214R1	<DD>
C132	C-CERA C	CC725CH1H-821J1	1	342108214R1	<DD>
C133	C-CERA C	CC725CH1H-821J1	1	342108214R1	<DD>
C135	UTSP C	CE04W25V-100M(UTSP)	1	397551017T	<DD>
C136	UTSP C	CE04W25V-100M(UTSP)	1	397551017T	<DD>
C137	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DD>
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C139	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD>
C140	C-CERA C	CK725B1H-102K1	1	332101025R1	<DD>
C3001	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C3002	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C3004	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C3006	VR C	CE04W16V-100M(VR)	1	394641017T	
C3007	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C3008	VR C	CE04W16V-100M(VR)	1	394641017T	
C3011	C-CERA C	CC725CH1H-101J1	1	342101014R1	
C3012	C-CERA C	CK725B1C-104K1	1	332121045R1	
C3013	C-CERA C	CC725CH1H-080D1	1	342100802R1	
C3014	C-CERA C	CC725CH1H-101J1	1	342101014R1	
C3015	C-CERA C	CK725B1C-104K1	1	332121045R1	
C3016	C-CERA C	CC725CH1H-080D1	1	342100802R1	
C3017	C-CERA C	CC725CH1H-101J1	1	342101014R1	
C3018	C-CERA C	CK725B1C-104K1	1	332121045R1	
C3019	C-CERA C	CC725CH1H-080D1	1	342100802R1	
C3021	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C3022	VR C	CE04W16V-100M(VR)	1	394641017T	
C3025	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C3031	UTSP C	CE04W50V-1M(UTSP)	1	397580107T	
C3032	UTSP C	CE04W50V-1M(UTSP)	1	397580107T	
C3033	UTSP C	CE04W50V-1M(UTSP)	1	397580107T	
C3034	UTSP C	CE04W50V-1M(UTSP)	1	397580107T	
C3035	VR C	CE04W16V-100M(VR)	1	394641017T	
C3036	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C3037	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C3041	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	
C3042	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	
C3043	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C3044	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C3045	TF C	ECQ-B50V-222J	1	374722224T	
C3046	TF C	ECQ-B50V-222J	1	374722224T	
C3047	UTSJ C	CE04W25V-47M(UTSJ)	1	398054707T	
C3048	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C3049	VR C	CE04W16V-100M(VR)	1	394641017T	
C3050	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	
C3051	C-CERA C	CK725F1E-104Z1	1	332161040R1	

C3052	C-CERA C	CK725B1H-102K1	1	332101025R1
C3053	C-CERA C	CK725B1H-223K1	1	332102235R1
C3054	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3055	C-CERA C	CC725CH1H-330J1	1	342103304R1
C3057	C-CERA C	CC725CH1H-330J1	1	342103304R1
C3058	C-CERA C	CC725CH1H-330J1	1	342103304R1
C3059	UTSP C	CE04W10V-470M(UTSP)	1	397534717T
C3061	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3062	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3064	C-CERA C	CK725B1H-102K1	1	332101025R1
C3065	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3069	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3071	C-CERA C	CC725CH1H-120J1	1	342101204R1
C3072	C-CERA C	CC725CH1H-120J1	1	342101204R1
C3073	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3081	UTSP C	CE04W25V-47M(UTSP)	1	397554707T
C3082	UTSP C	CE04W25V-47M(UTSP)	1	397554707T
C3091	UTSP C	CE04W25V-47M(UTSP)	1	397554707T
C3092	UTSP C	CE04W25V-47M(UTSP)	1	397554707T
C3095	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C3096	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C3701	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3702	C-FILM C	ECHU16V-104J	1	373041044R2
C3703	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3704	C-FILM C	ECHU16V-104J	1	373041044R2
C3705	UTSJ C	CE04W25V-47M(UTSJ)	1	398054707T
C3707	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3708	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3709	C-FILM C	ECHU16V-104J	1	373041044R2
C3710	C-CERA C	CK725B1H-102K1	1	332101025R1
C3711	C-CERA C	CK725B1H-102K1	1	332101025R1
C3721	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3722	C-FILM C	ECHU16V-104J	1	373041044R2
C3723	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3724	C-FILM C	ECHU16V-104J	1	373041044R2
C3725	UTSJ C	CE04W25V-47M(UTSJ)	1	398054707T
C3727	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3728	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3729	C-FILM C	ECHU16V-104J	1	373041044R2
C3730	C-CERA C	CK725B1H-102K1	1	332101025R1
C3741	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3742	C-FILM C	ECHU16V-104J	1	373041044R2
C3743	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3744	C-FILM C	ECHU16V-104J	1	373041044R2
C3745	UTSJ C	CE04W25V-47M(UTSJ)	1	398054707T

C3747	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3748	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3749	C-FILM C	ECHU16V-104J	1	373041044R2
C3750	C-CERA C	CK725B1H-102K1	1	332101025R1
C3761	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3762	C-FILM C	ECHU16V-104J	1	373041044R2
C3763	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3764	C-FILM C	ECHU16V-104J	1	373041044R2
C3765	UTSJ C	CE04W25V-47M(UTSJ)	1	398054707T
C3767	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3768	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3769	C-FILM C	ECHU16V-104J	1	373041044R2
C3770	C-CERA C	CK725B1H-102K1	1	332101025R1
C3781	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3782	C-FILM C	ECHU16V-104J	1	373041044R2
C3783	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3784	C-FILM C	ECHU16V-104J	1	373041044R2
C3785	UTSJ C	CE04W25V-47M(UTSJ)	1	398054707T
C3787	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3788	UTSP C	CE04W10V-220M(UTSP)	1	397532217T
C3789	C-FILM C	ECHU16V-104J	1	373041044R2
C3790	C-CERA C	CK725B1H-102K1	1	332101025R1
C3800	TF C	ECQ-B50V-272J	1	374722724T
C3801	TF C	ECQ-B50V-272J	1	374722724T
C3802	TF C	ECQ-B50V-272J	1	374722724T
C3803	TF C	ECQ-B50V-272J	1	374722724T
C3804	TF C	ECQ-B50V-272J	1	374722724T
C3805	TF C	ECQ-B50V-272J	1	374722724T
C3806	TF C	ECQ-B50V-272J	1	374722724T
C3807	TF C	ECQ-B50V-272J	1	374722724T
C3808	TF C	ECQ-B50V-272J	1	374722724T
C3809	TF C	ECQ-B50V-272J	1	374722724T
C3810	TF C	ECQ-B50V-272J	1	374722724T
C3811	TF C	ECQ-B50V-272J	1	374722724T
C3812	TF C	ECQ-B50V-272J	1	374722724T
C3813	TF C	ECQ-B50V-272J	1	374722724T
C3814	TF C	ECQ-B50V-272J	1	374722724T
C3815	TF C	ECQ-B50V-272J	1	374722724T
C3816	TF C	ECQ-B50V-272J	1	374722724T
C3817	TF C	ECQ-B50V-272J	1	374722724T
C3818	TF C	ECQ-B50V-272J	1	374722724T
C3819	TF C	ECQ-B50V-272J	1	374722724T
C3820	TF C	ECQ-B50V-471J	1	374724714T
C3821	TF C	ECQ-B50V-471J	1	374724714T
C3822	TF C	ECQ-B50V-471J	1	374724714T

C3823	TF C	ECQ-B50V-471J	1	374724714T
C3824	TF C	ECQ-B50V-471J	1	374724714T
C3825	TF C	ECQ-B50V-471J	1	374724714T
C3826	TF C	ECQ-B50V-471J	1	374724714T
C3827	TF C	ECQ-B50V-471J	1	374724714T
C3828	TF C	ECQ-B50V-471J	1	374724714T
C3829	TF C	ECQ-B50V-471J	1	374724714T
C3830	TF C	ECQ-B50V-471J	1	374724714T
C3831	TF C	ECQ-B50V-471J	1	374724714T
C3832	TF C	ECQ-B50V-471J	1	374724714T
C3833	TF C	ECQ-B50V-471J	1	374724714T
C3834	TF C	ECQ-B50V-471J	1	374724714T
C3835	TF C	ECQ-B50V-471J	1	374724714T
C3836	TF C	ECQ-B50V-471J	1	374724714T
C3837	TF C	ECQ-B50V-471J	1	374724714T
C3838	TF C	ECQ-B50V-471J	1	374724714T
C3839	TF C	ECQ-B50V-471J	1	374724714T
C3840	TF C	ECQ-B50V-272J	1	374722724T
C3841	TF C	ECQ-B50V-272J	1	374722724T
C3842	TF C	ECQ-B50V-272J	1	374722724T
C3843	TF C	ECQ-B50V-272J	1	374722724T
C3844	TF C	ECQ-B50V-272J	1	374722724T
C3845	TF C	ECQ-B50V-272J	1	374722724T
C3846	TF C	ECQ-B50V-272J	1	374722724T
C3847	TF C	ECQ-B50V-272J	1	374722724T
C3848	TF C	ECQ-B50V-272J	1	374722724T
C3849	TF C	ECQ-B50V-272J	1	374722724T
C3870	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C3871	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C3872	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C3873	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C3874	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C3875	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C3876	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C3877	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C3878	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C3879	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C3880	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C3881	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C3882	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C3883	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C3884	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C3885	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C3886	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C3887	UTSP C	CE04W25V-220M(UTSP)	1	397552217T

C3888	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C3889	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C4201	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4202	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4203	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4204	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4205	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4206	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4207	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4208	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4209	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4210	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4211	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4212	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4213	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4214	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4227	TF C	ECQ-B50V-223J	1	374722234T
C4228	TF C	ECQ-B50V-223J	1	374722234T
C4229	TF C	ECQ-V50V-823J	1	374728234T
C4230	TF C	ECQ-V50V-823J	1	374728234T
C4231	TF C	ECQ-V50V-474J	1	374724744T
C4232	TF C	ECQ-V50V-474J	1	374724744T
C4233	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4234	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4235	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4236	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4237	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4238	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4239	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4240	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4291	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C4292	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C4293	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4294	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4295	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C4296	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C4720	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4721	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4722	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4723	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4724	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4725	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4726	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4727	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C4730	UTSP C	CE04W50V 47M(UTSP)	1	397584707T

C4731	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C4732	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C4733	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C4734	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C4735	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C4736	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C4737	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C4740	UTSP C	CE04W25V-100M(UTSP)	1	397551017T	
C4741	UTSP C	CE04W25V-100M(UTSP)	1	397551017T	
C7002	VR C	CE04W50V-4.7M(VR)	1	394680477T	
C7003	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7004	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7005	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7006	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7007	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7008	C-CERA C	CK725B1H-102K1	1	332101025R1	
C7009	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7010	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7011	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7012	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7013	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7014	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7015	C-CERA C	CK725B1H-102K1	1	332101025R1	
C7016	C-CERA C	CK725B1H-102K1	1	332101025R1	
C7017	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7018	C-CERA C	CK725B1H-102K1	1	332101025R1	
C7019	C-CERA C	CK725B1H-102K1	1	332101025R1	
C7020	C-CERA C	CK725B1H-102K1	1	332101025R1	
C7021	C-CERA C	CK725B1H-102K1	1	332101025R1	
C7022	C-CERA C	CC725CH1H-101J1	1	342101014R1	
C7023	C-CERA C	CC725CH1H-101J1	1	342101014R1	
C7024	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7025	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7027	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7151	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7152	VR C	CE04W16V-100M(VR)	1	394641017T	
C7155	C-CERA C	CK725F1E-104Z1	1	332161040R1	
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C7166	VR C	CE04W16V-100M(VR)	1	394641017T	
C7171	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7172	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7181	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7183	VR C	CE04W16V-100M(VR)	1	394641017T	
C7201	VR C	CE04W16V-470M(VR)	1	394644717T	

C7203	VR C	CE04W6.3V-1000M(VR)	1	394621027T	
C7221	VR C	CE04W16V-470M(VR)	1	394644717T	
C7223	VR C	CE04W6.3V-1000M(VR)	1	394621027T	
C7231	VR C	CE04W16V-470M(VR)	1	394644717T	
C7233	VR C	CE04W6.3V-1000M(VR)	1	394621027T	
C7234	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DD>
C7235	VR C	CE04W16V-100M(VR)	1	394641017T	<DD>
C7241	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C7242	VR C	CE04W16V-100M(VR)	1	394641017T	
C7243	VR C	CE04W16V-100M(VR)	1	394641017T	
C7247	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C7248	VR C	CE04W16V-100M(VR)	1	394641017T	
C7251	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C7252	VR C	CE04W16V-100M(VR)	1	394641017T	
C7255	VR C	CE04W16V-470M(VR)	1	394644717T	
C7262	VR C	CE04W16V-100M(VR)	1	394641017T	
C7263	VR C	CE04W16V-100M(VR)	1	394641017T	
C7265	C-CERA C	CK732B1A-105K	1	337361055R2	
C7266	VR C	CE04W16V-100M(VR)	1	394641017T	
C7351	C-CERA C	CK732B1A-105K	1	337361055R2	
C7352	C-CERA C	CK732B1A-105K	1	337361055R2	
C7355	C-CERA C	CK732B1A-105K	1	337361055R2	
C7356	C-CERA C	CK732B1A-105K	1	337361055R2	
C7361	C-CERA C	CK732B1A-105K	1	337361055R2	
C7362	C-CERA C	CK732B1A-105K	1	337361055R2	
C7365	C-CERA C	CK732B1A-105K	1	337361055R2	
C7366	C-CERA C	CK732B1A-105K	1	337361055R2	
C7371	VR C	CE04W16V-470M(VR)	1	394644717T	
C7381	VR C	CE04W16V-470M(VR)	1	394644717T	
C7382	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7383	VR C	CE04W16V-100M(VR)	1	394641017T	
C7385	VR C	CE04W16V-470M(VR)	1	394644717T	
C7386	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7387	VR C	CE04W16V-100M(VR)	1	394641017T	
C7391	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7392	VR C	CE04W16V-100M(VR)	1	394641017T	
C7401	VR C	CE04W16V-100M(VR)	1	394641017T	
R1001	CARBON R	MCR03EZPF49R9(49.9_1%)	1	4100037R2	
R1002	CARBON R	MCR03EZPF49R9(49.9_1%)	1	4100037R2	
R1003	CARBON R	MCR03EZPF49R9(49.9_1%)	1	4100037R2	
R1004	CARBON R	MCR03EZPF49R9(49.9_1%)	1	4100037R2	
R1005	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R1008	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1009	C-CARBON R	RN72K1J-471JE	1	435034714R1	
R101	C-CARBON R	RN72K1J-220JE	1	435032204R1	<DD>

R1010	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1011	C-CARBON R	RN72K1J-100JE	1	435031004R1	
R1012	C-CARBON R	RN72K1J-100JE	1	435031004R1	
R102	C-CARBON R	RN72K1J-331JE	1	435033314R1	<DD>
R1026	C-CARBON R	RN72K1J-470JE	1	435034704R1	
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R1028	C-CARBON R	RN72K1J-470JE	1	435034704R1	
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R133	C-CARBON R	RN72K1J-472JE	1	435034724R1	<DD>
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R136	C-CARBON R	RN72K1J-104JE	1	435031044R1	<DD>
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R142	C-CARBON R	RN72K1J-103JE	1	435031034R1	<DD>

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R151	C-CARBON R	RN72K1J-563JE	1	435035634R1	<DD>
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R3001	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R3002	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R3004	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R3007	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R3011	C-CARBON R	RN72K1J-750JE	1	435037504R1	
R3012	C-CARBON R	RN72K1J-100JE	1	435031004R1	
R3013	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R3014	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R3015	C-CARBON R	RN72K1J-750JE	1	435037504R1	
R3016	C-CARBON R	RN72K1J-100JE	1	435031004R1	
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R3019	C-CARBON R	RN72K1J-750JE	1	435037504R1	
R3020	C-CARBON R	RN72K1J-100JE	1	435031004R1	
R3021	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R3022	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R3023	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R3025	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R3031	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R3032	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R3033	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R3034	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R3035	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R3036	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R3037	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R3041	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R3042	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R3043	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R3045	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R3046	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R3047	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R3048	C-CARBON R	RN72K1J-392JE	1	435033924R1	
R3049	C-CARBON R	RN72K1J-392JE	1	435033924R1	
R3050	C-CARBON R	RN72K1J-152JE	1	435031524R1	
R3051	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R3052	C-CARBON R	RN72K1J-331JE	1	435033314R1	
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R3054	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R3056	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R3057	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R3058	C-CARBON R	RN72K1J-470JE	1	435034704R1	

R3059	C-CARBON R	RN72K1J-221JE	1	435032214R1
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R3061	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3065	C-CARBON R	RN72K1J-101JE	1	435031014R1
R3069	C-CARBON R	RN72K1J-101JE	1	435031014R1
R3071	C-CARBON R	RN72K1J-105JE	1	435031054R1
R3076	C-CARBON R	RN72K1J-000JE	1	435030004R1
R3081	C-CARBON R	RN72K1J-103JE	1	435031034R1
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R3098	C-CARBON R	RN72K1J-391JE	1	435033914R1
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R3680	C-CARBON R	RN72K1J-181JE	1	435031814R1
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R3701	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3702	C-CARBON R	RN72K1J-331JE	1	435033314R1

R3703	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3704	C-CARBON R	RN72K1J-331JE	1	435033314R1
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R3706	C-CARBON R	RN72K1J-331JE	1	435033314R1
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R3708	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3709	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3710	C-CARBON R	RN72K1J-331JE	1	435033314R1
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R3790	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3791	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3800	C-CARBON R	RN72K1J-561JE	1	435035614R1
R3801	C-CARBON R	RN72K1J-561JE	1	435035614R1
R3802	C-CARBON R	RN72K1J-561JE	1	435035614R1
R3803	C-CARBON R	RN72K1J-561JE	1	435035614R1
R3804	C-CARBON R	RN72K1J-561JE	1	435035614R1
R3805	C-CARBON R	RN72K1J-561JE	1	435035614R1
R3806	C-CARBON R	RN72K1J-561JE	1	435035614R1
R3807	C-CARBON R	RN72K1J-561JE	1	435035614R1
R3808	C-CARBON R	RN72K1J-561JE	1	435035614R1
R3809	C-CARBON R	RN72K1J-561JE	1	435035614R1
R3810	C-CARBON R	RN72K1J-561JE	1	435035614R1
R3811	C-CARBON R	RN72K1J-561JE	1	435035614R1
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R3838	C-CARBON R	RN72K1J-391JE	1	435033914R1
R3839	C-CARBON R	RN72K1J-391JE	1	435033914R1
R3840	C-CARBON R	RN72K1J-332JE	1	435033324R1
R3841	C-CARBON R	RN72K1J-332JE	1	435033324R1
R3842	C-CARBON R	RN72K1J-332JE	1	435033324R1
R3843	C-CARBON R	RN72K1J-332JE	1	435033324R1
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R3845	C-CARBON R	RN72K1J-332JE	1	435033324R1
R3846	C-CARBON R	RN72K1J-332JE	1	435033324R1
R3847	C-CARBON R	RN72K1J-332JE	1	435033324R1
R3848	C-CARBON R	RN72K1J-332JE	1	435033324R1
R3849	C-CARBON R	RN72K1J-332JE	1	435033324R1
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R3879	C-CARBON R	RN72K1J-472JE	1	435034724R1
R3970	C-CARBON R	RN72K1J-220JE	1	435032204R1
R3971	C-CARBON R	RN72K1J-220JE	1	435032204R1

R3972	C-CARBON R	RN72K1J-220JE	1	435032204R1
R3973	C-CARBON R	RN72K1J-220JE	1	435032204R1
R3974	C-CARBON R	RN72K1J-220JE	1	435032204R1
R3975	C-CARBON R	RN72K1J-220JE	1	435032204R1
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R4211	C-CARBON R	RN72K1J-473JE	1	435034734R1
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R4215	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4216	C-CARBON R	RN72K1J-224JE	1	435032244R1
R4253	C-CARBON R	RN72K1J-182JE	1	435031824R1

R4254	C-CARBON R	RN72K1J-182JE	1	435031824R1	
R4255	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R4256	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R4291	NF CARBON R	R25J-22	1	415472204T	
R4292	NF CARBON R	R25J-22	1	415472204T	
R4293	C-CARBON R	RN72K1J-152JE	1	435031524R1	
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R4720	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R4721	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R4722	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R4723	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R4724	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R4725	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R4726	C-CARBON R	RN72K1J-224JE	1	435032244R1	
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R4731	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R4732	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R4733	C-CARBON R	RN72K1J-224JE	1	435032244R1	
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R4735	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R4736	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R4737	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R4740	METAL O R	RS1/2WBJ-22	1	443522204T	
R4741	METAL O R	RS1/2WBJ-22	1	443522204T	
R7001	C-CARBON R	RN72K1J-470JE	1	435034704R1	<DD>
R7002	C-CARBON R	RN72K1J-470JE	1	435034704R1	<DD>
R7003	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7005	C-CARBON R	RN72K1J-470JE	1	435034704R1	<DD>
R7006	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R7007	C-CARBON R	RN72K1J-470JE	1	435034704R1	<DD>
R7008	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R7011	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R7012	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R7016	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7018	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R7024	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7025	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R7026	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R7027	C-CARBON R	RN72K1J-472JE	1	435034724R1	
R7030	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7031	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7032	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R7033	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R7034	C-CARBON R	RN72K1J-470JE	1	435034704R1	

R7035	C-CARBON R	RN72K1J-470JE	1	435034704R1
R7036	C-CARBON R	RN72K1J-470JE	1	435034704R1
R7037	C-CARBON R	RN72K1J-470JE	1	435034704R1
R7038	C-CARBON R	RN72K1J-470JE	1	435034704R1
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R7044	C-CARBON R	RN72K1J-470JE	1	435034704R1
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R7053	C-CARBON R	RN72K1J-470JE	1	435034704R1
R7054	C-CARBON R	RN72K1J-103JE	1	435031034R1
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R7062	C-CARBON R	RN72K1J-470JE	1	435034704R1
R7063	C-CARBON R	RN72K1J-470JE	1	435034704R1
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R7089	C-CARBON R	RN72K1J-470JE	1	435034704R1
R7090	C-CARBON R	RN72K1J-470JE	1	435034704R1
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R7094	C-CARBON R	RN72K1J-470JE	1	435034704R1
R7095	C-CARBON R	RN72K1J-470JE	1	435034704R1
R7096	C-CARBON R	RN72K1J-221JE	1	435032214R1

R7097	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7098	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7099	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R7100	C-CARBON R	RN72K1J-221JE	1	435032214R1	
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R7103	C-CARBON R	RN72K1J-221JE	1	435032214R1	
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R7107	C-CARBON R	RN72K1J-221JE	1	435032214R1	
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R7109	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R7110	C-CARBON R	RN72K1J-333JE	1	435033334R1	
R7111	C-CARBON R	RN72K1J-333JE	1	435033334R1	
R7112	C-CARBON R	RN72K1J-103JE	1	435031034R1	
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R7119	C-CARBON R	RN72K1J-102JE	1	435031024R1	
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R7121	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7122	C-CARBON R	RN72K1J-470JE	1	435034704R1	
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R7127	C-CARBON R	RN72K1J-221JE	1	435032214R1	
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R7137	C-CARBON R	RN72K1J-221JE	1	435032214R1	
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R7161	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7162	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7163	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7164	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7167	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7171	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7172	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7173	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7174	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7175	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7176	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7177	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7178	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7181	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R7182	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R7183	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R7184	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R7185	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R7186	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R7187	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R7188	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R7189	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R7190	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R7191	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R7192	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R7193	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R7194	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R7195	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R7196	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R7197	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R7198	C-CARBON R	RN72K1J-561JE	1	435035614R1	
R7201	METAL R	RNU1/2WCJ-2.2	1	453530224T	
R7202	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R7203	C-CARBON R	RN72K1J-392JE	1	435033924R1	
R7204	C-CARBON R	RN72K1J-272JE	1	435032724R1	
R7205	C-CARBON R	RN72K1J-472JE	1	435034724R1	
R7210	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7211	C-CARBON R	RN72K1J-472JE	1	435034724R1	
R7212	C-CARBON R	RN72K1J-333JE	1	435033334R1	
R7213	C-CARBON R	RN72K1J-000JE	1	435030004R1	<DD>
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R7222	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R7223	C-CARBON R	RN72K1J-392JE	1	435033924R1	
R7224	C-CARBON R	RN72K1J-272JE	1	435032724R1	

R7225	C-CARBON R	RN72K1J-472JE	1	435034724R1	
R7231	METAL R	RNU1/2WCJ-0.22	1	453532294T	
R7232	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R7233	C-CARBON R	RN72K1J-392JE	1	435033924R1	
R7234	C-CARBON R	RN72K1J-563JE	1	435035634R1	
R7235	C-CARBON R	RN72K1J-562JE	1	435035624R1	
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R7241	METAL O R	RS1/2WBJ-56	1	443525604T	
R7245	METAL R	RNU1/2WCJ-5.6	1	453530564T	
R7246	METAL R	RNU1/2WCJ-5.6	1	453530564T	
R7247	METAL R	RNU1/2WCJ-5.6	1	453530564T	
R7248	METAL R	RNU1/2WCJ-5.6	1	453530564T	
R7251	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7252	METAL O R	RS1/2WBJ-22	1	443522204T	
R7255	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7256	C-CARBON R	RN72K1J-103JE	1	435031034R1	
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R7266	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7267	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R7268	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7269	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7270	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R7271	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R7272	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7273	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7275	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7278	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7279	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7280	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7281	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7282	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7283	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7284	C-CARBON R	RN72K1J-101JE	1	435031014R1	
R7285	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R7286	C-CARBON R	RN72K1J-101JE	1	435031014R1	
R7287	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7288	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7289	C-CARBON R	RN72K1J-103JE	1	435031034R1	

R7290	C-CARBON R	RN72K1J-103JE	1	435031034R1	
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R7292	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7293	C-CARBON R	RN72K1J-272JE	1	435032724R1	
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R7295	C-CARBON R	RN72K1J-272JE	1	435032724R1	
R7296	C-CARBON R	RN72K1J-272JE	1	435032724R1	
R7298	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R7299	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R7300	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7301	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7302	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7303	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7351	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7352	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R7353	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R7355	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7356	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R7357	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R7361	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7362	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R7363	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R7365	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7366	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R7367	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R7371	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R7391	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7392	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7401	C-CARBON R	RN72K1J-220JE	1	435032204R1	
R7402	C-CARBON R	RN72K1J-220JE	1	435032204R1	
R7403	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R7404	C-CARBON R	RN72K1J-273JE	1	435032734R1	
R7411	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R7413	C-CARBON R	RN72K1J-000JE	1	435030004R1	
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R7421	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R7425	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R7428	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R7429	C-CARBON R	RN72K1J-000JE	1	435030004R1	
E101	TRM(SCREW)	NEJITANSI M3	1	25065425	<DD>
E102	TRM(SCREW)	NEJITANSI M3	1	25065425	<DD>

JL9501A	SOCKET	NSCT-6P111	1	25050283	
P1001	SOCKET	J0026D21NL	1	25053250	
P1010	PLUG	IMSA-9201B-1-06Z388-PT1	1	25056614	
P1011	TRM(SCREW)	NEJITANSI M3	1	25065425	
P1012	TRM(SCREW)	NEJITANSI M3	1	25065425	
P101B	SOCKET	NSCT-13P2106	1	25052209	
P101B or	SOCKET	NSCT-13P1607	(1)	25051820	
P102A	SOCKET	NSCT-18P2148	1	25052251	<DD>
P102A or	SOCKET	NSCT-18P1649	(1)	25051862	<DD>
P102B	SOCKET	NSCT-18P2111	1	25052214	<DD>
P102B or	SOCKET	NSCT-18P1612	(1)	25051825	<DD>
P121	SOCKET	YKF51-5397N	1	25053201	<DD>
P122	SOCKET	CAM-C16	1	25053104R2	<DD>
P122A	RETAINER	(XM)	1	27142048	<DD>
P2010B	SOCKET	IMSA-9142S-24A	1	25053234	
P205A	SOCKET	NSCT-9P2206	1	25052309	
P205A or	SOCKET	NSCT-9P2400	(1)	25052503	
P205B	SOCKET	NSCT-9P2206	1	25052309	
P205B or	SOCKET	NSCT-9P2400	(1)	25052503	
P2998	TRM	NTM-1P232(M1700)	1	25060301	
P2999	TRM	NTM-1P232(M1700)	1	25060301	
P3001	PIN JACK	NPJ-3PDO657	1	25045885	
P3001 or	PIN JACK	NPJ-3PDO431	(1)	25045624	
P3002	ST JACK	MSJ-035-22	1	25045887	
P3002 or	JACK	YKB21-5130	(1)	25045387	
P3003	SOCKET	7906-09FHA	1	25053103	
P3101A	PLUG	IMSA-9142B-24A	1	25056602	
P3102A	PLUG	IMSA-9142B-14A	1	25056597	
P3103A	PLUG	IMSA-9142B-16A	1	25056598	
P3801A	PLUG	IMSA-9855B-30D-T	1	25056604	
P3802A	PLUG	IMSA-9855B-30D-T	1	25056604	
P4020B	SOCKET	IMSA-9142S-26A	1	25053235	
P4021B	SOCKET	IMSA-9142S-26A	1	25053235	
P4032B	SOCKET	NSCT-8P1023	1	25051233	
P4033B	SOCKET	NSCT-13P1028	1	25051238	
P4110	SOCKET	9210B-1-10Z140-PT1	1	25053247	
P4111	SOCKET	9210B-1-09Z140-PT1	1	25053249	
P6851A	PLUG	IMSA-9142B-20A	1	25056600	
P6852A	PLUG	IMSA-9142B-20A	1	25056600	
P6853A	PLUG	IMSA-9142B-20A	1	25056600	
P7001	SOCKET	NSCT-9P2427	1	25052530	
P7002	TRM(SCREW)	NEJITANSI M3	1	25065425	
P7210B	PLUG	NPLG-9P356	1	25055373	
P7501A	SOCKET	NSCT-40P2170	1	25052273	
P8002A	PLUG	NPLG-15P667	1	25055711	

U33	DISPLAY PC BOARD (NADIS-9096-1A/1B)
U34	DISPLAY PC BOARD (NADIS-9097-1A/1B)
U35	HEADPHONE PC BOARD (NAETC-9098-1A/1B)
U36	POWER SUPPLY PC BOARD (NAPS-9099-1A/1B)
U37	OPT PC BOARD (NAETC-9100-1A/1B)
U38	VOLUME PC BOARD (NADIS-9101-1A/1B)
U39	XM PC BOARD (NAETC-9102-1A)
U40	HOLDER PC BOARD (NAETC-9103-1A/1B)

REF. NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
U7520	PHT CP	TORX177L	1	24120127	
U7560	REMO SENS	NJL34H380A	1	241365	
Q7500	FL TUBE	HNA-16SL04T	1	212266	
Q7500A	HOLDER	(FL)	1	27191303	
Q7501	IC	M66005-0001AHP	1	22242208R3	
Q7502	IC	M66005-0001AHP	1	22242208R3	
Q7503	TR	2SC2712-GR	1	2213145R2	
Q7503 or	TR	2SC2712-Y(TE85L_F)	(1)	2213144R2	
Q7504	TR	2SC2712-GR	1	2213145R2	
Q7504 or	TR	2SC2712-Y(TE85L_F)	(1)	2213144R2	
Q7520	IC	NE5532APSR	1	22242283R2	
Q7530	IC	NJM4580M-D	1	22241448R2	
Q7532	TR	RN1441	1	2215410R2	
Q7533	TR	RN2403	1	2214540R2	
Q7533 or	TR	DTA124EKA	(1)	2216240R2	
Q7533 or	TR	KRA103S	(1)	2216230R2	
Q7592	TR	DTC123JKA	1	2216690R2	
Q7593	TR	DTC123JKA	1	2216690R2	
Q7594	TR	DTC123JKA	1	2216690R2	<MA>
Q7611	IC	TC74VHC08F(EL_K_F)	1	22242492R2	
Q9301	TR	2SC2235-Y(TPE6_F)	1	2211654T	
Q9301 or	TR	2SC2235-O(TPE6_F)	(1)	2211653T	
D7500	ZENER D	UDZS10B	1	224551000R2	
D7520	C-DIODE	1SS355	1	223269R2	
D7521	C-DIODE	1SS355	1	223269R2	
D7522	C-DIODE	1SS355	1	223269R2	
D7523	C-DIODE	1SS355	1	223269R2	
D7530	ZENER D	UDZS5.1B	1	224550510R2	
D7531	C-DIODE	1SS355	1	223269R2	
D7532	C-DIODE	1SS355	1	223269R2	
D7560	C-DIODE	1SS355	1	223269R2	
D7561	C-DIODE	1SS355	1	223269R2	
D7570	SPCF D	SIR-34ST3F	1	225456	
D7571	SPCF D	SIR-34ST3F	1	225456	

D7580	C-DIODE	ISS355	1	223269R2	
D7581	C-DIODE	ISS355	1	223269R2	
D7582	C-DIODE	ISS355	1	223269R2	
D7583	C-DIODE	ISS355	1	223269R2	
D7592	LED	SLR-342MGTE7P	1	225455T	
D7592 or	LED	SEL4410G	(1)	225454T	
D7592 or	LED	SEL4310G-D	(1)	225292DT	
D7593	LED	SLR-342MGTE7P	1	225455T	
D7593 or	LED	SEL4410G	(1)	225454T	
D7593 or	LED	SEL4310G-D	(1)	225292DT	
D7594	LED	SLI-343URC-TE7	1	225449T	<DD>
D7594	LED	SEL4910D-D	1	225291DT	<MA>
D7595	LED	SLI-343URC-TE7	1	225449T	<MA>
D9303	DIODE	D10XB60H	1	22380337F	
D9306	ZENER D	MTZJ22B	1	224472202T	
D9307	DIODE	ISS133	1	223163T	
D9308	DIODE	ISS133	1	223163T	
D9310	ZENER D	MTZJ24B	1	224472402T	
D9311	ZENER D	MTZJ5.1B	1	224470512T	
D9312	DIODE	RL1N4003	1	22380260T	
D9312 or	DIODE	GP104003E	(1)	22380035T	
D9313	DIODE	RL1N4003	1	22380260T	
D9313 or	DIODE	GP104003E	(1)	22380035T	
D9314	DIODE	RL1N4003	1	22380260T	
D9314 or	DIODE	GP104003E	(1)	22380035T	
D9315	DIODE	RL1N4003	1	22380260T	
D9315 or	DIODE	GP104003E	(1)	22380035T	
L7520	CHOKE COIL	NCH-1561 022K	1	233526K022T	
L7530	CHOKE COIL	NCH-1561 022K	1	233526K022T	
L7580	CHOKE COIL	NCH-1561 022K	1	233526K022T	
L7581	CHOKE COIL	NCH-1561 022K	1	233526K022T	
L7582	CHOKE COIL	NCH-1561 022K	1	233526K022T	
C7501	C-CERA C	CK725B1H-223K1	1	332102235R1	
C7502	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7503	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7504	C-CERA C	CK725B1H-473K1	1	332104735R1	
C7505	C-CERA C	CK725B1H-473K1	1	332104735R1	
C7506	ELECT C	CE04W50V-33M	1	355783309T	
C7511	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7513	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7514	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7515	C-CERA C	CC725CHI1H-180J1	1	342101804R1	
C7518	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7519	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C7520	C-CERA C	CK725B1H-223K1	1	332102235R1	

C7521	UTSP C	CE04W10V-100M(UTSP)	1	397531017T
C7522	C-CERA C	CC725CH1H-221J1	1	342102214R1
C7523	C-CERA C	CC725CH1H-221J1	1	342102214R1
C7524	C-CERA C	CK725B1H-102K1	1	332101025R1
C7530	C-CERA C	CK725B1H-102K1	1	332101025R1
C7531	C-CERA C	CK725B1H-102K1	1	332101025R1
C7533	ELECT C	CE04W35V-47M	1	355764709T
C7534	ELECT C	CE04W35V-47M	1	355764709T
C7535	ELECT C	CE04W35V-10M(S)	1	353761009T
C7536	C-CERA C	CC725CH1H-101J1	1	342101014R1
C7537	C-CERA C	CC725CH1H-330J1	1	342103304R1
C7538	ELECT C	CE04W35V-10M(S)	1	353761009T
C7539	ELECT C	CE04W35V-10M(S)	1	353761009T
C7540	ELECT C	CE04W35V-10M(S)	1	353761009T
C7543	C-CERA C	CK725B1H-102K1	1	332101025R1
C7560	ELECT C	CE04W6.3V-220M	1	355722219T
C7561	C-CERA C	CK725B1H-102K1	1	332101025R1
C7562	C-CERA C	CK725B1H-102K1	1	332101025R1
C7580	C-CERA C	CK725B1H-102K1	1	332101025R1
C7581	C-CERA C	CK725B1H-102K1	1	332101025R1
C7582	C-CERA C	CK725B1H-102K1	1	332101025R1
C7583	C-CERA C	CK725B1H-102K1	1	332101025R1
C7590	C-CERA C	CK725B1H-103K1	1	332101035R1
C7591	C-CERA C	CK725B1H-103K1	1	332101035R1
C7900	C-CERA C	CK725F1E-104Z1	1	332161040R1
C9302	VR C	CE04W16V-10000M(VR)	1	394641037S
C9304	VR C	CE04W63V-470M(VR)	1	394674717S
C9305	VR C	CE04W63V-47M(VR)	1	394674707T
C9306	TF C	ECQ-B50V-223J	1	374722234T
C9307	TF C	ECQ-V50V-334J	1	374723344T
C9308	VR C	CE04W50V-4.7M(VR)	1	394680477T
R7500	C-CARBON R	RN72K1J-221JE	1	435032214R1
R7501	C-CARBON R	RN72K1J-221JE	1	435032214R1
R7502	C-CARBON R	RN72K1J-273JE	1	435032734R1
R7503	C-CARBON R	RN72K1J-222JE	1	435032224R1
R7504	C-CARBON R	RN72K1J-222JE	1	435032224R1
R7505	C-CARBON R	RN72K1J-222JE	1	435032224R1
R7506	C-CARBON R	RN72K1J-222JE	1	435032224R1
R7507	C-CARBON R	RN72K1J-222JE	1	435032224R1
R7508	C-CARBON R	RN72K1J-222JE	1	435032224R1
R7509	C-CARBON R	RN72K1J-222JE	1	435032224R1
R7510	C-CARBON R	RN72K1J-222JE	1	435032224R1
R7520	C-CARBON R	RN72K1J-221JE	1	435032214R1
R7521	C-CARBON R	RN72K1J-331JE	1	435033314R1
R7522	C-CARBON R	RN72K1J-331JE	1	435033314R1

R7523	C-CARBON R	RN72K1J-750JE	1	435037504R1	
R7524	C-CARBON R	RN72K1J-750JE	1	435037504R1	
R7525	C-CARBON R	RN72K1J-750JE	1	435037504R1	
R7526	C-CARBON R	RN72K1J-223JE	1	435032234R1	
R7527	C-CARBON R	RN72K1J-223JE	1	435032234R1	
R7528	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R7529	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R7530	C-CARBON R	RN72K1J-472JE	1	435034724R1	
R7531	C-CARBON R	RN72K1J-101JE	1	435031014R1	
R7532	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R7533	C-CARBON R	RN72K1J-182JE	1	435031824R1	
R7534	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R7535	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R7536	C-CARBON R	RN72K1J-333JE	1	435033334R1	
R7537	C-CARBON R	RN72K1J-333JE	1	435033334R1	
R7538	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R7539	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R7540	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R7560	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R7561	C-CARBON R	RN72K1J-101JE	1	435031014R1	
R7580	METAL O R	RS1WBJ-33	1	443623304T	
R7581	METAL O R	RS1WBJ-33	1	443623304T	
R7590	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7591	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7592	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7593	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R7596	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R7597	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R7598	C-CARBON R	RN72K1J-102JE	1	435031024R1	<DD>
R7598	C-CARBON R	RN72K1J-221JE	1	435032214R1	<MA>
R7599	C-CARBON R	RN72K1J-102JE	1	435031024R1	<MA>
R7611	C-CARBON R	RN72K1J-271JE	1	435032714R1	
R7612	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R7613	C-CARBON R	RN72K1J-471JE	1	435034714R1	
R7614	C-CARBON R	RN72K1J-561JE	1	435035614R1	
R7615	C-CARBON R	RN72K1J-821JE	1	435038214R1	
R7616	C-CARBON R	RN72K1J-122JE	1	435031224R1	
R7617	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R7618	C-CARBON R	RN72K1J-392JE	1	435033924R1	
R7621	C-CARBON R	RN72K1J-271JE	1	435032714R1	
R7622	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R7623	C-CARBON R	RN72K1J-471JE	1	435034714R1	
R7624	C-CARBON R	RN72K1J-561JE	1	435035614R1	
R7625	C-CARBON R	RN72K1J-821JE	1	435038214R1	
R7626	C-CARBON R	RN72K1J-122JE	1	435031224R1	

R7627	C-CARBON R	RN72K1J-222JE	1	435032224R1
R7628	C-CARBON R	RN72K1J-392JE	1	435033924R1
R7629	C-CARBON R	RN72K1J-123JE	1	435031234R1
R7631	C-CARBON R	RN72K1J-271JE	1	435032714R1
R7632	C-CARBON R	RN72K1J-331JE	1	435033314R1
R7633	C-CARBON R	RN72K1J-471JE	1	435034714R1
R7634	C-CARBON R	RN72K1J-561JE	1	435035614R1
R7635	C-CARBON R	RN72K1J-821JE	1	435038214R1
R7636	C-CARBON R	RN72K1J-122JE	1	435031224R1
R7637	C-CARBON R	RN72K1J-222JE	1	435032224R1
R7638	C-CARBON R	RN72K1J-392JE	1	435033924R1
R7639	C-CARBON R	RN72K1J-123JE	1	435031234R1
R7641	C-CARBON R	RN72K1J-271JE	1	435032714R1
R7642	C-CARBON R	RN72K1J-331JE	1	435033314R1
R7643	C-CARBON R	RN72K1J-471JE	1	435034714R1
R7644	C-CARBON R	RN72K1J-561JE	1	435035614R1
R7645	C-CARBON R	RN72K1J-821JE	1	435038214R1
R7646	C-CARBON R	RN72K1J-122JE	1	435031224R1
R7647	C-CARBON R	RN72K1J-222JE	1	435032224R1
R7648	C-CARBON R	RN72K1J-392JE	1	435033924R1
R7649	C-CARBON R	RN72K1J-123JE	1	435031234R1
R7939	C-CARBON R	RN72K1J-104JE	1	435031044R1
R7954	C-CARBON R	RN72K1J-104JE	1	435031044R1
R9304	NF CARBON R	R25J-10	1	415471004T
R9305	CARBON R	R16J-5.6K	1	417345624T
R9307	CARBON R	R16J-33K	1	417343334T
R9308	METAL R	RNU1/2WCJ-1	1	453530104T
R9309	CARBON R	R16J-10K	1	417341034T
R9310	NF CARBON R	R25J-10	1	415471004T
E7580	TRM	NTM-1P233(M1969)	1	25060302
F9301A	FUSE HOL	NSCT-1P2031	1	25052133T
F9301B	FUSE HOL	NSCT-1P2031	1	25052133T
JL4103B	SOCKET	NSCT-5P97	1	25050269
JL7560A	WIRE HOL	NSCT-3P874	1	25051087
JL7560B	WIRE HOL	NSCT-3P874	1	25051087
JL7590A	WIRE HOL	NSCT-10P881	1	25051094
JL7590B	WIRE HOL	NSCT-10P881	1	25051094
JL7591A	WIRE HOL	NSCT-4P875	1	25051088
JL7591B	WIRE HOL	NSCT-4P875	1	25051088
JL9303A	WIRE HOL	NSCT-4P875	1	25051088
JL9303B	WIRE TRAP	NPLG-4P587	1	25055625
JL9501B	SOCKET	NSCT-6P98	1	25050270
P7501B	SOCKET	NSCT-40P2170	1	25052273
P7522	PIN JACK	NPJ-7PDB603	1	25045823
P7530	ST JACK	MSJ-035-05C B AG GR type	1	25045880

P7530 or	JACK	LGT1516-0100	(1)	25045487
P7580	ST JACK	MSJ-064-05A GR	1	25045782
P7999	WS CLAMP	CB-71683(L=50)	1	260261
P9301A	PLUG	NPLG-6P120	1	25055136
S7590	R ENCODE	EVEHD1F3024B	1	25065695W
S7611	PUSH SW	NPS-111-S681	1	25035718T
S7611 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7612	PUSH SW	NPS-111-S681	1	25035718T
S7612 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7613	PUSH SW	NPS-111-S681	1	25035718T
S7613 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7614	PUSH SW	NPS-111-S681	1	25035718T
S7614 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7615	PUSH SW	NPS-111-S681	1	25035718T
S7615 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7616	PUSH SW	NPS-111-S681	1	25035718T
S7616 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7618	PUSH SW	NPS-111-S681	1	25035718T
S7618 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7619	PUSH SW	NPS-111-S681	1	25035718T
S7619 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7622	PUSH SW	NPS-111-S681	1	25035718T
S7622 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7623	PUSH SW	NPS-111-S681	1	25035718T
S7623 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7624	PUSH SW	NPS-111-S681	1	25035718T
S7624 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7625	PUSH SW	NPS-111-S681	1	25035718T
S7625 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7626	PUSH SW	NPS-111-S681	1	25035718T
S7626 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7627	PUSH SW	NPS-111-S681	1	25035718T
S7627 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7628	PUSH SW	NPS-111-S681	1	25035718T
S7628 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7629	PUSH SW	NPS-111-S681	1	25035718T
S7629 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7630	PUSH SW	NPS-111-S681	1	25035718T
S7630 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7631	PUSH SW	NPS-111-S681	1	25035718T
S7631 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7632	PUSH SW	NPS-111-S681	1	25035718T
S7632 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7633	PUSH SW	NPS-111-S681	1	25035718T
S7633 or	PUSH SW	NPS-111-S677	(1)	25035714T

S7634	PUSH SW	NPS-111-S681	1	25035718T
S7634 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7635	PUSH SW	NPS-111-S681	1	25035718T
S7635 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7636	PUSH SW	NPS-111-S681	1	25035718T
S7636 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7637	PUSH SW	NPS-111-S681	1	25035718T
S7637 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7638	PUSH SW	NPS-111-S681	1	25035718T
S7638 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7639	PUSH SW	NPS-111-S681	1	25035718T
S7639 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7640	PUSH SW	NPS-111-S681	1	25035718T
S7640 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7644	PUSH SW	NPS-111-S681	1	25035718T
S7644 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7645	PUSH SW	NPS-111-S681	1	25035718T
S7645 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7646	PUSH SW	NPS-111-S681	1	25035718T
S7646 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7647	PUSH SW	NPS-111-S681	1	25035718T
S7647 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7648	PUSH SW	NPS-111-S681	1	25035718T
S7648 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7649	PUSH SW	NPS-111-S681	1	25035718T
S7649 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7650	PUSH SW	NPS-111-S681	1	25035718T
S7650 or	PUSH SW	NPS-111-S677	(1)	25035714T

U42 HDMI PC BOARD (NAHDM-9107-1A)

REF. NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
Q8001	IC	FLI8125-LF-BC	1	22242389R3	
Q8002	IC	TC74VCX162244FT(EL_F)	1	2227C244DR2TO	
Q8003	IC	TC74VCX162244FT(EL_F)	1	2227C244DR2TO	
Q8004	IC	BA18BC0FP	1	22278018DR2RH	
Q8004 or	IC	TA48018AF(TE16L_NQ)	(1)	22278018DR2TO	
Q8004 or	IC	UPC2918T-E1-AZ	(1)	22278018ER2NE	
Q8005	IC	BA33BC0FP	1	22278033DR2RH	
Q8005 or	IC	TA48033AF(TE16L_NQ)	(1)	22278033DR2TO	
Q8005 or	IC	UPC2933TAT-E1-A	(1)	22278033DR2NE	
Q8005 or	IC	NJM2391DL1-33	(1)	22278033DR2JR	
Q8006	IC	SI8008TM	1	22242323R2	
Q8010	IC	S-24CS16A0I-J8V1G	1	22242326R2	
Q8011	IC(VIDEO MEMORY)	SST25VF080B-50-4C-S2AF(0222)	1	222W0064R20222A	

Q8101	IC	AD8196	1	---	NRP
Q8151	IC	BA33BC0FP	1	22278033DR2RH	
Q8151 or	IC	TA48033AF(TE16L_NQ)	(1)	22278033DR2TO	
Q8151 or	IC	UPC2933TAT-E1-A	(1)	22278033DR2NE	
Q8151 or	IC	NJM2391DL1-33	(1)	22278033DR2JR	
Q8204	TR	DTA144EE	1	2216380R2	
Q8206	TR	DTC144EE	1	2216390R2	
Q8207	TR	2SK3019	1	2216520R2	
Q8208	IC	SN74CB3T3306DCT	1	22242454R2	
Q8210	IC	S-24CS02AFT-V-G	1	22242360R2	
Q8210 or	IC	BR24L02FV-W	(1)	22242069R2	
Q8305	IC	S-812C50BUC-C5ET2G	1	22242407R2	
Q8306	IC	TC7SZ08FU(TE85L_F)	1	22242071R2TO	
Q8306 or	IC	NC7SZ08P5X_F042	1	22242482R2	
Q8309	TR ARRAY	UM6K1N	1	226066R2	
Q8309 or	TR ARRAY	UPA672T	(1)	226067R2	
Q8401	IC	SI9134CTU	1	22242394R3	
Q8404	IC	XC6213B182MR	1	22242443R2	
Q8405	IC	SN74CB3Q3305PWR	1	22242258R2	
Q8501	IC	SI9135CTU	1	---	NRP
Q8504	TR	DTA144EE	1	2216380R2	
Q8506	TR	DTC144EE	1	2216390R2	
Q8507	TR	2SK3019	1	2216520R2	
Q8508	IC	SN74CB3T3306DCT	1	22242454R2	
Q8510	IC	S-24CS02AFT-V-G	1	22242360R2	
Q8510 or	IC	BR24L02FV-W	(1)	22242069R2	
Q8592	IC	SI8008TM	1	22242323R2	
Q8593	IC	SI8008TM	1	22242323R2	
Q8595	IC	BA18BC0FP	1	22278018DR2RH	
Q8595 or	IC	TA48018AF(TE16L_NQ)	(1)	22278018DR2TO	
Q8595 or	IC	UPC2918T-E1-AZ	(1)	22278018ER2NE	
Q8604	TR	DTA144EE	1	2216380R2	
Q8606	TR	DTC144EE	1	2216390R2	
Q8607	TR	2SK3019	1	2216520R2	
Q8608	IC	SN74CB3T3306DCT	1	22242454R2	
Q8610	IC	S-24CS02AFT-V-G	1	22242360R2	
Q8610 or	IC	BR24L02FV-W	(1)	22242069R2	
Q8651	IC	BA18BC0FP	1	22278018DR2RH	
Q8651 or	IC	TA48018AF(TE16L_NQ)	(1)	22278018DR2TO	
Q8651 or	IC	UPC2918T-E1-AZ	(1)	22278018ER2NE	
Q8652	IC	XC6213B332MR	1	22242277R2	
Q8653	IC	BA33BC0FP	1	22278033DR2RH	
Q8653 or	IC	TA48033AF(TE16L_NQ)	(1)	22278033DR2TO	
Q8653 or	IC	UPC2933TAT-E1-A	(1)	22278033DR2NE	
Q8653 or	IC	NJM2391DL1-33	(1)	22278033DR2JR	

Q8654	IC	BA18BC0FP	1	22278018DR2RH
Q8654 or	IC	TA48018AF(TE16L_NQ)	(1)	22278018DR2TO
Q8654 or	IC	UPC2918T-E1-AZ	(1)	22278018ER2NE
Q8701	IC(HDMI MEMORY)	MPD70F3716GC-8EA(0210)	1	222W0054R302105
Q8801	IC	ADV7172	1	22242155R3
D8001	C-DIODE	CRS09(TE85L_Q)	1	223274R2
D8301	C-DIODE	1SS226(TE85L_F)	1	223266R2
D8301 or	DIODE	DAN217T146	(1)	223285R2
D8302	C-DIODE	1SS352	1	223234R2
D8302 or	C-DIODE	1SS355	(1)	223269R2
D8591	C-DIODE	CRS09(TE85L_Q)	1	223274R2
D8592	C-DIODE	CRS09(TE85L_Q)	1	223274R2
D8701	C-DIODE	1SS352	1	223234R2
D8701 or	C-DIODE	1SS355	(1)	223269R2
L8001	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8002	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8003	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8004	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L8005	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L8006	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L8007	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L8008	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L8009	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8010	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8012	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8014	CHOKE COIL	NCH-2541	1	231363K470
L8015	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8016	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L8018	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L8019	C-CARBON R	RN72K1J-100JE	1	435031004R1
L8101	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L8102	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L8401	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8402	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8403	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8404	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8405	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8406	C-R NET	MNR12E0APJ000	1	43464900002R2
L8407	C-R NET	MNR12E0APJ000	1	43464900002R2
L8408	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8409	C-R NET	MNR12E0APJ000	1	43464900002R2
L8410	C-R NET	MNR12E0APJ000	1	43464900002R2
L8505	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8507	CHOKE COIL	NCH-2541	1	231363K470
L8508	CHOKE COIL	BLM21PG221SN1	1	230949R2

L8525	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8527	CHOKE COIL	NCH-2541	1	231363K470
L8528	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8601	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8602	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8603	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8604	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8605	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8606	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8607	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8608	EMIFIL	BK1608LL241-T	1	230959R1
L8701	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L8801	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L8901	CHOKE COIL	LBC2518T2R2M	1	231364M022R2
L8902	CHOKE COIL	LBC2518T2R2M	1	231364M022R2
L8903	CHOKE COIL	LBC2518T2R2M	1	231364M022R2
L8904	CHOKE COIL	LBC2518T2R2M	1	231364M022R2
L8905	CHOKE COIL	LBC2518T2R2M	1	231364M022R2
L8906	CHOKE COIL	LBC2518T2R2M	1	231364M022R2
X8001	CRYSTAL	FCX-03-19.6608M	1	3010439R2
X8501	CRYSTAL	HC-49-28.332MHz	1	3010417R2
X8701	CERA LOCK	CSTCR5M00G53-B0	1	3010356R2
C8000	CD C	UCD1E221MNL1GS	1	396652217R2
C8001	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8002	C-CERA C	CK725B1H-102K1	1	332101025R1
C8003	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8004	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8005	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8006	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8007	C-CERA C	CC725CH1H-120J1	1	342101204R1
C8008	C-CERA C	CC725CH1H-120J1	1	342101204R1
C8009	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8010	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8011	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8012	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8013	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8014	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8015	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8016	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8017	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8018	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8019	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8020	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8021	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8022	C-CERA C	CK725F1E-104Z1	1	332161040R1

C8023	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8024	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8025	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8026	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8027	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8028	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8029	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8030	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8031	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8032	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8033	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8034	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8035	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8036	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8037	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8038	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8039	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8040	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8041	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8042	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8043	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8044	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8045	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8046	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8047	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8048	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8049	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8051	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8052	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8053	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8055	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8056	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8057	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8060	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8061	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8062	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8063	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8064	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8065	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8066	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8067	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8068	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8069	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8070	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C8071	C-CERA C	CK725F1E-104Z1	1	332161040R1

C8072	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C8073	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8075	CD C	UCD1A471MNL1GS	1	396634717R2
C8076	CD C	UCD1E221MNL1GS	1	396652217R2
C8077	C-CERA C	CK725B1H-223K1	1	332102235R1
C8078	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8081	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C8082	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8083	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8084	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C8085	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8086	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8101	C-CERA C	CK725B1H-102K1	1	332101025R1
C8103	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8104	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8105	C-CERA C	CK725B1H-102K1	1	332101025R1
C8106	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8107	C-CERA C	CK725B1H-102K1	1	332101025R1
C8108	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8109	C-CERA C	CK725B1H-102K1	1	332101025R1
C8110	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8111	C-CERA C	CK725B1H-102K1	1	332101025R1
C8112	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8113	C-CERA C	CK725B1H-102K1	1	332101025R1
C8114	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8115	C-CERA C	CK725B1H-102K1	1	332101025R1
C8116	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8117	C-CERA C	CK725B1H-102K1	1	332101025R1
C8118	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8119	C-CERA C	CK725B1H-102K1	1	332101025R1
C8120	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8121	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8123	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8124	C-CERA C	CK725B1H-102K1	1	332101025R1
C8125	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8126	C-CERA C	CK725B1H-102K1	1	332101025R1
C8127	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8128	C-CERA C	CK725B1H-102K1	1	332101025R1
C8129	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8151	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C8152	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8281	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8292	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8293	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8298	C-CERA C	CK725B1H-102K1	1	332101025R1

C8299	C-CERA C	CK725B1H-102K1	1	332101025R1
C8326	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8327	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8328	CHIP ELECT C	CEWX16V-22M	1	398142207R2
C8329	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8330	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8348	C-CERA C	CK725B1H-102K1	1	332101025R1
C8399	C-CERA C	CK725B1H-102K1	1	332101025R1
C8401	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8402	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8403	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8404	C-CERA C	CK725B1H-102K1	1	332101025R1
C8405	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8406	C-CERA C	CK725B1H-102K1	1	332101025R1
C8408	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8409	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8410	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8411	C-CERA C	CK725B1H-102K1	1	332101025R1
C8412	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8413	C-CERA C	CK725B1H-102K1	1	332101025R1
C8414	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8415	C-CERA C	CK725B1H-102K1	1	332101025R1
C8416	C-CERA C	CK725B1H-102K1	1	332101025R1
C8417	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8418	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8419	C-CERA C	CK725B1H-102K1	1	332101025R1
C8420	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8421	C-CERA C	CK725B1H-102K1	1	332101025R1
C8422	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8423	C-CERA C	CK725B1H-102K1	1	332101025R1
C8424	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8425	C-CERA C	CK725B1H-102K1	1	332101025R1
C8426	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8427	C-CERA C	CK725B1H-102K1	1	332101025R1
C8428	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8429	C-CERA C	CK725B1H-102K1	1	332101025R1
C8430	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8431	C-CERA C	CK725B1H-102K1	1	332101025R1
C8432	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8433	C-CERA C	CK725B1H-102K1	1	332101025R1
C8434	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8435	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8441	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8442	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8443	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2

C8444	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8501	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8502	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8503	C-CERA C	CK725B1H-102K1	1	332101025R1
C8504	C-CERA C	CK725B1H-102K1	1	332101025R1
C8505	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8506	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8507	C-CERA C	CK725B1H-102K1	1	332101025R1
C8508	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8509	C-CERA C	CK725B1H-102K1	1	332101025R1
C8510	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8511	C-CERA C	CK725B1H-102K1	1	332101025R1
C8512	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8513	C-CERA C	CK725B1H-102K1	1	332101025R1
C8514	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8515	C-CERA C	CK725B1H-102K1	1	332101025R1
C8516	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8517	C-CERA C	CK725B1H-102K1	1	332101025R1
C8518	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8519	C-CERA C	CK725B1H-102K1	1	332101025R1
C8520	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8521	C-CERA C	CK725B1H-102K1	1	332101025R1
C8522	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8523	C-CERA C	CK725B1H-102K1	1	332101025R1
C8524	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8529	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8530	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8531	C-CERA C	CK725B1H-102K1	1	332101025R1
C8532	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8533	C-CERA C	CK725B1H-102K1	1	332101025R1
C8534	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8535	C-CERA C	CK725B1H-102K1	1	332101025R1
C8536	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8537	C-CERA C	CK725B1H-102K1	1	332101025R1
C8538	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8539	C-CERA C	CK725B1H-102K1	1	332101025R1
C8540	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8541	C-CERA C	CK725B1H-102K1	1	332101025R1
C8542	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8543	C-CERA C	CK725B1H-102K1	1	332101025R1
C8544	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8545	C-CERA C	CK725B1H-102K1	1	332101025R1
C8546	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8547	C-CERA C	CK725B1H-102K1	1	332101025R1
C8548	C-CERA C	CK725F1A-105Z1	1	332181050R1

C8549	C-CERA C	CK725B1H-102K1	1	332101025R1
C8550	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8551	C-CERA C	CK725B1H-102K1	1	332101025R1
C8552	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8553	C-CERA C	CK725B1H-102K1	1	332101025R1
C8554	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8555	C-CERA C	CK725B1H-102K1	1	332101025R1
C8556	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8557	C-CERA C	CK725B1H-102K1	1	332101025R1
C8558	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8559	C-CERA C	CK725B1H-102K1	1	332101025R1
C8560	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8561	C-CERA C	CK725B1H-102K1	1	332101025R1
C8562	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8563	C-CERA C	CK725B1H-102K1	1	332101025R1
C8564	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8565	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8566	C-CERA C	CK725B1H-102K1	1	332101025R1
C8567	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8568	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8569	C-CERA C	CK725B1H-102K1	1	332101025R1
C8570	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8571	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8572	C-CERA C	CK725B1H-102K1	1	332101025R1
C8573	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8574	C-CERA C	CC725CH1H-070D1	1	342100702R1
C8575	C-CERA C	CC725CH1H-070D1	1	342100702R1
C8581	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8592	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8593	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8598	C-CERA C	CK725B1H-102K1	1	332101025R1
C8599	C-CERA C	CK725B1H-102K1	1	332101025R1
C8601	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8602	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C8603	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8604	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8605	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C8606	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8607	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C8608	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8609	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C8662	C-CERA C	CK725B1H-223K1	1	332102235R1
C8663	CD C	UCD1E221MNL1GS	1	396652217R2
C8664	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8669	CD C	UCD1A471MNL1GS	1	396634717R2

C8675	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C8676	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8680	CD C	UCD1A471MNL1GS	1	396634717R2
C8681	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8682	C-CERA C	CK725B1H-223K1	1	332102235R1
C8683	CD C	UCD1E221MNL1GS	1	396652217R2
C8684	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8691	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8692	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8698	C-CERA C	CK725B1H-102K1	1	332101025R1
C8699	C-CERA C	CK725B1H-102K1	1	332101025R1
C8701	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8702	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8703	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8704	CHIP ELECT C	CEWX50V-4.7M	1	398180477R2
C8705	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8706	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8707	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8708	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8709	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C8710	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8801	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8802	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8803	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8804	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8805	C-CERA C	CK725B1H-102K1	1	332101025R1
C8806	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8807	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8808	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8809	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8810	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8811	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8812	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8813	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8814	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8901	C-CERA C	CC725CH1H-101J1	1	342101014R1
C8902	C-CERA C	CC725CH1H-101J1	1	342101014R1
C8903	C-CERA C	CC725CH1H-101J1	1	342101014R1
C8904	C-CERA C	CC725CH1H-101J1	1	342101014R1
C8905	C-CERA C	CC725CH1H-101J1	1	342101014R1
C8906	C-CERA C	CC725CH1H-101J1	1	342101014R1
C8919	C-CERA C	CC725CH1H-220J1	1	342102204R1
C8920	C-CERA C	CC725CH1H-220J1	1	342102204R1
C8921	C-CERA C	CC725CH1H-220J1	1	342102204R1
C8922	C-CERA C	CC725CH1H-220J1	1	342102204R1

C8923	C-CERA C	CC725CH1H-220J1	1	342102204R1
C8924	C-CERA C	CC725CH1H-220J1	1	342102204R1
R8001	C-R NET	RM7LJ103X04	1	43484710304R2
R8002	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8003	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8004	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8005	C-CARBON R	RN72K1J-330JE	1	435033304R1
R8006	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8007	C-R NET	RM7LJ330X04	1	43484733004R2
R8009	C-R NET	RM7LJ220X04	1	43484722004R2
R8010	C-R NET	RM7LJ220X04	1	43484722004R2
R8011	C-R NET	RM7LJ220X04	1	43484722004R2
R8012	C-R NET	RM7LJ220X04	1	43484722004R2
R8013	C-R NET	RM7LJ220X04	1	43484722004R2
R8014	C-R NET	RM7LJ220X04	1	43484722004R2
R8015	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8016	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8018	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8020	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8021	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8023	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8024	C-R NET	RM7LJ103X04	1	43484710304R2
R8025	C-R NET	RM7LJ103X04	1	43484710304R2
R8026	C-R NET	RM7LJ103X04	1	43484710304R2
R8027	C-R NET	RM7LJ103X04	1	43484710304R2
R8028	C-R NET	RM7LJ103X04	1	43484710304R2
R8029	C-R NET	RM7LJ103X04	1	43484710304R2
R8030	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8033	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8034	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8035	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8036	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8037	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8038	C-CARBON R	RN72K1J-471JE	1	435034714R1
R8040	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8041	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8042	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8043	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8044	C-CARBON R	RN72K1J-471JE	1	435034714R1
R8045	C-R NET	RM7LJ103X04	1	43484710304R2
R8046	C-CARBON R	RN72K1J-471JE	1	435034714R1
R8047	C-R NET	RM7LJ103X04	1	43484710304R2
R8048	C-CARBON R	RN72K1J-471JE	1	435034714R1
R8049	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8050	C-CARBON R	RN72K1J-103JE	1	435031034R1

R8051	C-R NET	RM7LJ330X04	1	43484733004R2
R8052	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8053	C-CARBON R	RN72K1J-750JE	1	435037504R1
R8054	C-CARBON R	RN72K1J-750JE	1	435037504R1
R8055	C-CARBON R	RN72K1J-750JE	1	435037504R1
R8056	C-CARBON R	RN72K1J-750JE	1	435037504R1
R8060	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8062	C-R NET	RM7LJ220X04	1	43484722004R2
R8063	C-R NET	RM7LJ220X04	1	43484722004R2
R8066	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8067	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8070	C-CARBON R	RN72K1J-272JE	1	435032724R1
R8071	C-CARBON R	RN72K1J-272JE	1	435032724R1
R8072	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8073	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8074	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8075	C-CARBON R	RN72K1J-680JE	1	435036804R1
R8076	C-CARBON R	RN72K1J-680JE	1	435036804R1
R8077	C-CARBON R	RN72K1J-680JE	1	435036804R1
R8078	C-CARBON R	RN72K1J-680JE	1	435036804R1
R8079	C-CARBON R	RN72K1J-330JE	1	435033304R1
R8081	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8085	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8101	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8102	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8103	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8104	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8234	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8235	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8236	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8237	C-CARBON R	RN72K1J-102JE	1	435031024R1
R8238	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8239	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8240	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8242	C-CARBON R	RN72K1J-562JE	1	435035624R1
R8243	C-CARBON R	RN72K1J-562JE	1	435035624R1
R8244	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8247	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8248	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8323	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8324	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8325	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8326	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8334	C-CARBON R	RN72K1J-222JE	1	435032224R1
R8335	C-CARBON R	RN72K1J-222JE	1	435032224R1

R8341	C-CARBON R	RN72K2E-100JE	1	435221004R1
R8401	C-R NET	RM7LJ220X04	1	43484722004R2
R8402	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8403	C-R NET	RM7LJ220X04	1	43484722004R2
R8404	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8405	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8408	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8409	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8410	C-CARBON R	RN72K1J-681JE	1	435036814R1
R8411	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8414	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8415	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8416	C-R NET	RM7LJ220X04	1	43484722004R2
R8417	C-R NET	RM7LJ220X04	1	43484722004R2
R8418	C-R NET	RM7LJ220X04	1	43484722004R2
R8419	C-R NET	RM7LJ220X04	1	43484722004R2
R8420	C-R NET	RM7LJ220X04	1	43484722004R2
R8421	C-R NET	RM7LJ220X04	1	43484722004R2
R8422	C-R NET	RM7LJ220X04	1	43484722004R2
R8423	C-R NET	RM7LJ220X04	1	43484722004R2
R8424	C-R NET	RM7LJ220X04	1	43484722004R2
R8425	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8429	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8431	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8432	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8442	C-CARBON R	RN72K1J-102JE	1	435031024R1
R8444	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8501	C-CARBON R	RN72K1J-330JE	1	435033304R1
R8502	C-CARBON R	RN72K1J-330JE	1	435033304R1
R8503	C-CARBON R	RN72K1J-330JE	1	435033304R1
R8504	C-R NET	RM7LJ330X04	1	43484733004R2
R8505	C-R NET	RM7LJ330X04	1	43484733004R2
R8506	C-CARBON R	RN72K1J-120JE	1	435031204R1
R8507	C-R NET	RM7LJ330X04	1	43484733004R2
R8508	C-R NET	RM7LJ330X04	1	43484733004R2
R8509	C-R NET	RM7LJ330X04	1	43484733004R2
R8510	C-R NET	RM7LJ330X04	1	43484733004R2
R8511	C-R NET	RM7LJ330X04	1	43484733004R2
R8512	C-R NET	RM7LJ330X04	1	43484733004R2
R8513	C-R NET	RM7LJ330X04	1	43484733004R2
R8514	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8516	C-CARBON R	RN72K1J-101JE	1	435031014R1
R8517	C-CARBON R	RN72K1J-101JE	1	435031014R1
R8518	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8519	C-CARBON R	RN72K1J-470JE	1	435034704R1

R8520	C-CARBON R	RN72K1J-330JE	1	435033304R1
R8521	C-CARBON R	RN72K1J-330JE	1	435033304R1
R8522	C-R NET	RM7LJ330X04	1	43484733004R2
R8523	C-CARBON R	RN72K1J-330JE	1	435033304R1
R8524	C-CARBON R	RN72K1J-330JE	1	435033304R1
R8534	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8535	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8536	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8537	C-CARBON R	RN72K1J-102JE	1	435031024R1
R8538	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8539	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8540	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8542	C-CARBON R	RN72K1J-562JE	1	435035624R1
R8543	C-CARBON R	RN72K1J-562JE	1	435035624R1
R8544	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8547	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8548	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8591	C-CARBON R	RN72K1J-222JE	1	435032224R1
R8593	C-CARBON R	RN72K1J-821JE	1	435038214R1
R8595	C-CARBON R	RN72K1J-392JE	1	435033924R1
R8597	C-CARBON R	RN72K1J-152JE	1	435031524R1
R8598	C-CARBON R	RN72K1J-152JE	1	435031524R1
R8629	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8630	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8631	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8632	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8633	C-CARBON R	RN72K1J-102JE	1	435031024R1
R8634	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8635	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8636	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8637	C-CARBON R	RN72K1J-102JE	1	435031024R1
R8638	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8639	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8640	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8642	C-CARBON R	RN72K1J-562JE	1	435035624R1
R8643	C-CARBON R	RN72K1J-562JE	1	435035624R1
R8644	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8647	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8648	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8662	C-CARBON R	RN72K1J-105JE	1	435031054R1
R8702	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8703	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8706	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8707	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8708	C-CARBON R	RN72K1J-000JE	1	435030004R1

R8710	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8711	C-CARBON R	RN72K1J-222JE	1	435032224R1
R8712	C-CARBON R	RN72K1J-222JE	1	435032224R1
R8713	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8714	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8715	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8716	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8717	C-CARBON R	RN72K1J-330JE	1	435033304R1
R8718	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8720	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8721	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8722	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8723	C-R NET	RM7LJ222X04	1	43484722204R2
R8726	C-R NET	RM7LJ222X04	1	43484722204R2
R8727	C-R NET	RM7LJ103X04	1	43484710304R2
R8728	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8730	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8732	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8733	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8734	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8736	C-R NET	RM7LJ220X04	1	43484722004R2
R8738	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8741	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8742	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8745	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8747	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8748	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8749	C-R NET	RM7LJ220X04	1	43484722004R2
R8750	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8751	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8753	C-R NET	RM7LJ220X04	1	43484722004R2
R8758	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8762	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8763	C-R NET	RM7LJ103X04	1	43484710304R2
R8765	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8766	C-R NET	RM7LJ103X04	1	43484710304R2
R8770	C-R NET	RM7LJ103X04	1	43484710304R2
R8772	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8801	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8803	C-CARBON R	RN72K1J-272JE	1	435032724R1
R8804	C-CARBON R	RN72K1J-272JE	1	435032724R1
R8805	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8806	C-CARBON R	RN72K1J-330JE	1	435033304R1
R8807	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8808	C-CARBON R	RN72K1J-122JE	1	435031224R1

R8809	C-CARBON R	RN72K1J-122JE	1	435031224R1
R8810	C-CARBON R	RN72K1J-122JE	1	435031224R1
R8811	C-CARBON R	RN72K1J-122JE	1	435031224R1
R8812	C-R NET	RM7LJ220X04	1	43484722004R2
R8813	C-R NET	RM7LJ220X04	1	43484722004R2
R8814	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8815	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8816	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8817	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8901	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8902	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8903	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8904	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8905	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8906	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8907	C-CARBON R	RN72K1J-151JE	1	435031514R1
R8908	C-CARBON R	RN72K1J-151JE	1	435031514R1
R8909	C-CARBON R	RN72K1J-151JE	1	435031514R1
R8910	C-CARBON R	RN72K1J-151JE	1	435031514R1
R8911	C-CARBON R	RN72K1J-151JE	1	435031514R1
R8912	C-CARBON R	RN72K1J-151JE	1	435031514R1
R8913	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8914	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8915	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8916	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8917	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8918	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8931	C-CARBON R	RN72K1J-333JE	1	435033334R1
R8932	C-CARBON R	RN72K1J-152JE	1	435031524R1
R8933	C-CARBON R	RN72K1J-152JE	1	435031524R1
R8934	C-CARBON R	RN72K1J-332JE	1	435033324R1
JL8001B	WIRE TRAP	NPLG-4P587	1	25055625
P2801B	SOCKET	NSCT-23P2116	1	25052219
P3805B	SOCKET	NSCT-10P1025	1	25051235
P8002B	SOCKET	NSCT-15P1030	1	25051240
P8011	SOCKET	NSCT-4P2238	1	25052341
P8201	SOCKET	YKF45-7037V	1	25053253R3
P8302	SOCKET	YKF45-7037V	1	25053253R3
P8501	SOCKET	YKF45-7037V	1	25053253R3
P8601	SOCKET	YKF45-7037V	1	25053253R3
P8702	SOCKET	NSCT-8P2242	1	25052345

DTR-7.8

PACKING PROCEDURE PARTS LIST

REF. NO.	PART NAME	DESCRIPTION	Q'TY	PART NO(SN)	REMARKS
A603	SHEET	T0.515*1300*900	1	29096066	
A604	POLY BAG	(W1020xD770)	1	29100253	
A606	TAPE	(SEROHAN)NITTO NO.29	1	29110149	
A608	PAD	AS	1	29092367	[U]
A608	PAD	AS	1	29092384	[M]
A610	CARTON	DTR-7.8(B)UDD	1	29054723	[U]
A610	CARTON	DTR-7.8(B)MDD	1	29054795A	[M]
A614a	UPC LABEL	.	1	29364859	[U], <DD>
A614a	EAN LABEL	.	1	29364856	[U], <MA>
A614a	UPC LABEL	DTR-7.8(B)MDD	1	29390075	[M], <DD>
A614a	EAN LABEL	DTR-7.8(B)MMA	1	29390237	[M], <MA>
A620	CARTON	(ACC)	1	29054767	[U]
A620	CARTON	(ACC)	1	29054470	[M]
A622	TAPE	NITTO 3703	1	29110176	[U]
A622	PP TAPE	W50 SBT-70	1	29110200	[M]
A624	STAPLE	FUKAN-BARI(1000KO)	4	282321	
A630	LABEL	(CARTON)UMA	2	29364890	[U], <MA>
A803	POLY BAG	w250xd350	1	29100250A	
A811	INS MANUAL	En(DTR-7.8)	1	29344459	
A819	INS MANUAL	U9(RC-687M-692M)	1	29344467	
A833	INST SHEET	En(XM RADIO)	1	29355602	<DD>
A835	REMO CON	RC-691M	1	24140691	
A840	ANT COIL	NMA-3057	1	232140	
A842	FM ANT AS	Type W	1	292191	
A844	BATTERY	R6/AA(UM-3)	3	3010194	
A844 or	BATTERY	R6/AA(UM-3)	(3)	3010054	
A848	POLY BAG	t0.1*70*100	1	29100217A	
A852	LABEL	(SP CABLE)	1	29390189	
A853	INST SHEET	U10(07REC HDMI)	1	29355689	
A856	WRNTY CARD	(INTEGRA)	1	29365103	<DD>
A867	INST SHEET	U3EnFrEs(EZ Sync 805series)	1	29355647B	<DD>
A868	INST SHEET	U9(VIERA Link 805Series)	1	29355648B	<MA>
A872	INST SHEET	U10(HUDSON VCR)	1	29355657	
A880	HANDBILL	(SIRIUS)	1	29380149	<DD>
A884	INST SHEET	U2EnJa(IntegraREMO CON)	1	29355670	
P901	AC CORD	AS-UC-2	1	253301VOL	!, <DD>
P901	AC CORD	AS-SAA	1	253391VOL	!, <MA>
U016	MIC AS	MIC-5000	1	1B068MIC	

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