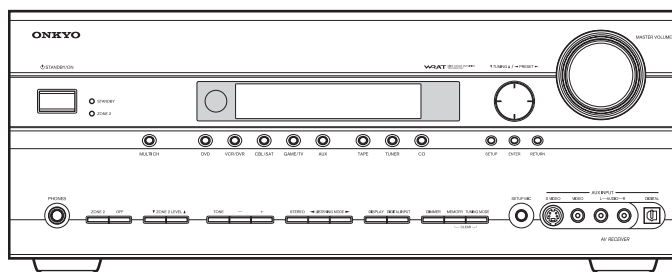


# ONKYO SERVICE MANUAL

## AV RECEIVER

### MODEL TX-SR605 MODEL TX-SA605 MODEL TX-SA8560



RC-682M


#### TX-SR605 Black, Golden and Silver models

B MDD, B MDC, S MDC	120V AC, 60Hz
B MPP, MPA, S MPP, MPA	230-240V AC, 50Hz
B MWO, S MWO, G MWT	120V/220-240V AC, 50/60Hz
G MGQ, G MGK	220-230V AC, 50/60Hz

#### TX-SA605/SA8560 Golden models

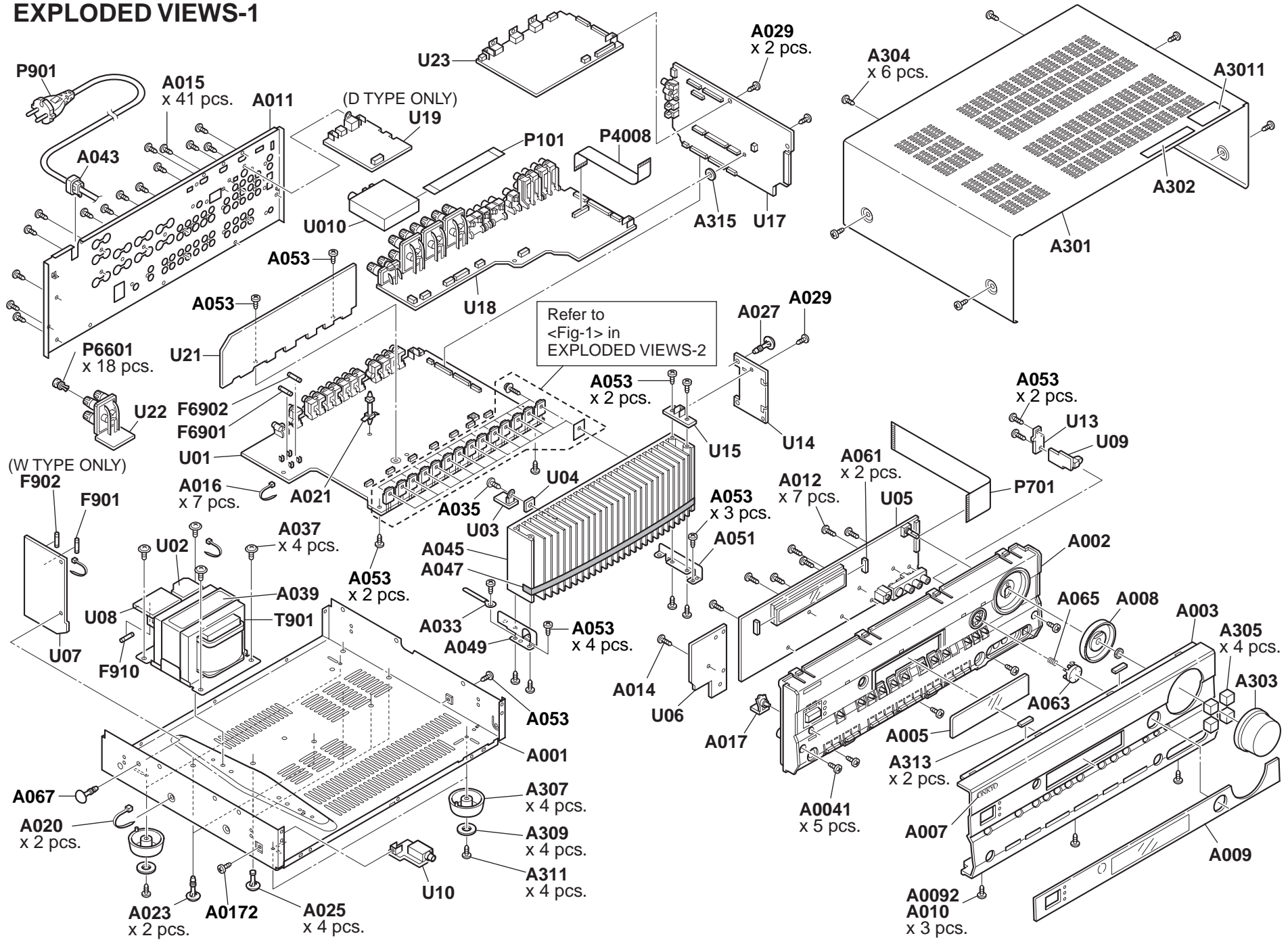
G MGR	220-230V AC, 50/60Hz
-------	----------------------

### 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.

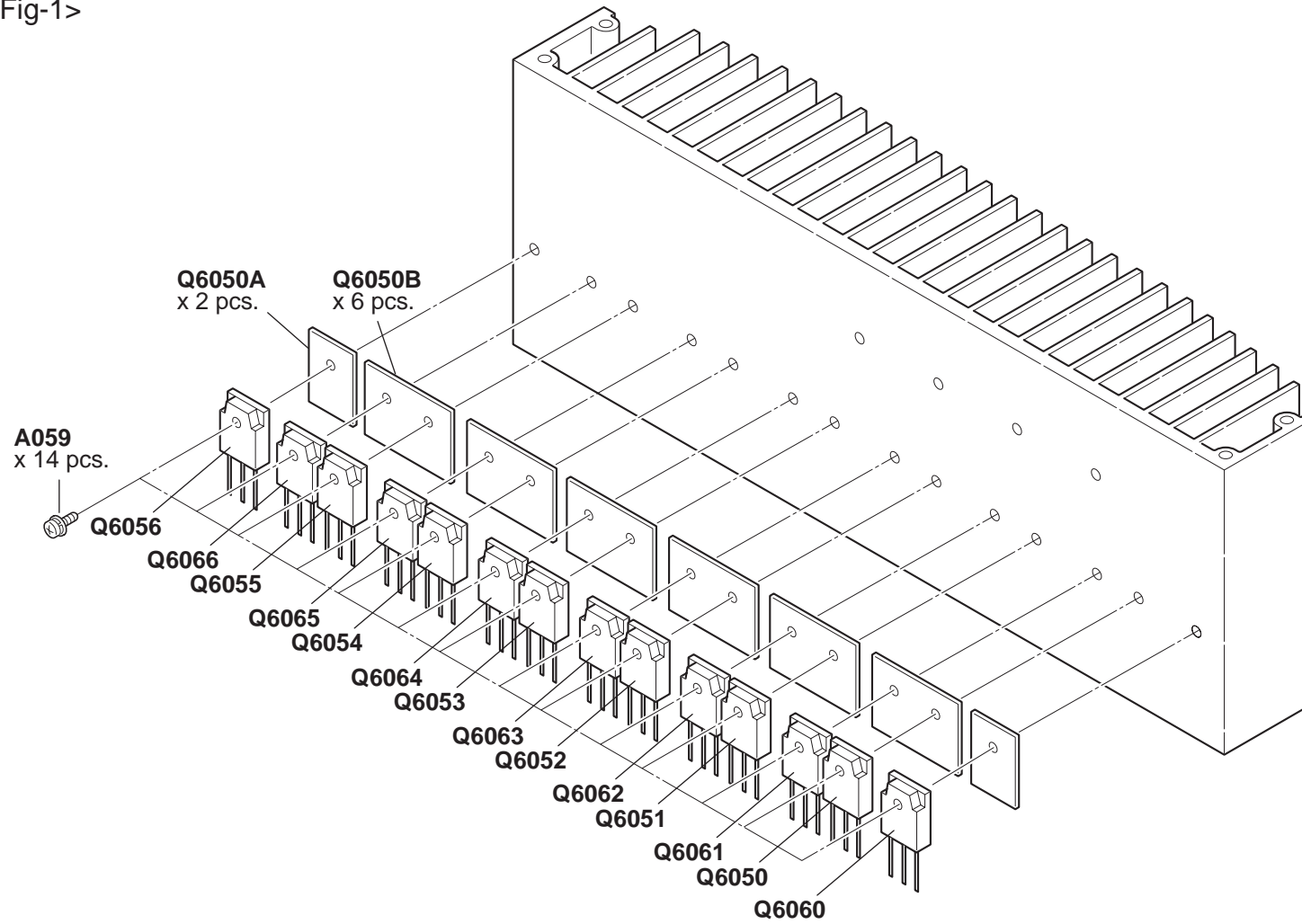
MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

EXPLODED VIEWS-1



## EXPLODED VIEWS-2

&lt;Fig-1&gt;



**BLOCK DIAGRAM-1**  
**AUDIO SECTION**

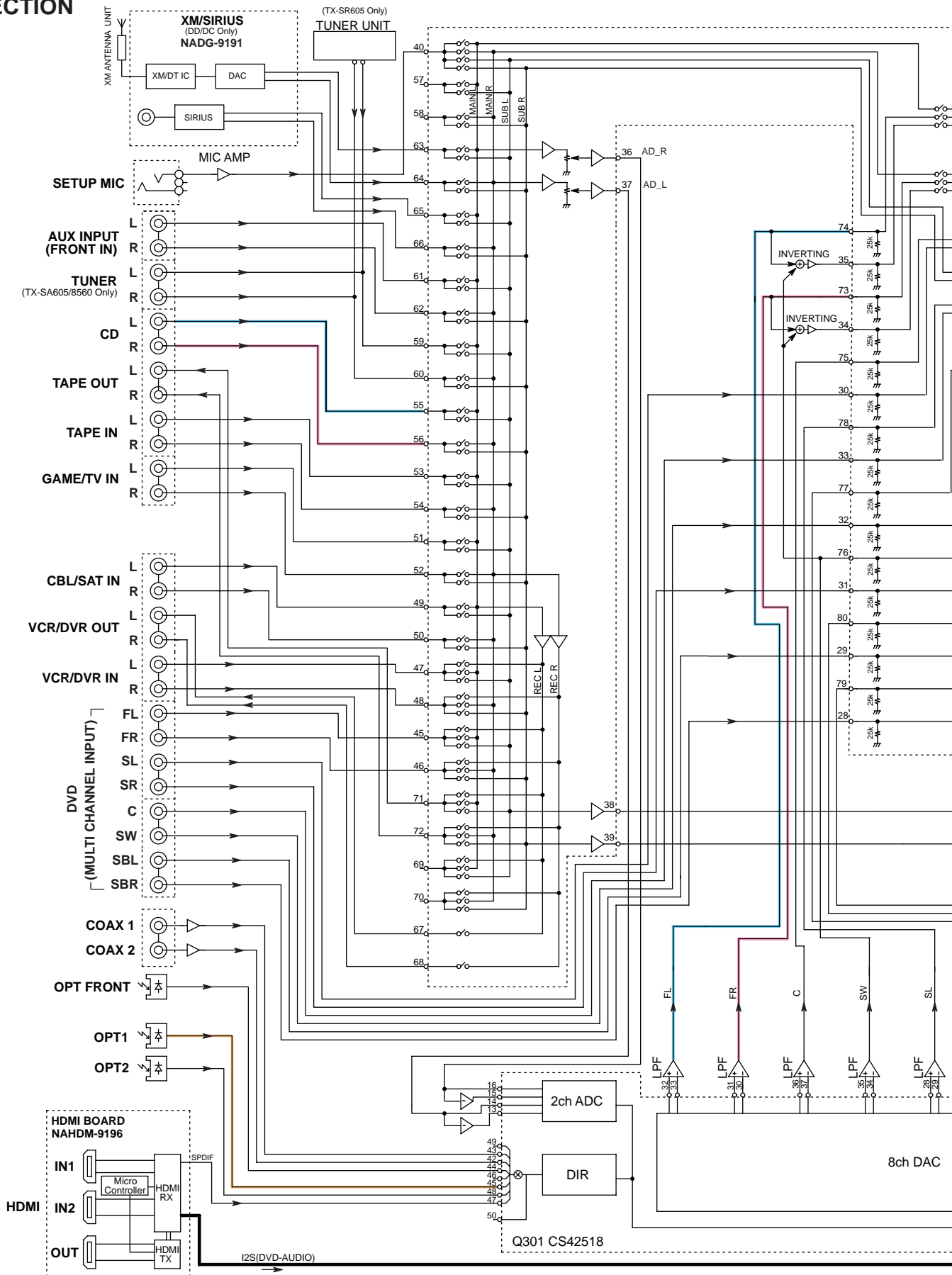
1

2

3

4

5

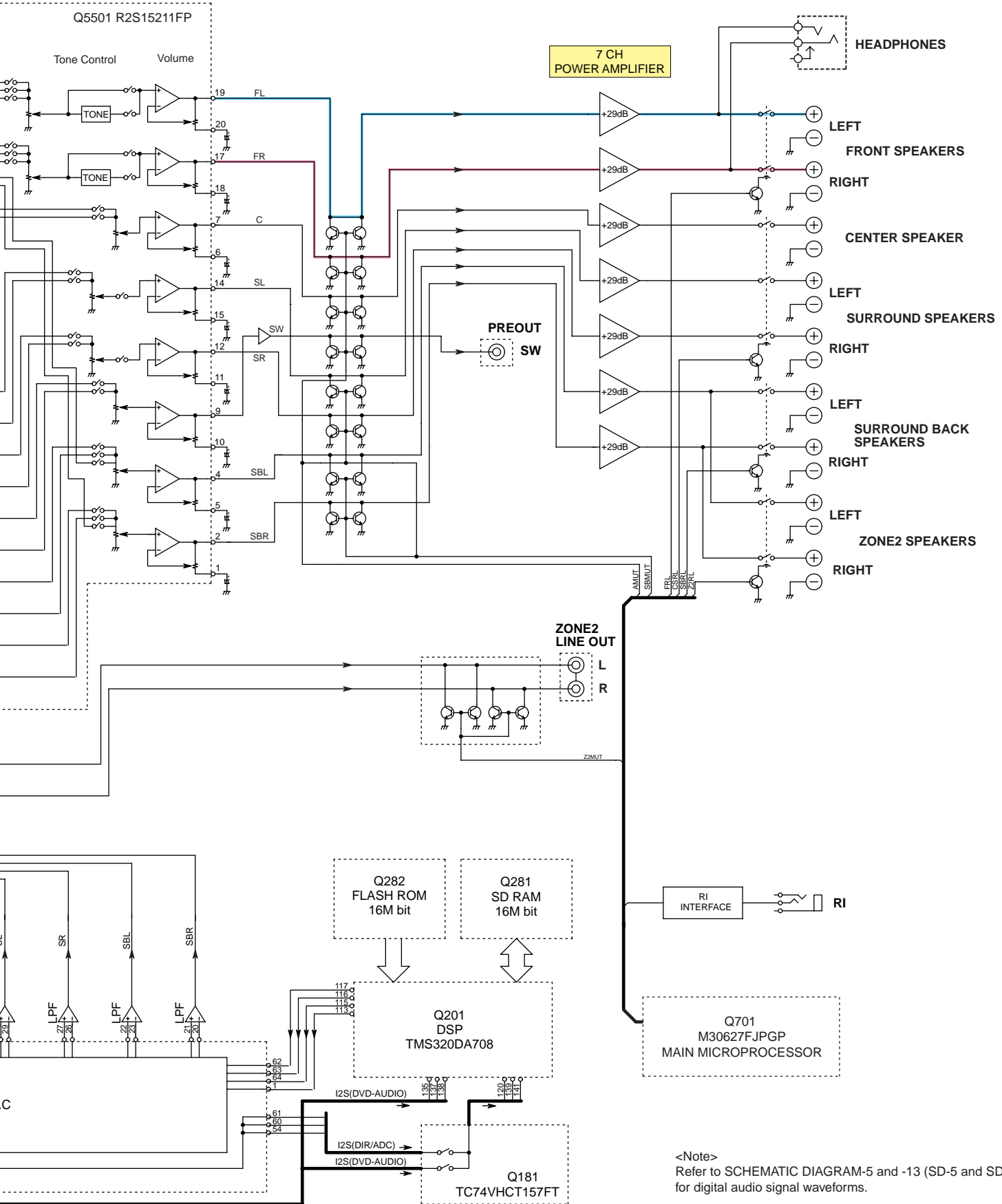


E

F

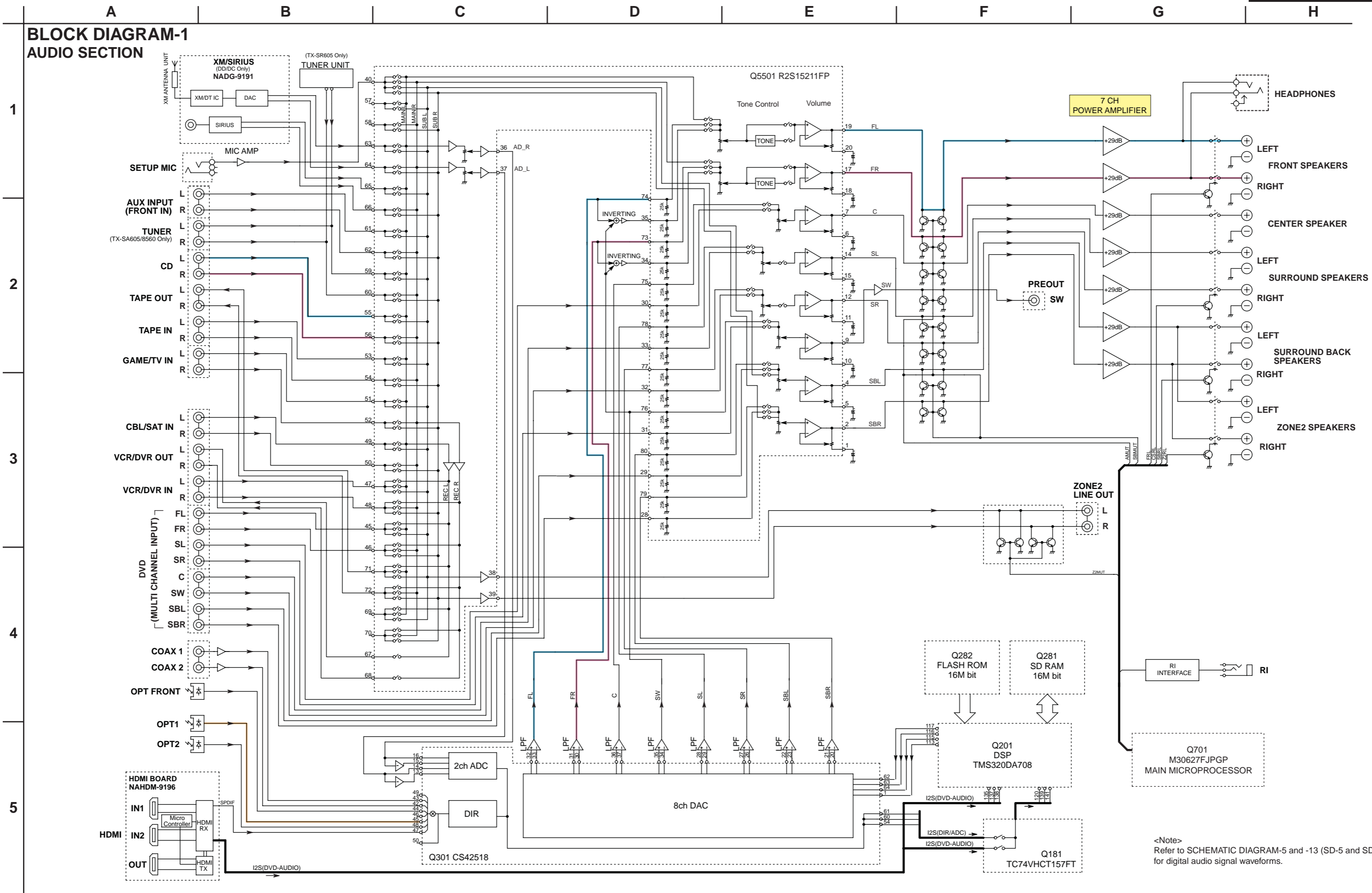
G

H



<Note>  
Refer to SCHEMATIC DIAGRAM-5 and -13 (SD-5 and SD-13)  
for digital audio signal waveforms.

**BLOCK DIAGRAM-1**  
**AUDIO SECTION**

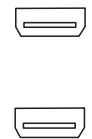


<Note>  
Refer to SCHEMATIC DIAGRAM-5 and -13 (SD-5 and SD-13) for digital audio signal waveforms.

**BLOCK DIAGRAM-2**  
**VIDEO SECTION**

1

IN 1  
HDMI  
IN 2



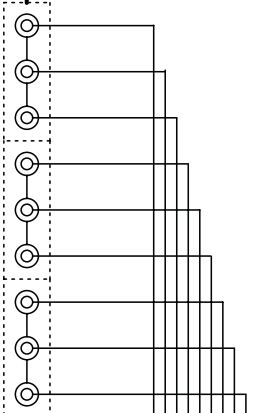
**HDMI BOARD**  
**NAHDM-9196 (SD-10 and SD-11)**

Refer to BLOCK DIAGRAM-3  
HDMI SECTION

2

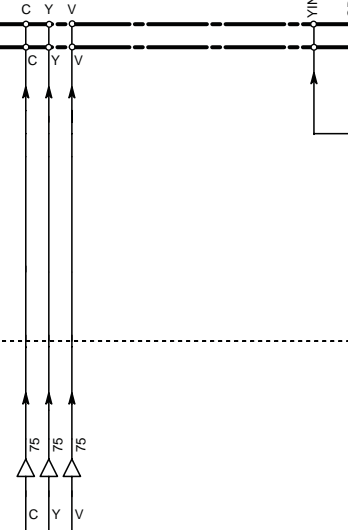
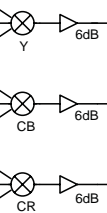
**COMPONENT VIDEO INPUT**

IN 1  
Y  
CB/PB  
CR/PR  
IN 2  
Y  
CB/PB  
CR/PR  
IN 3  
Y  
CB/PB  
CR/PR



**VIDEO BOARD**  
**NAVD-9190 (SD-9)**

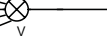
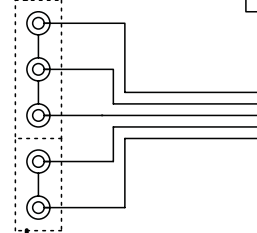
Q4002 AN-15881A



3

**COMPOSITE VIDEO INPUT**

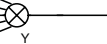
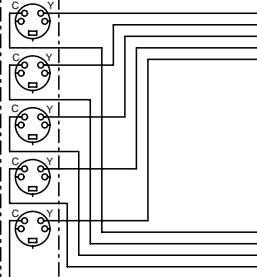
DVD  
VCR/DVR  
CBL/SAT  
GAME/TV  
AUX INPUT (FRONT)



4

**S VIDEO INPUT**

DVD  
VCR/DVR  
CBL/SAT  
GAME/TV  
AUX INPUT (FRONT)



5

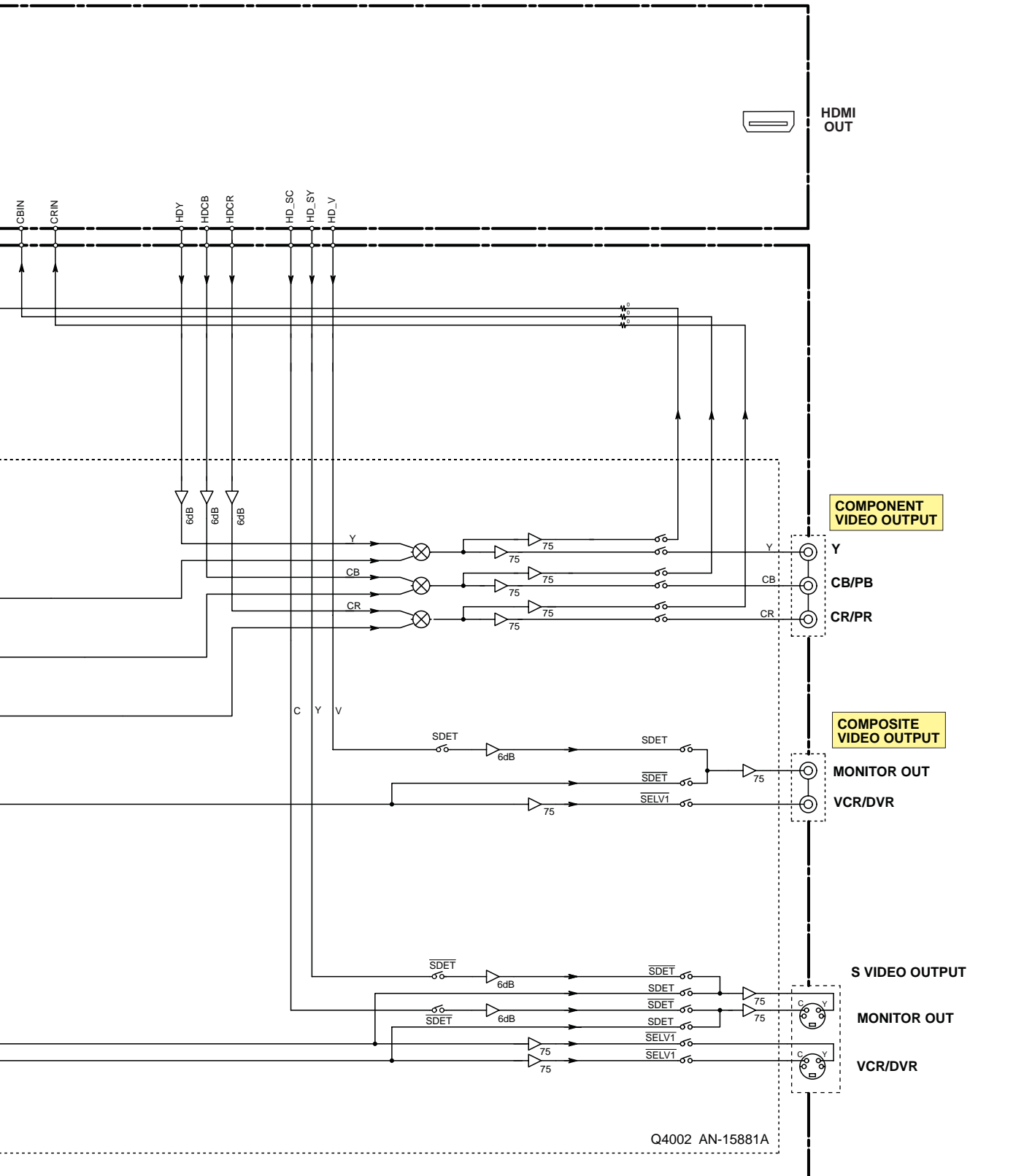
<Note>  
Refer to SCHEMATIC DIAGRAM-9, -10 and -13 (SD-9, SD-10 and SD-13)  
for video and HDMI signal waveforms.

E

F

G

H



HDMI OUT

COMPONENT VIDEO OUTPUT

COMPOSITE VIDEO OUTPUT

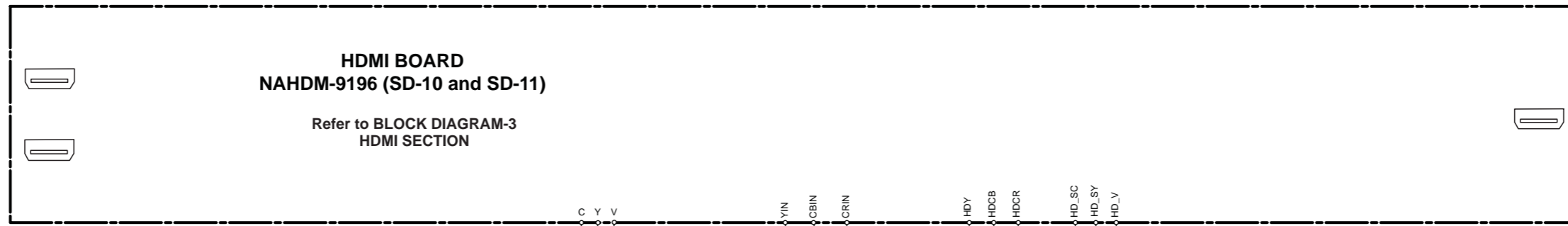
S VIDEO OUTPUT

Q4002 AN-15881A

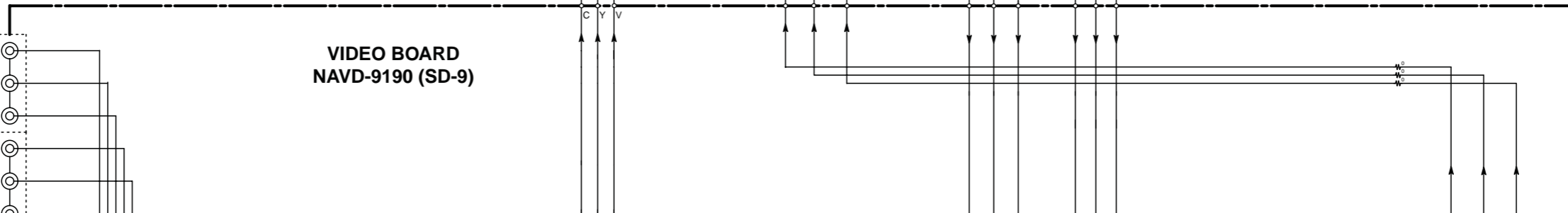


**BLOCK DIAGRAM-2  
VIDEO SECTION**

1

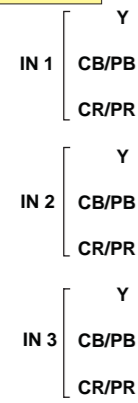


2

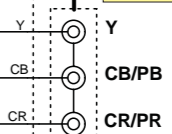


3

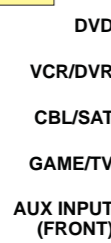
**COMPONENT VIDEO INPUT**



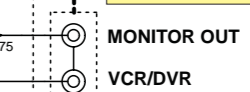
**COMPONENT VIDEO OUTPUT**



**COMPOSITE VIDEO INPUT**



**COMPOSITE VIDEO OUTPUT**

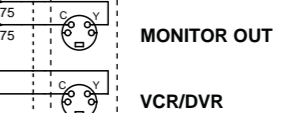


4

**S VIDEO INPUT**



**S VIDEO OUTPUT**

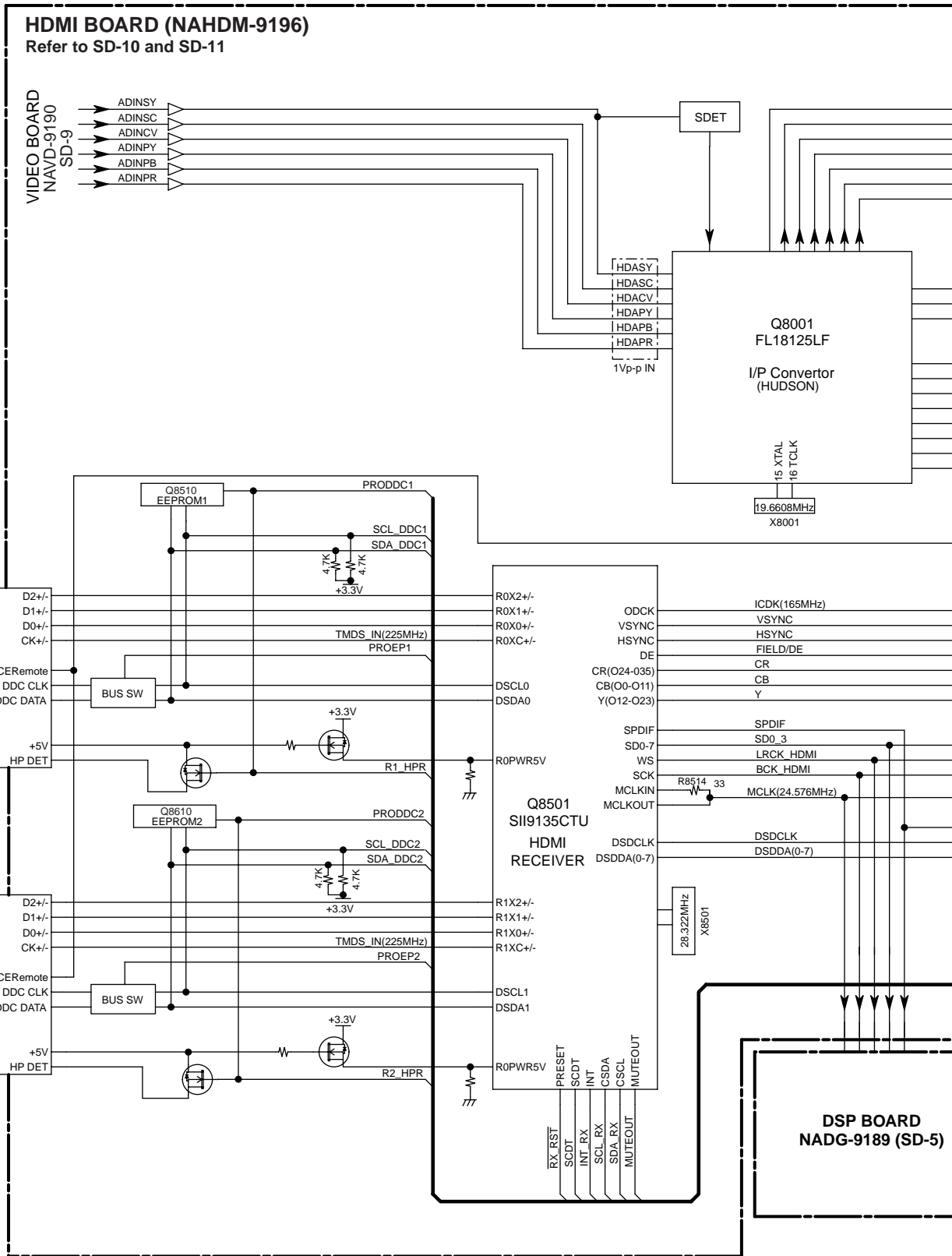


5

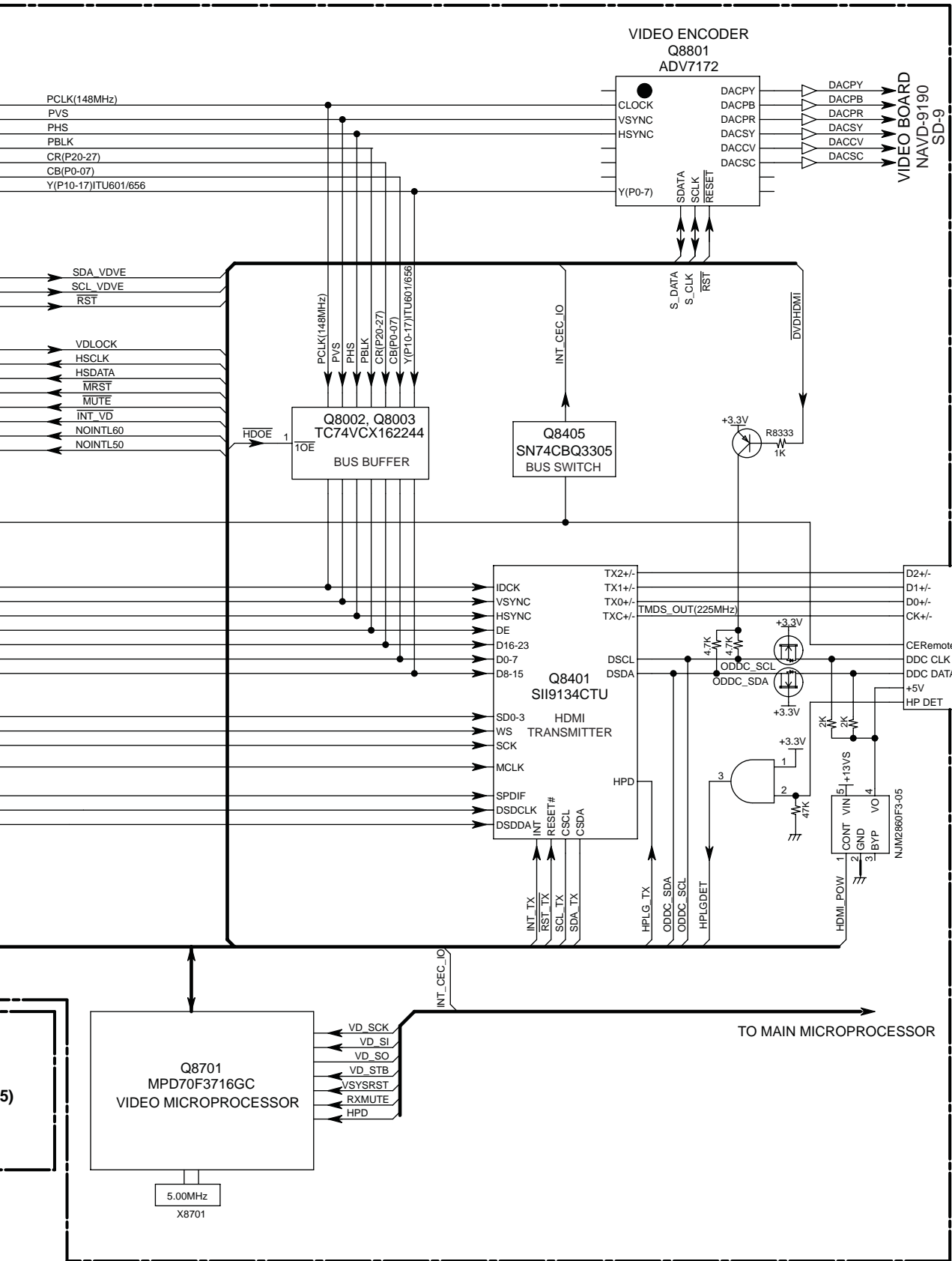
<Note>  
Refer to SCHEMATIC DIAGRAM-9, -10 and -13 (SD-9, SD-10 and SD-13)  
for video and HDMI signal waveforms.

**BLOCK DIAGRAM-3**  
**HDMI SECTION**

1  
2  
3  
4  
5



<Note>  
Refer to SCHEMATIC DIAGRAM-9, -10 and -13 (SD-9, SD-10 and SD-13) for video and HDMI signal waveforms.



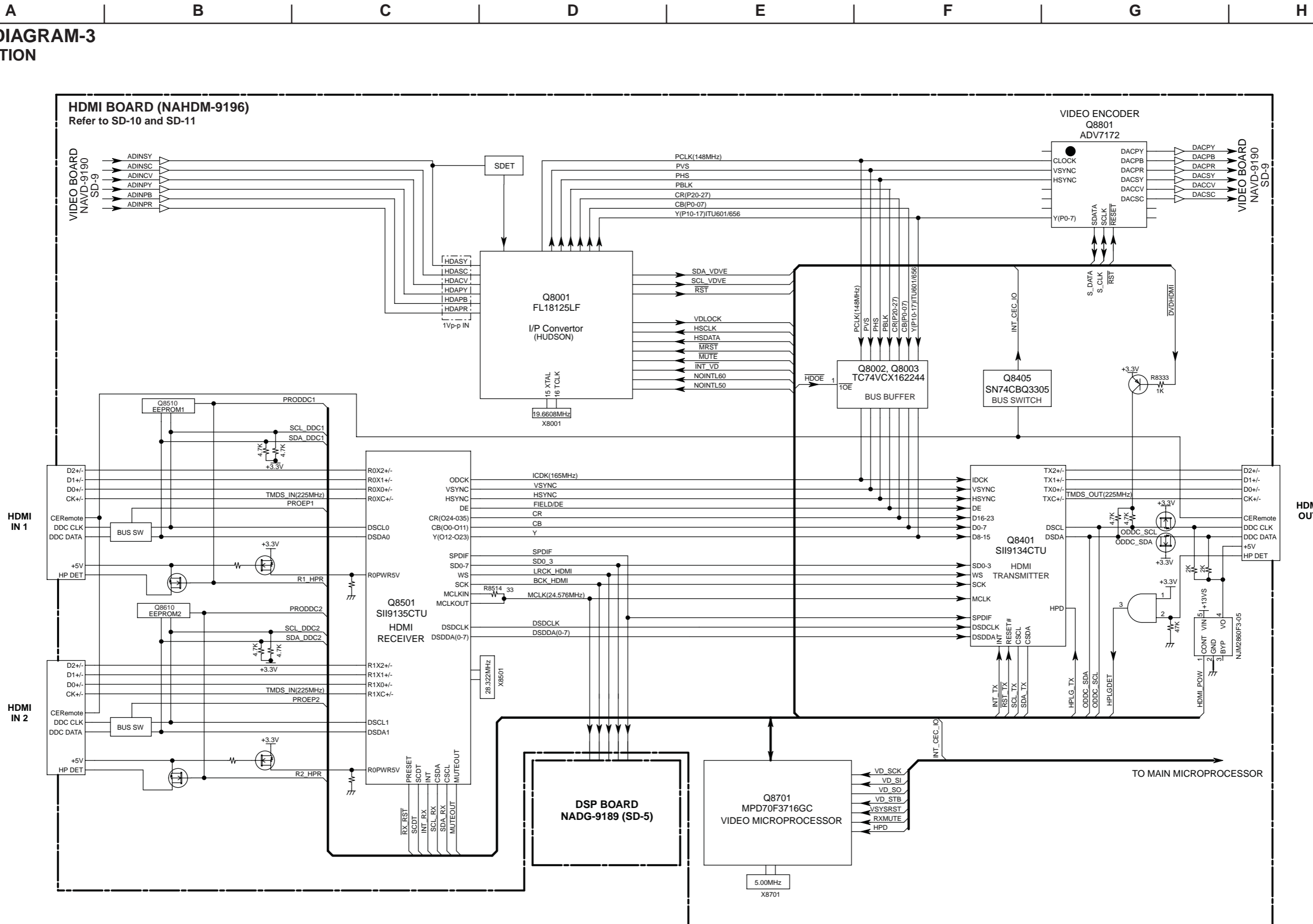
TO MAIN MICROPROCESSOR

HDMI OUT

5)

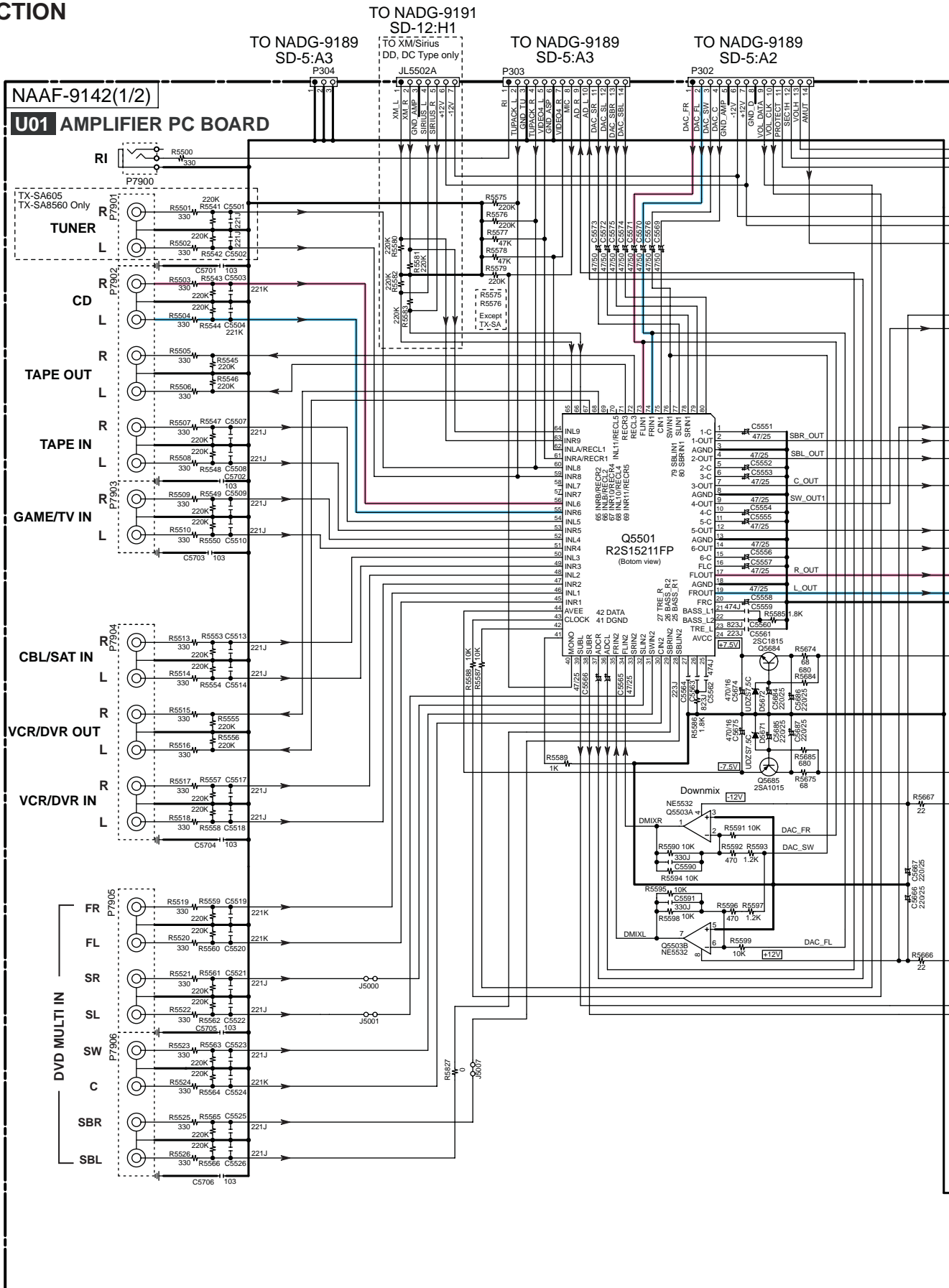
**BLOCK DIAGRAM-3**  
**HDMI SECTION**

1  
2  
3  
4  
5

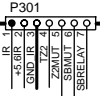


<Note>  
Refer to SCHEMATIC DIAGRAM-9, -10 and -13 (SD-9, SD-10 and SD-13)  
for video and HDMI signal waveforms.

SCHEMATIC DIAGRAM-1 (SD-1)  
AUDIO SECTION



TO NADG-9189  
SD-5:A2



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

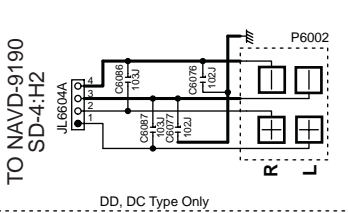
NOTE

- THE COMPONENTS IDENTIFIED BY MARK  $\triangle$  ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER)  $\leftarrow$  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 (  $\text{---}$  ) 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 $\mu\text{F}$
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.  
EX)  $\text{---}$  PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

TO MAIN AMP  
SD-2:A3

TO MAIN AMP  
SD-2:A3

TO NAVD-9190  
SD-4:H2



DD, DC Type Only

ZONE 2  
LINE OUT

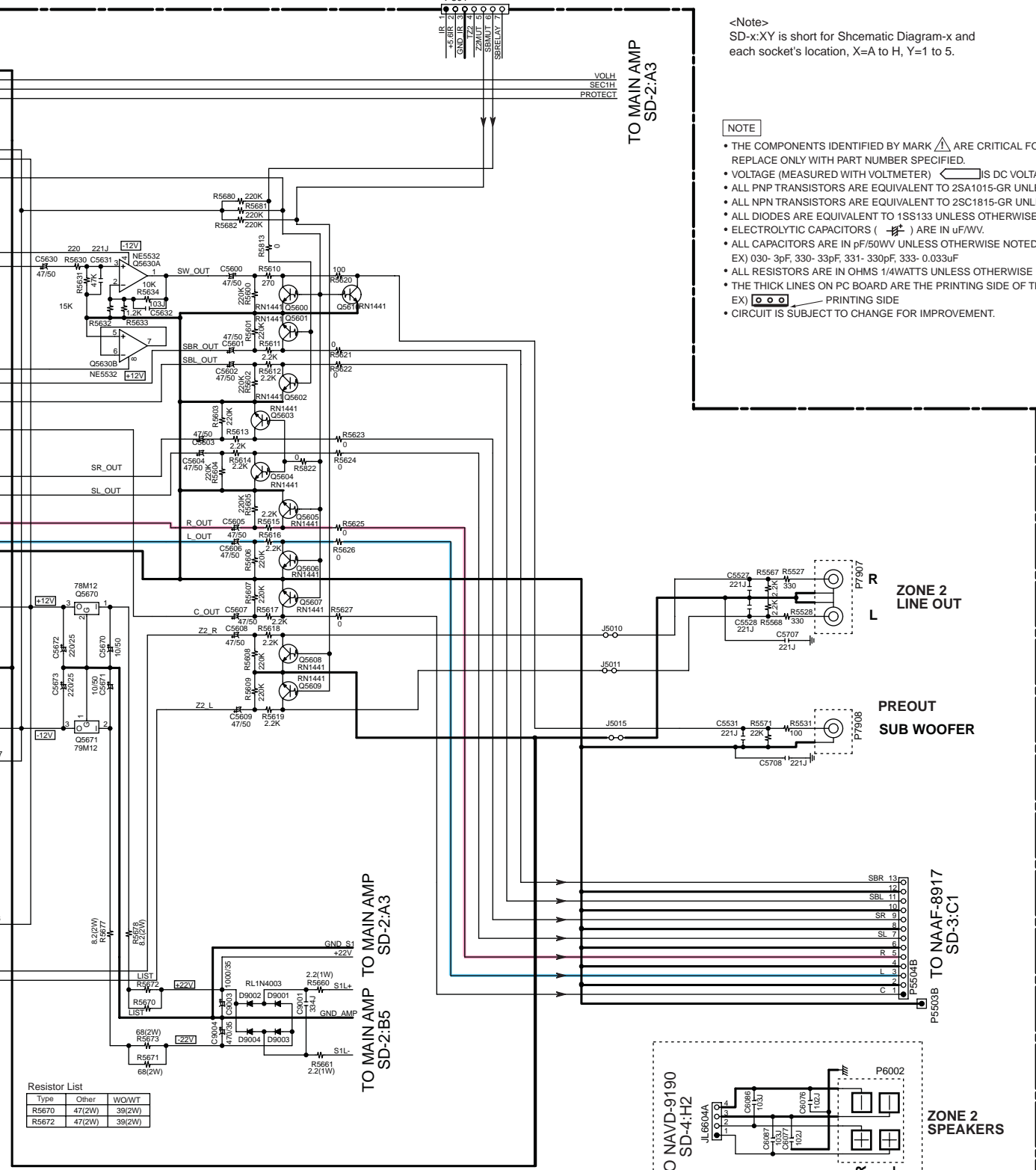
PREOUT  
SUB WOOFER

TO NAAF-8917  
SD-3:C1

ZONE 2  
SPEAKERS

Resistor List

Type	Other	WO/WT
R5670	47(2W)	39(2W)
R5672	47(2W)	39(2W)



**SCHEMATIC DIAGRAM-1 (SD-1)**  
**AUDIO SECTION**

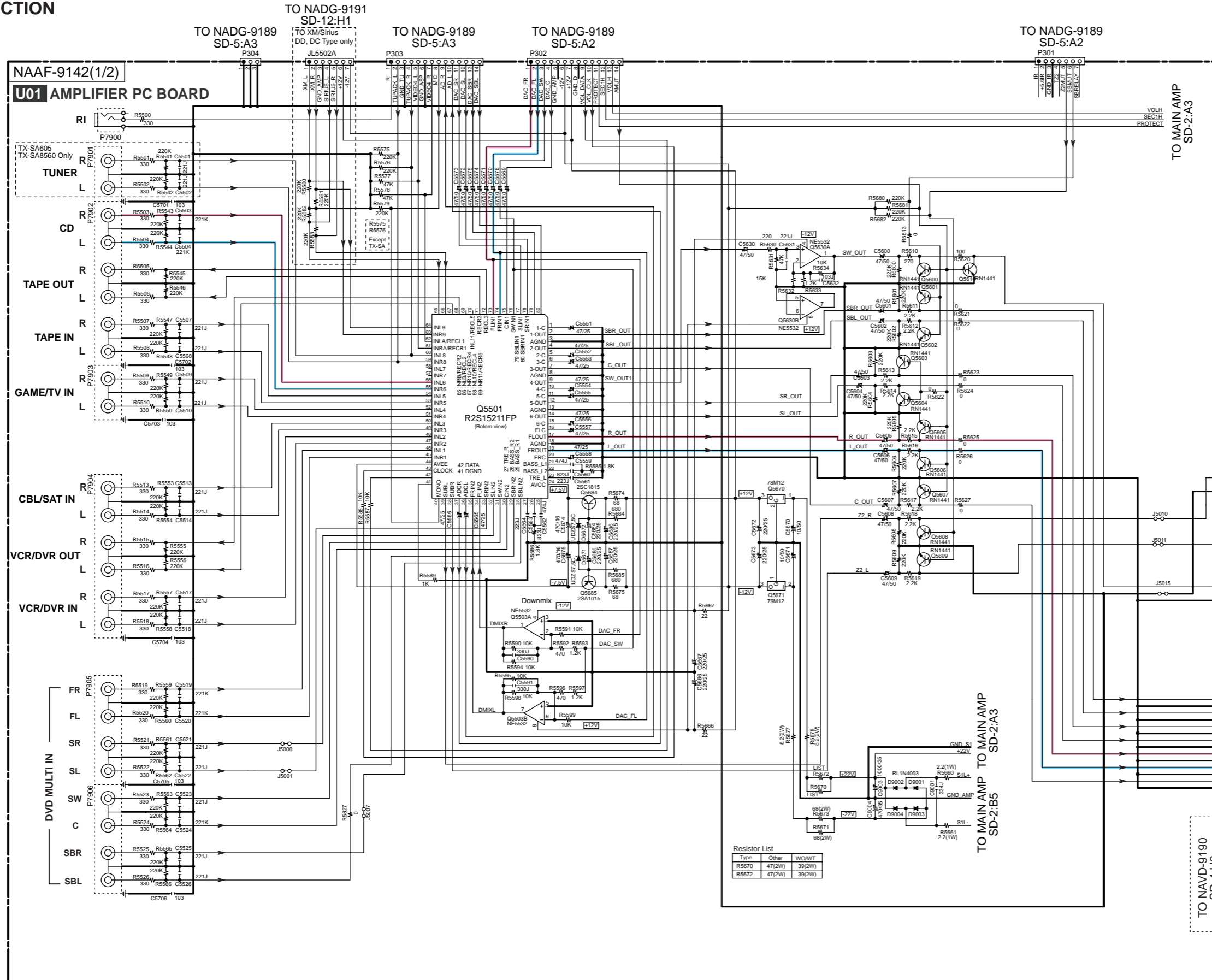
1

2

3

4

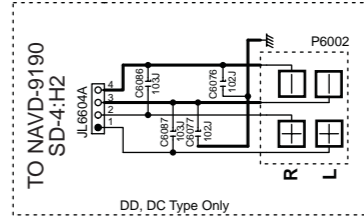
5



<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  $\triangle$  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 (  $\text{---}$  ) ARE IN  $\mu$ F/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.  
EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033 $\mu$ F
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
- EX)  $\square$   $\square$   $\square$  PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.



ZONE 2 LINE OUT

PREOUT  
SUB WOOFER

TO NAAF-8917  
SD-3:C1

ZONE 2  
SPEAKERS

# SCHEMATIC DIAGRAM-2 (SD-2) POWER AMP SECTION-1

**NOTE**

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

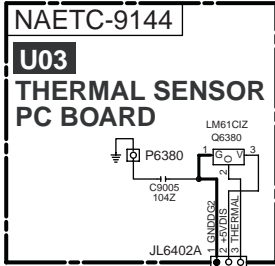
1

2

3

4

5



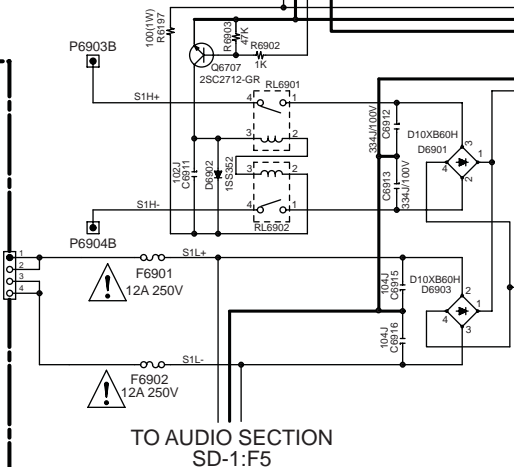
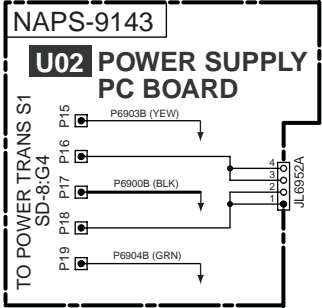
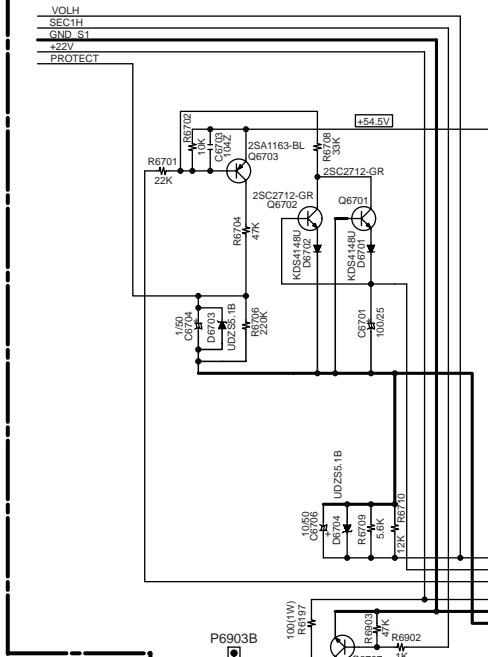
**Driver Transistor List**

Type	ALL	ALL (or)
C. NO	2SC5171	2SC5993
	2SA1930	2SA2140

**Power Transistor List**

Type	Other	PP
C. NO	MN130	2SC5242
	MP130	2SA1962

TO AUDIO SECTION  
SD-1:G1 & F4

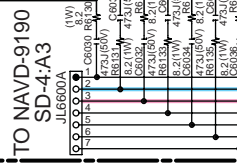
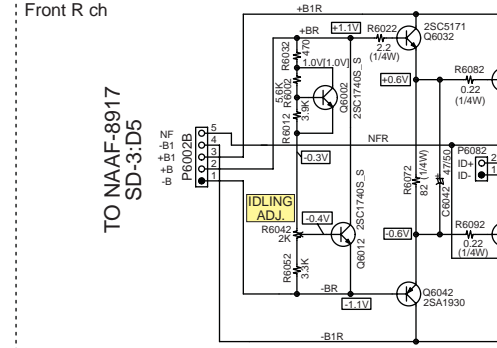
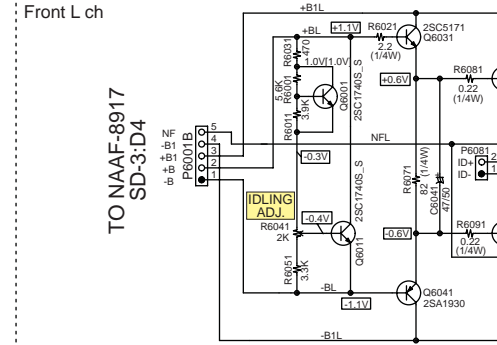
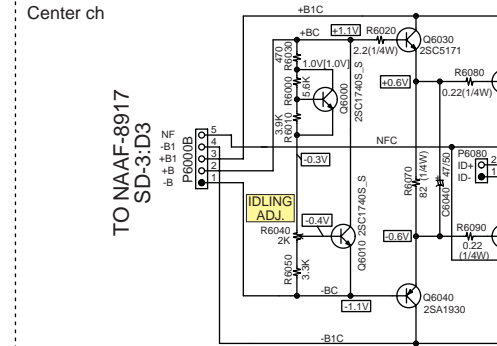


**CAPACITOR LIST**

Type	C6901, C6902
DD, DC	10000/63
P, G, W, SA605/8560	10000/69

**NAAF-9142(2/2)**

**U01** AMPLIFIER PC BOARD



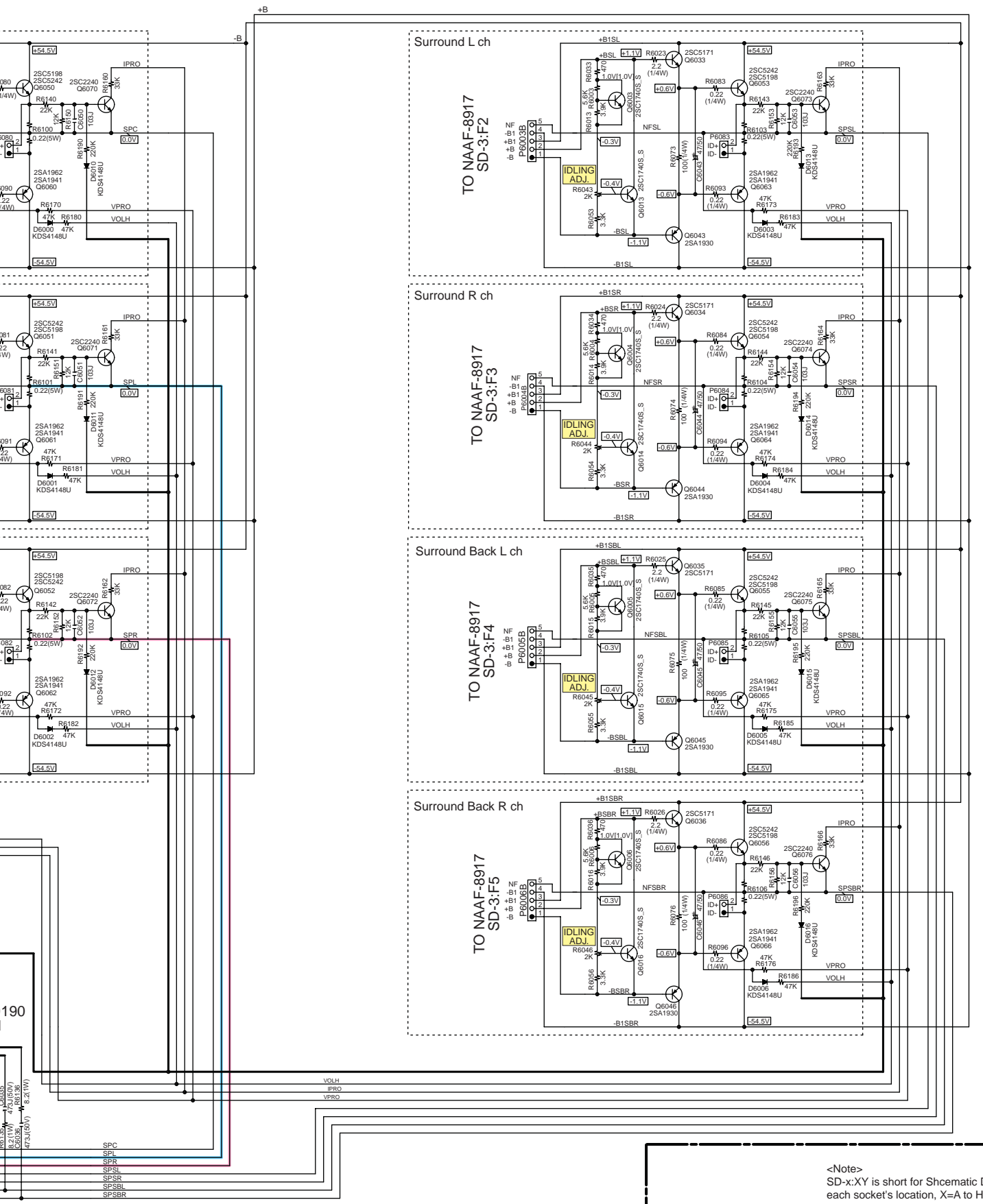


E

F

G

H

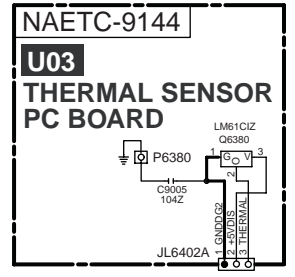


<Note>  
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

# SCHEMATIC DIAGRAM-2 (SD-2)

## POWER AMP SECTION-1

- NOTE**
- THE COMPONENTS IDENTIFIED BY MARK  $\Delta$  ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
  - VOLTAGE (MEASURED WITH VOLTMETER)  $\overleftarrow{\Delta}$  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 (  $\Gamma$  ) ARE IN  $\mu$ F/ WV.
  - ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
  - EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033 $\mu$ F
  - ALL TRANSISTORS 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.



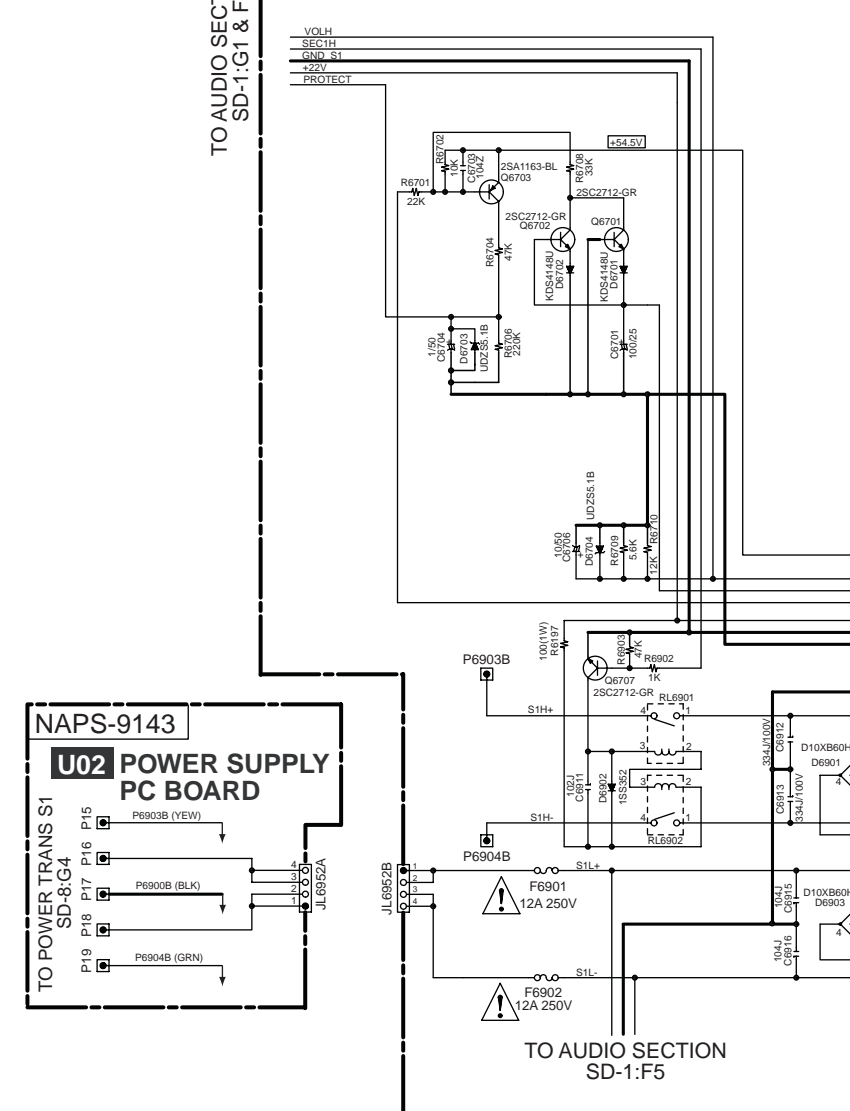
Driver Transistor List

Type	ALL	ALL (or)
Q6030-36	2SC5171	2SC5993
Q6040-46	2SA1930	2SA2140

Power Transistor List

Type	Other	PP
Q6050-56	MN130	2SC5242
Q6060-66	MP130	2SA1962

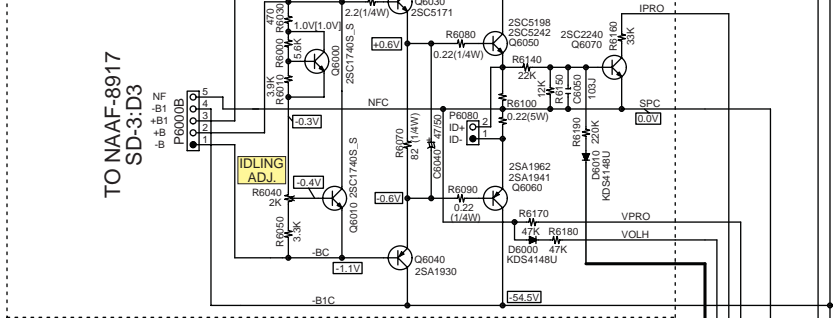
TO AUDIO SECTION SD-1:G1 & F4



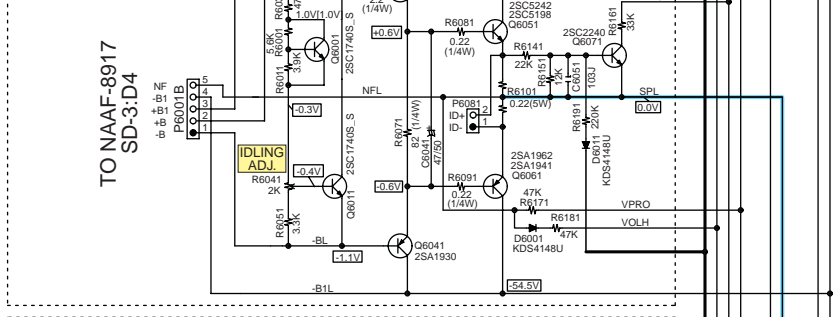
NAAF-9142(2/2)

**U01 AMPLIFIER PC BOARD**

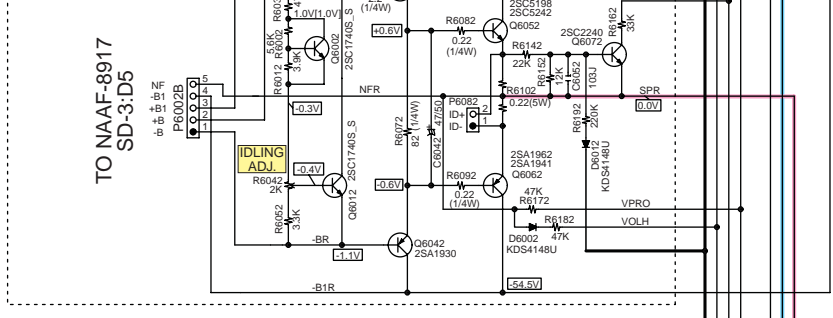
Center ch



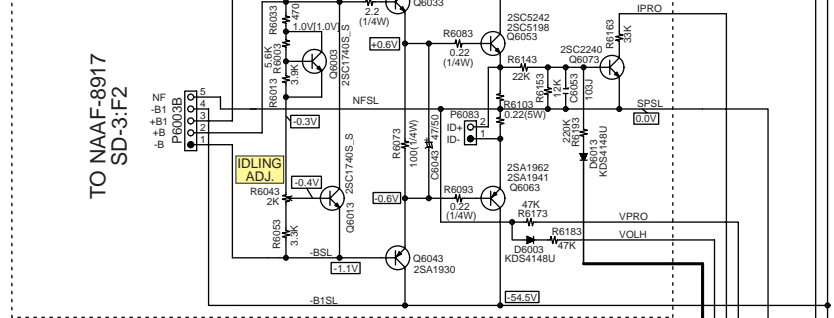
Front L ch



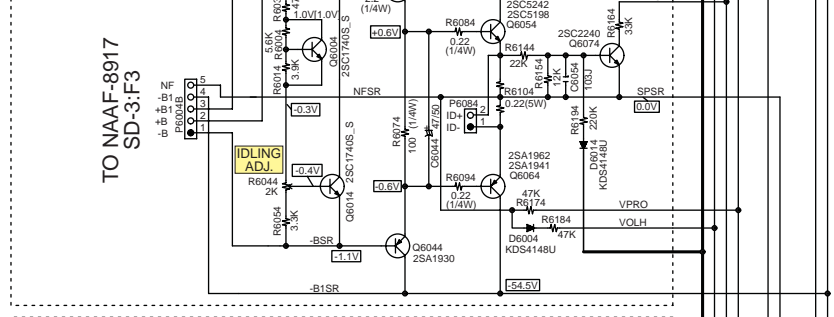
Front R ch



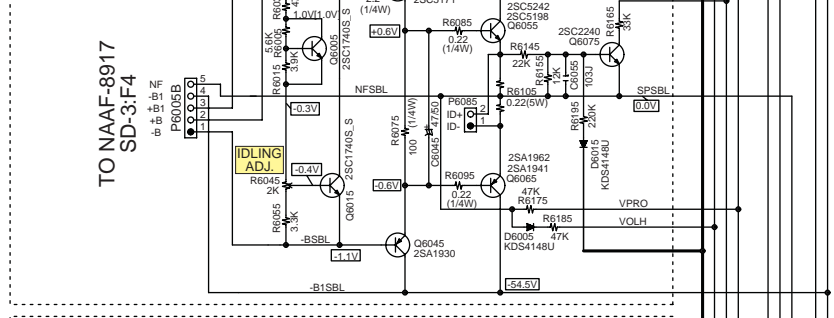
Surround L ch



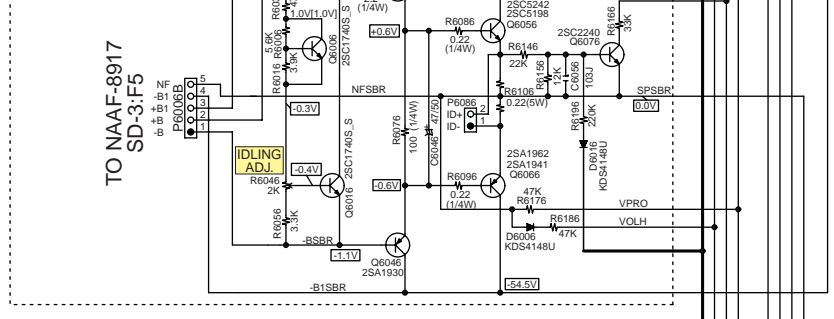
Surround R ch



Surround Back L ch



Surround Back R ch



TO AUDIO SECTION SD-1:F5

CAPACITOR LIST

Type	C6901, C6902
DD, DC	10000/63
P, G, W, SA605/8560	10000/69

TO NAVD-9190 SD-4:A3

C6901	10000/63
C6902	10000/63
C6903	10000/63
C6904	10000/63
C6905	10000/63
C6906	10000/63
C6907	10000/63
C6908	10000/63
C6909	10000/63
C6910	10000/63
C6911	10000/63
C6912	10000/63
C6913	10000/63
C6914	10000/63
C6915	10000/63
C6916	10000/63
C6917	10000/63
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C6922	10000/63
C6923	10000/63
C6924	10000/63
C6925	10000/63
C6926	10000/63
C6927	10000/63
C6928	10000/63
C6929	10000/63
C6930	10000/63
C6931	10000/63
C6932	10000/63
C6933	10000/63
C6934	10000/63
C6935	10000/63
C6936	10000/63
C6937	10000/63
C6938	10000/63
C6939	10000/63
C6940	10000/63

TO NAVD-9190 SD-4:H1

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

A

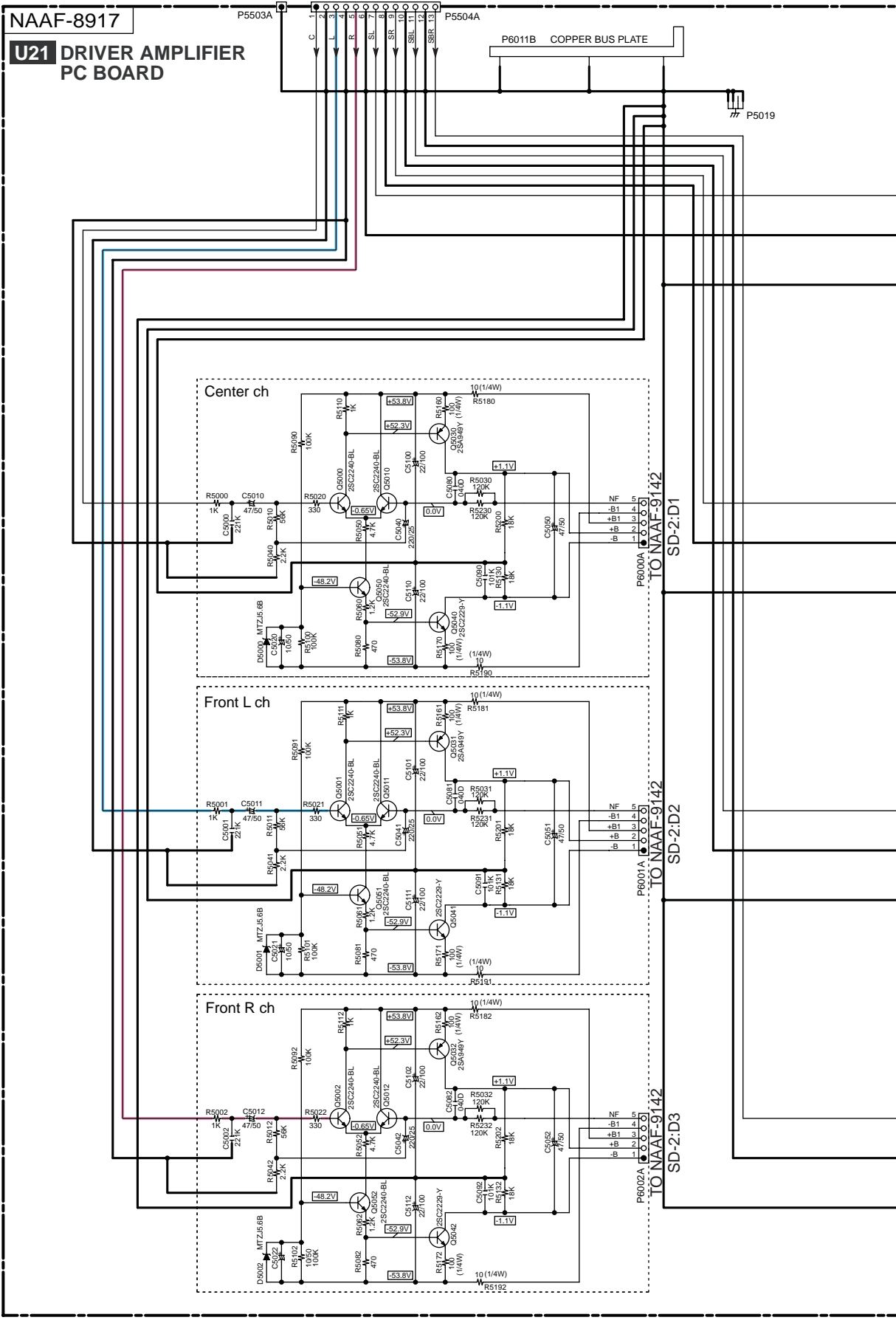
B

C

D

# SCHEMATIC DIAGRAM-3 (SD-3) POWER AMP SECTION-2

TO NAAF-9142  
SD-1:H4



1

2

3

4

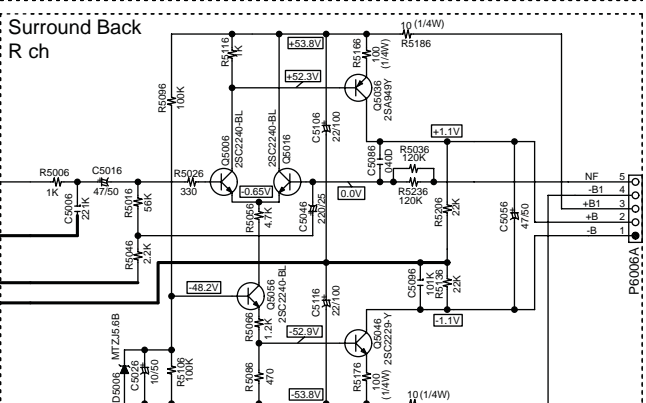
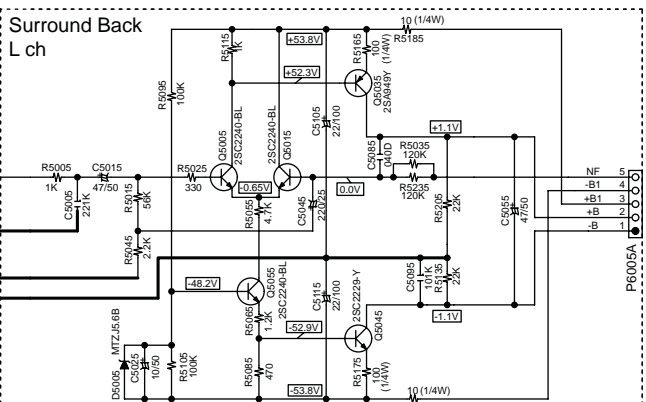
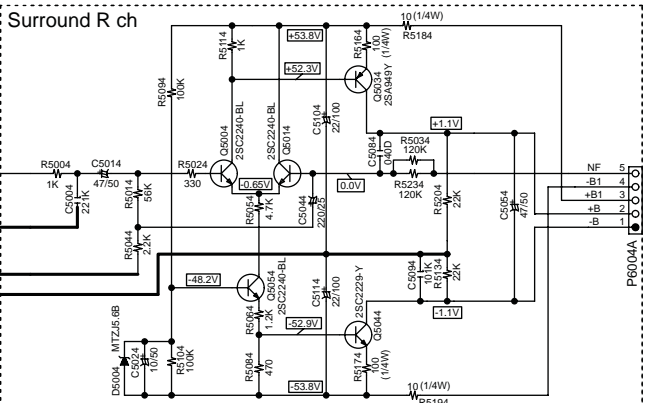
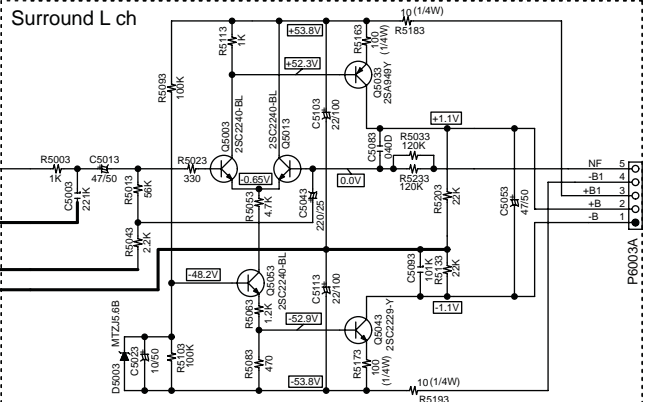
5

E

F

G

H



NOTE

- THE COMPONENTS IDENTIFIED BY MARK  $\triangle$  ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER)  $\leftarrow$  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 (  $\text{---}$  ) 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 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.  
EX)  $\text{---}$  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.

**SCHEMATIC DIAGRAM-3 (SD-3)**  
**POWER AMP SECTION-2**

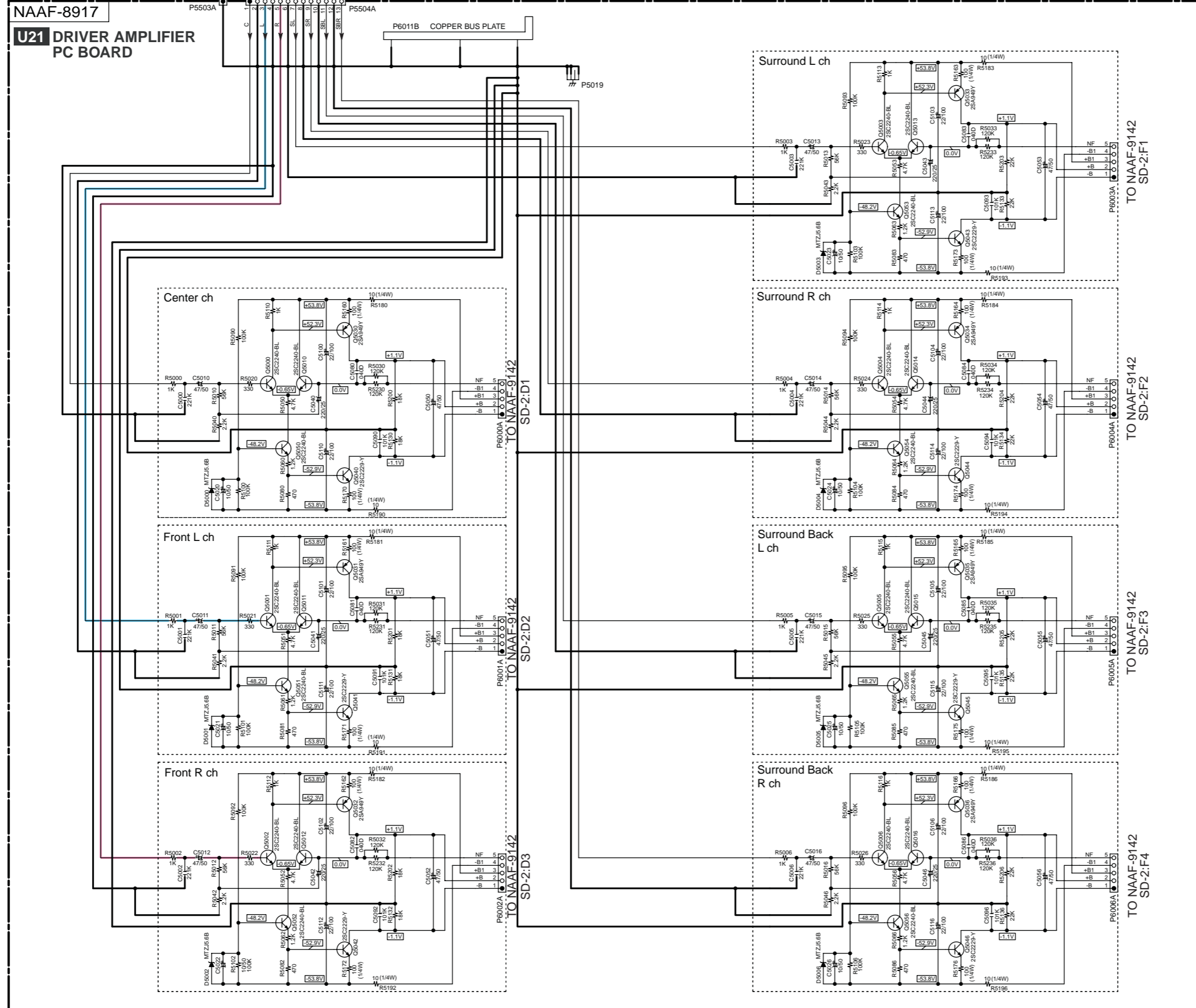
1

2

3

4

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/MV.
- ALL CAPACITORS ARE IN pF/50V UNLESS OTHERWISE NOTED.
- 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 Shcematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

A

B

C

D

# SCHEMATIC DIAGRAM-4 (SD-4) VIDEO SECTION-1

## NAVD-9190(1/2) U18 VIDEO AND SP TERMINAL PC BOARD

1

2

3

4

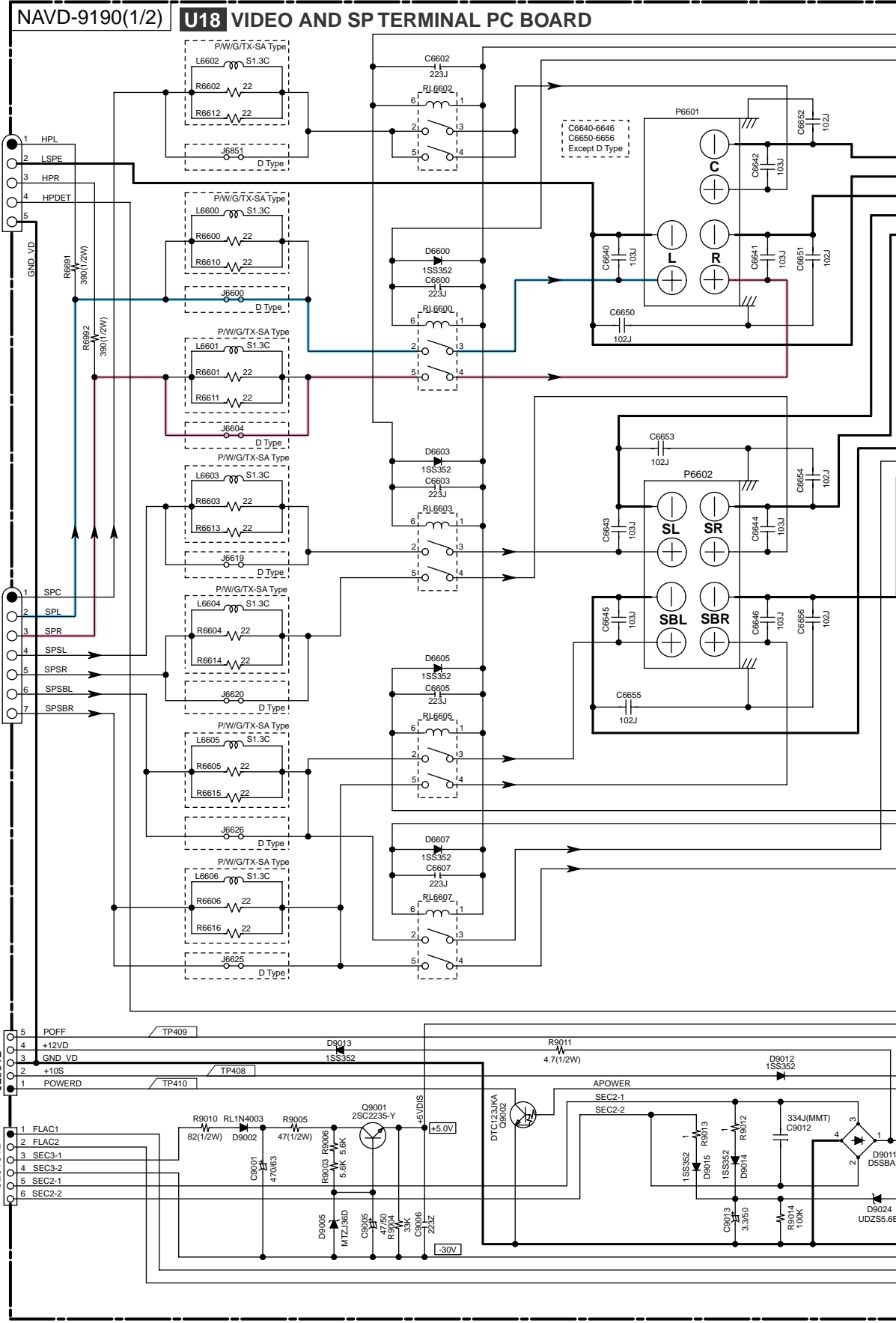
5

TO NAEIC-9153  
SD-7:C1

TO NAAF-9142  
SD-2:D5

TO NAPS-9150  
SD-8:F1

TO NAPS-9151  
SD-8:G2

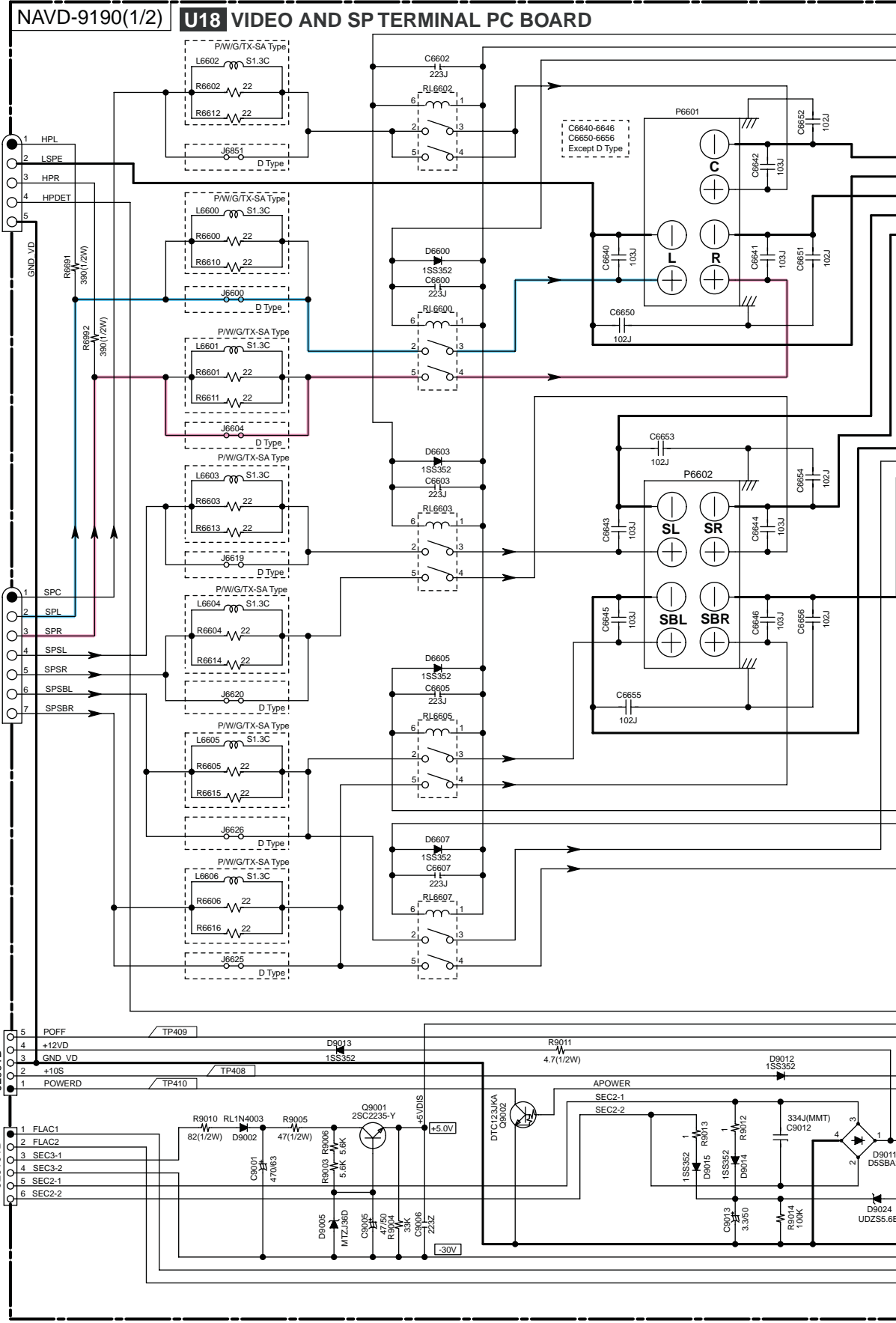


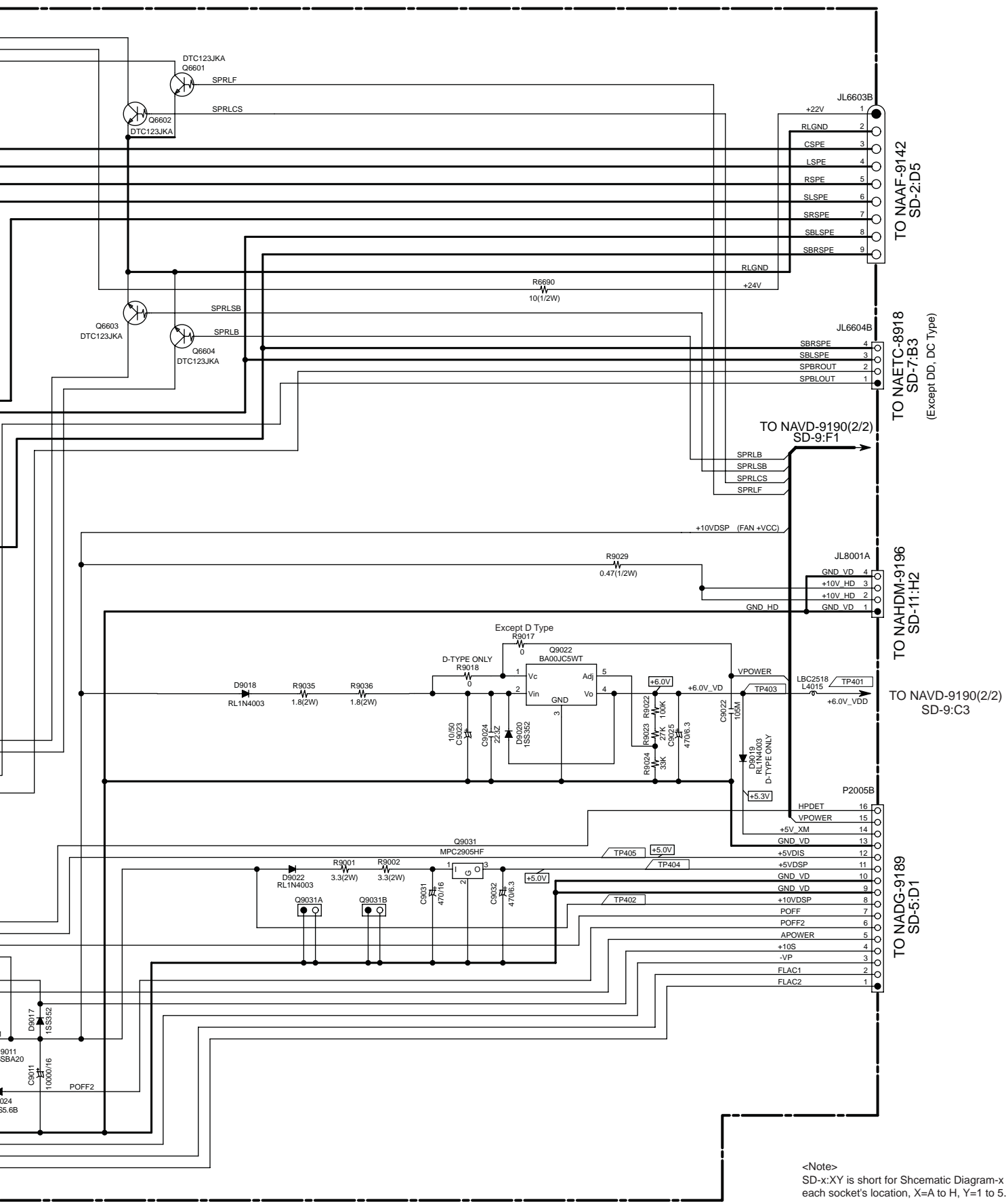
TO NAEIC-9153  
SD-7:C1

TO NAAF-9142  
SD-2:D5

TO NAPS-9150  
SD-8:F1

TO NAPS-9151  
SD-8:G2



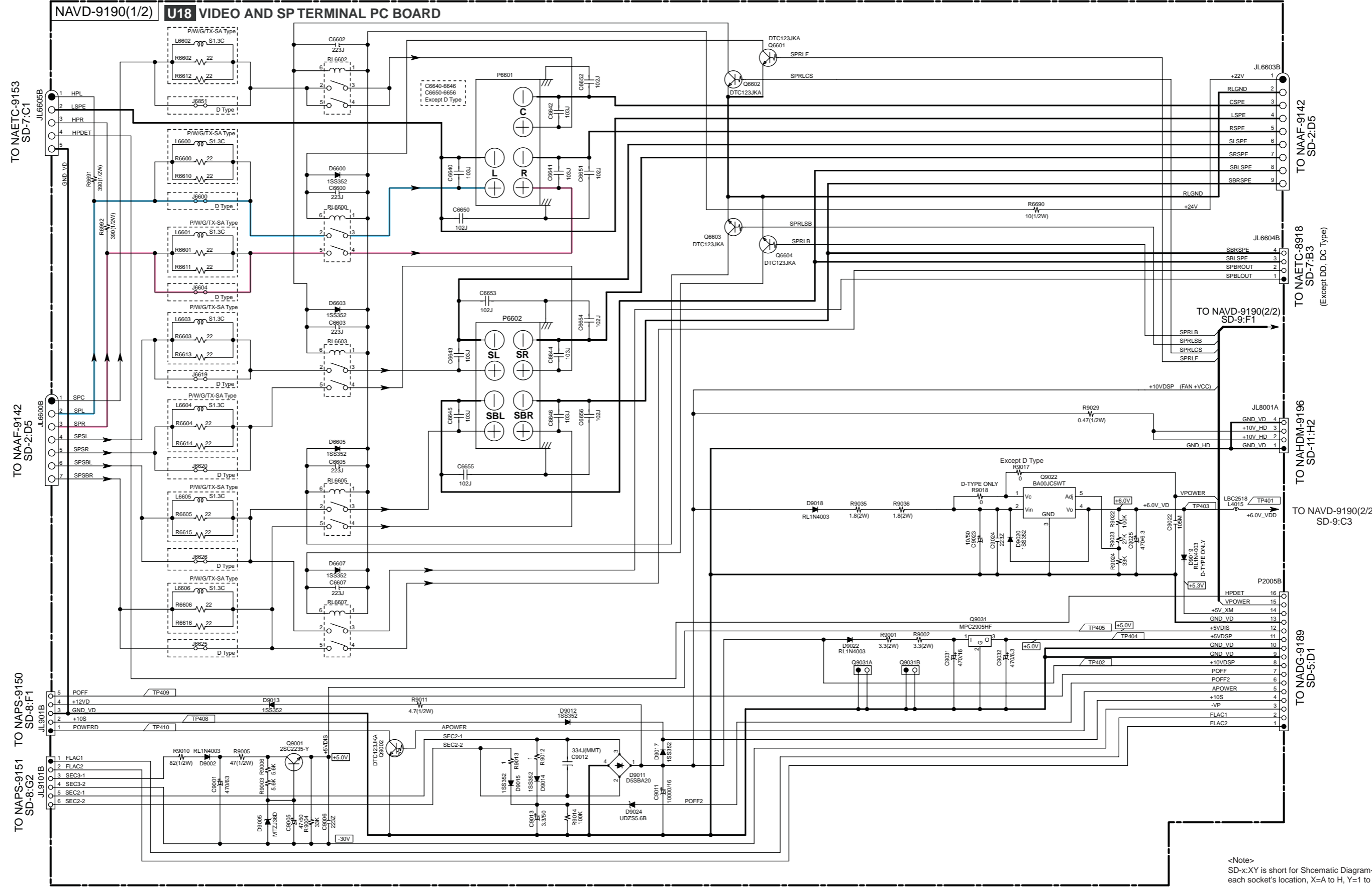


<Note>  
 SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

**SCHEMATIC DIAGRAM-4 (SD-4)**  
**VIDEO SECTION-1**

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.



**SCHEMATIC DIAGRAM-5 (SD-5)  
DIGITAL SECTION**

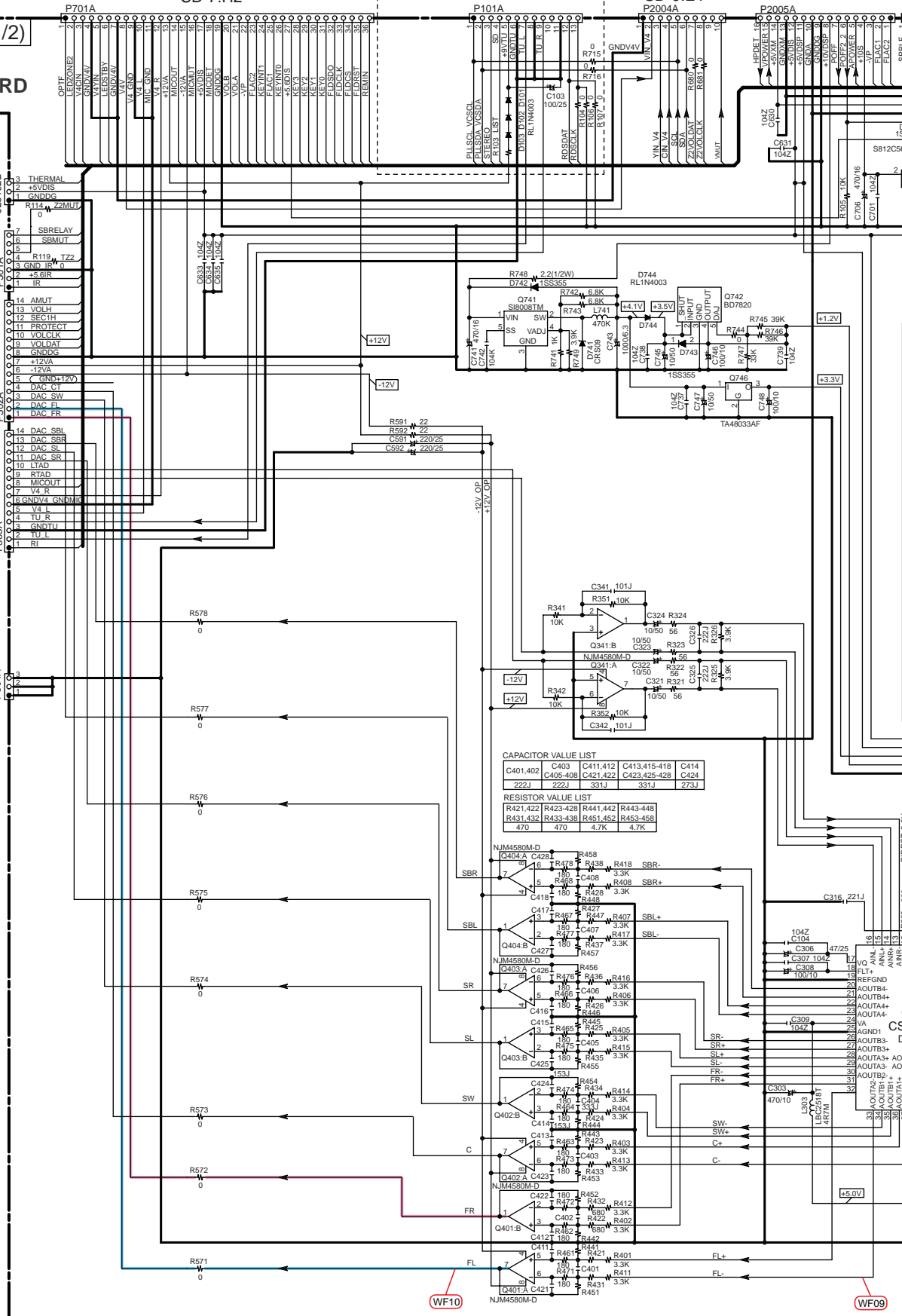
TYPE	R103	R104	R106,R107
PP	4.7(1/2W)	YES	NO
D.PA,W,G	10(1/2W)	NO	YES
TX-SA	NO	NO	YES

1  
2  
3  
4  
5

**U17  
DSP PC BOARD**

TO NADIS-9148 SD-7:H2  
TO NADG-9189(1/2)  
TO NAEITC-9144 SD-2:B2  
TO NAAF-9142 SD-1:F1  
TO NAAF-9142(1/2) TO NAAF-9142 SD-1:D1  
TO NAAF-9142(1/2) TO NAAF-9142 SD-1:C1  
TO NAAF-9142 SD-1:B1

TO NADIS-9148 SD-7:H2  
TX-SR605 ONLY  
TO TUNER UNIT  
TO NAVD-9190 SD-9:E1  
TO NAVD-9190 TO SD-4:H4



**CAPACITOR VALUE LIST**

C401,402	C403	C411,412	C413,415-418	C414
C405-408	C421,422	C423,425-428	C424	
222J	222J	331J	331J	273J

**RESISTOR VALUE LIST**

R421,422	R423-429	R441,442	R443-448
R431,432	R433-438	R451,452	R453-458
470	470	4.7K	4.7K

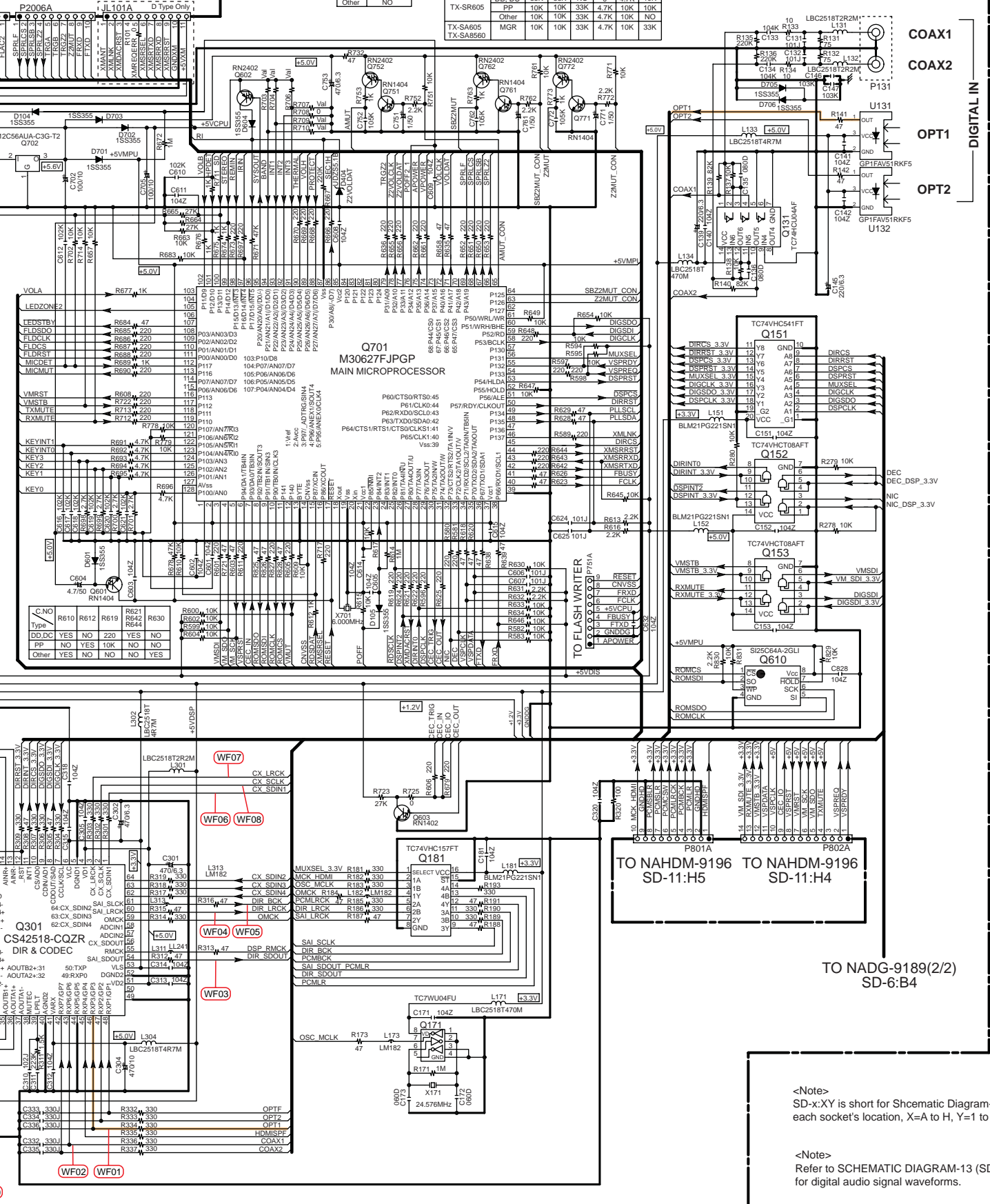
WF10

WF09

TO NAVD-9190 TO NADG-9191  
SD-9:F1 SD-12:H5

Type	R655,R656
WT,WO	YES
Other	NO

Model	Type	R703	R704	R706	R707	R709	R710
TX-SR605	DD_DC	33K	33K	NO	0	4.7K	10K
	PP	10K	10K	33K	4.7K	10K	10K
TX-SA605	Other	10K	10K	33K	4.7K	10K	NO
TX-SA8560	MGR	10K	10K	33K	4.7K	10K	33K



COAX1  
COAX2  
OPT1  
OPT2  
DIGITAL IN

TO NADG-9189(2/2)  
SD-6:B4

TO NAHDM-9196 TO NAHDM-9196  
SD-11:H5 SD-11:H4

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

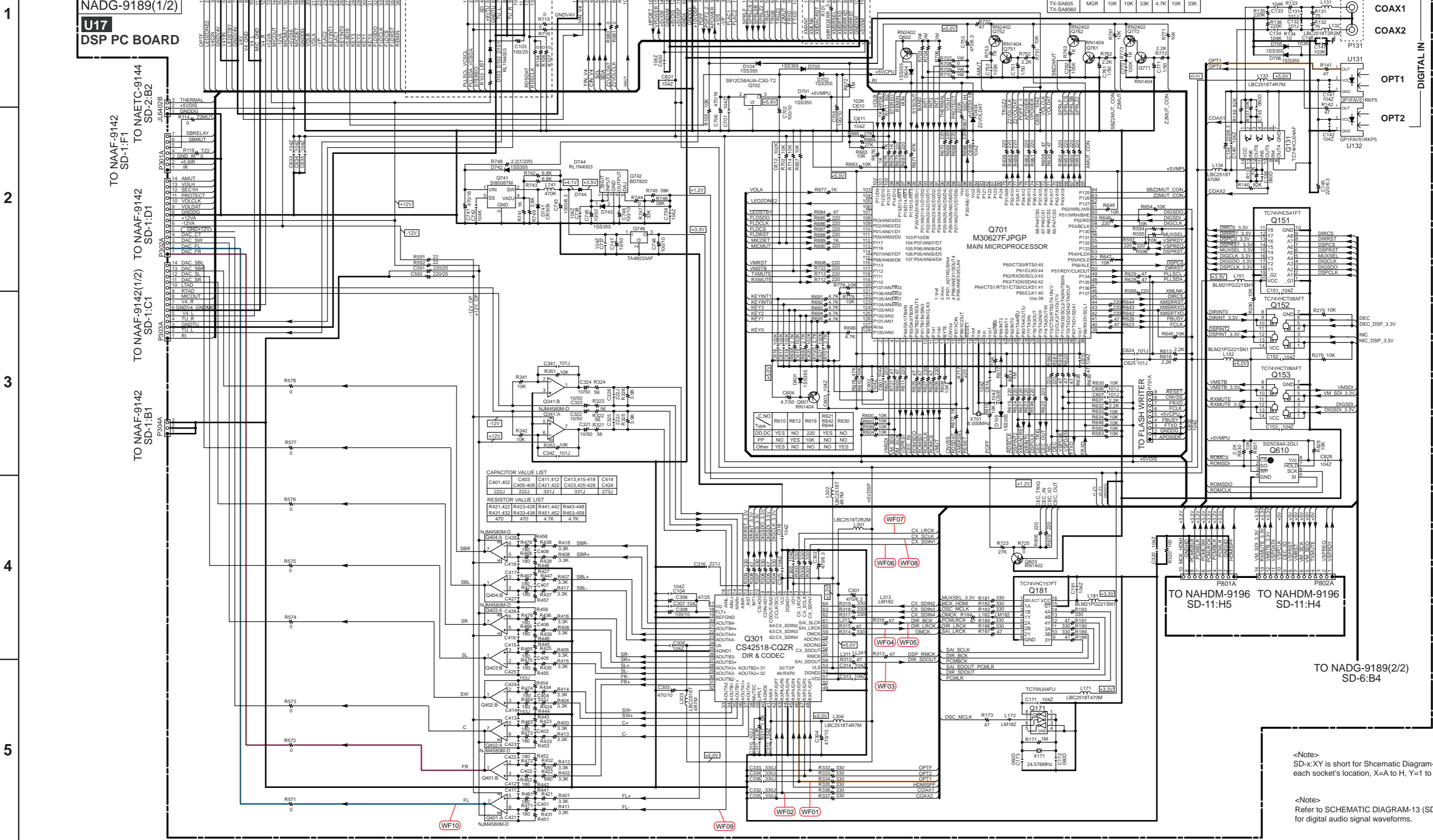
<Note>  
Refer to SCHEMATIC DIAGRAM-13 (SD-13) for digital audio signal waveforms.

**SCHEMATIC DIAGRAM-5 (SD-5)**  
**DIGITAL SECTION**

TYPE	R103	R104	R106,R107
PP	4.7(1.2W)	YES	NO
D.PA.W.G	10(1/2W)	NO	YES
TX-SA	NO	NO	YES

TYPE	R655,R656
W.V.L.V.D	YES
Other	NO

Model	Type	R703	R704	R706	R707	R709	R710
TX-SR605	DD,DC	33K	33K	NO	0	4.7K	10K
Other		10K	10K	33K	4.7K	10K	10K
TX-SA605	MGR	10K	10K	33K	4.7K	10K	33K



**CAPACITOR VALUE LIST**

C401,402	C403	C411,412	C413,415-418	C414
R421,422	R423-428	R441,442	R443-448	
R431,432	R433-438	R451,452	R453-458	
470	470	4.7K	4.7K	

**RESISTOR VALUE LIST**

R421,422	R423-428	R441,442	R443-448
R431,432	R433-438	R451,452	R453-458
470	470	4.7K	4.7K

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

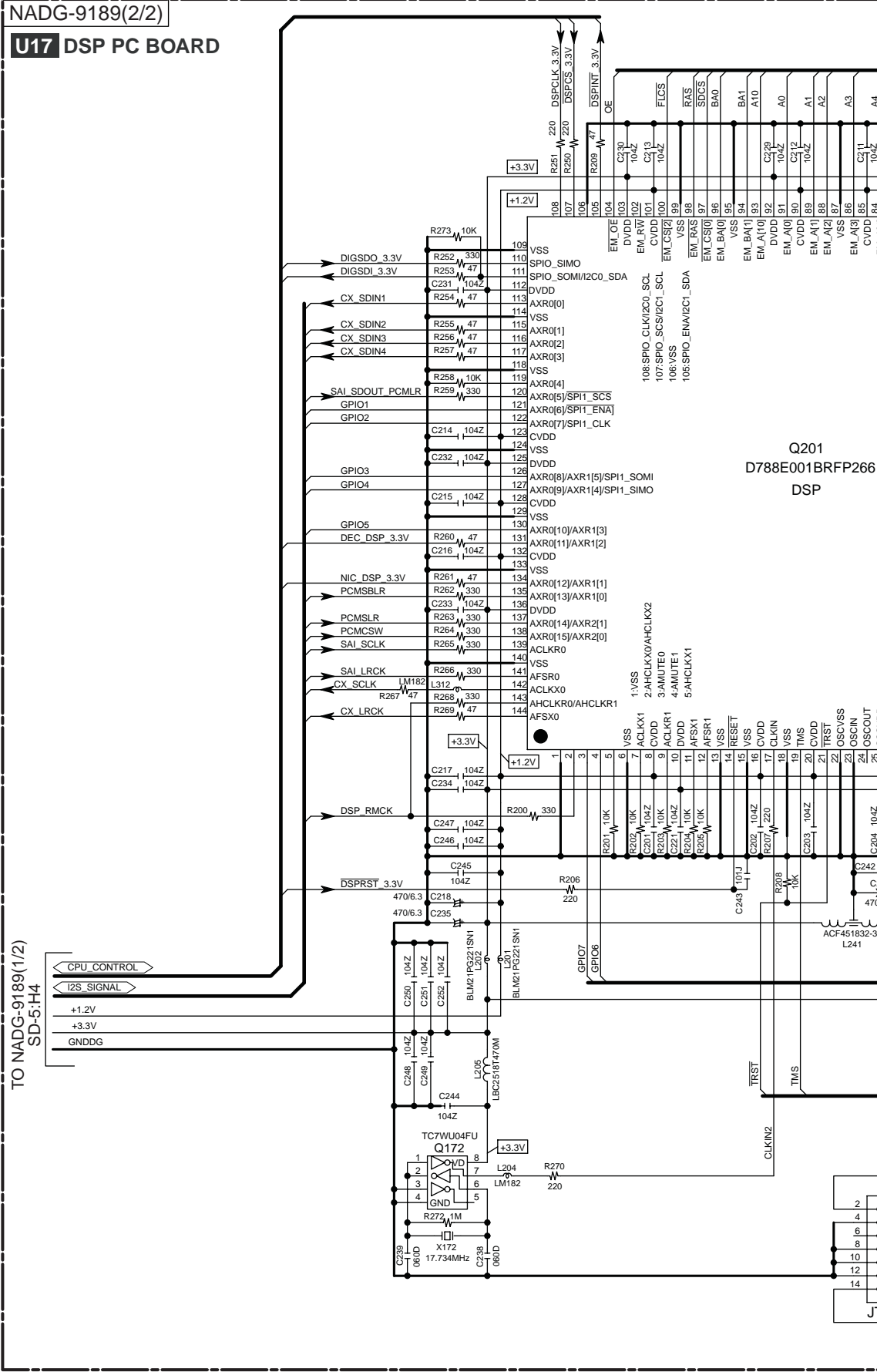
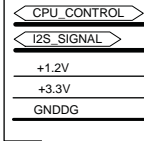
<Note>  
Refer to SCHEMATIC DIAGRAM-13 (SD-13) for digital audio signal waveforms.

SCHEMATIC DIAGRAM-6 (SD-6)  
DSP SECTION

NADG-9189(2/2)

U17 DSP PC BOARD

TO NADG-9189(1/2)  
SD-5:H4



1

2

3

4

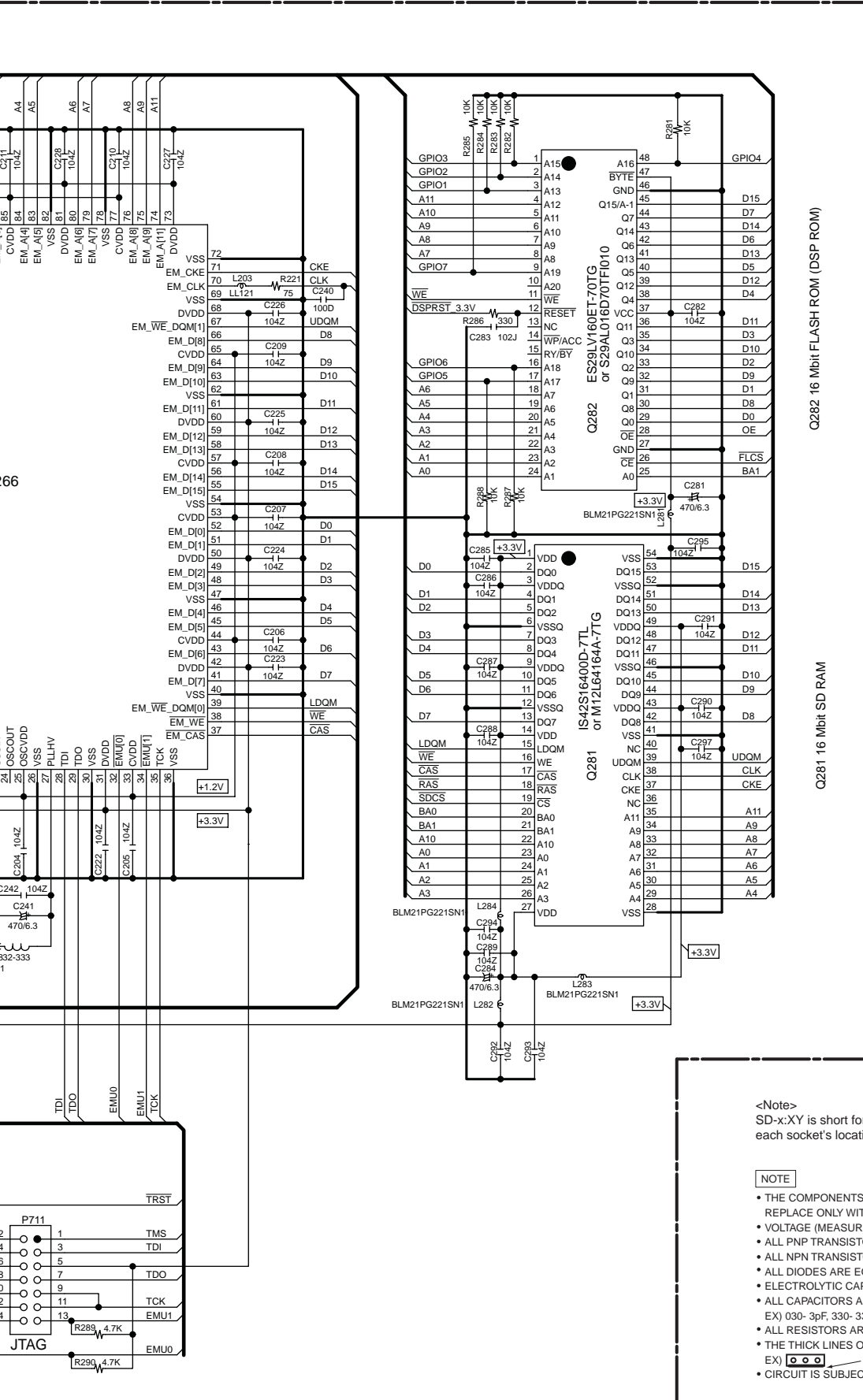
5

E

F

G

H

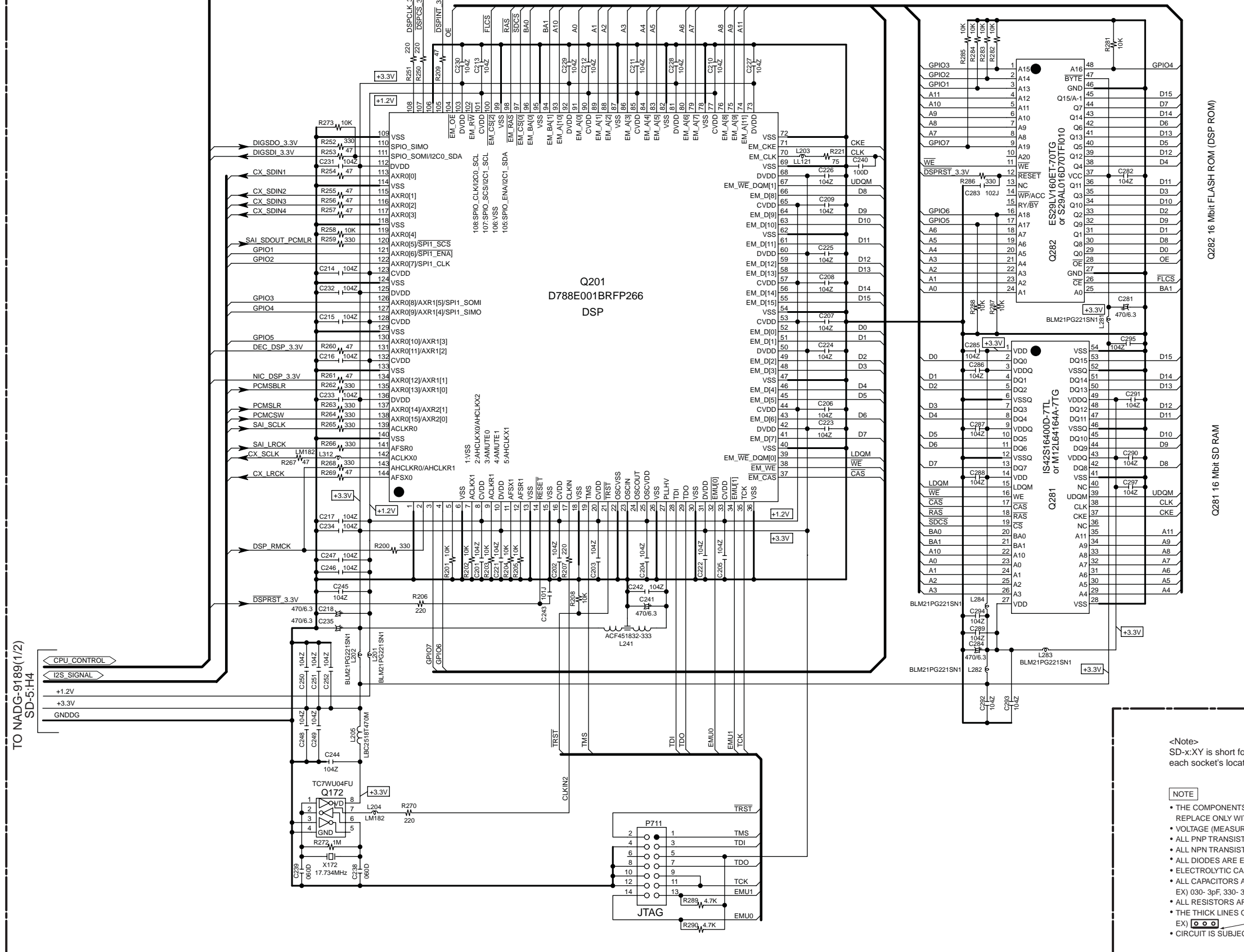


<Note>  
 SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

- NOTE**
- THE COMPONENTS IDENTIFIED BY MARK  $\triangle$  ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
  - VOLTAGE (MEASURED WITH VOLTMETER)  $\leftarrow$  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 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)  $\text{---} \text{---} \text{---}$  PRINTING SIDE
  - CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

**SCHEMATIC DIAGRAM-6 (SD-6)**  
**DSP SECTION**

NADG-9189(2/2)  
**U17 DSP PC BOARD**



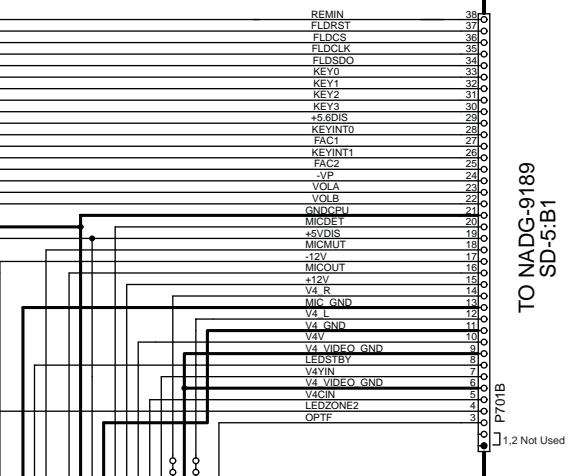
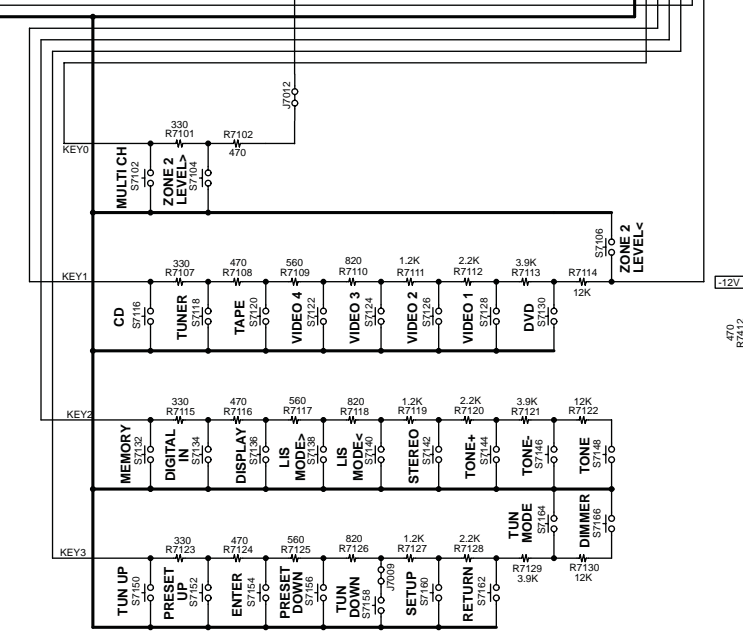
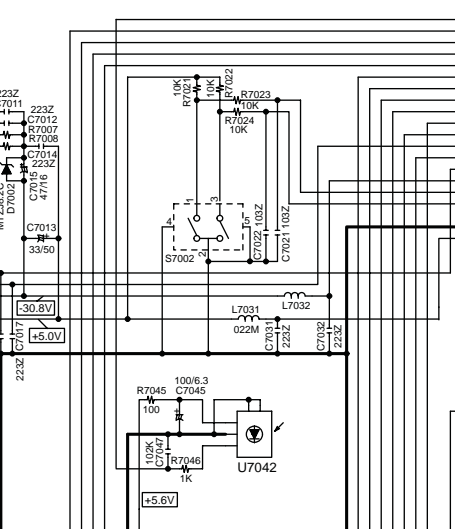
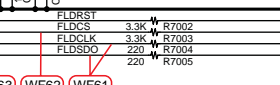
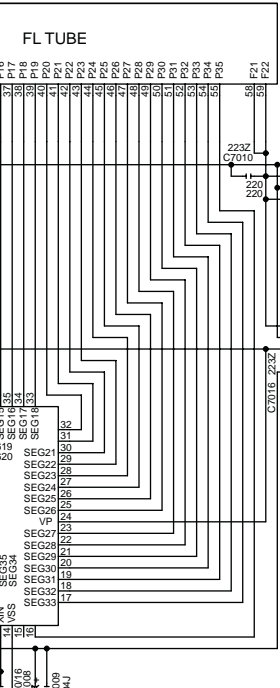
<Note>  
SD-x:XY is short for Shcematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

**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, 333-0.03uF
- 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.

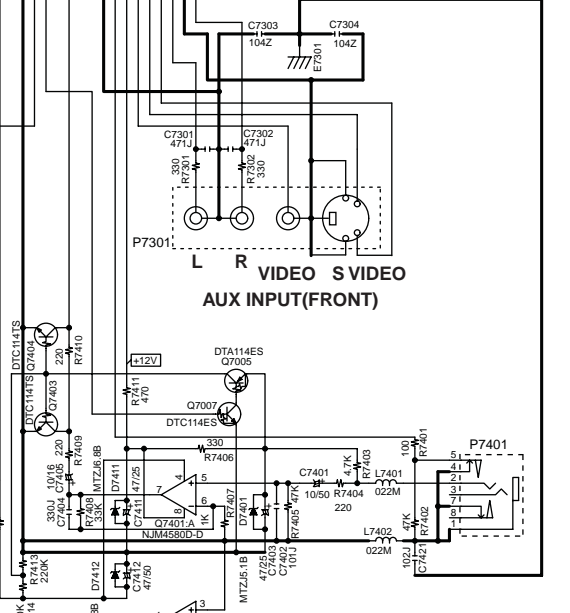


RD



TO NADG-9189 SD-5:B1

**NAETC-9152**  
**U09 FRONT OPT PC BOARD**  
**AUX INPUT DIGITAL**



SETUP MIC



SCHEMATIC DIAGRAM-7 (SD-7)  
DISPLAY SECTION

1

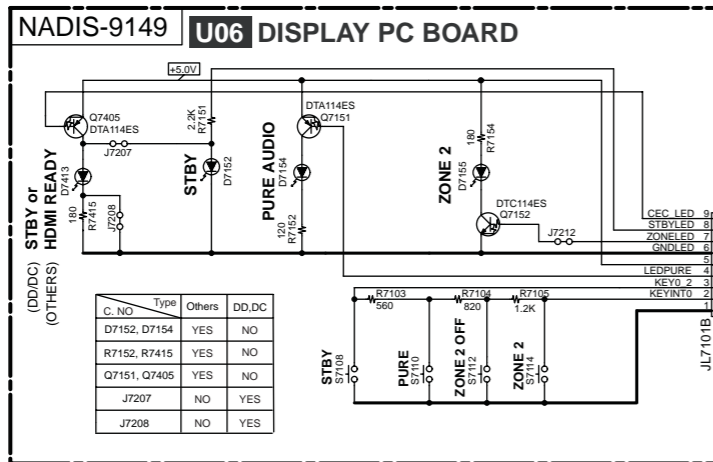
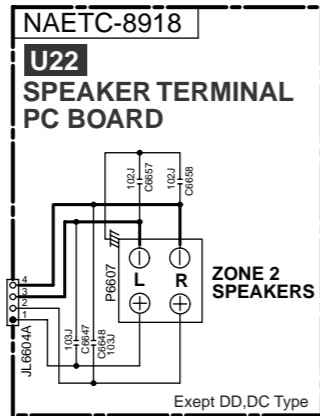
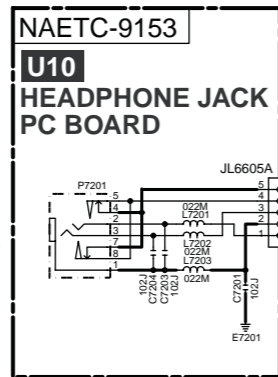
2

3

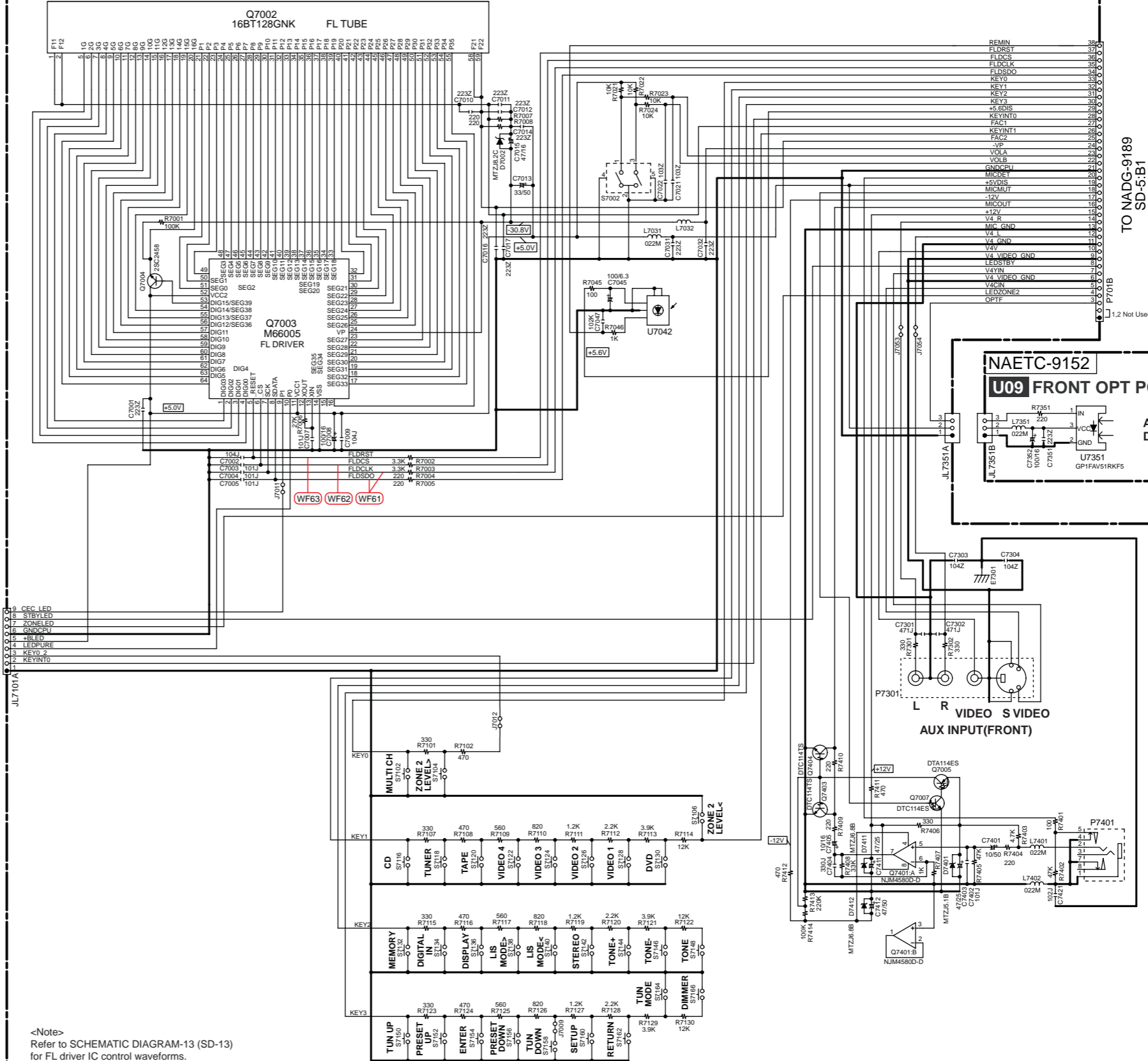
4

5

HEADPHONE



NADIS-9148 U05 DISPLAY 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.

- 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.

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

TO NADG-9189 SD-5:B1

TO NADG-9189 SD-5:B1

TO NADG-9189 SD-5:B1

A

B

C

D

# SCHEMATIC DIAGRAM-8 (SD-8) POWER SUPPLY SECTION

1

**NOTE**

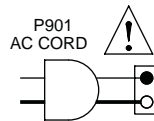
- THE COMPONENTS IDENTIFIED BY MARK ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER) IS DC VOLTAGE. (NO INPUT SIGNAL).
- ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS 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.

2

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

Type	AC Volt/Freq.
D	120V / 60HZ
P	230-240V / 50HZ
G	220-230V / 50HZ
J	100V/ 50/60HZ
W	120V/220V / 50/60HZ

3



**CAUTION**



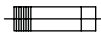
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH FUSE OF SAME TYPE AND RATING INDICATED.

4

**ATTENTION**

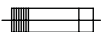


CAUTIONN AFIN D'ASSURER UNE PROTECTION PERMANENTE CONTRE LES RISQUES D'INCENDIE, REMPLACER UNIQUEMENT PAR UN FUSIBLE DE MEME TYPE ET CALIBRATION COMME INDIQUE.

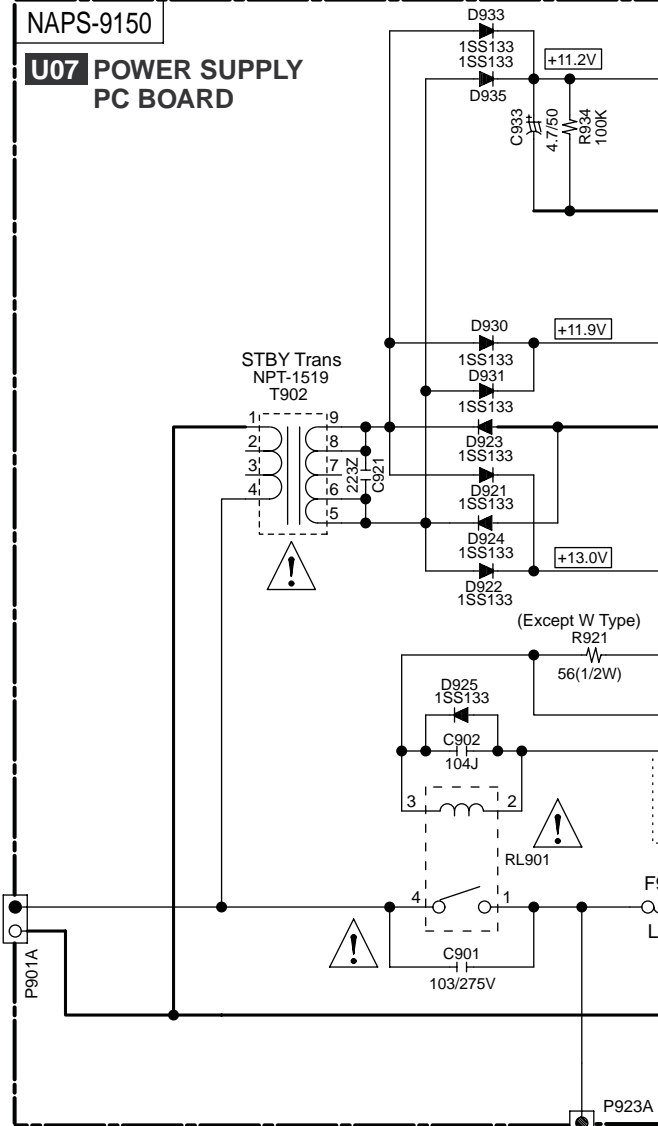


THIS SYMBOL LOCATED NEAR THE FUSE INDICATES THAT THE FUSE USED IS SLOW OPERATING TYPE FOR CONTINUED PROTECTION AGAINST FIRE FUSE HAZARD,REPLACE WITH SAME TYPE FUSE. FOR FUSE RATING REFER TO THE MAKING ADJACENT TO THE SYMBOL.

5



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 SYMBOL EST APPOSE.

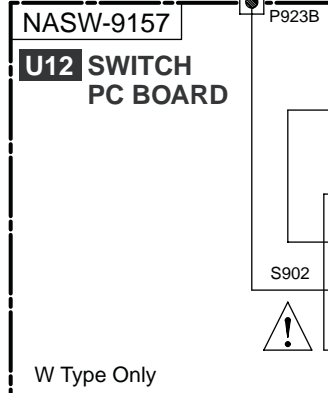


**STBY Trans T902**

Type	Rating
D	NPT-1520JQ
P	NPT-1520GQ
G	NPT-1520GQ
TX-SA	
W	NPT-1520JQ

**Fuse F901**

Type	Rating
D	10A 125V
P	5A 250V
G	5A 250V
TX-SA	
W	5A 250V

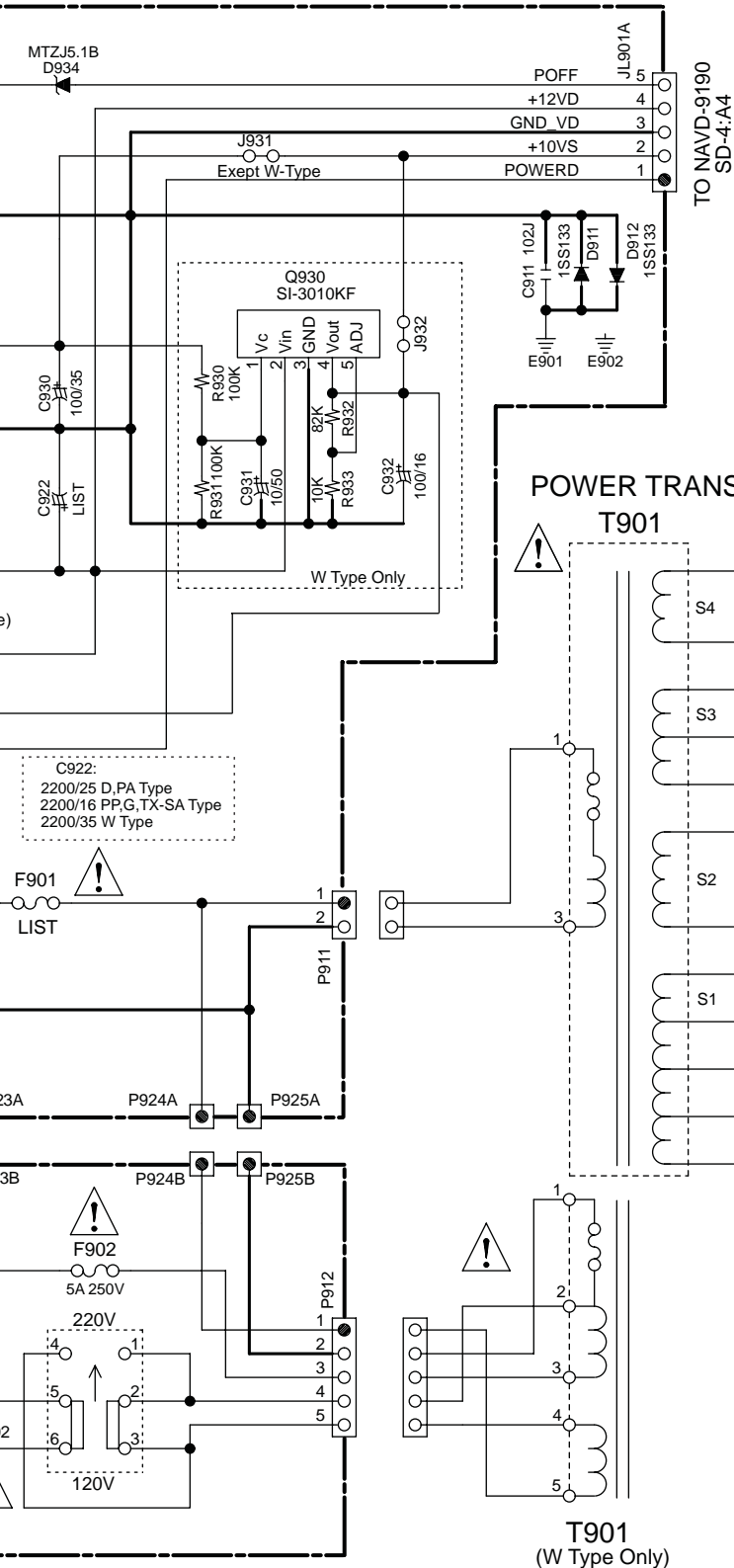


E

F

G

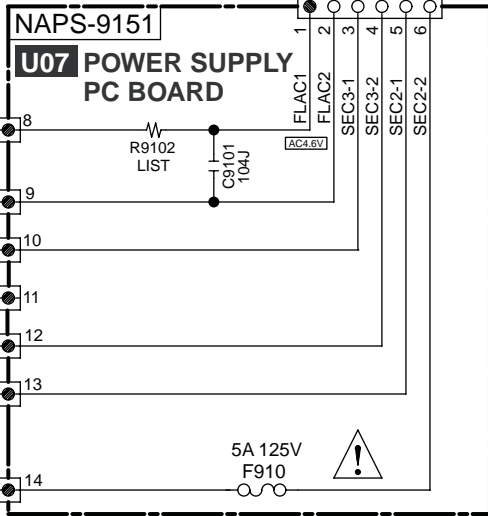
H



R9102

Type	Rating
D	8.2(1/2W)
PP	5.6(1/2W)
G	5.6(1/2W)
W	8.2(1/2W)
PA	8.2(1/2W)
TX-SA	5.6(1/2W)

POWER TRANS T901







Power Trans T901

Type	Rating
D	NPT-1552D
P	NPT-1552P
G	NPT-1552G
TX-SA	
W	NPT-1552DQ

T901 (W Type Only)

**SCHEMATIC DIAGRAM-8 (SD-8)**  
**POWER SUPPLY SECTION**

**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  $\mu\text{F/WV}$ .
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.  
EX) 030-3pF 330-33pF 331-330pF 333-0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS 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.

Type	AC Volt/Freq.
D	120V / 60HZ
P	230-240V / 50HZ
G	220-230V / 50HZ
J	100V / 50/60HZ
W	120V/220V / 50/60HZ

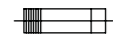
**CAUTION**

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

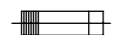


**ATTENTION**

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

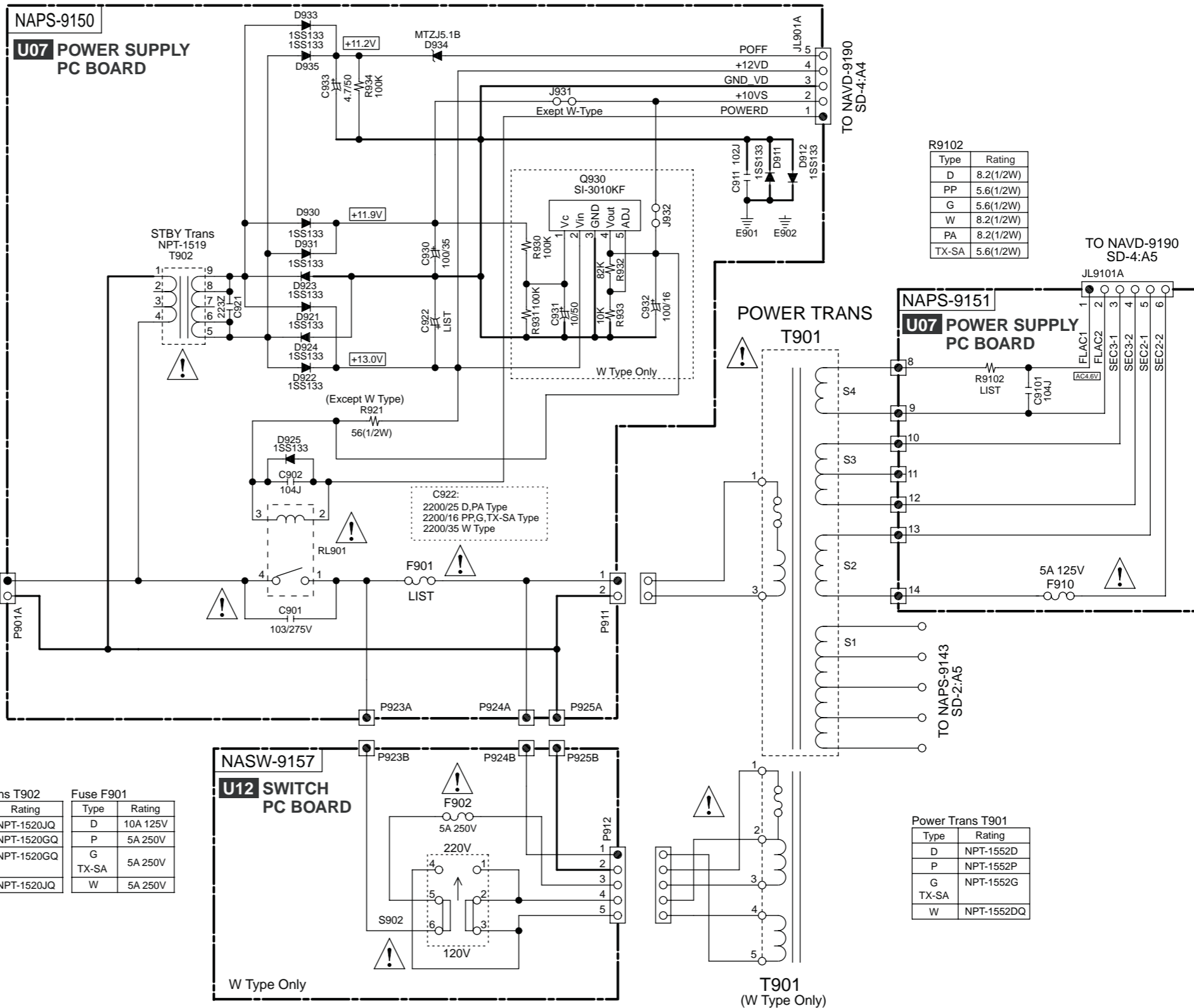


THIS SYMBOL LOCATED NEAR THE FUSE INDICATES THAT THE FUSE USED IS SLOW OPERATING TYPE FOR CONTINUED PROTECTION AGAINST FIRE FUSE HAZARD, REPLACE WITH SAME TYPE FUSE. FOR FUSE RATING REFER TO THE MAKING ADJACENT TO THE SYMBOL.



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.

STBY Trans T902		Fuse F901	
Type	Rating	Type	Rating
D	NPT-1520JQ	D	10A 125V
P	NPT-1520GQ	P	5A 250V
G	NPT-1520GQ	G	5A 250V
TX-SA	NPT-1520GQ	TX-SA	5A 250V
W	NPT-1520JQ	W	5A 250V



R9102

Type	Rating
D	8.2(1/2W)
PP	5.6(1/2W)
G	5.6(1/2W)
W	8.2(1/2W)
PA	8.2(1/2W)
TX-SA	5.6(1/2W)

Power Trans T901

Type	Rating
D	NPT-1552D
P	NPT-1552P
G	NPT-1552G
TX-SA	NPT-1552DQ
W	NPT-1552DQ

1

2

3

4

5

**SCHEMATIC DIAGRAM-9 (SD-9)**  
**VIDEO SECTION-2**

1

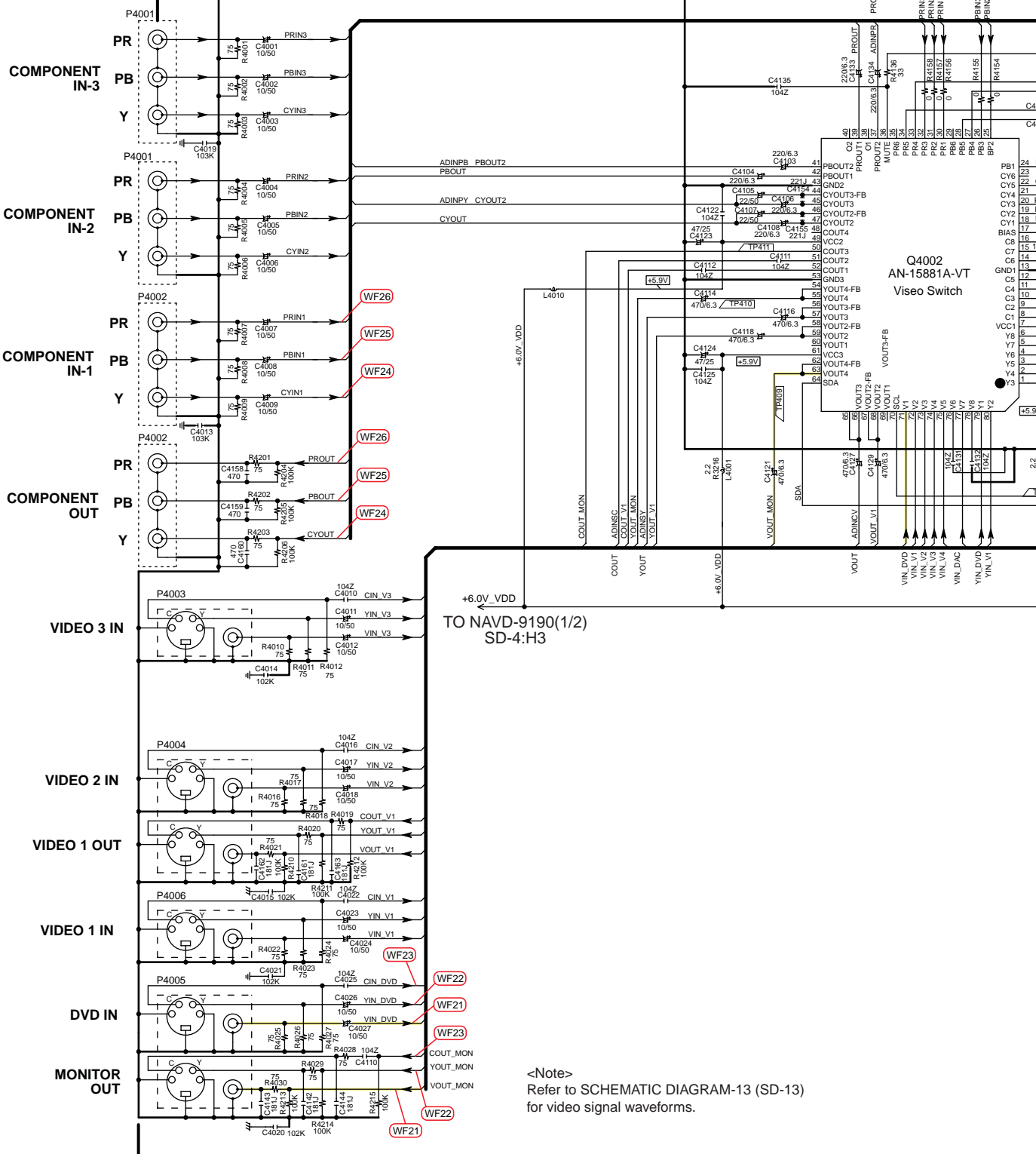
2

3

4

5

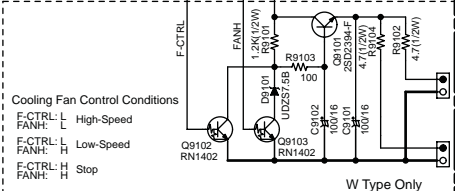
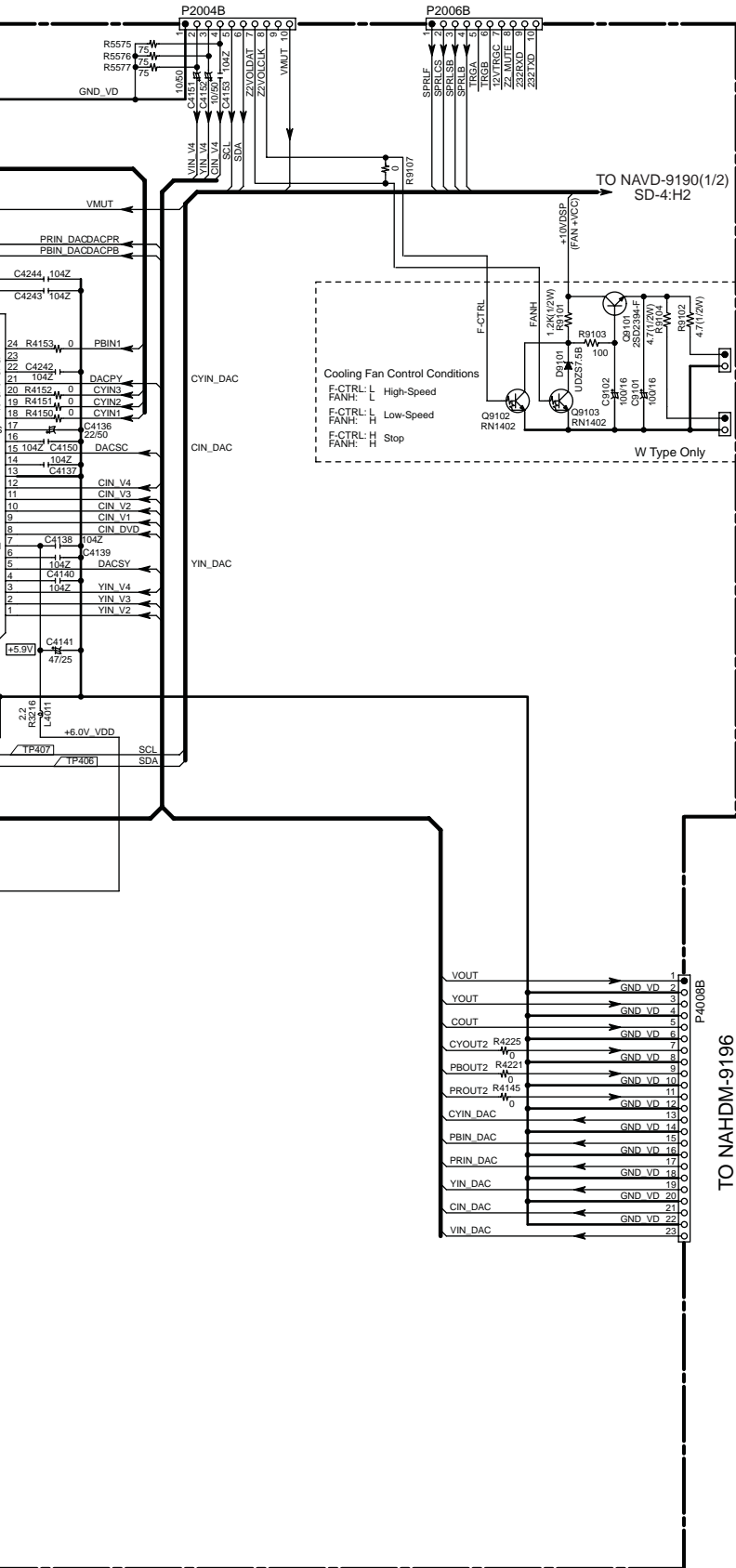
**NAVD-9190(2/2) U18 VIDEO AND SP TERMINAL PC BOARD**



<Note>  
Refer to SCHEMATIC DIAGRAM-13 (SD-13)  
for video signal waveforms.

TO NADG-9189  
SD-5:D1

TO NADG-9189  
SD-5:E1



NOTE

- THE COMPONENTS IDENTIFIED BY MARK  $\Delta$  ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER)  $\leftarrow$  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 (  $\text{---}$  ) 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 1/4WATTS 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 Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

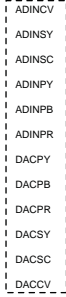
<Note>  
Refer to SCHEMATIC DIAGRAM-13 (SD-13) for video signal waveforms.

CORRESPONDING SIGNAL NAMES ON NAHDM-9196

- ADINCV
- ADINSY
- ADINSC
- ADINPY
- ADINPB
- ADINPR
- DACPY
- DACPB
- DACPR
- DACSY
- DACSC
- DACCV

TO COOLING FAN

TO NAHDM-9196  
SD-11:H2



**SCHEMATIC DIAGRAM-9 (SD-9)**  
**VIDEO SECTION-2**

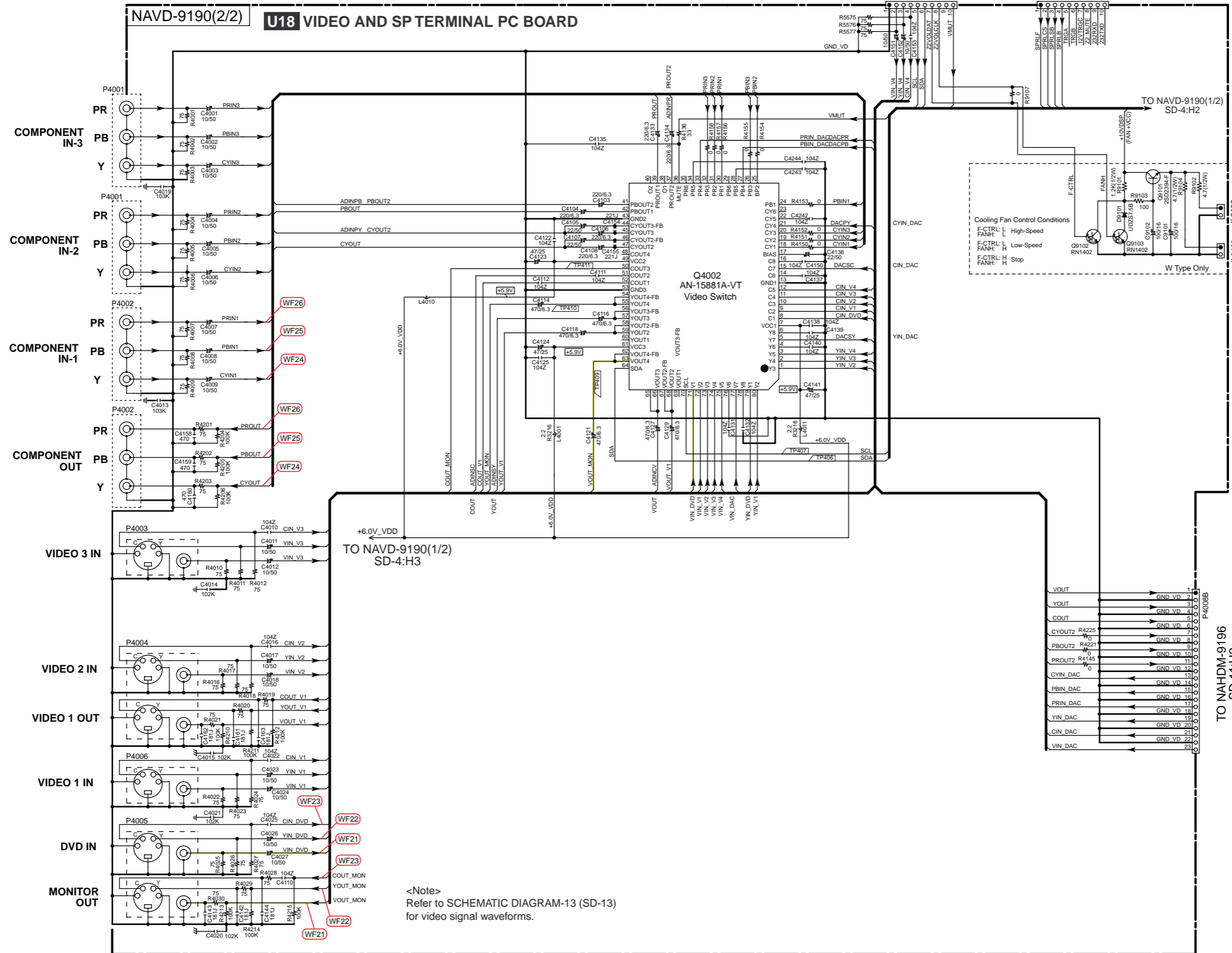
1

2

3

4

5



- NOTE**
- THE COMPONENTS IDENTIFIED BY MARK  $\Delta$  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 (  $\text{---}$  ) ARE IN  $\mu$ F/VV.
  - 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)  $\square$  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.

<Note>  
Refer to SCHEMATIC DIAGRAM-13 (SD-13) for video signal waveforms.

CORRESPONDING SIGNAL NAMES ON NAHDM-9196

ADINCV
ADINSY
ADINSC
ADINPY
ADINPB
ADINPR
DACPY
DACPB
DACPR
DACSY
DACSC
DACCV

<Note>  
Refer to SCHEMATIC DIAGRAM-13 (SD-13) for video signal waveforms.

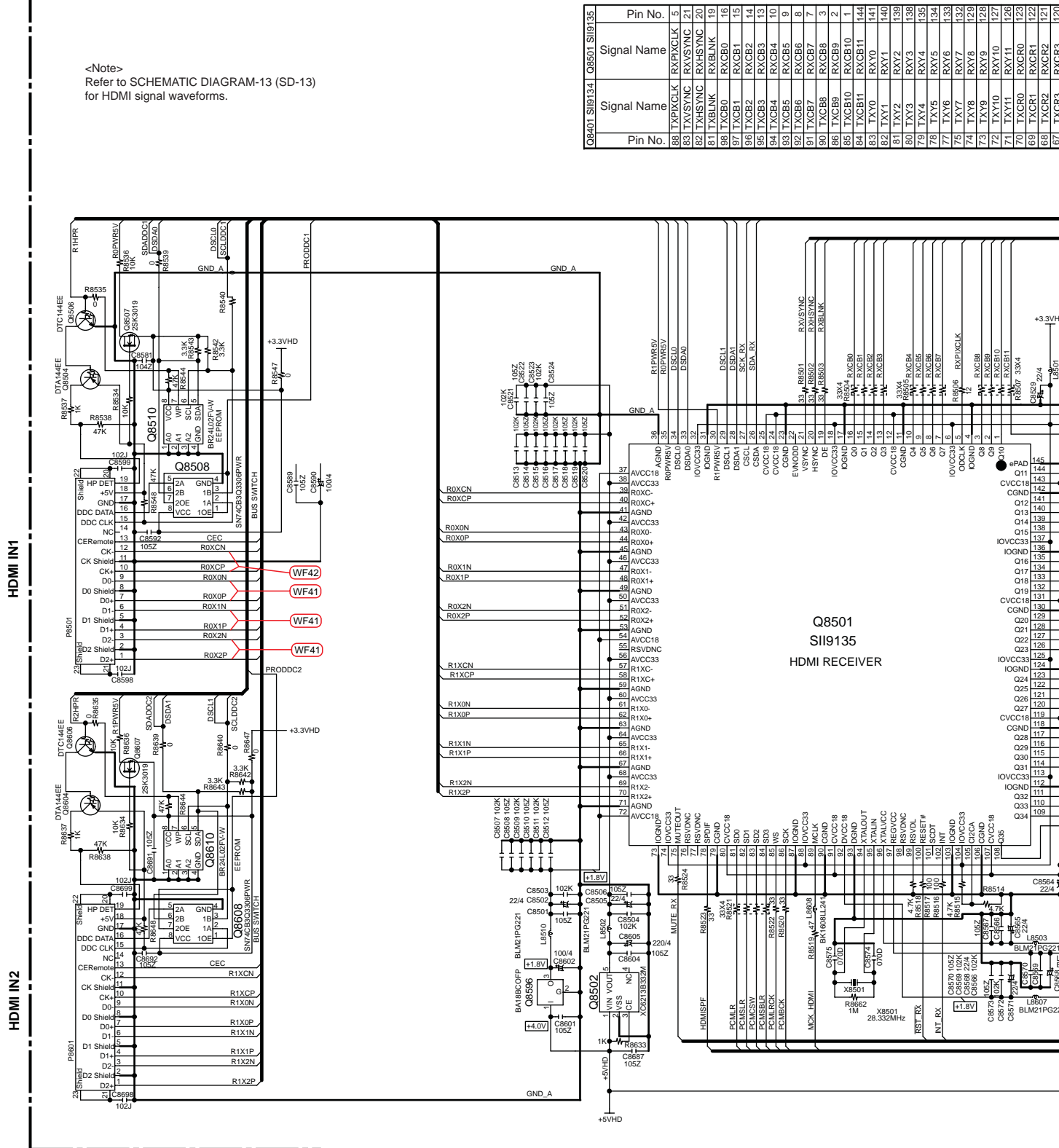
# SCHEMATIC DIAGRAM-10 (SD-10) HDMI SECTION-1

NAHDM-9196(1/2) **U23** HDMI PC BOARD

<Note>  
Refer to SCHEMATIC DIAGRAM-13 (SD-13)  
for HDMI signal waveforms.

Q8401 SII9134 / Q8501 SII9135 Pin Connection Chart

Pin No.	Signal Name	Pin No.	Signal Name
88	TXPIXCLK	88	TXPIXCLK
83	TXHSYNC	83	TXHSYNC
82	TXVSYNC	82	TXVSYNC
81	TXBLANK	81	TXBLANK
98	RXCBO	98	RXCBO
97	TXCB1	97	TXCB1
96	TXCB2	96	TXCB2
95	TXCB3	95	TXCB3
94	TXCB4	94	TXCB4
93	TXCB5	93	TXCB5
92	TXCB6	92	TXCB6
91	TXCB7	91	TXCB7
90	TXCB8	90	TXCB8
86	TXCB9	86	TXCB9
85	TXCB10	85	TXCB10
84	TXCB11	84	TXCB11
83	TXCB12	83	TXCB12
82	TXCB13	82	TXCB13
81	TXCB14	81	TXCB14
80	TXCB15	80	TXCB15
79	TXCB16	79	TXCB16
78	TXCB17	78	TXCB17
77	TXCB18	77	TXCB18
75	TXCB19	75	TXCB19
74	TXCB20	74	TXCB20
73	TXCB21	73	TXCB21
72	TXCB22	72	TXCB22
71	TXCB23	71	TXCB23
70	TXCB24	70	TXCB24
69	TXCB25	69	TXCB25
68	TXCB26	68	TXCB26
67	TXCB27	67	TXCB27

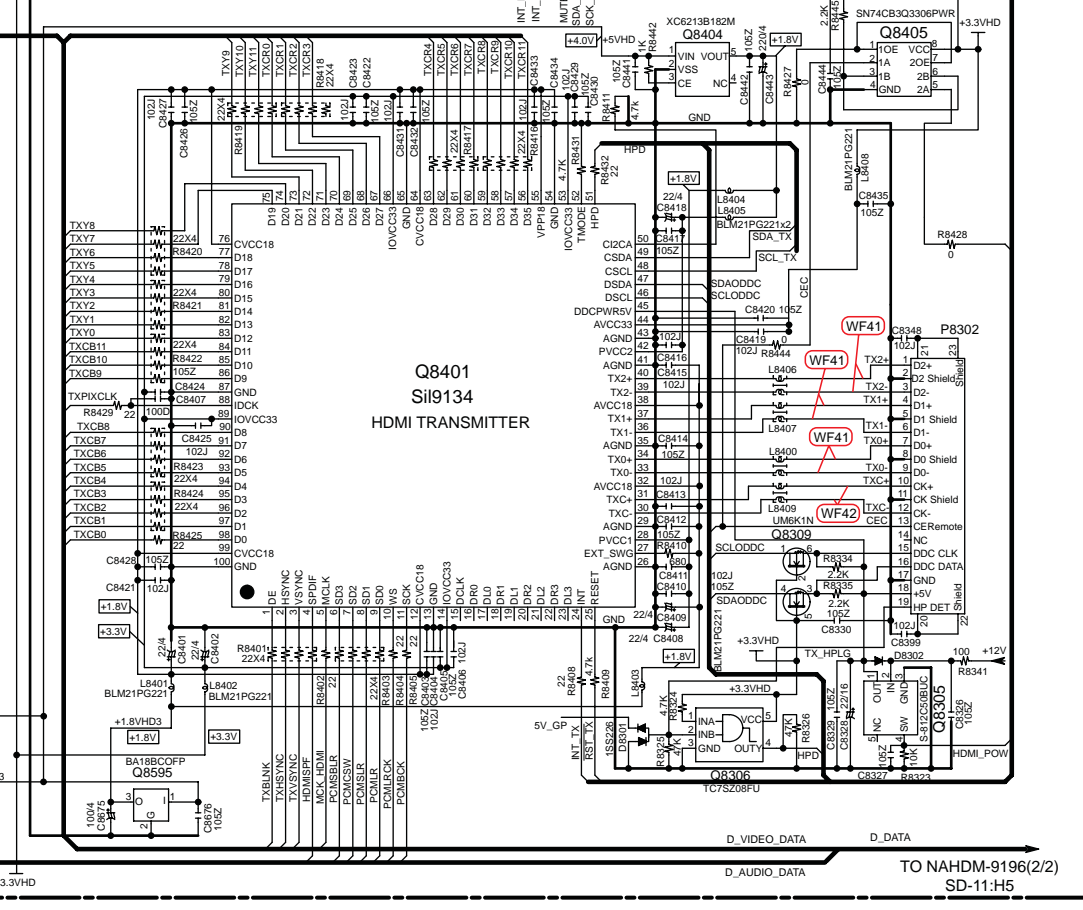
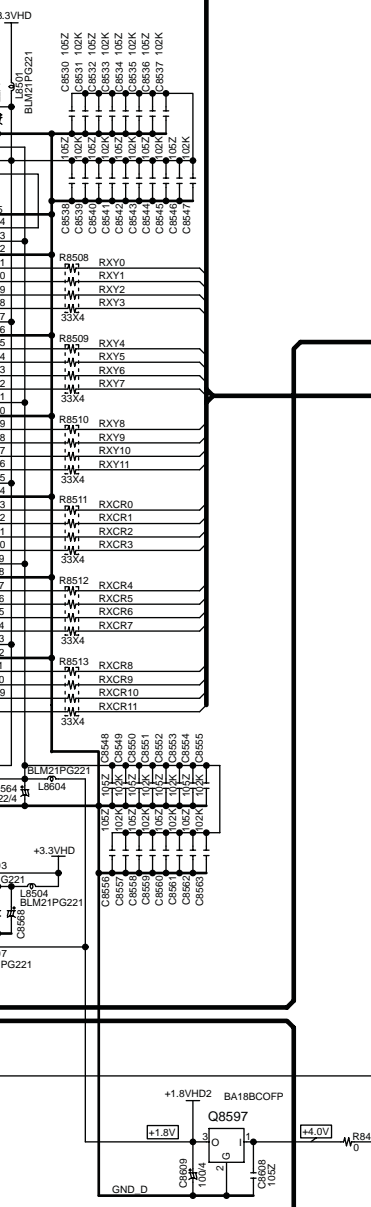
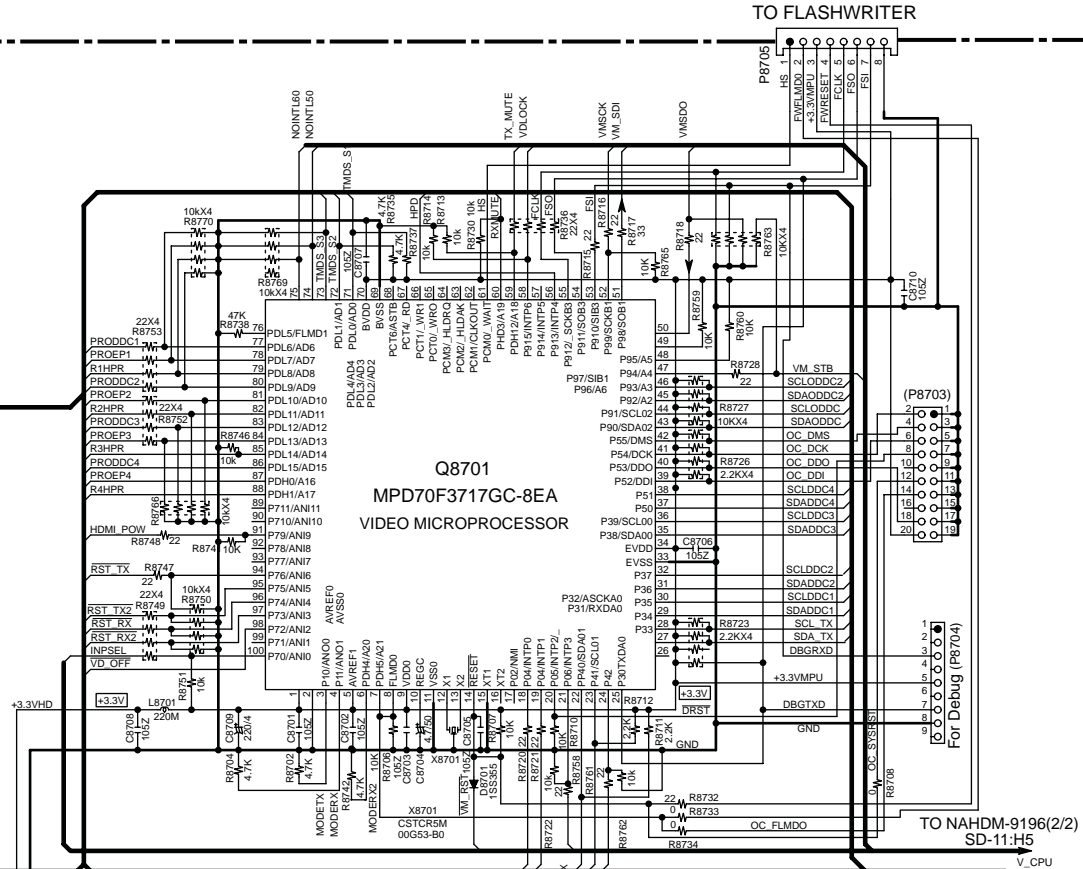


Q8501  
SII9135  
HDMI RECEIVER

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



68	TXGR2	RXCR2	120
67	TXGR3	RXCR3	119
66	TXGR4	RXCR4	118
65	TXGR5	RXCR5	117
64	TXGR6	RXCR6	116
63	TXGR7	RXCR7	115
62	TXGR8	RXCR8	114
61	TXGR9	RXCR9	113
60	TXGR10	RXCR10	112
59	TXGR11	RXCR11	111
58	TXGR12	RXCR12	110
57	TXGR13	RXCR13	109
56	TXGR14	RXCR14	108



TO FLASHWRITER

TO NAHDM-9196(2/2)  
SD-11:H5

V\_CPU

TO NAHDM-9196(2/2)  
SD-11:H5

HDMI OUT

D\_VIDEO\_DATA

D\_AUDIO\_DATA

D\_DATA

**SCHEMATIC DIAGRAM-10 (SD-10)**  
**HDMI SECTION-1**

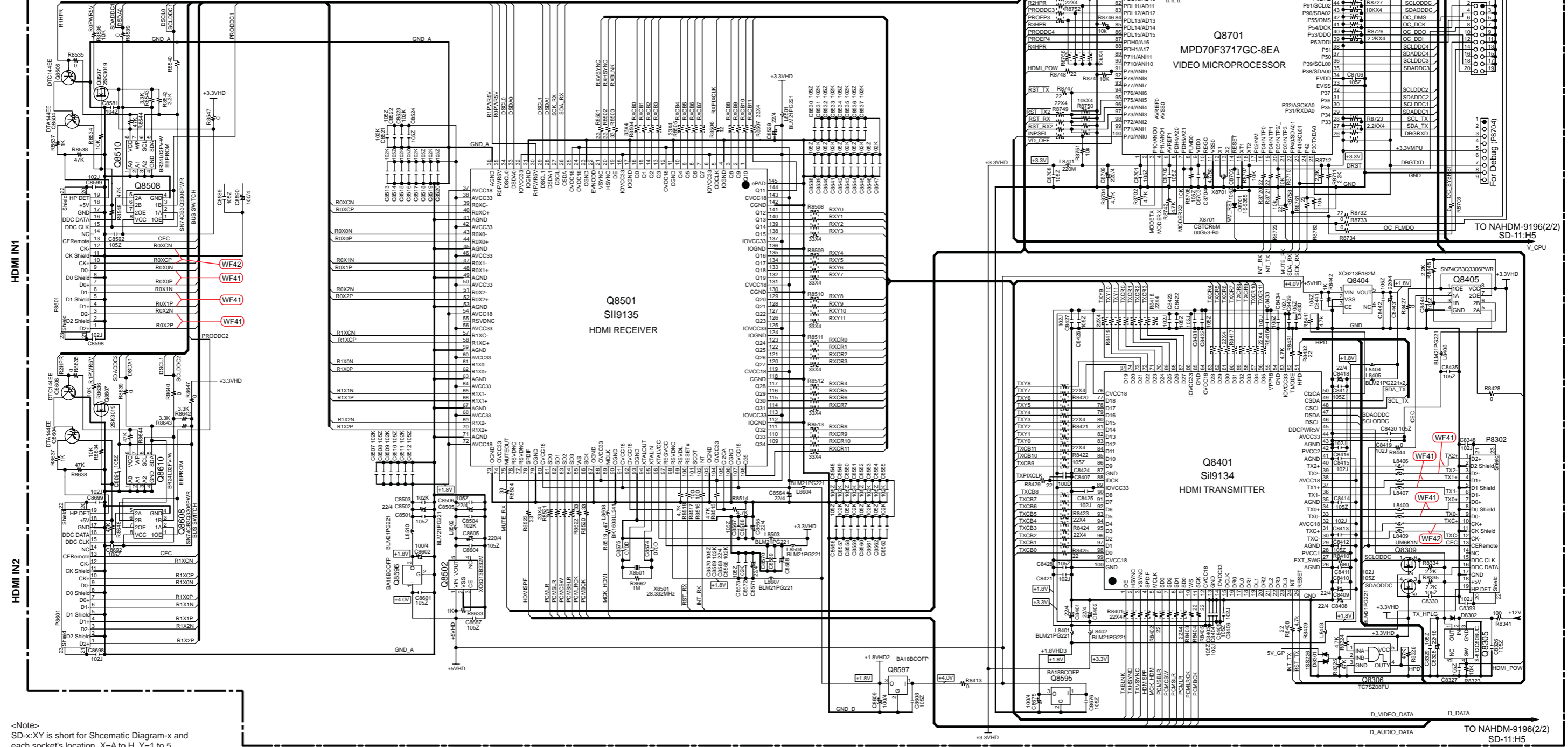
1  
2  
3  
4  
5

NAHDM-9196(1/2) **U23** HDMI PC BOARD

Q8401 SII9134 / Q8501 SII9135 Pin Connection Chart

Pin No.	Signal Name	Pin No.	Signal Name
5	RXPXCLK	5	RXPXCLK
6	RXPXCLK	6	RXPXCLK
7	RXPXCLK	7	RXPXCLK
8	RXPXCLK	8	RXPXCLK
9	RXPXCLK	9	RXPXCLK
10	RXPXCLK	10	RXPXCLK
11	RXPXCLK	11	RXPXCLK
12	RXPXCLK	12	RXPXCLK
13	RXPXCLK	13	RXPXCLK
14	RXPXCLK	14	RXPXCLK
15	RXPXCLK	15	RXPXCLK
16	RXPXCLK	16	RXPXCLK
17	RXPXCLK	17	RXPXCLK
18	RXPXCLK	18	RXPXCLK
19	RXPXCLK	19	RXPXCLK
20	RXPXCLK	20	RXPXCLK
21	RXPXCLK	21	RXPXCLK
22	RXPXCLK	22	RXPXCLK
23	RXPXCLK	23	RXPXCLK
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25	RXPXCLK	25	RXPXCLK
26	RXPXCLK	26	RXPXCLK
27	RXPXCLK	27	RXPXCLK
28	RXPXCLK	28	RXPXCLK
29	RXPXCLK	29	RXPXCLK
30	RXPXCLK	30	RXPXCLK
31	RXPXCLK	31	RXPXCLK
32	RXPXCLK	32	RXPXCLK
33	RXPXCLK	33	RXPXCLK
34	RXPXCLK	34	RXPXCLK
35	RXPXCLK	35	RXPXCLK
36	RXPXCLK	36	RXPXCLK
37	RXPXCLK	37	RXPXCLK
38	RXPXCLK	38	RXPXCLK
39	RXPXCLK	39	RXPXCLK
40	RXPXCLK	40	RXPXCLK
41	RXPXCLK	41	RXPXCLK
42	RXPXCLK	42	RXPXCLK
43	RXPXCLK	43	RXPXCLK
44	RXPXCLK	44	RXPXCLK
45	RXPXCLK	45	RXPXCLK
46	RXPXCLK	46	RXPXCLK
47	RXPXCLK	47	RXPXCLK
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64	RXPXCLK	64	RXPXCLK
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66	RXPXCLK	66	RXPXCLK
67	RXPXCLK	67	RXPXCLK
68	RXPXCLK	68	RXPXCLK
69	RXPXCLK	69	RXPXCLK
70	RXPXCLK	70	RXPXCLK
71	RXPXCLK	71	RXPXCLK
72	RXPXCLK	72	RXPXCLK
73	RXPXCLK	73	RXPXCLK
74	RXPXCLK	74	RXPXCLK
75	RXPXCLK	75	RXPXCLK
76	RXPXCLK	76	RXPXCLK
77	RXPXCLK	77	RXPXCLK
78	RXPXCLK	78	RXPXCLK
79	RXPXCLK	79	RXPXCLK
80	RXPXCLK	80	RXPXCLK
81	RXPXCLK	81	RXPXCLK
82	RXPXCLK	82	RXPXCLK
83	RXPXCLK	83	RXPXCLK
84	RXPXCLK	84	RXPXCLK
85	RXPXCLK	85	RXPXCLK
86	RXPXCLK	86	RXPXCLK
87	RXPXCLK	87	RXPXCLK
88	RXPXCLK	88	RXPXCLK
89	RXPXCLK	89	RXPXCLK
90	RXPXCLK	90	RXPXCLK
91	RXPXCLK	91	RXPXCLK
92	RXPXCLK	92	RXPXCLK
93	RXPXCLK	93	RXPXCLK
94	RXPXCLK	94	RXPXCLK
95	RXPXCLK	95	RXPXCLK
96	RXPXCLK	96	RXPXCLK
97	RXPXCLK	97	RXPXCLK
98	RXPXCLK	98	RXPXCLK
99	RXPXCLK	99	RXPXCLK
100	RXPXCLK	100	RXPXCLK
101	RXPXCLK	101	RXPXCLK
102	RXPXCLK	102	RXPXCLK
103	RXPXCLK	103	RXPXCLK
104	RXPXCLK	104	RXPXCLK
105	RXPXCLK	105	RXPXCLK
106	RXPXCLK	106	RXPXCLK
107	RXPXCLK	107	RXPXCLK
108	RXPXCLK	108	RXPXCLK

<Note>  
Refer to SCHEMATIC DIAGRAM-13 (SD-13)  
for HDMI signal waveforms.



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

D\_VIDEO\_DATA  
D\_AUDIO\_DATA  
TO NAHDM-9196(2/2)  
SD-11:H5

A

B

C

D

# SCHEMATIC DIAGRAM-11 (SD-11) HDMI SECTION-2

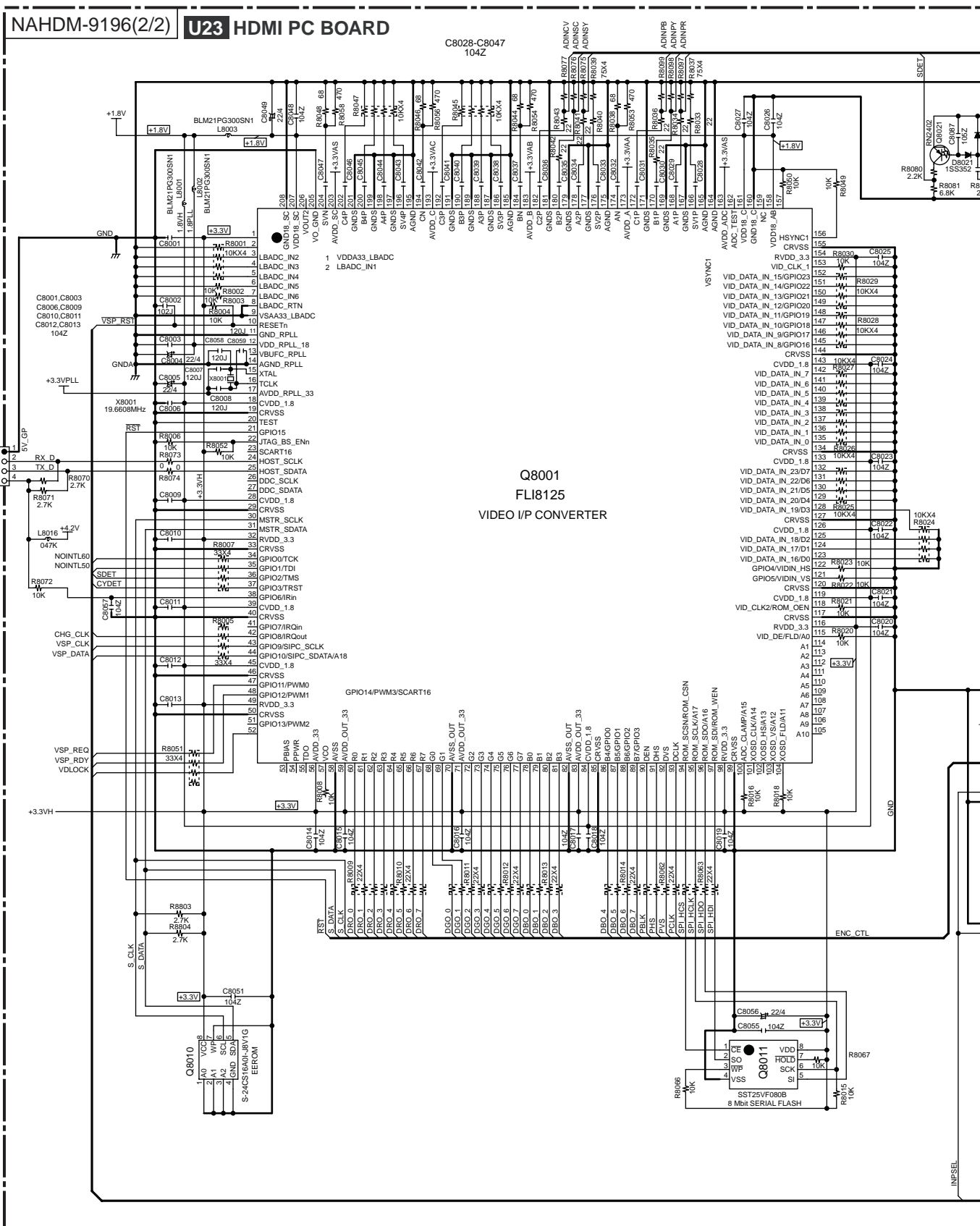
1

2

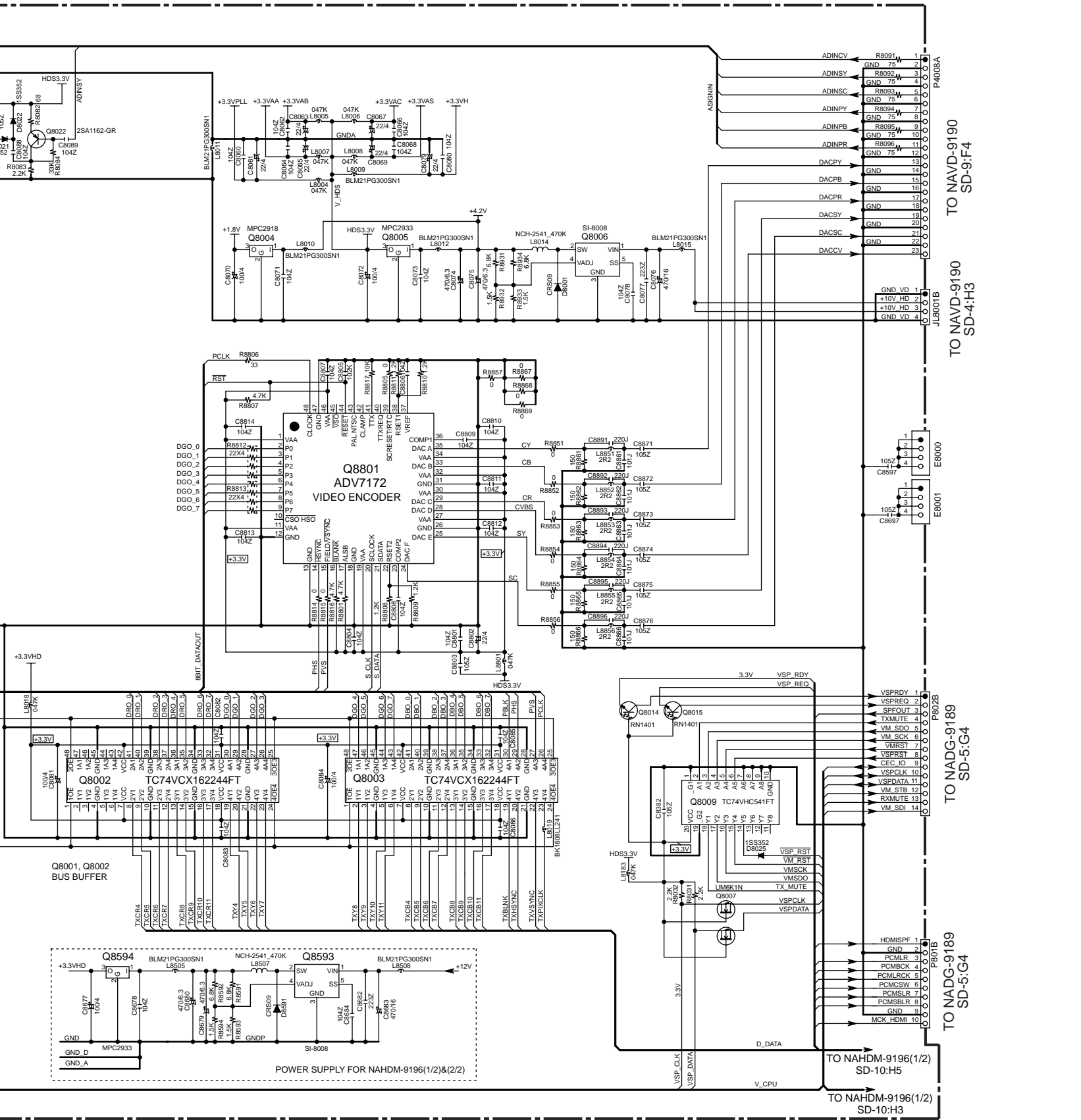
3

4

5

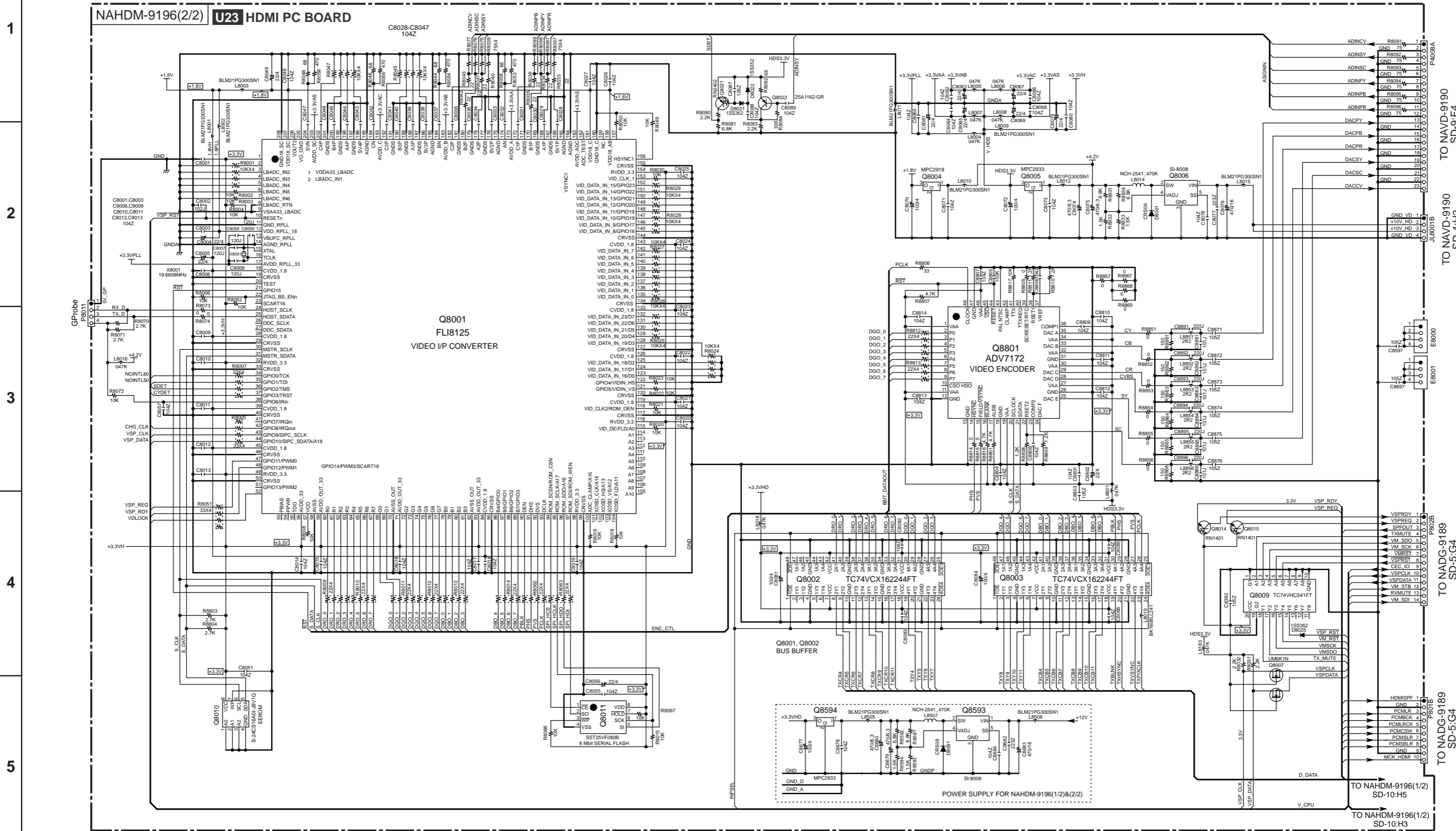


<Note>  
SD-x:XY is short for Shcematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.



# SCHEMATIC DIAGRAM-11 (SD-11) HDMI SECTION-2

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



TO NAVD-9190 SD-9:F4

TO NAVD-9190 SD-4:H3

TO NAVD-9189 SD-5:G4

TO NAVD-9189 SD-5:G4

TO NAHDM-9196(1/2) SD-10:H5

TO NAHDM-9196(1/2) SD-10:H3

A B C D

**SCHEMATIC DIAGRAM-12 (SD-12)**  
**XM SECTION**

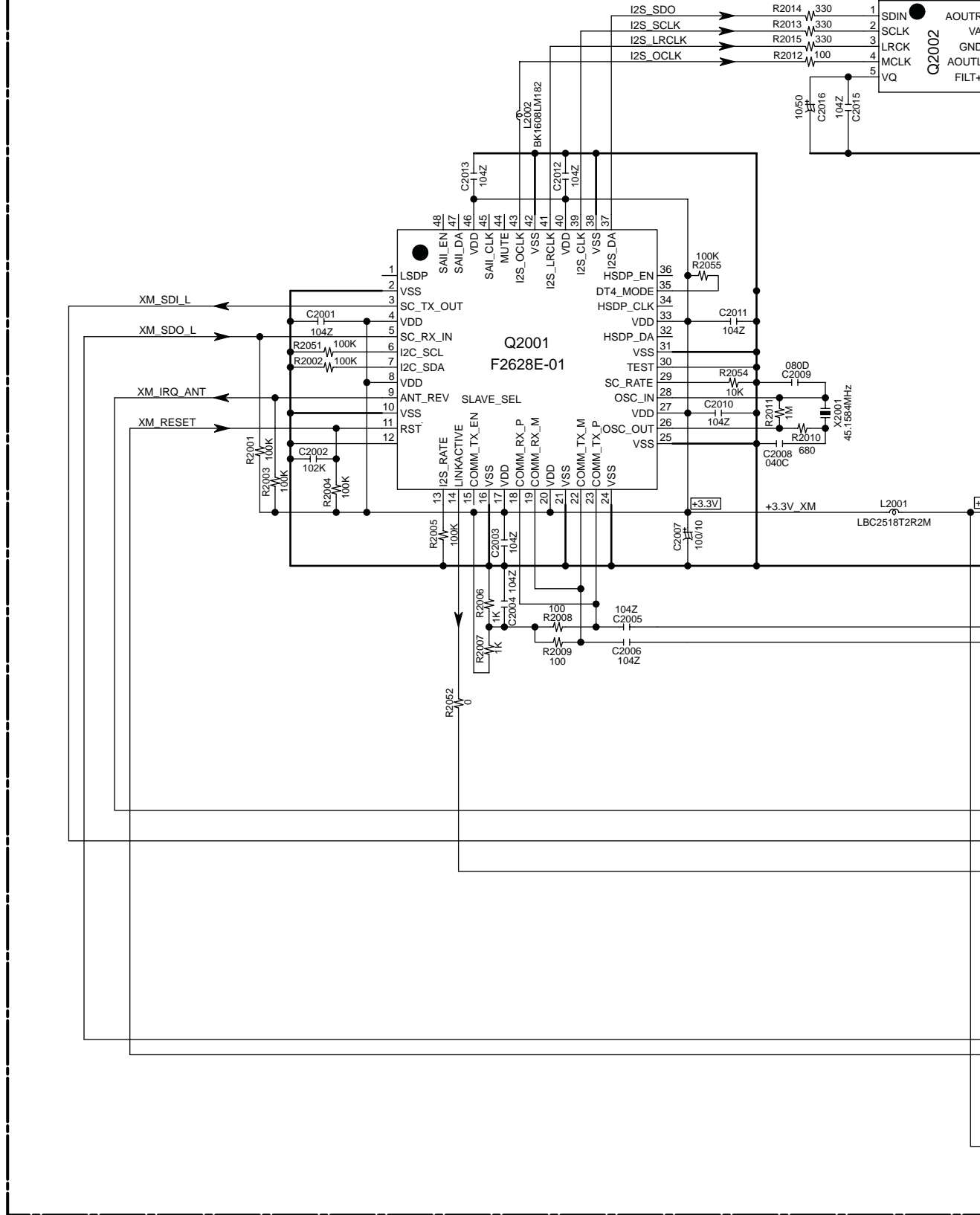
1

NADG-9191 **U19** XM PC BOARD

DD, DC Type Only

CS4344-CZZR  
 2 ch DAC

2



3

4

5

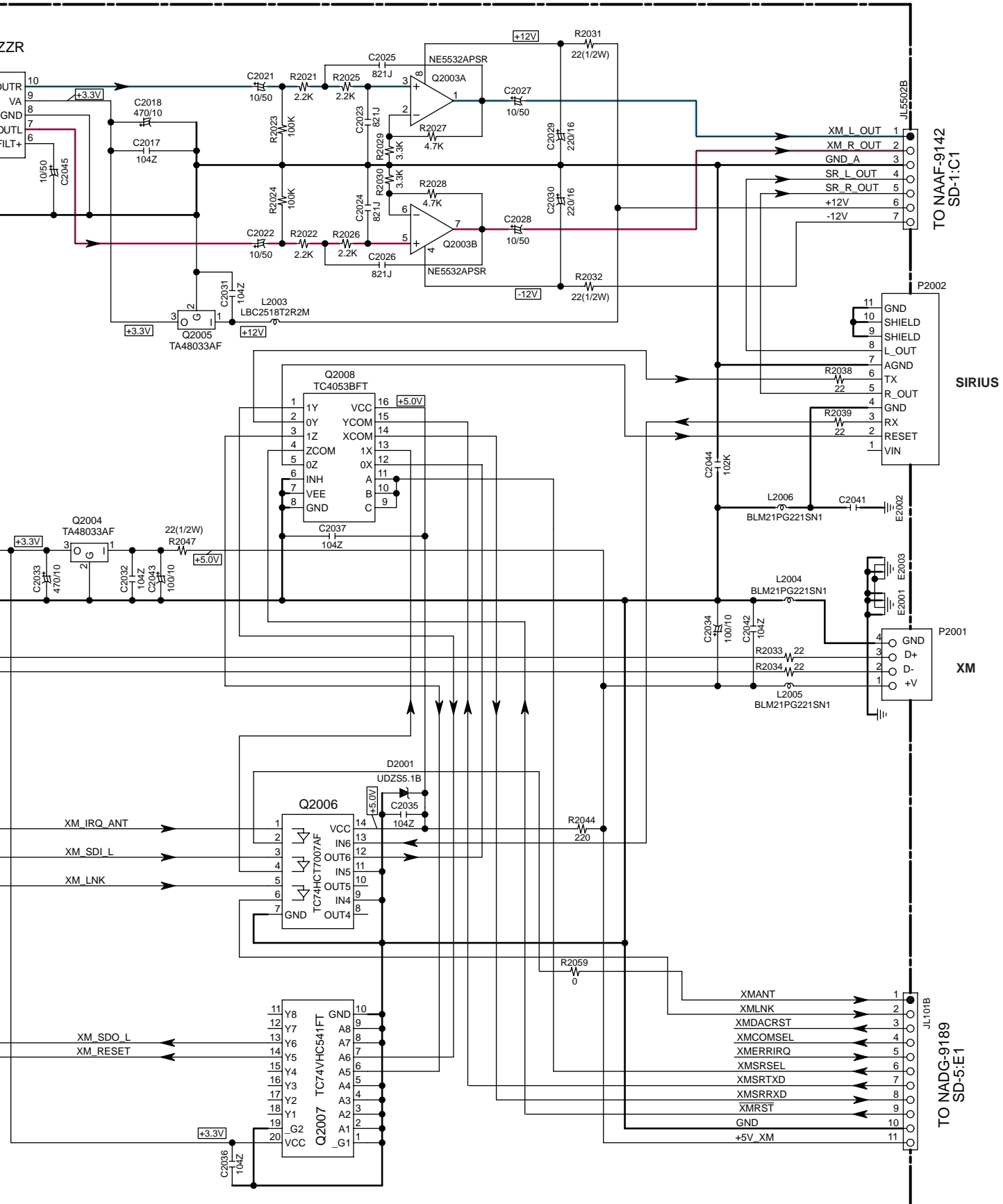
E

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 DIAGRAM-12 (SD-12)  
XM SECTION

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

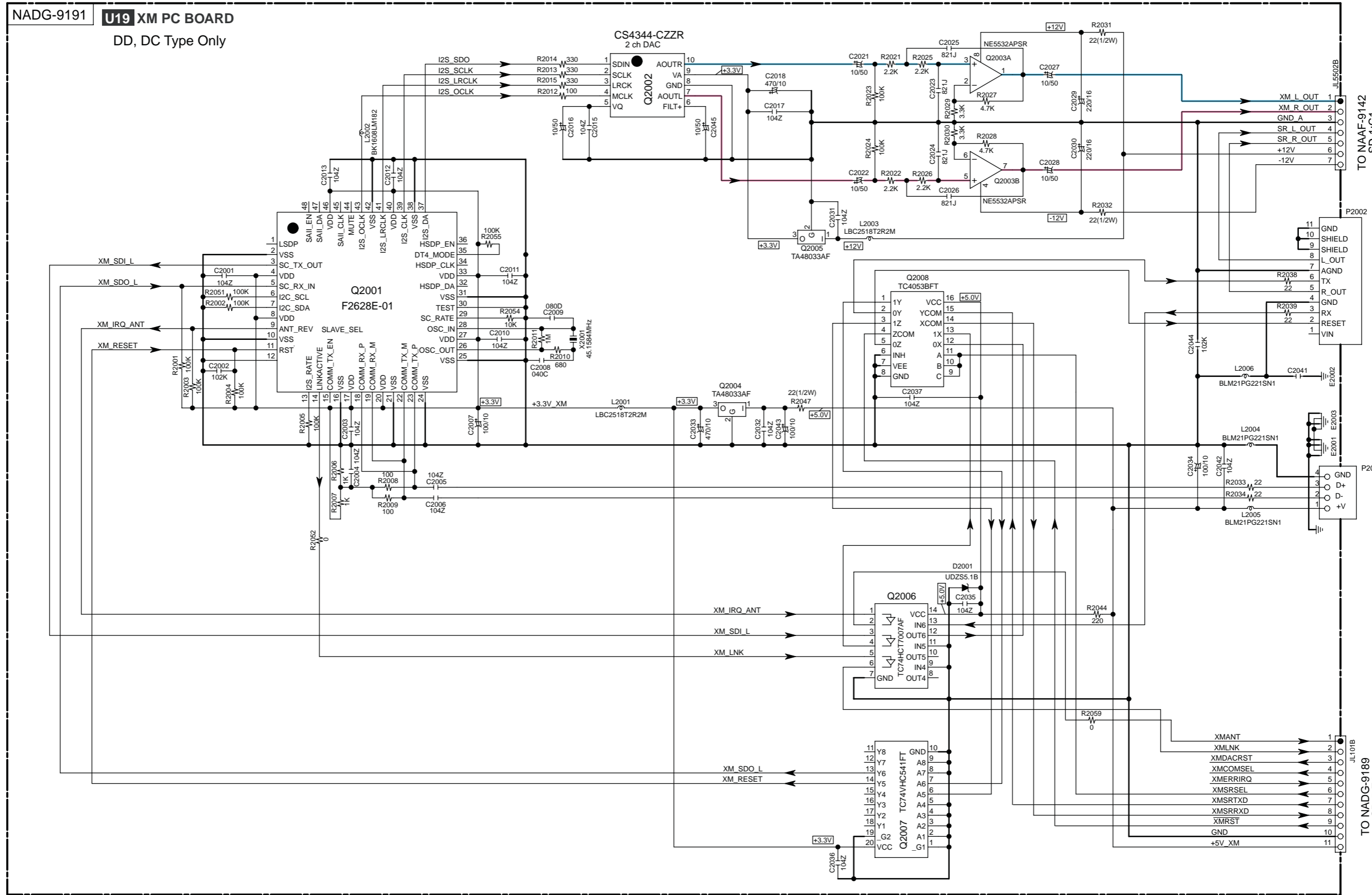
1

2

3

4

5



NADG-9191 U19 XM PC BOARD  
DD, DC Type Only

CS4344-CZZR  
2 ch DAC

Q2001  
F2628E-01

Q2004  
TA48033AF

Q2006  
TC74HCT7007AF

Q2007  
TC74VHC541FT

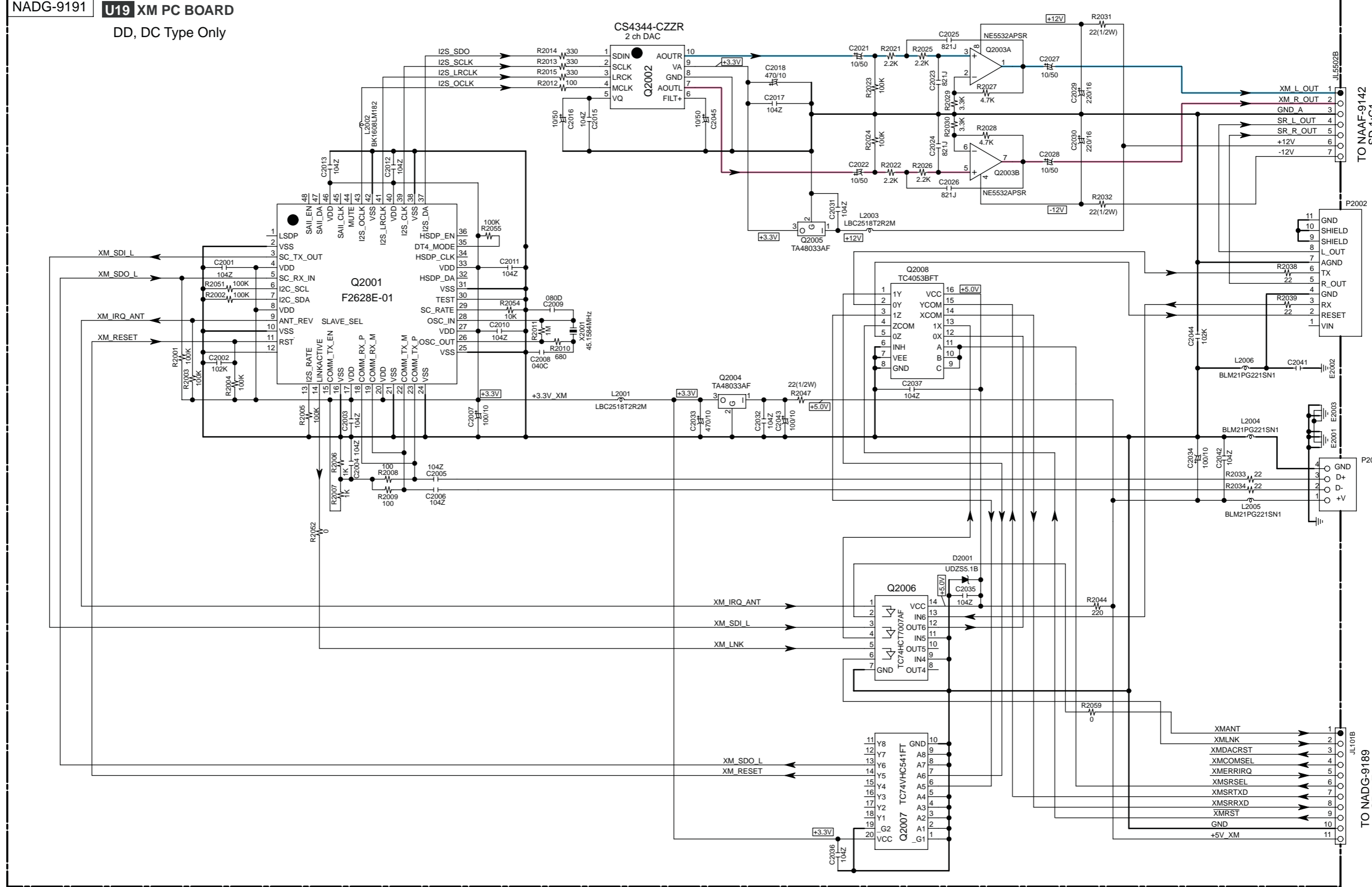
Q2008  
TC4053BFT

Q2002  
TA48033AF

Q2003A  
NE5532APSR

Q2003B  
NE5532APSR

D2001  
UDZ55.1B



NADG-9191 U19 XM PC BOARD  
DD, DC Type Only

CS4344-CZZR  
2 ch DAC

Q2001  
F2628E-01

Q2004  
TA48033AF

Q2006  
TC74HCT7007AF

Q2007  
TC74VHC541FT

Q2008  
TC4053BFT

Q2002  
TA48033AF

Q2003A  
NE5532APSR

Q2003B  
NE5532APSR

D2001  
UDZ55.1B

J15502B  
TO NADG-9142  
SD-1:C1

P2002  
SIRIUS

P2001  
XM

J1010B  
TO NADG-9189  
SD-5:E1



A

B

C

D

# SCHEMATIC DIAGRAM-13(SD-13) WAVEFORM SECTION

## Digital Audio Waveform Part

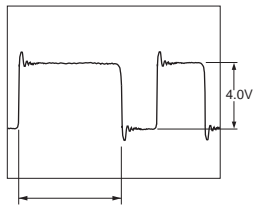
**NOTE:**

1. (WF01) is short for (Waveform01)
2. Refer to SD-5(SCHEMATIC DIAGRAM-5) 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

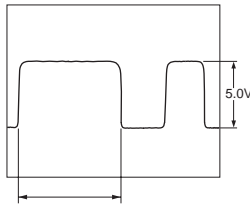
BIT CLOCK (SAI\_SLCK, CX\_SLCK)  
64Fs=3072kHz : DVD, Clock width=325ns  
64Fs=2822.4kHz : CD, Clock width=354ns

(WF01) OPT1 (SD-5:E5)



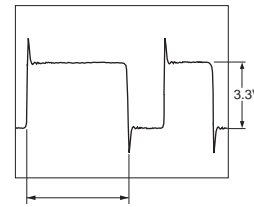
Duty varies according to audio data

(WF02) COAX1 (SD-5:E5)



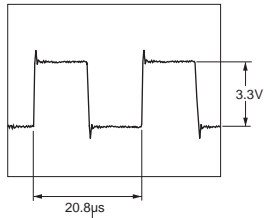
Duty always varies according to audio data

(WF03) SAI\_SDOUT (SD-5:E5)

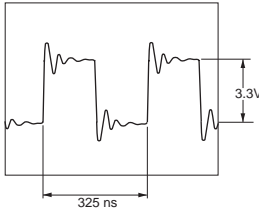


Duty varies according to audio data

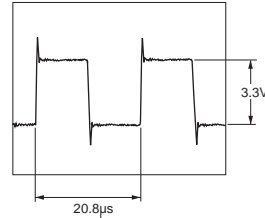
(WF04) SAI\_LRCK (SD-5:E4)



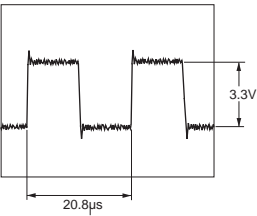
(WF05) SAI\_SLCK (SD-5:E4)



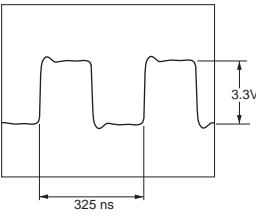
(WF06) CX\_SDIN1 (SD-5:E4)



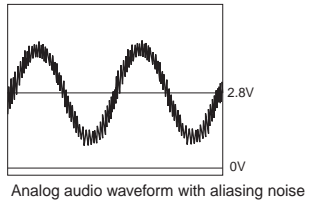
(WF07) CX\_LRCK (SD-5:E4)



(WF08) CX\_SCLK (SD-5:E4)

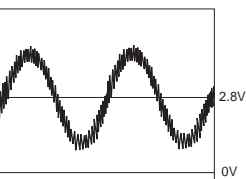


(WF09) DAC\_OUT- (SD-5:D5)



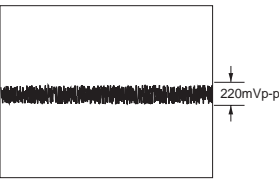
Analog audio waveform with aliasing noise

(WF10) AUDIO\_FL (SD-5:C5)



Analog audio waveform with aliasing noise

(WF10) AUDIO\_FL (SD-5:C5)



Aliasing noise in no audio data

1

2

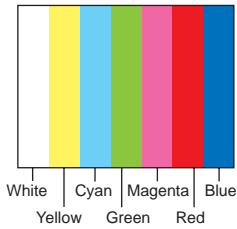
3

4

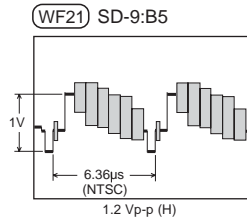
5

Video Waveform Part

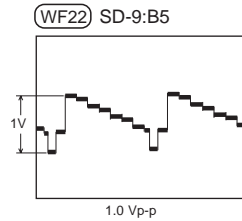
Video source color and pattern



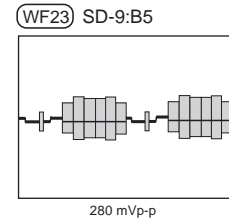
Composite waveform



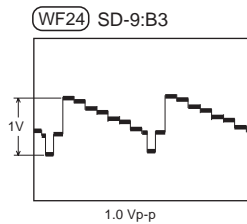
S-Video Y waveform



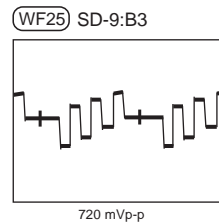
S-Video C waveform



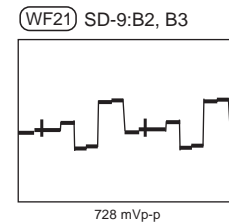
Component Y waveform



Component PB waveform



Component PR waveform



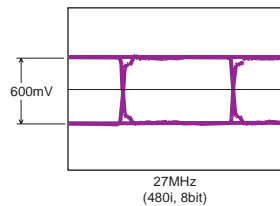
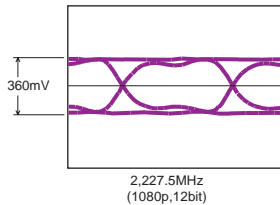
NOTE:

- (WF21) is short for (Waveform21)
- Refer to SD-9(SCHEMATIC DIAGRAM-9) 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

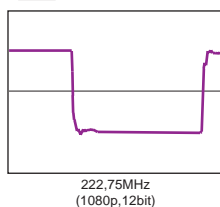
(WF41) SD-10:A3, H4



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-10:A3, H4

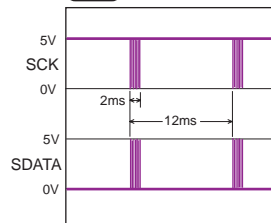


CK waveform, frequency and level differ according to video resolution, aspect and profile. D0,D1,D2 are just CK x10.

FL Driver IC Control Waveform Part

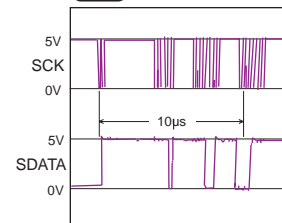
SCK/SDATA waveform

(WF61) SD-7:D3



SCK/SDATA waveform

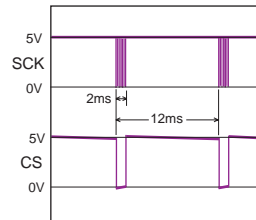
(WF61) SD-7:D3



SDATA waveform varies according to the data content

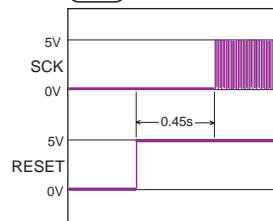
SCK/CS waveform

(WF62) SD-7:D3



SCK/RESET waveform

(WF63) SD-9:A1



When power on

SCK/RESET waveform

(WF63) SD-9:A1



When power off

**SCHEMATIC DIAGRAM-13(SD-13)**  
**WAVEFORM SECTION**

1

**Digital Audio Waveform Part**

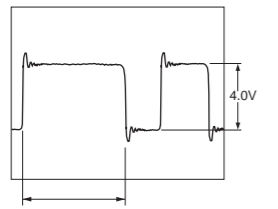
**NOTE:**

- (WF01) is short for (Waveform01)
- Refer to SD-5(SCHEMATIC DIAGRAM-5) 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.

LR CLOCK (SAI\_LRCK, CX\_LRCK)  
Fs=48kHz : DVD, Clock width=20.8us  
Fs=44.1kHz : CD, Clock width=22.7us

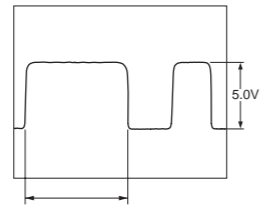
BIT CLOCK (SAI\_SLCK, CX\_SLCK)  
64Fs=3072kHz : DVD, Clock width=325ns  
64Fs=2822.4kHz : CD, Clock width=354ns

(WF01) OPT1 (SD-5:E5)



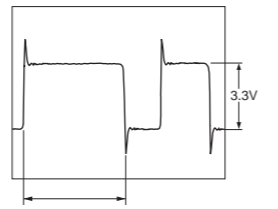
Duty varies according to audio data

(WF02) COAX1 (SD-5:E5)



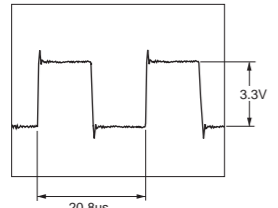
Duty always varies according to audio data

(WF03) SAI\_SDOUT (SD-5:E5)

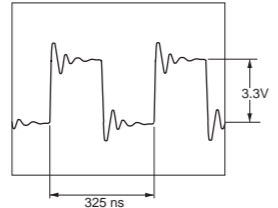


Duty varies according to audio data

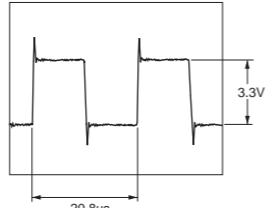
(WF04) SAI\_LRCK (SD-5:E4)



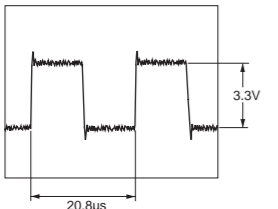
(WF05) SAI\_SLCK (SD-5:E4)



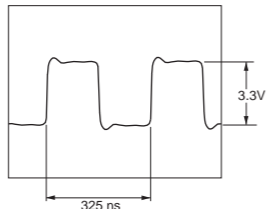
(WF06) CX\_SDIN1 (SD-5:E4)



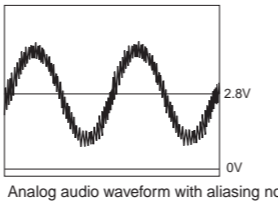
(WF07) CX\_LRCK (SD-5:E4)



(WF08) CX\_SCLK (SD-5:E4)

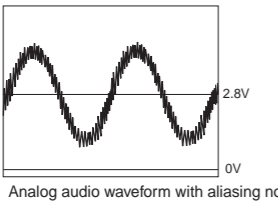


(WF09) DAC\_OUT- (SD-5:D5)



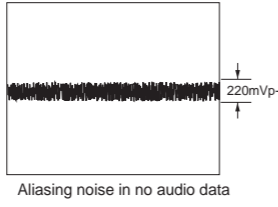
Analog audio waveform with aliasing noise

(WF10) AUDIO\_FL (SD-5:C5)



Analog audio waveform with aliasing noise

(WF10) AUDIO\_FL (SD-5:C5)



Aliasing noise in no audio data

2

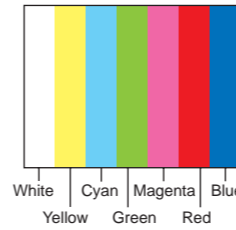
3

4

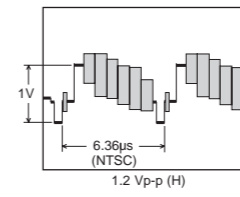
5

**Video Waveform Part**

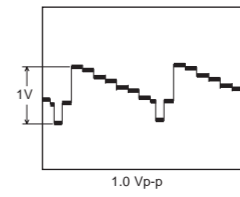
**Video source color and pattern**



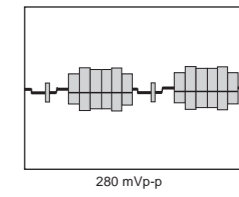
Composite waveform  
(WF21) SD-9:B5



S-Video Y waveform  
(WF22) SD-9:B5



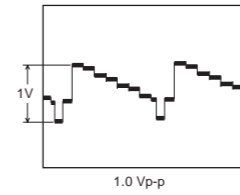
S-Video C waveform  
(WF23) SD-9:B5



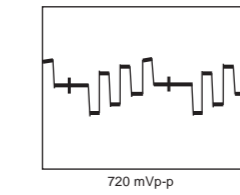
**NOTE:**

- (WF21) is short for (Waveform21)
- Refer to SD-9(SCHEMATIC DIAGRAM-9) 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.

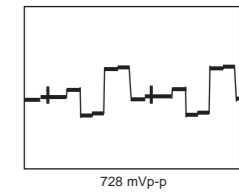
Component Y waveform  
(WF24) SD-9:B3



Component PB waveform  
(WF25) SD-9:B3



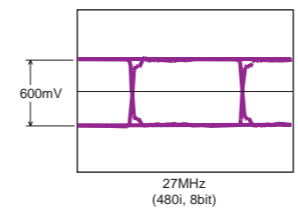
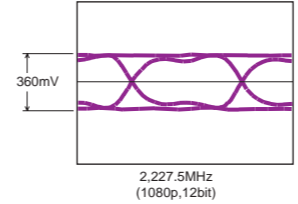
Component PR waveform  
(WF21) SD-9:B2, B3



**HDMI Waveform Part**

**HDMI D0,D1,D2 waveform**

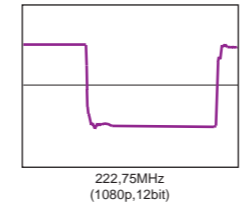
(WF41) SD-10:A3, H4



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-10:A3, H4

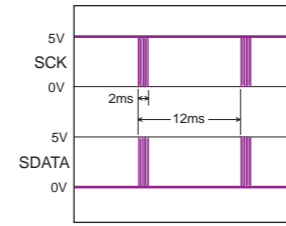


CK waveform, frequency and level differ according to video resolution, aspect and profile. D0,D1,D2 are just CK x10.

**FL Driver IC Control Waveform Part**

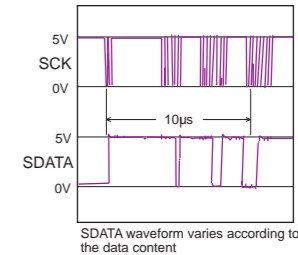
**SCK/SDATA waveform**

(WF61) SD-7:D3



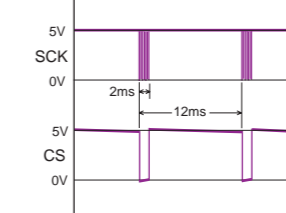
**SCK/SDATA waveform**

(WF61) SD-7:D3



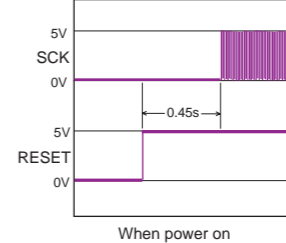
**SCK/CS waveform**

(WF62) SD-7:D3



**SCK/RESET waveform**

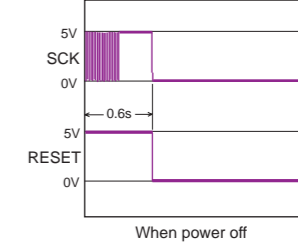
(WF63) SD-9:A1



When power on

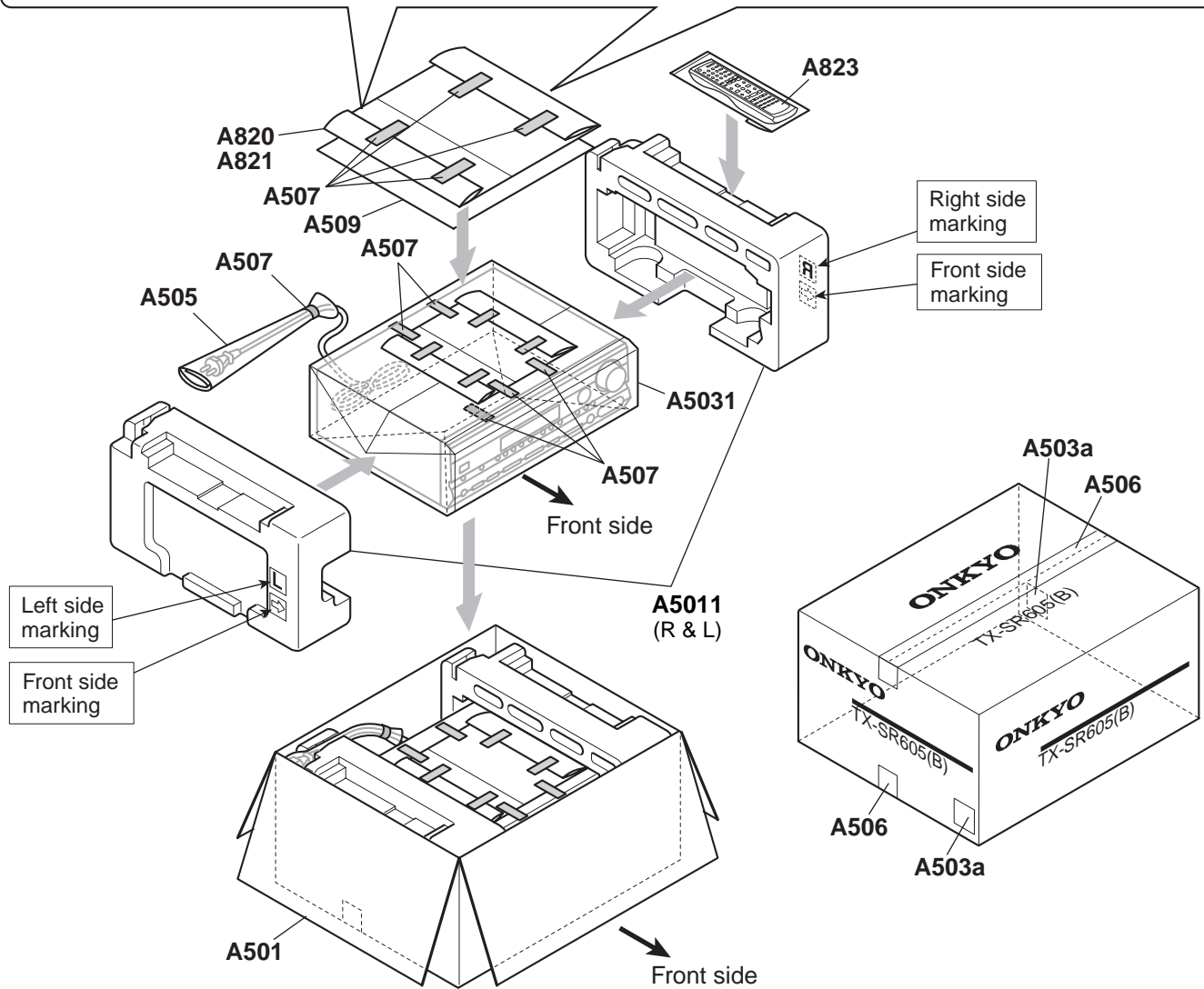
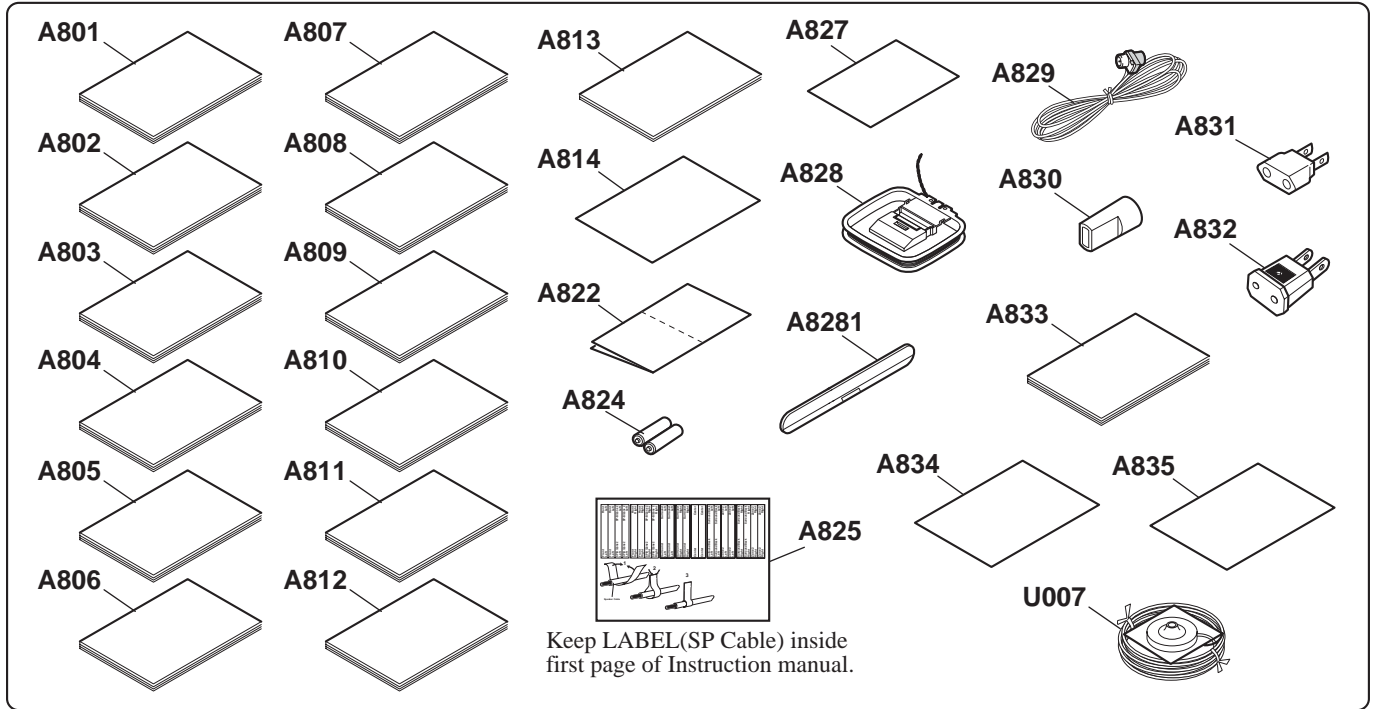
**SCK/RESET waveform**

(WF63) SD-9:A1



When power off

PACKING PROCEDURE



A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-1

**U01** AMPLIFIER PC BOARD  
(NAAF-9142)  
Component side

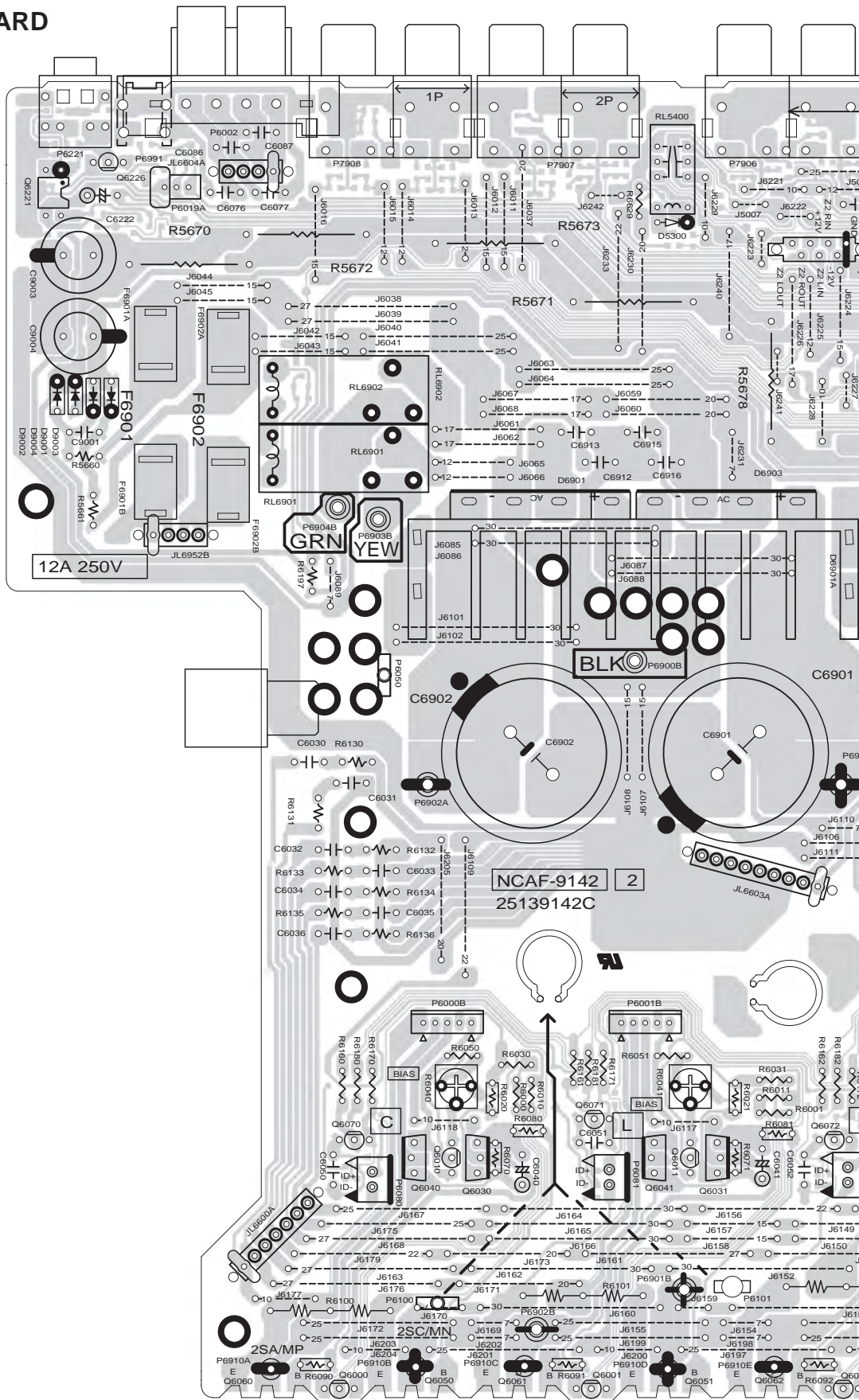
1

2

3

4

5

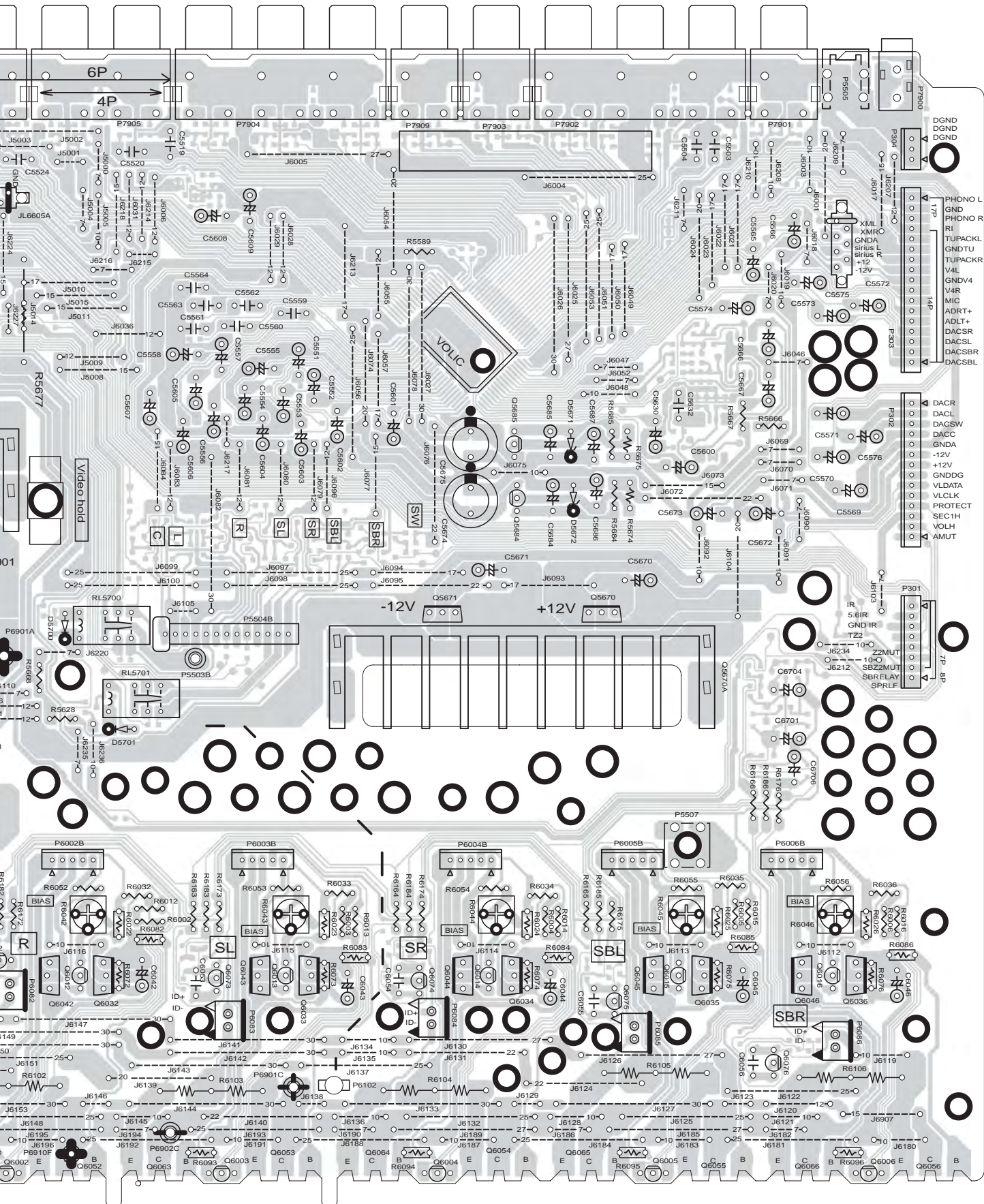


E

F

G

H



A B C D E F G H  
PRINTED CIRCUIT BOARD VIEWS-1

**U01** AMPLIFIER PC BOARD  
(NAAF-9142)  
Component side

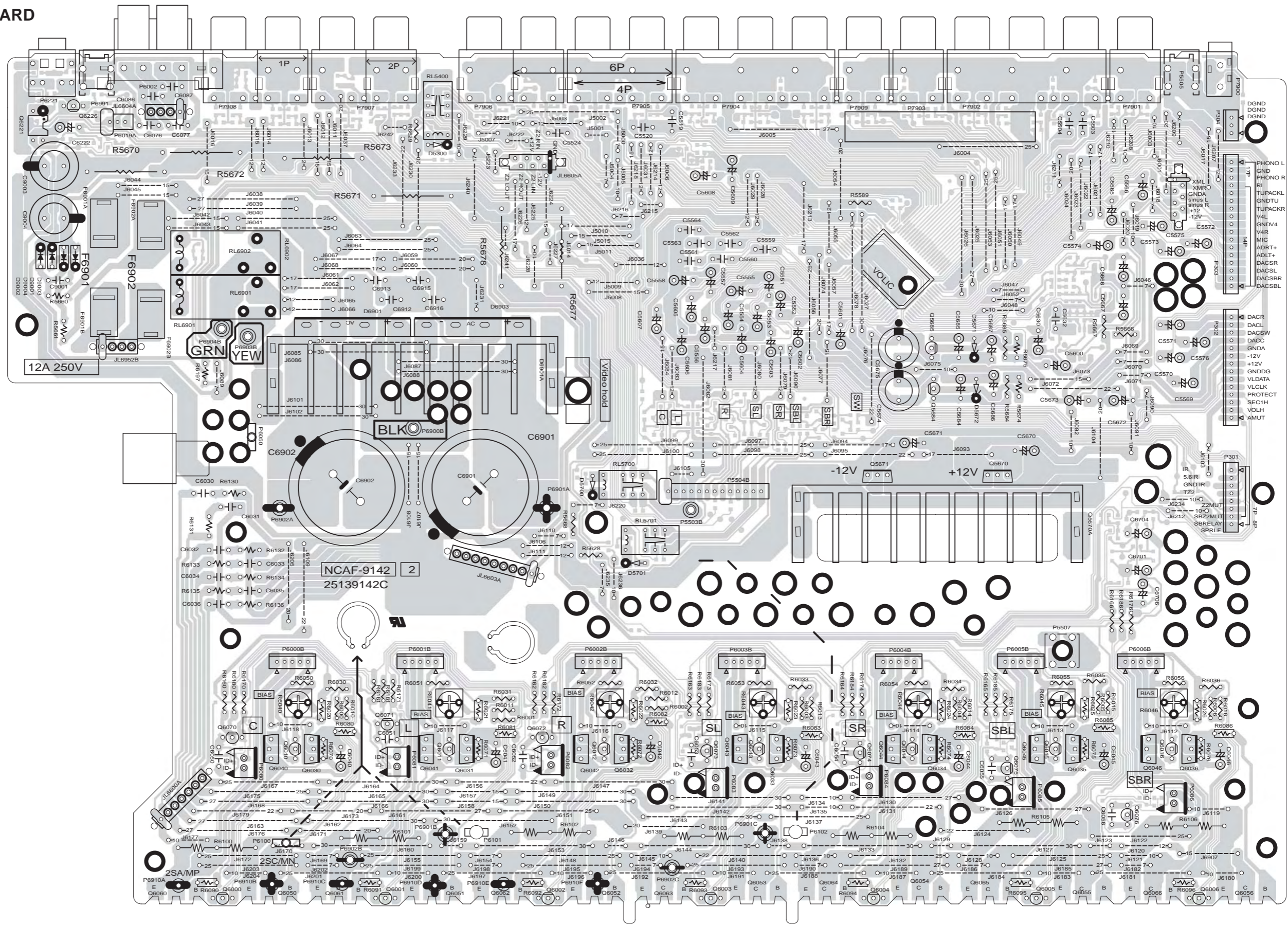
1

2

3

4

5



- PHONO L
  - GND
  - PHONO R
  - RI
  - TUPACKL
  - GNDTU
  - TUPACKR
  - VAL
  - GNDV4
  - V4R
  - MIC
  - ADRT+
  - DACSR
  - DACSL
  - DACSBR
  - DACSBL
- 
- DACR
  - DACL
  - DACSW
  - DACC
  - GND4
  - +12V
  - GND0G
  - VLATA
  - VLCLK
  - PROTECT
  - SECHH
  - VOLH
  - AMUT

A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-2

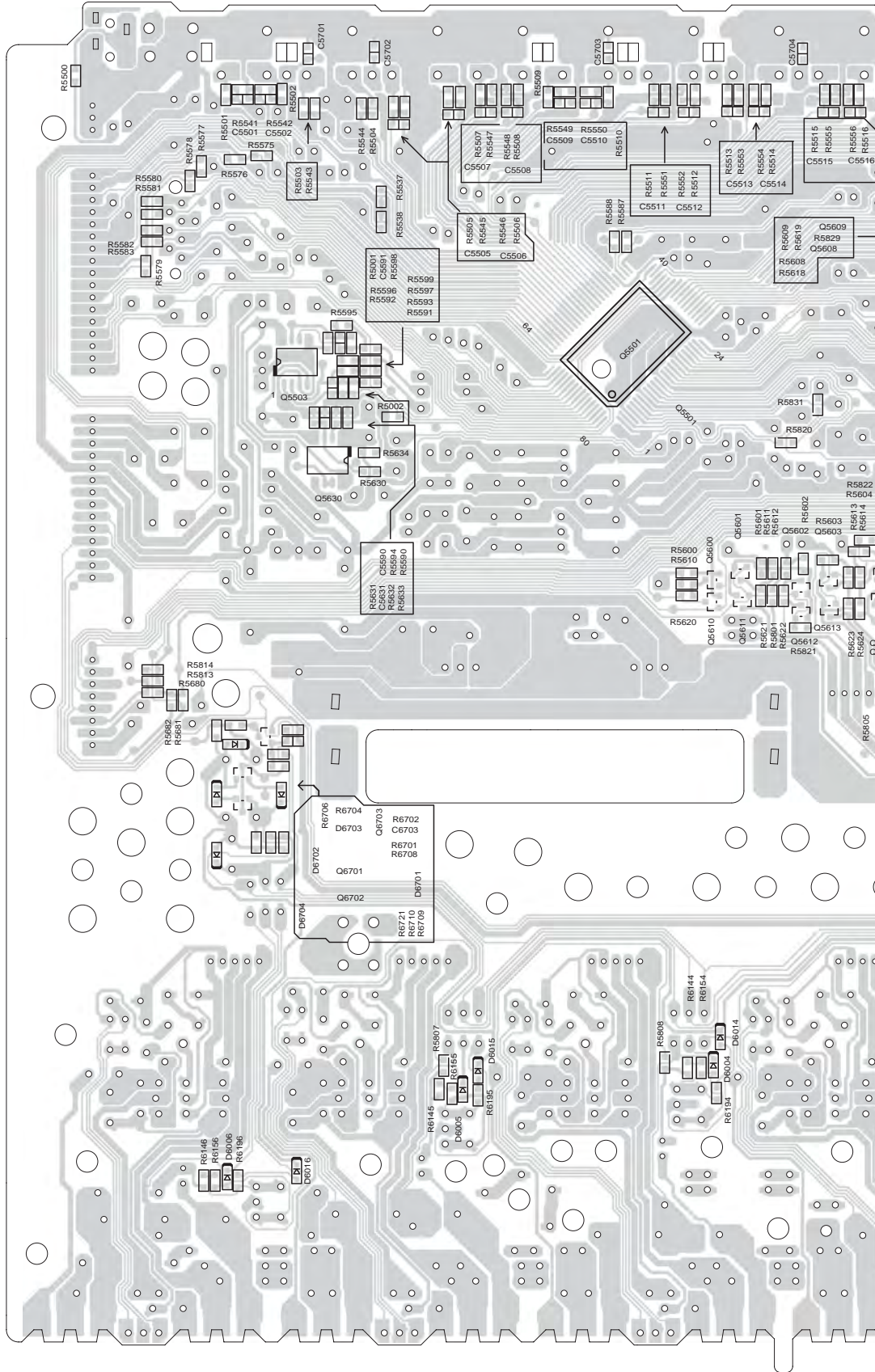
1

2

3

4

5



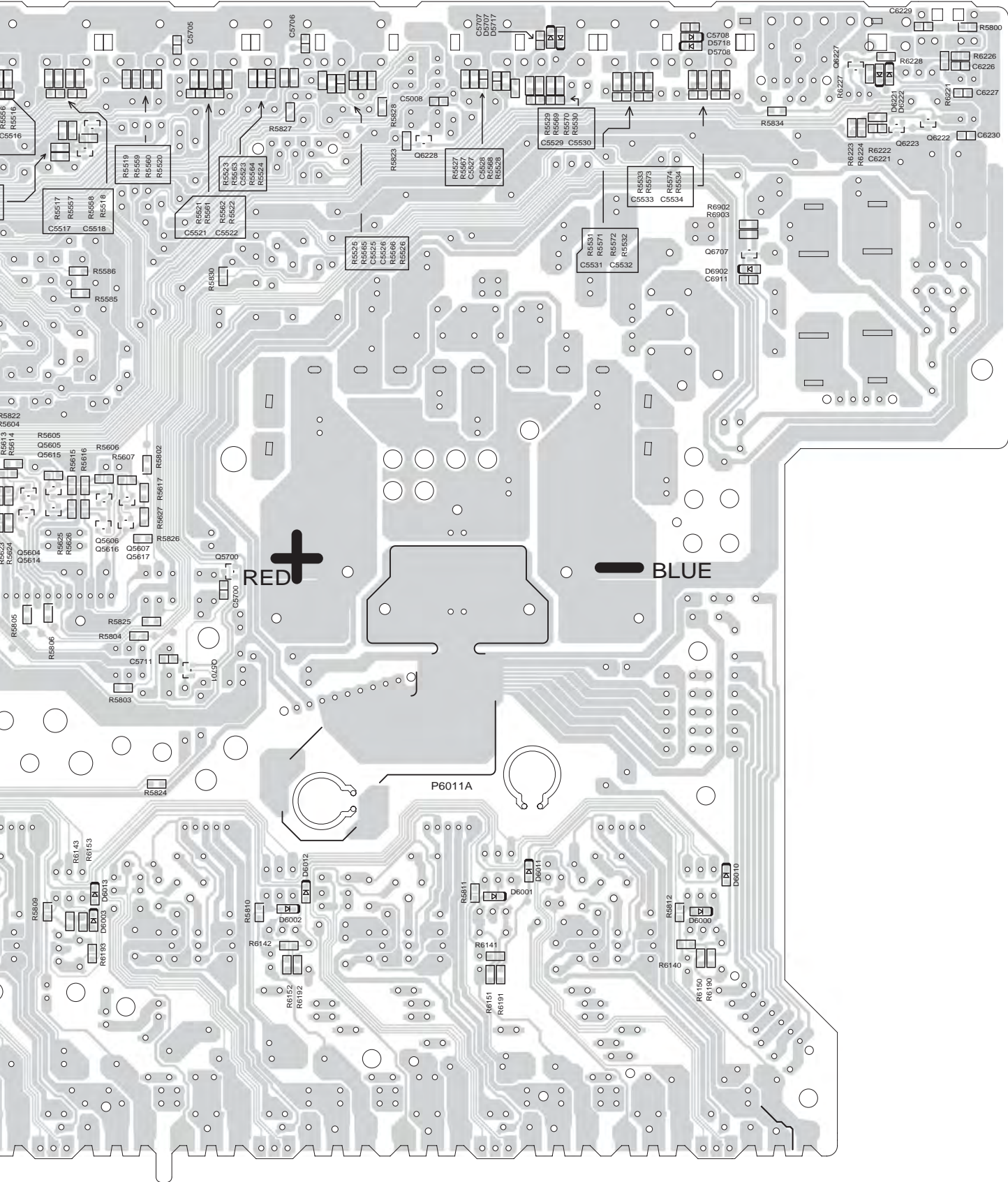


E

F

G

H



A      B      C      D      E      F      G      H

PRINTED CIRCUIT BOARD VIEWS-2

**U01** AMPLIFIER PC BOARD  
(NAAF-9142)  
Soldering side

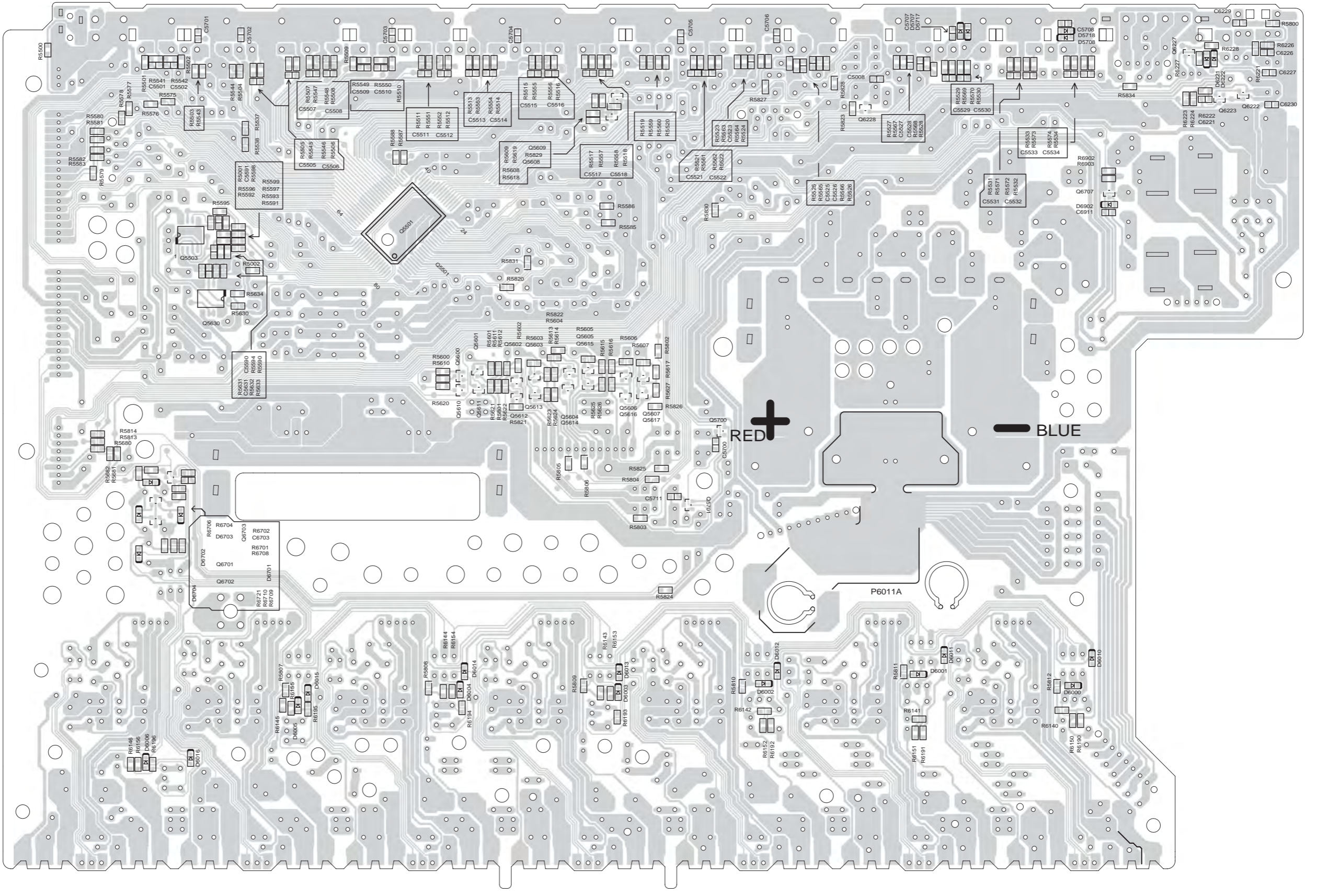
1

2

3

4

5



A

B

C

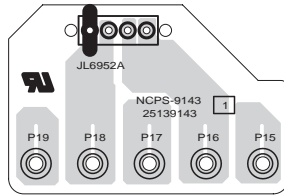
D

PRINTED CIRCUIT BOARD VIEWS-3

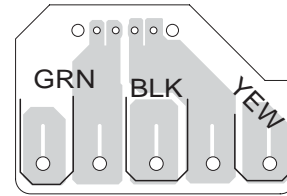
1

**U02** POWER SUPPLY PC BOARD (NAPS-9143)

Component side



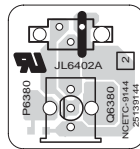
Soldering side



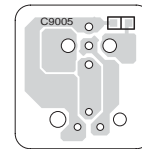
2

**U03** THERMAL SENSOR PC BOARD (NAETC-9144)

Component side



Soldering side



3

**U04** HOLDER PC BOARD (NAETC-9145)

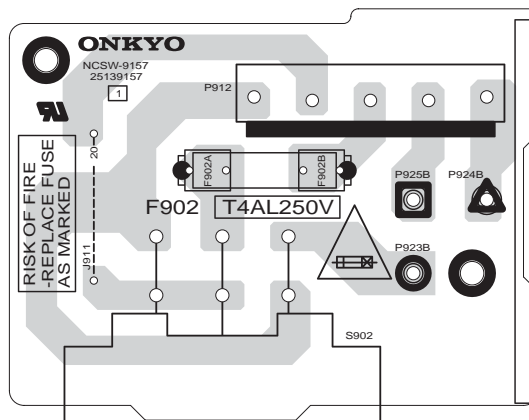
Component side



4

**U12** SWITCH PC BOARD (NASW-9157)

Component side



5

A

B

C

D

# PRINTED CIRCUIT BOARD VIEWS-4

## U05 DISPLAY PC BOARD (NADIS-9148)

Component side

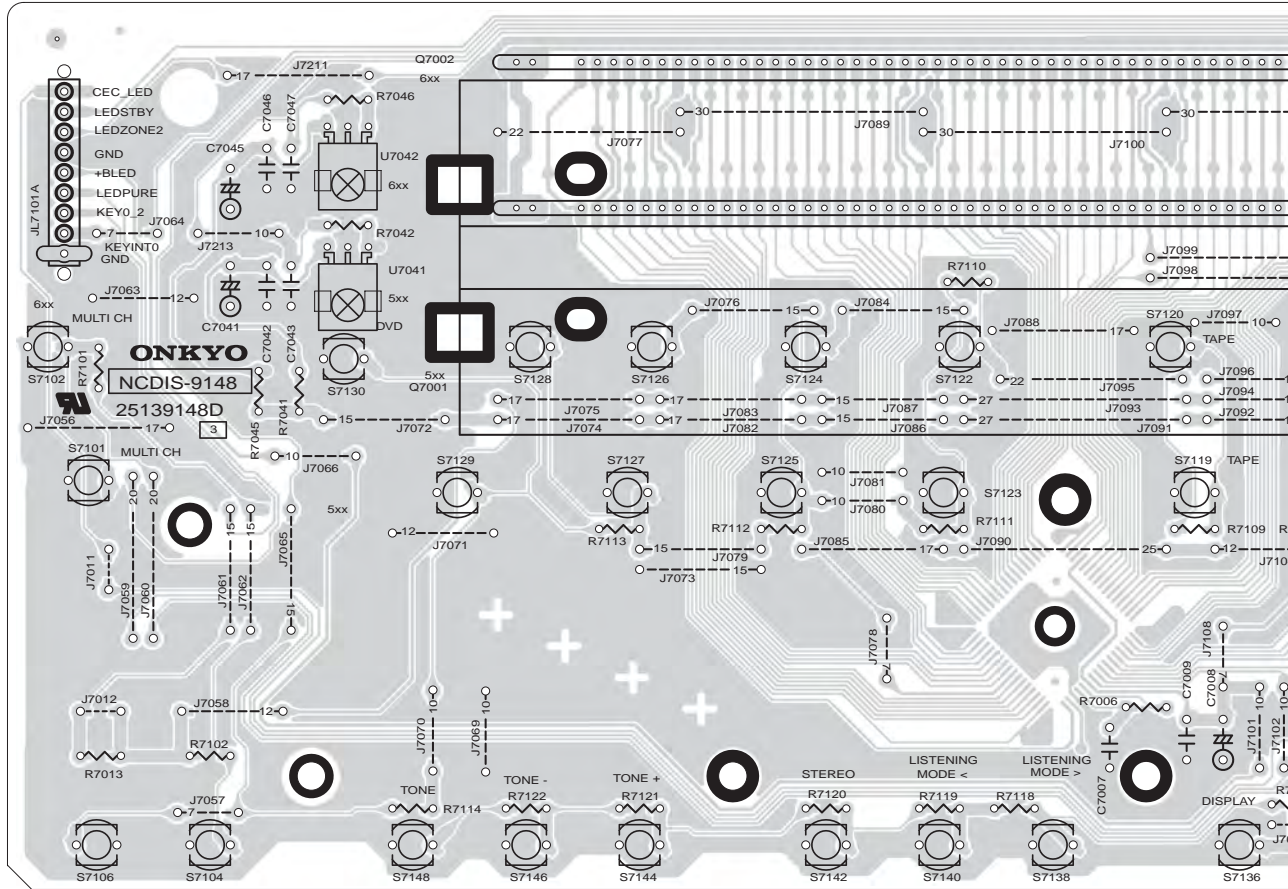
1

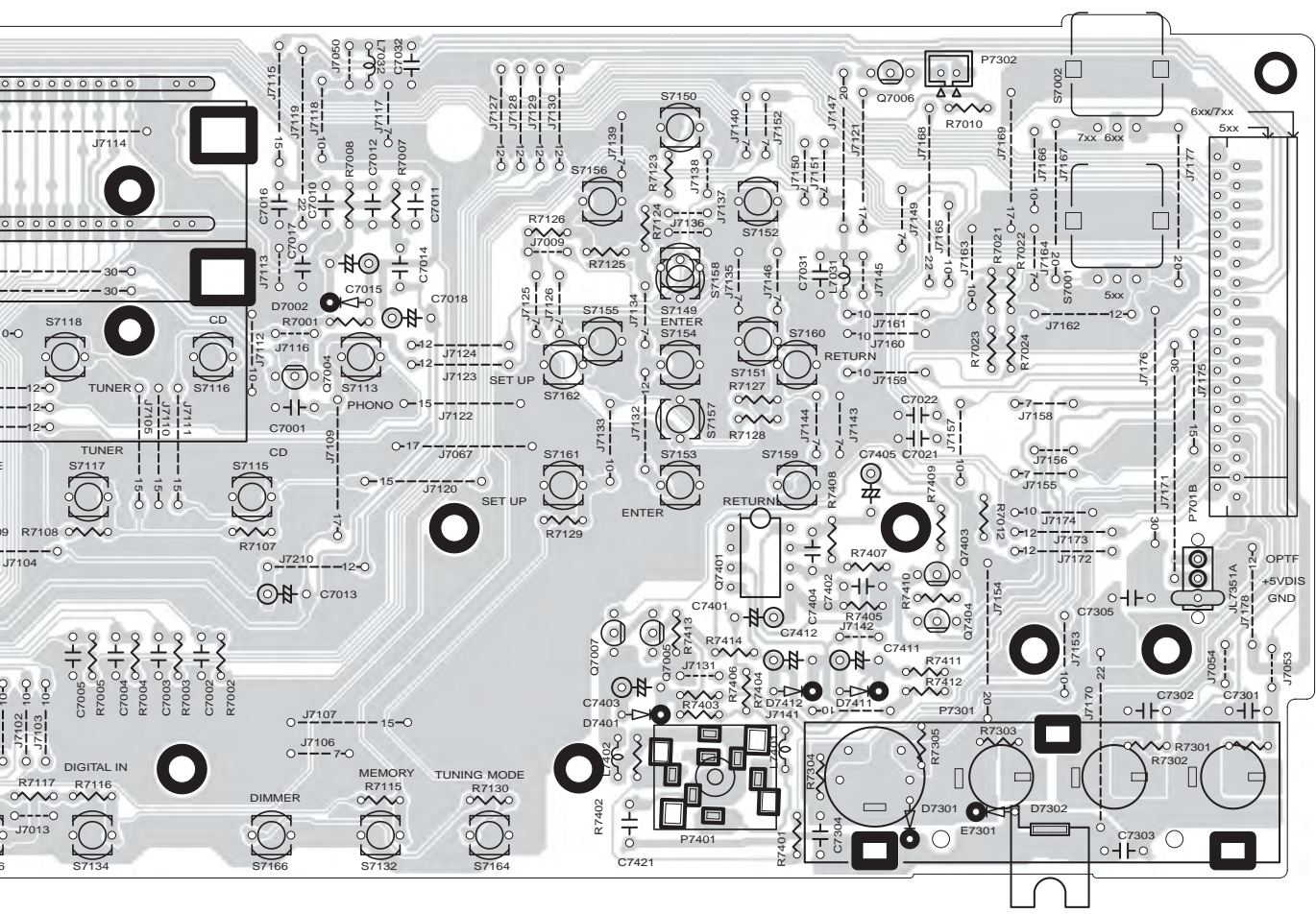
2

3

4

5





A

B

C

D

E

F

G

H

PRINTED CIRCUIT BOARD VIEWS-4

**U05** DISPLAY PC BOARD (NADIS-9148)

Component side

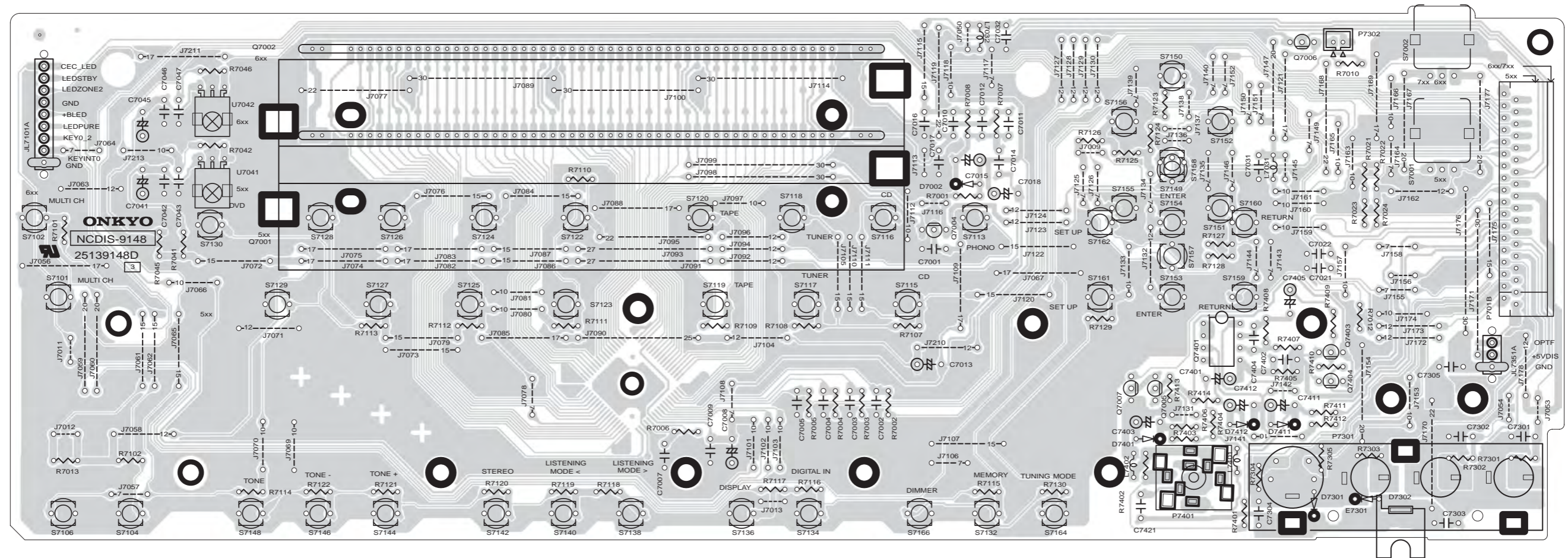
1

2

3

4

5





A

B

C

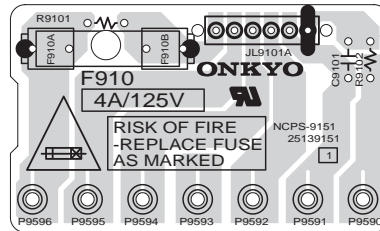
D

## PRINTED CIRCUIT BOARD VIEWS-6

1

**U08** POWER SUPPLY PC BOARD (NAPS-9151)

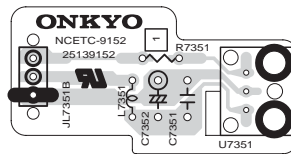
Component side



2

**U09** FRONT OPT PC BOARD (NAETC-9152)

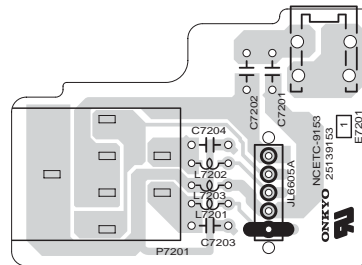
Component side



3

**U10** HEADPHONE JACK PC BOARD (NAETC-9153)

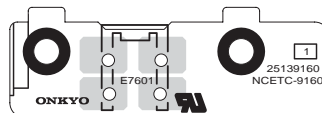
Component side



4

**U15** HOLDER PC BOARD (NAETC-9160)

Component side



5



A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-7

**U17** DSP PC BOARD (NADG-9189)

Side-A

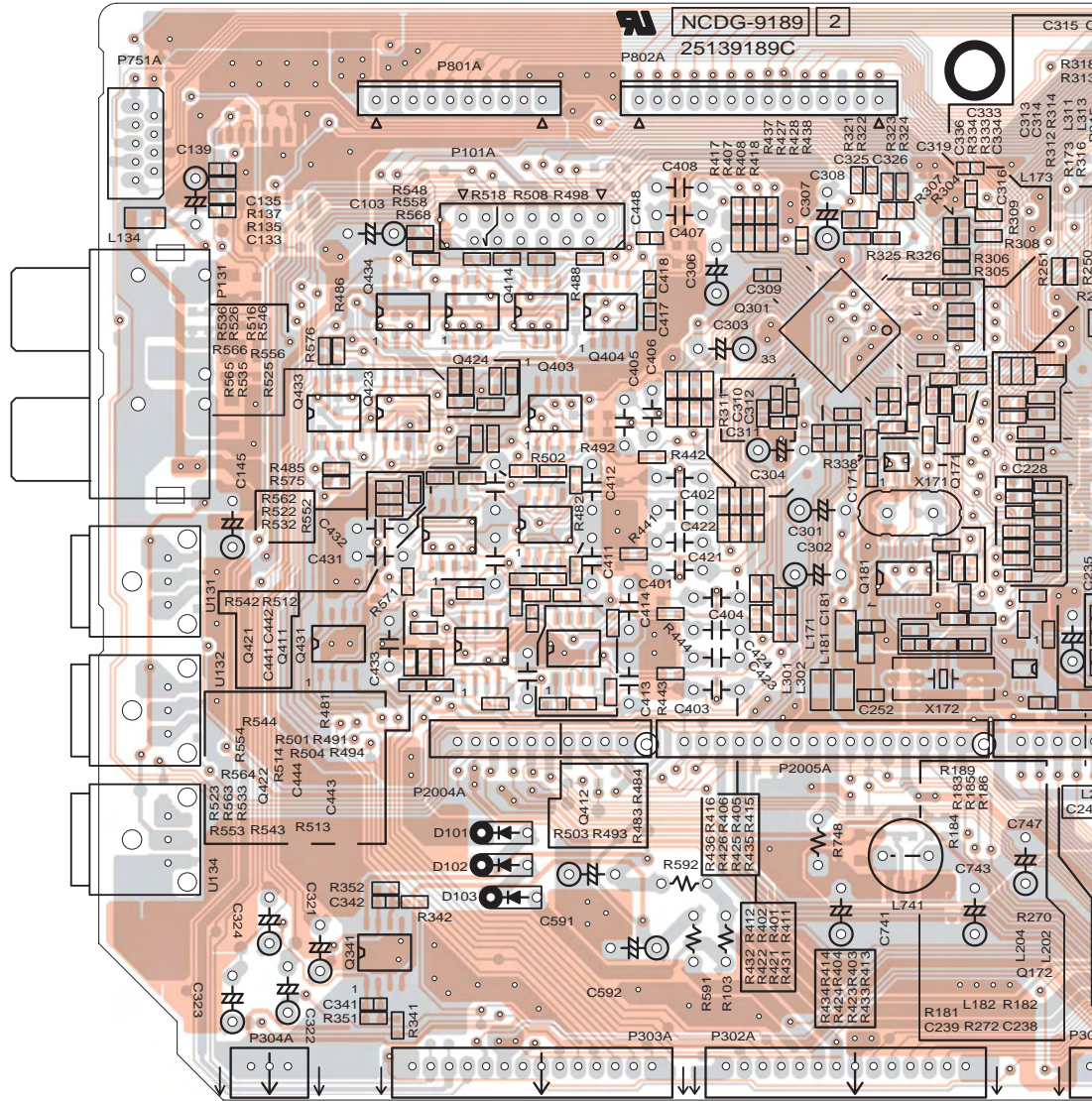
1

2

3

4

5

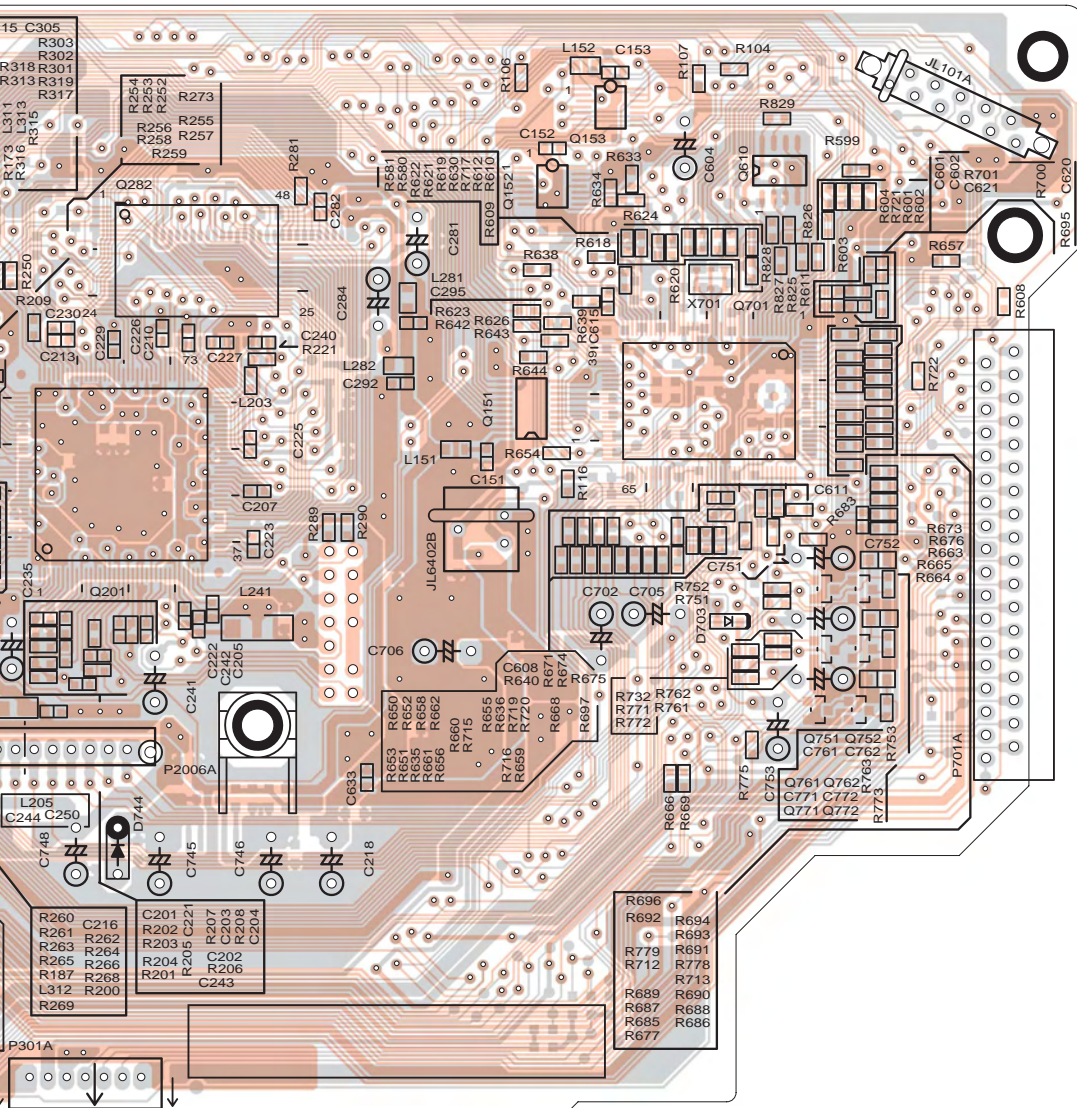


E

F

G

H



A B C D E F G H

PRINTED CIRCUIT BOARD VIEWS-7

**U17** DSP PC BOARD (NADG-9189)

Side-A

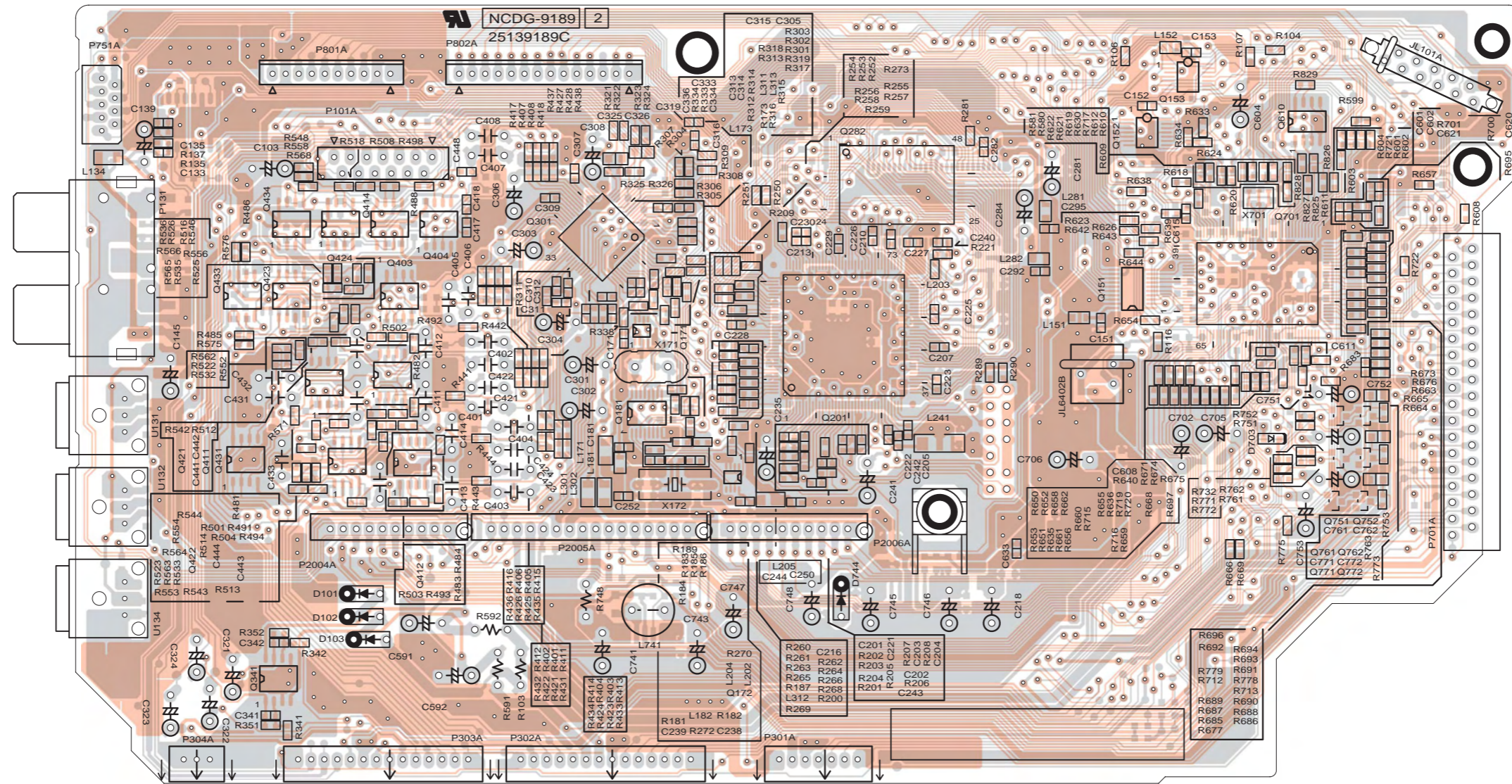
1

2

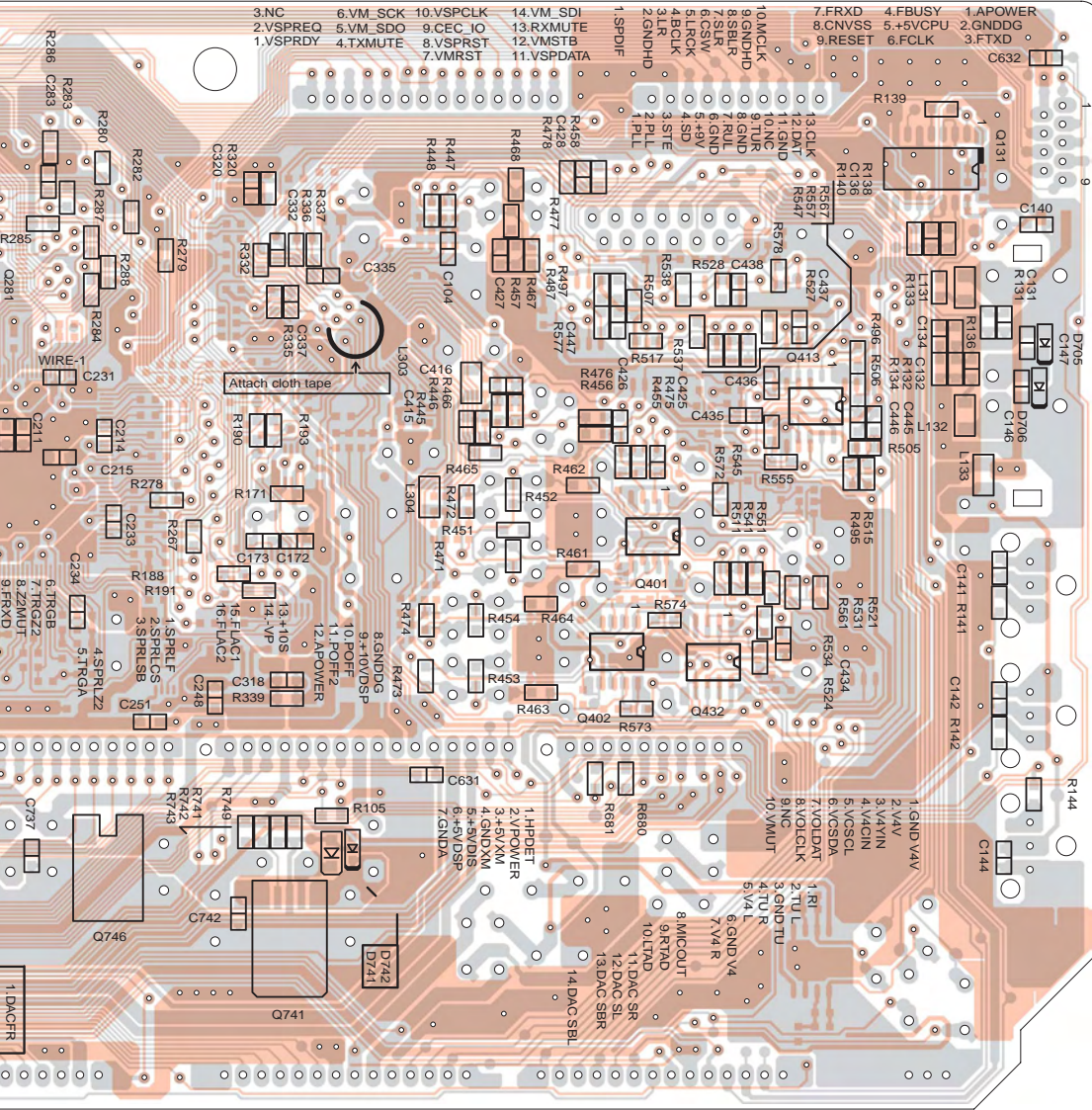
3

4

5







PRINTED CIRCUIT BOARD VIEWS-8

**U17** DSP PC BOARD (NADG-9189)

Side-B

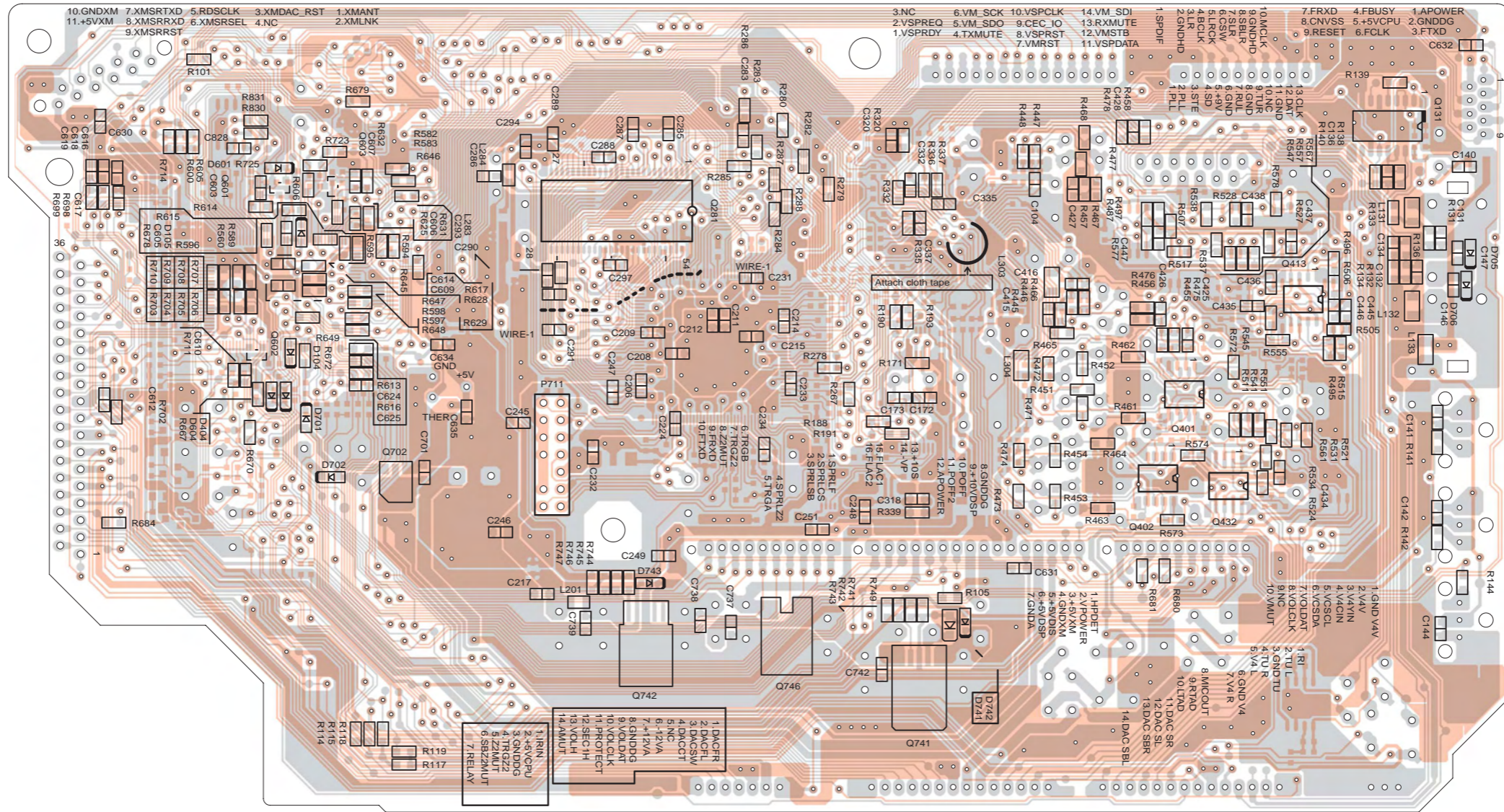
1

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A

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C

D

# PRINTED CIRCUIT BOARD VIEWS-10

## U18 VIDEO AND SP TERMINAL PC BOARD (NAVD-9190)

Side-A

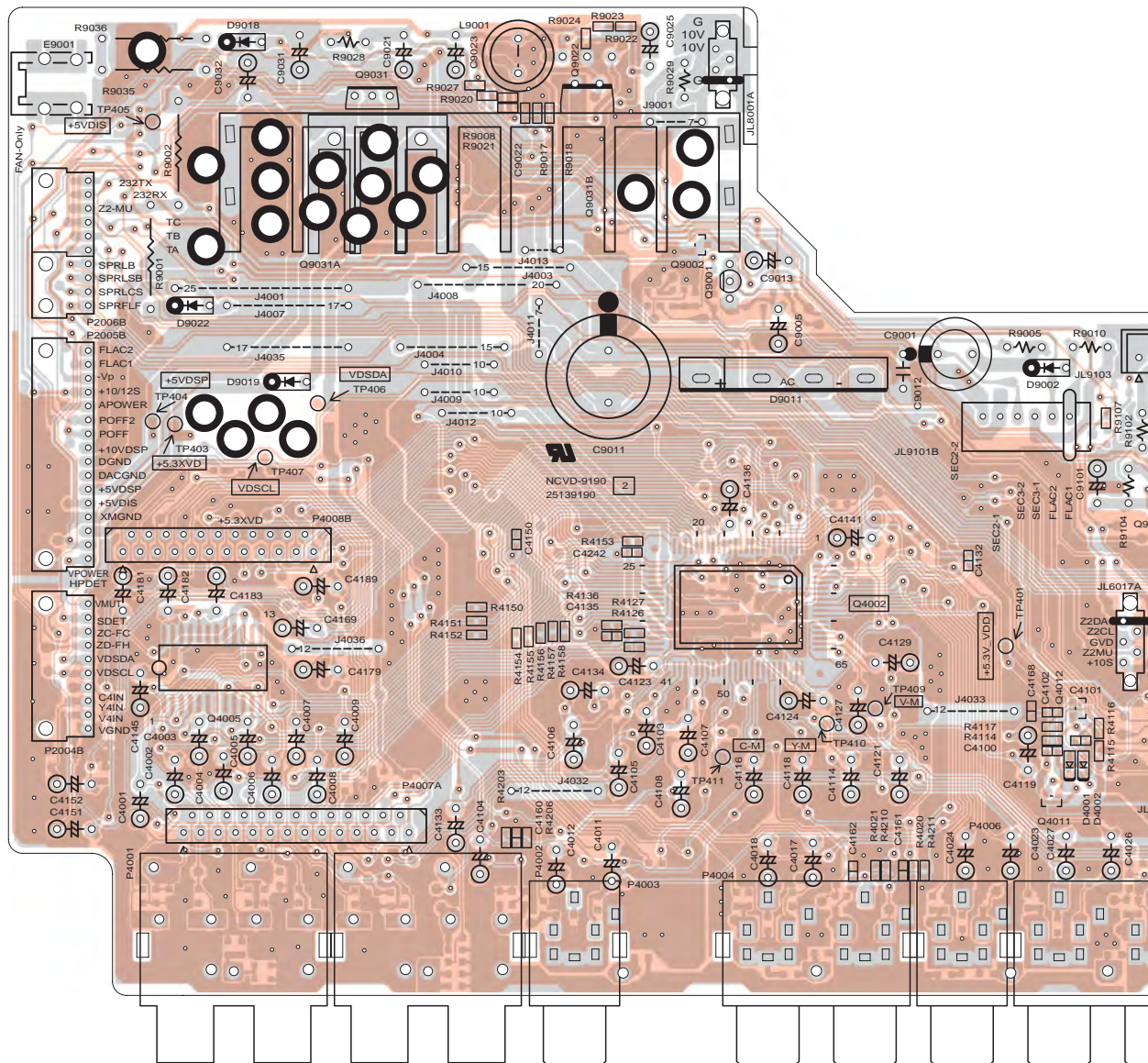
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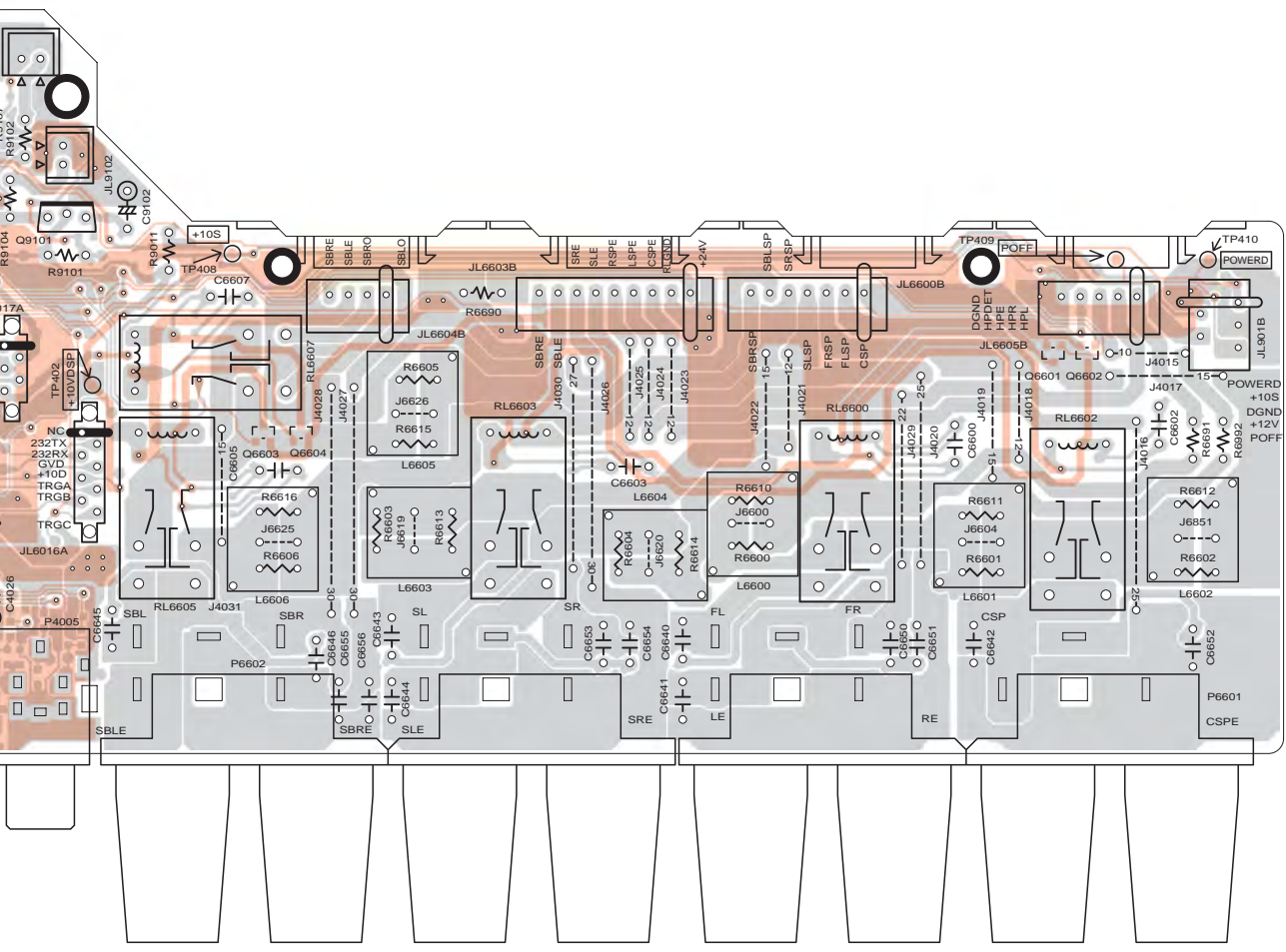


E

F

G

H



PRINTED CIRCUIT BOARD VIEWS-10

**U18** VIDEO AND SP TERMINAL PC BOARD (NAVD-9190)

Side-A

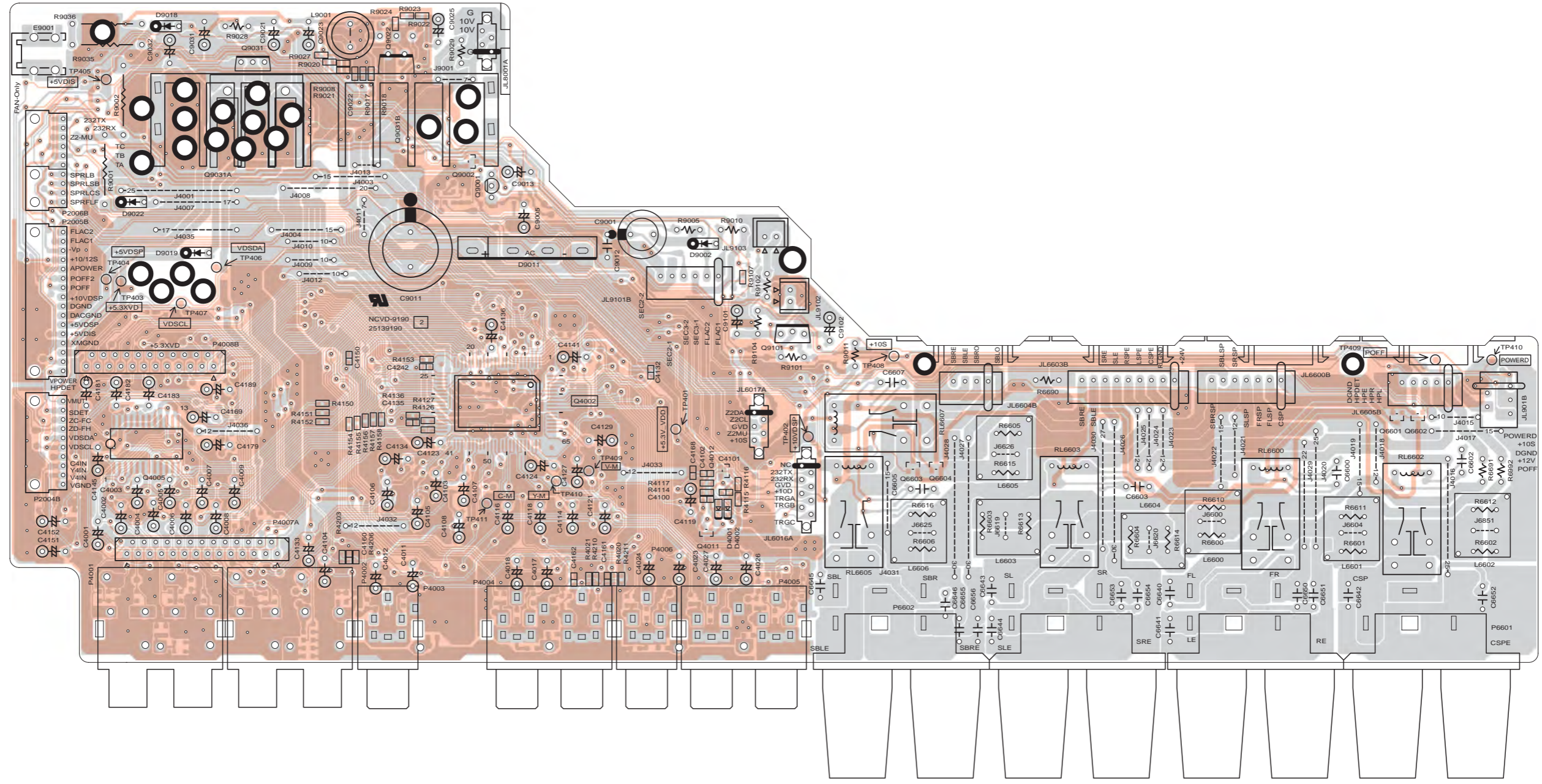
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A

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# PRINTED CIRCUIT BOARD VIEWS-11

## U18 VIDEO AND SP TERMINAL PC BOARD (NAVD-9190)

Side-B

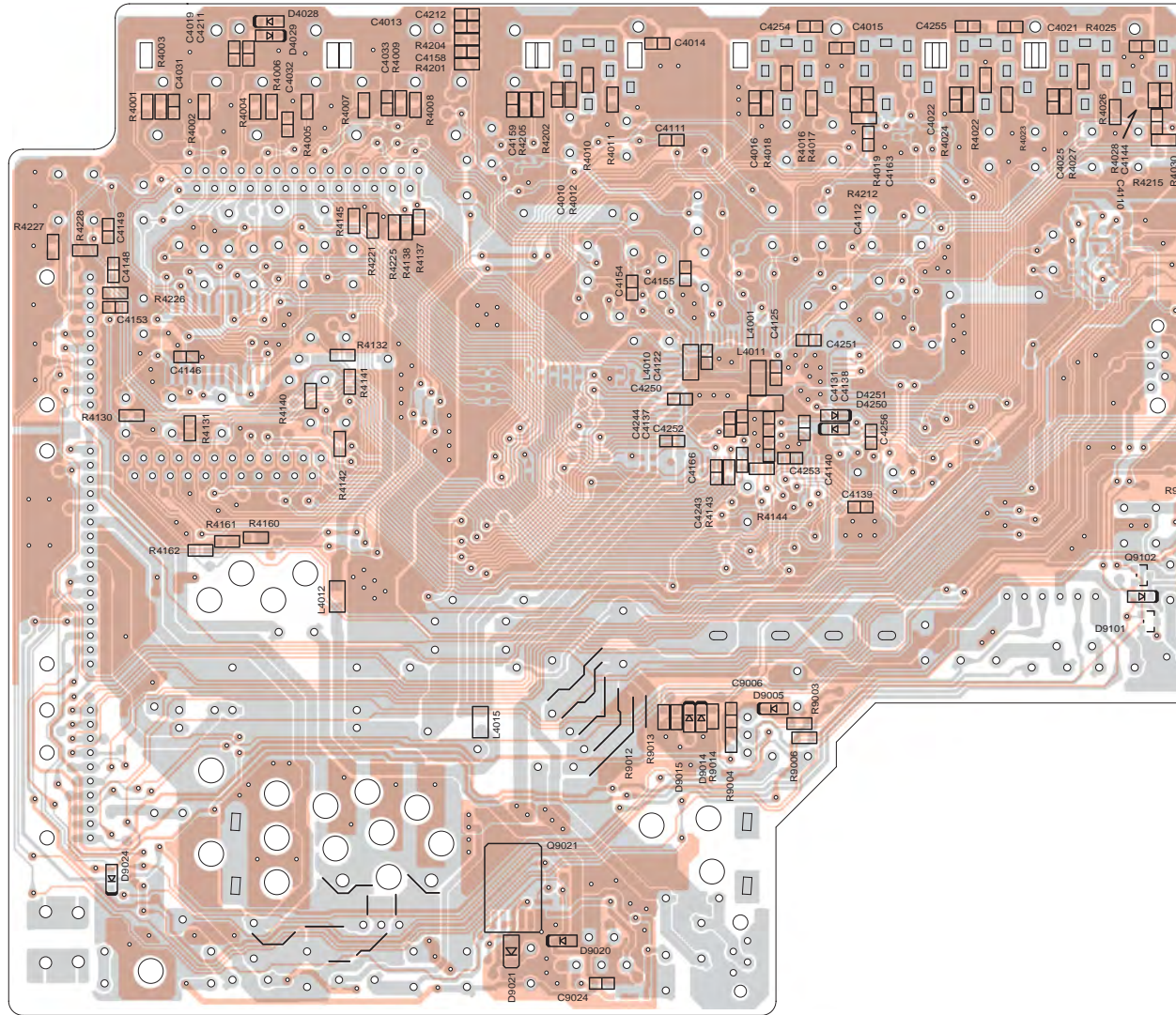
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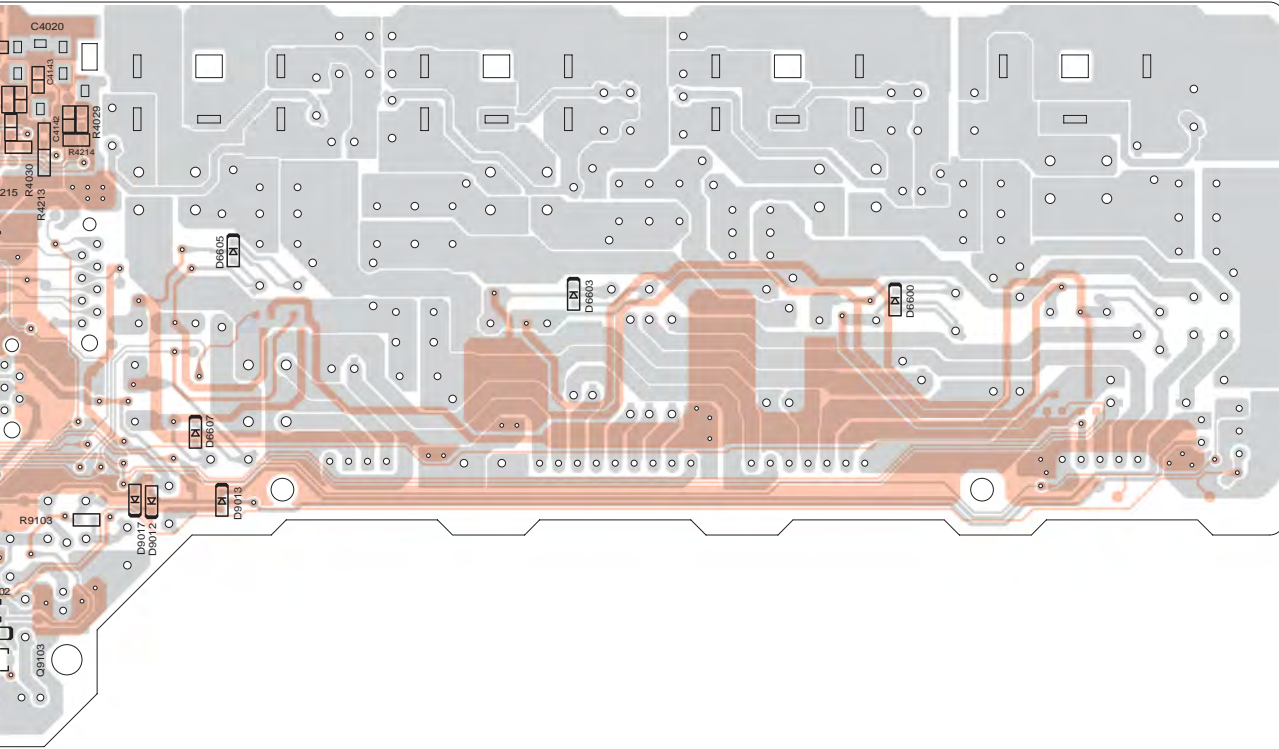


E

F

G

H



A

B

C

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PRINTED CIRCUIT BOARD VIEWS-11

**U18** VIDEO AND SP TERMINAL PC BOARD (NAVD-9190)

Side-B

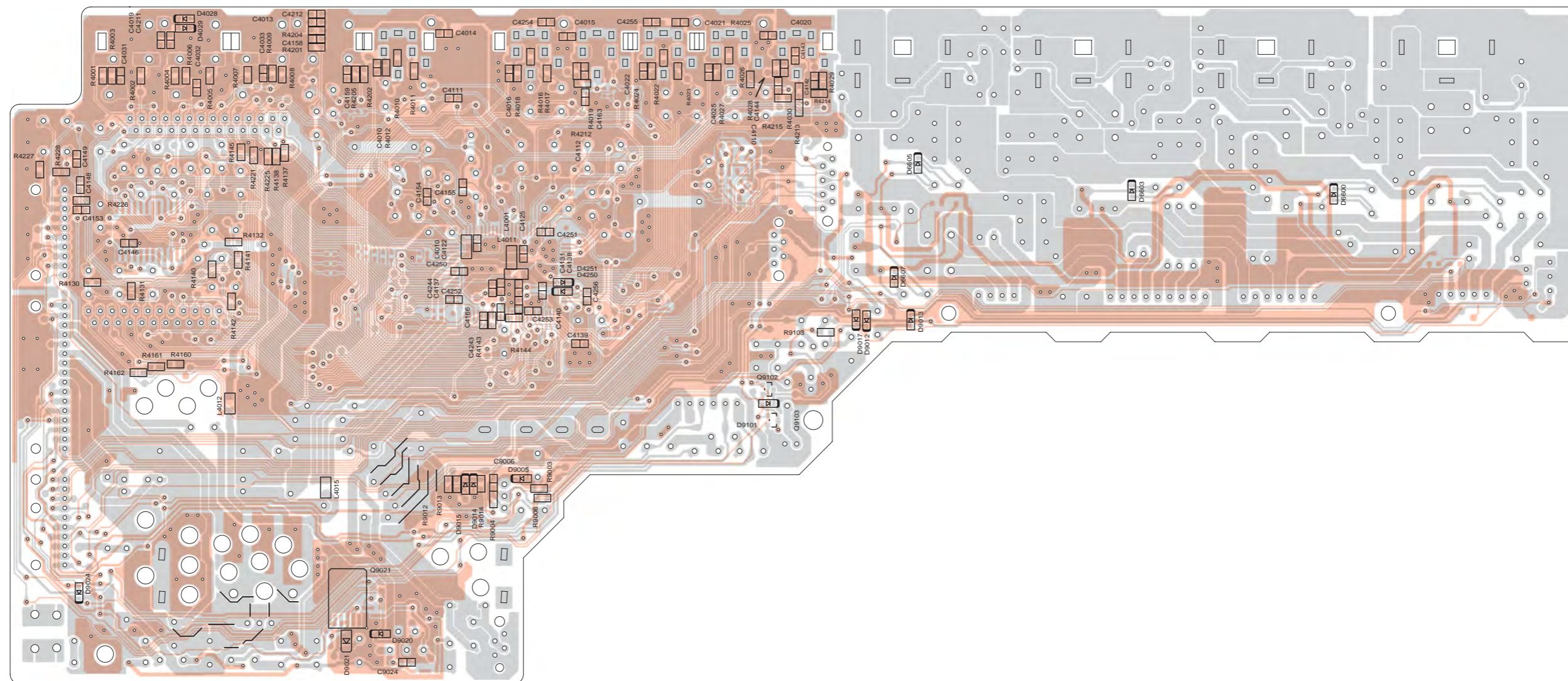
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A

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PRINTED CIRCUIT BOARD VIEWS-12

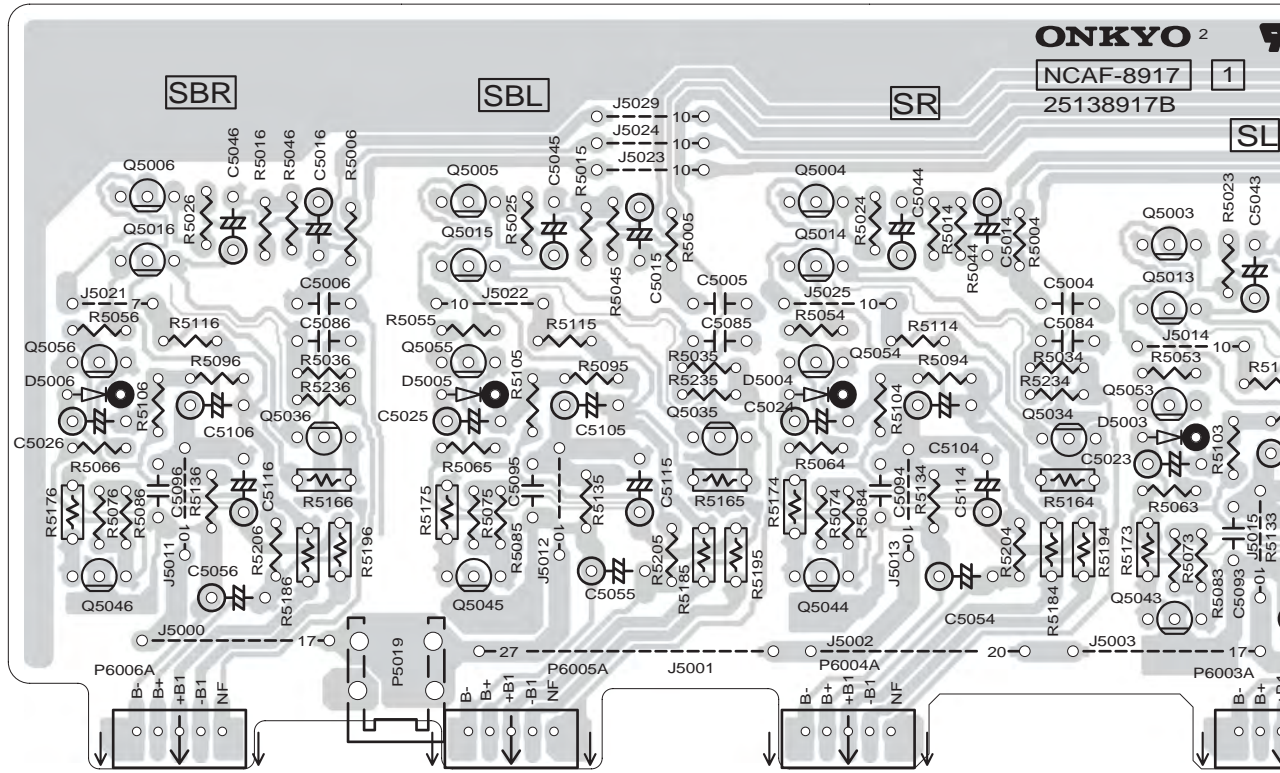
**U21 DRIVER AMPLIFIER PC BOARD (NAAF-8917)**

Component side

1

2

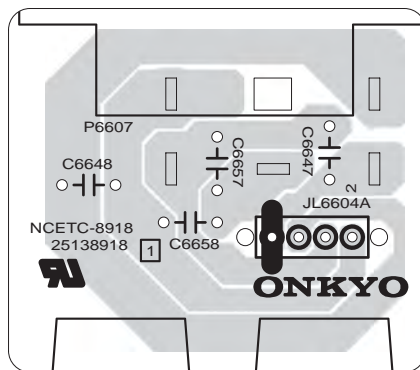
3



**U22 SPEAKER TERMINAL PC BOARD (NAETC-8918)**

Component side

4



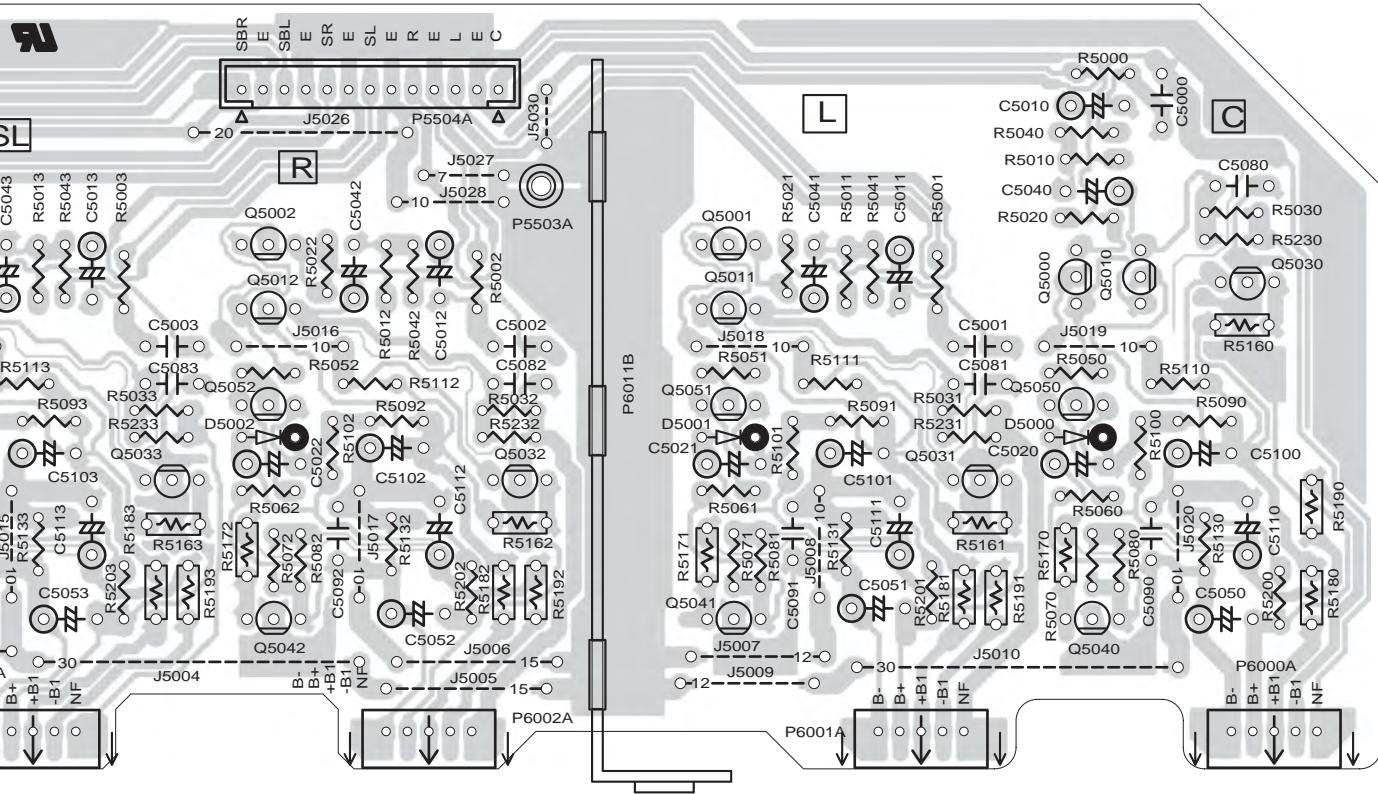
5

E

F

G

H



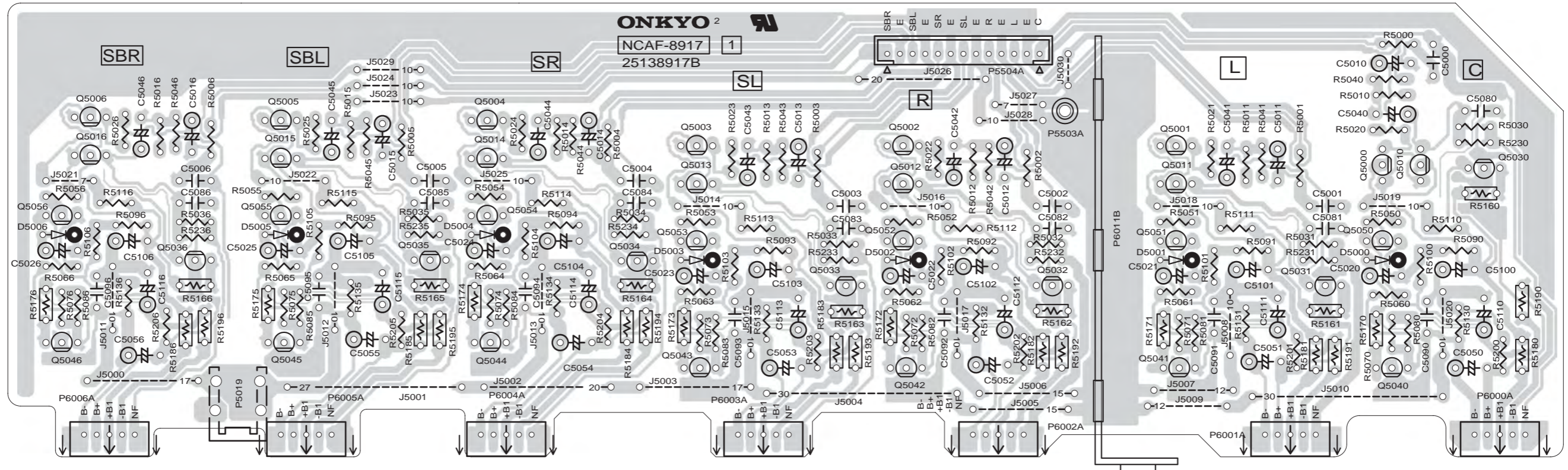
A B C D E F G H

PRINTED CIRCUIT BOARD VIEWS-12

**U21** DRIVER AMPLIFIER PC BOARD (NAAF-8917)

Component side

1



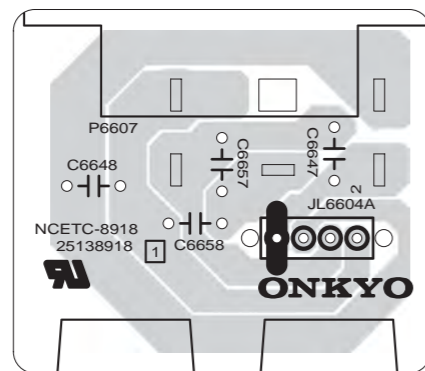
2

3

**U22** SPEAKER TERMINAL PC BOARD (NAETC-8918)

Component side

4



5



A

B

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D

PRINTED CIRCUIT BOARD VIEWS-13

U23 HDMI PC BOARD (NAHDM-9196)

Side-A

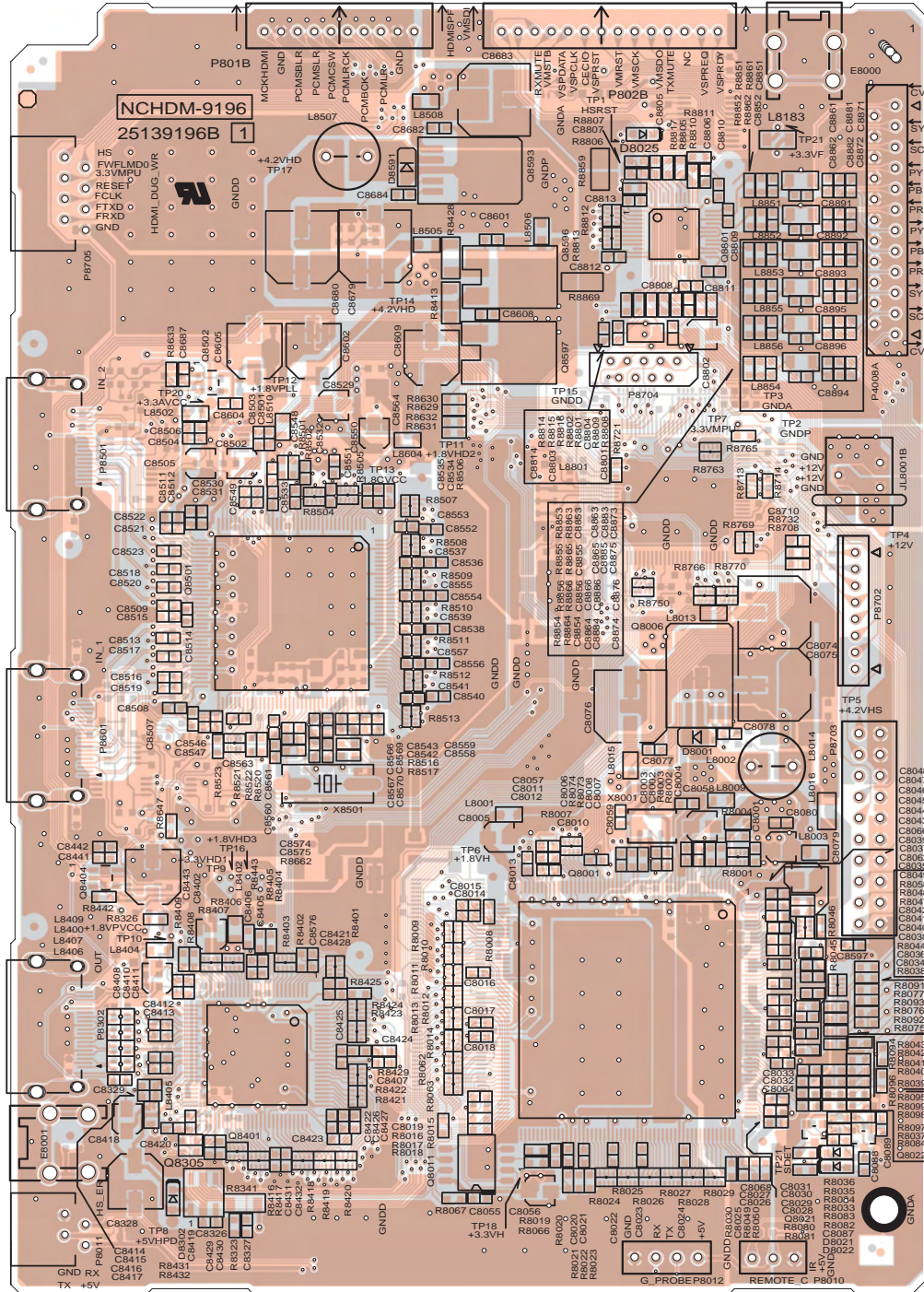
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A

B

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PRINTED CIRCUIT BOARD VIEWS-14

**U23** HDMI PC BOARD (NAHDM-9196)

Side-B

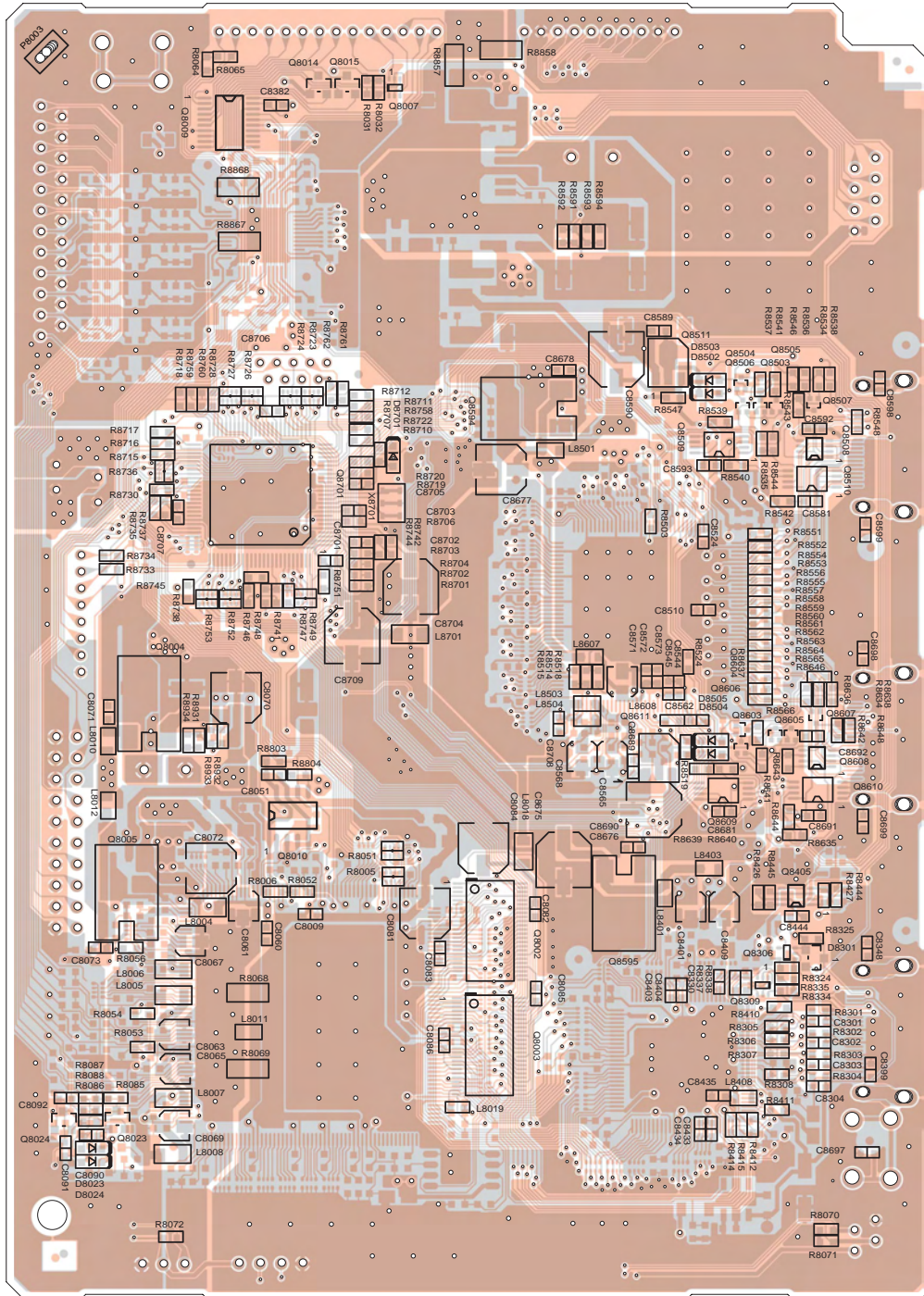
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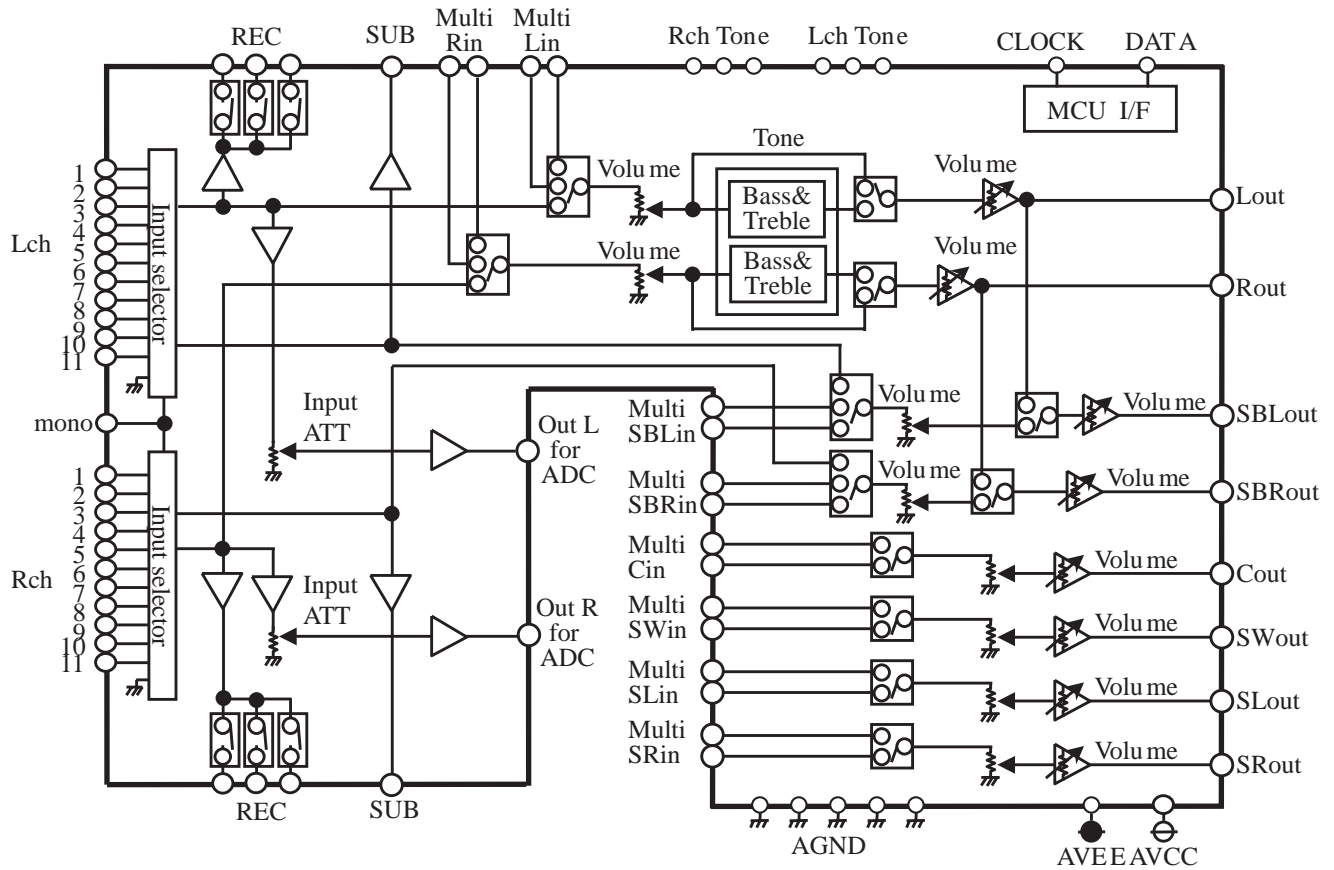
5



## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -1

Q5501 : R2S15211FP (8 ch Electronic Volume and 11 Input Selector and Tone Control)

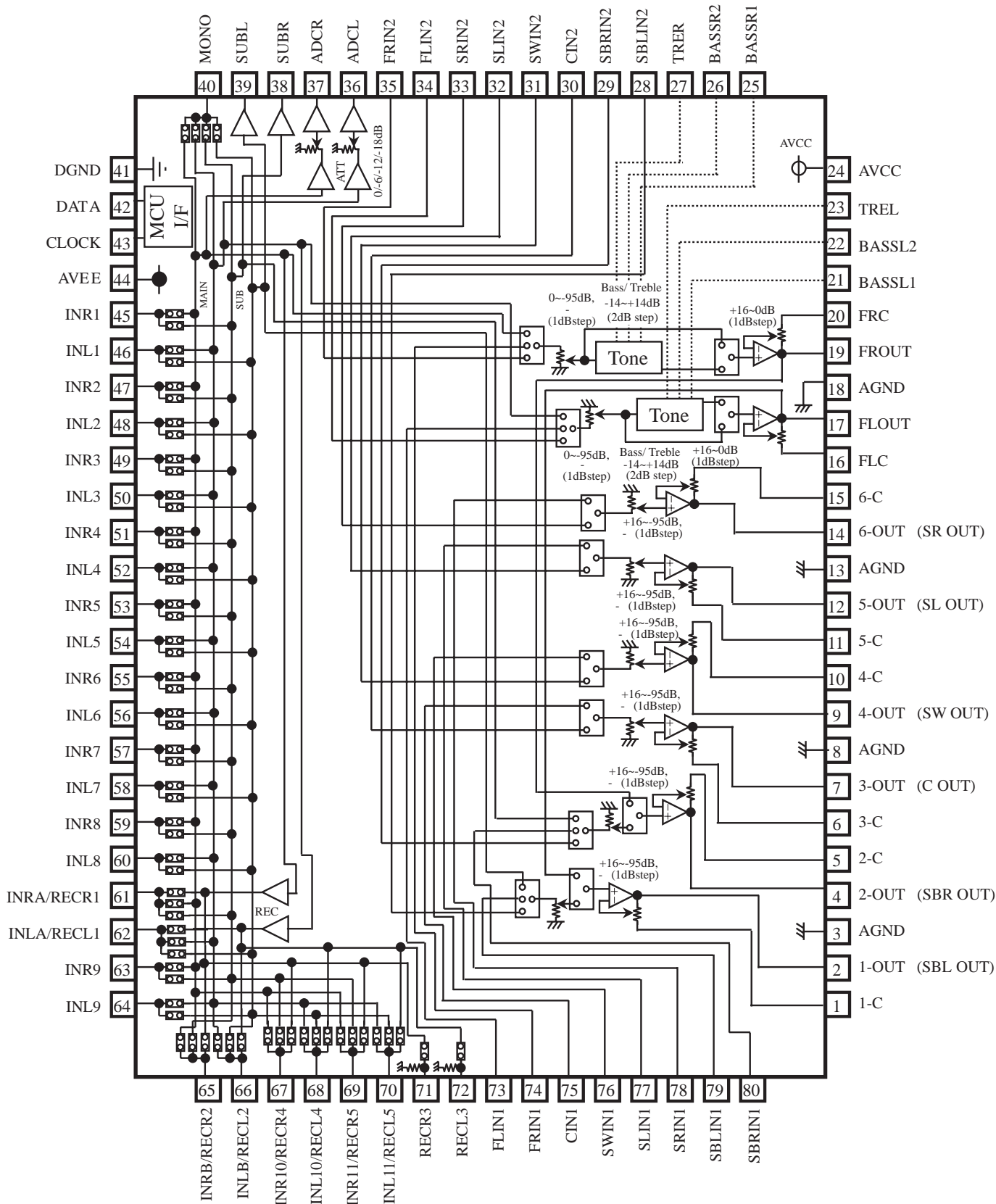
## SYSTEM BLOCK DIAGRAM



# IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -2

Q5501 : R2S15211FP (8 ch Electronic Volume and 11 Input Selector and Tone Control)

## BLOCK DIAGRAM AND PIN CONFIGURATION



## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -3

### Q5501 : R2S15211FP (8 ch Electronic Volume and 11 Input Selector and Tone Control)

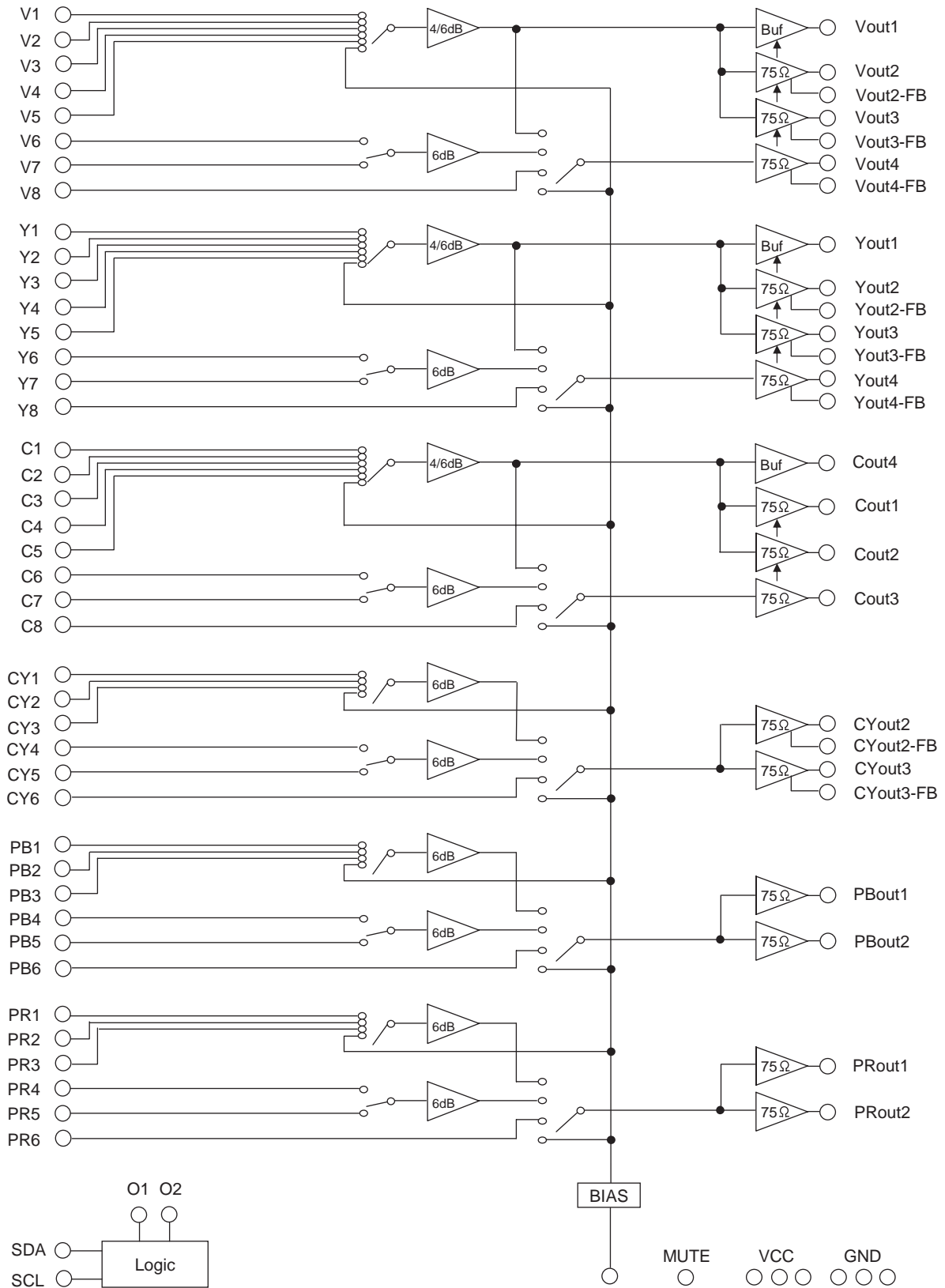
#### TERMINAL DESCRIPTION

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

Q4002: AN15881A (Video SW for TV with Multi-signal 14 Inputs and 4 Outputs)

## BLOCK DIAGRAM



## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -5

### Q4002: AN15881A (Video SW for TV with Multi-signal 14 Inputs and 4 Outputs)

#### TERMINAL DESCRIPTION (1/3)

Pin No.	Pin name	Type	Description
1	Y3	In	Luminance signal input 3
2	Y4	In	Luminance signal input 4
3	Y5	In	Luminance signal input 5
4	Y6	In	Luminance signal input 6
5	Y7	In	Luminance signal input 7
6	Y8	In	Luminance signal input 8
7	VCC1	Power supply	5.0V power supply
8	C1	In	Chrominance signal input 1
9	C2	In	Chrominance signal input 2
10	C3	In	Chrominance signal input 3
11	C4	In	Chrominance signal input 4
12	C5	In	Chrominance signal input 5
13	GND1	Ground	Ground
14	C6	In	Chrominance signal input 6
15	C7	In	Chrominance signal input 7
16	C8	In	Chrominance signal input 8
17	BIAS	Output	Bias voltage
18	CY1	In	CY1 signal input
19	CY2	In	CY2 signal input
20	CY3	In	CY3 signal input
21	CY4	In	CY4 signal input
22	CY5	In	CY5 signal input
23	CY6	In	CY6 signal input
24	PB1	In	PB1 signal input
25	PB2	In	PB2 signal input
26	PB3	In	PB3 signal input
27	PB4	In	PB4 signal input
28	PB5	In	PB5 signal input
29	PB6	In	PB6 signal input
30	PR1	In	PR1 signal input
31	PR2	In	PR2 signal input
32	PR3	In	PR3 signal input
33	PR4	In	PR4 signal input
34	PR5	In	PR5 signal input
35	PR6	In	PR6 signal input

**IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -6****Q4002: AN15881A (Video SW for TV with Multi-signal 14 Inputs and 4 Outputs)****TERMINAL DESCRIPTION (2/3)**

Pin No.	Pin name	Type	Description
36	MUTE	In	Mute control pin
37	PROUT2	Out	PROUT2 signal output
38	O1	Out	General output 1
39	PROUT1	Out	PROUT1 signal output
40	O2	Out	General output 2
41	PBOUT2	Out	PBOUT2 signal output
42	PBOUT1	Out	PBOUT1 signal output
43	GND2	Ground	Ground
44	CYOUT3-FB	In	CYOUT3 feedback input
45	CYOUT3	Out	CYOUT3 signal output
46	CYOUT2-FB	In	CYOUT2 feedback input
47	CYOUT2	Out	CYOUT2 signal output
48	COUT4	Out	COUT4 signal output
49	VCC2	Power supply	5.0V power supply
50	COUT3	Out	COUT3 signal output
51	COUT2	Out	COUT2 signal output
52	COUT1	Out	COUT1 signal output
53	GND3	Ground	Ground
54	YOUT4-FB	In	YOUT4 feedback input
55	YOUT4	Out	YOUT4 signal output
56	YOUT3-FB	In	YOUT3 feedback input
57	YOUT3	Out	YOUT3 signal output
58	YOUT2-FB	In	YOUT2 feedback input
59	YOUT2	Out	YOUT2 signal output
60	YOUT1	Out	YOUT1 signal output
61	VCC3	Power supply	5.0V power supply
62	VOUT4-FB	In	VOUT4 feedback input
63	VOUT4	Out	VOUT4 signal output
64	SDA	In	I <sup>2</sup> C bus data input
65	VOUT3-FB	In	VOUT3 feedback input
66	VOUT3	Out	VOUT3 signal output
67	VOUT2-FB	In	VOUT2 feedback input
68	VOUT2	Out	VOUT2 signal output
69	VOUT1	Out	VOUT1 signal output
70	SCL	In	I <sup>2</sup> C bus clock input



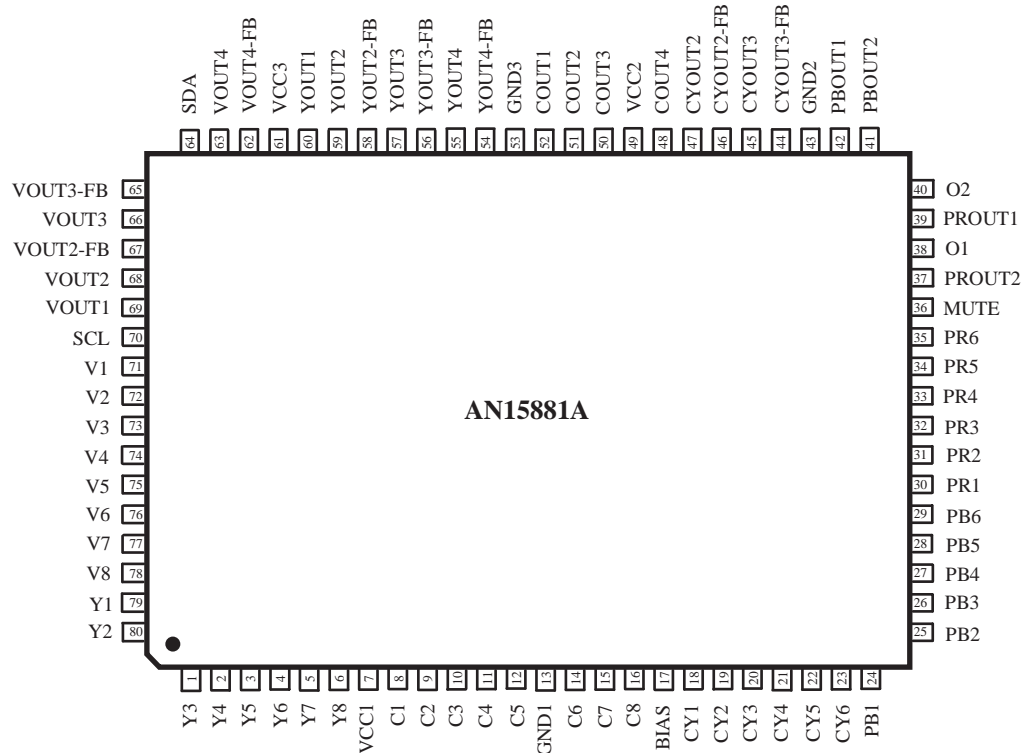
## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -7

### Q4002: AN15881A (Video SW for TV with Multi-signal 14 Inputs and 4 Outputs)

#### TERMINAL DESCRIPTION (3/3)

Pin No.	Pin name	Type	Description
71	V1	In	Video composite signal input 1
72	V2	In	Video composite signal input 2
73	V3	In	Video composite signal input 3
74	V4	In	Video composite signal input 4
75	V5	In	Video composite signal input 5
76	V6	In	Video composite signal input 6
77	V7	In	Video composite signal input 7
78	V8	In	Video composite signal input 8
79	Y1	In	Luminance signal input 1
80	Y2	In	Luminance signal input 2

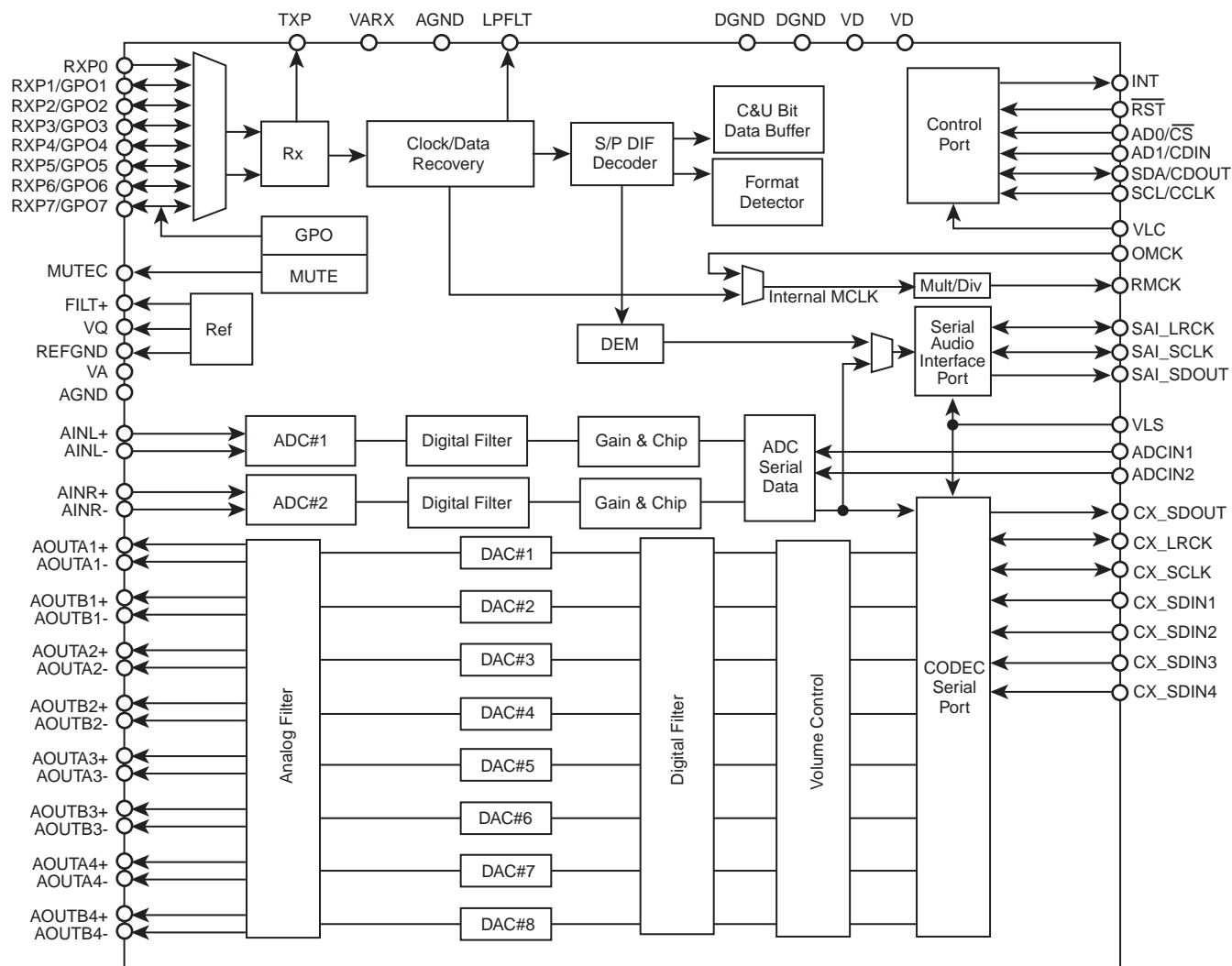
#### PIN CONFIGURATION



## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -8

## Q301 : CS42518 (8-Ch Codec with S/PDIF Receiver)

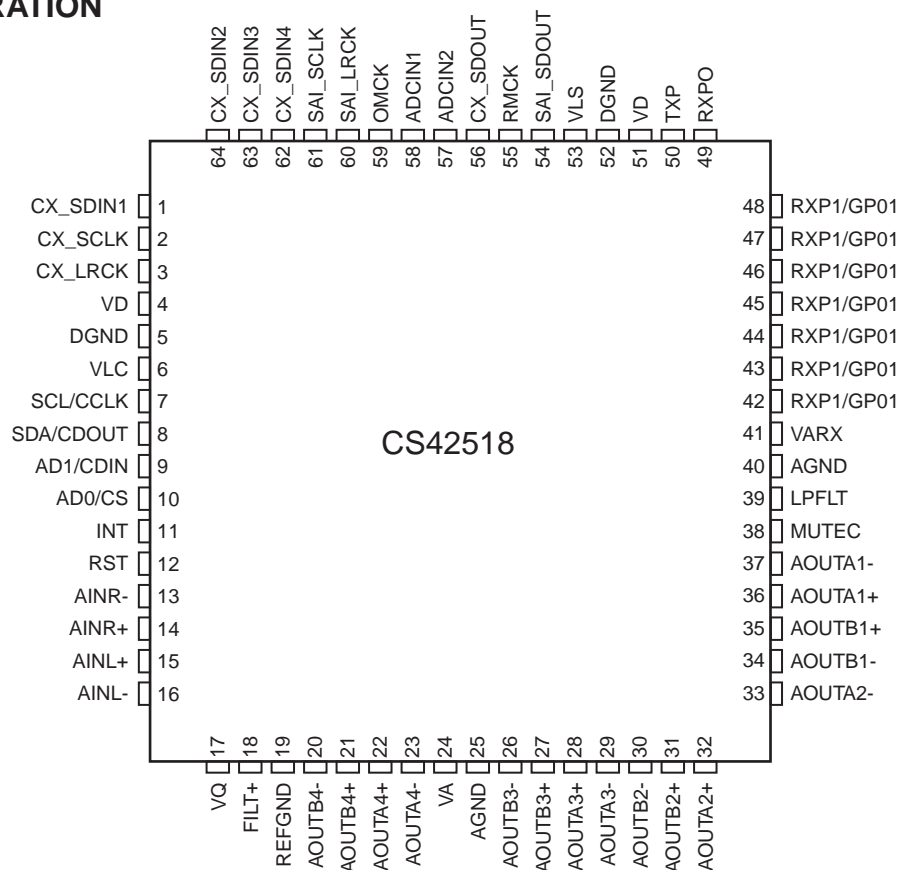
## BLOCK DIAGRAM



## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -9

### Q301 : CS42518 (8-Ch Codec with S/PDIF Receiver)

#### PIN CONFIGURATION



#### TERMINAL DESCRIPTION (1/3)

Pin Name	#	Pin Description
CX_SDIN1	1	Codec Serial Audio Data Input (Input) - Input for two's complement serial audio data.
CX_SDIN2	64	
CX_SDIN3	63	
CX_SDIN4	62	
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	Digital Power (Input) - Positive power supply for the digital section.
	51	
DGND	5	Digital Ground (Input) - Ground reference. Should be connected to digital ground.
	52	
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 I2C mode as shown in the Typical Connection Diagram.
SDA/CDOUT	8	Serial Control Data (Input/Output) - SDA is a data I/O line in IC mode and requires an external pull-up resistor to the logic interface voltage, as shown in the Typical connection Diagram. CDOUT 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 a chip address pin in I2C mode; CDIN is the input data line for control port interface in SPI mode.

## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -10

### Q301 : CS42518 (8-Ch Codec with S/PDIF Receiver)

#### TERMINAL DESCRIPTION (2/3)

Pin Name	#	Pin Description
AD0/CS	10	Address Bit 0 (I2C)/Control Port Chip Select (SPI) (Input) - AD0 is a chip address pin in I2C mode; CS is the chip select signal in SPI mode.
INT	11	Interrupt (Output) - The CS42518 will generate an interrupt condition as per the Interrupt Mask register.
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 right Channel Analog Input (Input) - Signals are presented differentially to the delta-sigma modulators via the AINR+/- 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.
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	
AOUTA4 +, -	22, 23	
AOUTB4 +, -	21, 20	
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.
MUTE	38	Mute Control (Output) - The Mute Control pin outputs high impedance following an initial power -on condition or whenever the PDN bit is set to a "1", forcing the codec into power -down mode. The signal will remain in a high impedance state as long as the part is in power-down mode. The Mute Control pin goes to the selected "active" state during reset, muting, or if the master clock to left/right clock frequency ratio is incorrect. This pin is intended to be used as a control for external mute circuits to prevent the clicks and pops that can occur in any single supply system. The use of external mute circuits are not mandatory but may be desired for designs requiring the absolute minimum in extraneous clicks and pops.
LPFLT	39	PLL Loop Filter (Output) - An RC network should be connected between this pin and ground.
RXP7/GPO7	42	S/PDIF Receiver Input/ General Purpose Output (Input/ Output) - Receiver inputs for S/PDIF encoded data. The CS42518 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.
RXP6/GPO6	43	
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.
VLP	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

## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -11

### Q301 : CS42518 (8-Ch Codec with S/PDIF Receiver)

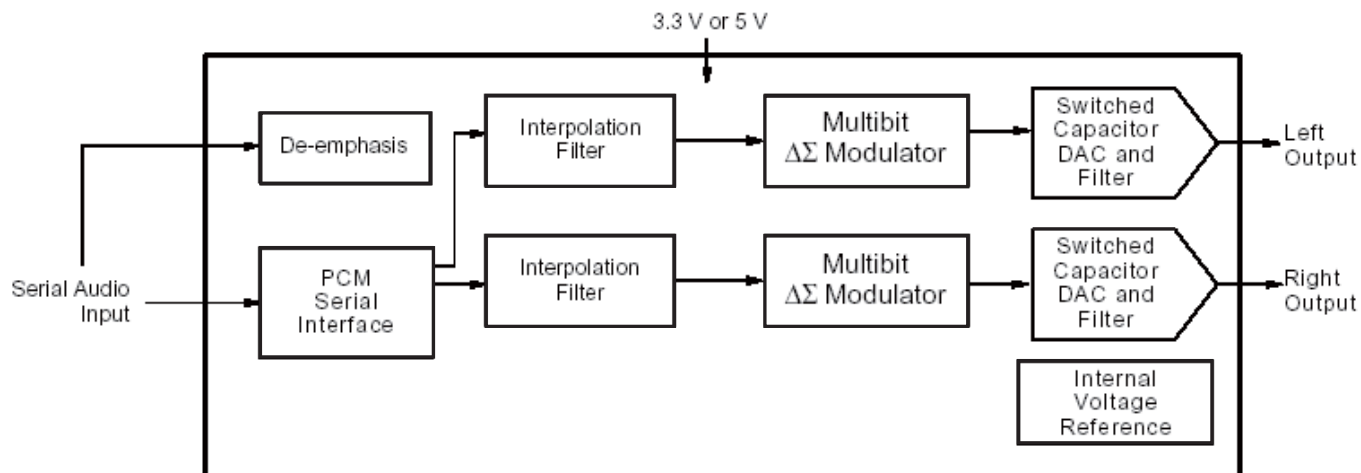
#### TERMINAL DESCRIPTION (3/3)

Pin Name	#	Pin Description
CL_SDOOUT	56	CODEC Serial Data Output (Output) - Output for two's complement serial audio data the internal and external ADCs.
ADCIN1	58	External ADC Serial Input (Input) - The CS42518 provides for up two external stereo analog to digital converter inputs to provide a maximum of six channels on serial data output line when the CS42518 is placed in One Line mode.
ADCIN2	57	
OMCK	59	External Reference Clock (Input) - External clock reference that must be within the ranges specified in currently active on the serial audio data line.
SAI_LRCK	60	Serial Audio Interface Left/Right Clock (Input/Output) - Determines which channel, Left of Right, is currently active on the serial audio data line.
SAI_LRCK	61	Serial Audio Interface Serial Clock (Input/Output) - Serial clock for the Serial Audio Interface

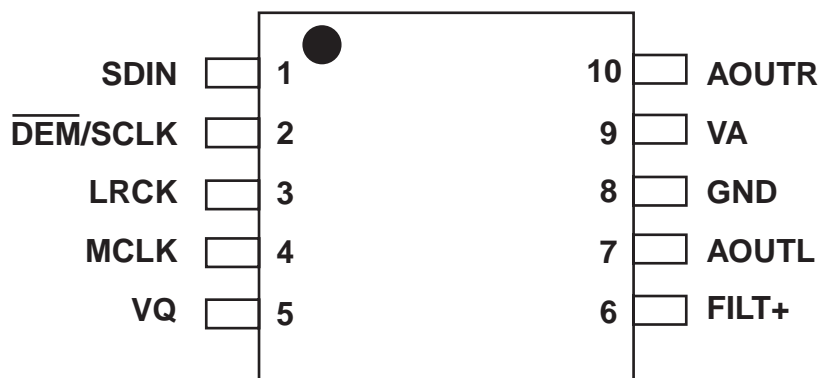
## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -12

## Q2002: CS4344-CZZR (24bit, 192kHz, Stereo, DAC)

## BLOCK DIAGRAM



## PIN CONFIGURATION



## TERMINAL DESCRIPTION

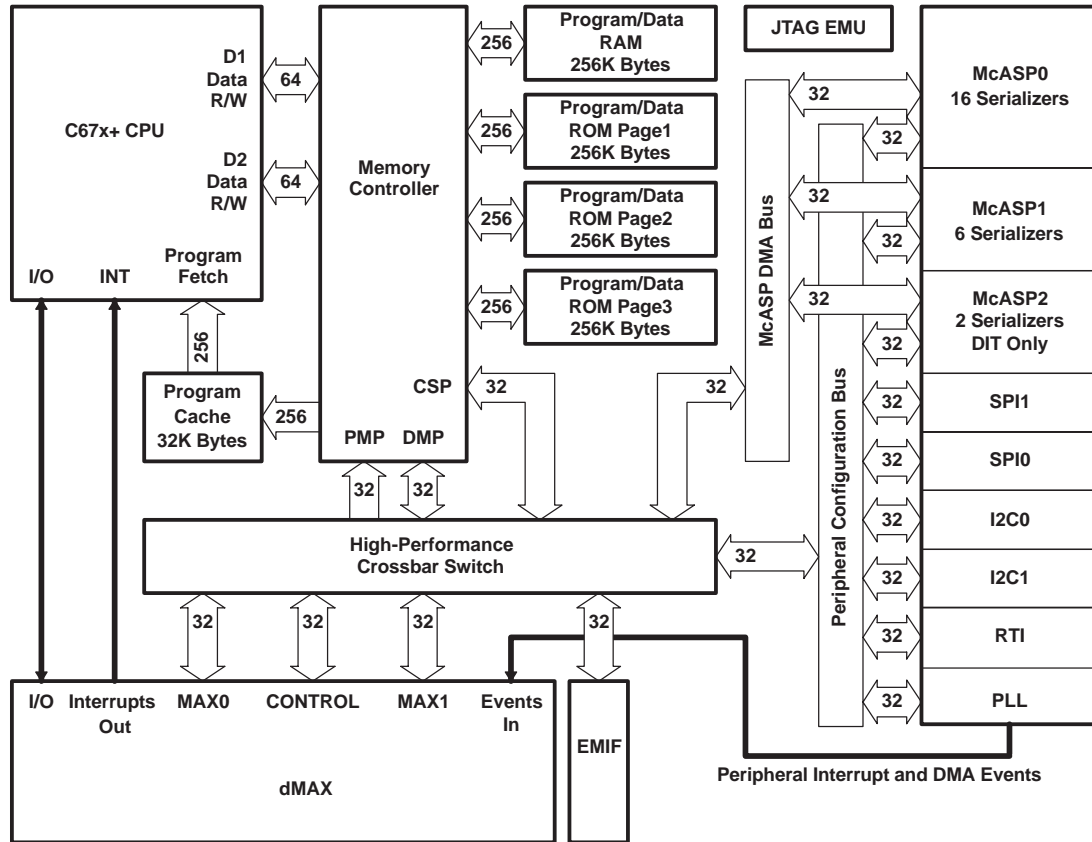
Pin Name	#	Pin Description
SDIN	1	<b>Serial Audio Data Input (Input)</b> - Input for two's complement serial audio data.
$\overline{\text{DEM/SCLK}}$	2	<b>De-Emphasis/External Serial Clock Input (Input)</b> - used for de-emphasis filter control or external serial clock input.
LRCK	3	<b>Left Right Clock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

# IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -13

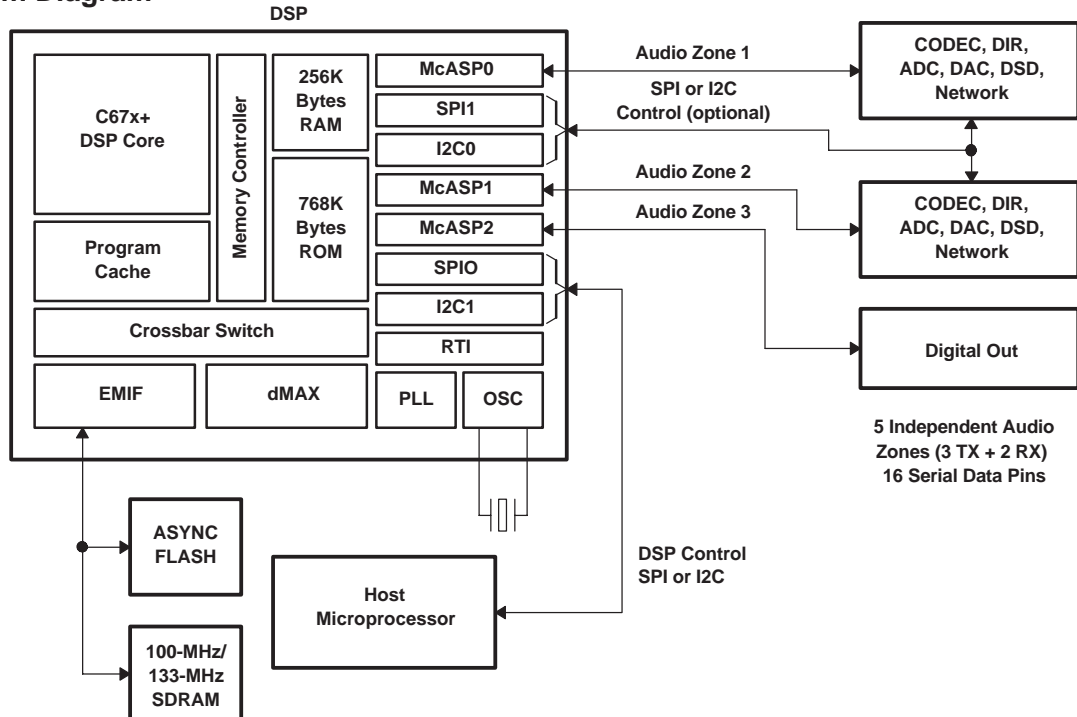
## Q201: D708E001BRFP266 (Audio DSP)

### BLOCK DIAGRAM

#### Device Block Diagram



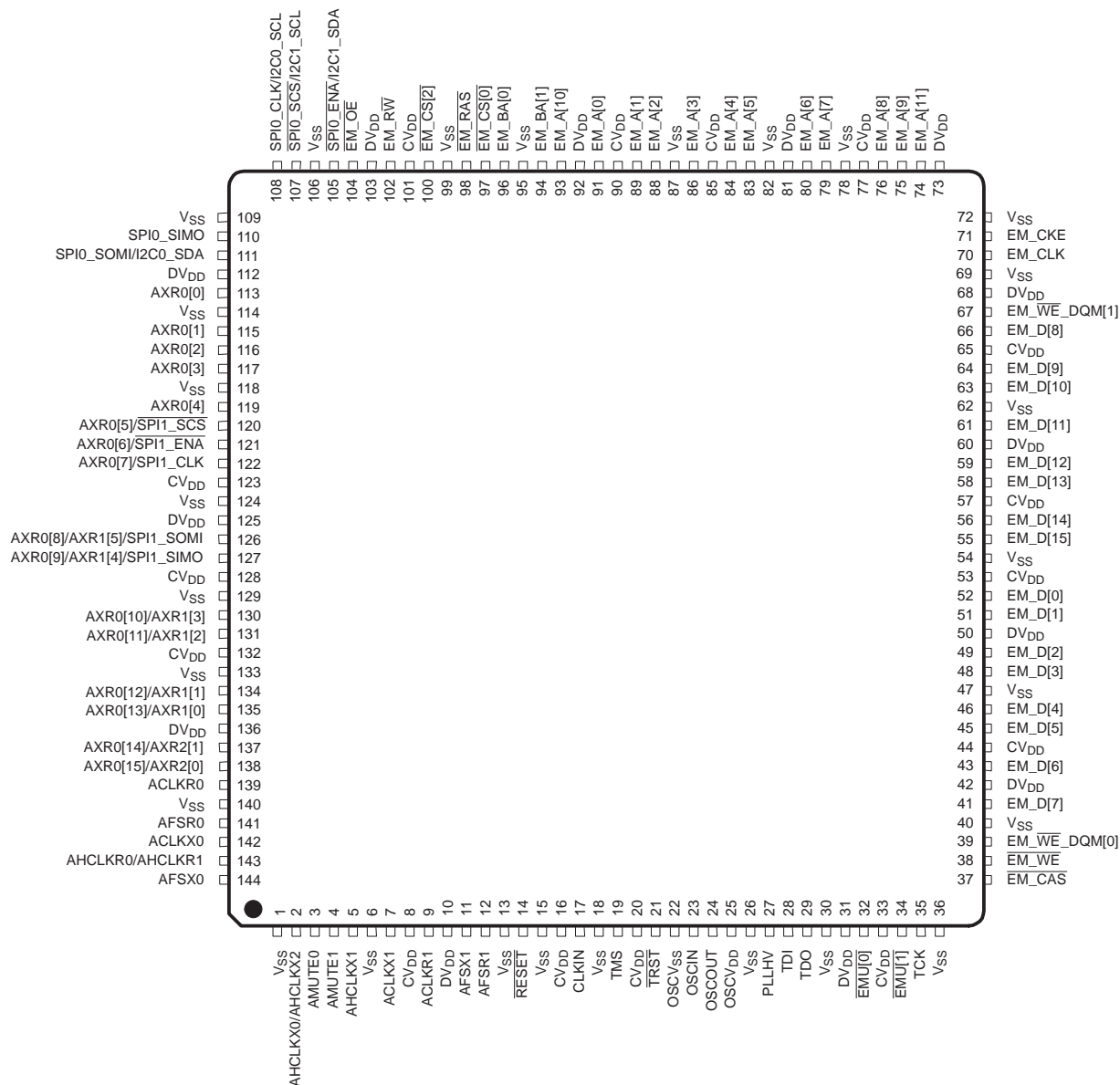
#### System Diagram



# IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -14

## Q201: D708E001BRFP266 (Audio DSP)

### PIN CONFIGURATION





## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -15

## Q201: D708E001BRFP266 (Audio DSP)

## TERMINAL DESCRIPTION

SIGNAL NAME	PIN NO.	TYPE <sup>(1)</sup>	PULL <sup>(2)</sup>	GPIO <sup>(3)</sup>	DESCRIPTION
<b>External Memory Interface (EMIF) Address and Control</b>					
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 -16

## Q201: D708E001BRFP266 (Audio DSP)

## TERMINAL DESCRIPTION

SIGNAL NAME	PIN NO.	TYPE <sup>(1)</sup>	PULL <sup>(2)</sup>	GPIO <sup>(3)</sup>	DESCRIPTION
<b>McASP0, McASP1, McASP2, and SPI1 Serial Ports</b>					
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 <b>or</b> SPI1 Slave Chip Select
AXR0[6]/SPI1_ENA	121	IO	-	Y	McASP0 Serial Data 6 <b>or</b> SPI1 Enable (Ready)
AXR0[7]/SPI1_CLK	122	IO	-	Y	McASP0 Serial Data 7 <b>or</b> SPI1 Serial Clock
AXR0[8]/AXR1[5]/SPI1_SOMI	126	IO	-	Y	McASP0 Serial Data 8 <b>or</b> McASP1 Serial Data 5 <b>or</b> SPI1 Data Pin Slave Out Master In
AXR0[9]/AXR1[4]/SPI1_SIMO	127	IO	-	Y	McASP0 Serial Data 9 <b>or</b> McASP1 Serial Data 4 <b>or</b> SPI1 Data Pin Slave In Master Out
AXR0[10]/AXR1[3]	130	IO	-	Y	McASP0 Serial Data 10 <b>or</b> McASP1 Serial Data 3
AXR0[11]/AXR1[2]	131	IO	-	Y	McASP0 Serial Data 11 <b>or</b> McASP1 Serial Data 2
AXR0[12]/AXR1[1]	134	IO	-	Y	McASP0 Serial Data 12 <b>or</b> McASP1 Serial Data 1
AXR0[13]/AXR1[0]	135	IO	-	Y	McASP0 Serial Data 13 <b>or</b> McASP1 Serial Data 0
AXR0[14]/AXR2[1]	137	IO	-	Y	McASP0 Serial Data 14 <b>or</b> McASP2 Serial Data 1
AXR0[15]/AXR2[0]	138	IO	-	Y	McASP0 Serial Data 15 <b>or</b> 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
<b>SPI0, I2C0, and I2C1 Serial Port Pins</b>					
SPI0_SOMI/I2C0_SDA	111	IO	-	Y	SPI0 Data Pin Slave Out Master In <b>or</b> 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 <b>or</b> I2C0 Serial Clock
SPI0_SCS/I2C1_SCL	107	IO	-	Y	SPI0 Slave Chip Select <b>or</b> I2C1 Serial Clock
SPI0_ENA/I2C1_SDA	105	IO	-	Y	SPI0 Enable (Ready) <b>or</b> I2C1 Serial Data

## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -17

## Q201: D708E001BRFP266 (Audio DSP)

## TERMINAL DESCRIPTION

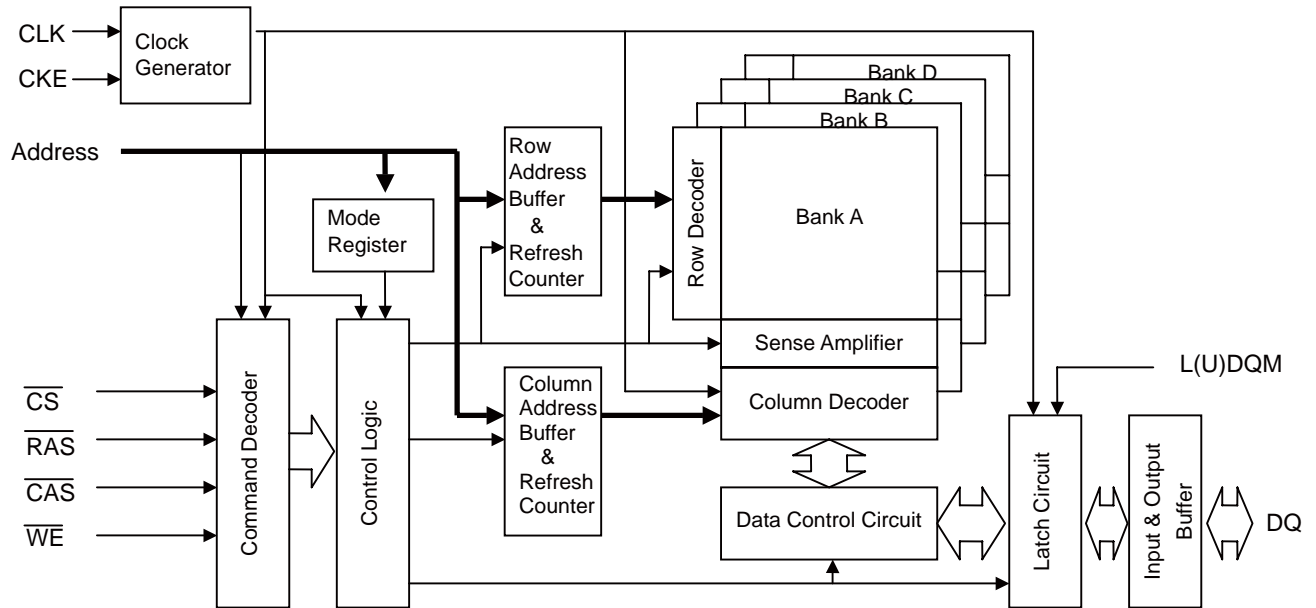
SIGNAL NAME	PIN NO.	TYPE <sup>(1)</sup>	PULL <sup>(2)</sup>	GPIO <sup>(3)</sup>	DESCRIPTION
<b>External Memory Interface (EMIF) Data Bus</b>					
EM_D[0]	52	IO	-	N	EMIF Data Bus [Lower 16 Bits]
EM_D[1]	51	IO	-	N	
EM_D[2]	49	IO	-	N	
EM_D[3]	48	IO	-	N	
EM_D[4]	46	IO	-	N	
EM_D[5]	45	IO	-	N	
EM_D[6]	43	IO	-	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 <sup>(1)</sup>	PULL <sup>(2)</sup>	GPIO <sup>(3)</sup>	DESCRIPTION
<b>Clocks</b>					
OSCIN	23	I	-	N	1.2-V Oscillator Input
OSCOUT	24	O	-	N	1.2-V Oscillator Output
OSCV <sub>DD</sub>	25	PWR	-	N	Oscillator 1.2-V V <sub>DD</sub> tap point (for filter only)
OSCV <sub>SS</sub>	22	PWR	-	N	Oscillator V <sub>SS</sub> 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)
<b>Device Reset</b>					
RESET	14	I	-	N	Device reset pin
<b>Emulation/JTAG Port</b>					
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
<b>Power Pins</b>					
Core Supply (CV <sub>DD</sub> )	8, 16, 20, 33, 44, 53, 57, 65, 77, 85, 90, 101, 123, 128, 132				
IO Supply (DV <sub>DD</sub> )	10, 31, 42, 50, 60, 68, 73, 81, 92, 103, 112, 125, 136				
Ground (V <sub>SS</sub> )	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				

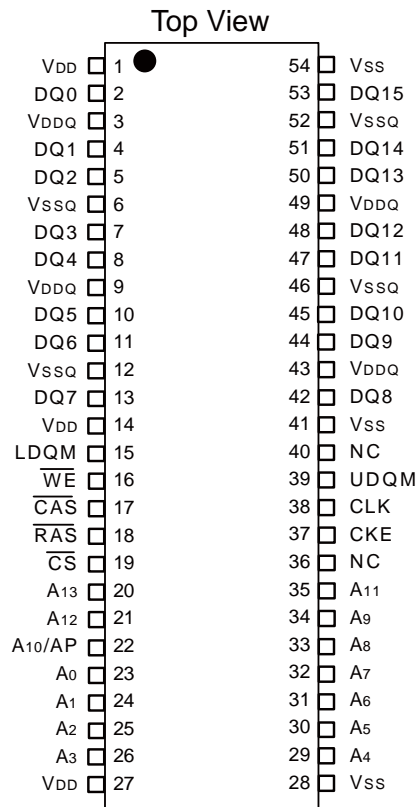
# IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -18

## Q281: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  $\mu$ s refresh interval

## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -19

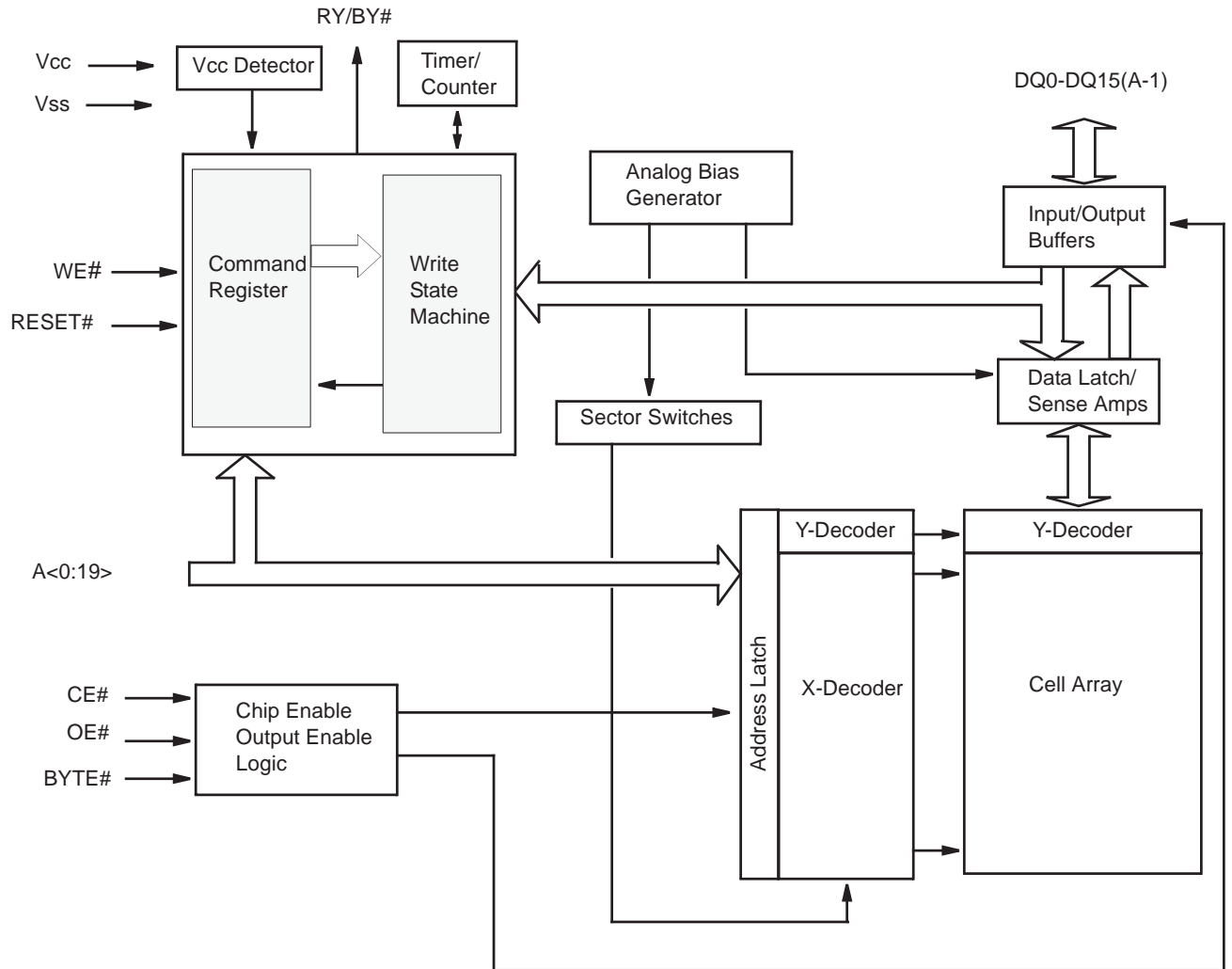
### Q281:M12L64164A-7TG (64 Mbit Synchronous DRAM)

#### TERMINAL DESCRIPTION

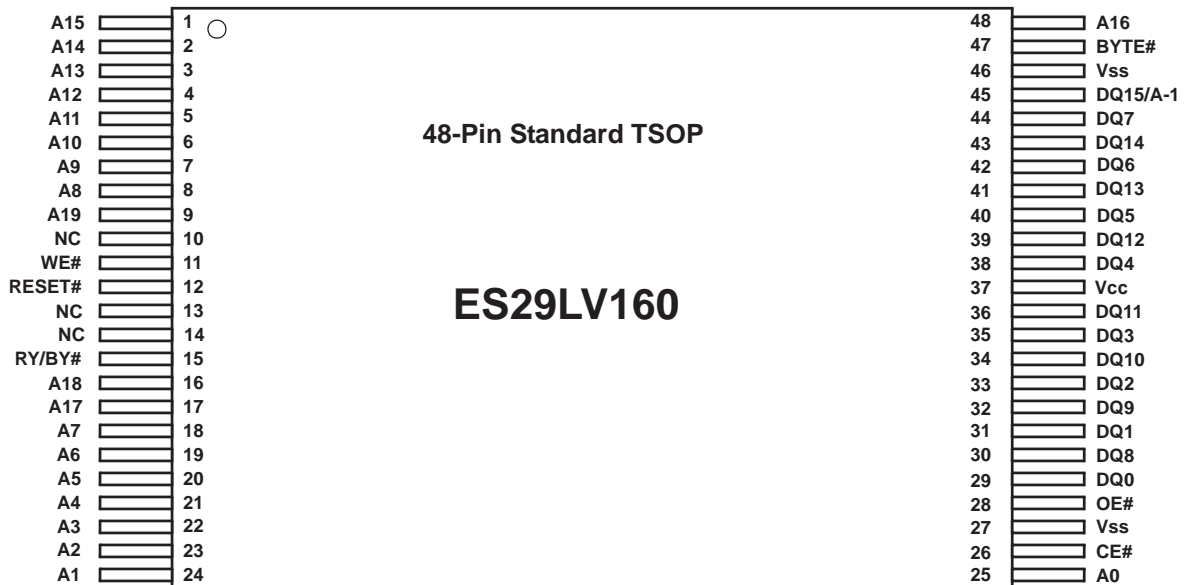
PIN	NAME	INPUT FUNCTION
CLK	System Clock	Active on the positive going edge to sample all inputs
$\overline{\text{CS}}$	Chip Select	Disables or enables device operation by masking or enabling all inputs except CLK , CKE and L(U)DQM
CKE	Clock Enable	Masks system clock to freeze operation from the next 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, $t_{\text{SHZ}}$ 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 -20**  
**Q282: ES29LV160ET-70TG (16 Mbit Flash Memory)**

**BLOCK DIAGRAM**



**PIN CONFIGURATION**



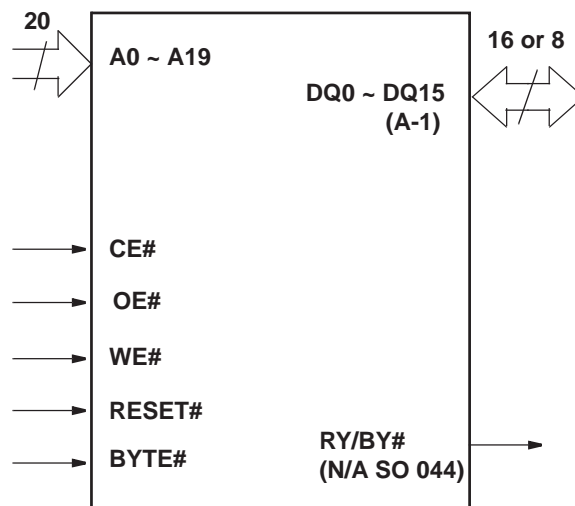
## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -21

## Q282: 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

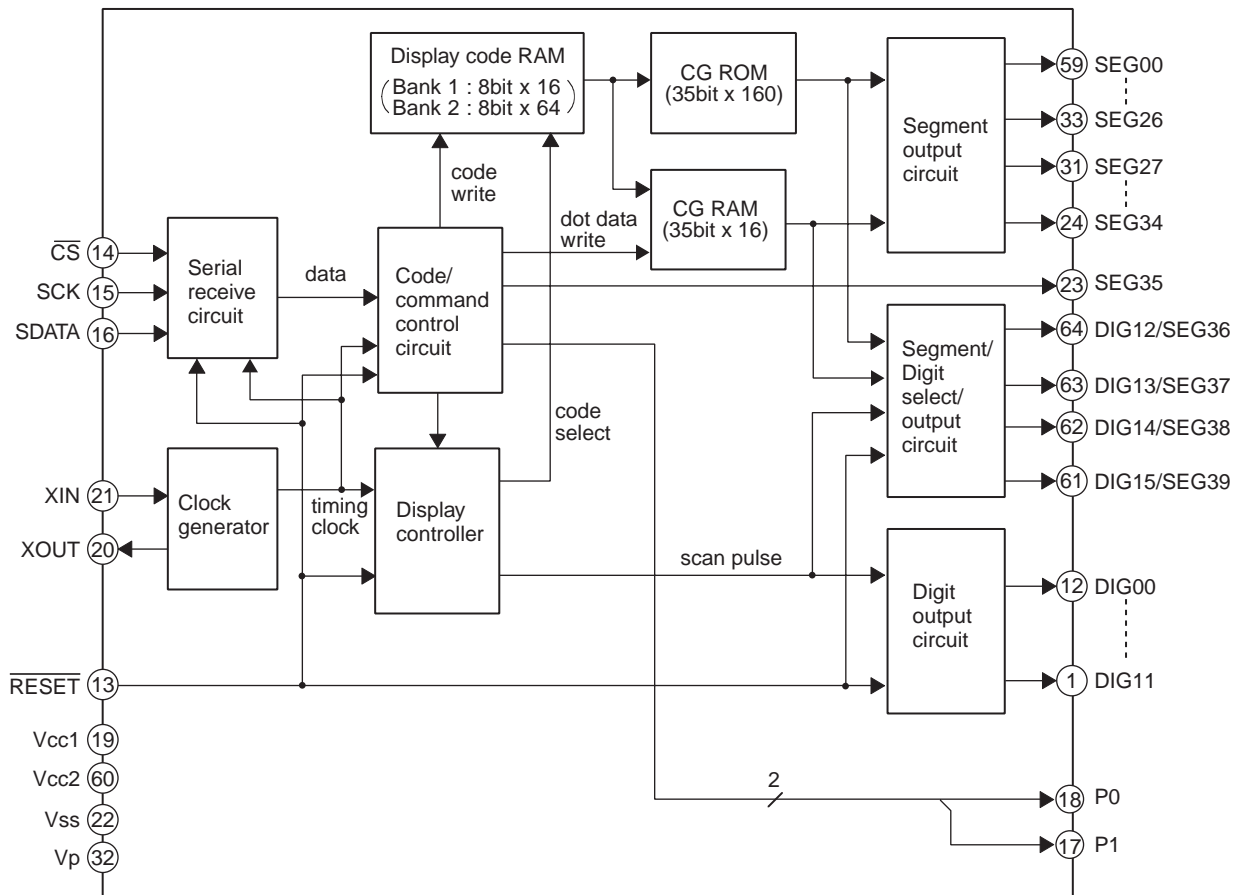
## LOGIC SYMBOL



## IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS -22

## Q7003: M66005-0001AHP (FL Tube Driver)

## BLOCK DIAGRAM



## TERMINAL DESCRIPTION

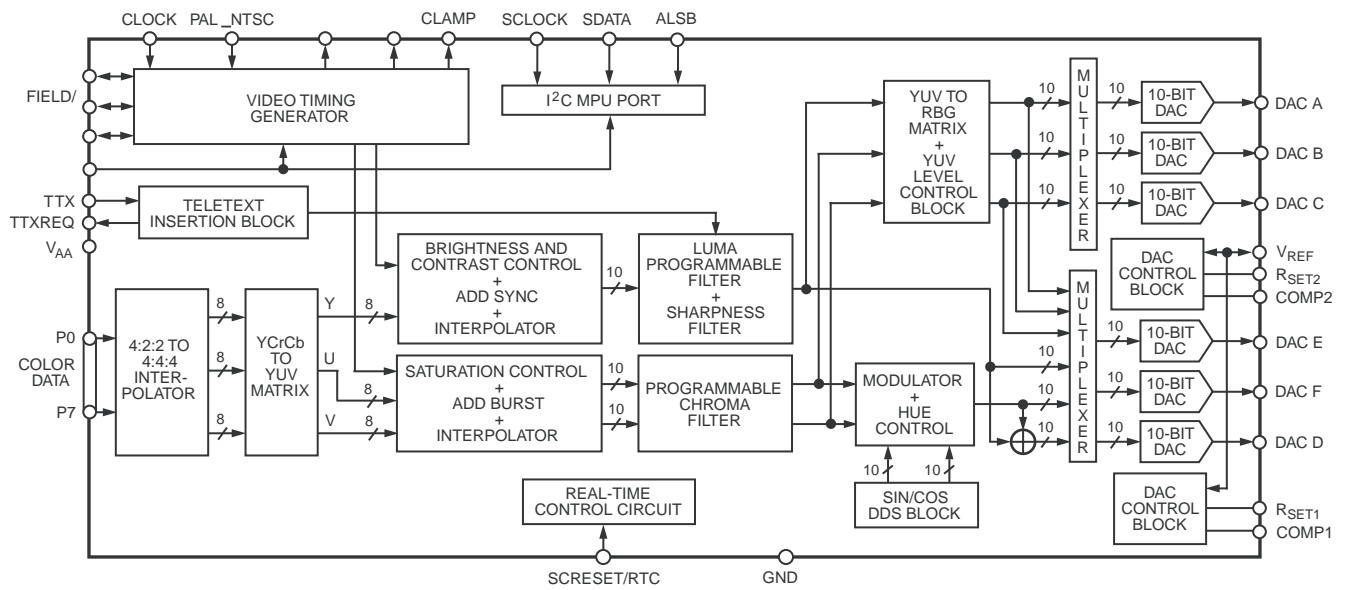
PIN NO.	SYMBOL	PIN NAME	DESCRIPTION
13	$\overline{\text{RESET}}$	Reset input	This pin is used to initialize the internal state of the M66004.
14	$\overline{\text{CS}}$	Chip select input	"L" : Communication with the MCU is possible. "H" : Any instruction from the MCU is neglected.
15	SCK	Shift clock input	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.



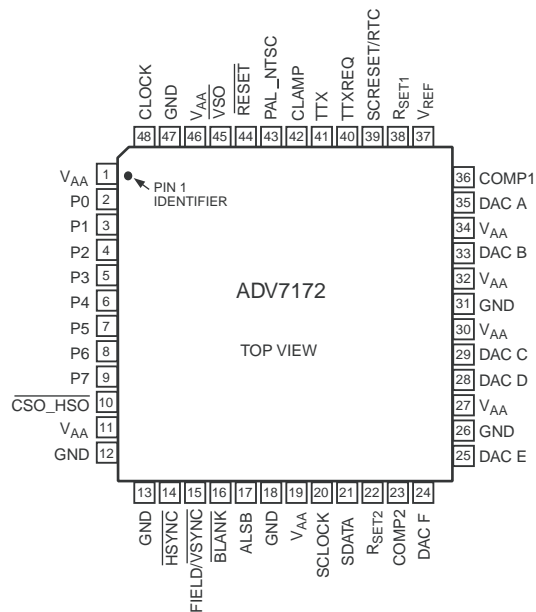
# IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -23

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

### BLOCK DIAGRAM



### PIN CONFIGURATION



## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -24

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

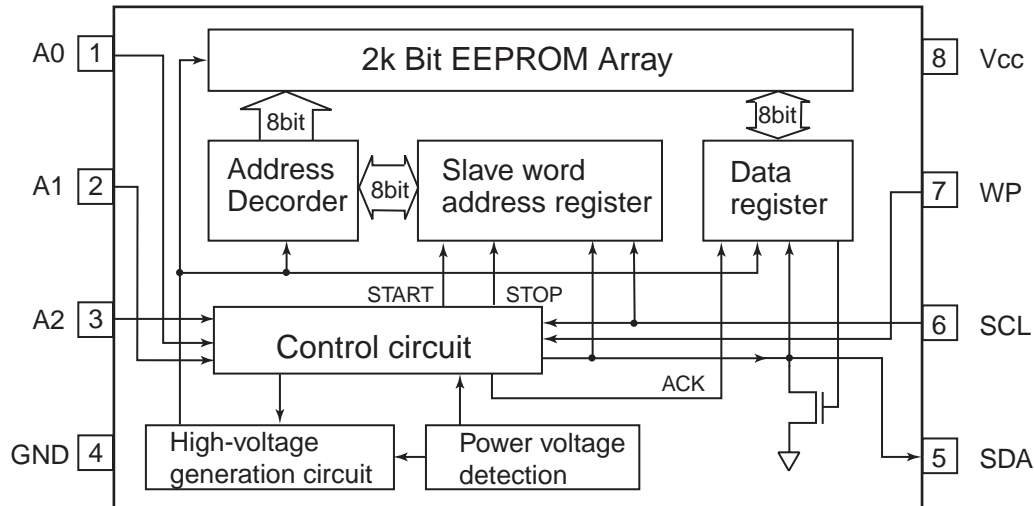
## TERMINAL DESCRIPTION

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 <sub>REF</sub>	I/O	Voltage Reference Input for DACs or Voltage Reference Output (1.235 V).
R <sub>SET1</sub>	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 <sub>SET2</sub>	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 <sub>AA</sub> . 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 <sub>AA</sub> .
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 <sub>AA</sub>	I	Power Supply (3 V to 5 V).
GND	G	Ground Pin.

## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -25

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

### BLOCK DIAGRAM AND PIN CONFIGURATION



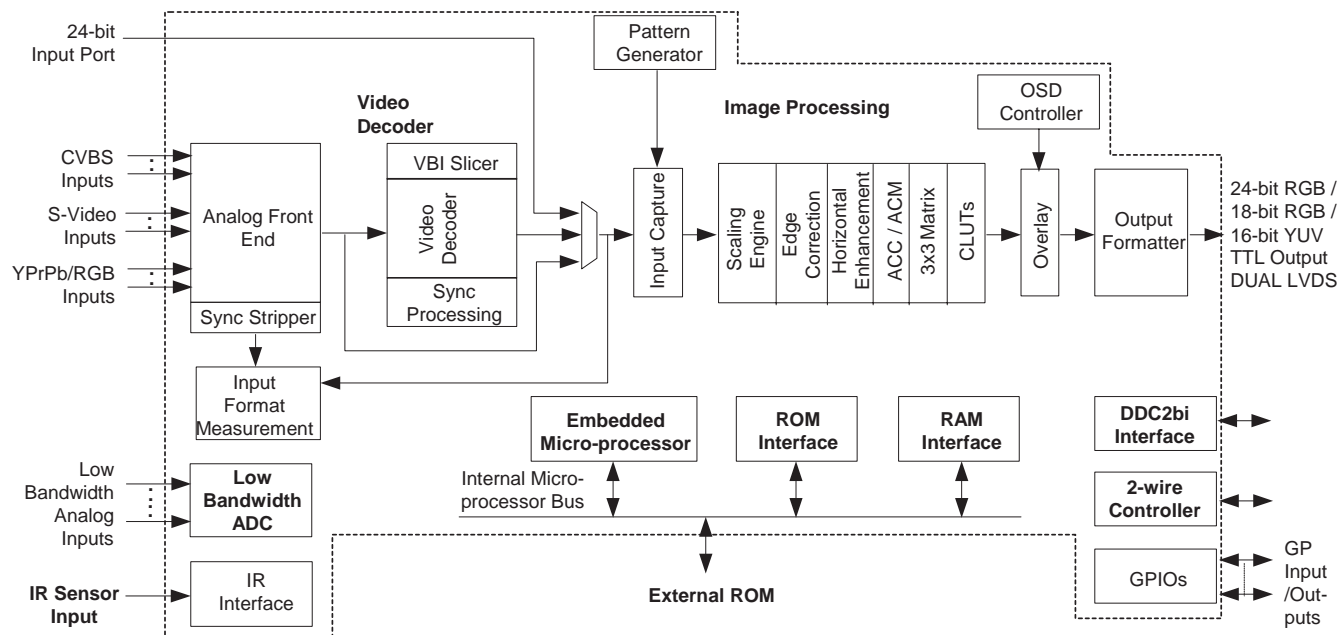
### TERMINAL DESCRIPTION

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 DIAGRAMS AND TERMINAL DESCRIPTIONS -26

## 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 -27

## Q8001: FLI8125-LF-BC (Video Processor)

### PIN CONFIGURATION

VDDA33_LBADC	1	GND18_SC	208	HSYNC1	156
LBADC_IN1	2	VDD18_SC	207	CRVSS	155
LBADC_IN2	3	VOUT2	206	RVDD_3.3	154
LBADC_IN3	4	VO_GND	205	VID_CLK_1	153
LBADC_IN4	5	SVN	204	VID_DATA_IN_15/GPIO23	152
LBADC_IN5	6	AVDD_SC	203	VID_DATA_IN_14/GPIO22	151
LBADC_IN6	7	C4P	202	VID_DATA_IN_13/GPIO21	150
LBADC_RTN	8	GND5	201	VID_DATA_IN_12/GPIO20	149
VSA33_LBADC	9	B4P	200	VID_DATA_IN_11/GPIO19	148
RESETn	10	GND5	199	VID_DATA_IN_10/GPIO18	147
GND_RPLL	11	A4P	198	VID_DATA_IN_9/GPIO17	146
VDD_RPLL_18	12	GND5	197	VID_DATA_IN_8/GPIO16	145
VBUF_C_RPLL	13	SV4P	196	CRVSS	144
AGND_RPLL	14	GND5	195	CVDD_1.8	143
XTAL	15	AGND	194	VID_DATA_IN_7	142
TCLK	16	CN	193	VID_DATA_IN_6	141
AVDD_RPLL_33	17	AVDD_C	192	VID_DATA_IN_5	140
CVDD_1.8	18	C3P	191	VID_DATA_IN_4	139
CRVSS	19	GND5	190	VID_DATA_IN_3	138
TEST	20	GND5	189	VID_DATA_IN_2	137
GPIO15	21	A3P	188	VID_DATA_IN_1	136
JTAG_BS_Enn	22	GND5	187	VID_DATA_IN_0	135
SCART16	23	AGND	186	CRVSS	134
HOST_SCLK	24	BN	185	CVDD_1.8	133
HOST_SDATA	25	AVDD_B	184	VID_DATA_IN_23/D7/PD46	132
DDC_SCLK	26	C2P	183	VID_DATA_IN_22/D6/PD45	131
DDC_SDATA	27	GND5	182	VID_DATA_IN_21/D5/PD44	130
CVDD_1.8	28	B2P	181	VID_DATA_IN_20/D4/PD43	129
CRVSS	29	GND5	180	VID_DATA_IN_19/D3/PD42	128
MSTR_SCLK	30	A2P	179	CRVSS	127
MSTR_SDATA	31	GND5	178	CVDD_1.8	126
RVDD_3.3	32	GND5	177	VID_DATA_IN_18/D2/PD41	125
CRVSS	33	SV2P	176	VID_DATA_IN_17/D1/PD40	124
GPIO0/TCK	34	AGND	175	VID_DATA_IN_16/D0/PD39	123
GPIO1/TDI	35	AVDD_A	174	GPIO4/MIDIN_HS	122
GPIO2/TMS	36	C1P	173	GPIO5/MIDIN_VS	121
GPIO3/TRST	37	B1P	172	CRVSS	120
GPIO6/IRin	38	GND5	171	CVDD_1.8	119
CVDD_1.8	39	GND5	169	VID_CLK2/ROM_OEN/PD24	118
CRVSS	40	A1P	168	CRVSS	117
GPIO7/IRQin	41	GND5	167	RVDD_3.3	116
GPIO8/IRQout	42	AGND	166	VID_DE/FLD/A0/PD24	115
GPIO9/SIPC_SCLK	43	AGND	165	A1/PD25	114
GPIO10/SIPC_SDATA/A18	44	AGND	164	A2/PD26	113
CVDD_1.8	45	AGND	163	A3/PD27	112
CRVSS	46	AGND	162	A4/PD28	111
GPIO11/PWM0	47	AGND	161	A5/PD29	110
GPIO12/PWM1	48	AGND	160	A6/PD30	109
RVDD_3.3	49	AGND	159	A7/PD31	108
CRVSS	50	AGND	158	A8/PD32	107
GPIO13/PWM2	51	AGND	157	A9/PD33	106
GPIO14/PWM3/SCART16	52	VSTNCT		A10/PD34	105
PBIAS	53				
FWK	54				
AVDD_LV_33	55				
VCO_LV	56				
AVSS_LV	57				
AVDD_OUT_LV_33	59				
CHP_LV_ER0	60				
CH3N_LV_ER1	61				
CLKP_LV_ER2	62				
CLKN_LV_ER3	63				
CH2P_LV_ER4	64				
CH2N_LV_ER5	65				
CH1P_LV_ER6	66				
CH1N_LV_ER7	67				
CH0P_LV_ER8	68				
CH0N_LV_ER9	69				
AVSS_OUT_LV	70				
AVDD_OUT_LV_33	71				
CH3P_LV_OG2	72				
CH3N_LV_OG3	73				
CLKN_LV_OG4	74				
CLKN_LV_OG5	75				
CH2P_LV_OG6	76				
CH2N_LV_OG7	77				
CH1P_LV_OB0	78				
CH1N_LV_OB1	79				
CH0P_LV_OB2	80				
CH0N_LV_OB3	81				
AVSS_OUT_LV	82				
AVDD_OUT_LV_33	83				
CVDD_1.8	84				
CRVSS	85				
PD20/B4/GPIO0	86				
PD21/B5/GPIO1	87				
PD22/B6/GPIO2	88				
PD23/B7/GPIO3	89				
DEN	90				
DHS	91				
DVS	92				
DCLK	93				
ROM_SCSNROM_CSN	94				
ROM_SCLK/A17	95				
ROM_SDO/A16	96				
ROM_SDI/ROM_WEN	97				
RVDD_3.3	98				
CRVSS	99				
ADC_CLAMP/A15	100				
XOSD_CLK/A14/PD38	101				
XOSD_HS/A13/PD37	102				
XOSD_VS/A12/PD36	103				
XOSD_FLD/A11/PD35	104				



## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -28

### Q8001: FLI8125-LF-BC (Video Processor)

#### TERMINAL DESCRIPTION

##### 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 -29

### Q8001: FLI8125-LF-BC (Video Processor)

#### TERMINAL DESCRIPTION

##### 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 -30

### Q8001: FLI8125-LF-BC (Video Processor)

#### TERMINAL DESCRIPTION

##### 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 -31

## Q8001: FLI8125-LF-BC (Video Processor)

### TERMINAL DESCRIPTION

#### 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 -32

### Q8001: FLI8125-LF-BC (Video Processor)

#### TERMINAL DESCRIPTION

##### 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 -33

### Q8001: FLI8125-LF-BC (Video Processor)

#### TERMINAL DESCRIPTION

##### 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 -34

### Q8001: FLI8125-LF-BC (Video Processor)

#### TERMINAL DESCRIPTION

##### 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 -35

## Q8001: FLI8125-LF-BC (Video Processor)

## TERMINAL DESCRIPTION

## 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.

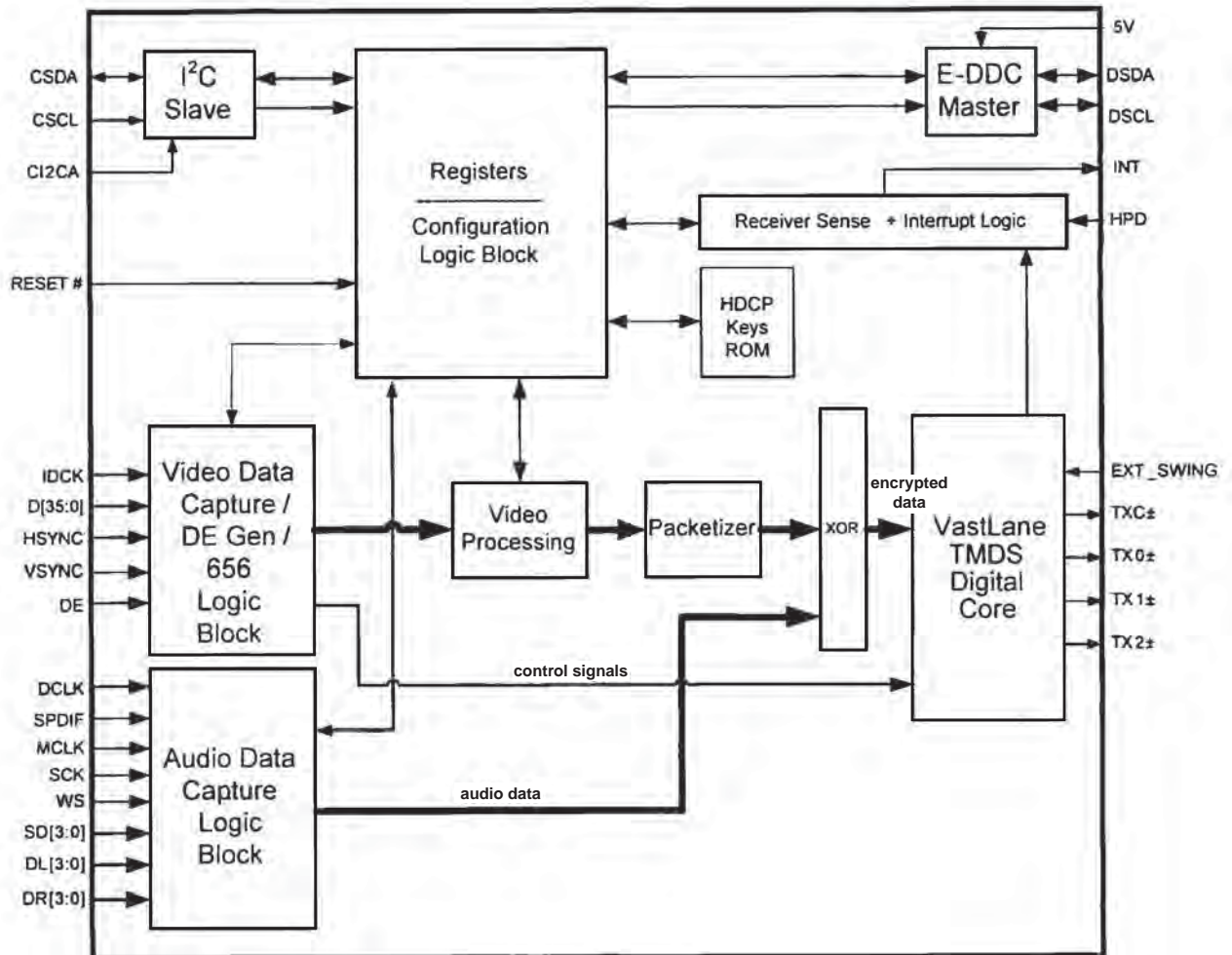
## JTAG Boundary Scan

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 -36

## Q8401: SII9134CTU (HDMI TRANSMITTER)

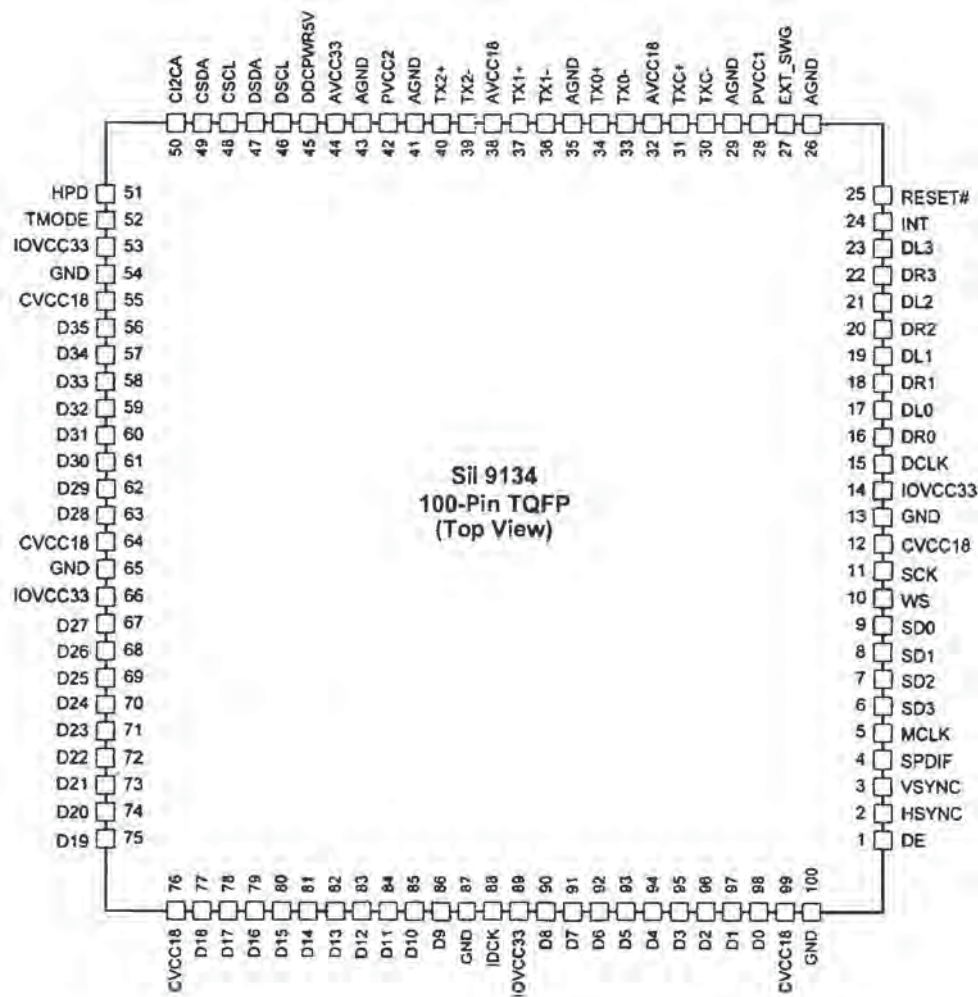
## BLOCK DIAGRAM



## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -37

## Q8401: SII9134CTU (HDMI TRANSMITTER)

## PIN CONFIGURATION



## TERMINAL DESCRIPTION

## 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
CI2CA	50	LVTTTL	Input	I <sup>2</sup> C device address select (see page 11)
RESET#	25	LVTTTL Schmitt	Input	Reset Pin (Active LOW) 5V Tolerant
CSCL	48	Schmitt	Input	I <sup>2</sup> C Clock
CSDA	49	Schmitt- Open Drain	Bi-Di	I <sup>2</sup> 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 -38

## Q8401: SII9134CTU (HDMI TRANSMITTER)

## TERMINAL DESCRIPTION

## Video and Audio Pins-1

Pin Name	Pin #	Type	Dir	Description
D0	98	LVTTL	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	LVTTL	Input	
D2	96	LVTTL	Input	
D3	95	LVTTL	Input	
D4	94	LVTTL	Input	
D5	93	LVTTL	Input	
D6	92	LVTTL	Input	
D7	91	LVTTL	Input	
D8	90	LVTTL	Input	
D9	86	LVTTL	Input	
D10	85	LVTTL	Input	
D11	84	LVTTL	Input	
D12	83	LVTTL	Input	These are the middle 12 bits of the 36-bit pixel bus.
D13	82	LVTTL	Input	
D14	81	LVTTL	Input	
D15	80	LVTTL	Input	
D16	79	LVTTL	Input	
D17	78	LVTTL	Input	
D18	77	LVTTL	Input	
D19	75	LVTTL	Input	
D20	74	LVTTL	Input	
D21	73	LVTTL	Input	
D22	72	LVTTL	Input	
D23	71	LVTTL	Input	
D24	70	LVTTL	Input	
D25	69	LVTTL	Input	
D26	68	LVTTL	Input	
D27	67	LVTTL	Input	
D28	63	LVTTL	Input	
D29	62	LVTTL	Input	
D30	61	LVTTL	Input	
D31	60	LVTTL	Input	
D32	59	LVTTL	Input	
D33	58	LVTTL	Input	
D34	57	LVTTL	Input	
D35	56	LVTTL	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 -39

### Q8401: SII9134CTU (HDMI TRANSMITTER)

#### TERMINAL DESCRIPTION

##### 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 <sup>2</sup> S Serial Clock
WS	10	LVTTTL	Input	I <sup>2</sup> S Word Select
SD0	9	LVTTTL	Input	I <sup>2</sup> S Serial Data
SD1	8	LVTTTL	Input	I <sup>2</sup> S Serial Data
SD2	7	LVTTTL	Input	I <sup>2</sup> S Serial Data
SD3	6	LVTTTL	Input	I <sup>2</sup> 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.

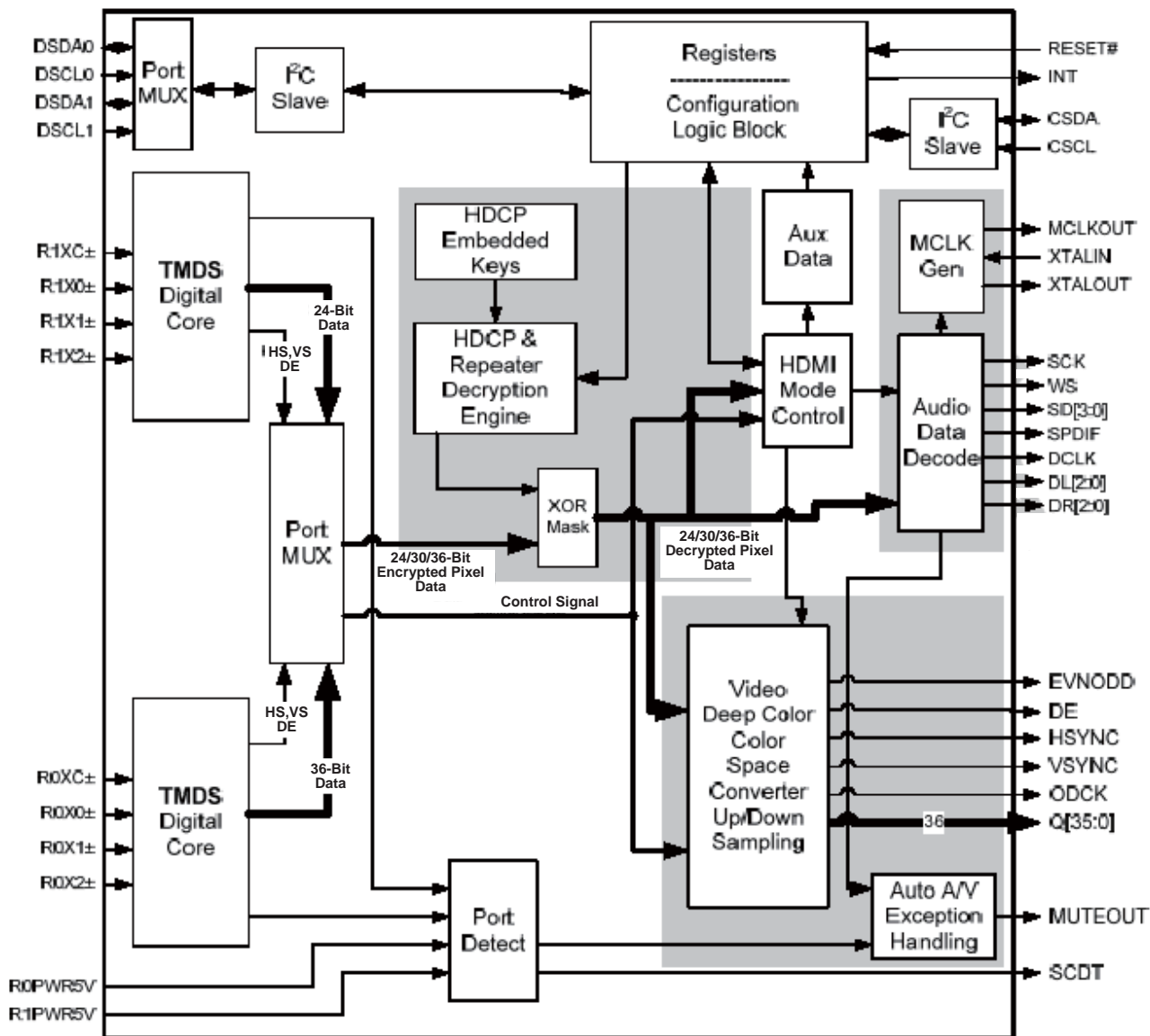
##### Differetial Signal Data Pins

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 $\Omega$ 1% when source termination and leakage bias is on and 845 $\Omega$ 1% when source termination and leakage bias is off.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -40

Q8501: SII9135CTU (HDMI RECEIVER)

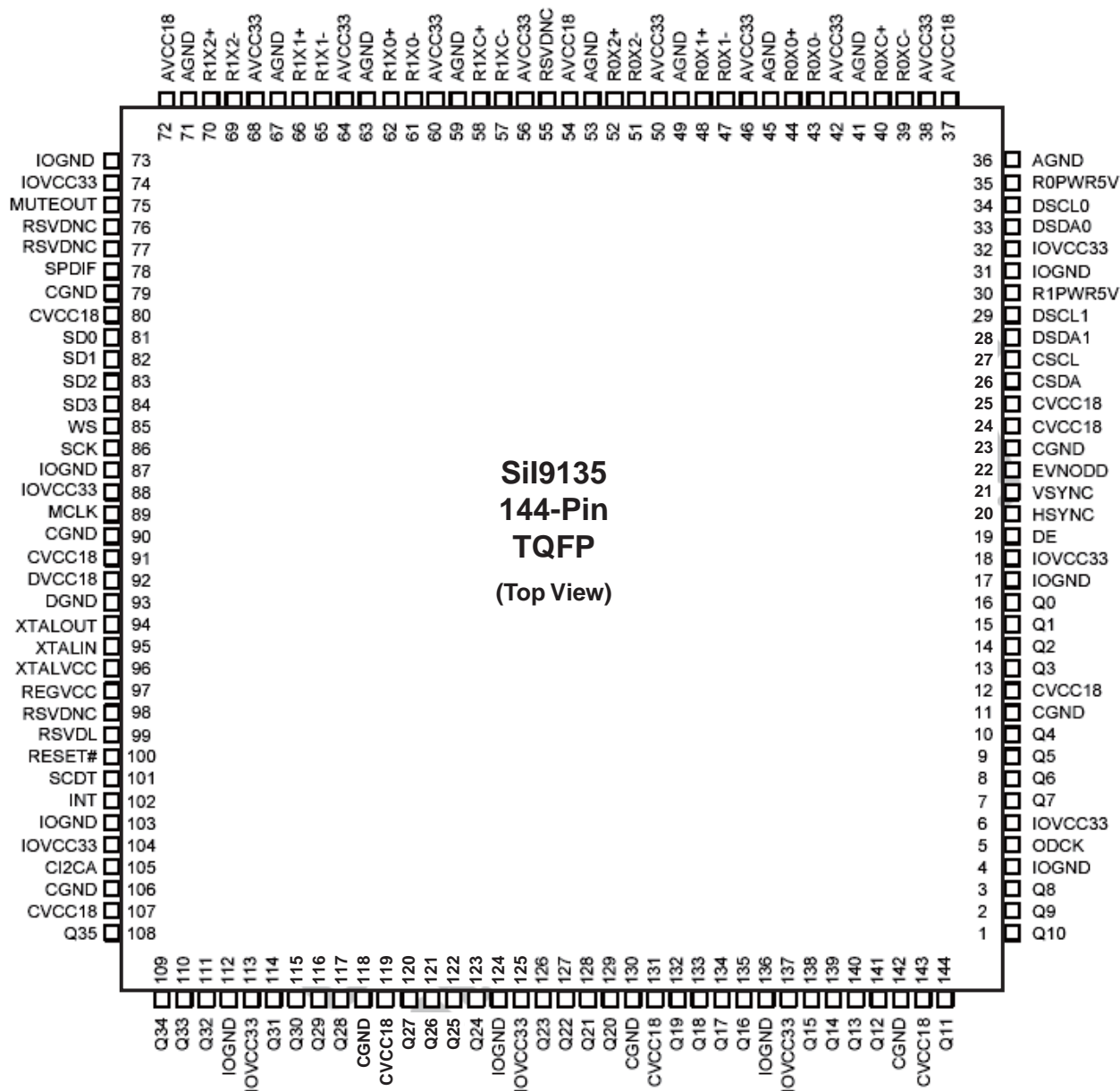
BLOCK DIAGRAM



## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -41

## Q8501: SII9135CTU (HDMI RECEIVER)

## PIN CONFIGURATION



## IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -42

## Q8501: SII9135CTU (HDMI RECEIVER)

## TERMINAL DESCRIPTION

## 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 -43

## Q8501: SII9135CTU (HDMI RECEIVER)

## TERMINAL DESCRIPTION

## Digital Audio Output Pins

Pin Name	Pin #	Strength	Type	Dir	Description
XTALIN	95	---	5V Tolerant LVTTTL	In	Crystal Clock Input. Also allows LVTTTL input. Frequency required: 26-28.5 MHz
XTALOUT	94	4 mA	LVTTTL	Out	Crystal Clock Output
MCLK	89	8 mA	LVTTTL	Out	Audio Master Clock Output
SCK/DCLK	86	4 mA	LVTTTL	Out	I2S Serial Clock Output. DSD Clock Out.
WS/DR0	85	4 mA	LVTTTL	Out	I2S Word Select Output. DSD Serial Right Ch0 Data Output
SD0/DL0	81	4 mA	LVTTTL	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	LVTTTL	Out	
SD2/DL1	83	4 mA	LVTTTL	Out	
SD3/DR2	84	4 mA	LVTTTL	Out	
SPDIF/DL2	78	4 mA	LVTTTL	Out	S/PDIF Audio Output. Configurable to be shared with DSD DSD Serial Left Ch2 Data Output
MUTEOUT	75	4 mA	LVTTTL	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 -44

## Q8501: SII9135CTU (HDMI RECEIVER)

## TERMINAL DESCRIPTION

## 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
DSCL0	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 -45

### Q8501: SII9135CTU (HDMI RECEIVER)

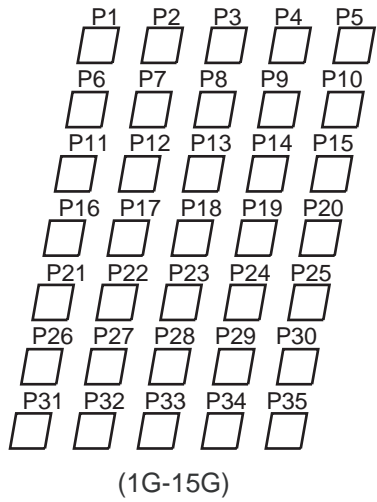
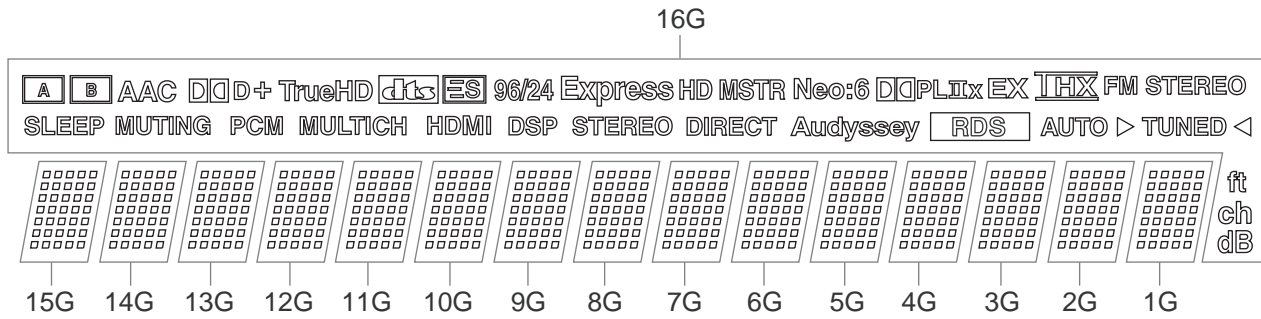
#### TERMINAL DESCRIPTION

##### 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

FL TUBE VIEW

Q7002: 16-BT-138GNK



	16G	15G-1G
P1	SLEEP	1-1
P2	MUTING	2-1
P3	PCM	3-1
P4	MULTI CH	4-1
P5	HDMI	5-1
P6	DSP	1-2
P7	STEREO	2-2
P8	DIRECT	3-2
P9	Audyssey	4-2
P10	RDS	5-2
P11	AUTO	1-3
P12	▷ ◁	2-3
P13	TUNED	3-3
P14	A	4-3
P15	B	5-3
P16	AAC	1-4
P17	DQ	2-4
P18	D	3-4

	16G	15G-1G
P19	+	4-4
P20	TrueHD	5-4
P21	DTS	1-5
P22	ES	2-5
P23	96/24	3-5
P24	Express	4-5
P25	HD	5-5
P26	MSTR	1-6
P27	Neo:6	2-6
P28	DQ	3-6
P29	PLII	4-6
P30	X	5-6
P31	EX	1-7
P32	THX	2-7
P33	FM STEREO	3-7
P34	ch	4-7
P35	dB	5-7



## MICROPROCESSOR TERMINAL DESCRIPTIONS-1

## Q701: M30627FJPGP

No.	Pin Name	Function	I/O	Act.	Description
1	Vref	Vref	---	---	A/D Reference Voltage (Vcc)
2	AVcc	AVcc	---	---	A/D Power supply
3	P97/~ADTRG/SIN4	VMSDI	I	H	Data input pin from HDMI microprocessor
4	P96/ANEX1/SOUT4	VMSDO	O	H	Data output pin to HDMI microprocessor
5	P95/ANEX0/CLK4	VMCLK	O	CLK	Clock output pin to HDMI microprocessor
6	P94/DA1/TB4IN	VSPRST	O	H	Reset control pin to FLI8125LF
7	P93/DA0/TB3IN	CECIN	I	L	CEC input
8	P92/TB2IN/SOUT3	ROMSDO	O	H	Data output pin to EEPROM
9	P91/TB1IN/SIN3	ROMSDI	I	H	Data input pin from EEPROM
10	P90/TB0IN/CLK3	ROMCLK	O	CLK	Clock output pin to EEPROM
11	P141	~ROMCS	O	L	EEPROM chip select pin
12	P140	~VMUT	O	L	Video mut control output
13	BYTE	BYTE	---	---	External bus width select pin. Connect to Ground.
14	CNVSS	CNVss	---	---	Processor mode select pin. Connect to Ground via a resistor.
15	P87/XCIN	RDSDATA	I	H	RDS data input from LA72725 in tuner unit
16	P86/XCOUT	XMSRSEL	O	H	XM/SIRIUS select pin
17	~RESET	~RESET	I	L	Reset input
18	XOUT	Xout	---	---	Ceramic oscillator connection pin.
19	VSS	Vss	---	---	Ground pin for Power supply
20	XIN	Xin	---	---	Ceramic oscillator connection pin.
21	VCC1	Vcc1	---	---	Power supply pin
22	P85/~NMI	~NMI	I	L	No use
23	P84/~INT2	POFF	I	L	Power failure detection input
24	P83/~INT1	---	O	L	No use
25	P82/~INT0	RDSCLK	I	L	(PP-type)RDS clock input / (Other type)No use
26	P81/TA4IN/~U	~DSPINT2	I	L	Input pin of DSP AD detect
27	P80/TA4OUT/U	~XMDACRST	O	L	XM DAC reset pin
28	P77/TA3IN	~DIRINT0	I	H	DIR/Codec UNLOCK detect pin
29	P76/TA3OUT	DSPCLK	O	CLK	Clock output for DSP
30	P75/TA2IN/~W	CECTRG	I	L	Input pin of CEC trigger
31	P74/TA2OUT/W	~CECOUT	O	L	CEC output
32	P73/~CTS2/~RTS2/TA1IN/~V	~DSPINT0	I	L	DSP detect pin
33	P72/CLK2/TA1OUT/V	~DSPINT1	I	L	DSP detect pin
34	P71/RXD2/SCL2/TA0IN/TB5IN	VSPSCL	O	CLK	FLI8125LF I2C clock output
35	P70/TXD2/SDA2/TA0OUT	VSPSDA	I/O	H	FLI8125LF I2C data input/output
36	P67/TXD1/SDA1	FTXD	O	H	Flash microprocessor rewrite port
37	Vcc1	Vcc1	---	H	Power supply
38	P66/RXD1/SCL1	FRXD	I	H	Flash microprocessor rewrite port
39	Vss	Vss	---	H	Ground
40	P65/CLK1	FCLK	O	CLK	Flash microprocessor rewrite port
41	P64/~CTS1/~RTS1/~CTS0/CLKS1	FBUSY	O	H	Flash microprocessor rewrite port
42	P63/TXD0/SDA0	XMSRTXD	O	H	XM/SIRIUS data output pin
43	P62/RXD0/SCL0	XMSRRXD	I	H	XM/SIRIUS data input pin
44	P61/CLK0	~XMSRRST	O	L	XM/SIRIUS IC reset pin
45	P60/~CTS0/~RTS0	~DIRCS	O	L	DIR/Codec chip select pin
46	P137	XMLNK	I	H	XM input pin
47	P136	XMANT	I	H	XM input pin
48	P135	VSDA/PLLSDA	I/O	H	VIDEO SW/Tuner unit I2C Data input/output
49	P134	VDSCL/PLLSCL	O	CLK	VIDEO SW/Tuner unit I2C Clock output
50	P57/~RDY/CLKOUT	~DIRRST	O	L	DIR/Codec reset pin
51	P56/ALE	~DSPCS	O	L	DSP chip select pin
52	P55/~HOLD	~FEPM	I	L	Flash microprocessor rewrite port(Connect to Vss)
53	P54/~HLDA	~DSPRST	O	L	DSP reset pin
54	P133	VSPREQ	I	H	Pin for handshake with FLI8125LF
55	P132	VSPRDY	I	H	Pin for handshake with FLI8125LF
56	P131	MCHSEL	O	H	ANALOG/HDMI MCLK select pin
57	P130	---	O	L	No use
58	P53/BCLK	DIGCLK	O	CLK	DIR/Codec/DSP clock output pin
59	P52/~RD	DIGSDI	I	H	DIR/Codec/DSP data input pin
60	P51/~WRH/~BHE	DIGSDO	O	H	DIR/Codec/DSP data output pin
61	P50/~WRL/~WR	~FCE	I	H	Flash microprocessor rewrite port(Connect to Vcc)
62	P127	MUTIN_MUT	O	H	ZONE2 selector
63	P126	Z2MUT	O	H	Mute control output for ZONE2
64	P125	SBZ2MUT	O	H	Mute control output for SB/ZONE2


## MICROPROCESSOR TERMINAL DESCRIPTIONS-2


## Q701: M30627FJPGP

No.	Pin Name	Function	I/O	Act.	Description
65	P47/~CS3	AMUT	O	H	Audio mute control pin
66	P46/~CS2	SPRLZ2	O	H	ZONE2 speaker relay control pin
67	P45/~CS1	SPRLSB	O	H	Surround Back speaker relay control pin
68	P44/~CS0	SPRLCS	O	H	Center/Surround speaker relay control pin
69	P43/A19	SPRLF	O	H	Front speaker relay control pin
70	P42/A18	---	O	L	No use
71	P41/A17	VOLDATA	O	H	Data output to R2S15211
72	P40/A16	VOLCLK	O	CLK	Clock output to R2S15211
73	P37/A15	---	O	L	No use
74	P36/A14	VPOWER	O	H	Power control output to video section
75	P35/A13	APOWER	O	H	Power source control output
76	P34/A12	~POFF2	I	L	POFF2 detect pin
77	P33/A11	~FANH	O	L	Fan control pin
78	P32/A10	~FANCTRL	O	L	Fan control pin
79	P31/A09	TRGZ2	O	H	12V trigger C output
80	P124	TRGB	O	H	12V trigger B output
81	P123	TRGA	O	H	12V trigger A output
82	P122	PRERLSB	O	H	PREOUT SB relay control
83	P121	Z2VOLCLK	O	H	ZONE2 volume IC clock output
84	P120	Z2VOLDAT	O	H	ZONE2 volume IC data output
85	VCC2	Vcc2	---	---	Power supply
86	P30/A8(/-/D7)	SEC1H	O	H	Power amp +/-B voltage select pin
87	VSS	Vss	---	---	Power supply Ground
88	P27/AN27/A7(/D7/D6)	PROTECT	I	H	PROTECT detect pin
89	P26/AN26/A6(/D6/D5)	VOLH	I	A/D	Signal level protection detect pin
90	P25/AN25/A5(/D5/D4)	THERMAL	I	A/D	Thermal protection detect pin
91	P24/AN24/A4(/D4/D3)	INIT3	I	A/D	Initial setting pin 3
92	P23/AN23/A3(/D3/D2)	INIT2	I	A/D	Initial setting pin 2
93	P22/AN22/A2(/D2/D1)	INIT1	I	A/D	Initial setting pin 1
94	P21/AN21/A1(/D1/D0)	BAND	I	A/D	Initial setting pin for tuner frequency
95	P20/AN20/A0(/D0/-)	~SYSOUT	O	L	RI output pin
96	P17/D15/~INT5	SYSIN	I	H	RI input pin
97	P16/D14/~INT4	~IRIN	I	L	IRIN remote control input pin
98	P15/D13/~INT3	~REMIN	I	L	Remote controller signal input pin
99	P14/D12	~STEREO	I	H	FM Stereo detect pin
100	P13/D11	~SD	I	H	FM/AM TUNED detect pin
101	P12/D10	HPDET	I	H	Headphone detection input
102	P11/D9	VOLB	I	H	Master volume rotary encoder data input
103	P10/D8	VOLA	I	H	Master volume rotary encoder data input
104	P07/AN07/D7	---	O	L	No use
105	P06/AN06/D6	LEDZONE2	O	H	ZONE2 LED control pin
106	P05/AN05/D5	---	O	L	No use
107	P04/AN04/D4	~LEDSTBY	O	L	STANDBY LED control pin
108	P03/AN03/D3	FLDSDO	O	H	Serial data output for FL driver IC
109	P02/AN02/D2	FLDCLK	O	CLK	Serial clock output for FL driver IC
110	P01/AN01/D1	~FLDCS	O	L	Chip select output for FL driver IC
111	P00/AN00/D0	~FLDRST	O	L	Reset output for FL driver IC
112	P117	~MICDET	I	L	Microphone detection input
113	P116	MICMUT	O	H	Microphone mute output
114	P115	---	O	L	No use
115	P114	---	O	L	No use
116	P113	~VMRST	O	L	HDMI microprocessor reset pin
117	P112	VMSTB	I	H	HDMI microprocessor strobe input
118	P111	TXMUTE	O	H	HDMI microprocessor mute pin
119	P110	RXMUTE	I	H	HDMI microprocessor RXMUTE detect pin
120	P107/AN7/~KI3	~KEYINT3	I	L	Key input interrupt 3
121	P106/AN6/~KI2	~KEYINT2	I	L	Key input interrupt 2
122	P105/AN5/~KI1	~KEYINT1	I	L	Key input interrupt 1
123	P104/AN4/~KI0	~KEYINT0	I	L	Key input interrupt 0
124	P103/AN3	KEY3	I	A/D	Key input 3
125	P102/AN2	KEY2	I	A/D	Key input 2
126	P101/AN1	KEY1	I	A/D	Key input 1
127	AVIS	AVss	---	---	Ground for A/D
128	P100/AN0	KEY0	I	A/D	Key input 0

## SERVICE PROCEDURE

### 1. Replacing the fuses

 This symbol located near the fuse indicates that the fuse used is show operating 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 utilise est e lent. Pour une protection permanente, n'utiliser que des fusibles de meme type. Ce demier est indique la qu le present symbol est apposse.

#### <Notes>

<DD> : TX-SR605 USA model                      <WO> : TX-SR605 Saudi model  
 <DC> : TX-SR605 Canadian model              <GK> : TX-SR605 Korean model  
 <PP> : TX-SR605 European model              <GQ> : TX-SR605 Hong kong model  
 <PA> : TX-SR605 Australian model            <GR> : TX-SA605 and TX-SA8560 Chinese model  
 <WT> : TX-SR605 World wide model

REF NO.	PART NAME	DESCRIPTION	PART NO.	REMARKS
F901	FUSE	10A-UL/T-233	252330GR	!, <DD, DC>
F901	FUSE	5A-SE-EAK	252078GR	!, <PP, PA, WT, WO, GK, GQ, GR>
F902	FUSE	5A-SE-EAK	252078GR	!, <WT, WO>
F910	FUSE	5A-UL/T-233	252326GR	!
F6901	FUSE	12A-TUL-250V	252301GR	!
F6902	FUSE	12A-TUL-250V	252301GR	!

### 2. To initialize the unit

1. Press and hold down VCR/DVR button, then press STANDBY/ON button when the unit is Power 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.

### 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
Q6051,Q6061	Q6052,Q6062	Q6050,Q6060	Q6053,Q6063	Q6054,Q6064	Q6055,Q6065	Q6056,Q6066
Q6031,Q6041	Q6032,Q6042	Q6030,Q6040	Q6033,Q6043	Q6034,Q6044	Q6035,Q6045	Q6036,Q6046
Q6011,Q6001	Q6012,Q6002	Q6010,Q6000	Q6013,Q6003	Q6014,Q6004	Q6015,Q6005	Q6016,Q6006
C6041,R6101	C6042,R6102	C6040,R6100	C6043,R6103	C6044,R6104	C6045,R6105	C6046,R6106
R6081,R6091	R6082,R6092	R6080,R6090	R6083,R6093	R6084,R6094	R6085,R6095	R6086,R6096
R6071,R6021	R6072,R6022	R6070,R6020	R6073,R6023	R6074,R6024	R6075,R6025	R6076,R6026

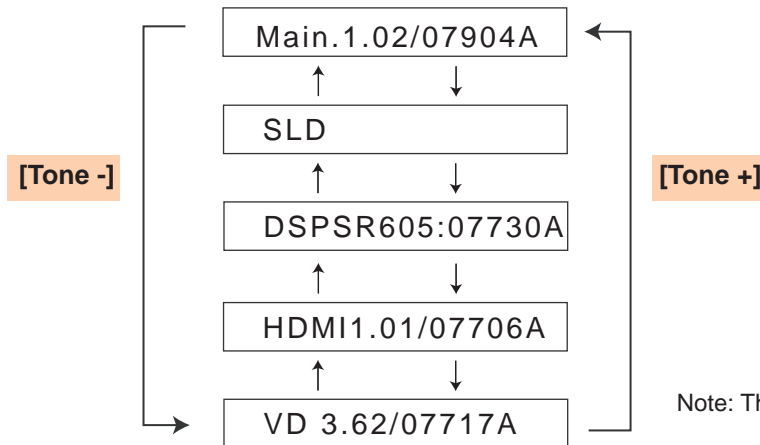
## FIRMWARE UPDATE -1

### How to Check Versions of Main, DSP, HDMI and Video FW

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

<e.g.> Main.1.02/07904A

2. Press **[Tone +]** button while the version is displayed. Then, "SLD" will be displayed.  
Press **[Tone +]** button again while "SLD" is displayed. Then, "DSPSR605:07730A" 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. 18, 2007.

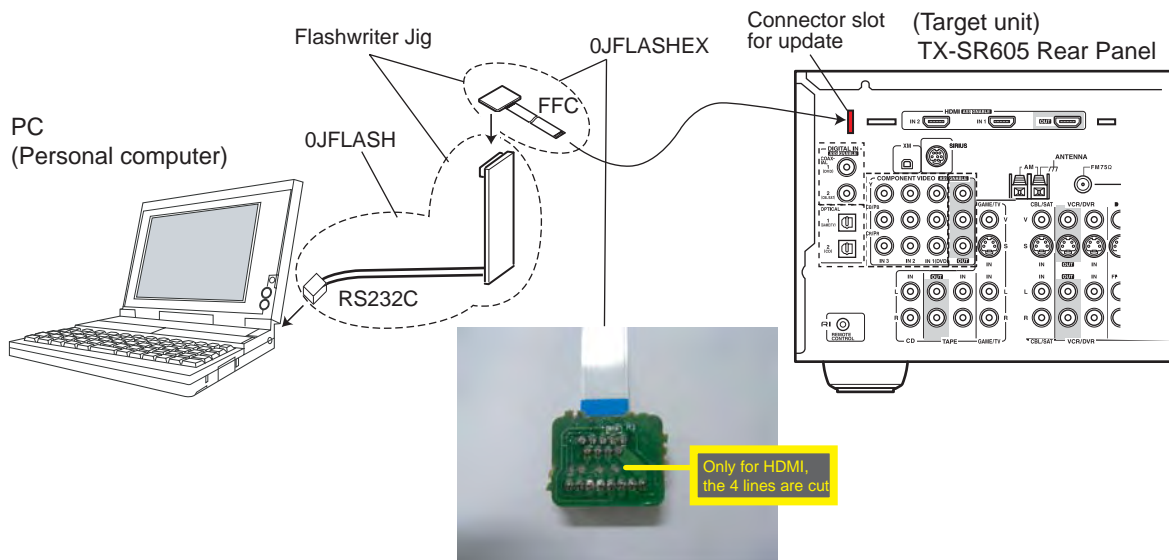
### Preparation for Update (Main and HDMI)

#### Hardware and Software

1. Personal computer(PC) with Windows XP or 2000
2. Flashwriter jig: **0JFLASH** and **0JFLASHX** (including 2 Types: for Main and for HDMI)
3. Writing soft: "flasta\_exe.zip" and Manual: "Flash Writer M16 Manual.pdf" for Main microprocessor  
Download and unzip "flasta\_exe.zip" to extract "FlashSta.exe" etc. in advance.
4. Program & ID: Download the latest ".mot" and ".id" files for TX-SR605/TX-SA605/TX-SA8560/DTR-5.8 and store in the same folder as "FlashSta.exe."
5. Writing soft: "HDMIUpdater\_SR605\_07706A.zip" for HDMI microprocessor (File name depends on the version.)  
Unzip "HDMIUpdater\_SR605\_07706A.zip" in advance.

#### Connection and Setup

1. While the target unit is off, connect 0JFLASH and 0JFLASHX to RS232C port of the PC.
2. Connect the FFC of the jig to the connector slot on the rear panel of TX-SR605/TX-SA605/TX-SA8560/DTR-5.8.
3. Power on the unit.



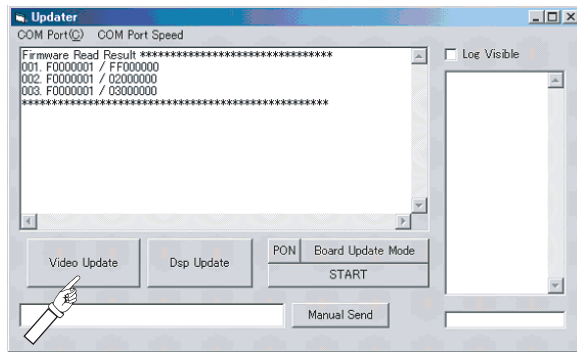
## FIRMWARE UPDATE -2

### Main Microprocessor Update Procedure

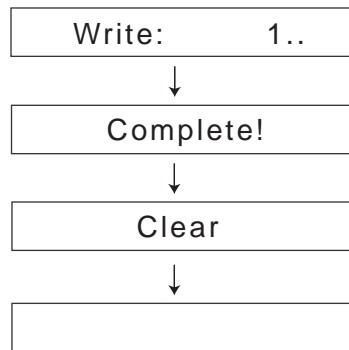
1. Start "FlashSta.exe" and update the unit referring to "Flash Writer M16 Manual.pdf."  
**MCU Type is M16C/20 62** It takes about 5 minutes.
2. After Program and Read Check are finished, click "Exit" button to end "FlastSta.exe".
3. Turn off the main power switch or pull the power cord off the wall 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.

### HDMI Update Procedure

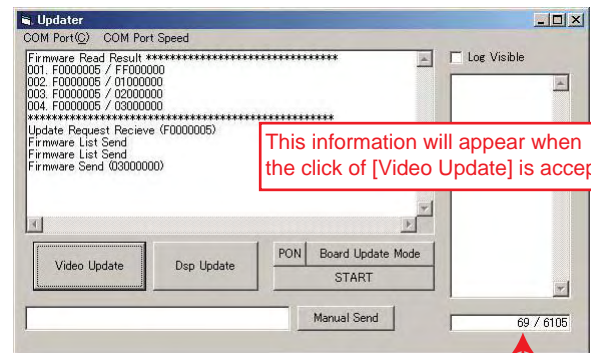
1. Double click "Update.exe" in the unzipped folder "HDMIUpdater\_SR805\_07706A" (Folder name depends on the version.)  
The following window will appear.



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.



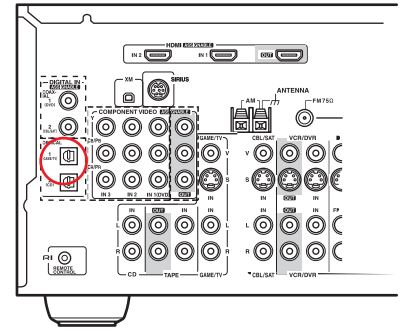
This information will appear when the click of [Video Update] is accepted.

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 -3

TX-SR605 Rear Panel  
(Target Unit)



### Preparation for Update (DSP)

#### Hardware and Software

1. blank CD-R, PC, CD-R writing software
2. Writing soft: "CD\_SR6050\_07730A.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

#### 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.

### 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.1.02/07904A

2. Press **[Tone +]** button twice while the Main version is displayed for about 3 seconds.  
Then, DSP FW version will be displayed.

<e.g.> DSPSR605:07730A

3. Press **[CD]** button while the 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 finished, writing will start.

Writing...

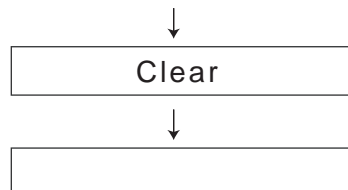
If the above message does not appear after waiting for a while, please try again.

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.

5. After writing ends, the message on Front Display will change as follows.



The unit is put into the Standby mode.

6. Confirm the new version number.

## FIRMWARE UPDATE -4

### Preparation for Update (Video)

#### Hardware

1. PC with RS232C terminal
2. RS232 straight through cable
3. 0JHUDSON (Adaptor Jig)



#### 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-8-9.

#### 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.>



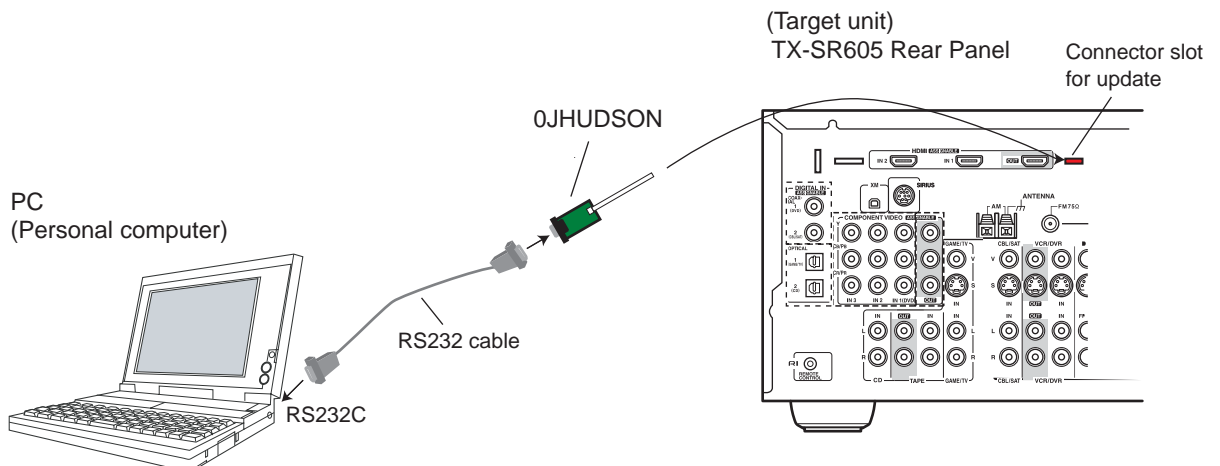
sst25vf080b\_istemp\_spi.hex : for communication

VD\*\*\*\_\*\*\*\*\*\_OSD\*\*\*\*\*.bat : Batch file

VD\*\*\*\_\*\*\*\*\*\_OSD\*\*\*\*\*.hex : Program file

#### 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 TX-SR605/TX-SA605/SA8560/DTR-5.8.
3. Power on the unit.



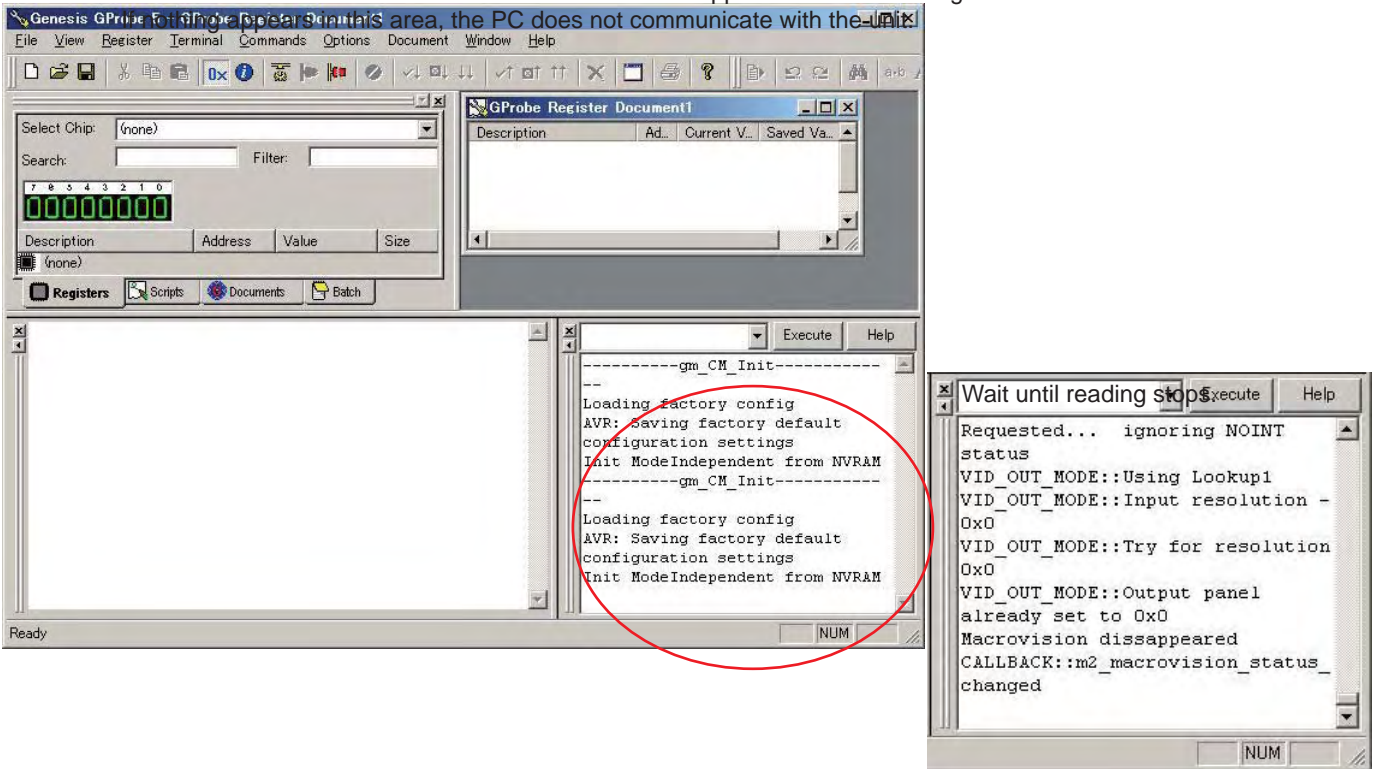
## FIRMWARE UPDATE -5

### Video Update Procedure

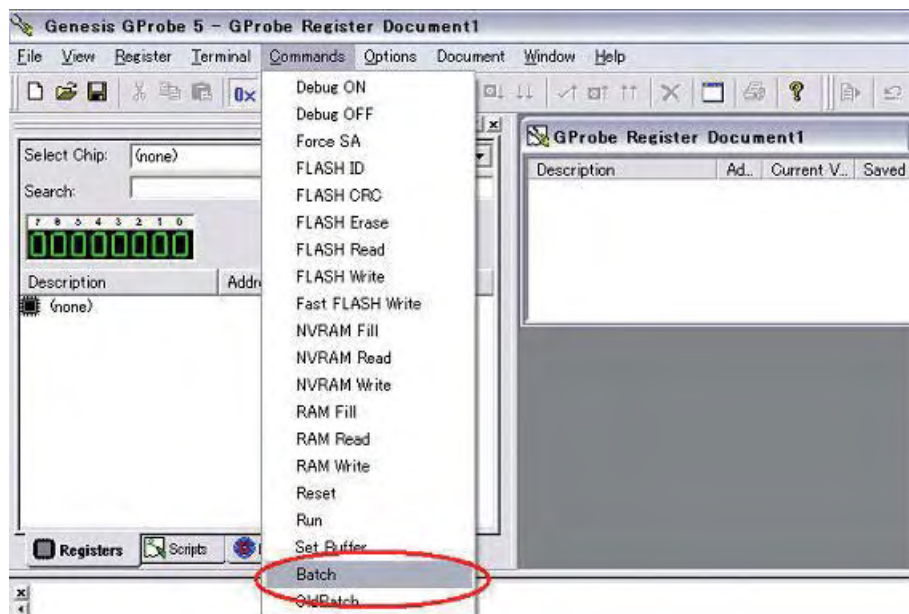
1. Start GProbe by clicking the icon.



2. Turn on the unit and make sure that some information appears in the bottom right corner of the window.



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

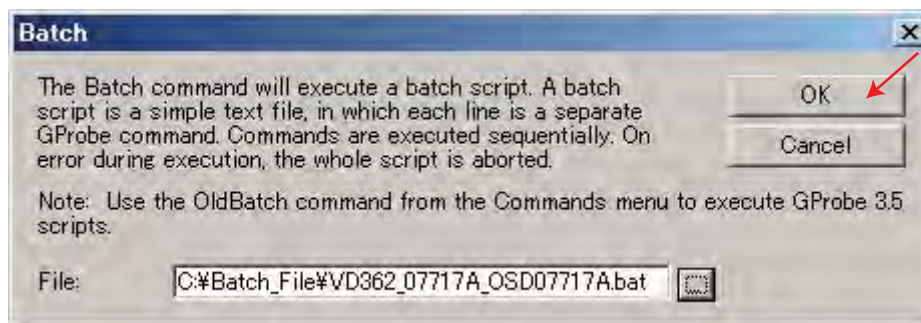
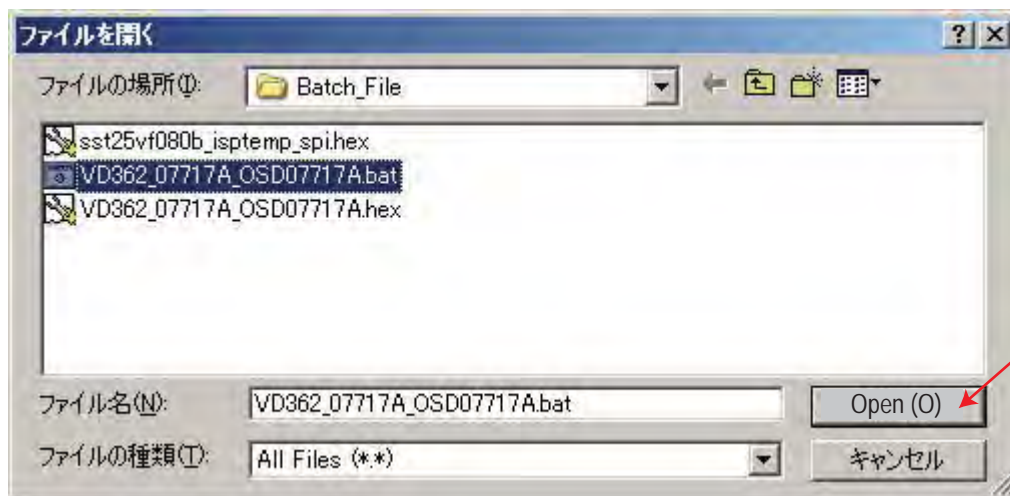
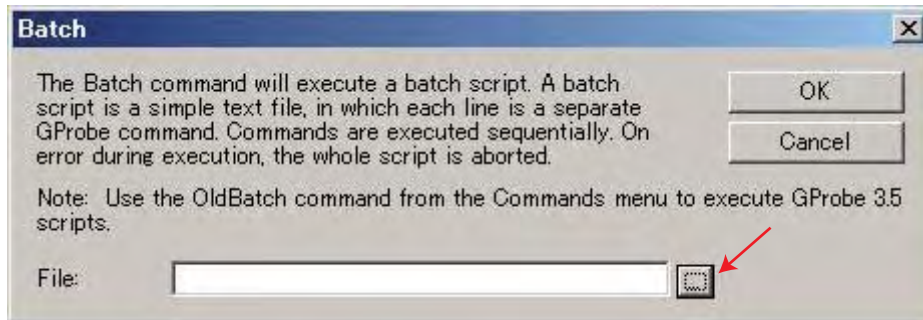




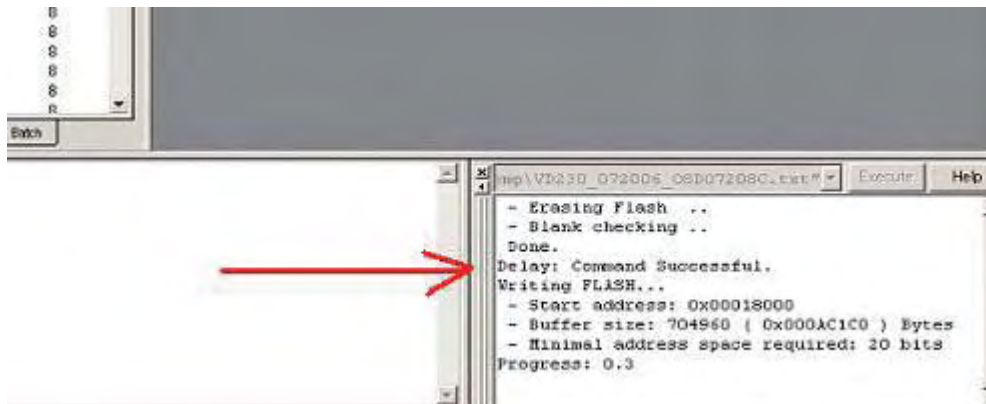
## FIRMWARE UPDATE -6

### Video Update Procedure

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



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

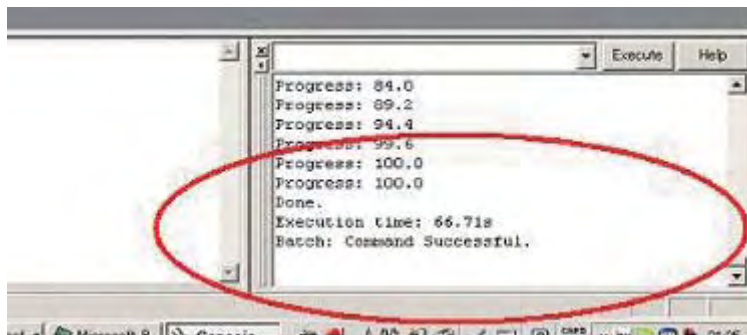


Note:  
 Front Display on the unit will show no information about writing but continue to display what was shown before.

## FIRMWARE UPDATE -7

### Video Update Procedure

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



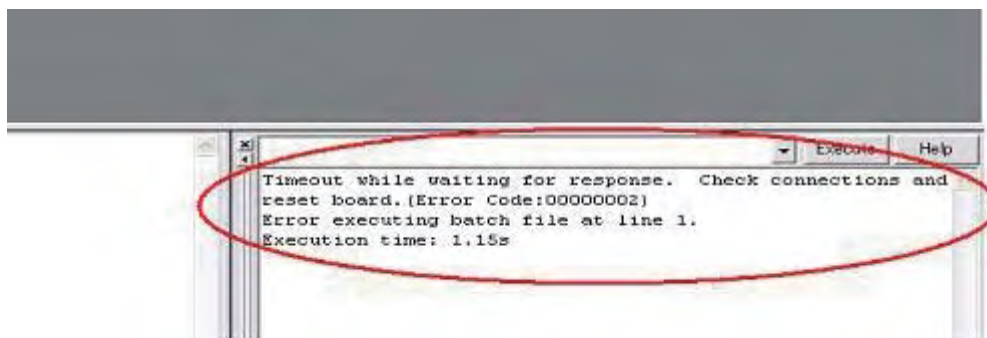
A screenshot of a Windows command prompt window. The window title bar includes 'Execute' and 'Help' buttons. The text inside the window shows the progress of a firmware update: 'Progress: 84.0', 'Progress: 89.2', 'Progress: 94.4', 'Progress: 99.6', 'Progress: 100.0', 'Progress: 100.0', 'Done.', 'Execution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

```
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.

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 bar includes 'Execute' and 'Help' buttons. 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 -8

How to install GProbe

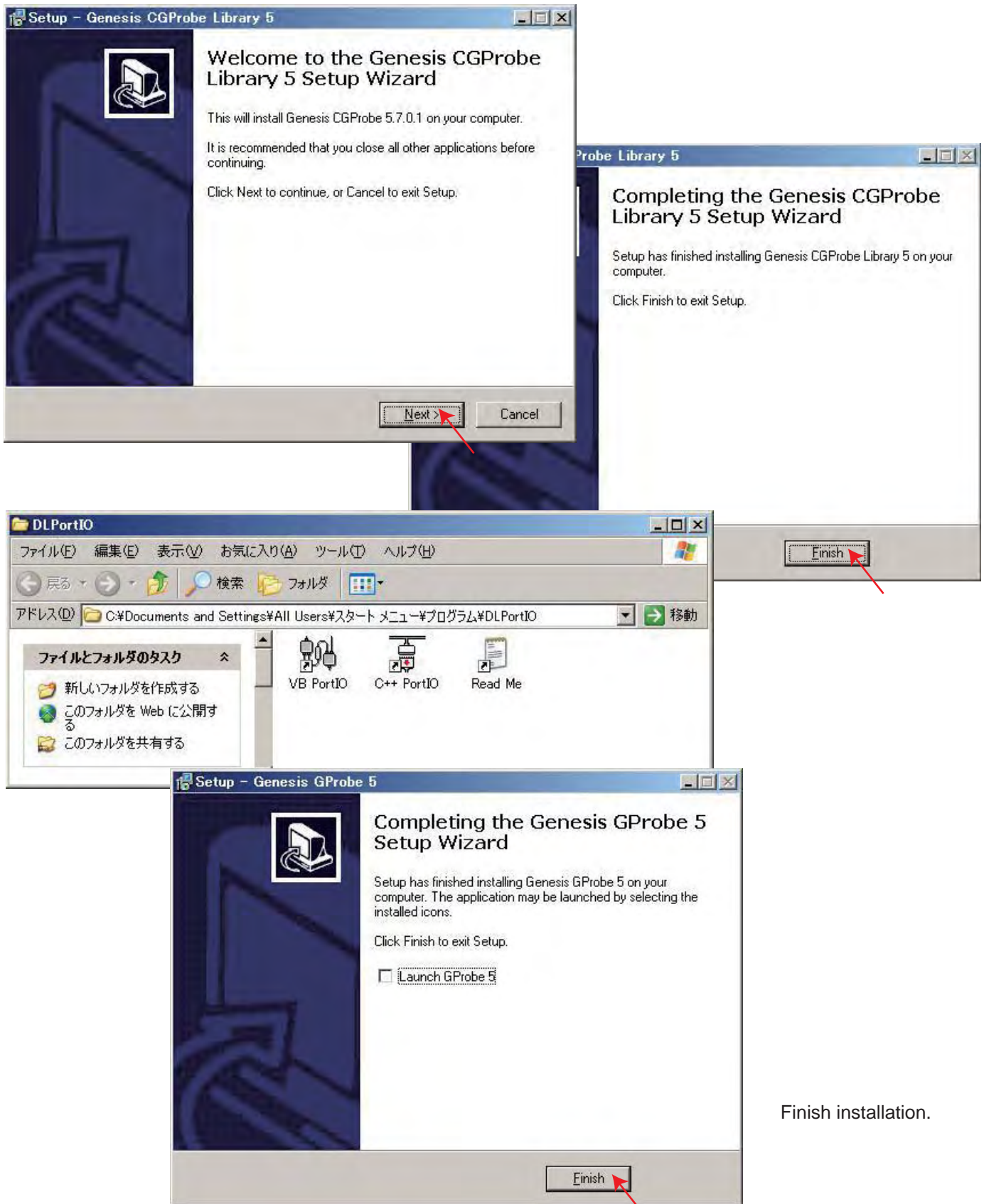
1. Unzip "GProbe 5[1].4.0.3.zip" and click the extracted file "GProbe5.4.0.3.exe."
2. Follow the instructions on the window as below.  
Note: Not all the windows are shown in this procedure.



## FIRMWARE UPDATE -9

How to install GProbe

- Continued from previous page  
Another Setup Wizard starts.



## OPERATION CHECK-1

### SPEAKER PROTECT-1 (DC VOLTAGE DETECTION)

#### [When]


1. Exchange power transistors (Q6030 - Q6036, Q6050 - Q6056).
2. Exchange amplifier PC board ass'y (NAAF-9142).

#### [Procedure]

<Note>

No load. No input.

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

Test - \_  Blinks

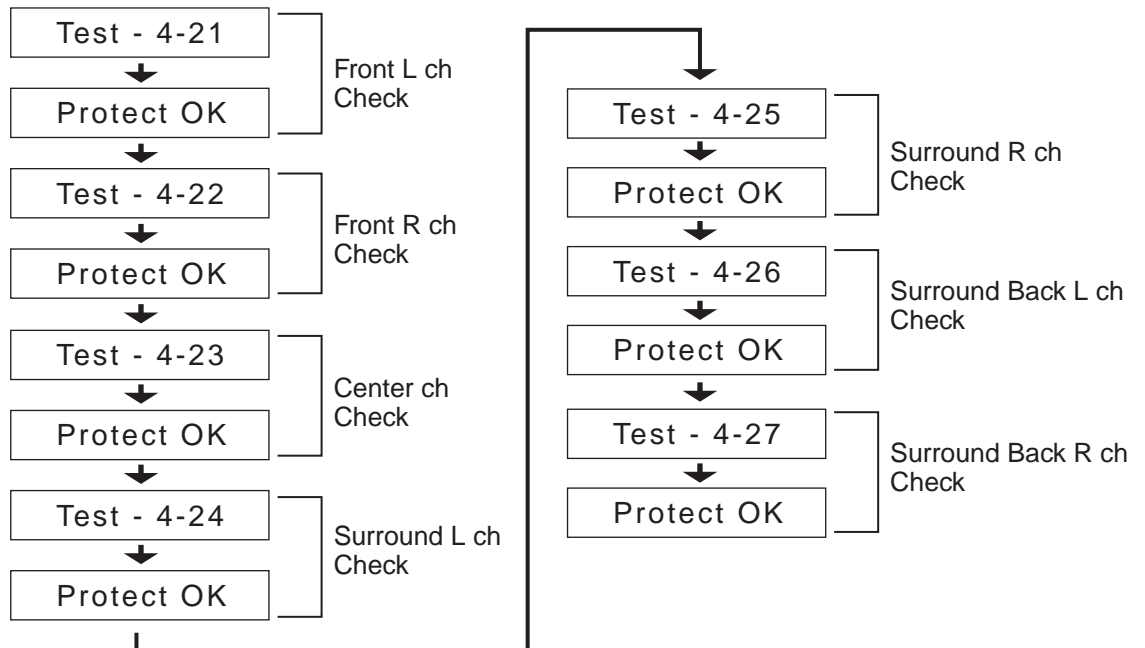
2. Press GAME/TV button, while the characters of " Test - \_ " are displayed.  
The unit will be in the state of " Test-4-00 ".

Test - 4-00

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

Test - 4-21

Check whether the operation starts and continues automatically as follows.



If all channels are OK, the characters of " Test - 4 - 35 " are displayed.

Test - 4-35

4. Press STANDBY/ON button.



## OPERATION CHECK-2

### SPEAKER PROTECT-2 (CURRENT DETECTION)

#### [When]

1. Exchange power transistors (Q6030 - Q6036, Q6050 - Q6056).
2. Exchange amplifier PC board ass'y (NAAF-9142).

#### [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 Power 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-4-35" is displayed.

Test - 4-35

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 - 4-35

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 - 4-35

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 (Q6030 - Q6036, Q6050 - Q6056).
2. Exchange power amplifier PC board ass'y (NAAF-9142).
3. Exchange thermal sensor PC board ass'y (NAETC-9144).


#### [Procedure]

<Note>

No output. No input.

#### Output sensor

1. Press and hold down CD button, then press STANDBY/ON button while the unit is Power 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. At this time, confirm that the red characters of "FM STEREO" is displayed.  
And, check relay RL6901 and RL6902 are turned off in 2 or 3 seconds.

Test - 4-36  (Front R, Center, Surround L ch check)

3. press TONE + button, then "Test-4-37" will be displayed.

Test - 4-37

4. At this time, confirm that the red characters of "FM STEREO" is displayed.  
And, check relay RL6901 and RL6902 are turned off in 2 or 3 seconds.

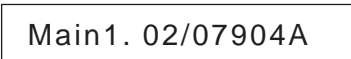
Test - 4-37  (Surround R, Surround Back L, Surround R ch check)

5. Press STANDBY/ON button.

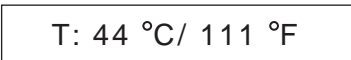
Clear  Turn off

#### Thermal sensor

1. Press and hold down DISPLAY button, then press STANDBY button when the unit is power ON.  
The main microprocessor version will be displayed only for 2 seconds.

<Ex.> 

2. Press TONE button while the version is displayed. The temperature of thermal sensor will be displayed.

<Ex.> 

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

After 10 minutes of  $T \geq 100\text{ }^{\circ}\text{C}$

or

Immediately  $T \leq -30\text{ }^{\circ}\text{C}$

or

Immediately  $T > 150\text{ }^{\circ}\text{C}$

or

Immediately  $T \geq 90\text{ }^{\circ}\text{C}$  (if  $T > 40\text{ }^{\circ}\text{C}$  when Power is on)

or

Immediately  $T = 90\text{ }^{\circ}\text{C}$  (if the unit is powered on longer than 24 hours)

#### 2. DC voltage condition

The sum of dc voltage of 7 channel speaker outputs is more than 7 V.

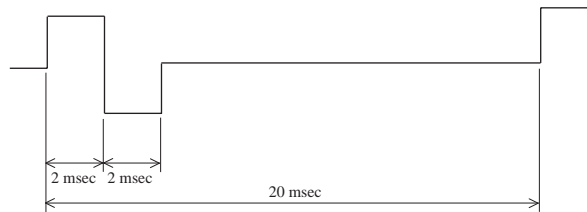
#### 3. Current condition

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 Control

The power supply voltage(VH or VL) for power amplifiers is changed by the relays: RL6901 and RL6902.

$VH > VL$

T: Thermal sensor temperature

VOLH: Pin #89 input voltage of Main microprocessor: Q701 (Refer to SD-2:A3 and SD-5:F2 of Schematic Diagram)

This is created by the largest ac voltage in 7 speaker outputs.

VH:  $VOLH > 2.5\text{ V}$  (Equivalent to 23.8Vrms at Speaker Output)

or

$T \geq 65\text{ }^{\circ}\text{C}$

VL: Conditions except above

### Condition of Cooling Fan Operation(WT and WO type only)

The cooling fan will stop or rotate at high speed or low speed under the following conditions.

STOP:

$VOLH \leq 0.5\text{ V}$

LOW SPEED:

$VOLH > 0.5$  and  $T < 55\text{ }^{\circ}\text{C}$

HIGH SPEED:

$VOLH > 4\text{ V}$  or  $T \geq 55\text{ }^{\circ}\text{C}$



## DEBUG MODE -1

The operation of DSP is able to checked by the information displayed on FL in this debug mode.  
This information will help to pursue the cause of trouble.

### To set in DSP debug mode

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

<Ex.> Main1. 02/07904A

2. Press TONE+ button twice within 3 seconds above, the version number of DSP is displayed.

<Ex.> DSPSR605:07727A

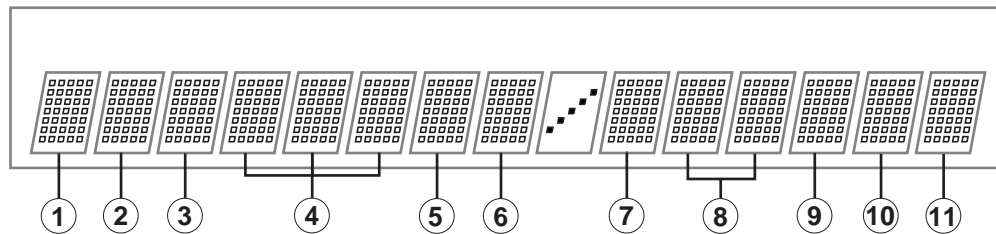
3. Press DISPLAY button while the DSP version is displayed. The status of DSP and DIR will be displayed.

<Ex.> 0A48KON/0FFPo0

### To exit

Press STANDBY/ON button.

### Content of display



----- DIR -----		----- DSP -----	
① UNLOCK E = UNLOCK = LOCK	④ 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	⑦ DSP Port bit0 = NIC bit1 = DEC bit2 = SPI Busy bit3 = Exec wait	(Normal state) (Abnormal state)
② Digital Selector 0 = None 1 = COAX1 2 = COAX2 3 = OPT 1 4 = OPT 2 5 = FRONT 8 = HDMI1 9 = HDMI2	⑤ CODEC CLOCK MODE N = Normal U = Up Sampling H = High Sampling (Double Rate) D = Down Sampling Q = Quad Rate	⑧ DSP Sequence 00-FE = Not Free 2D = Mute Control FF = Free	
③ DIR Status D = Digital A = Analog M = Multich p = PCM Fixed d = DTS Fixed	⑥ DIR Detect Type 0 = Analog 1 = PCM 2 = Not PCM 3 = Data 4 = DTS CD (Not used) 5 = Multich 6 = Not Decided	⑨ DSP Detect Format P = PCM (Analog) D = Dolby Digital d = DTS p = Dolby Digital+ H = DTS-HD High Resolution M = DTS-HD Master Audio ? = UNKNOWN	T = TrueHD A = AAC S = DSD
		⑩ DSP Decode o = Decode OK x = Decode NG	
		----- Main Microprocessor -----	
		⑪ Mute output device bit0 = Selector IC(Q5501) bit1 = Effector bit2 = DSP(Q201) bit3 = DIR(Q301)	

## DEBUG MODE -2

### Trouble Shooting by Debug Mode -1

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: Q701.

DSP: Q201, DIR and DAC: Q301

Flash ROM: Q281, SDRAM: Q282

Audio Processor: Q5501

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	Displayed freq. is different from input	No input signal to DIR.	Related devices from digital input to DIR.
⑥	Displayed format is different from input	No input signal to DIR.	Related devices from digital input to DIR.
⑧	"04" or "11" do not change to "FF"	Flash ROM or SDRAM error.	Flash ROM, SDRAM & related devices.
⑨	Displayed format is different from input	Input signal to DSP is no good.	Related devices from DIR to DSP.
⑩	"x" is displayed	Interface between DSP and MPU is no good.	Related devices from MPU to DSP.
⑪	This identifies IC which outputs error	IC outputs error to MPU.	Audio Processor, DSP, DIR & related devices.
⑦	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 ⑧ items.
⑧	Continue to display "03"	Communication between DSP and MPU is no good.	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. 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. 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. Connection between DSP and Flash ROM. Clock freq. to DSP.

## DEBUG MODE -3

### Trouble Shooting by Debug Mode -2

(Continued)

Digit no on FL	Symptom on display	Cause	Check
⑧	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. 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. 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. Connection between DSP and Flash ROM.

### Trouble Shooting by Displaying Service information

This service information display system is helpful in analyse 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 button while the unit is powered ON.

The version number of microprocessor is displayed only for 3 seconds.

<Ex.> Main1. 02/07904A

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

<Ex.> - 50° C 30 0D

3. Press SETUP button again. The following informatios are displayed.

<Ex.> 01:23 10hour

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

<Ex.> ProtectData CLR

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

#### 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 PROCEDURE-1

### IDLING CURRENT ADJUSTMENT

#### [When]

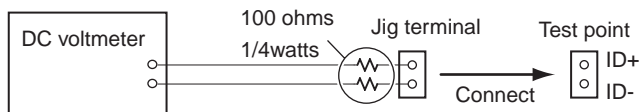
Exchange Power transistor (Q6050 - Q6056, Q6060 - Q6066) and Amplifier PC board (NAAF-9142).

#### [Procedure]

<Note> No load and No signal

Refer to <Fig-1> in " ADJUSTMENT PROCEDURE-2 " 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
Center	C	R6040	P6080	2.5 mV
Front Left	L	R6041	P6081	2.5 mV
Front Right	R	R6042	P6082	2.5 mV
Surround Left	SL	R6043	P6083	1.5 mV
Surround Right	SR	R6044	P6084	1.5 mV
Surround Back Left	SBL	R6045	P6085	1.5 mV
Surround Back Right	SBR	R6046	P6086	1.5 mV

6. Wait for 4 - 6 minutes. (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	R6041, R6042 and R6040	In case below 9 mV	→ 9 mV	12 +/- 3 mV
		In case 9 - 11 mV	→ No re-adjustment	
		In case over 11 mV	→ 11 mV	
Surround Left Surround Right Surround Back Left Surround Back Right	R6043, R6044, R6045 and R6046	In case below 6 mV	→ 6 mV	9 +/- 3 mV
		In case 6 - 8 mV	→ No re-adjustment	
		In case over 8 mV	→ 8 mV	

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.

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



## TX-SR605/SA605/SA8560

## &lt;Note&gt;

- 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 touch..

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

## &lt;Notes&gt;

(B) : TX-SR605 Black model	<DD> : TX-SR605 USA model
(G) : TX-SR605 Golden model	<DC> : TX-SR605 Canadian model
(S) : TX-SR605 Silver model	<PP> :TX-SR605 European model
<SA605> : TX-SA605 Golden model	<PA> : TX-SR605 Australian model
<SA8560> : TX-SA8560 Golden model	<WO> : TX-SR605 Saudi model
	<WT> : TX-SR605 World wide model
	<GQ> : TX-SR605 Hong kong model
	<GK> : TX-SR605 Korean model
	<SA605> : TX-SA605 Chinese model
	<SA8560> : TX-SA8560 Chinese model

## EXPLODED VIEW PARTS LIST

REF. NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
A001	CHASSIS	TXSR505/605	1	27100489B	NSP,<DD ,DC, PA, PP, GK, GQ, SA605, SA8560>
A001	CHASSIS	.	1	27100490B	NSP, <WO, WT>
A002	F BRACKET	605 BLACK	1	27111488B	(B)
A002	F BRACKET	605 SILVER	1	27111489B	(S)
A002	F BRACKET	605 GOLD	1	27111490B	(G)
A002	F BRACKET	605 GOLD	1	27111490B	<SA605, SA8560>
A003	F PANEL	605(B)MDD/MDC	1	27213015A	(B), <DD,DC>
A003	F PANEL	605(B)MPA/MWO	1	27213019A	(B), <PA, WO>
A003	F PANEL	605(B)MPP	1	27213017A	(B), <PP>
A003	F PANEL	605(S)MDC	1	27213016A	(S), <DC>
A003	F PANEL	605(S)MPA/MWO	1	27213020A	(S), <PA, WO>
A003	F PANEL	605(S)MPP	1	27213018A	(S), <PP>
A003	F PANEL	605(G)MWT/MGK	1	27213021A	(G), <GK, GQ, WT>
A003	F PANEL	TXSA605MGR	1	27213051	<SA605>
A003	F PANEL	TX-SA8560	1	27213052	<SA8560>
A004	HOLDER	(FAN)	8	27191302	<WO, WT>
A0041	SCREW	3TTB+8B(3CM)SR	5	801637	
A0042	CUSHION	.	1	28141688	<WO, WT>
A005	B PLATE	.	1	28133425	(B)
A005	B PLATE	.	1	28133426	(S)
A005	B PLATE	.	1	28133426	(G)
A005	B PLATE	.	1	28133426	<SA605, SA8560>
A007	BADGE	BADGE	1	28135244	(B)
A007	BADGE	.	1	28135298	(S)
A007	BADGE	BADGE	1	28135245	(G)

A007	BADGE	BADGE	1	28135245	<SA605, SA8560>
A008	GUIDE	(VOL) BLACK	1	27268207	(B)
A008	GUIDE	(VOL) SILVER	1	27268208	(S)
A008	GUIDE	(VOL) GOLD	1	27268209	(G)
A008	GUIDE	(VOL) GOLD	1	27268209	<SA605, SA8560>
A009	CLEAR PLT	.605(B) DC	1	28192166A	(B), <DD, DC>
A009	CLEAR PLT	.605(B) PP	1	28192168A	(B), <PA, PP, WO>
A009	CLEAR PLT	.605(S) DC	1	28192167A	(S), <DC>
A009	CLEAR PLT	.605(S) PP	1	28192169A	(S), <PA, PP, WO>
A009	CLEAR PLT	.605(S) PP	1	28192169A	(G), <WT, GK, GQ>
A009	CLEAR PLT	.605(S) PP	1	28192169A	<SA605, SA8560>
A0091	SCREW	3TTB+8B(3BC)	3	838430088GR	<SA605, SA8560>
A010	SCREW	3TTB+8B(3BC)	3	838430088GR	(B)
A010	SCREW	3TTB+8B(3BC)	3	838430088GR	(S)
A010	SCREW	3TTB+8B(3BC)	3	838430088GR	(G)
A011	REAR PANEL	SR605MDD/MDC	1	27123733	<DD, DC>
A011	REAR PANEL	SR605MGK/MGQ	1	27123736	<GK, GQ>
A011	REAR PANEL	SR605MPA	1	27123737	<PA>
A011	REAR PANEL	SR605MPP	1	27123734A	<PP>
A011	REAR PANEL	SR605MWO/MWT	1	27123735	<WO, WT>
A011	REAR PANEL	SR605CGR	1	27123738B	<SA605>
A011	REAR PANEL	SR8560CGR	1	27123739B	<SA8560>
A012	SCREW	3TTB+8B(3CM)SR	12	801637	
A015	SCREW	3TTB+8B(3BC)	41	838430088GR	<DD, DC>
A015	SCREW	3TTB+8B(3BC)	37	838430088GR	<PP, PA>
A015	SCREW	3TTB+8B(3BC)	39	838430088GR	<WO, WT>
A015	SCREW	3TTB+8B(3BC)	37	838430088GR	<GK, GQ>
A015	SCREW	3TTB+8B(3BC)	36	838430088GR	<SA605, SA8560>
A016	WIRE TIE	BSK-1	7	260208	
A0161	ISO PLT	.	1	28175324	<WO, WT>
A017	KNOB	(PURE)AS BLACK	1	28326582A	(B), <PP, PA, WO>
A017	KNOB	(PURE)AS SILVER	1	28326583A	(S), <PP, PA, WO>
A017	KNOB	(PURE)AS GOLD	1	28326584A	(G), <WT, GK, GQ>
A017	KNOB	(PURE)AS GOLD	1	28326584A	<SA605, SA8560>
A0171	SCREW	3P+6FN(3B)	1	82143006GR	<DD, DC>
A0172	SCREW	3TTB+8B(3CM)SR	1	801637	(B)
A0172	SCREW	3TTB+8B(3CM)SR	1	801637	(S)
A0172	SCREW	3TTB+8B(3CM)SR	1	801637	(G)
A0172	SCREW	3TTB+8B(3CM)SR	1	801637	<SA605, SA8560>
A019	P RIVET	P-3055B-8L	2	880048	<WO, WT>
A020	WIRE TIE	BINDER(CLAMPER)JUL	2	260258	
A021	HOLDER	KGLS-22S	1	27190369	
A023	HOLDER	KGLS-16RT	2	27190511	
A025	HOLDER	KGPS-16RF	4	27190991	
A027	HOLDER	KGLS-10RT	1	27190428A	
A029	SCREW	3TTB+8B(3CM)SR	3	801637	
A033	CLIP	CS-1U	1	27255004	
A035	SCREW	3TTB+8B(3CM)SR	1	801637	(B)
A035	SCREW	3TTB+8B(3CM)SR	1	801637	(S)
A035	SCREW	3TTB+8B(3CM)SR	1	801637	(G)
A035	SCREW	3TTB+8B(3CM)SR	2	801637	<SA605, SA8560>

A037	SCREW	4TTC+8C(3BC)	4	830440089GR	
A039	LABEL	(PT)	1	29363379-1	
A043	BUSHING	S-RELIEF #2271	1	27300750	!
A045	HEAT SINK	.	1	27160609	
A047	TAPE	TAPE(CLOTH-8U)	1	29110082	
A048	TAPE	TAPE(CLOTH-8U)	1	29110082	
A049	BRACKET	(HT-L)	1	27131029	
A051	BRACKET	(HT-R)	1	27131030	
A053	SCREW	3TTB+8B(3CM)SR	11	801637	
A059	SCREW	3SMS8W.SW+14B(CU)	14	801634	
A061	IB CUSHION	W15*3t TAPE	1	28141585	
A063	KNOB	(SETUP) BLACK	1	28326517B	(B)
A063	KNOB	(SETUP) SILVER	1	28326518B	(S)
A063	KNOB	(SETUP) SILVER	1	28326518B	(G)
A063	KNOB	(SETUP) SILVER	1	28326518B	<SA605, SA8560>
A065	SPRING	.	1	27180596	
A067	HOLDER	.	1	27191279	
A069	SCREW	3P+10FN(3BC)	1	82143010GR	
A301	COVER	(B)	1	28184972	(B)
A301	COVER	(S)	1	28184973	(S)
A301	COVER	(G)	1	28184974	(G)
A301	COVER	(G)	1	28184974	<SA605, SA8560>
A3011	LABEL	(COVER)	1	29364123	(B)
A3011	LABEL	(COVER)	1	29364123	(S)
A3011	LABEL	(COVER)	1	29364123	(G)
A302	LABEL	HOOKUP-ONKYO	1	29363194	<DD, DC>
A303	KNOB	(VOL) BLACK	1	28326514	(B), <DD, DC>
A303	KNOB	(VOL)AS BLACK	1	28326579	(B), <PP, PA, WO>
A303	KNOB	(VOL) SILVER	1	28326515	(S), <DC>
A303	KNOB	(VOL)AS SILVER	1	28326580	(S), <PP, PA, WO>
A303	KNOB	(VOL)AS GOLD	1	28326581	(G), <WT, GK, GQ>
A303	KNOB	(VOL)AS GOLD	1	28326581	<SA605, SA8560>
A304	SCREW	3TTB+8B(3BC)	6	838430088GR	(B)
A304	SCREW	3TTB+8B(3CM)SR	6	801637	(S)
A304	SCREW	3TTB+8B(3CM)SR	6	801637	(G)
A304	SCREW	3TTB+8B(3CM)SR	6	801637	<SA605, SA8560>
A305	CUSHION	.	1	28141681	
A306	CUSHION	.	4	28141637	
A307	BOTTOM LEG	.	4	27175432B	
A309	CUSHION	.	4	28141700	
A311	SCREW	3TTB+8B(3CM)SR	4	801637	
A313	CUSHION	.	2	28141688	
A315	SPACER	T0.5*8*3.5	1	27270463	(B)
A315	SPACER	T0.5*8*3.5	1	27270463	(S)
A315	SPACER	T0.5*8*3.5	1	27270463	(G)
F6901	FUSE	12A-TUL-250V	1	252301GR	!
F6902	FUSE	12A-TUL-250V	1	252301GR	!
F901	FUSE	10A-UL/T-233	1	252330GR	!,<DD, DC>
F901 or	FUSE	10A-T/UL-ST2	(1)	252333GR	!,<DD, DC>
F901	FUSE	5A-SE-EAK FUSE	1	252078GR	!,<PP, PA, WO, WT, GK, GQ, SA605, SA8560>
F901 or	FUSE	5A-SE-TL250V	(1)	252278GR	!,<PP, PA, WO, WT, GK, GQ, SA605, SA8560>



F902	FUSE	5A-SE-EAK FUSE	1	252078GR	!,<WT,WO>
F902 or	FUSE	5A-SE-TL250V	(1)	252278GR	!,<WT,WO>
F910	FUSE	5A-UL/T-233	1	252326GR	!
F910 or	FUSE	5A-T/UL-ST2	(1)	252258GR	!
P101	FFC	NCFC7-131012	1	2047131012	(B)
P101	FFC	NCFC7-131012	1	2047131012	(S)
P101	FFC	NCFC7-131012	1	2047131012	(G)
P4008	FFC	NCFC7-231512	1	2047231512	
P691	FAN	DO5X-12T	1	24502321	<WO, WT>
P692	FAN	DO5X-12T	1	24502321	<WO, WT>
P701	FFC	NCFC3-36023	1	204336023	
P901	AC CORD	AS-UC-2	1	253333VOL	!,<DD, DC>
P901 or	AC CORD	AS-UC-2	(1)	253368LTK	!,<DD, DC>
P901 or	AC CORD	AS-UC-2	(1)	253368YUN	!,<DD, DC>
P901 or	AC CORD	AS-UC-2	(1)	253368HSN	!,<DD, DC>
P901	AC CORD	AS-CEE-2	1	253306VOL	!,<PP, WO, WT>
P901 or	AC CORD	AS-CEE-2	(1)	253374LTK	!,<PP, WO, WT>
P901 or	AC CORD	AS-CEE-2	(1)	253374YUN	!,<PP, WO, WT>
P901	AC CORD	AS-BS	1	253198VOL	!,<GQ>
P901 or	AC CORD	AS-BS	(1)	253198LTK	!,<GQ>
P901	AC CORD	AS-CCC	1	253355VOL	!,<SA605, SA8560>
P901 or	AC CORD	AS-CCC	(1)	253377LTK	!,<SA605, SA8560>
P901	AC CORD	AS-KS	1	253406VOL	!,<GK>
P901	AC CORD	AS-SAA	1	253388LTK	!,<PA>
Q6050	TR	2SC5242-O	1	2202843	<PP>
Q6050 or	TR	2SC5242-R	(1)	2202842	<PP>
Q6050	TR	MN130S-O	1	2203663	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6050 or	TR	MN130S-P	(1)	2203666	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6050 or	TR	MN130S-Y	(1)	2203664	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6050A	ISO SHEET	AC238	2	223024	
Q6050B	ISO SHEET	ISO SHEET	6	223041	
Q6051	TR	2SC5242-O	1	2202843	<PP>
Q6051 or	TR	2SC5242-R	(1)	2202842	<PP>
Q6051	TR	MN130S-O	1	2203663	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6051 or	TR	MN130S-P	(1)	2203666	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6051 or	TR	MN130S-Y	(1)	2203664	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6052	TR	2SC5242-O	1	2202843	<PP>
Q6052 or	TR	2SC5242-R	(1)	2202842	<PP>
Q6052	TR	MN130S-O	1	2203663	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6052 or	TR	MN130S-P	(1)	2203666	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6052 or	TR	MN130S-Y	(1)	2203664	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6053	TR	2SC5242-O	1	2202843	<PP>
Q6053 or	TR	2SC5242-R	(1)	2202842	<PP>
Q6053	TR	MN130S-O	1	2203663	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6053 or	TR	MN130S-P	(1)	2203666	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6053 or	TR	MN130S-Y	(1)	2203664	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6054	TR	2SC5242-O	1	2202843	<PP>
Q6054 or	TR	2SC5242-R	(1)	2202842	<PP>
Q6054	TR	MN130S-O	1	2203663	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6054 or	TR	MN130S-P	(1)	2203666	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6054 or	TR	MN130S-Y	(1)	2203664	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>

Q6055	TR	2SC5242-O	1	2202843	<PP>
Q6055 or	TR	2SC5242-R	(1)	2202842	<PP>
Q6055	TR	MN130S-O	1	2203663	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6055 or	TR	MN130S-P	(1)	2203666	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6055 or	TR	MN130S-Y	(1)	2203664	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6056	TR	2SC5242-O	1	2202843	<PP>
Q6056 or	TR	2SC5242-R	(1)	2202842	<PP>
Q6056	TR	MN130S-O	1	2203663	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6056 or	TR	MN130S-P	(1)	2203666	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6056 or	TR	MN130S-Y	(1)	2203664	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6060	TR	2SA1962-O	1	2202833	<PP>
Q6060 or	TR	2SA1962-R	(1)	2202832	<PP>
Q6060	TR	MP130S-O	1	2203673	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6060 or	TR	MP130S-P	(1)	2203676	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6060 or	TR	MP130S-Y	(1)	2203674	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6061	TR	2SA1962-O	1	2202833	<PP>
Q6061 or	TR	2SA1962-R	(1)	2202832	<PP>
Q6061	TR	MP130S-O	1	2203673	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6061 or	TR	MP130S-P	(1)	2203676	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6061 or	TR	MP130S-Y	(1)	2203674	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6062	TR	2SA1962-O	1	2202833	<PP>
Q6062 or	TR	2SA1962-R	(1)	2202832	<PP>
Q6062	TR	MP130S-O	1	2203673	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6062 or	TR	MP130S-P	(1)	2203676	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6062 or	TR	MP130S-Y	(1)	2203674	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6063	TR	2SA1962-O	1	2202833	<PP>
Q6063 or	TR	2SA1962-R	(1)	2202832	<PP>
Q6063	TR	MP130S-O	1	2203673	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6063 or	TR	MP130S-P	(1)	2203676	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6063 or	TR	MP130S-Y	(1)	2203674	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6064	TR	2SA1962-O	1	2202833	<PP>
Q6064 or	TR	2SA1962-R	(1)	2202832	<PP>
Q6064	TR	MP130S-O	1	2203673	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6064 or	TR	MP130S-P	(1)	2203676	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6064 or	TR	MP130S-Y	(1)	2203674	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6065	TR	2SA1962-O	1	2202833	<PP>
Q6065 or	TR	2SA1962-R	(1)	2202832	<PP>
Q6065	TR	MP130S-O	1	2203673	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6065 or	TR	MP130S-P	(1)	2203676	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6065 or	TR	MP130S-Y	(1)	2203674	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6066	TR	2SA1962-O	1	2202833	<PP>
Q6066 or	TR	2SA1962-R	(1)	2202832	<PP>
Q6066	TR	MP130S-O	1	2203673	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6066 or	TR	MP130S-P	(1)	2203676	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>
Q6066 or	TR	MP130S-Y	(1)	2203674	<DD, DC, PA, WO, WT, GK, GQ, SA605, SA8560>

## &lt;Notes&gt;

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

T901	P TRANS	NPT-1552D	1	2301888	!,<DD, DC>
T901	P TRANS	NPT-1552DQ	1	2301890	!,<WO, WT>
T901	P TRANS	NPT-1552G	1	2301891	!,<GK, GQ, SA605, SA8560>

T901	P TRANS	NPT-1552P	1	2301889	!,<PP, PA>
U010	TUNER UNIT	ENG06507QFUS	1	240156	<DD, DC>
U010 or	TUNER UNIT	FAE385-A11US	(1)	240152	<DD, DC>
U010	TUNER UNIT	ENG07506QFEX	1	240159	<PA, WO, WT, GK, GQ>
U010 or	TUNER UNIT	FAE485-E12EX	(1)	240155	<PA, WO, WT, GK, GQ>
U010	TUNER UNIT	FAE485-E11EU	1	240154	<PP>
U010 or	TUNER UNIT	ENG07505QFEU	(1)	240158	<PP>
<b>U01</b>	<b>AMPLIFIER PC board ass'y</b>	NAAF-9142-1A	1	1B176542-1A	<DD, DC>
		NAAF-9142-1B	1	1B176542-1B	<PA, PP, GK, GQ>
		NAAF-9142-1C	1	1B176542-1C	<WO, WT>
		NAAF-9142-1K	1	1B176542-1K	<SA605, SA8560>
U02	POWER SUPPLY PC board ass'y	NAPS-9143-1A	1	1B176543-1A	<DD, DC>
		NAPS-9143-1B	1	1B176543-1B	<PA, PP, GK, GQ>
		NAPS-9143-1C	1	1B176543-1C	<WO, WT>
		NAPS-9143-1K	1	1B176543-1K	<SA605, SA8560>
U03	THERMAL SENSOR PC board ass'y	NAETC-9144-1A	1	1B176544-1A	<DD, DC>
		NAETC-9144-1B	1	1B176544-1B	<PA, PP, GK, GQ>
		NAETC-9144-1C	1	1B176544-1C	<WO, WT>
		NAETC-9144-1K	1	1B176544-1K	<SA605, SA8560>
U04	HOLDER PC board ass'y	NAETC-9145-1A	1	1B176545-1A	<DD, DC>
		NAETC-9145-1B	1	1B176545-1B	<PA, PP, GK, GQ>
		NAETC-9145-1C	1	1B176545-1C	<WO, WT>
		NAETC-9145-1K	1	1B176545-1K	<SA605, SA8560>
<b>U05</b>	<b>DISPLAY PC board ass'y</b>	NADIS-9148-1H	1	1B176548-1H	<DD, DC>
		NADIS-9148-1J	1	1B176548-1J	<PP>
		NADIS-9148-1K	1	1B176548-1K	<PA>
		NADIS-9148-1L	1	1B176548-1L	<WO, WT>
		NADIS-9148-1M	1	1B176548-1M	<GK>
		NADIS-9148-1N	1	1B176548-1N	<SA605, SA8560>
		NADIS-9148-1P	1	1B176548-1P	<GQ>
U06	DISPLAY PC board ass'y	NADIS-9149-1H	1	1B176549-1H	<DD, DC>
		NADIS-9149-1J	1	1B176549-1J	<PP>
		NADIS-9149-1K	1	1B176549-1K	<PA>
		NADIS-9149-1L	1	1B176549-1L	<WO, WT>
		NADIS-9149-1M	1	1B176549-1M	<GK>
		NADIS-9149-1N	1	1B176549-1N	<SA605, SA8560>
		NADIS-9149-1P	1	1B176549-1P	<GQ>
U07	POWER SUPPLY PC board ass'y	NAPS-9150-1H	1	1B176550-1H	<DD, DC>
		NAPS-9150-1J	1	1B176550-1J	<PP>
		NAPS-9150-1K	1	1B176550-1K	<PA>
		NAPS-9150-1L	1	1B176550-1L	<WO, WT>
		NAPS-9150-1M	1	1B176550-1M	<GK>
		NAPS-9150-1N	1	1B176550-1N	<SA605, SA8560>
		NAPS-9150-1P	1	1B176550-1P	<GQ>
U08	POWER SUPPLY PC board ass'y	NAPS-9151-1H	1	1B176551-1H	<DD, DC>
		NAPS-9151-1J	1	1B176551-1J	<PP>
		NAPS-9151-1K	1	1B176551-1K	<PA>
		NAPS-9151-1L	1	1B176551-1L	<WO, WT>
		NAPS-9151-1M	1	1B176551-1M	<GK>
		NAPS-9151-1N	1	1B176551-1N	<SA605, SA8560>
		NAPS-9151-1P	1	1B176551-1P	<GQ>

U09	FRONT OPT PC board ass'y	NAETC-9152-1H	1	1B176552-1H	<DD, DC>
		NAETC-9152-1J	1	1B176552-1J	<PP>
		NAETC-9152-1K	1	1B176552-1K	<PA>
		NAETC-9152-1L	1	1B176552-1L	<WO, WT>
		NAETC-9152-1M	1	1B176552-1M	<GK>
		NAETC-9152-1N	1	1B176552-1N	<SA605, SA8560>
		NAETC-9152-1P	1	1B176552-1P	<GQ>
U10	HEADPHONE JACK PC board ass'y	NAETC-9153-1H	1	1B176553-1H	<DD, DC>
		NAETC-9153-1J	1	1B176553-1J	<PP>
		NAETC-9153-1K	1	1B176553-1K	<PA>
		NAETC-9153-1L	1	1B176553-1L	<WO, WT>
		NAETC-9153-1M	1	1B176553-1M	<GK>
		NAETC-9153-1N	1	1B176553-1N	<SA605, SA8560>
		NAETC-9153-1P	1	1B176553-1P	<GQ>
U12	SWITCH PC board ass'y	NASW-9157-1L	1	1B176557-1L	<WO, WT>
U13	HOLDER PC board ass'y	NAETC-9158-1H	1	1B176558-1H	<DD, DC>
		NAETC-9158-1J	1	1B176558-1J	<PP>
		NAETC-9158-1K	1	1B176558-1K	<PA>
		NAETC-9158-1L	1	1B176558-1L	<WO, WT>
		NAETC-9158-1M	1	1B176558-1M	<GK>
		NAETC-9158-1N	1	1B176558-1N	<SA605, SA8560>
		NAETC-9158-1P	1	1B176558-1P	<GQ>
U14	HOLDER PC board ass'y	NAETC-9159-1H	1	1B176559-1H	<DD, DC>
		NAETC-9159-1J	1	1B176559-1J	<PP>
		NAETC-9159-1K	1	1B176559-1K	<PA>
		NAETC-9159-1L	1	1B176559-1L	<WO, WT>
		NAETC-9159-1M	1	1B176559-1M	<GK>
		NAETC-9159-1N	1	1B176559-1N	<SA605, SA8560>
		NAETC-9159-1P	1	1B176559-1P	<GQ>
U15	HOLDER PC board ass'y	NAETC-9160-1H	1	1B176560-1H	<DD, DC>
		NAETC-9160-1J	1	1B176560-1J	<PP>
		NAETC-9160-1K	1	1B176560-1K	<PA>
		NAETC-9160-1L	1	1B176560-1L	<WO, WT>
		NAETC-9160-1M	1	1B176560-1M	<GK>
		NAETC-9160-1N	1	1B176560-1N	<SA605, SA8560>
		NAETC-9160-1P	1	1B176560-1P	<GQ>
U17	DSP PC board ass'y	NADG-9189-1A	1	1B176589-1A	<DD, DC>
		NADG-9189-1B	1	1B176589-1B	<PP>
		NADG-9189-1C	1	1B176589-1C	<PA, GK, GQ>
		NADG-9189-1D	1	1B176589-1D	<WO, WT>
		NADG-9189-1L	1	1B176589-1L	<SA605, SA8560>
U18	VIDEO AND SP TERMINAL PC board ass'y	NAVD-9190-1A	1	1B176590-1A	<DD, DC>
		NAVD-9190-1B	1	1B176590-1B	<PP>
		NAVD-9190-1C	1	1B176590-1C	<PA, GK, GQ>
		NAVD-9190-1D	1	1B176590-1D	<WO, WT>
		NAVD-9190-1L	1	1B176590-1L	<SA605, SA8560>
U19	XM PC board ass'y	NADG-9191-1A	1	1B176591-1A	<DD, DC>
U21	DRIVER AMPLIFIER PC board ass'y	NAAF-8917-2A	1	1B176517-2A	<DD, DC>
		NAAF-8917-2B	1	1B176517-2B	<PA, WO, WT, GK, GQ, SA605, SA8560>
		NAAF-8917-2C	1	1B176517-2C	<PP>
U22	SPEAKER TERMINAL PC board ass'y	NAETC-8918-2B	1	1B176518-2B	<PA, WO, WT, GK, GQ, SA605, SA8560>

		NAETC-8918-2C	1	1B176518-2C	<PP>
U23	HDMI PC board ass'y	NAHDM-9196-1	1	1B176596-1	

TX-SR605/SA605/SA8560

## PC BOARD PARTS LIST

U01	AMPLIFIER PC BOARD(NAAF-9142-1A/1B/1C/1K)
U02	POWER SUPPLY PC BOARD(NAPS-9143-1A/1B/1C/1K)
U03	THERMAL SENSOR PC BOARD(NAETC-9144-1A/1B/1C/1K)
U04	HOLDER PC BOARD(NAETC-9145-1A/1B/1C/1K)

CIRCUIT NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
Q5501	IC	R2S15211FP	1	22242297R3	
Q5503	IC	NE5532AFSR	1	22242283R2	
Q5600	TR	RN1441	1	2215410R2	
Q5601	TR	RN1441	1	2215410R2	
Q5602	TR	RN1441	1	2215410R2	
Q5603	TR	RN1441	1	2215410R2	
Q5604	TR	RN1441	1	2215410R2	
Q5605	TR	RN1441	1	2215410R2	
Q5606	TR	RN1441	1	2215410R2	
Q5607	TR	RN1441	1	2215410R2	
Q5608	TR	RN1441	1	2215410R2	
Q5609	TR	RN1441	1	2215410R2	
Q5610	TR	RN1441	1	2215410R2	
Q5630	IC	NE5532AFSR	1	22242283R2	
Q5670	IC	78M12HF(NJM78M12FA)	1	222780125JRC	
Q5670 or	IC	78M12(AN78M12F)	( 1)	222780125MAT	
Q5670 or	IC	MPC78M12AHF-AZ	( 1)	222780125NEC	
Q5670A	HEAT SINK	RAD-196	1	27160545	
Q5670B	SCREW	3P+10FN(3BC)	1	82143010GR	
Q5670C	TAPE	TAPE(CLOTH-8U)	1	29110082	
Q5671	IC	79M12HF(NJM79M12FA)	1	222790125JRC	
Q5671 or	IC	79M12F(AN79M12F)	( 1)	222790125MAT	
Q5671 or	IC	79M12HF(MPC79M12HF)	( 1)	222790125NEC	
Q5671B	SCREW	3P+10FN(3BC)	1	82143010GR	
Q5684	TR	2SC1815-GR	1	2211255T	
Q5685	TR	2SA1015-GR	1	2211455T	
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	
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
Q6030	TR	2SC5171(ONK_Q)	1	2203010
Q6030 or	TR	2SC5993-Q_P	(1)	2217161
Q6031	TR	2SC5171(ONK_Q)	1	2203010
Q6031 or	TR	2SC5993-Q_P	(1)	2217161
Q6032	TR	2SC5171(ONK_Q)	1	2203010
Q6032 or	TR	2SC5993-Q_P	(1)	2217161
Q6033	TR	2SC5171(ONK_Q)	1	2203010
Q6033 or	TR	2SC5993-Q_P	(1)	2217161
Q6034	TR	2SC5171(ONK_Q)	1	2203010
Q6034 or	TR	2SC5993-Q_P	(1)	2217161
Q6035	TR	2SC5171(ONK_Q)	1	2203010
Q6035 or	TR	2SC5993-Q_P	(1)	2217161
Q6036	TR	2SC5171(ONK_Q)	1	2203010
Q6036 or	TR	2SC5993-Q_P	(1)	2217161
Q6040	TR	2SA1930(ONK_Q)	1	2203000
Q6040 or	TR	2SA2140-Q_P	(1)	2217151
Q6041	TR	2SA1930(ONK_Q)	1	2203000
Q6041 or	TR	2SA2140-Q_P	(1)	2217151
Q6042	TR	2SA1930(ONK_Q)	1	2203000
Q6042 or	TR	2SA2140-Q_P	(1)	2217151
Q6043	TR	2SA1930(ONK_Q)	1	2203000
Q6043 or	TR	2SA2140-Q_P	(1)	2217151
Q6044	TR	2SA1930(ONK_Q)	1	2203000
Q6044 or	TR	2SA2140-Q_P	(1)	2217151
Q6045	TR	2SA1930(ONK_Q)	1	2203000
Q6045 or	TR	2SA2140-Q_P	(1)	2217151
Q6046	TR	2SA1930(ONK_Q)	1	2203000
Q6046 or	TR	2SA2140-Q_P	(1)	2217151
Q6070	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q6070 or	TR	2SC2240-GR	(1)	2211405T
Q6071	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q6071 or	TR	2SC2240-GR	(1)	2211405T
Q6072	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q6072 or	TR	2SC2240-GR	(1)	2211405T
Q6073	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q6073 or	TR	2SC2240-GR	(1)	2211405T
Q6074	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q6074 or	TR	2SC2240-GR	(1)	2211405T
Q6075	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q6075 or	TR	2SC2240-GR	(1)	2211405T
Q6076	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q6076 or	TR	2SC2240-GR	(1)	2211405T
Q6380	IC	LM61CIZ	1	22242212
Q6380A	RETAINER	(PTH)	1	27141884-1
Q6701	TR	2SC2712-GR	1	2213145R2
Q6701 or	TR	KTC3875-GR	(1)	2216175R2
Q6702	TR	2SC2712-GR	1	2213145R2
Q6702 or	TR	KTC3875-GR	(1)	2216175R2
Q6703	TR	2SA1163-BL(TE85L_F)	1	2216756R2
Q6707	TR	2SC2712-GR	1	2213145R2

Q6707 or	TR	KTC3875-GR	(1)	2216175R2
D5671	ZENER D	DZ-7.5BSC	1	224850753T
D5671 or	ZENER D	MTZJ7.5C	(1)	224470753T
D5672	ZENER D	DZ-7.5BSC	1	224850753T
D5672 or	ZENER D	MTZJ7.5C	(1)	224470753T
D6000	C-DIODE	ISS352	1	223234R2
D6000 or	C-DIODE	ISS355	(1)	223269R2
D6000 or	C-DIODE	KDS4148U	(1)	223283R2
D6001	C-DIODE	ISS352	1	223234R2
D6001 or	C-DIODE	ISS355	(1)	223269R2
D6001 or	C-DIODE	KDS4148U	(1)	223283R2
D6002	C-DIODE	ISS352	1	223234R2
D6002 or	C-DIODE	ISS355	(1)	223269R2
D6002 or	C-DIODE	KDS4148U	(1)	223283R2
D6003	C-DIODE	ISS352	1	223234R2
D6003 or	C-DIODE	ISS355	(1)	223269R2
D6003 or	C-DIODE	KDS4148U	(1)	223283R2
D6004	C-DIODE	ISS352	1	223234R2
D6004 or	C-DIODE	ISS355	(1)	223269R2
D6004 or	C-DIODE	KDS4148U	(1)	223283R2
D6005	C-DIODE	ISS352	1	223234R2
D6005 or	C-DIODE	ISS355	(1)	223269R2
D6005 or	C-DIODE	KDS4148U	(1)	223283R2
D6006	C-DIODE	ISS352	1	223234R2
D6006 or	C-DIODE	ISS355	(1)	223269R2
D6006 or	C-DIODE	KDS4148U	(1)	223283R2
D6010	C-DIODE	ISS352	1	223234R2
D6010 or	C-DIODE	ISS355	(1)	223269R2
D6010 or	C-DIODE	KDS4148U	(1)	223283R2
D6011	C-DIODE	ISS352	1	223234R2
D6011 or	C-DIODE	ISS355	(1)	223269R2
D6011 or	C-DIODE	KDS4148U	(1)	223283R2
D6012	C-DIODE	ISS352	1	223234R2
D6012 or	C-DIODE	ISS355	(1)	223269R2
D6012 or	C-DIODE	KDS4148U	(1)	223283R2
D6013	C-DIODE	ISS352	1	223234R2
D6013 or	C-DIODE	ISS355	(1)	223269R2
D6013 or	C-DIODE	KDS4148U	(1)	223283R2
D6014	C-DIODE	ISS352	1	223234R2
D6014 or	C-DIODE	ISS355	(1)	223269R2
D6014 or	C-DIODE	KDS4148U	(1)	223283R2
D6015	C-DIODE	ISS352	1	223234R2
D6015 or	C-DIODE	ISS355	(1)	223269R2
D6015 or	C-DIODE	KDS4148U	(1)	223283R2
D6016	C-DIODE	ISS352	1	223234R2
D6016 or	C-DIODE	ISS355	(1)	223269R2
D6016 or	C-DIODE	KDS4148U	(1)	223283R2
D6701	C-DIODE	ISS352	1	223234R2
D6701 or	C-DIODE	ISS355	(1)	223269R2
D6701 or	C-DIODE	KDS4148U	(1)	223283R2
D6702	C-DIODE	ISS352	1	223234R2

D6702 or	C-DIODE	ISS355	(1)	223269R2	
D6702 or	C-DIODE	KDS4148U	(1)	223283R2	
D6703	ZENER D	UDZS5.1B	1	224550510R2	
D6703 or	ZENER D	MAZ8051-M	(1)	224750512R2	
D6704	ZENER D	UDZS5.1B	1	224550510R2	
D6704 or	ZENER D	MAZ8051-M	(1)	224750512R2	
D6901	DIODE	D10XB60H	1	22380337	
D6901A	HEAT SINK	RAD-196	1	27160545	
D6901B	TAPE	TAPE(CLOTH-8U)	1	29110082	
D6901C	SCREW	3P+10FN(3BC)	2	82143010GR	
D6902	C-DIODE	ISS352	1	223234R2	
D6902 or	C-DIODE	ISS355	(1)	223269R2	
D6902 or	C-DIODE	KDS4148U	(1)	223283R2	
D6903	DIODE	D10XB60H	1	22380337	
D9001	DIODE	RL1N4003	1	22380260T	
D9001 or	DIODE	GP104003E	(1)	22380035T	
D9002	DIODE	RL1N4003	1	22380260T	
D9002 or	DIODE	GP104003E	(1)	22380035T	
D9003	DIODE	RL1N4003	1	22380260T	
D9003 or	DIODE	GP104003E	(1)	22380035T	
D9004	DIODE	RL1N4003	1	22380260T	
D9004 or	DIODE	GP104003E	(1)	22380035T	
C5501	C-CERA C	CC725CH1H-221J1	1	342102214R1	<SA605, SA8560>
C5502	C-CERA C	CC725CH1H-221J1	1	342102214R1	<SA605, SA8560>
C5503	TF C	ECQ-B50V-221K	1	374722215T	
C5504	TF C	ECQ-B50V-221K	1	374722215T	
C5507	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5508	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5509	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5510	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5513	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5514	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5517	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5518	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5519	TF C	ECQ-B50V-221K	1	374722215T	
C5520	TF C	ECQ-B50V-221K	1	374722215T	
C5521	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5522	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5523	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5524	TF C	ECQ-B50V-221K	1	374722215T	
C5525	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5526	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5527	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5528	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5531	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5551	UTSP C	CE04W25V-47M(UTSP)	1	397554707T	
C5552	UTSP C	CE04W25V-47M(UTSP)	1	397554707T	
C5553	UTSP C	CE04W25V-47M(UTSP)	1	397554707T	
C5554	UTSP C	CE04W25V-47M(UTSP)	1	397554707T	
C5555	UTSP C	CE04W25V-47M(UTSP)	1	397554707T	
C5556	UTSP C	CE04W25V-47M(UTSP)	1	397554707T	



C5557	UTSP C	CE04W25V-47M(UTSP)	1	397554707T
C5558	UTSP C	CE04W25V-47M(UTSP)	1	397554707T
C5559	TF C	ECQ-V50V-474J	1	374724744T
C5560	TF C	ECQ-V50V-823J	1	374728234T
C5561	TF C	ECQ-B50V-223J	1	374722234T
C5562	TF C	ECQ-V50V-474J	1	374724744T
C5563	TF C	ECQ-V50V-823J	1	374728234T
C5564	TF C	ECQ-B50V-223J	1	374722234T
C5565	UTSP C	CE04W25V-47M(UTSP)	1	397554707T
C5566	UTSP C	CE04W25V-47M(UTSP)	1	397554707T
C5569	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5570	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5571	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5572	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5573	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5574	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5575	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5576	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5590	C-CERA C	CC725CH1H-330J1	1	342103304R1
C5591	C-CERA C	CC725CH1H-330J1	1	342103304R1
C5600	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5601	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5602	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5603	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5604	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5605	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5606	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5607	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5608	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5609	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5630	UTSP C	CE04W50V 47M(UTSP)	1	397584707T
C5631	C-CERA C	CC725CH1H-221J1	1	342102214R1
C5632	TF C	ECQ-B50V-103J	1	374721034T
C5666	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C5667	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C5670	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C5671	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C5672	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C5673	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C5674	UTSP C	CE04W16V-470M(UTSP)	1	397544717T
C5675	UTSP C	CE04W16V-470M(UTSP)	1	397544717T
C5684	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C5685	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C5686	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C5687	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C5701	C-CERA C	CC725CH1H-102J1	1	342101024R1
C5702	C-CERA C	CC725CH1H-102J1	1	342101024R1
C5703	C-CERA C	CC725CH1H-102J1	1	342101024R1
C5704	C-CERA C	CC725CH1H-102J1	1	342101024R1
C5705	C-CERA C	CC725CH1H-102J1	1	342101024R1
C5706	C-CERA C	CC725CH1H-102J1	1	342101024R1

C5707	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5708	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C6030	TF C	ECQ-V50V-473J	1	374724734T	
C6031	TF C	ECQ-V50V-473J	1	374724734T	
C6032	TF C	ECQ-V50V-473J	1	374724734T	
C6033	TF C	ECQ-V50V-473J	1	374724734T	
C6034	TF C	ECQ-V50V-473J	1	374724734T	
C6035	TF C	ECQ-V50V-473J	1	374724734T	
C6036	TF C	ECQ-V50V-473J	1	374724734T	
C6040	UTSP C	CE04W50V-47M(UTSP)	1	397584707T	
C6041	UTSP C	CE04W50V-47M(UTSP)	1	397584707T	
C6042	UTSP C	CE04W50V-47M(UTSP)	1	397584707T	
C6043	UTSP C	CE04W50V-47M(UTSP)	1	397584707T	
C6044	UTSP C	CE04W50V-47M(UTSP)	1	397584707T	
C6045	UTSP C	CE04W50V-47M(UTSP)	1	397584707T	
C6046	UTSP C	CE04W50V-47M(UTSP)	1	397584707T	
C6050	TF C	ECQ-B50V-103J	1	374721034T	
C6051	TF C	ECQ-B50V-103J	1	374721034T	
C6052	TF C	ECQ-B50V-103J	1	374721034T	
C6053	TF C	ECQ-B50V-103J	1	374721034T	
C6054	TF C	ECQ-B50V-103J	1	374721034T	
C6055	TF C	ECQ-B50V-103J	1	374721034T	
C6056	TF C	ECQ-B50V-103J	1	374721034T	
C6076	TF C	ECQ-B50V-102J	1	374721024T	<DD, DC>
C6077	TF C	ECQ-B50V-102J	1	374721024T	<DD, DC>
C6086	TF C	ECQ-B50V-103J	1	374721034T	<DD, DC>
C6087	TF C	ECQ-B50V-103J	1	374721034T	<DD, DC>
C6701	UTSP C	CE04W25V-100M(UTSP)	1	397551017T	
C6703	C-CERA C	CK725F1H-104Z1	1	332151040R1	
C6704	UTSP C	CE04W50V-1M(UTSP)	1	397580107T	
C6706	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C6901	ELECT C	CE69W63V-10000MA	1	3504417	<DD, DC>
C6901 or	ELECT C	CE69W63V-10000MB	( 1)	3504418	<DD, DC>
C6901	ELECT C	CE69W69V-10000MA	1	3504425	<PA, PP, GK, GQ, WO, WT, SA605, SA8560>
C6901A	TAPE	TAPE(CLOTH-16U)	1	29110083	
C6902	ELECT C	CE69W63V-10000MA	1	3504417	<DD, DC>
C6902 or	ELECT C	CE69W63V-10000MB	( 1)	3504418	<DD, DC>
C6902	ELECT C	CE69W69V-10000MA	1	3504425	<PA, PP, GK, GQ, WO, WT, SA605, SA8560>
C6902A	TAPE	TAPE(CLOTH-16U)	1	29110083	
C6911	C-CERA C	CC725CH1H-102J1	1	342101024R1	
C6912	TF C	ECQ-V100-334J	1	374733344T	
C6913	TF C	ECQ-V100-334J	1	374733344T	
C6915	TF C	ECQ-V50V-104J	1	374721044T	
C6916	TF C	ECQ-V50V-104J	1	374721044T	
C9001	MMT C	MMT50V-334J	1	375523344T	
C9003	VR C	CE04W35V-1000M(VR)	1	394661027S	
C9004	VR C	CE04W35V-470M(VR)	1	394664717S	
C9005	C-CERA C	CK725F1E-104Z1	1	332161040R1	
R5500	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R5501	C-CARBON R	RN72K1J-331JE	1	435033314R1	<SA605, SA8560>
R5502	C-CARBON R	RN72K1J-331JE	1	435033314R1	<SA605, SA8560>

R5503	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R5504	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R5505	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R5506	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R5507	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R5508	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R5509	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R5510	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R5513	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R5514	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R5515	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R5516	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R5517	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R5518	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R5519	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R5520	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R5521	C-CARBON R	RN72K1J-331JE	1	435033314R1	
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R5524	C-CARBON R	RN72K1J-331JE	1	435033314R1	
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R5527	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R5528	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R5531	C-CARBON R	RN72K1J-101JE	1	435031014R1	
R5541	C-CARBON R	RN72K1J-224JE	1	435032244R1	<SA605, SA8560>
R5542	C-CARBON R	RN72K1J-224JE	1	435032244R1	<SA605, SA8560>
R5543	C-CARBON R	RN72K1J-224JE	1	435032244R1	
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R5545	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5546	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5547	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5548	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5549	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5550	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5553	C-CARBON R	RN72K1J-224JE	1	435032244R1	
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R5556	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5557	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5558	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5559	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5560	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5561	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5562	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5563	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5564	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5565	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5566	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5567	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R5568	C-CARBON R	RN72K1J-222JE	1	435032224R1	

R5571	C-CARBON R	RN72K1J-223JE	1	435032234R1	
R5575	C-CARBON R	RN72K1J-224JE	1	435032244R1	<DD, DC, PA, PP, GK, GQ, WO, WT>
R5576	C-CARBON R	RN72K1J-224JE	1	435032244R1	<DD, DC, PA, PP, GK, GQ, WO, WT>
R5577	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R5578	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R5579	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5580	C-CARBON R	RN72K1J-224JE	1	435032244R1	<DD, DC>
R5581	C-CARBON R	RN72K1J-224JE	1	435032244R1	<DD, DC>
R5582	C-CARBON R	RN72K1J-224JE	1	435032244R1	<DD, DC>
R5583	C-CARBON R	RN72K1J-224JE	1	435032244R1	<DD, DC>
R5585	C-CARBON R	RN72K1J-182JE	1	435031824R1	
R5586	C-CARBON R	RN72K1J-182JE	1	435031824R1	
R5587	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R5588	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R5589	CARBON R	R16J-1K	1	417341024T	
R5590	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R5591	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R5592	C-CARBON R	RN72K1J-471JE	1	435034714R1	
R5593	C-CARBON R	RN72K1J-122JE	1	435031224R1	
R5594	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R5595	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R5596	C-CARBON R	RN72K1J-471JE	1	435034714R1	
R5597	C-CARBON R	RN72K1J-122JE	1	435031224R1	
R5598	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R5599	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R5600	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5601	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5602	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5603	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5604	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5605	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5606	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5607	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5608	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5609	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5610	C-CARBON R	RN72K1J-271JE	1	435032714R1	
R5611	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R5612	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R5613	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R5614	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R5615	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R5616	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R5617	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R5618	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R5619	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R5620	C-CARBON R	RN72K1J-101JE	1	435031014R1	
R5621	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5622	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5623	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5624	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5625	C-CARBON R	RN72K1J-000JE	1	435030004R1	

R5626	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5627	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5630	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R5631	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R5632	C-CARBON R	RN72K1J-153JE	1	435031534R1	
R5633	C-CARBON R	RN72K1J-122JE	1	435031224R1	
R5634	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R5660	METAL R	RNU1WCJ-2.2	1	453630224T	
R5661	METAL R	RNU1WCJ-2.2	1	453630224T	
R5666	CARBON R	R16J-22	1	417342204T	
R5667	CARBON R	R16J-22	1	417342204T	
R5670	METAL O R	RS2WBJ-39	1	441723904F	<WO, WT>
R5670	METAL O R	RS2WBJ-47	1	441724704F	<DD, DC, PA, PP, GK, GQ, SA605, SA8560>
R5671	METAL O R	RS2WBJ-68	1	441726804F	
R5672	METAL O R	RS2WBJ-39	1	441723904F	<WO, WT>
R5672	METAL O R	RS2WBJ-47	1	441724704F	<DD, DC, PA, PP, GK, GQ, SA605, SA8560>
R5673	METAL O R	RS2WBJ-68	1	441726804F	
R5674	METAL O R	RS1WBJ-68	1	443626804T	
R5675	METAL O R	RS1WBJ-68	1	443626804T	
R5677	METAL O R	RS2WBJ-8.2	1	441720824F	
R5678	METAL O R	RS2WBJ-8.2	1	441720824F	
R5680	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5681	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5682	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5684	CARBON R	R16J-680	1	417346814T	
R5685	CARBON R	R16J-680	1	417346814T	
R5801	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5807	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5808	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5809	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5810	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5811	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5812	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5813	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5820	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5822	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5827	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5829	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5831	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R6000	CARBON R	R16J-5.6K	1	417345624T	
R6001	CARBON R	R16J-5.6K	1	417345624T	
R6002	CARBON R	R16J-5.6K	1	417345624T	
R6003	CARBON R	R16J-5.6K	1	417345624T	
R6004	CARBON R	R16J-5.6K	1	417345624T	
R6005	CARBON R	R16J-5.6K	1	417345624T	
R6006	CARBON R	R16J-5.6K	1	417345624T	
R6010	CARBON R	R16J-3.9K	1	417343924T	
R6011	CARBON R	R16J-3.9K	1	417343924T	
R6012	CARBON R	R16J-3.9K	1	417343924T	
R6013	CARBON R	R16J-3.9K	1	417343924T	
R6014	CARBON R	R16J-3.9K	1	417343924T	

R6015	CARBON R	R16J-3.9K	1	417343924T
R6016	CARBON R	R16J-3.9K	1	417343924T
R6020	NF CARBON R	R25J-2.2	1	415470224T
R6021	NF CARBON R	R25J-2.2	1	415470224T
R6022	NF CARBON R	R25J-2.2	1	415470224T
R6023	NF CARBON R	R25J-2.2	1	415470224T
R6024	NF CARBON R	R25J-2.2	1	415470224T
R6025	NF CARBON R	R25J-2.2	1	415470224T
R6026	NF CARBON R	R25J-2.2	1	415470224T
R6030	CARBON R	R16J-470	1	417344714T
R6031	CARBON R	R16J-470	1	417344714T
R6032	CARBON R	R16J-470	1	417344714T
R6033	CARBON R	R16J-470	1	417344714T
R6034	CARBON R	R16J-470	1	417344714T
R6035	CARBON R	R16J-470	1	417344714T
R6036	CARBON R	R16J-470	1	417344714T
R6040	TRIM R	N06HR2KBC	1	5210390T
R6041	TRIM R	N06HR2KBC	1	5210390T
R6042	TRIM R	N06HR2KBC	1	5210390T
R6043	TRIM R	N06HR2KBC	1	5210390T
R6044	TRIM R	N06HR2KBC	1	5210390T
R6045	TRIM R	N06HR2KBC	1	5210390T
R6046	TRIM R	N06HR2KBC	1	5210390T
R6050	CARBON R	R16J-3.3K	1	417343324T
R6051	CARBON R	R16J-3.3K	1	417343324T
R6052	CARBON R	R16J-3.3K	1	417343324T
R6053	CARBON R	R16J-3.3K	1	417343324T
R6054	CARBON R	R16J-3.3K	1	417343324T
R6055	CARBON R	R16J-3.3K	1	417343324T
R6056	CARBON R	R16J-3.3K	1	417343324T
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-100	1	415471014T
R6074	NF CARBON R	R25J-100	1	415471014T
R6075	NF CARBON R	R25J-100	1	415471014T
R6076	NF CARBON R	R25J-100	1	415471014T
R6080	NF CARBON R	R25J-0.22	1	415472294T
R6081	NF CARBON R	R25J-0.22	1	415472294T
R6082	NF CARBON R	R25J-0.22	1	415472294T
R6083	NF CARBON R	R25J-0.22	1	415472294T
R6084	NF CARBON R	R25J-0.22	1	415472294T
R6085	NF CARBON R	R25J-0.22	1	415472294T
R6086	NF CARBON R	R25J-0.22	1	415472294T
R6090	NF CARBON R	R25J-0.22	1	415472294T
R6091	NF CARBON R	R25J-0.22	1	415472294T
R6092	NF CARBON R	R25J-0.22	1	415472294T
R6093	NF CARBON R	R25J-0.22	1	415472294T
R6094	NF CARBON R	R25J-0.22	1	415472294T
R6095	NF CARBON R	R25J-0.22	1	415472294T
R6096	NF CARBON R	R25J-0.22	1	415472294T

R6100	METAL PR	MPR5W+5W 0R22	1	4000233
R6100 or	METAL PR	RGC55 0.22	(1)	4000132
R6101	METAL PR	MPR5W+5W 0R22	1	4000233
R6101 or	METAL PR	RGC55 0.22	(1)	4000132
R6102	METAL PR	MPR5W+5W 0R22	1	4000233
R6102 or	METAL PR	RGC55 0.22	(1)	4000132
R6103	METAL PR	MPR5W+5W 0R22	1	4000233
R6103 or	METAL PR	RGC55 0.22	(1)	4000132
R6104	METAL PR	MPR5W+5W 0R22	1	4000233
R6104 or	METAL PR	RGC55 0.22	(1)	4000132
R6105	METAL PR	MPR5W+5W 0R22	1	4000233
R6105 or	METAL PR	RGC55 0.22	(1)	4000132
R6106	METAL PR	MPR5W+5W 0R22	1	4000233
R6106 or	METAL PR	RGC55 0.22	(1)	4000132
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
R6140	C-CARBON R	RN72K1J-223JE	1	435032234R1
R6141	C-CARBON R	RN72K1J-223JE	1	435032234R1
R6142	C-CARBON R	RN72K1J-223JE	1	435032234R1
R6143	C-CARBON R	RN72K1J-223JE	1	435032234R1
R6144	C-CARBON R	RN72K1J-223JE	1	435032234R1
R6145	C-CARBON R	RN72K1J-223JE	1	435032234R1
R6146	C-CARBON R	RN72K1J-223JE	1	435032234R1
R6150	C-CARBON R	RN72K1J-123JE	1	435031234R1
R6151	C-CARBON R	RN72K1J-123JE	1	435031234R1
R6152	C-CARBON R	RN72K1J-123JE	1	435031234R1
R6153	C-CARBON R	RN72K1J-123JE	1	435031234R1
R6154	C-CARBON R	RN72K1J-123JE	1	435031234R1
R6155	C-CARBON R	RN72K1J-123JE	1	435031234R1
R6156	C-CARBON R	RN72K1J-123JE	1	435031234R1
R6160	CARBON R	R16J-33K	1	417343334T
R6161	CARBON R	R16J-33K	1	417343334T
R6162	CARBON R	R16J-33K	1	417343334T
R6163	CARBON R	R16J-33K	1	417343334T
R6164	CARBON R	R16J-33K	1	417343334T
R6165	CARBON R	R16J-33K	1	417343334T
R6166	CARBON R	R16J-33K	1	417343334T
R6170	CARBON R	R16J-47K	1	417344734T
R6171	CARBON R	R16J-47K	1	417344734T
R6172	CARBON R	R16J-47K	1	417344734T
R6173	CARBON R	R16J-47K	1	417344734T
R6174	CARBON R	R16J-47K	1	417344734T
R6175	CARBON R	R16J-47K	1	417344734T
R6176	CARBON R	R16J-47K	1	417344734T
R6180	CARBON R	R16J-47K	1	417344734T
R6181	CARBON R	R16J-47K	1	417344734T

R6182	CARBON R	R16J-47K	1	417344734T	
R6183	CARBON R	R16J-47K	1	417344734T	
R6184	CARBON R	R16J-47K	1	417344734T	
R6185	CARBON R	R16J-47K	1	417344734T	
R6186	CARBON R	R16J-47K	1	417344734T	
R6190	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R6191	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R6192	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R6193	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R6194	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R6195	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R6196	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R6197	METAL O R	RS1WBJ-100	1	443621014T	
R6701	C-CARBON R	RN72K1J-223JE	1	435032234R1	
R6702	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R6704	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R6706	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R6708	C-CARBON R	RN72K1J-333JE	1	435033334R1	
R6709	C-CARBON R	RN72K1J-562JE	1	435035624R1	
R6710	C-CARBON R	RN72K1J-123JE	1	435031234R1	
R6902	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R6903	C-CARBON R	RN72K1J-473JE	1	435034734R1	
F6901A	FUSE HOLDER	SN5051	1	250113	!
F6901B	FUSE HOLDER	SN5051	1	250113	!
F6902A	FUSE HOLDER	SN5051	1	250113	!
F6902B	FUSE HOLDER	SN5051	1	250113	!
JL5502A	WIRE HOL	NSCT-7P878	1	25051091	<DD, DC>
JL6402A	WIRE HOL	NSCT-3P874	1	25051087	
JL6600A	WIRE HOL	NSCT-7P898	1	25051111	
JL6603A	WIRE HOL	NSCT-9P900	1	25051113	
JL6604A	WIRE HOL	NSCT-4P895	1	25051108	<DD, DC>
JL6952A	WIRE HOL	NSCT-4P895	1	25051108	
JL6952B	WIRE HOL	NSCT-4P895	1	25051108	
P301	PLUG	NPLG-7P0962	1	25056012	
P302	PLUG	NPLG-14P0969	1	25056019	
P303	PLUG	NPLG-14P0969	1	25056019	
P304	PLUG	NPLG-3P0958	1	25056008	
P5503	CRIMP AS	CRIMP AS	1	2069955120UL	
P5504	SOCKET AS	NSAS-26P1612	1	2009991020UL	
P5505	TRM(SCREW)	NEJITANSI M3	1	25065425	
P5507	TRM	NTM-1P232(M1700)	1	25060301	
P6000B	PLUG	NPLG-5P0960	1	25056010	
P6001B	PLUG	NPLG-5P0960	1	25056010	
P6002	TRM	NTM-4PDML365	1	25060436	<DD, DC>
P6002B	PLUG	NPLG-5P0960	1	25056010	
P6003B	PLUG	NPLG-5P0960	1	25056010	
P6004B	PLUG	NPLG-5P0960	1	25056010	
P6005B	PLUG	NPLG-5P0960	1	25056010	
P6006B	PLUG	NPLG-5P0960	1	25056010	
P6011A	RETAINER	(BUS-D)	1	27142035	
P6050	HOLDER	HOLDER(CLAMP)	1	27190540-1	



P6080	PLUG	NPLG-2P29	1	25055038	
P6081	PLUG	NPLG-2P29	1	25055038	
P6082	PLUG	NPLG-2P29	1	25055038	
P6083	PLUG	NPLG-2P29	1	25055038	
P6084	PLUG	NPLG-2P29	1	25055038	
P6085	PLUG	NPLG-2P29	1	25055038	
P6086	PLUG	NPLG-2P29	1	25055038	
P6100	HOLDER	HOLDER(CLAMP)	1	27190540-1	
P6101	HOLDER	(CRAMP) UA-0 V0	1	27190608-1	
P6102	HOLDER	(CRAMP) UA-0 V0	1	27190608-1	
P6900	CRIMP AS	CRIMP AS	1	20799165UL	
P6901	CRIMP AS	CRIMP AS	1	2069925189UL	
P6902	CRIMP AS	CRIMP AS	1	2069925266UL	
P6903	CRIMP AS	CRIMP AS	1	20799163UL	
P6904	CRIMP AS	CRIMP AS	1	20799164UL	
P6910	CRIMP AS	PVCAS-TXSR604	1	20799167UL	
P7900	ST JACK	LGY2502-0200FC	1	25045696	
P7901	PIN JACK	NPJ-2PDWR558	1	25045776	<SA605, SA8560>
P7901 or	PIN JACK	NPJ-2PDBL185	( 1)	25045333	<SA605, SA8560>
P7902	PIN JACK	NPJ-6PDWWRRRR561	1	25045779	
P7902 or	PIN JACK	NPJ-6PDBL159	( 1)	25045300	
P7903	PIN JACK	NPJ-2PDWR558	1	25045776	
P7903 or	PIN JACK	NPJ-2PDBL185	( 1)	25045333	
P7904	PIN JACK	NPJ-6PDWWRRRR561	1	25045779	
P7904 or	PIN JACK	NPJ-6PDBL159	( 1)	25045300	
P7905	PIN JACK	NPJ-4PDWLRE642	1	25045866	
P7906	PIN JACK	NPJ-4PDGNPT643	1	25045867	
P7907	PIN JACK	NPJ-2PDWR558	1	25045776	
P7907 or	PIN JACK	NPJ-2PDBL185	( 1)	25045333	
P7908	PIN JACK	NPJ-1PDP555	1	25045773	
RL6901	RELAY	NRL-1P10A-DC12-140	1	25065584	
RL6901 or	RELAY	NRL-1P10A-DC12-143	( 1)	25065588	
RL6901A	TAPE	TAPE(CLOTH-16U)	1	29110083	
RL6902	RELAY	NRL-1P10A-DC12-140	1	25065584	
RL6902 or	RELAY	NRL-1P10A-DC12-143	( 1)	25065588	
RL6902A	TAPE	TAPE(CLOTH-16U)	1	29110083	

<b>U05</b>	<b>DISPLAY PC BOARD(NADIS-9148-1H/1J/1K/1L/1M/1N/1P)</b>
<b>U06</b>	<b>DISPLAY PC BOARD(NADIS-9149-1H/1J/1K/1L/1M/1N/1P)</b>
<b>U07</b>	<b>POWER SUPPLY PC BOARD(NAPS-9150-1H/1J/1K/1L/1M/1N/1P)</b>
<b>U08</b>	<b>POWER SUPPLY PC BOARD(NAPS-9151-1H/1J/1K/1L/1M/1N/1P)</b>
<b>U09</b>	<b>FRONT OPT PC BOARD(NAETC-9152-1H/1J/1K/1L/1M/1N/1P)</b>
<b>U10</b>	<b>HEADPHONE JACK PC BOARD(NAETC-9153-1H/1J/1K/1L/1M/1N/1P)</b>
<b>U12</b>	<b>SWITCH PC BOARD(NASW-9157-1L)</b>
<b>U13</b>	<b>HOLDER PC BOARD(NAETC-9158-1H/1J/1K/1L/1M/1N/1P)</b>
<b>U14</b>	<b>HOLDER PC BOARD(NAETC-9159-1H/1J/1K/1L/1M/1N/1P)</b>
<b>U15</b>	<b>HOLDER PC BOARD(NAETC-9160-1H/1J/1K/1L/1M/1N/1P)</b>

CIRCUIT NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
U7042	REMO SENS	NJL34H380A	1	241365	
U7351	PHT CP	GP1FAV51RKF5	1	24120129	

Q7002	FL TUBE	16-BT-138GNK	1	212268	
Q7002A	HOLDER	(FL)	1	27191222C	
Q7003	IC	M66005-0001AHP	1	22242208R3	
Q7004	TR	2SC2458-GR	1	2212115T	
Q7004 or	TR	2SC1740S-R	(1)	2213284T	
Q7004 or	TR	2SC1740S-S	(1)	2213285T	
Q7005	TR	KRA102M	1	2215770T	
Q7005 or	TR	DTA114ES	(1)	2213510T	
Q7007	TR	KRC102M	1	2215960T	
Q7007 or	TR	DTC114ES	(1)	2213290T	
Q7151	TR	KRA102M	1	2215770T	<PP, PA, WO, WT, GK, GQ, SA605, SA8560>
Q7151 or	TR	DTA114ES	(1)	2213510T	<PP, PA, WO, WT, GK, GQ, SA605, SA8560>
Q7152	TR	KRC102M	1	2215960T	
Q7152 or	TR	DTC114ES	(1)	2213290T	
Q7401	IC	NJM4580D-D	1	22241112	
Q7403	TR	KRC111M	1	2216320T	
Q7403 or	TR	DTC114TS	(1)	221299T	
Q7404	TR	KRC111M	1	2216320T	
Q7404 or	TR	DTC114TS	(1)	221299T	
Q7405	TR	KRA102M	1	2215770T	<PP, PA, WO, WT, GK, GQ, SA605, SA8560>
Q7405 or	TR	DTA114ES	(1)	2213510T	<PP, PA, WO, WT, GK, GQ, SA605, SA8560>
Q930	IC	SI-3010KF	1	22242203	<WO, WT>
D7002	ZENER D	MTZJ8.2C	1	224470823T	
D7152	LED	SLI-343URC-TE7	1	225449T	<PP, PA, WO, WT, GK, GQ, SA605, SA8560>
D7154	LED	SDPB3DD0C0000-ABCDEF	1	225473	<PP, PA, WO, WT, GK, GQ, SA605, SA8560>
D7155	LED	SLR-342MGTE7P	1	225455T	
D7401	ZENER D	MTZJ5.1B	1	224470512T	
D7411	ZENER D	MTZJ6.8C	1	224470683T	
D7411 or	ZENER D	DZ-6.8BSC	(1)	224850683T	
D7412	ZENER D	MTZJ6.8C	1	224470683T	
D7412 or	ZENER D	DZ-6.8BSC	(1)	224850683T	
D7413	LED	SLI-343URC-TE7	1	225449T	<DD, DC>
D7413	LED	SEL2910A-TP6	1	225390T	<PP, PA, WO, WT, GK, GQ, SA605, SA8560>
D911	DIODE	ISS133	1	223163T	
D912	DIODE	ISS133	1	223163T	
D921	DIODE	ISS133	1	223163T	
D922	DIODE	ISS133	1	223163T	
D923	DIODE	ISS133	1	223163T	
D924	DIODE	ISS133	1	223163T	
D925	DIODE	ISS133	1	223163T	
D930	DIODE	ISS133	1	223163T	
D931	DIODE	ISS133	1	223163T	
D933	DIODE	ISS133	1	223163T	
D934	ZENER D	MTZJ5.1B	1	224470512T	
D935	DIODE	ISS133	1	223163T	
L7031	CHOKE COIL	NCH-1561 022K	1	233526K022T	
L7032	CHOKE COIL	NCH-1561 022K	1	233526K022T	
L7201	CHOKE COIL	NCH-1561 022K	1	233526K022T	
L7202	CHOKE COIL	NCH-1561 022K	1	233526K022T	
L7203	CHOKE COIL	NCH-1561 022K	1	233526K022T	
L7351	CHOKE COIL	NCH-1561 022K	1	233526K022T	

L7401	CHOKE COIL	NCH-1561 022K	1	233526K022T	
L7402	CHOKE COIL	NCH-1561 022K	1	233526K022T	
T902	P TRANS	NPT-1520GQ	1	2301813	!, <PP, PA, GK, GQ, SA605, SA8560>
T902	P TRANS	NPT-1520JQ	1	2301812	!, <DD, DC, WO, WT>
C7001	CERA C	CK45F50V-223Z	1	335622230T	
C7002	MMT C	MMT50V-104J	1	375521044T	
C7003	CERA C	CC45SL50V-101J	1	345021014T	
C7004	CERA C	CC45SL50V-101J	1	345021014T	
C7005	CERA C	CC45SL50V-101J	1	345021014T	
C7007	CERA C	CC45SL50V-101J	1	345021014T	
C7008	UTSP C	CE04W10V-100M(UTSP)	1	397531017T	
C7009	MMT C	MMT50V-104J	1	375521044T	
C7010	CERA C	CK45F50V-223Z	1	335622230T	
C7011	CERA C	CK45F50V-223Z	1	335622230T	
C7012	CERA C	CK45F50V-223Z	1	335622230T	
C7013	VR C	CE04W50V-33M(VR)	1	394683307T	
C7014	CERA C	CK45F50V-223Z	1	335622230T	
C7015	ELECT C	CE04W16V-47M(S)	1	353744709T	
C7016	CERA C	CK45F50V-223Z	1	335622230T	
C7017	CERA C	CK45F50V-223Z	1	335622230T	
C7021	CERA C	CK45F50V-103Z	1	335621030T	
C7022	CERA C	CK45F50V-103Z	1	335621030T	
C7031	CERA C	CK45F50V-223Z	1	335622230T	
C7032	CERA C	CK45F50V-223Z	1	335622230T	
C7045	ELECT C	CE04W6.3V-100M(S)	1	353721019T	
C7047	CERA C	CK45B50V-102K	1	335321025T	
C7201	TF C	ECQ-B50V-102J	1	374721024T	
C7203	TF C	ECQ-B50V-102J	1	374721024T	
C7204	TF C	ECQ-B50V-102J	1	374721024T	
C7301	TF C	ECQ-B50V-471J	1	374724714T	
C7302	TF C	ECQ-B50V-471J	1	374724714T	
C7303	MMT C	MMT50V-104J	1	375521044T	
C7304	MMT C	MMT50V-104J	1	375521044T	
C7351	CERA C	CK45F50V-223Z	1	335622230T	
C7352	VR C	CE04W16V-100M(VR)	1	394641017T	
C7401	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C7402	CERA C	CC45SL50V-101J	1	345021014T	
C7403	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C7404	CERA C	CC45SL50V-330J	1	345023304T	
C7405	ELECT C	CE04W16V-10M(S)	1	353741009T	
C7411	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C7412	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C7421	CERA C	CC45SL50V-102J	1	345021024T	
C901	IS C	ECQU2A103MLC	1	3800039S	!
C901 or	IS C	LE103-C3.5	(1)	3800042S	!
C901 or	IS C	RE275V-103M	(1)	3500196S	!
C902	TF C	ECQ-V50V-104J	1	374721044T	
C9101	MMT C	MMT50V-104J	1	375521044T	
C911	TF C	ECQ-B50V-102J	1	374721024T	
C921	CERA C	CK45F50V-223Z	1	335622230T	
C922	VR C	CE04W16V-2200M(VR)	1	394642227S	<PP, GK, GQ, SA605, SA8560>

C922	VR C	CE04W25V-2200M(VR)	1	394652227S	<DD, DC, PA>
C922	VR C	CE04W35V-2200M(VR)	1	394662227S	<WO, WT>
C930	UTSP C	CE04W50V-100M(UTSP)	1	397581017T	
C931	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<WO, WT>
C932	VR C	CE04W16V-100M(VR)	1	394641017T	<WO, WT>
C933	UTSP C	CE04W50V-4.7M(UTSP)	1	397580477T	
R7001	CARBON R	R16J-100K	1	417341044T	
R7002	CARBON R	R16J-3.3K	1	417343324T	
R7003	CARBON R	R16J-3.3K	1	417343324T	
R7004	CARBON R	R16J-220	1	417342214T	
R7005	CARBON R	R16J-220	1	417342214T	
R7006	CARBON R	R16J-27K	1	417342734T	
R7007	CARBON R	R16J-220	1	417342214T	
R7008	CARBON R	R16J-220	1	417342214T	
R7021	CARBON R	R16J-10K	1	417341034T	
R7022	CARBON R	R16J-10K	1	417341034T	
R7023	CARBON R	R16J-10K	1	417341034T	
R7024	CARBON R	R16J-10K	1	417341034T	
R7045	CARBON R	R16J-100	1	417341014T	
R7046	CARBON R	R16J-1K	1	417341024T	
R7101	CARBON R	R16J-330	1	417343314T	
R7102	CARBON R	R16J-470	1	417344714T	
R7103	CARBON R	R16J-560	1	417345614T	
R7104	CARBON R	R16J-820	1	417348214T	
R7105	CARBON R	R16J-1.2K	1	417341224T	
R7107	CARBON R	R16J-330	1	417343314T	
R7108	CARBON R	R16J-470	1	417344714T	
R7109	CARBON R	R16J-560	1	417345614T	
R7110	CARBON R	R16J-820	1	417348214T	
R7111	CARBON R	R16J-1.2K	1	417341224T	
R7112	CARBON R	R16J-2.2K	1	417342224T	
R7113	CARBON R	R16J-3.9K	1	417343924T	
R7114	CARBON R	R16J-12K	1	417341234T	
R7115	CARBON R	R16J-330	1	417343314T	
R7116	CARBON R	R16J-470	1	417344714T	
R7117	CARBON R	R16J-560	1	417345614T	
R7118	CARBON R	R16J-820	1	417348214T	
R7119	CARBON R	R16J-1.2K	1	417341224T	
R7120	CARBON R	R16J-2.2K	1	417342224T	
R7121	CARBON R	R16J-3.9K	1	417343924T	
R7122	CARBON R	R16J-12K	1	417341234T	
R7123	CARBON R	R16J-330	1	417343314T	
R7124	CARBON R	R16J-470	1	417344714T	
R7125	CARBON R	R16J-560	1	417345614T	
R7126	CARBON R	R16J-820	1	417348214T	
R7127	CARBON R	R16J-1.2K	1	417341224T	
R7128	CARBON R	R16J-2.2K	1	417342224T	
R7129	CARBON R	R16J-3.9K	1	417343924T	
R7130	CARBON R	R16J-12K	1	417341234T	
R7151	CARBON R	R16J-2.2K	1	417342224T	
R7152	CARBON R	R16J-120	1	417341214T	<PP, PA, WO, WT, GK, GQ, SA605, SA8560>

R7154	CARBON R	R16J-180	1	417341814T	
R7301	CARBON R	R16J-330	1	417343314T	
R7302	CARBON R	R16J-330	1	417343314T	
R7351	CARBON R	R16J-220	1	417342214T	
R7401	CARBON R	R16J-100	1	417341014T	
R7402	CARBON R	R16J-47K	1	417344734T	
R7403	CARBON R	R16J-4.7K	1	417344724T	
R7404	CARBON R	R16J-220	1	417342214T	
R7405	CARBON R	R16J-47K	1	417344734T	
R7406	CARBON R	R16J-330	1	417343314T	
R7407	CARBON R	R16J-1K	1	417341024T	
R7408	CARBON R	R16J-33K	1	417343334T	
R7409	CARBON R	R16J-220	1	417342214T	
R7410	CARBON R	R16J-220	1	417342214T	
R7411	CARBON R	R16J-470	1	417344714T	
R7412	CARBON R	R16J-470	1	417344714T	
R7413	CARBON R	R16J-220K	1	417342244T	
R7414	CARBON R	R16J-100K	1	417341044T	
R7415	CARBON R	R16J-180	1	417341814T	<PP, PA, WO, WT, GK, GQ, SA605, SA8560>
R9102	METAL R	RNU1/2WCJ-5.6	1	453530564T	<PP, GK, GQ, SA605, SA8560>
R9102	METAL R	RNU1/2WCJ-8.2	1	453530824T	<DD, DC, PA, WO, WT>
R921	METAL O R	RS1/2WBJ-56	1	443525604T	<DD, DC, PP, PA, GK, GQ, SA605, SA8560>
R930	CARBON R	R16J-100K	1	417341044T	<WO, WT>
R931	CARBON R	R16J-100K	1	417341044T	<WO, WT>
R932	CARBON R	R16J-82K	1	417348234T	<WO, WT>
R933	CARBON R	R16J-10K	1	417341034T	<WO, WT>
R934	CARBON R	R16J-100K	1	417341044T	<WO, WT>
E7201	TRM(SCREW)	NEJITANSI M3	1	25065425	
E7301	RETAINER	(S)	1	27142074	
E7601	TRM(SCREW)	NEJITANSI M3	1	25065425	
E901	TRM(SCREW)	NEJITANSI M3	1	25065425	
E902	TRM(SCREW)	NEJITANSI M3	1	25065425	
F901C	FUSE HOL	NSCT-1P2031	1	25052133T	!
F901D	FUSE HOL	NSCT-1P2031	1	25052133T	!
F901E	FUSE LABEL	10A/125V	1	29362241	!,<DD, DC>
F901E	LABEL	T5AL250V	1	29361938	!,<PP, PA, WO, WT, GK, GQ, SA605, SA8560>
F902A	FUSE HOL	NSCT-1P2031	1	25052133T	!,<WO, WT>
F902B	FUSE HOL	NSCT-1P2031	1	25052133T	!,<WO, WT>
F902C	LABEL	T5A/250V	1	29360419	!,<WO, WT>
F910A	FUSE HOL	NSCT-1P2031	1	25052133T	!
F910B	FUSE HOL	NSCT-1P2031	1	25052133T	!
F910C	LABEL	5A/125V	2	29360462	!
JL6605A	WIRE HOL	NSCT-5P896	1	25051109	
JL7101A	WIRE HOL	NSCT-9P900	1	25051113	
JL7101B	WIRE HOL	NSCT-9P900	1	25051113	
JL7351A	WIRE HOL	NSCT-3P894	1	25051107	
JL7351B	WIRE HOL	NSCT-3P894	1	25051107	
JL901A	WIRE HOL	NSCT-5P876	1	25051089	
JL9101A	WIRE HOL	NSCT-6P897	1	25051110	
P701B	SOCKET	NSCT-36P2166	1	25052269	
P7201	ST JACK	MSJ-064-05A SR	1	25045783	

P7201 or	ST JACK	YKB21-5005	(1)	25045724	
P7301	PIN JACK	NPJ-7PDB477	1	25045680	
P7401	ST JACK	MSJ-035-05C B AG SR type	1	25045879	
P901A	PLUG	NPLG-2P631	1	25055675	!
P901Aor	PLUG	1-1123724-2	(1)	25056402	!
P911	PLUG	NPLG-2P631	1	25055675	!, <DD, DC, PP, PA, GK, GQ, SA605, SA8560>
P911 or	PLUG	1-1123724-2	(1)	25056402	!, <DD, DC, PP, PA, GK, GQ, SA605, SA8560>
P912	PLUG	B5P9-VH	1	25056568	!, <WO, WT>
P912 or	PLUG	1-1123724-5	(1)	25056579	!, <WO, WT>
P923	CRIMP AS	CRIMP-AS	1	2069943153UL	<WO, WT>
P924	CRIMP AS	CRIMP-AS	1	2069943154UL	<WO, WT>
P925	CRIMP AS	CRIMP AS	1	2069943159UL	<WO, WT>
RL901	RELAY	NRL-1P10A-DC9-186	1	25065683	<DD, DC, WO, WT>
RL901	RELAY	NRL-1P5A-DC9-179	1	25065669	<PP, PA, GK, GQ, SA605, SA8560>
S7002	R ENCODE	EC12E2425WITH WASHER	1	25065655W	
S7102	PUSH SW	NPS-111-S681	1	25035718T	
S7104	PUSH SW	NPS-111-S681	1	25035718T	
S7106	PUSH SW	NPS-111-S681	1	25035718T	
S7108	PUSH SW	NPS-111-S681	1	25035718T	
S7110	PUSH SW	NPS-111-S681	1	25035718T	<PP, PA, WO, WT, GK, GQ, SA605, SA8560>
S7112	PUSH SW	NPS-111-S681	1	25035718T	
S7114	PUSH SW	NPS-111-S681	1	25035718T	
S7116	PUSH SW	NPS-111-S681	1	25035718T	
S7118	PUSH SW	NPS-111-S681	1	25035718T	
S7120	PUSH SW	NPS-111-S681	1	25035718T	
S7122	PUSH SW	NPS-111-S681	1	25035718T	
S7124	PUSH SW	NPS-111-S681	1	25035718T	
S7126	PUSH SW	NPS-111-S681	1	25035718T	
S7128	PUSH SW	NPS-111-S681	1	25035718T	
S7130	PUSH SW	NPS-111-S681	1	25035718T	
S7132	PUSH SW	NPS-111-S681	1	25035718T	
S7134	PUSH SW	NPS-111-S681	1	25035718T	
S7136	PUSH SW	NPS-111-S681	1	25035718T	
S7138	PUSH SW	NPS-111-S681	1	25035718T	
S7140	PUSH SW	NPS-111-S681	1	25035718T	
S7142	PUSH SW	NPS-111-S681	1	25035718T	
S7144	PUSH SW	NPS-111-S681	1	25035718T	
S7146	PUSH SW	NPS-111-S681	1	25035718T	
S7148	PUSH SW	NPS-111-S681	1	25035718T	
S7150	PUSH SW	NPS-111-S681	1	25035718T	
S7152	PUSH SW	NPS-111-S681	1	25035718T	
S7154	PUSH SW	NPS-111-S681	1	25035718T	
S7156	PUSH SW	NPS-111-S681	1	25035718T	
S7158	PUSH SW	NPS-111-S681	1	25035718T	
S7160	PUSH SW	NPS-111-S681	1	25035718T	
S7162	PUSH SW	NPS-111-S681	1	25035718T	
S7164	PUSH SW	NPS-111-S681	1	25035718T	
S7166	PUSH SW	NPS-111-S681	1	25035718T	
S902	SLIDE SW	NSS-22157P	1	25065437	!, <WO, WT>

<b>U18</b>	<b>VIDEO AND SP TERMINAL PC BOARD(NAVD-9190-1A/1B/1C/1D/1L)</b>
<b>U19</b>	<b>XM PC BOARD(NADG-9191-1A)</b>

CIRCUIT NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
U131	PHT CP	JSR1165-001recieving	1	24120143	
U131 or	PHT CP	GPIFAV51RKF5	(1)	24120129	
U132	PHT CP	JSR1165-001recieving	1	24120143	
U132 or	PHT CP	GPIFAV51RKF5	(1)	24120129	
Q131	IC	74HCU04F	1	222740046R2	
Q151	IC	TC74VHC541FT(EKJ)	1	22274541E1R2TO	
Q151 or	IC	SN74AHC541PWR	(1)	22274541I1R2TI	
Q151 or	IC	TC74VHC541FT	(1)	22274541ER2TO	
Q152	IC	TC74VHCT08AFT	1	22274008GR2TO	
Q152 or	IC	TC74VHCT08AFT (EKJ)	(1)	22274008G1R2TO	
Q153	IC	TC74VHCT08AFT	1	22274008GR2TO	
Q153 or	IC	TC74VHCT08AFT (EKJ)	(1)	22274008G1R2TO	
Q171	IC	TC7WU04FU(TE12L_F)	1	22240935R2	
Q172	IC	TC7WU04FU(TE12L_F)	1	22240935R2	
Q181	IC	TC74VHC157FT	1	22274157ER2TO	
Q2001	IC	F2628E-01	1	22242436R2	<DD, DC>
Q2002	IC	CS4344-CZZR	1	22242406R2	<DD, DC>
Q2003	IC	NE5532APSR	1	22242283R2	<DD, DC>
Q2004	IC	TA48033AF(TE16L_NQ)	1	22278033DR2TO	<DD, DC>
Q2004 or	IC	BA33BC0FP	(1)	22278033DR2RH	<DD, DC>
Q2004 or	IC	NJM2391DL1-33	(1)	22278033DR2JR	<DD, DC>
Q2005	IC	TA48033AF(TE16L_NQ)	1	22278033DR2TO	<DD, DC>
Q2005 or	IC	BA33BC0FP	(1)	22278033DR2RH	<DD, DC>
Q2005 or	IC	NJM2391DL1-33	(1)	22278033DR2JR	<DD, DC>
Q2006	IC	TC74HCT7007AF(EL_F)	1	222740077R2TO	<DD, DC>
Q2007	IC	TC74VHC541FT(EKJ)	1	22274541E1R2TO	<DD, DC>
Q2007 or	IC	SN74AHC541PWR	(1)	22274541I1R2TI	<DD, DC>
Q2007 or	IC	TC74VHC541FT	(1)	22274541ER2TO	<DD, DC>
Q2008	IC	4053BFT(TC4053BFT)	1	222840533R2TO	<DD, DC>
Q201	IC	D788E001BRFP266	1	22242502R3	NRP
Q201 or	IC	D708E001BRFP266	(1)	22242402R3	NRP
Q281	IC	IS42S16400D-7TL	1	22241910R2	
Q281 or	IC	M12L64164A-7TG	(1)	22242441R3	
Q282	IC(DSP ROM)	ES29LV160ET-70TG(0215)	1	222W0069R302156	
Q282 or	IC(DSP ROM)	S29AL016D70TFI010(0215)	(1)	222W0063R302156	
Q301	IC	CS42518-CQZR-D	1	22242229R2	
Q341	IC	NJM4580M-D	1	22241448R2	
Q4002	IC	AN15881A-VT	1	22242318R3	
Q401	IC	NJM4580M-D	1	22241448R2	
Q402	IC	NJM4580M-D	1	22241448R2	
Q403	IC	NJM4580M-D	1	22241448R2	
Q404	IC	NJM4580M-D	1	22241448R2	
Q601	TR	KRC104S	1	2216210R2	
Q601 or	TR	RN1404	(1)	2214490R2	
Q602	TR	KRA102S	1	2216220R2	
Q602 or	TR	RN2402	(1)	2214530R2	
Q603	TR	RN1402	1	2214470R2	

Q610	IC	IS25C64A-2GLI	1	22242385R2	
Q6601	TR	DTC123JKA	1	2216690R2	
Q6601 or	TR	KRC105S	(1)	2217290R2	
Q6601 or	TR	RN1405	(1)	2214500R2	
Q6602	TR	DTC123JKA	1	2216690R2	
Q6602 or	TR	KRC105S	(1)	2217290R2	
Q6602 or	TR	RN1405	(1)	2214500R2	
Q6603	TR	DTC123JKA	1	2216690R2	
Q6603 or	TR	KRC105S	(1)	2217290R2	
Q6603 or	TR	RN1405	(1)	2214500R2	
Q6604	TR	DTC123JKA	1	2216690R2	
Q6604 or	TR	KRC105S	(1)	2217290R2	
Q6604 or	TR	RN1405	(1)	2214500R2	
Q701	IC(MAIN MICROPROCESSOR)	M30627FJPGP U5C(0227)	1	222W0055R302270	
Q702	IC	S-812C56AUA-C3K	1	22242207R2	
Q741	IC	SI8008TM	1	22242323R2	
Q742	IC	BD7820	1	22242300R2	
Q746	IC	TA48033AF(TE16L_NQ)	1	22278033DR2TO	
Q746 or	IC	BA33BC0FP	(1)	22278033DR2RH	
Q746 or	IC	NJM2391DL1-33	(1)	22278033DR2JR	
Q751	TR	KRC104S	1	2216210R2	
Q751 or	TR	RN1404	(1)	2214490R2	
Q752	TR	KRA102S	1	2216220R2	
Q752 or	TR	RN2402	(1)	2214530R2	
Q761	TR	KRC104S	1	2216210R2	
Q761 or	TR	RN1404	(1)	2214490R2	
Q762	TR	KRA102S	1	2216220R2	
Q762 or	TR	RN2402	(1)	2214530R2	
Q771	TR	KRC104S	1	2216210R2	
Q771 or	TR	RN1404	(1)	2214490R2	
Q772	TR	KRA102S	1	2216220R2	
Q772 or	TR	RN2402	(1)	2214530R2	
Q9001	TR	2SC2235-Y(TPE6_F)	1	2211654T	
Q9002	TR	DTC123JKA	1	2216690R2	
Q9002 or	TR	KRC105S	(1)	2217290R2	
Q9002 or	TR	RN1405	(1)	2214500R2	
Q9022	IC	BA00JC5WT-V5	1	222580002	
Q9022B	SCREW	3P+10FN(3BC)	1	82143010GR	
Q9031	IC	MPC2905BHF	1	22278005DBNE	
Q9031A	HEAT SINK	RAD-231	1	27160592	
Q9031B	SCREW	3P+10FN(3BC)	1	82143010GR	
Q9101	TR	2SD2394-F	1	2202706	<WO, WT>
Q9102	TR	RN1402	1	2214470R2	<WO, WT>
Q9103	TR	RN1402	1	2214470R2	<WO, WT>
D101	DIODE	RL1N4003	1	22380260T	<DD, DC, PP, PA, GK, GQ, WO, WT>
D101 or	DIODE	GP104003E	(1)	22380035T	<DD, DC, PP, PA, GK, GQ, WO, WT>
D102	DIODE	RL1N4003	1	22380260T	<DD, DC, PP, PA, GK, GQ, WO, WT>
D102 or	DIODE	GP104003E	(1)	22380035T	<DD, DC, PP, PA, GK, GQ, WO, WT>
D103	DIODE	RL1N4003	1	22380260T	<DD, DC, PP, PA, GK, GQ, WO, WT>
D103 or	DIODE	GP104003E	(1)	22380035T	<DD, DC, PP, PA, GK, GQ, WO, WT>
D104	C-DIODE	ISS355	1	223269R2	



D104 or	C-DIODE	ISS352	(1)	223234R2	
D104 or	C-DIODE	KDS4148U	(1)	223283R2	
D104 or	C-DIODE	MA2J111	(1)	223279R2	
D105	C-DIODE	ISS355	1	223269R2	
D105 or	C-DIODE	ISS352	(1)	223234R2	
D105 or	C-DIODE	KDS4148U	(1)	223283R2	
D105 or	C-DIODE	MA2J111	(1)	223279R2	
D2001	ZENER D	UDZS5.1B	1	224550510R2	<DD, DC>
D2001 or	ZENER D	MAZ8051-M	(1)	224750512R2	<DD, DC>
D404	ZENER D	UDZS5.1B	1	224550510R2	
D601	C-DIODE	ISS355	1	223269R2	
D601 or	C-DIODE	ISS352	(1)	223234R2	
D601 or	C-DIODE	KDS4148U	(1)	223283R2	
D601 or	C-DIODE	MA2J111	(1)	223279R2	
D604	C-DIODE	ISS355	1	223269R2	
D604 or	C-DIODE	ISS352	(1)	223234R2	
D604 or	C-DIODE	KDS4148U	(1)	223283R2	
D604 or	C-DIODE	MA2J111	(1)	223279R2	
D6600	C-DIODE	ISS352	1	223234R2	
D6600 or	C-DIODE	ISS355	(1)	223269R2	
D6600 or	C-DIODE	KDS4148U	(1)	223283R2	
D6600 or	C-DIODE	MA2J111	(1)	223279R2	
D6603	C-DIODE	ISS352	1	223234R2	
D6603 or	C-DIODE	ISS355	(1)	223269R2	
D6603 or	C-DIODE	KDS4148U	(1)	223283R2	
D6603 or	C-DIODE	MA2J111	(1)	223279R2	
D6605	C-DIODE	ISS352	1	223234R2	
D6605 or	C-DIODE	ISS355	(1)	223269R2	
D6605 or	C-DIODE	KDS4148U	(1)	223283R2	
D6605 or	C-DIODE	MA2J111	(1)	223279R2	
D6607	C-DIODE	ISS352	1	223234R2	
D6607 or	C-DIODE	ISS355	(1)	223269R2	
D6607 or	C-DIODE	KDS4148U	(1)	223283R2	
D6607 or	C-DIODE	MA2J111	(1)	223279R2	
D701	C-DIODE	ISS355	1	223269R2	
D701 or	C-DIODE	ISS352	(1)	223234R2	
D701 or	C-DIODE	KDS4148U	(1)	223283R2	
D701 or	C-DIODE	MA2J111	(1)	223279R2	
D702	C-DIODE	ISS355	1	223269R2	
D702 or	C-DIODE	ISS352	(1)	223234R2	
D702 or	C-DIODE	KDS4148U	(1)	223283R2	
D702 or	C-DIODE	MA2J111	(1)	223279R2	
D703	C-DIODE	ISS355	1	223269R2	
D703 or	C-DIODE	ISS352	(1)	223234R2	
D703 or	C-DIODE	KDS4148U	(1)	223283R2	
D703 or	C-DIODE	MA2J111	(1)	223279R2	
D705	C-DIODE	ISS355	1	223269R2	
D705 or	C-DIODE	ISS352	(1)	223234R2	
D705 or	C-DIODE	KDS4148U	(1)	223283R2	
D705 or	C-DIODE	MA2J111	(1)	223279R2	
D706	C-DIODE	ISS355	1	223269R2	

D706 or	C-DIODE	ISS352	(1)	223234R2	
D706 or	C-DIODE	KDS4148U	(1)	223283R2	
D706 or	C-DIODE	MA2J111	(1)	223279R2	
D741	C-DIODE	CRS09(TE85L_Q)	1	223274R2	
D742	C-DIODE	ISS355	1	223269R2	
D742 or	C-DIODE	ISS352	(1)	223234R2	
D742 or	C-DIODE	KDS4148U	(1)	223283R2	
D742 or	C-DIODE	MA2J111	(1)	223279R2	
D743	C-DIODE	ISS355	1	223269R2	
D743 or	C-DIODE	ISS352	(1)	223234R2	
D743 or	C-DIODE	KDS4148U	(1)	223283R2	
D743 or	C-DIODE	MA2J111	(1)	223279R2	
D744	DIODE	RL1N4003	1	22380260T	
D744 or	DIODE	GP104003E	(1)	22380035T	
D9002	DIODE	RL1N4003	1	22380260T	
D9002 or	DIODE	GP104003E	(1)	22380035T	
D9005	ZENER D	UDZS36B	1	224553600R2	
D9011	DIODE	D5SBA20	1	22380130F	
D9012	C-DIODE	ISS352	1	223234R2	
D9012 or	C-DIODE	ISS355	(1)	223269R2	
D9012 or	C-DIODE	KDS4148U	(1)	223283R2	
D9012 or	C-DIODE	MA2J111	(1)	223279R2	
D9013	C-DIODE	ISS352	1	223234R2	
D9013 or	C-DIODE	ISS355	(1)	223269R2	
D9013 or	C-DIODE	KDS4148U	(1)	223283R2	
D9013 or	C-DIODE	MA2J111	(1)	223279R2	
D9014	C-DIODE	ISS352	1	223234R2	
D9014 or	C-DIODE	ISS355	(1)	223269R2	
D9014 or	C-DIODE	KDS4148U	(1)	223283R2	
D9014 or	C-DIODE	MA2J111	(1)	223279R2	
D9015	C-DIODE	ISS352	1	223234R2	
D9015 or	C-DIODE	ISS355	(1)	223269R2	
D9015 or	C-DIODE	KDS4148U	(1)	223283R2	
D9015 or	C-DIODE	MA2J111	(1)	223279R2	
D9017	C-DIODE	ISS352	1	223234R2	
D9017 or	C-DIODE	ISS355	(1)	223269R2	
D9017 or	C-DIODE	KDS4148U	(1)	223283R2	
D9017 or	C-DIODE	MA2J111	(1)	223279R2	
D9018	DIODE	RL1N4003	1	22380260T	
D9018 or	DIODE	GP104003E	(1)	22380035T	
D9019	DIODE	RL1N4003	1	22380260T	<DD, DC>
D9019 or	DIODE	GP104003E	(1)	22380035T	<DD, DC>
D9020	C-DIODE	ISS352	1	223234R2	
D9020 or	C-DIODE	ISS355	(1)	223269R2	
D9020 or	C-DIODE	KDS4148U	(1)	223283R2	
D9020 or	C-DIODE	MA2J111	(1)	223279R2	
D9022	DIODE	RL1N4003	1	22380260T	
D9022 or	DIODE	GP104003E	(1)	22380035T	
D9024	ZENER D	UDZS5.6B	1	224550560R2	
D9024 or	ZENER D	MAZ8056-M	(1)	224750562R2	
D9101	ZENER D	UDZS7.5B	1	224550750R2	<WO, WT>

L131	CHOKE COIL	LBC2518T2R2M	1	231364M022R2	
L132	CHOKE COIL	LBC2518T2R2M	1	231364M022R2	
L133	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L134	CHOKE COIL	LBC2518T470M	1	231364M470R2	
L151	CHOKE COIL	BLM21PG221SN1	1	230949R2	
L152	CHOKE COIL	BLM21PG221SN1	1	230949R2	
L171	CHOKE COIL	LBC2518T470M	1	231364M470R2	
L173	EMIFIL	BK1608LM182-T	1	230958R1	
L181	CHOKE COIL	BLM21PG221SN1	1	230949R2	
L182	EMIFIL	BK1608LM182-T	1	230958R1	
L2001	CHOKE COIL	LBC2518T2R2M	1	231364M022R2	<DD, DC>
L2002	EMIFIL	BK1608LM182-T	1	230958R1	<DD, DC>
L2003	CHOKE COIL	LBC2518T2R2M	1	231364M022R2	<DD, DC>
L2004	CHOKE COIL	BLM21PG221SN1	1	230949R2	<DD, DC>
L2005	CHOKE COIL	BLM21PG221SN1	1	230949R2	<DD, DC>
L2006	CHOKE COIL	BLM21PG221SN1	1	230949R2	<DD, DC>
L201	CHOKE COIL	BLM21PG221SN1	1	230949R2	
L202	CHOKE COIL	BLM21PG221SN1	1	230949R2	
L203	EMIFIL	BK1608LL121-T	1	230996R2	
L204	EMIFIL	BK1608LM182-T	1	230958R1	
L205	CHOKE COIL	LBC2518T470M	1	231364M470R2	
L241	EMIFIL	ACF451832-333-T	1	230978R2	
L281	CHOKE COIL	BLM21PG221SN1	1	230949R2	
L282	CHOKE COIL	BLM21PG221SN1	1	230949R2	
L283	CHOKE COIL	BLM21PG221SN1	1	230949R2	
L284	CHOKE COIL	BLM21PG221SN1	1	230949R2	
L301	CHOKE COIL	LBC2518T2R2M	1	231364M022R2	
L302	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L303	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L304	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L311	EMIFIL	BK1608LL241-T	1	230959R1	
L312	EMIFIL	BK1608LM182-T	1	230958R1	
L313	EMIFIL	BK1608LM182-T	1	230958R1	
L4001	C-CARBON R	RN72K2E-022JE	1	435220224R1	
L4010	C-CARBON R	RN72K2E-220JE	1	435222204R1	
L4011	C-CARBON R	RN72K2E-022JE	1	435220224R1	
L4015	CHOKE COIL	LBC2518T4R7M	1	231364M047R2	
L6600	S COIL	S-1.3C	1	231176S	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
L6601	S COIL	S-1.3C	1	231176S	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
L6602	S COIL	S-1.3C	1	231176S	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
L6603	S COIL	S-1.3C	1	231176S	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
L6604	S COIL	S-1.3C	1	231176S	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
L6605	S COIL	S-1.3C	1	231176S	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
L6606	S COIL	S-1.3C	1	231176S	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
L741	CHOKE COIL	NCH-2541	1	231363K470	
X171	CRYSTAL	HC-49US24.576MHz	1	3010423T	
X171 or	CRYSTAL	HC-49/U03-24.576M	( 1)	3010314T	
X172	CRYSTAL	HC-49USSMD17.734MHz	1	3010442R2	
X2001	CRYSTAL	DSX840GA 45.1584MHz	1	3010420R2	<DD, DC>
X2001 or	CRYSTAL	FCX-02N 45.1584MHz	( 1)	3010421R2	<DD, DC>
X701	CERA LOCK	CSTCR6M0055-R0	1	3010397R2	

C103	UTSP C	CE04W25V-100M(UTSP)	1	397551017T	<DD, DC, PP, PA, GK, GQ, WO, WT>
C104	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C131	C-CERA C	CC725CH1H-101J1	1	342101014R1	
C132	C-CERA C	CC725CH1H-101J1	1	342101014R1	
C133	C-CERA C	CK725B1C-104K1	1	332121045R1	
C134	C-CERA C	CK725B1C-104K1	1	332121045R1	
C135	C-CERA C	CC725CH1H-080D1	1	342100802R1	
C136	C-CERA C	CC725CH1H-080D1	1	342100802R1	
C139	VR C	CE04W6.3V-220M(VR)	1	394622217T	
C140	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C141	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C142	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C145	VR C	CE04W6.3V-220M(VR)	1	394622217T	
C146	C-CERA C	CK725B1H-103K1	1	332101035R1	
C147	C-CERA C	CK725B1H-103K1	1	332101035R1	
C151	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C152	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C153	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C171	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C172	C-CERA C	CC725CH1H-060D1	1	342100602R1	
C173	C-CERA C	CC725CH1H-060D1	1	342100602R1	
C181	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C2001	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
C2002	C-CERA C	CK725B1H-102K1	1	332101025R1	<DD, DC>
C2003	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
C2004	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
C2005	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
C2006	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
C2007	UTSP C	CE04W10V-100M(UTSP)	1	397531017T	<DD, DC>
C2008	C-CERA C	CC725CH1H-040C1	1	342100401R1	<DD, DC>
C2009	C-CERA C	CC725CH1H-080D1	1	342100802R1	<DD, DC>
C201	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C2010	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
C2011	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
C2012	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
C2013	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
C2015	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
C2016	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DD, DC>
C2017	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
C2018	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	<DD, DC>
C202	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C2021	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DD, DC>
C2022	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DD, DC>
C2023	C-CERA C	CC725CH1H-821J1	1	342108214R1	<DD, DC>
C2024	C-CERA C	CC725CH1H-821J1	1	342108214R1	<DD, DC>
C2025	C-CERA C	CC725CH1H-821J1	1	342108214R1	<DD, DC>
C2026	C-CERA C	CC725CH1H-821J1	1	342108214R1	<DD, DC>
C2027	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DD, DC>
C2028	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DD, DC>
C2029	VR C	CE04W16V-220M(VR)	1	394642217T	<DD, DC>
C203	C-CERA C	CK725F1E-104Z1	1	332161040R1	

C2030	VR C	CE04W16V-220M(VR)	1	394642217T	<DD, DC>
C2031	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
C2032	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
C2033	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	<DD, DC>
C2034	UTSP C	CE04W10V-100M(UTSP)	1	397531017T	<DD, DC>
C2035	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
C2036	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
C2037	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
C204	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C2041	C-CERA C	CK725B1H-102K1	1	332101025R1	<DD, DC>
C2042	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
C2043	UTSP C	CE04W10V-100M(UTSP)	1	397531017T	<DD, DC>
C2044	C-CERA C	CK725B1H-102K1	1	332101025R1	<DD, DC>
C2045	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DD, DC>
C205	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C206	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C207	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C208	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C209	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C210	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C211	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C212	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C213	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C214	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C215	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C216	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C217	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C218	VR C	CE04W6.3V-470M(VR)	1	394624717T	
C221	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C222	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C223	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C224	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C225	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C226	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C227	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C228	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C229	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C230	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C231	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C232	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C233	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C234	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C235	VR C	CE04W6.3V-470M(VR)	1	394624717T	
C238	C-CERA C	CC725CH1H-060D1	1	342100602R1	
C239	C-CERA C	CC725CH1H-060D1	1	342100602R1	
C241	VR C	CE04W6.3V-470M(VR)	1	394624717T	
C242	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C243	C-CERA C	CC725CH1H-101J1	1	342101014R1	
C244	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C245	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C246	C-CERA C	CK725F1E-104Z1	1	332161040R1	

C247	C-CERA C	CK725F1E-104Z1	1	332161040R1
C248	C-CERA C	CK725F1E-104Z1	1	332161040R1
C249	C-CERA C	CK725F1E-104Z1	1	332161040R1
C250	C-CERA C	CK725F1E-104Z1	1	332161040R1
C251	C-CERA C	CK725F1E-104Z1	1	332161040R1
C252	C-CERA C	CK725F1E-104Z1	1	332161040R1
C281	VR C	CE04W6.3V-470M(VR)	1	394624717T
C282	C-CERA C	CK725F1E-104Z1	1	332161040R1
C283	C-CERA C	CC725CH1H-102J1	1	342101024R1
C284	VR C	CE04W6.3V-470M(VR)	1	394624717T
C285	C-CERA C	CK725F1E-104Z1	1	332161040R1
C286	C-CERA C	CK725F1E-104Z1	1	332161040R1
C287	C-CERA C	CK725F1E-104Z1	1	332161040R1
C288	C-CERA C	CK725F1E-104Z1	1	332161040R1
C289	C-CERA C	CK725F1E-104Z1	1	332161040R1
C290	C-CERA C	CK725F1E-104Z1	1	332161040R1
C291	C-CERA C	CK725F1E-104Z1	1	332161040R1
C292	C-CERA C	CK725F1E-104Z1	1	332161040R1
C293	C-CERA C	CK725F1E-104Z1	1	332161040R1
C294	C-CERA C	CK725F1E-104Z1	1	332161040R1
C295	C-CERA C	CK725F1E-104Z1	1	332161040R1
C297	C-CERA C	CK725F1E-104Z1	1	332161040R1
C301	VR C	CE04W6.3V-470M(VR)	1	394624717T
C302	VR C	CE04W6.3V-470M(VR)	1	394624717T
C303	UTSP C	CE04W10V-470M(UTSP)	1	397534717T
C304	UTSP C	CE04W10V-470M(UTSP)	1	397534717T
C305	C-CERA C	CK725F1E-104Z1	1	332161040R1
C306	RFS C	CE04W25V-47M(RFS)	1	395954707T
C307	C-CERA C	CK725F1E-104Z1	1	332161040R1
C308	UTSP C	CE04W10V-100M(UTSP)	1	397531017T
C309	C-CERA C	CK725F1E-104Z1	1	332161040R1
C310	C-CERA C	CC725CH1H-102J1	1	342101024R1
C311	C-CERA C	CK725B1H-223K1	1	332102235R1
C312	C-CERA C	CK725F1E-104Z1	1	332161040R1
C313	C-CERA C	CK725F1E-104Z1	1	332161040R1
C314	C-CERA C	CK725F1E-104Z1	1	332161040R1
C315	C-CERA C	CK725F1E-104Z1	1	332161040R1
C316	C-CERA C	CC725CH1H-221J1	1	342102214R1
C318	C-CERA C	CK725F1E-104Z1	1	332161040R1
C320	C-CERA C	CK725F1E-104Z1	1	332161040R1
C321	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C322	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C323	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C324	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C325	C-CERA C	CC732CH1H-222J	1	347342224R2
C326	C-CERA C	CC732CH1H-222J	1	347342224R2
C332	C-CERA C	CC725CH1H-330J1	1	342103304R1
C333	C-CERA C	CC725CH1H-330J1	1	342103304R1
C334	C-CERA C	CC725CH1H-330J1	1	342103304R1
C335	C-CERA C	CC725CH1H-330J1	1	342103304R1
C336	C-CERA C	CC725CH1H-330J1	1	342103304R1

C341	C-CERA C	CC725CH1H-101J1	1	342101014R1
C342	C-CERA C	CC725CH1H-101J1	1	342101014R1
C4001	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4002	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4003	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4004	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4005	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4006	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4007	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4008	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4009	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C401	TF C	ECQ-B50V-222J	1	374722224T
C4010	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4011	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4012	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4013	C-CERA C	CK725B1H-103K1	1	332101035R1
C4014	C-CERA C	CK725B1H-102K1	1	332101025R1
C4015	C-CERA C	CK725B1H-102K1	1	332101025R1
C4016	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4017	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4018	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4019	C-CERA C	CK725B1H-103K1	1	332101035R1
C402	TF C	ECQ-B50V-222J	1	374722224T
C4020	C-CERA C	CK725B1H-102K1	1	332101025R1
C4021	C-CERA C	CK725B1H-102K1	1	332101025R1
C4022	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4023	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4024	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4025	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4026	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4027	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C403	TF C	ECQ-B50V-222J	1	374722224T
C404	TF C	ECQ-V50V-333J	1	374723334T
C405	TF C	ECQ-B50V-222J	1	374722224T
C406	TF C	ECQ-B50V-222J	1	374722224T
C407	TF C	ECQ-B50V-222J	1	374722224T
C408	TF C	ECQ-B50V-222J	1	374722224T
C4103	VR C	CE04W6.3V-220M(VR)	1	394622217T
C4104	VR C	CE04W6.3V-220M(VR)	1	394622217T
C4105	UTSP C	CE04W50V-22M(UTSP)	1	397582207T
C4106	VR C	CE04W6.3V-1000M(VR)	1	394621027T
C4107	UTSP C	CE04W50V-22M(UTSP)	1	397582207T
C4108	VR C	CE04W6.3V-1000M(VR)	1	394621027T
C411	TF C	ECQ-B50V-331J	1	374723314T
C4110	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4111	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4112	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4114	VR C	CE04W6.3V-470M(VR)	1	394624717T
C4116	VR C	CE04W6.3V-470M(VR)	1	394624717T
C4118	VR C	CE04W6.3V-470M(VR)	1	394624717T
C412	TF C	ECQ-B50V-331J	1	374723314T

C4121	VR C	CE04W6.3V-470M(VR)	1	394624717T
C4122	C-CERA C	CK725F1H-104Z1	1	332151040R1
C4123	UTSP C	CE04W25V-47M(UTSP)	1	397554707T
C4124	UTSP C	CE04W25V-47M(UTSP)	1	397554707T
C4125	C-CERA C	CK725F1H-104Z1	1	332151040R1
C4127	VR C	CE04W6.3V-470M(VR)	1	394624717T
C4129	VR C	CE04W6.3V-470M(VR)	1	394624717T
C413	TF C	ECQ-B50V-331J	1	374723314T
C4131	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4132	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4133	VR C	CE04W6.3V-220M(VR)	1	394622217T
C4134	VR C	CE04W6.3V-220M(VR)	1	394622217T
C4135	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4136	UTSP C	CE04W50V-22M(UTSP)	1	397582207T
C4137	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4138	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4139	C-CERA C	CK725F1E-104Z1	1	332161040R1
C414	TF C	ECQ-V50V-273J	1	374722734T
C4140	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4141	UTSP C	CE04W25V-47M(UTSP)	1	397554707T
C4142	C-CERA C	CC725CH1H-181J1	1	342101814R1
C4143	C-CERA C	CC725CH1H-181J1	1	342101814R1
C4144	C-CERA C	CC725CH1H-181J1	1	342101814R1
C415	C-CERA C	CC725CH1H-331J1	1	342103314R1
C4150	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4151	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4152	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4153	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4154	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4155	C-CERA C	CC725CH1H-221J1	1	342102214R1
C4158	C-CERA C	CC725CH1H-470J1	1	342104704R1
C4159	C-CERA C	CC725CH1H-470J1	1	342104704R1
C416	C-CERA C	CC725CH1H-331J1	1	342103314R1
C4160	C-CERA C	CC725CH1H-470J1	1	342104704R1
C4161	C-CERA C	CC725CH1H-181J1	1	342101814R1
C4162	C-CERA C	CC725CH1H-181J1	1	342101814R1
C4163	C-CERA C	CC725CH1H-181J1	1	342101814R1
C417	C-CERA C	CC725CH1H-331J1	1	342103314R1
C418	C-CERA C	CC725CH1H-331J1	1	342103314R1
C421	TF C	ECQ-B50V-331J	1	374723314T
C422	TF C	ECQ-B50V-331J	1	374723314T
C423	TF C	ECQ-B50V-331J	1	374723314T
C424	TF C	ECQ-V50V-273J	1	374722734T
C4242	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4243	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4244	C-CERA C	CK725F1E-104Z1	1	332161040R1
C425	C-CERA C	CC725CH1H-331J1	1	342103314R1
C426	C-CERA C	CC725CH1H-331J1	1	342103314R1
C427	C-CERA C	CC725CH1H-331J1	1	342103314R1
C428	C-CERA C	CC725CH1H-331J1	1	342103314R1
C591	UTSP C	CE04W25V-220M(UTSP)	1	397552217T



C592	UTSP C	CE04W25V-220M(UTSP)	1	397552217T	
C601	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C602	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C603	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C604	UTSP C	CE04W50V-4.7M(UTSP)	1	397580477T	
C605	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C606	C-CERA C	CC725CH1H-101J1	1	342101014R1	
C607	C-CERA C	CC725CH1H-101J1	1	342101014R1	
C608	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C609	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C610	C-CERA C	CK725B1H-102K1	1	332101025R1	
C611	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C612	C-CERA C	CK725B1H-102K1	1	332101025R1	
C614	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C615	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C616	C-CERA C	CK725B1H-102K1	1	332101025R1	
C617	C-CERA C	CK725B1H-102K1	1	332101025R1	
C618	C-CERA C	CK725B1H-102K1	1	332101025R1	
C619	C-CERA C	CK725B1H-102K1	1	332101025R1	
C620	C-CERA C	CK725B1H-102K1	1	332101025R1	
C621	C-CERA C	CK725B1H-102K1	1	332101025R1	
C624	C-CERA C	CC725CH1H-101J1	1	342101014R1	
C625	C-CERA C	CC725CH1H-101J1	1	342101014R1	
C630	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C631	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C632	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C633	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C634	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C635	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C6600	TF C	ECQ-B50V-223J	1	374722234T	
C6602	TF C	ECQ-B50V-223J	1	374722234T	
C6603	TF C	ECQ-B50V-223J	1	374722234T	
C6605	TF C	ECQ-B50V-223J	1	374722234T	
C6607	TF C	ECQ-B50V-223J	1	374722234T	
C6640	TF C	ECQ-B50V-103J	1	374721034T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
C6641	TF C	ECQ-B50V-103J	1	374721034T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
C6642	TF C	ECQ-B50V-103J	1	374721034T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
C6643	TF C	ECQ-B50V-103J	1	374721034T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
C6644	TF C	ECQ-B50V-103J	1	374721034T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
C6645	TF C	ECQ-B50V-103J	1	374721034T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
C6646	TF C	ECQ-B50V-103J	1	374721034T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
C6650	TF C	ECQ-B50V-102J	1	374721024T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
C6651	TF C	ECQ-B50V-102J	1	374721024T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
C6652	TF C	ECQ-B50V-102J	1	374721024T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
C6653	TF C	ECQ-B50V-102J	1	374721024T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
C6654	TF C	ECQ-B50V-102J	1	374721024T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
C6655	TF C	ECQ-B50V-102J	1	374721024T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
C6656	TF C	ECQ-B50V-102J	1	374721024T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
C701	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C702	UTSP C	CE04W10V-100M(UTSP)	1	397531017T	
C705	UTSP C	CE04W10V-100M(UTSP)	1	397531017T	

C706	VR C	CE04W16V-470M(VR)	1	394644717T	
C737	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C738	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C739	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C741	VR C	CE04W16V-470M(VR)	1	394644717T	
C742	C-CERA C	CK725B1C-104K1	1	332121045R1	
C743	VR C	CE04W6.3V-1000M(VR)	1	394621027T	
C745	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C746	UTSP C	CE04W10V-100M(UTSP)	1	397531017T	
C747	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C748	UTSP C	CE04W10V-100M(UTSP)	1	397531017T	
C751	UTSP C	CE04W50V-1M(UTSP)	1	397580107T	
C752	C-CERA C	CK732B1A-105K	1	337361055R2	
C753	VR C	CE04W6.3V-470M(VR)	1	394624717T	
C761	UTSP C	CE04W50V-1M(UTSP)	1	397580107T	
C762	C-CERA C	CK732B1A-105K	1	337361055R2	
C771	UTSP C	CE04W50V-1M(UTSP)	1	397580107T	
C772	C-CERA C	CK732B1A-105K	1	337361055R2	
C828	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C9001	VR C	CE04W63V-470M(VR)	1	394674717S	
C9005	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C9006	C-CERA C	CK725F1H-223Z1	1	332152230R1	
C9011	VR C	CE04W16V-10000M(VR)	1	394641037S	
C9012	TF C	ECQ-V50V-334J	1	374723344T	
C9013	UTSP C	CE04W50V-3.3M(UTSP)	1	397580337T	
C9022	C-CERA C	CK725F1A-105Z1	1	332181050R1	
C9023	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C9024	C-CERA C	CK725F1H-223Z1	1	332152230R1	
C9025	VR C	CE04W6.3V-470M(VR)	1	394624717T	
C9031	VR C	CE04W16V-470M(VR)	1	394644717T	
C9032	VR C	CE04W6.3V-470M(VR)	1	394624717T	
C9101	VR C	CE04W16V-100M(VR)	1	394641017T	<WO, WT>
C9102	VR C	CE04W16V-100M(VR)	1	394641017T	<WO, WT>
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R438	C-CARBON R	RN72K1J-471JE	1	435034714R1
R441	C-CARBON R	RN72K1J-472JE	1	435034724R1
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R458	C-CARBON R	RN72K1J-472JE	1	435034724R1
R461	C-CARBON R	RN72K1J-181JE	1	435031814R1
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R475	C-CARBON R	RN72K1J-181JE	1	435031814R1
R476	C-CARBON R	RN72K1J-181JE	1	435031814R1
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R478	C-CARBON R	RN72K1J-181JE	1	435031814R1	
R560	C-CARBON R	RN72K1J-221JE	1	435032214R1	<DD, DC>
R571	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R572	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R573	C-CARBON R	RN72K1J-000JE	1	435030004R1	
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R576	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R577	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R578	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R580	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R581	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R582	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R583	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R589	C-CARBON R	RN72K1J-221JE	1	435032214R1	<DD, DC>
R591	METAL O R	RS1/2WBJ-22	1	443522204T	
R592	METAL O R	RS1/2WBJ-22	1	443522204T	
R594	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R595	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R596	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R597	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R598	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R599	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R600	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R601	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R602	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R603	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R604	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R605	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R606	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R608	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R609	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R610	C-CARBON R	RN72K1J-103JE	1	435031034R1	<DD, DC, PA, GK, GQ, WO, WT, SA605, SA8560>
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R612	C-CARBON R	RN72K1J-102JE	1	435031024R1	<PP>
R613	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R614	C-CARBON R	RN72K1J-105JE	1	435031054R1	
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R616	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R617	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R618	C-CARBON R	RN72K1J-470JE	1	435034704R1	
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R620	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R621	C-CARBON R	RN72K1J-221JE	1	435032214R1	<DD, DC>
R622	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R623	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R624	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R625	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R626	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R628	C-CARBON R	RN72K1J-470JE	1	435034704R1	



R629	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R630	C-CARBON R	RN72K1J-103JE	1	435031034R1	<PA, GK, GQ, WO, WT, SA605, SA8560>
R631	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R632	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R633	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R634	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R635	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R636	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R638	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R639	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R642	C-CARBON R	RN72K1J-221JE	1	435032214R1	<DD, DC>
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R644	C-CARBON R	RN72K1J-221JE	1	435032214R1	<DD, DC>
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R646	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R647	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R648	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R649	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R650	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R651	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R652	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R653	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R654	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R655	C-CARBON R	RN72K1J-221JE	1	435032214R1	<WO, WT>
R656	C-CARBON R	RN72K1J-221JE	1	435032214R1	<WO, WT>
R657	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R658	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R6600	CARBON R	R16J-22	1	417342204T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
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R6602	CARBON R	R16J-22	1	417342204T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
R6603	CARBON R	R16J-22	1	417342204T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
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R6606	CARBON R	R16J-22	1	417342204T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
R661	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R6610	CARBON R	R16J-22	1	417342204T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
R6611	CARBON R	R16J-22	1	417342204T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
R6612	CARBON R	R16J-22	1	417342204T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
R6613	CARBON R	R16J-22	1	417342204T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
R6614	CARBON R	R16J-22	1	417342204T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
R6615	CARBON R	R16J-22	1	417342204T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
R6616	CARBON R	R16J-22	1	417342204T	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
R662	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R663	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R664	C-CARBON R	RN72K1J-273JE	1	435032734R1	
R665	C-CARBON R	RN72K1J-273JE	1	435032734R1	
R666	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R667	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R668	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R669	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R6690	METAL O R	RS1/2WBJ-10	1	443521004T	

R6691	METAL O R	RS1/2WBJ-390	1	443523914T	
R670	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R671	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R672	C-CARBON R	RN72K1J-105JE	1	435031054R1	
R673	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R674	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R675	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R676	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R677	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R678	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R679	C-CARBON R	RN72K1J-221JE	1	435032214R1	
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R681	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R683	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R684	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R685	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R686	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R687	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R688	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R689	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R690	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R691	C-CARBON R	RN72K1J-472JE	1	435034724R1	
R692	C-CARBON R	RN72K1J-472JE	1	435034724R1	
R693	C-CARBON R	RN72K1J-472JE	1	435034724R1	
R694	C-CARBON R	RN72K1J-472JE	1	435034724R1	
R695	C-CARBON R	RN72K1J-472JE	1	435034724R1	
R696	C-CARBON R	RN72K1J-472JE	1	435034724R1	
R697	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R698	C-CARBON R	RN72K1J-272JE	1	435032724R1	
R699	C-CARBON R	RN72K1J-272JE	1	435032724R1	
R6992	METAL O R	RS1/2WBJ-390	1	443523914T	
R700	C-CARBON R	RN72K1J-272JE	1	435032724R1	
R701	C-CARBON R	RN72K1J-272JE	1	435032724R1	
R702	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R703	C-CARBON R	RN72K1J-333JE	1	435033334R1	<DD, DC>
R703	C-CARBON R	RN72K1J-103JE	1	435031034R1	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
R704	C-CARBON R	RN72K1J-333JE	1	435033334R1	<DD, DC>
R704	C-CARBON R	RN72K1J-103JE	1	435031034R1	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
R706	C-CARBON R	RN72K1J-333JE	1	435033334R1	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
R707	C-CARBON R	RN72K1J-000JE	1	435030004R1	<DD, DC>
R707	C-CARBON R	RN72K1J-472JE	1	435034724R1	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
R708	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R709	C-CARBON R	RN72K1J-472JE	1	435034724R1	DD,DC
R709	C-CARBON R	RN72K1J-103JE	1	435031034R1	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
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R710	C-CARBON R	RN72K1J-333JE	1	435033334R1	<SA605, SA8560>
R711	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R712	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R713	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R714	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R715	C-CARBON R	RN72K1J-000JE	1	435030004R1	

R716	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R717	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R721	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R722	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R723	C-CARBON R	RN72K1J-393JE	1	435033934R1	
R725	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R732	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R741	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R742	C-CARBON R	RN72K1J-682JE	1	435036824R1	
R743	C-CARBON R	RN72K1J-682JE	1	435036824R1	
R744	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R745	C-CARBON R	RN72K1J-393JE	1	435033934R1	
R746	C-CARBON R	RN72K1J-393JE	1	435033934R1	
R747	C-CARBON R	RN72K1J-333JE	1	435033334R1	
R748	METAL R	RNU1/2WCJ-2.2	1	453530224T	
R749	C-CARBON R	RN72K1J-392JE	1	435033924R1	
R751	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R752	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R753	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R761	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R762	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R763	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R771	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R772	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R773	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R778	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R779	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R825	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R826	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R827	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R828	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R829	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R830	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R831	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R9001	METAL R	RNU2WCJ-3.3	1	452730334F	
R9002	METAL R	RNU2WCJ-3.3	1	452730334F	
R9003	C-CARBON R	RN72K1J-562JE	1	435035624R1	
R9004	C-CARBON R	RN72K1J-333JE	1	435033334R1	
R9005	METAL O R	RS1/2WBJ-47	1	443524704T	
R9006	C-CARBON R	RN72K1J-562JE	1	435035624R1	
R9010	METAL O R	RS1/2WBJ-82	1	443528204T	
R9011	METAL R	RNU1/2WCJ-4.7	1	453530474T	
R9012	C-CARBON R	RN72K1J-010JE	1	435030104R1	
R9013	C-CARBON R	RN72K1J-010JE	1	435030104R1	
R9014	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R9017	C-CARBON R	RN72K1J-000JE	1	435030004R1	<PP, PA, GK, GQ, WO, WT, SA605, SA8560>
R9018	C-CARBON R	RN72K1J-000JE	1	435030004R1	<DD, DC>
R9022	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R9023	C-CARBON R	RN72K1J-273JE	1	435032734R1	
R9024	C-CARBON R	RN72K1J-333JE	1	435033334R1	
R9029	METAL R	RNU1/2WCJ-0.47	1	453534794T	

R9035	METAL R	RNU2WCJ-1.8	1	452730184F	
R9036	METAL R	RNU2WCJ-1.8	1	452730184F	
R9101	METAL O R	RS1/2WBJ-1.2K	1	443521224T	<WO, WT>
R9102	METAL R	RNU1/2WCJ-4.7	1	453530474T	<WO, WT>
R9103	C-CARBON R	RN72KIJ-10IJE	1	435031014R1	<WO, WT>
R9104	METAL R	RNU1/2WCJ-4.7	1	453530474T	<WO, WT>
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E2001	TRM(SCREW)	NEJITANSI M3	1	25065425	<DD, DC>
E2002	TRM(SCREW)	NEJITANSI M3	1	25065425	<DD, DC>
E2003	RETAINER	(XM)	1	27142048	<DD, DC>
E9001	TRM(SCREW)	NEJITANSI M3	1	25065425	
J100	PVC	1007#18 .2/7HAN	1	---	NSP
JL101A	WIRE HOL	NSCT-11P882	1	25051095	<DD, DC>
JL101B	WIRE TRAP	NPLG-11P594	1	25055632	<DD, DC>
JL5502B	WIRE TRAP	NPLG-7P590	1	25055628	<DD, DC>
JL6402B	WIRE TRAP	NPLG-3P586	1	25055624	
JL6600B	SOCKET	NSCT-7P99	1	25050271	
JL6603B	SOCKET	NSCT-9P101	1	25050273	
JL6604B	SOCKET	NSCT-4P96	1	25050268	
JL6605B	SOCKET	NSCT-5P97	1	25050269	
JL8001A	WIRE HOL	NSCT-4P875	1	25051088	
JL901B	WIRE TRAP	NPLG-5P588	1	25055626	
JL9101B	SOCKET	NSCT-6P98	1	25050270	
JL9102	PLUG	NPLG-2P83	1	25055099	<WO, WT>
JL9103	PLUG	NPLG-2P83	1	25055099	<WO, WT>
P101A	SOCKET	NSCT-13P2106	1	25052209	<DD, DC, PP, PA, GK, GQ, WO, WT>
P131	PIN JACK	NPJ-2PDO0626	1	25045847	
P131 or	PIN JACK	NPJ-2PDO445	( 1)	25045640	
P2001	SOCKET	CAM-C16	1	25053104R2	<DD, DC>
P2002	SOCKET	YKF51-5397N	1	25053201	<DD, DC>
P2004A	PLUG	IMSA-9163B-10G	1	25056587A	
P2004B	SOCKET	IMSA-9163S-10A	1	25053107	
P2005A	PLUG	IMSA-9163B-16G	1	25056588A	
P2005B	SOCKET	IMSA-9163S-16A	1	25053108	
P2006A	PLUG	IMSA-9163B-10G	1	25056587A	
P2006B	SOCKET	IMSA-9163S-10A	1	25053107	
P301A	SOCKET	NSCT-7P2187	1	25052290	
P302A	SOCKET	NSCT-14P2194	1	25052297	
P303A	SOCKET	NSCT-14P2194	1	25052297	
P304A	SOCKET	NSCT-3P2183	1	25052286	
P4001	PIN JACK	NPJ-6PDGLRGLR646	1	25045871	
P4002	PIN JACK	NPJ-6PDGLRGLR646	1	25045871	
P4003	PIN JACK	NPJ-5PDBY622	1	25045843	
P4003 or	PIN JACK	NPJ-5PDBY479	( 1)	25045682	
P4004	PIN JACK	NPJ-10PDBY621	1	25045842	
P4004 or	PIN JACK	NPJ-10PDBY478	( 1)	25045681	
P4005	PIN JACK	NPJ-10PDBY621	1	25045842	
P4005 or	PIN JACK	NPJ-10PDBY478	( 1)	25045681	
P4006	PIN JACK	NPJ-5PDBY622	1	25045843	
P4006 or	PIN JACK	NPJ-5PDBY479	( 1)	25045682	

P4008B	SOCKET	NSCT-23P2116	1	25052219	
P6601	TRM	NTM-6PDMCWRG410	1	25060482	
P6601 or	TRM	NTM-6PDMC392	(1)	25060463	
P6602	TRM	NTM-8PDMCNTLE411	1	25060483	
P6602 or	TRM	NTM-8PDMC393	(1)	25060464	
P701A	SOCKET	52492-3620	1	25053110	
P711	PLUG	IMSA-9204B-2-13Z122-GF	1	25056542	
P751A	SOCKET	NSCT-9P2427	1	25052530	
P801A	PLUG	NPLG-10P0965	1	25056015	
P802A	PLUG	NPLG-14P0969	1	25056019	
RL6600	RELAY	NRL-2P5A-DC24-158	1	25065618	
RL6600 or	RELAY	NRL-2P5A-DC24-129	(1)	25065563A	
RL6602	RELAY	NRL-2P5A-DC24-158	1	25065618	
RL6602 or	RELAY	NRL-2P5A-DC24-129	(1)	25065563A	
RL6603	RELAY	NRL-2P5A-DC24-158	1	25065618	
RL6603 or	RELAY	NRL-2P5A-DC24-129	(1)	25065563A	
RL6605	RELAY	NRL-2P5A-DC24-158	1	25065618	
RL6605 or	RELAY	NRL-2P5A-DC24-129	(1)	25065563A	
RL6607	RELAY	NRL-2P5A-DC24-158	1	25065618	
RL6607 or	RELAY	NRL-2P5A-DC24-129	(1)	25065563A	

**U21 DRIVER AMPLIFIER PC BOARD (NAAF-8917-2A/2B/2C)**

**U22 SPEAKER TERMINAL PC BOARD (NAETC-8918-2B/2C)**

CIRCUIT 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	
Q5030	TR	2SA949-Y(TPE6_F)	1	2211354T	
Q5031	TR	2SA949-Y(TPE6_F)	1	2211354T	
Q5032	TR	2SA949-Y(TPE6_F)	1	2211354T	
Q5033	TR	2SA949-Y(TPE6_F)	1	2211354T	
Q5034	TR	2SA949-Y(TPE6_F)	1	2211354T	
Q5035	TR	2SA949-Y(TPE6_F)	1	2211354T	
Q5036	TR	2SA949-Y(TPE6_F)	1	2211354T	
Q5040	TR	2SC2229-Y(TPE6_F)	1	2211634T	
Q5041	TR	2SC2229-Y(TPE6_F)	1	2211634T	
Q5042	TR	2SC2229-Y(TPE6_F)	1	2211634T	
Q5043	TR	2SC2229-Y(TPE6_F)	1	2211634T	
Q5044	TR	2SC2229-Y(TPE6_F)	1	2211634T	

Q5045	TR	2SC2229-Y(TPE6_F)	1	2211634T
Q5046	TR	2SC2229-Y(TPE6_F)	1	2211634T
Q5050	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5050 or	TR	2SC2240-GR	( 1)	2211405T
Q5051	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5051 or	TR	2SC2240-GR	( 1)	2211405T
Q5052	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5052 or	TR	2SC2240-GR	( 1)	2211405T
Q5053	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5053 or	TR	2SC2240-GR	( 1)	2211405T
Q5054	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5054 or	TR	2SC2240-GR	( 1)	2211405T
Q5055	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5055 or	TR	2SC2240-GR	( 1)	2211405T
Q5056	TR	2SC2240-BL(TPE2_F)	1	2211406T
Q5056 or	TR	2SC2240-GR	( 1)	2211405T
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
C5000	TF C	ECQ-B50V-221K	1	374722215T
C5001	TF C	ECQ-B50V-221K	1	374722215T
C5002	TF C	ECQ-B50V-221K	1	374722215T
C5003	TF C	ECQ-B50V-221K	1	374722215T
C5004	TF C	ECQ-B50V-221K	1	374722215T
C5005	TF C	ECQ-B50V-221K	1	374722215T
C5006	TF C	ECQ-B50V-221K	1	374722215T
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	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C5021	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C5022	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C5023	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C5024	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C5025	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C5026	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
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 47M(UTSP)	1	397584707T	
C5051	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C5052	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C5053	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C5054	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C5055	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C5056	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C5080	CERA C	CC45SL50V-040D	1	345020402T	
C5081	CERA C	CC45SL50V-040D	1	345020402T	
C5082	CERA C	CC45SL50V-040D	1	345020402T	
C5083	CERA C	CC45SL50V-040D	1	345020402T	
C5084	CERA C	CC45SL50V-040D	1	345020402T	
C5085	CERA C	CC45SL50V-040D	1	345020402T	
C5086	CERA C	CC45SL50V-040D	1	345020402T	
C5090	TF C	ECQ-B50V-101K	1	374721015T	
C5091	TF C	ECQ-B50V-101K	1	374721015T	
C5092	TF C	ECQ-B50V-101K	1	374721015T	
C5093	TF C	ECQ-B50V-101K	1	374721015T	
C5094	TF C	ECQ-B50V-101K	1	374721015T	
C5095	TF C	ECQ-B50V-101K	1	374721015T	
C5096	TF C	ECQ-B50V-101K	1	374721015T	
C5100	VR C	CE04W100V-22M(VR)	1	394692207T	
C5101	VR C	CE04W100V-22M(VR)	1	394692207T	
C5102	VR C	CE04W100V-22M(VR)	1	394692207T	
C5103	VR C	CE04W100V-22M(VR)	1	394692207T	
C5104	VR C	CE04W100V-22M(VR)	1	394692207T	
C5105	VR C	CE04W100V-22M(VR)	1	394692207T	
C5106	VR C	CE04W100V-22M(VR)	1	394692207T	
C5110	VR C	CE04W100V-22M(VR)	1	394692207T	
C5111	VR C	CE04W100V-22M(VR)	1	394692207T	
C5112	VR C	CE04W100V-22M(VR)	1	394692207T	
C5113	VR C	CE04W100V-22M(VR)	1	394692207T	
C5114	VR C	CE04W100V-22M(VR)	1	394692207T	
C5115	VR C	CE04W100V-22M(VR)	1	394692207T	
C5116	VR C	CE04W100V-22M(VR)	1	394692207T	
C6647	TF C	ECQ-B50V-103J	1	374721034T	<PP, PA, WO, WT, GK, GQ, SA605GR>
C6648	TF C	ECQ-B50V-103J	1	374721034T	<PP, PA, WO, WT, GK, GQ, SA605GR>
C6657	TF C	ECQ-B50V-102J	1	374721024T	<PP, PA, WO, WT, GK, GQ, SA605GR>
C6658	TF C	ECQ-B50V-102J	1	374721024T	<PP, PA, WO, WT, GK, GQ, SA605GR>
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-120K	1	417341244T
R5031	CARBON R	R16J-120K	1	417341244T
R5032	CARBON R	R16J-120K	1	417341244T
R5033	CARBON R	R16J-120K	1	417341244T
R5034	CARBON R	R16J-120K	1	417341244T
R5035	CARBON R	R16J-120K	1	417341244T
R5036	CARBON R	R16J-120K	1	417341244T
R5040	CARBON R	R16J-2.2K	1	417342224T
R5041	CARBON R	R16J-2.2K	1	417342224T
R5042	CARBON R	R16J-2.2K	1	417342224T
R5043	CARBON R	R16J-2.2K	1	417342224T
R5044	CARBON R	R16J-2.2K	1	417342224T
R5045	CARBON R	R16J-2.2K	1	417342224T
R5046	CARBON R	R16J-2.2K	1	417342224T
R5050	CARBON R	R16J-4.7K	1	417344724T
R5051	CARBON R	R16J-4.7K	1	417344724T
R5052	CARBON R	R16J-4.7K	1	417344724T
R5053	CARBON R	R16J-4.7K	1	417344724T
R5054	CARBON R	R16J-4.7K	1	417344724T
R5055	CARBON R	R16J-4.7K	1	417344724T
R5056	CARBON R	R16J-4.7K	1	417344724T
R5060	CARBON R	R16J-1.2K	1	417341224T
R5061	CARBON R	R16J-1.2K	1	417341224T
R5062	CARBON R	R16J-1.2K	1	417341224T
R5063	CARBON R	R16J-1.2K	1	417341224T
R5064	CARBON R	R16J-1.2K	1	417341224T
R5065	CARBON R	R16J-1.2K	1	417341224T
R5066	CARBON R	R16J-1.2K	1	417341224T
R5080	CARBON R	R16J-470	1	417344714T
R5081	CARBON R	R16J-470	1	417344714T
R5082	CARBON R	R16J-470	1	417344714T
R5083	CARBON R	R16J-470	1	417344714T
R5084	CARBON R	R16J-470	1	417344714T
R5085	CARBON R	R16J-470	1	417344714T
R5086	CARBON R	R16J-470	1	417344714T
R5090	CARBON R	R16J-100K	1	417341044T
R5091	CARBON R	R16J-100K	1	417341044T
R5092	CARBON R	R16J-100K	1	417341044T
R5093	CARBON R	R16J-100K	1	417341044T
R5094	CARBON R	R16J-100K	1	417341044T
R5095	CARBON R	R16J-100K	1	417341044T
R5096	CARBON R	R16J-100K	1	417341044T



R5100	CARBON R	R16J-100K	1	417341044T
R5101	CARBON R	R16J-100K	1	417341044T
R5102	CARBON R	R16J-100K	1	417341044T
R5103	CARBON R	R16J-100K	1	417341044T
R5104	CARBON R	R16J-100K	1	417341044T
R5105	CARBON R	R16J-100K	1	417341044T
R5106	CARBON R	R16J-100K	1	417341044T
R5110	CARBON R	R16J-1K	1	417341024T
R5111	CARBON R	R16J-1K	1	417341024T
R5112	CARBON R	R16J-1K	1	417341024T
R5113	CARBON R	R16J-1K	1	417341024T
R5114	CARBON R	R16J-1K	1	417341024T
R5115	CARBON R	R16J-1K	1	417341024T
R5116	CARBON R	R16J-1K	1	417341024T
R5130	CARBON R	R16J-18K	1	417341834T
R5131	CARBON R	R16J-18K	1	417341834T
R5132	CARBON R	R16J-18K	1	417341834T
R5133	CARBON R	R16J-22K	1	417342234T
R5134	CARBON R	R16J-22K	1	417342234T
R5135	CARBON R	R16J-22K	1	417342234T
R5136	CARBON R	R16J-22K	1	417342234T
R5160	NF CARBON R	R25J-100	1	415471014T
R5161	NF CARBON R	R25J-100	1	415471014T
R5162	NF CARBON R	R25J-100	1	415471014T
R5163	NF CARBON R	R25J-100	1	415471014T
R5164	NF CARBON R	R25J-100	1	415471014T
R5165	NF CARBON R	R25J-100	1	415471014T
R5166	NF CARBON R	R25J-100	1	415471014T
R5170	NF CARBON R	R25J-100	1	415471014T
R5171	NF CARBON R	R25J-100	1	415471014T
R5172	NF CARBON R	R25J-100	1	415471014T
R5173	NF CARBON R	R25J-100	1	415471014T
R5174	NF CARBON R	R25J-100	1	415471014T
R5175	NF CARBON R	R25J-100	1	415471014T
R5176	NF CARBON R	R25J-100	1	415471014T
R5180	NF CARBON R	R25J-10	1	415471004T
R5181	NF CARBON R	R25J-10	1	415471004T
R5182	NF CARBON R	R25J-10	1	415471004T
R5183	NF CARBON R	R25J-10	1	415471004T
R5184	NF CARBON R	R25J-10	1	415471004T
R5185	NF CARBON R	R25J-10	1	415471004T
R5186	NF CARBON R	R25J-10	1	415471004T
R5190	NF CARBON R	R25J-10	1	415471004T
R5191	NF CARBON R	R25J-10	1	415471004T
R5192	NF CARBON R	R25J-10	1	415471004T
R5193	NF CARBON R	R25J-10	1	415471004T
R5194	NF CARBON R	R25J-10	1	415471004T
R5195	NF CARBON R	R25J-10	1	415471004T
R5196	NF CARBON R	R25J-10	1	415471004T
R5200	CARBON R	R16J-18K	1	417341834T
R5201	CARBON R	R16J-18K	1	417341834T

R5202	CARBON R	R16J-18K	1	417341834T	
R5203	CARBON R	R16J-22K	1	417342234T	
R5204	CARBON R	R16J-22K	1	417342234T	
R5205	CARBON R	R16J-22K	1	417342234T	
R5206	CARBON R	R16J-22K	1	417342234T	
R5230	CARBON R	R16J-120K	1	417341244T	
R5231	CARBON R	R16J-120K	1	417341244T	
R5232	CARBON R	R16J-120K	1	417341244T	
R5233	CARBON R	R16J-120K	1	417341244T	
R5234	CARBON R	R16J-120K	1	417341244T	
R5235	CARBON R	R16J-120K	1	417341244T	
R5236	CARBON R	R16J-120K	1	417341244T	
JL6604A	WIRE HOL	NSCT-4P895	1	25051108	<PP, PA, WO, WT, GK, GQ, SA605GR>
P5019	TRM	NTM-1P233(M1969)	1	25060302	
P5504A	PLUG	NPLG-13P141	1	25055157	
P6000A	SOCKET	NSCT-5P2185	1	25052288	
P6001A	SOCKET	NSCT-5P2185	1	25052288	
P6002A	SOCKET	NSCT-5P2185	1	25052288	
P6003A	SOCKET	NSCT-5P2185	1	25052288	
P6004A	SOCKET	NSCT-5P2185	1	25052288	
P6005A	SOCKET	NSCT-5P2185	1	25052288	
P6006A	SOCKET	NSCT-5P2185	1	25052288	
P6011B	RETAINER	(BUS-U)	1	27141859	
P6607	TRM	NTM-4PDMCWR409	1	25060481	<PP, PA, WO, WT, GK, GQ, SA605GR>
P6607 or	TRM	NTM-4PDMC391	( 1)	25060462	<PP, PA, WO, WT, GK, GQ, SA605GR>

**U23 HDMI PC BOARD(NAHDM-9196-1)**

CIRCUIT 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	NJM2391DLI-33	1	22278033DR2JR	
Q8005 or	IC	BA33BC0FP	( 1)	22278033DR2RH	
Q8005 or	IC	UPC2933TAT-E1-A	( 1)	22278033DR2NE	
Q8006	IC	S18008TM	1	22242323R2	
Q8007	TR ARRAY	UM6K1N	1	226066R2	
Q8007 or	TR ARRAY	UPA672T	( 1)	226067R2	
Q8009	IC	TC74VHC541FT	1	22274541ER2TO	
Q8009 or	IC	TC74VHC541FT(EKJ)	( 1)	22274541E1R2TO	
Q8010	IC	S-24CSI6A0I-J8V1G	1	22242326R2	
Q8011	IC(VIDEO MEMORY)	SST25VF080B-50-4C-S2AF(0222)	1	222W0064R20222A	
Q8014	TR	KRC101S	1	2216330R2	
Q8014 or	TR	RN1401(TE85L_F)	( 1)	2214460R2	
Q8015	TR	KRC101S	1	2216330R2	
Q8015 or	TR	RN1401(TE85L_F)	( 1)	2214460R2	
Q8021	TR	KRA102S	1	2216220R2	
Q8021 or	TR	RN2402	( 1)	2214530R2	

Q8022	TR	KTA1504-GR	1	2216185R2	
Q8022 or	TR	2SA1162-GR	(1)	2214375R2	
Q8305	IC	S-812C50BUC-C5ET2G	1	22242407R2	
Q8306	IC	TC7SZ08FU(TE85L_F)	1	22242071R2TO	
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	SN74CB3T3306DCT	1	22242454R2	
Q8501	IC	SI9135CTU	1	22242393R3	NRP
Q8502	IC	XC6213B332MR	1	22242277R2	
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	
Q8593	IC	SI8008TM	1	22242323R2	
Q8594	IC	NJM2391DL1-33	1	22278033DR2JR	
Q8594 or	IC	BA33BC0FP	(1)	22278033DR2RH	
Q8594 or	IC	UPC2933TAT-E1-A	(1)	22278033DR2NE	
Q8595	IC	BA18BC0FP	1	22278018DR2RH	
Q8595 or	IC	TA48018AF(TE16L_NQ)	(1)	22278018DR2TO	
Q8595 or	IC	UPC2918T-E1-AZ	(1)	22278018ER2NE	
Q8596	IC	BA18BC0FP	1	22278018DR2RH	
Q8596 or	IC	TA48018AF(TE16L_NQ)	(1)	22278018DR2TO	
Q8596 or	IC	UPC2918T-E1-AZ	(1)	22278018ER2NE	
Q8597	IC	BA18BC0FP	1	22278018DR2RH	
Q8597 or	IC	TA48018AF(TE16L_NQ)	(1)	22278018DR2TO	
Q8597 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	
Q8701	IC(HDMI MEMORY)	MPD70F3716GC-8EA(0210)	1	222W0054R302105	
Q8801	IC	ADV7172	1	22242155R3	
D8001	C-DIODE	CRS09(TE85L_Q)	1	223274R2	
D8021	C-DIODE	1SS352	1	223234R2	
D8021 or	C-DIODE	1SS355	(1)	223269R2	
D8022	C-DIODE	1SS352	1	223234R2	
D8022 or	C-DIODE	1SS355	(1)	223269R2	
D8025	C-DIODE	1SS352	1	223234R2	
D8025 or	C-DIODE	1SS355	(1)	223269R2	
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	
D8701	C-DIODE	1SS355	1	223269R2	

D8701 or	C-DIODE	ISS352	(1)	223234R2
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
L8011	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	EMIFIL	BK1608LL241-T	1	230959R1
L8183	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L8400	C-R NET	MNR12E0APJ000	1	43464900002R2
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
L8501	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8502	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8503	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8504	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8505	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8507	CHOKE COIL	NCH-2541	1	231363K470
L8508	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8510	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8604	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
L8851	CHOKE COIL	LBC2518T2R2M	1	231364M022R2
L8852	CHOKE COIL	LBC2518T2R2M	1	231364M022R2
L8853	CHOKE COIL	LBC2518T2R2M	1	231364M022R2
L8854	CHOKE COIL	LBC2518T2R2M	1	231364M022R2
L8855	CHOKE COIL	LBC2518T2R2M	1	231364M022R2
L8856	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

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	3567A2209R2
C8005	CHIP ELECT C	CEWX4V-22M	1	3567A2209R2
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	3567A2209R2
C8051	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8055	C-CERA C	CK725F1E-104Z1	1	332161040R1

C8056	CHIP ELECT C	CEWX4V-22M	1	3567A2209R2
C8057	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8058	C-CERA C	CC725CH1H-120J1	1	342101204R1
C8059	C-CERA C	CC725CH1H-120J1	1	342101204R1
C8060	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8061	CHIP ELECT C	CEWX4V-22M	1	3567A2209R2
C8062	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8063	CHIP ELECT C	CEWX4V-22M	1	3567A2209R2
C8064	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8065	CHIP ELECT C	CEWX4V-22M	1	3567A2209R2
C8066	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8067	CHIP ELECT C	CEWX4V-22M	1	3567A2209R2
C8068	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8069	CHIP ELECT C	CEWX4V-22M	1	3567A2209R2
C8070	CHIP ELECT C	CEWX4V-100M	1	3567A1019R2
C8071	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8072	CHIP ELECT C	CEWX4V-100M	1	3567A1019R2
C8073	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8074	CHIP ELECT C	CEWT16V-470M	1	395744717R2
C8075	CHIP ELECT C	CEWT16V-470M	1	395744717R2
C8076	CHIP ELECT C	CEWT16V-470M	1	395744717R2
C8077	C-CERA C	CK725F1H-223Z1	1	332152230R1
C8078	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8079	CHIP ELECT C	CEWX4V-22M	1	3567A2209R2
C8080	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8081	CHIP ELECT C	CEWX4V-100M	1	3567A1019R2
C8082	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8083	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8084	CHIP ELECT C	CEWX4V-100M	1	3567A1019R2
C8085	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8086	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8087	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8088	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8089	C-CERA C	CK725F1E-104Z1	1	332161040R1
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
C8382	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8399	C-CERA C	CK725B1H-102K1	1	332101025R1
C8401	CHIP ELECT C	CEWX4V-22M	1	3567A2209R2
C8402	CHIP ELECT C	CEWX4V-22M	1	3567A2209R2
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
C8407	C-CERA C	CC725CH1H-100D1	1	342101002R1
C8408	CHIP ELECT C	CEWX4V-22M	1	3567A2209R2
C8409	CHIP ELECT C	CEWX4V-22M	1	3567A2209R2

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	3567A2209R2
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	3567A2219R2
C8444	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8501	C-CERA C	CK725B1H-102K1	1	332101025R1
C8502	CHIP ELECT C	CEWX4V-22M	1	3567A2209R2
C8503	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8504	C-CERA C	CK725B1H-102K1	1	332101025R1
C8505	CHIP ELECT C	CEWX4V-22M	1	3567A2209R2
C8506	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8507	C-CERA C	CK725B1H-102K1	1	332101025R1
C8508	C-CERA C	CK725B1H-102K1	1	332101025R1
C8509	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8510	C-CERA C	CK725B1H-102K1	1	332101025R1
C8511	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8512	C-CERA C	CK725B1H-102K1	1	332101025R1
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	CK725B1H-102K1	1	332101025R1
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	3567A2209R2
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	3567A2209R2
C8565	CHIP ELECT C	CEWX4V-22M	1	3567A2209R2
C8566	C-CERA C	CK725B1H-102K1	1	332101025R1
C8567	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8568	CHIP ELECT C	CEWX4V-22M	1	3567A2209R2
C8569	C-CERA C	CK725B1H-102K1	1	332101025R1
C8570	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8571	CHIP ELECT C	CEWX4V-22M	1	3567A2209R2
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	CK725F1H-104Z1	1	332151040R1



C8589	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8590	CHIP ELECT C	CEWX4V-100M	1	3567A1019R2
C8592	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8597	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	3567A1019R2
C8604	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8605	CHIP ELECT C	CEWX4V-220M	1	3567A2219R2
C8608	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8609	CHIP ELECT C	CEWX4V-100M	1	3567A1019R2
C8675	CHIP ELECT C	CEWX4V-100M	1	3567A1019R2
C8676	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8677	CHIP ELECT C	CEWX4V-100M	1	3567A1019R2
C8678	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8679	CHIP ELECT C	CEWT16V-470M	1	395744717R2
C8680	CHIP ELECT C	CEWT16V-470M	1	395744717R2
C8682	C-CERA C	CK725F1H-223Z1	1	332152230R1
C8683	CHIP ELECT C	CEWT16V-470M	1	395744717R2
C8684	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8687	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8691	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8692	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8697	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	356780479R2
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	3567A2219R2
C8710	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8801	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8802	CHIP ELECT C	CEWX4V-22M	1	3567A2209R2
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

C8861	C-CERA C	CC725CH1H-101J1	1	342101014R1
C8862	C-CERA C	CC725CH1H-101J1	1	342101014R1
C8863	C-CERA C	CC725CH1H-101J1	1	342101014R1
C8864	C-CERA C	CC725CH1H-101J1	1	342101014R1
C8865	C-CERA C	CC725CH1H-101J1	1	342101014R1
C8866	C-CERA C	CC725CH1H-101J1	1	342101014R1
C8871	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8872	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8873	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8874	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8875	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8876	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8891	C-CERA C	CC725CH1H-220J1	1	342102204R1
C8892	C-CERA C	CC725CH1H-220J1	1	342102204R1
C8893	C-CERA C	CC725CH1H-220J1	1	342102204R1
C8894	C-CERA C	CC725CH1H-220J1	1	342102204R1
C8895	C-CERA C	CC725CH1H-220J1	1	342102204R1
C8896	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-R NET	RM7LJ330X04	1	43484733004R2
R8006	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8007	C-R NET	RM7LJ330X04	1	43484733004R2
R8008	C-CARBON R	RN72K1J-103JE	1	435031034R1
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
R8022	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
R8031	C-CARBON R	RN72K1J-222JE	1	435032224R1
R8032	C-CARBON R	RN72K1J-222JE	1	435032224R1
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-750JE	1	435037504R1
R8038	C-CARBON R	RN72K1J-680JE	1	435036804R1
R8039	C-CARBON R	RN72K1J-750JE	1	435037504R1
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-680JE	1	435036804R1
R8045	C-R NET	RM7LJ103X04	1	43484710304R2
R8046	C-CARBON R	RN72K1J-680JE	1	435036804R1
R8047	C-R NET	RM7LJ103X04	1	43484710304R2
R8048	C-CARBON R	RN72K1J-680JE	1	435036804R1
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-471JE	1	435034714R1
R8054	C-CARBON R	RN72K1J-471JE	1	435034714R1
R8056	C-CARBON R	RN72K1J-471JE	1	435034714R1
R8058	C-CARBON R	RN72K1J-471JE	1	435034714R1
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-750JE	1	435037504R1
R8076	C-CARBON R	RN72K1J-750JE	1	435037504R1
R8077	C-CARBON R	RN72K1J-750JE	1	435037504R1
R8080	C-CARBON R	RN72K1J-222JE	1	435032224R1
R8081	C-CARBON R	RN72K1J-682JE	1	435036824R1
R8082	C-CARBON R	RN72K1J-680JE	1	435036804R1
R8083	C-CARBON R	RN72K1J-222JE	1	435032224R1
R8084	C-CARBON R	RN72K1J-333JE	1	435033334R1
R8091	C-CARBON R	RN72K1J-750JE	1	435037504R1
R8092	C-CARBON R	RN72K1J-750JE	1	435037504R1
R8093	C-CARBON R	RN72K1J-750JE	1	435037504R1
R8094	C-CARBON R	RN72K1J-750JE	1	435037504R1
R8095	C-CARBON R	RN72K1J-750JE	1	435037504R1
R8096	C-CARBON R	RN72K1J-750JE	1	435037504R1
R8097	C-CARBON R	RN72K1J-750JE	1	435037504R1
R8098	C-CARBON R	RN72K1J-750JE	1	435037504R1
R8099	C-CARBON R	RN72K1J-750JE	1	435037504R1
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-470JE	1	435224704R1
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
R8413	C-CARBON R	RN72K2E-000JE	1	435220004R1
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
R8427	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8428	C-CARBON R	RN72K2E-000JE	1	435220004R1
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
R8515	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8516	C-CARBON R	RN72K1J-330JE	1	435033304R1
R8517	C-CARBON R	RN72K1J-101JE	1	435031014R1
R8518	C-CARBON R	RN72K1J-101JE	1	435031014R1
R8519	C-CARBON R	RN72K1J-470JE	1	435034704R1
R8520	C-CARBON R	RN72K1J-470JE	1	435034704R1
R8521	C-R NET	RM7LJ330X04	1	43484733004R2

R8522	C-CARBON R	RN72K1J-330JE	1	435033304R1
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-103JE	1	435031034R1
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-332JE	1	435033324R1
R8543	C-CARBON R	RN72K1J-332JE	1	435033324R1
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-682JE	1	435036824R1
R8592	C-CARBON R	RN72K1J-682JE	1	435036824R1
R8593	C-CARBON R	RN72K1J-152JE	1	435031524R1
R8594	C-CARBON R	RN72K1J-152JE	1	435031524R1
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-103JE	1	435031034R1
R8637	C-CARBON R	RN72K1J-102JE	1	435031024R1
R8638	C-CARBON R	RN72K1J-473JE	1	435034734R1
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R8640	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8642	C-CARBON R	RN72K1J-332JE	1	435033324R1
R8643	C-CARBON R	RN72K1J-332JE	1	435033324R1
R8644	C-CARBON R	RN72K1J-473JE	1	435034734R1
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R8648	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8662	C-CARBON R	RN72K1J-105JE	1	435031054R1
R8702	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8704	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8706	C-CARBON R	RN72K1J-103JE	1	435031034R1
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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
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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
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R8733	C-CARBON R	RN72K1J-000JE	1	435030004R1
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R8736	C-R NET	RM7LJ220X04	1	43484722004R2
R8737	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8738	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8741	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8742	C-CARBON R	RN72K1J-472JE	1	435034724R1
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R8747	C-CARBON R	RN72K1J-220JE	1	435032204R1
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R8749	C-R NET	RM7LJ220X04	1	43484722004R2
R8750	C-R NET	RM7LJ103X04	1	43484710304R2
R8751	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8752	C-R NET	RM7LJ220X04	1	43484722004R2
R8753	C-R NET	RM7LJ220X04	1	43484722004R2
R8758	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8759	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8760	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8761	C-CARBON R	RN72K1J-220JE	1	435032204R1
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R8763	C-R NET	RM7LJ103X04	1	43484710304R2
R8765	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8766	C-R NET	RM7LJ103X04	1	43484710304R2
R8769	C-R NET	RM7LJ103X04	1	43484710304R2
R8770	C-R NET	RM7LJ103X04	1	43484710304R2
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-472JE	1	435034724R1
R8816	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8817	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8851	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8852	C-CARBON R	RN72K1J-000JE	1	435030004R1
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R8855	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8856	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8857	C-CARBON R	RN72K2E-000JE	1	435220004R1
R8861	C-CARBON R	RN72K1J-151JE	1	435031514R1
R8862	C-CARBON R	RN72K1J-151JE	1	435031514R1
R8863	C-CARBON R	RN72K1J-151JE	1	435031514R1
R8864	C-CARBON R	RN72K1J-151JE	1	435031514R1
R8865	C-CARBON R	RN72K1J-151JE	1	435031514R1
R8866	C-CARBON R	RN72K1J-151JE	1	435031514R1
R8867	C-CARBON R	RN72K2E-000JE	1	435220004R1
R8868	C-CARBON R	RN72K2E-000JE	1	435220004R1
R8869	C-CARBON R	RN72K2E-000JE	1	435220004R1
R8931	C-CARBON R	RN72K1J-682JE	1	435036824R1
R8932	C-CARBON R	RN72K1J-152JE	1	435031524R1
R8933	C-CARBON R	RN72K1J-152JE	1	435031524R1
R8934	C-CARBON R	RN72K1J-682JE	1	435036824R1
E8000	TRM(SCREW)	NEJITANSI M3	1	25065425
E8001	TRM(SCREW)	NEJITANSI M3	1	25065425
JL8001B	WIRE TRAP	NPLG-4P587	1	25055625
P4008A	SOCKET	NSCT-23P2116	1	25052219
P8003	WS CLAMP	CB-71683(L=50)	1	260261
P8011	SOCKET	NSCT-4P2134	1	25052237
P801B	SOCKET	NSCT-10P2190	1	25052293
P802B	SOCKET	NSCT-14P2194	1	25052297
P8302	SOCKET	CSS5019-0411FSZ	1	25053198R3
P8501	SOCKET	CSS5019-0411FSZ	1	25053198R3
P8601	SOCKET	CSS5019-0411FSZ	1	25053198R3
P8705	SOCKET	NSCT-8P2138	1	25052241

TX-SR605/SA605/SA8560

## PACKING PROCEDURE PARTS LIST

REF. NO.	PART NAME	DESCRIPTION	Q`TY	PART NO. (SN)	REMARKS
A501	CARTON	605(B)	1	29054694A	(B), <PA, WO>
A501	CARTON	605(B)MDD/MDC	1	29054690A	(B), <DD, DC>
A501	CARTON	605(B)MPP	1	29054692B	(B), <PP>
A501	CARTON	605(G)	1	29054696A	(G)
A501	CARTON	605(S)	1	29054695A	(S), <PA, WO>
A501	CARTON	605(S)MDC	1	29054691A	(S), <DC>
A501	CARTON	605(S)MPP	1	29054693B	(S), <PP>
A501	CARTON	TXSA605MGR	1	29054762	<SA605>
A501	CARTON	TXSA8560MGR	1	29054763	<SA8560>
A5011	PAD	(AS)	1	29092364	
A502	LABEL	(MDC)	2	29363243	(B), <DC>
A502	LABEL	(MWO)	2	29364977	<WO>
A502	LABEL	(MGK)	2	29364975	<GK>
A502	LABEL	(MGQ)	2	29364974	<GQ>
A502	LABEL	(MWT)	2	29364973	<WT>
A5031	POLY BAG	POLY BAG(850*650)	1	29100034-1A	
A503a	UPC LABEL	605B	1	29364831	<DD, DC>
A503a	EAN LABEL	605B	1	29364827	(B), <PP, PA, WO>
A503a	EAN LABEL	605S	1	29364828	(S), <PP, PA, WO>
A503a	EAN LABEL	605G	1	29364829	(G), <WT, GK, GQ>
A503a	EAN LABEL	TXSA605(G)	1	29364944	<SA605>
A503a	EAN LABEL	8560G	1	29364830	<SA8560>
A504	LABEL	(MPA)	2	29364273	<PA>
A505	POLY BAG	w250xd350	1	29100250	<PP, PA, WO, WT, GK, GQ, SA605, SA8560>
A506	PP TAPE	W48 OPP TAPE	1	29110148	
A507	TAPE	(SEROHAN)NITTO NO.29	1	29110149	
A509	SHEET	(PAD)	1	29096065	
A801	INS MANUAL	En(TX-SR605/8560)	1	29344489A	
A802	INS MANUAL	En(QSS_TX-SR605/8560)	1	29344490	
A803	INS MANUAL	FrEs(TX-SR605)	1	29344491	<DC, PP>
A804	INS MANUAL	ItDe(TX-SR605)	1	29344492	<PP>
A805	INS MANUAL	NISv(TX-SR605)	1	29344493	<PP>
A806	INS MANUAL	Ci(TX-SR605)	1	29344494	<WO, WT, GQ>
A807	INS MANUAL	Cs(TX-SR605/8560)	1	29344495	<SA605, SA8560>
A808	INS MANUAL	Cs(QSS_TX-SR605/8560)	1	29344496	<SA605, SA8560>
A809	INS MANUAL	Ar(TX-SR605)	1	29344499	<WO>
A810	INS MANUAL	En(TX-SR605_XM/SIRIUS)	1	29344502	<DD,DC>
A811	INS MANUAL	FrEs(605_XM/SIRIUS)	1	29344504	<DC>
A812	INS MANUAL	U9(RC-681/682/683/684)	1	29344414	
A813	INST SHEET	WEEE	1	29355537	<PP>
A814	INST SHEET	En(XM RADIO)	1	29355602	<DD,DC>
A820	POLY BAG	w250xd350	1	29100250	
A821	POLY BAG	D250xd300xW300(t0.04)	1	29100256	<PP>
A822	WRNTY CARD	(ONKYO)	1	29365102A	<DD, DC>
A822	WRNTY CARD	(ONKYO-CH)	1	29365098B	<SA605>
A822	WRNTY CARD	MGQ	1	29365099A	<GQ>
A823	REMO CON	RC-682M	1	24140682	



A824	BATTERY	R6/AA(UM-3)	2	3010194	
A824 or	BATTERY	R6/AA(UM-3)	( 2)	3010054	
A825	LABEL	(SP CABLE)	1	29363059A	
A826	TAPE	(SEROHAN)NITTO NO.29	1	29110149	
A827	HANDBILL	(DS-A2)US	1	29380145	<DD, DC>
A827	HANDBILL	(DS-A2)EU	1	29380146	<PP>
A827	HANDBILL	(DS-A2)AUS	1	29380147A	<PA>
A828	ANT COIL	NMA-3057	1	232140	(B)
A828	ANT COIL	NMA-3057	1	232140	(S)
A828	ANT COIL	NMA-3057	1	232140	(G)
A8281	CAP	(AUX) BLACK	1	28330178	(B), <PP>
A8281	CAP	(AUX) SILVER	1	28330179	(S), <PP>
A829	FM ANT AS	Type W	1	292191	(B)
A829	FM ANT AS	Type W	1	292191	(S)
A829	FM ANT AS	Type W	1	292191	(G)
A830	TRM	(WRENCH)	1	25060468	
A831	CV PLUG	CV-K-1	1	25056005	!,<WO, WT>
A832	CV PLUG	SCP-13A-BLK(UK)	1	25056591	!,<WO>
A833	INS MANUAL	(QC ImportantSheet)	1	29344267A	<WO>
A834	INST SHEET	En/Fr/Es(HDMI)	1	29355641	<DD, DC>
A834	INST SHEET	En_Ja(HDMI)	1	29355642	<PP, PA, WO, WT, GK, GQ, SA605, SA8560>
A835	INST SHEET	Fr/Es/It/De/Ni/Sv/Ct/Cs(HDMI)	1	29355643	<PP, GQ, WT, SA605, SA8560>
P6601	P RIVET	JB-407A-C	18	880052	<PP, PA, WT, WO, GK, GQ, SA605, SA8560>
U007	MIC AS	MIC-5000	1	1B068MIC	

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