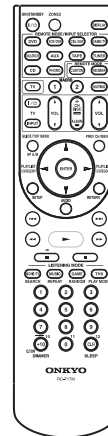
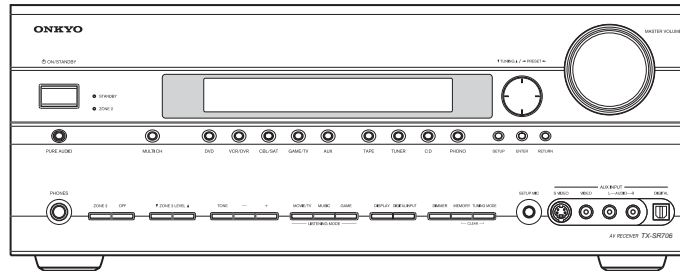


ONKYO SERVICE MANUAL

AV RECEIVER MODEL TX-SR706 MODEL TX-SA706



RC-717M


TX-SR706 Black, Golden and Silver models

B MDC, S MDD, G MDT	120V AC, 60Hz
B MMP, MMA, S MMP, MMA	220-240V AC, 50Hz
B MMO, S MMO	220-240V AC, 50/60Hz
G MMQ, MMT	220-240V AC, 50/60Hz

TX-SA706 Golden model

G MMR	220-240V AC, 50/60Hz
-------	----------------------

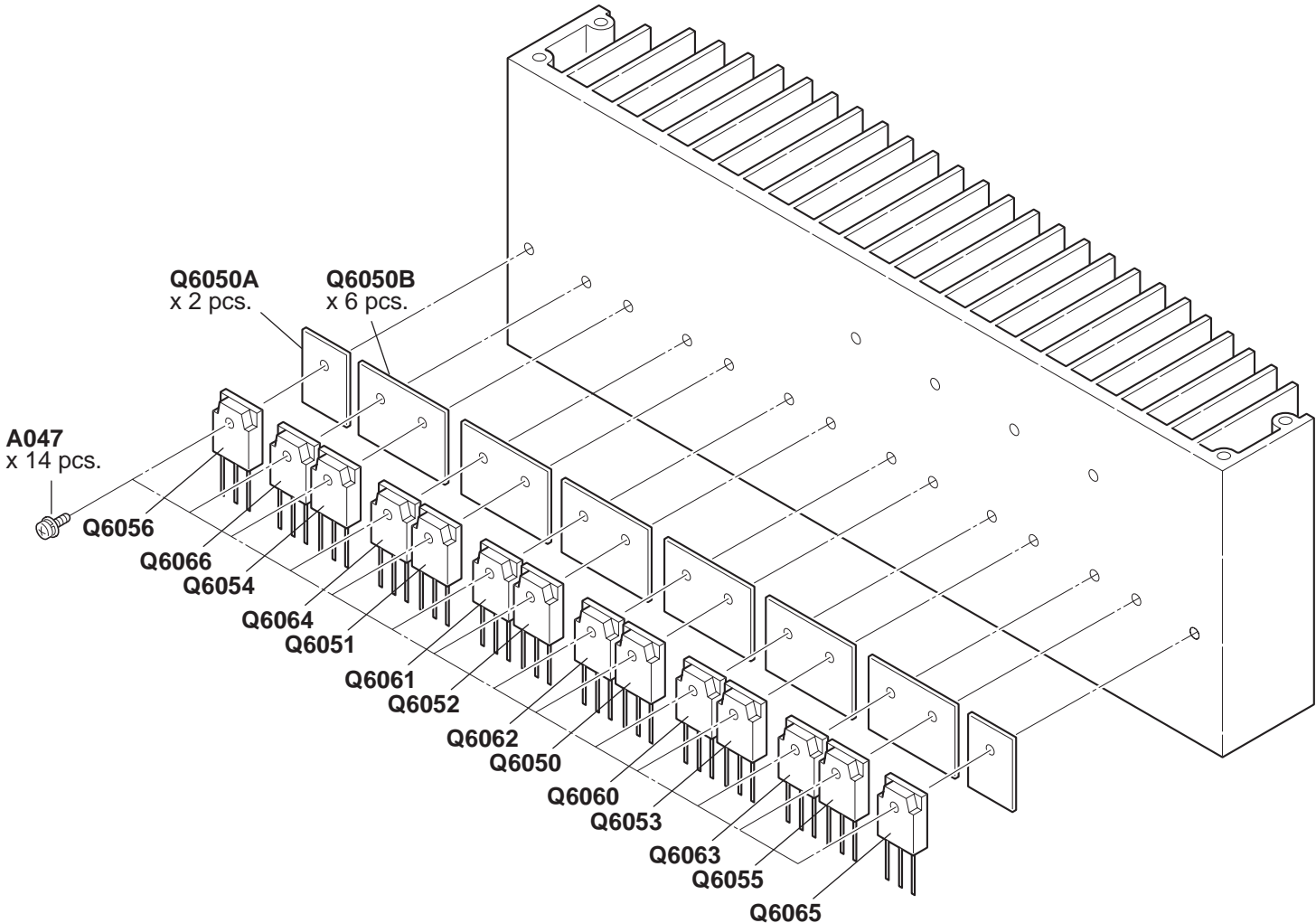
SAFETY-RELATED COMPONENT WARNING!!

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.

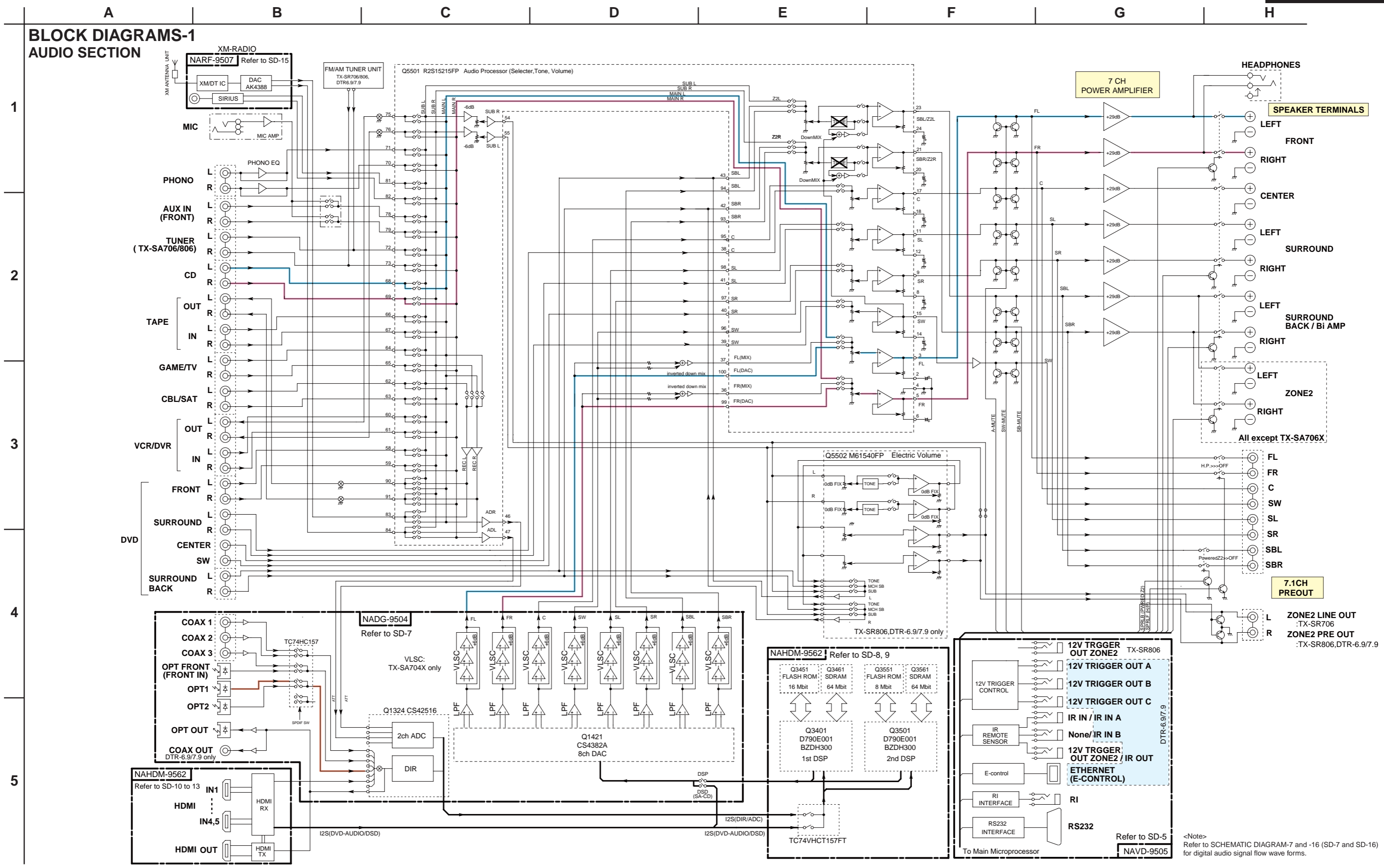
MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

EXPLODED VIEWS-2

<Fig-1>



**BLOCK DIAGRAMS-1
AUDIO SECTION**



1

2

3

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<Note>
Refer to SCHEMATIC DIAGRAM-7 and -16 (SD-7 and SD-16)
for digital audio signal flow wave forms.

BLOCK DIAGRAMS-3
HDMI SECTION

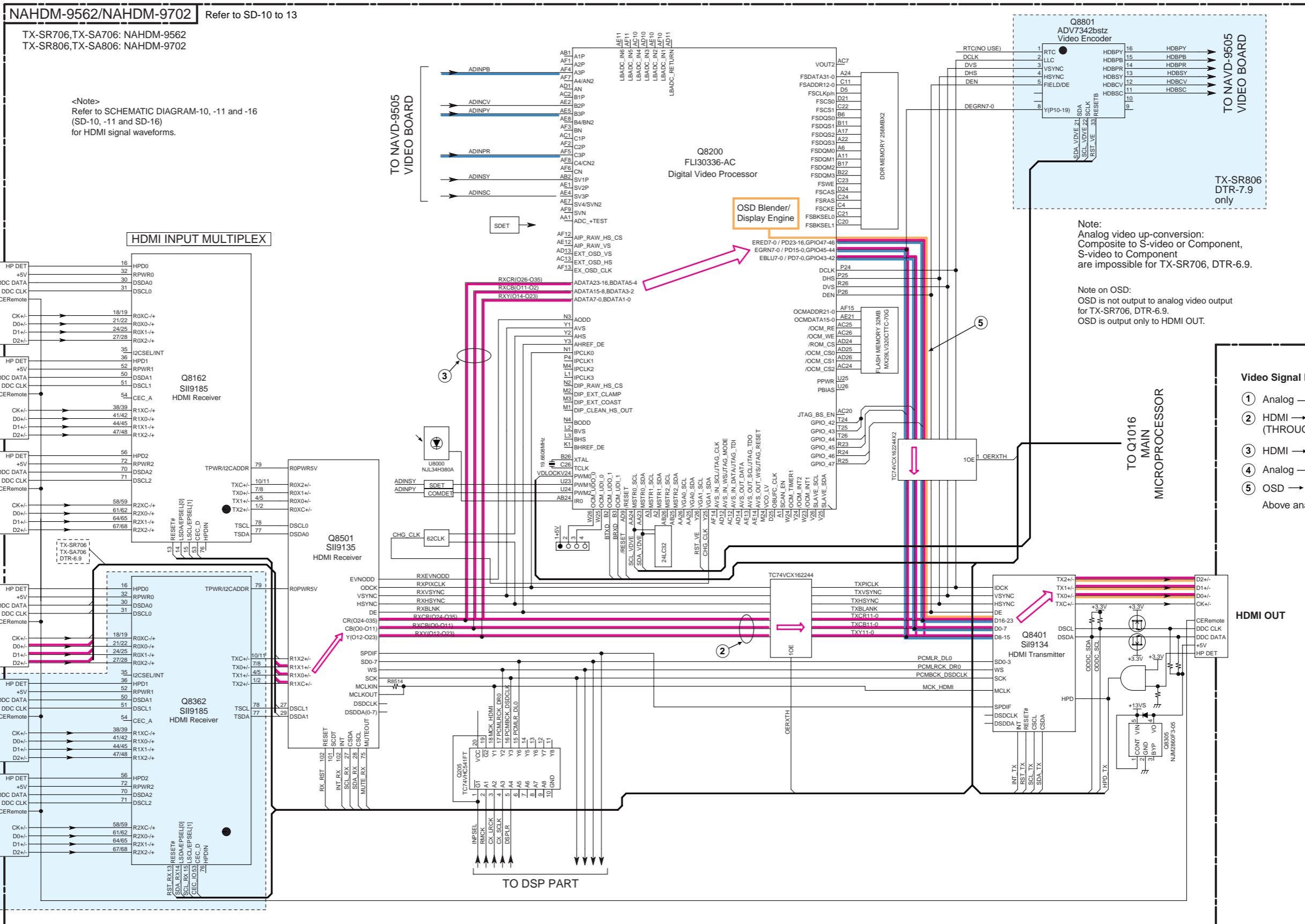
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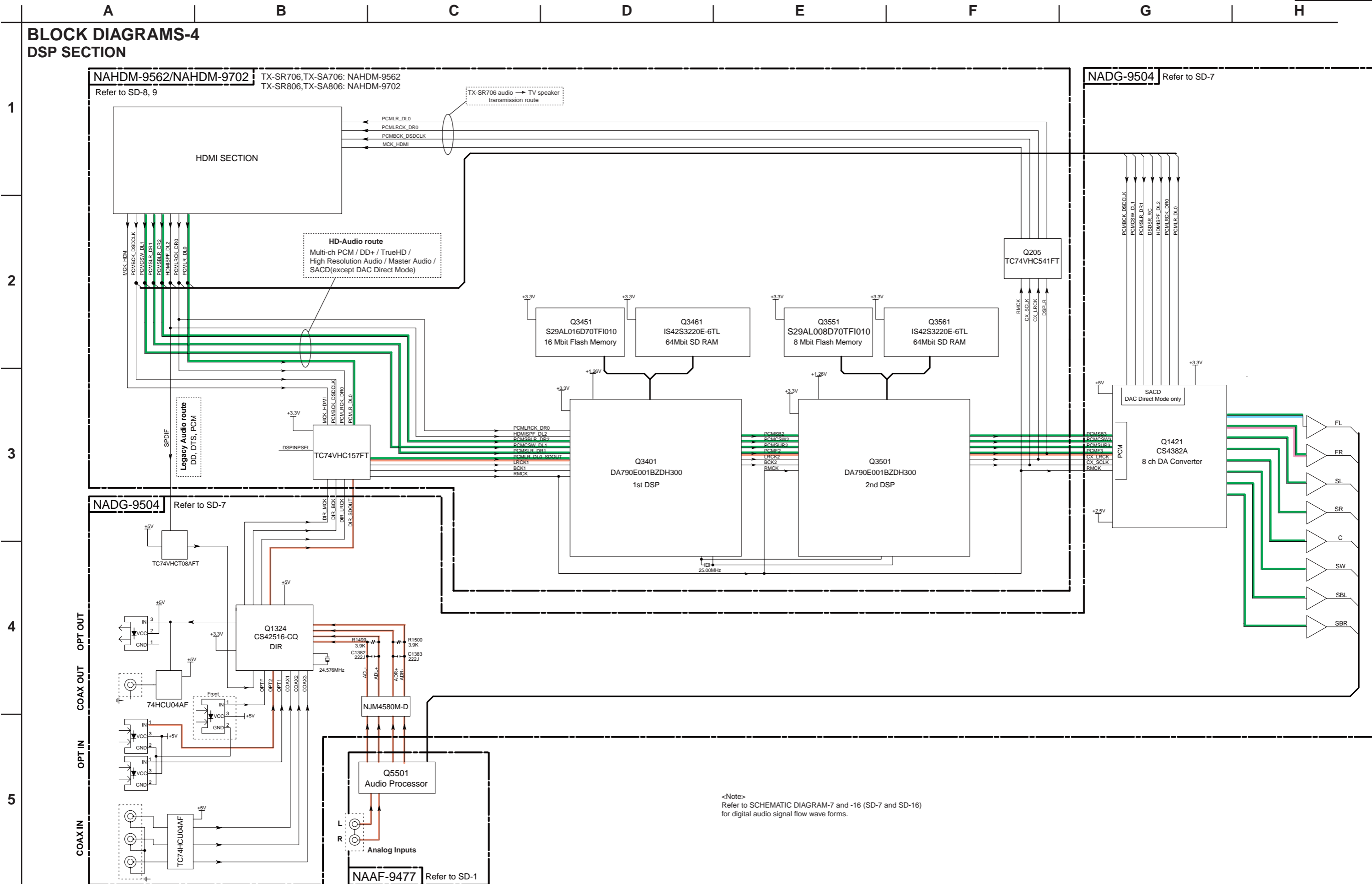
3

4

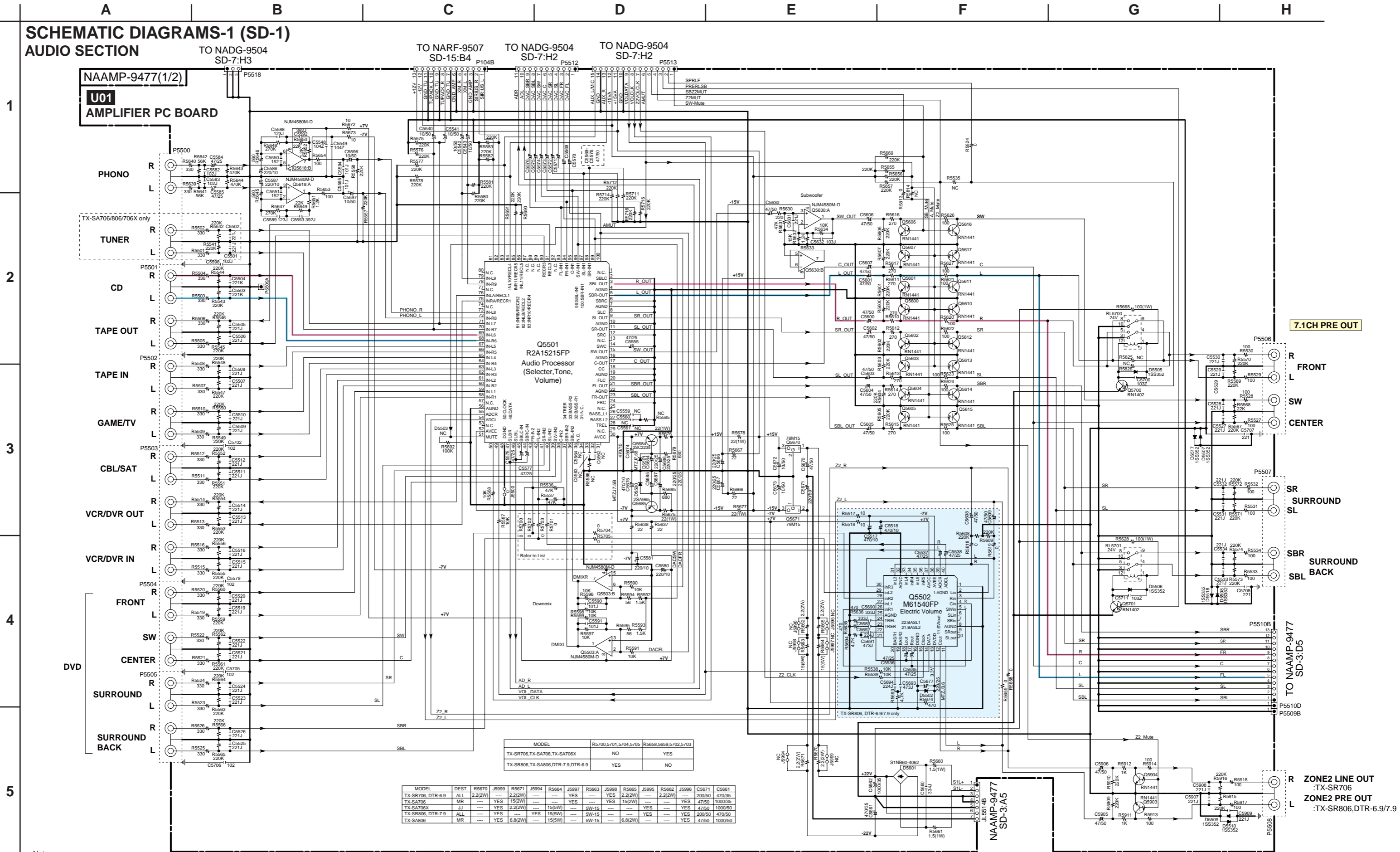
5



BLOCK DIAGRAMS-4
DSP SECTION



SCHEMATIC DIAGRAMS-1 (SD-1)
AUDIO SECTION



MODEL	R5700	5701	5704	5705	R5658	5659	5702	5703
TX-SR706, TX-SA706, TX-SA706X	NO				YES			
TX-SR806, TX-SA806, DTR-7.9, DTR-6.9	YES				NO			

MODEL	DEST.	R5670	J5999	R5671	J5994	R5664	J5997	R5663	J5998	R5665	J5995	R5662	J5996	C5671	C5661
TX-SR706, DTR-6.9	ALL	2.2(2W)	---	2.2(2W)	---	---	YES	---	YES	2.2(2W)	---	2.2(2W)	---	200/50	470/35
TX-SA706	MR	---	YES	15(2W)	---	---	YES	---	YES	15(2W)	---	---	YES	47/50	1000/35
TX-SA706X	JJ	---	YES	2.2(2W)	---	15(SW)	---	SW-15	---	---	---	---	YES	47/50	1000/50
TX-SR806, DTR-7.9	ALL	---	YES	15(SW)	---	---	YES	SW-15	---	---	---	---	YES	200/50	470/50
TX-SA806	MR	---	YES	6.8(2W)	---	15(SW)	---	SW-15	---	6.8(2W)	---	---	YES	47/50	1000/50

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

SCHEMATIC DIAGRAMS-4 (SD-4)
SP TERMINAL AND POWER SUPPLY SECTION

1

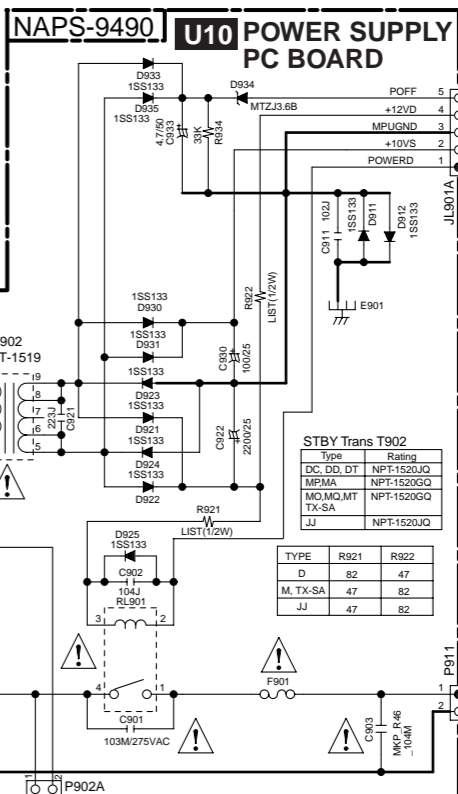
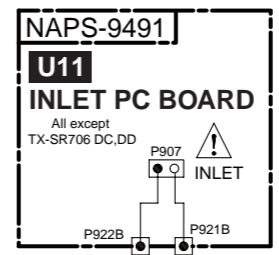
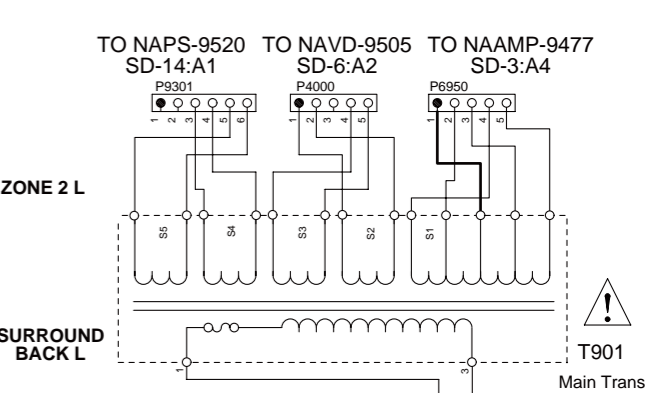
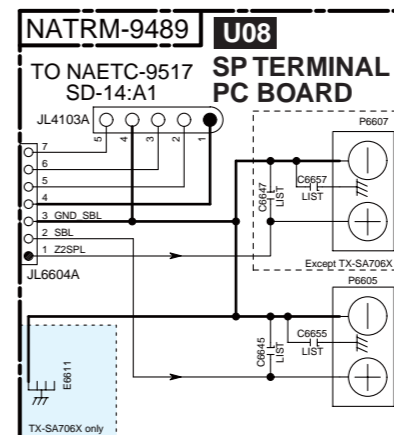
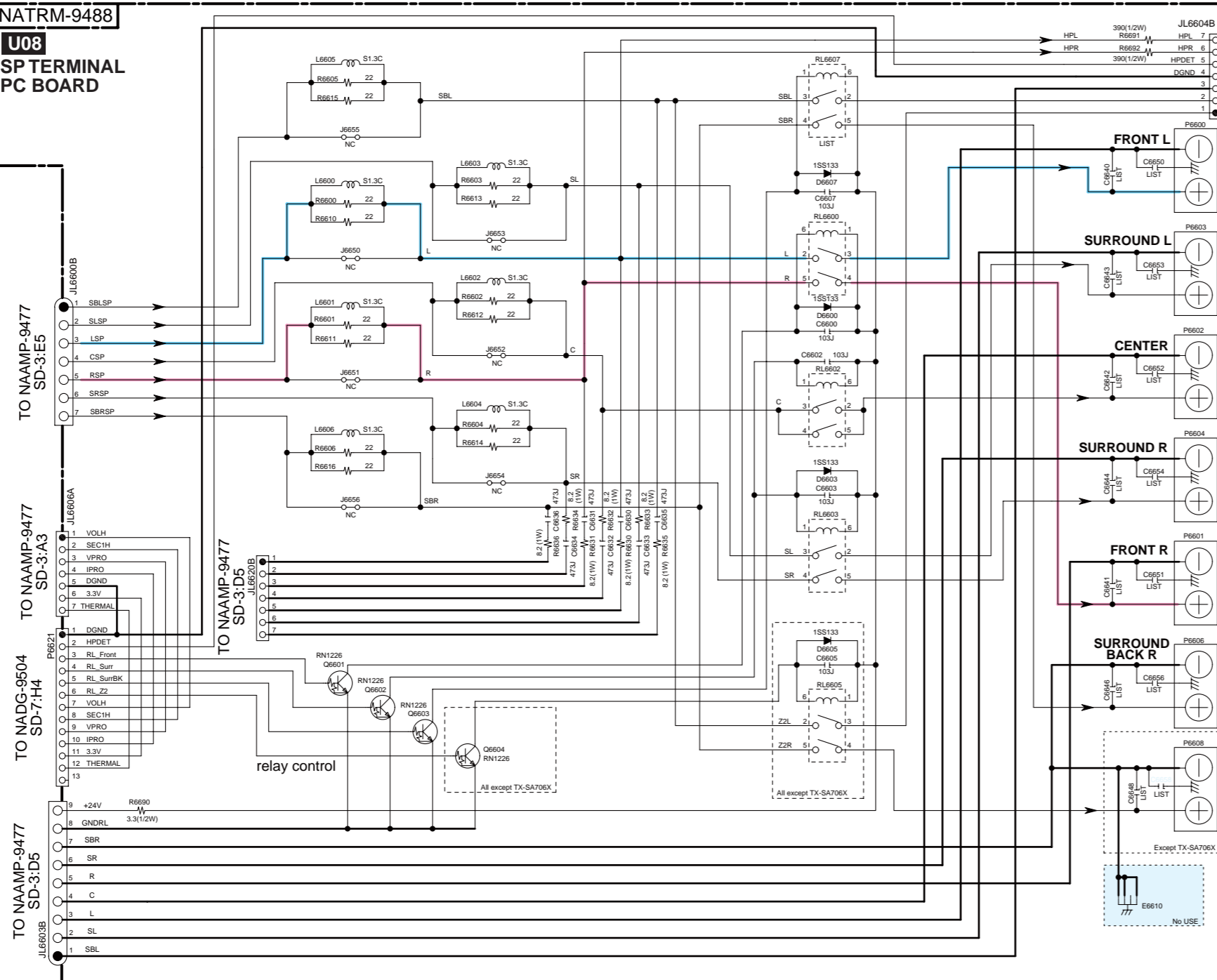
2

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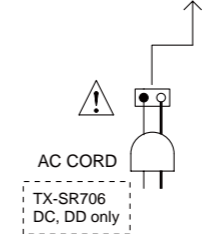
NATRM-9488
U08
SP TERMINAL
PC BOARD



STBY Trans T902

Type	Rating
DC, DD, DT	NPT-1520JQ
MPMA	NPT-1520GG
MO, MQ, MT	NPT-1520GQ
TX-SA	NPT-1520JQ
JJ	NPT-1520JQ

TYPE	R921	R922
D	82	47
M, TX-SA	47	82
JJ	47	82



F901 RATING

	TX-SR706	TX-SR806
DC, DD, DT	10A/125V	12A/125V
MP, MA, MQ	5A/250V	6.3A/250V
MT, MO	5A/250V	6.3A/250V
TX-SA	5A/250V	6.3A/250V
JJ	10A/125V	---

Main Trans T901

Type	TX-SR706	TX-SR806
DC, DD, DT	NPT-1570D	NPT-1571D
MPMA	NPT-1570M	NPT-1571M
MO, MQ, MT	NPT-1570M	NPT-1571M
TX-SA	NPT-1570M	NPT-1571M
JJ	NPT-1571J	---

- NOTE**
- THE COMPONENTS IDENTIFIED BY MARK ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
 - BOLD 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.

C6640-6648

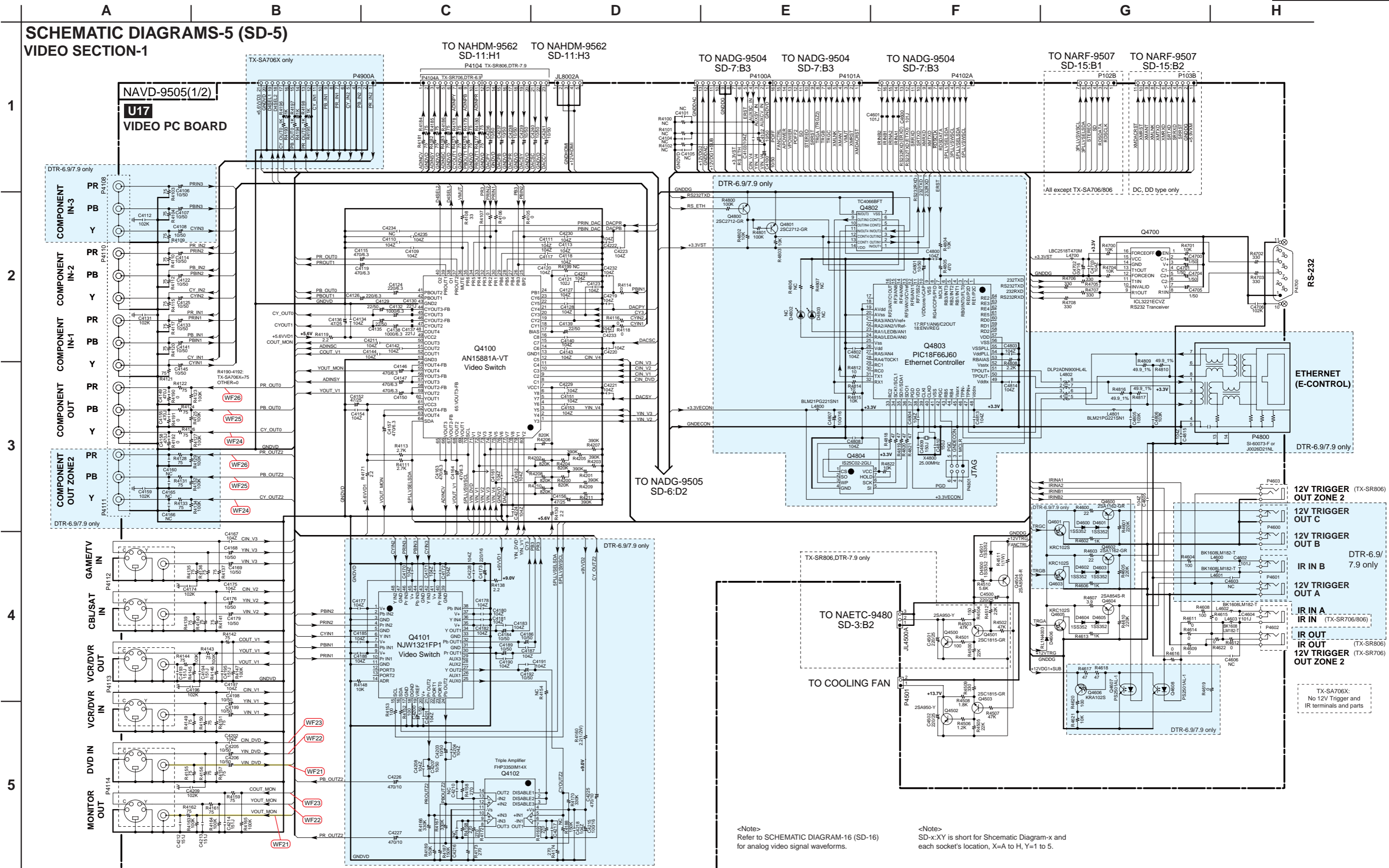
TYPE	TX-SR706	TX-SA706	TX-SR806	TX-SA806	TX-SA706X
D	NC	---	NC	---	---
J	---	---	---	---	NC
M	472J	472J	472J	472J	---

C6650-6658

TYPE	TX-SR706	TX-SA706	TX-SR806	TX-SA806	TX-SA706X
D	102J	---	102J	---	---
J	---	---	---	---	NC
M	102J	102J	102J	102J	---

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

SCHEMATIC DIAGRAMS-5 (SD-5)
VIDEO SECTION-1



<Note>
Refer to SCHEMATIC DIAGRAM-16 (SD-16)
for analog video signal waveforms.

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

SCHEMATIC DIAGRAMS-6 (SD-6)
VIDEO SECTION-2

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

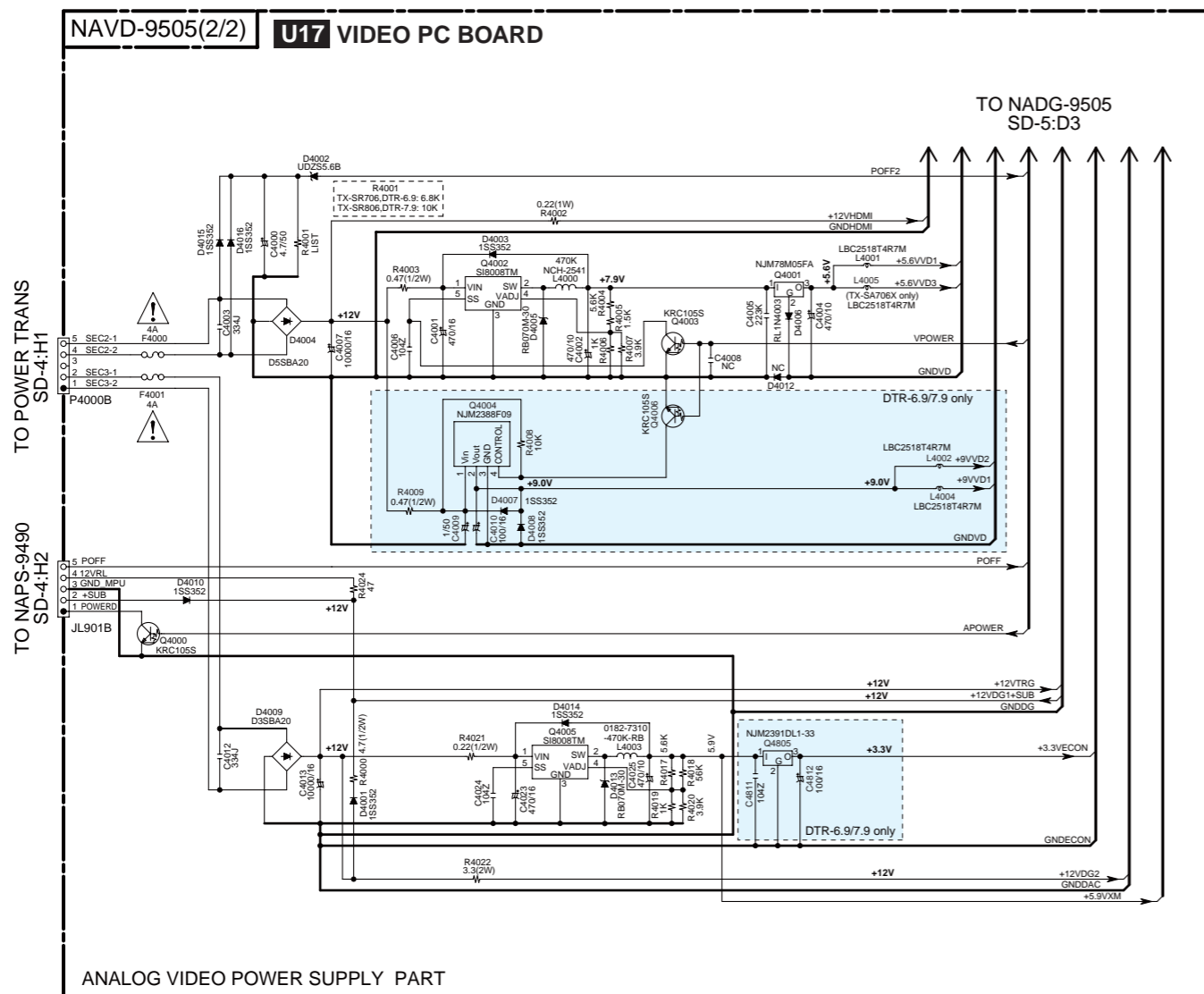
1

2

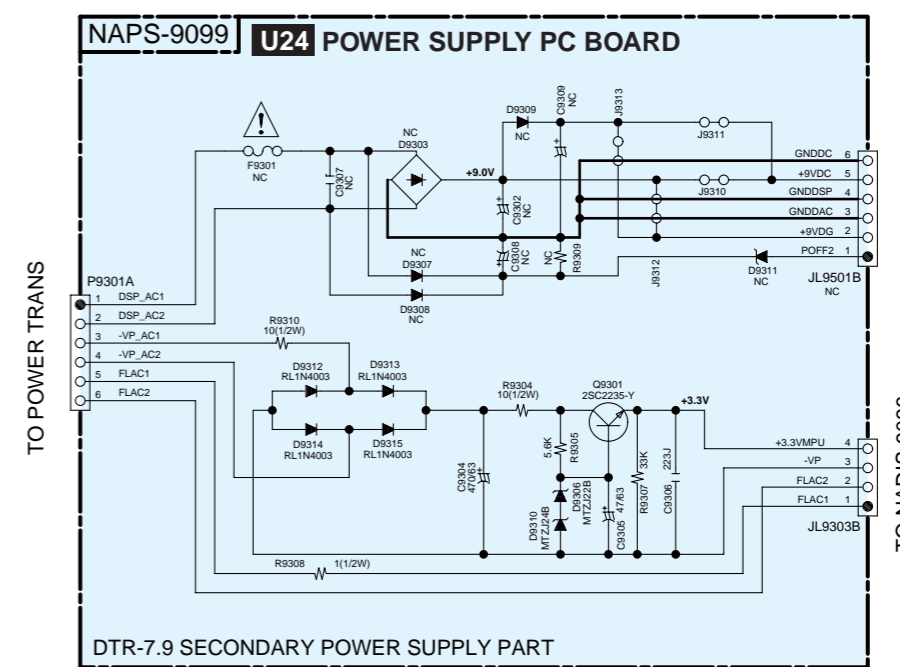
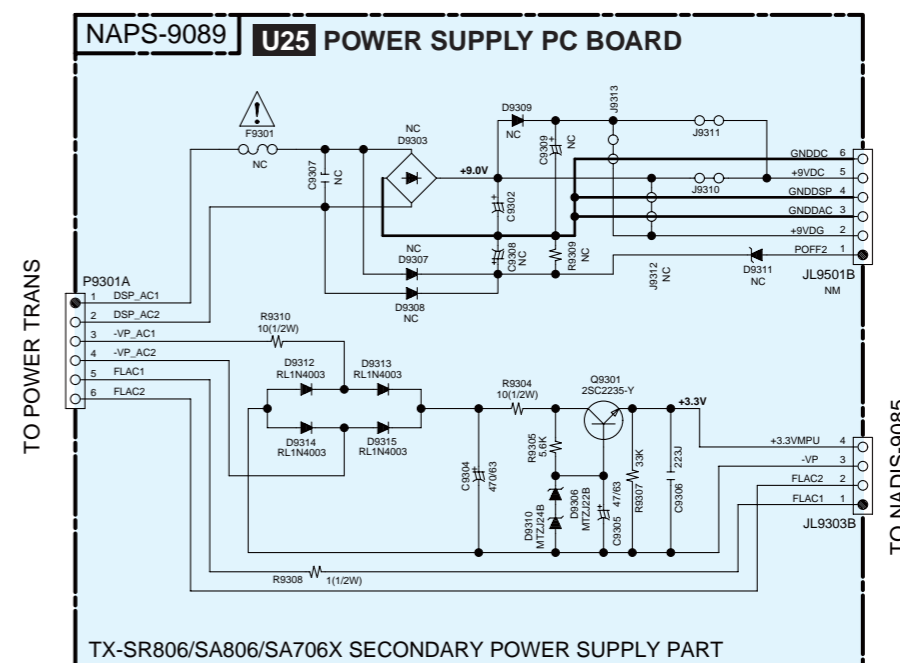
3

4

5



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



A B C D E F G H

SCHEMATIC DIAGRAMS-7 (SD-7) MICROPROCESSOR AND DAC SECTION

NADG-9504 U16

MICROPROCESSOR AND DAC PC BOARD

TO DEBUGGER TO FLASH WRITER TO NAHDM-9562 SD-8:A4 TO NAHDM-9562 SD-8:A4 TO NAHDM-9562 SD-8:A3

TO NADIS-9515 (P7901B) SD-14:B2

TO NAVD-9505 TO NAVD-9505 SD-5:E1

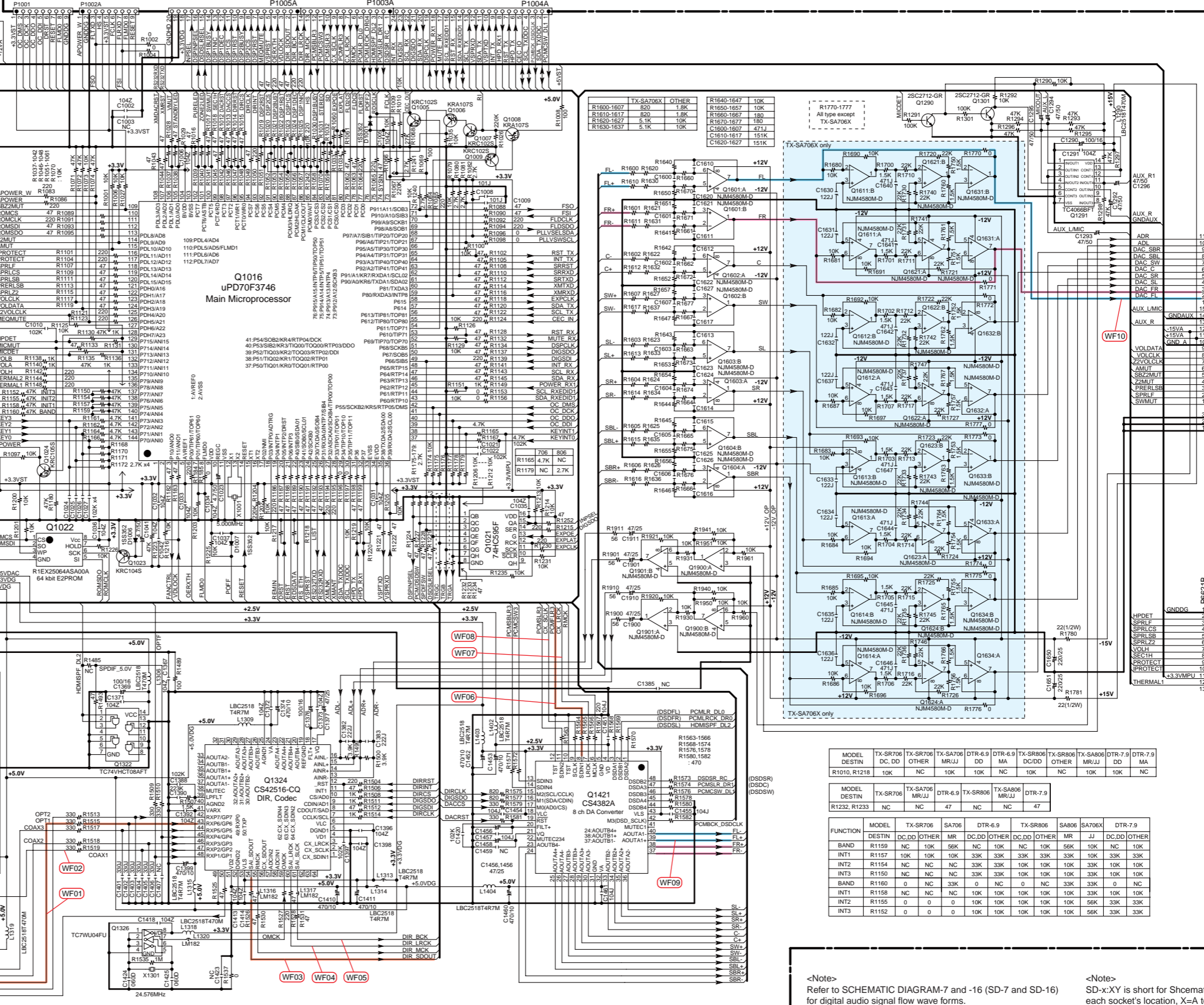
TO NAVD-9505 TO NAVD-9505 SD-5:E1

TO NAVD-9505 TO NAVD-9505 SD-5:F1

COAX1 COAX2 COAX3

OPT1 OPT2

OPTOUT



MODEL	TX-SA706X	OTHER
R1600-1607	820	1.8K
R1610-1617	820	1.8K
R1630-1637	5.1K	10K
R1640-1647	10K	10K
R1650-1657	10K	10K
R1660-1667	180	180
R1680-1687	471K	471K
R1690-1697	151K	151K
R1700-1707	151K	151K

MODEL	TX-SA706X	OTHER
R1770-1777	47K	47K
R1780-1787	47K	47K
R1790-1797	47K	47K
R1800-1807	47K	47K
R1810-1817	47K	47K
R1820-1827	47K	47K
R1830-1837	47K	47K
R1840-1847	47K	47K
R1850-1857	47K	47K
R1860-1867	47K	47K
R1870-1877	47K	47K
R1880-1887	47K	47K
R1890-1897	47K	47K
R1900-1907	47K	47K
R1910-1917	47K	47K
R1920-1927	47K	47K
R1930-1937	47K	47K
R1940-1947	47K	47K
R1950-1957	47K	47K
R1960-1967	47K	47K
R1970-1977	47K	47K
R1980-1987	47K	47K
R1990-1997	47K	47K

MODEL	TX-SR706	TX-SR706	TX-SR706	DTR-6.9	DTR-6.9	TX-SR806	TX-SR806	TX-SR806	DTR-7.9	DTR-7.9
DESTIN	DC,DD	OTHER	MR	JJ	MA	DC,DD	OTHER	MR	JJ	MA
R1010, R1218	10K	NC	10K	10K	NC	10K	NC	10K	10K	NC

MODEL	TX-SR706	TX-SR706	TX-SR806	TX-SR806	DTR-7.9
DESTIN	DC,DD	OTHER	MR	JJ	MA
R1232, R1233	NC	NC	47	NC	47

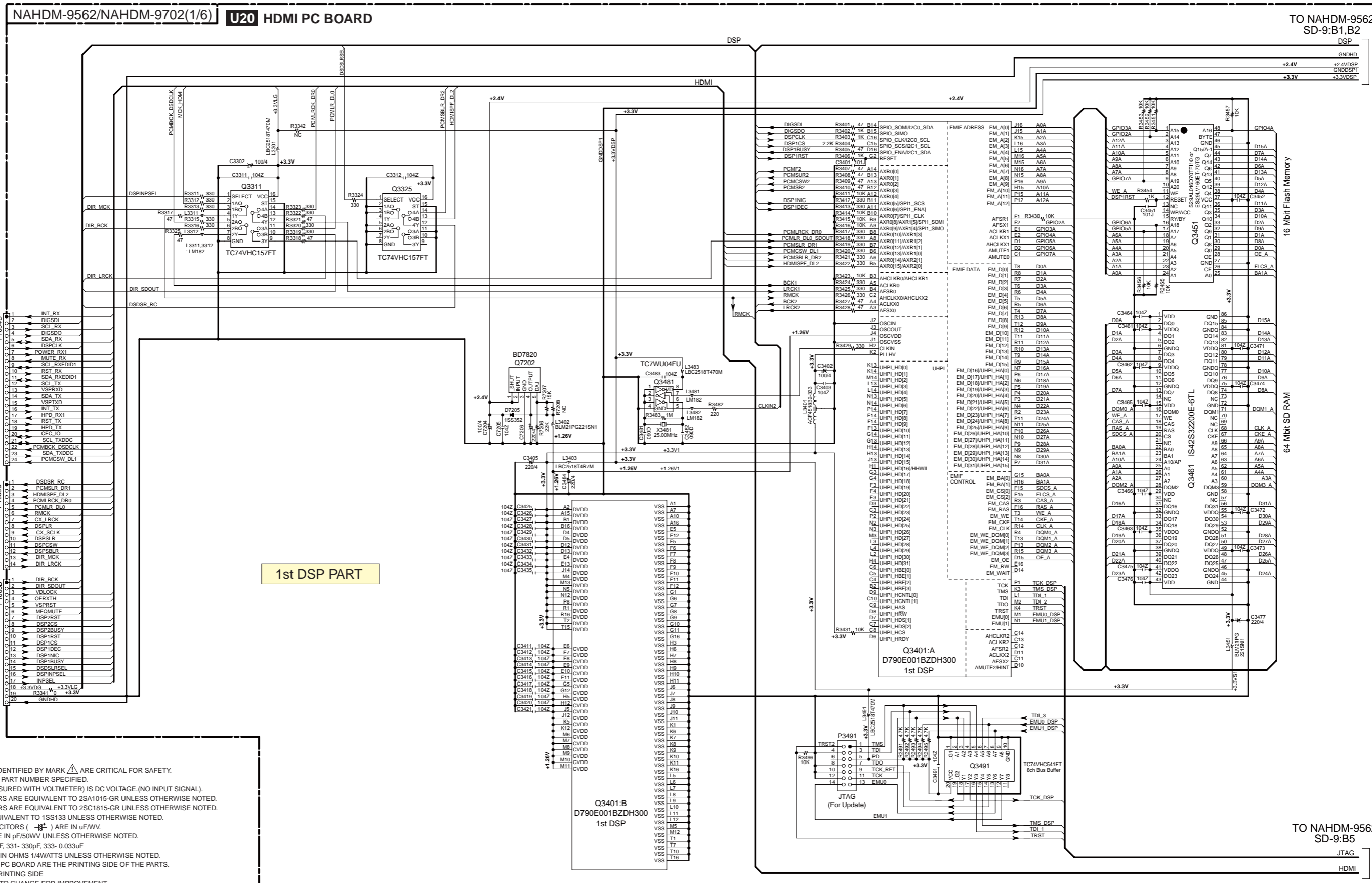
FUNCTION	MODEL	TX-SR706	SA706	DTR-6.9	TX-SR806	SA806	SA706X	DTR-7.9
BAND	DESTIN	DC,DD	OTHER	MR	JJ	MA	DC,DD	OTHER
INT1	R1157	10K	10K	56K	NC	10K	56K	10K
INT2	R1154	NC	NC	33K	33K	33K	33K	33K
INT3	R1150	NC	NC	33K	33K	10K	33K	10K
BAND	R1160	0	NC	33K	0	NC	33K	0
INT1	R1158	NC	NC	10K	10K	10K	10K	10K
INT2	R1155	0	0	10K	10K	10K	10K	33K
INT3	R1152	0	0	10K	10K	10K	10K	33K

<Note> Refer to SCHEMATIC DIAGRAM-7 and -16 (SD-7 and SD-16) for digital audio signal flow wave forms. <Note> SD-X:Y is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

SCHEMATIC DIAGRAMS-8 (SD-8) DSP SECTION-1

TX-SR706, TX-SA706: NAHDM-9562
TX-SR806, TX-SA806: NAHDM-9702

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



NOTE

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

TO NAHDM-9562 SD-9:B1,B2 DSP

TO NAHDM-9562 SD-9:B5 JTAG

HDMI

16 Mbit Flash Memory

64 Mbit SD RAM

EMIF ADDRESS

EMIF DATA

EMU0

EMU1

TCK DSP

TMS DSP

TDI DSP

TRST

TD0

TD1

TD2

TD3

TD4

TD5

TD6

TD7

TD8

TD9

TD10

TD11

TD12

TD13

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TD15

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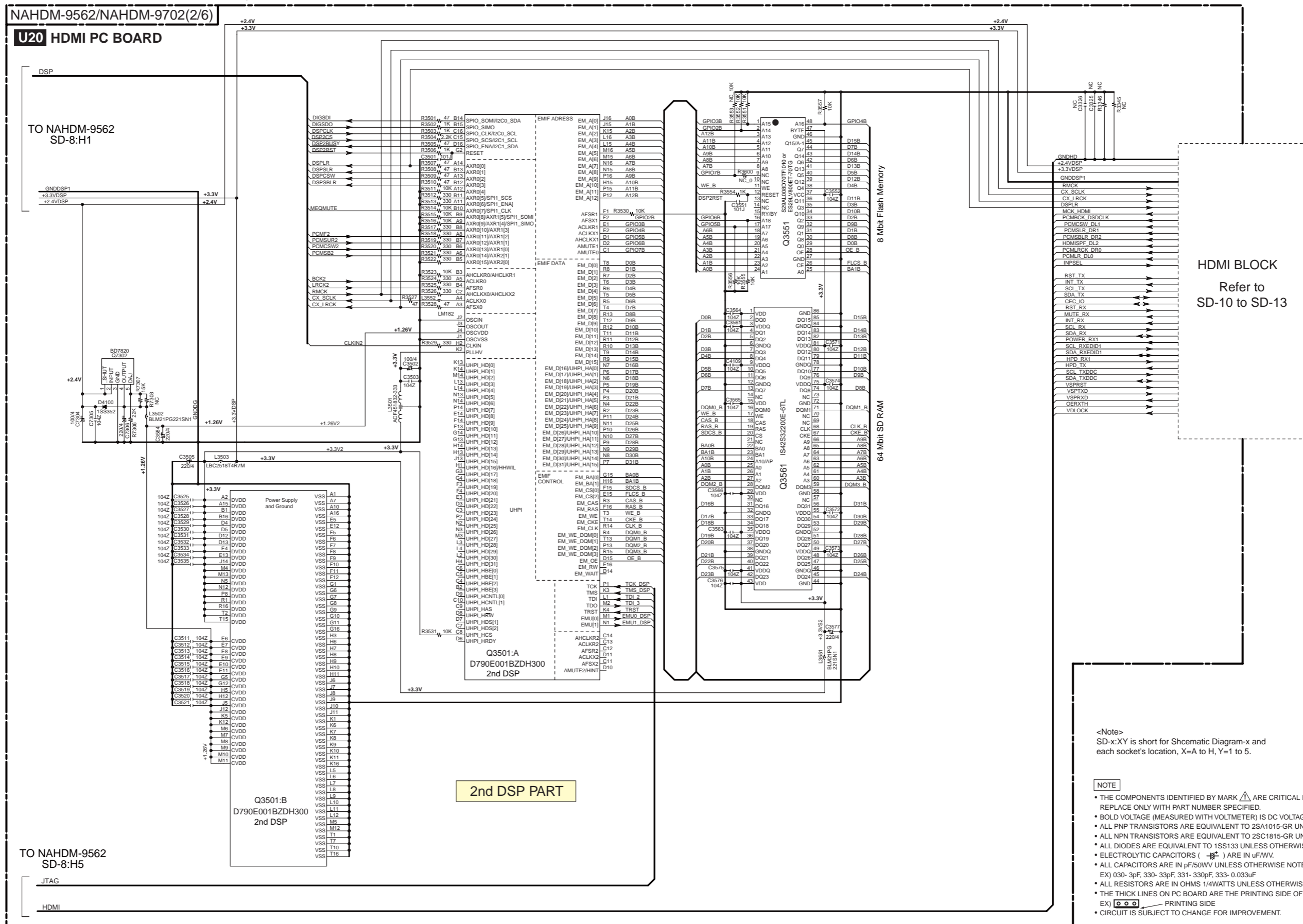
TD98

TD99

TD100

SCHEMATIC DIAGRAMS-9 (SD-9)
DSP SECTION-2

TX-SR706, TX-SA706: NAHDM-9562
TX-SR806, TX-SA806: NAHDM-9702



1

2

3

4

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SCHEMATIC DIAGRAMS-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.

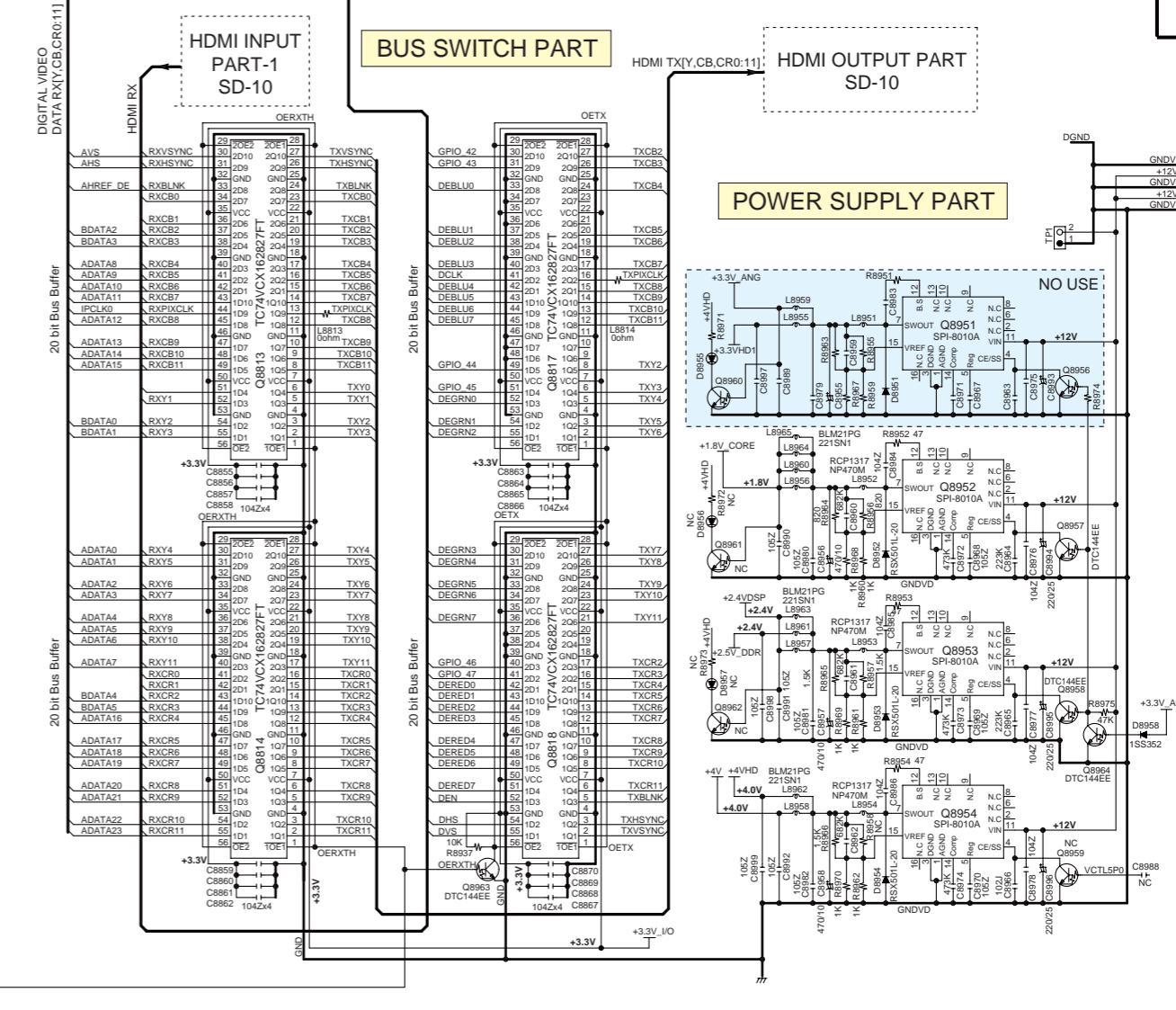
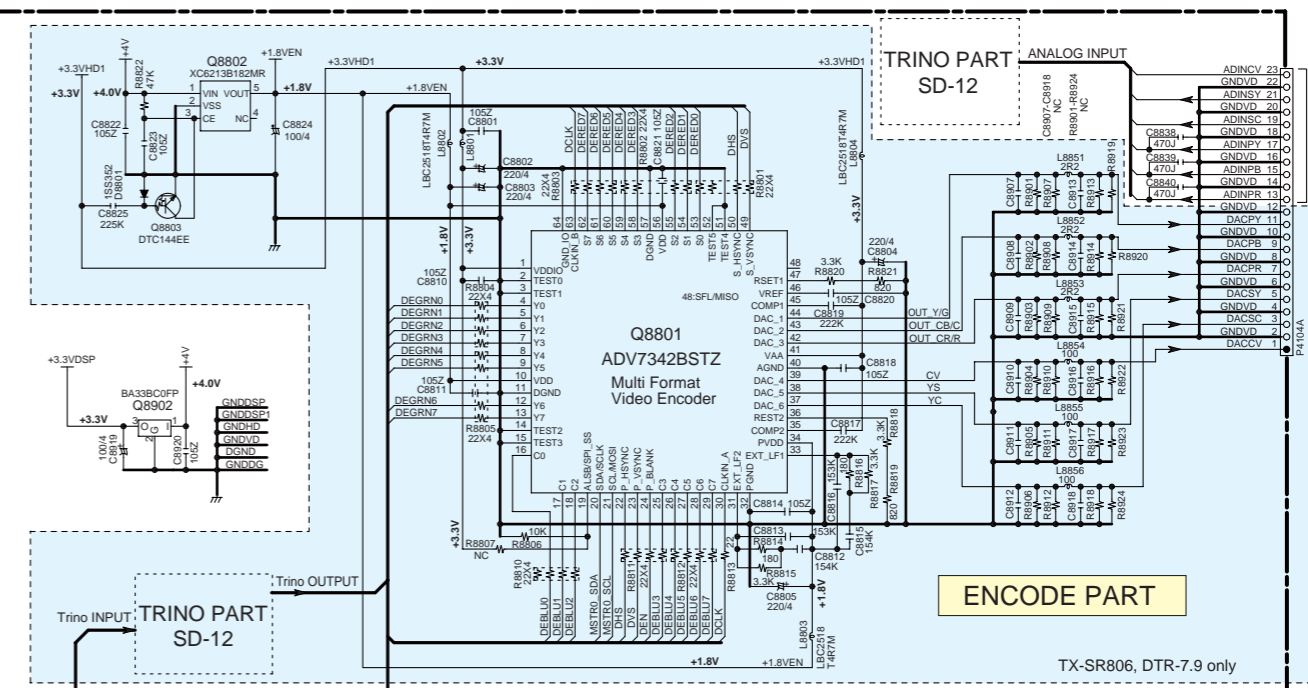
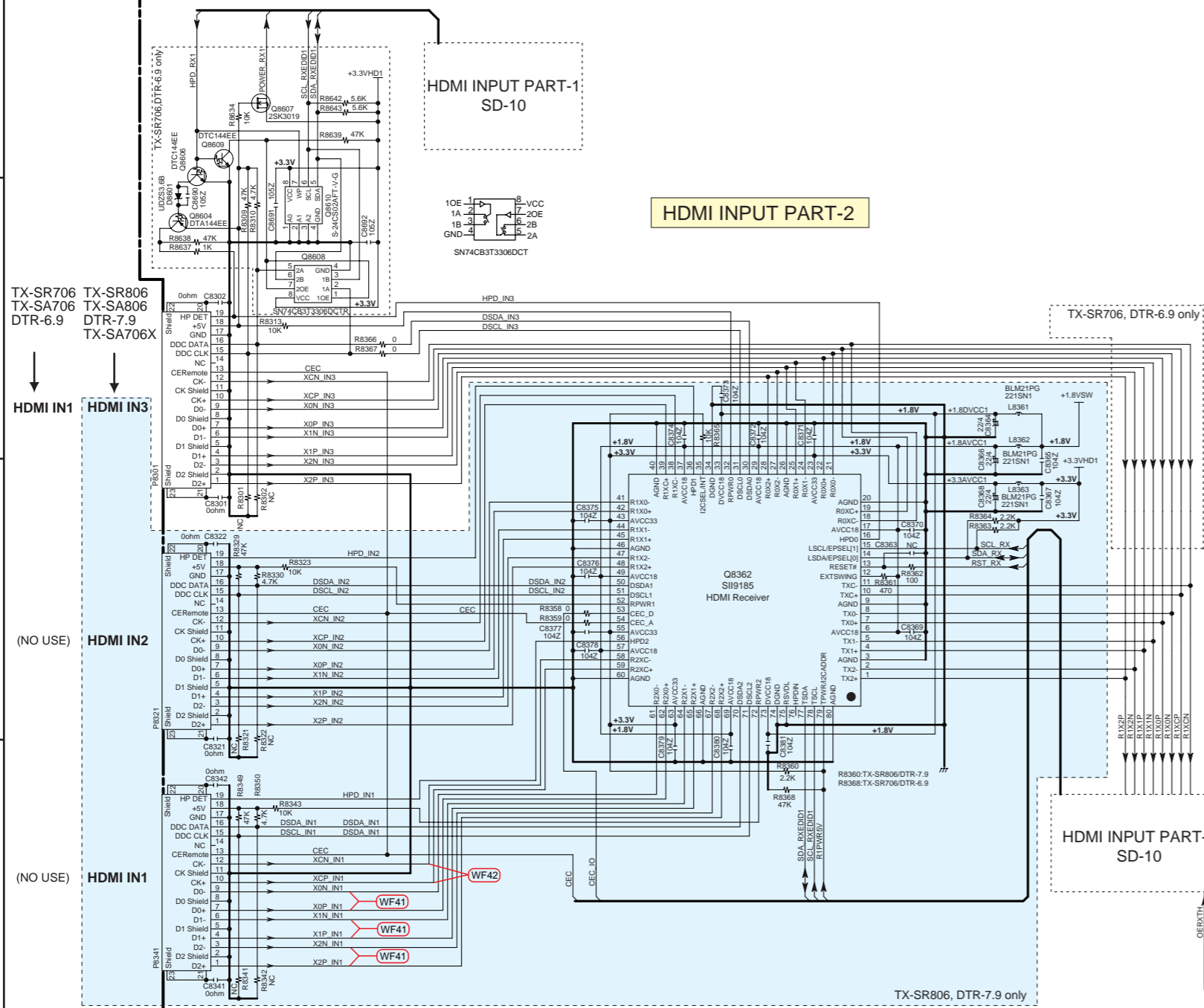
<Note> Refer to SCHEMATIC DIAGRAM-16 (SD-16) for HDMI signal waveforms.

NOTE

- THE COMPONENTS IDENTIFIED BY MARK Δ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED. BOLD VOLTAGE (MEASURED WITH VOLTMETER) IS DC VOLTAGE. (NO INPUT SIGNAL). ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED. ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED. ELECTROLYTIC CAPACITORS () ARE IN μF/VV. 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.

TX-SR706, TX-SA706: NAHDM-9562 TX-SR806, TX-SA806: NAHDM-9702

NAHDM-9562/NAHDM-9702(4/6) U20 HDMI PC BOARD



1
2
3
4
5

TO NAVD-9505 SD-5:C1
TO NAVD-9505 SD-5:D1

TX-SR806, DTR-7.9 only

TX-SR806, DTR-7.9 only

NO USE

SCHEMATIC DIAGRAMS-12 (SD-12)
HDMI SECTION-3

TX-SR706, TX-SA706: NAHDM-9562
TX-SR806, TX-SA806: NAHDM-9702

NAHDM-9562/NAHDM-9702(5/6) U20 HDMI PC BOARD

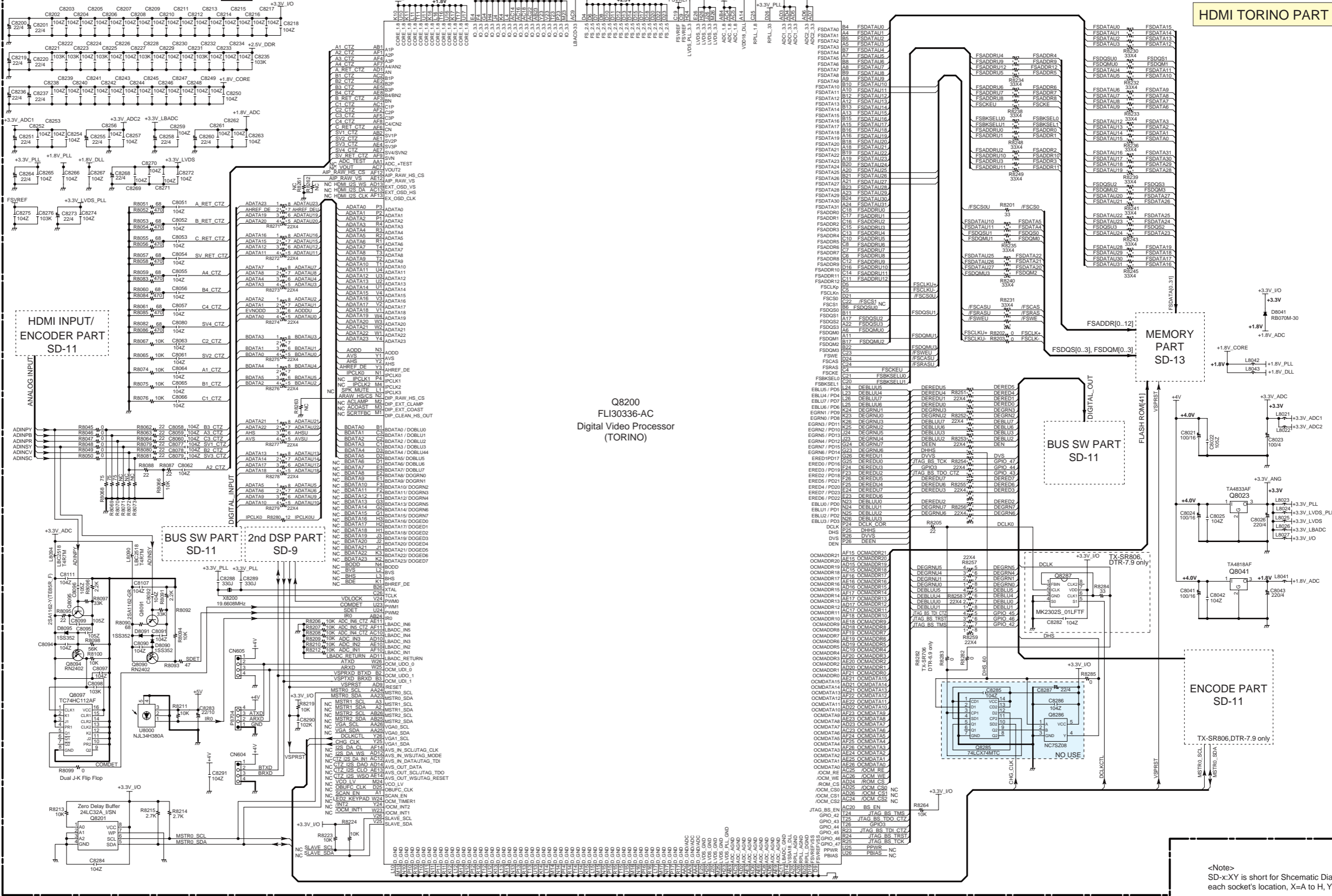
1

2

3

4

5



HDMI TORINO PART

HDMI INPUT/
ENCODER PART
SD-11

BUS SW PART
SD-11

2nd DSP PART
SD-9

Q8200
FLI30336-AC
Digital Video Processor
(TORINO)

MEMORY PART
SD-13

BUS SW PART
SD-11

ENCODE PART
SD-11

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

SCHEMATIC DIAGRAMS-13 (SD-13)
HDMI SECTION-4

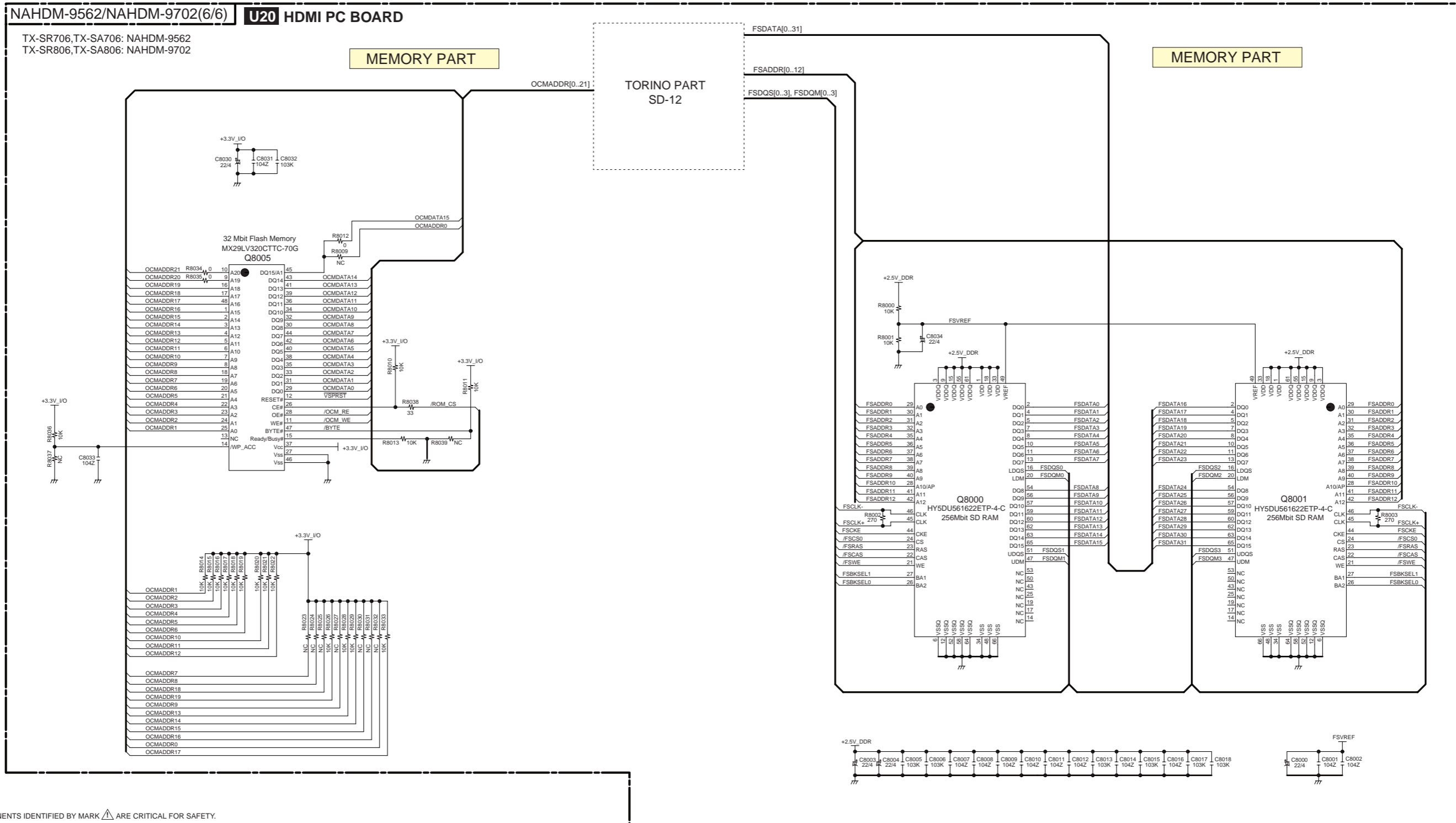
1

2

3

4

5

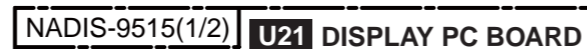
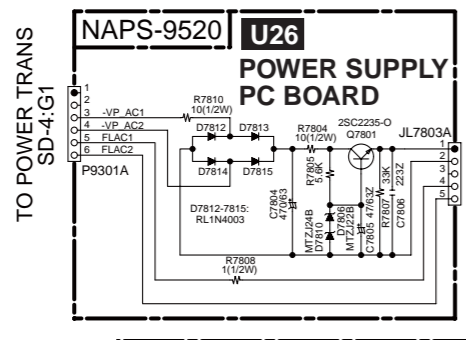


- NOTE**
- THE COMPONENTS IDENTIFIED BY MARK Δ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
 - BOLD VOLTAGE (MEASURED WITH VOLTMETER) IS DC VOLTAGE.(NO INPUT SIGNAL).
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 - ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE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

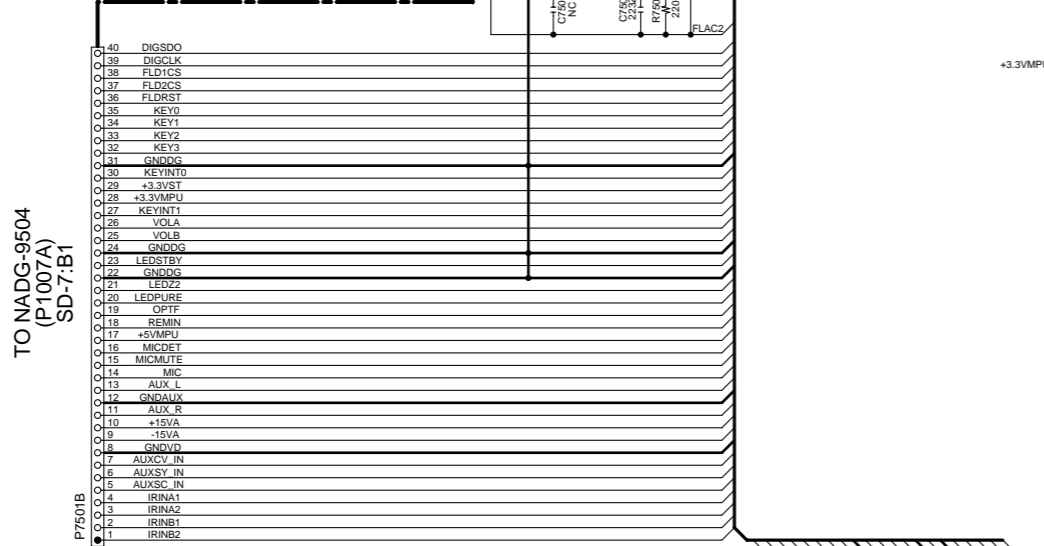
<Note>
SD-x:XY is short for Shcematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

SCHEMATIC DIAGRAMS-14 (SD-14)
DISPLAY SECTION

1



2

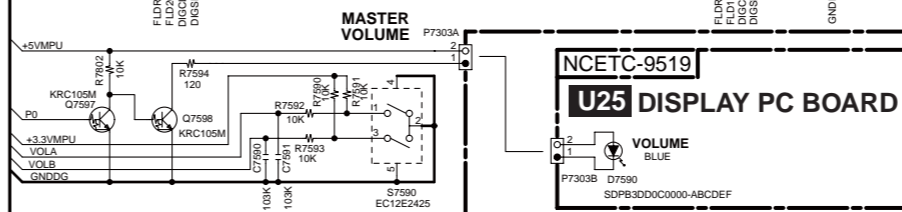
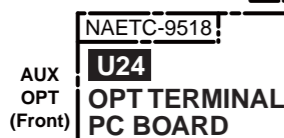


<Note>
Refer to SCHEMATIC DIAGRAM-16 (SD-16) for FL driver IC control waveforms.

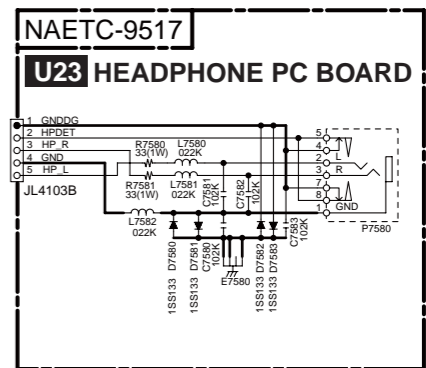
<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

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

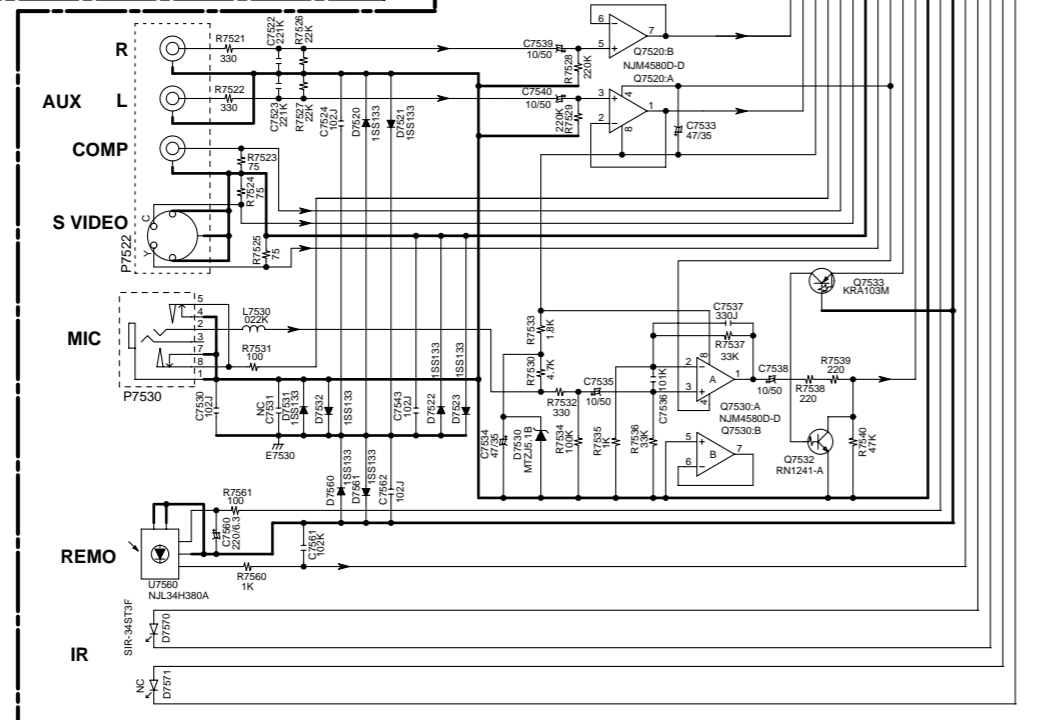
3



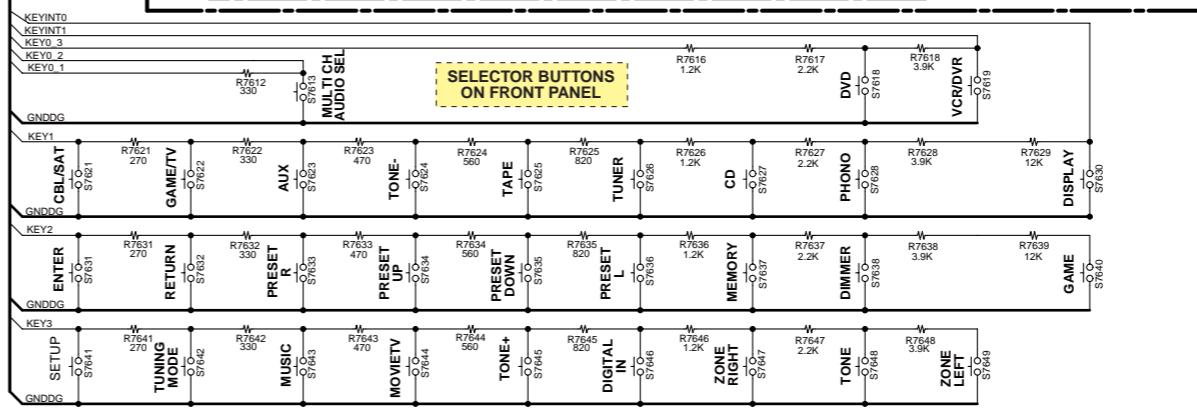
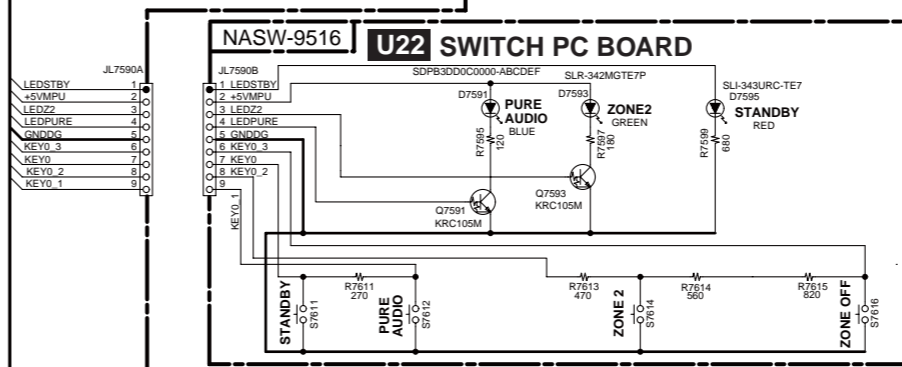
TO NATRM-9489 SD-4-F1



4



5



SCHEMATIC DIAGRAMS-15 (SD-15)
XM AND SIRIUS SECTION

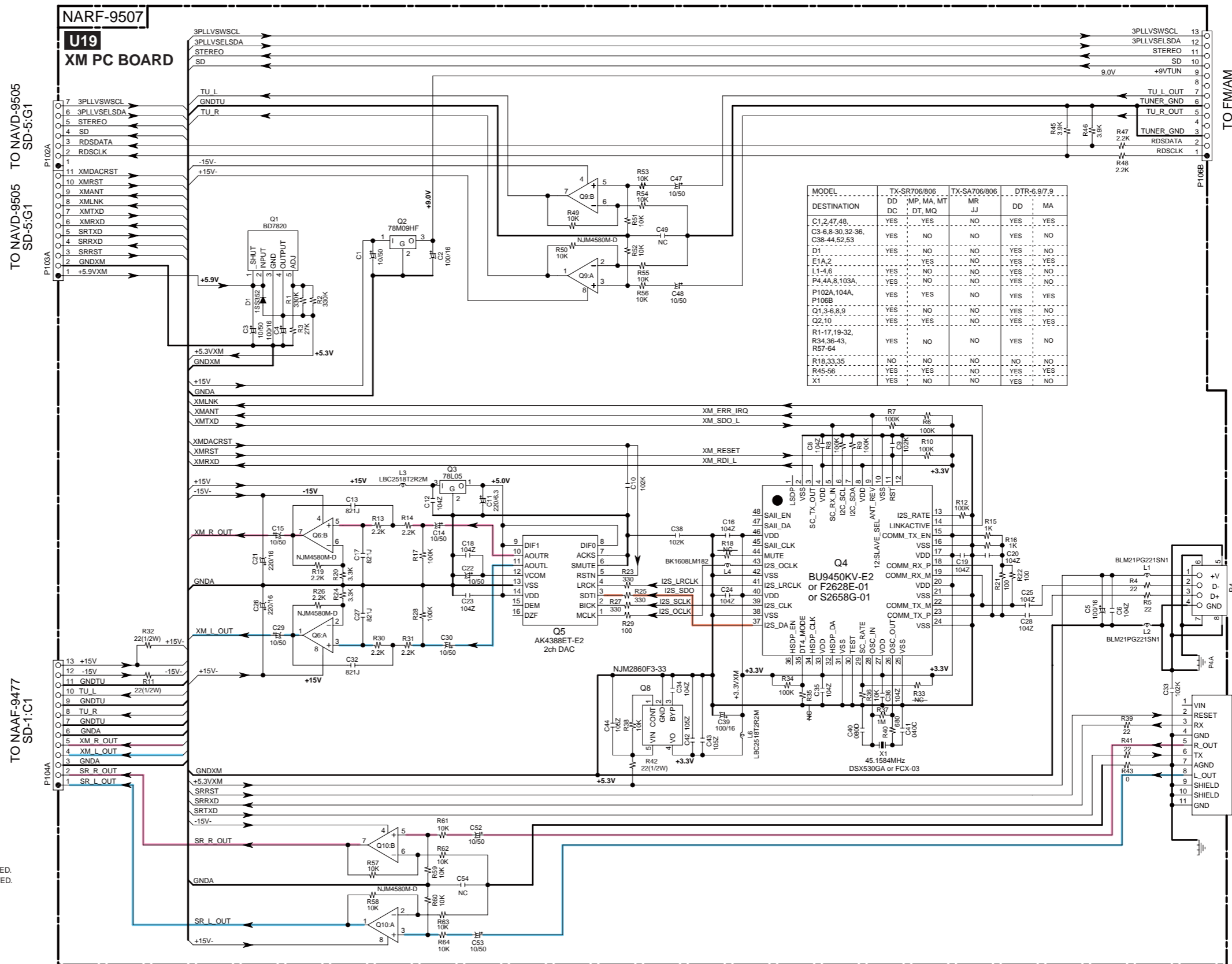
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<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

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

TO FM/AM
TUNER UNIT

XM

SIRIUS

**SCHEMATIC DIAGRAM-16(SD-16)
WAVEFORM SECTION**

1

Digital Audio Waveform Part

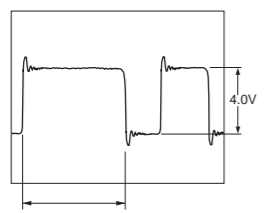
NOTE:

1. (WF01) is short for (Waveform01)
2. Refer to SD-7(SCHEMATIC DIAGRAM-9) for the location of each waveform on circuit.
3. SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

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

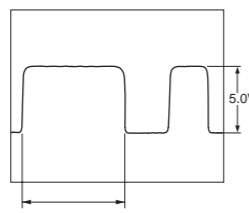
BIT CLOCK (SAI_SLCK, CX_SLCK)
64Fs=3072kHz : DVD, Clock width=325ns
64Fs=2822.4kHz : CD, Clock width=354ns

(WF01) OPT1 (SD-7:C5)



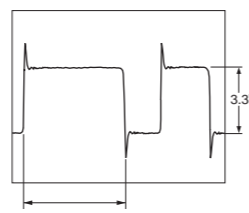
Duty varies according to audio data

(WF02) COAX1 (SD-7:C5)



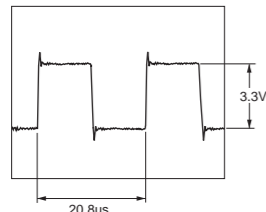
Duty always varies according to audio data

(WF03) SAI_SDOUT (SD-7:D5)

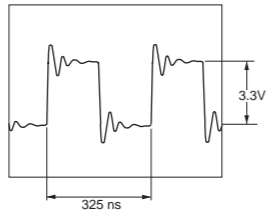


Duty varies according to audio data

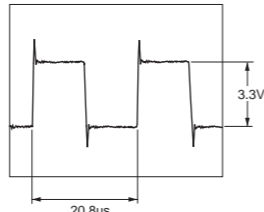
(WF04) SAI_LRCK (SD-7:D5)



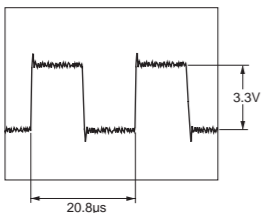
(WF05) SAI_SLCK (SD-7:D5)



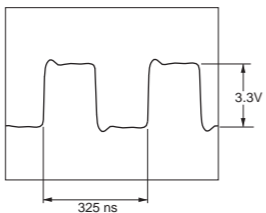
(WF06) PCMF3 (SD-7:E4)



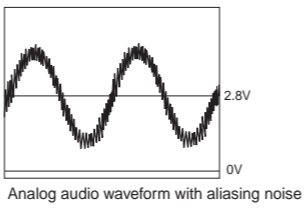
(WF07) CX_LRCK (SD-7:E4)



(WF08) CX_SLCK (SD-7:E4)

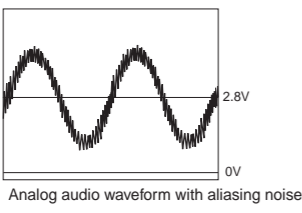


(WF09) FL+ (SD-7:F5)



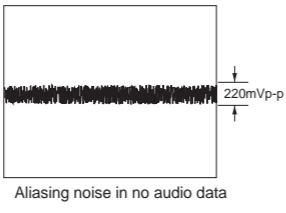
Analog audio waveform with aliasing noise

(WF10) DAC_FL (SD-7:H2)



Analog audio waveform with aliasing noise

(WF10) DAC_FL (SD-7:H2)



Aliasing noise in no audio data

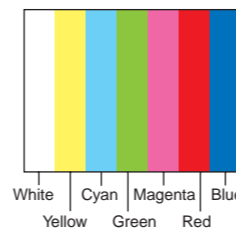
2

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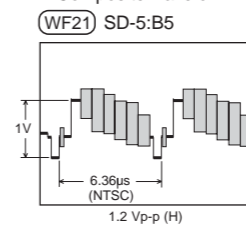
4

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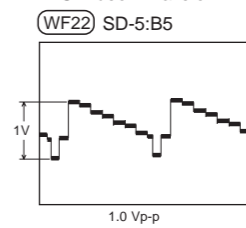
Video source color and pattern



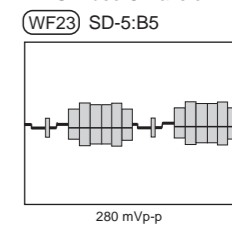
Composite waveform



S-Video Y waveform



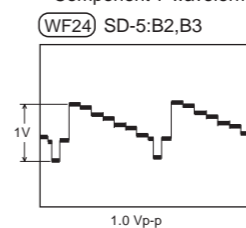
S-Video C waveform



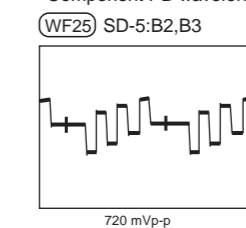
NOTE:

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

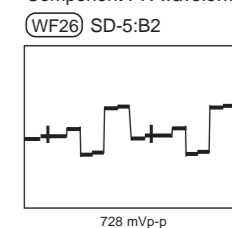
Component Y waveform



Component PB waveform



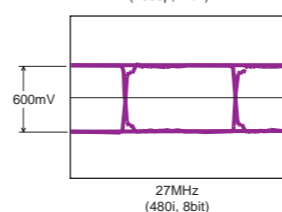
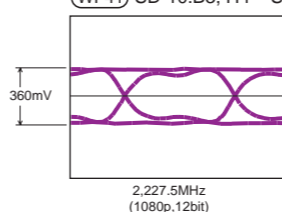
Component PR waveform



HDMI Waveform Part

HDMI D0,D1,D2 waveform

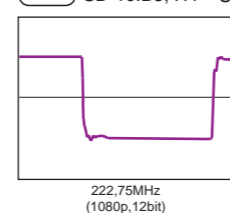
(WF41) SD-10:B3, H4 SD-11:B5



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:B3, H4 SD-11:B5

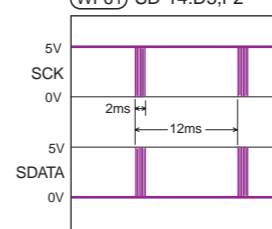


CK waveform, frequency and level differ according to video resolution, aspect and profile. D0,D1,D2 are just CK x10.

FL Driver IC Control Waveform Part

SCK/SDATA waveform

(WF61) SD-14:D3,F2



SCK/SDATA waveform

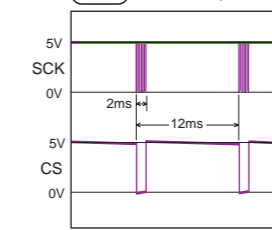
(WF61) SD-14:D3,F2



SDATA waveform varies according to the data content

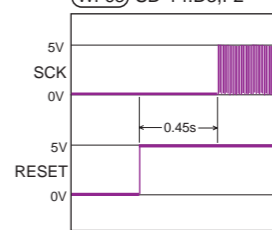
SCK/CS waveform

(WF62) SD-14:D3,F2



SCK/RESET waveform

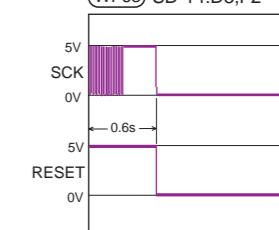
(WF63) SD-14:D3,F2



When power on

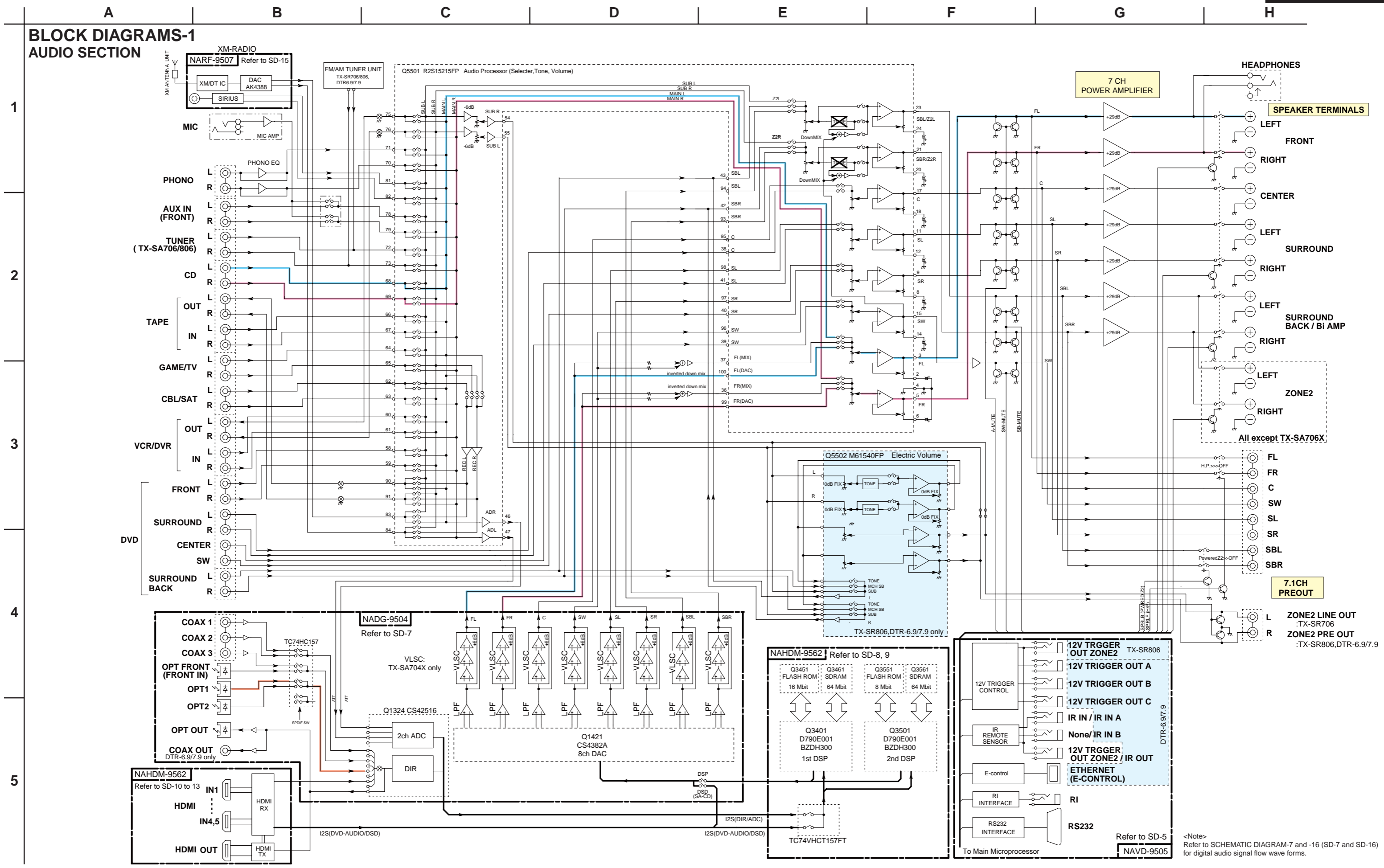
SCK/RESET waveform

(WF63) SD-14:D3,F2



When power off

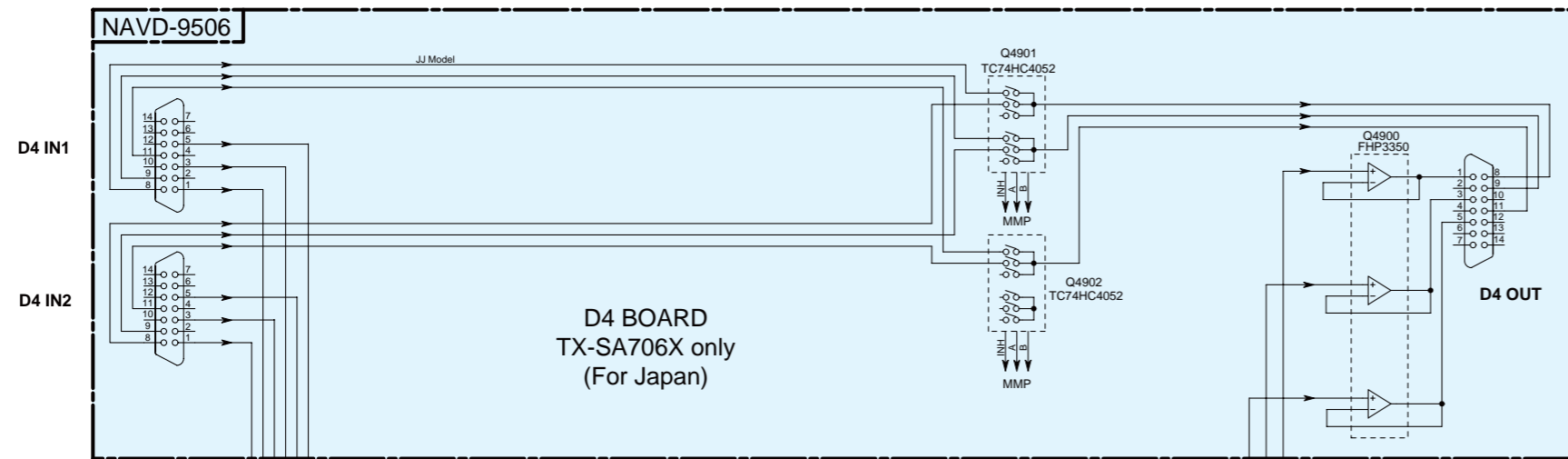
**BLOCK DIAGRAMS-1
AUDIO SECTION**



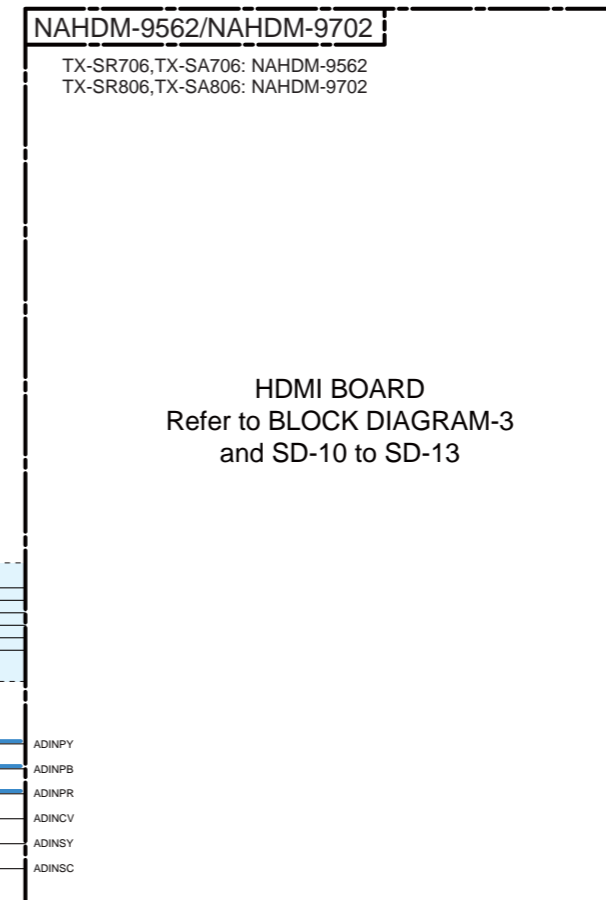
<Note>
Refer to SCHEMATIC DIAGRAM-7 and -16 (SD-7 and SD-16)
for digital audio signal flow wave forms.

BLOCK DIAGRAMS-2
VIDEO SECTION

1



2



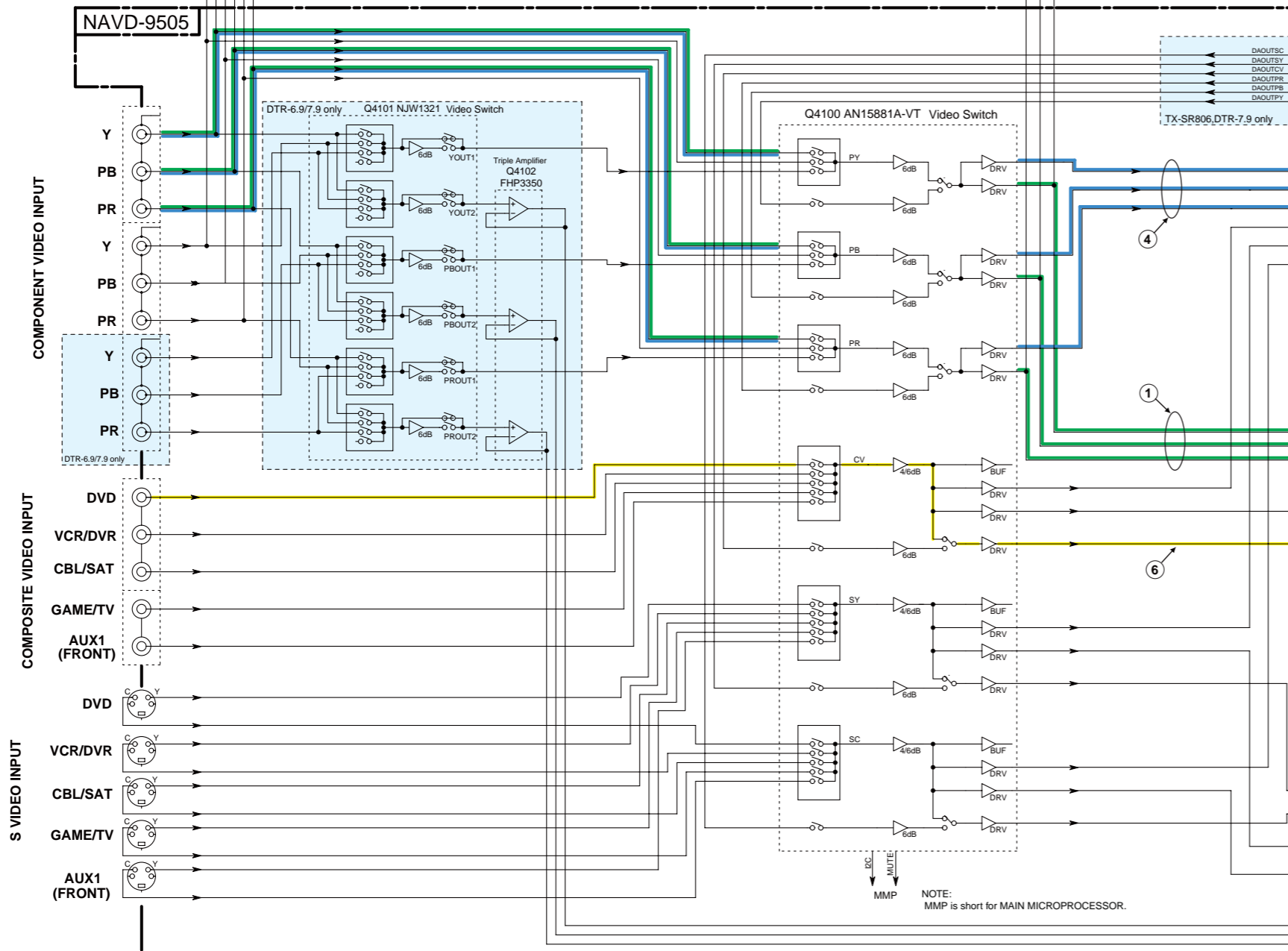
<Note>
Refer to SCHEMATIC DIAGRAM-5 and -16 (SD-5 and SD-16) for analog video signal waveforms.

Video Signal Flow

- ① Analog → Analog
 - ② HDMI → HDMI (THROUGH MODE)
 - ③ HDMI → HDMI
 - ④ Analog → HDMI
 - ⑤ OSD → HDMI
 - ⑥ Composite → Composite
- Above analog ex. is Component

Note on OSD:
OSD is not output to analog video output for TX-SR706, DTR-6.9.
OSD is output only to HDMI OUT.

3



4

5

BLOCK DIAGRAMS-3
HDMI SECTION

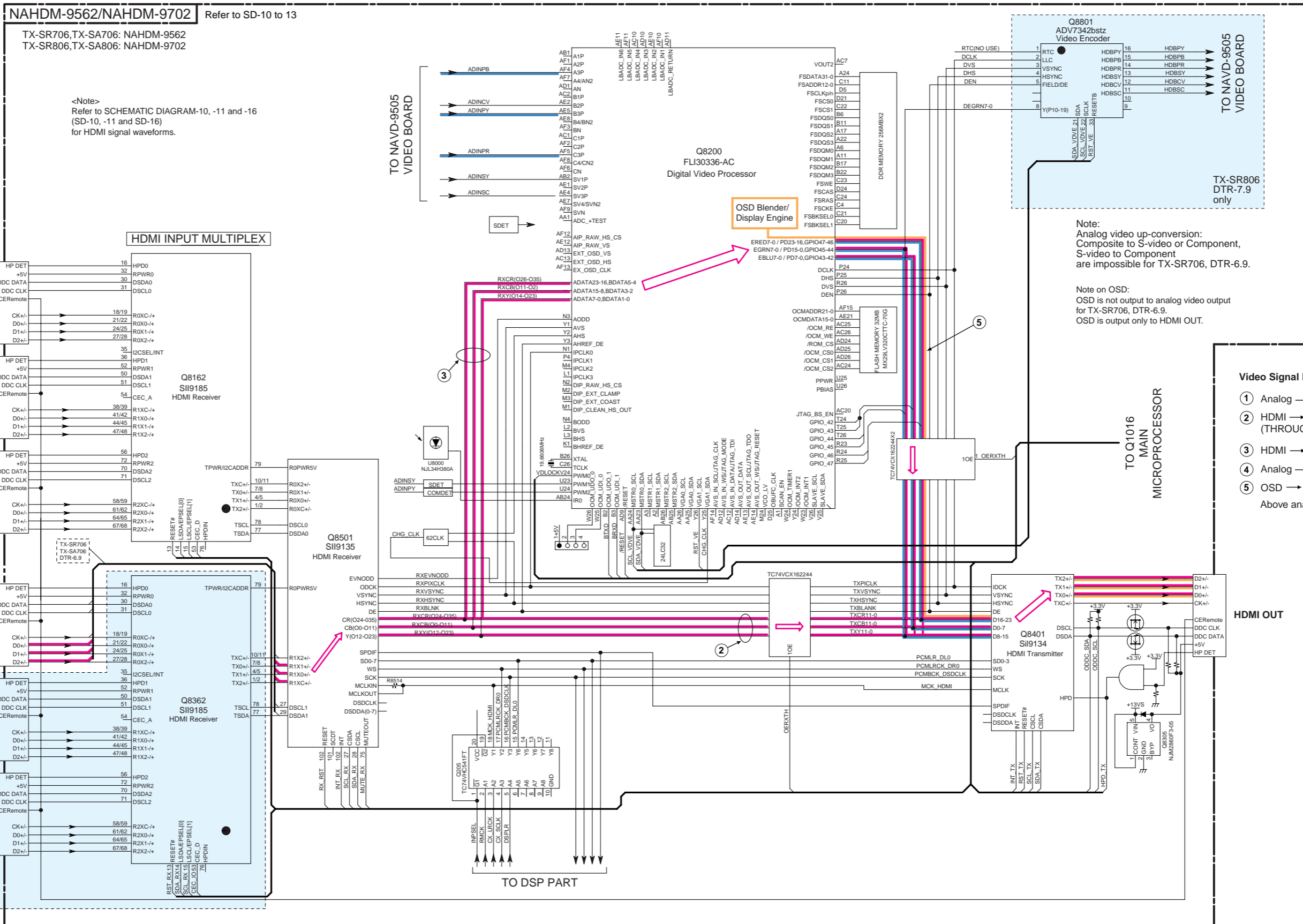
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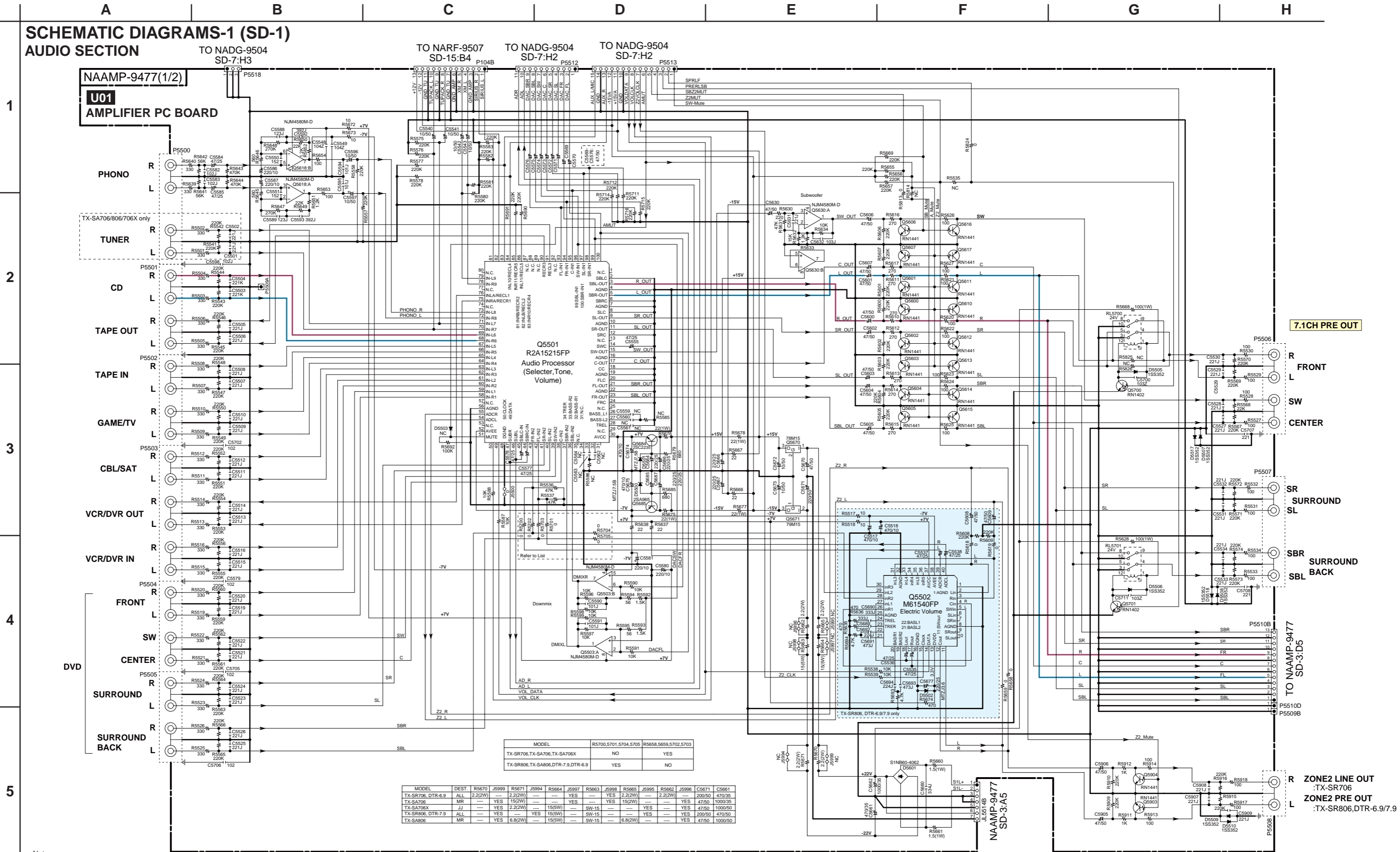
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SCHEMATIC DIAGRAMS-1 (SD-1)
AUDIO SECTION



MODEL	R5700	5701	5704	5705	R5658	5659	5702	5703
TX-SR706, TX-SA706, TX-SA706X	NO				YES			
TX-SR806, TX-SA806, DTR-7.9, DTR-6.9	YES				NO			

MODEL	DEST.	R5670	J5999	R5671	J5994	R5664	J5997	R5663	J5998	R5665	J5995	R5662	J5996	C5671	C5661
TX-SR706, DTR-6.9	ALL	2.2(2W)	---	2.2(2W)	---	---	YES	---	YES	2.2(2W)	---	2.2(2W)	---	200/50	470/35
TX-SA706	MR	---	YES	15(2W)	---	---	YES	---	YES	15(2W)	---	---	YES	47/50	1000/35
TX-SA706X	JJ	---	YES	2.2(2W)	---	15(SW)	---	SW-15	---	---	---	---	YES	47/50	1000/50
TX-SR806, DTR-7.9	ALL	---	YES	15(SW)	---	---	YES	SW-15	---	---	---	---	YES	200/50	470/50
TX-SA806	MR	---	YES	6.8(2W)	---	15(SW)	---	SW-15	---	6.8(2W)	---	---	YES	47/50	1000/50

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

SCHEMATIC DIAGRAMS-2 (SD-2)
POWER AMPLIFIER SECTION-1

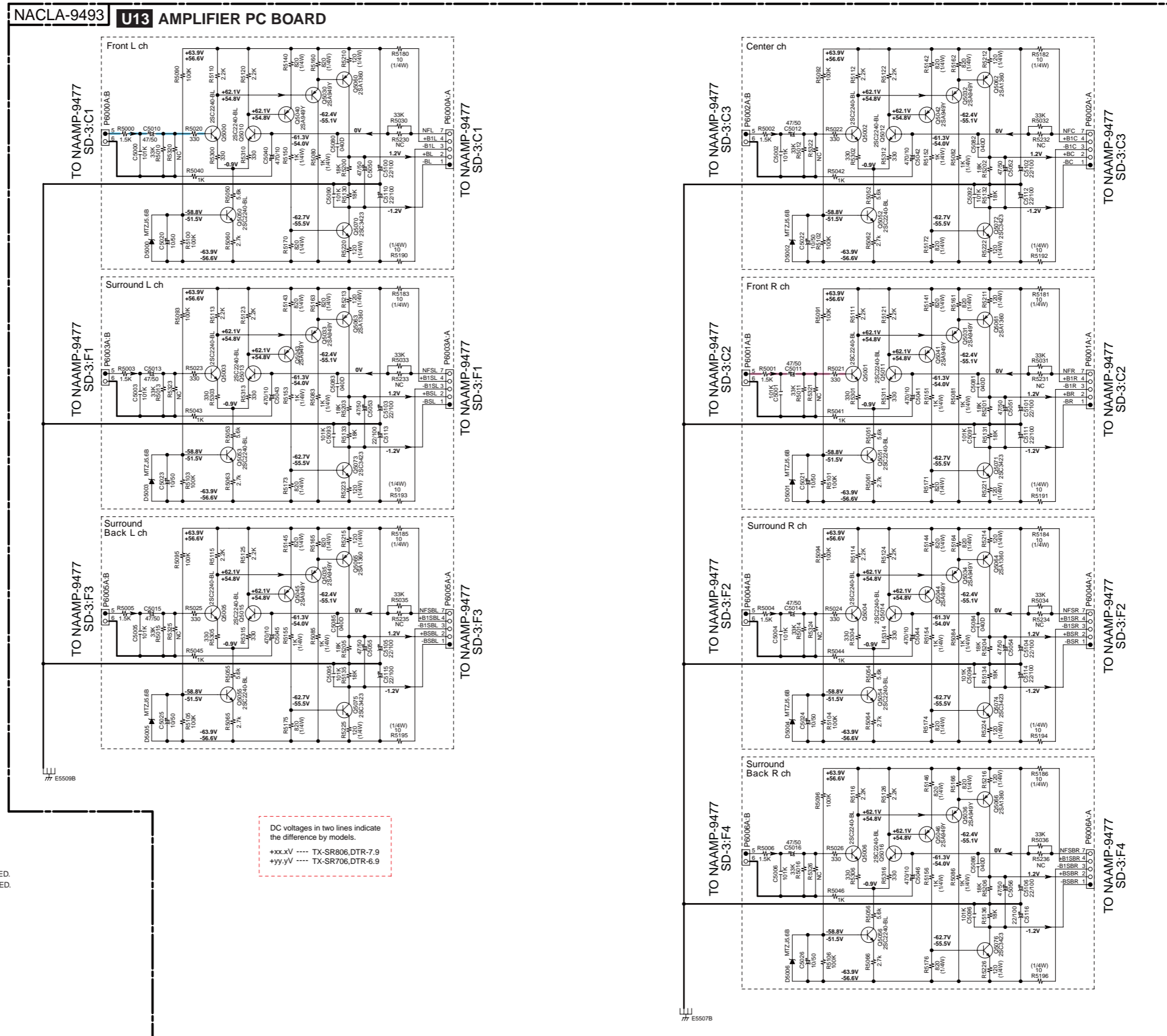
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- NOTE**
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 - BOLD VOLTAGE (MEASURED WITH VOLTMETER) IS DC VOLTAGE.(NO INPUT SIGNAL).
 - ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
 - ALL NPN TRANSISTORS ARE EQUIVALENT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

DC voltages in two lines indicate the difference by models.
 +xx.xV ---- TX-SR806,DTR-7.9
 +yy.yV ---- TX-SR706,DTR-6.9

DC voltages in two lines indicate the difference by models.
 +xx.xV ---- TX-SR806,DTR-7.9
 +yy.yV ---- TX-SR706,DTR-6.9

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

SCHEMATIC DIAGRAMS-3 (SD-3)
POWER AMPLIFIER SECTION-2

1

NAAMP-9477(2/2)
U01 AMPLIFIER PC BOARD

NCETC-9478
U02 THERMAL SENSOR PC BOARD

NAETC-9480
U04 TERMINAL PC BOARD
TO COOLING FAN
TX-SR806/
DTR-7.9 only

TO NAVD-9505
SD-5:F4

2

TO NATRM-9488
SD-4:A3

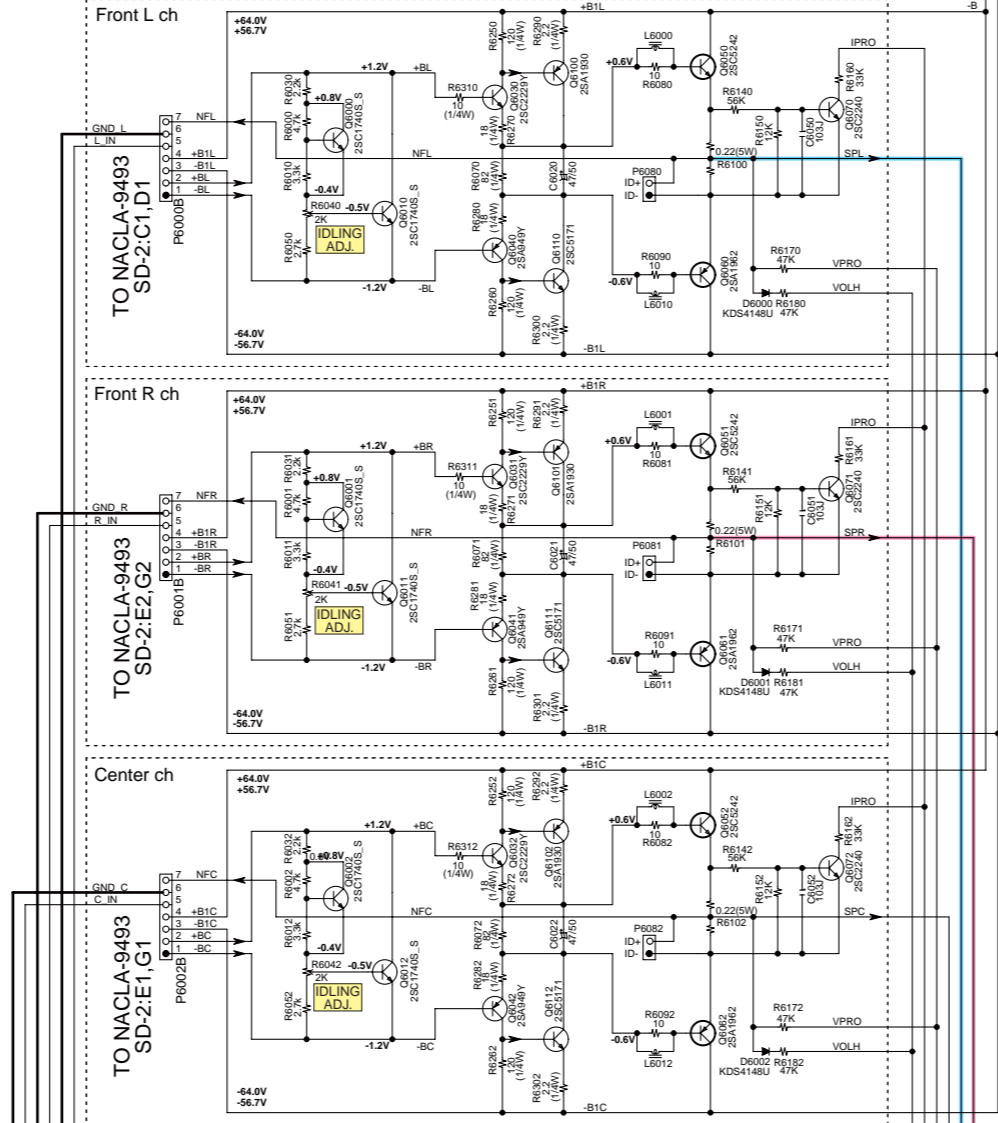
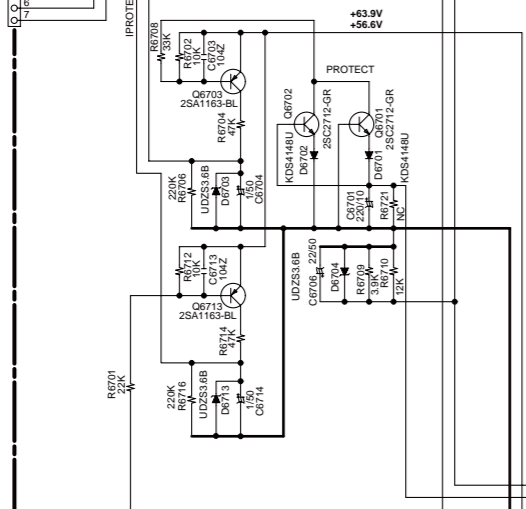
3

4

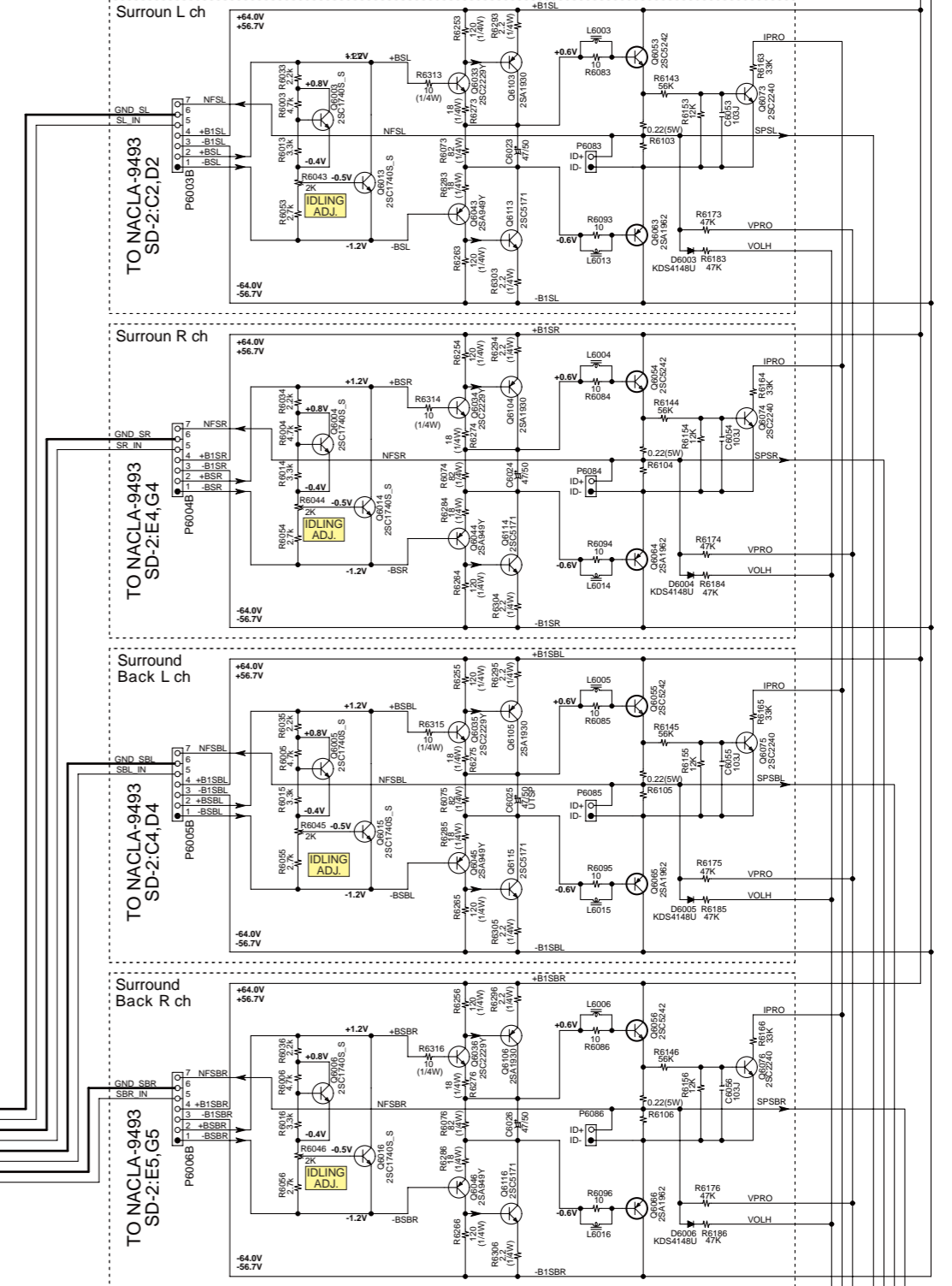
5

TO NAAF-9477
SD-1:F5

TO POWER TRANS
T901 SD-4:H1



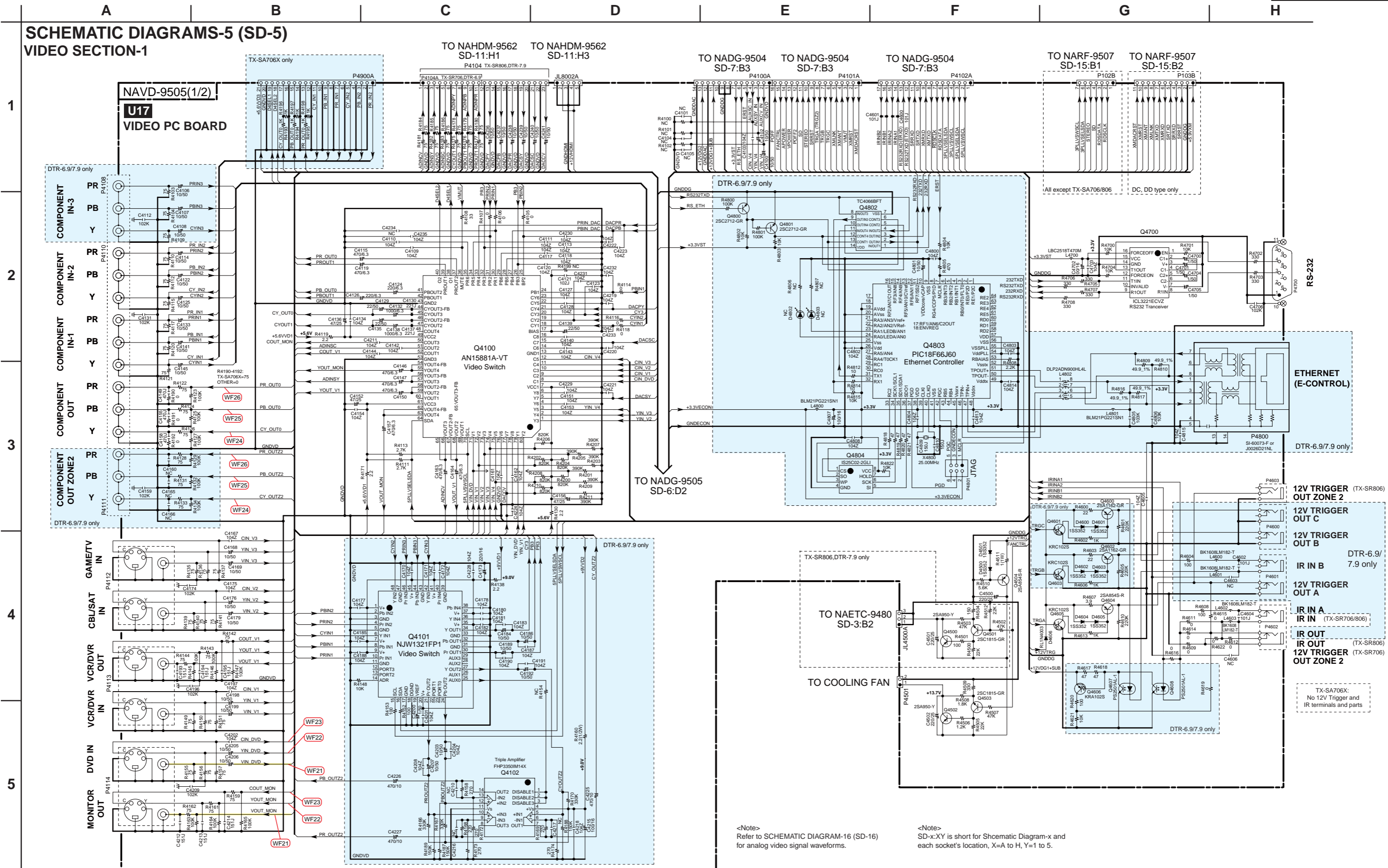
DC voltages in two lines indicate the difference by models.
+xx.xV ---- TX-SR806,DTR-7.9
+yy.yV ---- TX-SR706,DTR-6.9



MODEL	DEST.	C6901,C6902
TX-SR706,DTR-6.9	DC,DD	12000/63V
TX-SR706,DTR-6.9	OTHER	12000/69V
TX-SR806,DTR-7.9	ALL	15000/71V

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

SCHEMATIC DIAGRAMS-5 (SD-5)
VIDEO SECTION-1



<Note>
Refer to SCHEMATIC DIAGRAM-16 (SD-16)
for analog video signal waveforms.

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

SCHEMATIC DIAGRAMS-6 (SD-6)
VIDEO SECTION-2

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

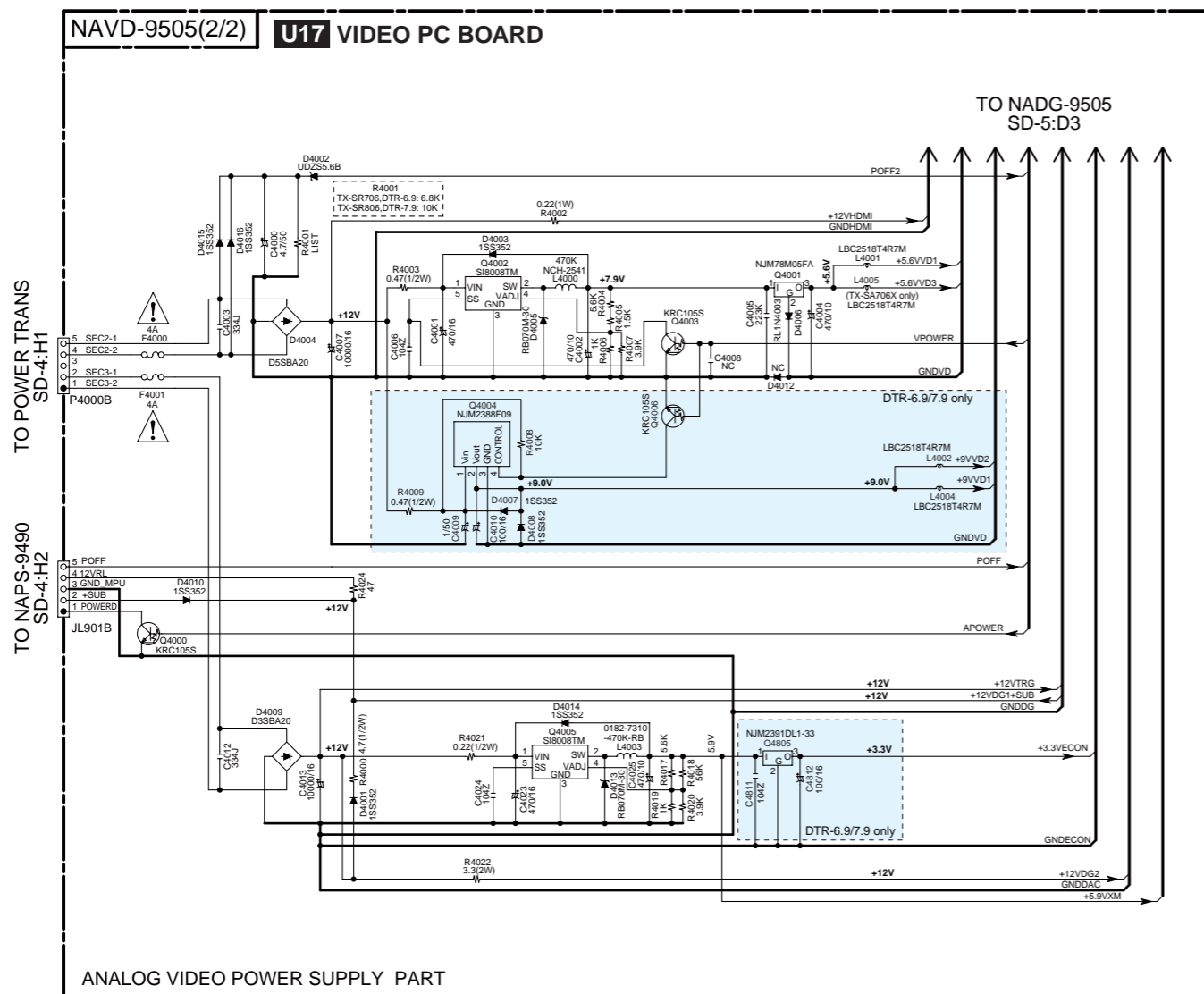
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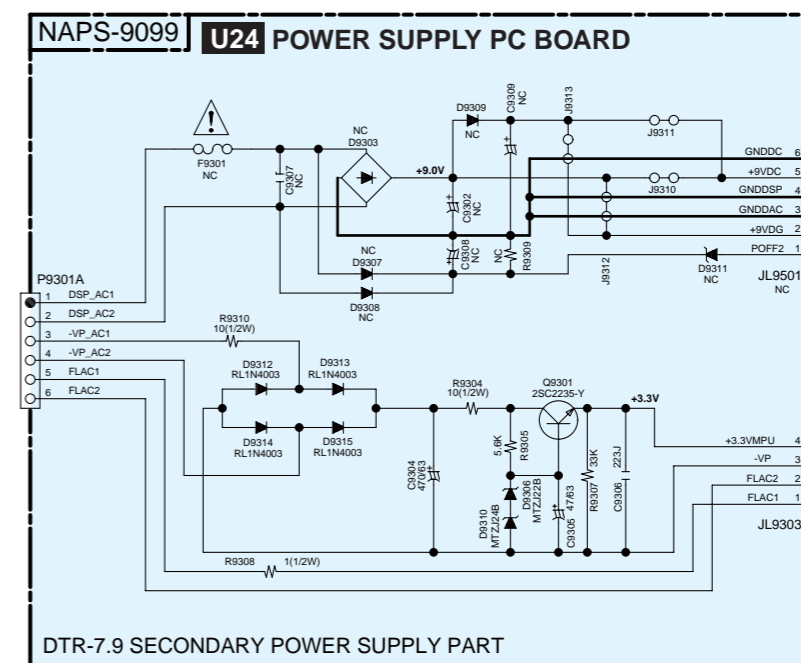
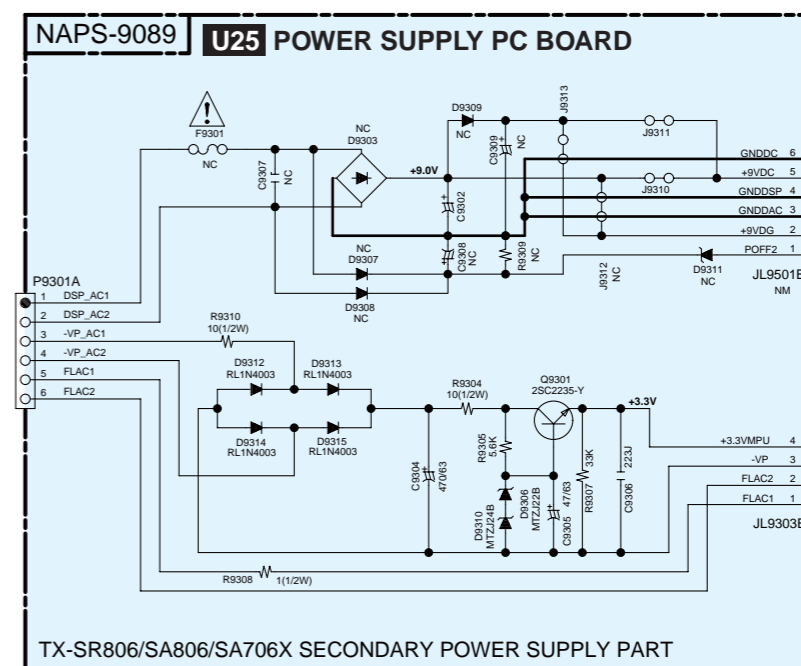
4

5



NOTE

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- BOLD 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.



A B C D E F G H

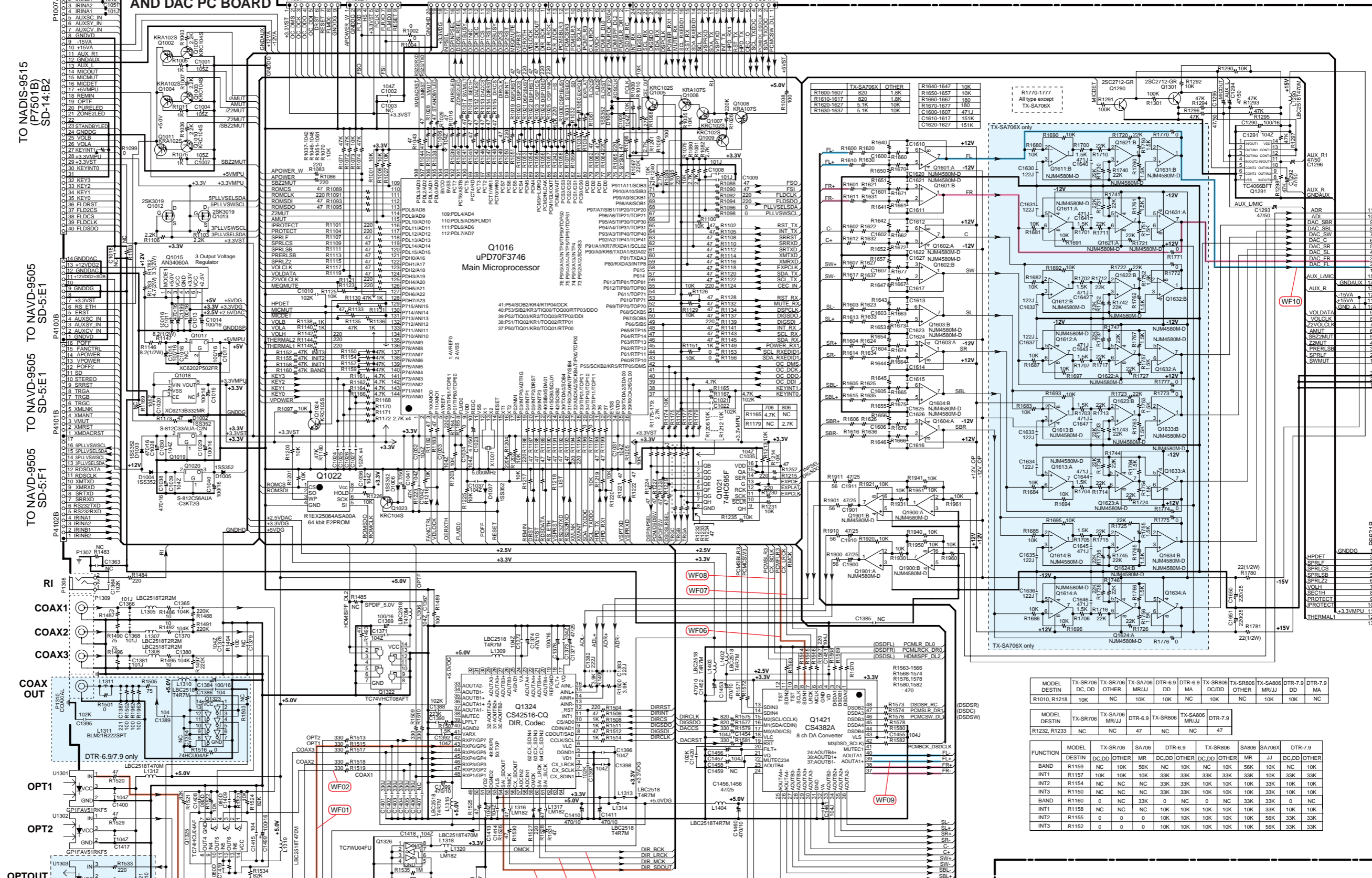
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**SCHEMATIC DIAGRAMS-7 (SD-7)
MICROPROCESSOR
AND DAC SECTION**

NADG-9504 U16

**MICROPROCESSOR
AND DAC PC BOARD**

TO DEBUGGER P1001
TO FLASH WRITER P1002A
TO NAHDM-9562 SD-8:A4 P1005A
TO NAHDM-9562 SD-8:A4 P1003A
TO NAHDM-9562 SD-8:A3 P1004A



TX-SA706X OTHER

R1600-1607	820	1.8K
R1610-1617	820	1.8K
R1630-1637	5.1K	10K
R1630-1637	5.1K	10K
R1620-1627	151K	

TX-SA706X only

R1640-1647	10K
R1650-1657	10K
R1660-1667	180
R1670-1677	180
R1680-1687	471K
R1690-1697	471K
R1700-1707	471K
R1710-1717	471K
R1720-1727	471K
R1730-1737	471K
R1740-1747	471K
R1750-1757	471K
R1760-1767	471K
R1770-1777	471K
R1780-1787	471K
R1790-1797	471K
R1800-1807	471K
R1810-1817	471K
R1820-1827	471K
R1830-1837	471K
R1840-1847	471K
R1850-1857	471K
R1860-1867	471K
R1870-1877	471K
R1880-1887	471K
R1890-1897	471K
R1900-1907	471K
R1910-1917	471K
R1920-1927	471K
R1930-1937	471K
R1940-1947	471K
R1950-1957	471K
R1960-1967	471K
R1970-1977	471K
R1980-1987	471K
R1990-1997	471K

MODEL DESTIN	TX-SR706	TX-SR706	TX-SR706	DTR-6.9	DTR-6.9	TX-SR806	TX-SR806	TX-SR806	DTR-7.9	DTR-7.9
DC, DD	OTHER	MR, JJ	DD	MA	DC, DD	OTHER	MR, JJ	DD	MA	DC, DD
R1010, R1218	10K	NC	10K	10K	NC	10K	NC	10K	10K	NC

MODEL DESTIN	TX-SR706	TX-SR806	TX-SR806	DTR-6.9	DTR-7.9
DC, DD	OTHER	MR, JJ	DD	MA	DC, DD
R1232, R1233	NC	NC	47	NC	47

FUNCTION	MODEL DESTIN	TX-SR706	TX-SR706	TX-SR706	DTR-6.9	TX-SR806	TX-SR806	TX-SR806	DTR-7.9
BAND	INT1	INT2	INT3	BAND	INT1	INT2	INT3	BAND	INT1
R1150	NC	10K	10K	10K	10K	10K	10K	10K	10K
R1151	NC	0	0	0	0	0	0	0	0
R1152	0	0	0	0	0	0	0	0	0
R1153	0	0	0	0	0	0	0	0	0
R1154	0	0	0	0	0	0	0	0	0
R1155	0	0	0	0	0	0	0	0	0
R1156	0	0	0	0	0	0	0	0	0
R1157	0	0	0	0	0	0	0	0	0
R1158	0	0	0	0	0	0	0	0	0
R1159	0	0	0	0	0	0	0	0	0
R1160	0	0	0	0	0	0	0	0	0
R1161	0	0	0	0	0	0	0	0	0
R1162	0	0	0	0	0	0	0	0	0
R1163	0	0	0	0	0	0	0	0	0
R1164	0	0	0	0	0	0	0	0	0
R1165	0	0	0	0	0	0	0	0	0
R1166	0	0	0	0	0	0	0	0	0
R1167	0	0	0	0	0	0	0	0	0
R1168	0	0	0	0	0	0	0	0	0
R1169	0	0	0	0	0	0	0	0	0
R1170	0	0	0	0	0	0	0	0	0
R1171	0	0	0	0	0	0	0	0	0
R1172	0	0	0	0	0	0	0	0	0
R1173	0	0	0	0	0	0	0	0	0
R1174	0	0	0	0	0	0	0	0	0
R1175	0	0	0	0	0	0	0	0	0
R1176	0	0	0	0	0	0	0	0	0
R1177	0	0	0	0	0	0	0	0	0
R1178	0	0	0	0	0	0	0	0	0
R1179	0	0	0	0	0	0	0	0	0
R1180	0	0	0	0	0	0	0	0	0
R1181	0	0	0	0	0	0	0	0	0
R1182	0	0	0	0	0	0	0	0	0
R1183	0	0	0	0	0	0	0	0	0
R1184	0	0	0	0	0	0	0	0	0
R1185	0	0	0	0	0	0	0	0	0
R1186	0	0	0	0	0	0	0	0	0
R1187	0	0	0	0	0	0	0	0	0
R1188	0	0	0	0	0	0	0	0	0
R1189	0	0	0	0	0	0	0	0	0
R1190	0	0	0	0	0	0	0	0	0
R1191	0	0	0	0	0	0	0	0	0
R1192	0	0	0	0	0	0	0	0	0
R1193	0	0	0	0	0	0	0	0	0
R1194	0	0	0	0	0	0	0	0	0
R1195	0	0	0	0	0	0	0	0	0
R1196	0	0	0	0	0	0	0	0	0
R1197	0	0	0	0	0	0	0	0	0
R1198	0	0	0	0	0	0	0	0	0
R1199	0	0	0	0	0	0	0	0	0
R1200	0	0	0	0	0	0	0	0	0

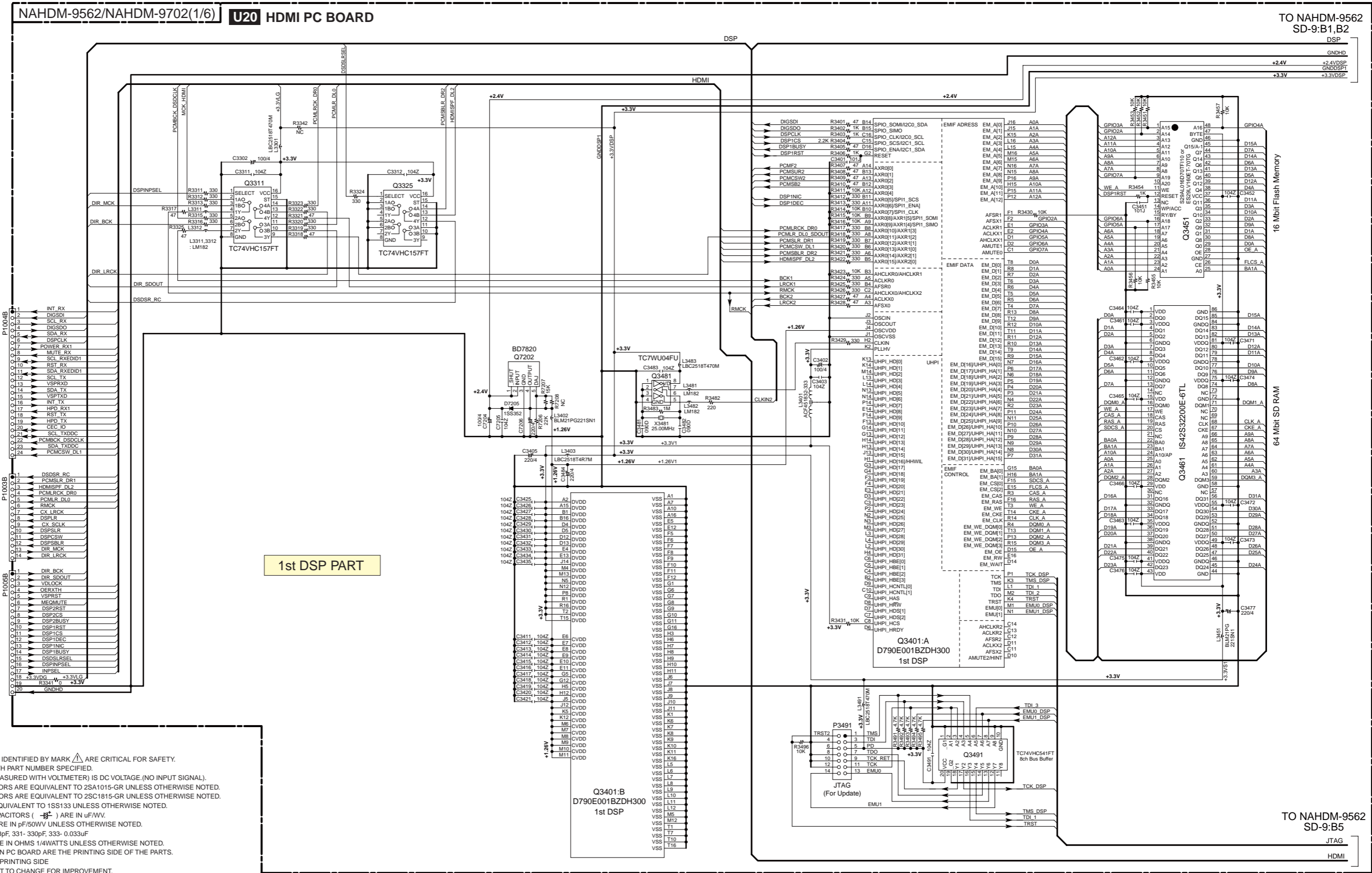
<Note> Refer to SCHEMATIC DIAGRAM-7 and -16 (SD-7 and SD-16) for digital audio signal flow wave forms.

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

SCHEMATIC DIAGRAMS-8 (SD-8) DSP SECTION-1

TX-SR706, TX-SA706: NAHDM-9562
TX-SR806, TX-SA806: NAHDM-9702

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



- NOTE
- THE COMPONENTS IDENTIFIED BY MARK Δ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
 - BOLD 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 ($\text{---} \text{||} \text{---}$) ARE IN $\mu\text{F/WV}$.
 - ALL CAPACITORS ARE IN pF/50VWV 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.

TO NAHDM-9562 SD-9:B1,B2 DSP

16 Mbit Flash Memory

64 Mbit SD RAM

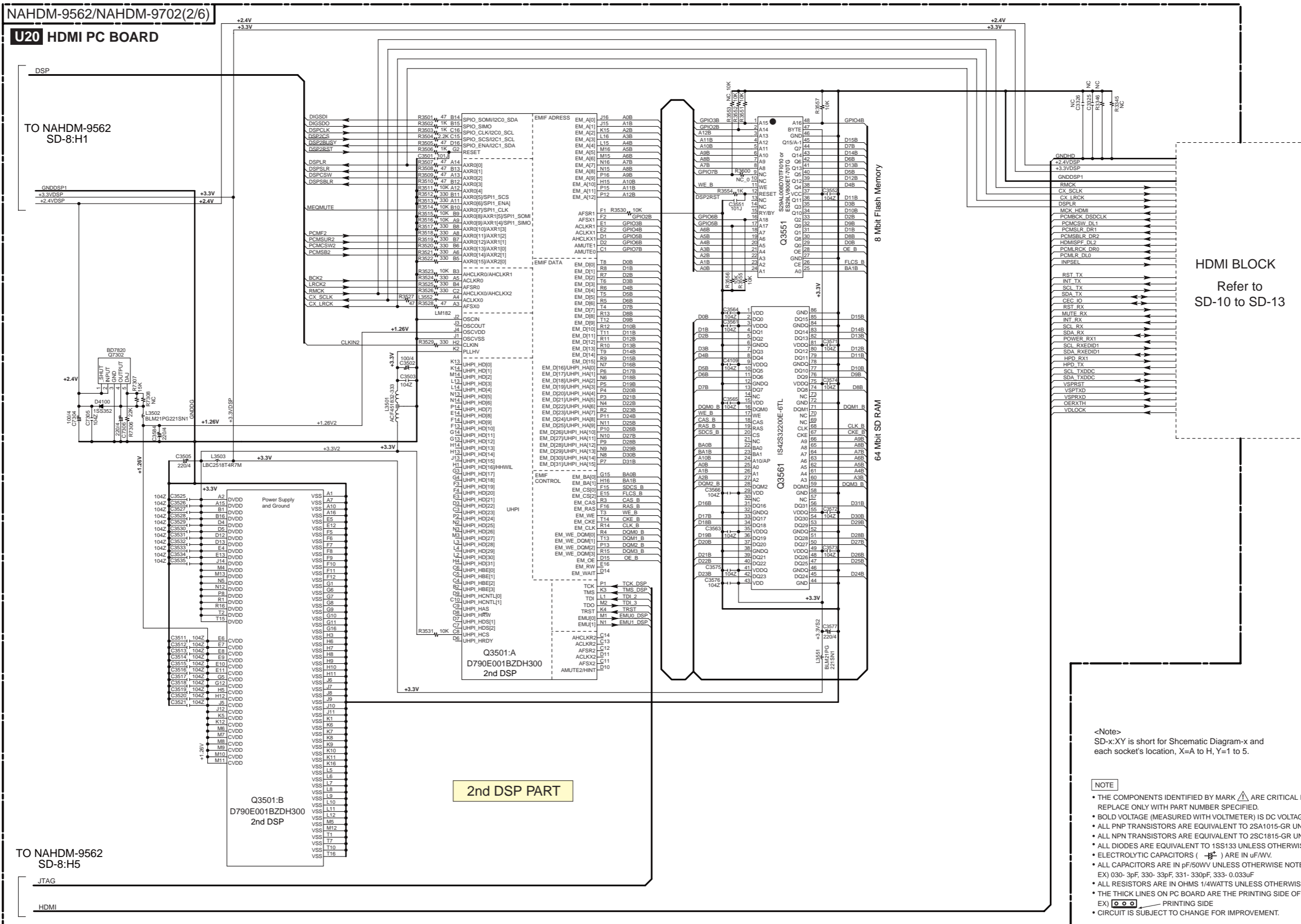
TO NAHDM-9562 SD-9:B5

JTAG

HDMI

SCHEMATIC DIAGRAMS-9 (SD-9)
DSP SECTION-2

TX-SR706, TX-SA706: NAHDM-9562
TX-SR806, TX-SA806: NAHDM-9702



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

NOTE

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

SCHEMATIC DIAGRAMS-10 (SD-10) HDMI SECTION-1

TX-SR706, TX-SA706: NAHDM-9562
TX-SR806, TX-SA806: NAHDM-9702

NAHDM-9562/NAHDM-9702(3/6) U20 HDMI PC BOARD

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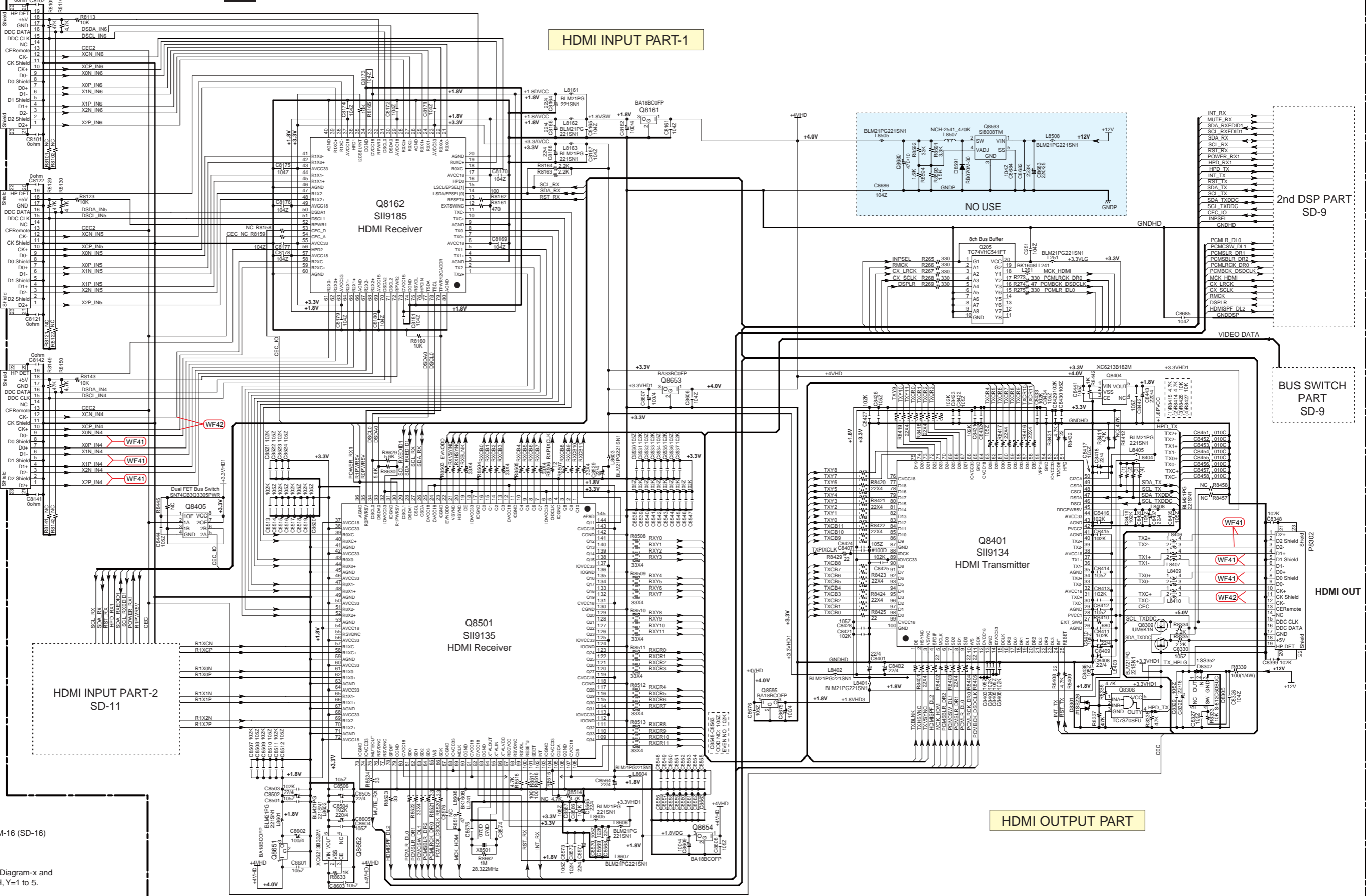
HDMI IN4 (NO USE)

HDMI IN3

HDMI IN2

TX-SR706
TX-SA706
DTR-6.9

TX-SR806
TX-SA806
DTR-7.9
TX-SA706X



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

HDMI OUTPUT PART

SCHEMATIC DIAGRAMS-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.

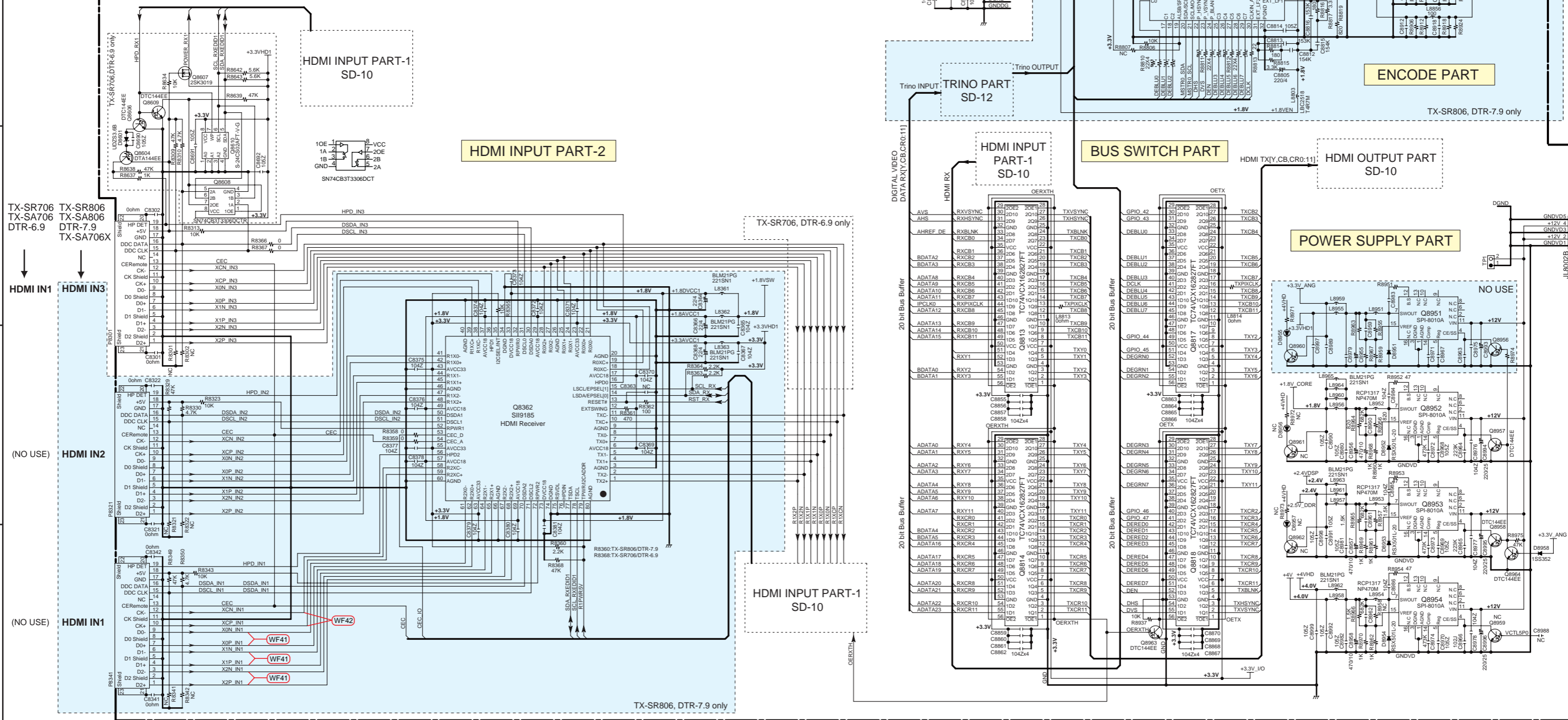
<Note>
Refer to SCHEMATIC DIAGRAM-16 (SD-16) for HDMI signal waveforms.

NOTE

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

TX-SR706, TX-SA706: NAHDM-9562
TX-SR806, TX-SA806: NAHDM-9702

NAHDM-9562/NAHDM-9702(4/6) U20 HDMI PC BOARD



TX-SR706 TX-SR806
TX-SA706 TX-SA806
DTR-6.9 DTR-7.9
TX-SA706X

HDMI IN1 HDMI IN3

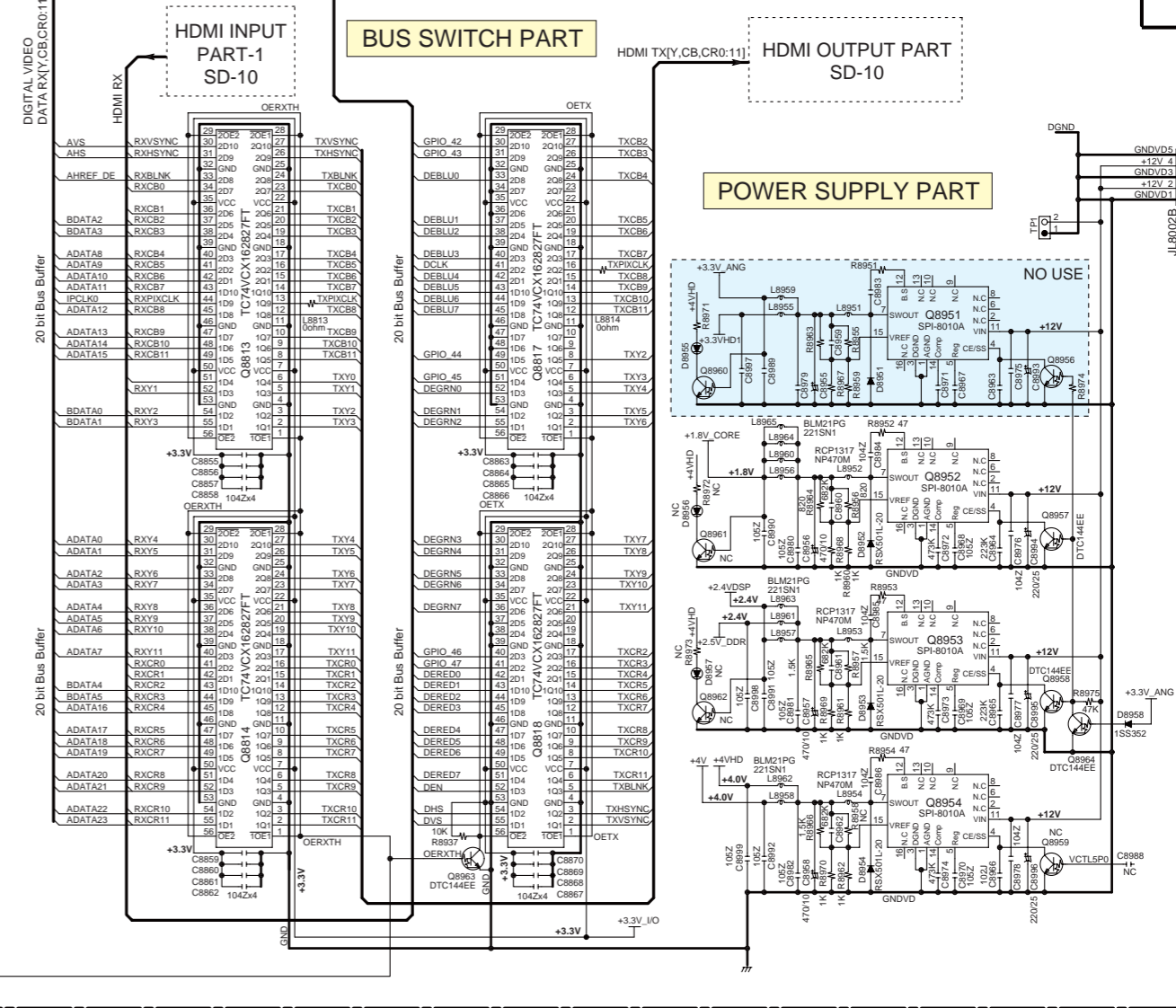
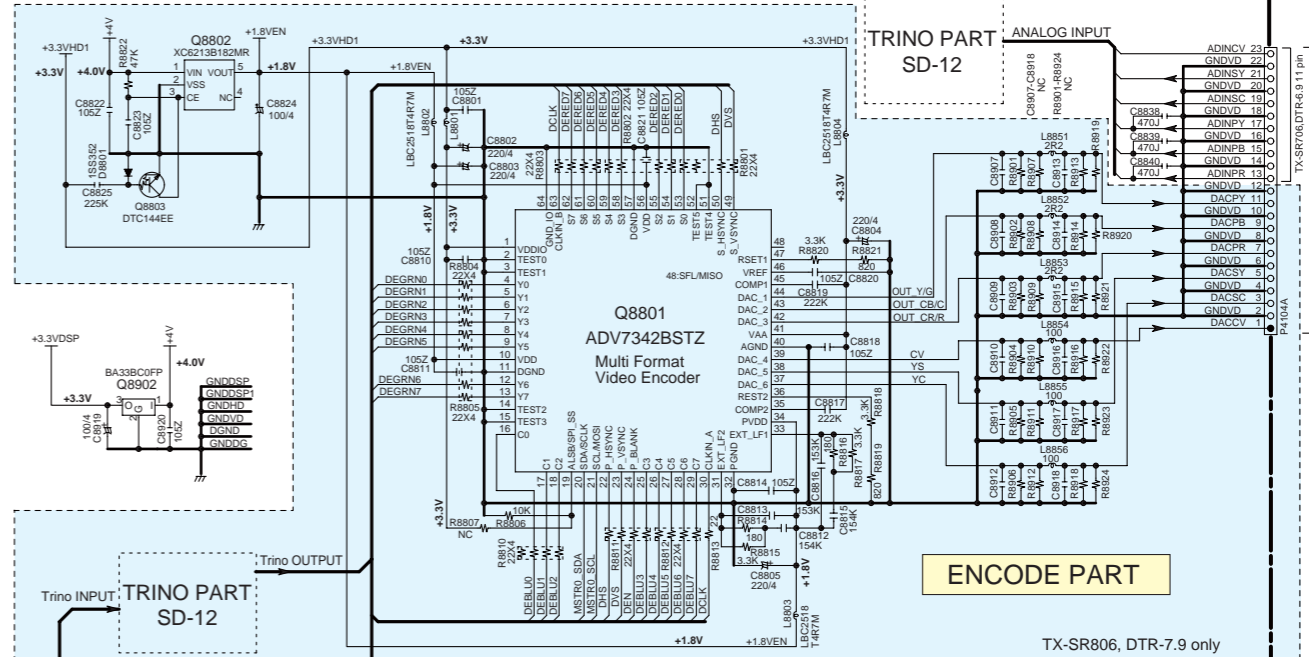
(NO USE) HDMI IN2

(NO USE) HDMI IN1

HDMI INPUT PART-1 SD-10

HDMI INPUT PART-1 SD-10

TX-SR806, DTR-7.9 only



TO NAVD-9505
SD-5:C1

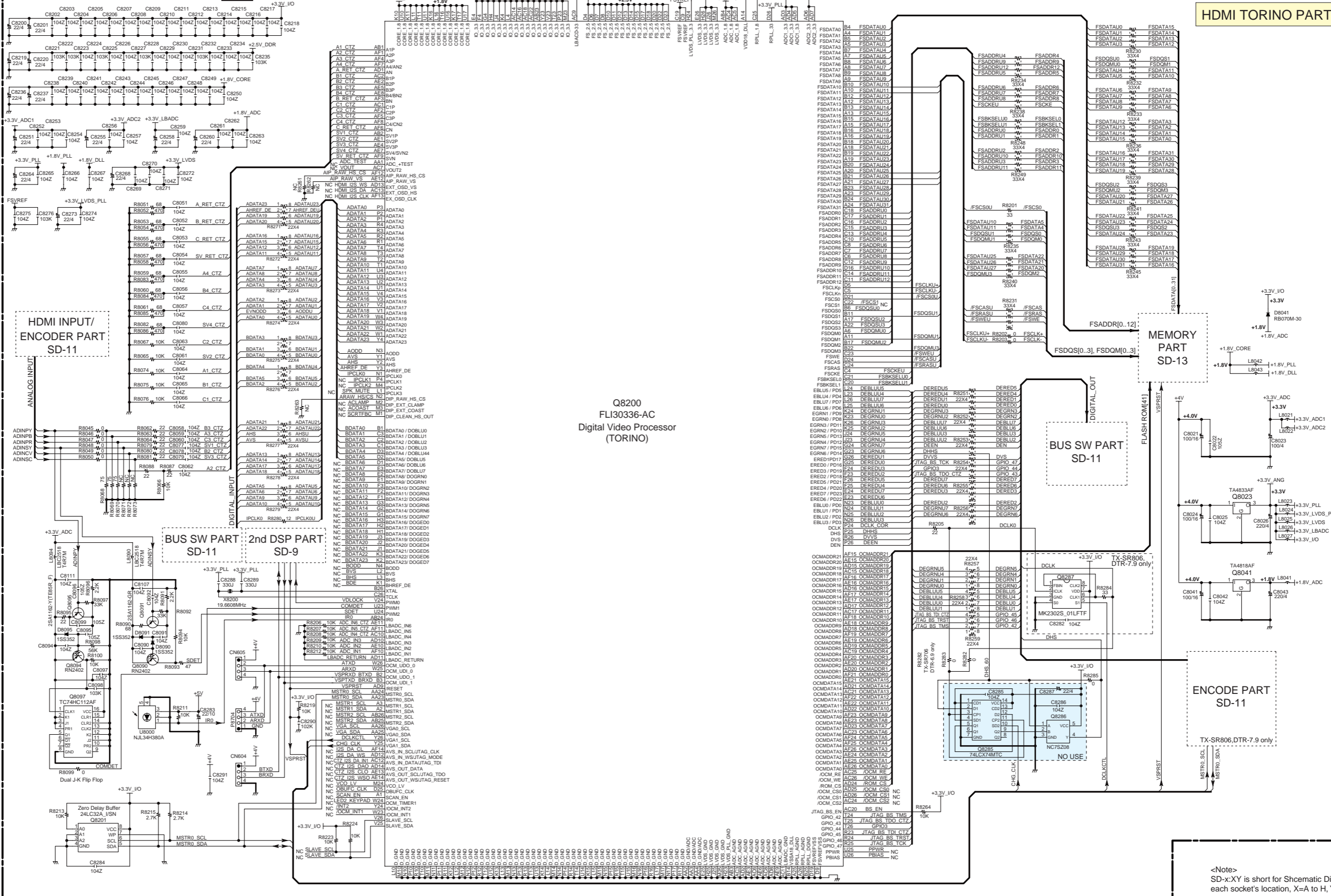
TO NAVD-9505
SD-5:D1

SCHEMATIC DIAGRAMS-12 (SD-12)

TX-SR706, TX-SA706: NAHDM-9562
TX-SR806, TX-SA806: NAHDM-9702

HDMI SECTION-3

NAHDM-9562/NAHDM-9702(5/6) U20 HDMI PC BOARD



HDMI TORINO PART

MEMORY PART SD-13

BUS SW PART SD-11

BUS SW PART SD-11

2nd DSP PART SD-9

ENCODE PART SD-11

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

SCHEMATIC DIAGRAMS-13 (SD-13)
HDMI SECTION-4

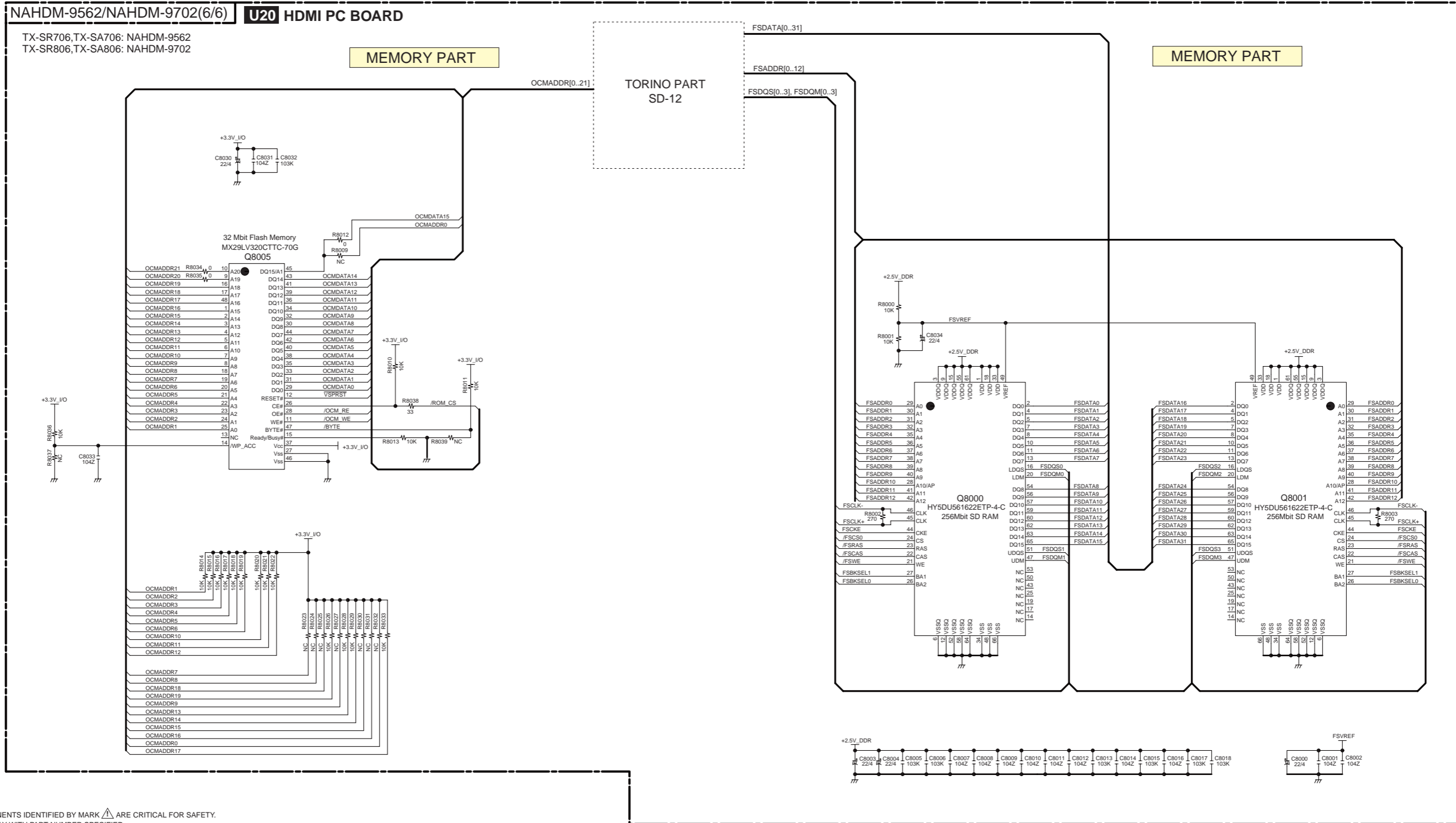
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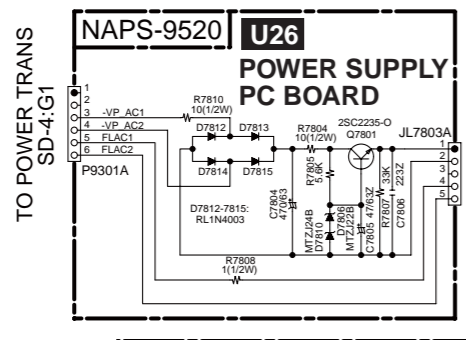


- NOTE**
- THE COMPONENTS IDENTIFIED BY MARK Δ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
 - BOLD VOLTAGE (MEASURED WITH VOLTMETER) IS DC VOLTAGE (NO INPUT SIGNAL).
 - ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
 - ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
 - ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
 - ELECTROLYTIC CAPACITORS ($\text{---} \text{||} \text{---}$) ARE IN $\mu\text{F/WV}$.
 - ALL CAPACITORS ARE IN pF/50V UNLESS OTHERWISE NOTED.
EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033 μF
 - ALL RESISTORS ARE IN OHMS 1/4WATT'S 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.

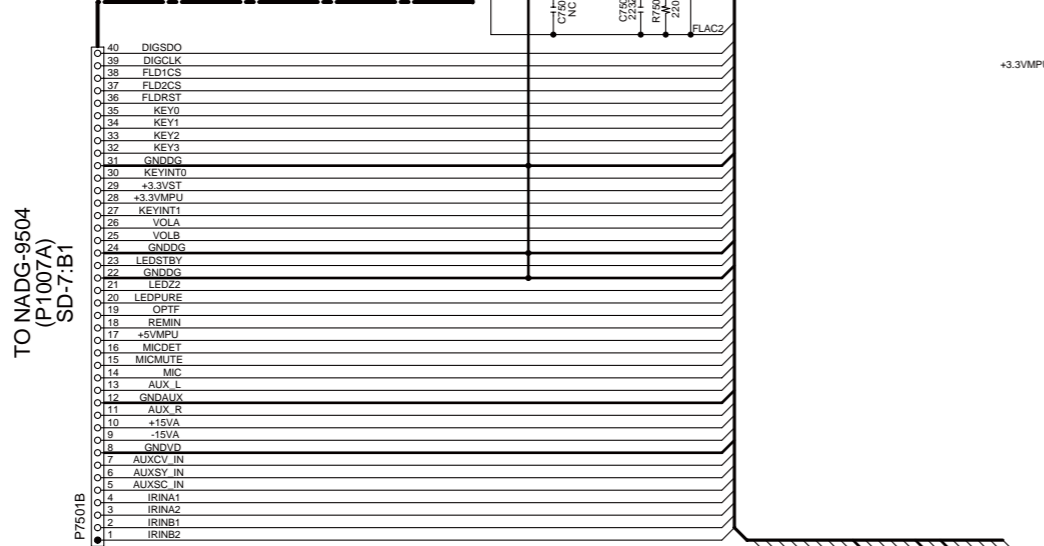
<Note>
SD-x:XY is short for Shcematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

SCHEMATIC DIAGRAMS-14 (SD-14)
DISPLAY SECTION

1



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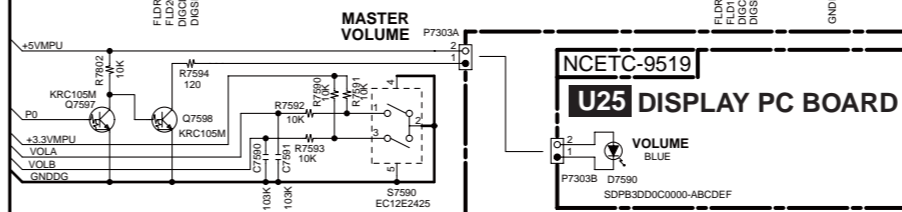
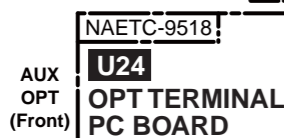


<Note>
Refer to SCHEMATIC DIAGRAM-16 (SD-16) for FL driver IC control waveforms.

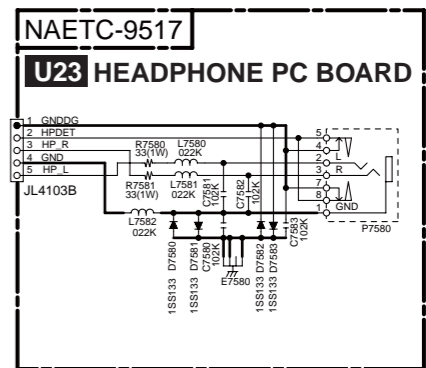
<Note>
SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

- NOTE**
- THE COMPONENTS IDENTIFIED BY MARK Δ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
 - BOLD 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 $\mu\text{F}/\text{V.V.}$
 - ALL CAPACITORS ARE IN $\text{pF}/50\text{V/V}$ UNLESS OTHERWISE NOTED.
 - EX) 030-3pF, 330-33pF, 331-330pF, 333-0.03 μF
 - ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
 - THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
 - EX) \square PRINTING SIDE
 - CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

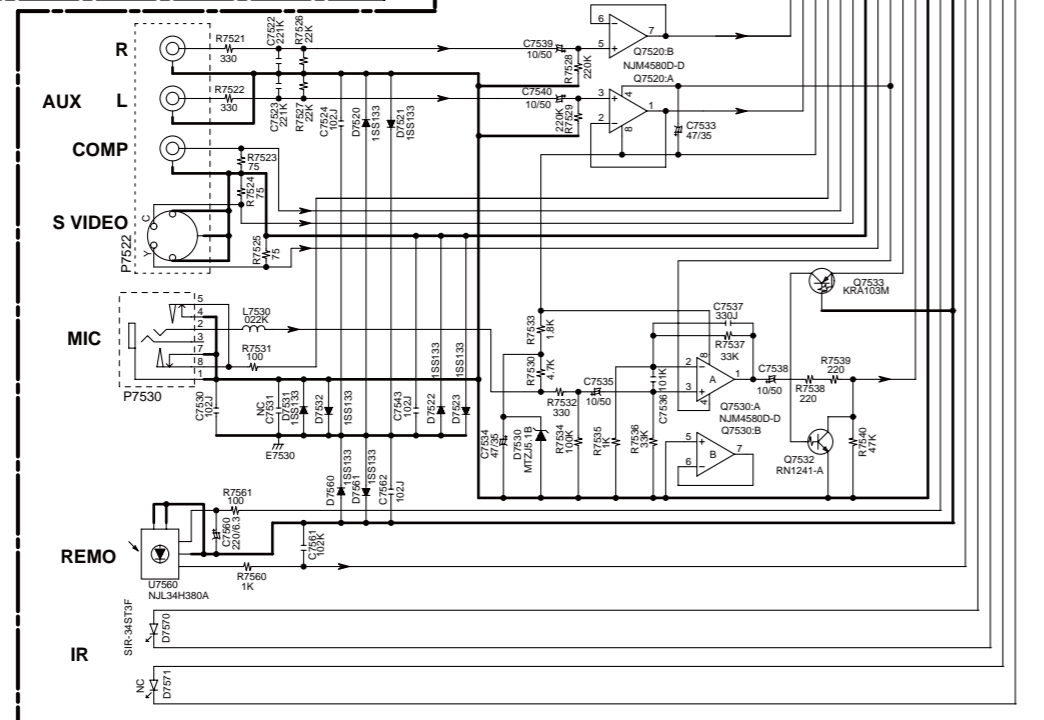
3



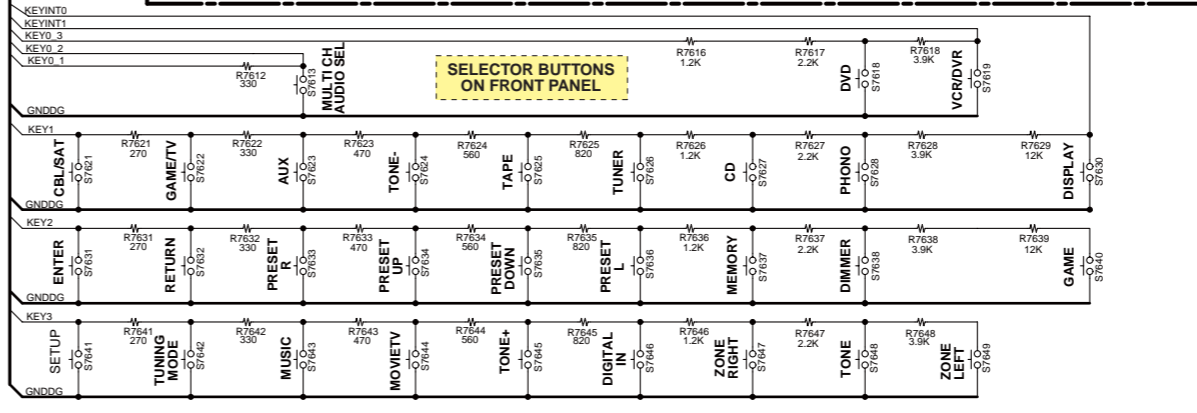
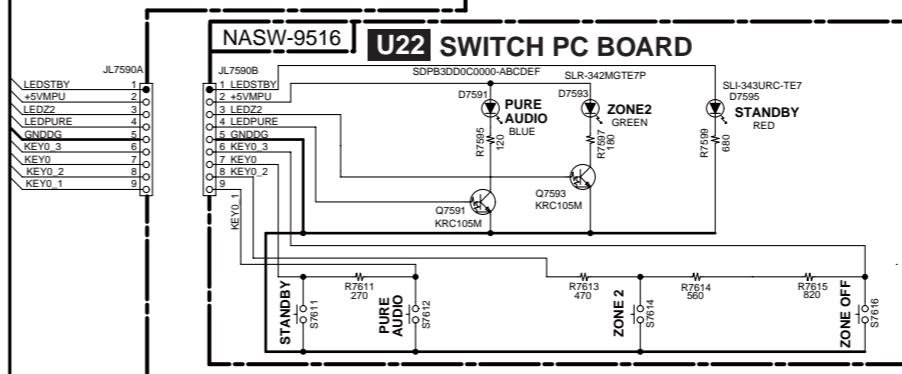
TO NATRM-9489 SD-4-F1



4



5



SCHEMATIC DIAGRAMS-15 (SD-15)
XM AND SIRIUS SECTION

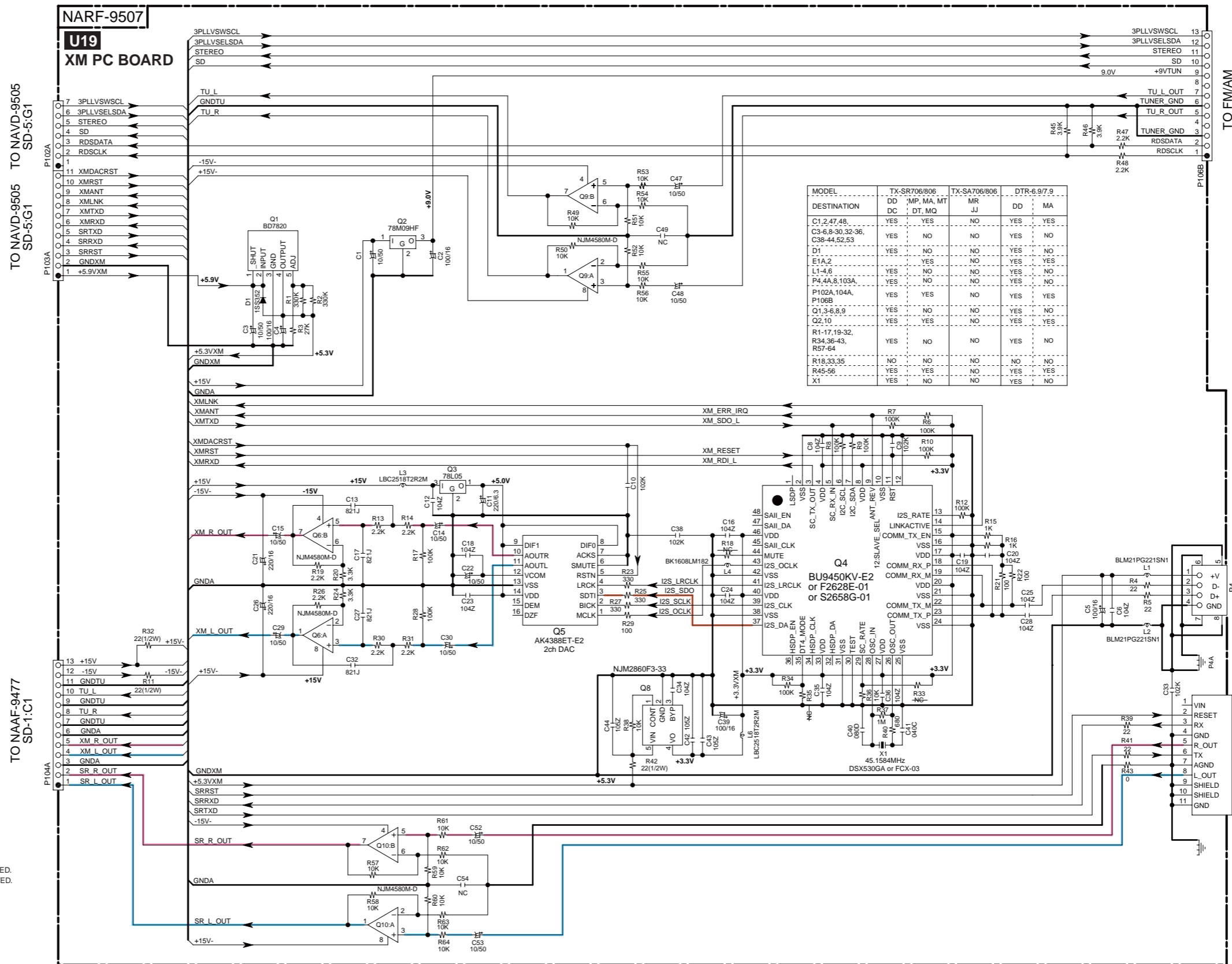
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MODEL	TX-SR706/806	TX-SA706/806	DTR-6.9/7.9
DESTINATION	DD MP, MA, MT	MR JJ	DD MA
C1,2,47,48	YES	YES	NO
C3-6,8-30,32-36, C38-44,52,53	YES	NO	YES
D1	YES	NO	YES
E1A,2	YES	NO	YES
L1-4,6	YES	NO	YES
P4,4A,8,103A, P102A,104A, P106B	YES	NO	YES
Q1,3-6,8,9	YES	NO	YES
Q2,10	YES	YES	YES
R1-17,19-32, R34,36-43, R57-64	YES	NO	YES
R18,33,35	NO	NO	NO
R45-56	YES	YES	YES
X1	YES	NO	YES

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

TO FM/AM
TUNER UNIT

XM

SIRIUS

**SCHEMATIC DIAGRAM-16(SD-16)
WAVEFORM SECTION**

1

Digital Audio Waveform Part

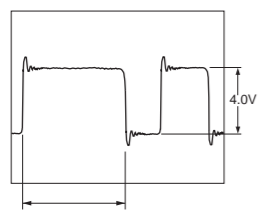
NOTE:

1. (WF01) is short for (Waveform01)
2. Refer to SD-7(SCHEMATIC DIAGRAM-9) for the location of each waveform on circuit.
3. SD-x:XY is short for Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

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

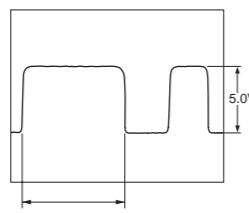
BIT CLOCK (SAI_SLCK, CX_SLCK)
64Fs=3072kHz : DVD, Clock width=325ns
64Fs=2822.4kHz : CD, Clock width=354ns

(WF01) OPT1 (SD-7:C5)



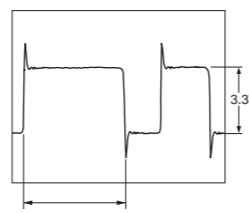
Duty varies according to audio data

(WF02) COAX1 (SD-7:C5)



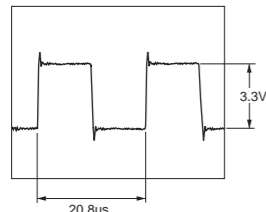
Duty always varies according to audio data

(WF03) SAI_SDOUT (SD-7:D5)

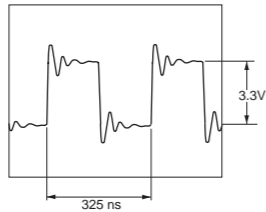


Duty varies according to audio data

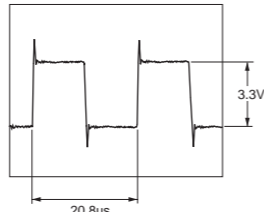
(WF04) SAI_LRCK (SD-7:D5)



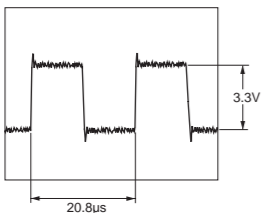
(WF05) SAI_SLCK (SD-7:D5)



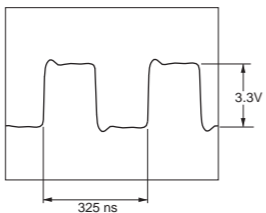
(WF06) PCMF3 (SD-7:E4)



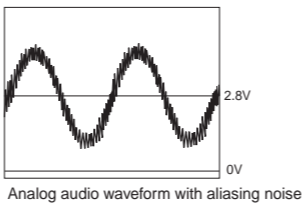
(WF07) CX_LRCK (SD-7:E4)



(WF08) CX_SLCK (SD-7:E4)

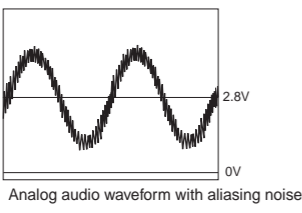


(WF09) FL+ (SD-7:F5)



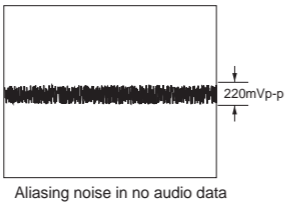
Analog audio waveform with aliasing noise

(WF10) DAC_FL (SD-7:H2)



Analog audio waveform with aliasing noise

(WF10) DAC_FL (SD-7:H2)



Aliasing noise in no audio data

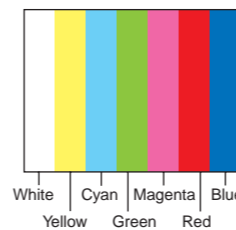
2

3

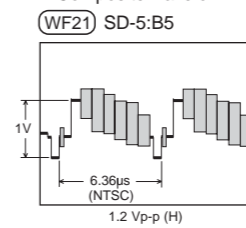
4

5

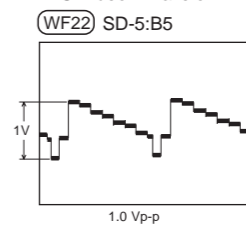
Video source color and pattern



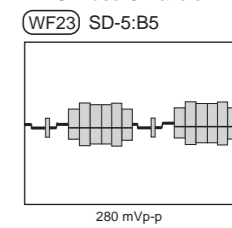
Composite waveform



S-Video Y waveform



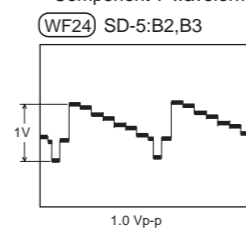
S-Video C waveform



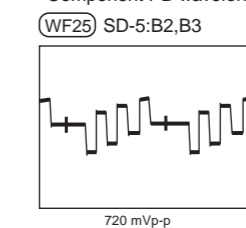
NOTE:

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

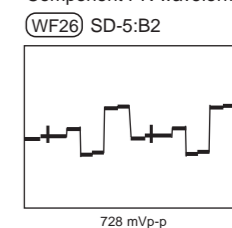
Component Y waveform



Component PB waveform



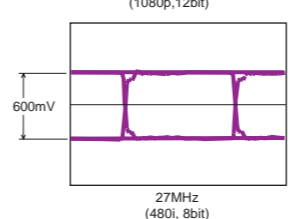
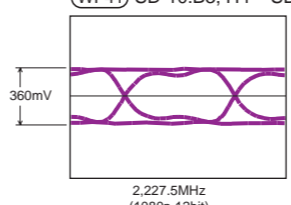
Component PR waveform



HDMI Waveform Part

HDMI D0,D1,D2 waveform

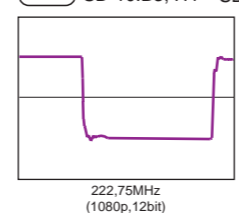
(WF41) SD-10:B3, H4 SD-11:B5



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:B3, H4 SD-11:B5

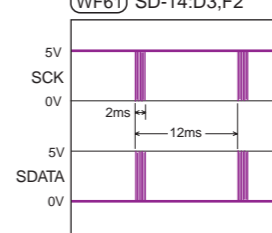


CK waveform, frequency and level differ according to video resolution, aspect and profile. D0,D1,D2 are just CK x10.

FL Driver IC Control Waveform Part

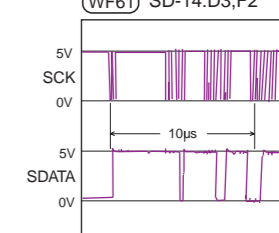
SCK/SDATA waveform

(WF61) SD-14:D3,F2



SCK/SDATA waveform

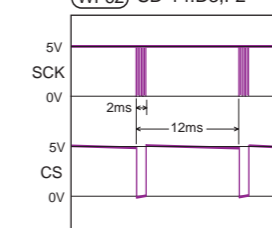
(WF61) SD-14:D3,F2



SDATA waveform varies according to the data content

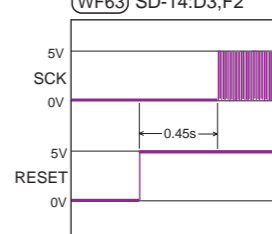
SCK/CS waveform

(WF62) SD-14:D3,F2



SCK/RESET waveform

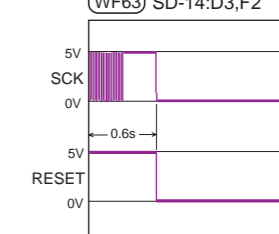
(WF63) SD-14:D3,F2



When power on

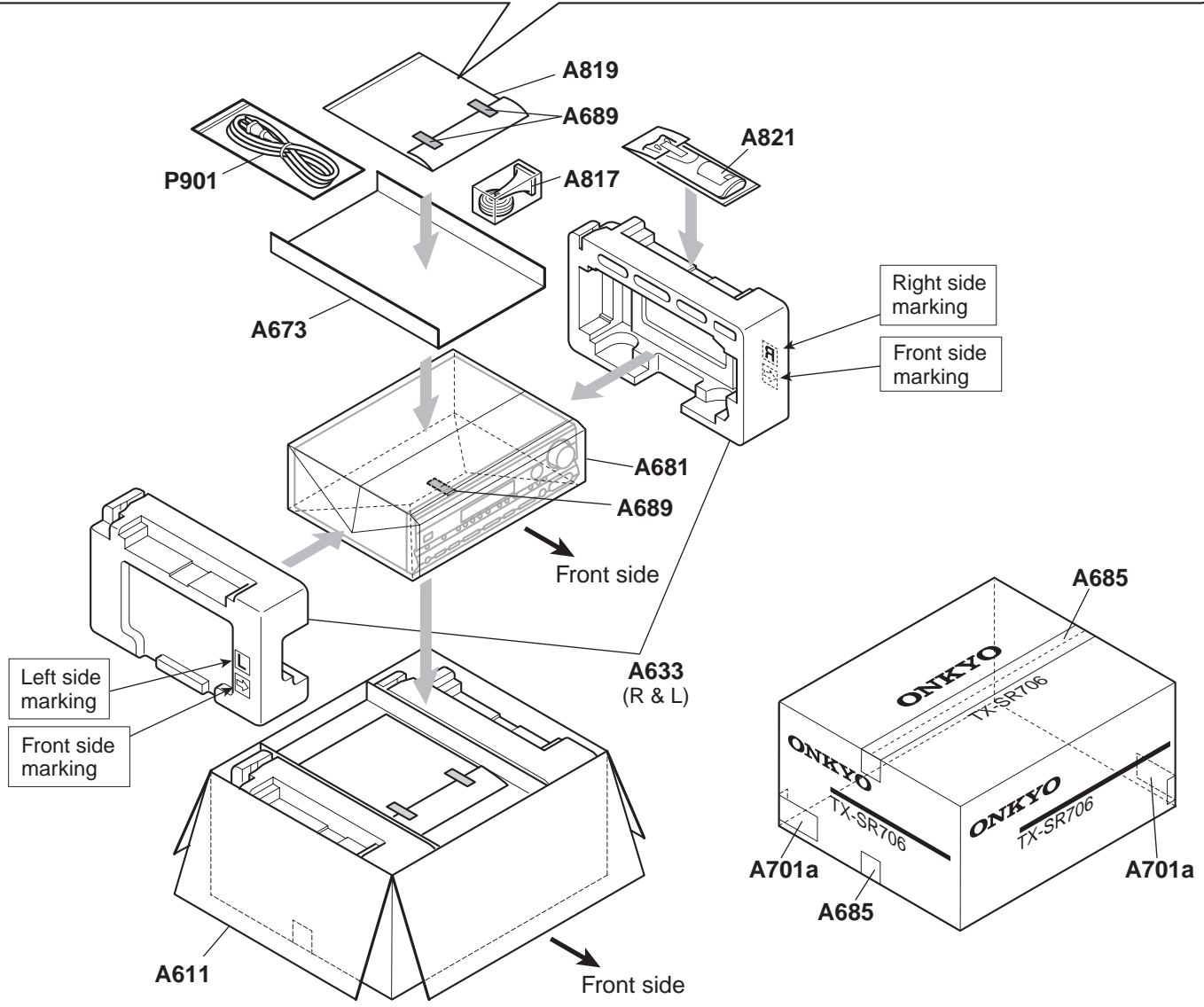
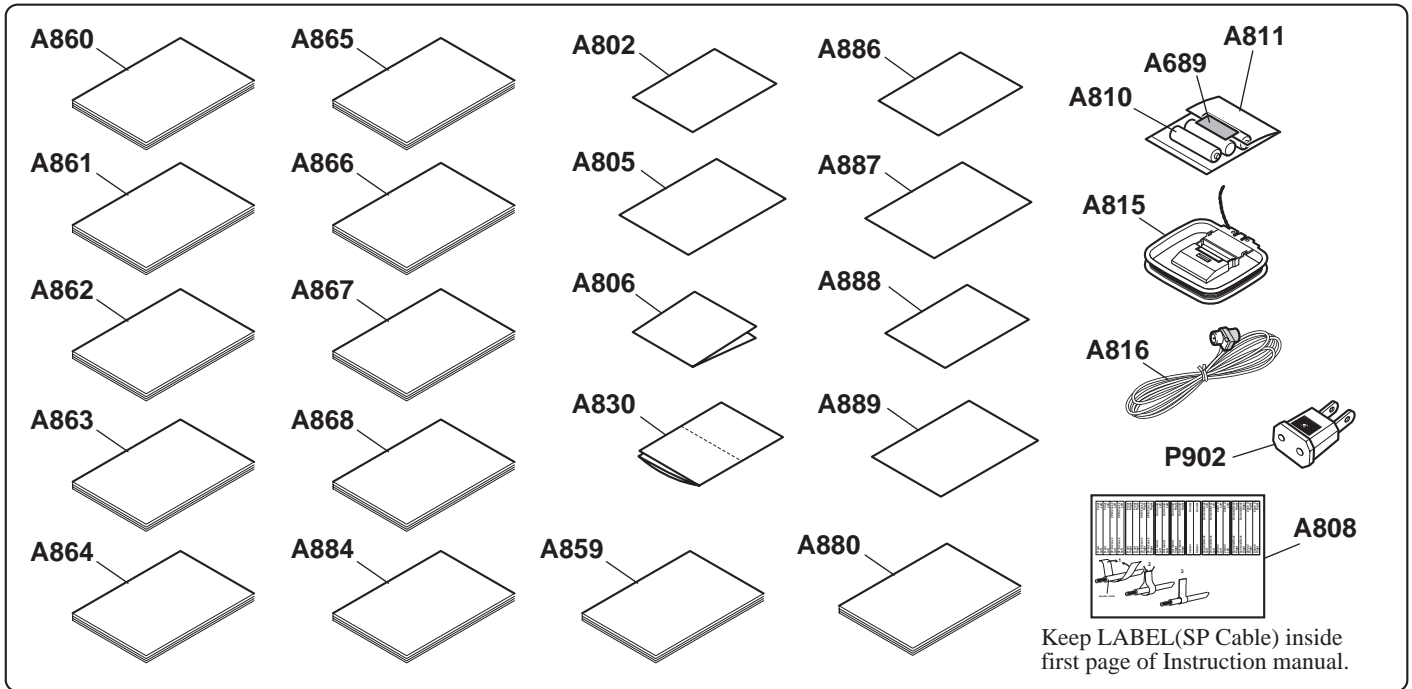
SCK/RESET waveform

(WF63) SD-14:D3,F2



When power off

PACKING PROCEDURE



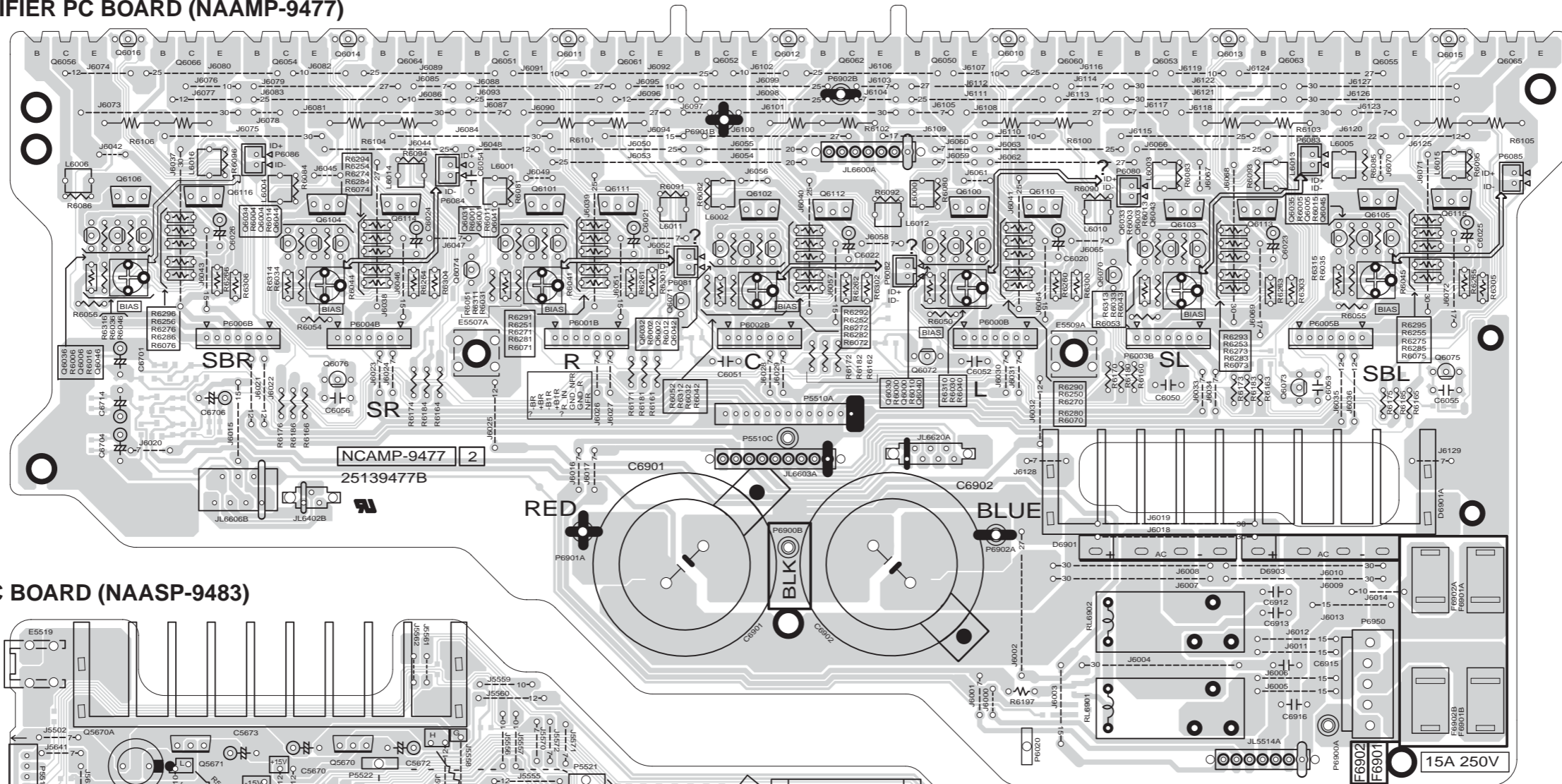
A B C D E F G H

PRINTED CIRCUIT BOARD VIEWS-1

U01 POWER AMPLIFIER PC BOARD (NAAMP-9477)

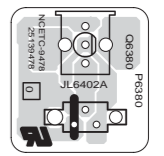
Component side

1



2

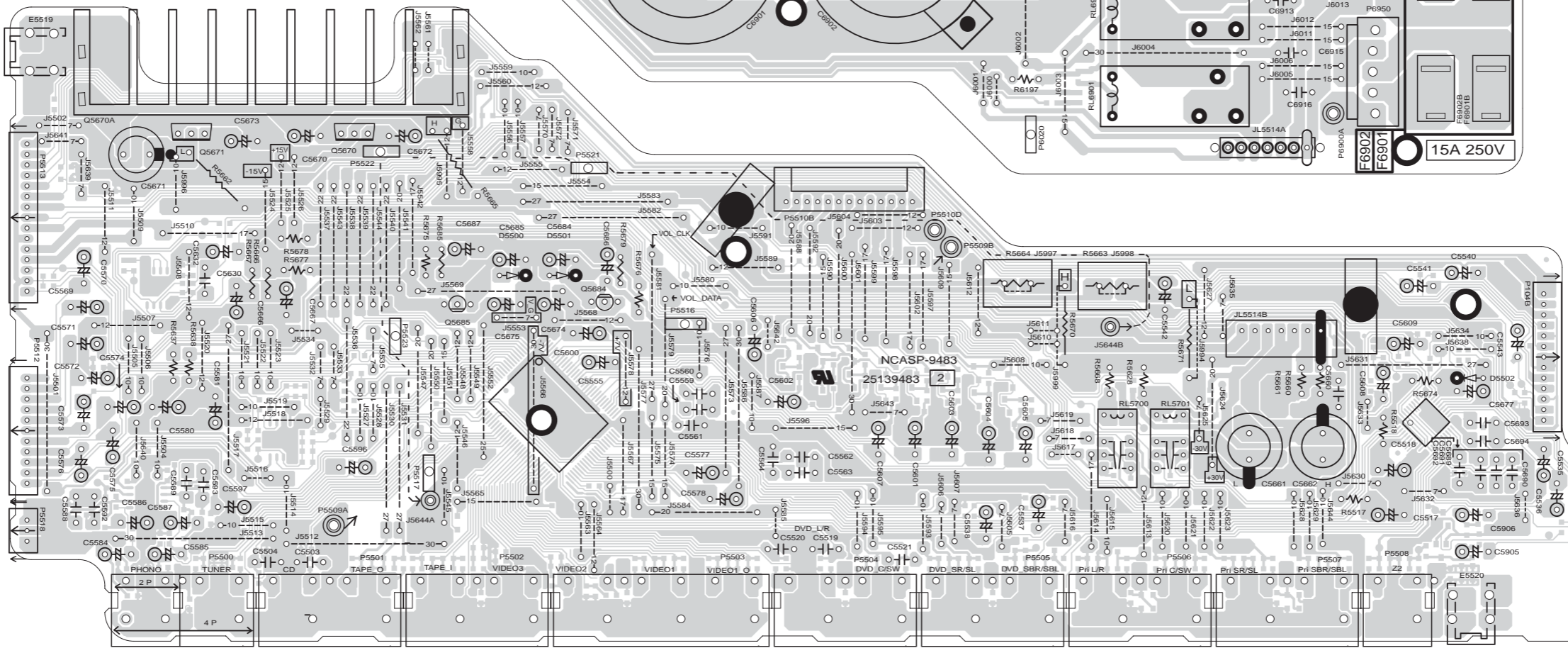
U02 THERMAL SENSOR PC BOARD (NAETC-9478)
Component side



U07 AMPLIFIER PC BOARD (NAASP-9483)

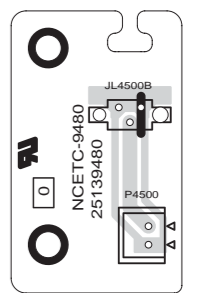
Component side

3



4

U04 TERMINAL PC BOARD (NAETC-9480)
Component side



5

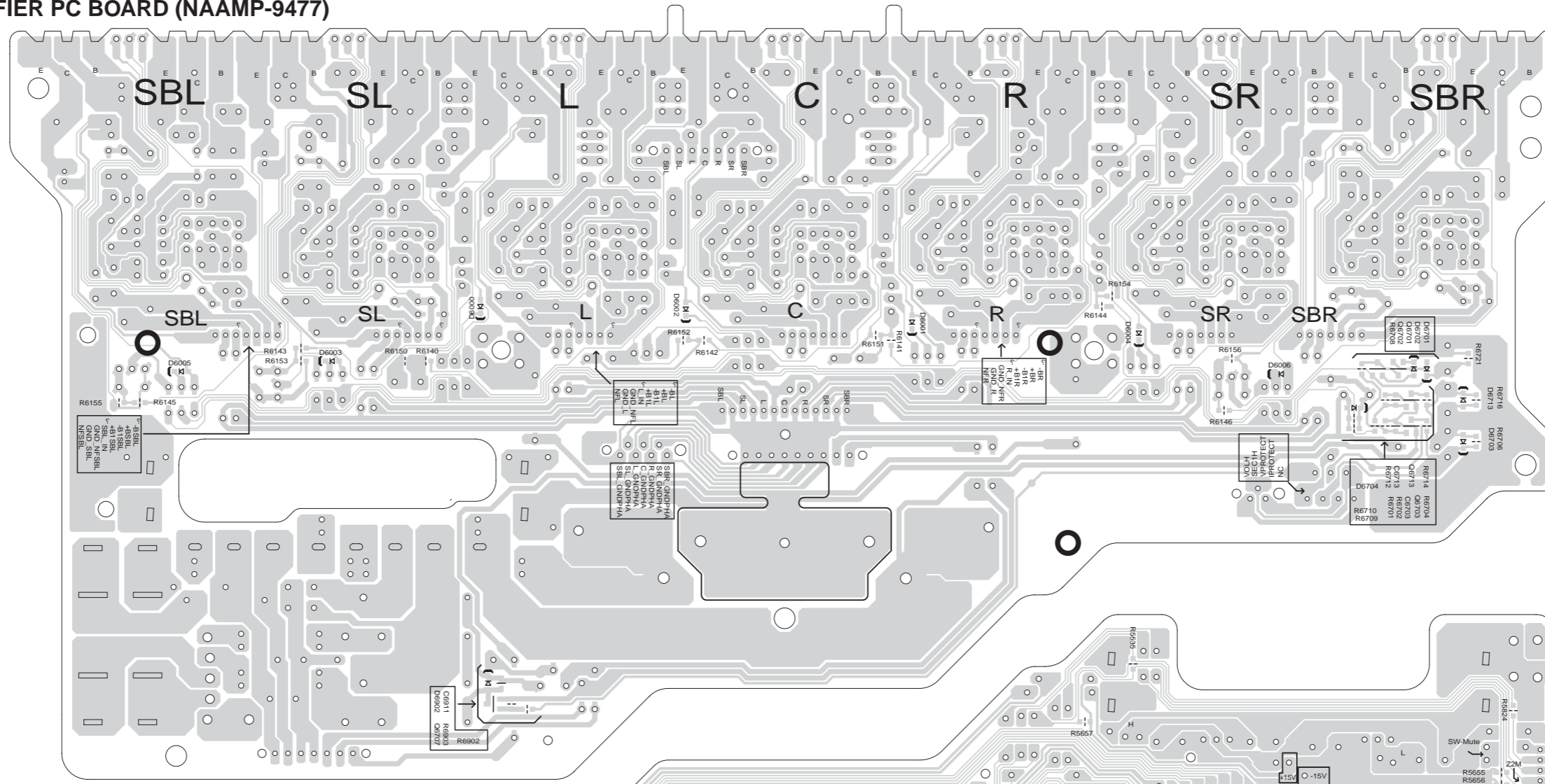
A B C D E F G H

PRINTED CIRCUIT BOARD VIEWS-2

U01 POWER AMPLIFIER PC BOARD (NAAMP-9477)

Soldering side

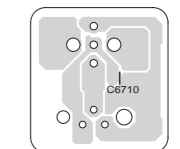
1



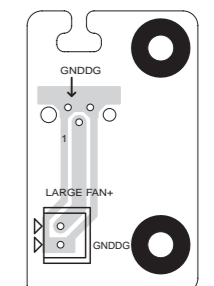
2

3

U02 THERMAL SENSOR PC BOARD (NAETC-9478)
Soldering side



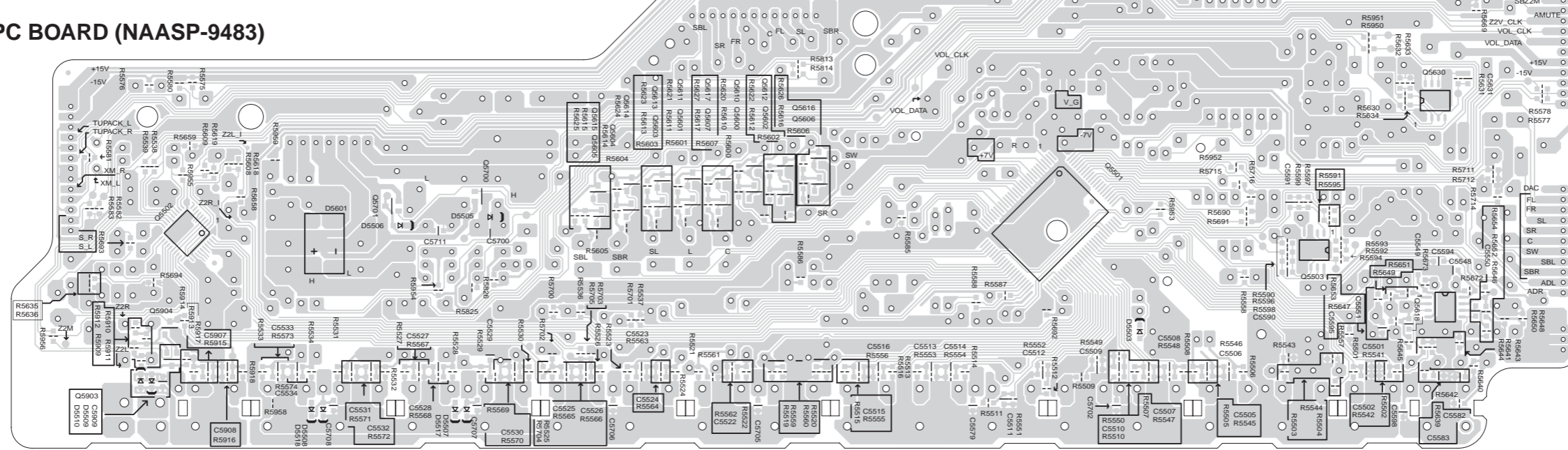
U04 TERMINAL PC BOARD (NAETC-9480)
Soldering side



U07 AMPLIFIER PC BOARD (NAASP-9483)

Soldering side

4



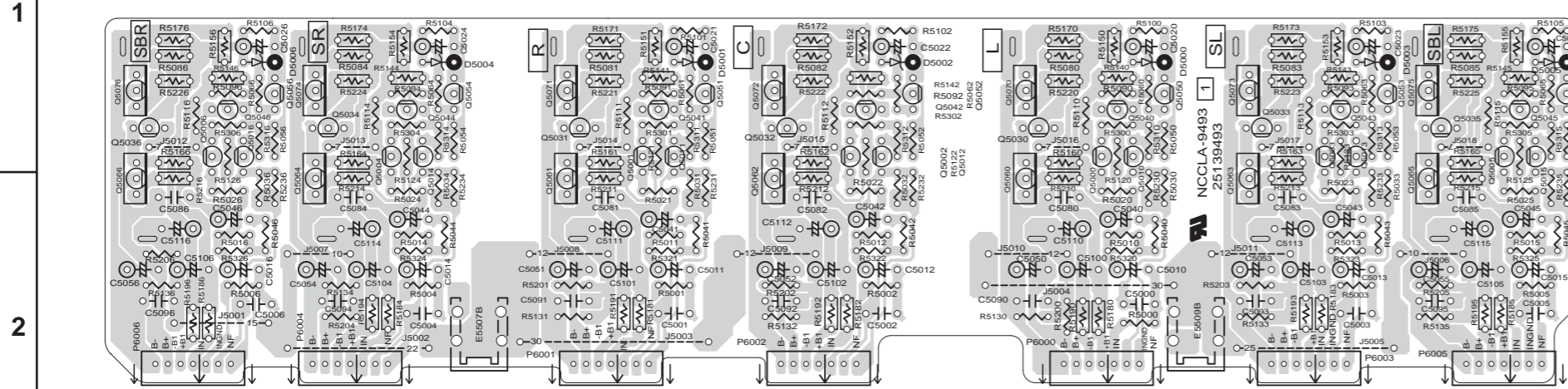
5

A B C D E F G H

PRINTED CIRCUIT BOARD VIEWS-3

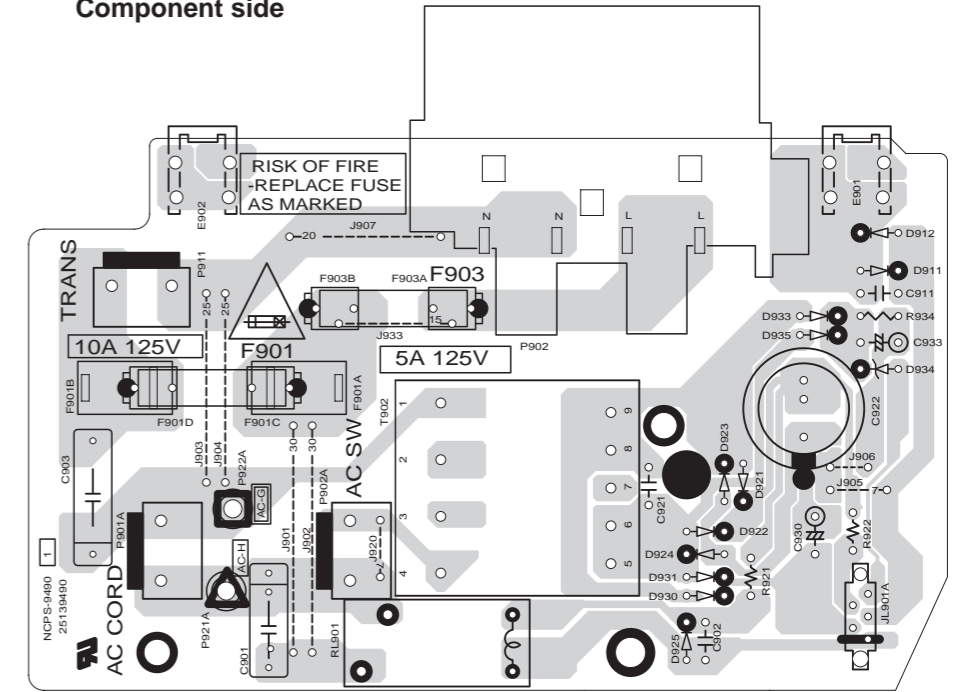
U13 AMPLIFIER PC BOARD (NACLA-9493)

Component side



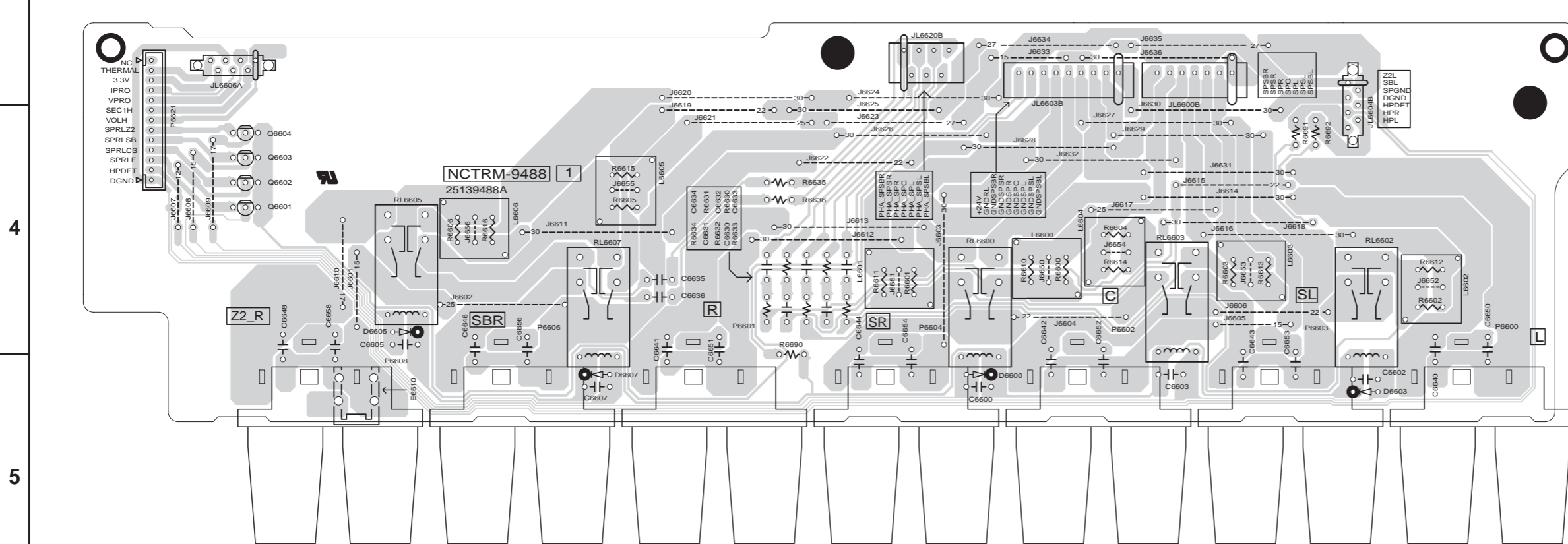
U10 POWER SUPPLY PC BOARD (NAPS-9490)

Component side



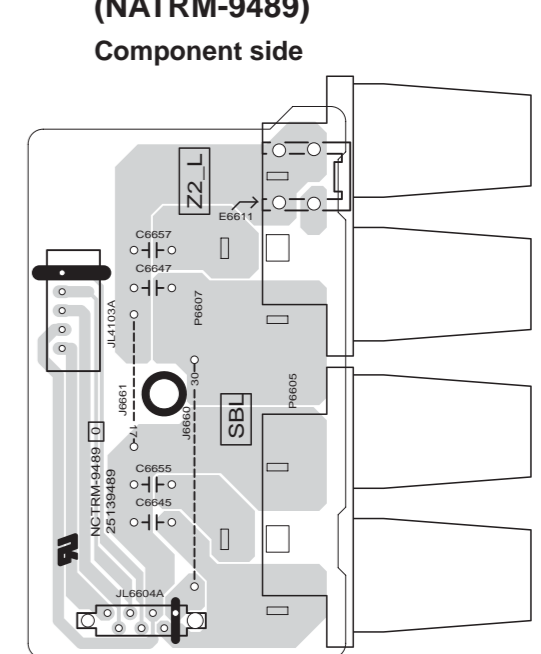
U08 SP TERMINAL PC BOARD (NATRM-9488)

Component side



U09 SP TERMINAL PC BOARD (NATRM-9489)

Component side



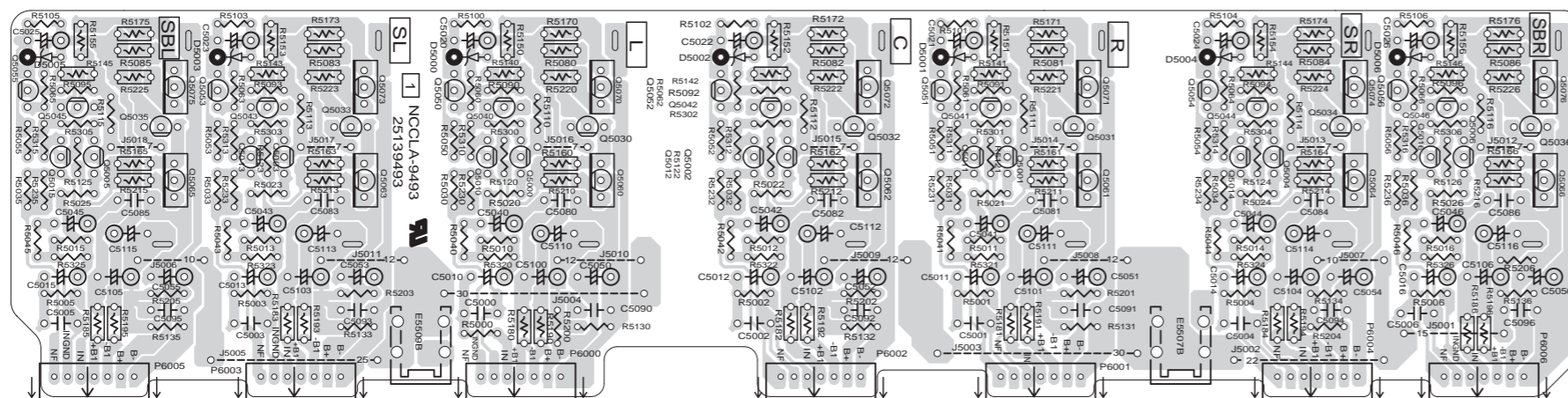
5

PRINTED CIRCUIT BOARD VIEWS-4

U13 AMPLIFIER PC BOARD (NACLA-9493)

Soldering side

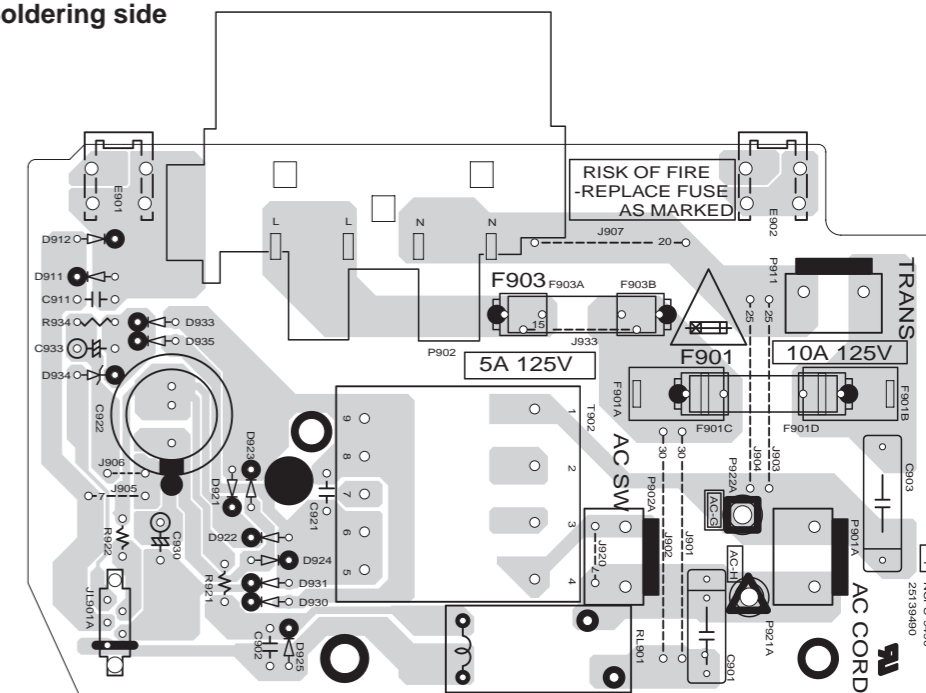
1



2

U10 POWER SUPPLY PC BOARD (NAPS-9490)

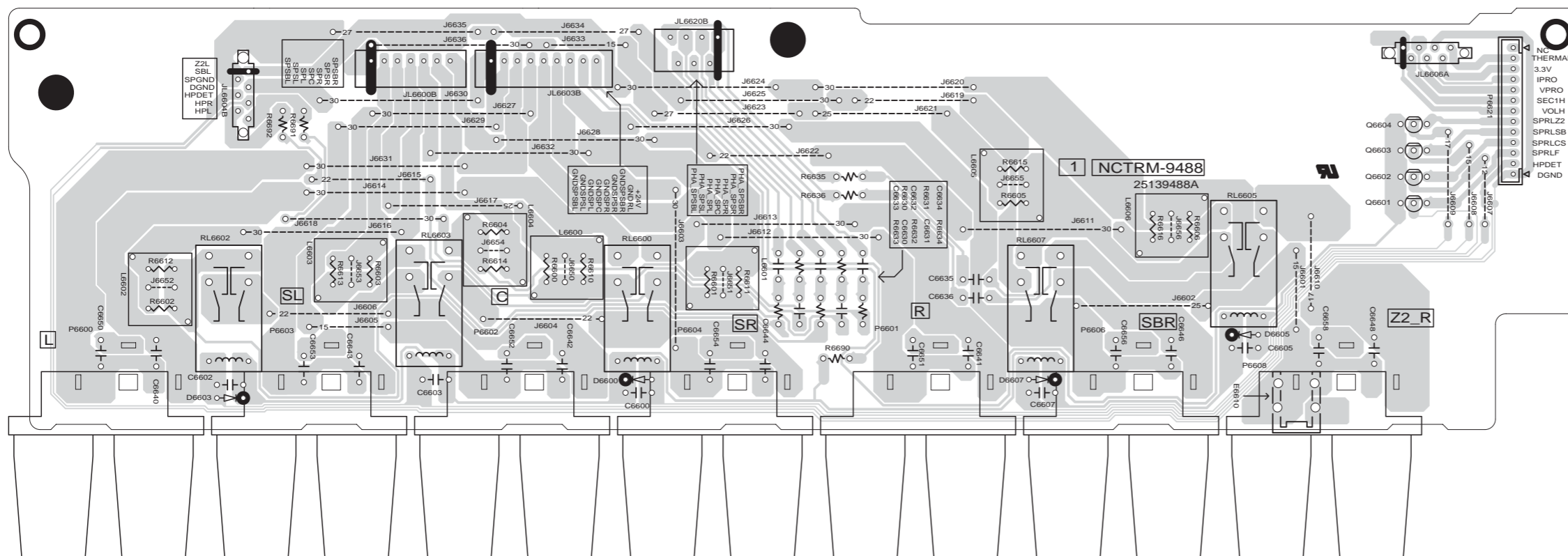
Soldering side



U08 SP TERMINAL PC BOARD (NATRM-9488)

Soldering side

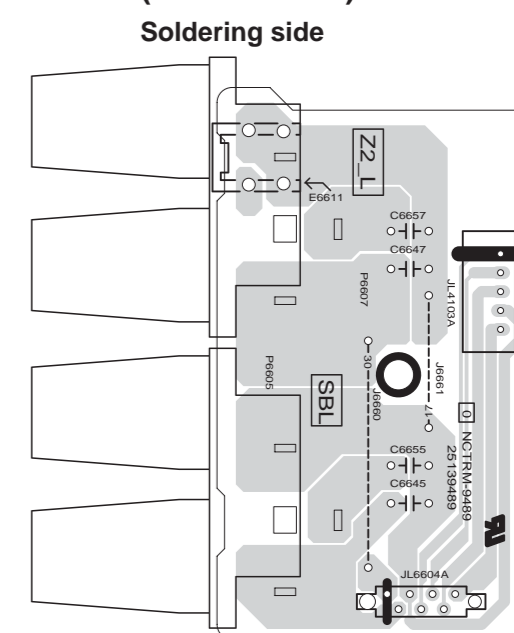
3



4

U09 SP TERMINAL PC BOARD (NATRM-9489)

Soldering side

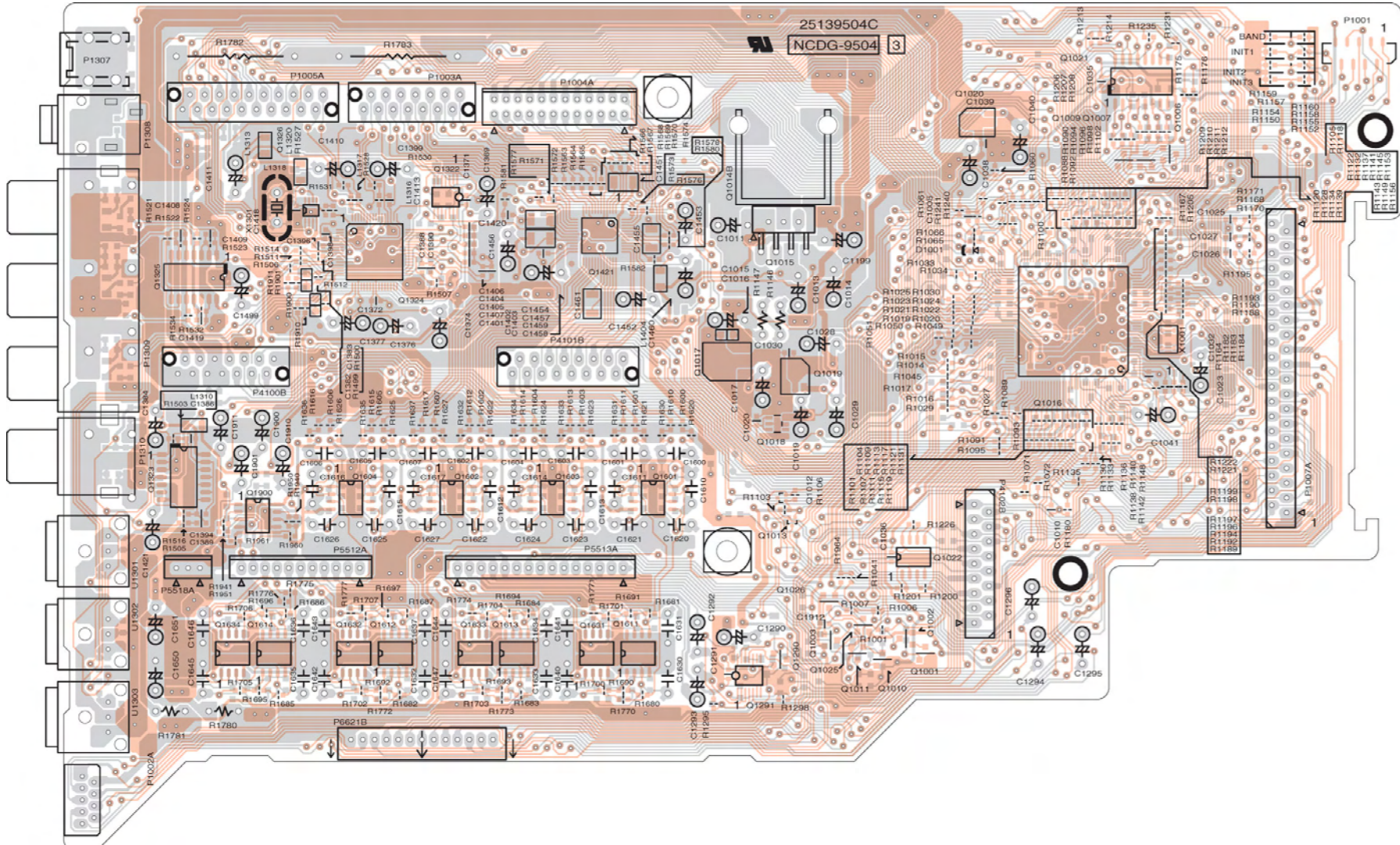


5

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

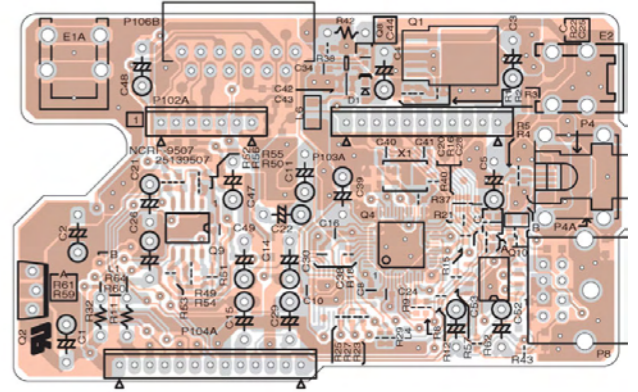
1

U16 MICROPROCESSOR AND DAC PC BOARD (NADG-9504)
Side-A



2

U19 XM PC BOARD (NARF-9507)
Side-A



3

4

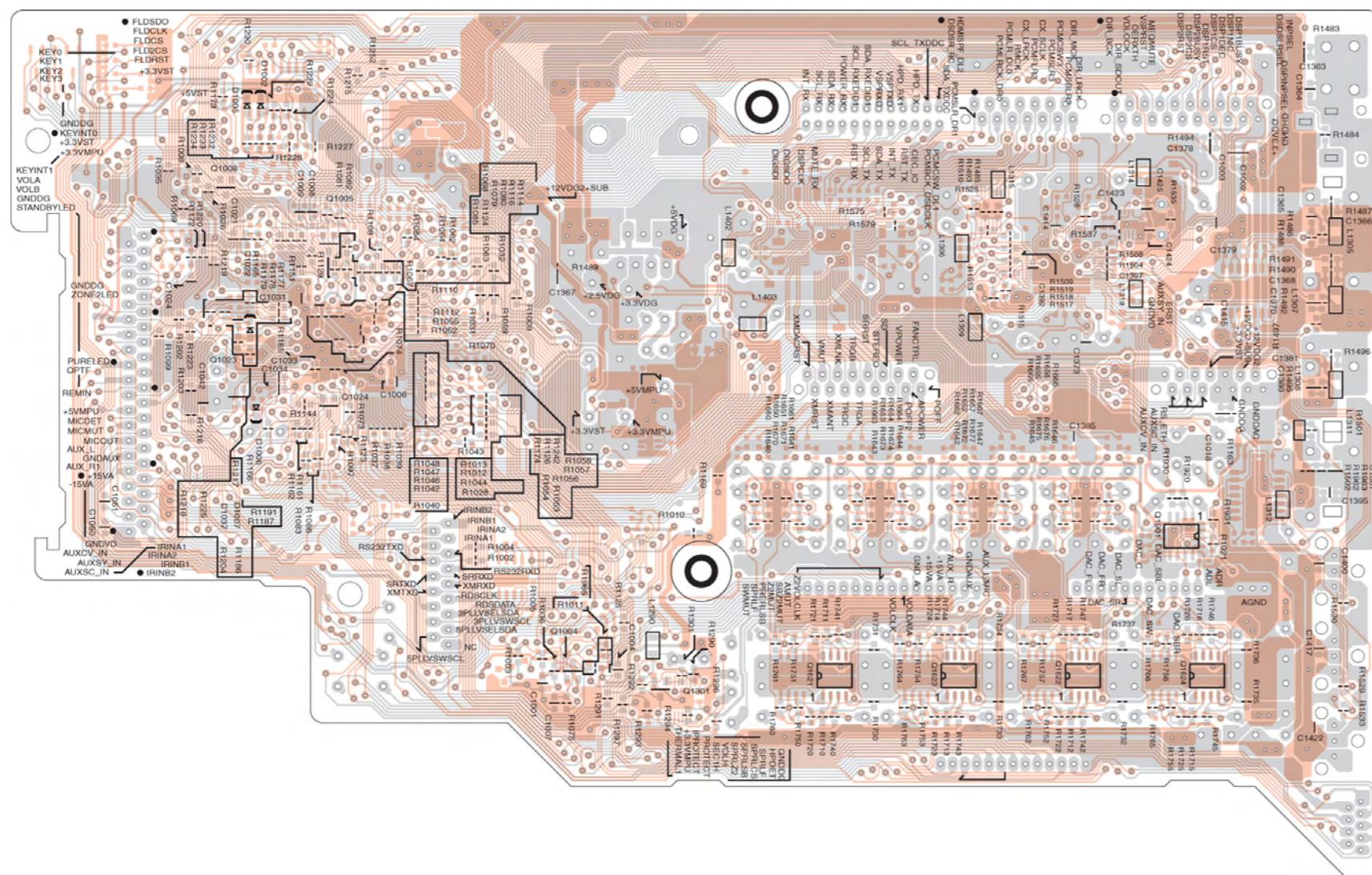
5

PRINTED CIRCUIT BOARD VIEWS-6

1

U16 MICROPROCESSOR AND DAC PC BOARD (NADG-9504)

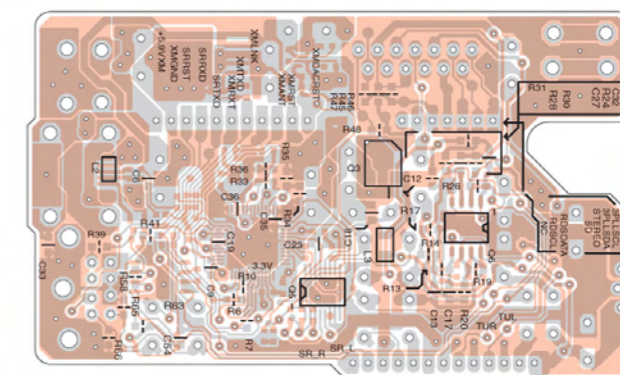
Side-B



2

U19 XM PC BOARD (NARF-9507)

Side-B



3

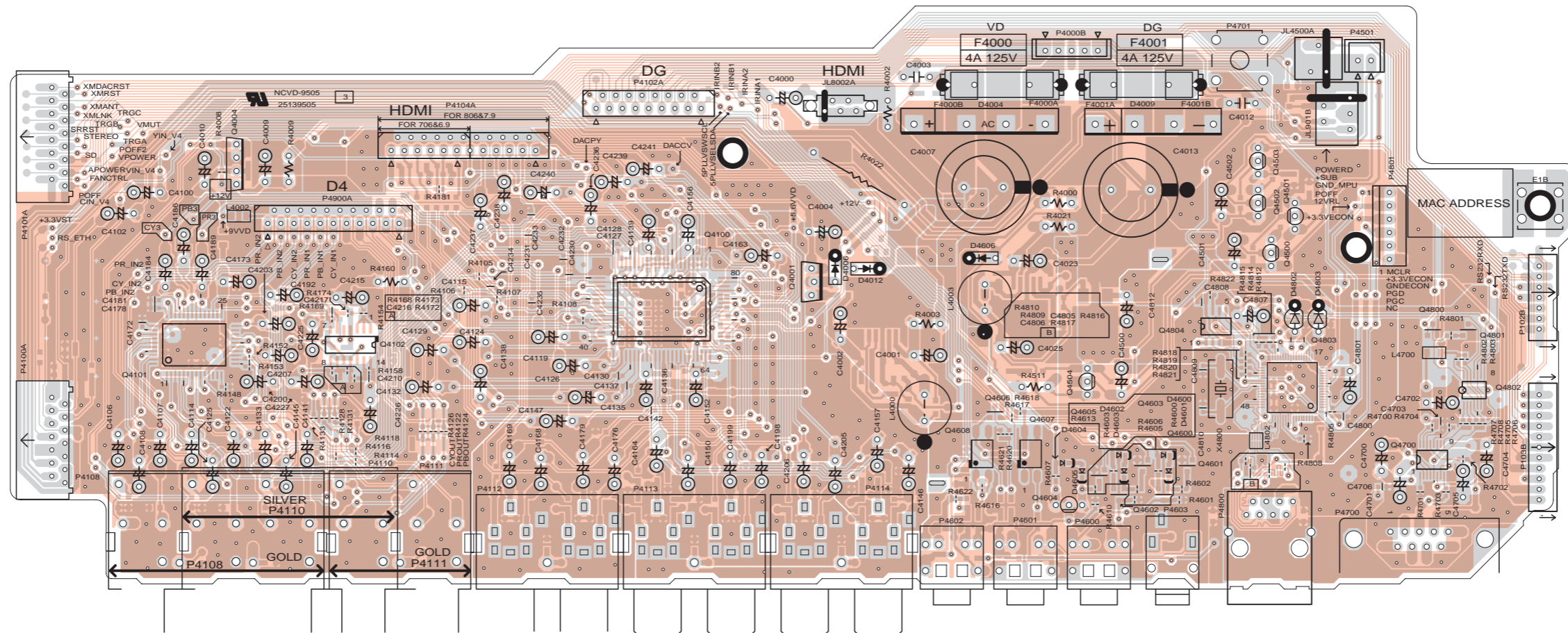
4

5

A B C D E F G H
PRINTED CIRCUIT BOARD VIEWS-7

U17 VIDEO PC BOARD (NAVD-9505)

Side-A



1

2

3

4

5

A

B

C

D

E

F

G

H

PRINTED CIRCUIT BOARD VIEWS-8

1

U17 VIDEO PC BOARD (NAVD-9505)

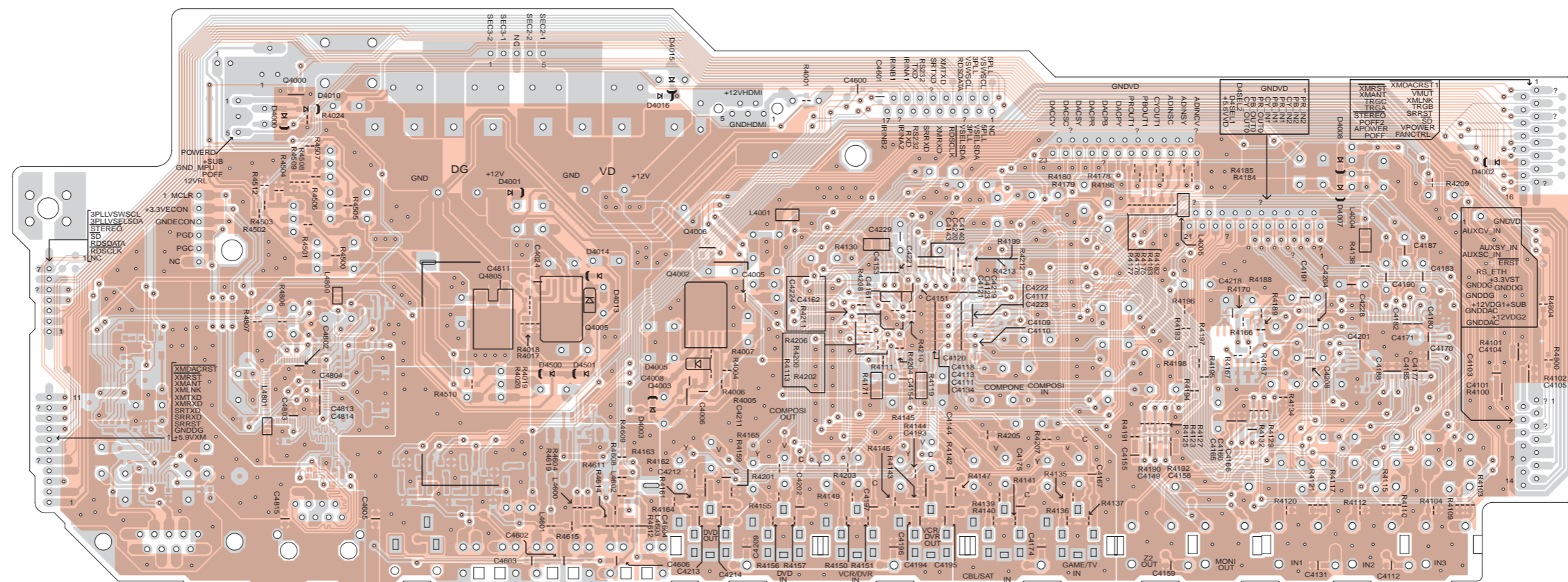
Side-B

2

3

4

5



A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-9

U20 HDMI PC BOARD
(NAHDM-9562)
Side-A

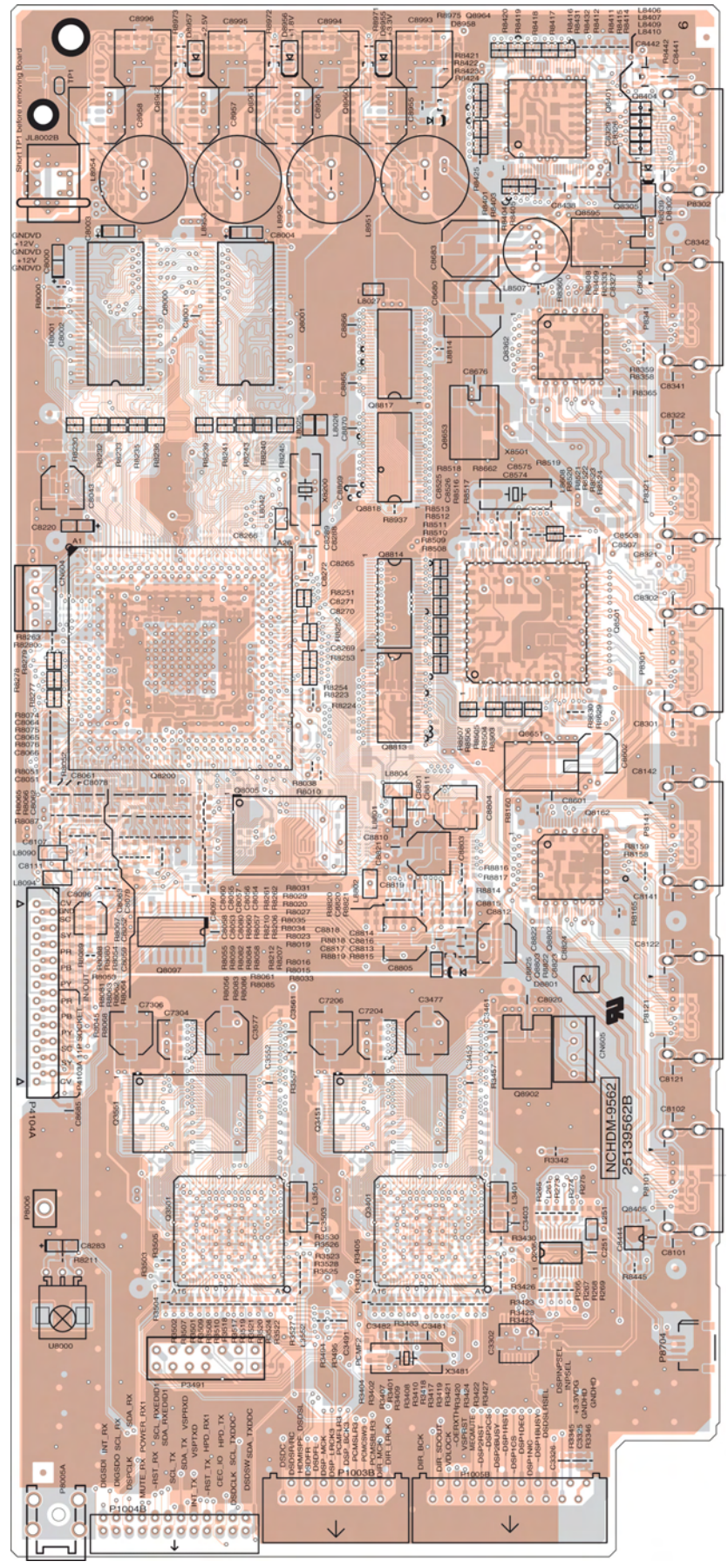
1

2

3

4

5



A

B

C

D

PRINTED CIRCUIT BOARD VIEWS-10

U20 HDMI PC BOARD
(NAHDM-9562)
Side-B

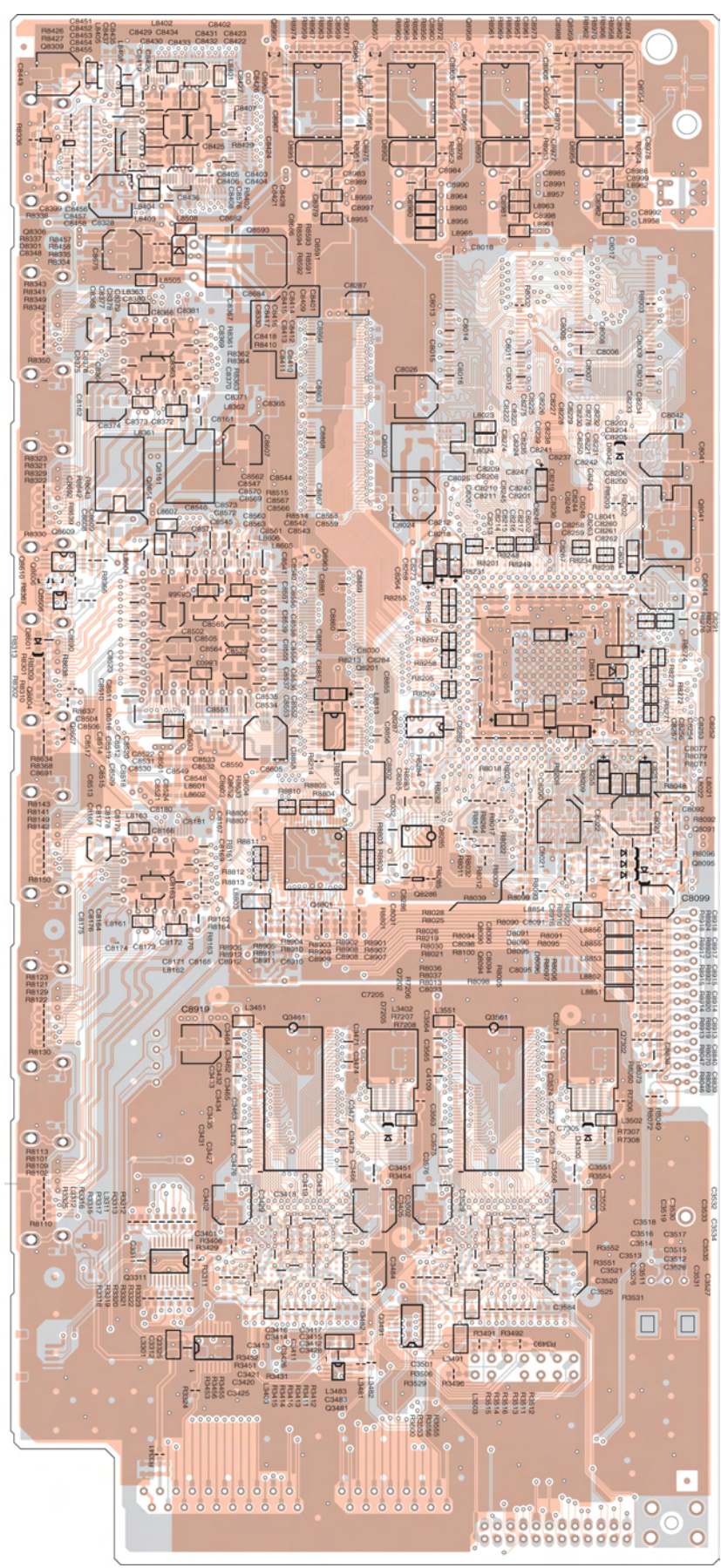
1

2

3

4

5



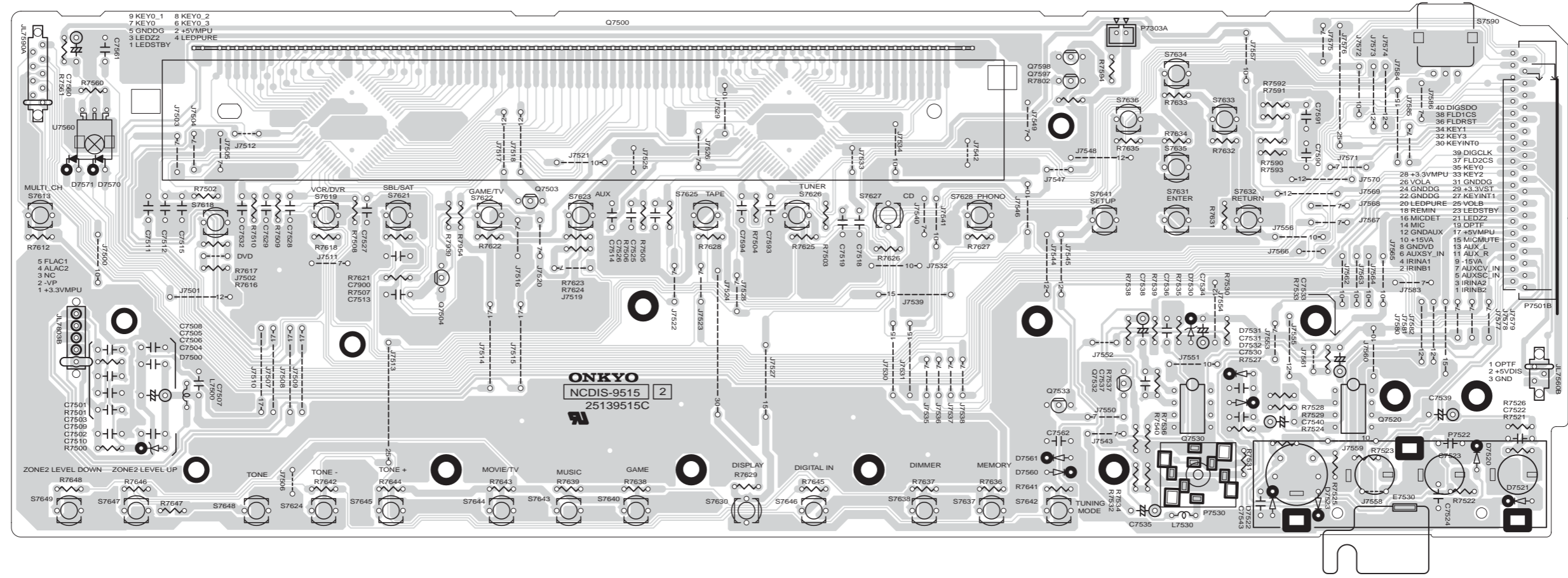
A B C D E F G H

PRINTED CIRCUIT BOARD VIEWS-11

U21 DISPLAY PC BOARD (NADIS-9515)

Component side

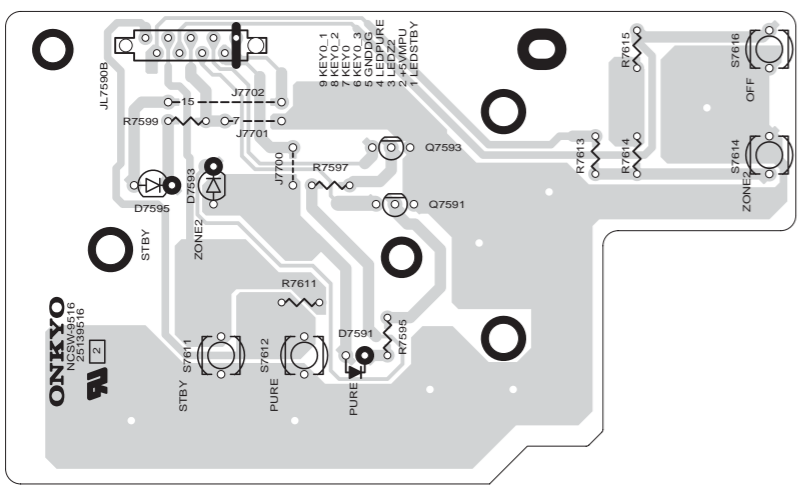
1
2
3



U22 SWITCH PC BOARD (NASW-9516)

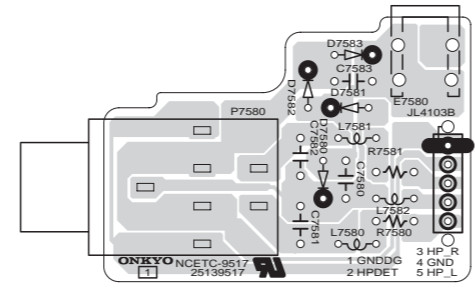
Component side

4



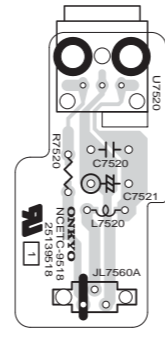
U23 HEADPHONE PC BOARD (NAETC-9517)

Component side



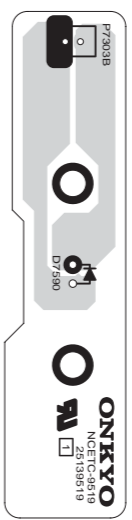
U24 OPT TERMINAL PC BOARD (NAETC-9518)

Component side



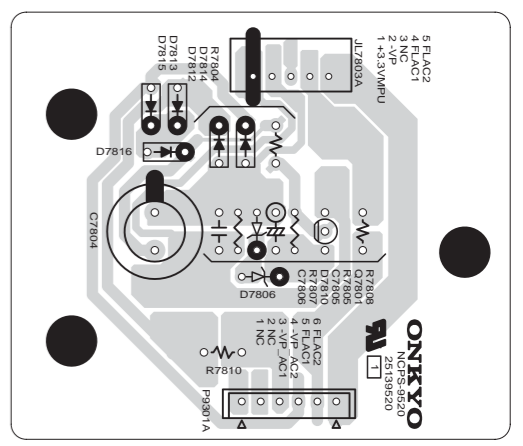
U25 DISPLAY PC BOARD (NAETC-9519)

Component side



U26 POWER SUPPLY PC BOARD (NAPS-9520)

Component side



5

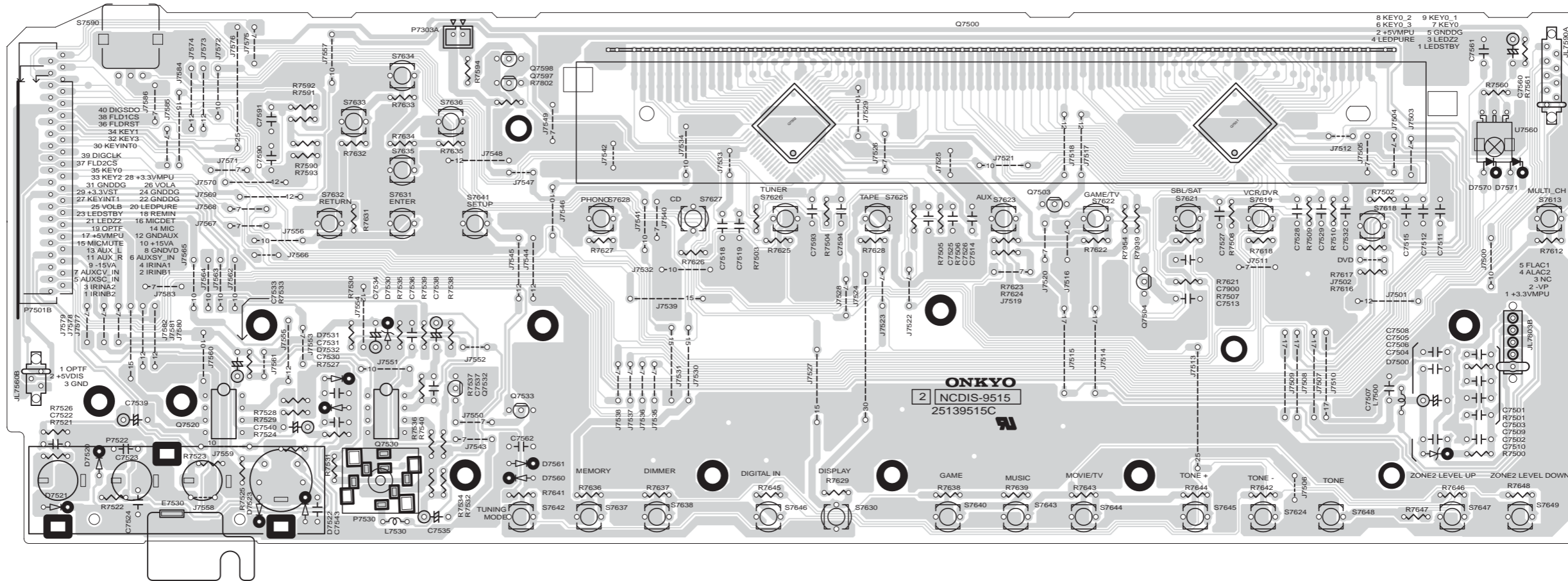
A B C D E F G H

PRINTED CIRCUIT BOARD VIEWS-12

U21 DISPLAY PC BOARD (NADIS-9515)

Soldering side

1



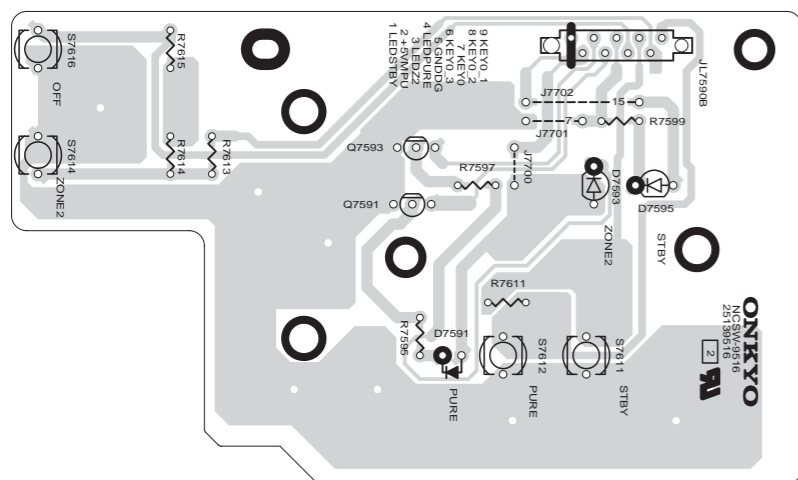
2

3

U22 SWITCH PC BOARD (NASW-9516)

Soldering side

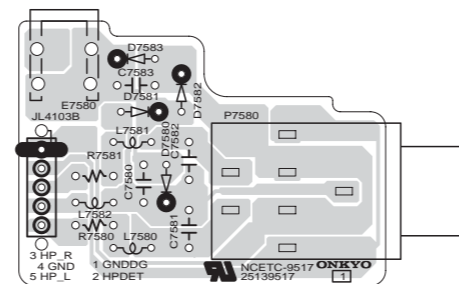
4



5

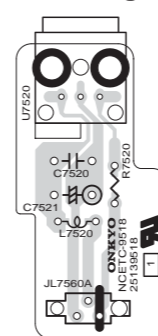
U23 HEADPHONE PC BOARD (NAETC-9517)

Soldering side



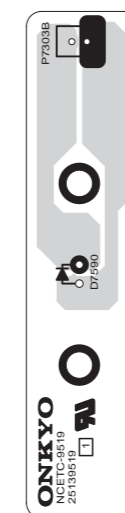
U24 OPT TERMINAL PC BOARD (NAETC-9518)

Soldering side



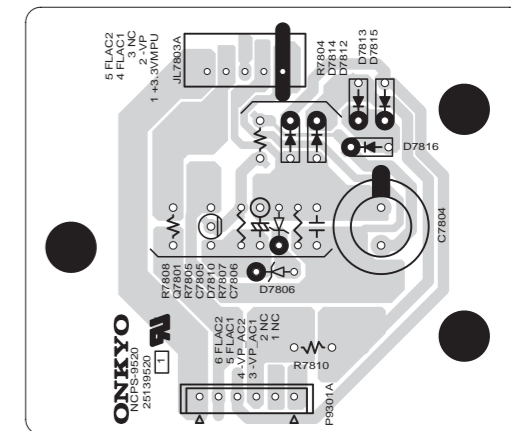
U25 DISPLAY PC BOARD (NAETC-9519)

Soldering side



U26 POWER SUPPLY PC BOARD (NAPS-9520)

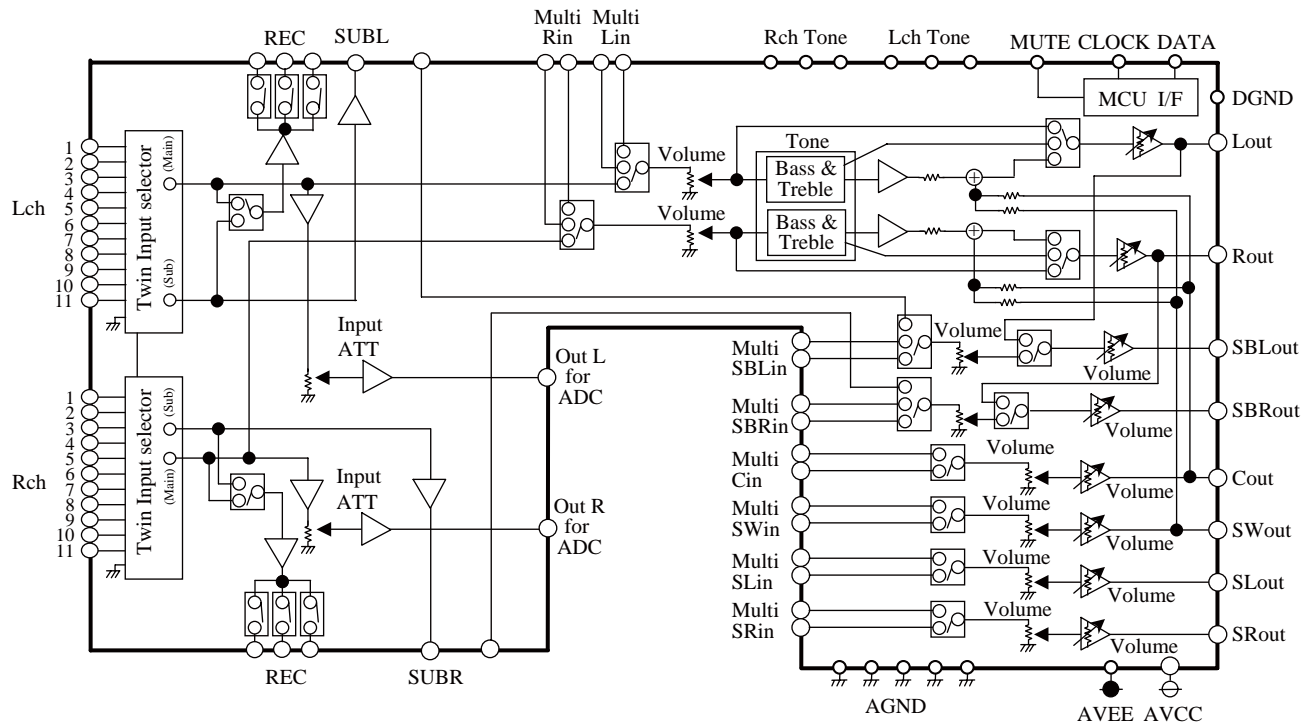
Soldering side



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -1

Q5501: R2A15215FP (8 ch Electronic Volume, 11 Input Selector and Tone Control)

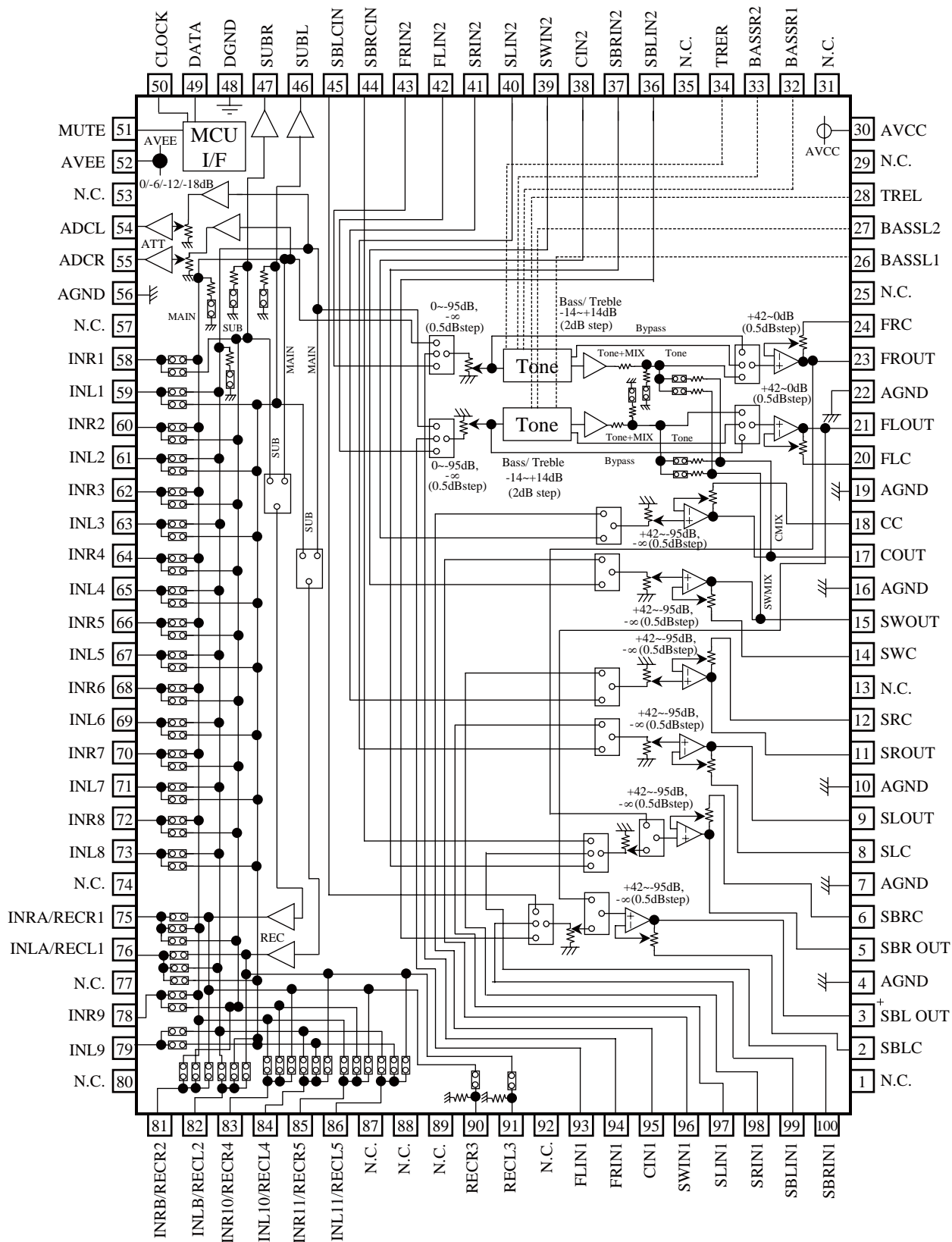
SYSTEM BLOCK DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -2

Q5501: R2A15215FP (8 ch Electronic Volume, 11 Input Selector and Tone Control)

BLOCK DIAGRAM AND PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -3

Q5501: R2A15215FP (8 ch Electronic Volume, 11 Input Selector and Tone Control)

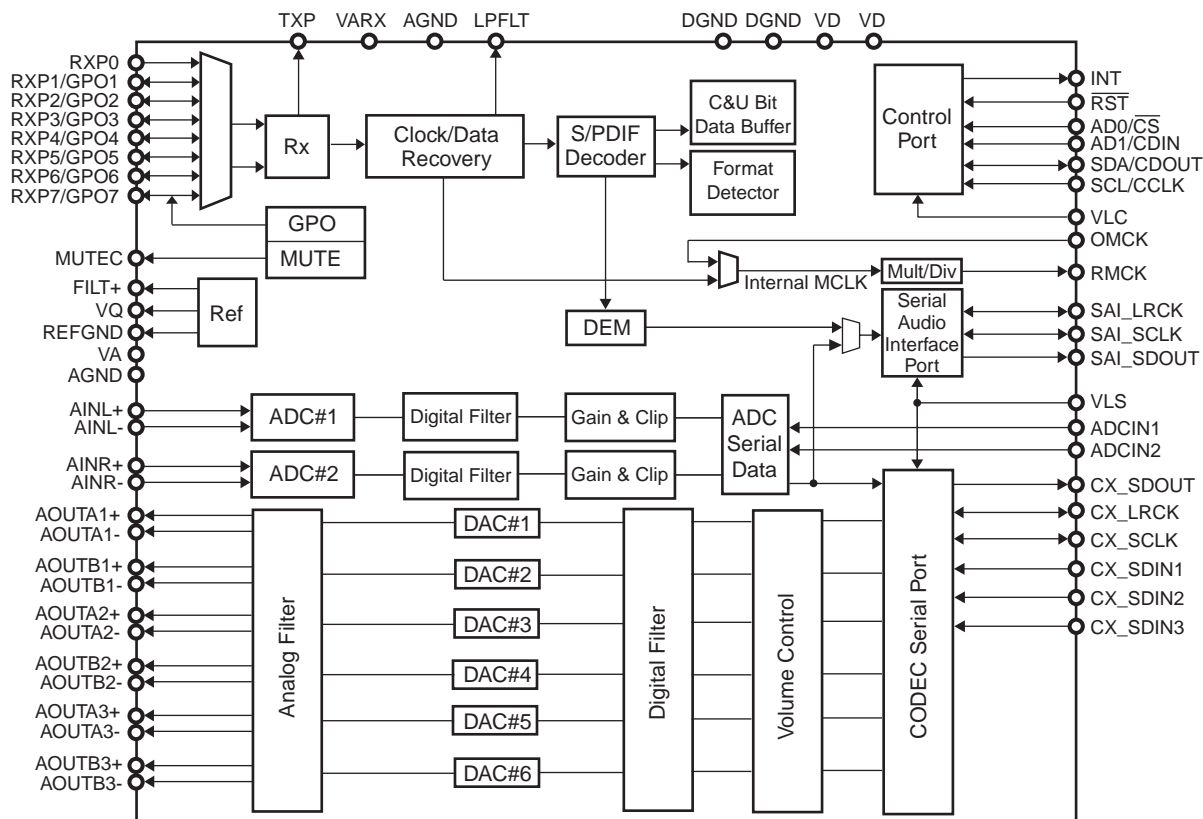
TERMINAL DESCRIPTION

PIN No.	Name	Function
23,21, 17,15, 11,9, 5,3	FRONT,FLOUT, COUT,SWOUT, SROUT, SLOUT, SBROUT,SBLOUT	Output pin of FL/FR/C/SW/SL/SR/SBL/SBR channel
24,20, 18,14, 12,8, 6,2	FRC,FLC, CC,SWC, SRC,SLC, SBRC,SBLC	Connects capacitor for reducing click noise of L/R/C/SW/SL/SR/SBL/SBR channel volume
4,7,10,16, 19,22,56	AGND	Analog ground of internal circuit
28,34	TREL, TRER	Frequency characteristic setting pin of L/R channel tone control (Treble)
26,27, 32,33	BASSL1,BASSL2 BASSR1,BASSR2	Frequency characteristic setting pin of L/R channel tone control (Bass)
30	AVCC	Positive power supply to internal circuit
43,42, 41,40, 39,38, 37,36	FRIN2, FLIN2, SRN2,SLIN2, SWIN2,CIN2, SBRIN2,SBLIN2	Input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
93,94, 95,96, 97,98, 99,100	FLIN1, FRIN1, CIN1,SWIN1, SLIN1,SRIN1, SBLIN1,SBRIN1	
48	DGND	Digital ground of internal circuit
49	DATA	Input pin of control data
50	CLOCK	Input pin of control clock
52	AVEE	Negative power supply to internal circuit
59,61,63, 65,67,69, 71,73,79	INL1,INL2, INL3, INL4,INL5,INL6, INL7,INL8,INL9	Input pin of L/R channel (Input Selector)
58,60,62, 64,66,68, 70,72,78	INR1,INR2, INR3, INR4,INR5,INR6, INR7,INR8,INR9	
51	MUTE	Outside Mute Control PIN
44,45	SBRCIN,SBLCIN	Input pin for SBL/SBR channel Volume
46,47	SUBL,SUBR	Output pin for L/R channel SUB Output
54,55	ADCL, ADCR	Output pin for L/R channel ADC
90,91	RECR3,RECL3	Output pin for L/R channel REC Output
75,76, 81,82, 83,84, 85,86	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
1,13,25,29, 31,35,53, 57,74,77,80, 87,88,89,92	N.C.	No Connected PIN

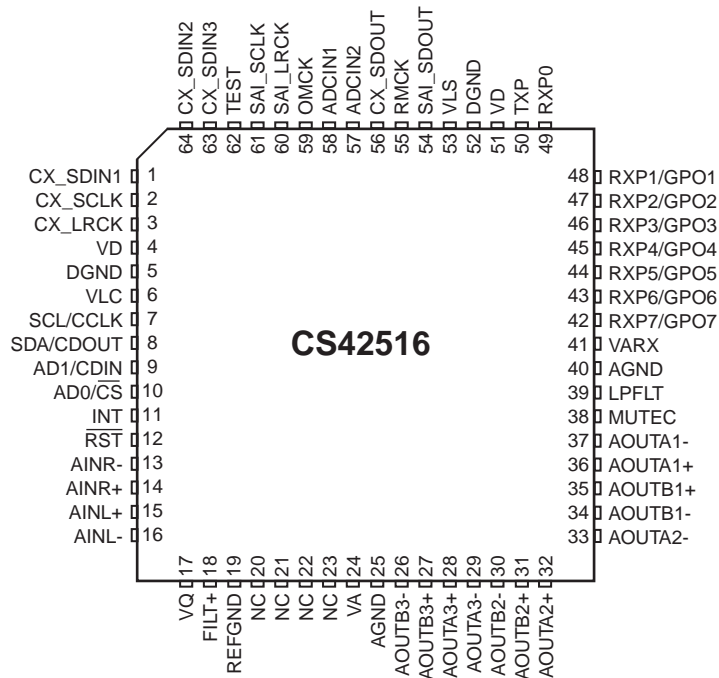
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -4

Q1324 : CS42516-CQZ (192 kHz, 6-Ch Codec with S/PDIF Receiver)

BLOCK DIAGRAM



PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -5

Q1324 : CS42516-CQZ (192 kHz, 6-Ch Codec with S/PDIF Receiver)

TERMINAL DESCRIPTION(1/2)

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

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -6

Q1324 : CS42516-CQZ (192 kHz, 6-Ch Codec with S/PDIF Receiver)

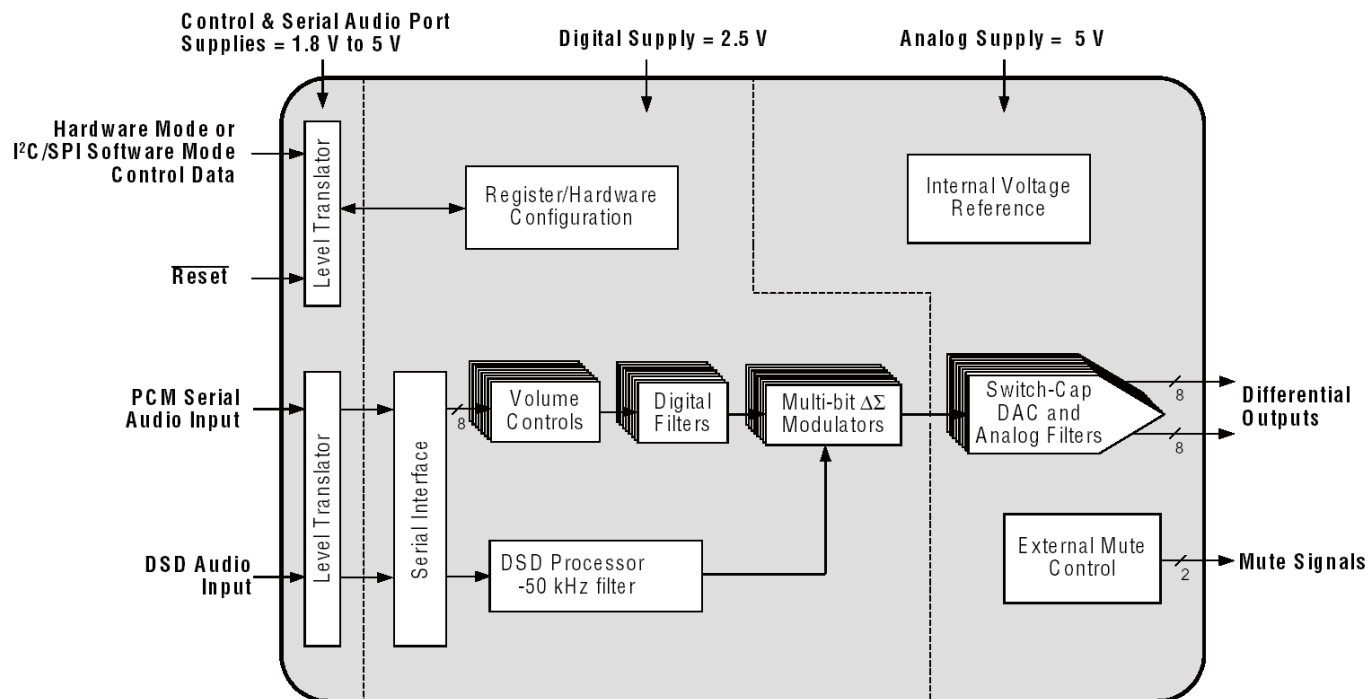
TERMINAL DESCRIPTION(2/2)

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

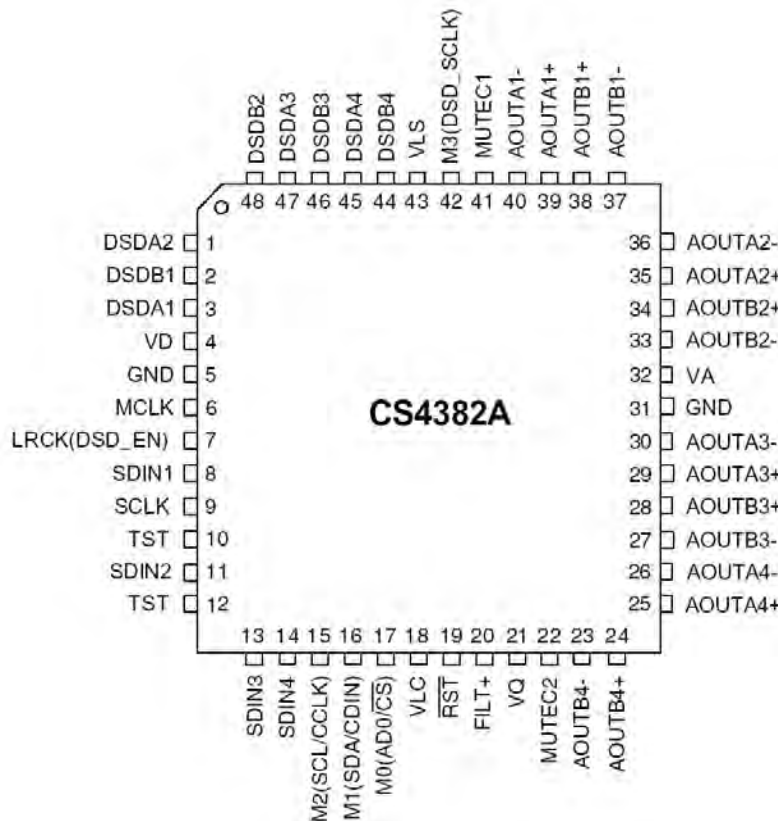
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -7

Q1421 : CS4382A (192 kHz, 8-ch D/A Converter)

BLOCK DIAGRAM



PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -8

Q1421 : CS4382A (192 kHz, 8-ch D/A Converter)

TERMINAL DESCRIPTION(1/2)

Pin Name	#	Pin Description
VD	4	Digital Power (Input) - Positive power supply for the digital section.
GND	5 31	Ground (Input) - Ground reference. Should be connected to analog ground.
MCLK	6	Master Clock (Input) - Clock source for the delta-sigma modulator and digital filters.
LRCK	7	Left Right Clock (Input) - Determines which channel, Left or Right, is currently active on the serial audio data line. The frequency of the left/right clock must be at the audio sample rate, Fs.
SDIN1	8	Serial Audio Data Input (Input) - Input for two's complement serial audio data.
SDIN2	11	
SDIN3	13	
SDIN4	14	
SCLK	9	Serial Clock (Input) - Serial clock for the serial audio interface.
VLC	18	Control Port Power (Input) - Determines the required signal level for the Control Port. Refer to the Recommended Operating Conditions for appropriate voltages.
$\overline{\text{RST}}$	19	Reset (Input) - The device enters a low power mode and all internal registers are reset to their default settings when low.
FILT+	20	Positive Voltage Reference (Output) - Positive reference voltage for the internal sampling circuits. Requires the capacitive decoupling to analog ground, as shown in the Typical Connection Diagram.
VQ	21	Quiescent Voltage (Output) - Filter connection for internal quiescent voltage. VQ must be capacitively coupled to analog ground, as shown in the Typical Connection Diagram. The nominal voltage level is specified in the Analog Characteristics and Specifications section. VQ presents an appreciable source impedance and any current drawn from this pin will alter device performance. However, VQ can be used to bias the analog circuitry assuming there is no AC signal component and the DC current is less than the maximum specified in the Analog Characteristics and Specifications section.
MUTE1 MUTE234	41 22	Mute Control (Output) - The Mute Control pins go high during power-up initialization, reset, muting, power-down or if the master clock to left/right clock frequency ratio is incorrect. These pins are 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.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -9

Q1421 : CS4382A (192 kHz, 8-ch D/A Converter)

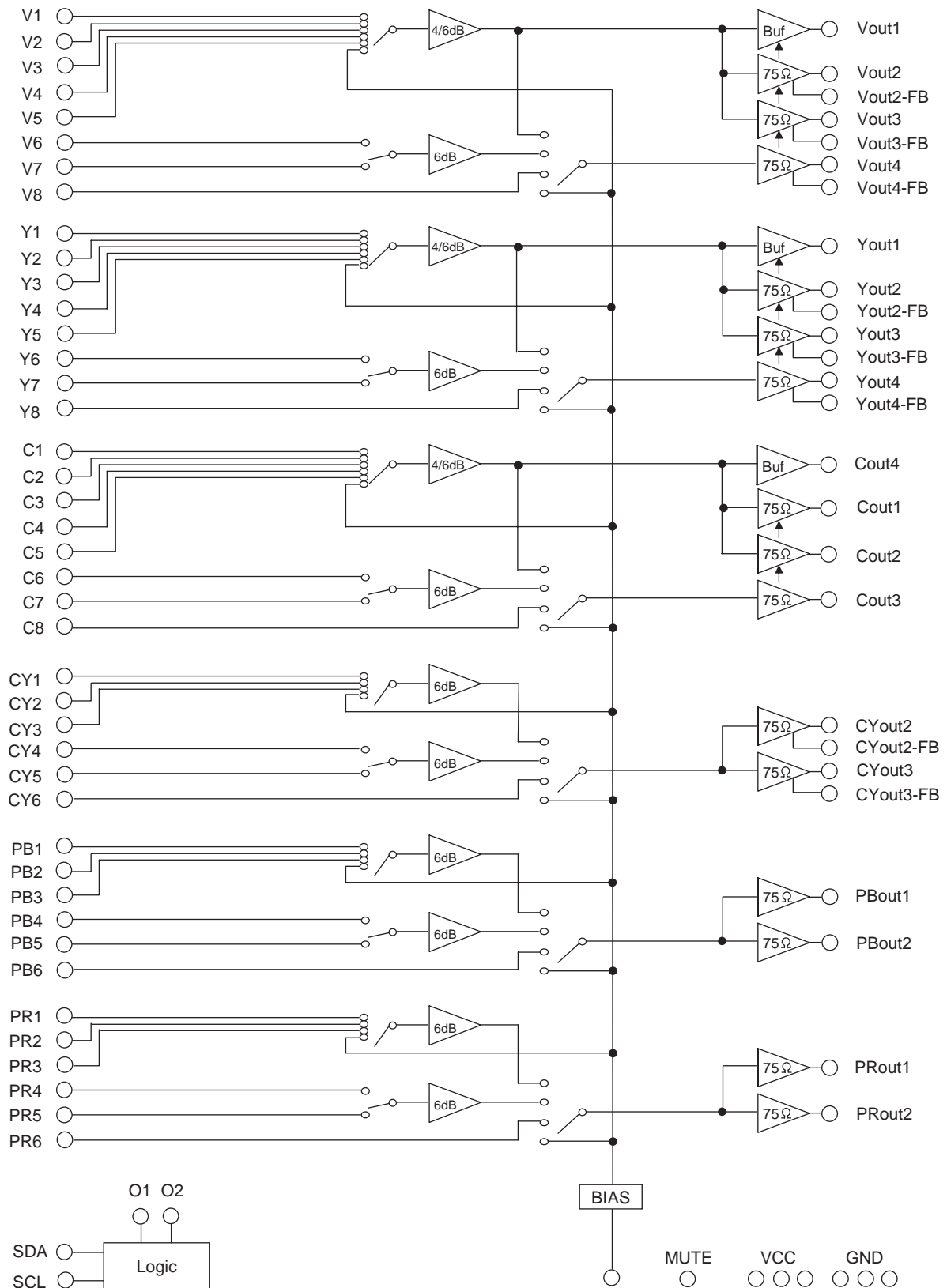
TERMINAL DESCRIPTION(2/2)

Pin Name	#	Pin Description
AOUTA1 +,-	39, 40	Differential Analog Output (Output) - The full-scale differential analog output level is specified in the Analog Characteristics specification table.
AOUTB1 +,-	38, 37	
AOUTA2 +,-	35, 36	
AOUTB2 +,-	34, 33	
AOUTA3 +,-	29, 30	
AOUTB3 +,-	28, 27	
AOUTA4 +,-	25, 26	
AOUTB4 +,-	24, 23	
VA	32	Analog Power (Input) - Positive power supply for the analog section.
VLS	43	Serial Audio Interface Power (Input) - Determines the required signal level for the serial audio interface. Refer to the Recommended Operating Conditions for appropriate voltages.
TST	10 12	Test - These pins need to be tied to analog ground.
Software Mode Definitions		
SCL/CCLK	15	Serial Control Port Clock (Input) - Serial clock for the serial Control Port. Requires an external pull-up resistor to the logic interface voltage in I ² C [®] Mode as shown in the Typical Connection Diagram.
SDA/CDIN	16	Serial Control Data (Input/Output) - SDA is a data I/O line in I ² C Mode and requires an external pull-up resistor to the logic interface voltage, as shown in the Typical Connection Diagram. CDIN is the input data line for the Control Port interface in SPI [™] Mode.
AD0/ $\overline{\text{CS}}$	17	Address Bit 0 (I²C) / Control Port Chip Select (SPI) (Input) - AD0 is a chip address pin in I ² C Mode; $\overline{\text{CS}}$ is the chip select signal for SPI format.
Stand-Alone Definitions		
M0	17	Mode Selection (Input) - Determines the operational mode of the device.
M1	16	
M2	15	
M3	42	
DSD Definitions		
DSD_SCLK	42	DSD Serial Clock (Input) - Serial clock for the Direct Stream Digital audio interface.
DSD_EN	7	DSD-Enable (Input) - When held at logic '1' the device will enter DSD Mode (Stand-Alone mode only).
DSDA1	3	Direct Stream Digital Input (Input) - Input for Direct Stream Digital serial audio data.
DSDB1	2	
DSDA2	1	
DSDB2	48	
DSDA3	47	
DSDB3	46	
DSDA4	45	
DSDB4	44	

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -10

Q4100: AN15881A (Video SW for TV with Multi-signal 14 Inputs and 4 Outputs)

BLOCK DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -11

Q4100: 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 -12**Q4100: 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 ² 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 ² C bus clock input

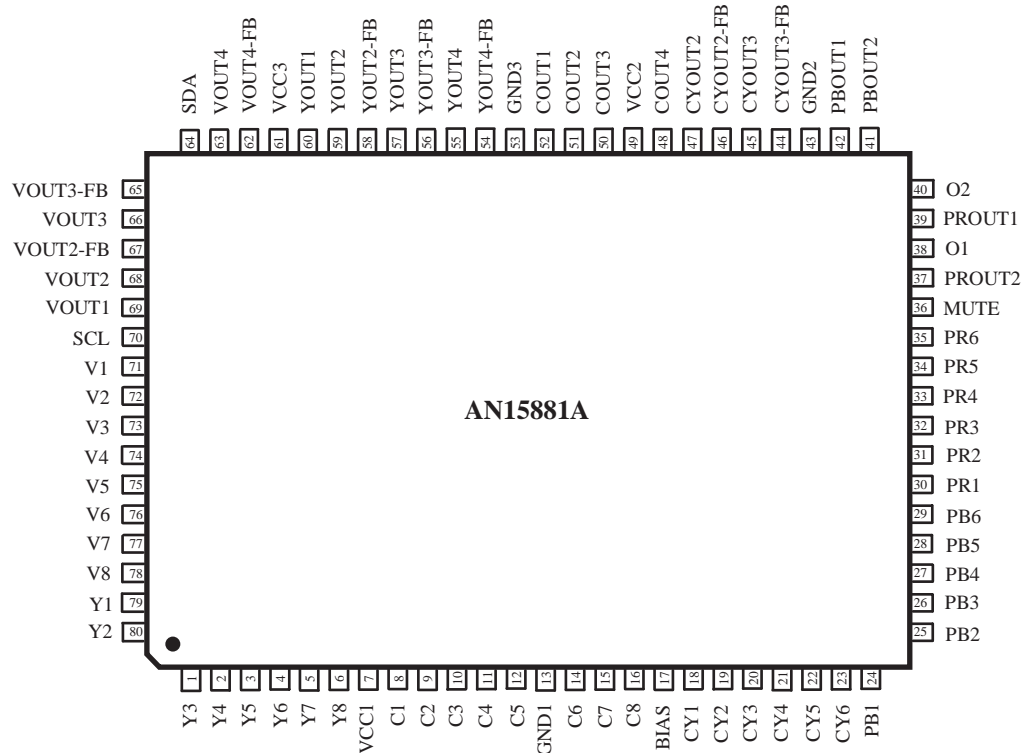
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -13

Q4100: 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

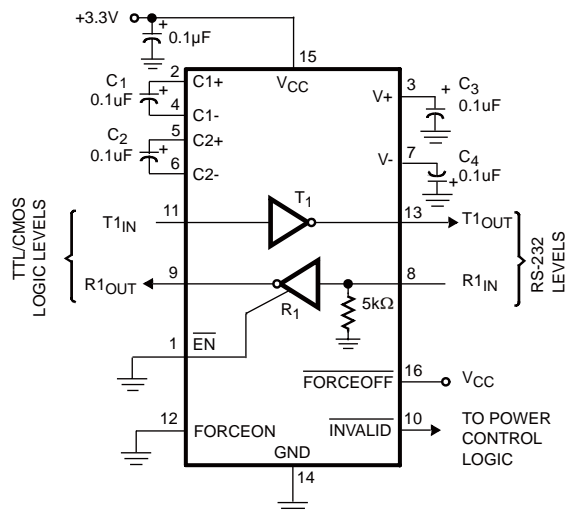
PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -14

Q4700 : ICL3221ECVZ (RS-232 Transmitter/Receiver)

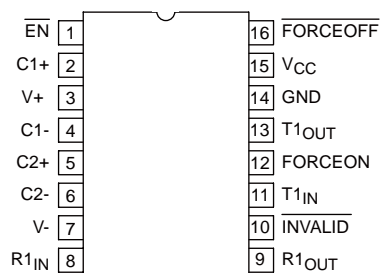
BLOCK DIAGRAM



TERMINAL DESCRIPTION

PIN	FUNCTION
V _{CC}	System power supply input (3.0V to 5.5V).
V+	Internally generated positive transmitter supply (+5.5V).
V-	Internally generated negative transmitter supply (-5.5V).
GND	Ground connection.
C1+	External capacitor (voltage doubler) is connected to this lead.
C1-	External capacitor (voltage doubler) is connected to this lead.
C2+	External capacitor (voltage inverter) is connected to this lead.
C2-	External capacitor (voltage inverter) is connected to this lead.
T _{IN}	TTL/CMOS compatible transmitter Inputs.
T _{OUT}	RS-232 level (nominally +/- 5.5V) transmitter outputs.
R _{IN}	RS-232 compatible receiver inputs.
R _{OUT}	TTL/CMOS level receiver outputs.
R _{OUTB}	TTL/CMOS level, noninverting, always enabled receiver outputs.
$\overline{\text{INVALID}}$	Active low output that indicates if no valid RS-232 levels are present on any receiver input.
$\overline{\text{EN}}$	Active low receiver enable control; doesn't disable R _{OUTB} outputs.
$\overline{\text{SHDN}}$	Active low input to shut down transmitters and on-board power supply, to place device in low power mode.
$\overline{\text{FORCEOFF}}$	Active low to shut down transmitters and on-chip power supply. This overrides any automatic circuitry and FORCEON (See Table 2).
FORCEON	Active high input to override automatic powerdown circuitry thereby keeping transmitters active. ($\overline{\text{FORCEOFF}}$ must be high).

PIN CONFIGURATION

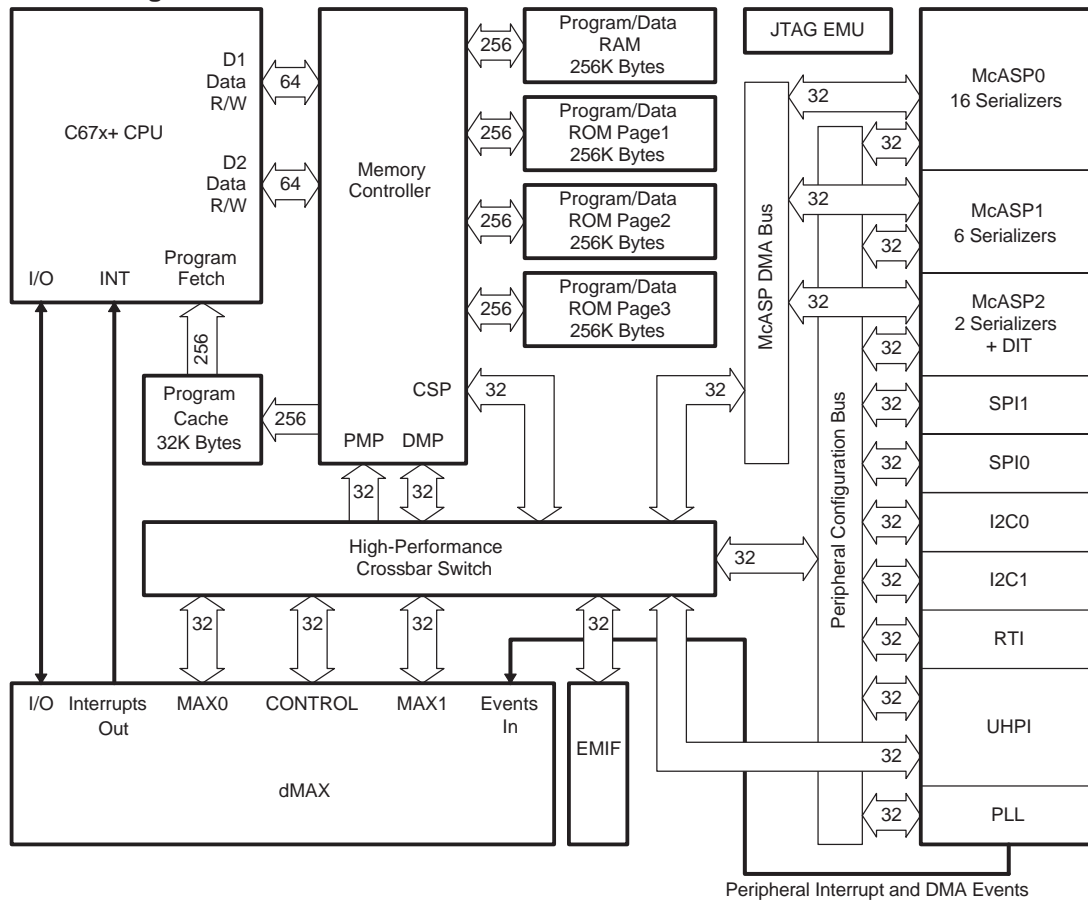


IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -15

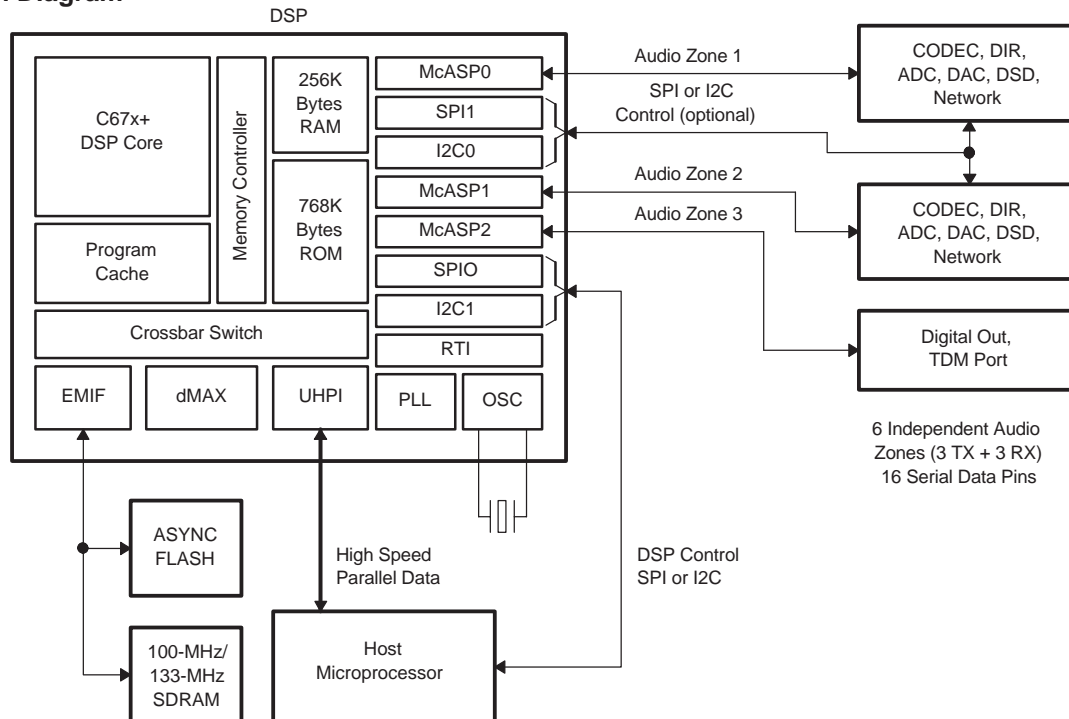
Q3401, Q3501: D790E001BZDH300 (Audio DSP)

BLOCK DIAGRAM

Device Block Diagram



System Diagram



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -16

Q3401, Q3501: D790E001BZDH300 (Audio DSP)

PIN CONFIGURATION(1/2)

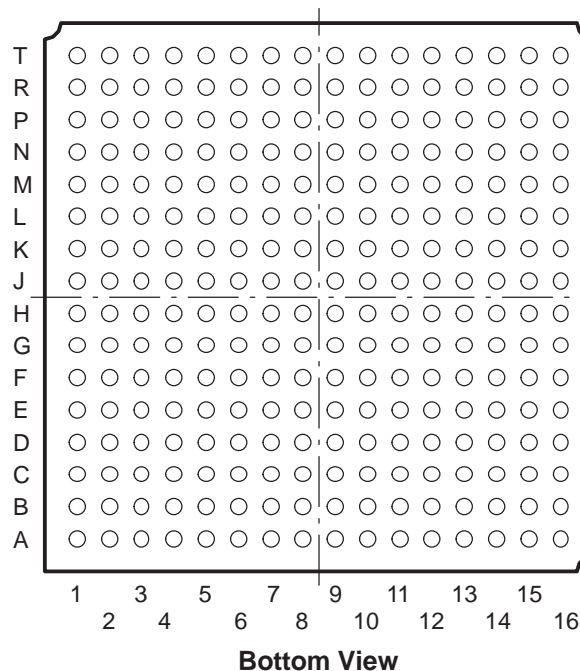
PIN MAP

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
T	V _{SS}	DV _{DD}	$\overline{\text{EM_WE}}$	EM_D[7]	EM_D[5]	EM_D[3]	V _{SS}	EM_D[0]	EM_D[14]	V _{SS}	EM_D[11]	EM_D[9]	$\overline{\text{EM_WE_DQM}}[1]$	EM_CKE	DV _{DD}	V _{SS}	T
R	DV _{DD}	EM_D[23] /UHPI_ HA[7]	$\overline{\text{EM_CAS}}$	$\overline{\text{EM_WE_DQM}}[0]$	EM_D[6]	EM_D[4]	EM_D[2]	EM_D[1]	EM_D[15]	EM_D[13]	EM_D[12]	EM_D[10]	EM_D[8]	EM_CLK	$\overline{\text{EM_WE_DQM}}[3]$	DV _{DD}	R
P	TCK	UHPI_ HD[24]	EM_D[21] /UHPI_ HA[5]	EM_D[20] /UHPI_ HA[4]	EM_D[19] /UHPI_ HA[3]	EM_D[17] /UHPI_ HA[1]	EM_D[31] /UHPI_ HA[15]	DV _{DD}	EM_D[28] /UHPI_ HA[12]	EM_D[26] /UHPI_ HA[10]	EM_D[24] /UHPI_ HA[8]	EM_A[12]	$\overline{\text{EM_WE_DQM}}[2]$	UHPI_ HD[7]	EM_A[11]	EM_A[9]	P
N	$\overline{\text{EMU}}[1]$	UHPI_ HD[25]	UHPI_ HD[26]	EM_D[22] /UHPI_ HA[6]	DV _{DD}	EM_D[18] /UHPI_ HA[2]	EM_D[16] /UHPI_ HA[0]	EM_D[30] /UHPI_ HA[14]	EM_D[29] /UHPI_ HA[13]	EM_D[27] /UHPI_ HA[11]	EM_D[25] /UHPI_ HA[9]	DV _{DD}	UHPI_ HD[5]	UHPI_ HD[6]	EM_A[8]	EM_A[7]	N
M	$\overline{\text{EMU}}[0]$	TDO	UHPI_ HD[27]	DV _{DD}	V _{SS}	CV _{DD}	CV _{DD}	CV _{DD}	CV _{DD}	CV _{DD}	CV _{DD}	V _{SS}	DV _{DD}	UHPI_ HD[2]	EM_A[6]	EM_A[5]	M
L	TDI	UHPI_ HD[30]	UHPI_ HD[28]	UHPI_ HD[29]	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	UHPI_ HD[3]	UHPI_ HD[4]	EM_A[4]	EM_A[3]	L
K	V _{SS}	PLLHV	TMS	$\overline{\text{TRST}}$	CV _{DD}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	CV _{DD}	UHPI_ HD[0]	UHPI_ HD[1]	EM_A[2]	V _{SS}	K
J	OSCV _{SS}	OSCIN	OSCOU	OSCV _{DD}	CV _{DD}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	CV _{DD}	UHPI_ HD[15]	DV _{DD}	EM_A[1]	EM_A[0]	J
H	UHPI_ HD[16] /HHWIL	CLKIN	V _{SS}	UHPI_ HD[31]	CV _{DD}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	CV _{DD}	UHPI_ HD[14]	UHPI_ HD[13]	EM_A[10]	EM_BA[1]	H
G	V _{SS}	$\overline{\text{RESET}}$	UHPI_ HD[17]	UHPI_ HD[18]	CV _{DD}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	CV _{DD}	UHPI_ HD[12]	UHPI_ HD[11]	EM_BA[0]	V _{SS}	G
F	AFSR1	AFSX1	UHPI_ HD[19]	UHPI_ HD[20]	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	V _{SS}	UHPI_ HD[10]	UHPI_ HD[9]	$\overline{\text{EM_CS}}[0]$	$\overline{\text{EM_RAS}}$	F
E	ACLKR1	ACLKX1	UHPI_ HD[21]	DV _{DD}	V _{SS}	CV _{DD}	CV _{DD}	CV _{DD}	CV _{DD}	CV _{DD}	CV _{DD}	V _{SS}	DV _{DD}	UHPI_ HD[8]	$\overline{\text{EM_CS}}[2]$	EM_R $\overline{\text{W}}$	E
D	AHCLKX1	AMUTE1	UHPI_ HD[22]	DV _{DD}	DV _{DD}	$\overline{\text{UHPI_HRDY}}$	$\overline{\text{UHPI_HDS}}[1]$	UHPI_ HR $\overline{\text{W}}$	UHPI_ HCNTL[0]	AMUTE2/ HINT	ACLKX2	DV _{DD}	DV _{DD}	EM_WAIT	$\overline{\text{EM_OE}}$	SPI0_ENA /I2C1_ SDA	D
C	AMUTE0	AHCLKX0 /AHCLKX2	UHPI_ HD[23]	$\overline{\text{UHPI_HBE}}[2]$	$\overline{\text{UHPI_HBE}}[1]$	$\overline{\text{UHPI_HBE}}[0]$	$\overline{\text{UHPI_HDS}}[2]$	$\overline{\text{UHPI_HCS}}$	$\overline{\text{UHPI_HAS}}$	UHPI_ HCNTL[1]	AFSX2	AFSR2	ACLKR2	AHCLKR2	SPI0_SCS /I2C1_ SCL	SPI0_CLK /I2C0_ SCL	C
B	DV _{DD}	$\overline{\text{UHPI_HBE}}[3]$	AHCLKR0 /AHCLKR1	AFSR0	AXR0[15] /AXR2[0]	AXR0[13] /AXR1[0]	AXR0[12] /AXR1[1]	AXR0[10] /AXR1[3]	AXR0[8] /AXR1[5] /SPI1_ SOMI	AXR0[7] /SPI1_ CLK	AXR0[5] /SPI1_ SCS	AXR0[3]	AXR0[1]	SPI0_ SOMI /I2C0_ SDA	SPI0_ SIMO	DV _{DD}	B
A	V _{SS}	DV _{DD}	AFSX0	ACLKX0	ACLKR0	AXR0[14] /AXR2[1]	V _{SS}	AXR0[11] /AXR1[2]	AXR0[9] /AXR1[4] /SPI1_ SIMO	V _{SS}	AXR0[6] /SPI1_ ENA	AXR0[4]	AXR0[2]	AXR0[0]	DV _{DD}	V _{SS}	A

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -17

Q3401, Q3501: D790E001BZDH300 (Audio DSP)

PIN CONFIGURATION(2/2)



TERMINAL DESCRIPTION(1/5)

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

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -18

Q3401, Q3501: D790E001BZDH300 (Audio DSP)

TERMINAL DESCRIPTION(2/5)

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

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

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -19

Q3401, Q3501: D790E001BZDH300 (Audio DSP)

TERMINAL DESCRIPTION(3/5)

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

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -20

Q3401, Q3501: D790E001BZDH300 (Audio DSP)

TERMINAL DESCRIPTION(4/5)

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

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -21

Q3401, Q3501: D790E001BZDH300 (Audio DSP)

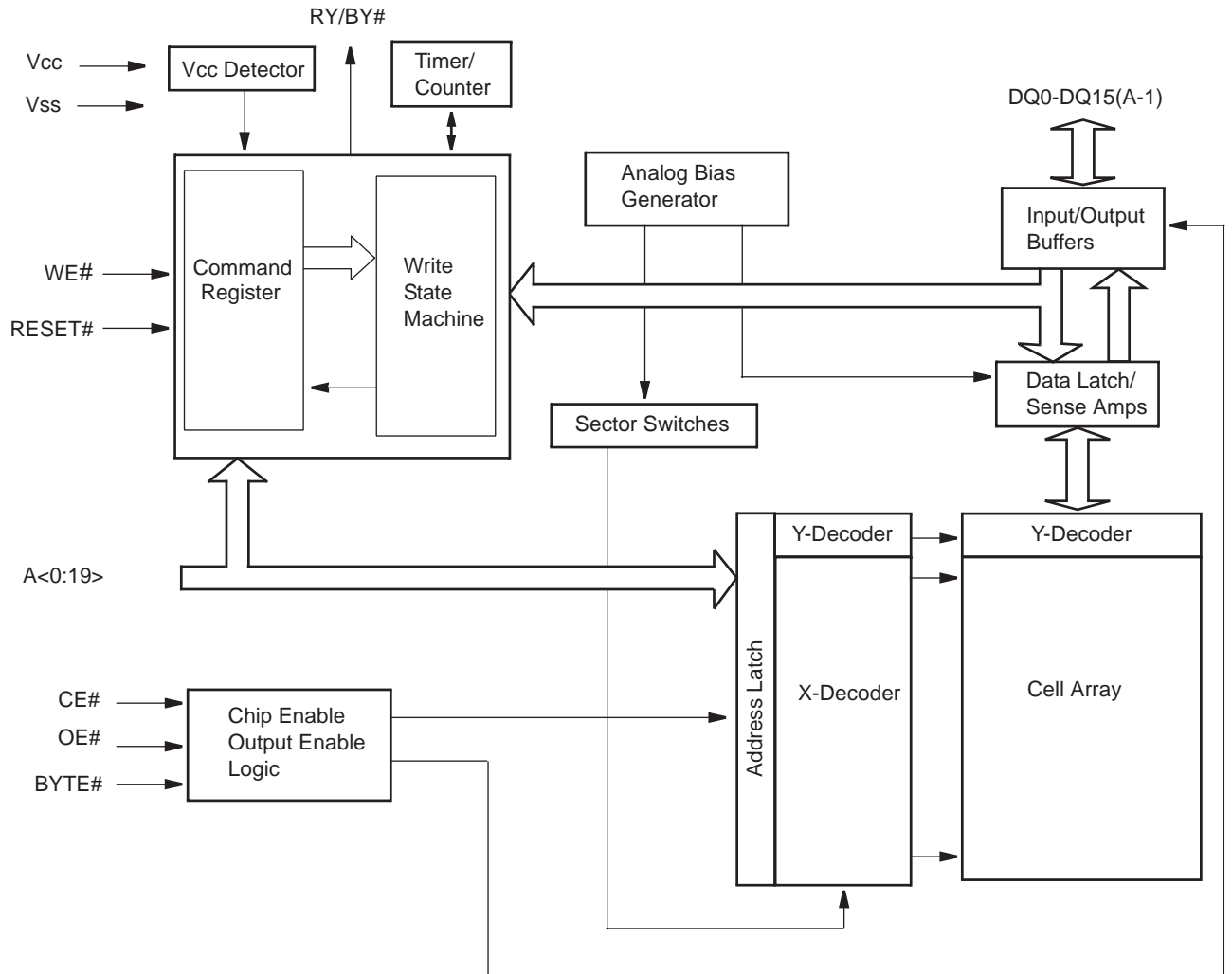
TERMINAL DESCRIPTION(5/5)

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

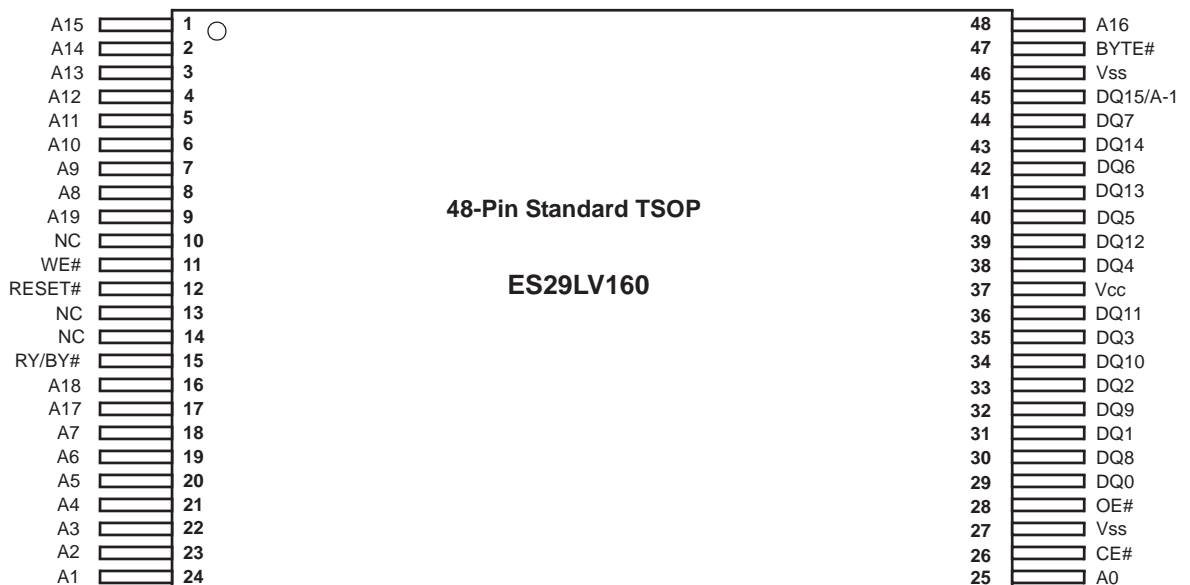
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -22

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

BLOCK DIAGRAM



PIN CONFIGURATION



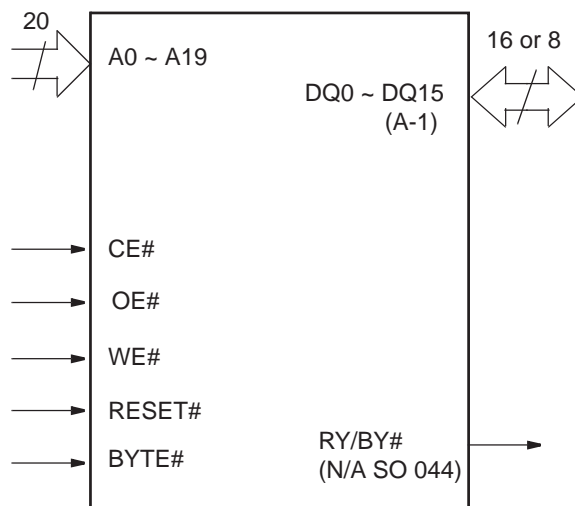
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -23

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

TERMINAL DESCRIPTION

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

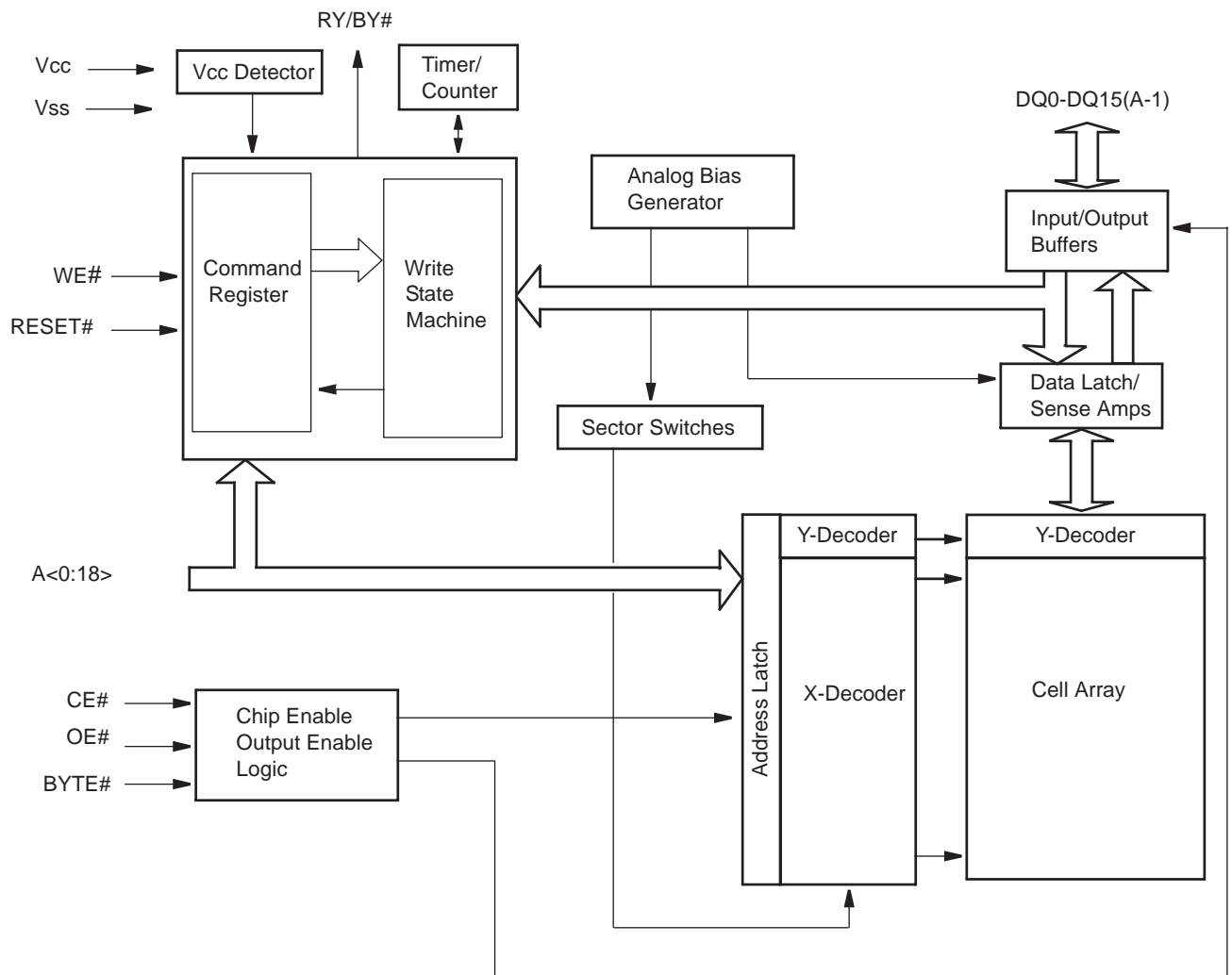
LOGIC SYMBOL



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -24

Q3551 : ES29LV800ET-70TG (8 Mbit Flash Memory)

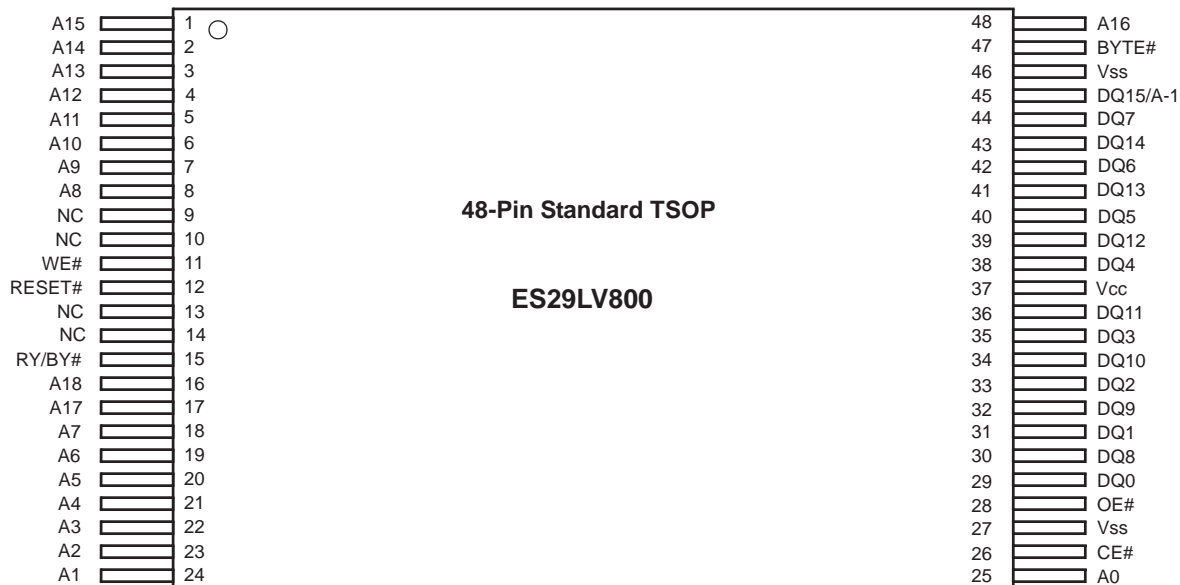
BLOCK DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -25

Q3551 : ES29LV800ET-70TG (8 Mbit Flash Memory)

PIN CONFIGURATION



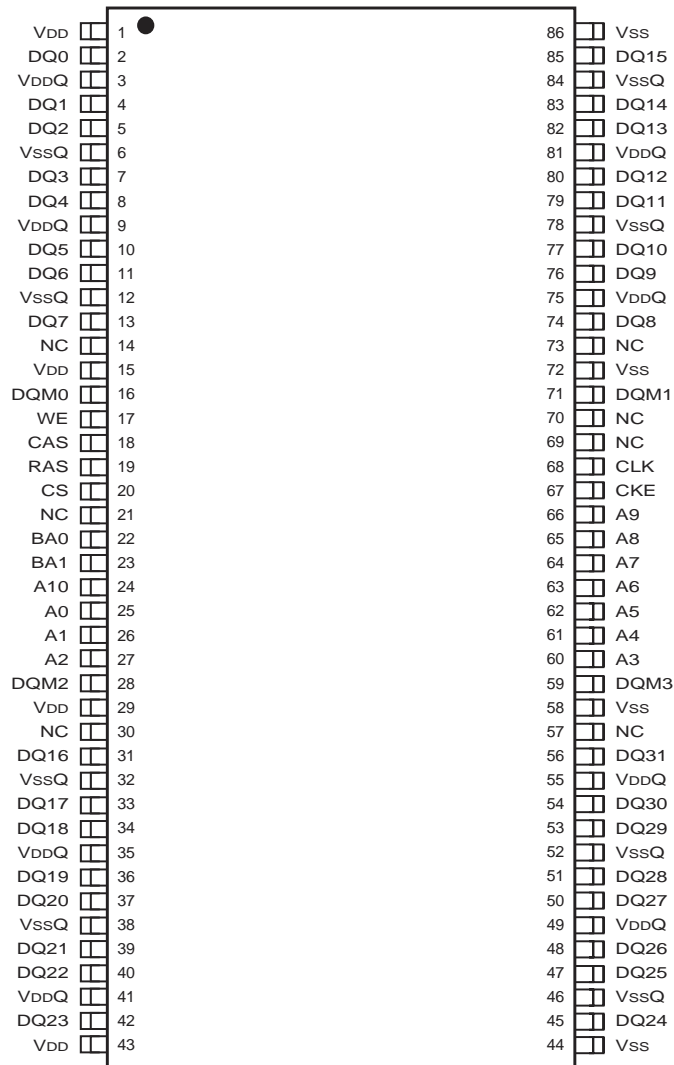
TERMINAL DESCRIPTION

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

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -27

Q3461, Q3561 : IS42S32200E-6TL (64 Mbit SD RAM)

PIN CONFIGURATION



PIN DESCRIPTIONS

A0-A10	Row Address Input
A0-A7	Column Address Input
BA0, BA1	Bank Select Address
DQ0 to DQ31	Data I/O
CLK	System Clock Input
CKE	Clock Enable
CS	Chip Select
RAS	Row Address Strobe Command
CAS	Column Address Strobe Command

WE	Write Enable
DQM0-DQM3	x32 Input/Output Mask
VDD	Power
Vss	Ground
VDDQ	Power Supply for I/O Pin
VssQ	Ground for I/O Pin
NC	No Connection

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -28

Q3461, Q3561 : IS42S32200E-6TL (64 Mbit SD RAM)

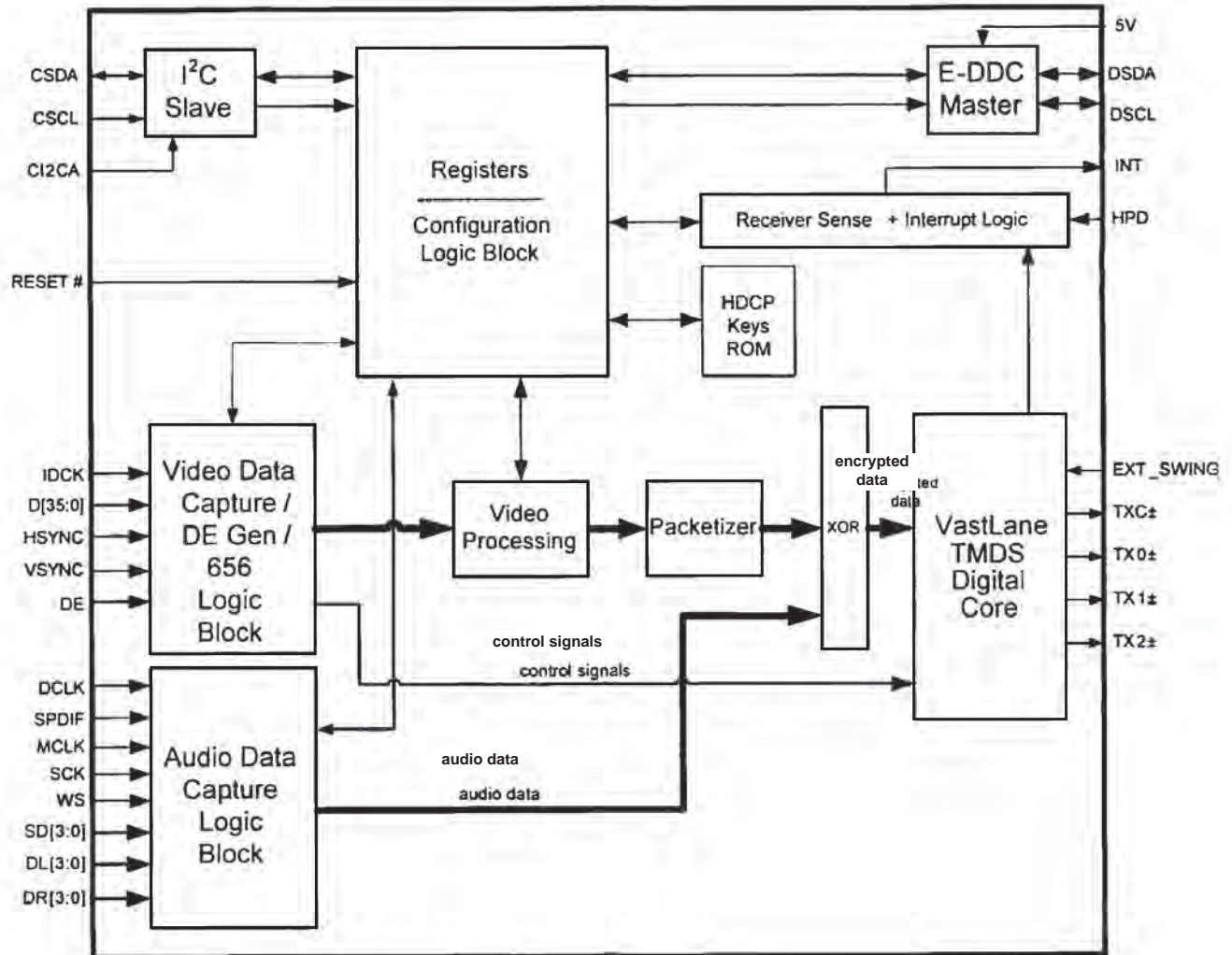
TERMINAL DESCRIPTION

Symbol	Pin No.	Type	Function
A0-A10	25 to 27 60 to 66 24	Input Pin	Address Inputs: A0-A10 are sampled during the ACTIVE command (row-address A0-A10) and READ/WRITE command (A0-A7 with A10 defining auto precharge) to select one location out of the memory array in the respective bank. A10 is sampled during a PRECHARGE command to determine if all banks are to be precharged (A10 HIGH) or bank selected by BA0, BA1 (LOW). The address inputs also provide the op-code during a LOAD MODE REGISTER command.
BA0, BA1	22,23	Input Pin	Bank Select Address: BA0 and BA1 defines which bank the ACTIVE, READ, WRITE or PRECHARGE command is being applied.
CAS	18	Input Pin	CAS, in conjunction with the RAS and WE, forms the device command. See the "Command Truth Table" for details on device commands.
CKE	67	Input Pin	The CKE input determines whether the CLK input is enabled. The next rising edge of the CLK signal will be valid when is CKE HIGH and invalid when LOW. When CKE is LOW, the device will be in either power-down mode, clock suspend mode, or self refresh mode. CKE is an asynchronous input.
CLK	68	Input Pin	CLK is the master clock input for this device. Except for CKE, all inputs to this device are acquired in synchronization with the rising edge of this pin.
CS	20	Input Pin	The CS input determines whether command input is enabled within the device. Command input is enabled when CS is LOW, and disabled with CS is HIGH. The device remains in the previous state when CS is HIGH.
DQ0 to DQ31	2, 4, 5, 7, 8, 10,11,13 74,76,77,79,80,82,83,85 45,47,48,50,51,53,54,56 31,33,34,36,37,39,40,42	DQ Pin	DQ0 to DQ15 are DQ pins. DQ through these pins can be controlled in byte units using the DQM0-DQM3 pins
DQM0 DQM3	16,28,59,71	Input Pin	DQMx control the lower and upper bytes of the DQ buffers. In read mode, the output buffers are place in a High-Z state. During a WRITE cycle the input data is masked. When DQMx is sampled HIGH and is an input mask signal for write accesses and an output enable signal for read accesses. DQ0 through DQ7 are controlled by DQM0. DQ8 through DQ15 are controlled by DQM1. DQ16 through DQ23 are controlled by DQM2. DQ24 through DQ31 are controlled by DQM3.
RAS	19	Input Pin	RAS, in conjunction with CAS and WE, forms the device command. See the "Command Truth Table" item for details on device commands.
WE	17	Input Pin	WE, in conjunction with RAS and CAS, forms the device command. See the "Command Truth Table" item for details on device commands.
V _{DDQ}	3,9,35,41,49,55,75,81	Supply Pin	V _{DDQ} is the output buffer power supply.
V _{DD}	1,15,29,43	Supply Pin	V _{DD} is the device internal power supply.
GND _Q	6,12,32,38,46,52,78,84	Supply Pin	GND _Q is the output buffer ground.
GND	44,58,72,86	Supply Pin	GND is the device internal ground.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -29

Q8401: SII9134CTU (HDMI Transmitter)

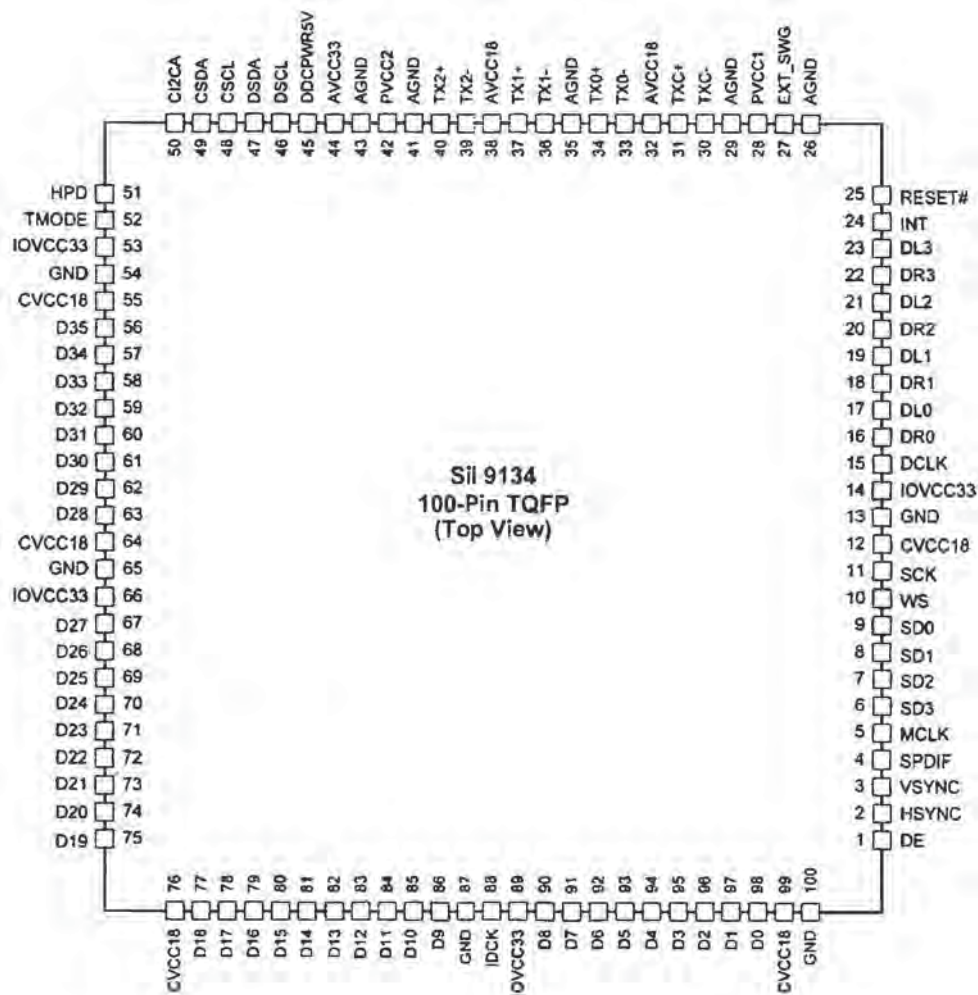
BLOCK DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -30

Q8401: SII9134CTU (HDMI Transmitter)

PIN CONFIGURATION



TERMINAL DESCRIPTION(1/3)

Configuration/Programing Pins

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

Control Pins

Pin Name	Pin #	Type	Dir	Description
CI2CA	50	LVTTTL	Input	I ² C device address select (see page 11)
RESET#	25	LVTTTL Schmitt	Input	Reset Pin (Active LOW) 5V Tolerant
CSCL	48	Schmitt	Input	I ² C Clock
CSDA	49	Schmitt- Open Drain	Bi-Di	I ² C Data (Open drain output.)
DSCL	46	Schmitt- Open Drain	Bi-Di	DDC Clock (Open Drain Output)
DSDA	47	Schmitt- Open Drain	Bi-Di	DDC Data (Open drain output.)

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -31

Q8401: SII9134CTU (HDMI Transmitter)

TERMINAL DESCRIPTION(2/3)

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 -32

Q8401: SII9134CTU (HDMI Transmitter)

TERMINAL DESCRIPTION(3/3)

Video and Audio Pins-2

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

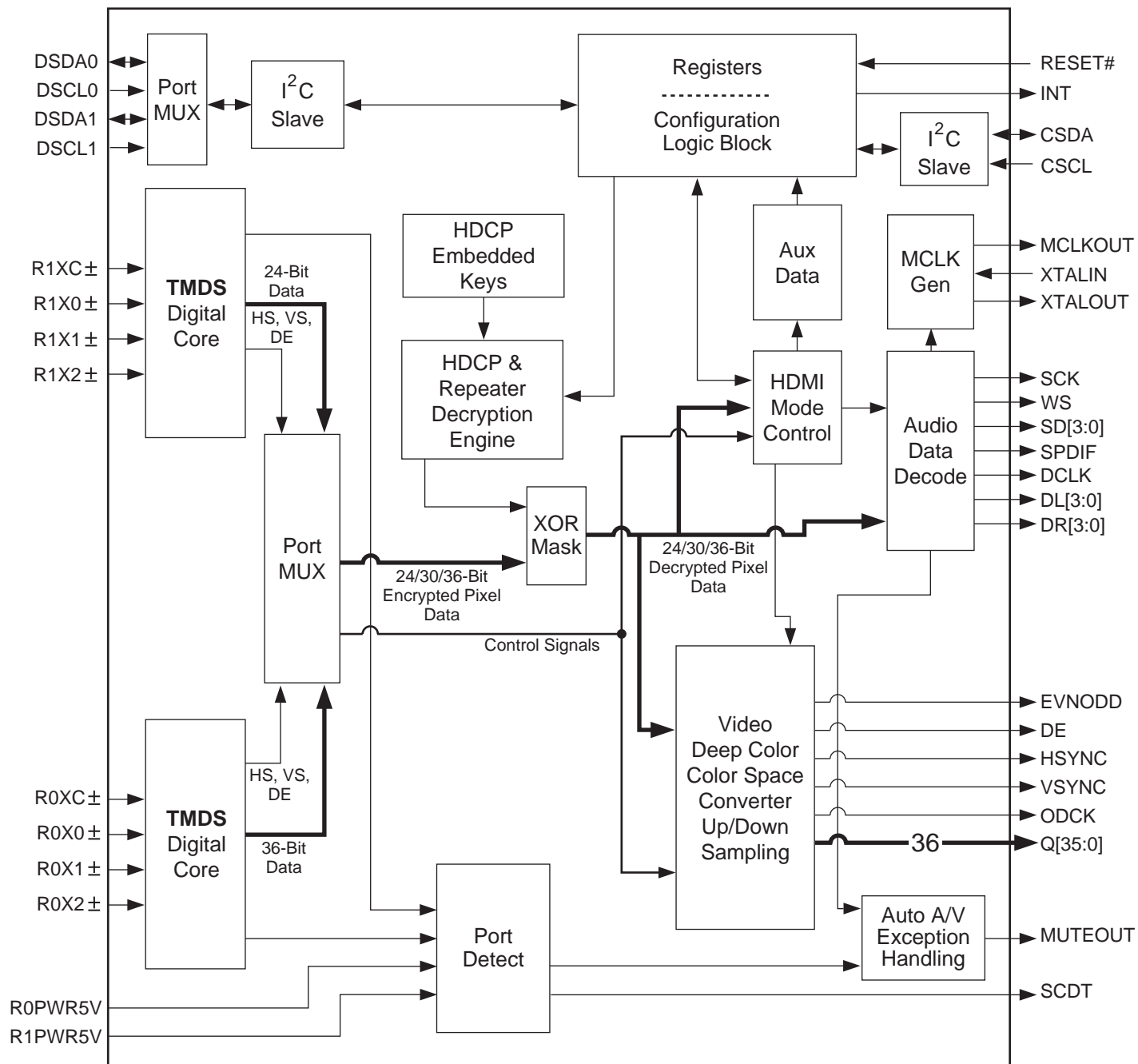
Differetial Signal Data Pins

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

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-33

Q8501 : SII9135ACTU (HDMI Receiver)

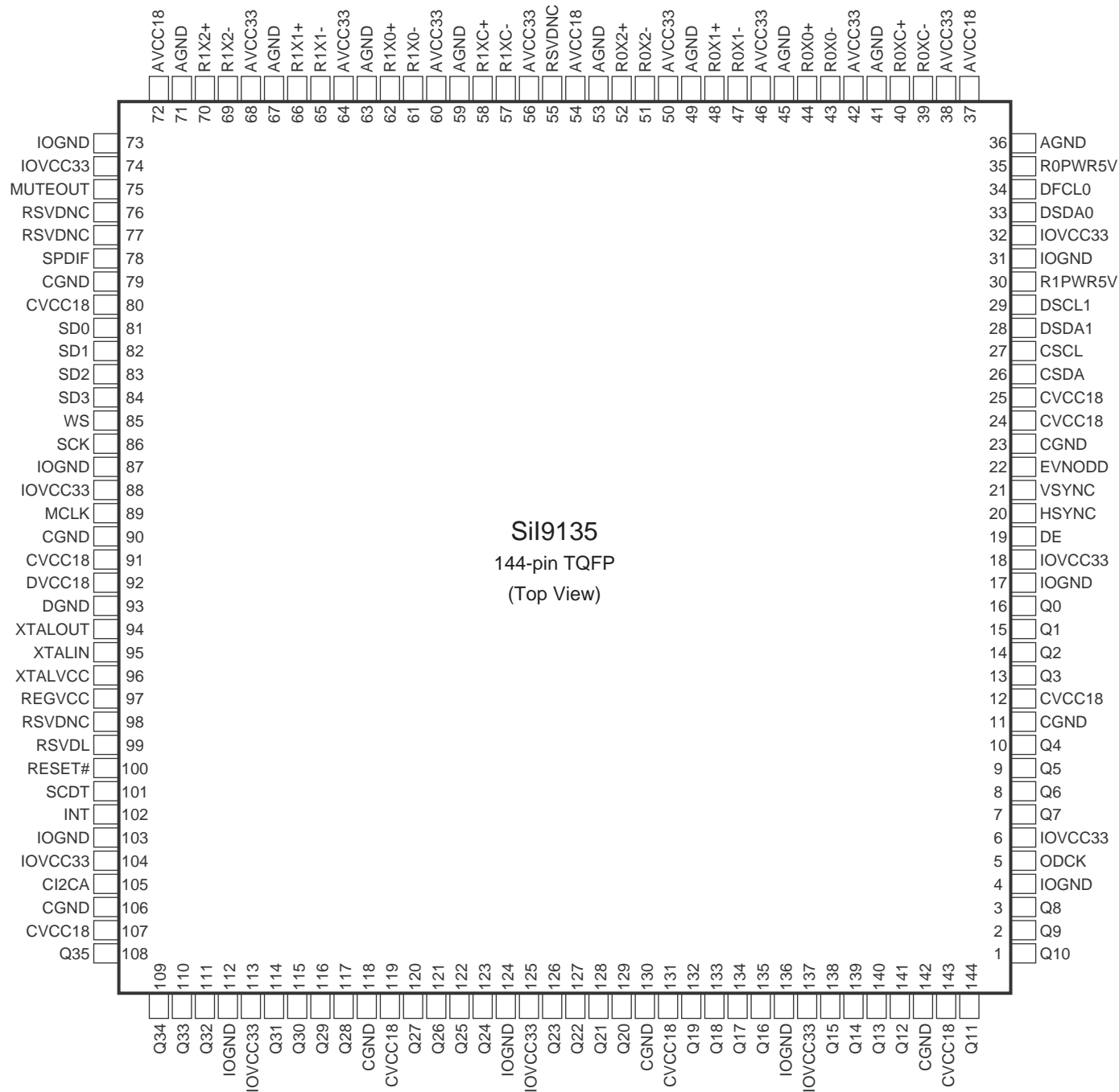
BLOCK DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-34

Q8501 : SII9135ACTU (HDMI Receiver)

PIN LAYOUT



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-35

Q8501 : SII9135ACTU (HDMI Receiver)

TERMINAL DESCRIPTION(1/3)

Digital Video Output Pins

Pin Name	Pin #	Dir	Description
Q0	16	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 RBG 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	Output	
Q2	14	Output	
Q3	13	Output	
Q4	10	Output	
Q5	9	Output	
Q6	8	Output	
Q7	7	Output	
Q8	3	Output	
Q9	2	Output	
Q10	1	Output	
Q11	144	Output	
Q12	141	Output	
Q13	140	Output	
Q14	139	Output	
Q15	138	Output	
Q16	135	Output	
Q17	134	Output	
Q18	133	Output	
Q19	132	Output	
Q20	129	Output	
Q21	128	Output	
Q22	127	Output	
Q23	126	Output	
Q24	123	Output	
Q25	122	Output	
Q26	121	Output	
Q27	120	Output	
Q28	117	Output	
Q29	116	Output	
Q30	115	Output	
Q31	114	Output	
Q32	111	Output	
Q33	110	Output	
Q34	109	Output	
Q35	108	Output	
DE	19	Output	Data Enable.
HSYNC	20	Output	Horizontal Sync Output.
VSYNC	21	Output	Vertical Sync Output.
EVNODD	22	Output	Indicates Even or Odd Field for Interlaced Formats.
ODCK	5	Output	Output Data Clock.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-36

Q8501 : SiI9135ACTU (HDMI Receiver)

TERMINAL DESCRIPTION(2/3)

Digital Audio Output Pins

Pin Name	Pin #	Dir	Description
XTALIN	95	Input	Crystal Clock Input. Also allows LVTTTL input. Frequency required: 26-28.5 MHz
XTALOUT	94	Output	Crystal Clock Output.
MCLK	89	Output	Audio Master Clock Output.
SCK/DCLK	86	Output	I ² S Serial Clock Output. DSD Clock Out.
WS/DR0	85	Output	I ² S Word Select Output. DSD Serial Right Ch0 Data Output.
SD0/DL0	81	Output	I ² S 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. SD3 = DSD Serial Right Ch2 Data Output.
SD1/DR1	82	Output	
SD2/DL1	83	Output	
SD3/DR2	84	Output	
SPDIF/DL2	78	Output	S/PDIF Audio Output. Configurable to be shared with DSD. DSD Serial Left Ch2 Data Output.
MUTEOUT	75	Output	Mute Audio Output. Signal to the external downstream audio device, audio DAC, etc. to mute audio output.

Configuration / Programming Pins

Pin Name	Pin #	Dir	Description
INT	102	Output	Interrupt Output. Configurable polarity and pushpull output. Multiple sources of interrupt can be enabled through the INT_EN register.
RESET#	100	Input	Reset Pin. Active LOW. 5V Tolerant
DSCL0	34	Input	DDC I ² C Clock for Port 0. 5V Tolerant. HDCP KSV, An and Ri values are exchanged over an I ² C port during authentication. True open drain, so does not pull to GND if R0PWR5V is not applied.
DSDA0	33	Bi-Di	DDC I ² C Data for Port 0. 5V Tolerant. HDCP KSV, An and Ri values are exchanged over an I ² C during authentication. True open drain, so does not pull to GND if R0PWR5V is not applied.
DSCL1	29	Input	DDC I ² C Clock for Port 1. 5V Tolerant. 5V Tolerant. HDCP KSV, An and Ri values are exchanged over an I ² C port during authentication. True open drain, so does not pull to GND if R1PWR5V is not applied.
DSDA1	28	Bi-Di	DDC I ² C Data for Port 1. 5V Tolerant. 5V Tolerant. HDCP KSV, An and Ri values are exchanged over an I ² C port during authentication. True open drain, so does not pull to GND if R1PWR5V is not applied.
CSCL	27	Input	Configuration/Status I ² C Clock. 5V Tolerant. Chip configuration/status, CEA-861 support and downstream HDCP repeater-specific registers are accessed via this I ² C port. True open drain, so does not pull to GND if power is not applied.
CSDA	26	Bi-Di	Configuration/Status I ² C Data. 5V Tolerant. Chip configuration/status, CEA-861 support and downstream HDCP repeater-specific registers are accessed via this I ² C port. True open drain, so does not pull to GND if power is not applied.
CI2CA	105	Input	Local I ² C Address Select. 5V Tolerant. Low = Addresses 0x60/0x68 High = Addresses 0x62/0x6A
SCDT	101	Output	Indicates Active Video at HDMI Input Port. Sync detection indicator.
R0PWR5V	35	Input	Port 0 Transmitter Detect. 5V Tolerant. Used for MUTEIN function.
R1PWR5V	30	Input	Port 1 Transmitter Detect. 5V Tolerant. Used for MUTEIN function.
RSVDNC	98, 77, 76, 55	---	Reserved, must be left unconnected
RSVDL	99	Input	Reserved, must be tied to ground

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-37

Q8501 : SiI9135ACTU (HDMI Receiver)

TERMINAL DESCRIPTION

Differential Signal Data Pins

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

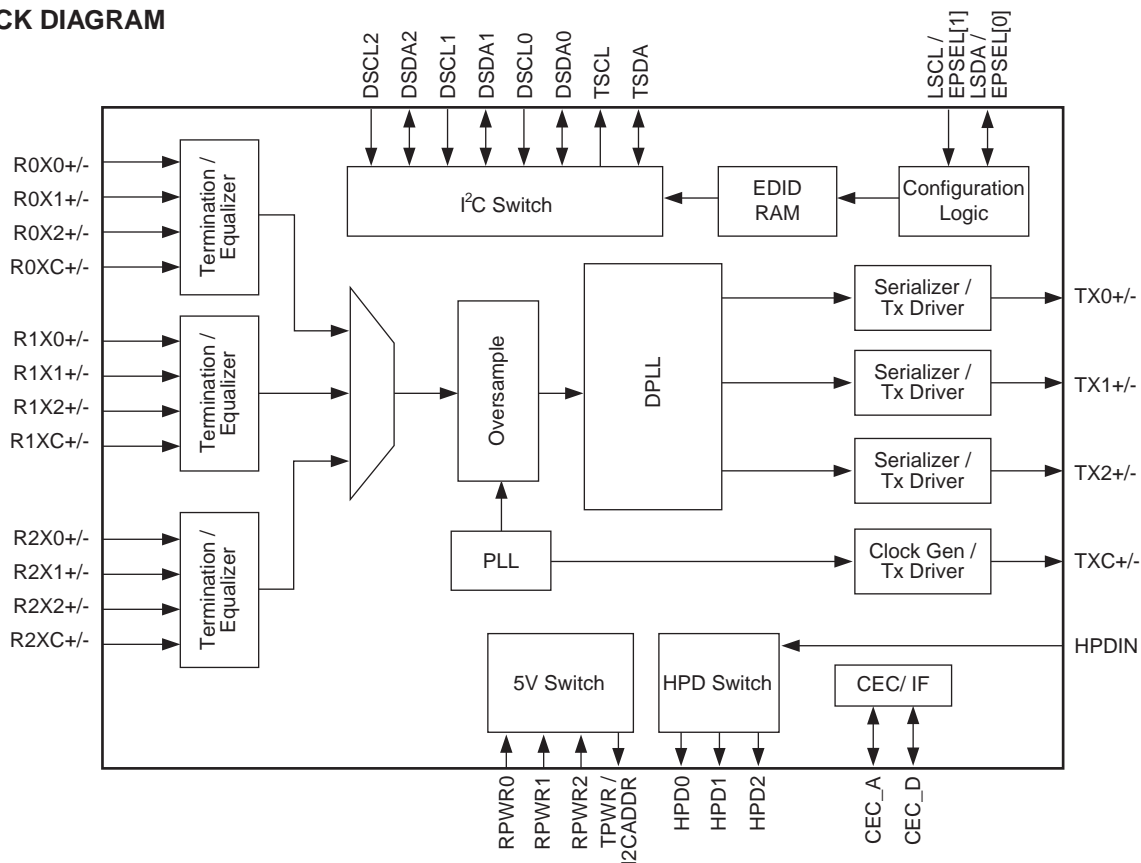
Power and Ground Pins

Pin Name	Pin #	Type	Description
CVCC18	12, 24, 25, 80, 91, 107, 119, 131, 143	Power	Digital Logic VCC.
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.
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.
AGND	36, 41, 45, 49, 53, 59, 63, 67, 71	Ground	TMDS Analog GND.
AVCC18	37, 54, 72	Power	TMDS Analog VCC 1.8V.
DVCC18	92	Power	Audio Clock Regeneration PLL. Analog VCC. Must be connected to 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.
REGVCC	97	Power	Audio Clock Regeneration PLL. Crystal Regulator Power. Must be connected to 3.3V.

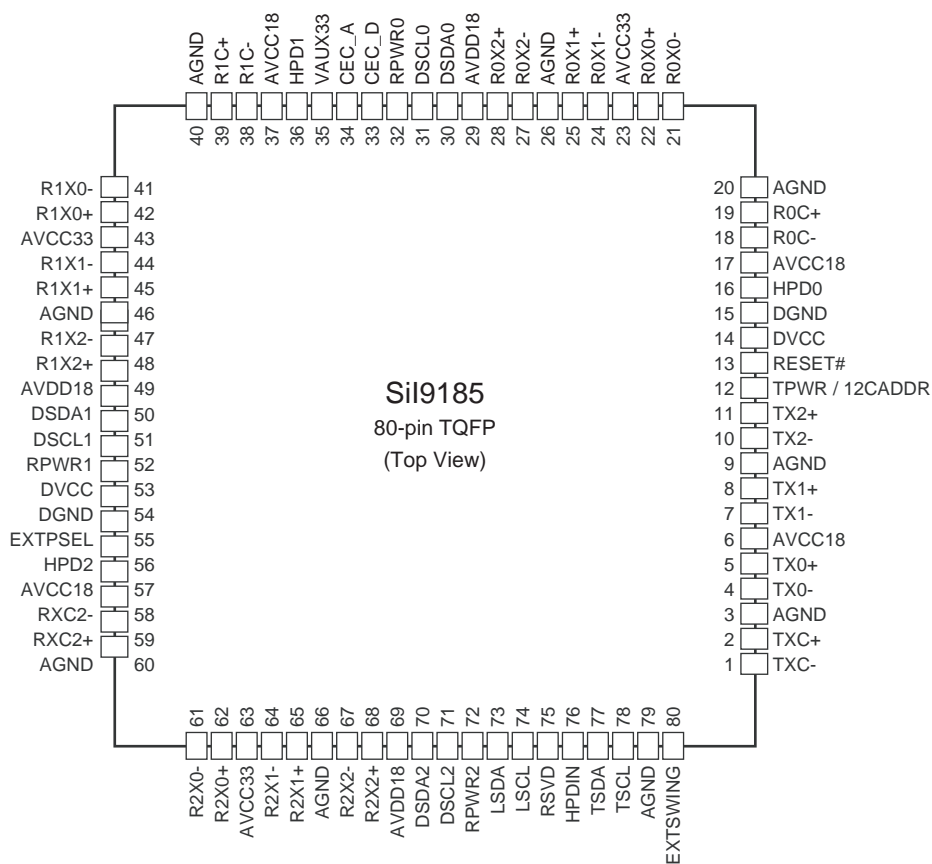
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -38

Q8162: SII9185ACTU (HDMI Switch with 3 Inputs and 1 Output)

BLOCK DIAGRAM



PIN LAYOUT



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -39

Q8162: SII9185ACTU (HDMI Switch with 3 Inputs and 1 Output)

TERMINAL DESCRIPTION(1/2)

System switching

Pin Name	Pin #	Dir	Description
DSDA0, DSDA1, DSDA2	30, 50, 70	Input / Output	DDC I ² C Data for respective port.
DSCL0, DSCL1, DSCL2	31, 51, 71	Input	DDC I ² C Clock for respective port.
RPWR0, RPWR1, RPWR2	32, 52, 72	---	Port “ Tx detection ” input. Connect 5V input from HDMI connector.

Configuration

Pin Name	Pin #	Dir	Description
HPD0, HPD1, HPD2	16, 36, 56	Output	Hot Plug Detect Output.
HPDIN	76	Input	Hot Plug Detect Input.
TPWR / I2CADDR	12	Input / Output	Optical I2C address. When RESET # is ‘0’, pin will be used as an input to latch I2C sub-address. When RESET # is ‘1’, this pin will be used as an output for TPWR indicating selected Rx-port is alive.
EXTPSEL	55	Input	External Port selection input pin. When this pin is ‘1’ external pins, SCL_L and SDA_L, will be use to select Rx-port as ExPSEL[1:0]. When ‘0’, internal local I2C register will be used to select Rx-port.
RSVDL	75	---	Reserved for use by Silicon Image and must be tied low.

Control Pins

Pin Name	Pin #	Dir	Description
RESET #	13	Input	Reset Pin (Active LOW)
LSCL / EPSEL[1]	74	Input	Local Configuration / Status I ² C Clock. When EXTPSEL = ‘1’, local CSL will be used as External port selection pin, EPSEL[1].
LSDA / EPSEL[0]	73	Bi-Di	Local Configuration / Status I ² C Data. When EXTPSEL = ‘1’, local SDA will be used as External port selection pin, EPSEL[0].
TSCL	78	Output	Master DDC Clock (Open Drain Output) to HDMI receiver.
TSDA	77	Bi-Di	Master DDC Data (Open Drain Output) to HDMI receiver.

CEC Pins

Pin Name	Pin #	Direction	Description
CEC_A	34	Input / Output	HDMI compliant CEC I/O.
CEC_D	33	Input / Output	CEC interface to system microcontroller.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -40

Q8162: SII9185ACTU (HDMI Switch with 3 Inputs and 1 Output)

TERMINAL DESCRIPTION(2/2)

Differential Signal Data Pins

Pin Name	Pin #	Dir	Description
RX0+	20, 41, 62	Input	TMDS input data pairs.
RX0-	21, 42, 61	Input	
RX1+	22, 45, 65	Input	
RX1-	24, 44, 64	Input	
RX2+	28, 48, 68	Input	
RX2-	27, 47, 67	Input	
RXC+	19, 39, 59	Input	TMDS input clock pair.
RXC-	18, 38, 58	Input	
TX0+	5	Output	TMDS output data pairs.
TX0-	4	Output	
TX1+	8	Output	
TX1-	7	Output	
TX2+	11	Output	
TX2-	10	Output	
TXC+	2	Output	TMDS output clock pair.
TXC-	1	Output	
EXT_SWING	80	Input	Voltage Swing Adjust. A resistor is tied from this pin to AVCC. This resistor determines the amplitude of the voltage swing. Recommend TBD Ω .

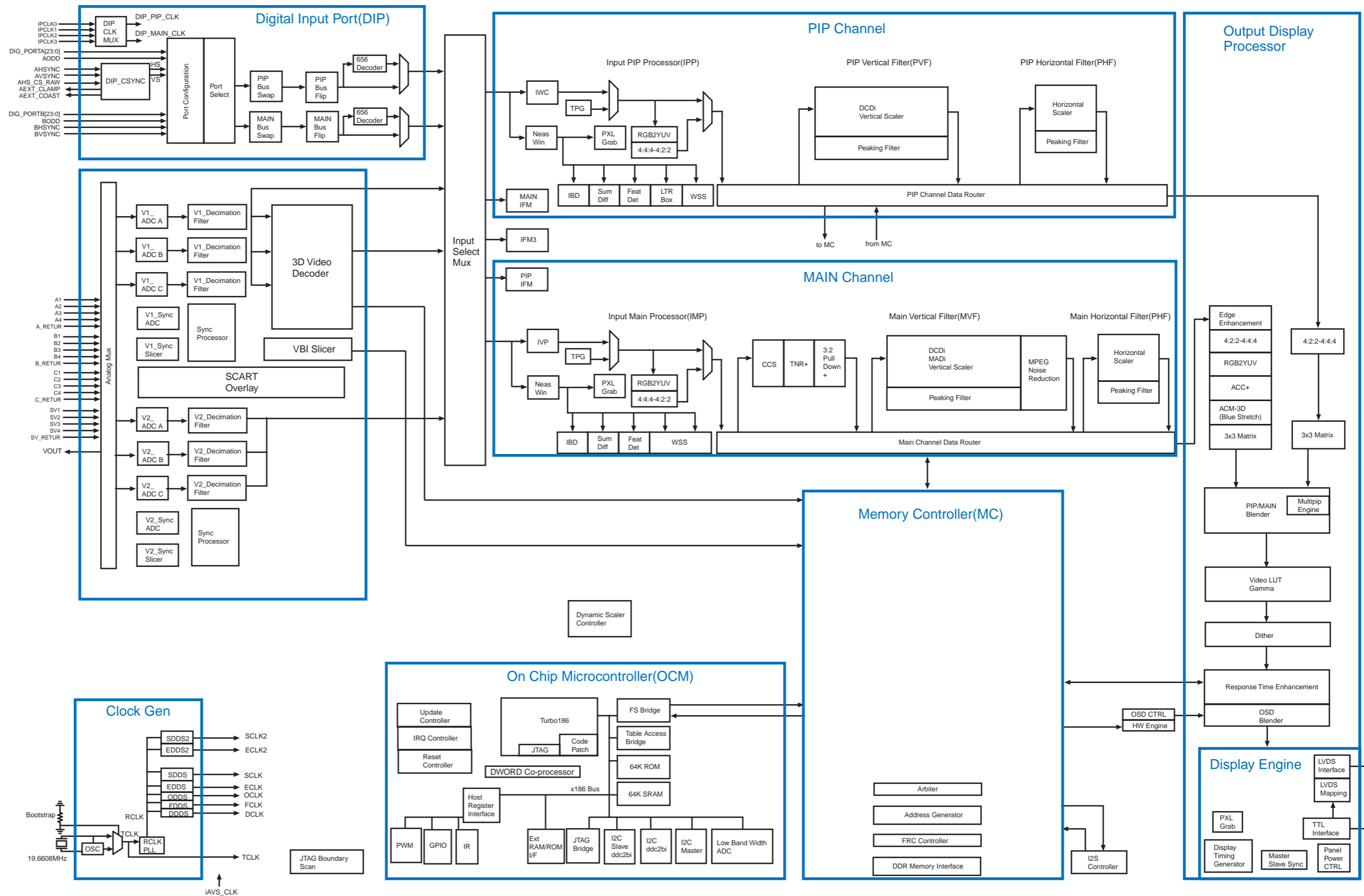
Power and Ground Pins

Pin Name	Pin #	Type	Description
AGND	3, 9, 20, 26, 40, 46, 60, 66, 79	Ground	Analog GND.
AVCC18	6, 17, 57	Power	Analog VCC. Connect to 1.8V supply.
DVCC	14, 53	Power	Digital VCC. Connect to 1.8V supply.
DGND	15, 54	Ground	Digital GND.
AVCC33	23, 43, 63	Power	Analog VCC. Connect to 3.3V supply.
AVDD18	29, 49, 69	Power	Analog VCC. Connect to 1.8V supply.
VAUX33	35	Power	Standby VCC. Connect to 3.3V supply. This supply should always be powered for standby operation.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -41

Q8200: FLI30336 (Video Processor, TORINO)

BLOCK DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -42
Q8200: FLI30336 (Video Processor, TORINO)

PIN CONFIGURATION

1

2

3

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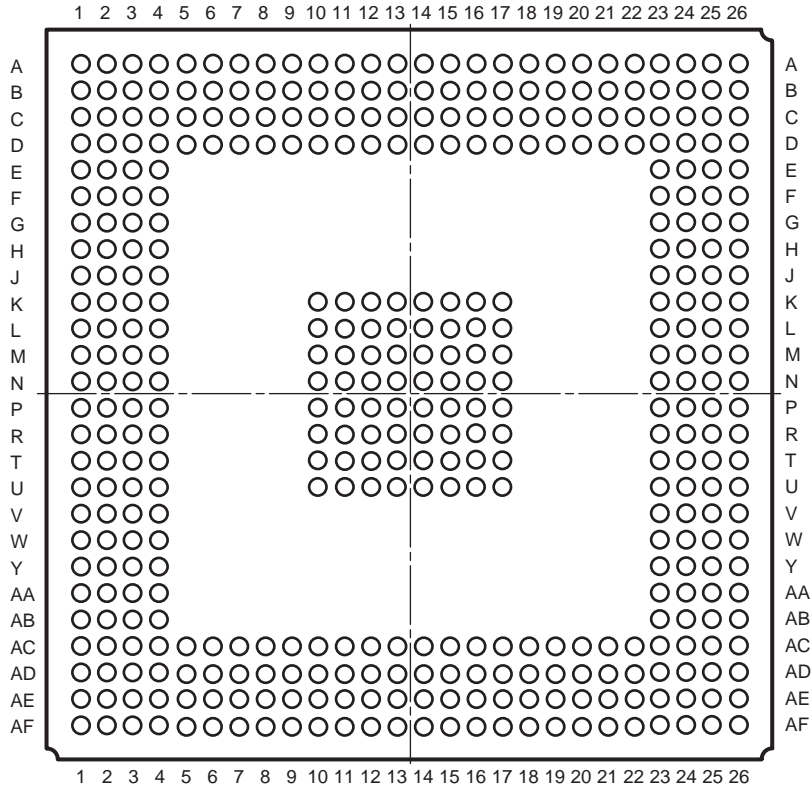
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	A	B	C	D	E	F	G	H																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26		
A	N/C	MSTR1_SDM	MSTR1_SCL	FSDATA1	FSDATA3	FSDQM0	FSDATA5	FSDATA7	FSDATA9	FSDATA11	FSDQM1	FSDATA13	FSDATA15	VDDA18_DLL	FSDATA17	FSDATA19	FSDQS2	FSDATA21	FSDATA23	FSDATA25	FSDATA27	FSDQS3	FSDATA29	FSDATA31	RPLL_AGND	RPLL_AGND	A	
B	BDATA0	OCM_UDO_1	OCM_UDI_1	FSDATA0	FSDATA2	FSDQS0	FSDATA4	FSDATA6	FSDATA8	FSDATA11	FSDQS1	FSDATA12	FSDATA14	VSSA18_DLL	FSDATA16	FSDATA18	FSDQM2	FSDATA20	FSDATA22	FSDATA24	FSDATA26	FSDQM3	FSDATA28	FSDATA30	RPLL_DGND	XTAL	B	
C	BDATA3	BDATA2	BDATA1	FSCKE	FSCLKN	FSADDR8	FSADDR7	FSADDR6	FSVREF	FSADDR5	FSADDR12	FSADDR9	FSADDR4	FSADDR11	FSADDR3	FSADDR2	FSADDR1	FSADDR0	FSVREF	FSBKSEL1	FSBKSEL0	FSCS1	FSWE	FSRAS	RPLL_18	TCLK	C	
D	BDATA6	BDATA5	BDATA4	DDR_2.5	FSCLKP	DDR_2.5	DDR_2.5	DDR_2.5	FSVREF_VSS	DDR_2.5	DDR_2.5	DDR_2.5	DDR_2.5	DDR_2.5	DDR_2.5	FSADDR10	DDR_2.5	DDR_2.5	FSVREF_VSS	DDR_2.5	FSCS0	DDR_2.5	DDR_2.5	FSCAS	N/C	RPLL_33	D	
E	BDATA9	BDATA8	BDATA7	I/O_3.3																			CH0P_LV_O/PD22	CH0P_LV_O/PD23	LVDS_GND	LVDS_3.3	E	
F	BDATA12	BDATA11	BDATA10	I/O_3.3																			CH2P_LV_O/PD18	CH2N_LV_O/PD19	CH1P_LV_O/PD20	CH1N_LV_O/PD21	F	
G	BDATA15	BDATA14	BDATA13	I/O_3.3																			CH3P_LV_O/PD14	CH3N_LV_O/PD15	CLKP_LV_O/PD16	CLKN_LV_O/PD17	G	
H	BDATA18	BDATA17	BDATA16	I/O_3.3																			LVDS_PLL_GND	LVDS_PLL_3.3	LVDS_GND	LVDS_3.3	H	
J	BDATA21	BDATA20	BDATA19	I/O_3.3																			CH4P_LV_O/PD12	CH4N_LV_O/PD13	LVDS_GND	LVDS_3.3	J	
K	BHREF_DE	BDATA23	BDATA22	I/O_3.3	CORE_1.8				D_GND				CORE_1.8				CORE_1.8				CH1P_LV_E/PD8	CH1N_LV_E/PD9	CH0P_LV_E/PD10	CH0N_LV_E/PD11	K			
L	IPCLK3	BVS	BHS	I/O_3.3	D_GND				CORE_1.8				D_GND				CORE_1.8				CLKP_LV_E/PD4	CLKN_LV_E/PD5	CH2P_LV_E/PD6	CH2N_LV_E/PD7	L			
M	DIP_CLEAN_HS_OUT	DIP_EXT_CLAMP	DIP_EXT_COAST	IPCLK2	D_GND				D_GND				D_GND				D_GND				I/O_3.3	LVDS_GND	LVDS_GND	LVDS_3.3	M			
N	IPCLK0	DIP_RAW_HS_CS	DIP_AODD	DIP_BODD	D_GND				D_GND				D_GND				D_GND				CH4P_LV_E/PD0	CH4N_LV_E/PD1	CH3P_LV_E/PD2	CH3N_LV_E/PD3	N			
P	ADATA2	ADATA1	ADATA0	IPCLK1	D_GND				D_GND				D_GND				D_GND				I/O_3.3	DCLK	DHS	DEN	P			
R	ADATA6	ADATA5	ADATA4	ADATA3	D_GND				D_GND				D_GND				D_GND				GPIO_45/JTAG_BS_TDI	GPIO_46/JTAG_BS_RST	GPIO_47/JTAG_BS_TCK	DVS	R			
T	ADATA10	ADATA9	ADATA8	ADATA7	D_GND				CORE_1.8				D_GND				CORE_1.8				I/O_3.3	GPIO_42/JTAG_BS_TMS	GPIO_43/JTAG_BS_TDO	GPIO_44	T			
U	ADATA14	ADATA13	ADATA12	ADATA11	CORE_1.8				CORE_1.8				D_GND				CORE_1.8				PWM1	PWM2	PPWR	PBIAS	U			
V	ADATA18	ADATA17	ADATA16	ADATA15	I/O_3.3				PWM0				SLAVE_SDA				SLAVE_SCL				I/O_3.3	PWM0	SLAVE_SDA	SLAVE_SCL	V			
W	ADATA22	ADATA21	ADATA20	ADATA19	OCM_INT1				OCM_TIMER1				OCM_UDI_0				OCM_UDO_0				OCM_INT1	OCM_TIMER1	OCM_UDI_0	OCM_UDO_0	W			
Y	AVS	AHS	AHREF_DE	ADATA23	I/O_3.3				OCM_INT2				VGA1_SDA				VGA1_SCL				I/O_3.3	OCM_INT2	VGA1_SDA	VGA1_SCL	Y			
AA	N/C	DGND_ADC	DGND_ADC	DGND_ADC	MSTR0_SDA				MSTR0_SCL				VGA0_SDA				VGA0_SCL				MSTR0_SDA	MSTR0_SCL	VGA0_SDA	VGA0_SCL	AA			
AB	A1P	SV1P	AGND_ADC	ADC_1.8	I/O_3.3				IR0				MSTR2_SDA				MSTR2_SCL				I/O_3.3	IR0	MSTR2_SDA	MSTR2_SCL	AB			
AC	C1P	B1P	AGND_ADC	ADC_1.8	ADC_1.8	AGND_ADC	VOUT2	AGND_ADC	LBADC_33	LBADC_IN4	LBADC_IN3	LBADC_RETURN	AVS_IN_DATA	EXT_OSD_HS	I/O_3.3	OCMADDR18	I/O_3.3	OCMADDR11	I/O_3.3	OCMADDR4	JTAG_BS_EN	OCMDATA13	I/O_3.3	OCMDATA6	OCM_CS2n	OCM_REn	OCM_WEn	AC
AD	AN	AGND_ADC	ADC1_3.3	ADC1_3.3	ADC1_3.3	ADC2_3.3	ADC2_3.3	AGND_ADC	RESETn	LBADC_IN3	LBADC_RETURN	AVS_IN_WORD_SEL	EXT_OSD_VS	AVS_OUT_DATA	OCMADDR19	OCMADDR15	OCMADDR12	OCMADDR8	OCMADDR5	OCMADDR1	OCMADDR1	OCMDATA14	OCMDATA10	OCMDATA7	ROM_CSn	OCM_CS0n	OCM_CS1n	AD
AE	SV2P	B2P	AGND_ADC	SV3P	B3P	AGND_ADC	SV4P	B4P	AGND_ADC	LBADC_IN2	LBADC_IN6	AIP_RAW_VS	AVS_OUT_SCL	AVS_OUT_WORD_SELO	OCMADDR20	OCMADDR16	OCMADDR13	OCMADDR9	OCMADDR6	OCMADDR2	OCMADDR2	OCMDATA15	OCMDATA11	OCMDATA8	OCMDATA2	OCMDATA1	OCMDATA0	AE
AF	A2P	C2P	BN	A3P	C3P	CN	A4P	C4P	DVN	LBADC_IN1	LBADC_IN5	AIP_RAW_HS_CS	AVS_OSD_CLK	AVS_IN_SCL	OCMADDR17	OCMADDR17	OCMADDR14	OCMADDR10	OCMADDR7	OCMADDR3	OCMADDR0	OCMADDR12	OCMDATA9	OCMDATA5	OCMDATA4	OCMDATA3	AF	

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -43

Q8200: FLI30336 (Video Processor, TORINO)

PIN LAYOUT



TERMINAL DESCRIPTION(1/10)

Digital Input Port Clocks

Pin name	Pin#	I/O	Description
IPCLK0	N1	I/O	Digital input port Clock 0.
IPCLK1	P4	I/O	Digital input port Clock 1.
IPCLK2	M4	I/O	Digital input port Clock 2.
IPCLK3	L1	I/O	Digital input port Clock 3.

Digital A Input Port

Pin name	Pin#	I/O	Description
AVS	Y1	I/O	Digital input port A VSync.
AHS	Y2	I/O	Digital input port A HSync.
AHREF_DE	Y3	I/O	Digital input port A Data Enable.
DIP_AODD	N3	I/O	Digital input port A channel odd input.
DIP_RAW_HS_CS	N2	I	Digital input port H Sync or CSync input.
DIP_EXT_CLAMP	M2	I/O	Digital input port clamp output.
DIP_EXT_COAST	M3	I/O	Digital input port coast output.
DIP_CLEAN_HS_OUT	M1	I/O	Digital input port HSync out.
ADATA23	Y4	I/O	Digital input port A bit 23.
ADATA22	W1	I/O	Digital input port A bit 22.
ADATA21	W2	I/O	Digital input port A bit 21.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -44

Q8200: FLI30336 (Video Processor, TORINO)

TERMINAL DESCRIPTION(2/10)

Digital A Input Port

Pin name	Pin#	I/O	Description
ADATA20	W3	I/O	Digital input port A bit 20.
ADATA19	W4	I/O	Digital input port A bit 19.
ADATA18	V1	I/O	Digital input port A bit 18.
ADATA17	V2	I/O	Digital input port A bit 17.
ADATA16	V3	I/O	Digital input port A bit 16.
ADATA15	V4	I/O	Digital input port A bit 15.
ADATA14	U1	I/O	Digital input port A bit 14.
ADATA13	U2	I/O	Digital input port A bit 13.
ADATA12	U3	I/O	Digital input port A bit 12.
ADATA11	U4	I/O	Digital input port A bit 11.
ADATA10	T1	I/O	Digital input port A bit 10.
ADATA9	T2	I/O	Digital input port A bit 9.
ADATA8	T3	I/O	Digital input port A bit 8.
ADATA7	T4	I/O	Digital input port A bit 7.
ADATA6	R1	I/O	Digital input port A bit 6.
ADATA5	R2	I/O	Digital input port A bit 5.
ADATA4	R3	I/O	Digital input port A bit 4.
ADATA3	R4	I/O	Digital input port A bit 3.
ADATA2	P1	I/O	Digital input port A bit 2.
ADATA1	P2	I/O	Digital input port A bit 1.
ADATA0	P3	I/O	Digital input port A bit 0.

Digital B Input Port

Pin name	Pin#	I/O	Description
BVS	L2	I/O	Digital input Port B VSync.
BHS	L3	I/O	Digital input Port B HSync.
BREF_DE	K1	I/O	Digital input Port B Data Enable.
DIP_BODD	N4	I/O	Digital input Port B channel odd input.
BDATA23	K2	I/O	Digital input Port B bit 23.
BDATA22	K3	I/O	Digital input Port B bit 22.
BDATA21	J1	I/O	Digital input Port B bit 21.
BDATA20	J2	I/O	Digital input Port B bit 20.
BDATA19	J3	I/O	Digital input Port B bit 19.
BDATA18	H1	I/O	Digital input Port B bit 18.
BDATA17	H2	I/O	Digital input Port B bit 17.
BDATA16	H3	I/O	Digital input Port B bit 16.
BDATA15	G1	I/O	Digital input Port B bit 15.
BDATA14	G2	I/O	Digital input Port B bit 14.
BDATA13	G3	I/O	Digital input Port B bit 13.
BDATA12	F1	I/O	Digital input Port B bit 12.
BDATA11	F2	I/O	Digital input Port B bit 11.
BDATA10	F3	I/O	Digital input Port B bit 10.
BDATA9	E1	I/O	Digital input Port B bit 9.
BDATA8	E2	I/O	Digital input Port B bit 8.
BDATA7	E3	I/O	Digital input Port B bit 7.
BDATA6	D1	I/O	Digital input Port B bit 6.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -45

Q8200: FLI30336 (Video Processor, TORINO)

TERMINAL DESCRIPTION(3/10)

Digital B Input Port

Pin name	Pin#	I/O	Description
BDATA5	D2	I/O	Digital input Port B bit 5.
BDATA4	D3	I/O	Digital input Port B bit 4.
BDATA3	C1	I/O	Digital input Port B bit 3.
BDATA2	C2	I/O	Digital input Port B bit 2.
BDATA1	C3	I/O	Digital input Port B bit 1.
BDATA0	B1	I/O	Digital input Port B bit 0.

Analog Front End

Pin name	Pin#	I/O	Description
ADC_1.8	AB4,AC4, AC5	AP	Analog front end analog power(1.8V).
DGND_ADC	AA2,AA3, AA4	AG	Analog front end digital ground.
ADC1_3.3	AS3	AP	Analog front end analog power for 1st set of ADCs(3.3V).
ADC1_3.3	AD4	AP	Analog front end analog power for 1st set of ADCs(3.3V).
ADC1_3.3	AD5	AP	Analog front end analog power for 1st set of ADCs(3.3V).
ADC2_3.3	AD6	AP	Analog front end analog power for 2nd set of ADCs(3.3V).
ADC2_3.3	AD7	AP	Analog front end analog power for 2nd set of ADCs(3.3V).
AGND_ADC	AB3,AC3, AD2,AC6, AC8,AD8, AE3,AE6, AE9	AG	Analog front end analog ground.
AIP_RAW_HS_CS	AF12	I	Analog front end HSync or CSync input.
AIP_RAW_VS	AE12	I	Analog front end VSync input.
N/C	AA1	AO	No connect.
SV1P	AB2	AI	Positive analog input or sync input for channel 1.
A1P	AB1	AI	Positive analog input A for channel 1.
B1P	AC2	AI	Positive analog input B for channel 1.
C1P	AC1	AI	Positive analog input C for channel 1.
SV2P	AE1	AI	Positive analog input or sync input for channel 2.
A2P	AF1	AI	Positive analog input A for channel 2.
B2P	AE2	AI	Positive analog input B for channel 2.
C2P	AF2	AI	Positive analog input C for channel 2.
SV3P	AE4	AI	Positive analog input or sync input for channel 3.
A3P	AF4	AI	Positive analog input A for channel 3.
B3P	AE5	AI	Positive analog input B for channel 3.
C3P	AF5	AI	Positive analog input C for channel 3.
SV4P	AE7	AI	Positive analog input or sync input for channel 4.
AN	AD1	AI	Negative analog input A for channel 1 through 3 for 1st set of ADCs.
BN	AF3	AI	Negative analog input B for channel 1 through 3 for 1st set of ADCs.
CN	AF6	AI	Negative analog input C for channel 1 through 3 for 1st set of ADCs.
SVN	AF9	AI	Negative analog input or sync input for channel 1 through 4.
A4P	AF7	AI	Positive analog input A for channel 4.
B4P	AE8	AI	Positive analog input B for channel 4.
C4P	AF8	AI	Positive analog input C for channel 4.
VOUT2	AC7	AO	Analog VOUT signal.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -46

Q8200: FLI30336 (Video Processor, TORINO)

TERMINAL DESCRIPTION(4/10)

Analog Front End

Pin name	Pin#	I/O	Description
OCMADDR21	AF15	I/O	Address output for external ROM/SRAM interface.
OCMADDR20	AE15	I/O	Address output for external ROM/SRAM interface.
OCMADDR19	AD15	I/O	Address output for external ROM/SRAM interface.
OCMADDR18	AC15	I/O	Address output for external ROM/SRAM interface.
OCMADDR17	AF16	I/O	Address output for external ROM/SRAM interface.
OCMADDR16	AE16	I/O	Address output for external ROM/SRAM interface.
OCMADDR15	AD16	I/O	Address output for external ROM/SRAM interface.
OCMADDR14	AF17	I/O	Address output for external ROM/SRAM interface.
OCMADDR13	AE17	I/O	Address output for external ROM/SRAM interface.
OCMADDR12	AD17	I/O	Address output for external ROM/SRAM interface.
OCMADDR11	AC17	I/O	Address output for external ROM/SRAM interface.
OCMADDR10	AF18	I/O	Address output for external ROM/SRAM interface.
OCMADDR9	AE18	I/O	Address output for external ROM/SRAM interface.
OCMADDR8	AD18	I/O	Address output for external ROM/SRAM interface.
OCMADDR7	AF19	I/O	Address output for external ROM/SRAM interface.
OCMADDR6	AE19	I/O	Address output for external ROM/SRAM interface.
OCMADDR5	AD19	I/O	Address output for external ROM/SRAM interface.
OCMADDR4	AC19	I/O	Address output for external ROM/SRAM interface.
OCMADDR3	AF20	I/O	Address output for external ROM/SRAM interface.
OCMADDR2	AE20	I/O	Address output for external ROM/SRAM interface.
OCMADDR1	AD20	I/O	Address output for external ROM/SRAM interface.
OCMADDR0	AF21	I/O	Address output for external ROM/SRAM interface.

OCM Data Bus

Pin name	Pin#	I/O	Description
OCMDATA15	AE21	I/O	Data bus for external ROM/SRAM interface.
OCMDATA14	AD21	I/O	Data bus for external ROM/SRAM interface.
OCMDATA13	AC21	I/O	Data bus for external ROM/SRAM interface.
OCMDATA12	AF22	I/O	Data bus for external ROM/SRAM interface.
OCMDATA11	AE22	I/O	Data bus for external ROM/SRAM interface.
OCMDATA10	AD22	I/O	Data bus for external ROM/SRAM interface.
OCMDATA9	AF23	I/O	Data bus for external ROM/SRAM interface.
OCMDATA8	AE23	I/O	Data bus for external ROM/SRAM interface.
OCMDATA7	AD23	I/O	Data bus for external ROM/SRAM interface.
OCMDATA6	AC23	I/O	Data bus for external ROM/SRAM interface.
OCMDATA5	AF24	I/O	Data bus for external ROM/SRAM interface.
OCMDATA4	AF25	I/O	Data bus for external ROM/SRAM interface.
OCMDATA3	AF26	I/O	Data bus for external ROM/SRAM interface.
OCMDATA2	AE24	I/O	Data bus for external ROM/SRAM interface.
OCMDATA1	AE25	I/O	Data bus for external ROM/SRAM interface.
OCMDATA0	AE26	I/O	Data bus for external ROM/SRAM interface.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -47

Q8200: FLI30336 (Video Processor, TORINO)

TERMINAL DESCRIPTION(5/10)

OCM External ROM/SRAM Control Signal

Pin name	Pin#	I/O	Description
ROM_CS _n	AD24	O	Chip select output signal to external ROM.
OCM_CS0 _n	AD25	I/O	Chip select output signal to external peripheral.
OCM_CS1 _n	AD26	I/O	Chip select output signal to external peripheral.
OCM_CS2 _n	AC24	I/O	Chip select output signal to external peripheral.
OCM_RE _n	AC25	O	Read enable output signal to enable external device to drive data pin(ball).
OCM_WE _n	AC26	O	Write enable output signal to enable writing external devices.

OCM Peripherals

Pin name	Pin#	I/O	Description
OCM_INT1	W23	I/O	Interrupt #1 input for generating system interrupt to OCM. Level sensitive.
OCM_INT2	Y24	I/O	Interrupt #2 input for generating system interrupt to OCM. Edge sensitive.
OCM_UDO_0	W26	I/O	OCM UART '0' data output.
OCM_UDI_0	W25	I/O	OCM UART '0' data input.
OCM_UDO_1	B2	I/O	OCM UART '1' data output.
OCM_UDI_1	B3	I/O	OCM UART '1' data input.
IR0	AB24	I/O	Input to IR decoder.
PWM0	V24	I/O	Pulse width modulator '0' output.
PWM1	U23	I/O	Pulse width modulator '1' output.
PWM2	U24	I/O	Pulse width modulator '2' output.
OCM_TIMER1	W24	I/O	Timer In: used as clock or clock enable input to OCMTIMER1.
MSTR0_SDA	AA23	I/O	Two wire serial master - Bus '0' data.
MSTR0_SCL	AA24	I/O	Two wire serial master - Bus '0' data.
MSTR1_SDA	A2	I/O	Two wire serial master - Bus '1' data.
MSTR1_SCL	A3	I/O	Two wire serial master - Bus '1' data.
MSTR2_SDA	AB25	I/O	Two wire serial master - Bus '2' data.
MSTR2_SCL	AB26	I/O	Two wire serial master - Bus '2' data.
VGA0_SDA	AA25	I/O	Can be configured as data for two wire serial In-Circuit JTAG debugger.
VGA0_SCL	AA26	I/O	Can be configured as clock for two wire serial In-Circuit JTAG debugger.
VGA1_SDA	Y25	I/O	Can be configured as data for two wire serial In-Circuit JTAG debugger.
VGA1_SCL	Y26	I/O	Can be configured as clock for two wire serial In-Circuit JTAG debugger.
SLAVE_SDA	V25	I/O	Two wire slave serial data.
SLAVE_SCL	V26	I/O	Two wire slave serial clock.

System

Pin name	Pin#	I/O	Description
RESET _n	AD9	I/O	Hard Reset, active low input.
N/C	A1	I/O	No connect.

Power Panel Control

Pin name	Pin#	I/O	Description
PPWR	U25	O	Panel Power Control output controlled by Panel Power On Sequencer.
PBIAS	U26	O	Panel Bias Control controlled by Panel Power On Sequencer.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -48

Q8200: FLI30336 (Video Processor, TORINO)

TERMINAL DESCRIPTION(6/10)

LVDS AND TTLDisplay Port

Pin name	Pin#	I/O	Description
CH4P_LV_E/PD0	N23	I/O	When display drive type is TTL, this is PD0. When display drive type is LVDS, this is CH4P_LV_E.
CH4N_LV_E/PD1	N24	I/O	When display drive type is TTL, this is PD1. When display drive type is LVDS, this is CH4N_LV_E.
CH3P_LV_E/PD2	N25	I/O	When display drive type is TTL, this is PD2. When display drive type is LVDS, this is CH3P_LV_E.
CH3N_LV_E/PD3	N26	I/O	When display drive type is TTL, this is PD3. When display drive type is LVDS, this is CH3N_LV_E.
CLKP_LV_E/PD4	L23	I/O	When display drive type is TTL, this is PD4. When display drive type is LVDS, this is CLKP_LV_E.
CLKN_LV_E/PD5	L24	I/O	When display drive type is TTL, this is PD5. When display drive type is LVDS, this is CLKN_LV_E.
CH2P_LV_E/PD6	L25	I/O	When display drive type is TTL, this is PD6. When display drive type is LVDS, this is CH2P_LV_E.
CH2N_LV_E/PD7	L26	I/O	When display drive type is TTL, this is PD7. When display drive type is LVDS, this is CH2N_LV_E.
CH1P_LV_E/PD8	K23	I/O	When display drive type is TTL, this is PD8. When display drive type is LVDS, this is CH1P_LV_E.
CH1N_LV_E/PD9	K24	I/O	When display drive type is TTL, this is PD9. When display drive type is LVDS, this is CH1N_LV_E.
CH0P_LV_E/PD10	K25	I/O	When display drive type is TTL, this is PD10. When display drive type is LVDS, this is CH0P_LV_E.
CH0N_LV_E/PD11	K26	I/O	When display drive type is TTL, this is PD11. When display drive type is LVDS, this is CH0N_LV_E.
CH4P_LV_O/PD12	J23	I/O	When display drive type is TTL, this is PD12. When display drive type is LVDS, this is CH4P_LV_O.
CH4N_LV_O/PD13	J24	I/O	When display drive type is TTL, this is PD13. When display drive type is LVDS, this is CH4N_LV_O.
CH3P_LV_O/PD14	G23	I/O	When display drive type is TTL, this is PD14. When display drive type is LVDS, this is CH3P_LV_O.
CH3N_LV_E/PD15	G24	I/O	When display drive type is TTL, this is PD15. When display drive type is LVDS, this is H3N_LV_E.
CLKP_LV_O/PD16	G25	I/O	When display drive type is TTL, this is PD16. When display drive type is LVDS, this is CLKP_LV_O.
CLKN_LV_O/PD17	G26	I/O	When display drive type is TTL, this is PD17. When display drive type is LVDS, this is CLKN_LV_O.
CH2P_LV_O/PD18	F23	I/O	When display drive type is TTL, this is PD18. When display drive type is LVDS, this is CH2P_LV_O.
CH2N_LV_E/PD19	F24	I/O	When display drive type is TTL, this is PD19. When display drive type is LVDS, this is CH2N_LV_E.
CH1P_LV_O/PD20	F25	I/O	When display drive type is TTL, this is PD20. When display drive type is LVDS, this is CH1P_LV_O.
CH1N_LV_O/PD21	F26	I/O	When display drive type is TTL, this is PD21. When display drive type is LVDS, this is CH1N_LV_O.
CH0P_LV_O/PD22	E23	I/O	When display drive type is TTL, this is PD22. When display drive type is LVDS, this is CH0P_LV_O.
CH0N_LV_O/PD23	E24	I/O	When display drive type is TTL, this is PD23. When display drive type is LVDS, this is CH0N_LV_O.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -49

Q8200: FLI30336 (Video Processor, TORINO)

TERMINAL DESCRIPTION(7/10)

DSYNC and CLK

Pin name	Pin#	I/O	Description
DCLK	P24	I/O	When display drive type is TTL, this is panel output pixel clock.
DVS	R26	I/O	When display drive type is TTL, this is panel output V-sync.
DHS	P25	I/O	When display drive type is TTL, this is panel output H-sync.
DEN	P26	I/O	When display drive type is TTL, this is panel output data enable.

Display Port Power

Pin name	Pin#	I/O	Description
DCLK	E26,H26, J26,M26	P	LVDS power(3.3V).
DVS	E25,H25, J25,M24, M25	G	LVDS Ground.
DHS	H24	AP	LVDS analog power(3.3V)
DEN	H23	AG	LVDS PLL ground.

Display Port Power

Pin name	Pin#	I/O	Description
AVS_IN_WORD_SEL	AD12	I/O	Audio/video synchronizer input word select.
AVS_IN_SCL	AF14	I/O	Audio/video synchronizer input clock.
AVS_IN_DATA	AC12	I/O	Audio/video synchronizer input data.
AVS_OUT_WORD_SEL	AE14	I/O	Audio/video synchronizer output word select.
AVS_OUT_SCL	AE13	I/O	Audio/video synchronizer output clock.
AVS_OUT_DATA	AD14	I/O	Audio/video synchronizer output data.

External OSD

Pin name	Pin#	I/O	Description
EXT_OSD_CLK	AF13	I/O	External OSD clock.
EXT_OSD_HS	AC13	I/O	External OSD HSync.
EXT_OSD_VS	AD13	I/O	External OSD VSync.

Dedicated GPIO

Pin name	Pin#	I/O	Description
GPIO_42	T24	I/O	General purpose I/O 42.
GPIO_43	T25	I/O	General purpose I/O 43.
GPIO_44	T26	I/O	General purpose I/O 44.
GPIO_45	R23	I/O	General purpose I/O 45.
GPIO_46	R24	I/O	General purpose I/O 46.
GPIO_47	R25	I/O	General purpose I/O 47.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -50

Q8200: FLI30336 (Video Processor, TORINO)

TERMINAL DESCRIPTION(8/10)

JTAG Boundary Scan

Pin name	Pin#	I/O	Description
JTAG_BS_TMS	T24	I	JTAG Boundary Scan TMS signal.
JTAG_BS_TDO	T25	O	JTAG Boundary Scan TDO signal.
GPIO_44	T26	I/O	General purpose I/O 44.
JTAG_BS_TDI	R23	I	JTAG Boundary Scan TDI signal.
JTAG_BS_RST	R24	I	JTAG Boundary Scan RST signal.
JTAG_BS_TCK	R25	I	JTAG Boundary Scan TCK signal.
JTAG_BS_EN	AC20	I	JTAG Boundary Scan Enable signal.

Frame Store DDR Interface

Pin name	Pin#	I/O	Description
FSCLKp	D5	O	Differential frame store clock output (positive signal). SSTL2
FSCLKn	C5	O	Differential frame store clock output (negative signal). SSTL2
FSRAS	C24	O	Row address strobe output. SSTL2
FSCAS	D24	O	Column address strobe output. SSTL2
FSWE	C23	O	Write enable. SSTL2
FSCKE	C4	O	Clock enable. SSTL2
FSVREFF	C9,C19	AP	Reference voltage for SSTL2 inputs.
FSVREFVSS	D9,D19	AG	Reference voltage return (ground) for SSTL2 inputs.
FSDQS3	A22	I/O	Data strobe.
FSDQS2	A17	I/O	Data strobe.
FSDQS1	B11	I/O	Data strobe.
FSDQS0	B6	I/O	Data strobe.
FSDATA31	A24	I/O	Data input/output. Synchronized with FSDQS3. SSTL2
FSDATA30	B24	I/O	Data input/output. Synchronized with FSDQS3. SSTL2
FSDATA29	A23	I/O	Data input/output. Synchronized with FSDQS3. SSTL2
FSDATA28	B23	I/O	Data input/output. Synchronized with FSDQS3. SSTL2
FSDATA27	A21	I/O	Data input/output. Synchronized with FSDQS3. SSTL2
FSDATA26	B21	I/O	Data input/output. Synchronized with FSDQS3. SSTL2
FSDATA25	A20	I/O	Data input/output. Synchronized with FSDQS3. SSTL2
FSDATA24	B20	I/O	Data input/output. Synchronized with FSDQS3. SSTL2
FSDATA23	A19	I/O	Data input/output. Synchronized with FSDQS2. SSTL2
FSDATA22	B19	I/O	Data input/output. Synchronized with FSDQS2. SSTL2
FSDATA21	A18	I/O	Data input/output. Synchronized with FSDQS2. SSTL2
FSDATA20	B18	I/O	Data input/output. Synchronized with FSDQS2. SSTL2
FSDATA19	A16	I/O	Data input/output. Synchronized with FSDQS2. SSTL2
FSDATA18	B16	I/O	Data input/output. Synchronized with FSDQS2. SSTL2
FSDATA17	A15	I/O	Data input/output. Synchronized with FSDQS2. SSTL2
FSDATA16	B15	I/O	Data input/output. Synchronized with FSDQS2. SSTL2
FSDATA15	A13	I/O	Data input/output. Synchronized with FSDQS1. SSTL2
FSDATA14	B13	I/O	Data input/output. Synchronized with FSDQS1. SSTL2
FSDATA13	A12	I/O	Data input/output. Synchronized with FSDQS1. SSTL2
FSDATA12	B12	I/O	Data input/output. Synchronized with FSDQS1. SSTL2
FSDATA11	A10	I/O	Data input/output. Synchronized with FSDQS1. SSTL2
FSDATA10	B10	I/O	Data input/output. Synchronized with FSDQS1. SSTL2
FSDATA9	A9	I/O	Data input/output. Synchronized with FSDQS1. SSTL2
FSDATA8	B9	I/O	Data input/output. Synchronized with FSDQS1. SSTL2

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -51

Q8200: FLI30336 (Video Processor, TORINO)

TERMINAL DESCRIPTION(9/10)

Frame Store DDR Interface

Pin name	Pin#	I/O	Description
FSDATA7	A8	I/O	Data input/output. Synchronized with FSDQS0. SSTL2
FSDATA6	B8	I/O	Data input/output. Synchronized with FSDQS0. SSTL2
FSDATA5	A7	I/O	Data input/output. Synchronized with FSDQS0. SSTL2
FSDATA4	B7	I/O	Data input/output. Synchronized with FSDQS0. SSTL2
FSDATA3	A5	I/O	Data input/output. Synchronized with FSDQS0. SSTL2
FSDATA2	B5	I/O	Data input/output. Synchronized with FSDQS0. SSTL2
FSDATA1	A4	I/O	Data input/output. Synchronized with FSDQS0. SSTL2
FSDATA0	B4	I/O	Data input/output. Synchronized with FSDQS0. SSTL2
FSDQM3	B22	O	Data out mask. Only used during write cycles.
FSDQM2	B17	O	Data out mask. Only used during write cycles.
FSDQM1	A11	O	Data out mask. Only used during write cycles.
FSDQM0	A6	O	Data out mask. Only used during write cycles.
FSBKSEL1	C20	O	Bank select address.
FSBKSEL0	C21	O	Bank select address. Row/column address outputs multiplexed on to the same pins.
FSADDR12	C11	O	Bank select address. Row/column address outputs multiplexed on to the same pins.
FSADDR11	C14	O	Bank select address. Row/column address outputs multiplexed on to the same pins.
FSADDR10	D16	O	Bank select address. Row/column address outputs multiplexed on to the same pins.
FSADDR9	C12	O	Bank select address. Row/column address outputs multiplexed on to the same pins.
FSADDR8	C6	O	Bank select address. Row/column address outputs multiplexed on to the same pins.
FSADDR7	C7	O	Bank select address. Row/column address outputs multiplexed on to the same pins.
FSADDR6	C8	O	Bank select address. Row/column address outputs multiplexed on to the same pins.
FSADDR5	C10	O	Bank select address. Row/column address outputs multiplexed on to the same pins.
FSADDR4	C13	O	Bank select address. Row/column address outputs multiplexed on to the same pins.
FSADDR3	C15	O	Bank select address. Row/column address outputs multiplexed on to the same pins.
FSADDR2	C16	O	Bank select address. Row/column address outputs multiplexed on to the same pins.
FSADDR1	C17	O	Bank select address. Row/column address outputs multiplexed on to the same pins.
FSADDR0	C18	O	Bank select address. Row/column address outputs multiplexed on to the same pins.
FSCS0	D21	O	Chip select 0 pin(ball). SSTL2
FSCS1	C22	O	Chip select 1 pin(ball). SSTL2
VDDA18_DLL	A14	AP	1.8V power supply for on chip DLL for DDR interface timing control.
VSSA18_DLL	B14	AG	Power supply return for on chip DLL.
DDR2.5	D4,D6, D7,D8, D10,D11, D12,D13, D14,D15, D17,D18, D20,D22, D23	P	2.5V power supply for DDR SSTL2 I/O's.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -52

Q8200: FLI30336 (Video Processor, TORINO)

TERMINAL DESCRIPTION(10/10)

Clock Synthesis

Pin name	Pin#	I/O	Description
RPLL_18	C25	AP	RPLL power supply (1.8V)
RPLL_AGND	A25,A26	AG	RPLL analog ground.
RPLL_33	D26	AP	RPLL power supply (3.3V)
RPLL_DGND	B25	AG	RPLL digital ground.
XTAL	B26	AO	Output to external crystal.
TCLK	C26	AI	Reference clock input for external crystal connection.
N/C	D25	O	No connect.

Low Bandwidth ADC

Pin name	Pin#	I/O	Description
LBADC_3.3	AC9	AP	Row bandwidth ADC analog VDD (3.3V)
LBADC_GND	AC11	AG	Row bandwidth ADC ground.
LBADC_IN1	AF10	I	Analog input channel 1 for low bandwidth ADC.
LBADC_IN2	AE10	I	Analog input channel 2 for low bandwidth ADC.
LBADC_IN3	AD10	I	Analog input channel 3 for low bandwidth ADC.
LBADC_IN4	AC10	I	Analog input channel 4 for low bandwidth ADC.
LBADC_IN5	AF11	I	Analog input channel 5 for low bandwidth ADC.
LBADC_IN6	AE11	I	Analog input channel 6 for low bandwidth ADC.
LBADC_RETURN	AD11	I	Signal return path for channels 1 to 6 of low band ADC.

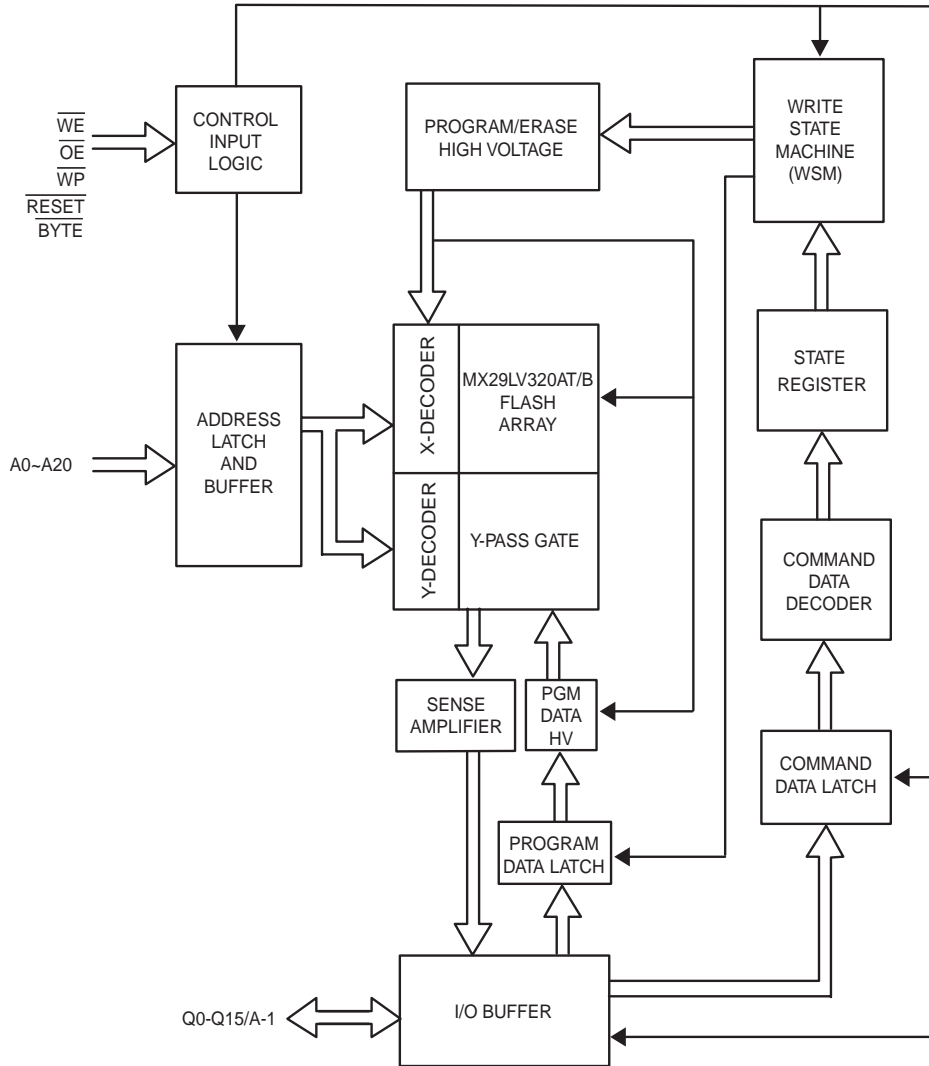
Digital Power Supply

Pin name	Pin#	I/O	Description
CORE_1.8	K10,K11,K16,K17, L11,L16,T11,T16,T17 U10,U11,U16,U17	P	1.8V VDD for core supply.
IO_3.3	E4,F4,G4,H4,J4,K4, L4,AC14,AC16,AC18, AC22,AB23,Y23,V23, T23,P23,M23	P	3.3V VDD for I/O.
D_GND	L10,M10,N10,P10, R10,T10,M11,N11, P11,R11,K12,L12, M12,N12,P12,R12, T12,U12,K13,L13, M13,N13,P13,R13, M14,N14,P14,R14, T14,U14,K15,L15, M15,N15,P15,R15, T15,U15,M16,N16, P16,R16,L17,M17, N17,P17,R17	G	Ground for core 1.8V SSTL2 2.5V, and I/O 3.3V power supplies.

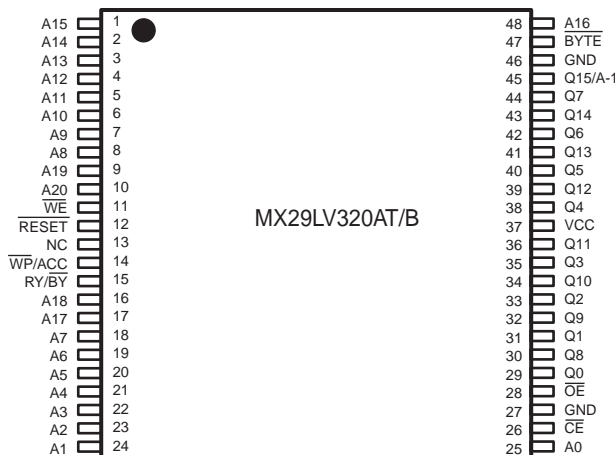
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -53

Q8005 MX29LV320(32Mbit CMOS Flash memory)

BLOCK DIAGRAM



PIN DESCRIPTION

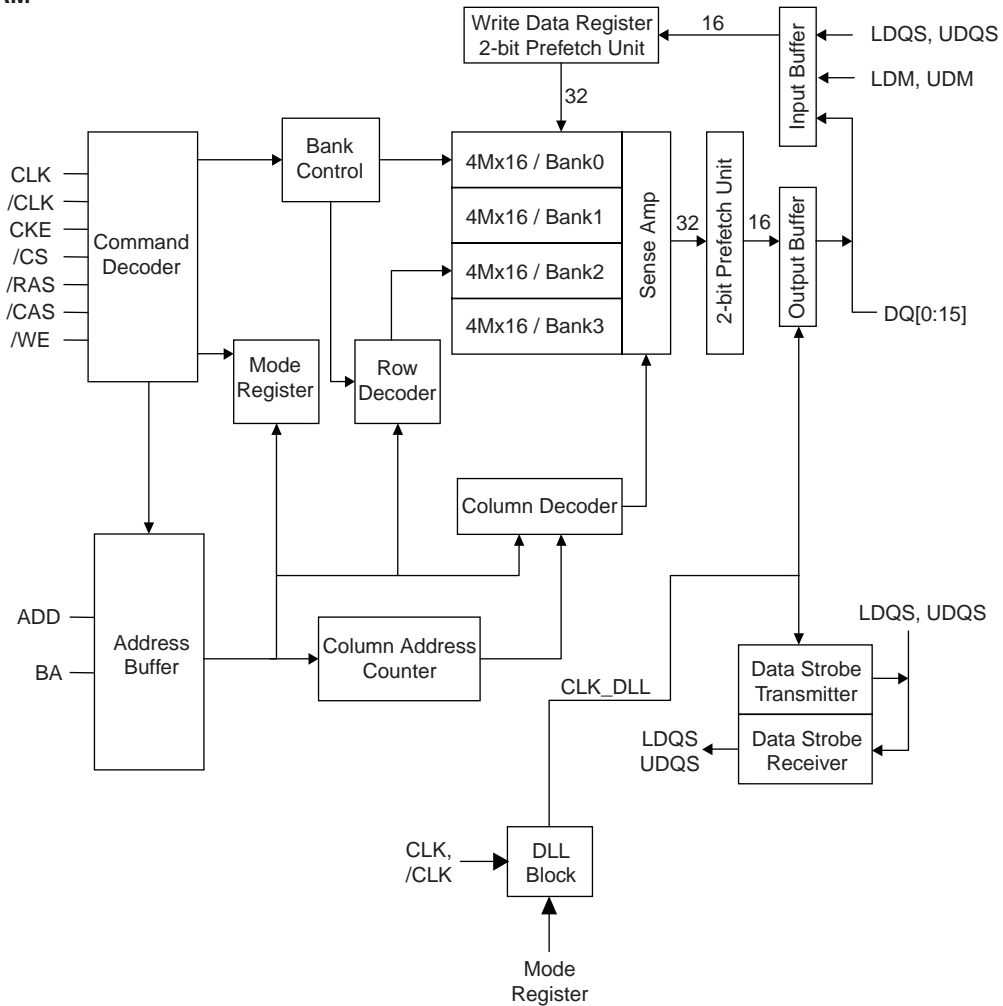


PIN NAME	DESCRIPTION
A0~A20	Address Input
Q0~Q14	Data Input/Output
Q15/A-1	Q15:Data Input/Output,word mode A-1:LSB Address Input,byte mode
\overline{CE}	Chip Enable Input
\overline{WE}	Write Enable Input
\overline{OE}	Output Enable Input
\overline{BYTE}	Word/Byte Selection Pin
\overline{RESET}	Hardware Reset Pin/Sector Protect Unlock
$\overline{RY}/\overline{BY}$	Read/Busy output
VCC	Power Supply Pin (+5V)
$\overline{WP}/\overline{ACC}$	Hardware Write Protect/Acceleration Pin
GND	Ground Pin

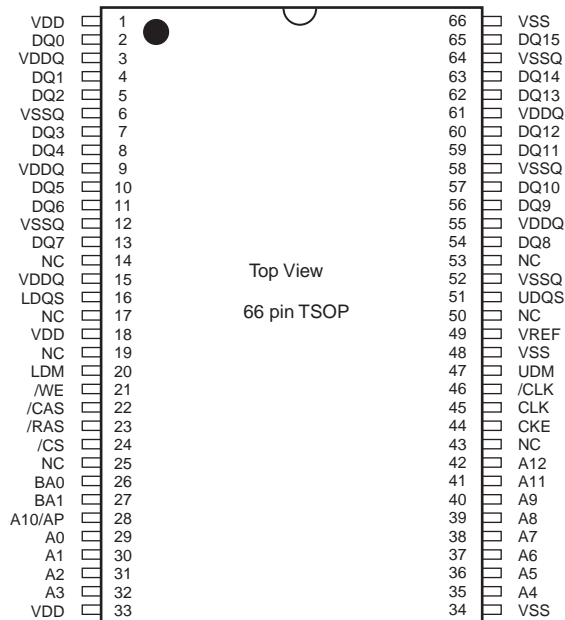
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -54

Q800, Q8001: HY5DU561622ETP (256 Mbit DDR SDRAM)

BLOCK DIAGRAM



PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -55

Q8000, Q8001: HY5DU561622ETP (256 Mbit DDR SDRAM)

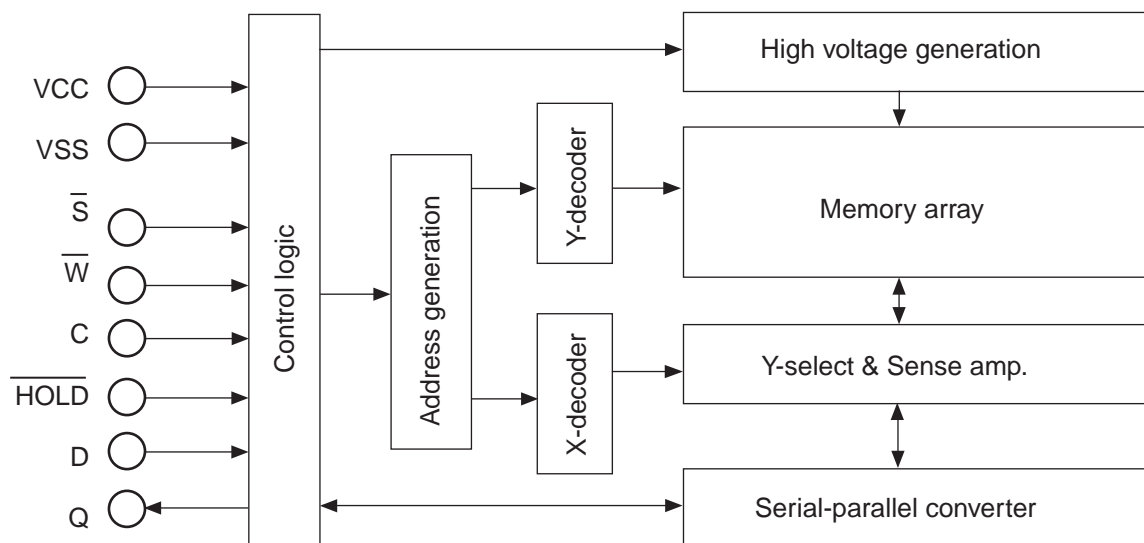
TERMINAL DESCRIPTION

PIN	TYPE	DESCRIPTION
CK, /CK	Input	Clock: CK and /CK are differential clock inputs. All address and control input signals are sampled on the crossing of the positive edge of CK and negative edge of /CK. Output (read) data is referenced to the crossings of CK and /CK (both directions of crossing).
CKE	Input	Clock Enable: CKE HIGH activates, and CKE LOW deactivates internal clock signals, and device input buffers and output drivers. Taking CKE LOW provides PRECHARGE POWER DOWN and SELF REFRESH operation (all banks idle), or ACTIVE POWER DOWN (row ACTIVE in any bank). CKE is synchronous to POWER DOWN entry and exit, and for SELF REFRESH entry. CKE is asynchronous for SELF REFRESH exit, and for output disable. CKE must be maintained high throughout READ and WRITE accesses. Input buffers, excluding CK, /CK and CKE are disabled during POWER DOWN. Input buffers, excluding CKE are disabled during SELF REFRESH. CKE is an SSTL_2 input, but will detect an LVCMOS LOW level after Vdd is applied.
/CS	Input	Chip Select : Enables or disables all inputs except CK, /CK, CKE, DQS and DM. All commands are masked when CS is registered high. CS provides for external bank selection on systems with multiple banks. CS is considered part of the command code.
BA0, BA1	Input	Bank Address Inputs: BA0 and BA1 define to which bank an ACTIVE, Read, Write or PRECHARGE command is being applied.
A0 ~ A12	Input	Address Inputs: Provide the row address for ACTIVE commands, and the column address and AUTO PRECHARGE bit for READ/WRITE commands, to select one location out of the memory array in the respective bank. A10 is sampled during a precharge command to determine whether the PRECHARGE applies to one bank (A10 LOW) or all banks (A10 HIGH). If only one bank is to be precharged, the bank is selected by BA0, BA1. The address inputs also provide the op code during a MODE REGISTER SET command. BA0 and BA1 define which mode register is loaded during the MODE REGISTER SET command (MRS or EMRS).
/RAS, /CAS, /WE	Input	Command Inputs: /RAS, /CAS and /WE (along with /CS) define the command being entered.
DM (LDM, UDM)	Input	Input Data Mask: DM is an input mask signal for write data. Input data is masked when DM is sampled HIGH along with that input data during a WRITE access. DM is sampled on both edges of DQS. Although DM pins are input only, the DM loading matches the DQ and DQS loading. For the x16, LDM corresponds to the data on DQ0-Q7; UDM corresponds to the data on DQ8-Q15.
DQS (LDQS, UDQS)	I/O	Data Strobe: Output with read data, input with write data. Edge aligned with read data, centered in write data. Used to capture write data. For the x16, LDQS corresponds to the data on DQ0-Q7; UDQS corresponds to the data on DQ8-Q15.
DQ	I/O	Data input / output pin : Data bus
VDD/VSS	Supply	Power supply for internal circuits and input buffers.
VDDQ/VSSQ	Supply	Power supply for output buffers for noise immunity.
VREF	Supply	Reference voltage for inputs for SSTL interface.
NC	NC	No connection.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -56

Q1022: R1EX25064ASA(8192 x 8 bit EEPROM)

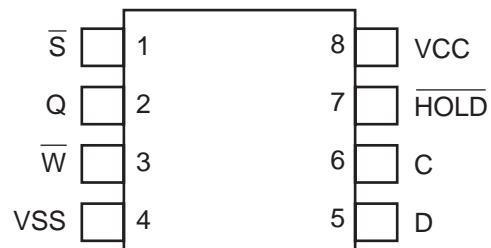
BLOCK DIAGRAM



TERMINAL DESCRIPTION

PIN NAME	FUNCTION
C	Serial clock
D	Serial data input
Q	Serial data output
\bar{S}	Chip select
\bar{W}	Write protect
\overline{HOLD}	Hold
VCC	Supply voltage
VSS	Ground

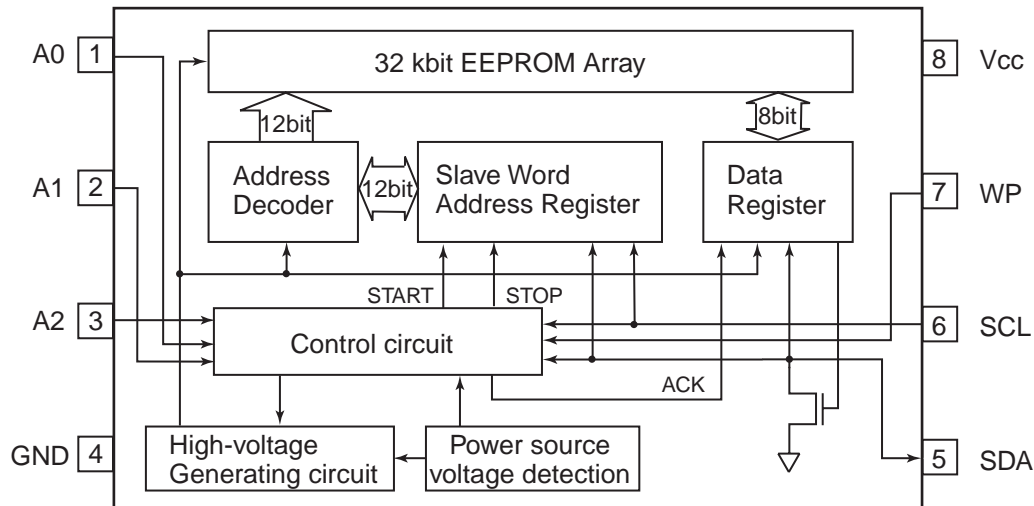
PIN LAYOUT



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -57

Q8201: BR24S32FJ(32kbit, 4096x8 bit EEPROM)

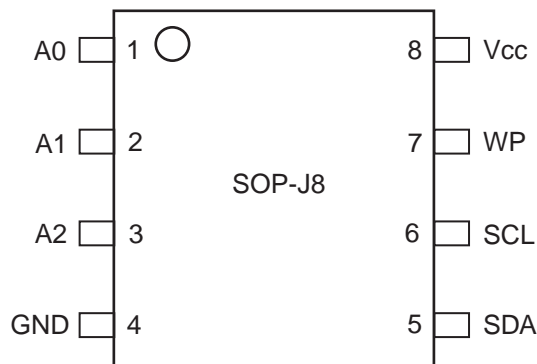
BLOCK DIAGRAM AND PIN CONFIGURATION



TERMINAL DESCRIPTION

Terminal Name	I/O	Function
Vcc	-	Connect the power source
GND	-	Reference voltage of all input / output, 0V
A0,A1,A2	I	Slave address setting terminal
SCL	I	Serial clock input
SDA	I/O	Slave and word address Serial data input, serial data output
WP	I	Write protect terminal

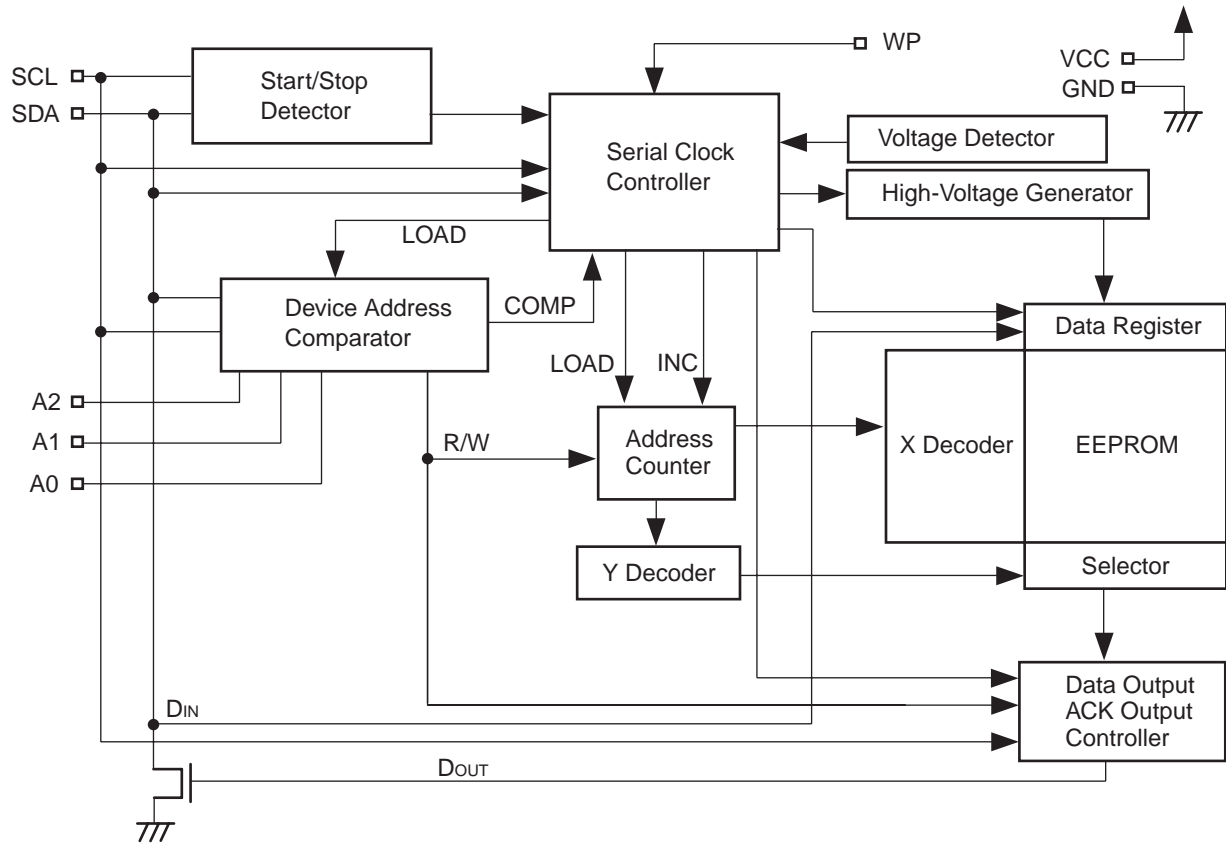
PIN LAYOUT



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -58

Q8610: S-24CS02AFT(2kbit, 256 x 8 bit EEPROM)

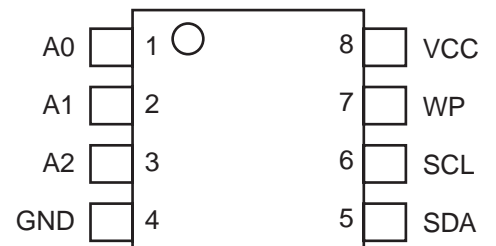
BLOCK DIAGRAM



TERMINAL DESCRIPTION

Pin No.	Symbol	Description
1	A0	Address input
2	A1	Address input
3	A2	Address input
4	GND	Ground
5	SDA	Serial data input/output
6	SCL	Serial clock input
7	WP	Write protection input Connected to Vcc: Protection valid Connected to GND: Protection invalid
8	VCC	Power supply

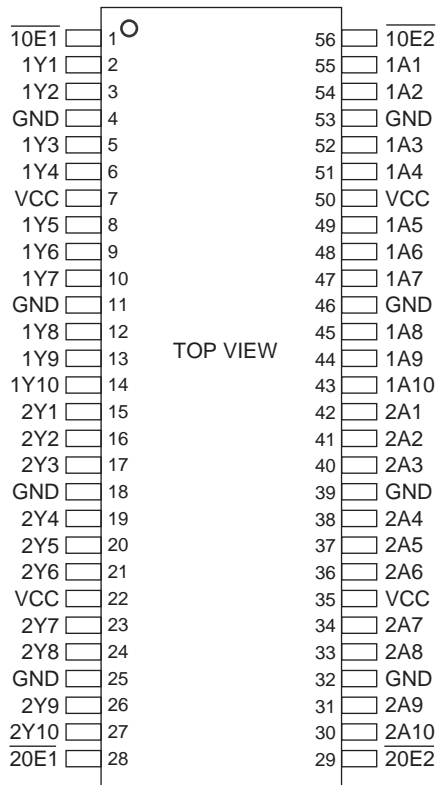
PIN LAYOUT



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -59

Q8813, Q8814, Q8817, Q8818: TC74VCX162827(20 bit BUS BUFFER)

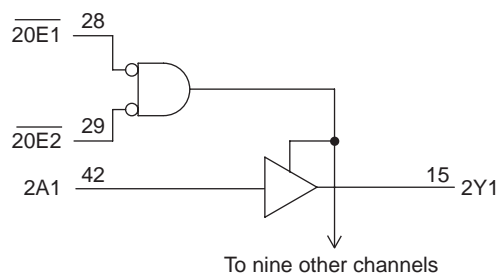
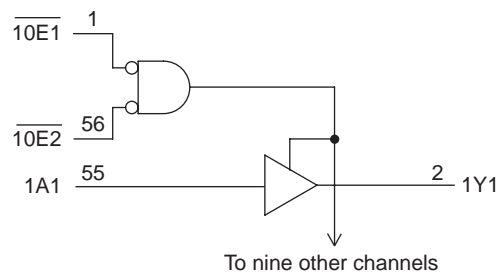
PIN ASSIGNMENT



TRUTH TABLE

Inputs			Outputs
$\overline{OE1}$	$\overline{OE2}$	A	Y
L	L	L	L
L	L	H	H
H	X	X	Z
X	H	X	Z

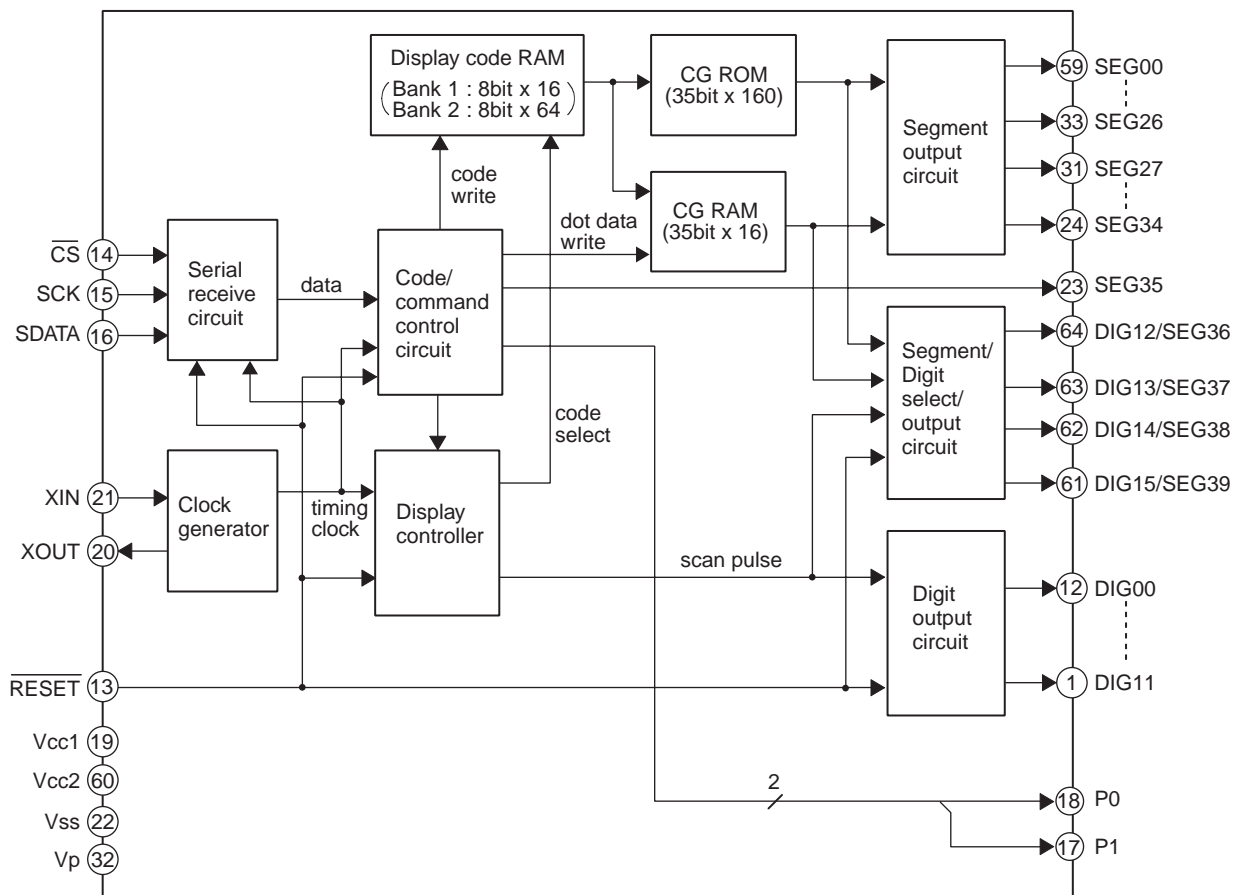
SYSTEM DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -60

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

BLOCK DIAGRAM



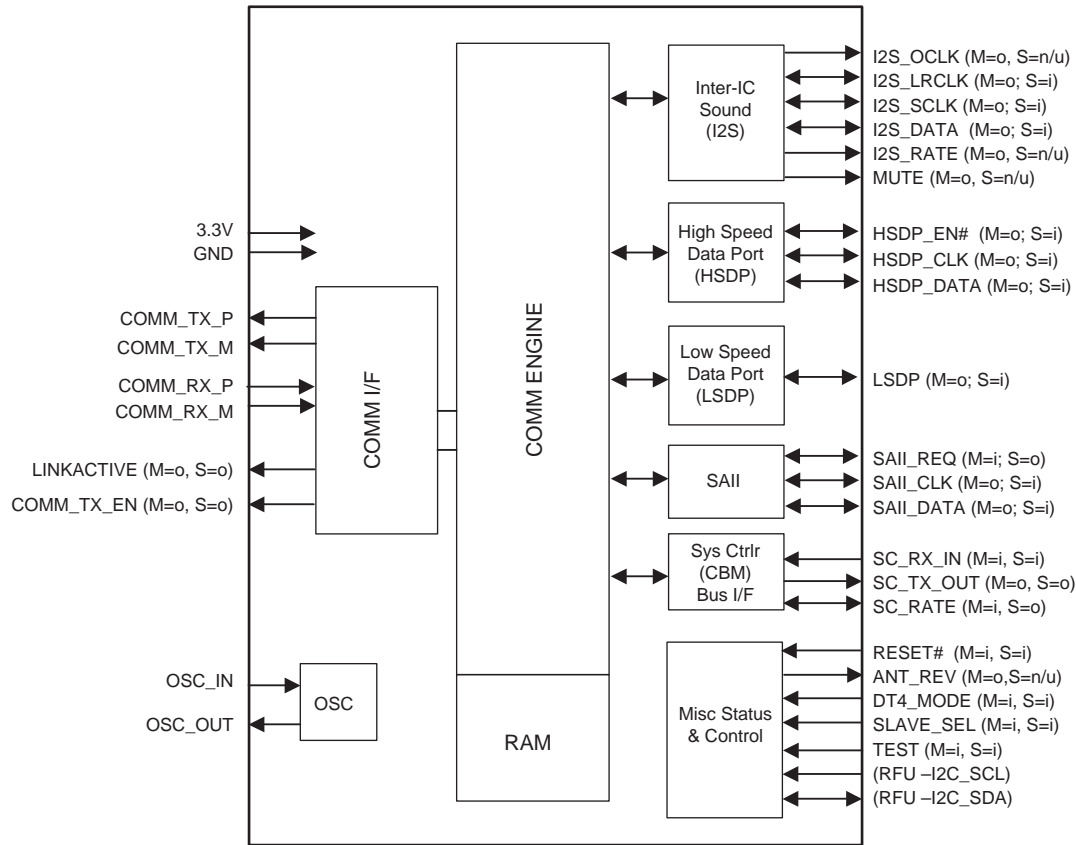
TERMINAL DESCRIPTION

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

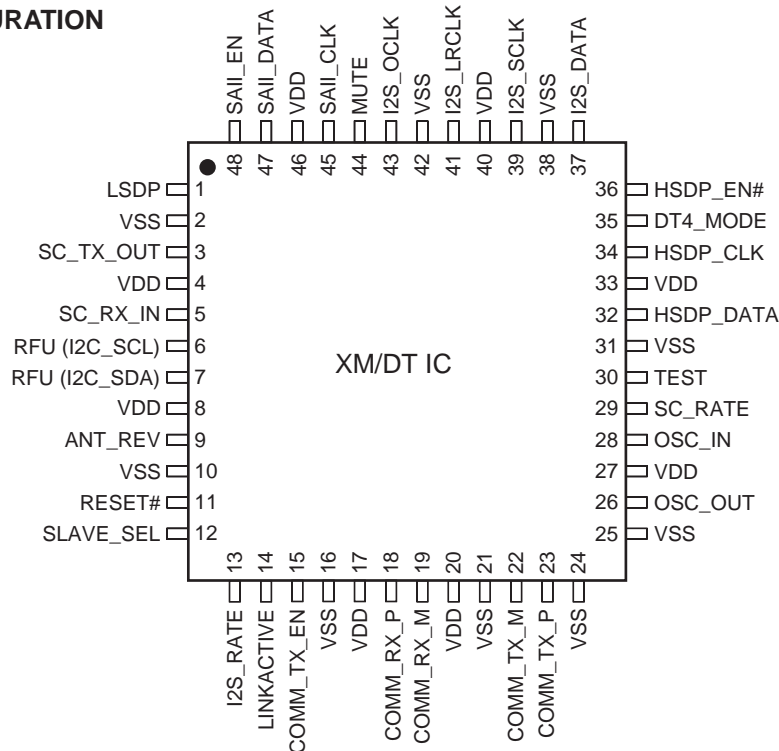
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -61

Q4 : F2628E-01 (XM Digital Transceiver)

BLOCK DIAGRAM



PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -62

Q4 : F2628E-01 (XM Digital Transceiver)

TERMINAL DESCRIPTION(1/2)

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

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -63

Q4 : F2628E-01 (XM Digital Transceiver)

TERMINAL DESCRIPTION(2/2)

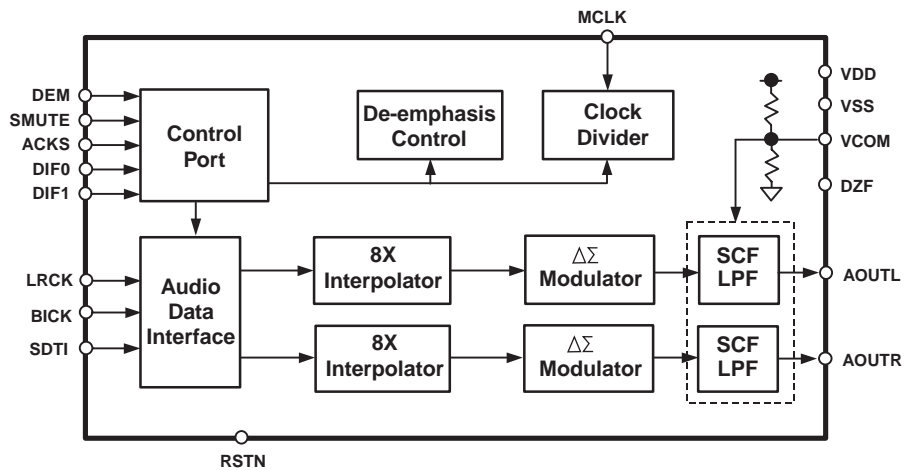
Pin No.	Pin Name	Direction	Function in Slave Mode	Function in Master Mode	Notes
32	HSDP_DATA	S=In M=Out	High Speed Data Port Data Input	High Speed Data Port Data Output	Out= 4mA, SLC In=LVTTL S/T
34	HSDP_CLK	S=In M=Out	High Speed Data Port Clock Input	High Speed Data Port Clock Output	Out= 4mA, SLC In=LVTTL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

Pin No.	Pin Name	Type	Function in Slave Mode	Function in Master Mode
4, 8, 17, 20, 27, 33, 40, 46	VDD	PWR	+3.3V Supply Voltage	+3.3V Supply Voltage
2, 10, 16, 21, 24, 25, 31, 38, 42	VSS	GND	Digital Ground	Digital Ground

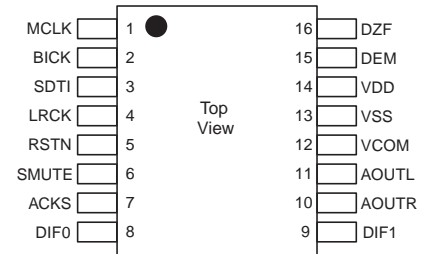
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS -64

Q5: AK4388ET (192kHz 24-bit 2ch DAC)

BLOCK DIAGRAM



PIN CONFIGURATION



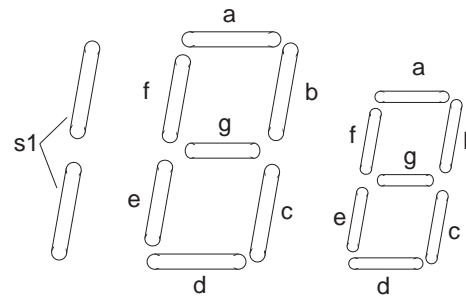
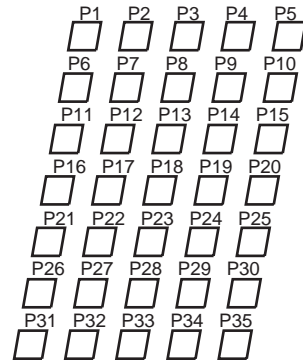
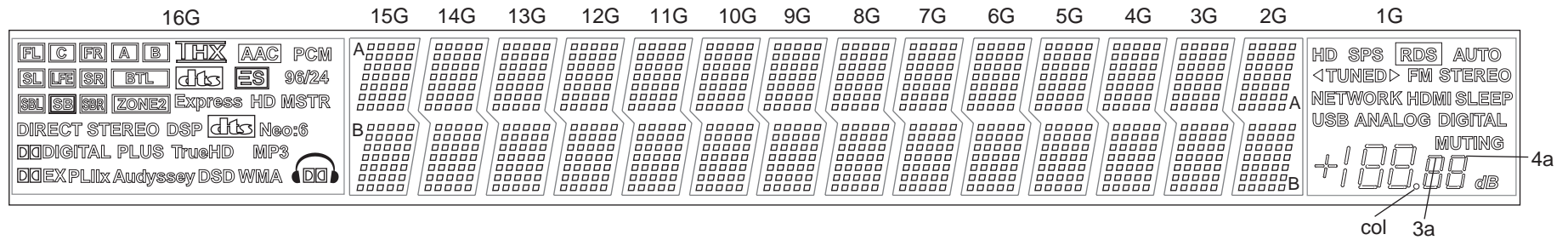
TERMINAL DESCRIPTION

No.	Pin Name	I/O	Function
1	MCLK	I	Master Clock Input Pin
2	BICK	I	Audio Serial Data Clock Pin
3	SDTI	I	Audio Serial Data Input Pin
4	LRCK	I	L/R Clock Pin
5	RSTN	I	Reset Mode Pin
6	SMUTE	I	Soft Mute Pin in parallel mode “H”: Enable, “L”: Disable
7	ACKS	I	Auto Setting Mode Pin “L”: Manual Setting Mode, “H”: Auto Setting Mode
8	DIF0	I	Audio Data Interface Format Pin
9	DIF1	I	Audio Data Interface Format Pin
10	AOUTR	O	Rch Analog Output Pin
11	AOUTL	O	Lch Analog Output Pin
12	VCOM	O	Common Voltage Pin, VDD/2
13	VSS	-	Ground Pin
14	VDD	-	Power Supply Pin
15	DEM	O	De-emphasis Mode Pin
16	DZF	O	Zero Input Detect Pin

FL TUBE VIEWS -1

Q7500: HNA-16SL04T

GRID ASSIGNMENT



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

1G

FL TUBE VIEWS -2

Q7500: HNA-16SL04T

ANODE CONNECTION

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

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

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

MICROPROCESSOR TERMINAL DESCRIPTIONS -1

Q1016: MPD70F3746

Pin No.	Pin Name	I/O	Active	Description
1	AVREF0	I	---	Internal A/D converter reference voltage 0.
2	AVSS	---	---	A/D converter ground.
3	FANCTRL	O	D/A	Cooling fan control output.
4	VDLOCK	I	H	INT input from Video processor TORINO
5	AVREF1	I	H	Internal D/A converter reference voltage 1.
6	OERXTH	O	H	HDMI bus buffers control output.
7	FLMD00	O	H	Self-writing control output, connected to Pin 8.
8	FLMD0	I	H	Self-writing control input.
9	VDD	---	---	Power supply +3.3V.
10	REGC	I	H	Capacitor-connected pin for internal regulator.
11	VSS	---	---	Ground.
12	X1	I	H	Pin to connect with oscillator.
13	X2	O	H	Pin to connect with oscillator.
14	RESET	I	H	Reset input.
15	XT1	I	H	Not used. Connected with ground.
16	XT2	O	H	Not used. Open pin.
17	NMI	O	H	Not used. Open pin.
18	POFF	I	L	Power down/resume (P-OFF) detecting input.
19	REMIN	I	L	Remote controller signal input.
20	DRST	I	L	Reset control input from debugger.
21	ERST	O	H	Ethernet reset control output.
22	RDSDATA	I	H	RDS data input.
23	RS_ETH	O	H	RS232/E-Control selecting output.
24	VSPRST	O	L	Video processor TORINO reset control output.
25	RS232TXD	O	L	UART output.
26	RS232RXD	I	L	UART input.
27	XMLNK	I	H	XM input.
28	XMANT	I	H	XM input.
29	SDA_TXDDC	I/O	H	HDMI Transmitter's DDC/EDID data input/output.
30	SCL_TXDDC	O	CLK	HDMI Transmitter's DDC/EDID clock output.
31	HPD_TX	I	H	HDMI Transmitter's HotPlugDetect input.
32	HPD_RX1	O	H	HDMI Receiver's HotPlugDetect output.
33	EVSS	---	---	Ground.
34	EVDD	---	---	Power supply +3.3V.
35	VSPTXD	O	L	Output to Video processor TORINO.
36	VSPRXD	I	L	Input from Video processor TORINO.
37	KEYINT0	I	L	Key interrupt input 0.
38	KEYINT1	I	L	Key interrupt input 1.
39	OC_DDI	I	H	Debugger data input.
40	OC_DDO	O	H	Debugger data output.
41	OC_DCK	I	CLK	Debugger clock input.
42	OC_DMS	I	H	Debugger's transfer-mode selecting signal input.
43	SDA_RXEDID1	I/O	H	HDMI Receiver-EEPROM communication data input/output.
44	SCL_RXEDID1	O	CLK	HDMI Receiver-EEPROM Communication clock output.
45	POWER_RX1	I	H	HDMI Receiver +5V detect.
46	SDA_RX	I/O	H	SII9135/SII9185 control data input/output.
47	SCL_RX	O	CLK	SII9135/SII9185 control clock output.
48	INT_RX	I	L	Interrupt input from SII9135.
49	DIGSDI	I	H	DIR/CODEC/DSP data input.
50	DIGSDO	O	H	DIR/CODEC/DSP data output.

MICROPROCESSOR TERMINAL DESCRIPTIONS -2

Q1016: MPD70F3746

Pin No.	Pin Name	I/O	Active	Description
51	DSPCLK	O	CLK	DSP colck output.
52	MUT_RX	I	H	RXMUTE signal input from SII9135.
53	RST_RX	O	L	Reset control output to SII9135/SII9185.
54	CECOUT	O	L	HDMI CEC output.
55	CECIN	I	L	HDMI CEC input.
56	SCL_TX	O	CLK	SII9134 clock output.
57	SDA_TX	I/O	H	SII9134 data input/output.
58	EXPCLK	O	CLK	Clock output to Expander chip Q1021.
59	XMRXD	I	L	XM data input.
60	XMTXD	O	L	XM data output.
61	SRTXD	O	L	SIRIUS UART data output.
62	SRRXD	I	L	SIRIUS UART data input.
63	SRRST	O	H	SIRIUS reset control output.
64	INT_TX	I	L	INT signal input from SII9134.
65	RST_TX	O	L	Reset control output to SII9134.
66	SYSOUT	O	H	RI output.
67	PLLVSWSCL	O	CLK	Clock output to Tuner Unit/Video Switch IC.
68	PLLVSELSDA	I/O	H	Data input/output from/to Tuner Unit/Video Switch IC.
69	FLDSDO	O	H	Data output to FL Driver M66005.
70	FLDCLK	O	CLK	Clock output to FL Driver M66005.
71	FSI	I	H	Data input from Flash Writer.
72	FSO	O	H	Data output to Flash Writer.
73	FCLK	I	CLK	Clock input from Flash Writer.
74	SYSIN	I	H	RI input.
75	RDSCLK	I	CLK	RDS clock input.
76	POFF2	I	L	Power down/resume (P-OFF2) detecting input.
77	FLDRST	O	L	Reset control output to FL Driver M66005.
78	FLDCS	O	L	Chip selecting signal to FL Driver1 M66005.
79	FLD2CS	O	L	Chip selecting signal to FL Driver2 M66005.
80	EXPLAT	O	H	Latch output to Expander chip Q1021.
81	EXPOE	O	H	Control output to Expander chip Q1021.
82	SD	I	L	FM/AM Tuned detecting input.
83	STEREO	I	L	FM STREO detecting input.
84	DSP1BUSY	I	H	1st DSP's BUSY detecting input.
85	HS	O	H	Hand-shake output to Flash Writer.
86	DSP1NIC	I	H	1st DSP's status change detecting input.
87	DSP1DEC	I	H	1st DSP's decoding success detecting input.
88	DSP1CS	O	L	1st DSP's chip selecting output.
89	DSP1RST	O	L	1st DSP's reset control output.
90	DSP2BUSY	I	H	2nd DSP's BUSY detecting input.
91	DSP2CS	O	L	2nd DSP' chip selecting output.
92	DSP2RST	O	L	2nd DSP's reset control output.
93	DIRINT	I	H	DIR/CODEC's UNLOCK detecting input.
94	DIRCLK	O	CLK	DIR/CODEC's clock output.
95	DIRCS	O	L	DIR/CODEC's chip selecting output.
96	DIRRST	O	L	DIR/CODEC's reset control output.
97	DACCS	O	L	CS4382A chip selecting output.
98	DACRST	O	L	DAC reset control output.
99	SEC1H	O	H	Power supply voltage switch control output for the power amplifier stage.
100	SWMUT	O	H	Subwoofer ch mute control output.

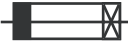
MICROPROCESSOR TERMINAL DESCRIPTIONS -3

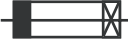
Q1016: MPD70F3746

Pin No.	Pin Name	I/O	Active	Description
101	ZONE2LED	O	H	ZONE2 LED control output.
102	PURELED	O	H	PURE AUDIO LED control output.
103	BVSS	---	---	Ground.
104	BVDD	---	---	Power supply +3.3V
105	STANDBYLED	O	H	STANDBY LED control output.
106	VMUT	O	H	VIDEO MUTE control output.
107	XMRST	O	H	XM IC reset control output.
108	XMDACRST	O	L	XM DAC reset control output.
109	SBZ2MUT	O	H	SurroundBack/ZONE2 MUTE control output.
110	ROMCS	O	H	EEPROM chip selecting output.
111	ROMCLK	O	CLK	EEPROM clock output.
112	ROMSDI	I	H	EEPROM data input.
113	ROMSDO	O	H	EEPROM data output.
114	Z2MUT	O	H	ZONE2 MUTE control output.
115	AMUT	O	H	AUDIO MUTE control output.
116	IPROTECT	I	H	Current PROTECT detecting input.
117	PROTECT	I	H	PROTECT detecting input.
118	SPRLF	O	H	Control output for Front ch Speaker relay.
119	SPRLCS	O	H	Control output for Center/Surround ch Speaker relay.
120	SPRLSB	O	H	Control output for SurroundBack ch Speaker relay.
121	PRERLSB	O	H	Control output for SurroundBack ch Preout relay.
122	SPRLZ2	O	H	Control output for ZONE2 speaker relay.
123	VOLCLK	O	CLK	Clock output to Audio Processor R2S15211.
124	VOLDATA	O	H	Data output to Audio Processor R2S15211.
125	Z2VOLCLK	O	CLK	ZONE2 Volume clock output.
126	MEQMUTE	I	H	Mute detecting input during Audyssey setup measurement.
127	APOWER	O	H	Control output to audio circuit's power supply.
128	VPOWER	O	H	Control output to video circuit's power supply.
129	HPDET	I	H	Headphone Detect input.
130	MICMUT	O	H	MIC mute control output.
131	MICDET	I	L	MIC detecting input.
132	VOLB	I	CLK	Master Volume rotary-encoder data input B.
133	VOLA	I	H	Master Volume rotary-encoder data input A.
134	VOLH	I	A/D	Power amplifier VOLH voltage input.
135	THERMAL2	I	A/D	Power amplifier's thermal sensor voltage input 2.
136	THERMAL1	I	A/D	Power amplifier's thermal sensor voltage input 1.
137	INIT3	I	A/D	Initial setting pin 3.
138	INIT2	I	A/D	Initial setting pin 2.
139	INIT1	I	A/D	Initial setting pin 1.
140	BAND	I	A/D	Tuner' band setting pin.
141	KEY3	I	A/D	A/D voltage input 3 for Key marix.
142	KEY2	I	A/D	A/D voltage input 2 for Key marix.
143	KEY1	I	H	A/D voltage input 1 for Key marix.
144	KEY0	I	A/D	A/D voltage input 0 for Key marix.

SERVICE PROCEDURES-1

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 appose.

<Notes>

<DC> : TX-SR706 USA and Canadian model	<MO> : TX-SR706 Saudi model
<DD> : TX-SR706 USA model	<MT> : TX-SR706 Southeast Asian model
<DT> : TX-SR706 Taiwanese model	<MQ> : TX-SR706 Hong kong model
<MP> : TX-SR706 European model	<MR> : TX-SA706 Chinese model
<MA> : TX-SR706 Australian model	

REF NO.	PART NAME	DESCRIPTION	PART NO.	REMARKS
F901	FUSE	10A-UL/T-233	252330GR	!, <DC, DD, DT>
F901	FUSE	5A-SE-EAK	252078GR	!, <MP, MA, MO, MQ, MT, MR>
F4000	FUSE	4A-UL/T-233	252325GR	!
F4001	FUSE	4A-UL/T-233	252325GR	!
F6901	FUSE	15A-TUL-250V	252303GR	!
F6902	FUSE	15A-TUL-250V	252303GR	!

2. To initialize the unit

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

3. Safety check out

(U.S.A. model only)

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

Leakage current Check

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

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

Any current measured must not exceed 0.5mA.

4. Memory Backup

This model uses not a capacitor but a EEPROM IC(Q1022) 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 same time, because these parts get damage together 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
Q6050, Q6060	Q6051, Q6061	Q6052, Q6062	Q6053, Q6063	Q6054, Q6064	Q6055, Q6065	Q6056, Q6066
Q6030, Q6040	Q6031, Q6041	Q6032, Q6042	Q6033, Q6043	Q6034, Q6044	Q6035, Q6045	Q6036, Q6046
Q6010, Q6100	Q6011, Q6101	Q6012, Q6102	Q6013, Q6103	Q6014, Q6104	Q6015, Q6105	Q6016, Q6106
Q6110, C6020	Q6111, C6021	Q6112, C6022	Q6113, C6023	Q6114, C6024	Q6115, C6025	Q6116, C6026
R6070, R6100	R6071, R6101	R6072, R6102	R6073, R6103	R6074, R6104	R6075, R6105	R6076, R6106
R6250, R6260	R6251, R6261	R6252, R6262	R6253, R6263	R6254, R6264	R6255, R6265	R6256, R6266
R6270, R6280	R6271, R6281	R6272, R6282	R6273, R6283	R6274, R6284	R6275, R6285	R6276, R6286
R6290, R6300	R6291, R6301	R6292, R6302	R6293, R6303	R6294, R6304	R6295, R6305	R6296, R6306
R6310	R6311	R6312	R6313	R6314	R6315	R6316

SERVICE PROCEDURES-2

6. Replacing microprocessors and flash memories

This page describes the method to write the firmware in the new chip which is replaced with broken one, and also to update it.

1. Main microprocessor

Target IC: Q1016

It is not necessary to write the firmware directly in a new chip by a specific ROM writer.

Mount the chip on pcb and the pcb on the unit.

Refer to FIRMWARE UPDATE -2 &3 for the method.

2. 1st DSP ROM

Target IC: Q3451

Must write the firmware directly in a new chip by the specific ROM writer before mounting on pcb.

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

In the case of updating the firmware, refer to FIRMWARE UPDATE -4 & 5.

3. 2nd DSP ROM

Target IC: Q3551

Must write the firmware directly in a new chip by the specific ROM writer before mounting on pcb.

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

In the case of updating the firmware, refer to FIRMWARE UPDATE -4 & 5.

4. Video processor (TORINO)

Target IC: Q8005

It is not necessary to write the firmware directly in a new chip by a specific ROM writer.

Mount the chip on pcb and the pcb on the unit.

However, this TORINO chip is impossible to remove from the pcb in order in the field service.

In the case of updating the firmware, refer to FIRMWARE UPDATE -6 to 12 for the method.

5. Network (E-Control) (DTR-6.9 only)

Target IC: Q4803

It is not necessary to write the firmware directly in a chip.

Mount the chip on pcb and the pcb on the unit.

ROM writer " PICKit 2 (MICROCHIP) " and PC application for it are necessary.

This update is through JTAG socket P4801 on pcb: NAVD-9505.

FIRMWARE UPDATE -1

How to Check Versions of Main Microprocessor, DSP(1st & 2nd) and Video FW

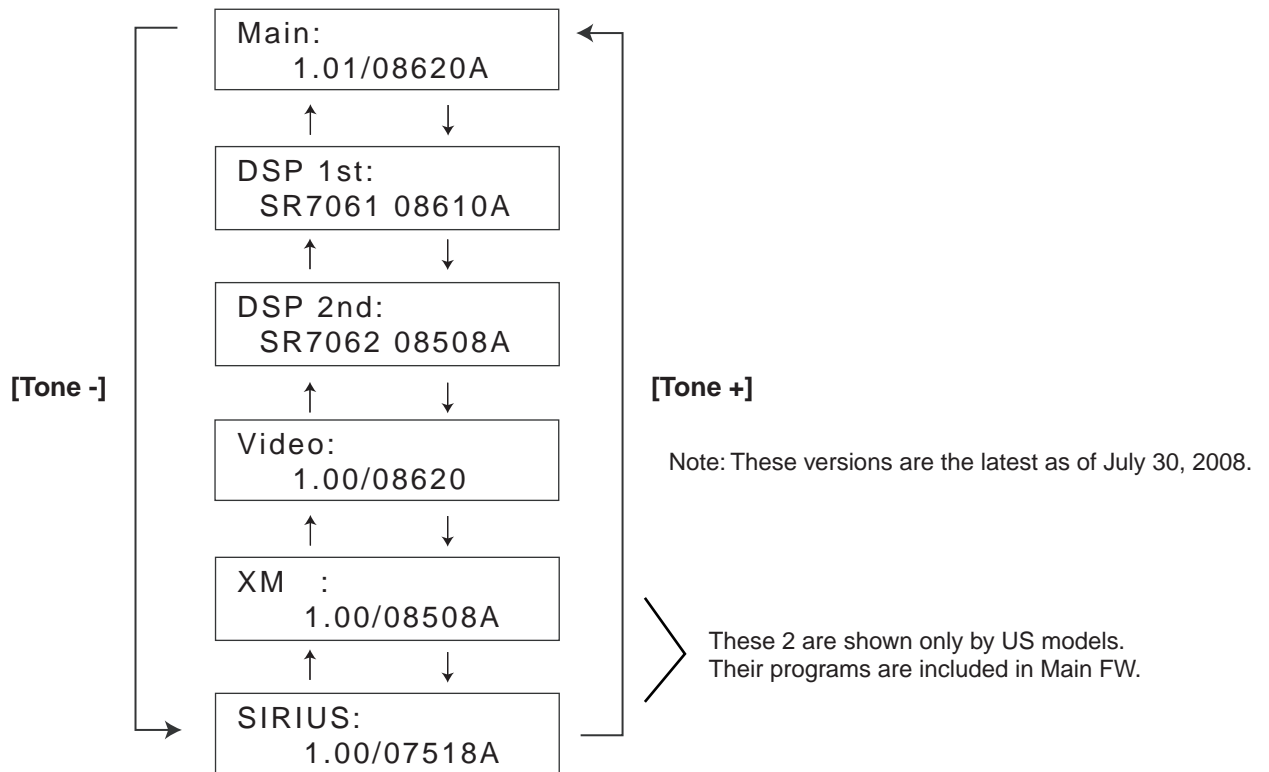
NOTE: HDMI FW is included in Main Microprocessor FW.

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

<e.g.>

Main: 1.01/08620A

2. Press [Tone +] button while the version is displayed. Then, "DSP 1st:SR7061 08610A" will be displayed. Press [Tone +] button again while "DSP 1st:SR7061 08610A" is displayed. Then, "DSP 2nd:SR7062 08508A" 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.



FIRMWARE UPDATE -2

Preparation for Update (Main Microprocessor)

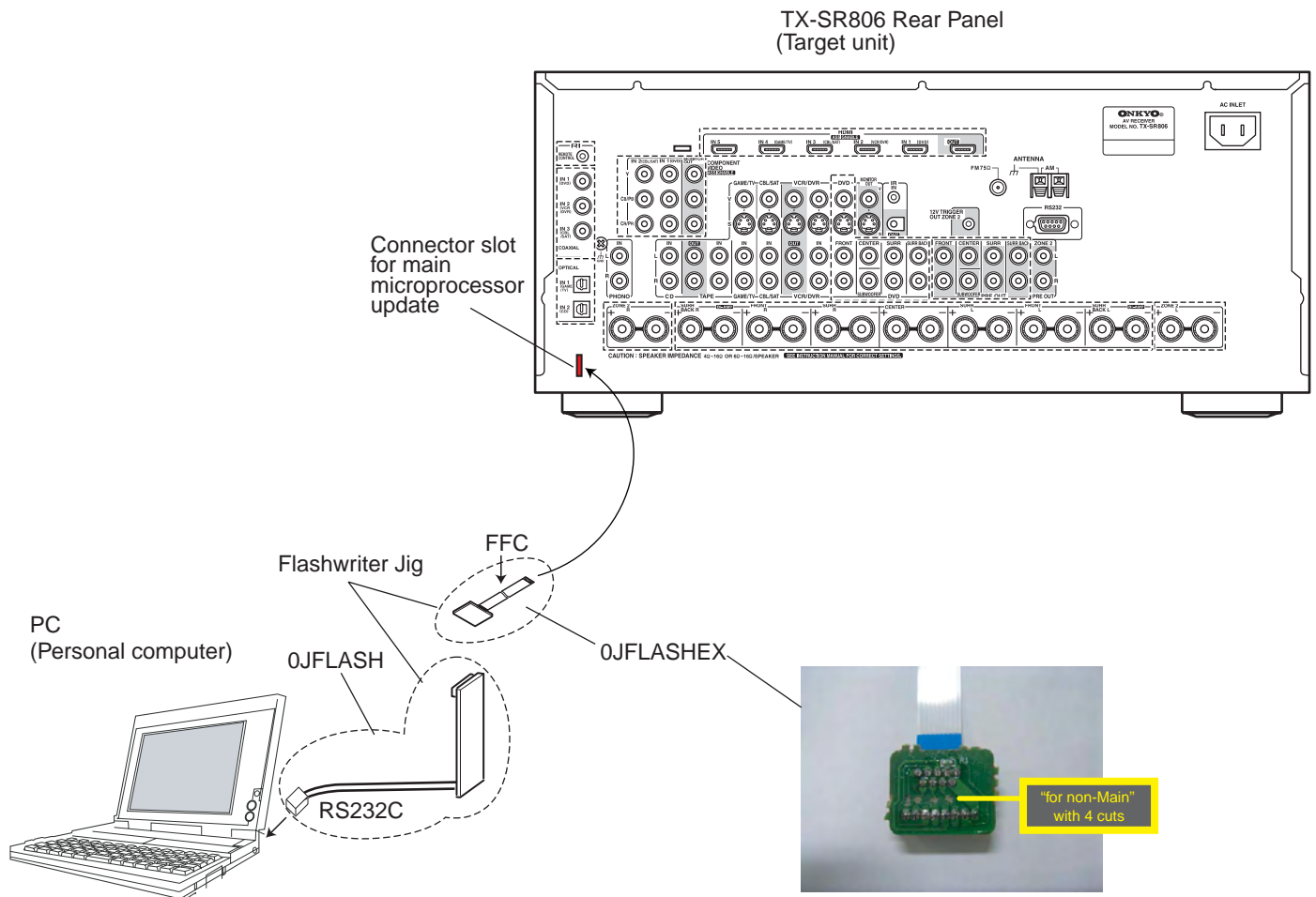
Update IC: Q1016 : MPD70F3746
PCB : NADG-9504

Hardware and Software

1. Personal computer(PC) with Windows XP or 2000
2. Flashwriter jig: OJFLASH and OJFLASHEX (including 2 Types: for non-Main)
3. Writing soft: "Update_SR806Main1.0.zip" for Main microprocessor (File name depends on the version.)
Unzip "Update_SR806Main1.0.zip" in advance.

Connection and Setup

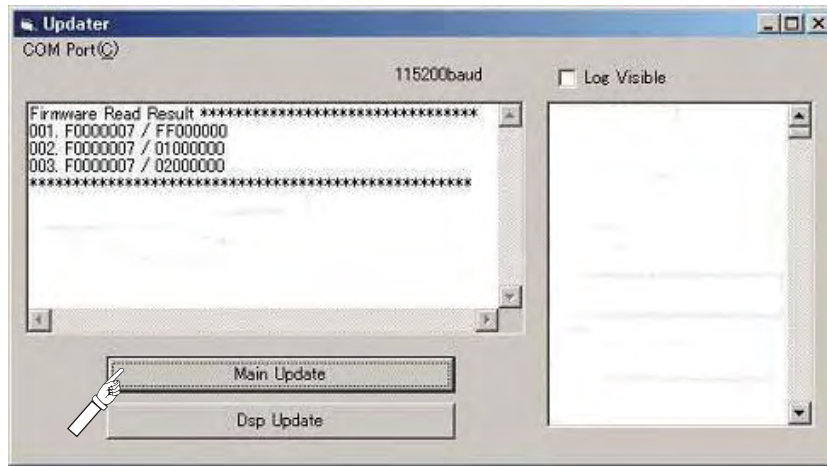
1. While the target unit is off, connect OJFLASH and OJFLASHEX (for non-Main) to RS232 port of the PC.
2. Connect the FFC of the jig to the connector slot on the rear panel of TX-SR706/806/DTR-6.9/7.9.
3. Power on the unit.



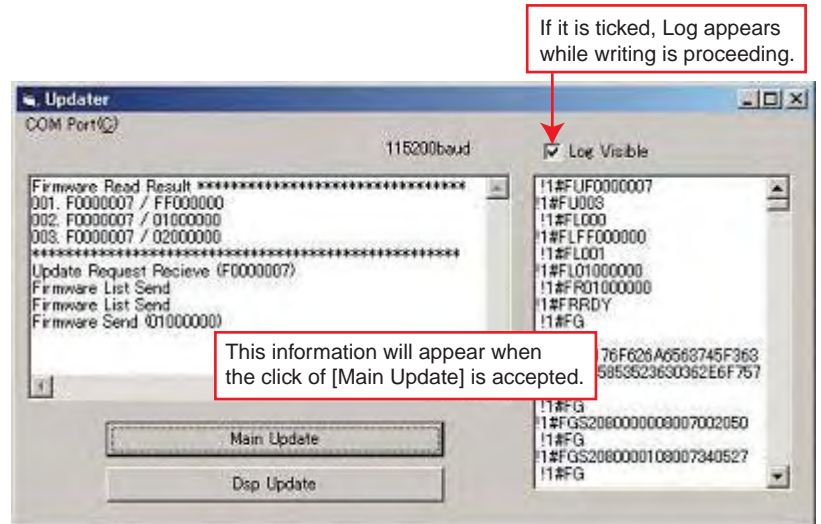
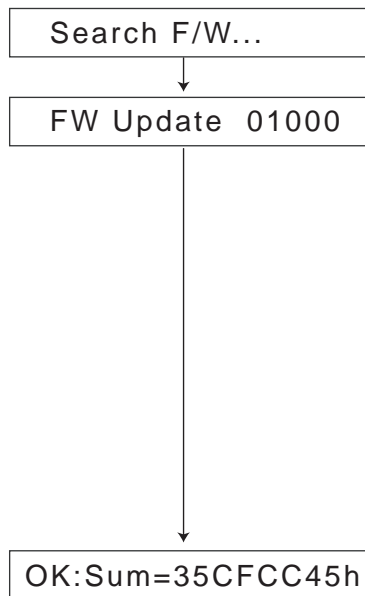
FIRMWARE UPDATE -3

Main Microprocessor Update Procedure

1. Double click "Update.exe" in the unzipped folder "Update_SR806Main1.0.zip" (Folder name depends on the version.)
The following window will appear.



2. Click "Main Update" button. The update takes about 15 minutes.
The message on Front Display will change as follows.



3. After the update ends, unplug the power code, remove the jig from the unit, and plug it again.
4. Turn on the unit and initialize it by holding down [VCR/DVR] button and the pressing [ON/STANDBY] button.
Confirm the new version number.

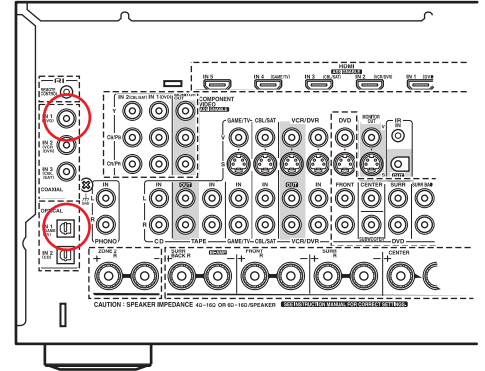
FIRMWARE UPDATE -4

Preparation for Update (DSP)

Update IC: Q3401 : 16Mbit Flash ROM for Q3401 D790E001BZDH300
 Q3501 : 8Mbit Flash ROM for Q3501 D790E001BZDH300
 PCB: NAHDM-9562

Hardware and Software

1. Blank CD-R, PC, CD-R writing software
2. Writing soft: "cd_SR70612_08610A_08523E.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 or Coaxial output terminal
 Note: Some CD players and a lot of DVD players process audio signal data before output. Such players cannot be used for this update.
4. Optical cable or Coaxial cable



TX-SR806 Rear Panel
(Target Unit)

First Procedure

1. Connect a CD Player with the target unit via Optical Input 1 or Coaxial 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 [ON/STANDBY] button to show Main FW version when the unit is powered on.

<e.g.>

Main:
1.01/08620A

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

<e.g.>

DSP 1st:
SR7061 08610A

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

Digin :
AUTO

4. Select OPT1 or COAX by using [< PRESET] button or [PRESET >] button.

Digin :
COAX1

or

Digin :
OPT1

5. Press [Enter] button. Then, the following message will appear.

S/PDIF Update
..

6. Play the DSP FW CD-R with the CD player. After playback of each program finished, writing will start.

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

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

FIRMWARE UPDATE -5

DSP Update Procedure (Continued)

Estimated Process Time in CD Player

0:12

Writing...
1st DSP

0:32

S/PDIF Update
..

0:55

0:58

Writing...
2nd DSP

.

.

.

.

Fin. Push STBY
1:OK 2:OK 0000

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

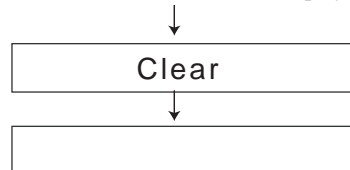
Some DVD players are not suitable for this update. If writing results in failure, use another model of player.

DURING WRITING, DO NOT TURN OFF THE POWER and DO NOT DISCONNECT OPTICAL/COAXIAL CABLE.

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

If "Clear" is shown and the unit goes into the standby mode automatically, start over from Step1.

7. Press [ON/STANDBY] button and see Front Display changes as below.



The unit goes into the Standby mode.

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

FIRMWARE UPDATE -6

Preparation for Update (Video)

Update IC: Q8005 : 32Mbit Flash ROM for Q8200 FLI30336-AC(TORINO)
PCB: NAHDM-9562

Hardware

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



or



Software

GProbe 5[1].4.0.3.zip

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

First Procedure

1. Store a provided folder "Batch_File" containing necessary folders and files in C drive.
C:\Torino_Batch

2. Make sure that the tree structure of the folder "Torino_Batch" is as shown below.
<e.g.>

名前	サイズ	種類	更新日時
isp_16_ext.hex	9 KB	HEX Document"	2008/05/30 13:25
outputlog.txt	0 KB	テキストドキュメント	2008/05/30 13:28
TR100_08620.bat	2 KB	MS-DOS バッチ ファ...	2008/06/23 14:30
TR100_08620.hex	3,348 KB	HEX Document"	2008/06/23 14:29

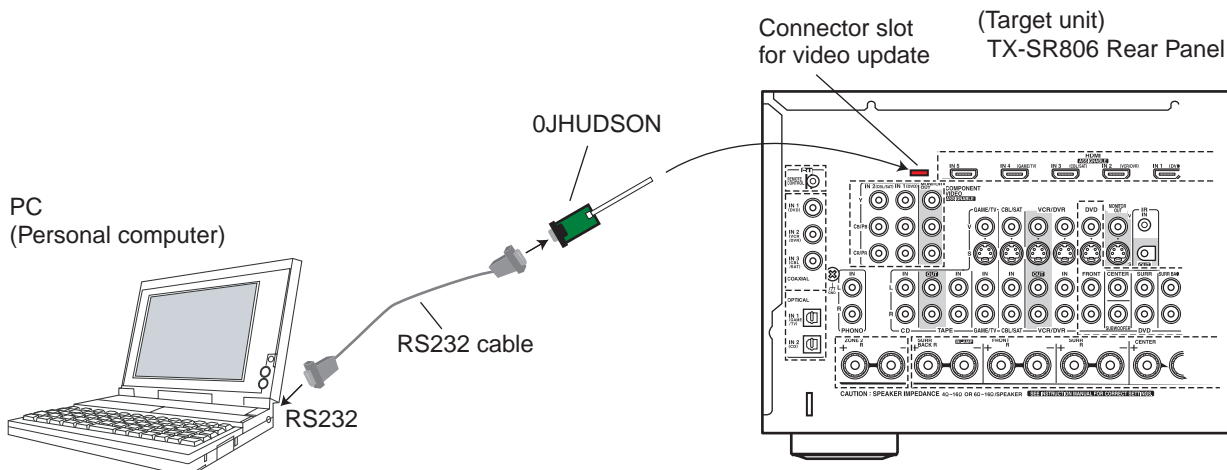
isp_16_ext.hex : for communication

TR100_08620.bat : Batch file

TR100_08620.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-SR706/806/DTR-6.9/7.9.



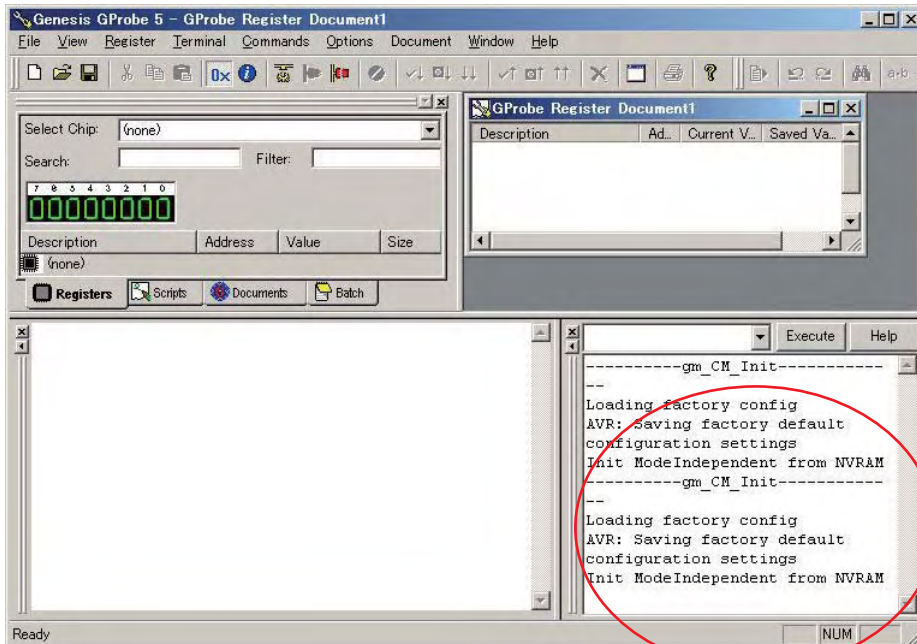
FIRMWARE UPDATE -7

Video Update Procedure

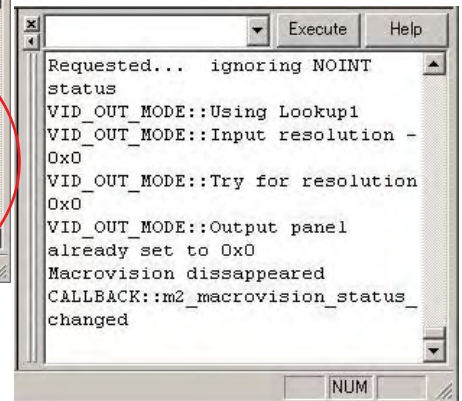
1. Start GProbe by clicking the icon. As for GProbe installation, refer to **FIRMWARE UPDATE -11** and **12**.



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



Wait until reading stops.

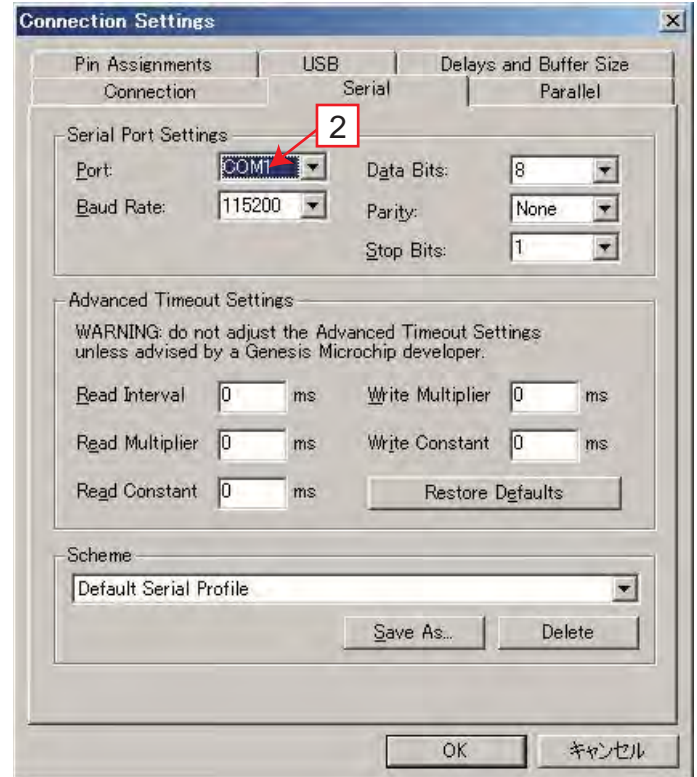
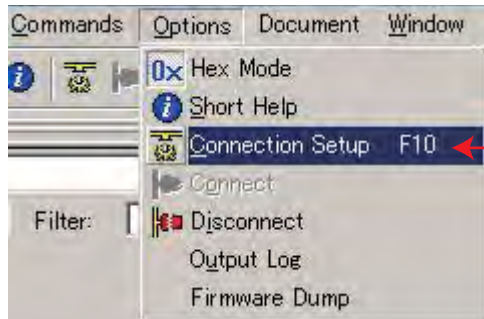


FIRMWARE UPDATE -8

Video Update Procedure(Continued)

Troubleshooting in the case of communication error

Check the serial port setting by following **1** and **2**.



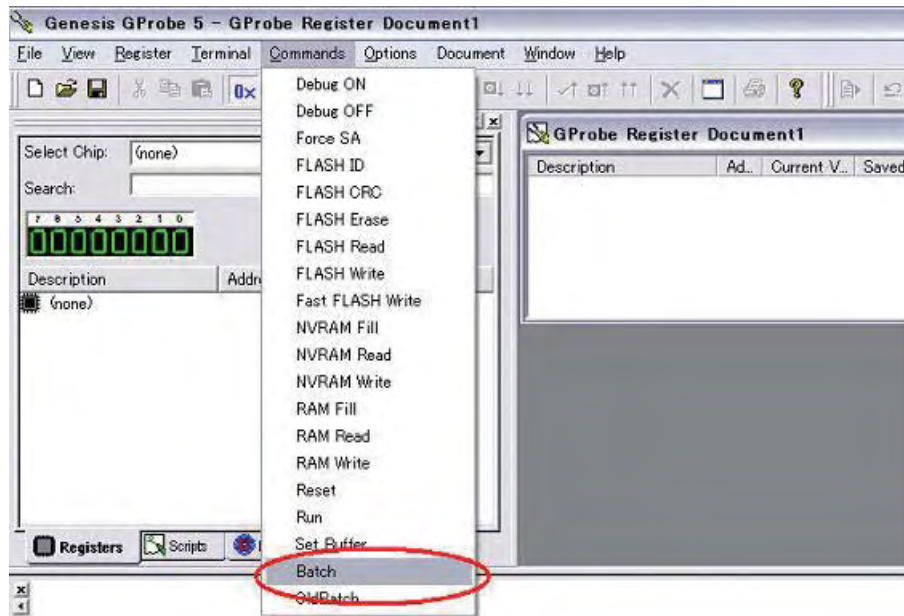
Note:

Make sure that software applications are installed after GProbe does not occupy the specified port.

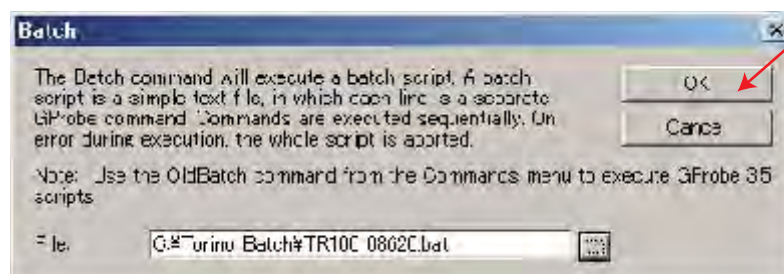
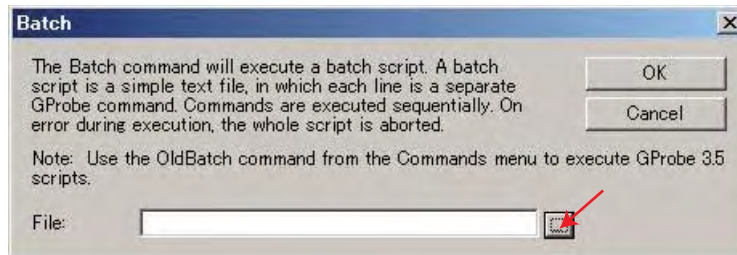
FIRMWARE UPDATE -9

Video Update Procedure(Continued)

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



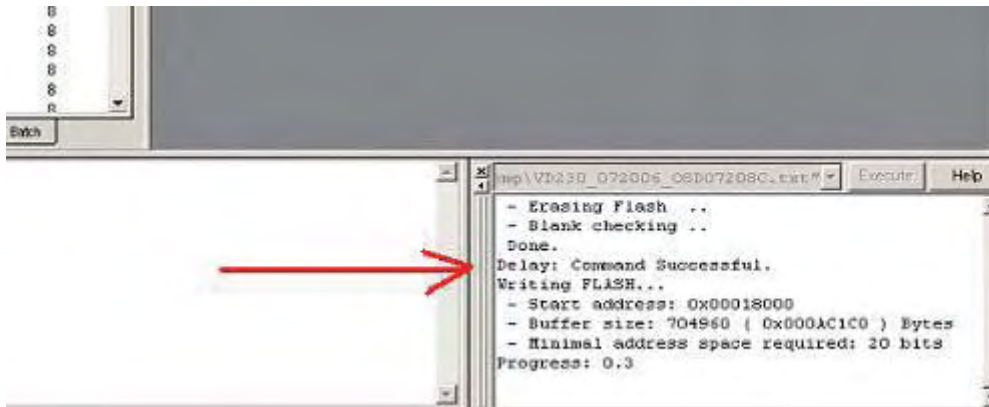
- Start Batch file by selecting the batch file, which has ".bat" as extension and is stored in First Procedure.



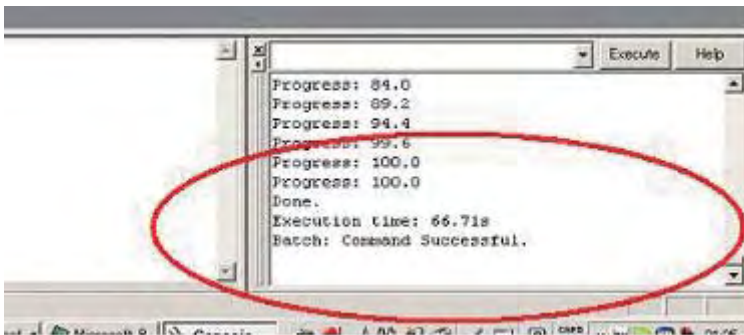
FIRMWARE UPDATE -10

Video Update Procedure(Continued)

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



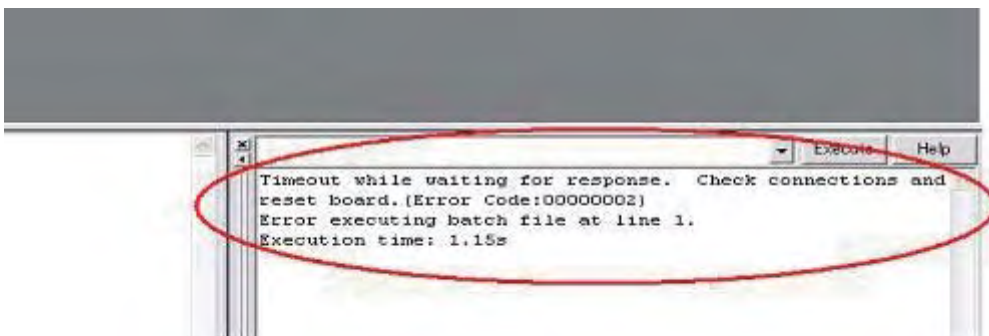
6. Make sure that "Progress: 100.0 Command Successful" is shown as below.



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

7. Turn off and on the unit.
8. Confirm the new version number.

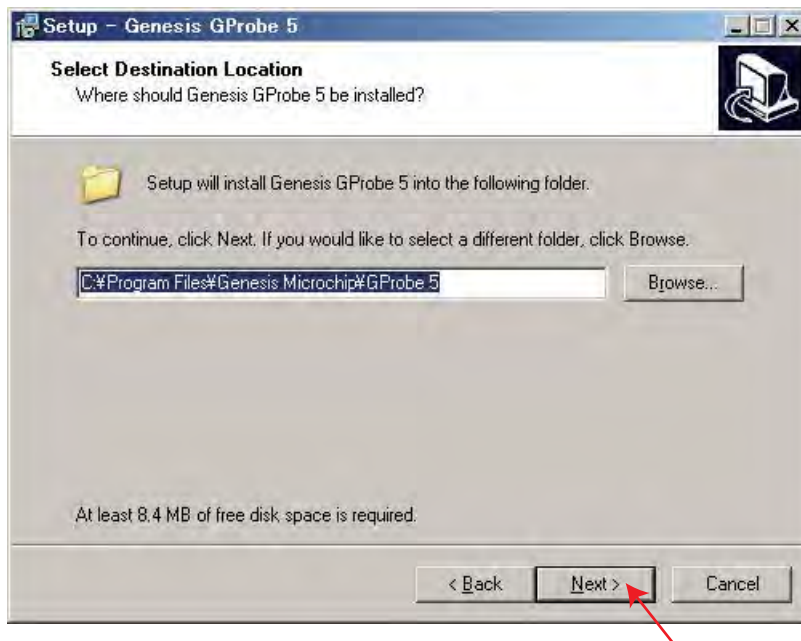
If "Command Successful Writing FLASH..." does not appear,
turn off and on the unit, and try again from Step 1.



FIRMWARE UPDATE -11

How to install GProbe

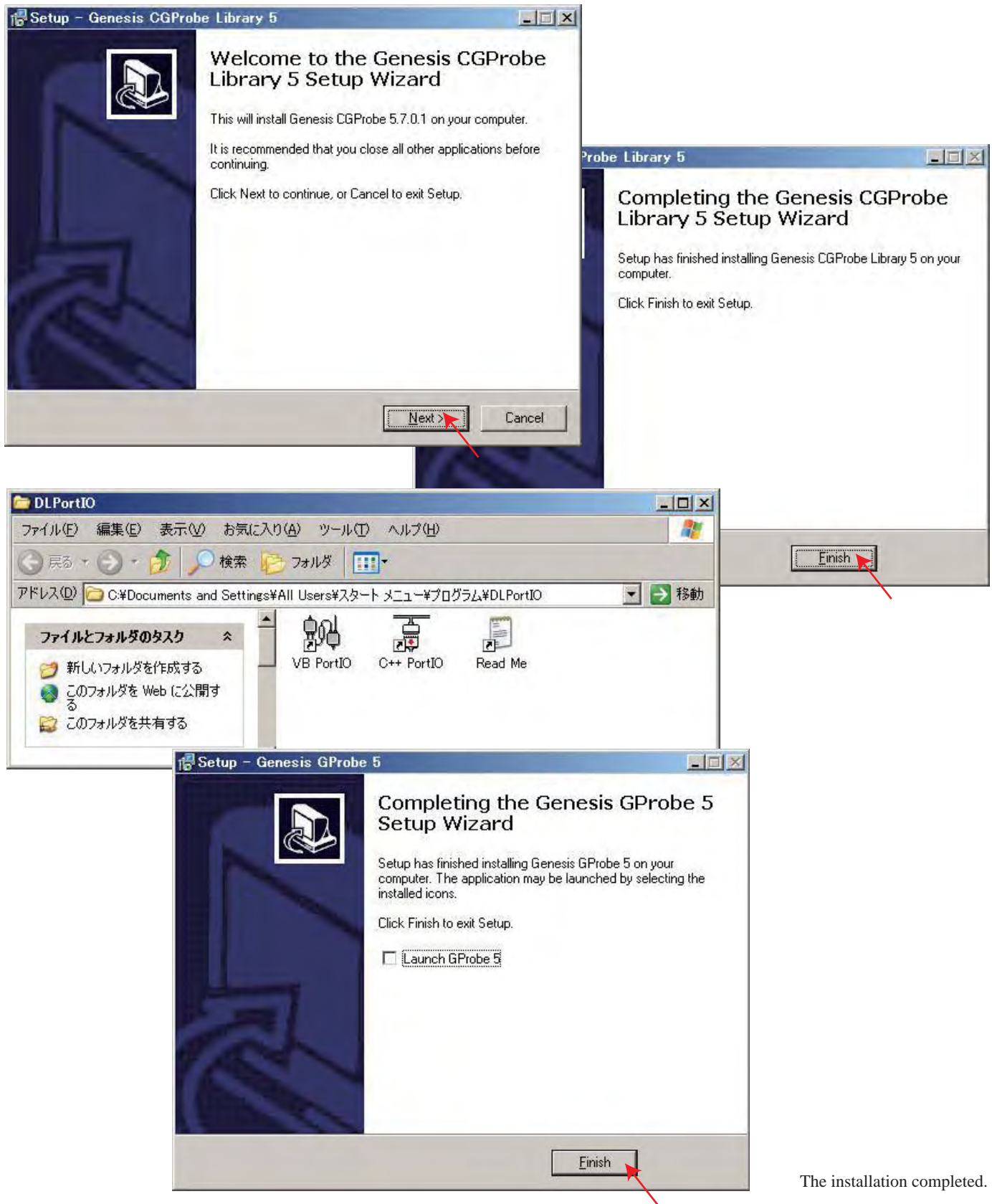
1. Unzip "GProbe 5[1].4.0.3.zip" and click the extracted file "GProbe5.4.0.3.exe".
2. Follow the instructions on the window as below.
Note: Not all the windows are shown in this procedure.



FIRMWARE UPDATE -12

How to install GProbe(Continued)

- Continued from previous page
Another Setup Wizard starts.



The installation completed.

OPERATION CHECK-1

SPEAKER PROTECT-1 (SPEAKER OUT DC VOLTAGE DETECTION)

[When]


1. Exchange power transistors (Q6050 - 6056, Q6060 - 6066).
2. Exchange amplifier PC board ass'y (NAAMP-9477, NACLA-9493).

[Procedure]

<Note>

No load. No input.

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

Test - _  Blinks

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

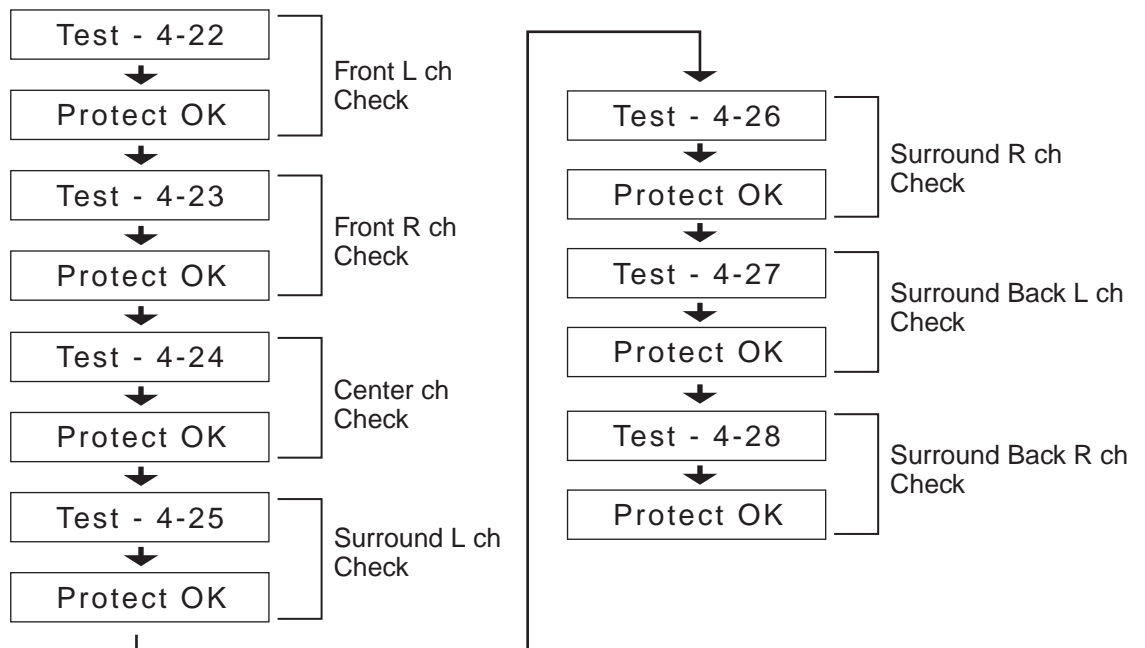
The unit will be in the state of " Test-4-00 ".

Test - 4-00

3. Repeatedly press TONE + button until the characters of " Test-4-22 " are displayed.

Test - 4-22

Check whether the operation starts and continues automatically as follows.



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

Test - 4-36

4. Press STANDBY/ON button to finish.



OPERATION CHECK-2

SPEAKER PROTECT-2 (SPEAKER OUT CURRENT DETECTION)

[When]

1. Exchange power transistors (Q6050 - 6056, Q6060 - 6066).
2. Exchange amplifier PC board ass'y (NAAMP-9477, NACLA-9493).

[Procedure]


<Note>

No input.

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

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

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

Test -  Blinks

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

Test - 4-00

3. Repeatedly press TONE + button until "Test-4-36" is displayed. DSP outputs the pulse signal to all channels. Refer to Fig-1.

Test - 4-36

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

Test - 4-36

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

Protect

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

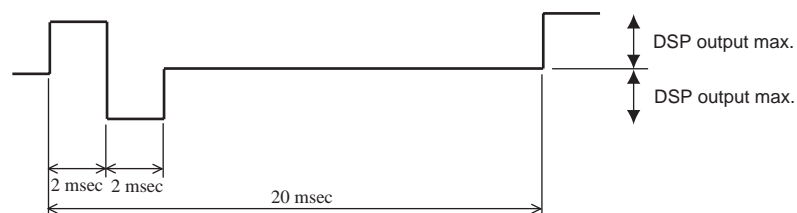
Test - 4-36

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

7. Press STANDBY/ON button to finish.

Clear → Turn off

Fig-1 Current detection test signal



OPERATION CHECK-3

SPEAKER OUTPUT SENSOR AND THERMAL SENSOR

[When]

1. Exchange power transistors (Q6050 - 6056, Q6060 - 6066).
2. Exchange amplifier PC board ass'y (NAAMP-9477, NACLA-9493).
3. Exchange thermal sensor Q6380 or PC board ass'y (NAETC-9478).


[Procedure]

<Note>

No output. No input.

Output sensor (Speaker out AC voltage)

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

Test - _  Blinks


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

Test - 4-00

3. Repeatedly press TONE + button until "Test-4-37" is displayed. DSP outputs 0 dBfs/1kHz audio signal to all power amplifiers.

Test - 4-37


4. At this time, confirm that the red characters of "FM STEREO" is displayed and relays RL6901/RL6902 are switched off.

Test - 4-37 

5. Press TONE + button until "Test-4-38" is displayed. DSP outputs 0 dBfs/1kHz audio signal to some power amplifiers.

Test - 4-38

6. At this time, confirm that the red characters of "FM STEREO" is displayed and relays RL6901/RL6902 are switched off.

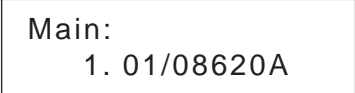
Test - 4-38 

7. Press STANDBY/ON button to finish.

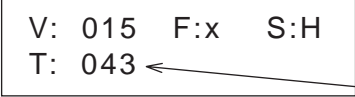

Clear  Turn off

Thermal sensor

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

<Ex.> 
Main:
1. 01/08620A

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

<Ex.> 
V: 015 F:x S:H
T: 043  Unit is °C

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

4. Press STANDBY/ON button to finish.

Clear  Turn off

OPERATION CHECK-4

Condition of Protect Mode

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

1. Thermal condition
 - Immediately at $T \leq -30\text{ }^{\circ}\text{C}$
 - or
 - Immediately at $T \geq 110\text{ }^{\circ}\text{C}$
 - or
 - After 10 minutes of $100\text{ }^{\circ}\text{C} > T > 110\text{ }^{\circ}\text{C}$
2. Time condition
 - The unit will go into Protect Mode in 24 hours after powered ON.
3. Current condition
 - The unit will go into Protect Mode if speaker output AC current $\geq 9\text{ A/ch}$.
 - This condition is equivalent to OPERATION CHECK-2.

Condition of Power Supply Voltage Control

The power supply voltage(VH or VL) for power amplifiers is changed by the relays: RL6901,06902 on NAAMP-9477.

$VH > VL$

T: Thermal sensor temperature

VOLH: The voltage at A/D input Pin #133 of Main microprocessor Q1016 (Refer to SD-3 and SD-7 of Schematic Diagrams).

Conditions:

Speaker imp. = 6 or 8 ohm

VH: $0V < VOLH < 0.4V$

VL: $0.4V < VOLH < 2.0V$, 5 minutes

or

$2.0V < VOLH < 3.3V$, 5 seconds

or

$T > 70\text{ }^{\circ}\text{C}$, 3 minutes

Speaker imp. = 4 ohm

VL: At all times.

Condition of Cooling Fan Operation

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

VOLH	Thermal Sensor Temperature(T)			
	55°C	62°C	73°C	
0V	STOP	LOW SPEED	LOW SPEED	MID SPEED
0.4V	STOP	LOW SPEED	MID SPEED	HIGH SPEED
2.0V	MID SPEED	MID SPEED	MID SPEED	HIGH SPEED
3.3V				

Note:

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

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

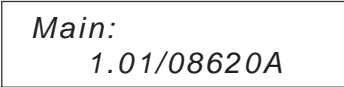
DEBUG MODE-1

DSP DEBUG MODE(1/3)


The status of DSP and related IC is able to be checked by the information displayed on FL as follows.
This information is useful to find the cause of trouble.

To set in DSP DEBUG MODE

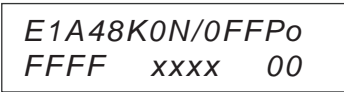
1. Press and hold down DISPLAY button, then press STANDBY/ON button while the unit is powered ON.
The version number of microprocessor is displayed only for 3 seconds.

<Ex.> 

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

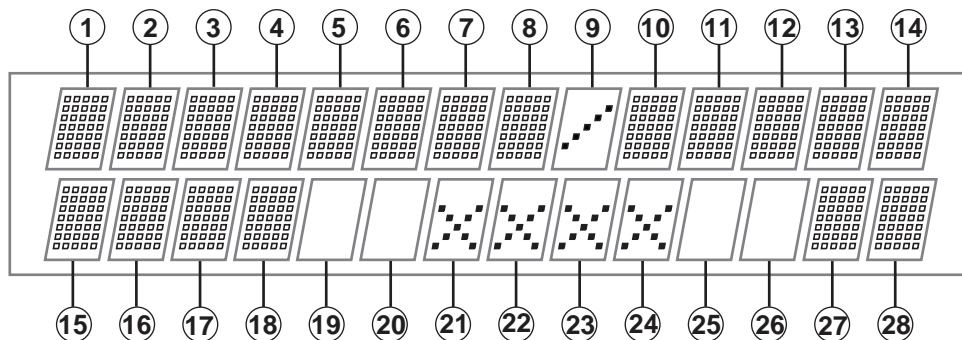
<Ex.> 

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

<Ex.> 

4. Press STANDBY/ON button to finish.

Content of display



① DIR Input Lock
E = UNLOCK
= LOCK

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

③ DIR/ADC
D = Digital(SPDIF)
A = Analog
M = Analog Multich
p = PCM Fixed
d = DTS Fixed
l = Digital(I2S_1)
S = Digital(I2S_4)
d = Digital(DSD)

⑦ DIR Detect Type
0 = Analog
1 = PCM
2 = Not PCM
3 = Data
4 = DTS CD (Not used)
5 = Multich
6 = Not Decided

④ - ⑥ Sampling Frequency and Emphasis

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

DEBUG MODE-2

DSP DEBUG MODE(2/3)

Content of display(Continued)

⑧ CODEC CLOCK MODE

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

⑨ Not Used(Slash)

⑩ DSP Port

This figure is displayed in hexadecimal form. If this is transformed to binary form, each bit indicates the following DSP port status.

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

(Abnormal state)

⑪-⑫ DSP Sequence

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

⑬ DSP Detect Format

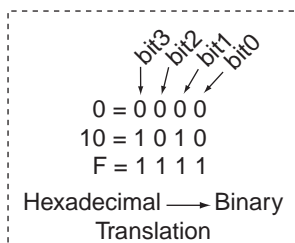
P = PCM (Analog)
D = Dolby Digital
d = DTS
A = AAC
S = DSD
p = Dolby Digital+
T = TrueHD
H = DTS-HD High Resolution
M = DTS-HD Master Audio
? = UNKNOWN

⑭ DSP Decode

o = Decode OK
x = Decode NG

⑮-⑯ 1st DSP Sequence

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



⑰-⑱ 2nd DSP Sequence

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

⑲-⑳ Not Used

㉑-㉒ MPU MUTE Output Cause

These two figures are displayed in hexadecimal form. If these are transformed to binary form, each bit indicates the IC which outputs error and mute.

㉑ bit0 = Selector IC
bit1 = Effector
bit2 = DSP
bit3 = DIR
㉒ bit4 = HDMI
bit5 = XM
bit6 = Auto Speaker Setup
bit7 = Speaker Config

Trouble Shooting by DSP DEBUG MODE

1. This debug mode will be useful in digital audio no sound or sound drop-out trouble.
2. Check information on FL display, then identify bad parts, and replace or resolder it.
3. Remedies Written below are of typical case. So, more detailed check may need in actual cases.
4. Before replace ICs below, resolder the pins first to save resources.

Note:

MPU is short for Micro Processor: Q1016.
1st DSP: Q3401, 2nd DSP: Q3501
DIR: Q1324
DAC: Q1421
Flash ROM: Q3451, Q3551
SDRAM: Q3461, Q3561
Audio Selector: Q5501

Digit No. on FL	Symptom on FL display	Cause of trouble	Remedy
①	"E" is displayed.	No input signal to DIR.	1. Find out which digital input does not work. 2. Confirm where the digital waveform stops between the digital input and DIR. 3. Resolder pins of the bad part or replace it with new one.
④ - ⑥	Displayed freq. is different from input signal.	No input signal to DIR.	The sam as above.
⑦	Displayed audio format is different from input signal.	No input signal to DIR.	The sam as above.

DEBUG MODE-3

DSP DEBUG MODE(3/4)

Trouble Shooting by DSP DEBUG MODE (Continued)

Digit No. on FL	Symptom on FL display	Cause of trouble	Remedy
⑩	Continue to display "1"	Interface between DSP and MPU is no good.	The same remedy as ⑭-b.
	Continue to display "2"	Connection from DIR to DSP is no good.	The same remedy as ⑬.
	Continue to display "3" to "7"	Interface between DSP and MPU is no good.	The same remedy as ⑭-b.
	Continue to display "8" to "F"	DSP Sequence is no good.	Check ⑮ - ⑳ items.
⑬	Displayed audio encoding format is different from input signal.	Input signal to DSP is no good.	<ol style="list-style-type: none"> 1. Confirm where the digital waveform stops between DIR and DSP by oscilloscope. 2. Q3311, P1003 or P1005 may relate. 3. Resolder pins of the bad part or replace it with new one.
⑭	"x" is displayed	a. No input signal to DSP.	The same as above.
		b. Interface between DSP and MPU is no good.	<ol style="list-style-type: none"> 1. Confirm where the digital waveform stops between MPU and DSP by oscilloscope. 2. P1003, P1004 or P1005 may relate. 3. Resolder pins of the bad part or replace it with new one.
⑮ - ⑳	Continue to display "03"	Communication between DSP and MPU is no good.	<ol style="list-style-type: none"> 1. The same remedy as ⑭-b. 2. Check the voltage of the power supply pin of DSP. 3. Check the reset port and clock input of DSP by oscilloscope, and find out bad part. 4. Flash ROM firmware is no good. Update. 5. DSP or MPU is broken. Replace MPU. DSP is impossible to replace, so replace with a new pcb.
	Continue to display "05"	Writing from MPU to DSP is no good.	<ol style="list-style-type: none"> 1. Flash ROM firmware is no good, update. 2. Check DSPSDO pin of MPU by oscilloscope. If no signal, find out bad part connected. 3. Flash ROM or SDRAM is no good, replace. 4. DSP or MPU is broken, replace the same method as above 5.
	Continue to display "09" to "10"	DSP program does not run properly. Flash ROM or SDRAM is no good.	<ol style="list-style-type: none"> 1. Flash ROM firmware is no good, update. 2. Flash ROM or SDRAM is broken, replace.
	Continue to display "19"	The unit was powered off during DSP firmware updating.	Initialize the unit. (Press STANDBY/ON button while pushing VCR/DVR button when the unit is powered on.)
	Display "21" to "23", then return and signal format indicator is flashing.	DSP program does not run properly. Flash ROM or SDRAM is no good.	<ol style="list-style-type: none"> 1. Flash ROM firmware is no good, upgrade. 2. Flash ROM or SDRAM is broken, replace.
	Continue to display "24" to "27", or "40" to "43".	DSP program does not run properly. Or audio clock to DSP is no good.	<ol style="list-style-type: none"> 1. Flash ROM program is no good, upgrade. 2. Flash ROM or SDRAM is broken, replace. 3. Check DSP drive clock freq. by oscilloscope. If no signal, find out bad part connected. 4. Check audio clock to DSP by oscilloscope. If no signal, find out bad part connected.
	Continue to display "29" to "32"	DSP setting is failed.	<ol style="list-style-type: none"> 1. Flash ROM firmware is no good, upgrade. 2. Flash ROM or SDRAM is broken, replace.
⑳ ㉑	This identifies IC which outputs error	The IC outputs error to MPU.	Replace the IC chip. DSP is impossible to replace, so replace with a new pcb.

DEBUG MODE-4

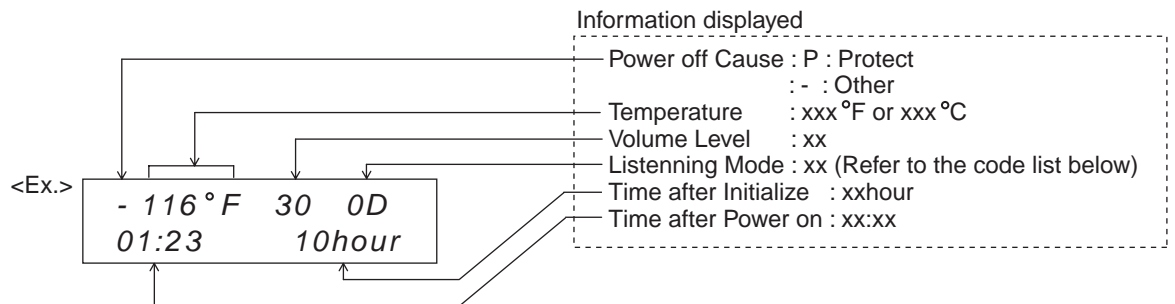
Service Information Display System

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

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

<Ex.> Main:
1.01/08620A

2. Press SETUP button within 3 seconds above, the following informations at powered-off are displayed.



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

<Ex.> ProtectDataCLR

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				

DEBUG MODE-5

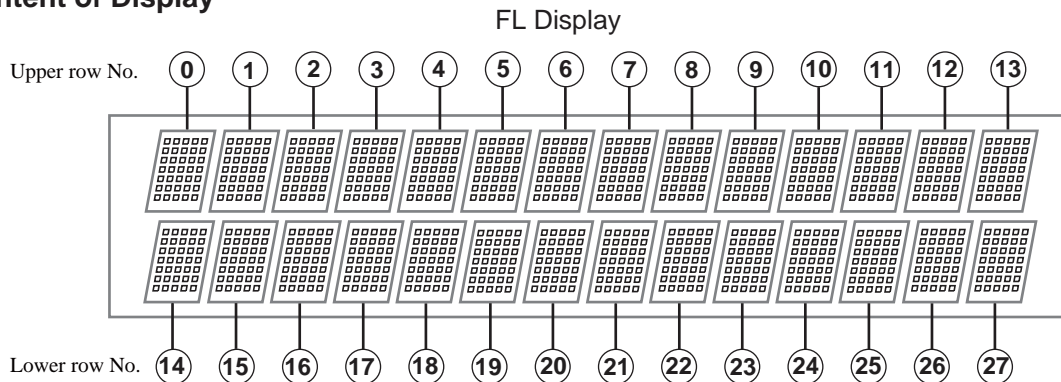
HDMI DEBUG MODE(1/2)

HDMI-related operations can be checked to some extent by displaying HDMI debug mode.

To enter this mode

Hold down DISPLAY button for 3 seconds. Information display will last for about 8 seconds.

Content of Display



Video Input Format	Status Description	FL segment No.	Upper row														
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	
			Lower row														
			14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Normal Source Video Formats	Source Device Video Format: OK, Sink Device EDID: OK	Description	Input Resolution				i/p/I/P	Frame Rate				0/0					
	Normal State	Display example	1 0 8 0 i				/	6 0 →									
		Description						Output Resolution				i/p/I/P	Frame Rate 0/0				
	Source Device Video Format: OK, Sink Device Hot plug: Low	Description	Input Resolution				i/p/I/P	Frame Rate				0/0					
	Error State → Remedy ①	Display example	1 0 8 0 i				/	6 0 →									
		Description						Output Resolution				i/p/I/P	Frame Rate 0/0				
	Source Device Video Format: OK, Sink Device HDCP Authentication: Fail	Description	Input Resolution				i/p/I/P	Frame Rate				0/0					
Error State → Remedy ②	Display example	1 0 8 0 i				/	6 0 →				1 0 8 0 i / 6 0 ← Blinks						
	Description						Output Resolution				i/p/I/P	Frame Rate 0/0					
Source Device Video Format: OK, Sink Device Resolution: Error	Description	Input Resolution				i/p/I/P	Frame Rate				0/0						
Error State → Remedy ③	Display example	1 0 8 0 i				/	6 0 →				1 0 8 0 i / 6 0 × ← Error mark						
	Description						Output Resolution				i/p/I/P	Frame Rate 0/0					
Source Device Video Format: OK, Sink Device EDID Reading: Error	Description	Input Resolution				i/p/I/P	Frame Rate				0/0						
Error State → Remedy ④	Display example	1 0 8 0 i				/	6 0 →				1 0 8 0 i / 6 0 # ← Error mark						
	Description						Output Resolution				i/p/I/P	Frame Rate 0/0					
Source Device Video Format: OK, Sink Device: Busy(Cannot accept HDMI signal)	Description	Input Resolution				i/p/I/P	Frame Rate				0/0						
Error State → Remedy ⑤	Display example	1 0 8 0 i				/	6 0 →				1 0 8 0 i / 6 0 * ← Error mark						
	Description						Output Resolution				i/p/I/P	Frame Rate 0/0					

Frame Rate
/6: 60 frame/sec
/5: 50 frame/sec

Video signal routing 0/0
0 : Analog Up-coverting
0 : HDMI Through mode

Progressive/Interlace i/p/I/P
p/P: Progressive, p=HDMI, P=DVI
i/I : Interlace, i=HDMI, I=DVI

Video signal routing 0/0
0 : Analog Up-coverting
0 : Video Device Route

DEBUG MODE-6

HDMI DEBUG MODE(2/2)

Video Input Format	Status Description	FL segment No.	Upper row	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬		
			Lower row	⑭	⑮	⑯	⑰	⑱	⑲	⑳	㉑	㉒	㉓	㉔	㉕	㉖	㉗	
Source Device Video Resolution is not Determined	Video signal route: HDMI Through	Description	Input Resolution	i/p/I/P	Frame Rate													
	Error State → Remedy ⑥	Display example	U N K N O W N _ _ _ →															
		Description				Output Resolution	i/p/I/P	Frame Rate										
	Video signal route: Via Video Processor TORINO	Description	Input Resolution	i/p/I/P	Frame Rate													
	Error State → Remedy ⑦	Display example	U n k n o w n _ _ _ →															
		Description				Output Resolution	i/p/I/P	Frame Rate										
Source Video Format: PC Format	Source Device Video Format: OK, Sink Device EDID: OK	Description	Input Horizontal Resolution	Input Vertical Resolution	i/p/I/P	Frame Rate												
	Normal State	Display example	1 9 2 0 × 1 2 0 0 F / 6 0 H D M I 4 2 2 8 b i t															
		Description	HDMI / DVI		RGB / YCbCr444 / YCbCr422		8bit / 10bit / 12bit											
	Source Device Video Format: OK, Sink Device Hot plug: Low	Description	Input Horizontal Resolution	Input Vertical Resolution	i/p/I/P	Frame Rate												
	Error State → Remedy ⑧	Display example	1 9 2 0 - 1 2 0 0 F / 6 0 H D M I 4 2 2 8 b i t															
		Description	HDMI / DVI		Error RGB / YCbCr444 / YCbCr422		8bit / 10bit / 12bit											
	Source Device Video Format: OK, Sink Device HDCP Authentication: Fail	Description	Input Resolution Blinks										i/p/I/P	Frame Rate				
	Error State → Remedy ⑨	Display example	1 9 2 0 × 1 2 0 0 F / 6 0 H D M I 4 2 2 8 b i t															
		Description	HDMI / DVI		RGB / YCbCr444 / YCbCr422		8bit / 10bit / 12bit											
	Source Device Video Format: OK, Sink Device: Busy(Cannot accept HDMI signal)	Description	Input Horizontal Resolution	Input Vertical Resolution	i/p/I/P	Frame Rate												
	Error State → Remedy ⑩	Display example	1 9 2 0 1 2 0 0 F / 6 0 * H D M I 4 2 2 8 b i t															
		Description	HDMI / DVI		RGB / YCbCr444 / YCbCr422		8bit / 10bit / 12bit											
VGA input via DVI-HDMI conversion cable	Description	Input Horizontal Resolution	Input Vertical Resolution	i/p/I/P	Frame Rate													
Normal State	Display example	* U G A → * U G A																
	Description	HDMI / DVI		RGB / YCbCr444 / YCbCr422		8bit / 10bit / 12bit												
VGA input via HDMI cable	Description	Input Horizontal Resolution	Input Vertical Resolution	i/p/I/P	Frame Rate													
Normal State	Display example	U G A → U G A																
	Description	HDMI / DVI		RGB / YCbCr444 / YCbCr422		8bit / 10bit / 12bit												

Note:

In the case that horizontal resolution is doubled, “#” is marked at the head of the resolution.
In the case that horizontal resolution is quadrupled, “*” is marked at the head of the resolution.

Resolution example: 480p, 576o, 480i, 576i, 240p, 288p

Source device example: Panasonic DVD player's Double Resolution of 480p.
Blu-ray player's Quadruple Resolution of 480p when TrueHD etc. is played back.

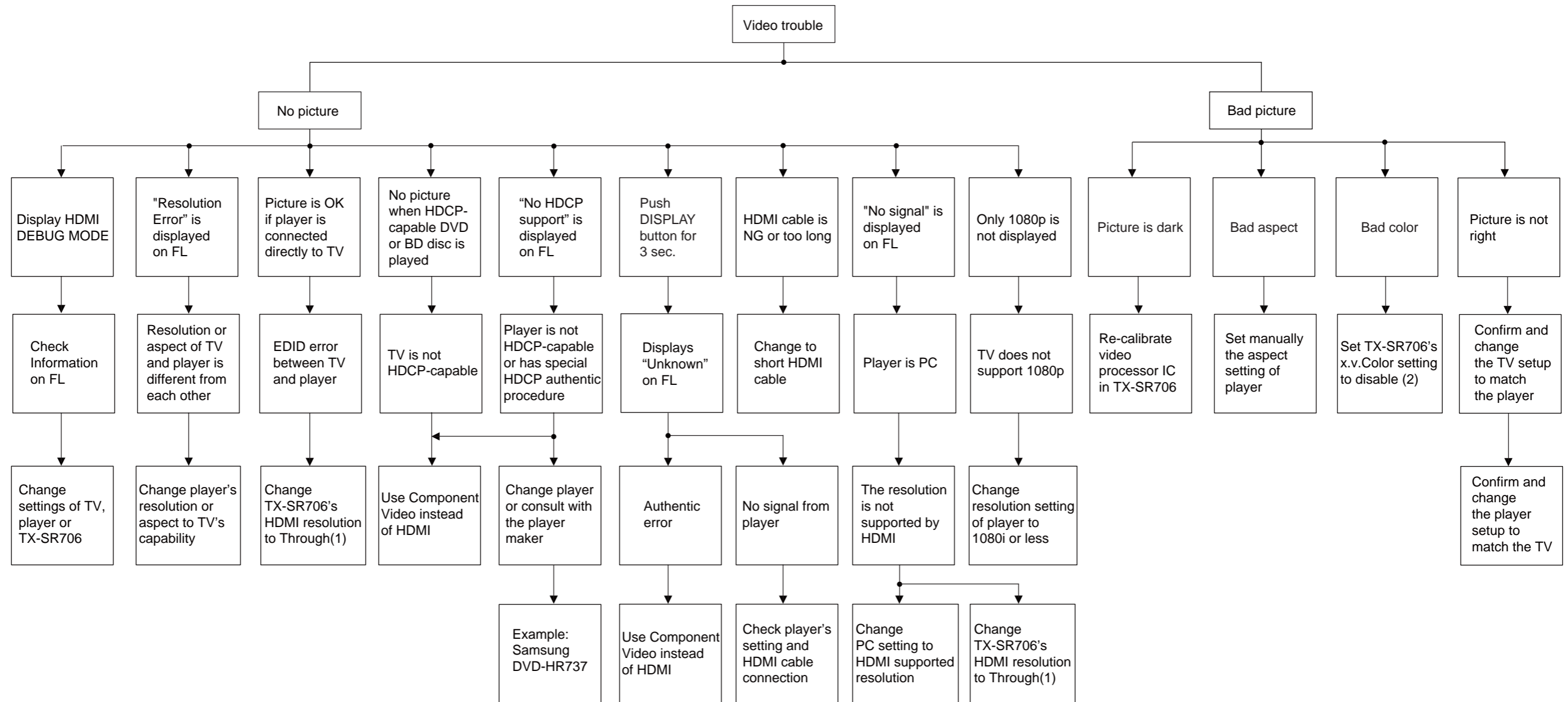
Remedy for Error State

Remedy No.	Remedy
①	The most possible cause is the hardware trouble of Sink device. Fix it.
②	Refere to HDCP and Authentication error in DEBUG MODE-7. Follow the procedure.
③	Refer to Resolution error in DEBUG MODE-7. Follow the procedure.
④	Refer to EDID error in DEBUG MODE-7. Follow the procedure.
⑤	Check other HDMI Inputs of TX-SR706. If NG, the most possible cause is the hardware trouble of Sink device. Fix it.
⑥	Check Source device output signal. No signal, or the format is not supported by both HDMI and TX-SR706.
⑦	The same as ⑥.
⑧	The most possible cause is the hardware trouble of Sink device. Fix it.
⑨	The same as ②.
⑩	The same as ⑤.

DEBUG MODE-7 HDMI TROUBLESHOOT(1/3)

HDMI VIDEO SETUP TROUBLE

This trouble shooting map focuses on the video setup errors regarding HDMI.
For reference, read TX-SR706 Owner's Manual.
Analysis written below is of typical cases. So, more detailed check may need in actual cases.



Note:

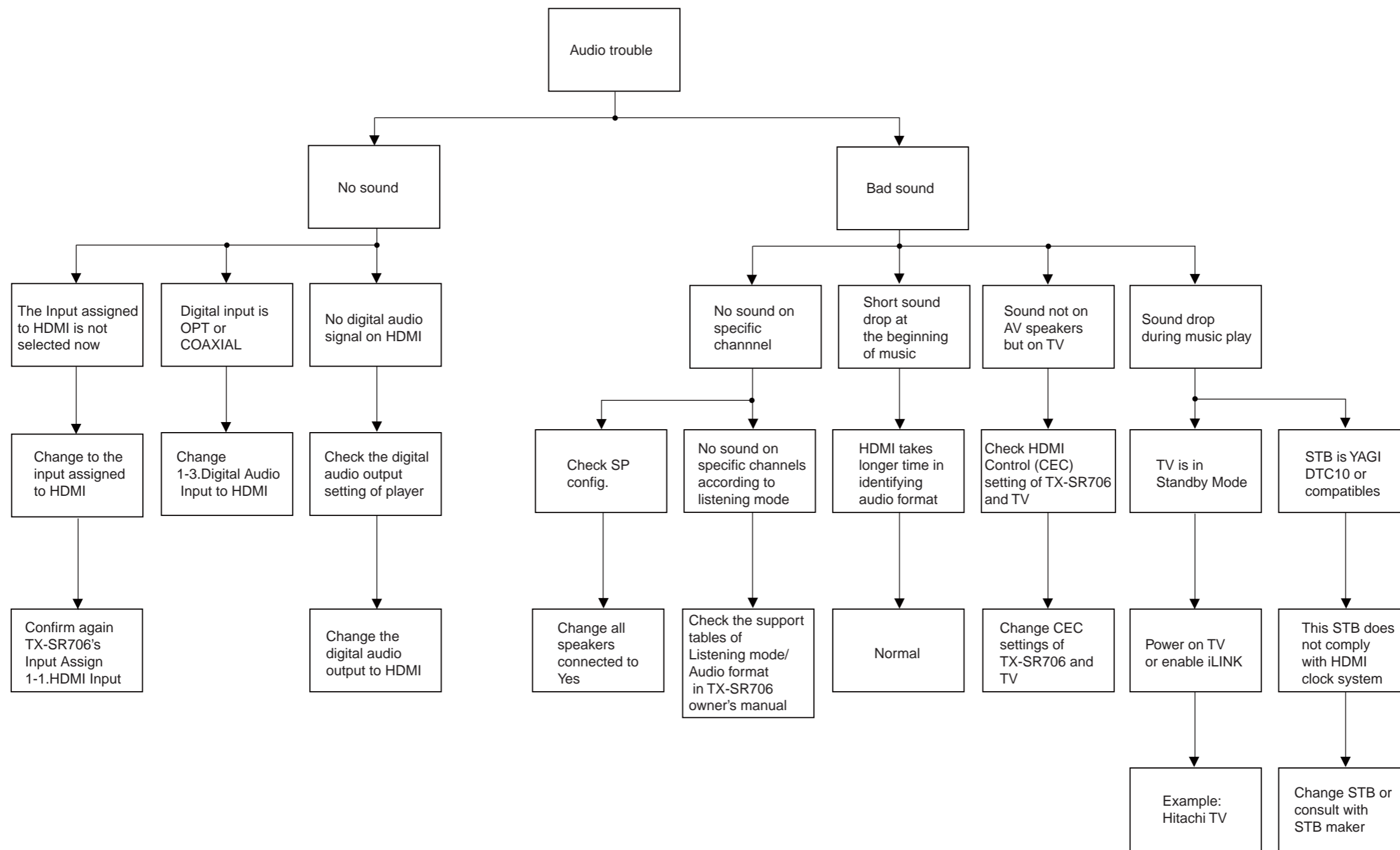
(1) Refer to Setup Menu 7-5. HDMI Setting
Resolution: Through.

(2) Refer to Setup Menu 7-5. HDMI Setting
x.v.Color: Disable.

DEBUG MODE-8
HDMI TROUBLESHOOT(2/3)

HDMI AUDIO SETUP TROUBLE

This trouble shooting map focuses on the audio setups and connections regarding HDMI. For reference, read TX-SR706 Owner's Manual. Analysis written below is of typical cases. So, more detailed check may need in actual cases.

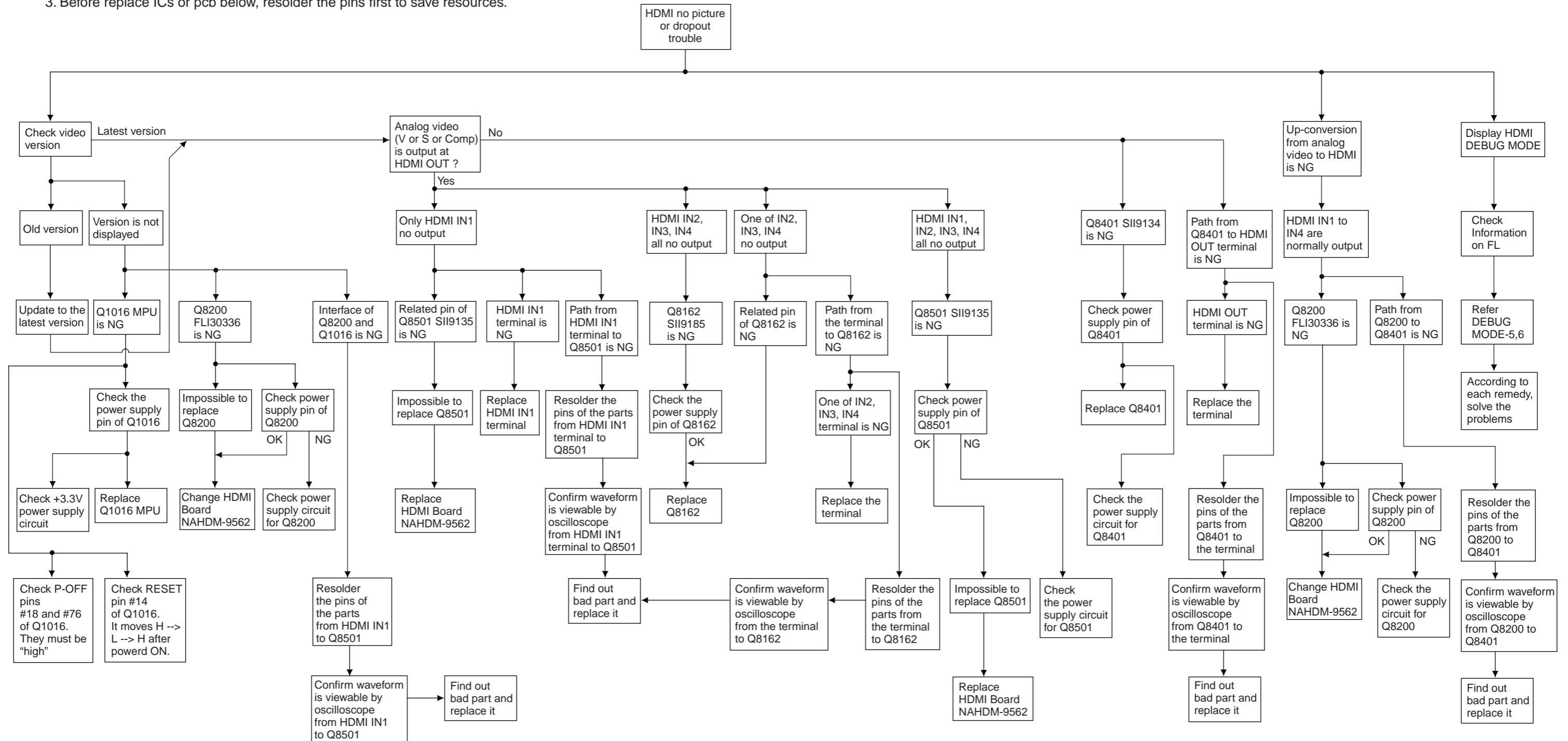


DEBUG MODE-9 HDMI TROUBLESHOOT(3/3)

HDMI HARDWARE TROUBLE

NOTE:

1. This trouble shooting map focuses on the HDMI hardware troubles.
For details, refer to TX-SR706 Block Diagrams and Schematic Diagrams.
2. Analysis written below is of typical cases. So, more detailed check may need in actual cases.
3. Before replace ICs or pcb below, resolder the pins first to save resources.



ADJUSTMENT PROCEDURE-1

IDLING CURRENT ADJUSTMENT

[When]

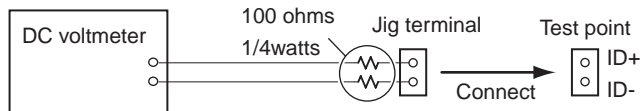
Exchange Power transistor (Q6050 - Q6056, Q6060 - Q6066) and/or Amplifier PC board (NAAMP-9477).

[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 a wall outlet.
4. Press STANDBY/ON button to turn the power on.
5. Adjust the trimming resistors as the following procedure immediately after power on.

Channel	Mark	Adjustment point (Trimming resistor)	Measuring point (Test point)	Adjustment value
Front Left	L	R6040	P6080	3.0 mV
Front Right	R	R6041	P6081	3.0 mV
Center	C	R6042	P6082	3.0 mV
Surround Left	SL	R6043	P6083	3.0 mV
Surround Right	SR	R6044	P6084	3.0 mV
Surround Back Left	SBL	R6045	P6085	3.0 mV
Surround Back Right	SBR	R6046	P6086	3.0 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	R6040, R6041 and R6042	In case below 4 mV	→ 4 mV	6 +/- 1 mV
		In case 4 - 6 mV	→ No re-adjustment	
		In case over 6 mV	→ 6 mV	
Surround Left Surround Right Surround Back Left Surround Back Right	R6043, R6044, R6045 and R6046	In case below 4 mV	→ 4 mV	6 +/- 1 mV
		In case 4 - 6 mV	→ No re-adjustment	
		In case over 6 mV	→ 6 mV	

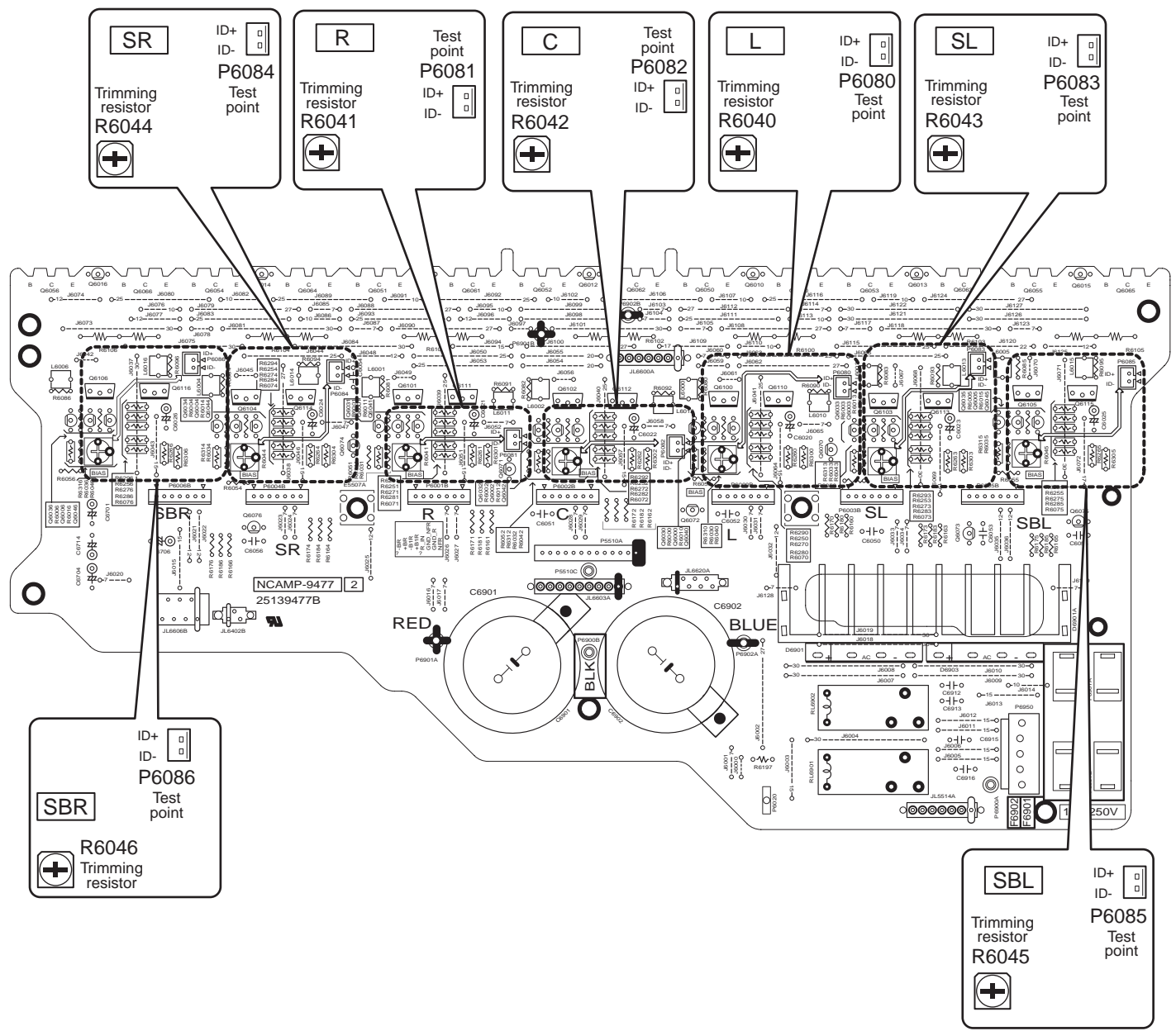
8. Disconnect the dc voltmeter.
9. Press the STANDBY/ON button to turn the power off.
10. Disconnect the ac power cord of the unit.

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

ADJUSTMENT PROCEDURE-2 IDLING CURRENT ADJUSTMENT

<Fig-1>

U01
AMPLIFIER PC BOARD
(NAAMP-9477)



TX-SR706/SA706

<Note>

Mechanical parts and pcb ass'y marked by "NSP" are generally unavailable because they are not in the Master Spare Parts List.
IC chip marked by "NSP" is impossible to remove form pcb, so it is unavailable too.

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

<Notes>

(B) : TX-SR706 Black model
(G) : TX-SR706 Golden model
(S) : TX-SR706 Silver model
<SA706> : TX-SA706 Golden model
<SR706> : TX-SR706 All model

<DC> : TX-SR706 USA & Canadian model
<DD> : TX-SR706 USA model
<MP> : TX-SR706 European model
<MA> : TX-SR706 Australian model
<MO> : TX-SR706 Saudi model
<DT> : TX-SR706 Asian model for 120V
<MQ> : TX-SR706 Hong kong model
<MT> : TX-SR706 Asian model for 220-240V
<SA706> : TX-SA706 Chinese model

EXPLODED VIEW PARTS LIST

REF. NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
A001	CHASSIS	.	1	---	NSP
A003	SCREW	4TTC+8C(3BC)	4	830440089GR	
A004	SPACER	.	1	27270439	
A015	SCREW	3TTB+8B(3CM)SR	45	801637	
A019	SCREW	3TTB+8B(3BC)	43	838430088GR	
A025	BOTTOM LEG	TX-SR506	4	27175441A	
A033	SCREW	3TTB+10B(3BC)	4	838430108GR	
A035	WASHER	W3*8F(3CM)	4	87613008GR	
A043	HEAT SINK	.	1	27160609A	
A047	SCREW	3SMS8W.SW+14B(CU)	14	801634	
A051	RETAINER	(HT-L7)	1	27142113	
A053	RETAINER	(HT-R7)	1	27142114	
A059	BRACKET	(FAN-S)	1	27131047	
A061	BUSHING	(FAN-S)	4	28170090	
A081	TAPE	TAPE(CLOTH-16U)	1	29110083	
A089	HOLDER	HOLDER KGLS-8S	5	27190480	
A091	HOLDER	KGLS-4S	1	27190009	
A093	HOLDER	KGPS-14RF	7	27190802	
A095	HOLDER	KGLS-14S	1	27190164	
A097	HOLDER	HOLDER KGLS-18S	4	27190470	
A101	HOLDER	KGLS-12RT	1	27190266	
A103	HOLDER	KGLS-10RT	1	27190428A	
A105	CLAMP	WS-2NS	1	27300833	
A107	RIVET	P-RIVET NRP-345	2	880009	
A108	RETAINER	(PC)	1	27142125	
A109	CUSHION	.	4	28141783	
A110	CUSHION	(PCB)	2	28141789	
A111	CUSHION	(BUTYL)	1	28141748	

A125	LABEL	(PT)	1	29363379-1	
A130	REAR PANEL	MDC	1	27123822	<DC, DD>
A130	REAR PANEL	MMP	1	27123823A	<MP, MA, MO, MT, MQ>
A130	REAR PANEL	MDT	1	27123826A	<DT>
A130	REAR PANEL	MMR	1	27123827	<SA706>
A131	LABEL	(SP)	1	29390382A	
A133	TAPE	TAPE(CLOTH-8U)	1	29110082	
A137	SCREW	3P+6FN(3BC)	5	82143006GR	
A139	SCREW	3P+6FN(3BC)	1	82143006GR	<DC, DD>
A141	SCREW	4TTB+8C(3BC)	2	838440089GR	<DT, MP, MA, MO, MT, MQ, SA706>
A143	SCREW	3TTB+8B(3CM)SR	1	801637	<DC, DD>
A145	SCREW	3TTB+8B(3CM)SR	1	801637	
A149	WASHER	W3*10F(3BC)	1	87643010GR	
A163	COVER	(B) (Bent)	1	28184972	(B)
A163	COVER	(S) (Bent)	1	28184973	(S)
A163	COVER	(G) (Bent)	1	28184974	(G), <SA706>
A163	COVER	(B) (Not bent)	1	28184972Z	<DC>
A163	COVER	(S) (Not bent)	1	28184973Z	<DD>
A179	SCREW	3TTB+8B(3BC)	6	838430088GR	(B)
A179	SCREW	3TTB+8B(3CM)SR	6	801637	(G), (S), <SA706>
A185	LABEL	(CAUTION)	1	29363796	(B)
A187	LABEL	(CAUTION)	1	29363797	(S)
A189	LABEL	(CAUTION)	1	29363798	(G), <SA706>
A191	LABEL	HOOKUP-ONKYO	1	29363194	<DC, DD>
A201	F BRACKET	TXSR706(B)	1	27111504	(B)
A201 or	F BRACKET	TXSR706(B)	(1)	27111504-1	(B)
A201	F BRACKET	TX-SR706(S)	1	27111508	(S)
A201 or	F BRACKET	TX-SR706(S)	(1)	27111508-1	(S)
A201	F BRACKET	TXSR706(G)	1	27111509	(G), <SA706>
A201 or	F BRACKET	TXSR706(G)	(1)	27111509-1	(G), <SA706>
A209	BADGE	BADGE	1	28135244	(B)
A209	BADGE	BADGE	1	28135245	(G), <SA706>
A209	BADGE	.	1	28135298	(S)
A211	B PLATE	706(B)	1	28133434	(B)
A211	B PLATE	706(S)/(G)	1	28133435	(G), (S), <SA706>
A213	IB CUSHION	W15*3t TAPE	1	28141585	
A301	KNOB	VOLAS(B)	1	28326654A	(B)
A301	KNOB	VOLAS(S)	1	28326655A	(S)
A301	KNOB	VOLAS(G)	1	28326656A	(G), <SA706>
A303	GUIDE	(VOL) MILKY	1	27268210	
A305	KNOB	(PURE)AS BLACK	1	28326582B	(B)
A305	KNOB	(PURE)AS SILVER	1	28326583B	(S)
A305	KNOB	(PURE) AS GOLD	1	28326634A	(G), <SA706>
A307	KNOB	(SETUP) BLACK	1	28326517B	
A309	SPRING	.	1	27180596	
A311	CAP	(AUX) BLACK	1	28330178	(B)<MP>
A311	CAP	(AUX) SILVER	1	28330179	(S)<MP>
A317	HOLDER	KGLS-4S	3	27190009	
A351	F PANEL	(B)MDC	1	27213121A	<DC>
A351	F PANEL	(S)MDC	1	27213122A	<DD>
A351	F PANEL	(B)MMP	1	27213123A	(B)<MP, MA, MO>
A351	F PANEL	(S)MMP	1	27213124A	(S)
A351	F PANEL	(G)MMT	1	27213125A	(G)

A351	F PANEL	(G)MGR	1	27213126A	<SA706>
A355	CLEAR PLT	(B)MDC	1	28192199A	
A583	CUSHION	(T3*W35*D10)	1	28141741	
A585	CUSHION	t5*30*5	1	28141562	
F4000	FUSE	4A-UL/T-233	1	252325GR	!
F4000 or	FUSE	4A-T/UL-ST2	(1)	252257GR	!
F4001	FUSE	4A-UL/T-233	1	252325GR	!
F4001 or	FUSE	4A-T/UL-ST2	(1)	252257GR	!
F6901	FUSE	15A-TUL-250V	1	252303GR	!
F6902	FUSE	15A-TUL-250V	1	252303GR	!
F901	FUSE	10A-UL/T-233	1	252330GR	!, <DC, DD, DT>
F901 or	FUSE	10A-T/UL-ST2	(1)	252333GR	!, <DC, DD, DT>
F901	FUSE	5A-SE-EAK FUSE	1	252078GR	!, <MP, MA, MO, MT, MQ, SA706>
F901 or	FUSE	5A-SE-TL250V	(1)	252278GR	!, <MP, MA, MO, MT, MQ, SA706>
F901A	FUSE LABEL	10A/125V	1	29362241	!, <DC, DD, DT>
F901A	LABEL	T5AL250V	1	29361938	!, <MP, MA, MO, MT, MQ, SA706>
P1007	FFC	NCFC7-401522	1	2047401522	
P106	FFC	NCFC7-130522	1	2047130522	<SR706>
P4102	FFC	NCFC7-172012	1	2047172012	
P4103	FFC	NCFC7-111012	1	2047111012	
P500	WIRE TIE	BSK-1	9	260208	
P6600A	P RIVET	JB-407A-C	18	880052	<DT, MP, MA, MO, MT, MQ, SA706>
P691	FAN	D05X-12TL	1	24502317	
P901	AC CORD	AS-UC-2	1	253368BLTK	!, <DC, DD>
P901 or	AC CORD	AS-UC-2	(1)	253333VOL	!, <DC, DD>
P901 or	AC CORD	AS-UC-2	(1)	253368AYUN	!, <DC, DD>
P901D	BUSHING	S-RELIEF #2271	1	27300750	<DC, DD>
Q6050	TR	2SC5242-O	1	2202843	
Q6050 or	TR	2SC5242-R	(1)	2202842	
Q6050A	ISO SHEET	AC238	2	223024	
Q6050B	ISO SHEET	ISO SHEET	6	223041	
Q6051	TR	2SC5242-O	1	2202843	
Q6051 or	TR	2SC5242-R	(1)	2202842	
Q6052	TR	2SC5242-O	1	2202843	
Q6052 or	TR	2SC5242-R	(1)	2202842	
Q6053	TR	2SC5242-O	1	2202843	
Q6053 or	TR	2SC5242-R	(1)	2202842	
Q6054	TR	2SC5242-O	1	2202843	
Q6054 or	TR	2SC5242-R	(1)	2202842	
Q6055	TR	2SC5242-O	1	2202843	
Q6055 or	TR	2SC5242-R	(1)	2202842	
Q6056	TR	2SC5242-O	1	2202843	
Q6056 or	TR	2SC5242-R	(1)	2202842	
Q6060	TR	2SA1962-O	1	2202833	
Q6060 or	TR	2SA1962-R	(1)	2202832	
Q6061	TR	2SA1962-O	1	2202833	
Q6061 or	TR	2SA1962-R	(1)	2202832	
Q6062	TR	2SA1962-O	1	2202833	
Q6062 or	TR	2SA1962-R	(1)	2202832	
Q6063	TR	2SA1962-O	1	2202833	
Q6063 or	TR	2SA1962-R	(1)	2202832	
Q6064	TR	2SA1962-O	1	2202833	
Q6064 or	TR	2SA1962-R	(1)	2202832	

Q6065	TR	2SA1962-O	1	2202833	
Q6065 or	TR	2SA1962-R	(1)	2202832	
Q6066	TR	2SA1962-O	1	2202833	
Q6066 or	TR	2SA1962-R	(1)	2202832	

<Notes>

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

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

T901	P TRANS	NPT-1570D	1	2301931	!, <DC, DD, DT>
T901	P TRANS	NPT-1570M	1	2301932	!, <MP, MA, MO, MT, MQ, SA706>
U01	AMPLIFIER PC board ass'y	NAAMP-9477-1A	1	1B209577-1A	<DC, DD>
		NAAMP-9477-1B	1	1B209577-1B	<DT, MP, MA, MO, MQ, MT>
		NAAMP-9477-1D	1	1B209577-1D	<SA706>
U02	THERMAL SENSOR PC board ass'y	NAETC-9478-1A	1	1B209578-1A	<DC, DD>
		NAETC-9478-1B	1	1B209578-1B	<DT, MP, MA, MO, MQ, MT>
		NAETC-9478-1D	1	1B209578-1D	<SA706>
U07	AMPLIFIER PC board ass'y	NAASP-9483-1A	1	1B209583-1A	<DC, DD>
		NAASP-9483-1B	1	1B209583-1B	<DT, MP, MA, MO, MQ, MT>
		NAASP-9483-1D	1	1B209583-1D	<SA706>
U08	SP TERMINAL PC board ass'y	NATRM-9488-1A	1	1B209588-1A	<DC, DD>
		NATRM-9488-1B	1	1B209588-1B	<MP, MA, MO, MT, MQ, SA706>
		NATRM-9488-1C	1	1B209588-1C	<DT>
U09	SP TERMINAL PC board ass'y	NATRM-9489-1A	1	1B209589-1A	<DC, DD>
		NATRM-9489-1B	1	1B209589-1B	<MP, MA, MO, MT, MQ, SA706>
		NATRM-9489-1C	1	1B209589-1C	<DT>
U10	POWER SUPPLY PC board ass'y	NAPS-9490-1A	1	1B209590-1A	<DC, DD>
		NAPS-9490-1B	1	1B209590-1B	<MP, MA, MO, MT, MQ, SA706>
		NAPS-9490-1C	1	1B209590-1C	<DT>
U11	INLET PC board ass'y	NAETC-9491-1A	0	---	<DC, DD>
		NAETC-9491-1B	1	1B209591-1B	<MP, MA, MO, MT, MQ, SA706>
		NAETC-9491-1C	1	1B209591-1C	<DT>
U13	AMPLIFIER PC board ass'y	NACLA-9493-1A	1	1B209593-1A	<DC, DD>
		NACLA-9493-1B	1	1B209593-1B	<MP, MA, MO, MT, MQ, SA706>
		NACLA-9493-1C	1	1B209593-1C	<DT>
U15	HOLDER PC board ass'y	NAETC-9495-1A	1	1B209595-1A	<DC, DD>
		NAETC-9495-1B	1	1B209595-1B	<MP, MA, MO, MT, MQ, SA706>
		NAETC-9495-1C	1	1B209595-1C	<DT>
U16	MICROPROCESSOR AND DAC PC board ass'y	NADG-9504-1A	1	1B209504-1A	<DC, DD>
		NADG-9504-1B	1	1B209504-1B	<DT, MP, MA, MO, MT, MQ>
		NADG-9504-1D	1	1B209504-1D	<SA706>
U17	VIDEO PC board ass'y	NAVD-9505-1A	1	1B209505-1A	<DC, DD>
		NAVD-9505-1B	1	1B209505-1B	<DT, MP, MA, MO, MT, MQ>
		NAVD-9505-1D	1	1B209505-1D	<SA706>
U19	XM PC board ass'y	NARF-9507-1A	1	1B209507-1A	<DC, DD>
		NARF-9507-1B	1	1B209507-1B	<DT, MP, MA, MO, MT, MQ>
		NARF-9507-1D	0	---	<SA706>
U20	HDMI PC board ass'y	NAHDM-9562-1A	1	1B209562-1A	
U21	DISPLAY PC board ass'y	NADIS-9515-1A	1	1B209515-1A	
U22	SWITCH PC board ass'y	NASW-9516-1A	1	1B209516-1A	
U23	HEADPHONE PC board ass'y	NAETC-9517-1A	1	1B209517-1A	
U24	OPT TERMINAL PC board ass'y	NAETC-9518-1A	1	1B209518-1A	
U25	DISPLAY PC board ass'y	NAETC-9519-1A	1	1B209519-1A	
U26	POWER SUPPLY PC board ass'y	NAPS-9520-1A	1	1B209520-1A	
U27	HOLDER PC board ass'y	NAETC-9521-1A	1	1B209521-1A	

U28	HOLDER PC board ass'y	NAETC-9522-1A	1	1B209522-1A	
U011	TUNER UNIT	ENG06507QFUS	1	240156	<DC, DD>
U011 or	TUNER UNIT	FAE385-A11US	(1)	240152	<DC, DD>
U011	TUNER UNIT	FAE485-E11EU	1	240154	<DT, MP, MA, MO, MT, MQ>

TX-SR706/SA706

PC BOARD PARTS LIST

U01	AMPLIFIER PC BOARD(NAAMP-9477-1A/1B/1D)
U02	THERMAL SENSOR PC BOARD(NAETC-9478-1A/1B/1D)
U07	AMPLIFIER PC BOARD(NAASP-9483-1A/1B/1D)

CIRCUIT NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
Q5501	IC	R2A15215FP	1	22242516R3	
Q5503	IC	NJM4580M-D	1	22241448R2	
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	
Q5610	TR	RN1441	1	2215410R2	
Q5611	TR	RN1441	1	2215410R2	
Q5612	TR	RN1441	1	2215410R2	
Q5613	TR	RN1441	1	2215410R2	
Q5614	TR	RN1441	1	2215410R2	
Q5615	TR	RN1441	1	2215410R2	
Q5616	TR	RN1441	1	2215410R2	
Q5617	TR	RN1441	1	2215410R2	
Q5618	IC	NJM4580M-D	1	22241448R2	
Q5630	IC	NJM4580M-D	1	22241448R2	
Q5670	IC	78M15HF(NJM78M15FA)	1	222780155JRC	
Q5670 or	IC	UPC78M15AHF-AZ	(1)	222780155NEC	
Q5670A	HEAT SINK	RAD-196	1	27160545	
Q5670B	SCREW	3P+10FN(3BC)	1	82143010GR	
Q5671	IC	79M15HF(NJM79M15FA)	1	222790155JRC	
Q5671 or	IC	79M15F(AN79M15F)	(1)	222790155MAT	
Q5671 or	IC	UPC79M15HF-AZ	(1)	222790155NEC	
Q5671B	SCREW	3P+10FN(3BC)	1	82143010GR	
Q5684	TR	2SC2235-O(TPE6_F)	1	2211653T	
Q5685	TR	2SA965-O(TPE6_F)	1	2211643T	
Q5700	TR	RN1402	1	2214470R2	
Q5701	TR	RN1402	1	2214470R2	
Q5903	TR	RN1441	1	2215410R2	
Q5904	TR	RN1441	1	2215410R2	
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	2SC2229-Y(TPE6_F)	1	2211634T
Q6030 or	TR	2SC2229-O(TPE6_F)	(1)	2211633T
Q6031	TR	2SC2229-Y(TPE6_F)	1	2211634T
Q6031 or	TR	2SC2229-O(TPE6_F)	(1)	2211633T
Q6032	TR	2SC2229-Y(TPE6_F)	1	2211634T
Q6032 or	TR	2SC2229-O(TPE6_F)	(1)	2211633T
Q6033	TR	2SC2229-Y(TPE6_F)	1	2211634T
Q6033 or	TR	2SC2229-O(TPE6_F)	(1)	2211633T
Q6034	TR	2SC2229-Y(TPE6_F)	1	2211634T
Q6034 or	TR	2SC2229-O(TPE6_F)	(1)	2211633T
Q6035	TR	2SC2229-Y(TPE6_F)	1	2211634T
Q6035 or	TR	2SC2229-O(TPE6_F)	(1)	2211633T
Q6036	TR	2SC2229-Y(TPE6_F)	1	2211634T
Q6036 or	TR	2SC2229-O(TPE6_F)	(1)	2211633T
Q6040	TR	2SA949-O(TPE6_F)	1	2211353T
Q6040 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q6041	TR	2SA949-O(TPE6_F)	1	2211353T
Q6041 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q6042	TR	2SA949-O(TPE6_F)	1	2211353T
Q6042 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q6043	TR	2SA949-O(TPE6_F)	1	2211353T
Q6043 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q6044	TR	2SA949-O(TPE6_F)	1	2211353T
Q6044 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q6045	TR	2SA949-O(TPE6_F)	1	2211353T
Q6045 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q6046	TR	2SA949-O(TPE6_F)	1	2211353T
Q6046 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T
Q6070	TR	2SC2229-O(TPE6_F)	1	2211633T
Q6070 or	TR	2SC2229-Y(TPE6_F)	(1)	2211634T
Q6071	TR	2SC2229-O(TPE6_F)	1	2211633T
Q6071 or	TR	2SC2229-Y(TPE6_F)	(1)	2211634T
Q6072	TR	2SC2229-O(TPE6_F)	1	2211633T
Q6072 or	TR	2SC2229-Y(TPE6_F)	(1)	2211634T
Q6073	TR	2SC2229-O(TPE6_F)	1	2211633T
Q6073 or	TR	2SC2229-Y(TPE6_F)	(1)	2211634T
Q6074	TR	2SC2229-O(TPE6_F)	1	2211633T
Q6074 or	TR	2SC2229-Y(TPE6_F)	(1)	2211634T
Q6075	TR	2SC2229-O(TPE6_F)	1	2211633T
Q6075 or	TR	2SC2229-Y(TPE6_F)	(1)	2211634T
Q6076	TR	2SC2229-O(TPE6_F)	1	2211633T
Q6076 or	TR	2SC2229-Y(TPE6_F)	(1)	2211634T
Q6100	TR	2SA1930(ONK_Q)	1	2203000
Q6100 or	TR	2SA2140-Q_P	(1)	2217151

Q6101	TR	2SA1930(ONK_Q)	1	2203000
Q6101 or	TR	2SA2140-Q_P	(1)	2217151
Q6102	TR	2SA1930(ONK_Q)	1	2203000
Q6102 or	TR	2SA2140-Q_P	(1)	2217151
Q6103	TR	2SA1930(ONK_Q)	1	2203000
Q6103 or	TR	2SA2140-Q_P	(1)	2217151
Q6104	TR	2SA1930(ONK_Q)	1	2203000
Q6104 or	TR	2SA2140-Q_P	(1)	2217151
Q6105	TR	2SA1930(ONK_Q)	1	2203000
Q6105 or	TR	2SA2140-Q_P	(1)	2217151
Q6106	TR	2SA1930(ONK_Q)	1	2203000
Q6106 or	TR	2SA2140-Q_P	(1)	2217151
Q6110	TR	2SC5171(ONK_Q)	1	2203010
Q6110 or	TR	2SC5993-Q_P	(1)	2217161
Q6111	TR	2SC5171(ONK_Q)	1	2203010
Q6111 or	TR	2SC5993-Q_P	(1)	2217161
Q6112	TR	2SC5171(ONK_Q)	1	2203010
Q6112 or	TR	2SC5993-Q_P	(1)	2217161
Q6113	TR	2SC5171(ONK_Q)	1	2203010
Q6113 or	TR	2SC5993-Q_P	(1)	2217161
Q6114	TR	2SC5171(ONK_Q)	1	2203010
Q6114 or	TR	2SC5993-Q_P	(1)	2217161
Q6115	TR	2SC5171(ONK_Q)	1	2203010
Q6115 or	TR	2SC5993-Q_P	(1)	2217161
Q6116	TR	2SC5171(ONK_Q)	1	2203010
Q6116 or	TR	2SC5993-Q_P	(1)	2217161
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
Q6713	TR	2SA1163-BL(TE85L_F)	1	2216756R2
D5500	ZENER D	MTZJ7.5B	1	224470752T
D5501	ZENER D	MTZJ7.5B	1	224470752T
D5505	C-DIODE	1SS352	1	223234R2
D5506	C-DIODE	1SS352	1	223234R2
D5507	C-DIODE	1SS352	1	223234R2
D5507 or	C-DIODE	1SS355	(1)	223269R2
D5507 or	C-DIODE	KDS4148U	(1)	223283R2
D5507 or	C-DIODE	MA2J1110GL	(1)	223302R2
D5508	C-DIODE	1SS352	1	223234R2
D5508 or	C-DIODE	1SS355	(1)	223269R2
D5508 or	C-DIODE	KDS4148U	(1)	223283R2
D5508 or	C-DIODE	MA2J1110GL	(1)	223302R2
D5509	C-DIODE	1SS352	1	223234R2
D5509 or	C-DIODE	1SS355	(1)	223269R2
D5509 or	C-DIODE	KDS4148U	(1)	223283R2
D5509 or	C-DIODE	MA2J1110GL	(1)	223302R2
D5510	C-DIODE	1SS352	1	223234R2

D5510 or	C-DIODE	1SS355	(1)	223269R2
D5510 or	C-DIODE	KDS4148U	(1)	223283R2
D5510 or	C-DIODE	MA2J1110GL	(1)	223302R2
D5517	C-DIODE	1SS352	1	223234R2
D5517 or	C-DIODE	1SS355	(1)	223269R2
D5517 or	C-DIODE	KDS4148U	(1)	223283R2
D5517 or	C-DIODE	MA2J1110GL	(1)	223302R2
D5518	C-DIODE	1SS352	1	223234R2
D5518 or	C-DIODE	1SS355	(1)	223269R2
D5518 or	C-DIODE	KDS4148U	(1)	223283R2
D5518 or	C-DIODE	MA2J1110GL	(1)	223302R2
D5601	C-DIODE	S1NB60-4062	1	22380318R2
D6000	C-DIODE	1SS352	1	223234R2
D6000 or	C-DIODE	1SS355	(1)	223269R2
D6000 or	C-DIODE	KDS4148U	(1)	223283R2
D6000 or	C-DIODE	MA2J1110GL	(1)	223302R2
D6001	C-DIODE	1SS352	1	223234R2
D6001 or	C-DIODE	1SS355	(1)	223269R2
D6001 or	C-DIODE	KDS4148U	(1)	223283R2
D6001 or	C-DIODE	MA2J1110GL	(1)	223302R2
D6002	C-DIODE	1SS352	1	223234R2
D6002 or	C-DIODE	1SS355	(1)	223269R2
D6002 or	C-DIODE	KDS4148U	(1)	223283R2
D6002 or	C-DIODE	MA2J1110GL	(1)	223302R2
D6003	C-DIODE	1SS352	1	223234R2
D6003 or	C-DIODE	1SS355	(1)	223269R2
D6003 or	C-DIODE	KDS4148U	(1)	223283R2
D6003 or	C-DIODE	MA2J1110GL	(1)	223302R2
D6004	C-DIODE	1SS352	1	223234R2
D6004 or	C-DIODE	1SS355	(1)	223269R2
D6004 or	C-DIODE	KDS4148U	(1)	223283R2
D6004 or	C-DIODE	MA2J1110GL	(1)	223302R2
D6005	C-DIODE	1SS352	1	223234R2
D6005 or	C-DIODE	1SS355	(1)	223269R2
D6005 or	C-DIODE	KDS4148U	(1)	223283R2
D6005 or	C-DIODE	MA2J1110GL	(1)	223302R2
D6006	C-DIODE	1SS352	1	223234R2
D6006 or	C-DIODE	1SS355	(1)	223269R2
D6006 or	C-DIODE	KDS4148U	(1)	223283R2
D6006 or	C-DIODE	MA2J1110GL	(1)	223302R2
D6701	C-DIODE	1SS352	1	223234R2
D6701 or	C-DIODE	1SS355	(1)	223269R2
D6701 or	C-DIODE	KDS4148U	(1)	223283R2
D6701 or	C-DIODE	MA2J1110GL	(1)	223302R2
D6702	C-DIODE	1SS352	1	223234R2
D6702 or	C-DIODE	1SS355	(1)	223269R2
D6702 or	C-DIODE	KDS4148U	(1)	223283R2
D6702 or	C-DIODE	MA2J1110GL	(1)	223302R2
D6703	ZENER D	UDZS3.6B	1	224550360R2
D6704	ZENER D	UDZS3.6B	1	224550360R2
D6713	ZENER D	UDZS3.6B	1	224550360R2
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	1SS352	1	223234R2
D6902 or	C-DIODE	1SS355	(1)	223269R2
D6902 or	C-DIODE	KDS4148U	(1)	223283R2
D6902 or	C-DIODE	MA2J1110GL	(1)	223302R2
D6903	DIODE	D10XB60H	1	22380337
L6000	FR CORE	*	1	5597-45502
L6001	FR CORE	*	1	5597-45502
L6002	FR CORE	*	1	5597-45502
L6003	FR CORE	*	1	5597-45502
L6004	FR CORE	*	1	5597-45502
L6005	FR CORE	*	1	5597-45502
L6006	FR CORE	*	1	5597-45502
L6010	FR CORE	*	1	5597-45502
L6011	FR CORE	*	1	5597-45502
L6012	FR CORE	*	1	5597-45502
L6013	FR CORE	*	1	5597-45502
L6014	FR CORE	*	1	5597-45502
L6015	FR CORE	*	1	5597-45502
L6016	FR CORE	*	1	5597-45502
C5501	C-CERA C	CC725CH1H-221J1	1	342102214R1
C5502	C-CERA C	CC725CH1H-221J1	1	342102214R1
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
C5511	C-CERA C	CC725CH1H-221J1	1	342102214R1
C5512	C-CERA C	CC725CH1H-221J1	1	342102214R1
C5515	C-CERA C	CC725CH1H-221J1	1	342102214R1
C5516	C-CERA C	CC725CH1H-221J1	1	342102214R1
C5519	TF C	ECQ-B50V-221K	1	374722215T
C5520	TF C	ECQ-B50V-221K	1	374722215T
C5521	TF C	ECQ-B50V-221K	1	374722215T
C5522	C-CERA C	CC725CH1H-221J1	1	342102214R1
C5523	C-CERA C	CC725CH1H-221J1	1	342102214R1
C5524	C-CERA C	CC725CH1H-221J1	1	342102214R1
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
C5529	C-CERA C	CC725CH1H-221J1	1	342102214R1
C5530	C-CERA C	CC725CH1H-221J1	1	342102214R1
C5531	C-CERA C	CC725CH1H-221J1	1	342102214R1
C5532	C-CERA C	CC725CH1H-221J1	1	342102214R1
C5533	C-CERA C	CC725CH1H-221J1	1	342102214R1
C5534	C-CERA C	CC725CH1H-221J1	1	342102214R1
C5540	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C5541	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C5542	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C5543	UTSP C	CE04W50V-10M(UTSP)	1	397581007T

C5548	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C5549	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C5550	C-CERA C	CK725B1H-152K1	1	332101525R1	
C5551	C-CERA C	CK725B1H-152K1	1	332101525R1	
C5555	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	
C5577	UTSP C	CE04W25V-47M(UTSP)	1	397554707T	
C5578	UTSP C	CE04W25V-47M(UTSP)	1	397554707T	
C5579	C-CERA C	CC725CH1H-102J1	1	342101024R1	
C5580	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	
C5581	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	
C5582	C-CERA C	CC725CH1H-102J1	1	342101024R1	
C5583	C-CERA C	CC725CH1H-102J1	1	342101024R1	
C5584	UTSP C	CE04W25V-47M(UTSP)	1	397554707T	
C5585	UTSP C	CE04W25V-47M(UTSP)	1	397554707T	
C5586	UTSP C	CE04W10V-220M(UTSP)	1	397532217T	
C5587	UTSP C	CE04W10V-220M(UTSP)	1	397532217T	
C5588	TF C	ECQ-B50V-123J	1	374721234T	
C5589	TF C	ECQ-B50V-123J	1	374721234T	
C5590	C-CERA C	CC725CH1H-101J1	1	342101014R1	
C5591	C-CERA C	CC725CH1H-101J1	1	342101014R1	
C5592	TF C	ECQ-B50V-392J	1	374723924T	
C5593	TF C	ECQ-B50V-392J	1	374723924T	
C5594	C-CERA C	CC725CH1H-101J1	1	342101014R1	
C5595	C-CERA C	CC725CH1H-101J1	1	342101014R1	
C5596	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C5597	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C5598	C-CERA C	CC725CH1H-102J1	1	342101024R1	
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	
C5630	UTSP C	CE04W50V-47M(UTSP)	1	397584707T	
C5631	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5632	TF C	ECQ-B50V-103J	1	374721034T	
C5660	MMT C	MMT50V-334J	1	375523344T	
C5661	VR C	CE04W35V-470M(VR)	1	394664717T	<SR706>
C5661	VR C	CE04W35V-1000M(VR)	1	394661027S	<SA706>
C5662	VR C	CE04W35V-1000M(VR)	1	394661027S	
C5666	UTSP C	CE04W25V-220M(UTSP)	1	397552217T	
C5667	UTSP C	CE04W25V-220M(UTSP)	1	397552217T	
C5670	UTSP C	CE04W50V-47M(UTSP)	1	397584707T	

C5671	UTSP C	CE04W50V-220M(UTSP)	1	397582217T	<SR706>
C5671	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	<SA706>
C5672	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C5673	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C5674	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	
C5675	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	
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	
C5700	C-CERA C	CK725B1H-103K1	1	332101035R1	
C5702	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	
C5711	C-CERA C	CK725B1H-103K1	1	332101035R1	
C5905	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C5906	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C5907	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5908	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C5909	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C6020	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C6021	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C6022	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C6023	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C6024	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C6025	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C6026	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
C6050	TF C	ECQ-V50V-104J	1	374721044T	
C6051	TF C	ECQ-V50V-104J	1	374721044T	
C6052	TF C	ECQ-V50V-104J	1	374721044T	
C6053	TF C	ECQ-V50V-104J	1	374721044T	
C6054	TF C	ECQ-V50V-104J	1	374721044T	
C6055	TF C	ECQ-V50V-104J	1	374721044T	
C6056	TF C	ECQ-V50V-104J	1	374721044T	
C6701	UTSP C	CE04W10V-220M(UTSP)	1	397532217T	
C6703	C-CERA C	CK725F1H-104Z1	1	332151040R1	
C6704	UTSP C	CE04W50V-1M(UTSP)	1	397580107T	
C6706	UTSP C	CE04W50V-22M(UTSP)	1	397582207T	
C6710	C-CERA C	CK725F1A-105Z1	1	332181050R1	
C6713	C-CERA C	CK725F1H-104Z1	1	332151040R1	
C6714	UTSP C	CE04W50V-2.2M(UTSP)	1	397580227T	
C6901	ELECT C	CE69W63V-12000MA	1	3504423	<DC, DD>
C6901	ELECT C	CE69W71V-12000M	1	3504460A	<DT, MP, MA, MO, MQ, MT, SA706>
C6902	ELECT C	CE69W63V-12000MA	1	3504423	<DC, DD>
C6902	ELECT C	CE69W71V-12000M	1	3504460A	<DT, MP, MA, MO, MQ, MT, SA706>
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	
R5501	C-CARBON R	RN72K1J-331JE	1	435033314R1	

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-224JE	1	435032244R1
R5568	C-CARBON R	RN72K1J-223JE	1	435032234R1
R5569	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5570	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5571	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5572	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5573	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5574	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5575	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5576	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5577	C-CARBON R	RN72K1J-223JE	1	435032234R1
R5578	C-CARBON R	RN72K1J-223JE	1	435032234R1
R5580	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5581	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5582	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5583	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5587	C-CARBON R	RN72K1J-103JE	1	435031034R1
R5588	C-CARBON R	RN72K1J-103JE	1	435031034R1
R5590	C-CARBON R	RN72K1J-103JE	1	435031034R1
R5591	C-CARBON R	RN72K1J-103JE	1	435031034R1
R5592	C-CARBON R	RN72K1J-152JE	1	435031524R1
R5593	C-CARBON R	RN72K1J-152JE	1	435031524R1
R5594	C-CARBON R	RN72K1J-560JE	1	435035604R1
R5595	C-CARBON R	RN72K1J-560JE	1	435035604R1
R5596	C-CARBON R	RN72K1J-103JE	1	435031034R1
R5597	C-CARBON R	RN72K1J-103JE	1	435031034R1
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
R5610	C-CARBON R	RN72K1J-271JE	1	435032714R1
R5611	C-CARBON R	RN72K1J-271JE	1	435032714R1
R5612	C-CARBON R	RN72K1J-271JE	1	435032714R1
R5613	C-CARBON R	RN72K1J-271JE	1	435032714R1
R5614	C-CARBON R	RN72K1J-271JE	1	435032714R1
R5615	C-CARBON R	RN72K1J-271JE	1	435032714R1
R5616	C-CARBON R	RN72K1J-271JE	1	435032714R1
R5617	C-CARBON R	RN72K1J-271JE	1	435032714R1
R5620	C-CARBON R	RN72K1J-101JE	1	435031014R1
R5621	C-CARBON R	RN72K1J-101JE	1	435031014R1
R5622	C-CARBON R	RN72K1J-101JE	1	435031014R1

R5623	C-CARBON R	RN72K1J-101JE	1	435031014R1	
R5624	C-CARBON R	RN72K1J-101JE	1	435031014R1	
R5625	C-CARBON R	RN72K1J-101JE	1	435031014R1	
R5626	C-CARBON R	RN72K1J-101JE	1	435031014R1	
R5627	C-CARBON R	RN72K1J-101JE	1	435031014R1	
R5628	METAL O R	RS1WBJ-100	1	443621014T	
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	
R5637	METAL O R	RS1/2WBJ-10	1	443521004T	
R5638	METAL O R	RS1/2WBJ-10	1	443521004T	
R5639	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R5640	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R5641	C-CARBON R	RN72K1J-563JE	1	435035634R1	
R5642	C-CARBON R	RN72K1J-563JE	1	435035634R1	
R5643	C-CARBON R	RN72K1J-474JE	1	435034744R1	
R5644	C-CARBON R	RN72K1J-474JE	1	435034744R1	
R5645	C-CARBON R	RN72K1J-561JE	1	435035614R1	
R5646	C-CARBON R	RN72K1J-561JE	1	435035614R1	
R5647	C-CARBON R	RN72K1J-274JE	1	435032744R1	
R5648	C-CARBON R	RN72K1J-274JE	1	435032744R1	
R5649	C-CARBON R	RN72K1J-223JE	1	435032234R1	
R5650	C-CARBON R	RN72K1J-223JE	1	435032234R1	
R5651	C-CARBON R	RN72K1J-122JE	1	435031224R1	
R5652	C-CARBON R	RN72K1J-122JE	1	435031224R1	
R5653	C-CARBON R	RN72K1J-101JE	1	435031014R1	
R5654	C-CARBON R	RN72K1J-101JE	1	435031014R1	
R5655	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5656	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5657	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5658	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5659	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R5660	METAL R	RNU1WCJ-1.5	1	453630154T	
R5661	METAL R	RNU1WCJ-1.5	1	453630154T	
R5662	METAL R	RNU2WCJ-2.2	1	452730224F	<SR706>
R5665	METAL R	RNU2WCJ-2.2	1	452730224F	<SR706>
R5665	METAL O R	RS2WBJ-15	1	442721504F	<SA706>
R5666	CARBON R	R16J-22	1	417342204T	
R5667	CARBON R	R16J-22	1	417342204T	
R5668	METAL O R	RS1WBJ-100	1	443621014T	
R5669	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R5670	METAL R	RNU2WCJ-2.2	1	452730224F	<SR706>
R5671	METAL R	RNU2WCJ-2.2	1	452730224F	<SR706>
R5671	METAL O R	RS2WBJ-15	1	442721504F	<SA706>
R5672	C-CARBON R	RN72K1J-100JE	1	435031004R1	
R5673	C-CARBON R	RN72K1J-100JE	1	435031004R1	
R5675	METAL O R	RS1WBJ-22	1	443622204T	
R5676	METAL O R	RS1WBJ-22	1	443622204T	
R5677	METAL O R	RS1WBJ-22	1	443622204T	
R5678	METAL O R	RS1WBJ-22	1	443622204T	
R5679	CARBON R	R16J-680	1	417346814T	

R5685	CARBON R	R16J-680	1	417346814T
R5690	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5691	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5692	C-CARBON R	RN72K1J-104JE	1	435031044R1
R5702	C-CARBON R	RN72K1J-000JE	1	435030004R1
R5703	C-CARBON R	RN72K1J-000JE	1	435030004R1
R5711	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5712	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5714	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5715	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5716	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5813	C-CARBON R	RN72K1J-000JE	1	435030004R1
R5824	C-CARBON R	RN72K1J-000JE	1	435030004R1
R5909	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5910	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5911	C-CARBON R	RN72K1J-102JE	1	435031024R1
R5912	C-CARBON R	RN72K1J-102JE	1	435031024R1
R5913	C-CARBON R	RN72K1J-101JE	1	435031014R1
R5914	C-CARBON R	RN72K1J-101JE	1	435031014R1
R5915	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5916	C-CARBON R	RN72K1J-224JE	1	435032244R1
R5917	C-CARBON R	RN72K1J-101JE	1	435031014R1
R5918	C-CARBON R	RN72K1J-101JE	1	435031014R1
R5950	C-CARBON R	RN72K1J-000JE	1	435030004R1
R5951	C-CARBON R	RN72K1J-000JE	1	435030004R1
R5952	C-CARBON R	RN72K1J-000JE	1	435030004R1
R5953	C-CARBON R	RN72K1J-000JE	1	435030004R1
R5954	C-CARBON R	RN72K1J-000JE	1	435030004R1
R5955	C-CARBON R	RN72K1J-000JE	1	435030004R1
R5956	C-CARBON R	RN72K1J-000JE	1	435030004R1
R6000	CARBON R	R16J-4.7K	1	417344724T
R6001	CARBON R	R16J-4.7K	1	417344724T
R6002	CARBON R	R16J-4.7K	1	417344724T
R6003	CARBON R	R16J-4.7K	1	417344724T
R6004	CARBON R	R16J-4.7K	1	417344724T
R6005	CARBON R	R16J-4.7K	1	417344724T
R6006	CARBON R	R16J-4.7K	1	417344724T
R6010	CARBON R	R16J-3.3K	1	417343324T
R6011	CARBON R	R16J-3.3K	1	417343324T
R6012	CARBON R	R16J-3.3K	1	417343324T
R6013	CARBON R	R16J-3.3K	1	417343324T
R6014	CARBON R	R16J-3.3K	1	417343324T
R6015	CARBON R	R16J-3.3K	1	417343324T
R6016	CARBON R	R16J-3.3K	1	417343324T
R6030	CARBON R	R16J-2.2K	1	417342224T
R6031	CARBON R	R16J-2.2K	1	417342224T
R6032	CARBON R	R16J-2.2K	1	417342224T
R6033	CARBON R	R16J-2.2K	1	417342224T
R6034	CARBON R	R16J-2.2K	1	417342224T
R6035	CARBON R	R16J-2.2K	1	417342224T
R6036	CARBON R	R16J-2.2K	1	417342224T
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-2.7K	1	417342724T
R6051	CARBON R	R16J-2.7K	1	417342724T
R6052	CARBON R	R16J-2.7K	1	417342724T
R6053	CARBON R	R16J-2.7K	1	417342724T
R6054	CARBON R	R16J-2.7K	1	417342724T
R6055	CARBON R	R16J-2.7K	1	417342724T
R6056	CARBON R	R16J-2.7K	1	417342724T
R6070	NF CARBON R	R25J-82	1	415478204T
R6071	NF CARBON R	R25J-82	1	415478204T
R6072	NF CARBON R	R25J-82	1	415478204T
R6073	NF CARBON R	R25J-82	1	415478204T
R6074	NF CARBON R	R25J-82	1	415478204T
R6075	NF CARBON R	R25J-82	1	415478204T
R6076	NF CARBON R	R25J-82	1	415478204T
R6080	CARBON R	R16J-10	1	417341004T
R6081	CARBON R	R16J-10	1	417341004T
R6082	CARBON R	R16J-10	1	417341004T
R6083	CARBON R	R16J-10	1	417341004T
R6084	CARBON R	R16J-10	1	417341004T
R6085	CARBON R	R16J-10	1	417341004T
R6086	CARBON R	R16J-10	1	417341004T
R6090	CARBON R	R16J-10	1	417341004T
R6091	CARBON R	R16J-10	1	417341004T
R6092	CARBON R	R16J-10	1	417341004T
R6093	CARBON R	R16J-10	1	417341004T
R6094	CARBON R	R16J-10	1	417341004T
R6095	CARBON R	R16J-10	1	417341004T
R6096	CARBON R	R16J-10	1	417341004T
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
R6140	C-CARBON R	RN72K1J-563JE	1	435035634R1
R6141	C-CARBON R	RN72K1J-563JE	1	435035634R1
R6142	C-CARBON R	RN72K1J-563JE	1	435035634R1
R6143	C-CARBON R	RN72K1J-563JE	1	435035634R1
R6144	C-CARBON R	RN72K1J-563JE	1	435035634R1
R6145	C-CARBON R	RN72K1J-563JE	1	435035634R1

R6146	C-CARBON R	RN72K1J-563JE	1	435035634R1
R6150	C-CARBON R	RN72K1J-103JE	1	435031034R1
R6151	C-CARBON R	RN72K1J-103JE	1	435031034R1
R6152	C-CARBON R	RN72K1J-103JE	1	435031034R1
R6153	C-CARBON R	RN72K1J-103JE	1	435031034R1
R6154	C-CARBON R	RN72K1J-103JE	1	435031034R1
R6155	C-CARBON R	RN72K1J-103JE	1	435031034R1
R6156	C-CARBON R	RN72K1J-103JE	1	435031034R1
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
R6197	METAL O R	RS1/2WBJ-33	1	443523304T
R6250	NF CARBON R	R25J-120	1	415471214T
R6251	NF CARBON R	R25J-120	1	415471214T
R6252	NF CARBON R	R25J-120	1	415471214T
R6253	NF CARBON R	R25J-120	1	415471214T
R6254	NF CARBON R	R25J-120	1	415471214T
R6255	NF CARBON R	R25J-120	1	415471214T
R6256	NF CARBON R	R25J-120	1	415471214T
R6260	NF CARBON R	R25J-120	1	415471214T
R6261	NF CARBON R	R25J-120	1	415471214T
R6262	NF CARBON R	R25J-120	1	415471214T
R6263	NF CARBON R	R25J-120	1	415471214T
R6264	NF CARBON R	R25J-120	1	415471214T
R6265	NF CARBON R	R25J-120	1	415471214T
R6266	NF CARBON R	R25J-120	1	415471214T
R6270	NF CARBON R	R25J-18	1	415471804T
R6271	NF CARBON R	R25J-18	1	415471804T
R6272	NF CARBON R	R25J-18	1	415471804T
R6273	NF CARBON R	R25J-18	1	415471804T
R6274	NF CARBON R	R25J-18	1	415471804T
R6275	NF CARBON R	R25J-18	1	415471804T
R6276	NF CARBON R	R25J-18	1	415471804T
R6280	NF CARBON R	R25J-18	1	415471804T
R6281	NF CARBON R	R25J-18	1	415471804T

R6282	NF CARBON R	R25J-18	1	415471804T	
R6283	NF CARBON R	R25J-18	1	415471804T	
R6284	NF CARBON R	R25J-18	1	415471804T	
R6285	NF CARBON R	R25J-18	1	415471804T	
R6286	NF CARBON R	R25J-18	1	415471804T	
R6290	NF CARBON R	R25J-2.2	1	415470224T	
R6291	NF CARBON R	R25J-2.2	1	415470224T	
R6292	NF CARBON R	R25J-2.2	1	415470224T	
R6293	NF CARBON R	R25J-2.2	1	415470224T	
R6294	NF CARBON R	R25J-2.2	1	415470224T	
R6295	NF CARBON R	R25J-2.2	1	415470224T	
R6296	NF CARBON R	R25J-2.2	1	415470224T	
R6300	NF CARBON R	R25J-2.2	1	415470224T	
R6301	NF CARBON R	R25J-2.2	1	415470224T	
R6302	NF CARBON R	R25J-2.2	1	415470224T	
R6303	NF CARBON R	R25J-2.2	1	415470224T	
R6304	NF CARBON R	R25J-2.2	1	415470224T	
R6305	NF CARBON R	R25J-2.2	1	415470224T	
R6306	NF CARBON R	R25J-2.2	1	415470224T	
R6310	NF CARBON R	R25J-10	1	415471004T	
R6311	NF CARBON R	R25J-10	1	415471004T	
R6312	NF CARBON R	R25J-10	1	415471004T	
R6313	NF CARBON R	R25J-10	1	415471004T	
R6314	NF CARBON R	R25J-10	1	415471004T	
R6315	NF CARBON R	R25J-10	1	415471004T	
R6316	NF CARBON R	R25J-10	1	415471004T	
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-392JE	1	435033924R1	
R6710	C-CARBON R	RN72K1J-123JE	1	435031234R1	
R6712	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R6714	C-CARBON R	RN72K1J-333JE	1	435033334R1	
R6716	C-CARBON R	RN72K1J-563JE	1	435035634R1	
R6902	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R6903	C-CARBON R	RN72K1J-473JE	1	435034734R1	
E5507A	TRM	NTM-1P232(M1700)	1	25060301	
E5509A	TRM	NTM-1P232(M1700)	1	25060301	
E5519	TRM(SCREW)	NEJITANSI M3	1	25065425	
F6901A	FUSE HOLDER	SN5051	1	250113	!
F6901B	FUSE HOLDER	SN5051	1	250113	!
F6902A	FUSE HOLDER	SN5051	1	250113	!
F6902B	FUSE HOLDER	SN5051	1	250113	!
J5664	PVC	UL1430#24 BLK	1	72910250505	
JL5514A	WIRE HOL	NSCT-7P898	1	25051111	
JL5514B	SOCKET	NSCT-7P99	1	25050271	
JL6402A	WIRE HOL	NSCT-3P874	1	25051087	
JL6402B	WIRE HOL	NSCT-3P874	1	25051087	
JL6600A	WIRE HOL	NSCT-7P898	1	25051111	
JL6603A	WIRE HOL	NSCT-9P900	1	25051113	
JL6606B	WIRE TRAP	NPLG-7P590	1	25055628	

JL6620A	WIRE HOL	NSCT-7P878	1	25051091	
P104B	SOCKET	NSCT-13P2193	1	25052296	
P5500	PIN JACK	NPJ-2PDWR558	1	25045776	<SR706>
P5500	PIN JACK	NPJ-4PDBL162	1	25045303	<SA706>
P5501	PIN JACK	NPJ-4PDBL162	1	25045303	
P5502	PIN JACK	NPJ-4PDBL162	1	25045303	
P5503	PIN JACK	NPJ-6PDBL159	1	25045300	
P5504	PIN JACK	NPJ-4PDGPRW661	1	25045890	
P5505	PIN JACK	NPJ-4PDELNT662	1	25045891	
P5506	PIN JACK	NPJ-4PDGPRW661	1	25045890	
P5507	PIN JACK	NPJ-4PDELNT662	1	25045891	
P5508	PIN JACK	NPJ-2PDWR558	1	25045776	
P5510A	SOCKET AS	NSAS-26P1742	1	2009991118UL	
P5510B	PLUG	NPLG-13P360	1	25055377	
P5510C	CRIMP AS	CRIMP SR805_2	1	20799170UL	
P5510D	CRIMP AS	CRIMP SR805_1	1	20799169UL	
P5512	SOCKET	NSCT-11P2191	1	25052294	
P5513	SOCKET	NSCT-15P2195	1	25052298	
P5518	SOCKET	NSCT-3P2183	1	25052286	
P5521	HOLDER	HOLDER(CLAMP)	1	27190540-1	
P5522	HOLDER	HOLDER(CLAMP)	1	27190540-1	
P5523	HOLDER	HOLDER(CLAMP)	1	27190540-1	
P6000B	PLUG	NPLG-7P0962	1	25056012	
P6001B	PLUG	NPLG-7P0962	1	25056012	
P6002B	PLUG	NPLG-7P0962	1	25056012	
P6003B	PLUG	NPLG-7P0962	1	25056012	
P6004B	PLUG	NPLG-7P0962	1	25056012	
P6005B	PLUG	NPLG-7P0962	1	25056012	
P6006B	PLUG	NPLG-7P0962	1	25056012	
P6011A	RETAINER	(BUS-D)	1	27142115A	
P6020	HOLDER	HOLDER(CLAMP)	1	27190540-1	
P6080	PLUG	NPLG-2P130	1	25055146	
P6081	PLUG	NPLG-2P130	1	25055146	
P6082	PLUG	NPLG-2P130	1	25055146	
P6083	PLUG	NPLG-2P130	1	25055146	
P6084	PLUG	NPLG-2P130	1	25055146	
P6085	PLUG	NPLG-2P130	1	25055146	
P6086	PLUG	NPLG-2P130	1	25055146	
P6900	CRIMP AS	CRIMP AS	1	2069925170UL	
P6901	CRIMP AS	CRIMP AS	1	2069925142UL	
P6902	CRIMP AS	CRIMP AS	1	2069925208UL	
P6950	PLUG	NPLG-5P152	1	25055168	
RL5700	RELAY	NRL-2P2A-DC24-174	1	25065659	
RL5701	RELAY	NRL-2P2A-DC24-174	1	25065659	
RL6901	RELAY	NRL-1P10A-DC12-140	1	25065584	
RL6902	RELAY	NRL-1P10A-DC12-140	1	25065584	

TX-SR706/SA706

PC BOARD PARTS LIST

U08	SP TERMINAL PC BOARD(NATRM-9488-1A/1B/1C)
U09	SP TERMINAL PC BOARD(NATRM-9489-1A/1B/1C)

U10	POWER SUPPLY PC BOARD(NAPS-9490-1A/1B/1C)
U11	INLET PC BOARD(NAETC-9491-1B/1C)
U13	AMPLIFIER PC BOARD(NACLA-9493-1A/1B/1C)
U15	HOLDER PC BOARD(NAETC-9495-1A/1B/1C)

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	2SA949-Y(TPE6_F)	1	2211354T	
Q5041	TR	2SA949-Y(TPE6_F)	1	2211354T	
Q5042	TR	2SA949-Y(TPE6_F)	1	2211354T	
Q5043	TR	2SA949-Y(TPE6_F)	1	2211354T	
Q5044	TR	2SA949-Y(TPE6_F)	1	2211354T	
Q5045	TR	2SA949-Y(TPE6_F)	1	2211354T	
Q5046	TR	2SA949-Y(TPE6_F)	1	2211354T	
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	
Q5060	TR	2SA949-Y(TPE6_F)	1	2211354T	
Q5061	TR	2SA949-Y(TPE6_F)	1	2211354T	
Q5062	TR	2SA949-Y(TPE6_F)	1	2211354T	
Q5063	TR	2SA949-Y(TPE6_F)	1	2211354T	
Q5064	TR	2SA949-Y(TPE6_F)	1	2211354T	

Q5065	TR	2SA949-Y(TPE6_F)	1	2211354T	
Q5066	TR	2SA949-Y(TPE6_F)	1	2211354T	
Q5070	TR	2SC2229-Y(TPE6_F)	1	2211634T	
Q5071	TR	2SC2229-Y(TPE6_F)	1	2211634T	
Q5072	TR	2SC2229-Y(TPE6_F)	1	2211634T	
Q5073	TR	2SC2229-Y(TPE6_F)	1	2211634T	
Q5074	TR	2SC2229-Y(TPE6_F)	1	2211634T	
Q5075	TR	2SC2229-Y(TPE6_F)	1	2211634T	
Q5076	TR	2SC2229-Y(TPE6_F)	1	2211634T	
Q6601	TR	RN1226	1	2214680T	
Q6602	TR	RN1226	1	2214680T	
Q6603	TR	RN1226	1	2214680T	
Q6604	TR	RN1226	1	2214680T	<DC, DD, MP, MA, MO, MQ, MT, SA706>
D911	DIODE	1SS133	1	223163T	
D912	DIODE	1SS133	1	223163T	
D921	DIODE	1SS133	1	223163T	
D922	DIODE	1SS133	1	223163T	
D923	DIODE	1SS133	1	223163T	
D924	DIODE	1SS133	1	223163T	
D925	DIODE	1SS133	1	223163T	
D930	DIODE	1SS133	1	223163T	
D931	DIODE	1SS133	1	223163T	
D933	DIODE	1SS133	1	223163T	
D934	ZENER D	MTZJ3.6B	1	224470362T	
D935	DIODE	1SS133	1	223163T	
Q6604	TR	RN1226	1	2214680T	<DT>
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	
D6600	DIODE	1SS133	1	223163T	
D6603	DIODE	1SS133	1	223163T	
D6605	DIODE	1SS133	1	223163T	
D6607	DIODE	1SS133	1	223163T	
T902	P TRANS	NPT-1520JQ	1	2301812A	!, <DC, DD, DT>
T902	P TRANS	NPT-1520GQ	1	2301813A	!, <MP, MA, MO, MQ, MT, SA706>
L6600	S COIL	S-1.3C	1	231176S	
L6601	S COIL	S-1.3C	1	231176S	
L6602	S COIL	S-1.3C	1	231176S	
L6603	S COIL	S-1.3C	1	231176S	
L6604	S COIL	S-1.3C	1	231176S	
L6605	S COIL	S-1.3C	1	231176S	
L6606	S COIL	S-1.3C	1	231176S	
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	
C903	PLA C	MKP R46 104M	1	3800041S	
C911	TF C	ECQ-B50V-102J	1	374721024T	
C921	TF C	ECQ-B50V-223J	1	374722234T	

C922	VR C	CE04W25V-2200M(VR)	1	394652227S	
C930	UTSP C	CE04W25V-100M(UTSP)	1	397551017T	
C933	UTSP C	CE04W50V-4.7M(UTSP)	1	397580477T	
C5000	TF C	ECQ-B50V-101K	1	374721015T	
C5001	TF C	ECQ-B50V-101K	1	374721015T	
C5002	TF C	ECQ-B50V-101K	1	374721015T	
C5003	TF C	ECQ-B50V-101K	1	374721015T	
C5004	TF C	ECQ-B50V-101K	1	374721015T	
C5005	TF C	ECQ-B50V-101K	1	374721015T	
C5006	TF C	ECQ-B50V-101K	1	374721015T	
C5010	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	<DC, DD>
C5010	UTSJ C	CE04W25V-47M(UTSJ)	1	398054707T	<DT, MP, MA, MO, MQ, MT, SA706>
C5011	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	<DC, DD>
C5011	UTSJ C	CE04W25V-47M(UTSJ)	1	398054707T	<DT, MP, MA, MO, MQ, MT, SA706>
C5012	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	<DC, DD>
C5012	UTSJ C	CE04W25V-47M(UTSJ)	1	398054707T	<DT, MP, MA, MO, MQ, MT, SA706>
C5013	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	<DC, DD>
C5013	UTSJ C	CE04W25V-47M(UTSJ)	1	398054707T	<DT, MP, MA, MO, MQ, MT, SA706>
C5014	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	<DC, DD>
C5014	UTSJ C	CE04W25V-47M(UTSJ)	1	398054707T	<DT, MP, MA, MO, MQ, MT, SA706>
C5015	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	<DC, DD>
C5015	UTSJ C	CE04W25V-47M(UTSJ)	1	398054707T	<DT, MP, MA, MO, MQ, MT, SA706>
C5016	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	<DC, DD>
C5016	UTSJ C	CE04W25V-47M(UTSJ)	1	398054707T	<DT, MP, MA, MO, MQ, MT, SA706>
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	CE04W10V-470M(UTSP)	1	397534717T	
C5041	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	
C5042	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	
C5043	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	
C5044	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	
C5045	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	
C5046	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	
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-040C	1	345020401T	
C5081	CERA C	CC45SL50V-040C	1	345020401T	
C5082	CERA C	CC45SL50V-040C	1	345020401T	
C5083	CERA C	CC45SL50V-040C	1	345020401T	
C5084	CERA C	CC45SL50V-040C	1	345020401T	
C5085	CERA C	CC45SL50V-040C	1	345020401T	
C5086	CERA C	CC45SL50V-040C	1	345020401T	
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	
C6600	TF C	ECQ-B50V-103J	1	374721034T	
C6602	TF C	ECQ-B50V-103J	1	374721034T	
C6603	TF C	ECQ-B50V-103J	1	374721034T	
C6605	TF C	ECQ-B50V-103J	1	374721034T	
C6607	TF C	ECQ-B50V-103J	1	374721034T	
C6630	TF C	ECQ-V50V-473J	1	374724734T	
C6631	TF C	ECQ-V50V-473J	1	374724734T	
C6632	TF C	ECQ-V50V-473J	1	374724734T	
C6633	TF C	ECQ-V50V-473J	1	374724734T	
C6634	TF C	ECQ-V50V-473J	1	374724734T	
C6635	TF C	ECQ-V50V-473J	1	374724734T	
C6636	TF C	ECQ-V50V-473J	1	374724734T	
C6640	TF C	ECQ-B50V-472J	1	374724724T	<MP, MA, MO, MQ, MT, SA706>
C6641	TF C	ECQ-B50V-472J	1	374724724T	<MP, MA, MO, MQ, MT, SA706>
C6642	TF C	ECQ-B50V-472J	1	374724724T	<MP, MA, MO, MQ, MT, SA706>
C6643	TF C	ECQ-B50V-472J	1	374724724T	<MP, MA, MO, MQ, MT, SA706>
C6644	TF C	ECQ-B50V-472J	1	374724724T	<MP, MA, MO, MQ, MT, SA706>
C6645	TF C	ECQ-B50V-472J	1	374724724T	<MP, MA, MO, MQ, MT, SA706>
C6646	TF C	ECQ-B50V-472J	1	374724724T	<MP, MA, MO, MQ, MT, SA706>
C6647	TF C	ECQ-B50V-472J	1	374724724T	<MP, MA, MO, MQ, MT, SA706>
C6648	TF C	ECQ-B50V-472J	1	374724724T	<MP, MA, MO, MQ, MT, SA706>
C6650	TF C	ECQ-B50V-102J	1	374721024T	
C6650	TF C	ECQ-B50V-102J	1	374721024T	
C6650	TF C	ECQ-B50V-102J	1	374721024T	
C6651	TF C	ECQ-B50V-102J	1	374721024T	
C6651	TF C	ECQ-B50V-102J	1	374721024T	
C6651	TF C	ECQ-B50V-102J	1	374721024T	
C6652	TF C	ECQ-B50V-102J	1	374721024T	
C6652	TF C	ECQ-B50V-102J	1	374721024T	
C6652	TF C	ECQ-B50V-102J	1	374721024T	
C6653	TF C	ECQ-B50V-102J	1	374721024T	
C6653	TF C	ECQ-B50V-102J	1	374721024T	
C6653	TF C	ECQ-B50V-102J	1	374721024T	

C6654	TF C	ECQ-B50V-102J	1	374721024T	
C6654	TF C	ECQ-B50V-102J	1	374721024T	
C6654	TF C	ECQ-B50V-102J	1	374721024T	
C6655	TF C	ECQ-B50V-102J	1	374721024T	
C6655	TF C	ECQ-B50V-102J	1	374721024T	
C6655	TF C	ECQ-B50V-102J	1	374721024T	
C6656	TF C	ECQ-B50V-102J	1	374721024T	
C6656	TF C	ECQ-B50V-102J	1	374721024T	
C6656	TF C	ECQ-B50V-102J	1	374721024T	
C6657	TF C	ECQ-B50V-102J	1	374721024T	
C6657	TF C	ECQ-B50V-102J	1	374721024T	
C6657	TF C	ECQ-B50V-102J	1	374721024T	
C6658	TF C	ECQ-B50V-102J	1	374721024T	
C6658	TF C	ECQ-B50V-102J	1	374721024T	
C6658	TF C	ECQ-B50V-102J	1	374721024T	
R921	METAL O R	RS1/2WBJ-82	1	443528204T	<DC, DD, DT>
R921	METAL O R	RS1/2WBJ-47	1	443524704T	<MP, MA, MO, MQ, MT, SA706>
R922	METAL O R	RS1/2WBJ-47	1	443524704T	<DC, DD, DT>
R922	METAL O R	RS1/2WBJ-82	1	443528204T	<MP, MA, MO, MQ, MT, SA706>
R934	CARBON R	R16J-33K	1	417343334T	
R5000	CARBON R	R16J-1.5K	1	417341524T	
R5001	CARBON R	R16J-1.5K	1	417341524T	
R5002	CARBON R	R16J-1.5K	1	417341524T	
R5003	CARBON R	R16J-1.5K	1	417341524T	
R5004	CARBON R	R16J-1.5K	1	417341524T	
R5005	CARBON R	R16J-1.5K	1	417341524T	
R5006	CARBON R	R16J-1.5K	1	417341524T	
R5010	CARBON R	R16J-33K	1	417343334T	
R5011	CARBON R	R16J-33K	1	417343334T	
R5012	CARBON R	R16J-33K	1	417343334T	
R5013	CARBON R	R16J-33K	1	417343334T	
R5014	CARBON R	R16J-33K	1	417343334T	
R5015	CARBON R	R16J-33K	1	417343334T	
R5016	CARBON R	R16J-33K	1	417343334T	
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-33K	1	417343334T	
R5031	CARBON R	R16J-33K	1	417343334T	
R5032	CARBON R	R16J-33K	1	417343334T	
R5033	CARBON R	R16J-33K	1	417343334T	
R5034	CARBON R	R16J-33K	1	417343334T	
R5035	CARBON R	R16J-33K	1	417343334T	
R5036	CARBON R	R16J-33K	1	417343334T	
R5040	CARBON R	R16J-1K	1	417341024T	
R5041	CARBON R	R16J-1K	1	417341024T	
R5042	CARBON R	R16J-1K	1	417341024T	
R5043	CARBON R	R16J-1K	1	417341024T	
R5044	CARBON R	R16J-1K	1	417341024T	

R5045	CARBON R	R16J-1K	1	417341024T
R5046	CARBON R	R16J-1K	1	417341024T
R5050	CARBON R	R16J-5.6K	1	417345624T
R5051	CARBON R	R16J-5.6K	1	417345624T
R5052	CARBON R	R16J-5.6K	1	417345624T
R5053	CARBON R	R16J-5.6K	1	417345624T
R5054	CARBON R	R16J-5.6K	1	417345624T
R5055	CARBON R	R16J-5.6K	1	417345624T
R5056	CARBON R	R16J-5.6K	1	417345624T
R5060	CARBON R	R16J-2.7K	1	417342724T
R5061	CARBON R	R16J-2.7K	1	417342724T
R5062	CARBON R	R16J-2.7K	1	417342724T
R5063	CARBON R	R16J-2.7K	1	417342724T
R5064	CARBON R	R16J-2.7K	1	417342724T
R5065	CARBON R	R16J-2.7K	1	417342724T
R5066	CARBON R	R16J-2.7K	1	417342724T
R5080	NF CARBON R	R25J-1.0K	1	415471024T
R5081	NF CARBON R	R25J-1.0K	1	415471024T
R5082	NF CARBON R	R25J-1.0K	1	415471024T
R5083	NF CARBON R	R25J-1.0K	1	415471024T
R5084	NF CARBON R	R25J-1.0K	1	415471024T
R5085	NF CARBON R	R25J-1.0K	1	415471024T
R5086	NF CARBON R	R25J-1.0K	1	415471024T
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-2.2K	1	417342224T
R5111	CARBON R	R16J-2.2K	1	417342224T
R5112	CARBON R	R16J-2.2K	1	417342224T
R5113	CARBON R	R16J-2.2K	1	417342224T
R5114	CARBON R	R16J-2.2K	1	417342224T
R5115	CARBON R	R16J-2.2K	1	417342224T
R5116	CARBON R	R16J-2.2K	1	417342224T
R5120	CARBON R	R16J-2.2K	1	417342224T
R5121	CARBON R	R16J-2.2K	1	417342224T
R5122	CARBON R	R16J-2.2K	1	417342224T
R5123	CARBON R	R16J-2.2K	1	417342224T
R5124	CARBON R	R16J-2.2K	1	417342224T
R5125	CARBON R	R16J-2.2K	1	417342224T
R5126	CARBON R	R16J-2.2K	1	417342224T
R5130	CARBON R	R16J-18K	1	417341834T
R5131	CARBON R	R16J-18K	1	417341834T

R5132	CARBON R	R16J-18K	1	417341834T
R5133	CARBON R	R16J-18K	1	417341834T
R5134	CARBON R	R16J-18K	1	417341834T
R5135	CARBON R	R16J-18K	1	417341834T
R5136	CARBON R	R16J-18K	1	417341834T
R5140	NF CARBON R	R25J-820	1	415478214T
R5141	NF CARBON R	R25J-820	1	415478214T
R5142	NF CARBON R	R25J-820	1	415478214T
R5143	NF CARBON R	R25J-820	1	415478214T
R5144	NF CARBON R	R25J-820	1	415478214T
R5145	NF CARBON R	R25J-820	1	415478214T
R5146	NF CARBON R	R25J-820	1	415478214T
R5150	NF CARBON R	R25J-1.0K	1	415471024T
R5151	NF CARBON R	R25J-1.0K	1	415471024T
R5152	NF CARBON R	R25J-1.0K	1	415471024T
R5153	NF CARBON R	R25J-1.0K	1	415471024T
R5154	NF CARBON R	R25J-1.0K	1	415471024T
R5155	NF CARBON R	R25J-1.0K	1	415471024T
R5156	NF CARBON R	R25J-1.0K	1	415471024T
R5160	NF CARBON R	R25J-820	1	415478214T
R5161	NF CARBON R	R25J-820	1	415478214T
R5162	NF CARBON R	R25J-820	1	415478214T
R5163	NF CARBON R	R25J-820	1	415478214T
R5164	NF CARBON R	R25J-820	1	415478214T
R5165	NF CARBON R	R25J-820	1	415478214T
R5166	NF CARBON R	R25J-820	1	415478214T
R5170	NF CARBON R	R25J-820	1	415478214T
R5171	NF CARBON R	R25J-820	1	415478214T
R5172	NF CARBON R	R25J-820	1	415478214T
R5173	NF CARBON R	R25J-820	1	415478214T
R5174	NF CARBON R	R25J-820	1	415478214T
R5175	NF CARBON R	R25J-820	1	415478214T
R5176	NF CARBON R	R25J-820	1	415478214T
R5180	NF CARBON R	R25J-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-18K	1	417341834T
R5204	CARBON R	R16J-18K	1	417341834T
R5205	CARBON R	R16J-18K	1	417341834T

R5206	CARBON R	R16J-18K	1	417341834T
R5210	NF CARBON R	R25J-120	1	415471214T
R5211	NF CARBON R	R25J-120	1	415471214T
R5212	NF CARBON R	R25J-120	1	415471214T
R5213	NF CARBON R	R25J-120	1	415471214T
R5214	NF CARBON R	R25J-120	1	415471214T
R5215	NF CARBON R	R25J-120	1	415471214T
R5216	NF CARBON R	R25J-120	1	415471214T
R5220	NF CARBON R	R25J-120	1	415471214T
R5221	NF CARBON R	R25J-120	1	415471214T
R5222	NF CARBON R	R25J-120	1	415471214T
R5223	NF CARBON R	R25J-120	1	415471214T
R5224	NF CARBON R	R25J-120	1	415471214T
R5225	NF CARBON R	R25J-120	1	415471214T
R5226	NF CARBON R	R25J-120	1	415471214T
R5300	CARBON R	R16J-330	1	417343314T
R5301	CARBON R	R16J-330	1	417343314T
R5302	CARBON R	R16J-330	1	417343314T
R5303	CARBON R	R16J-330	1	417343314T
R5304	CARBON R	R16J-330	1	417343314T
R5305	CARBON R	R16J-330	1	417343314T
R5306	CARBON R	R16J-330	1	417343314T
R5310	CARBON R	R16J-330	1	417343314T
R5311	CARBON R	R16J-330	1	417343314T
R5312	CARBON R	R16J-330	1	417343314T
R5313	CARBON R	R16J-330	1	417343314T
R5314	CARBON R	R16J-330	1	417343314T
R5315	CARBON R	R16J-330	1	417343314T
R5316	CARBON R	R16J-330	1	417343314T
R6600	CARBON R	R16J-22	1	417342204T
R6601	CARBON R	R16J-22	1	417342204T
R6602	CARBON R	R16J-22	1	417342204T
R6603	CARBON R	R16J-22	1	417342204T
R6604	CARBON R	R16J-22	1	417342204T
R6605	CARBON R	R16J-22	1	417342204T
R6606	CARBON R	R16J-22	1	417342204T
R6610	CARBON R	R16J-22	1	417342204T
R6611	CARBON R	R16J-22	1	417342204T
R6612	CARBON R	R16J-22	1	417342204T
R6613	CARBON R	R16J-22	1	417342204T
R6614	CARBON R	R16J-22	1	417342204T
R6615	CARBON R	R16J-22	1	417342204T
R6616	CARBON R	R16J-22	1	417342204T
R6630	METAL R	RNU1WCJ-8.2	1	453630824T
R6631	METAL R	RNU1WCJ-8.2	1	453630824T
R6632	METAL R	RNU1WCJ-8.2	1	453630824T
R6633	METAL R	RNU1WCJ-8.2	1	453630824T
R6634	METAL R	RNU1WCJ-8.2	1	453630824T
R6635	METAL R	RNU1WCJ-8.2	1	453630824T
R6636	METAL R	RNU1WCJ-8.2	1	453630824T
R6690	METAL R	RNU1WCJ-8.2	1	453630824T
R6691	METAL O R	RS1/2WBJ-390	1	443523914T
R6692	METAL O R	RS1/2WBJ-390	1	443523914T

E901	TRM(SCREW)	NEJITANSI M3	1	25065425	
E902	TRM(SCREW)	NEJITANSI M3	1	25065425	
E5507B	TRM	NTM-1P233(M1969)	1	25060302	
E5509B	TRM	NTM-1P233(M1969)	1	25060302	
E7601	TRM(SCREW)	NEJITANSI M3	1	25065425	
F901C	FUSE HOL	NSCT-1P2031	1	25052133T	!
F901D	FUSE HOL	NSCT-1P2031	1	25052133T	!
JL4103A	SOCKET	NSCT-5P97	1	25050269	
JL6600B	SOCKET	NSCT-7P99	1	25050271	
JL6603B	SOCKET	NSCT-9P101	1	25050273	
JL6604A	WIRE HOL	NSCT-7P878	1	25051091	
JL6604B	WIRE HOL	NSCT-7P878	1	25051091	
JL6606A	WIRE HOL	NSCT-7P878	1	25051091	
JL6620B	WIRE TRAP	NPLG-7P590	1	25055628	
JL901A	WIRE HOL	NSCT-5P876	1	25051089	
P901A	PLUG	NPLG-2P631	1	25055675	!, <DC, DD>
P901Aor	PLUG	1-1123724-2	(1)	25056402	!, <DC, DD>
P907	AC INLET	NPLG-2P913	1	25055960	!, <MP, MA, DT, MO, MQ, MT, SA706>
P911	PLUG	NPLG-2P631	1	25055675	!
P911 or	PLUG	1-1123724-2	(1)	25056402	!
P921	CRIMP AS	CRIMP AS	1	206CC45109UL	<MP, MA, DT, MO, MQ, MT, SA706>
P922	CRIMP AS	CRIMP AS	1	206CC45101UL	<MP, MA, DT, MO, MQ, MT, SA706>
P6000A	SOCKET	NSCT-7P2187	1	25052290	
P6001A	SOCKET	NSCT-7P2187	1	25052290	
P6002A	SOCKET	NSCT-7P2187	1	25052290	
P6003A	SOCKET	NSCT-7P2187	1	25052290	
P6004A	SOCKET	NSCT-7P2187	1	25052290	
P6005	SOCKET	NSCT-7P2187	1	25052290	
P6006	SOCKET	NSCT-7P2187	1	25052290	
P6600	TRM	NTM-2PDMCR400	1	25060472	
P6601	TRM	NTM-2PDMCR400	1	25060472	
P6602	TRM	NTM-2PDMCR400	1	25060472	
P6603	TRM	NTM-2PDMCR400	1	25060472	
P6604	TRM	NTM-2PDMCR400	1	25060472	
P6605	TRM	NTM-2PDMCR400	1	25060472	
P6606	TRM	NTM-2PDMCR400	1	25060472	
P6607	TRM	NTM-2PDMCR400	1	25060472	
P6608	TRM	NTM-2PDMCR400	1	25060472	
P6621	PLUG	NPLG-13P0968	1	25056018	
RL901	RELAY	NRL-1P10A-DC9-186	1	25065683	!
RL6600	RELAY	NRL-2P5A-DC24-158	1	25065618	
RL6600 or	RELAY	NRL-2P5A-DC24-193	(1)	25065703	
RL6602	RELAY	NRL-2P5A-DC24-158	1	25065618	
RL6602 or	RELAY	NRL-2P5A-DC24-193	(1)	25065703	
RL6603	RELAY	NRL-2P5A-DC24-158	1	25065618	
RL6603 or	RELAY	NRL-2P5A-DC24-193	(1)	25065703	
RL6605	RELAY	NRL-2P5A-DC24-158	1	25065618	
RL6605 or	RELAY	NRL-2P5A-DC24-193	(1)	25065703	
RL6607	RELAY	NRL-2P5A-DC24-158	1	25065618	
RL6607 or	RELAY	NRL-2P5A-DC24-193	(1)	25065703	

PC BOARD PARTS LIST

U16	MICROPROCESSOR AND DAC PC BOARD(NADG-9504-1A/1B/1D)
U17	VIDEO PC BOARD(NAVD-9505-1A/1B/1D)
U19	XM PC BOARD(NARF-9507-1A/1B)

CIRCUIT NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
U1301	PHT CP	JSR1165-001recieving	1	24120143	
U1301 or	PHT CP	GP1FAV51RK0F	(1)	24120129	
U1302	PHT CP	JSR1165-001recieving	1	24120143	
U1302 or	PHT CP	GP1FAV51RK0F	(1)	24120129	
Q1	IC	BD7820	1	22242300R2	<DC, DD>
Q2	IC	78M09HF(NJM78M09FA)	1	222780095JRC	<SR706>
Q3	IC	78L05(NJM78L05UA)	1	222780053R2JR	<DC, DD>
Q4	IC	BU9450KV-E2	1	22242505R2	<DC, DD>
Q4 or	IC	F2628E-01	(1)	22242436R2	<DC, DD>
Q4 or	IC	S2658G-01	(1)	22242535R2	<DC, DD>
Q5	IC	AK4388ET-E2	1	22242519R2	<DC, DD>
Q6	IC	NJM4580M-D	1	22241448R2	<DC, DD>
Q8	IC	NJM2860F3-33	1	22242087R2	<DC, DD>
Q9	IC	NJM4580M-D	1	22241448R2	<SR706>
Q10	IC	NJM4580M-D	1	22241448R2	<DC, DD>
Q1001	TR	KRC104S	1	2216210R2	
Q1001 or	TR	RN1404	(1)	2214490R2	
Q1002	TR	KRA102S	1	2216220R2	
Q1002 or	TR	RN2402	(1)	2214530R2	
Q1003	TR	KRC104S	1	2216210R2	
Q1003 or	TR	RN1404	(1)	2214490R2	
Q1004	TR	KRA102S	1	2216220R2	
Q1004 or	TR	RN2402	(1)	2214530R2	
Q1005	TR	KRC102S	1	2216190R2	
Q1005 or	TR	DTC114EKA	(1)	2216250R2	
Q1005 or	TR	RN1402	(1)	2214470R2	
Q1006	TR	KRA107S	1	2216350R2	
Q1006 or	TR	DTA114YKA	(1)	2216480R2	
Q1006 or	TR	RN2407(TE85L_F)	(1)	2216360R2	
Q1007	TR	KRC102S	1	2216190R2	
Q1007 or	TR	DTC114EKA	(1)	2216250R2	
Q1007 or	TR	RN1402	(1)	2214470R2	
Q1008	TR	KRA107S	1	2216350R2	
Q1008 or	TR	DTA114YKA	(1)	2216480R2	
Q1008 or	TR	RN2407(TE85L_F)	(1)	2216360R2	
Q1009	TR	KRC102S	1	2216190R2	
Q1009 or	TR	DTC114EKA	(1)	2216250R2	
Q1009 or	TR	RN1402	(1)	2214470R2	
Q1010	TR	KRC104S	1	2216210R2	
Q1010 or	TR	RN1404	(1)	2214490R2	
Q1011	TR	KRA102S	1	2216220R2	
Q1011 or	TR	RN2402	(1)	2214530R2	
Q1012	TR	2SK3019	1	2216520R2	
Q1013	TR	2SK3019	1	2216520R2	
Q1014B	HEAT-SINK	HEAT-SINK(RAD-07)	1	27160029	

Q1014C	SCREW	3P+10FN(3BC)	1	82143010GR	
Q1015	IC	AN34060A	1	22242205	
Q1016	IC(MAIN MICROPROCESSOR)	MPD70F3746(0263)	1	222W0079R302630	
Q1017	IC	XC6202P502FR	1	22242331R2	
Q1018	IC	XC6213B332MR	1	22242277R2	
Q1019	IC	S-812C33AUA-C2N	1	22242222R2	
Q1020	IC	S-812C56AUA-C3K	1	22242207R2	
Q1021	IC	74HC595F	1	222745955R2	
Q1022	IC	R1EX25064ASA00A	1	22242581R2	
Q1023	TR	KRC104S	1	2216210R2	
Q1023 or	TR	RN1404	(1)	2214490R2	
Q1024	TR	KRC105S	1	2217290R2	
Q1024 or	TR	DTC123JKA	(1)	2216690R2	
Q1024 or	TR	RN1405	(1)	2214500R2	
Q1025	TR	KRA102S	1	2216220R2	
Q1025 or	TR	RN2402	(1)	2214530R2	
Q1026	TR	KRC104S	1	2216210R2	
Q1026 or	TR	RN1404	(1)	2214490R2	
Q1290	TR	2SC2712-GR	1	2213145R2	
Q1291	IC	TC4066BFT	1	22284066MR2TO	
Q1301	TR	2SC2712-GR	1	2213145R2	
Q1322	IC	TC74VHCT08AFT	1	22274008GR2TO	
Q1322 or	IC	TC74VHCT08AFT (EKJ)	(1)	22274008G1R2TO	
Q1324	IC	CS42516-CQZ(R)-D	1	22242294R2	
Q1325	IC	74HCU04F	1	222740046R2	
Q1326	IC	TC7WU04FU(TE12L_F)	1	22240935R2	
Q1421	IC	CS4382A	1	22242529R2	
Q1601	IC	NJM4580M-D	1	22241448R2	
Q1602	IC	NJM4580M-D	1	22241448R2	
Q1603	IC	NJM4580M-D	1	22241448R2	
Q1604	IC	NJM4580M-D	1	22241448R2	
Q1900	IC	NJM4580M-D	1	22241448R2	
Q1901	IC	NJM4580M-D	1	22241448R2	
Q4000	TR	KRC105S	1	2217290R2	
Q4000 or	TR	RN1405	(1)	2214500R2	
Q4001	IC	78M05(NJM78M05FA)	1	222780055JRC	
Q4002	IC	SI8008TM	1	22242323R2	
Q4003	TR	KRC105S	1	2217290R2	
Q4003 or	TR	RN1405	(1)	2214500R2	
Q4005	IC	SI8008TM	1	22242323R2	<DC, DD>
Q4100	IC	AN15881A-VT	1	22242318R3	
Q4502	TR	2SA950-Y	1	2211504T	
Q4502 or	TR	2SA950-O	(1)	2211503T	
Q4503	TR	2SC1815-GR	1	2211255T	
Q4503 or	TR	2SC1815-Y	(1)	2211254T	
Q4504	TR	2SA854S-R	1	2217394T	
Q4504 or	TR	2SB1240-R	(1)	2213794T	
Q4604	TR	2SA854S-R	1	2217394T	
Q4604 or	TR	2SB1240-R	(1)	2213794T	
Q4605	TR	KRC102S	1	2216190R2	
Q4605 or	TR	RN1402	(1)	2214470R2	
Q4700	IC	ICL3221ECVZ	1	22242268R2	
D1	C-DIODE	1SS352	1	223234R2	<DC, DD>

D1 or	C-DIODE	KDS4148U	(1)	223283R2	<DC, DD>
D1 or	C-DIODE	MA2J111	(1)	223279R2	<DC, DD>
D1001	C-DIODE	1SS352	1	223234R2	
D1001 or	C-DIODE	KDS4148U	(1)	223283R2	
D1001 or	C-DIODE	MA2J111	(1)	223279R2	
D1002	C-DIODE	1SS352	1	223234R2	
D1002 or	C-DIODE	KDS4148U	(1)	223283R2	
D1002 or	C-DIODE	MA2J111	(1)	223279R2	
D1005	C-DIODE	1SS352	1	223234R2	
D1005 or	C-DIODE	KDS4148U	(1)	223283R2	
D1005 or	C-DIODE	MA2J111	(1)	223279R2	
D1006	C-DIODE	1SS352	1	223234R2	
D1006 or	C-DIODE	KDS4148U	(1)	223283R2	
D1006 or	C-DIODE	MA2J111	(1)	223279R2	
D1007	C-DIODE	1SS352	1	223234R2	
D1007 or	C-DIODE	KDS4148U	(1)	223283R2	
D1007 or	C-DIODE	MA2J111	(1)	223279R2	
D4001	C-DIODE	1SS352	1	223234R2	
D4001 or	C-DIODE	KDS4148U	(1)	223283R2	
D4001 or	C-DIODE	MA2J111	(1)	223279R2	
D4002	ZENER D	UDZS5.6B	1	224550560R2	
D4002 or	ZENER D	MAZ8056-M	(1)	224750562R2	
D4003	C-DIODE	1SS352	1	223234R2	
D4003 or	C-DIODE	KDS4148U	(1)	223283R2	
D4003 or	C-DIODE	MA2J111	(1)	223279R2	
D4004	DIODE	D5SBA20	1	22380130F	
D4005	DIODE	RB070M-30	1	22380361R2	
D4006	DIODE	RLIN4003	1	22380260T	
D4009	DIODE	D3SBA20	1	22380271F	
D4010	C-DIODE	1SS352	1	223234R2	
D4010 or	C-DIODE	KDS4148U	(1)	223283R2	
D4010 or	C-DIODE	MA2J111	(1)	223279R2	
D4013	DIODE	RB070M-30	1	22380361R2	<DC, DD>
D4014	C-DIODE	1SS352	1	223234R2	<DC, DD>
D4014 or	C-DIODE	KDS4148U	(1)	223283R2	<DC, DD>
D4014 or	C-DIODE	MA2J111	(1)	223279R2	<DC, DD>
D4015	C-DIODE	1SS352	1	223234R2	
D4015 or	C-DIODE	KDS4148U	(1)	223283R2	
D4015 or	C-DIODE	MA2J111	(1)	223279R2	
D4016	C-DIODE	1SS352	1	223234R2	
D4016 or	C-DIODE	KDS4148U	(1)	223283R2	
D4016 or	C-DIODE	MA2J111	(1)	223279R2	
D4500	C-DIODE	1SS352	1	223234R2	
D4500 or	C-DIODE	KDS4148U	(1)	223283R2	
D4500 or	C-DIODE	MA2J111	(1)	223279R2	
D4501	C-DIODE	1SS352	1	223234R2	
D4501 or	C-DIODE	KDS4148U	(1)	223283R2	
D4501 or	C-DIODE	MA2J111	(1)	223279R2	
D4604	C-DIODE	1SS352	1	223234R2	
D4604 or	C-DIODE	KDS4148U	(1)	223283R2	
D4604 or	C-DIODE	MA2J111	(1)	223279R2	
D4605	C-DIODE	1SS352	1	223234R2	
D4605 or	C-DIODE	KDS4148U	(1)	223283R2	

D4605 or	C-DIODE	MA2J111	(1)	223279R2	
D4606	DIODE	RL1N4003	1	22380260T	
X1	CRYSTAL	DSX530GA 45.1584MHz	1	3010418R2	<DC, DD>
X1 or	CRYSTAL	FCX-03 45.15840MHZ	(1)	3010466R2	<DC, DD>
X1001	CERA LOCK	CSTCR5M00G53-B0	1	3010356R2	
X1301	CRYSTAL	HC-49US24.576MHz	1	3010423T	
L1	CHOKE COIL	BLM21PG221SN1	1	230949R2	<DC, DD>
L2	CHOKE COIL	BLM21PG221SN1	1	230949R2	<DC, DD>
L3	CHOKE COIL	LBC2518T2R2M	1	231364M022R2	<DC, DD>
L4	EMIFIL	BK1608LM182-T	1	230958R1	<DC, DD>
L6	CHOKE COIL	LBC2518T2R2M	1	231364M022R2	<DC, DD>
L1290	CHOKE COIL	LBC2518T470M	1	231364M470R2	
L1305	CHOKE COIL	LBC2518T2R2M	1	231364M022R2	
L1306	CHOKE COIL	LBC2518T470M	1	231364M470R2	
L1307	CHOKE COIL	LBC2518T2R2M	1	231364M022R2	
L1308	CHOKE COIL	LBC2518T2R2M	1	231364M022R2	
L1309	CHOKE COIL	LBC2518T47M	1	231364M047R2	
L1312	CHOKE COIL	LBC2518T470M	1	231364M470R2	
L1313	CHOKE COIL	LBC2518T47M	1	231364M047R2	
L1314	CHOKE COIL	LBC2518T47M	1	231364M047R2	
L1315	CHOKE COIL	LBC2518T47M	1	231364M047R2	
L1316	EMIFIL	BK1608LM182-T	1	230958R1	
L1317	EMIFIL	BK1608LM182-T	1	230958R1	
L1318	CHOKE COIL	LBC2518T470M	1	231364M470R2	
L1319	CHOKE COIL	LBC2518T470M	1	231364M470R2	
L1320	EMIFIL	BK1608LM182-T	1	230958R1	
L1402	CHOKE COIL	LBC2518T47M	1	231364M047R2	
L1403	CHOKE COIL	LBC2518T47M	1	231364M047R2	
L1404	CHOKE COIL	LBC2518T47M	1	231364M047R2	
L4000	CHOKE COIL	NCH-2541	1	231363K470A	
L4000 or	CHOKE COIL	0182-7310-470K-RB	1	231389	
L4001	CHOKE COIL	LBC2518T47M	1	231364M047R2	
L4003	CHOKE COIL	NCH-2541	1	231363K470A	<DC, DD>
L4003 or	CHOKE COIL	0182-7310-470K-RB	1	231389	<DC, DD>
L4602	EMIFIL	BK1608LM182-T	1	230958R1	
L4603	EMIFIL	BK1608LM182-T	1	230958R1	
L4700	CHOKE COIL	LBC2518T470M	1	231364M470R2	
C1	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<SR706>
C2	VR C	CE04W16V-100M(VR)	1	394641017T	<SR706>
C3	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DC, DD>
C4	VR C	CE04W16V-100M(VR)	1	394641017T	<DC, DD>
C5	VR C	CE04W16V-100M(VR)	1	394641017T	<DC, DD>
C6	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DC, DD>
C8	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DC, DD>
C9	C-CERA C	CK725B1H-102K1	1	332101025R1	<DC, DD>
C10	C-CERA C	CK725B1H-102K1	1	332101025R1	<DC, DD>
C11	VR C	CE04W6.3V-220M(VR)	1	394622217T	<DC, DD>
C12	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DC, DD>
C13	C-CERA C	CC725CH1H-821J1	1	342108214R1	<DC, DD>
C14	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DC, DD>
C15	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DC, DD>
C16	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DC, DD>
C17	C-CERA C	CC725CH1H-821J1	1	342108214R1	<DC, DD>

C18	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DC, DD>
C19	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DC, DD>
C20	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DC, DD>
C21	VR C	CE04W16V-220M(VR)	1	394642217T	<SR706>
C22	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DC, DD>
C23	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DC, DD>
C24	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DC, DD>
C25	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DC, DD>
C26	VR C	CE04W16V-220M(VR)	1	394642217T	<SR706>
C27	C-CERA C	CC725CH1H-821J1	1	342108214R1	<DC, DD>
C28	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DC, DD>
C29	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DC, DD>
C30	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DC, DD>
C32	C-CERA C	CC725CH1H-821J1	1	342108214R1	<DC, DD>
C33	C-CERA C	CK725B1H-102K1	1	332101025R1	<DC, DD>
C34	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DC, DD>
C35	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DC, DD>
C36	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DC, DD>
C38	C-CERA C	CK725B1H-102K1	1	332101025R1	<DC, DD>
C39	VR C	CE04W16V-100M(VR)	1	394641017T	<DC, DD>
C40	C-CERA C	CC725CH1H-080D1	1	342100802R1	<DC, DD>
C41	C-CERA C	CC725CH1H-040C1	1	342100401R1	<DC, DD>
C42	C-CERA C	CK725F1A-105Z1	1	332181050R1	<DC, DD>
C43	C-CERA C	CK725F1A-105Z1	1	332181050R1	<DC, DD>
C44	C-CERA C	CK725F1A-105Z1	1	332181050R1	<DC, DD>
C47	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<SR706>
C48	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<SR706>
C52	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DC, DD>
C53	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	<DC, DD>
C1001	C-CERA C	CK725F1A-105Z1	1	332181050R1	
C1002	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C1004	C-CERA C	CK725F1A-105Z1	1	332181050R1	
C1005	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C1006	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C1007	C-CERA C	CK725F1A-105Z1	1	332181050R1	
C1008	C-CERA C	CC725CH1H-101J1	1	342101014R1	
C1009	C-CERA C	CC725CH1H-101J1	1	342101014R1	
C1010	C-CERA C	CK725B1H-102K1	1	332101025R1	
C1011	VR C	CE04W16V-100M(VR)	1	394641017T	
C1013	VR C	CE04W16V-100M(VR)	1	394641017T	
C1014	VR C	CE04W16V-100M(VR)	1	394641017T	
C1015	VR C	CE04W16V-100M(VR)	1	394641017T	
C1017	VR C	CE04W16V-100M(VR)	1	394641017T	
C1019	VR C	CE04W16V-100M(VR)	1	394641017T	
C1020	C-CERA C	CK725F1A-105Z1	1	332181050R1	
C1021	C-CERA C	CK725B1H-102K1	1	332101025R1	
C1022	C-CERA C	CK725B1H-102K1	1	332101025R1	
C1023	UTSP C	CE04W50V-4.7M(UTSP)	1	397580477T	
C1024	C-CERA C	CK725B1H-102K1	1	332101025R1	
C1025	C-CERA C	CK725B1H-102K1	1	332101025R1	
C1026	C-CERA C	CK725B1H-102K1	1	332101025R1	
C1027	C-CERA C	CK725B1H-102K1	1	332101025R1	
C1028	VR C	CE04W50V-10M(VR)	1	394681007T	

C1029	VR C	CE04W16V-100M(VR)	1	394641017T
C1030	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1031	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1032	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1033	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1034	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1035	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1036	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1037	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1038	VR C	CE04W50V-10M(VR)	1	394681007T
C1039	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1040	VR C	CE04W6.3V-470M(VR)	1	394624717T
C1041	UTSP C	CE04W50V-4.7M(UTSP)	1	397580477T
C1042	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1050	C-CERA C	CC725CH1H-101J1	1	342101014R1
C1051	C-CERA C	CC725CH1H-101J1	1	342101014R1
C1199	VR C	CE04W16V-470M(VR)	1	394644717T
C1290	VR C	CE04W16V-100M(VR)	1	394641017T
C1291	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1292	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C1293	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C1294	UTSP C	CE04W50V-47M(UTSP)	1	397584707T
C1295	UTSP C	CE04W50V-47M(UTSP)	1	397584707T
C1296	UTSP C	CE04W50V-47M(UTSP)	1	397584707T
C1364	C-CERA C	CK725B1H-102K1	1	332101025R1
C1365	C-CERA C	CK725B1C-104K1	1	332121045R1
C1366	C-CERA C	CC725CH1H-101J1	1	342101014R1
C1367	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1368	C-CERA C	CC725CH1H-101J1	1	342101014R1
C1369	VR C	CE04W16V-100M(VR)	1	394641017T
C1370	C-CERA C	CK725B1C-104K1	1	332121045R1
C1371	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1372	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1373	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1374	UTSP C	CE04W10V-470M(UTSP)	1	397534717T
C1376	VR C	CE04W16V-100M(VR)	1	394641017T
C1377	UTSJ C	CE04W25V-47M(UTSJ)	1	398054707T
C1378	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1380	C-CERA C	CK725B1C-104K1	1	332121045R1
C1381	C-CERA C	CC725CH1H-101J1	1	342101014R1
C1382	C-FILM C	ECHU50V-222J	1	373022224R2
C1383	C-FILM C	ECHU50V-222J	1	373022224R2
C1388	C-CERA C	CK725B1H-102K1	1	332101025R1
C1390	C-CERA C	CK725B1H-223K1	1	332102235R1
C1392	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1396	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1397	C-CERA C	CK725B1H-102K1	1	332101025R1
C1398	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1399	UTSP C	CE04W10V-470M(UTSP)	1	397534717T
C1400	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1401	C-CERA C	CC725CH1H-330J1	1	342103304R1
C1402	C-CERA C	CC725CH1H-330J1	1	342103304R1
C1403	C-CERA C	CC725CH1H-330J1	1	342103304R1

C1404	C-CERA C	CC725CH1H-330J1	1	342103304R1
C1405	C-CERA C	CC725CH1H-330J1	1	342103304R1
C1406	C-CERA C	CC725CH1H-330J1	1	342103304R1
C1408	C-CERA C	CC725CH1H-080D1	1	342100802R1
C1409	C-CERA C	CC725CH1H-080D1	1	342100802R1
C1410	UTSP C	CE04W10V-470M(UTSP)	1	397534717T
C1411	UTSP C	CE04W10V-470M(UTSP)	1	397534717T
C1413	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1414	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1415	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1417	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1418	C-CERA C	CK725F1E-104Z1	1	332161040R1
C1419	C-CERA C	CC725CH1H-080D1	1	342100802R1
C1420	C-CERA C	CK725B1H-102K1	1	332101025R1
C1424	C-CERA C	CC725CH1H-060D1	1	342100602R1
C1425	C-CERA C	CC725CH1H-060D1	1	342100602R1
C1451	C-FILM C	ECHU16V-104J	1	373041044R2
C1452	UTSP C	CE04W10V-470M(UTSP)	1	397534717T
C1453	UTSP C	CE04W10V-470M(UTSP)	1	397534717T
C1454	C-FILM C	ECHU16V-104J	1	373041044R2
C1455	C-FILM C	ECHU16V-104J	1	373041044R2
C1456	UTSP C	CE04W25V-47M(UTSP)	1	397554707T
C1457	C-FILM C	ECHU16V-104J	1	373041044R2
C1458	UTSJ C	CE04W25V-47M(UTSJ)	1	398054707T
C1460	UTSP C	CE04W10V-470M(UTSP)	1	397534717T
C1461	C-FILM C	ECHU16V-104J	1	373041044R2
C1499	VR C	CE04W16V-100M(VR)	1	394641017T
C1600	TF C	ECQ-B50V-471J	1	374724714T
C1601	TF C	ECQ-B50V-471J	1	374724714T
C1602	TF C	ECQ-B50V-471J	1	374724714T
C1603	TF C	ECQ-B50V-471J	1	374724714T
C1604	TF C	ECQ-B50V-471J	1	374724714T
C1605	TF C	ECQ-B50V-471J	1	374724714T
C1606	TF C	ECQ-B50V-471J	1	374724714T
C1607	TF C	ECQ-B50V-471J	1	374724714T
C1610	TF C	ECQ-B50V-151K	1	374721515T
C1611	TF C	ECQ-B50V-151K	1	374721515T
C1612	TF C	ECQ-B50V-151K	1	374721515T
C1613	TF C	ECQ-B50V-151K	1	374721515T
C1614	TF C	ECQ-B50V-151K	1	374721515T
C1615	TF C	ECQ-B50V-151K	1	374721515T
C1616	TF C	ECQ-B50V-151K	1	374721515T
C1617	TF C	ECQ-B50V-151K	1	374721515T
C1620	TF C	ECQ-B50V-151K	1	374721515T
C1621	TF C	ECQ-B50V-151K	1	374721515T
C1622	TF C	ECQ-B50V-151K	1	374721515T
C1623	TF C	ECQ-B50V-151K	1	374721515T
C1624	TF C	ECQ-B50V-151K	1	374721515T
C1625	TF C	ECQ-B50V-151K	1	374721515T
C1626	TF C	ECQ-B50V-151K	1	374721515T
C1627	TF C	ECQ-B50V-151K	1	374721515T
C1650	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C1651	UTSP C	CE04W25V-220M(UTSP)	1	397552217T

C1900	UTSP C	CE04W25V-47M(UTSP)	1	397554707T	
C1901	UTSP C	CE04W25V-47M(UTSP)	1	397554707T	
C1910	UTSP C	CE04W25V-47M(UTSP)	1	397554707T	
C1911	UTSP C	CE04W25V-47M(UTSP)	1	397554707T	
C1912	C-CERA C	CK725F1A-105Z1	1	332181050R1	
C4000	UTSP C	CE04W50V-4.7M(UTSP)	1	397580477T	
C4001	VR C	CE04W16V-470M(VR)	1	394644717T	
C4002	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	
C4003	TF C	ECQ-V50V-334J	1	374723344T	
C4004	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	
C4005	C-CERA C	CK725B1H-223K1	1	332102235R1	
C4006	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C4007	ELECT C	CE04W18V-10000M(VZ)	1	3945H1037S	
C4012	TF C	ECQ-V50V-334J	1	374723344T	
C4013	ELECT C	CE04W18V-10000M(VZ)	1	3945H1037S	
C4023	VR C	CE04W16V-470M(VR)	1	394644717T	<DC, DD>
C4024	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DC, DD>
C4025	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	<DC, DD>
C4100	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C4102	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C4103	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C4109	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C4110	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C4111	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C4113	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C4114	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C4115	VR C	CE04W6.3V-470M(VR)	1	394624717T	
C4117	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C4118	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C4119	VR C	CE04W6.3V-470M(VR)	1	394624717T	
C4120	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C4121	C-CERA C	CC725CH1H-102J1	1	342101024R1	
C4122	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C4123	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C4124	VR C	CE04W6.3V-220M(VR)	1	394622217T	
C4125	UTSP C	CE04W25V-47M(UTSP)	1	397554707T	
C4126	VR C	CE04W6.3V-220M(VR)	1	394622217T	
C4127	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C4128	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C4129	UTSP C	CE04W50V-22M(UTSP)	1	397582207T	
C4130	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C4131	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C4132	VR C	CE04W6.3V-220M(VR)	1	394622217T	
C4133	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C4134	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C4135	UTSP C	CE04W50V-22M(UTSP)	1	397582207T	
C4136	UTSP C	CE04W25V-47M(UTSP)	1	397554707T	
C4137	C-CERA C	CC725CH1H-221J1	1	342102214R1	
C4138	VR C	CE04W6.3V-220M(VR)	1	394622217T	
C4139	UTSP C	CE04W50V-22M(UTSP)	1	397582207T	
C4140	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C4141	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
C4142	C-CERA C	CK725F1E-104Z1	1	332161040R1	

C4143	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4144	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4145	UTSP C	CE04W25V-47M(UTSP)	1	397554707T
C4146	VR C	CE04W6.3V-470M(VR)	1	394624717T
C4147	VR C	CE04W6.3V-470M(VR)	1	394624717T
C4149	C-CERA C	CC725CH1H-470J1	1	342104704R1
C4150	VR C	CE04W6.3V-470M(VR)	1	394624717T
C4151	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4152	UTSP C	CE04W25V-47M(UTSP)	1	397554707T
C4153	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4154	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4155	C-CERA C	CC725CH1H-470J1	1	342104704R1
C4156	UTSP C	CE04W25V-47M(UTSP)	1	397554707T
C4157	VR C	CE04W6.3V-470M(VR)	1	394624717T
C4158	C-CERA C	CC725CH1H-470J1	1	342104704R1
C4161	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4162	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4163	VR C	CE04W6.3V-470M(VR)	1	394624717T
C4164	VR C	CE04W6.3V-470M(VR)	1	394624717T
C4167	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4168	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4169	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4174	C-CERA C	CK725B1H-102K1	1	332101025R1
C4175	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4176	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4179	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4193	C-CERA C	CC725CH1H-151J1	1	342101514R1
C4194	C-CERA C	CC725CH1H-151J1	1	342101514R1
C4195	C-CERA C	CC725CH1H-151J1	1	342101514R1
C4196	C-CERA C	CK725B1H-102K1	1	332101025R1
C4197	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4198	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4199	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4202	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4205	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4206	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C4209	C-CERA C	CK725B1H-102K1	1	332101025R1
C4211	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4212	C-CERA C	CC725CH1H-151J1	1	342101514R1
C4213	C-CERA C	CC725CH1H-151J1	1	342101514R1
C4214	C-CERA C	CC725CH1H-151J1	1	342101514R1
C4219	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4220	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4221	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4222	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4223	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4224	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4229	C-CERA C	CK725F1E-104Z1	1	332161040R1
C4500	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C4502	UTSP C	CE04W25V-220M(UTSP)	1	397552217T
C4600	C-CERA C	CC725CH1H-101J1	1	342101014R1
C4604	C-CERA C	CC725CH1H-101J1	1	342101014R1
C4605	C-CERA C	CK725F1E-104Z1	1	332161040R1

C4700	UTSP C	CE04W50V-1M(UTSP)	1	397580107T	
C4701	UTSP C	CE04W50V-1M(UTSP)	1	397580107T	
C4702	VR C	CE04W16V-100M(VR)	1	394641017T	
C4703	C-CERA C	CK725F1E-104Z1	1	332161040R1	
C4704	UTSP C	CE04W50V-1M(UTSP)	1	397580107T	
C4705	UTSP C	CE04W50V-1M(UTSP)	1	397580107T	
C4706	C-CERA C	CK725B1H-102K1	1	332101025R1	
R1	C-CARBON R	RN72K1J-334JE	1	435033344R1	<DC, DD>
R2	C-CARBON R	RN72K1J-334JE	1	435033344R1	<DC, DD>
R3	C-CARBON R	RN72K1J-273JE	1	435032734R1	<DC, DD>
R4	C-CARBON R	RN72K1J-220JE	1	435032204R1	<DC, DD>
R5	C-CARBON R	RN72K1J-220JE	1	435032204R1	<DC, DD>
R6	C-CARBON R	RN72K1J-104JE	1	435031044R1	<DC, DD>
R7	C-CARBON R	RN72K1J-104JE	1	435031044R1	<DC, DD>
R8	C-CARBON R	RN72K1J-104JE	1	435031044R1	<DC, DD>
R9	C-CARBON R	RN72K1J-104JE	1	435031044R1	<DC, DD>
R10	C-CARBON R	RN72K1J-104JE	1	435031044R1	<DC, DD>
R11	METAL O R	RS1/2WBJ-22	1	443522204T	<SR706>
R12	C-CARBON R	RN72K1J-104JE	1	435031044R1	<DC, DD>
R13	C-CARBON R	RN72K1J-222JE	1	435032224R1	<DC, DD>
R14	C-CARBON R	RN72K1J-222JE	1	435032224R1	<DC, DD>
R15	C-CARBON R	RN72K1J-102JE	1	435031024R1	<DC, DD>
R16	C-CARBON R	RN72K1J-102JE	1	435031024R1	<DC, DD>
R17	C-CARBON R	RN72K1J-104JE	1	435031044R1	<DC, DD>
R19	C-CARBON R	RN72K1J-222JE	1	435032224R1	<DC, DD>
R20	C-CARBON R	RN72K1J-332JE	1	435033324R1	<DC, DD>
R21	C-CARBON R	RN72K1J-101JE	1	435031014R1	<DC, DD>
R22	C-CARBON R	RN72K1J-101JE	1	435031014R1	<DC, DD>
R23	C-CARBON R	RN72K1J-331JE	1	435033314R1	<DC, DD>
R24	C-CARBON R	RN72K1J-332JE	1	435033324R1	<DC, DD>
R25	C-CARBON R	RN72K1J-331JE	1	435033314R1	<DC, DD>
R26	C-CARBON R	RN72K1J-222JE	1	435032224R1	<DC, DD>
R27	C-CARBON R	RN72K1J-331JE	1	435033314R1	<DC, DD>
R28	C-CARBON R	RN72K1J-104JE	1	435031044R1	<DC, DD>
R29	C-CARBON R	RN72K1J-101JE	1	435031014R1	<DC, DD>
R30	C-CARBON R	RN72K1J-222JE	1	435032224R1	<DC, DD>
R31	C-CARBON R	RN72K1J-222JE	1	435032224R1	<DC, DD>
R32	METAL O R	RS1/2WBJ-22	1	443522204T	<SR706>
R34	C-CARBON R	RN72K1J-104JE	1	435031044R1	<DC, DD>
R36	C-CARBON R	RN72K1J-103JE	1	435031034R1	<DC, DD>
R37	C-CARBON R	RN72K1J-105JE	1	435031054R1	<DC, DD>
R38	C-CARBON R	RN72K1J-103JE	1	435031034R1	<DC, DD>
R39	C-CARBON R	RN72K1J-220JE	1	435032204R1	<DC, DD>
R40	C-CARBON R	RN72K1J-681JE	1	435036814R1	<DC, DD>
R41	C-CARBON R	RN72K1J-220JE	1	435032204R1	<DC, DD>
R42	METAL O R	RS1/2WBJ-22	1	443522204T	<DC, DD>
R43	C-CARBON R	RN72K1J-000JE	1	435030004R1	<DC, DD>
R45	C-CARBON R	RN72K1J-392JE	1	435033924R1	<DT, MP, MA, MO, MQ, MT>
R46	C-CARBON R	RN72K1J-392JE	1	435033924R1	<DT, MP, MA, MO, MQ, MT>
R47	C-CARBON R	RN72K1J-222JE	1	435032224R1	<DT, MP, MA, MO, MQ, MT>
R48	C-CARBON R	RN72K1J-222JE	1	435032224R1	<DT, MP, MA, MO, MQ, MT>
R49	C-CARBON R	RN72K1J-103JE	1	435031034R1	<SR706>
R50	C-CARBON R	RN72K1J-103JE	1	435031034R1	<SR706>

R51	C-CARBON R	RN72K1J-103JE	1	435031034R1	<SR706>
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R62	C-CARBON R	RN72K1J-103JE	1	435031034R1	<DC, DD>
R63	C-CARBON R	RN72K1J-103JE	1	435031034R1	<DC, DD>
R64	C-CARBON R	RN72K1J-103JE	1	435031034R1	<DC, DD>
R1001	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1002	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R1003	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R1004	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R1005	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R1006	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1007	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R1008	C-CARBON R	RN72K1J-101JE	1	435031014R1	
R1009	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1010	C-CARBON R	RN72K1J-103JE	1	435031034R1	<DC, DD, SA706>
R1011	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R1012	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1013	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1014	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1015	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1016	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1017	C-CARBON R	RN72K1J-470JE	1	435034704R1	
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R1020	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1021	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R1022	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1023	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1024	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R1025	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R1026	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R1027	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1028	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1029	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1030	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R1031	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R1032	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R1033	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1034	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1035	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1036	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R1037	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1038	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1039	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1040	C-CARBON R	RN72K1J-103JE	1	435031034R1	

R1041	C-CARBON R	RN72K1J-103JE	1	435031034R1
R1042	C-CARBON R	RN72K1J-103JE	1	435031034R1
R1043	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1044	C-CARBON R	RN72K1J-470JE	1	435034704R1
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R1047	C-CARBON R	RN72K1J-103JE	1	435031034R1
R1048	C-CARBON R	RN72K1J-103JE	1	435031034R1
R1049	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1050	C-CARBON R	RN72K1J-221JE	1	435032214R1
R1051	C-CARBON R	RN72K1J-103JE	1	435031034R1
R1052	C-CARBON R	RN72K1J-103JE	1	435031034R1
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R1064	C-CARBON R	RN72K1J-221JE	1	435032214R1
R1065	C-CARBON R	RN72K1J-221JE	1	435032214R1
R1066	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1067	C-CARBON R	RN72K1J-224JE	1	435032244R1
R1068	C-CARBON R	RN72K1J-273JE	1	435032734R1
R1069	C-CARBON R	RN72K1J-101JE	1	435031014R1
R1070	C-CARBON R	RN72K1J-103JE	1	435031034R1
R1071	C-CARBON R	RN72K1J-473JE	1	435034734R1
R1072	C-CARBON R	RN72K1J-473JE	1	435034734R1
R1073	C-CARBON R	RN72K1J-103JE	1	435031034R1
R1074	C-CARBON R	RN72K1J-473JE	1	435034734R1
R1075	C-CARBON R	RN72K1J-102JE	1	435031024R1
R1079	C-CARBON R	RN72K1J-103JE	1	435031034R1
R1080	C-CARBON R	RN72K1J-272JE	1	435032724R1
R1081	C-CARBON R	RN72K1J-272JE	1	435032724R1
R1082	C-CARBON R	RN72K1J-272JE	1	435032724R1
R1083	C-CARBON R	RN72K1J-221JE	1	435032214R1
R1084	C-CARBON R	RN72K1J-272JE	1	435032724R1
R1085	C-CARBON R	RN72K1J-221JE	1	435032214R1
R1086	C-CARBON R	RN72K1J-221JE	1	435032214R1
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R1090	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1091	C-CARBON R	RN72K1J-221JE	1	435032214R1
R1092	C-CARBON R	RN72K1J-221JE	1	435032214R1
R1093	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1094	C-CARBON R	RN72K1J-221JE	1	435032214R1
R1095	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1096	C-CARBON R	RN72K1J-000JE	1	435030004R1
R1097	C-CARBON R	RN72K1J-103JE	1	435031034R1

R1098	C-CARBON R	RN72K1J-000JE	1	435030004R1
R1100	C-CARBON R	RN72K1J-103JE	1	435031034R1
R1101	C-CARBON R	RN72K1J-221JE	1	435032214R1
R1102	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1103	C-CARBON R	RN72K1J-222JE	1	435032224R1
R1104	C-CARBON R	RN72K1J-221JE	1	435032214R1
R1105	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1106	C-CARBON R	RN72K1J-222JE	1	435032224R1
R1107	C-CARBON R	RN72K1J-470JE	1	435034704R1
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R1109	C-CARBON R	RN72K1J-470JE	1	435034704R1
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R1111	C-CARBON R	RN72K1J-470JE	1	435034704R1
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R1113	C-CARBON R	RN72K1J-470JE	1	435034704R1
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R1120	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1121	C-CARBON R	RN72K1J-221JE	1	435032214R1
R1122	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1123	C-CARBON R	RN72K1J-221JE	1	435032214R1
R1124	C-CARBON R	RN72K1J-221JE	1	435032214R1
R1125	C-CARBON R	RN72K1J-103JE	1	435031034R1
R1126	C-CARBON R	RN72K1J-103JE	1	435031034R1
R1128	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1129	C-CARBON R	RN72K1J-103JE	1	435031034R1
R1130	C-CARBON R	RN72K1J-473JE	1	435034734R1
R1131	C-CARBON R	RN72K1J-102JE	1	435031024R1
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R1134	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1135	C-CARBON R	RN72K1J-473JE	1	435034734R1
R1136	C-CARBON R	RN72K1J-102JE	1	435031024R1
R1137	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1138	C-CARBON R	RN72K1J-102JE	1	435031024R1
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R1142	C-CARBON R	RN72K1J-221JE	1	435032214R1
R1143	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1144	C-CARBON R	RN72K1J-221JE	1	435032214R1
R1145	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1146	METAL R	RNU1/2WCJ-8.2	1	453530824T
R1147	METAL R	RNU1/2WCJ-8.2	1	453530824T
R1148	C-CARBON R	RN72K1J-221JE	1	435032214R1
R1149	C-CARBON R	RN72K1J-102JE	1	435031024R1
R1151	C-CARBON R	RN72K1J-473JE	1	435034734R1
R1152	C-CARBON R	RN72K1J-000JE	1	435030004R1
R1153	C-CARBON R	RN72K1J-000JE	1	435030004R1

R1155	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R1156	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R1157	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1159	C-CARBON R	RN72K1J-103JE	1	435031034R1	<DT, MP, MA, MO, MQ, MT, SA706>
R1160	C-CARBON R	RN72K1J-000JE	1	435030004R1	<DC, DD, SA706>
R1161	C-CARBON R	RN72K1J-472JE	1	435034724R1	
R1162	C-CARBON R	RN72K1J-472JE	1	435034724R1	
R1164	C-CARBON R	RN72K1J-472JE	1	435034724R1	
R1165	C-CARBON R	RN72K1J-472JE	1	435034724R1	
R1166	C-CARBON R	RN72K1J-472JE	1	435034724R1	
R1167	C-CARBON R	RN72K1J-472JE	1	435034724R1	
R1168	C-CARBON R	RN72K1J-272JE	1	435032724R1	
R1170	C-CARBON R	RN72K1J-272JE	1	435032724R1	
R1171	C-CARBON R	RN72K1J-272JE	1	435032724R1	
R1172	C-CARBON R	RN72K1J-272JE	1	435032724R1	
R1173	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1174	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1175	C-CARBON R	RN72K1J-272JE	1	435032724R1	
R1176	C-CARBON R	RN72K1J-272JE	1	435032724R1	
R1177	C-CARBON R	RN72K1J-272JE	1	435032724R1	
R1178	C-CARBON R	RN72K1J-272JE	1	435032724R1	
R1180	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R1182	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1183	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1184	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R1185	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R1186	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R1187	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1188	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1189	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1190	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1191	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1192	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1193	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1194	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R1195	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R1196	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R1197	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R1198	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1199	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1200	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1201	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1202	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1203	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1204	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R1205	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1206	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1207	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1208	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1209	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1210	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1211	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1212	C-CARBON R	RN72K1J-103JE	1	435031034R1	

R1213	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1214	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1215	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R1216	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1217	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1218	C-CARBON R	RN72K1J-103JE	1	435031034R1	<DC, DD, SA706>
R1219	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1220	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1221	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1222	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1223	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R1224	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1225	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1226	C-CARBON R	RN72K1J-103JE	1	435031034R1	
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R1229	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1230	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R1231	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1234	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1235	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1240	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1241	C-CARBON R	RN72K1J-272JE	1	435032724R1	
R1242	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1252	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1290	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1291	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R1292	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1293	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R1294	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R1295	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R1296	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R1297	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R1298	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R1301	C-CARBON R	RN72K1J-104JE	1	435031044R1	
R1484	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R1486	C-CARBON R	RN72K1J-100JE	1	435031004R1	
R1487	C-CARBON R	RN72K1J-750JE	1	435037504R1	
R1488	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R1489	C-CARBON R	RN72K1J-101JE	1	435031014R1	
R1490	C-CARBON R	RN72K1J-750JE	1	435037504R1	
R1491	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R1492	C-CARBON R	RN72K1J-100JE	1	435031004R1	
R1493	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1494	C-CARBON R	RN72K1J-101JE	1	435031014R1	
R1495	C-CARBON R	RN72K1J-100JE	1	435031004R1	
R1496	C-CARBON R	RN72K1J-750JE	1	435037504R1	
R1497	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R1499	C-CARBON R	RN72K1J-392JE	1	435033924R1	
R1500	C-CARBON R	RN72K1J-392JE	1	435033924R1	
R1504	C-CARBON R	RN72K1J-221JE	1	435032214R1	
R1506	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R1507	C-CARBON R	RN72K1J-152JE	1	435031524R1	

R1508	C-CARBON R	RN72K1J-102JE	1	435031024R1
R1509	C-CARBON R	RN72K1J-331JE	1	435033314R1
R1510	C-CARBON R	RN72K1J-331JE	1	435033314R1
R1511	C-CARBON R	RN72K1J-102JE	1	435031024R1
R1512	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1513	C-CARBON R	RN72K1J-331JE	1	435033314R1
R1514	C-CARBON R	RN72K1J-102JE	1	435031024R1
R1515	C-CARBON R	RN72K1J-331JE	1	435033314R1
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R1519	C-CARBON R	RN72K1J-331JE	1	435033314R1
R1520	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1521	C-CARBON R	RN72K1J-823JE	1	435038234R1
R1522	C-CARBON R	RN72K1J-103JE	1	435031034R1
R1523	C-CARBON R	RN72K1J-103JE	1	435031034R1
R1524	C-CARBON R	RN72K1J-823JE	1	435038234R1
R1525	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1526	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1527	C-CARBON R	RN72K1J-221JE	1	435032214R1
R1528	C-CARBON R	RN72K1J-470JE	1	435034704R1
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R1531	C-CARBON R	RN72K1J-470JE	1	435034704R1
R1532	C-CARBON R	RN72K1J-103JE	1	435031034R1
R1534	C-CARBON R	RN72K1J-823JE	1	435038234R1
R1535	C-CARBON R	RN72K1J-105JE	1	435031054R1
R1537	C-CARBON R	RN72K1J-000JE	1	435030004R1
R1563	C-CARBON R	RN72K1J-471JE	1	435034714R1
R1564	C-CARBON R	RN72K1J-471JE	1	435034714R1
R1565	C-CARBON R	RN72K1J-471JE	1	435034714R1
R1566	C-CARBON R	RN72K1J-471JE	1	435034714R1
R1567	C-CARBON R	RN72K1J-221JE	1	435032214R1
R1568	C-CARBON R	RN72K1J-471JE	1	435034714R1
R1569	C-CARBON R	RN72K1J-471JE	1	435034714R1
R1570	C-CARBON R	RN72K1J-471JE	1	435034714R1
R1571	C-CARBON R	RN72K1J-471JE	1	435034714R1
R1572	C-CARBON R	RN72K1J-471JE	1	435034714R1
R1573	C-CARBON R	RN72K1J-471JE	1	435034714R1
R1574	C-CARBON R	RN72K1J-471JE	1	435034714R1
R1575	C-CARBON R	RN72K1J-331JE	1	435033314R1
R1576	C-CARBON R	RN72K1J-471JE	1	435034714R1
R1577	C-CARBON R	RN72K1J-331JE	1	435033314R1
R1578	C-CARBON R	RN72K1J-471JE	1	435034714R1
R1579	C-CARBON R	RN72K1J-331JE	1	435033314R1
R1580	C-CARBON R	RN72K1J-471JE	1	435034714R1
R1581	C-CARBON R	RN72K1J-331JE	1	435033314R1
R1582	C-CARBON R	RN72K1J-471JE	1	435034714R1
R1600	C-CARBON R	RN72K1J-182JE	1	435031824R1
R1601	C-CARBON R	RN72K1J-182JE	1	435031824R1
R1602	C-CARBON R	RN72K1J-182JE	1	435031824R1
R1603	C-CARBON R	RN72K1J-182JE	1	435031824R1
R1604	C-CARBON R	RN72K1J-182JE	1	435031824R1
R1605	C-CARBON R	RN72K1J-182JE	1	435031824R1

R1673	C-CARBON R	RN72K1J-181JE	1	435031814R1	
R1674	C-CARBON R	RN72K1J-181JE	1	435031814R1	
R1675	C-CARBON R	RN72K1J-181JE	1	435031814R1	
R1676	C-CARBON R	RN72K1J-181JE	1	435031814R1	
R1677	C-CARBON R	RN72K1J-181JE	1	435031814R1	
R1770	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R1771	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R1772	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R1773	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R1774	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R1775	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R1776	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R1777	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R1780	METAL O R	RS1/2WBJ-22	1	443522204T	
R1781	METAL O R	RS1/2WBJ-22	1	443522204T	
R1782	METAL O R	RS2WBJ-3.3	1	441720334F	
R1783	METAL O R	RS2WBJ-4.7	1	441720474F	
R1900	C-CARBON R	RN72K1J-560JE	1	435035604R1	
R1901	C-CARBON R	RN72K1J-560JE	1	435035604R1	
R1910	C-CARBON R	RN72K1J-560JE	1	435035604R1	
R1911	C-CARBON R	RN72K1J-560JE	1	435035604R1	
R1920	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1921	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1930	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1931	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1940	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1941	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1950	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1951	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1960	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1961	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R1964	C-CARBON R	RN72K1J-222JE	1	435032224R1	
R1965	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R4000	METAL R	RNU1/2WCJ-4.7	1	453530474T	
R4001	C-CARBON R	RN72K1J-682JE	1	435036824R1	
R4002	METAL R	RNU1WCJ-0.22	1	453632294T	
R4003	METAL R	RNU1/2WCJ-0.47	1	453534794T	
R4004	C-CARBON R	RN72K1J-562JE	1	435035624R1	
R4005	C-CARBON R	RN72K1J-152JE	1	435031524R1	
R4006	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R4007	C-CARBON R	RN72K1J-392JE	1	435033924R1	
R4017	C-CARBON R	RN72K1J-562JE	1	435035624R1	<DC, DD>
R4018	C-CARBON R	RN72K1J-563JE	1	435035634R1	<DC, DD>
R4019	C-CARBON R	RN72K1J-102JE	1	435031024R1	<DC, DD>
R4020	C-CARBON R	RN72K1J-392JE	1	435033924R1	<DC, DD>
R4021	METAL R	RNU1/2WCJ-0.22	1	453532294T	<DC, DD>
R4022	METAL O R	RS2WBJ-3.3	1	441720334F	
R4024	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R4105	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R4106	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R4107	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R4108	C-CARBON R	RN72K1J-330JE	1	435033304R1	
R4110	C-CARBON R	RN72K1J-750JE	1	435037504R1	

R4111	C-CARBON R	RN72K1J-272JE	1	435032724R1
R4112	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4113	C-CARBON R	RN72K1J-272JE	1	435032724R1
R4114	C-CARBON R	RN72K1J-000JE	1	435030004R1
R4115	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4116	C-CARBON R	RN72K1J-000JE	1	435030004R1
R4117	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4118	C-CARBON R	RN72K1J-000JE	1	435030004R1
R4119	C-CARBON R	RN72K2E-022JE	1	435220224R1
R4120	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4121	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4122	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4123	C-CARBON R	RN72K1J-104JE	1	435031044R1
R4124	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4125	C-CARBON R	RN72K1J-104JE	1	435031044R1
R4126	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4127	C-CARBON R	RN72K1J-104JE	1	435031044R1
R4130	C-CARBON R	RN72K2E-022JE	1	435220224R1
R4135	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4136	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4137	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4139	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4140	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4141	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4142	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4143	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4144	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4145	C-CARBON R	RN72K1J-104JE	1	435031044R1
R4146	C-CARBON R	RN72K1J-104JE	1	435031044R1
R4147	C-CARBON R	RN72K1J-104JE	1	435031044R1
R4149	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4150	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4151	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4155	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4156	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4157	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4159	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4161	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4162	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4163	C-CARBON R	RN72K1J-104JE	1	435031044R1
R4164	C-CARBON R	RN72K1J-104JE	1	435031044R1
R4165	C-CARBON R	RN72K1J-104JE	1	435031044R1
R4171	C-CARBON R	RN72K2E-022JE	1	435220224R1
R4175	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4176	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4177	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4181	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4182	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4183	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4184	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4185	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4186	C-CARBON R	RN72K1J-750JE	1	435037504R1
R4190	C-CARBON R	RN72K1J-000JE	1	435030004R1

R4191	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R4192	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R4505	C-CARBON R	RN72K1J-223JE	1	435032234R1	
R4506	C-CARBON R	RN72K1J-122JE	1	435031224R1	
R4507	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R4508	C-CARBON R	RN72K1J-182JE	1	435031824R1	
R4509	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R4510	C-CARBON R	RN72K1J-562JE	1	435035624R1	
R4511	METAL R	RNU1WCJ-1	1	453630104T	
R4607	C-CARBON R	RN72K1J-039JE	1	435030394R1	
R4608	C-CARBON R	RN72K1J-101JE	1	435031014R1	
R4609	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R4610	C-CARBON R	RN72K1J-224JE	1	435032244R1	
R4611	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R4613	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R4615	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R4616	C-CARBON R	RN72K1J-000JE	1	435030004R1	
R4700	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R4701	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R4702	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R4703	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R4704	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R4706	C-CARBON R	RN72K1J-331JE	1	435033314R1	
R4708	C-CARBON R	RN72K1J-331JE	1	435033314R1	
E1A	TRM	NTM-1P233(M1969)	1	25060302	<SR706>
E1B	TRM	NTM-1P232(M1700)	1	25060301	<SR706>
E2	TRM(SCREW)	NEJITANSI M3	1	25065425	<SR706>
F4000A	FUSE HOL	NSCT-1P2031	1	25052133T	!
F4000B	FUSE HOL	NSCT-1P2031	1	25052133T	!
F4001A	FUSE HOL	NSCT-1P2031	1	25052133T	!
F4001B	FUSE HOL	NSCT-1P2031	1	25052133T	!
JL8002A	WIRE HOL	NSCT-5P876	1	25051089	
JL901B	WIRE TRAP	NPLG-5P588	1	25055626	
P4	SOCKET	CAM-C16	1	25053104R2	<DC, DD>
P4A	RETAINER	(XM)	1	27142048	<DC, DD>
P8	SOCKET	YKF51-5397N	1	25053201	<DC, DD>
P1002A	SOCKET	NSCT-9P2427	1	25052530	
P1003A	SOCKET	IMSA-9142S-14A	1	25053229	
P1004A	PLUG	IMSA-9111B-24	1	25056625	
P1005A	SOCKET	IMSA-9142S-20A	1	25053232	
P1007A	SOCKET	NSCT-40P2133	1	25052236	
P102A	PLUG	NPLG-7P0962	1	25056012	<SR706>
P102B	SOCKET	NSCT-7P2187	1	25052290	<SR706>
P103A	PLUG	NPLG-11P0966	1	25056016	<DC, DD>
P103B	SOCKET	NSCT-11P2191	1	25052294	<DC, DD>
P104A	PLUG	NPLG-13P0968	1	25056018	<SR706>
P106B	SOCKET	NSCT-13P2143	1	25052246	<SR706>
P1307	TRM(SCREW)	NEJITANSI M3	1	25065425	
P1308	JACK	YKB21-5130	1	25045387	
P1309	PIN JACK	NPJ-3PDO656	1	25045884	
P1309 or	PIN JACK	NPJ-3PDO465	(1)	25045666	
P4000B	PLUG	NPLG-5P119	1	25055135	
P4100A	PLUG	IMSA-9142B-14A	1	25056597	

P4100B	SOCKET	IMSA-9142S-14A	1	25053229	
P4101A	PLUG	IMSA-9142B-16A	1	25056598	
P4101B	SOCKET	IMSA-9142S-16A	1	25053230	
P4102A	SOCKET	NSCT-17P2110	1	25052213	
P4102B	SOCKET	NSCT-17P2110	1	25052213	
P4104A	SOCKET	NSCT-11P2104	1	25052207	
P4110	PIN JACK	NPJ-9PDGLRGLRGLR563	1	25045781	
P4110 or	PIN JACK	NPJ-9PDGLR519	(1)	25045731	
P4112	PIN JACK	NPJ-10PDBY621	1	25045842	
P4112 or	PIN JACK	NPJ-10PDBY478	(1)	25045681	
P4113	PIN JACK	NPJ-10PDBY621	1	25045842	
P4113 or	PIN JACK	NPJ-10PDBY478	(1)	25045681	
P4114	PIN JACK	NPJ-10PDBY621	1	25045842	
P4114 or	PIN JACK	NPJ-10PDBY478	(1)	25045681	
P4501	PLUG	NPLG-2P83	1	25055099	
P4602	ST JACK	HSJ1002-01-6020	1	25045647	
P4700	SOCKET	7906-09FHA	1	25053103	
P4701	RETAINER	(JOINT)	1	27142069	
P5512A	PLUG	NPLG-11P0966	1	25056016	
P5513A	PLUG	NPLG-15P0970	1	25056020	
P5518A	PLUG	NPLG-3P0958	1	25056008	
P6621B	SOCKET	NSCT-13P2193	1	25052296	

TX-SR706/SA706

PC BOARD PARTS LIST

U20 HDMI PC BOARD(NAHDM-9562-1A)

CIRCUIT NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
Q205	IC	TC74VHC541FT(EKJ)	1	22274541E1R2TO	
Q3311	IC	TC74VHC157FT	1	22274157ER2TO	
Q3325	IC	TC74VHC157FT	1	22274157ER2TO	
Q3401	IC	D790E001BZDH300	1	---	NSP
Q3451	IC(DSP1 MEMORY)	S29AL016D70TFI010(0272)	1	222W0063R302726	
Q3451 or	IC(DSP1 MEMORY)	ES29LV160ET-70TG(0272)	(1)	222W0069R302726	
Q3461	IC	IS42S32200E-6TL	1	22242553R3	
Q3481	IC	TC7WU04FU(TE12L_F)	1	22240935R2	
Q3491	IC	TC74VHC541FT(EKJ)	1	22274541E1R2TO	
Q3501	IC	D790E001BZDH300	1	---	NSP
Q3551	IC(DSP2 MEMORY)	S29AL008D70TFI010(0273)	1	222W0062R302737	
Q3551 or	IC(DSP2 MEMORY)	ES29LV800ET-70TG(0273)	(1)	222W0068R302737	
Q3561	IC	IS42S32200E-6TL	1	22242553R3	
Q7202	IC	BD7820	1	22242300R2	
Q7302	IC	BD7820	1	22242300R2	
Q8000	IC	HY5DU561622ETP-4-C	1	22242450R3	
Q8000 or	IC	HY5DU561622FTP-4-C	(1)	22242577R3	
Q8001	IC	HY5DU561622ETP-4-C	1	22242450R3	
Q8001 or	IC	HY5DU561622FTP-4-C	(1)	22242577R3	
Q8005	IC(VIDEO MEMORY)	MX29LV320CTTC-70G(0264)	1	222W0052R30264A	
Q8023	IC	TA48033AF(TE16L_NQ)	1	22278033DR2TO	
Q8023 or	IC	TA48033BF(TE16L_NQ)	(1)	22278033DBR2TO	
Q8041	IC	TA48018AF(TE16L_NQ)	1	22278018DR2TO	

Q8090	TR	RN2402	1	2214530R2	
Q8090 or	TR	KRA102S	(1)	2216220R2	
Q8091	TR	2SA1162-GR	1	2214375R2	
Q8094	TR	RN2402	1	2214530R2	
Q8094 or	TR	KRA102S	(1)	2216220R2	
Q8095	TR	2SA1162-Y(TE85R_F)	1	2214374R2	
Q8097	IC	74HC112(TC74HC112AF)	1	222741125R2TO	
Q8161	IC	TA48018AF(TE16L_NQ)	1	22278018DR2TO	
Q8162	IC	SI9185ACTU	1	22242471R3	
Q8200	IC	FLI30336	1	---	NSP
Q8201	IC	24LC32A-I/SN	1	22242521R2	
Q8201 or	IC	BR24S32FJ-WE2	(1)	22242569R2	
Q8305	IC	S-812C50BUC-C5ET2G	1	22242407R2	
Q8306	IC	NC7SZ08P5X_F042	1	22242482R2	
Q8306 or	IC	TC7SZ08FU(TE85L_F)	(1)	22242071R2TO	
Q8309	TR ARRAY	UM6K1N	1	226066R2	
Q8401	IC	SI9134CTU	1	22242394R3	
Q8404	IC	XC6213B182MR	1	22242443R2	
Q8405	IC	SN74CB3Q3305PWR	1	22242258R2	
Q8501	IC	SI9135CTU	1	---	NSP
Q8501 or	IC	SI9135ACTU	(1)	---	NSP
Q8595	IC	TA48018AF(TE16L_NQ)	1	22278018DR2TO	
Q8604	TR	DTA144EE	1	2216380R2	
Q8604 or	TR	KRA304E	(1)	2216440R2	
Q8606	TR	DTC144EE	1	2216390R2	
Q8606 or	TR	KRC404E	(1)	2216450R2	
Q8607	TR	2SK3019	1	2216520R2	
Q8608	IC	SN74CB3T3306DCT	1	22242454R2	
Q8609	TR	DTC144EE	1	2216390R2	
Q8609 or	TR	KRC404E	(1)	2216450R2	
Q8610	IC	S-24CS02AFT-V-G	1	22242360R2	
Q8651	IC	TA48018AF(TE16L_NQ)	1	22278018DR2TO	
Q8652	IC	XC6213B332MR	1	22242277R2	
Q8653	IC	TA48033AF(TE16L_NQ)	1	22278033DR2TO	
Q8653 or	IC	TA48033BF(TE16L_NQ)	(1)	22278033DBR2TO	
Q8654	IC	TA48018AF(TE16L_NQ)	1	22278018DR2TO	
Q8813	IC	TC74VCX162827	1	22242395R2	
Q8814	IC	TC74VCX162827	1	22242395R2	
Q8817	IC	TC74VCX162827	1	22242395R2	
Q8818	IC	TC74VCX162827	1	22242395R2	
Q8902	IC	TA48033AF(TE16L_NQ)	1	22278033DR2TO	
Q8902 or	IC	TA48033BF(TE16L_NQ)	(1)	22278033DBR2TO	
Q8952	IC	SPI-8010A	1	22242437R2	
Q8953	IC	SPI-8010A	1	22242437R2	
Q8954	IC	SPI-8010A	1	22242437R2	
Q8957	TR	DTC144EE	1	2216390R2	
Q8957 or	TR	KRC404E	(1)	2216450R2	
Q8958	TR	DTC144EE	1	2216390R2	
Q8958 or	TR	KRC404E	(1)	2216450R2	
Q8963	TR	DTC144EE	1	2216390R2	
Q8963 or	TR	KRC404E	(1)	2216450R2	
Q8964	TR	DTC144EE	1	2216390R2	
Q8964 or	TR	KRC404E	(1)	2216450R2	

D4100	C-DIODE	1SS352	1	223234R2
D4100 or	C-DIODE	KDS4148U	(1)	223283R2
D4100 or	C-DIODE	MA2J111	(1)	223279R2
D7205	C-DIODE	1SS352	1	223234R2
D7205 or	C-DIODE	KDS4148U	(1)	223283R2
D7205 or	C-DIODE	MA2J111	(1)	223279R2
D8041	DIODE	RB070M-30	1	22380361R2
D8090	C-DIODE	1SS352	1	223234R2
D8090 or	C-DIODE	KDS4148U	(1)	223283R2
D8090 or	C-DIODE	MA2J111	(1)	223279R2
D8091	C-DIODE	1SS352	1	223234R2
D8091 or	C-DIODE	KDS4148U	(1)	223283R2
D8091 or	C-DIODE	MA2J111	(1)	223279R2
D8095	C-DIODE	1SS352	1	223234R2
D8095 or	C-DIODE	KDS4148U	(1)	223283R2
D8095 or	C-DIODE	MA2J111	(1)	223279R2
D8096	C-DIODE	1SS352	1	223234R2
D8096 or	C-DIODE	KDS4148U	(1)	223283R2
D8096 or	C-DIODE	MA2J111	(1)	223279R2
D8301	C-DIODE	1SS226(TE85L_F)	1	223266R2
D8302	C-DIODE	1SS352	1	223234R2
D8302 or	C-DIODE	KDS4148U	(1)	223283R2
D8302 or	C-DIODE	MA2J111	(1)	223279R2
D8601	ZENER D	UDZS3.6B	1	224550360R2
D8952	DIODE	RSX501L-20	1	22380359R2
D8953	DIODE	RSX501L-20	1	22380359R2
D8954	DIODE	RSX501L-20	1	22380359R2
D8958	C-DIODE	1SS352	1	223234R2
D8958 or	C-DIODE	KDS4148U	(1)	223283R2
D8958 or	C-DIODE	MA2J111	(1)	223279R2
X3481	CRYSTAL	HC-49USSMD25.00MHz	1	301044R2
X8200	CRYSTAL	HC-49USSMD19.6608M	1	3010458R2
X8501	CRYSTAL	HC-49-28.332MHz	1	3010417R2
L251	CHOKE COIL	BLM21PG221SN1	1	230949R2
L261	EMIFIL	BK1608LL241-T	1	230959R1
L3301	CHOKE COIL	LBC2518T470M	1	231364M470R2
L3311	EMIFIL	BK1608LM182-T	1	230958R1
L3312	EMIFIL	BK1608LM182-T	1	230958R1
L3401	EMIFIL	ACF451832-333-T	1	230978R2
L3402	CHOKE COIL	BLM21PG221SN1	1	230949R2
L3403	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L3451	CHOKE COIL	BLM21PG221SN1	1	230949R2
L3481	EMIFIL	BK1608LM182-T	1	230958R1
L3482	EMIFIL	BK1608LM182-T	1	230958R1
L3483	CHOKE COIL	LBC2518T470M	1	231364M470R2
L3491	CHOKE COIL	LBC2518T470M	1	231364M470R2
L3501	EMIFIL	ACF451832-333-T	1	230978R2
L3502	CHOKE COIL	BLM21PG221SN1	1	230949R2
L3503	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L3551	CHOKE COIL	BLM21PG221SN1	1	230949R2
L3552	EMIFIL	BK1608LM182-T	1	230958R1
L8021	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8022	CHOKE COIL	BLM21PG221SN1	1	230949R2

L8023	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8024	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8025	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8026	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8027	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8041	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8042	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8043	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8090	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L8094	CHOKE COIL	LBC2518T4R7M	1	231364M047R2
L8161	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8162	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8163	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8401	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8402	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8403	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8404	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8405	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8406	C-R NET	MNR12E0APJ000	1	43464900002R2
L8407	C-R NET	MNR12E0APJ000	1	43464900002R2
L8408	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8409	C-R NET	MNR12E0APJ000	1	43464900002R2
L8410	C-R NET	MNR12E0APJ000	1	43464900002R2
L8601	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8602	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8603	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8604	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8605	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8606	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8607	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8608	EMIFIL	BK1608LL241-T	1	230959R1
L8813	C-CARBON R	RN72K1J-000JE	1	435030004R1
L8814	C-CARBON R	RN72K1J-000JE	1	435030004R1
L8952	CHOKE COIL	RCP1317NP470M	1	231375M470
L8953	CHOKE COIL	RCP1317NP470M	1	231375M470
L8954	CHOKE COIL	RCP1317NP470M	1	231375M470
L8956	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8957	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8958	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8960	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8961	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8962	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8963	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8964	CHOKE COIL	BLM21PG221SN1	1	230949R2
L8965	CHOKE COIL	BLM21PG221SN1	1	230949R2
C251	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3302	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C3311	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3312	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3401	C-CERA C	CC725CH1H-101J1	1	342101014R1
C3402	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C3403	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3405	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2

C3411	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3412	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3413	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3414	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3415	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3416	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3417	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3418	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3419	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3420	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3421	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3425	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3426	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3427	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3428	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3429	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3430	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3431	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3432	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3433	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3434	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3435	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3451	C-CERA C	CC725CH1H-101J1	1	342101014R1
C3452	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3461	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3462	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3463	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3464	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3465	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3466	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3471	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3472	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3473	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3474	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3475	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3476	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3477	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C3481	C-CERA C	CC725CH1H-090D1	1	342100902R1
C3482	C-CERA C	CC725CH1H-090D1	1	342100902R1
C3483	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3484	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C3491	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3501	C-CERA C	CC725CH1H-101J1	1	342101014R1
C3502	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C3503	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3505	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C3511	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3512	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3513	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3514	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3515	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3516	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3517	C-CERA C	CK725F1E-104Z1	1	332161040R1

C3518	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3519	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3520	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3521	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3525	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3526	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3527	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3528	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3529	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3530	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3531	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3532	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3533	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3534	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3535	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3551	C-CERA C	CC725CH1H-101J1	1	342101014R1
C3552	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3561	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3563	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3564	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3565	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3566	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3571	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3572	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3573	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3574	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3575	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3576	C-CERA C	CK725F1E-104Z1	1	332161040R1
C3577	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C3584	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C4109	C-CERA C	CK725F1E-104Z1	1	332161040R1
C7204	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C7205	C-CERA C	CK725F1E-104Z1	1	332161040R1
C7206	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C7304	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C7305	C-CERA C	CK725F1E-104Z1	1	332161040R1
C7306	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C8000	CHIP TANTAL	TCSCS0J226MAAR	1	396522207R2
C8000 or	CHIP TANTAL	F93-6.3V-22M	(1)	395522207R2
C8001	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8002	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8003	CHIP TANTAL	TCSCS0J226MAAR	1	396522207R2
C8003 or	CHIP TANTAL	F93-6.3V-22M	(1)	395522207R2
C8004	CHIP TANTAL	TCSCS0J226MAAR	1	396522207R2
C8004 or	CHIP TANTAL	F93-6.3V-22M	(1)	395522207R2
C8005	C-CERA C	CK725B1H-103K1	1	332101035R1
C8006	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8007	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8008	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8009	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8010	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8011	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8012	C-CERA C	CK725F1A-105Z1	1	332181050R1

C8013	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8014	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8015	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8016	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8017	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8018	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8021	CHIP ELECT C	CEWX16V-100M	1	398141017R2
C8022	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8023	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C8024	CHIP ELECT C	CEWX16V-100M	1	398141017R2
C8025	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8026	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C8030	CHIP TANTAL	TCSCS0J226MAAR	1	396522207R2
C8030 or	CHIP TANTAL	F93-6.3V-22M	(1)	395522207R2
C8031	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8032	C-CERA C	CK725B1H-103K1	1	332101035R1
C8033	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8034	CHIP TANTAL	TCSCS0J226MAAR	1	396522207R2
C8034 or	CHIP TANTAL	F93-6.3V-22M	(1)	395522207R2
C8041	CHIP ELECT C	CEWX16V-100M	1	398141017R2
C8042	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8043	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C8044	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C8051	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8052	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8053	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8054	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8055	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8056	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8057	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8058	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8059	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8060	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8061	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8062	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8063	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8064	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8065	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8066	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8077	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8078	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8079	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8080	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8090	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8091	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8092	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8094	C-CERA C	CK725B1C-104K1	1	332161040R1
C8095	C-CERA C	CK725B1A-105Z1	1	332131055R1
C8096	CHIP ELECT C	CEWX50V-2.2M	1	398180227R2
C8097	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8098	C-CERA C	CK725B1H-103K1	1	332101035R1
C8099	CHIP ELECT C	CEWX50V-2.2M	1	398180227R2
C8101	C-CARBON R	RN72K1J-000JE	1	435030004R1

C8102	C-CARBON R	RN72K1J-000JE	1	435030004R1
C8107	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8111	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8121	C-CARBON R	RN72K1J-000JE	1	435030004R1
C8122	C-CARBON R	RN72K1J-000JE	1	435030004R1
C8141	C-CARBON R	RN72K1J-000JE	1	435030004R1
C8142	C-CARBON R	RN72K1J-000JE	1	435030004R1
C8161	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8162	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C8164	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8165	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8166	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8167	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8168	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8169	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8170	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8171	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8172	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8173	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8174	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8175	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8176	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8177	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8178	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8179	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8180	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8181	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8200	CHIP TANTAL	TCSCS0J226MAAR	1	396522207R2
C8200 or	CHIP TANTAL	F93-6.3V-22M	(1)	395522207R2
C8201	CHIP TANTAL	TCSCS0J226MAAR	1	396522207R2
C8201 or	CHIP TANTAL	F93-6.3V-22M	(1)	395522207R2
C8202	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8203	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8204	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8205	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8206	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8207	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8208	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8209	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8210	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8211	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8212	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8213	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8214	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8215	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8216	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8217	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8218	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8219	CHIP TANTAL	TCSCS0J226MAAR	1	396522207R2
C8219 or	CHIP TANTAL	F93-6.3V-22M	(1)	395522207R2
C8220	CHIP TANTAL	TCSCS0J226MAAR	1	396522207R2
C8220 or	CHIP TANTAL	F93-6.3V-22M	(1)	395522207R2
C8221	C-CERA C	CK725B1H-103K1	1	332101035R1

C8222	C-CERA C	CK725B1H-103K1	1	332101035R1
C8223	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8224	C-CERA C	CK725B1H-103K1	1	332101035R1
C8225	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8226	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8227	C-CERA C	CK725B1H-103K1	1	332101035R1
C8228	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8229	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8230	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8231	C-CERA C	CK725B1H-103K1	1	332101035R1
C8232	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8233	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8234	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8235	C-CERA C	CK725B1H-103K1	1	332101035R1
C8236	CHIP TANTAL	TCSCS0J226MAAR	1	396522207R2
C8236 or	CHIP TANTAL	F93-6.3V-22M	(1)	395522207R2
C8237	CHIP TANTAL	TCSCS0J226MAAR	1	396522207R2
C8237 or	CHIP TANTAL	F93-6.3V-22M	(1)	395522207R2
C8238	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8239	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8240	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8241	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8242	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8243	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8244	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8245	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8246	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8247	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8248	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8249	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8250	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8251	CHIP TANTAL	TCSCS0J226MAAR	1	396522207R2
C8251 or	CHIP TANTAL	F93-6.3V-22M	(1)	395522207R2
C8252	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8253	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8254	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8255	CHIP TANTAL	TCSCS0J226MAAR	1	396522207R2
C8255 or	CHIP TANTAL	F93-6.3V-22M	(1)	395522207R2
C8256	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8257	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8258	CHIP TANTAL	TCSCS0J226MAAR	1	396522207R2
C8258 or	CHIP TANTAL	F93-6.3V-22M	(1)	395522207R2
C8259	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8260	CHIP TANTAL	TCSCS0J226MAAR	1	396522207R2
C8260 or	CHIP TANTAL	F93-6.3V-22M	(1)	395522207R2
C8261	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8262	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8263	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8264	CHIP TANTAL	TCSCS0J226MAAR	1	396522207R2
C8264 or	CHIP TANTAL	F93-6.3V-22M	(1)	395522207R2
C8265	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8266	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8267	C-CERA C	CK725F1E-104Z1	1	332161040R1

C8268	CHIP TANTAL	TCSCS0J226MAAR	1	396522207R2
C8268 or	CHIP TANTAL	F93-6.3V-22M	(1)	395522207R2
C8269	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8270	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8271	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8272	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8273	CHIP TANTAL	TCSCS0J226MAAR	1	396522207R2
C8273 or	CHIP TANTAL	F93-6.3V-22M	(1)	395522207R2
C8274	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8275	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8276	C-CERA C	CK725B1H-103K1	1	332101035R1
C8282	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8284	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8288	C-CERA C	CC725CH1H-330J1	1	342103304R1
C8289	C-CERA C	CC725CH1H-330J1	1	342103304R1
C8290	C-CERA C	CK725B1H-102K1	1	332101025R1
C8291	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8301	C-CARBON R	RN72K1J-000JE	1	435030004R1
C8302	C-CARBON R	RN72K1J-000JE	1	435030004R1
C8326	C-CERA C	CK725F1E-104Z1	1	332161040R1
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-CARBON R	RN72K1J-000JE	1	435030004R1
C8399	C-CARBON R	RN72K1J-000JE	1	435030004R1
C8401	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8402	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8403	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8404	C-CERA C	CK725B1H-102K1	1	332101025R1
C8405	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8406	C-CERA C	CK725B1H-102K1	1	332101025R1
C8408	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8409	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8410	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8411	C-CERA C	CK725B1H-102K1	1	332101025R1
C8412	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8413	C-CERA C	CK725B1H-102K1	1	332101025R1
C8414	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8415	C-CERA C	CK725B1H-102K1	1	332101025R1
C8416	C-CERA C	CK725B1H-102K1	1	332101025R1
C8417	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8418	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8419	C-CERA C	CK725B1H-102K1	1	332101025R1
C8420	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8421	C-CERA C	CK725B1H-102K1	1	332101025R1
C8422	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8423	C-CERA C	CK725B1H-102K1	1	332101025R1
C8424	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8425	C-CERA C	CK725B1H-102K1	1	332101025R1
C8426	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8427	C-CERA C	CK725B1H-102K1	1	332101025R1
C8428	C-CERA C	CK725F1A-105Z1	1	332181050R1

C8429	C-CERA C	CK725B1H-102K1	1	332101025R1
C8430	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8431	C-CERA C	CK725B1H-102K1	1	332101025R1
C8432	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8433	C-CERA C	CK725B1H-102K1	1	332101025R1
C8434	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8435	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8436	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8437	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8441	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8442	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8443	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C8444	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8451	C-CERA C	CC725CH1H-010C1	1	342100101R1
C8452	C-CERA C	CC725CH1H-010C1	1	342100101R1
C8453	C-CERA C	CC725CH1H-010C1	1	342100101R1
C8454	C-CERA C	CC725CH1H-010C1	1	342100101R1
C8455	C-CERA C	CC725CH1H-010C1	1	342100101R1
C8456	C-CERA C	CC725CH1H-010C1	1	342100101R1
C8457	C-CERA C	CC725CH1H-010C1	1	342100101R1
C8458	C-CERA C	CC725CH1H-010C1	1	342100101R1
C8501	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8502	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8503	C-CERA C	CK725B1H-102K1	1	332101025R1
C8504	C-CERA C	CK725B1H-102K1	1	332101025R1
C8505	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8506	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8507	C-CERA C	CK725B1H-102K1	1	332101025R1
C8508	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8509	C-CERA C	CK725B1H-102K1	1	332101025R1
C8510	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8511	C-CERA C	CK725B1H-102K1	1	332101025R1
C8512	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8513	C-CERA C	CK725B1H-102K1	1	332101025R1
C8514	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8515	C-CERA C	CK725B1H-102K1	1	332101025R1
C8516	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8517	C-CERA C	CK725B1H-102K1	1	332101025R1
C8518	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8519	C-CERA C	CK725B1H-102K1	1	332101025R1
C8520	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8521	C-CERA C	CK725B1H-102K1	1	332101025R1
C8522	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8523	C-CERA C	CK725B1H-102K1	1	332101025R1
C8524	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8529	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8530	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8531	C-CERA C	CK725B1H-102K1	1	332101025R1
C8532	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8533	C-CERA C	CK725B1H-102K1	1	332101025R1
C8534	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8535	C-CERA C	CK725B1H-102K1	1	332101025R1
C8536	C-CERA C	CK725F1A-105Z1	1	332181050R1

C8537	C-CERA C	CK725B1H-102K1	1	332101025R1
C8538	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8539	C-CERA C	CK725B1H-102K1	1	332101025R1
C8540	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8541	C-CERA C	CK725B1H-102K1	1	332101025R1
C8542	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8543	C-CERA C	CK725B1H-102K1	1	332101025R1
C8544	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8545	C-CERA C	CK725B1H-102K1	1	332101025R1
C8546	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8547	C-CERA C	CK725B1H-102K1	1	332101025R1
C8548	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8549	C-CERA C	CK725B1H-102K1	1	332101025R1
C8550	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8551	C-CERA C	CK725B1H-102K1	1	332101025R1
C8552	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8553	C-CERA C	CK725B1H-102K1	1	332101025R1
C8554	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8555	C-CERA C	CK725B1H-102K1	1	332101025R1
C8556	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8557	C-CERA C	CK725B1H-102K1	1	332101025R1
C8558	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8559	C-CERA C	CK725B1H-102K1	1	332101025R1
C8560	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8561	C-CERA C	CK725B1H-102K1	1	332101025R1
C8562	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8563	C-CERA C	CK725B1H-102K1	1	332101025R1
C8564	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8565	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8566	C-CERA C	CK725B1H-102K1	1	332101025R1
C8567	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8568	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8569	C-CERA C	CK725B1H-102K1	1	332101025R1
C8570	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8571	CHIP ELECT C	CEWX4V-22M	1	3981G2207R2
C8572	C-CERA C	CK725B1H-102K1	1	332101025R1
C8573	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8574	C-CERA C	CC725CH1H-070D1	1	342100702R1
C8575	C-CERA C	CC725CH1H-070D1	1	342100702R1
C8601	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8602	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C8603	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8604	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8605	CHIP ELECT C	CEWX4V-220M	1	3981G2217R2
C8606	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8607	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C8608	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8609	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C8675	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C8676	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8690	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8691	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8692	C-CERA C	CK725F1A-105Z1	1	332181050R1

C8838	C-CERA C	CC725CH1H-470J1	1	342104704R1
C8839	C-CERA C	CC725CH1H-470J1	1	342104704R1
C8840	C-CERA C	CC725CH1H-470J1	1	342104704R1
C8855	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8856	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8857	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8858	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8859	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8860	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8861	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8862	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8863	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8864	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8865	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8866	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8867	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8868	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8869	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8870	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8919	CHIP ELECT C	CEWX4V-100M	1	3981G1017R2
C8920	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8956	CD C	UCD1A471MNL1GS	1	396634717R2
C8957	CD C	UCD1A471MNL1GS	1	396634717R2
C8958	CD C	UCD1A471MNL1GS	1	396634717R2
C8960	C-CERA C	CK725B1H-682K1	1	332106825R1
C8961	C-CERA C	CK725B1H-682K1	1	332106825R1
C8962	C-CERA C	CK725B1H-682K1	1	332106825R1
C8964	C-CERA C	CK725B1H-223K1	1	332102235R1
C8965	C-CERA C	CK725B1H-223K1	1	332102235R1
C8966	C-CERA C	CC725CH1H-102J1	1	342101024R1
C8968	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8969	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8970	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8972	C-CERA C	CK725B1H-473K1	1	332104735R1
C8973	C-CERA C	CK725B1H-473K1	1	332104735R1
C8974	C-CERA C	CK725B1H-473K1	1	332104735R1
C8976	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8977	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8978	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8980	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8981	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8982	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8984	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8985	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8986	C-CERA C	CK725F1E-104Z1	1	332161040R1
C8990	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8991	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8992	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8994	CD C	UCD1E221MNL1GS	1	396652217R2
C8995	CD C	UCD1E221MNL1GS	1	396652217R2
C8996	CD C	UCD1E221MNL1GS	1	396652217R2
C8998	C-CERA C	CK725F1A-105Z1	1	332181050R1
C8999	C-CERA C	CK725F1A-105Z1	1	332181050R1

R265	C-CARBON R	RN72K1J-331JE	1	435033314R1
R266	C-CARBON R	RN72K1J-331JE	1	435033314R1
R267	C-CARBON R	RN72K1J-331JE	1	435033314R1
R268	C-CARBON R	RN72K1J-331JE	1	435033314R1
R269	C-CARBON R	RN72K1J-331JE	1	435033314R1
R273	C-CARBON R	RN72K1J-331JE	1	435033314R1
R274	C-CARBON R	RN72K1J-470JE	1	435034704R1
R275	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3311	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3312	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3313	C-CARBON R	RN72K1J-331JE	1	435033314R1
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R3316	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3317	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3318	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3319	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3320	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3321	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3322	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3323	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3324	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3325	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3341	C-CARBON R	RN72K1J-000JE	1	435030004R1
R3401	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3402	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3403	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3404	C-CARBON R	RN72K1J-222JE	1	435032224R1
R3405	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3406	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3407	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3408	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3409	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3410	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3411	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3412	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3413	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3414	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3415	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3416	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3417	C-CARBON R	RN72K1J-331JE	1	435033314R1
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R3422	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3423	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3424	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3425	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3426	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3427	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3428	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3429	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3430	C-CARBON R	RN72K1J-103JE	1	435031034R1

R3431	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3451	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3452	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3453	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3454	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3455	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3456	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3457	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3482	C-CARBON R	RN72K1J-221JE	1	435032214R1
R3483	C-CARBON R	RN72K1J-105JE	1	435031054R1
R3491	C-CARBON R	RN72K1J-472JE	1	435034724R1
R3492	C-CARBON R	RN72K1J-472JE	1	435034724R1
R3493	C-CARBON R	RN72K1J-472JE	1	435034724R1
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R3495	C-CARBON R	RN72K1J-472JE	1	435034724R1
R3496	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3501	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3502	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3503	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3504	C-CARBON R	RN72K1J-222JE	1	435032224R1
R3505	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3506	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3507	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3508	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3509	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3510	C-CARBON R	RN72K1J-470JE	1	435034704R1
R3511	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3512	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3513	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3514	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3515	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3516	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3517	C-CARBON R	RN72K1J-331JE	1	435033314R1
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R3519	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3520	C-CARBON R	RN72K1J-331JE	1	435033314R1
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R3522	C-CARBON R	RN72K1J-331JE	1	435033314R1
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R3529	C-CARBON R	RN72K1J-331JE	1	435033314R1
R3530	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3531	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3551	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3552	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3554	C-CARBON R	RN72K1J-102JE	1	435031024R1
R3555	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3556	C-CARBON R	RN72K1J-103JE	1	435031034R1
R3557	C-CARBON R	RN72K1J-103JE	1	435031034R1

R7206	C-CARBON R	RN72K1J-223JE	1	435032234R1
R7207	C-CARBON R	RN72K1J-153JE	1	435031534R1
R7306	C-CARBON R	RN72K1J-223JE	1	435032234R1
R7307	C-CARBON R	RN72K1J-153JE	1	435031534R1
R8000	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8001	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8002	C-CARBON R	RN72K1J-271JE	1	435032714R1
R8003	C-CARBON R	RN72K1J-271JE	1	435032714R1
R8005	C-CARBON R	RN72K1J-104JE	1	435031044R1
R8010	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8011	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8012	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8013	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8014	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8015	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8016	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8017	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8018	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8019	C-CARBON R	RN72K1J-103JE	1	435031034R1
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R8022	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8026	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8028	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8029	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8033	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8034	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8035	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8036	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8038	C-CARBON R	RN72K1J-330JE	1	435033304R1
R8045	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8046	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8047	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8048	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8049	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8050	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8051	C-CARBON R	RN72K1J-680JE	1	435036804R1
R8052	C-CARBON R	RN72K1J-471JE	1	435034714R1
R8053	C-CARBON R	RN72K1J-680JE	1	435036804R1
R8054	C-CARBON R	RN72K1J-471JE	1	435034714R1
R8055	C-CARBON R	RN72K1J-680JE	1	435036804R1
R8056	C-CARBON R	RN72K1J-471JE	1	435034714R1
R8057	C-CARBON R	RN72K1J-680JE	1	435036804R1
R8058	C-CARBON R	RN72K1J-471JE	1	435034714R1
R8059	C-CARBON R	RN72K1J-680JE	1	435036804R1
R8060	C-CARBON R	RN72K1J-680JE	1	435036804R1
R8061	C-CARBON R	RN72K1J-680JE	1	435036804R1
R8062	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8063	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8064	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8065	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8066	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8067	C-CARBON R	RN72K1J-103JE	1	435031034R1

R8068	C-CARBON R	RN72K1J-750JE	1	435037504R1
R8069	C-CARBON R	RN72K1J-750JE	1	435037504R1
R8070	C-CARBON R	RN72K1J-750JE	1	435037504R1
R8074	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8075	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8076	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8079	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8080	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8081	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8082	C-CARBON R	RN72K1J-680JE	1	435036804R1
R8083	C-CARBON R	RN72K1J-471JE	1	435034714R1
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R8086	C-CARBON R	RN72K1J-471JE	1	435034714R1
R8087	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8088	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8089	C-CARBON R	RN72K1J-271JE	1	435032714R1
R8090	C-CARBON R	RN72K1J-270JE	1	435032704R1
R8091	C-CARBON R	RN72K1J-222JE	1	435032224R1
R8092	C-CARBON R	RN72K1J-563JE	1	435035634R1
R8093	C-CARBON R	RN72K1J-470JE	1	435034704R1
R8094	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8095	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8096	C-CARBON R	RN72K1J-222JE	1	435032224R1
R8097	C-CARBON R	RN72K1J-563JE	1	435035634R1
R8098	C-CARBON R	RN72K1J-223JE	1	435032234R1
R8099	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8100	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8109	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8110	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8113	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8123	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8129	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8130	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8143	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8149	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8150	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8160	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8161	C-CARBON R	RN72K1J-471JE	1	435034714R1
R8162	C-CARBON R	RN72K1J-101JE	1	435031014R1
R8163	C-CARBON R	RN72K1J-222JE	1	435032224R1
R8164	C-CARBON R	RN72K1J-222JE	1	435032224R1
R8165	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8201	C-CARBON R	RN72K1J-330JE	1	435033304R1
R8202	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8203	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8205	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8206	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8207	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8208	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8209	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8210	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8212	C-CARBON R	RN72K1J-103JE	1	435031034R1

R8213	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8214	C-CARBON R	RN72K1J-272JE	1	435032724R1
R8215	C-CARBON R	RN72K1J-272JE	1	435032724R1
R8219	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8223	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8224	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8230	C-R NET	RM7LJ330X04	1	43484733004R2
R8231	C-R NET	RM7LJ330X04	1	43484733004R2
R8232	C-R NET	RM7LJ330X04	1	43484733004R2
R8233	C-R NET	RM7LJ330X04	1	43484733004R2
R8234	C-R NET	RM7LJ330X04	1	43484733004R2
R8235	C-R NET	RM7LJ330X04	1	43484733004R2
R8236	C-R NET	RM7LJ330X04	1	43484733004R2
R8238	C-R NET	RM7LJ330X04	1	43484733004R2
R8239	C-R NET	RM7LJ330X04	1	43484733004R2
R8240	C-R NET	RM7LJ330X04	1	43484733004R2
R8241	C-R NET	RM7LJ330X04	1	43484733004R2
R8243	C-R NET	RM7LJ330X04	1	43484733004R2
R8245	C-R NET	RM7LJ330X04	1	43484733004R2
R8248	C-R NET	RM7LJ330X04	1	43484733004R2
R8249	C-R NET	RM7LJ330X04	1	43484733004R2
R8251	C-R NET	RM7LJ220X04	1	43484722004R2
R8252	C-R NET	RM7LJ220X04	1	43484722004R2
R8253	C-R NET	RM7LJ220X04	1	43484722004R2
R8254	C-R NET	RM7LJ220X04	1	43484722004R2
R8255	C-R NET	RM7LJ220X04	1	43484722004R2
R8256	C-R NET	RM7LJ220X04	1	43484722004R2
R8257	C-R NET	RM7LJ220X04	1	43484722004R2
R8258	C-R NET	RM7LJ220X04	1	43484722004R2
R8259	C-R NET	RM7LJ220X04	1	43484722004R2
R8264	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8271	C-R NET	RM7LJ220X04	1	43484722004R2
R8272	C-R NET	RM7LJ220X04	1	43484722004R2
R8273	C-R NET	RM7LJ220X04	1	43484722004R2
R8274	C-R NET	RM7LJ220X04	1	43484722004R2
R8275	C-R NET	RM7LJ220X04	1	43484722004R2
R8276	C-R NET	RM7LJ220X04	1	43484722004R2
R8277	C-R NET	RM7LJ220X04	1	43484722004R2
R8278	C-R NET	RM7LJ220X04	1	43484722004R2
R8279	C-R NET	RM7LJ220X04	1	43484722004R2
R8280	C-CARBON R	RN72K1J-120JE	1	435031204R1
R8282	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8283	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8284	C-CARBON R	RN72K1J-330JE	1	43503304R1
R8285	C-CARBON R	RN72K1J-000JE	1	435030004R1
R8309	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8310	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8333	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8334	C-CARBON R	RN72K1J-222JE	1	435032224R1
R8335	C-CARBON R	RN72K1J-222JE	1	435032224R1
R8336	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8337	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8338	C-CARBON R	RN72K1J-473JE	1	435034734R1

R8339	C-CARBON R	RN72K2E-101JE	1	435221014R1
R8368	C-CARBON R	RN72K1J-473JE	1	435034734R1
R8401	C-R NET	RM7LJ220X04	1	43484722004R2
R8402	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8403	C-R NET	RM7LJ220X04	1	43484722004R2
R8404	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8405	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8408	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8409	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8410	C-CARBON R	RN72K1J-681JE	1	435036814R1
R8411	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8414	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8415	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8416	C-R NET	RM7LJ220X04	1	43484722004R2
R8417	C-R NET	RM7LJ220X04	1	43484722004R2
R8418	C-R NET	RM7LJ220X04	1	43484722004R2
R8419	C-R NET	RM7LJ220X04	1	43484722004R2
R8420	C-R NET	RM7LJ220X04	1	43484722004R2
R8421	C-R NET	RM7LJ220X04	1	43484722004R2
R8422	C-R NET	RM7LJ220X04	1	43484722004R2
R8423	C-R NET	RM7LJ220X04	1	43484722004R2
R8424	C-R NET	RM7LJ220X04	1	43484722004R2
R8425	C-CARBON R	RN72K1J-220JE	1	435032204R1
R8426	C-CARBON R	RN72K1J-103JE	1	435031034R1
R8427	C-CARBON R	RN72K1J-103JE	1	435031034R1
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
R8503	C-R NET	RM7LJ330X04	1	43484733004R2
R8504	C-R NET	RM7LJ330X04	1	43484733004R2
R8505	C-R NET	RM7LJ330X04	1	43484733004R2
R8506	C-CARBON R	RN72K1J-120JE	1	435031204R1
R8507	C-R NET	RM7LJ330X04	1	43484733004R2
R8508	C-R NET	RM7LJ330X04	1	43484733004R2
R8509	C-R NET	RM7LJ330X04	1	43484733004R2
R8510	C-R NET	RM7LJ330X04	1	43484733004R2
R8511	C-R NET	RM7LJ330X04	1	43484733004R2
R8512	C-R NET	RM7LJ330X04	1	43484733004R2
R8513	C-R NET	RM7LJ330X04	1	43484733004R2
R8514	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8516	C-CARBON R	RN72K1J-101JE	1	435031014R1
R8517	C-CARBON R	RN72K1J-101JE	1	435031014R1
R8518	C-CARBON R	RN72K1J-472JE	1	435034724R1
R8519	C-CARBON R	RN72K1J-470JE	1	435034704R1
R8520	C-CARBON R	RN72K1J-330JE	1	435033304R1
R8521	C-CARBON R	RN72K1J-330JE	1	435033304R1
R8522	C-R NET	RM7LJ330X04	1	43484733004R2
R8523	C-CARBON R	RN72K1J-330JE	1	435033304R1
R8524	C-CARBON R	RN72K1J-330JE	1	435033304R1
R8629	C-CARBON R	RN72K1J-562JE	1	435035624R1
R8630	C-CARBON R	RN72K1J-562JE	1	435035624R1
R8633	C-CARBON R	RN72K1J-102JE	1	435031024R1

R8634	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R8637	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R8638	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R8639	C-CARBON R	RN72K1J-473JE	1	435034734R1	
R8642	C-CARBON R	RN72K1J-562JE	1	435035624R1	
R8643	C-CARBON R	RN72K1J-562JE	1	435035624R1	
R8662	C-CARBON R	RN72K1J-105JE	1	435031054R1	
R8937	C-CARBON R	RN72K1J-103JE	1	435031034R1	
R8952	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R8953	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R8954	C-CARBON R	RN72K1J-470JE	1	435034704R1	
R8956	C-CARBON R	RN72K1J-821JE	1	435038214R1	
R8957	C-CARBON R	RN72K1J-152JE	1	435031524R1	
R8960	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R8961	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R8962	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R8964	C-CARBON R	RN72K1J-821JE	1	435038214R1	
R8965	C-CARBON R	RN72K1J-152JE	1	435031524R1	
R8966	C-CARBON R	RN72K1J-152JE	1	435031524R1	
R8968	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R8969	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R8970	C-CARBON R	RN72K1J-102JE	1	435031024R1	
R8975	C-CARBON R	RN72K1J-473JE	1	435034734R1	
JL8002B	WIRE TRAP	NPLG-5P588	1	25055626	
P1003B	PLUG	IMSA-9142B-14A	1	25056597	
P1004B	SOCKET	IMSA-9111S-24L	1	25053259	
P1005B	PLUG	IMSA-9142B-20A	1	25056600	
P4104A	SOCKET	NSCT-11P2104	1	25052207	
P4104A or	SOCKET	NSCT-11P1605	(1)	25051818	
P8005A	TRM(SCREW)	NEJITANSI M3	1	25065425	
P8006	HOLDER	HOLDER(CLAMP)	1	27190540-1	
P8101	SOCKET	YKF45-7037V	1	25053253R3	
P8121	SOCKET	YKF45-7037V	1	25053253R3	
P8141	SOCKET	YKF45-7037V	1	25053253R3	
P8301	SOCKET	YKF45-7037V	1	25053253R3	
P8302	SOCKET	YKF45-7037V	1	25053253R3	
P8704	SOCKET	04FMN-SMT-A-TF	1	25052821R2	

TX-SR706/SA706

PC BOARD PARTS LIST

U21	DISPLAY PC BOARD(NADIS-9515-1A)
U22	SWITCH PC BOARD(NASW-9516-1A)
U23	HEADPHONE PC BOARD(NAETC-9517-1A)
U24	OPT TERMINAL PC BOARD(NAETC-9518-1A)
U25	DISPLAY PC BOARD(NAETC-9519-1A)
U26	POWER SUPPLY PC BOARD(NAPS-9520-1A)
U27	HOLDER PC BOARD(NAETC-9521-1A)
U28	HOLDER PC BOARD(NAETC-9522-1A)

CIRCUIT NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
U7520	PHT CP	GP1FAV51RK0F	1	24120129	

U7560	REMO SENS	NJL34H380A	1	241365
Q7500	FL TUBE	HNA-16SL04T	1	212266
Q7501	IC	M66005-0001AHP	1	22242208R3
Q7502	IC	M66005-0001AHP	1	22242208R3
Q7503	TR	KTC3198-GR	1	2215985T
Q7503 or	TR	2SC1815-GR	(1)	2211255T
Q7504	TR	KTC3198-GR	1	2215985T
Q7504 or	TR	2SC1815-GR	(1)	2211255T
Q7520	IC	NJM4580D-D	1	22241112
Q7530	IC	NJM4580D-D	1	22241112
Q7532	TR	RN1241-A(TPE4_F)	1	2213631T
Q7532 or	TR	RN1241-B	(1)	2213632T
Q7533	TR	KRA103M	1	2215780T
Q7533 or	TR	DTA124ES	(1)	2212600T
Q7533 or	TR	RN2203	(1)	2213580T
Q7591	TR	KRC105M	1	2215830T
Q7591 or	TR	DTC123JS	(1)	2213640T
Q7591 or	TR	RN1205	(1)	2214660T
Q7593	TR	KRC105M	1	2215830T
Q7593 or	TR	DTC123JS	(1)	2213640T
Q7593 or	TR	RN1205	(1)	2214660T
Q7597	TR	KRC105M	1	2215830T
Q7597 or	TR	DTC123JS	(1)	2213640T
Q7597 or	TR	RN1205	(1)	2214660T
Q7598	TR	KRC105M	1	2215830T
Q7598 or	TR	DTC123JS	(1)	2213640T
Q7598 or	TR	RN1205	(1)	2214660T
Q7801	TR	2SC2235-O(TPE6_F)	1	2211653T
Q7801 or	TR	2SC2235-Y(TPE6_F)	(1)	2211654T
D7500	ZENER D	MTZJ10B	1	224471002T
D7520	DIODE	1SS133	1	223163T
D7521	DIODE	1SS133	1	223163T
D7522	DIODE	1SS133	1	223163T
D7523	DIODE	1SS133	1	223163T
D7530	ZENER D	MTZJ5.1B	1	224470512T
D7531	DIODE	1SS133	1	223163T
D7532	DIODE	1SS133	1	223163T
D7560	DIODE	1SS133	1	223163T
D7561	DIODE	1SS133	1	223163T
D7570	SPCF D	SIR-34ST3F	1	225456
D7590	LED	SDPB3DD0C0000-ABCDEF	1	225473
D7591	LED	SDPB3DD0C0000-ABCDEF	1	225473
D7593	LED	SLR-342MGTE7P	1	225455T
D7595	LED	SLI-343URC-TE7	1	225449T
D7806	ZENER D	MTZJ22B	1	224472202T
D7810	ZENER D	MTZJ24B	1	224472402T
D7812	DIODE	RLIN4003	1	22380260T
D7813	DIODE	RLIN4003	1	22380260T
D7814	DIODE	RLIN4003	1	22380260T
D7815	DIODE	RLIN4003	1	22380260T
D7816	DIODE	RLIN4003	1	22380260T
L7500	CHOKE COIL	NCH-1561 022K	1	233526K022T
L7520	CHOKE COIL	NCH-1561 022K	1	233526K022T

L7530	CHOKE COIL	NCH-1561 022K	1	233526K022T
L7580	CHOKE COIL	NCH-1561 022K	1	233526K022T
L7581	CHOKE COIL	NCH-1561 022K	1	233526K022T
L7582	CHOKE COIL	NCH-1561 022K	1	233526K022T
C7501	CERA C	CK45F50V-223Z	1	335622230T
C7502	CERA C	CK45F50V-223Z	1	335622230T
C7503	CERA C	CK45F50V-223Z	1	335622230T
C7504	CERA C	CK45F50V-223Z	1	335622230T
C7505	CERA C	CK45F50V-223Z	1	335622230T
C7506	VR C	CE04W50V-47M(VR)	1	394684707T
C7507	MMT C	MMT50V-104J	1	375521044T
C7508	MMT C	MMT50V-473J	1	375524734T
C7511	MMT C	MMT50V-104J	1	375521044T
C7512	CERA C	CC45SL50V-150J	1	345021504T
C7513	MMT C	MMT50V-104J	1	375521044T
C7514	MMT C	MMT50V-104J	1	375521044T
C7518	MMT C	MMT50V-104J	1	375521044T
C7519	MMT C	MMT50V-104J	1	375521044T
C7520	TF C	ECQ-B50V-223J	1	374722234T
C7521	VR C	CE04W16V-100M(VR)	1	394641017T
C7522	TF C	ECQ-B50V-221K	1	374722215T
C7523	TF C	ECQ-B50V-221K	1	374722215T
C7524	TF C	ECQ-B50V-102J	1	374721024T
C7530	TF C	ECQ-B50V-102J	1	374721024T
C7533	VR C	CE04W35V-47M(VR)	1	394664707T
C7534	VR C	CE04W35V-47M(VR)	1	394664707T
C7535	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C7536	TF C	ECQ-B50V-101K	1	374721015T
C7537	CERA C	CC45SL50V-330J	1	345023304T
C7538	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C7539	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C7540	UTSP C	CE04W50V-10M(UTSP)	1	397581007T
C7543	TF C	ECQ-B50V-102J	1	374721024T
C7560	ELECT C	CE04W6.3V-220M	1	355722219T
C7561	CERA C	CK45B50V-102K	1	335321025T
C7562	TF C	ECQ-B50V-102J	1	374721024T
C7580	CERA C	CK45B50V-102K	1	335321025T
C7581	CERA C	CK45B50V-102K	1	335321025T
C7582	CERA C	CK45B50V-102K	1	335321025T
C7583	CERA C	CK45B50V-102K	1	335321025T
C7590	CERA C	CK45F50V-103Z	1	335621030T
C7591	CERA C	CK45F50V-103Z	1	335621030T
C7804	VR C	CE04W63V-470M(VR)	1	394674717S
C7805	VR C	CE04W63V-47M(VR)	1	394674707T
C7806	CERA C	CK45F50V-223Z	1	335622230T
C7900	MMT C	MMT50V-104J	1	375521044T
R7500	CARBON R	R16J-220	1	417342214T
R7501	CARBON R	R16J-220	1	417342214T
R7502	CARBON R	R16J-27K	1	417342734T
R7503	CARBON R	R16J-2.2K	1	417342224T
R7504	CARBON R	R16J-2.2K	1	417342224T
R7505	CARBON R	R16J-2.2K	1	417342224T
R7506	CARBON R	R16J-2.2K	1	417342224T

R7507	CARBON R	R16J-2.2K	1	417342224T
R7508	CARBON R	R16J-2.2K	1	417342224T
R7509	CARBON R	R16J-2.2K	1	417342224T
R7510	CARBON R	R16J-2.2K	1	417342224T
R7520	CARBON R	R16J-47	1	417344704T
R7521	CARBON R	R16J-330	1	417343314T
R7522	CARBON R	R16J-330	1	417343314T
R7523	CARBON R	R16J-75	1	417347504T
R7524	CARBON R	R16J-75	1	417347504T
R7525	CARBON R	R16J-75	1	417347504T
R7526	CARBON R	R16J-22K	1	417342234T
R7527	CARBON R	R16J-22K	1	417342234T
R7528	CARBON R	R16J-220K	1	417342244T
R7529	CARBON R	R16J-220K	1	417342244T
R7530	CARBON R	R16J-4.7K	1	417344724T
R7531	CARBON R	R16J-100	1	417341014T
R7532	CARBON R	R16J-330	1	417343314T
R7533	CARBON R	R16J-1.8K	1	417341824T
R7534	CARBON R	R16J-100K	1	417341044T
R7535	CARBON R	R16J-1K	1	417341024T
R7536	CARBON R	R16J-33K	1	417343334T
R7537	CARBON R	R16J-33K	1	417343334T
R7538	CARBON R	R16J-220	1	417342214T
R7539	CARBON R	R16J-220	1	417342214T
R7540	CARBON R	R16J-47K	1	417344734T
R7560	CARBON R	R16J-1K	1	417341024T
R7561	CARBON R	R16J-100	1	417341014T
R7580	METAL O R	RS1WBJ-33	1	443623304T
R7581	METAL O R	RS1WBJ-33	1	443623304T
R7590	CARBON R	R16J-10K	1	417341034T
R7591	CARBON R	R16J-10K	1	417341034T
R7592	CARBON R	R16J-10K	1	417341034T
R7593	CARBON R	R16J-10K	1	417341034T
R7594	CARBON R	R16J-120	1	417341214T
R7595	CARBON R	R16J-120	1	417341214T
R7597	CARBON R	R16J-180	1	417341814T
R7599	CARBON R	R16J-680	1	417346814T
R7611	CARBON R	R16J-270	1	417342714T
R7612	CARBON R	R16J-330	1	417343314T
R7613	CARBON R	R16J-470	1	417344714T
R7614	CARBON R	R16J-560	1	417345614T
R7615	CARBON R	R16J-820	1	417348214T
R7616	CARBON R	R16J-1.2K	1	417341224T
R7617	CARBON R	R16J-2.2K	1	417342224T
R7618	CARBON R	R16J-3.9K	1	417343924T
R7621	CARBON R	R16J-270	1	417342714T
R7622	CARBON R	R16J-330	1	417343314T
R7623	CARBON R	R16J-470	1	417344714T
R7624	CARBON R	R16J-560	1	417345614T
R7625	CARBON R	R16J-820	1	417348214T
R7626	CARBON R	R16J-1.2K	1	417341224T
R7627	CARBON R	R16J-2.2K	1	417342224T
R7628	CARBON R	R16J-3.9K	1	417343924T

R7629	CARBON R	R16J-12K	1	417341234T
R7631	CARBON R	R16J-270	1	417342714T
R7632	CARBON R	R16J-330	1	417343314T
R7633	CARBON R	R16J-470	1	417344714T
R7634	CARBON R	R16J-560	1	417345614T
R7635	CARBON R	R16J-820	1	417348214T
R7636	CARBON R	R16J-1.2K	1	417341224T
R7637	CARBON R	R16J-2.2K	1	417342224T
R7638	CARBON R	R16J-3.9K	1	417343924T
R7639	CARBON R	R16J-12K	1	417341234T
R7641	CARBON R	R16J-270	1	417342714T
R7642	CARBON R	R16J-330	1	417343314T
R7643	CARBON R	R16J-470	1	417344714T
R7644	CARBON R	R16J-560	1	417345614T
R7645	CARBON R	R16J-820	1	417348214T
R7646	CARBON R	R16J-1.2K	1	417341224T
R7647	CARBON R	R16J-2.2K	1	417342224T
R7648	CARBON R	R16J-3.9K	1	417343924T
R7802	CARBON R	R16J-10K	1	417341034T
R7804	METAL O R	RS1/2WBJ-10	1	443521004T
R7805	CARBON R	R16J-5.6K	1	417345624T
R7807	CARBON R	R16J-33K	1	417343334T
R7808	METAL R	RNU1/2WCJ-1	1	453530104T
R7810	METAL O R	RS1WBJ-22	1	443622204T
R7939	CARBON R	R16J-220K	1	417342244T
R7954	CARBON R	R16J-220K	1	417342244T
E7530	RETAINER	(S)	1	27142074
E7580	TRM(SCREW)	NEJITANSI M3	1	25065425
JL4103B	WIRE HOL	NSCT-5P896	1	25051109
JL7560A	WIRE HOL	NSCT-3P874	1	25051087
JL7560B	WIRE HOL	NSCT-3P874	1	25051087
JL7590A	WIRE HOL	NSCT-9P880	1	25051093
JL7590B	WIRE HOL	NSCT-9P880	1	25051093
JL7803A	SOCKET	NSCT-5P97	1	25050269
JL7803B	WIRE HOL	NSCT-5P896	1	25051109
P7303A	PLUG	NPLG-2P130	1	25055146
P7303B	SOCKET AS	NSAS-4P0867	1	2002E390415
P7501B	SOCKET	NSCT-40P2170	1	25052273
P7522	PIN JACK	NPJ-7PDB477	1	25045680
P7530	ST JACK	MSJ-035-05C B AG SR type	1	25045879
P7580	ST JACK	MSJ-064-05A SR	1	25045783
P7580 or	ST JACK	YKB21-5005	(1)	25045724
P7610	HOLDER	(FL)	1	27191303
P9301A	PLUG	NPLG-6P120	1	25055136
S7590	R ENCODE	EC12E2425WITH WASHER	1	25065655W
S7611	PUSH SW	NPS-111-S681	1	25035718T
S7611 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7612	PUSH SW	NPS-111-S681	1	25035718T
S7612 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7613	PUSH SW	NPS-111-S681	1	25035718T
S7613 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7614	PUSH SW	NPS-111-S681	1	25035718T
S7614 or	PUSH SW	NPS-111-S677	(1)	25035714T

S7616	PUSH SW	NPS-111-S681	1	25035718T
S7616 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7618	PUSH SW	NPS-111-S681	1	25035718T
S7618 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7619	PUSH SW	NPS-111-S681	1	25035718T
S7619 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7621	PUSH SW	NPS-111-S681	1	25035718T
S7621 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7622	PUSH SW	NPS-111-S681	1	25035718T
S7622 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7623	PUSH SW	NPS-111-S681	1	25035718T
S7623 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7624	PUSH SW	NPS-111-S681	1	25035718T
S7624 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7625	PUSH SW	NPS-111-S681	1	25035718T
S7625 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7626	PUSH SW	NPS-111-S681	1	25035718T
S7626 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7627	PUSH SW	NPS-111-S681	1	25035718T
S7627 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7628	PUSH SW	NPS-111-S681	1	25035718T
S7628 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7630	PUSH SW	NPS-111-S681	1	25035718T
S7630 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7631	PUSH SW	NPS-111-S681	1	25035718T
S7631 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7632	PUSH SW	NPS-111-S681	1	25035718T
S7632 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7633	PUSH SW	NPS-111-S681	1	25035718T
S7633 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7634	PUSH SW	NPS-111-S681	1	25035718T
S7634 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7635	PUSH SW	NPS-111-S681	1	25035718T
S7635 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7636	PUSH SW	NPS-111-S681	1	25035718T
S7636 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7637	PUSH SW	NPS-111-S681	1	25035718T
S7637 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7638	PUSH SW	NPS-111-S681	1	25035718T
S7638 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7640	PUSH SW	NPS-111-S681	1	25035718T
S7640 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7641	PUSH SW	NPS-111-S681	1	25035718T
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S7642	PUSH SW	NPS-111-S681	1	25035718T
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S7643	PUSH SW	NPS-111-S681	1	25035718T
S7643 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7644	PUSH SW	NPS-111-S681	1	25035718T
S7644 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7645	PUSH SW	NPS-111-S681	1	25035718T
S7645 or	PUSH SW	NPS-111-S677	(1)	25035714T
S7646	PUSH SW	NPS-111-S681	1	25035718T

S7646 or	PUSH SW	NPS-111-S677	(1)	25035714T	
S7647	PUSH SW	NPS-111-S681	1	25035718T	
S7647 or	PUSH SW	NPS-111-S677	(1)	25035714T	
S7648	PUSH SW	NPS-111-S681	1	25035718T	
S7648 or	PUSH SW	NPS-111-S677	(1)	25035714T	
S7649	PUSH SW	NPS-111-S681	1	25035718T	
S7649 or	PUSH SW	NPS-111-S677	(1)	25035714T	

TX-SR706/SA706

PACKING PROCEDURE PARTS LIST

REF. NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
A611	CARTON	706MDC	1	29054867A	<DC, DD>
A611	CARTON	706MMA	1	29054868A	<DT, MP, MA, MO, MT, MQ>
A611	CARTON	706MMR	1	29054893A	<SA706>
A633	PAD	(AS)	1	29092364A	
A673	SHEET	(PAD)	1	29096065A	
A681	POLY BAG	w850xd650	1	29100245	
A685	PP TAPE	W50 SBT-70	1	29110200	
A689	TAPE	(SEROHAN)NITTO NO.29	1	29110149	
A700	LABEL	(CHINA)	1	29390395	<SA706>
A701a	LABEL	(SERIAL)	1	29390334	<DC>
A701a	LABEL	(SERIAL)	1	29390335	<DD>
A701a	LABEL	(SERIAL)	1	29390336	(B)<MP>
A701a	LABEL	(SERIAL)	1	29390337	(S)<MP>
A701a	LABEL	(SERIAL)	1	29390338	(B)<MA>
A701a	LABEL	(SERIAL)	1	29390339	(S)<MA>
A701a	LABEL	(SERIAL)	1	29390340	(B)<MO>
A701a	LABEL	(SERIAL)	1	29390341	(S)<MO>
A701a	LABEL	(SERIAL)	1	29390342	<MT>
A701a	LABEL	(SERIAL)	1	29390343	<DT>
A701a	LABEL	(SERIAL)	1	29390344	<MQ>
A701a	EAN LABEL	TXSA706	1	29390345	<SA706>
A702	LABEL	(GW)(15.9kg)	1	29390659	<MT, MO>
A715	LABEL	(APV)	1	29390190	<SA706>
A802	HANDBILL	(DS-A2X)US	1	29380150	<DC, DD>
A802	HANDBILL	(DS-A2X)EU	1	29380151	<MP>
A802	HANDBILL	(DS-A2X)AUS	1	29380152	<MA>
A805	INST SHEET	En(XM RADIO)	1	29355602	<DC, DD>
A806	HANDBILL	(SIRIUS)	1	29380149	<DC, DD>
A808	LABEL	(SPCABLE)	1	29390189	
A810	BATTERY	R6/AA(UM-3)	2	3010194	
A810 or	BATTERY	R6/AA(UM-3)	(2)	3010054	
A815	ANT COIL	NMA-3057	1	232140	<SR706>
A816	FM ANT AS	Type W	1	292191	<SR706>
A817	MIC	MIC-7000	1	245044	
A819	POLY BAG	D250xd300xW300(t0.04)	1	29100256A	
A821	REMO CON	RC-717M	1	24140717	
A830	WRNTY CARD	(ONKYO)	1	29365135	<DC, DD>
A830	WRNTY CARD	MGQ	1	29365099A	<MQ>
A830	WRNTY CARD	(ONKYO-CH)	1	29365098B	<SA706>
A859	INS MANUAL	U9(RC707/708/709/710/711)	1	29344636A	

A860	INS MANUAL	En(TX-SR706)	1	29344723	
A861	INS MANUAL	U2FrEs(TX-SR706)	1	29344724	<DC, MP>
A862	INS MANUAL	U2ItDe(TX-SR706)	1	29344725	<MP>
A863	INS MANUAL	U2NISv(TX-SR706)	1	29344726	<MP>
A864	INS MANUAL	Ct(TX-SR706)	1	29344727	<DT, MT, MQ>
A865	INS MANUAL	Cs(TX-SR706)	1	29344728	<SA706>
A866	INS MANUAL	Ar(TX-SR706)	1	29344729	<MO>
A867	INS MANUAL	En(QSS)(TX-SR706)	1	29344730	<DC>
A868	INS MANUAL	Cs(QSS)(TX-SR706)	1	29344731	<SA706>
A880	INS MANUAL	U3EnFrEs(XM/SIRIUS_706)	1	29344878	<DC, DD>
A884	INS MANUAL	(QC ImportantSheet)	1	29344267A	<MO>
A886	INST SHEET	En(606 RIHD)US	1	29355696	<DC, DD>
A887	INST SHEET	U2FrEs(606 RIHD)US	1	29355697	<DC>
A888	INST SHEET	U8FrEsItDeNISvCtCs(606 RIHD)	1	29355698	<DT, MP, MA, MO, MQ, MT, SA706>
A889	INST SHEET	En(606 RIHD)not US	1	29355699	<DT, MP, MA, MO, MQ, MT, SA706>
P902	CV PLUG	SCP-13A-BLK(UK)	1	25056591	!, <MO>
P901	AC CORD	AS-CEE-3	1	253298VOL	!, <MP, MO, MT>
P901	AC CORD	AS-CNS	1	253431VOL	!, <DT>
P901	AC CORD	AS-SAA	1	253391VOL	!, <MA>
P901	AC CORD	AS-BS	1	253425KAW	!, <MQ>
P901 or	AC CORD	AS-BS	(1)	253425YUN	!, <MQ>
P901	AC CORD	AS-CCC	1	253358VOL	!, <SA706>

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