

# BLOCK DIAGRAMS-1 AUDIO SECTION

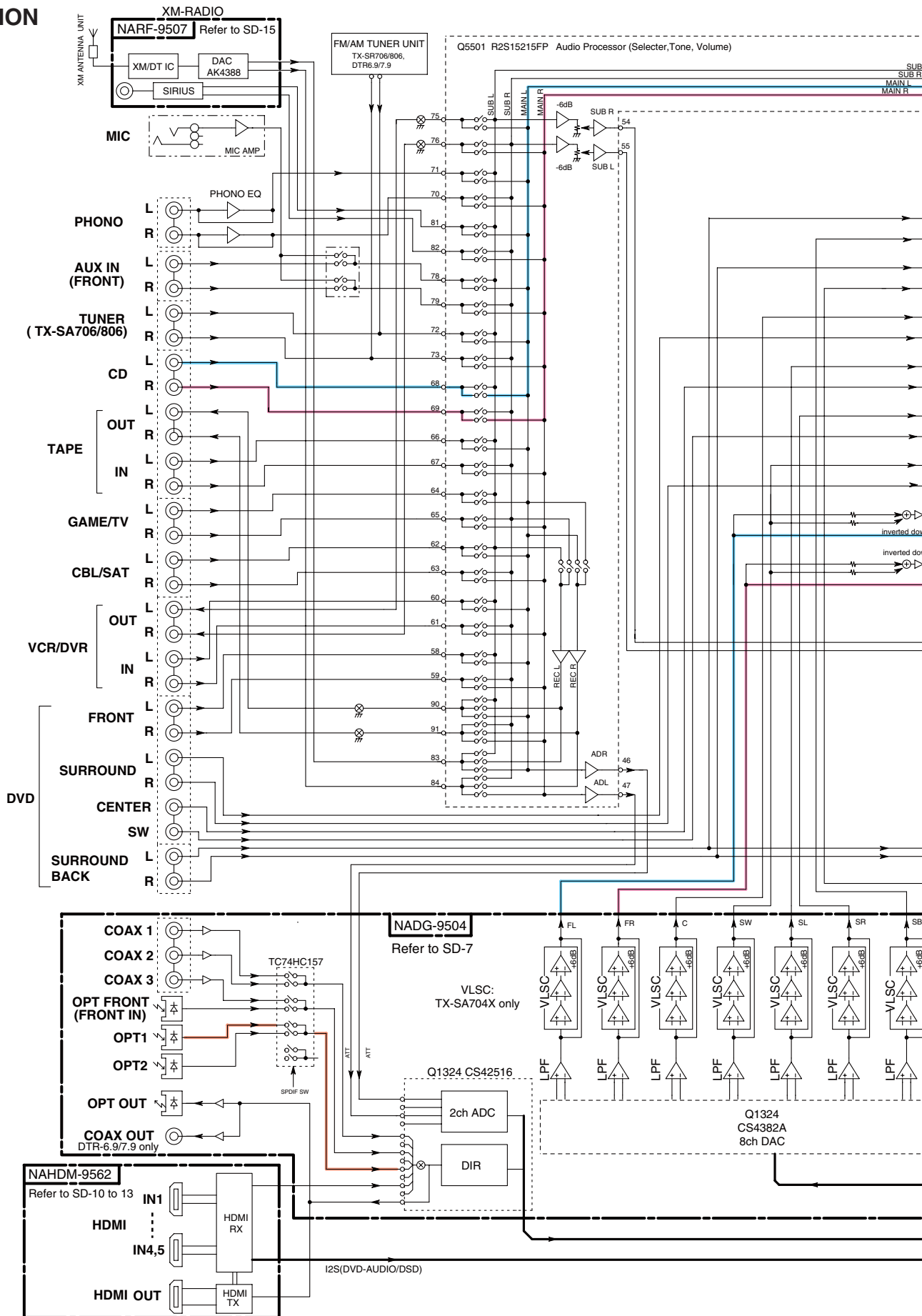
1

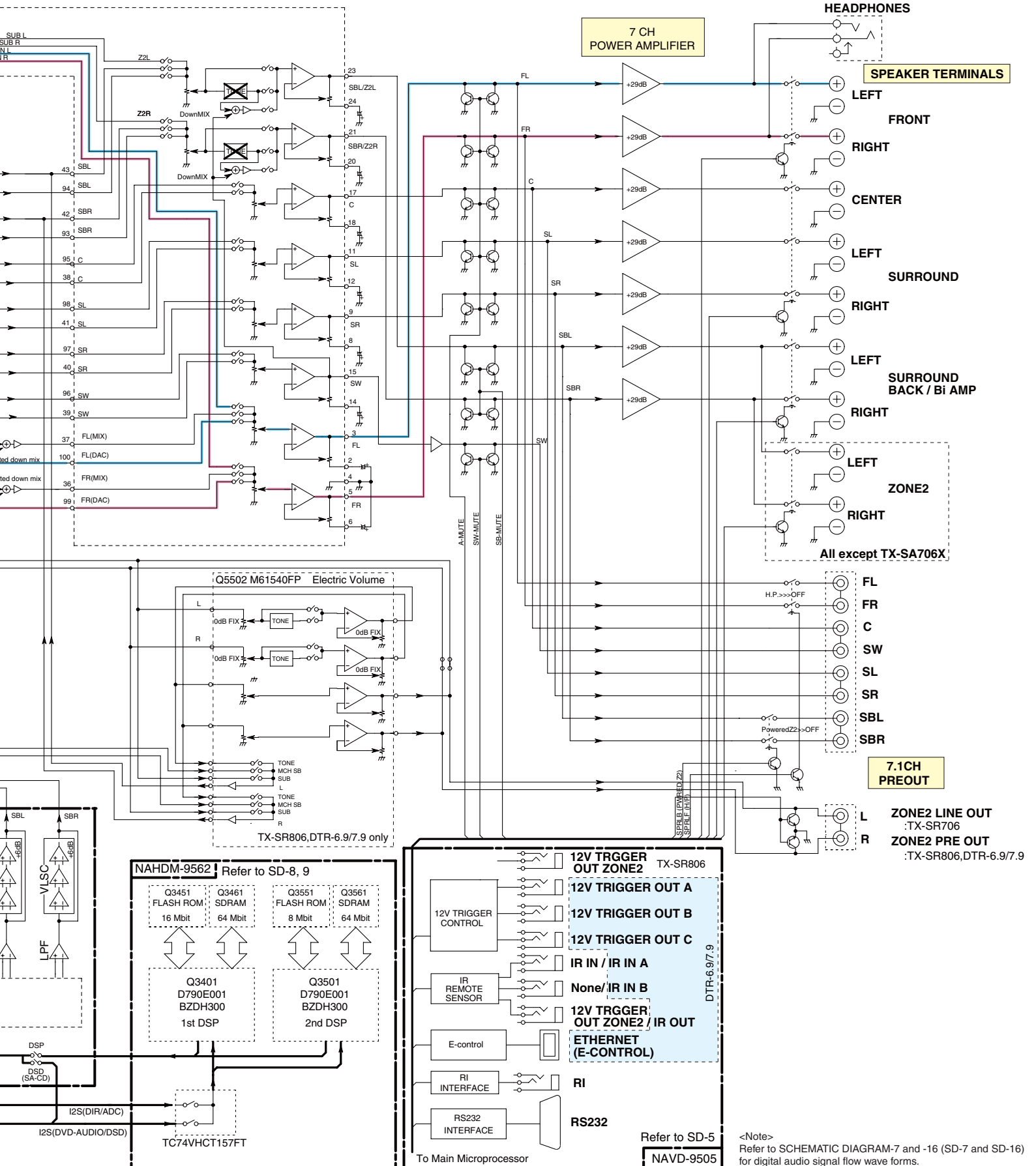
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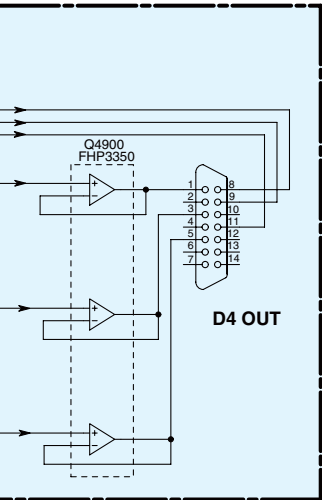


**E**

**F**

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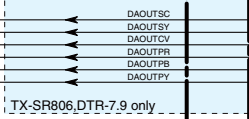


**NAHDM-9562/NAHDM-9702**

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

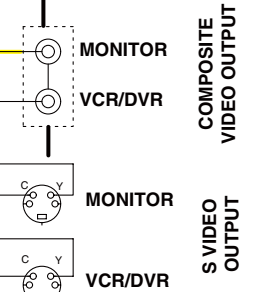
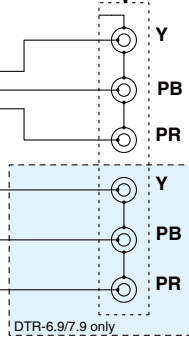
**HDMI BOARD**  
Refer to BLOCK DIAGRAM-3  
and SD-10 to SD-13

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



ADINPY  
ADINPB  
ADINPR  
ADINCV  
ADINSY  
ADINSC

**ANALOG VIDEO BOARD**  
Refer to SD-5 and SD-6



**BLOCK DIAGRAMS-3  
HDMI SECTION**

1  
2  
3  
4  
5

HDMI IN4

HDMI IN3

HDMI IN2

HDMI IN1

TX-SR706  
TX-SA706  
DTR-6.9

HDMI IN2

HDMI IN1

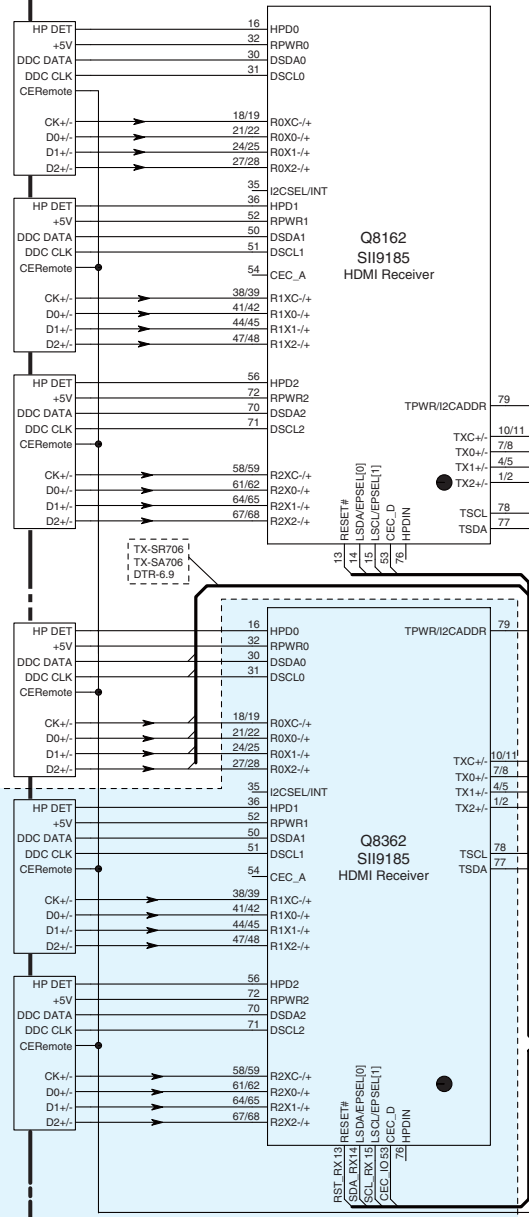
TX-SR806  
TX-SA806  
DTR-7.9  
TX-SA706X

**NAHDM-9562/NAHDM-9702** Refer to SD-10 to 13

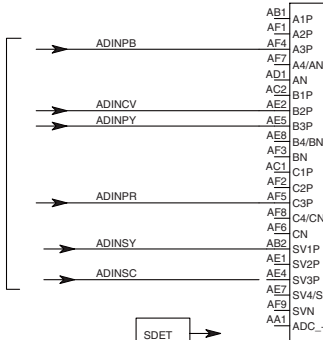
TX-SR706, TX-SA706: NAHDM-9562  
TX-SR806, TX-SA806: NAHDM-9702

<Note>  
Refer to SCHEMATIC DIAGRAM-10, -11 and -16  
(SD-10, -11 and SD-16)  
for HDMI signal waveforms.

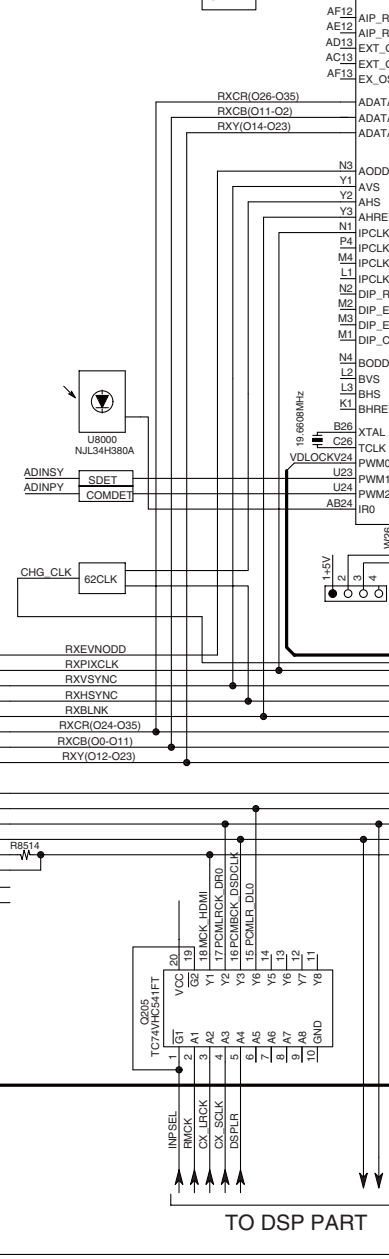
**HDMI INPUT MULTIPLEX**



TO NAVD-9505  
VIDEO BOARD



SDET



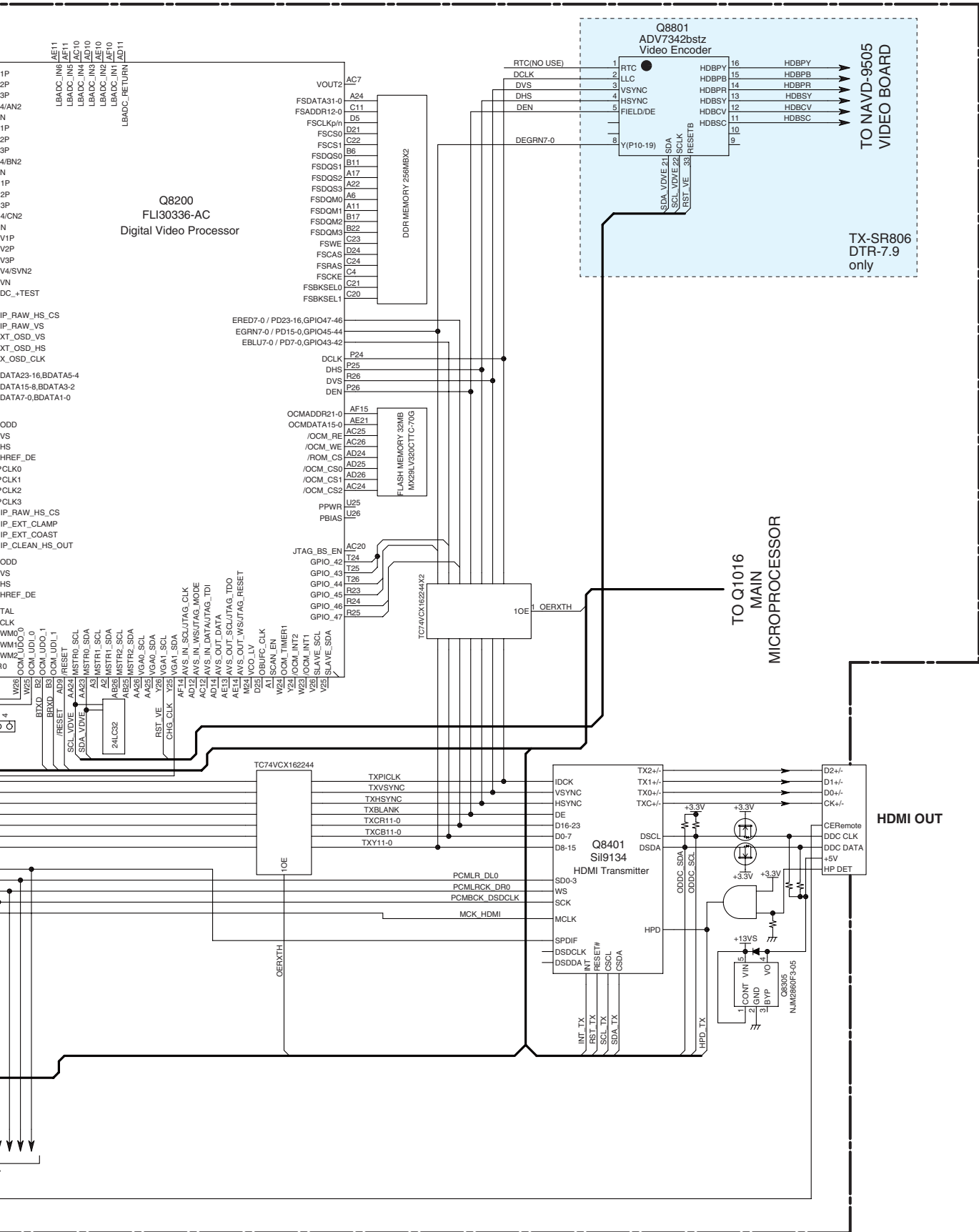
TO DSP PART

E

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G

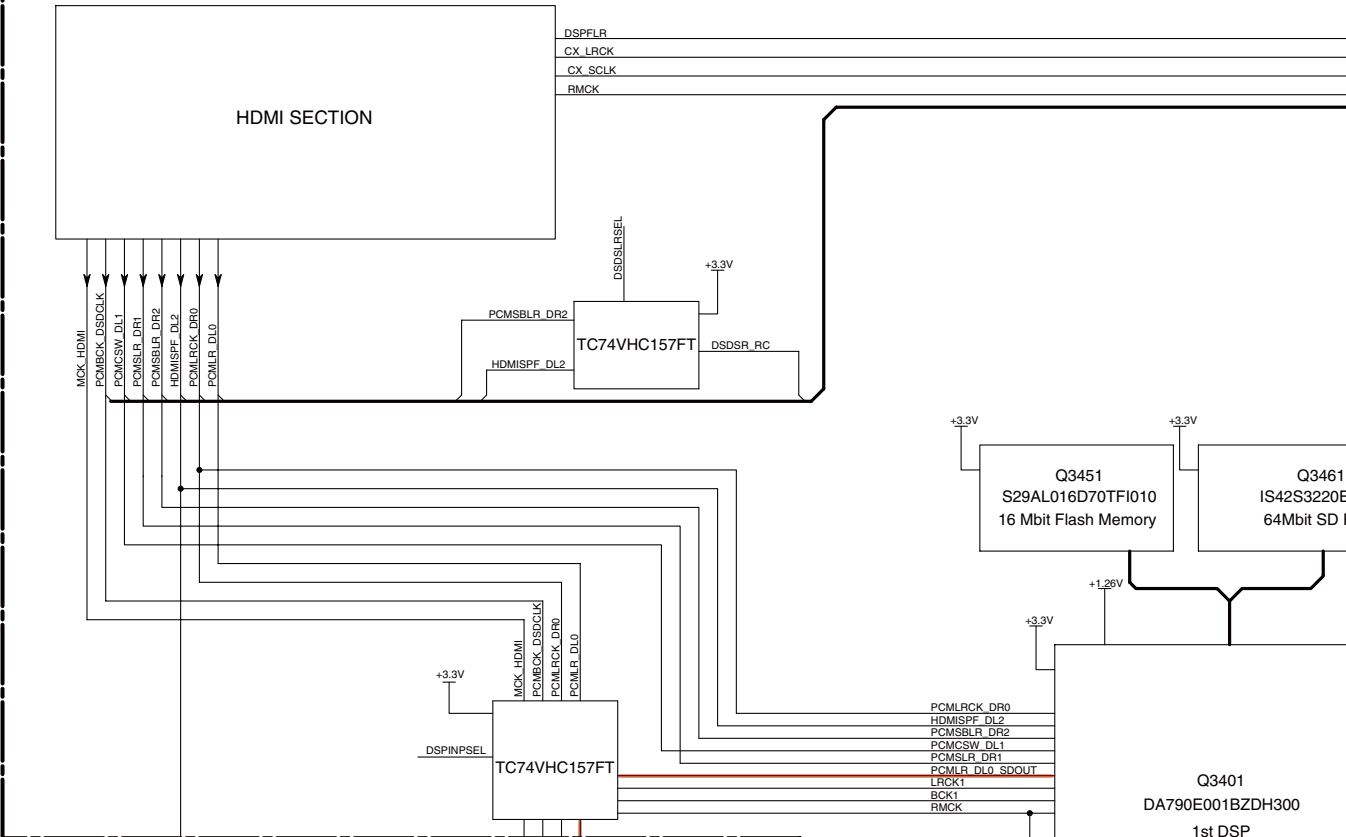
H



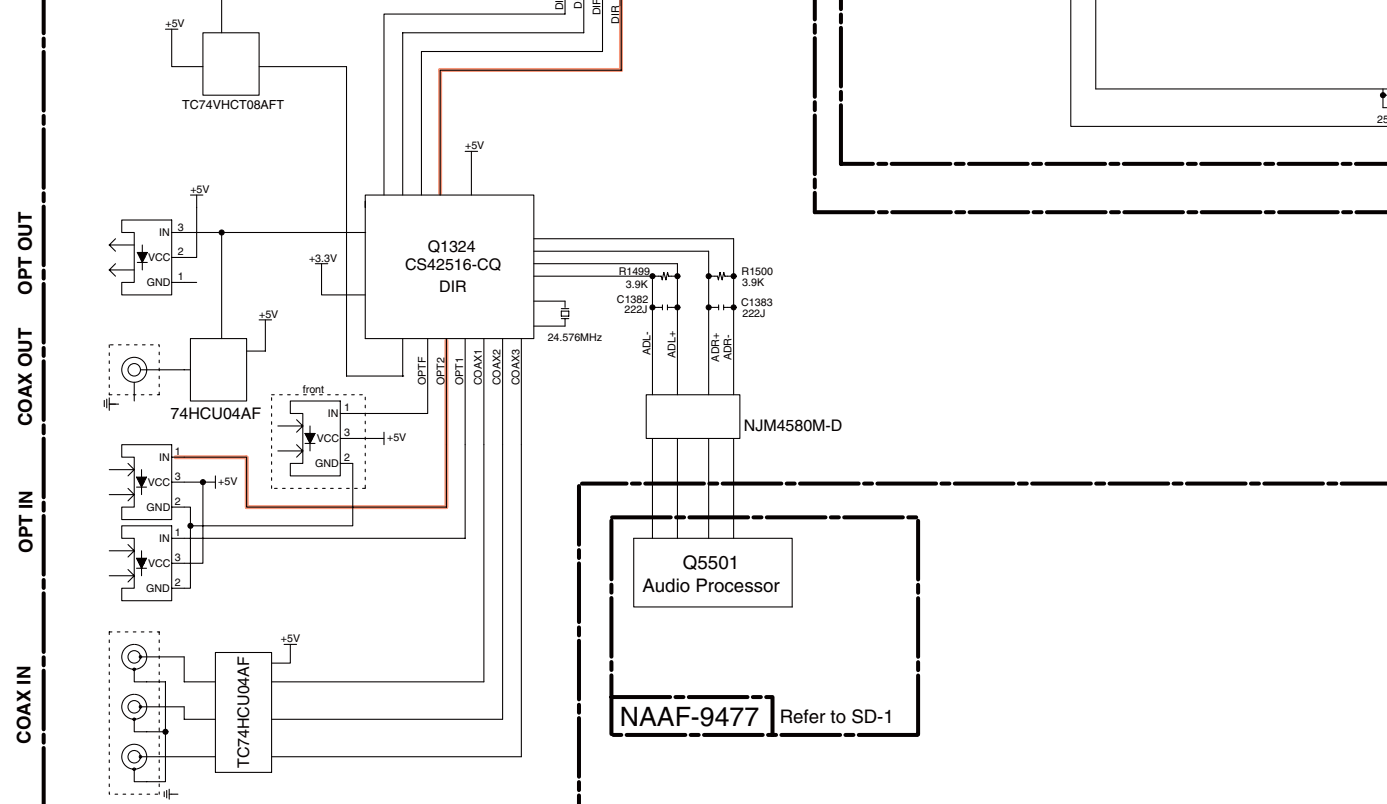
A B C D

BLOCK DIAGRAMS-4  
DSP SECTION

**NAHDM-9562/NAHDM-9702** TX-SR706, TX-SA706: NAHDM-9562  
TX-SR806, TX-SA806: NAHDM-9702  
Refer to SD-8, 9

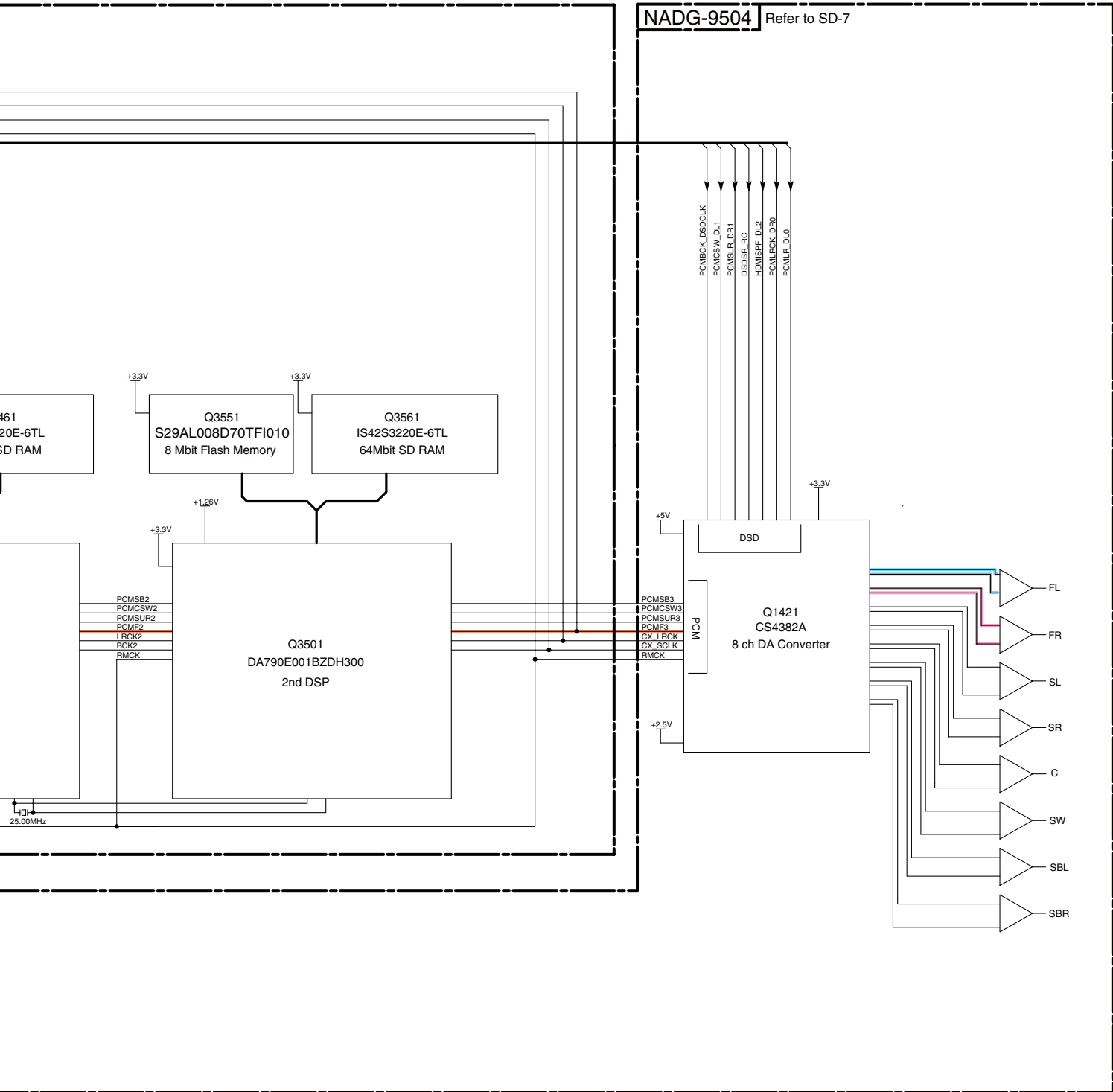


**NADG-9504** Refer to SD-7



**NAAF-9477** Refer to SD-1

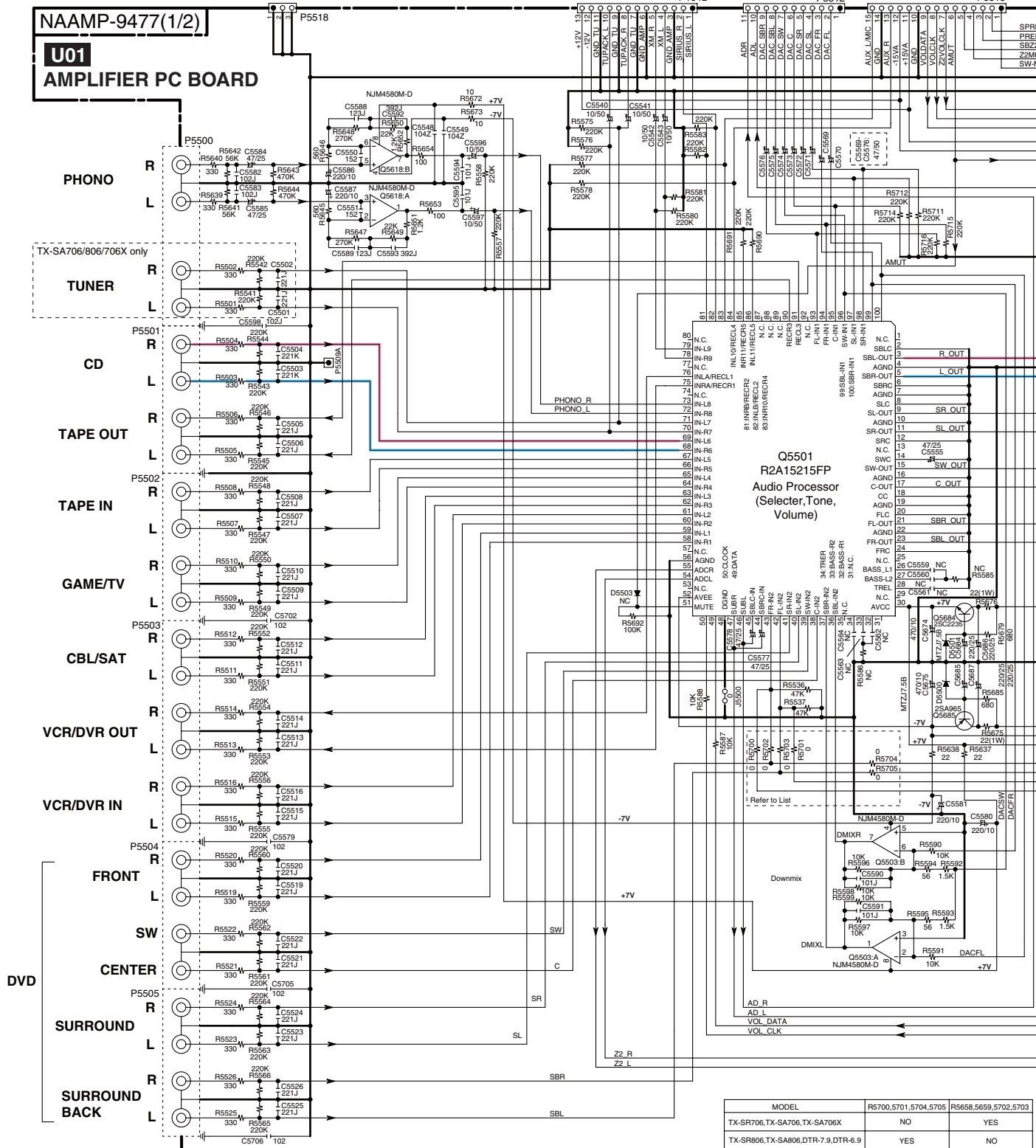
1  
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<Note>  
 Refer to SCHEMATIC DIAGRAM-7 and -16 (SD-7 and SD-16)  
 for digital audio signal flow wave forms.



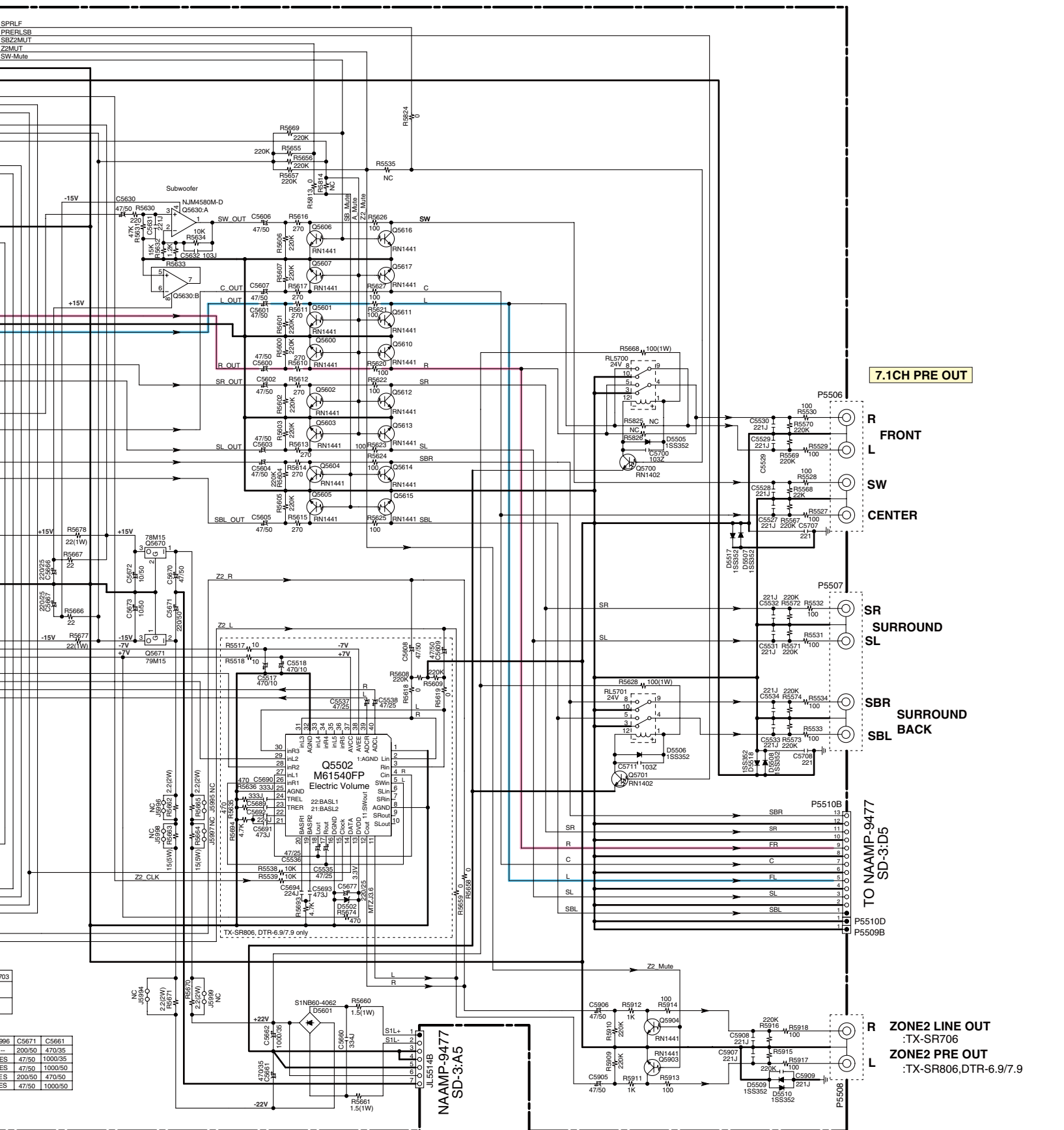
**SCHEMATIC DIAGRAMS-1 (SD-1)**  
**AUDIO SECTION**



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
TX-SR706, DTR-6.9	ALL	2.2(2W)	---	2.2(2W)	---	2.2(2W)	---	2.2(2W)	---	2.2(2W)	---	2.2(2W)	---
TX-SA706	MR	---	YES	15(2W)	---	---	YES	---	YES	15(2W)	---	---	YES
TX-SA706X	JJ	---	YES	2.2(2W)	---	15(5W)	---	5W-15	---	---	---	---	YES
TX-SR806, DTR-7.9	ALL	---	YES	---	YES	15(5W)	---	5W-15	---	---	---	---	YES
TX-SA806	MR	---	YES	6.8(2W)	---	15(5W)	---	5W-15	---	6.8(2W)	---	---	YES

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



7.1CH PRE OUT

R  
L  
SW  
CENTER

SR  
SURROUND  
SL

SBR  
SURROUND  
SBL

TO NAAMP-9477  
SD-3:D5

R ZONE2 LINE OUT  
L :TX-SR706  
L ZONE2 PRE OUT  
L :TX-SR806,DTR-6.9/7.9

ES	200/50	470/35
ES	47/50	1000/35
ES	47/50	1000/50
ES	200/50	470/50
ES	47/50	1000/50

A B C D  
**SCHEMATIC DIAGRAMS-2 (SD-2)**  
**POWER AMPLIFIER SECTION-1**

**U13 AMPLIFIER PC BOARD**

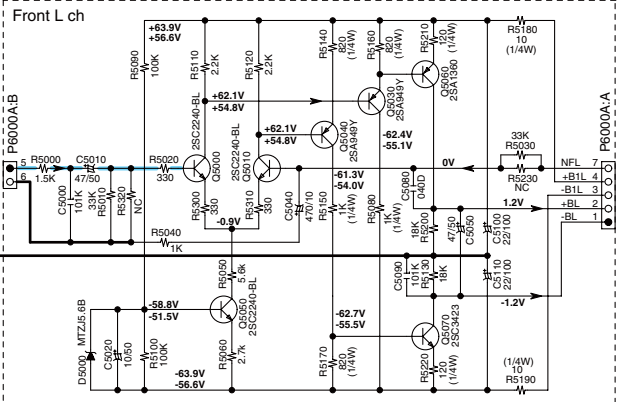
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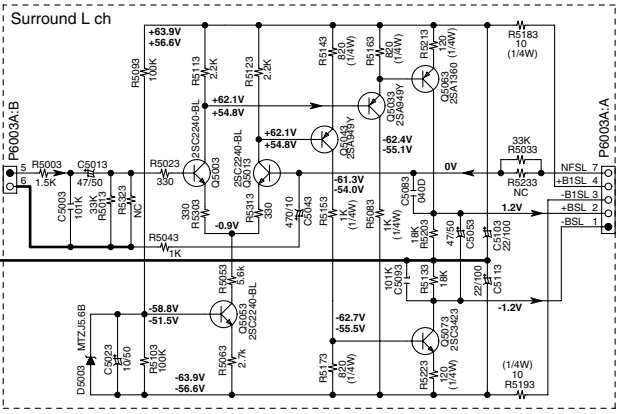
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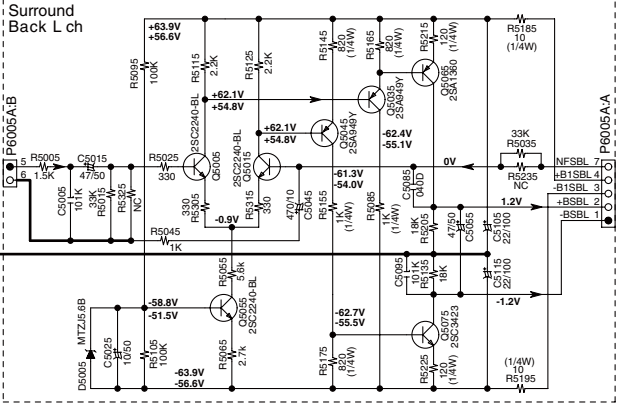
TO NAAMP-9477  
SD-3:C1

TO NAAMP-9477  
SD-3:C1



TO NAAMP-9477  
SD-3:F1

TO NAAMP-9477  
SD-3:F1



TO NAAMP-9477  
SD-3:F3

TO NAAMP-9477  
SD-3:F3

**NOTE**

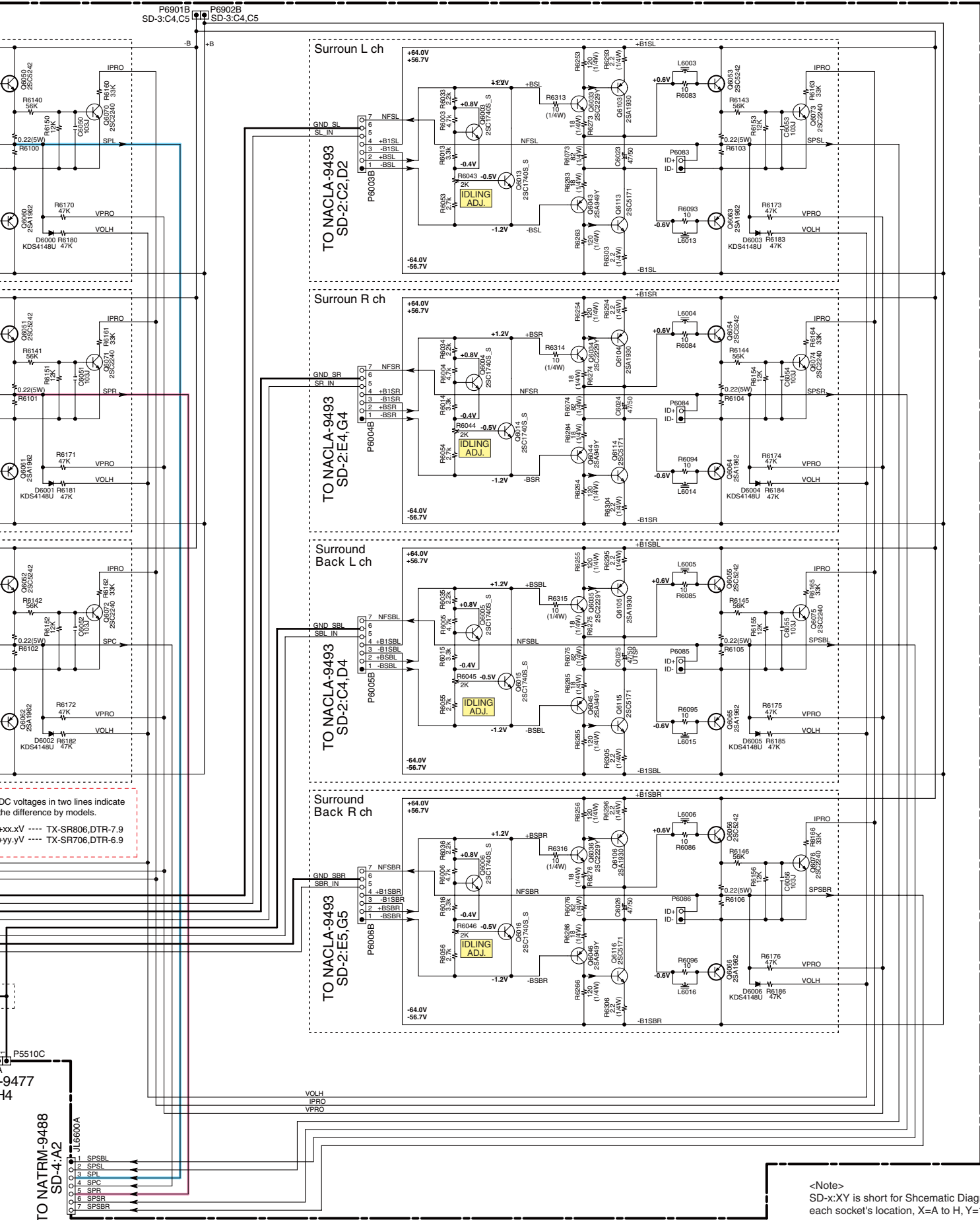
- THE COMPONENTS IDENTIFIED BY MARK  $\triangle$  ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- BOLD VOLTAGE (MEASURED WITH VOLTMETER) IS DC VOLTAGE.(NO INPUT SIGNAL).
- ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
- ALL NPN TRANSISTORS ARE EQUIVALENT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

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 Schematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.







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

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

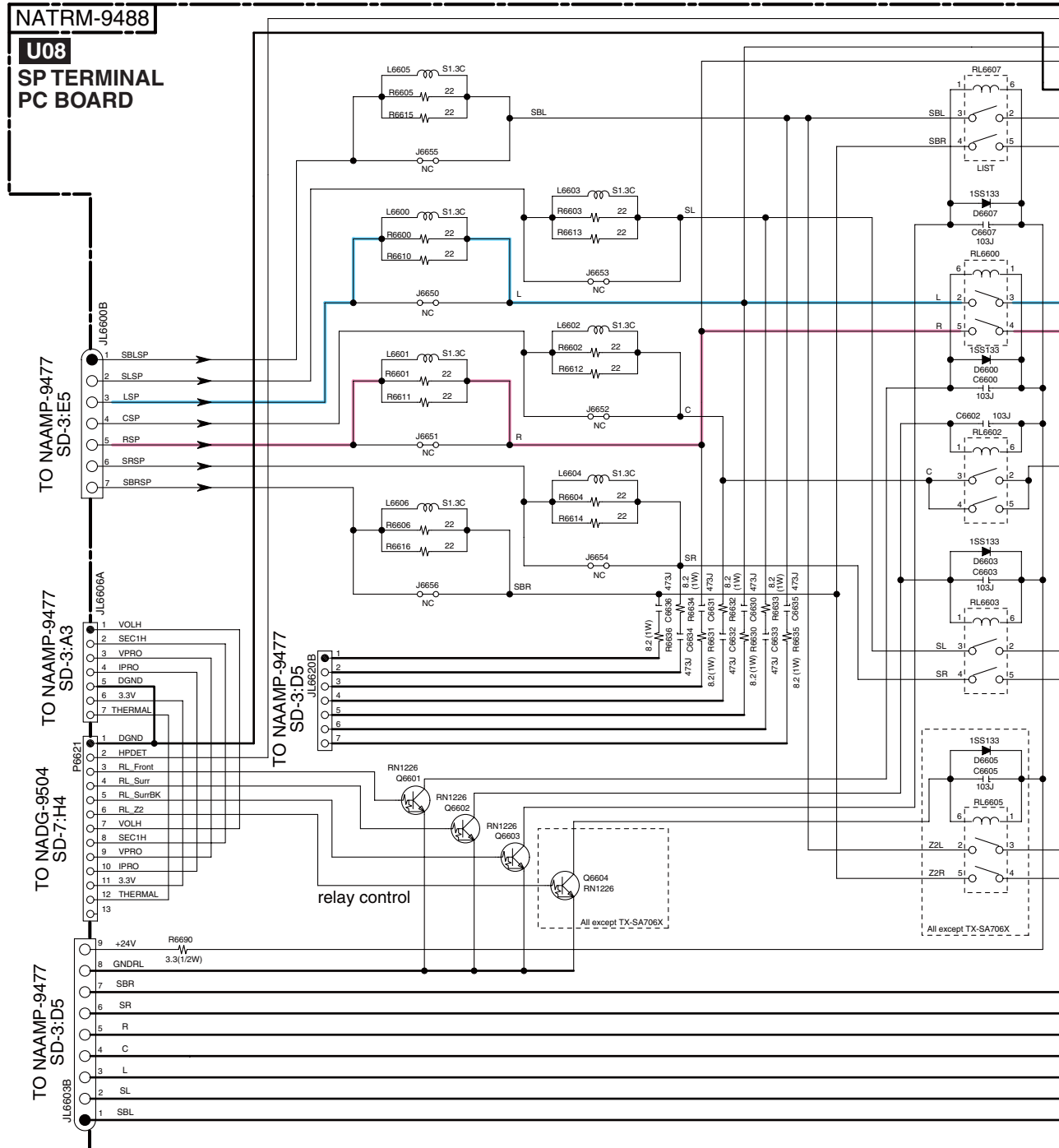
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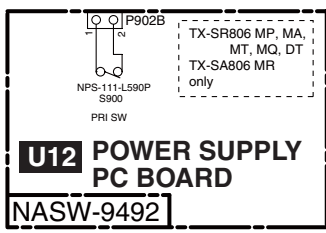
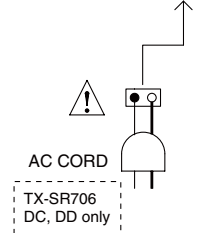
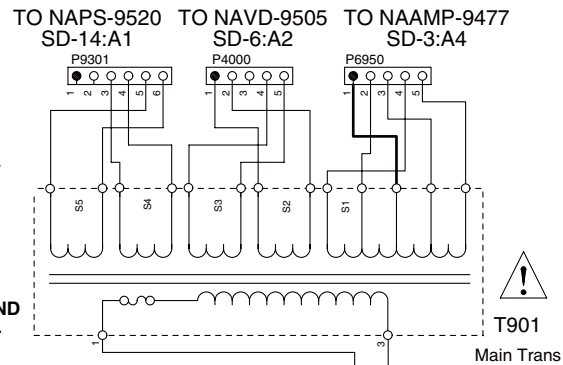
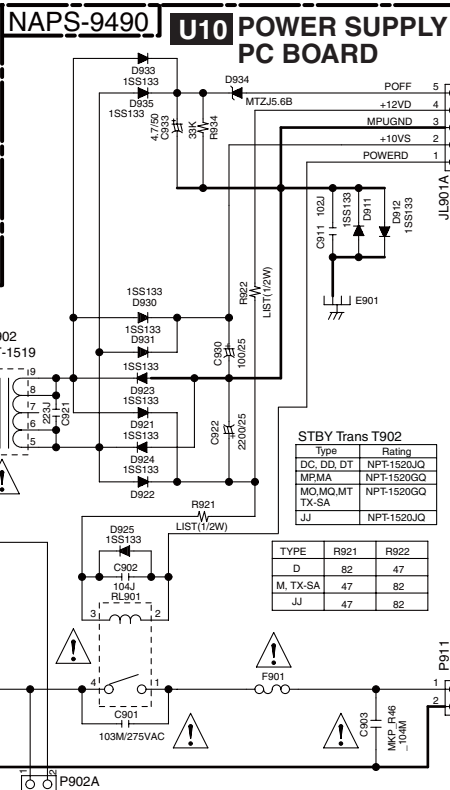
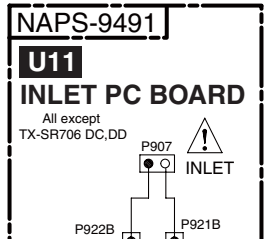
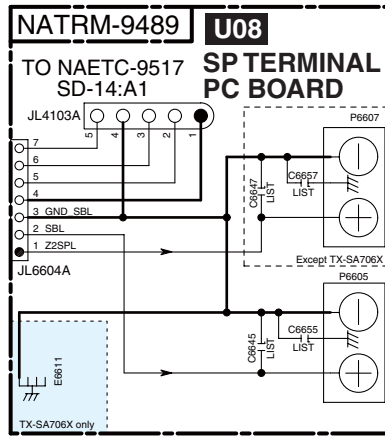
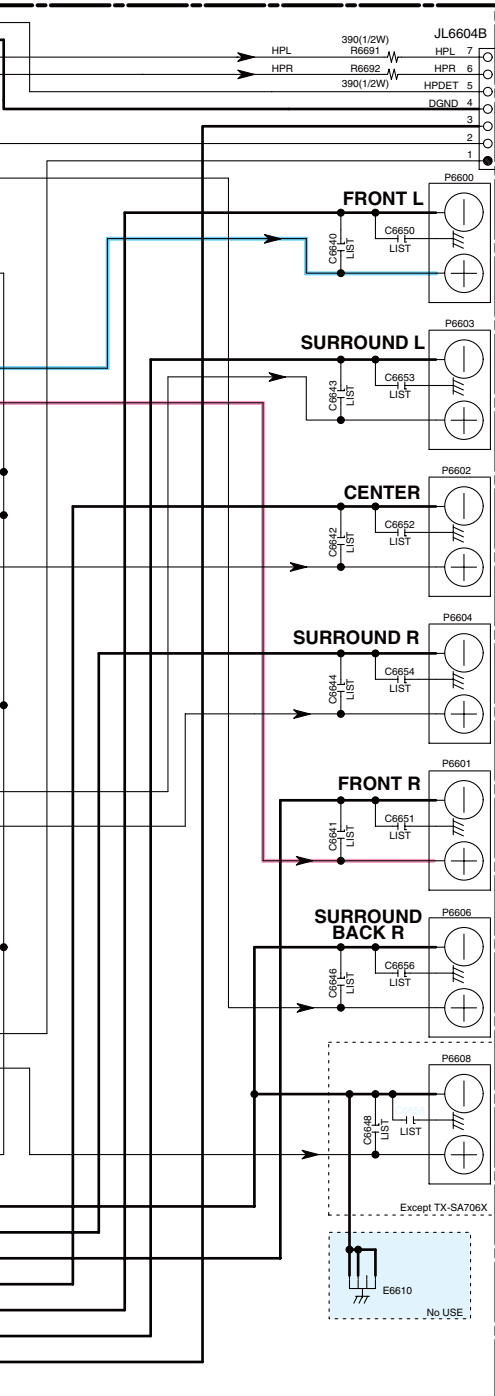


**NOTE**

- THE COMPONENTS IDENTIFIED BY MARK  $\triangle$  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  $\mu\text{F}/\text{WV}$ .
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.  
 EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.03uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.  
 EX)  $\text{---} \text{||} \text{---}$  PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

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





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	---	---
JJ	NPT-1571J	---

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	---



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

TO NAHDM-9562 SD-11:H1  
TO NAHDM-9562 SD-11:H3

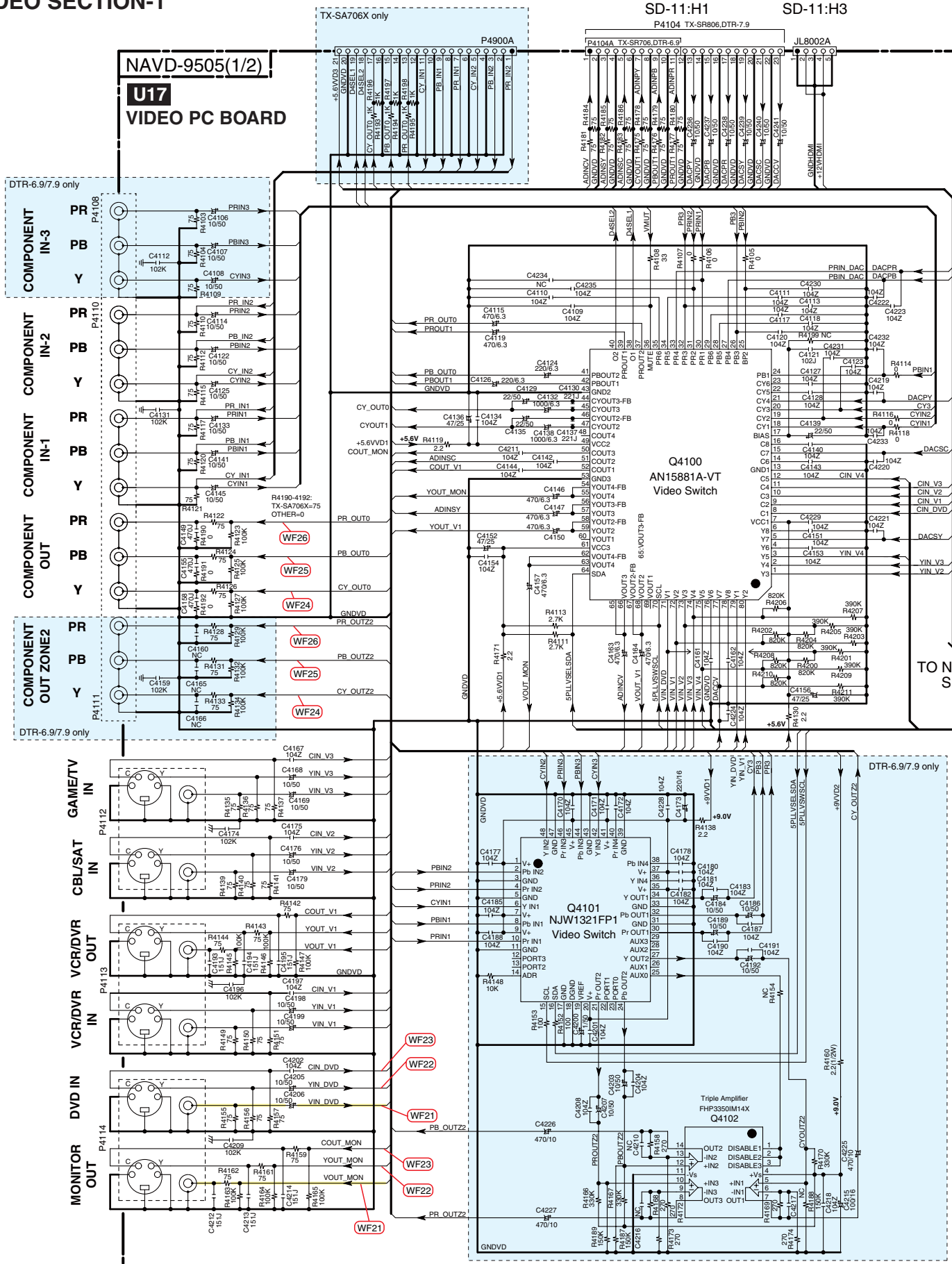
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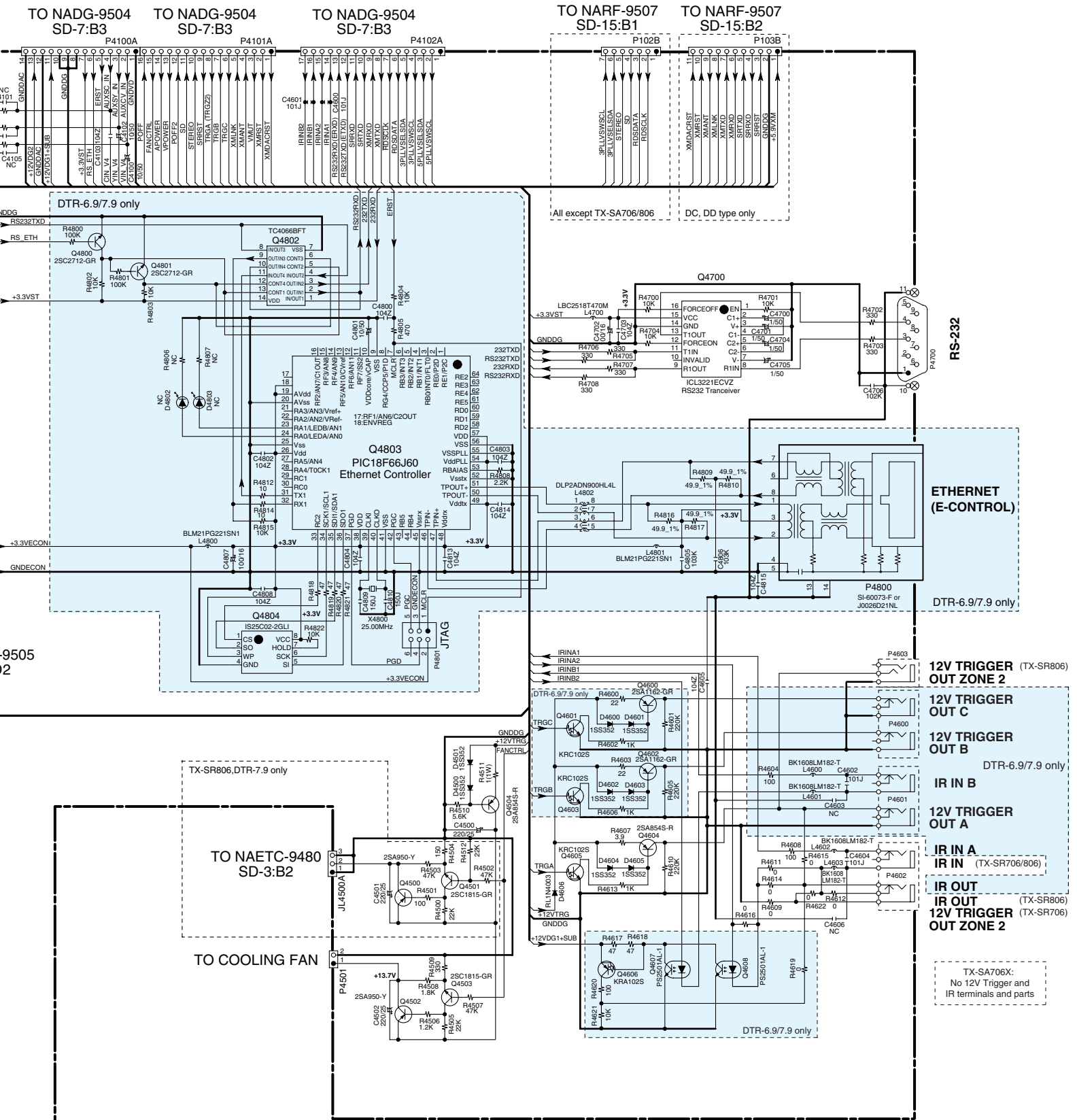
TO NADG-9506 SD-6:D2

E

F

G

H



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

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

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

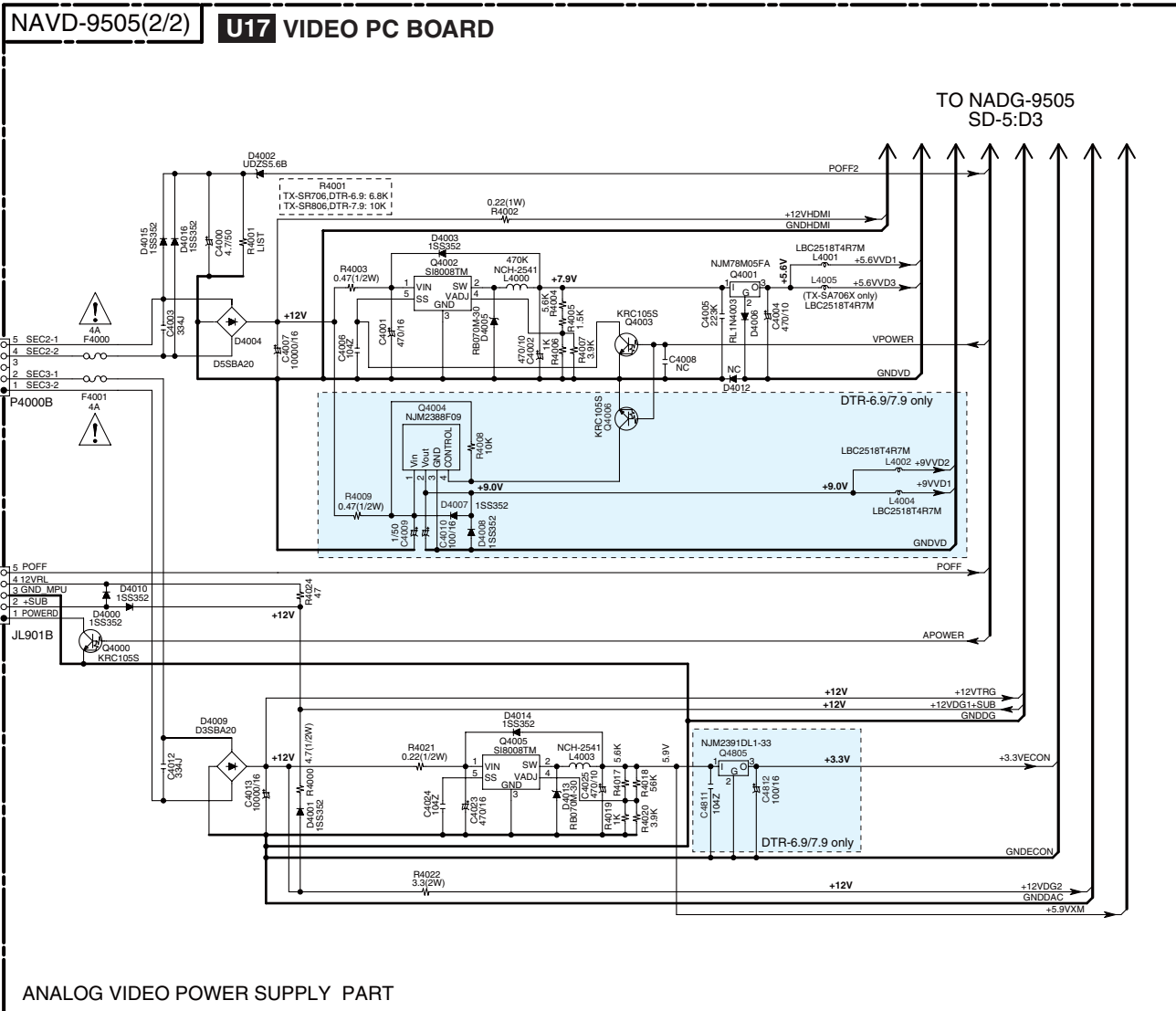
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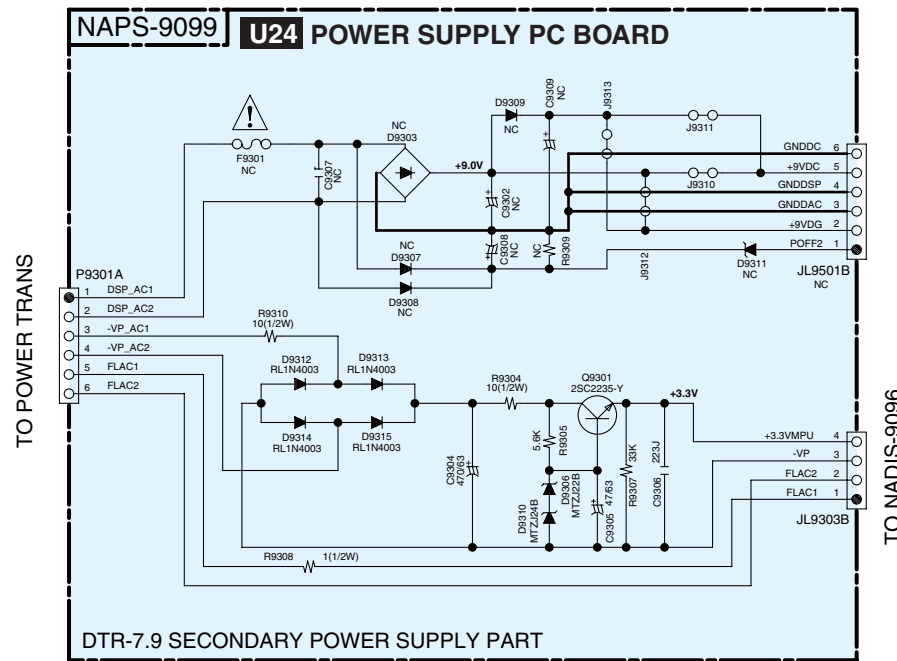
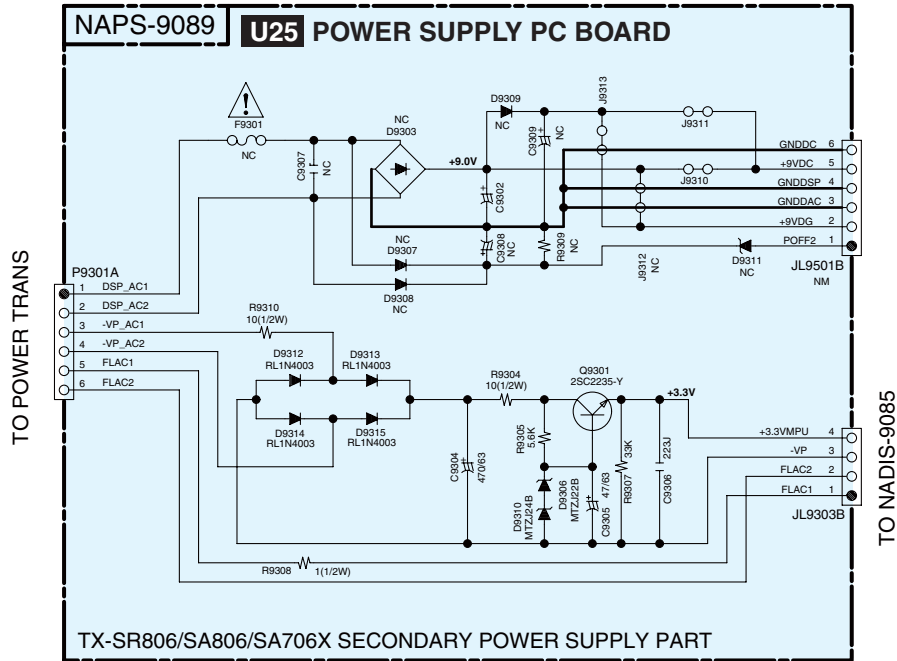


ANALOG VIDEO POWER SUPPLY PART

NOTE

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

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



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

A

B

C

D

1

2

3

4

5

NADG-9504

U16

MICROPROCESSOR  
AND DAC PC BOARD

TO DEBUGER

TO FLASH WRITER

TO NAHDM-9562  
SD-8:A4

TO NAHDM-9562  
SD-8:A4

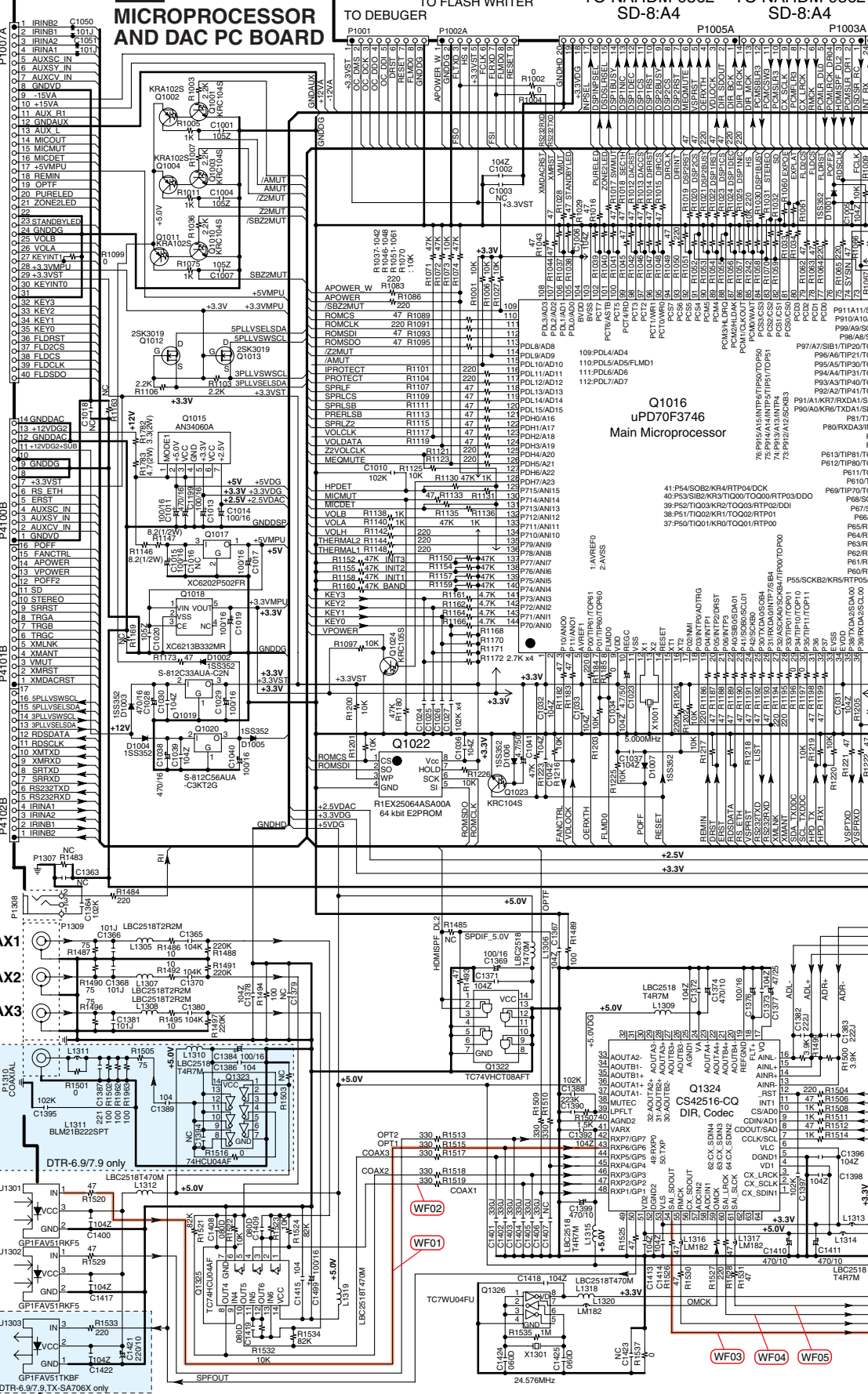
TO NADIS-9515  
(P7501B)  
SD-14:B2

TO NAVD-9505  
SD-5:E1

TO NAVD-9505  
SD-5:F1

COAX1  
COAX2  
COAX3  
COAX OUT

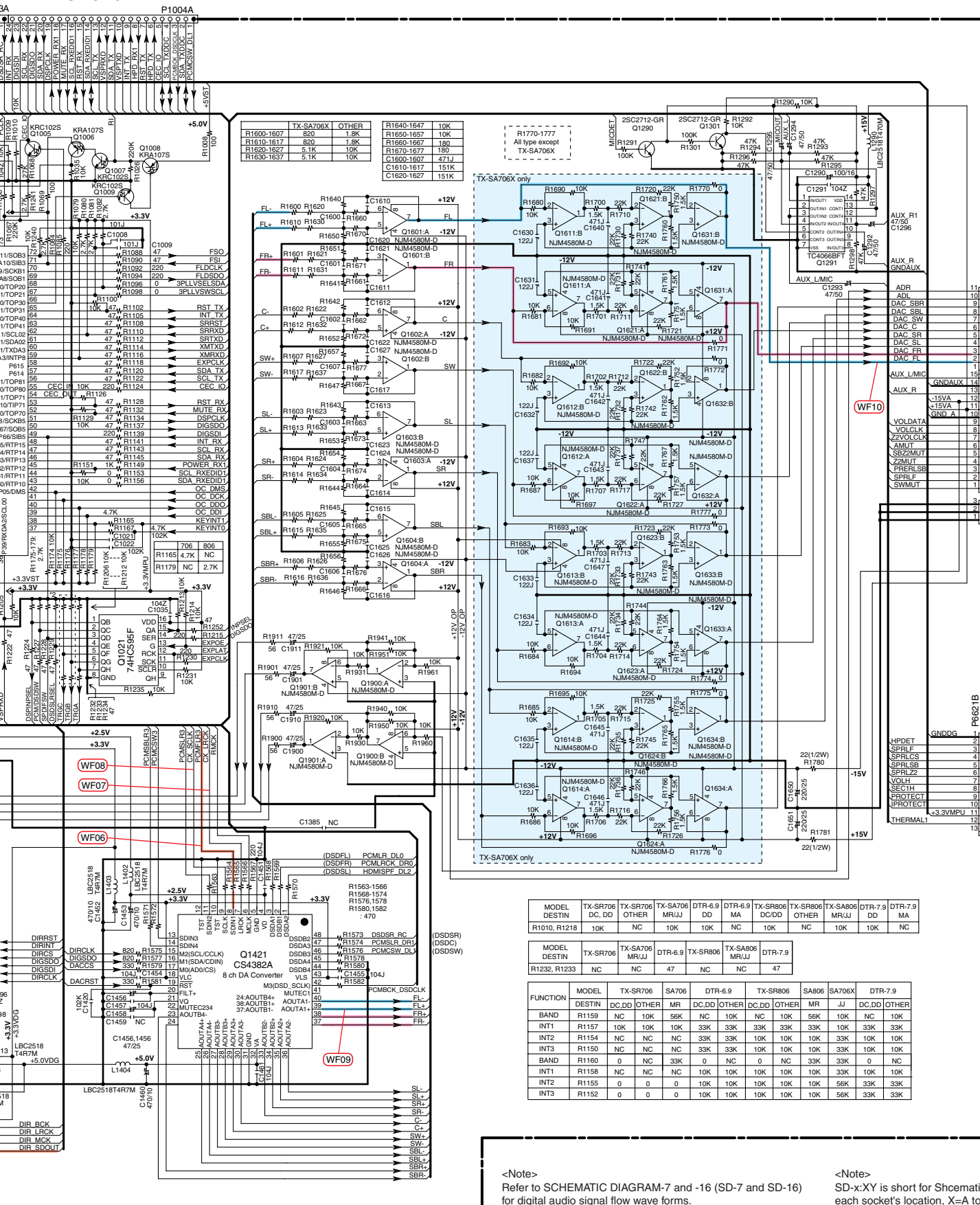
OPT1  
OPT2  
OPTOUT



DTR-6.9/7.9 TX-SA706X only.



2 TO NAHDM-9562  
SD-8:A3



TX-SA706X	OTHER
R1600-1607	820 1.8K
R1610-1617	820 1.8K
R1620-1627	5.1K 10K
R1630-1637	5.1K 10K

R1640-1647	10K
R1650-1657	10K
R1660-1667	180
R1670-1677	180
C1600-1607	47.1J
C1610-1617	151K
C1620-1627	151K

R1770-1777  
All type except  
TX-SA706X

MODEL	TX-SR706	TX-SR706X	TX-SA706	DTR-6.9	TX-SR806	TX-SR806X	TX-SA806	DTR-7.9
DESTIN	DC,DD	OTHER	MR/JJ	DD	MA	DC,DD	OTHER	MR/JJ
R1010, R1218	10K	NC	10K	10K	NC	10K	NC	10K

MODEL	TX-SR706	TX-SA706	DTR-6.9	TX-SR806	TX-SA806	DTR-7.9
DESTIN	TX-SR706	TX-SA706	OTHER	MR/JJ	OTHER	MR/JJ
R1232, R1233	NC	NC	47	NC	NC	47

FUNCTION	MODEL	TX-SR706	SA706	DTR-6.9	TX-SR806	SA806	SA706X	DTR-7.9
BAND	R1159	NC	10K	56K	NC	10K	NC	10K
INT1	R1157	10K	10K	33K	33K	33K	33K	10K
INT2	R1154	NC	NC	33K	33K	10K	10K	33K
INT3	R1150	NC	NC	33K	33K	10K	10K	33K
BAND	R1160	0	NC	33K	0	NC	33K	33K
INT1	R1158	NC	NC	10K	10K	10K	10K	33K
INT2	R1155	0	0	10K	10K	10K	10K	56K
INT3	R1152	0	0	10K	10K	10K	10K	56K

TO NAAMP-9477 TO NAAMP-9477  
SD-1:D1 SD-1:D1  
TO NAAMP-9477 TO NAAMP-9477  
SD-1:B1 SD-1:B1

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

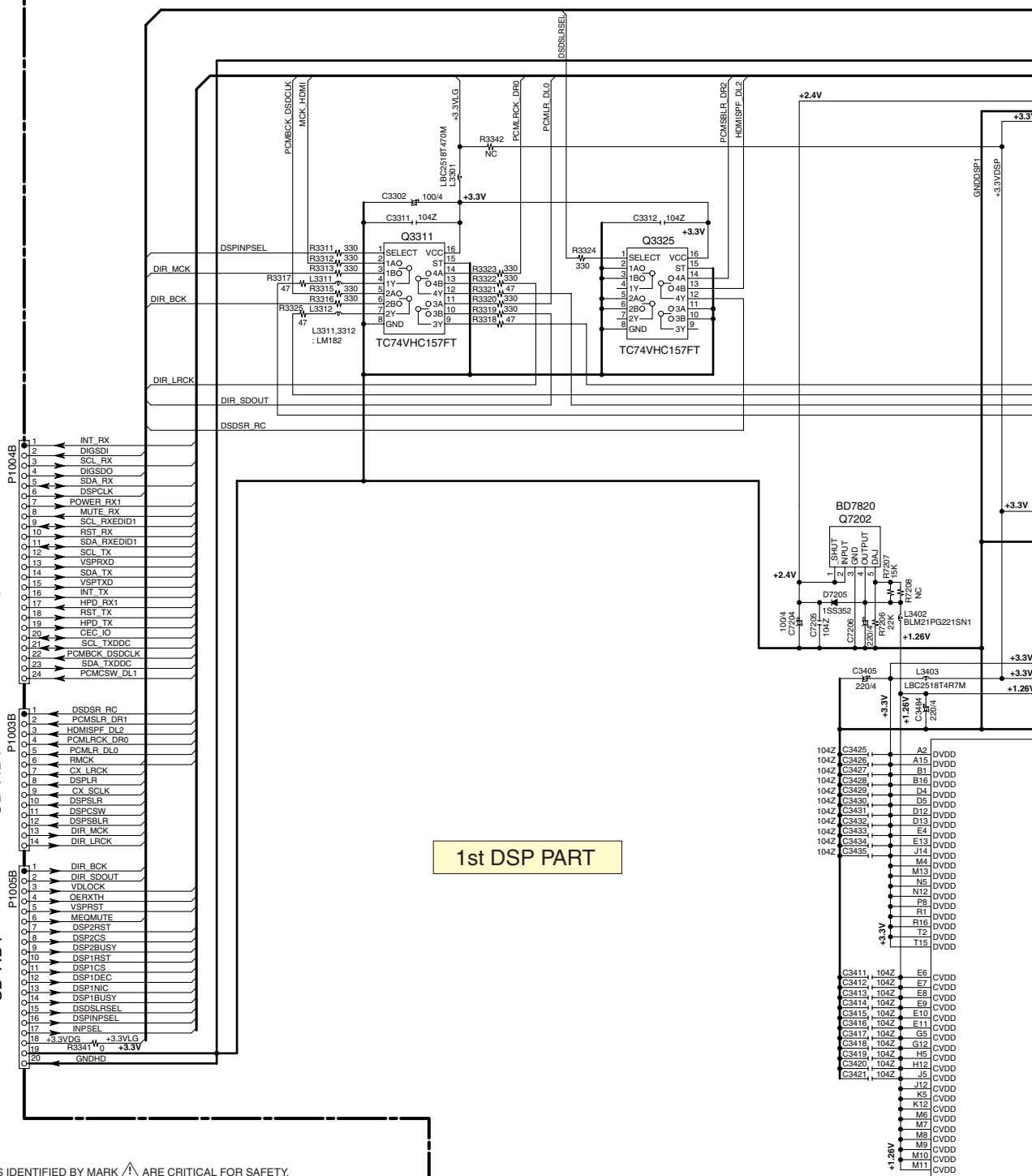
<Note>  
SD-x:XY is short for Schematic Diagram-x and  
each socket's location, X=A to H, Y=1 to 5.

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

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

NAHDM-9562/NAHDM-9702(1/6) **U20** HDMI PC BOARD

1  
2  
3  
4  
5



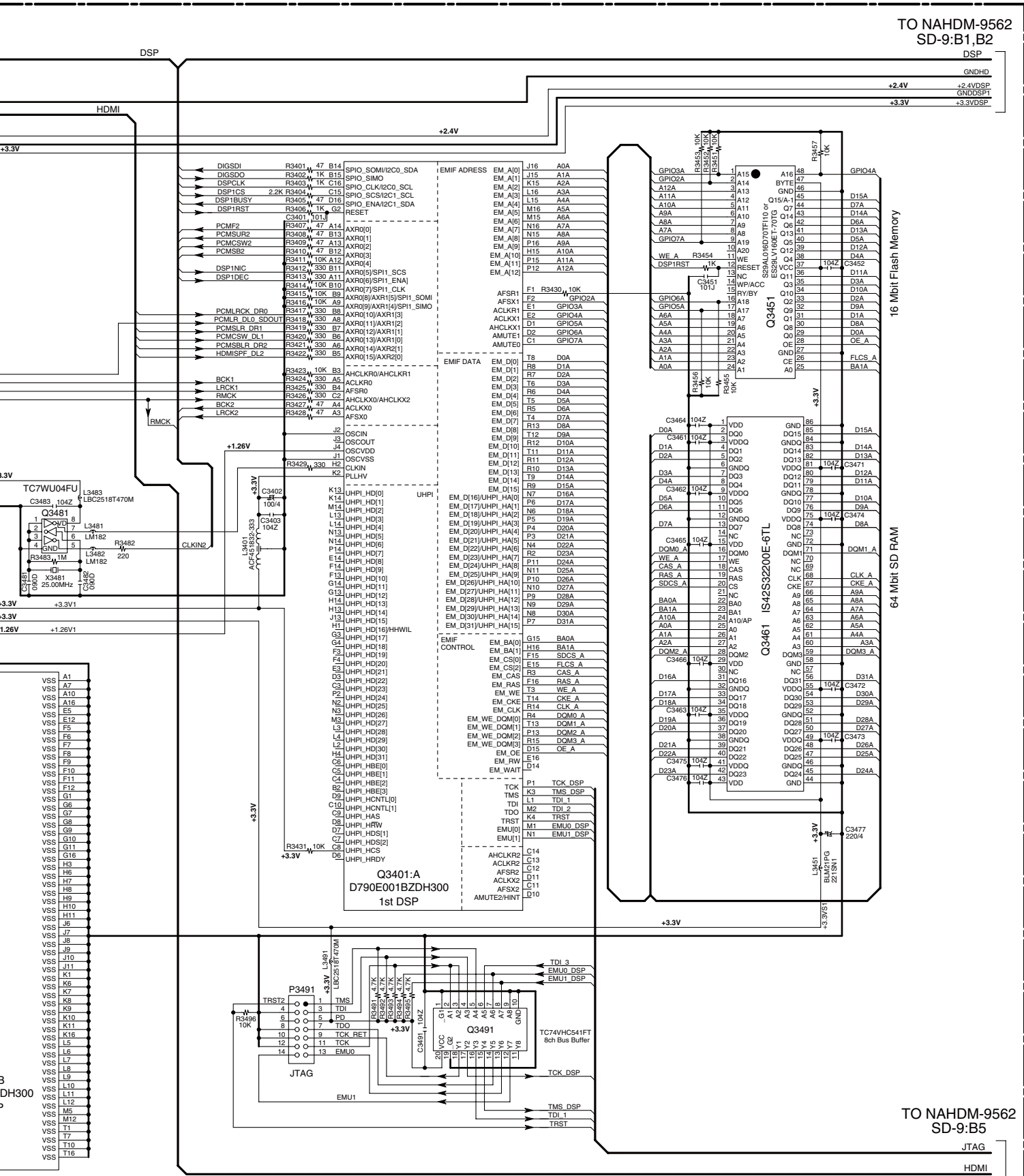
1st DSP PART

**NOTE**

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

Q3401:B  
D790E001BZDH3  
1st DSP

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



TO NAHDM-9562  
SD-9:B1,B2

TO NAHDM-9562  
SD-9:B5

JTAG  
HDMI



A

B

C

D

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

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

NAHDM-9562/NAHDM-9702(2/6)

U20 HDMI PC BOARD

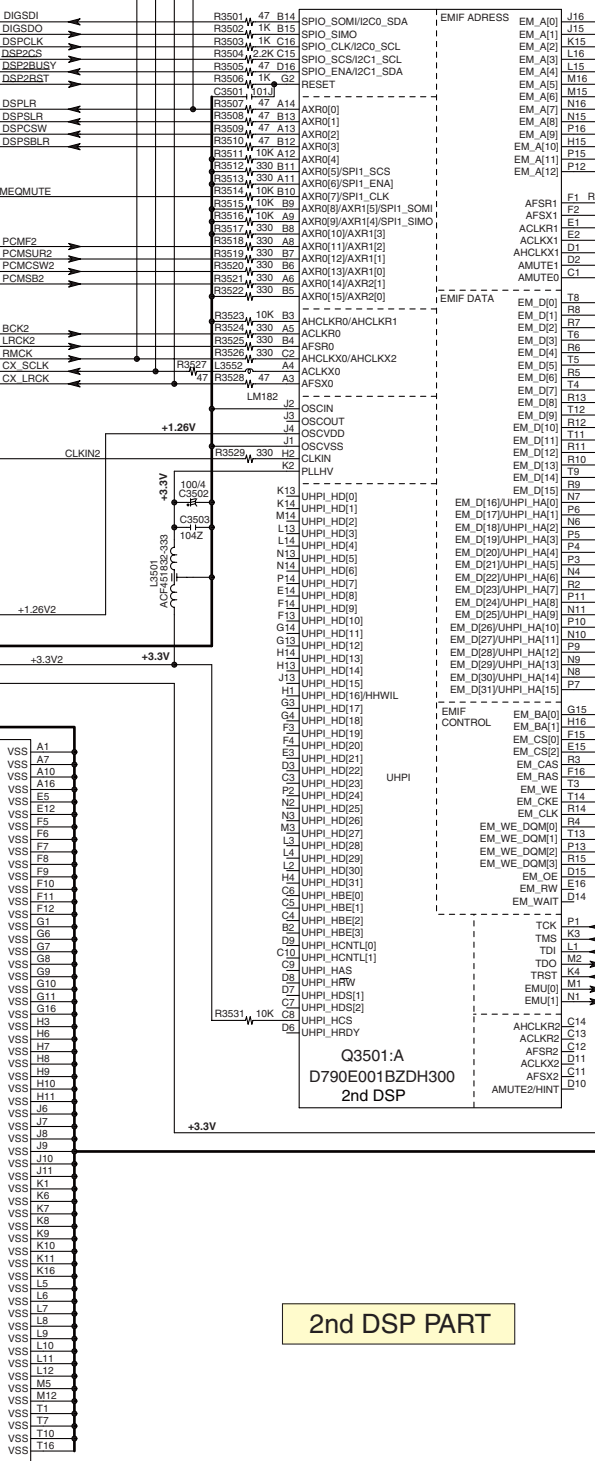
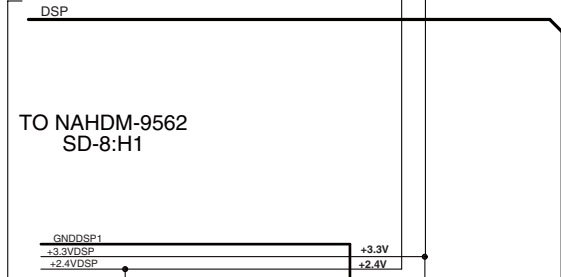
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5



TO NAHDM-9562 SD-8:H1

TO NAHDM-9562 SD-8:H5

JTAG

HDMI

Q3501:B D790E001BZDH300 2nd DSP

Q3501:A D790E001BZDH300 2nd DSP

2nd DSP PART



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

1

HDMI IN4 (NO USE)

2

HDMI IN3 HDMI IN5

3

HDMI IN2 HDMI IN4

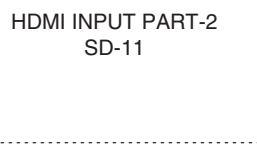
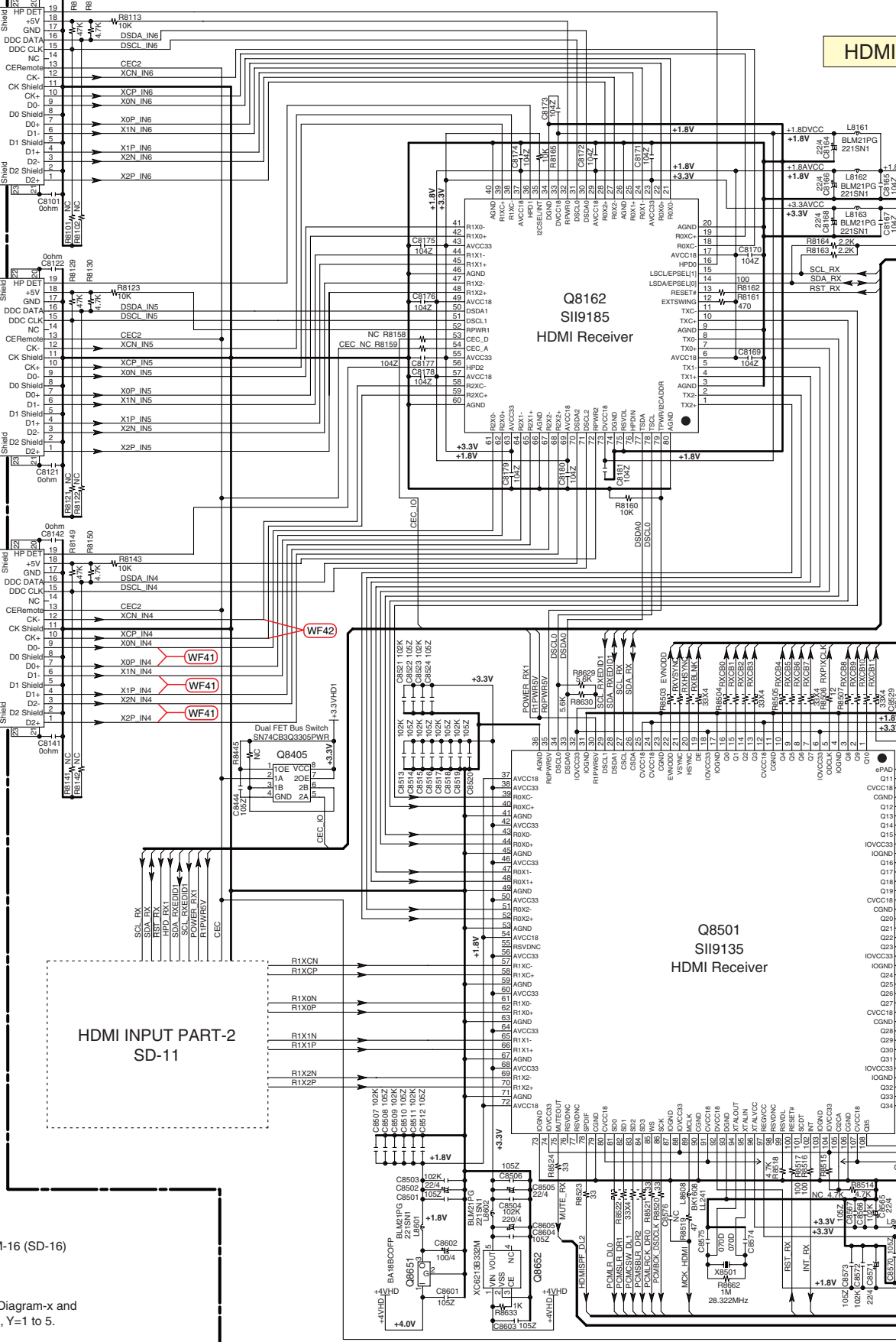
4

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

5

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

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



HDMI

Q8162  
SI19185  
HDMI Receiver

Q8501  
SI19135  
HDMI Receiver

Q8405  
Dual FET Bus Switch  
SN74CB30305PWR

WF42

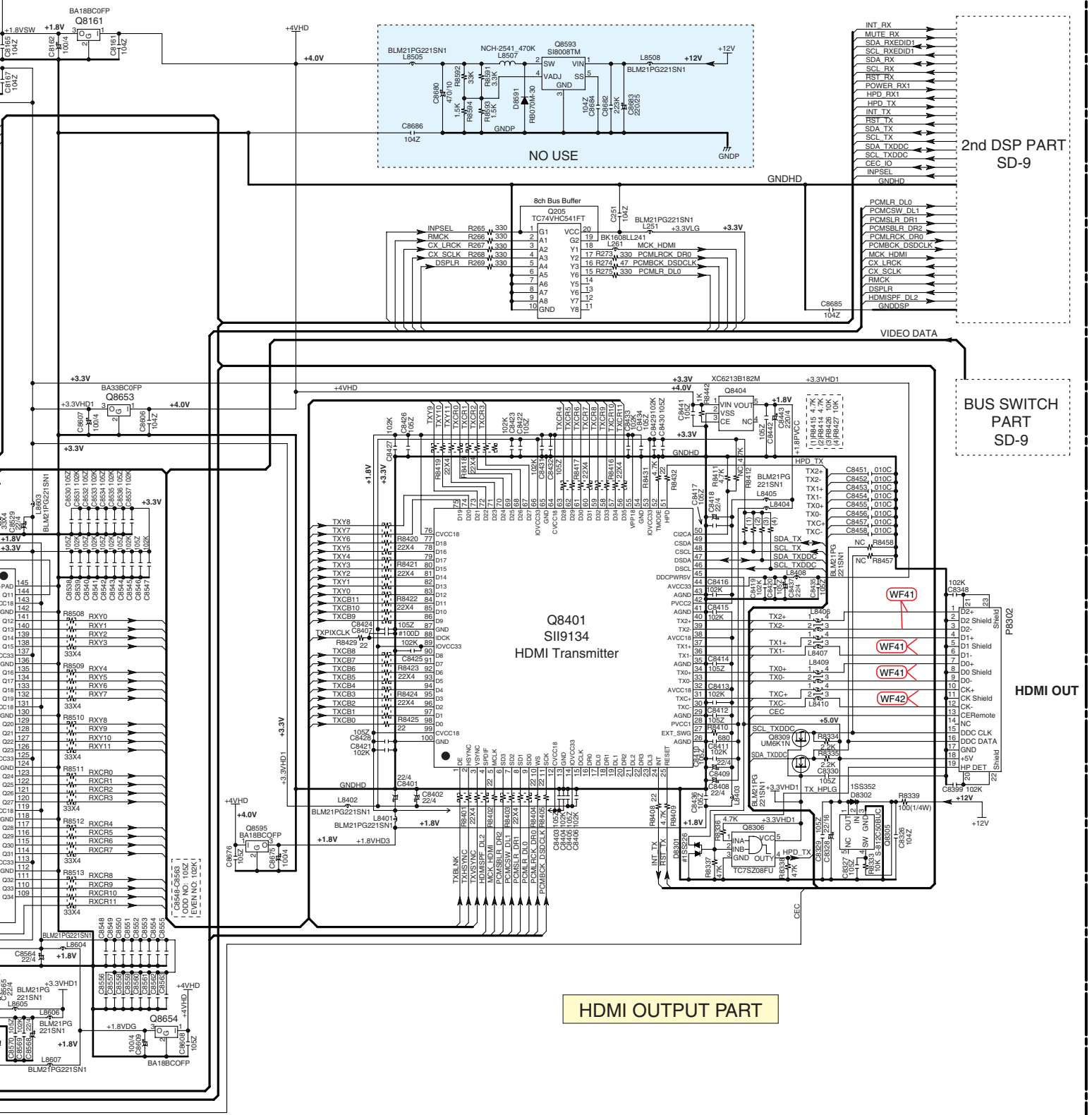
WF41

WF41

WF41

- Q101
- Q102
- Q103
- Q104
- Q105
- Q106
- Q107
- Q108
- Q109
- Q110
- Q111
- Q112
- Q113
- Q114
- Q115
- Q116
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- Q185
- Q186
- Q187
- Q188
- Q189
- Q190
- Q191
- Q192
- Q193
- Q194
- Q195
- Q196
- Q197
- Q198
- Q199
- Q200

MI INPUT PART-1



HDMI OUTPUT PART

SCHEMATIC DIAGRAMS-11 (SD-11) HDMI SECTION-2

1

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

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

NOTE

- THE COMPONENTS IDENTIFIED BY MARK  $\Delta$  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 (  $\text{---}$  ) ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50V/VV UNLESS OTHERWISE NOTED. EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS. EX)  $\square \circ \square$  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

2

HDMI INPUT PART-1 SD-10

HDMI INPUT PART-2

3

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

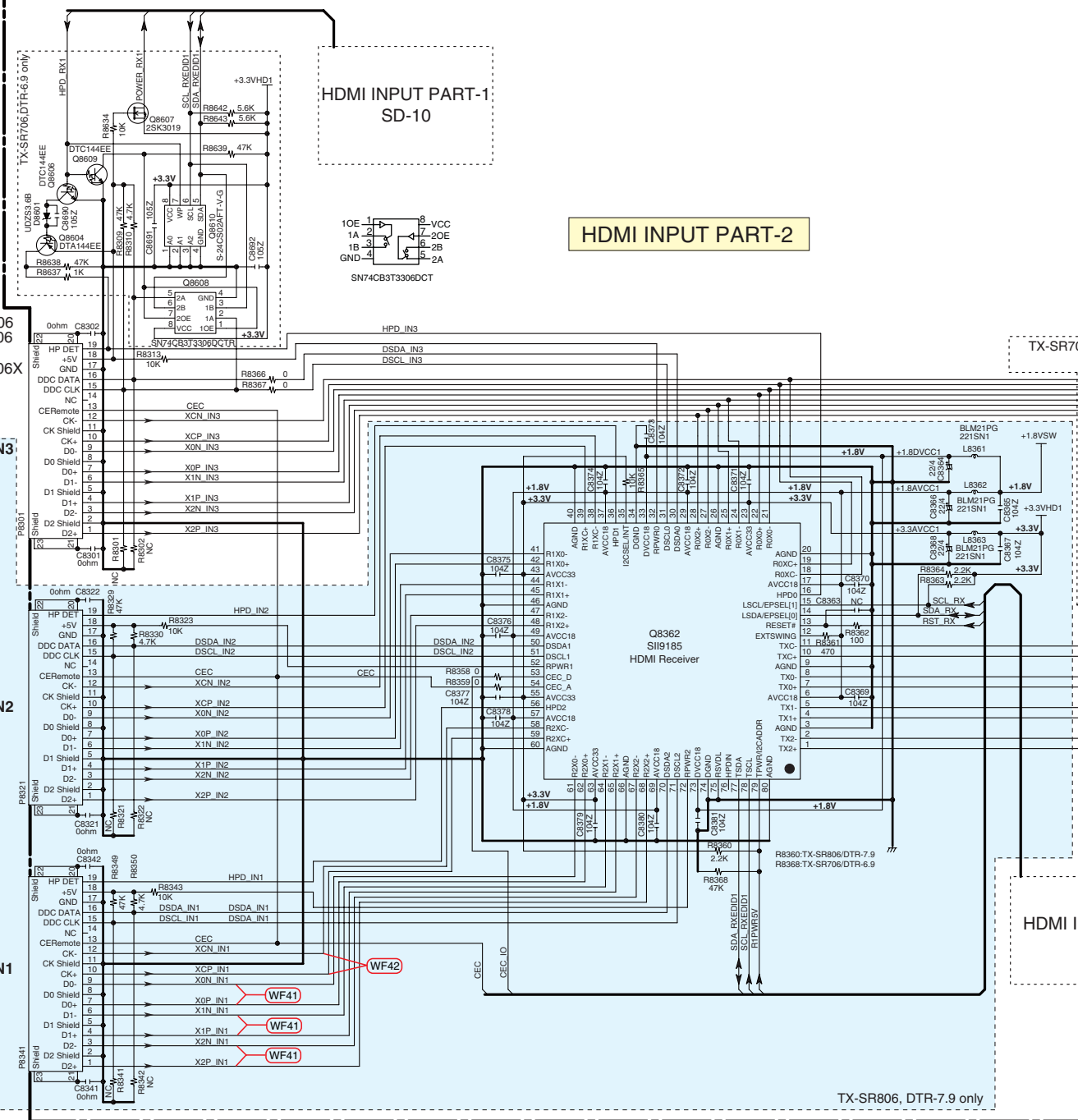
HDMI IN1 HDMI IN3

4

(NO USE) HDMI IN2

5

(NO USE) HDMI IN1



TX-SR806, DTR-7.9 only





A

B

C

D

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

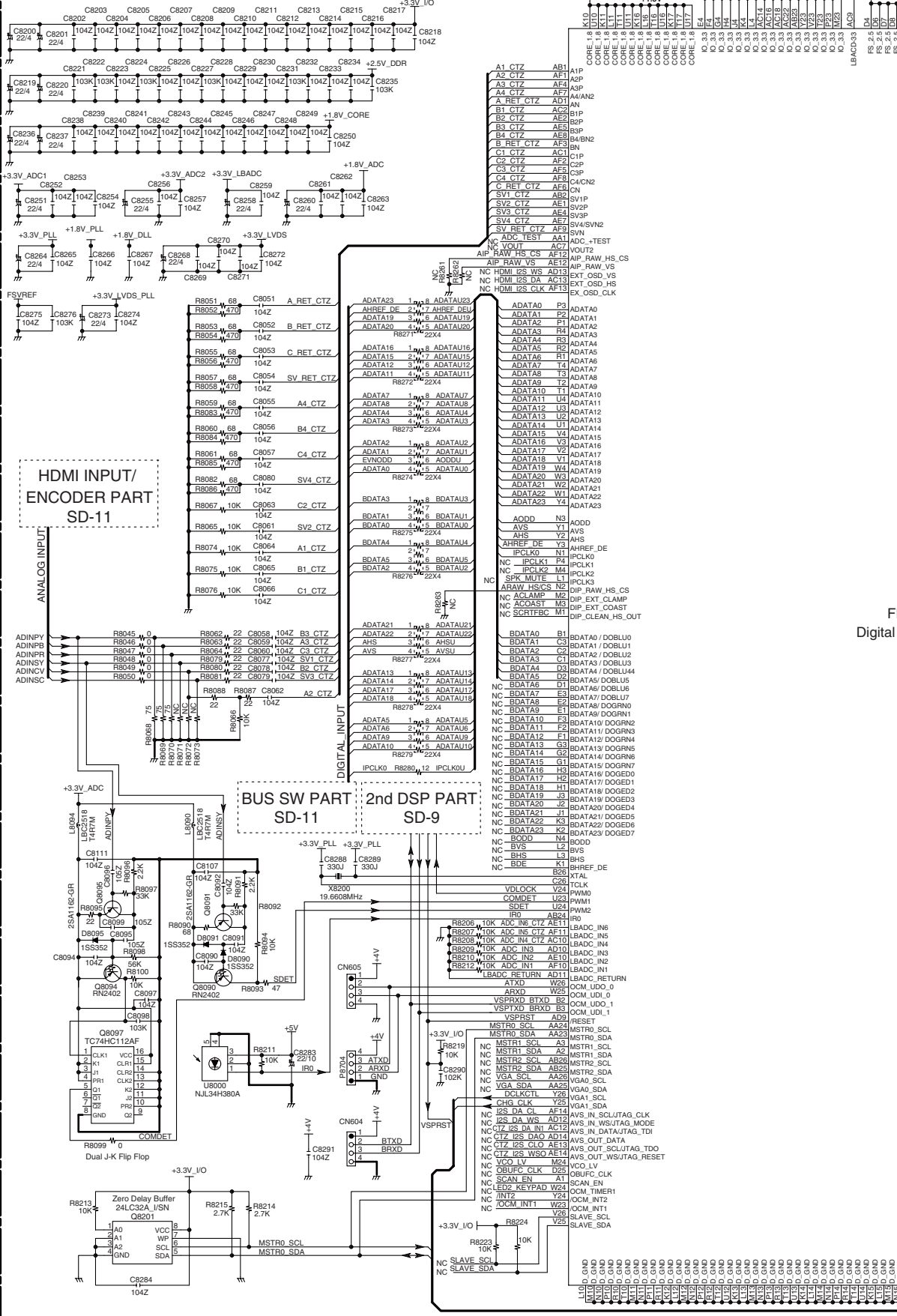
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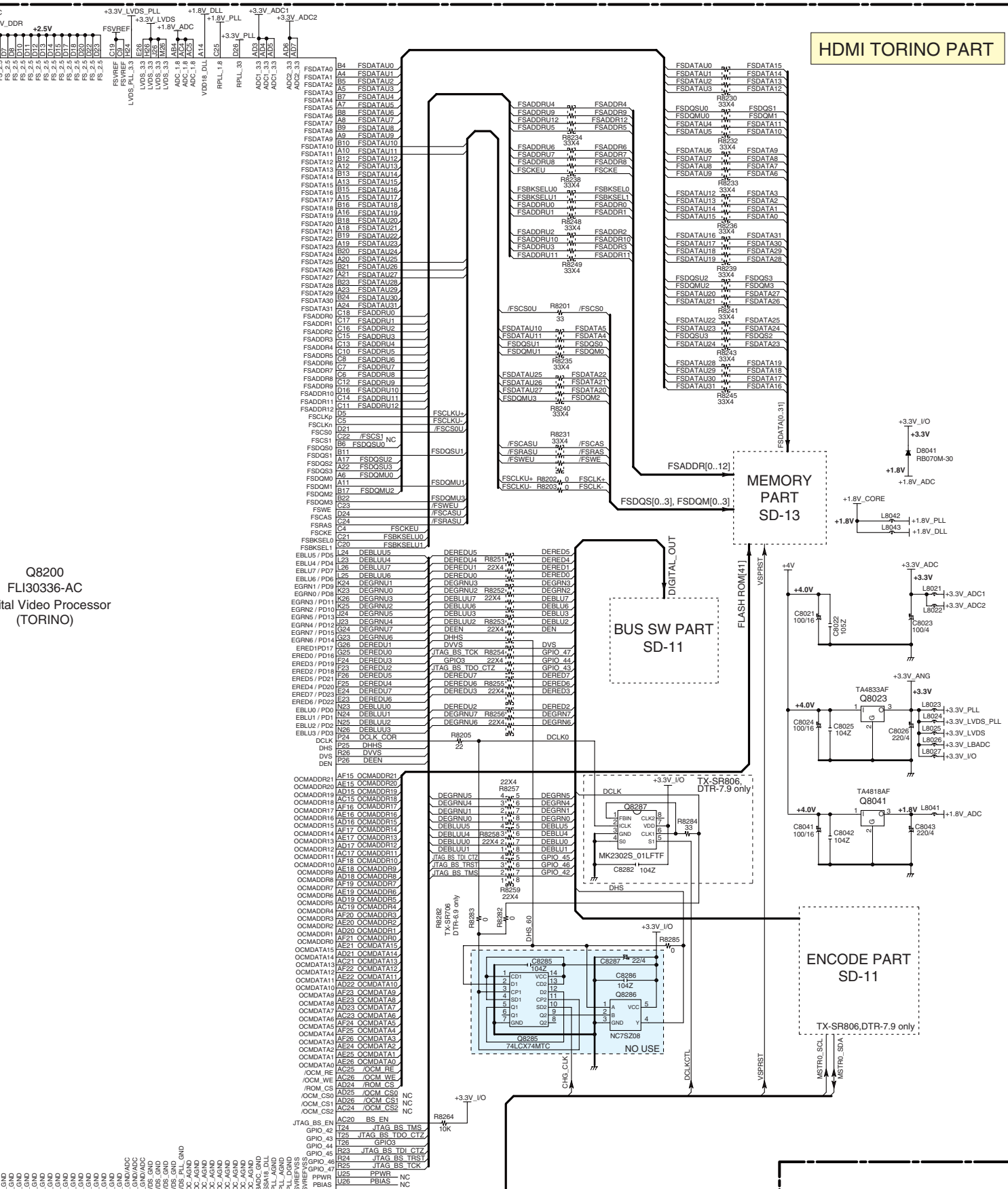
2

3

4

5





HDMI TORINO PART

MEMORY PART SD-13

BUS SW PART SD-11

ENCODE PART SD-11

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



A

B

C

D

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

1

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

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

MEMORY PART

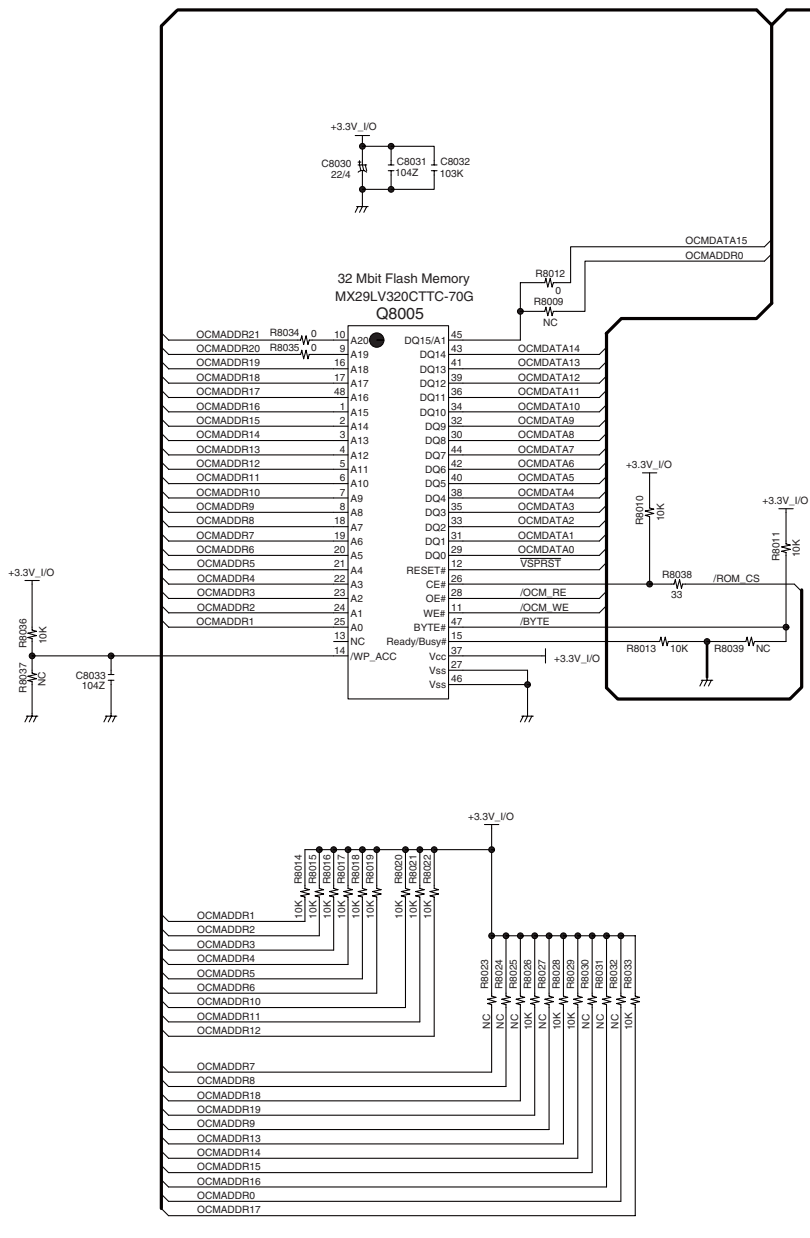
TORINO PART  
SD-12

2

3

4

5



**NOTE**

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

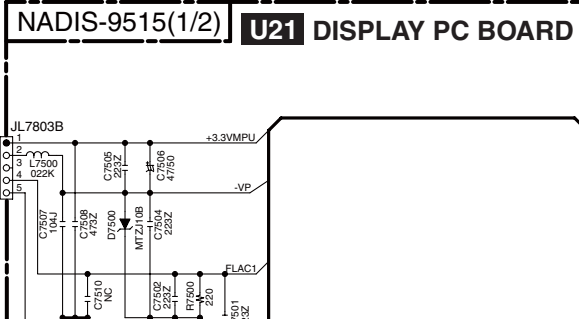
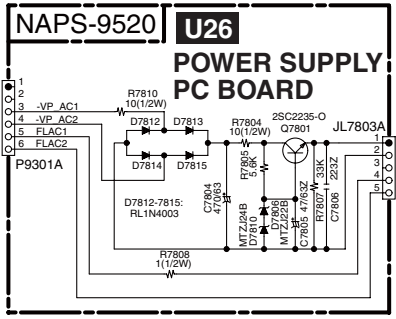
<Note>  
SD-x:XY is short for Shcematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.



A B C D

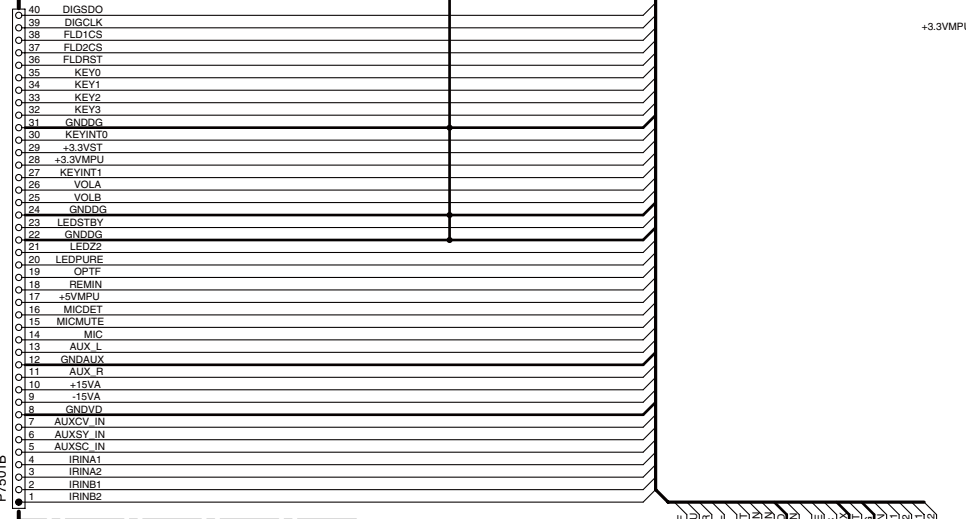
SCHEMATIC DIAGRAMS-14 (SD-14) DISPLAY SECTION

1

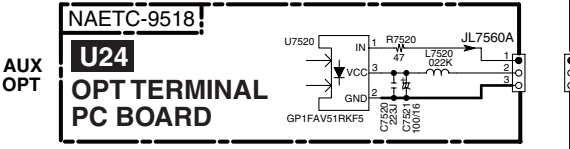


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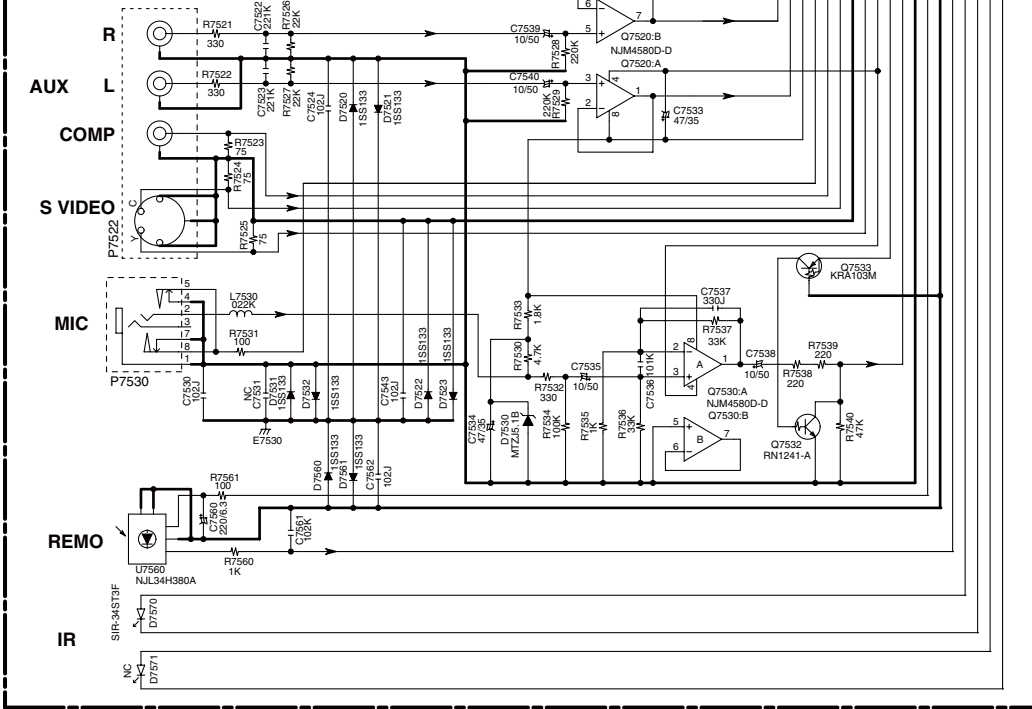
TO NADG-9504 (P1007A) SD-7-B1



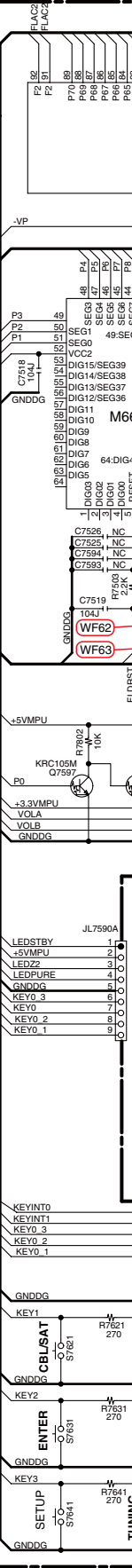
3



4



5





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

1

2

3

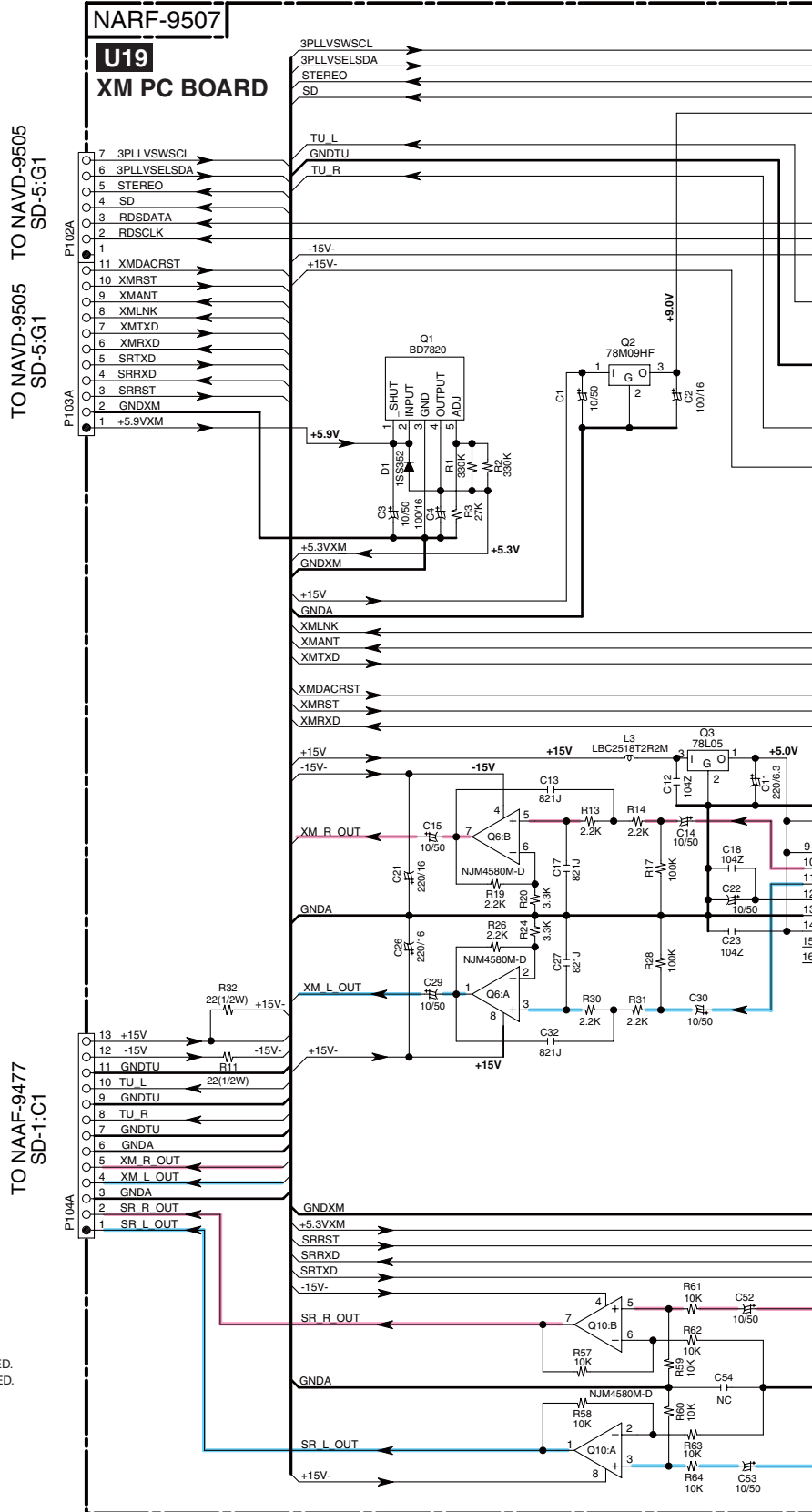
4

5

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

**NOTE**

- THE COMPONENTS IDENTIFIED BY MARK  $\triangle$  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 (  $\text{---}$  ) ARE IN uF/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)  $\square$  PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

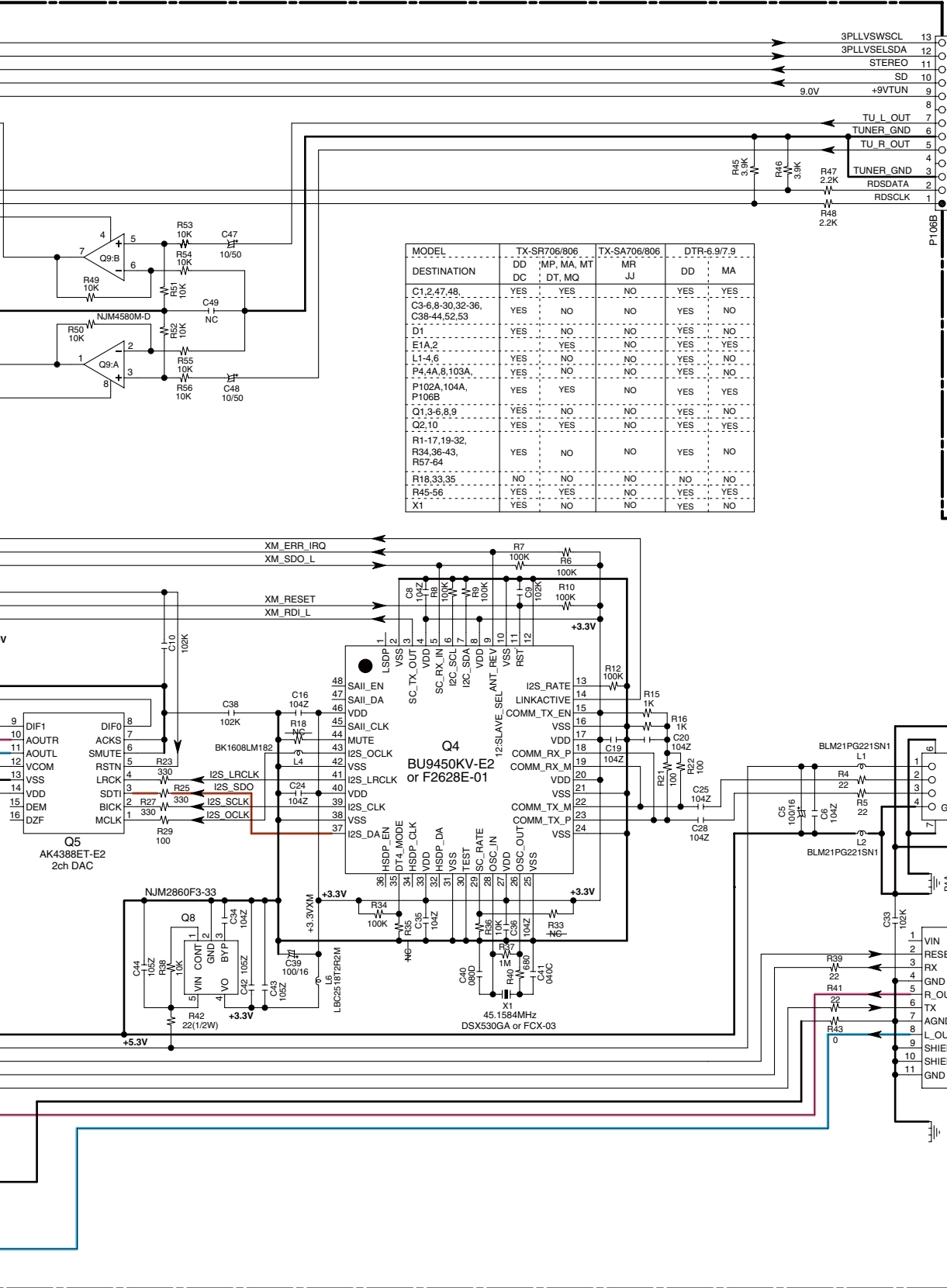


E

F

G

H



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

TO FM/AM  
TUNER UNIT

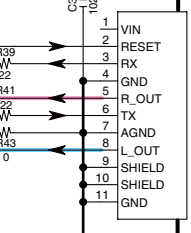
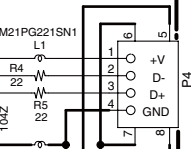
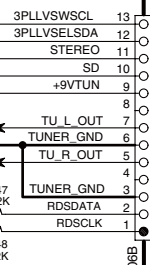
XM

SIRIUS

P106B

P4

P8



A

B

C

D

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

**Digital Audio Waveform Part**

1

**NOTE:**

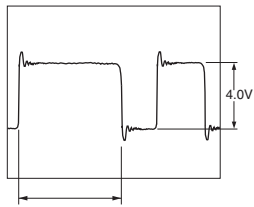
1. (WF01) is short for (Waveform01)
2. Refer to SD-7(SCHEMATIC DIAGRAM-9) for the location of each waveform on circuit.
3. SD-x:XY is short for Shcematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

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

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

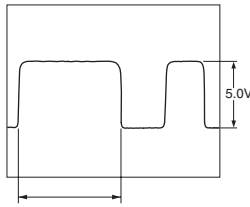
2

(WF01) OPT1 (SD-7:C5)



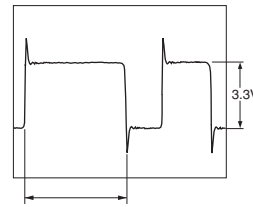
Duty varies according to audio data

(WF02) COAX1 (SD-7:C5)



Duty always varies according to audio data

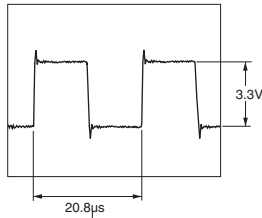
(WF03) SAI\_SDOUT (SD-7:D5)



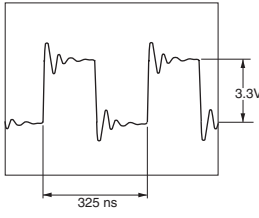
Duty varies according to audio data

3

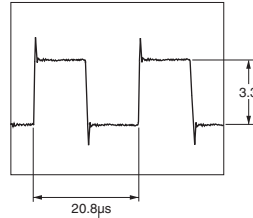
(WF04) SAI\_LRCK (SD-7:D5)



(WF05) SAI\_SLCK (SD-7:D5)

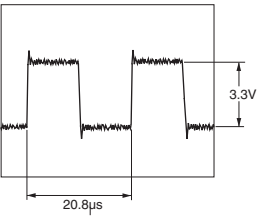


(WF06) PCMFLR3 (SD-7:E4)

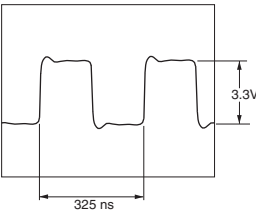


4

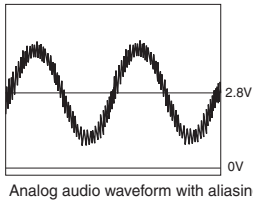
(WF07) CX\_LRCK (SD-7:E4)



(WF08) CX\_SCLK (SD-7:E4)



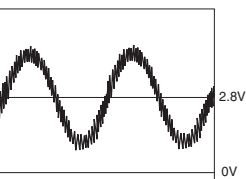
(WF09) FL+ (SD-7:F5)



Analog audio waveform with aliasing noise

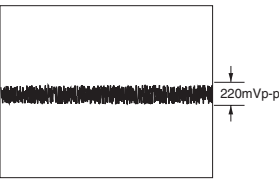
5

(WF10) DAC\_FL (SD-7:H2)



Analog audio waveform with aliasing noise

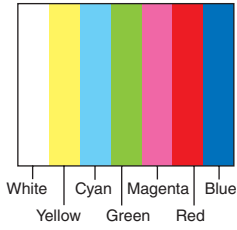
(WF10) DAC\_FL (SD-7:H2)



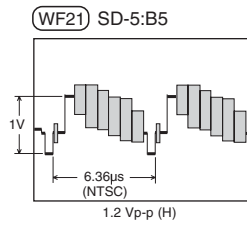
Aliasing noise in no audio data

Video Waveform Part

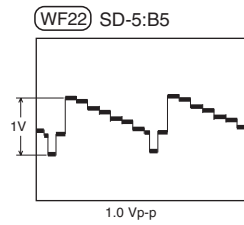
Video source color and pattern



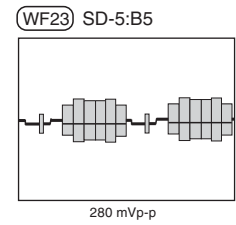
Composite waveform



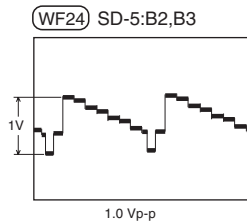
S-Video Y waveform



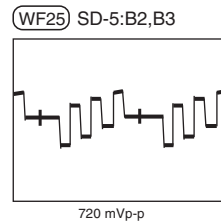
S-Video C waveform



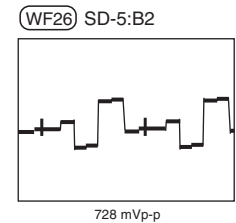
Component Y waveform



Component PB waveform



Component PR waveform



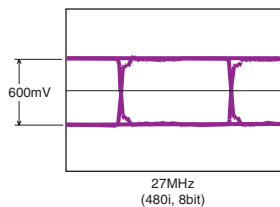
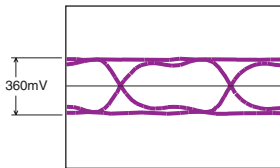
NOTE:

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

HDMI Waveform Part

HDMI D0,D1,D2 waveform

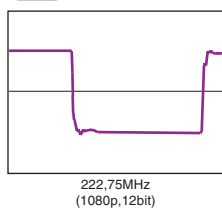
(WF41) SD-10:B3, H4 SD-11:B5



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

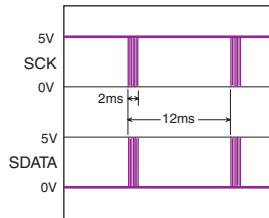


CK waveform, frequency and level differ according to video resolution, aspect and profile. D0,D1,D2 are just CK x10.

FL Driver IC Control Waveform Part

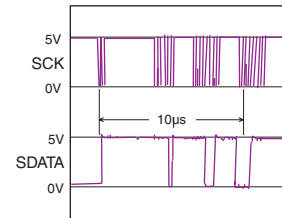
SCK/SDATA waveform

(WF61) SD-14:D3,F2



SCK/SDATA waveform

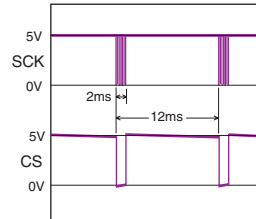
(WF61) SD-14:D3,F2



SDATA waveform varies according to the data content

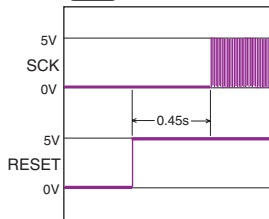
SCK/CS waveform

(WF62) SD-14:D3,F2



SCK/RESET waveform

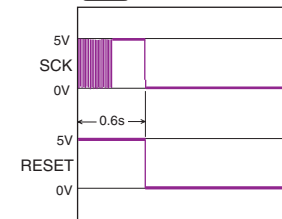
(WF63) SD-14:D3,F2



When power on

SCK/RESET waveform

(WF63) SD-14:D3,F2



When power off