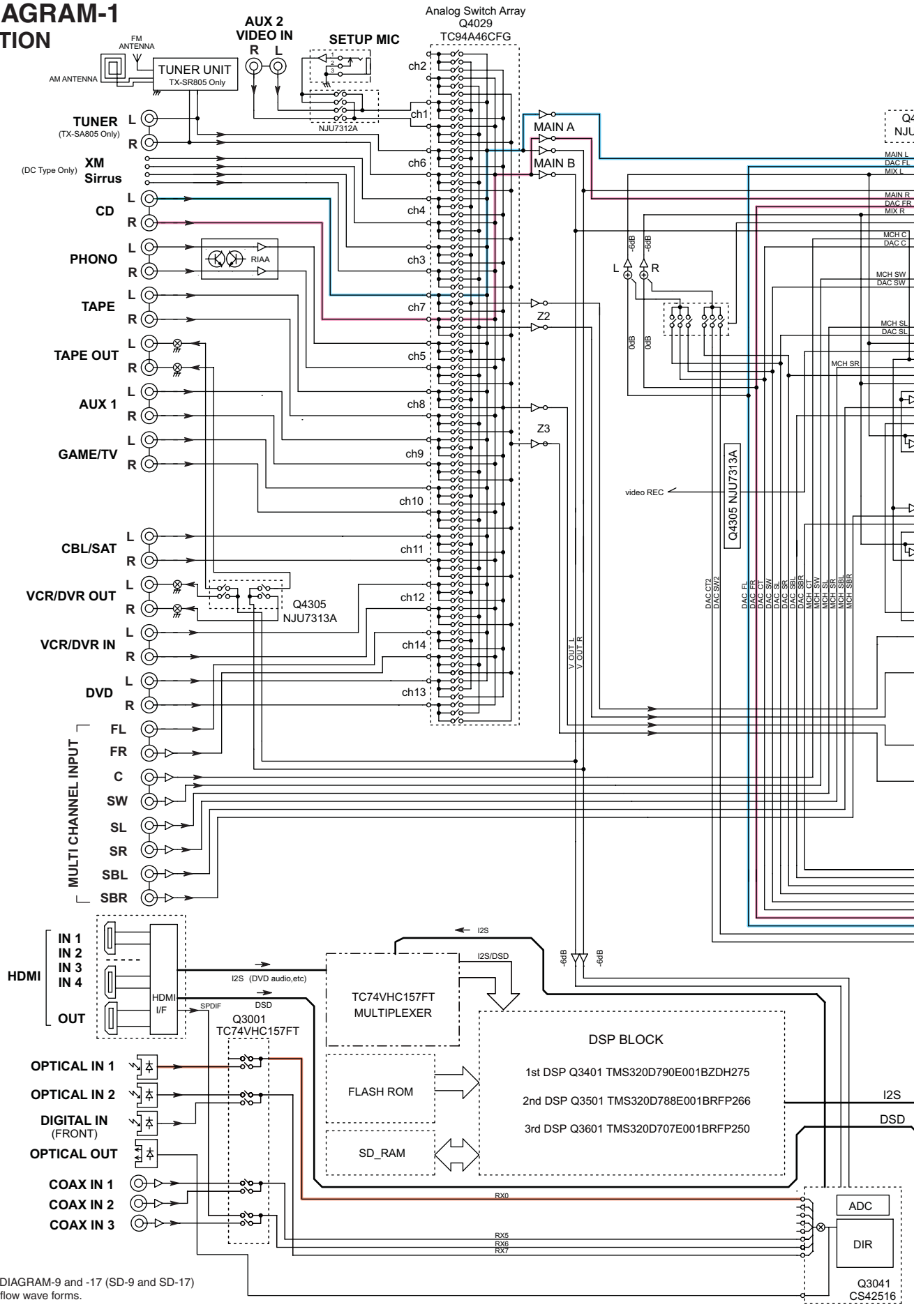
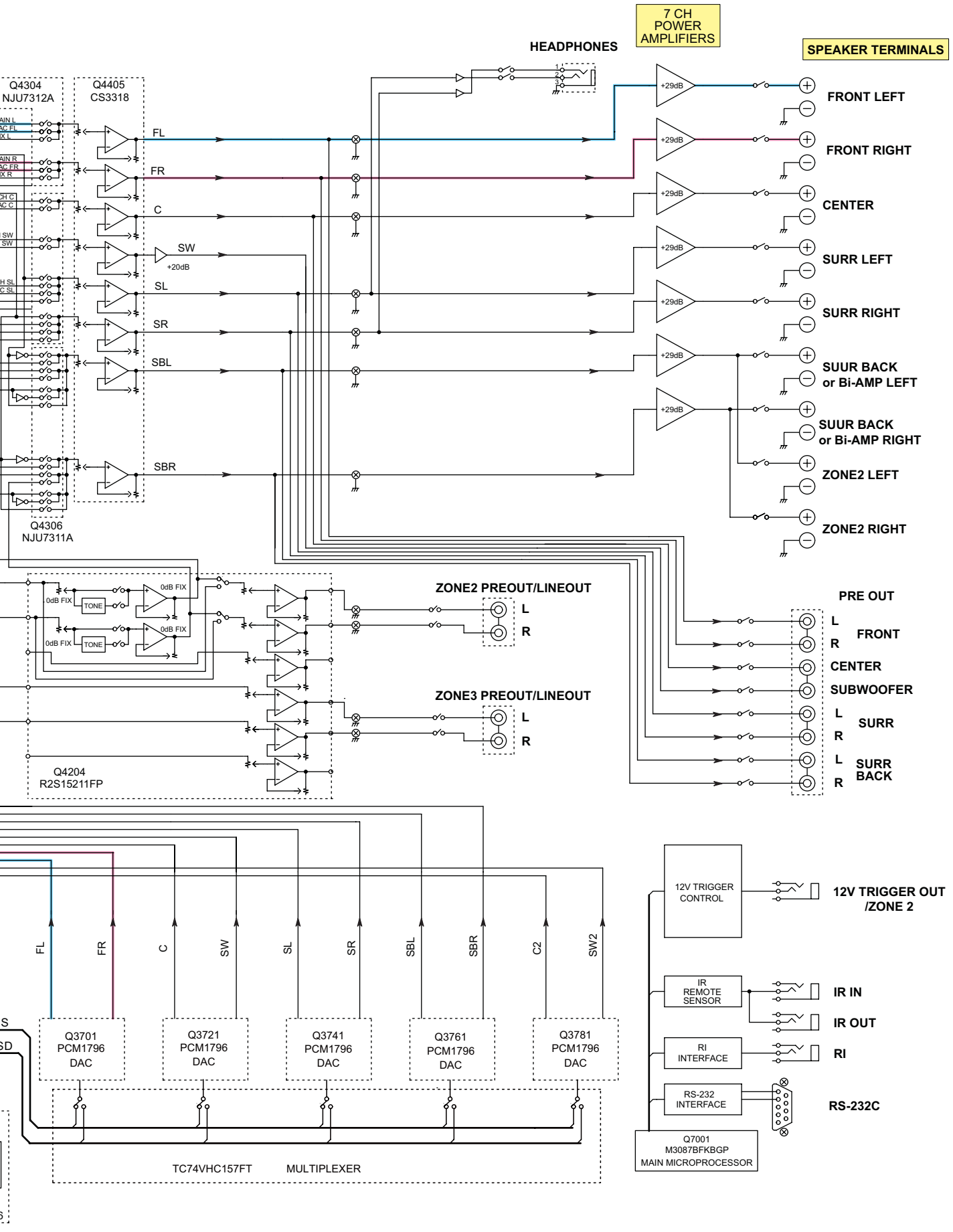
BLOCK DIAGRAM-1
AUDIO SECTION

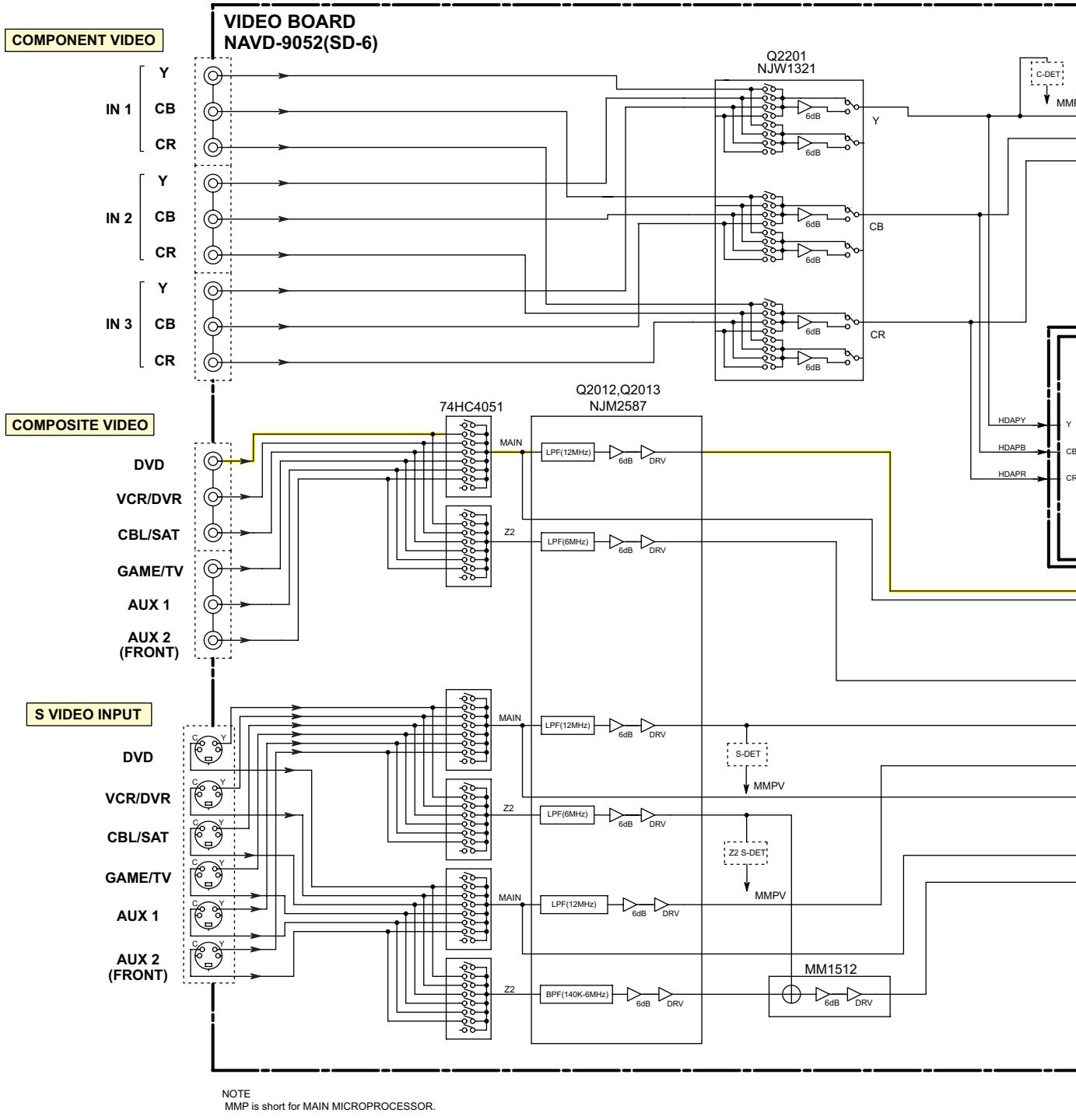


<Note>
Refer to SCHEMATIC DIAGRAM-9 and -17 (SD-9 and SD-17) for digital audio signal flow wave forms.

E F G H


7 CH POWER AMPLIFIERS
HEADPHONES
SPEAKER TERMINALS
Q4304 NJU7312A
Q4405 CS3318
Q4306 NJU7311A
FL
FR
C
SW
+20dB
SL
SR
SBL
SBR
+29dB
FRONT LEFT
FRONT RIGHT
CENTER
SURR LEFT
SURR RIGHT
SUUR BACK or Bi-AMP LEFT
SUUR BACK or Bi-AMP RIGHT
ZONE2 LEFT
ZONE2 RIGHT
ZONE2 PREOUT/LINEOUT
ZONE3 PREOUT/LINEOUT
L
R
0dB FIX
TONE
Q4204 R2S15211FP
PRE OUT
FRONT
CENTER
SUBWOOFER
SURR
SURR BACK
Q3701 PCM1796 DAC
Q3721 PCM1796 DAC
Q3741 PCM1796 DAC
Q3761 PCM1796 DAC
Q3781 PCM1796 DAC
C2
SW2
TC74VHC157FT MULTIPLEXER
12V TRIGGER CONTROL
12V TRIGGER OUT /ZONE 2
IR REMOTE SENSOR
IR IN
IR OUT
RI INTERFACE
RI
RS-232 INTERFACE
RS-232C
Q7001 M3087BFKBGP MAIN MICROPROCESSOR

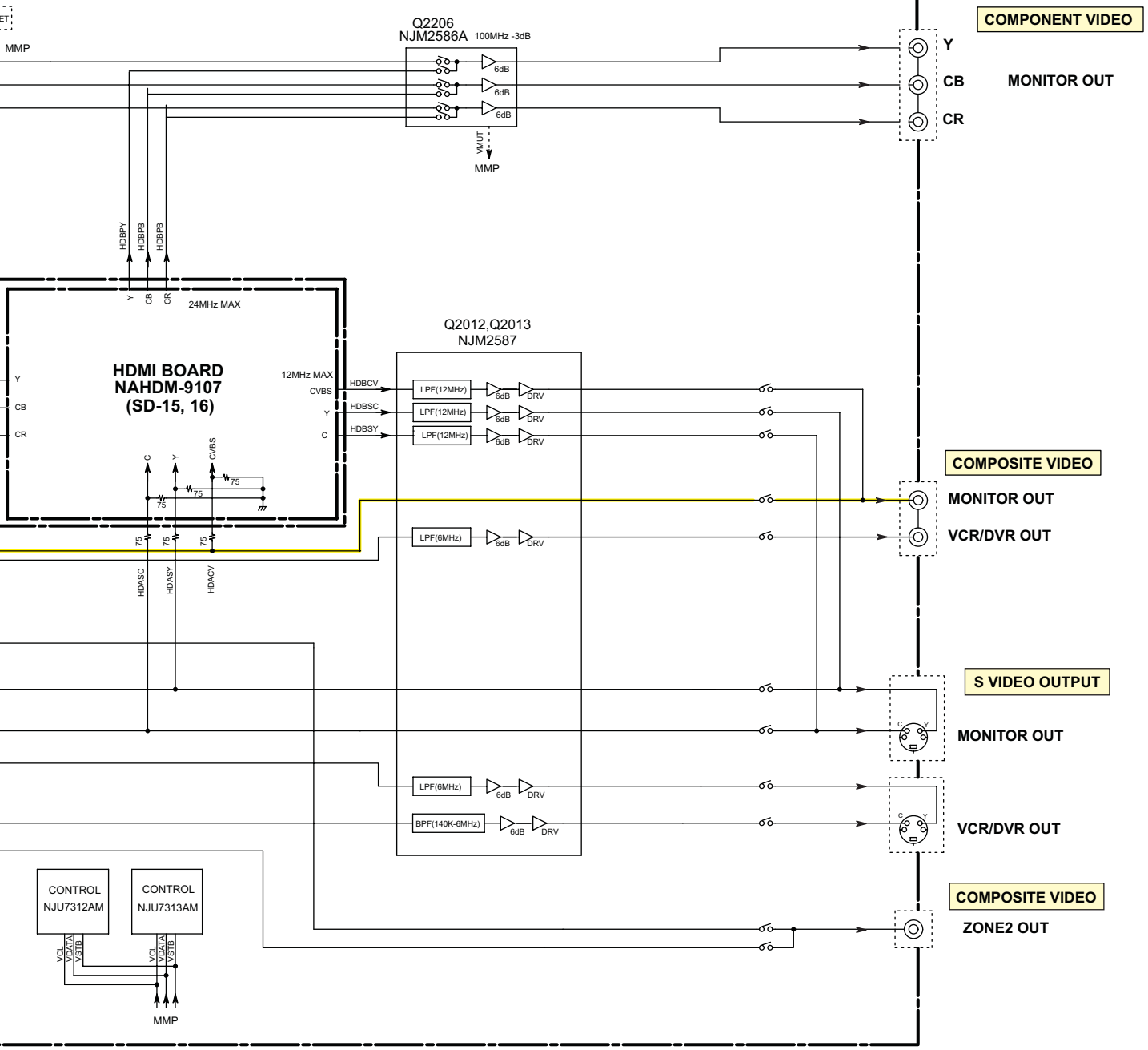
BLOCK DIAGRAM-2
VIDEO SECTION



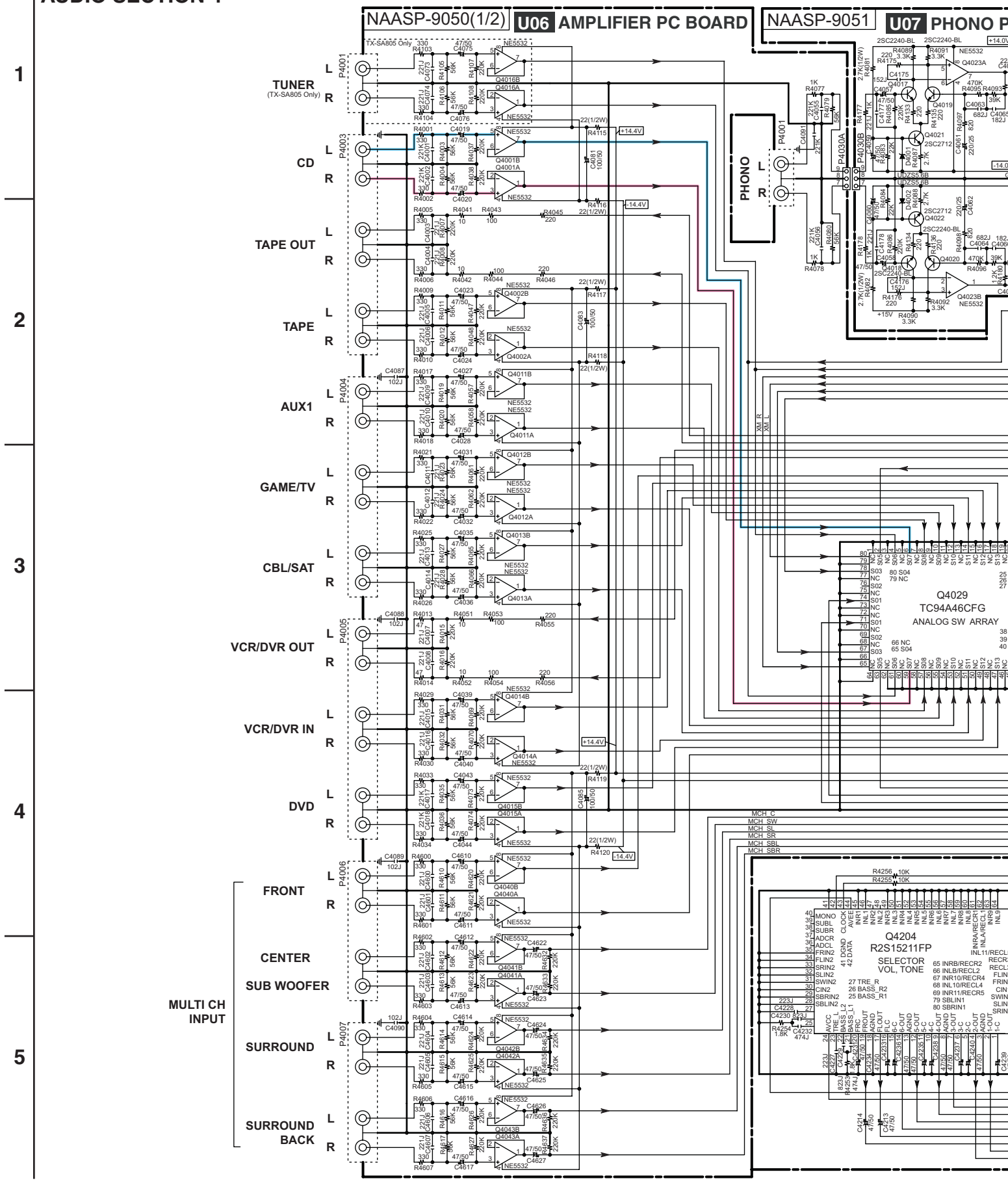
NOTE
MMP is short for MAIN MICROPROCESSOR.

<Note>
Refer to SCHEMATIC DIAGRAM-6, -15 and -17 (SD-6, SD-15 and SD-17)
for video and HDMI signal waveforms.

E F G H

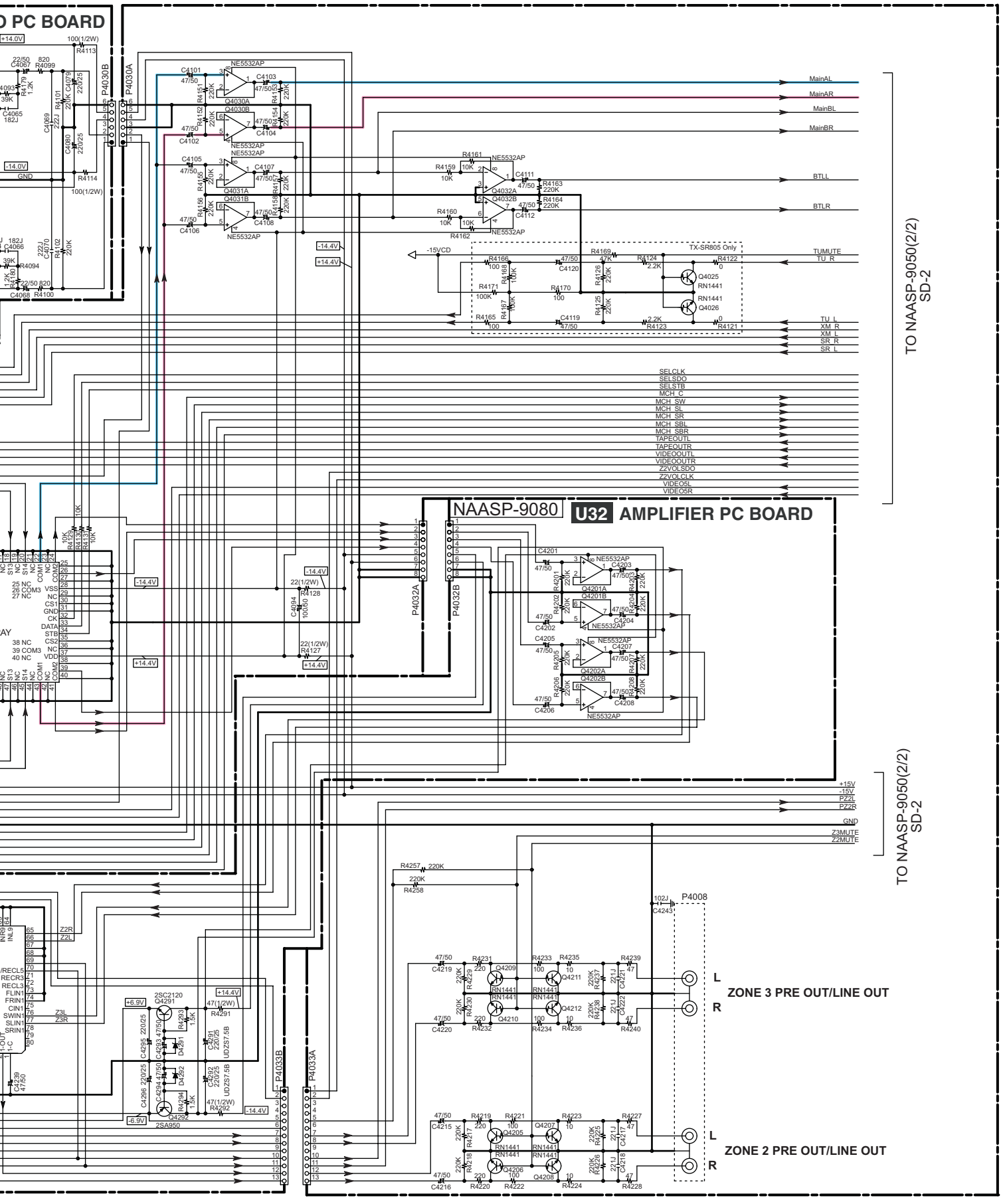

MMP
Q2206
NJM2586A
100MHz -3dB
6dB
6dB
6dB
VMUT
MMP
COMPONENT VIDEO
Y
CB
CR
MONITOR OUT
HDBPY
HDBPB
HDBPB
Y
CB
CR
24MHz MAX
HDMI BOARD
NAHDM-9107
(SD-15, 16)
Y
CB
CR
12MHz MAX
CVBS
Y
C
HDBCV
HDBSC
HDBSY
Q2012,Q2013
NJM2587
LPF(12MHz)
LPF(12MHz)
LPF(12MHz)
6dB
DRV
C
Y
CVBS
75
COMPOSITE VIDEO
MONITOR OUT
VCR/DVR OUT
LPF(6MHz)
HDASC
HDASY
HDACV
S VIDEO OUTPUT
MONITOR OUT
LPF(6MHz)
BPF(140K-6MHz)
VCR/DVR OUT
CONTROL
NJU7312AM
CONTROL
NJU7313AM
VCL
VDATA
VSTB
COMPOSITE VIDEO
ZONE2 OUT
MMP

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



E F G H

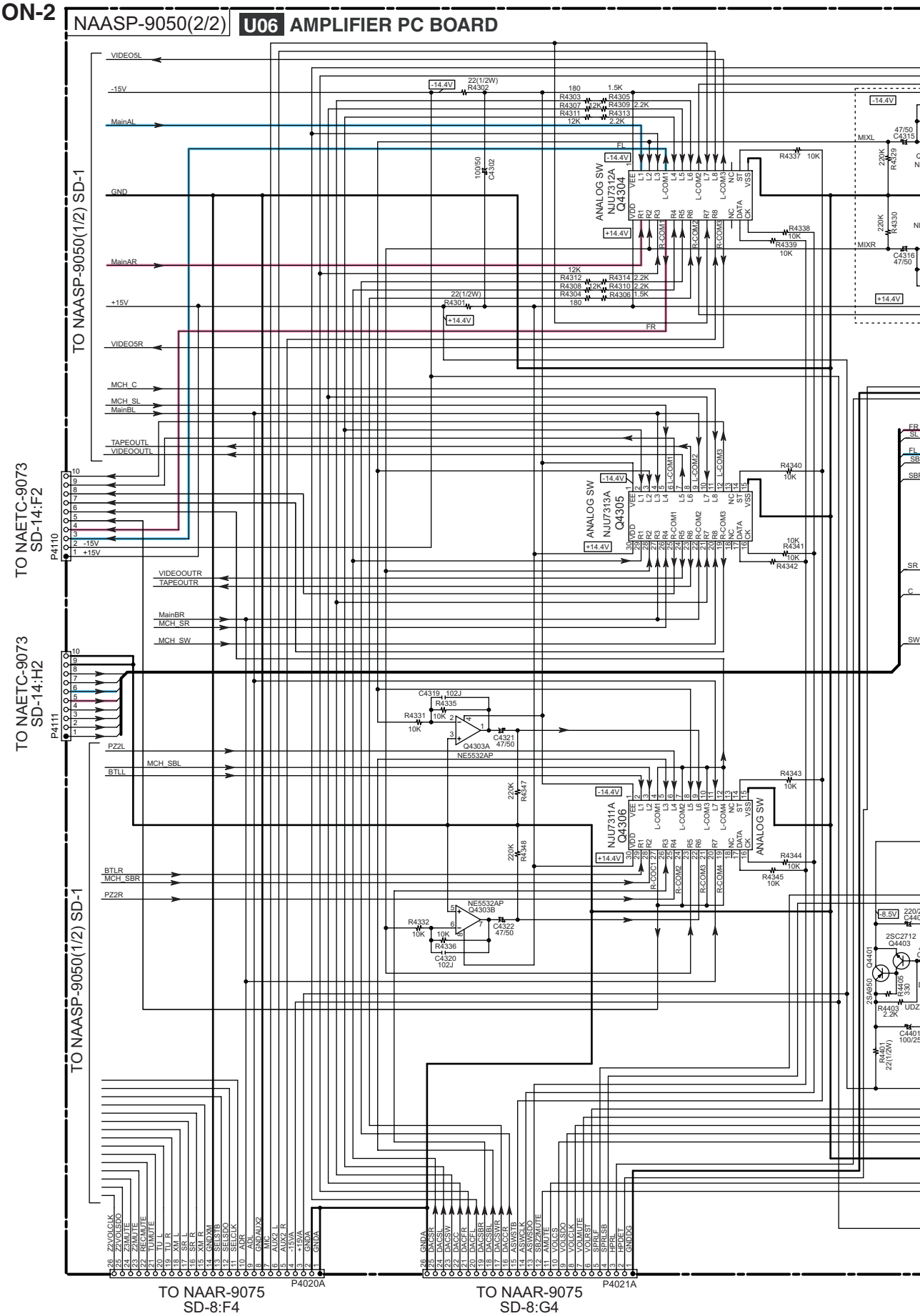
<Note>
SD-x:XY is short for Shcematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.



SCHEMATIC DIAGRAM-2 (SD-2)

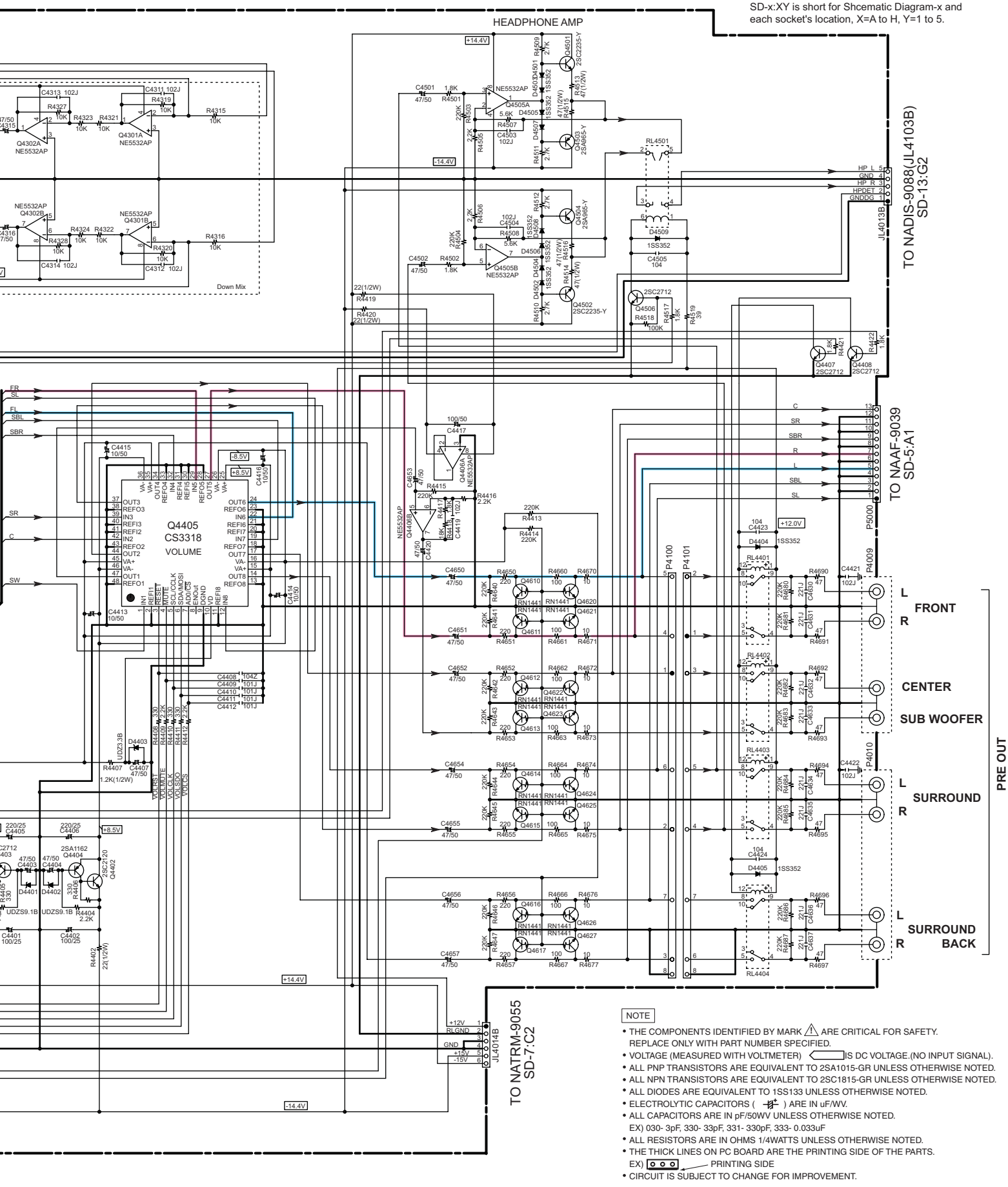
AUDIO SECTION-2

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



E F G H

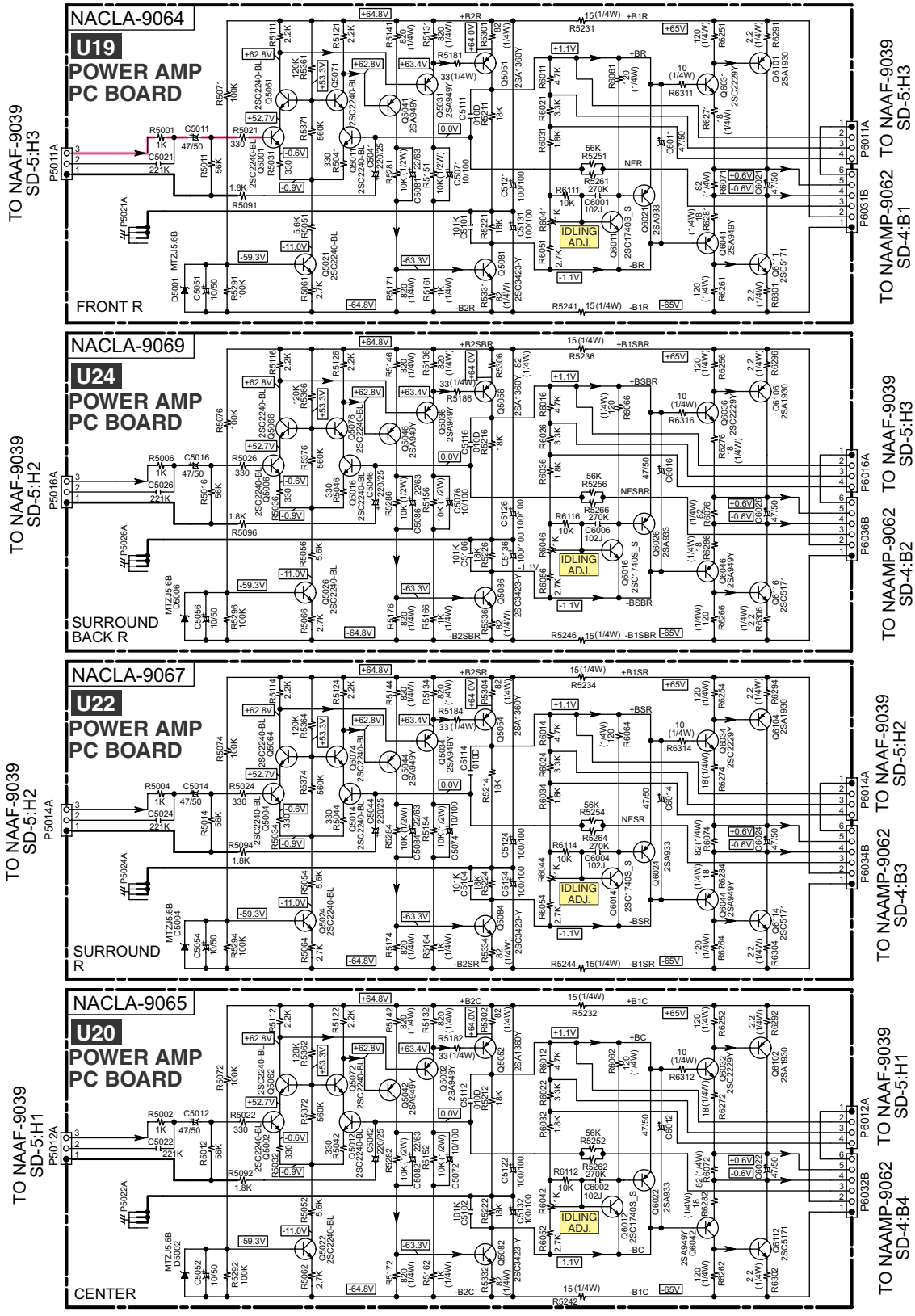
<Note>
SD-x:XY is short for Shcematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.



NOTE

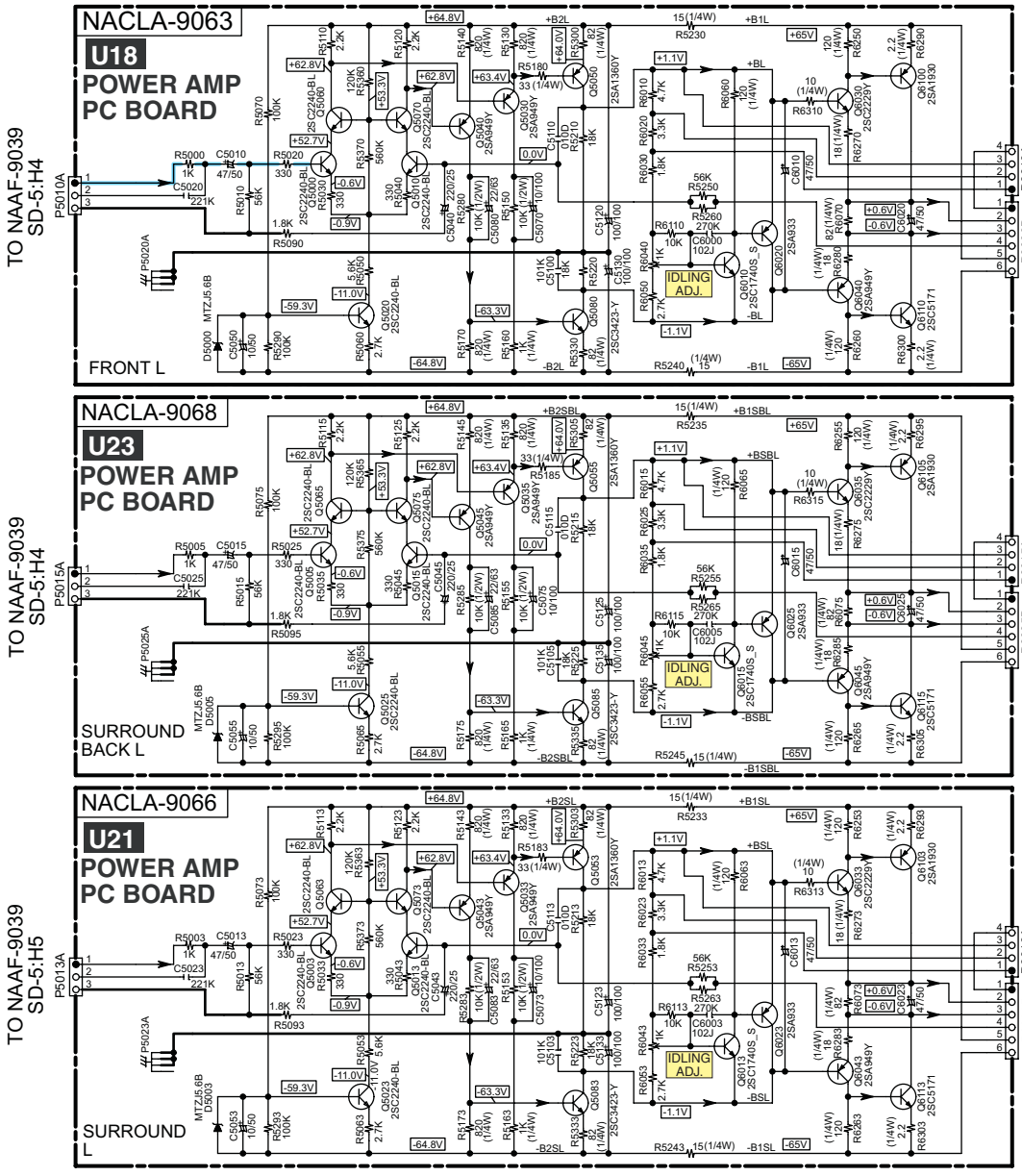
- THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER) ⟨ IS DC VOLTAGE.(NO INPUT SIGNAL).
- ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR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

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



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

E F G H



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

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

NOTE

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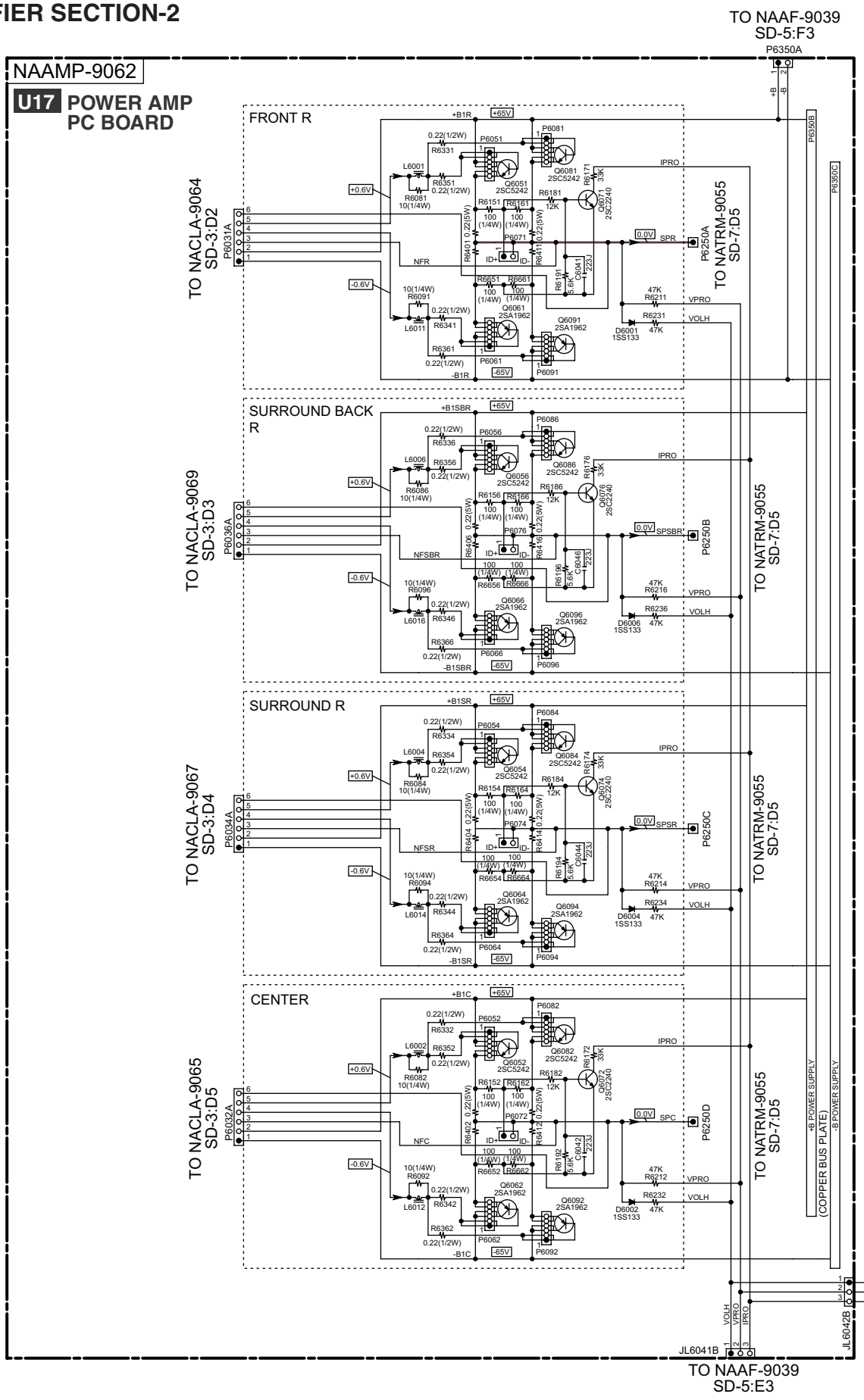
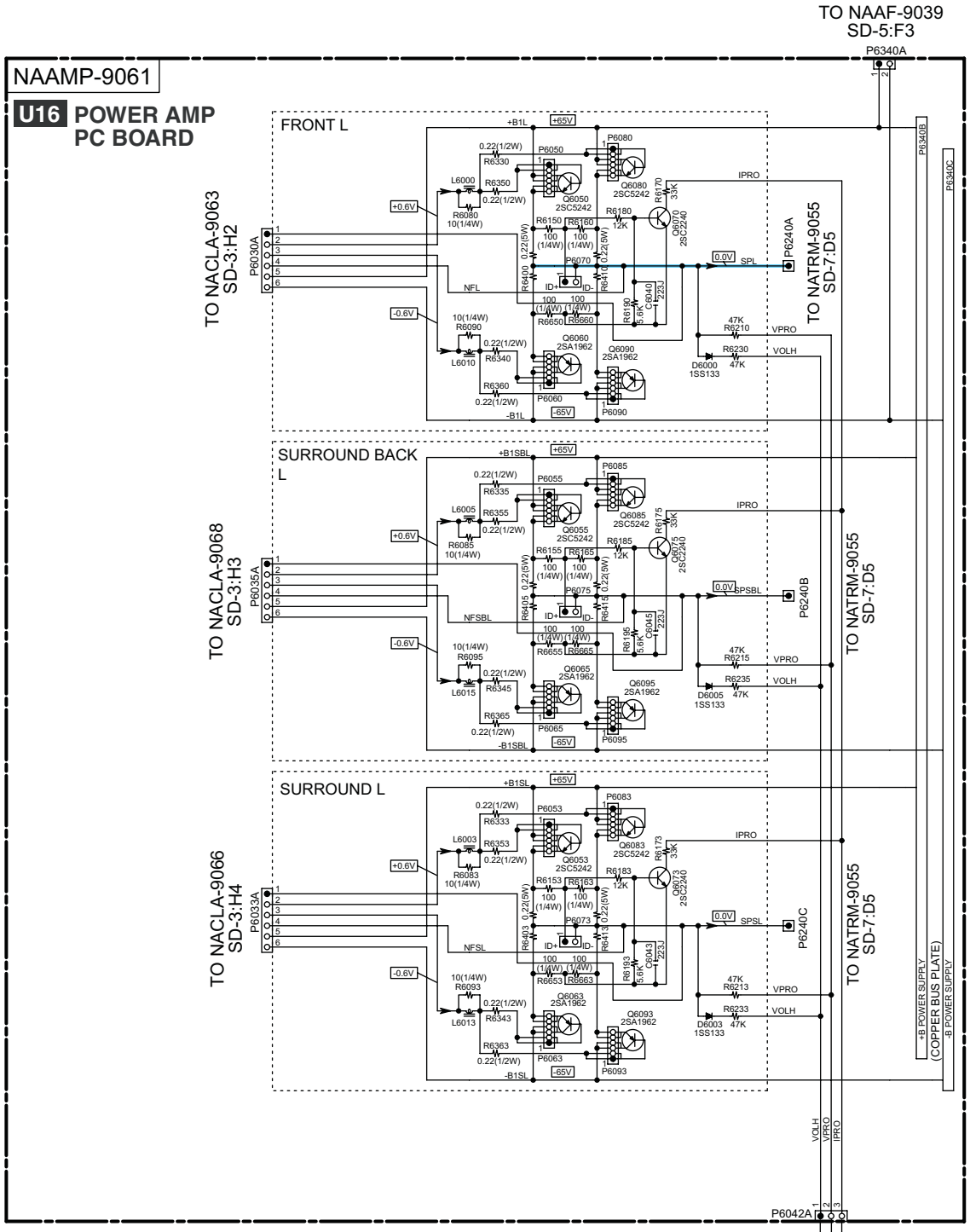
- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS (⊣⊢) ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED. EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033uF
- ALL RESISTORS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

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



E F G H



NOTE

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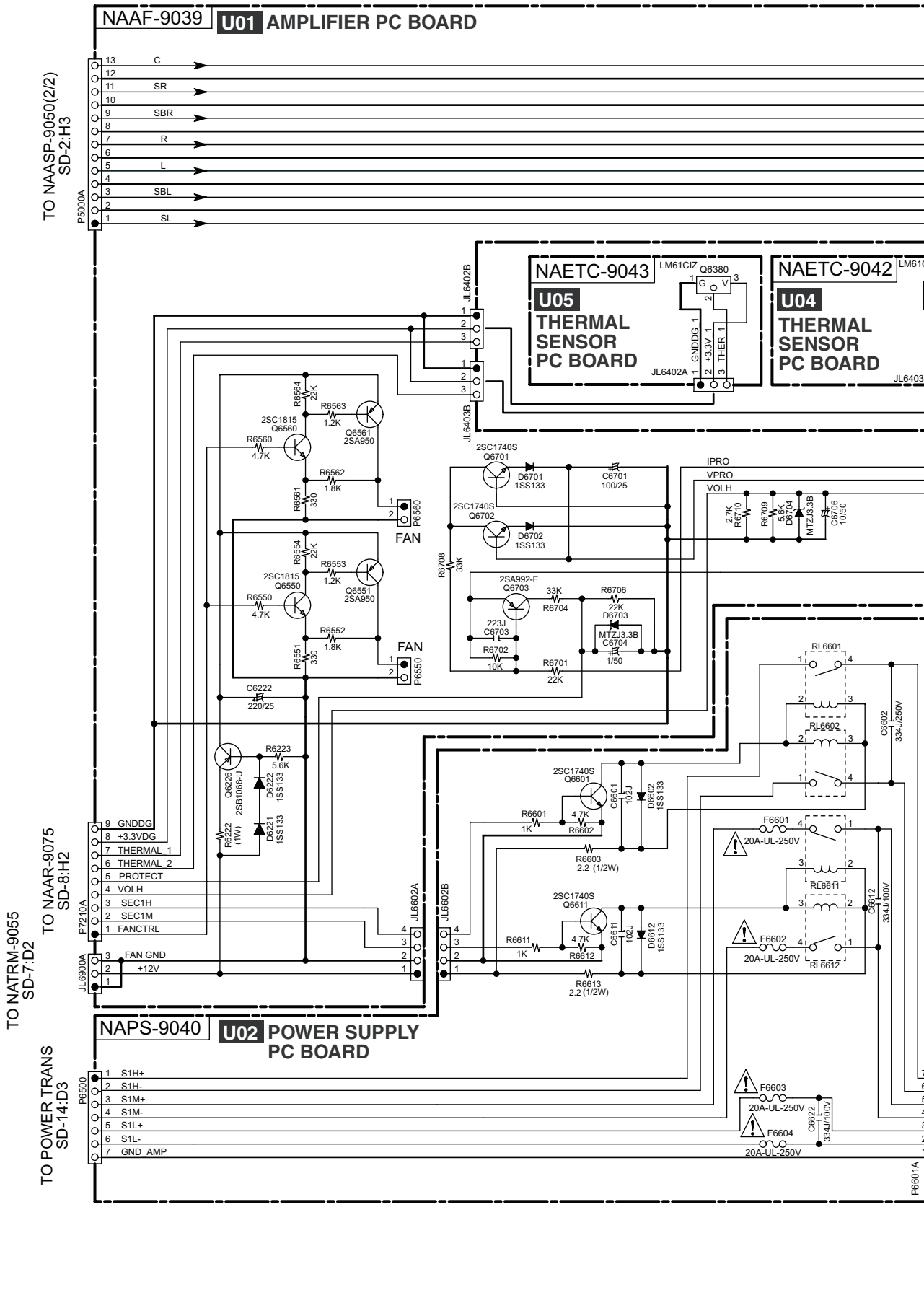
- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS (⊣⊢) ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED. EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033uF
- ALL RESISTORS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

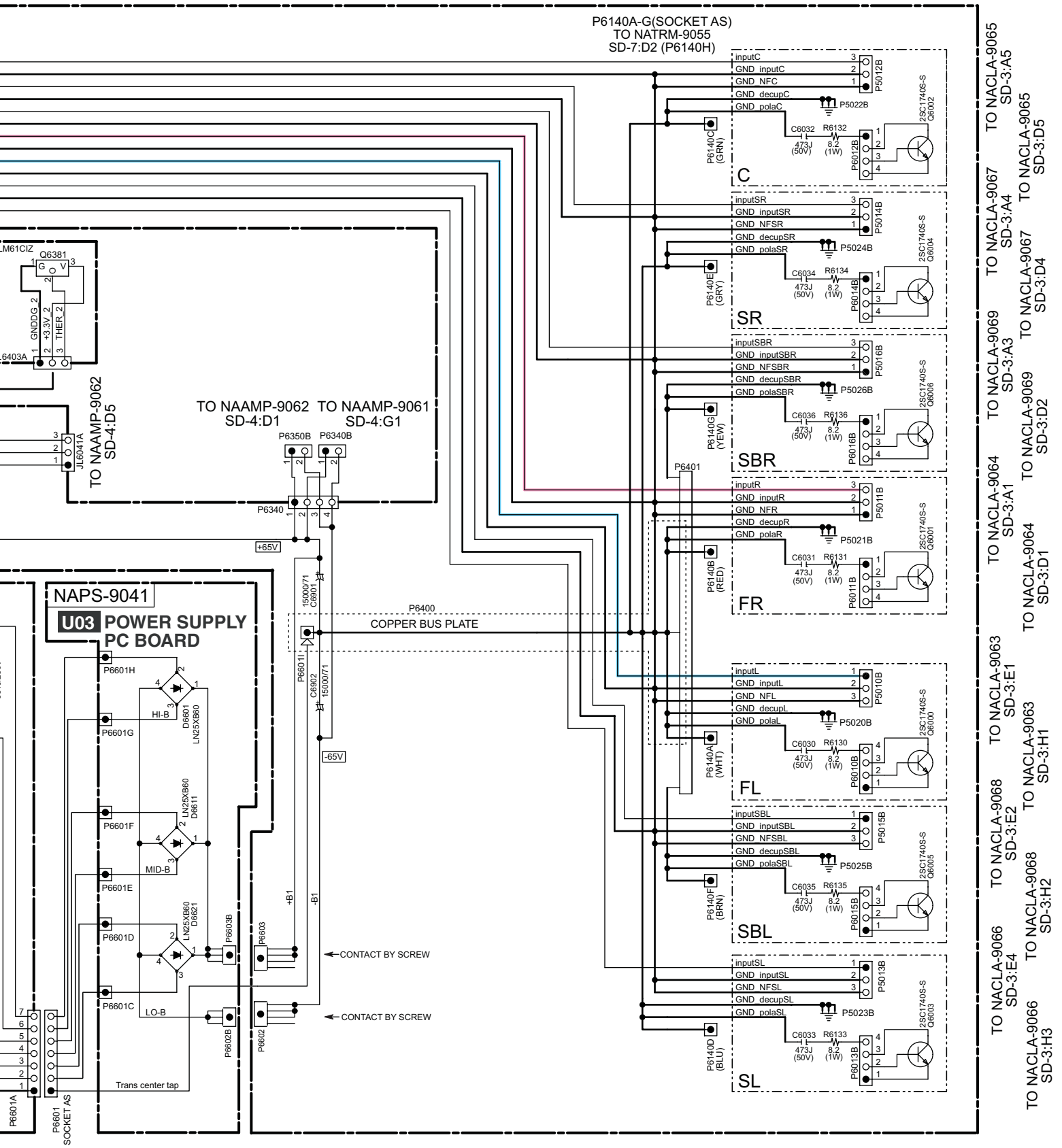
<Note>
SD-x:XY is short for Shcematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

SCHEMATIC DIAGRAM-5 (SD-5)
POWER SUPPLY SECTION-1



E F G H

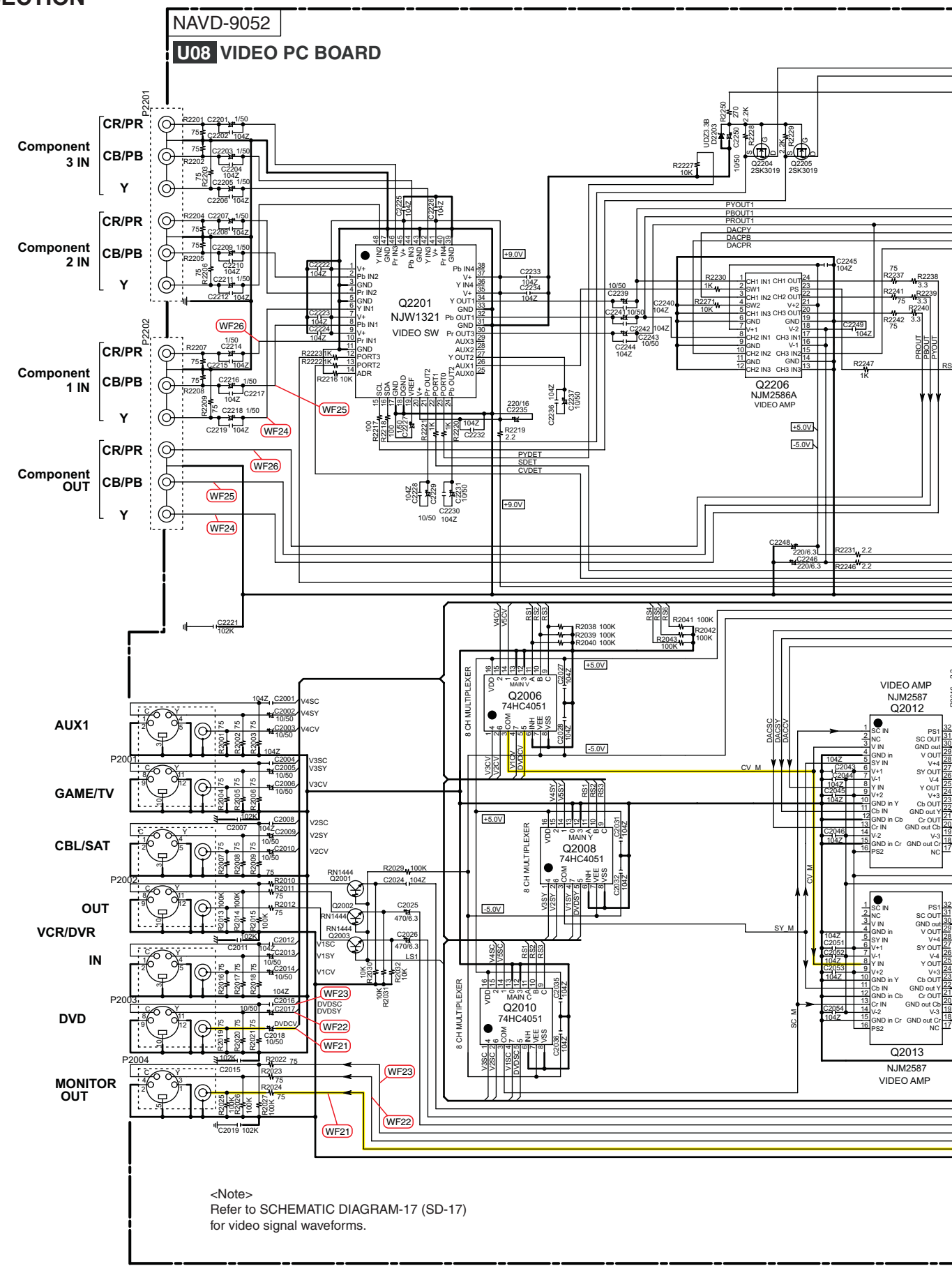
<Note>
SD-x:XY is short for Shcematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.



SCHEMATIC DIAGRAM-6 (SD-6)
VIDEO SECTION

NAVD-9052

U08 VIDEO PC BOARD



<Note>
Refer to SCHEMATIC DIAGRAM-17 (SD-17)
for video signal waveforms.
</Note>

E F G H

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

TO NAAR-9075
SD-8:G3

P2010A

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

P2801A

TO NAASP-9057
SD-14:D2

JL901B

P2601

12V TRIGGER OUT
/ZONE 2

P2604

IR IN

IR OUT

TO NATRM-9055
SD-7:C2

JL2601B

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

JL8001A

TO POWER TRANS
SD-14:D4

P2502

Q2027
NJU7312AM
ANALOG SW

Q2024
2SA1162-GR

RN2402
Q2023

RN1402
Q2606

2SB1240
Q2605

Q2501
SI8008TM

Q2505
NJM2386ADL3-05

Q2504
NJM2388F09

Q2503
Q2502
2SC2712-GR

Q2506
RN2402

Q2507
2SD1468S_R

Q2511
2SC2712-GR

Q2512
2SC1162-GR

Q2015
RN1444
Q2016

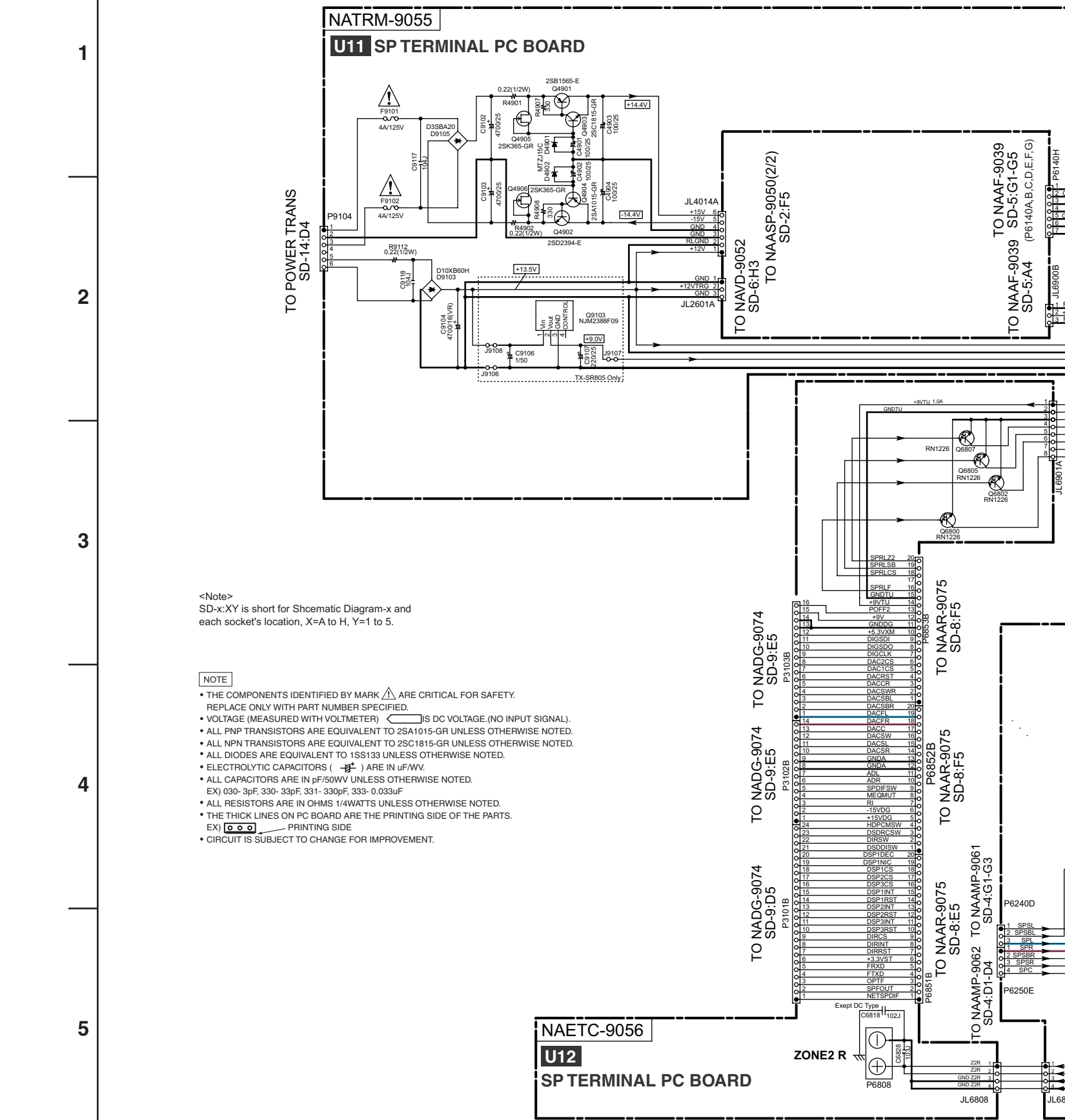
Q2017
RN1444
Q2018

RN1444
Q2019
RN1444
Q2020

LS1 LS2 LS3 LS4 LS5 LS6 LS7 LS8

VSELSCL
VSELSDA
ADINCV
ADINSY
ADINSC
ADINPY
ADINPB
ADINPR
DACPY
DACPB
DACPR
DACSY
DACSC
DACCV
CVOUT
SYOUT
SCOUT
CVDET
SDET
Z2SDET
DACSCOUT
DACSYOUT
DACCVOUT
+SUB
GNDSUB
POFF
+12V
APOWER2
APOWER1
MPOWER
GNDTRG
+12VTRG
+12VVD
GNDP
+5.6V
+9.3V
-9.3V
+5.0V
-5.0V

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



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

NOTE

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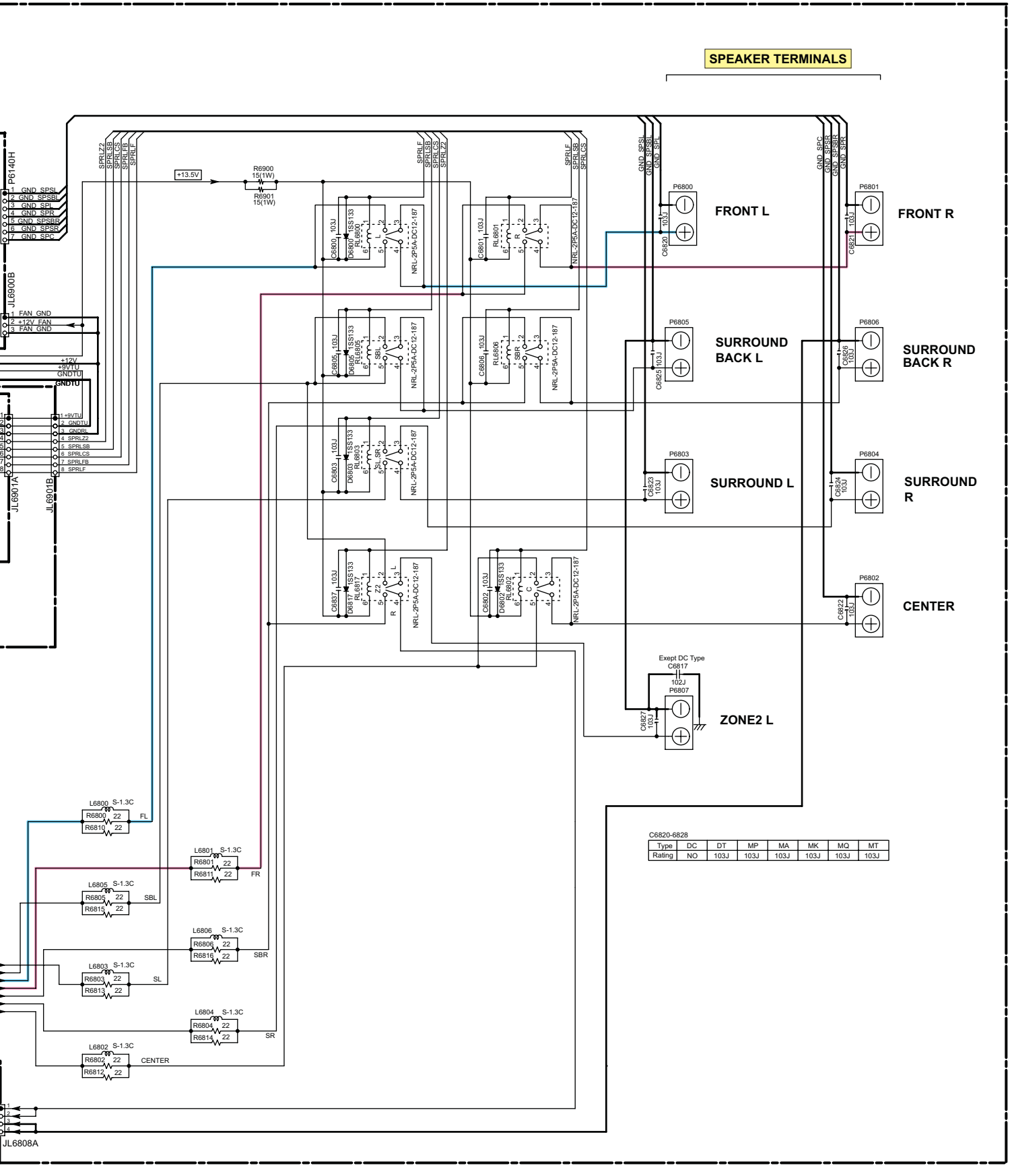
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS ( ) ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED. EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD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

E F G H

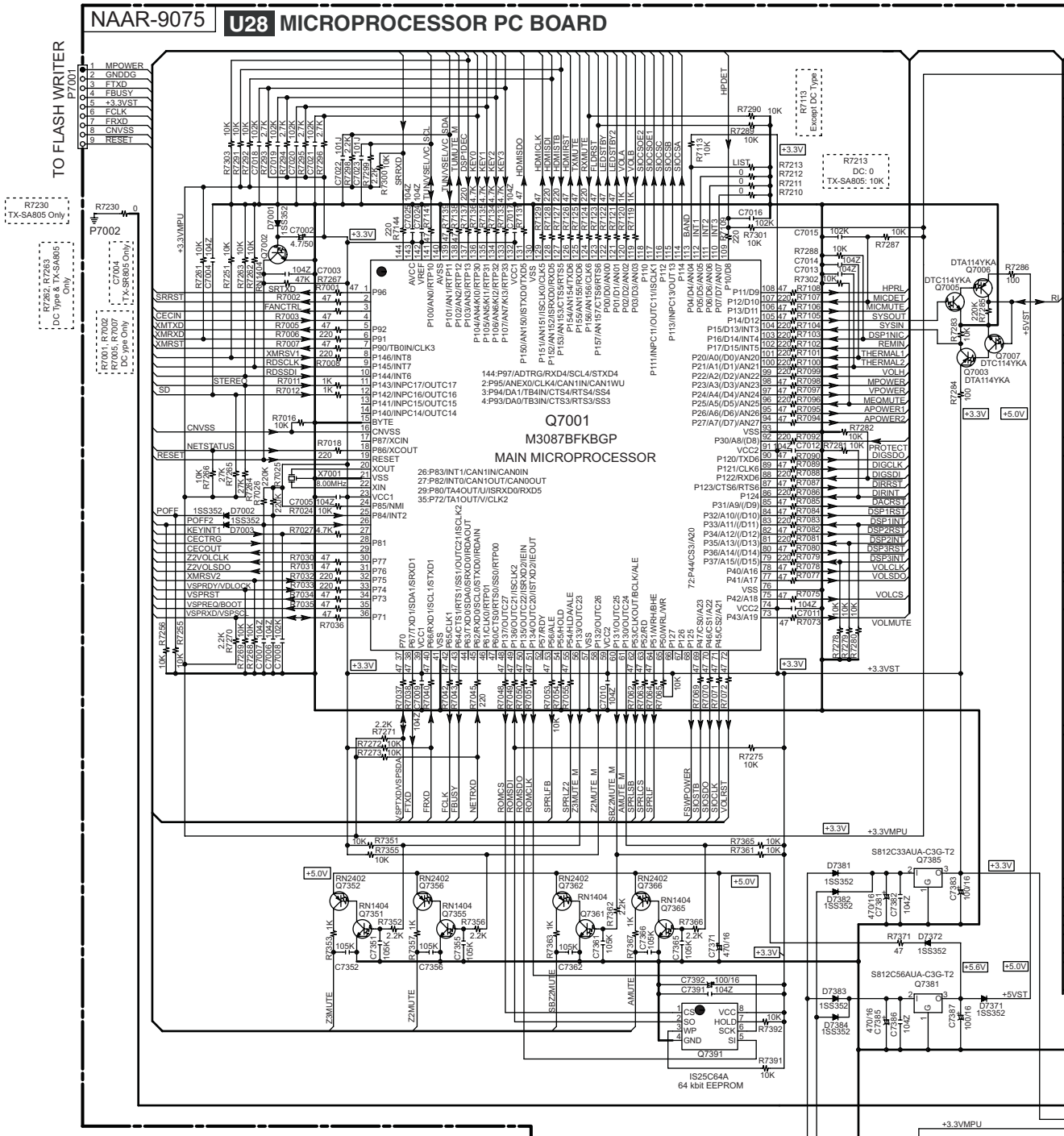


C6820-6828

Type	DC	DT	MP	MA	MK	MQ	MT
Rating	NO	103J	103J	103J	103J	103J	103J

SCHEMATIC DIAGRAM-8 (SD-8)
MICROPROCESSOR SECTION

NAAR-9075 **U28** MICROPROCESSOR PC BOARD



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

NOTE

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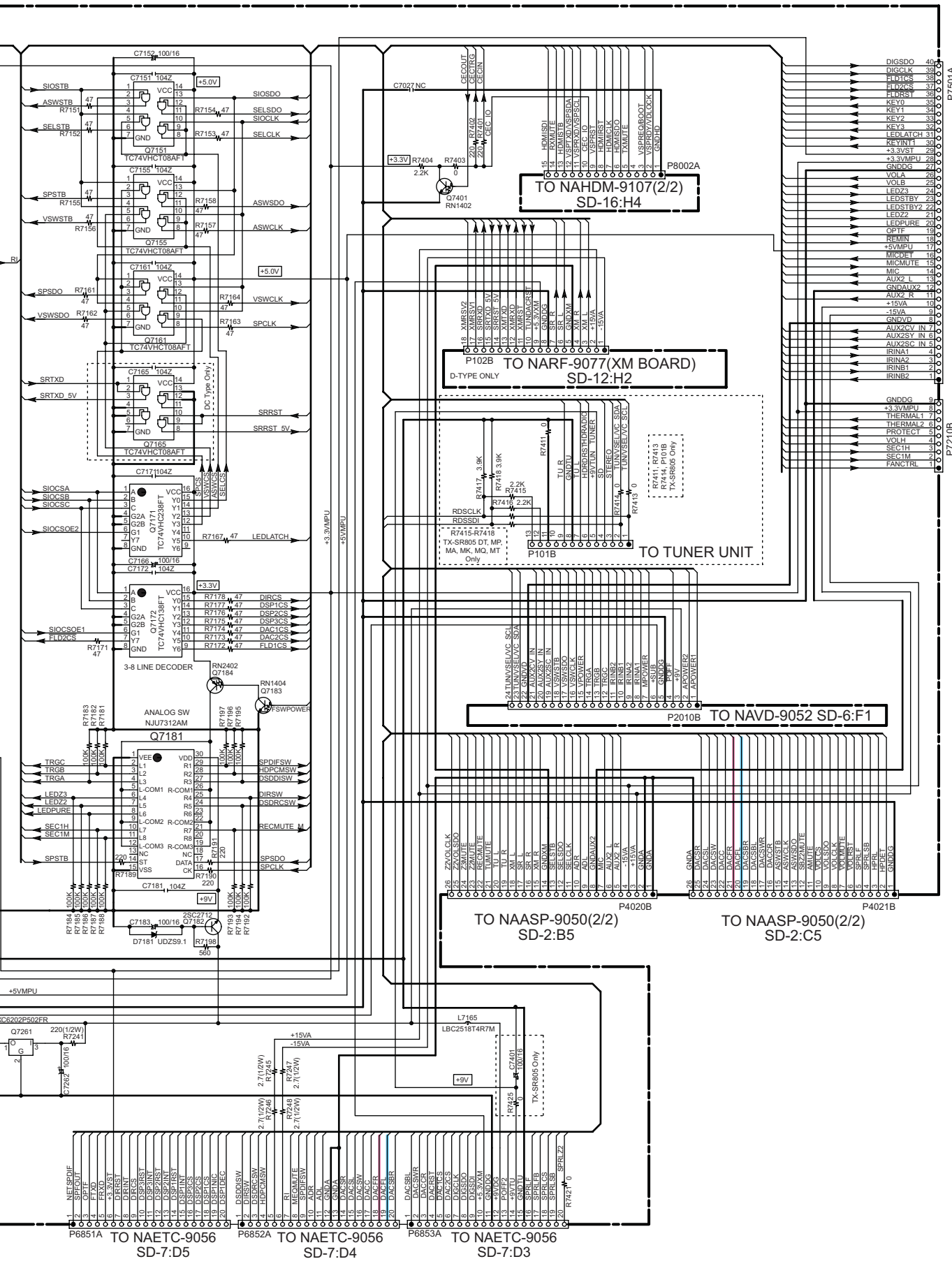
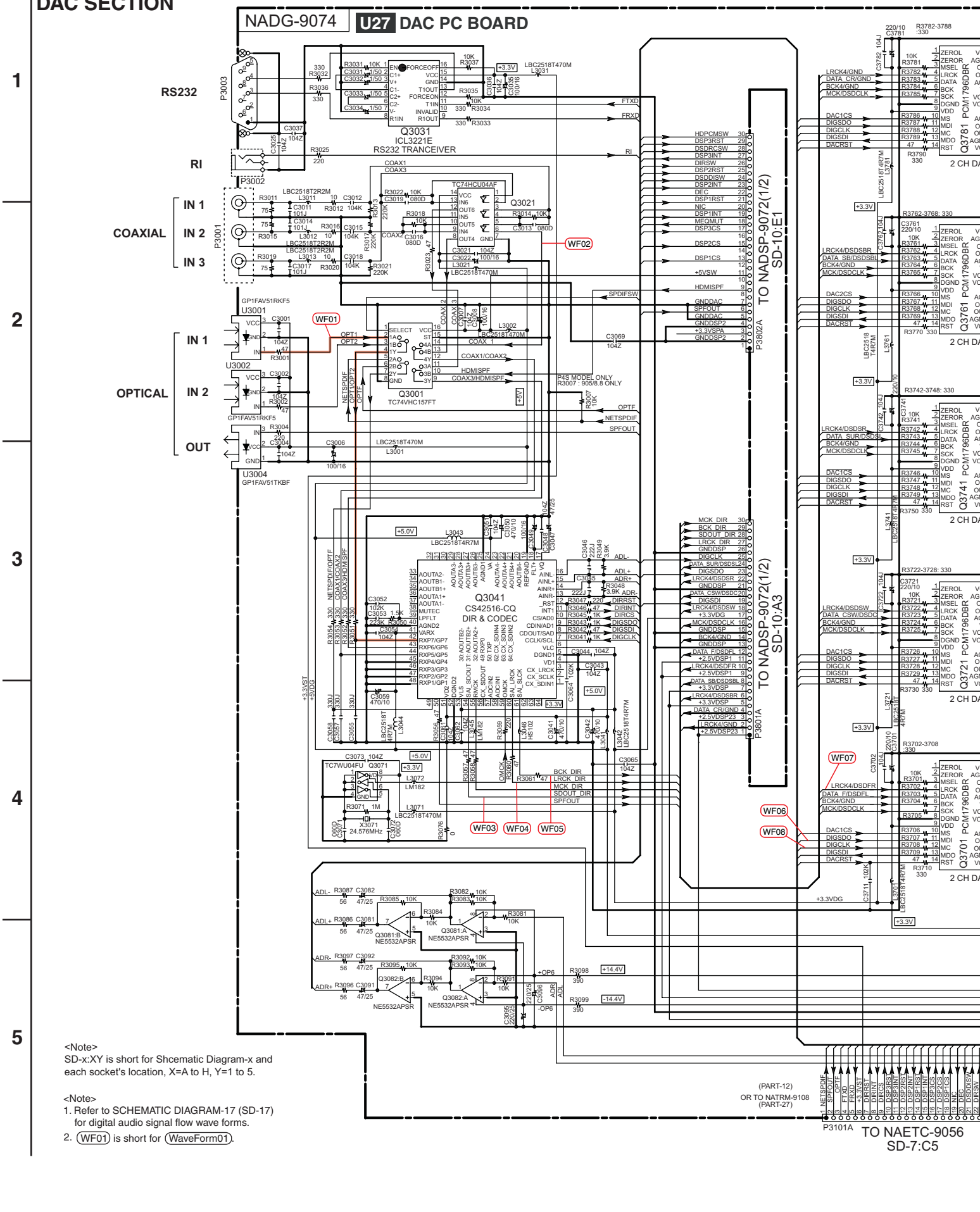
- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS (⊣⊢) ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
  EX) 030- 3pF, 330- 33pF, 331- 330pF, 333- 0.033uF
- ALL RESISTORS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

E F G H


TO NAHDM-9107(2/2)
SD-16:H4
TO NARF-9077(XM BOARD)
SD-12:H2
TO TUNER UNIT
TO NAVD-9052 SD-6:F1
TO NADIS-9085
SD-13:B2
TO NAAF-9039
SD-5:A4
TO NAASP-9050(2/2)
SD-2:B5
TO NAASP-9050(2/2)
SD-2:C5
TO NAETC-9056
SD-7:D5
TO NAETC-9056
SD-7:D4
TO NAETC-9056
SD-7:D3
3-8 LINE DECODER
ANALOG SW
NJU7312AM
TX-SR805 Only
D-TYPE ONLY
DC Type Only

SCHEMATIC DIAGRAM-9 (SD-9)

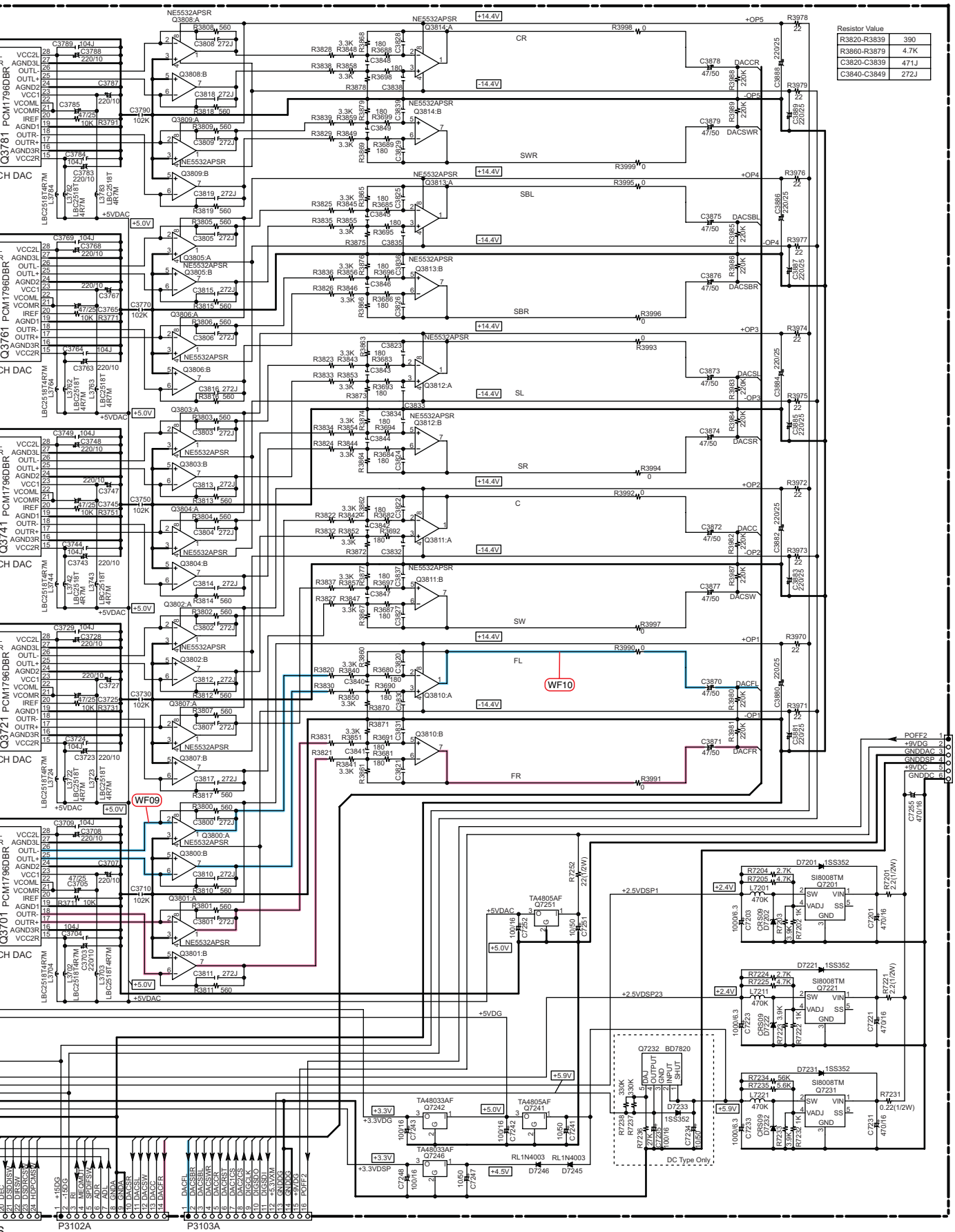
DAC SECTION



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

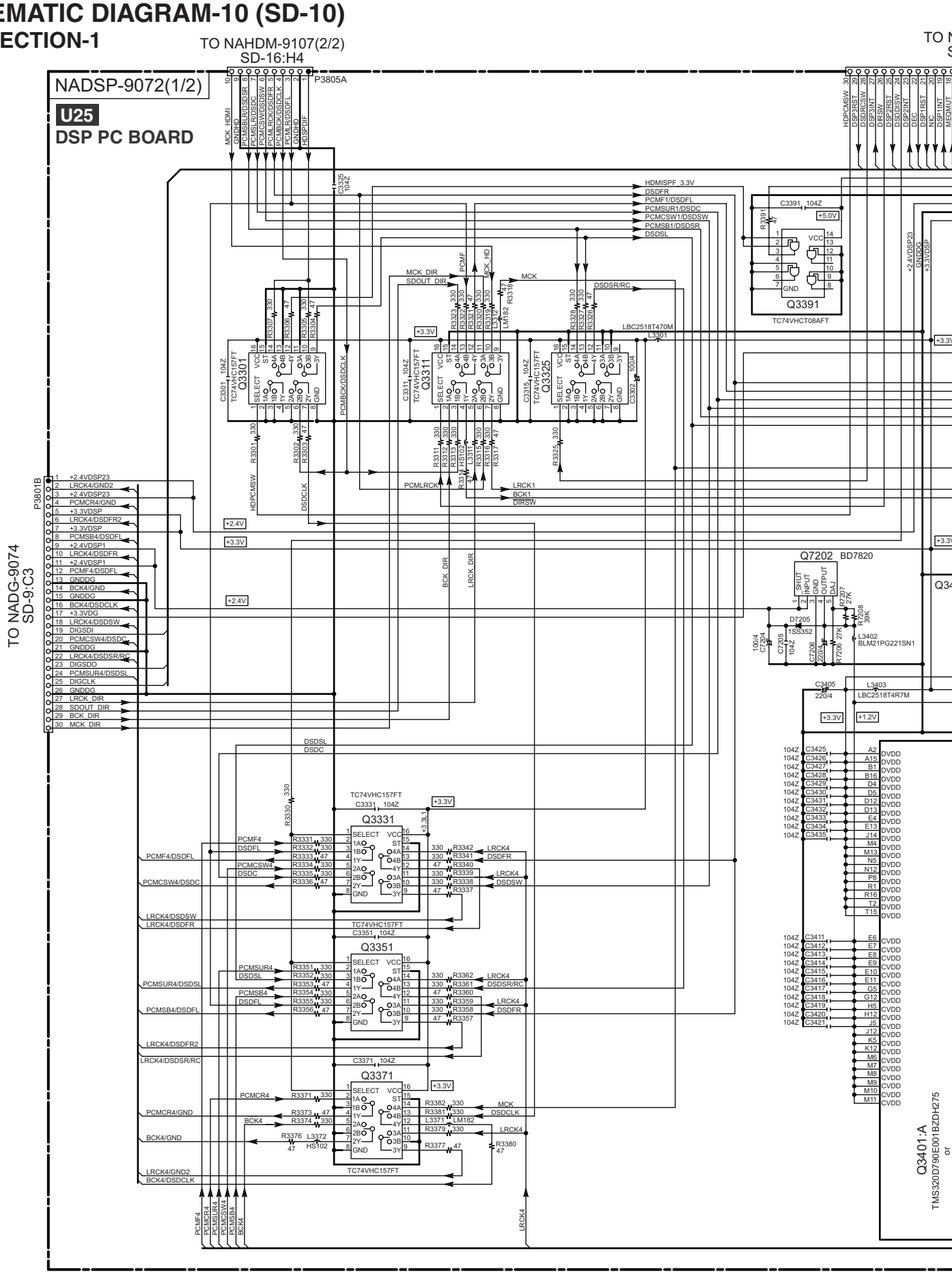
<Note>
1. Refer to SCHEMATIC DIAGRAM-17 (SD-17) for digital audio signal flow wave forms.
2. (WF01) is short for (WaveForm01).

E F G H


Resistor Value
R3820-R3839 390
R3860-R3879 4.7K
C3820-C3839 471J
C3840-C3849 272J
CR
SWR
SBL
SBR
SL
SR
C
SW
FL
FR
WF09
WF10
+14.4V
-14.4V
+5.0V
+5VDAC
+5VDG
+5.9V
+3.3VDG
+3.3VDSP
+4.5V
+2.5VDSP1
+2.5VDSP23
DC Type Only
TO NAPS-9089
SD-14:G4
P3102A
TO NAETC-9056
SD-7:C4
P3103A
TO NAETC-9056
SD-7:C3

SCHEMATIC DIAGRAM-10 (SD-10)

DSP SECTION-1



E F G H

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

TO NADG-9074
SD-9:C2

P3802B

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

+2.4V
+2.4VDSP23
GNDDG
+3.3VDSP
+3.3V
CPU_CONTROL

DIGSDI R3401 47 B14
DIGSDO R3402 1K B15
DIGCLK R3403 1K C16
DSP1CS R3404 2.2K C15
DSP1INT R3405 47 D16
DSP1RST R3406 1K G2
RESET

SPIO_SOMI/I2C0_SDA
SPIO_SIMO
SPIO_CLK/I2C0_SCL
SPIO_SCS/I2C1_SCL
SPIO_ENA/I2C1_SDA

C3401 101J

PCMF2 R3407 47 A14 AXR0[0]
PCMSUR2 R3408 47 B13 AXR0[1]
PCMCSW2 R3409 47 A13 AXR0[2]
PCMSB2 R3410 47 B12 AXR0[3]
R3411 10K A12 AXR0[4]
NIC R3412 330 B11 AXR0[5]/SPI1_SCS
DEC R3413 330 A11 AXR0[6]/SPI1_ENA]
R3414 10K B10 AXR0[7]/SPI1_CLK
R3415 10K B9 AXR0[8]/AXR1[5]/SPI1_SOMI
R3416 10K A9 AXR0[9]/AXR1[4]/SPI1_SIMO
R3417 330 B8 AXR0[10]/AXR1[3]
DSDFR R3418 330 A8 AXR0[11]/AXR1[2]
PCMSUR1/DSDC R3419 330 B7 AXR0[12]/AXR1[1]
PCMCSW1/DSDSW R3420 330 B6 AXR0[13]/AXR1[0]
PCMSB1/DSDSR R3427 330 A6 AXR0[14]/AXR2[1]
DSDSL R3422 330 B5 AXR0[15]/AXR2[0]

R3423 10K B3 AHCLKR0/AHCLKR1
BCK1 R3424 330 A5 ACLKR0
LRCK1 R3425 330 B4 AFSR0
MCK R3426 330 C2 AHCLKX0/AHCLKX2
BCK2 R3427 47 A4 ACLKX0
LRCK2 R3428 47 A3 AFSX0

MCK

OSCIN J2
OSCOUT J3
OSCVDD J4
OSCVSS J1
R3429 330 CLKIN H2
PLLHV K2

+3.3V
TC7WU04FU
L3483 LBC2518T470M
C3483 104Z
C3484 100/4
Q3481
LM182 L3481
L3482 LM182 R3482 220 CLKIN3
R3483 MM
X3481 25.00MHz
C3481 060D
C3482 060D
100/4 C3402
C3403 104Z
ACF451832-333 L3401

UHPI_HD[0]
UHPI_HD[1]
UHPI_HD[2]
UHPI_HD[3]
UHPI_HD[4]
UHPI_HD[5]
UHPI_HD[6]
UHPI_HD[7]
UHPI_HD[8]
UHPI_HD[9]
UHPI_HD[10]
UHPI_HD[11]
UHPI_HD[12]
UHPI_HD[13]
UHPI_HD[14]
UHPI_HD[15]
UHPI_HD[16]/HHWIL
UHPI_HD[17]
UHPI_HD[18]
UHPI_HD[19]
UHPI_HD[20]
UHPI_HD[21]
UHPI_HD[22]
UHPI_HD[23]
UHPI_HD[24]
UHPI_HD[25]
UHPI_HD[26]
UHPI_HD[27]
UHPI_HD[28]
UHPI_HD[29]
UHPI_HD[30]
UHPI_HD[31]
UHPI_HBE[0]
UHPI_HBE[1]
UHPI_HBE[2]
UHPI_HBE[3]
UHPI_HCNTL[0]
UHPI_HCNTL[1]
UHPI_HAS
UHPI_HRW
UHPI_HDS[1]
UHPI_HDS[2]
UHPI_HCS
UHPI_HRDY
R3431 10K

EM_D[16]/UHPI_HA[0]
EM_D[17]/UHPI_HA[1]
EM_D[18]/UHPI_HA[2]
EM_D[19]/UHPI_HA[3]
EM_D[20]/UHPI_HA[4]
EM_D[21]/UHPI_HA[5]
EM_D[22]/UHPI_HA[6]
EM_D[23]/UHPI_HA[7]
EM_D[24]/UHPI_HA[8]
EM_D[25]/UHPI_HA[9]
EM_D[26]/UHPI_HA[10]
EM_D[27]/UHPI_HA[11]
EM_D[28]/UHPI_HA[12]
EM_D[29]/UHPI_HA[13]
EM_D[30]/UHPI_HA[14]
EM_D[31]/UHPI_HA[15]

Q3401:B
TMS320D790E001BZDH275
or
TMS320D710E001BZDH275
DSP

EM_A[0] J16 A0A
EM_A[1] J15 A1A
EM_A[2] K15 A2A
EM_A[3] L16 A3A
EM_A[4] L15 A4A
EM_A[5] M16 A5A
EM_A[6] M15 A6A
EM_A[7] N16 A7A
EM_A[8] N15 A8A
EM_A[9] P16 A9A
EM_A[10] H15 A10A
EM_A[11] P15 A11A
EM_A[12] P12 A12A

AFSR1 F1 R3430 10K
AFSX1 F2 GPIO2A
ACLKR1 E1 GPIO3A
ACLKX1 E2 GPIO4A
AHCLKX1 D1 GPIO5A
AMUTE1 D2 GPIO6A
AMUTE0 C1 GPIO7A

EM_D[0] T8 D0A
EM_D[1] R8 D1A
EM_D[2] R7 D2A
EM_D[3] T6 D3A
EM_D[4] R6 D4A
EM_D[5] T5 D5A
EM_D[6] R5 D6A
EM_D[7] T4 D7A
EM_D[8] R13 D8A
EM_D[9] T12 D9A
EM_D[10] R12 D10A
EM_D[11] T11 D11A
EM_D[12] R11 D12A
EM_D[13] R10 D13A
EM_D[14] T9 D14A
EM_D[15] R9 D15A

EM_BA[0] G15 BA0A
EM_BA[1] H16 BA1A
EM_CS[1] F15 SDCS_A
EM_CS[0] E15 FLCS_A
EM_CAS R3 CAS_A
EM_RAS F16 RAS_A
EM_WE T3 WE_A
EM_CKE T14 CKE_A
EM_CLK R14 CLK_A
EM_WE_DQM[0] R4 DQM0_A
EM_WE_DQM[1] T13 DQM1_A
EM_WE_DQM[2] P13 DQM2_A
EM_WE_DQM[3] R15 DQM3_A
EM_OE D15 OE_A
EM_RW E16
EM_WAIT D14

TCK P1 TCK_DSP
TMS K3 TMS_DSP
TDI L1 TDI_1
TDO M2 TDI_2
TRST K4 TRST
EMU[0] M1 EMU0_DSP
EMU[1] N1 EMU1_DSP

AHCLKR2 C14
ACLKR2 C13
AFSR2 C12
ACLKX2 D11
AFSX2 C11
AMUTE2/HINT D10

Q3451 16 Mbit FLASH MEMORY
S29ALV160ET-70TG
or ES29LV160ET-70TG

R3452 10K
R3453 10K
R3454 1K
R3455 10K
R3456 10K
R3457 10K
C3451 101J
C3452 104Z
C3453 220/4

GPIO3A GPIO4A
GPIO2A D15A
A12A D7A
A11A D14A
A10A D6A
A9A D13A
A8A D5A
A7A D12A
GPIO7A D4A
WE_A D11A
DSP1RST D3A
GPIO6A D10A
GPIO5A D2A
A6A D9A
A5A D1A
A4A D8A
A3A D0A
A2A OE_A
A1A FLCS_A
A0A BA1A

Q3461 16 Mbit SDRAM
Q3471 16 Mbit SDRAM
M12L16161A-7TG
or IC42S16100
or RMS116T(LF)

C3461 104Z
C3462 104Z
C3463 104Z
C3464 104Z
C3465 104Z
C3466 104Z
C3467 220/4

D0A D15A
D1A D14A
D2A D13A
D3A D12A
D4A D11A
D5A D10A
D6A D9A
D7A D8A
DQM0_A DQM1_A
WE_A CLK_A
CAS_A CKE_A
RAS_A
SDCS_A A9A
BA0A A8A
A10A A7A
A0A A6A
A1A A5A
A2A A4A
A3A

C3471 104Z
C3472 104Z
C3473 104Z
C3474 104Z
C3475 104Z
C3476 104Z
C3477 220/4

D16A D31A
D17A D30A
D18A D29A
D19A D28A
D20A D27A
D21A D26A
D22A D25A
D23A D24A
DQM2_A DQM3_A
WE_A CLK_A
CAS_A CKE_A
RAS_A
SDCS_A A9A
BA0A A8A
A10A A7A
A0A A6A
A1A A5A
A2A A4A
A3A

BLM21PG221SN1
L3451
+3.3VS1

P3491
L3491 LBC2518T 470M
R3491 4.7K
R3492 4.7K
R3493 4.7K
R3494 4.7K
R3495 4.7K
R3496 10K
C3491 104Z
Q3491 TC74VHC541FT

TRST
TMS
TDI
PD
TDO
TCK_RET
TCK
EMU0
EMU1
JTAG

TDI_4
EMU0_DSP
EMU1_DSP
TCK_DSP
TMS_DSP
TDI_1
TRST

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

JTAG
I2S_SIGNAL

TMS320D790E001BZDH275
or
TMS320D710E001BZDH275
DSP

VSS A1
VSS A7
VSS A10
VSS A16
VSS E5
VSS E12
VSS F5
VSS F6
VSS F7
VSS F8
VSS F9
VSS F10
VSS F11
VSS F12
VSS G1
VSS G6
VSS G7
VSS G8
VSS G9
VSS G10
VSS G11
VSS G16
VSS H3
VSS H6
VSS H7
VSS H8
VSS H9
VSS H10
VSS H11
VSS J6
VSS J7
VSS J8
VSS J9
VSS J10
VSS J11
VSS K1
VSS K6
VSS K7
VSS K8
VSS K9
VSS K10
VSS K11
VSS K16
VSS L5
VSS L6
VSS L7
VSS L8
VSS L9
VSS L10
VSS L11
VSS L12
VSS M5
VSS M12
VSS T1
VSS T7
VSS T10
VSS T16

A B C D

SCHEMATIC DIAGRAM-11 (SD-11)
DSP SECTION-2

1 2 3 4 5

NADSP-9072(2/2)

U25 DSP PC BOARD

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

CPU_CONTROL

Q3501
TMS320D788E001BRFP266 or
TMS320D708E001BRFP266
DSP

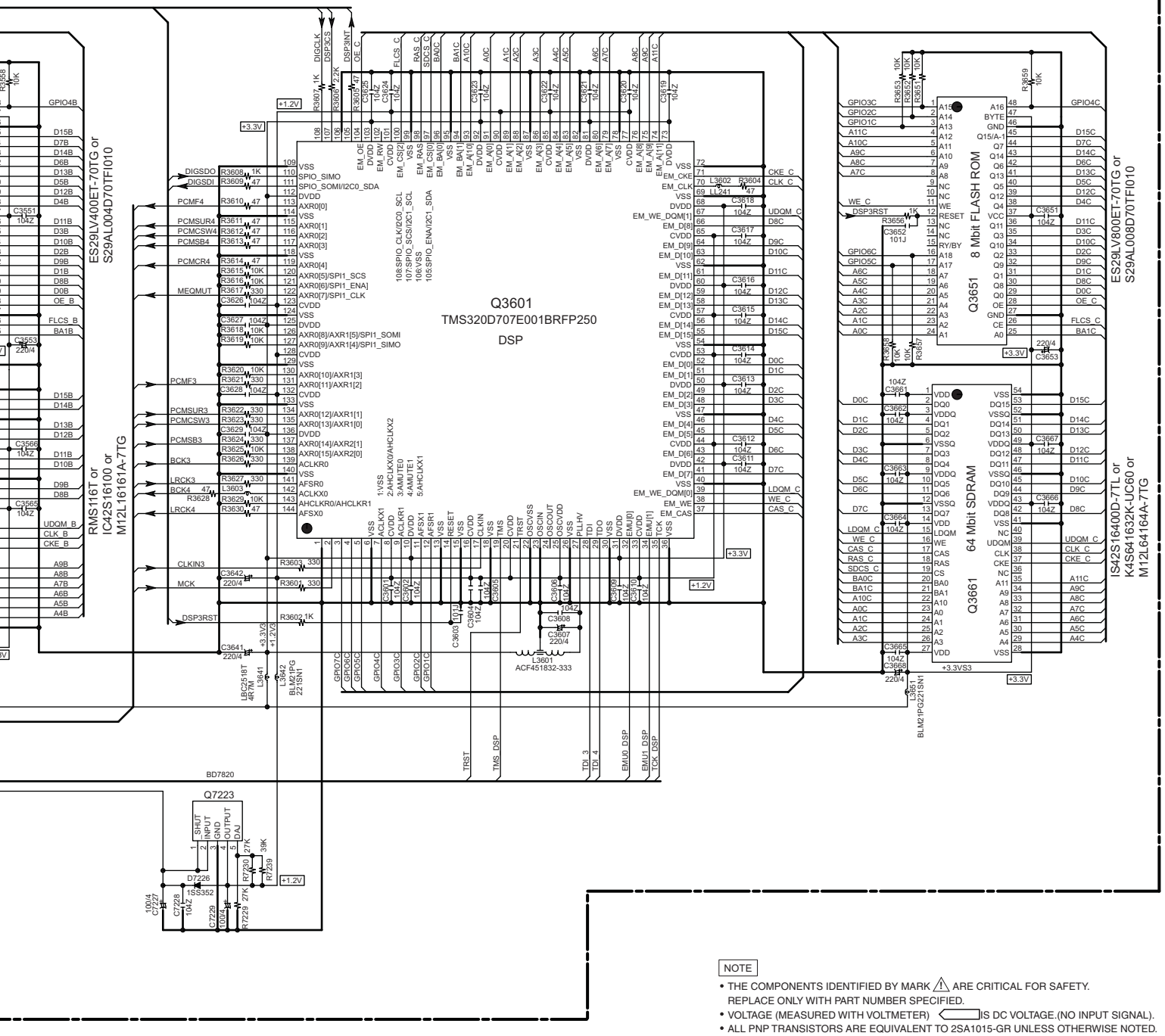
Q3551
4 Mbit FLASH ROM

Q3561
16 Mbit SDRAM

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

I2S_SIGNAL

JTAG



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

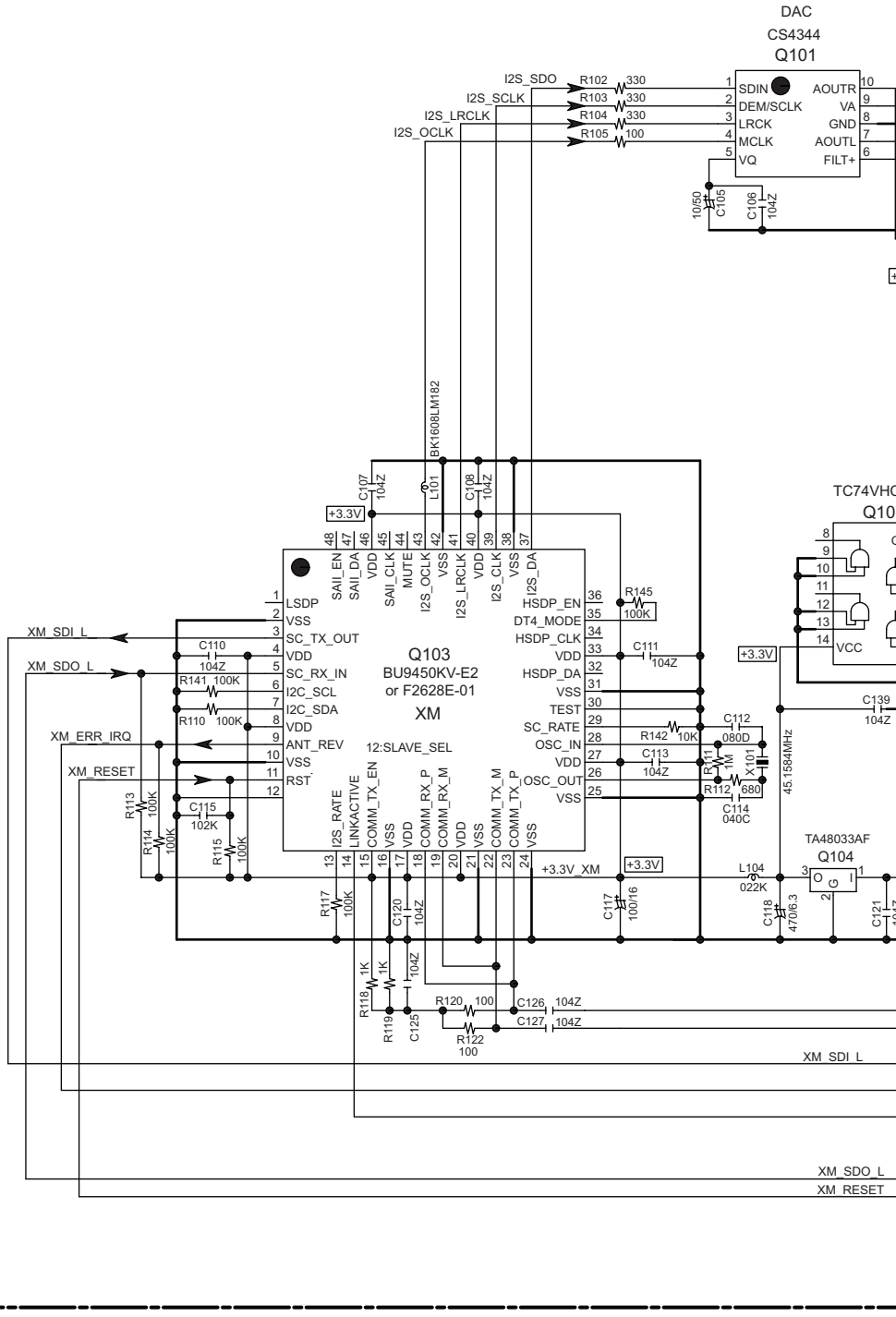
NOTE

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

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

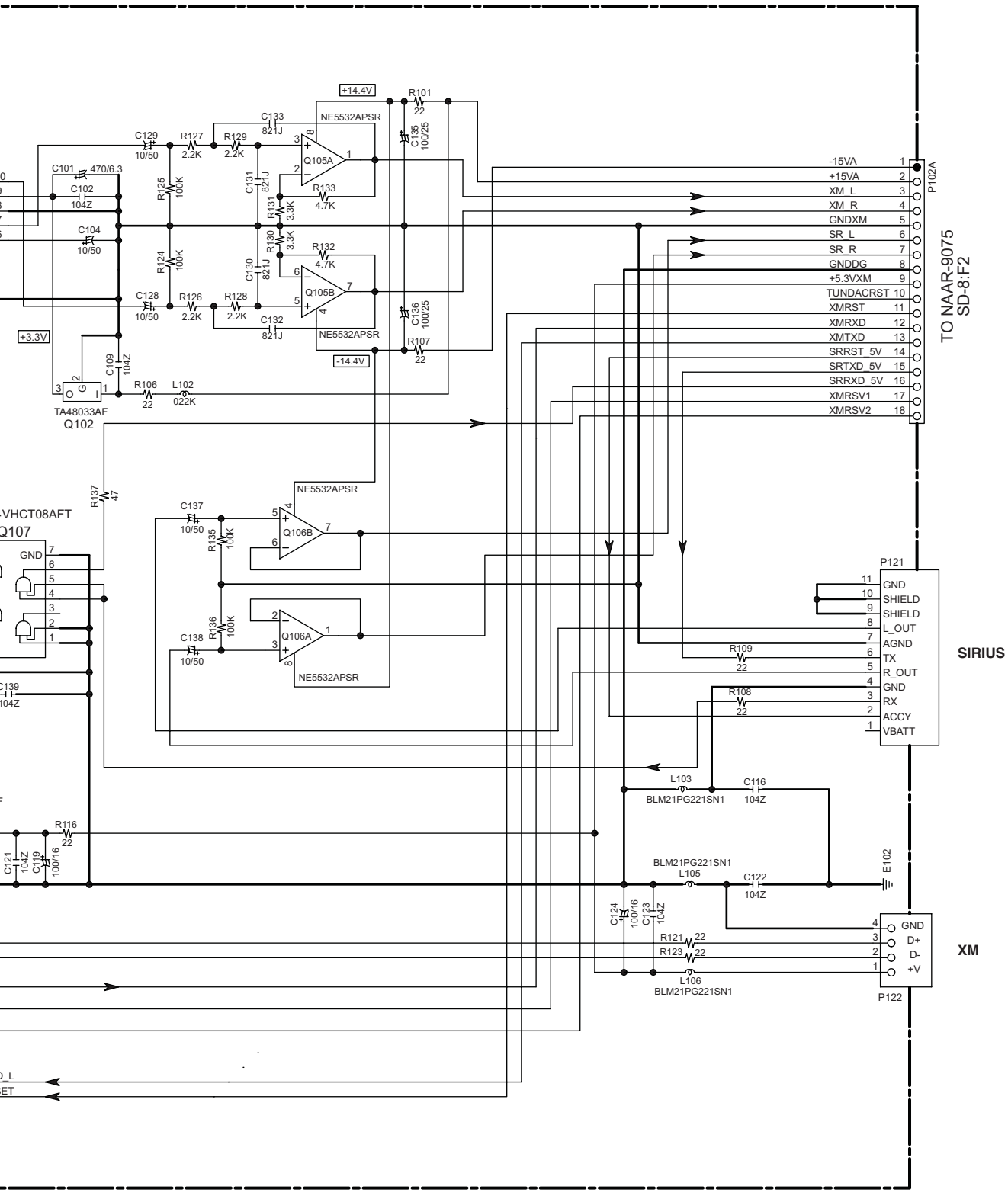
NARF-9077

U30 XM PC BOARD

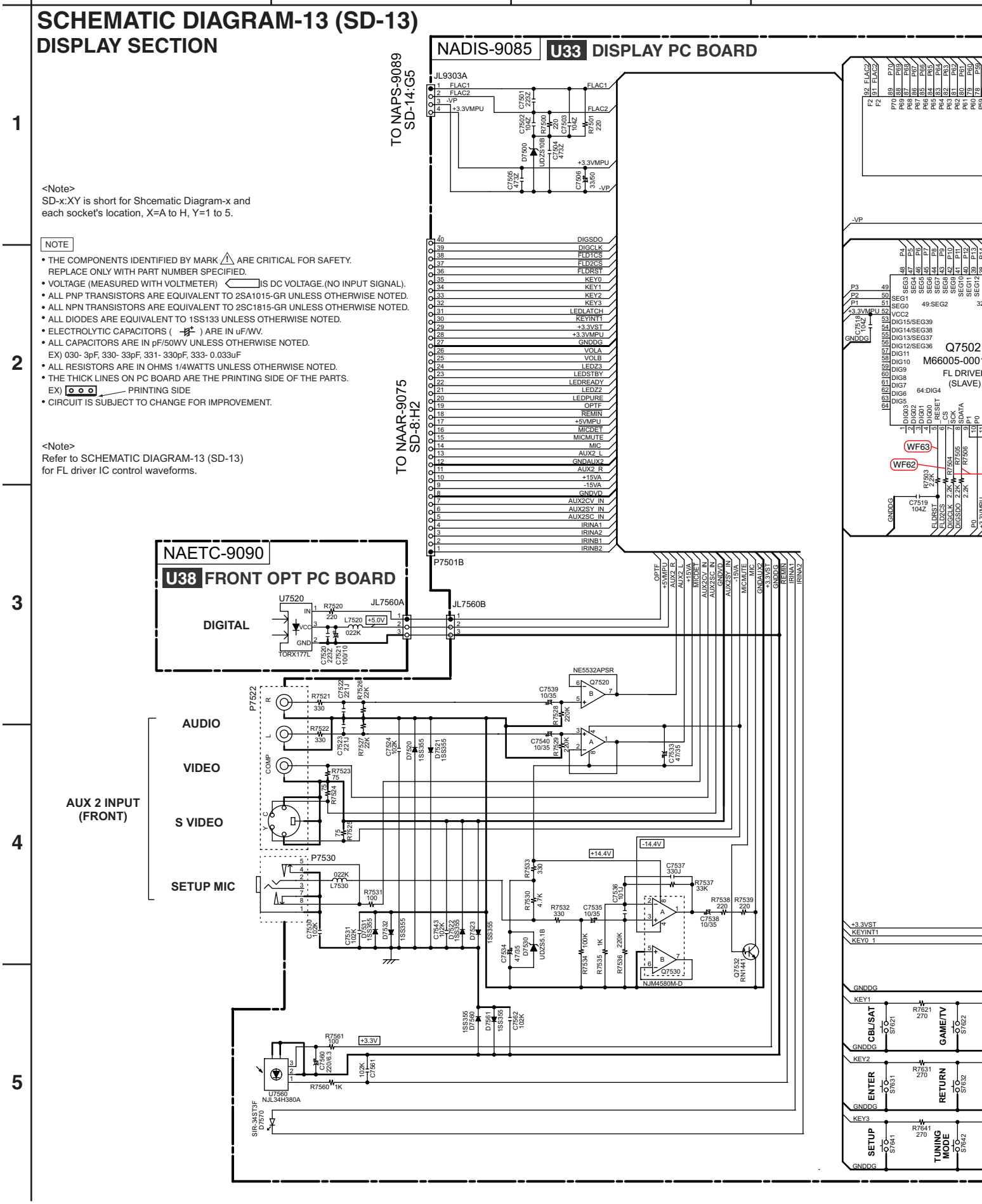


<Note>
SD-x:XY is short for Shcematic Diagram-x and each socket's location, X=A to H, Y=1 to 5.

E F G H


+14.4V
-14.4V
+3.3V
NE5532APSR
Q105A
Q105B
Q106B
Q106A
TA48033AF
Q102
-VHCT08AFT
Q107
-15VA
+15VA
XM_L
XM_R
GNDXM
SR_L
SR_R
GNDDG
+5.3VXM
TUNDACRST
XMRST
XMRXD
XMTXD
SRRST_5V
SRTXD_5V
SRRXD_5V
XMRSV1
XMRSV2
P102A
TO NAAR-9075
SD-8:F2
P121
GND
SHIELD
SHIELD
L_OUT
AGND
TX
R_OUT
GND
RX
ACCY
VBATT
SIRIUS
P122
GND
D+
D-
+V
XM
BLM21PG221SN1
E102

SCHEMATIC DIAGRAM-13 (SD-13)
DISPLAY SECTION



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

NOTE

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

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

E F G H

Q7500
HNA-16SL04T FL TUBE

Q7501
M66005-0001AHP
FL DRIVER
(MASTER)

TO NAASP-9050(2/2)
(JL4013B)
SD-2:H1

NAETC-9088
U36 HEADPHONE PC BOARD
HEADPHONE

NAETC-9091
U39 VOLUME PC BOARD
VOLUME
MASTER VOLUME

NADIS-9086 U34 DISPLAY PC BOARD

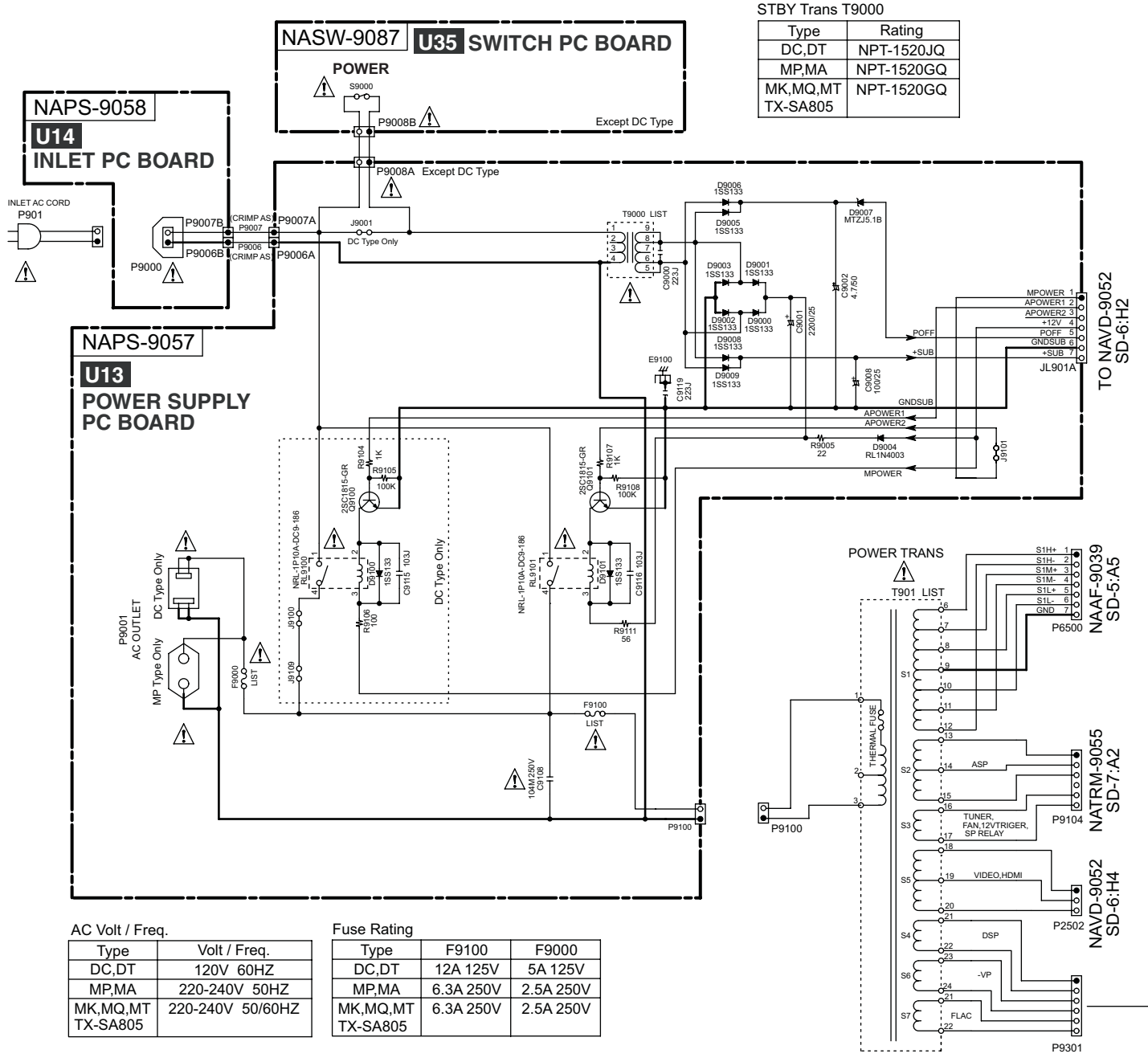
	Q7594	R7598	R7599	J7592	J7593	J7594	J7595
DC	NO	150	NO	NO	NO	YES	YES
DT, Mx TX-SA805	YES	220	150	YES	YES	NO	NO

SELECTOR KEYS

AUDIO SEL · Z2 · Z3 · ZONE OFF · J TONE · DVD · VCR/DVR
AUX1 · AUX2 · TAPE · TUNER · CD · PHONO · NET/USB · DISPLAY
PRESET R · PRESET UP · PRESET DOWN · PRESET L · MEMORY · DIMMER · LISTENING MODE R · LISTENING MODE L
THX · STEREO · HDMI OUT · DIGITAL IN · ZONE RIGHT · TONE · ZONE LEFT · LEVEL

Q7611 TC74VHC08F

SCHEMATIC DIAGRAM-14 (SD-14)
POWER SUPPLY SECTION-2



STBY Trans T9000

Type	Rating
DC,DT	NPT-1520JQ
MP,MA	NPT-1520GQ
MK,MQ,MT TX-SA805	NPT-1520GQ

AC Volt / Freq.

Type	Volt / Freq.
DC,DT	120V 60HZ
MP,MA	220-240V 50HZ
MK,MQ,MT TX-SA805	220-240V 50/60HZ

Fuse Rating

Type	F9100	F9000
DC,DT	12A 125V	5A 125V
MP,MA	6.3A 250V	2.5A 250V
MK,MQ,MT TX-SA805	6.3A 250V	2.5A 250V

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

NOTE

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

Power Trans T901

Type	Rating
DC,DT	NPT-1553D
MP,MA	NPT-1553M
MK,MQ,MT TX-SA805	NPT-1553M

E F G H

CAUTION

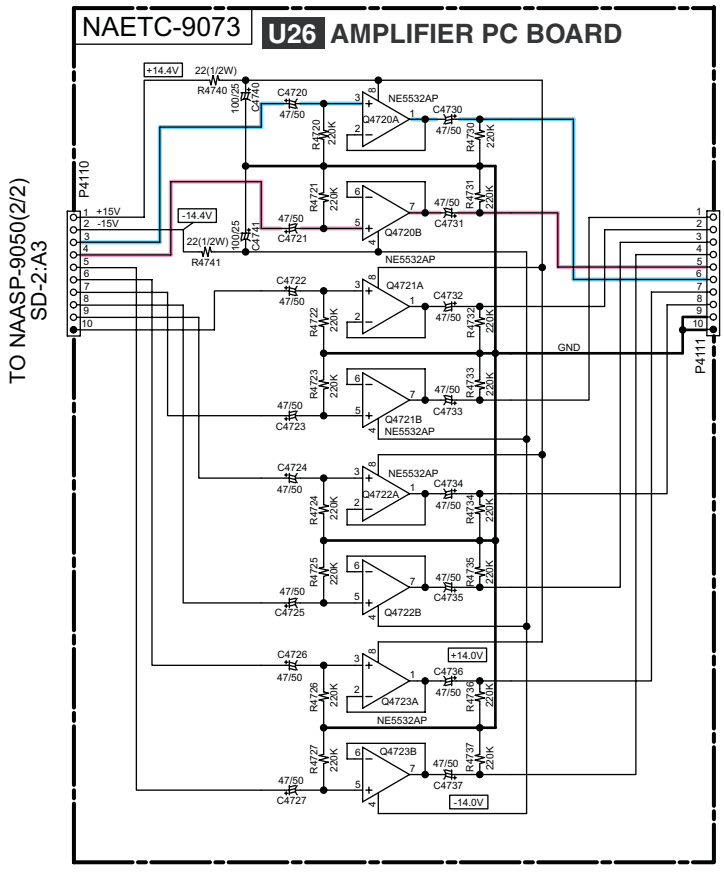
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH FUSE OF SAME TYPE AND RATING INDICATED.

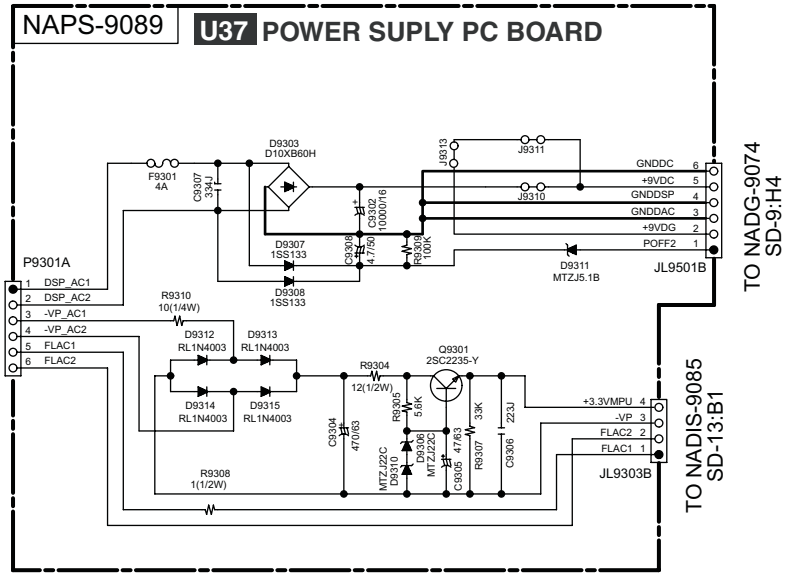
ATTENTION

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

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

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





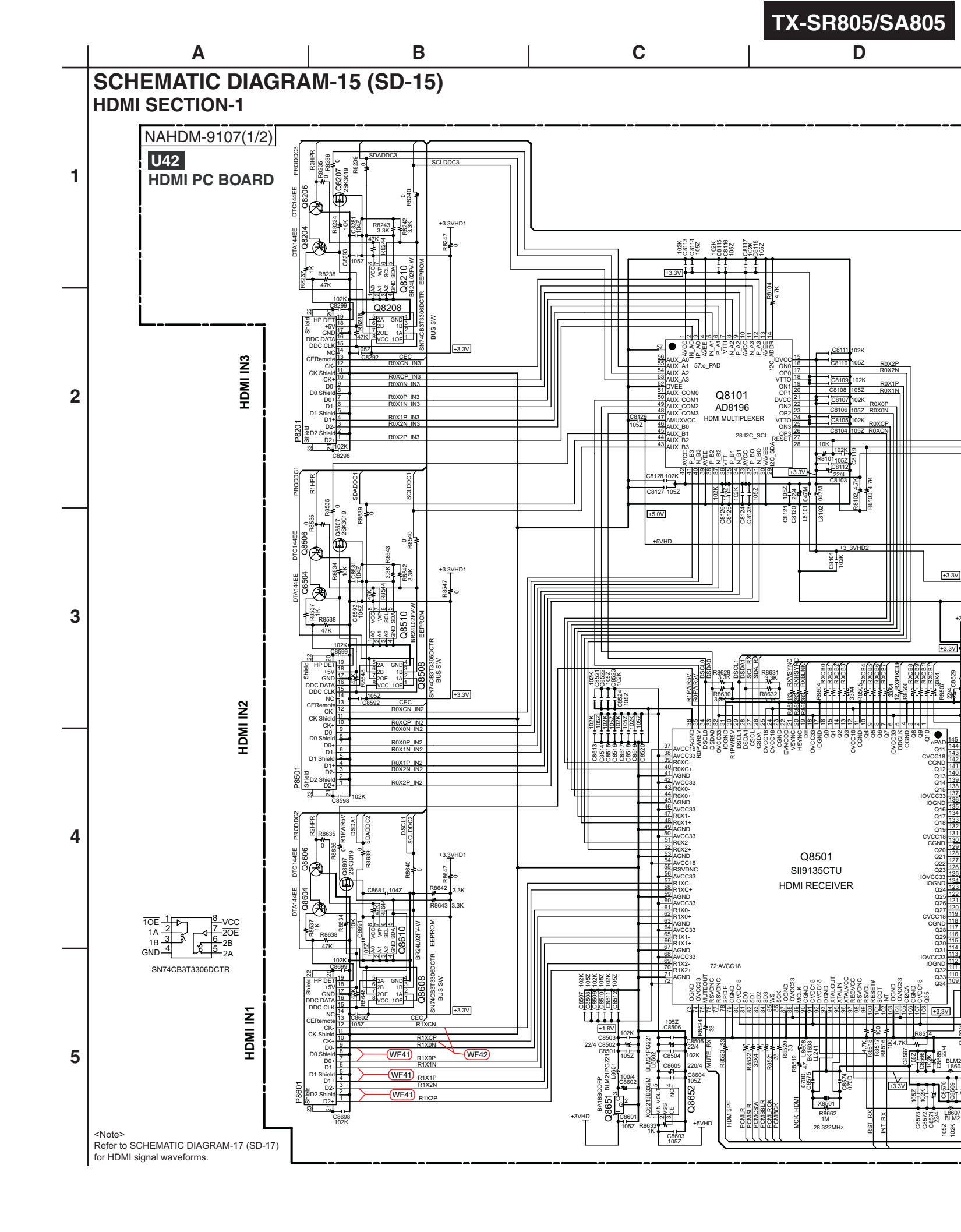
SCHEMATIC DIAGRAM-15 (SD-15)

HDMI SECTION-1

NAHDM-9107(1/2)

U42

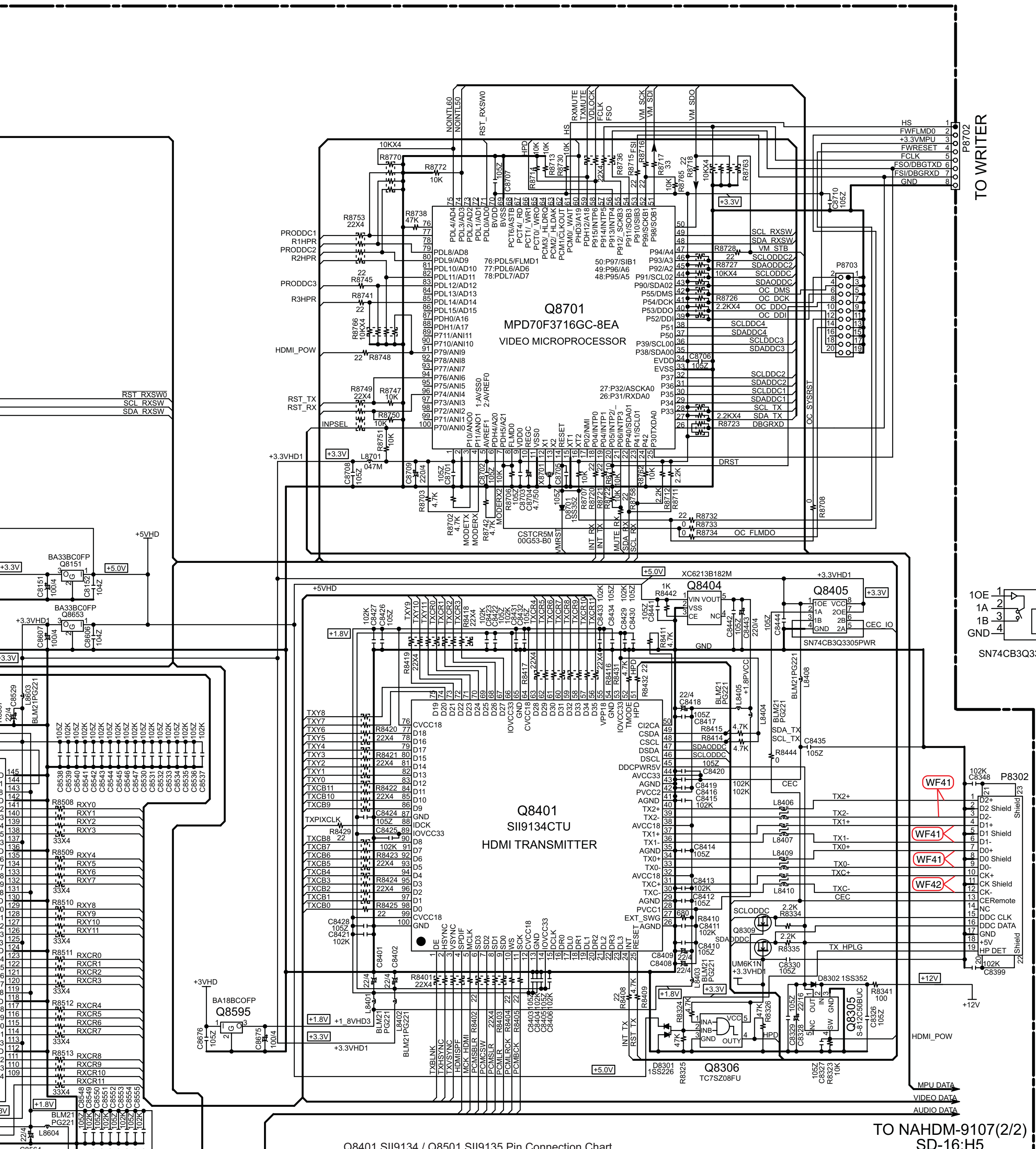
HDMI PC BOARD

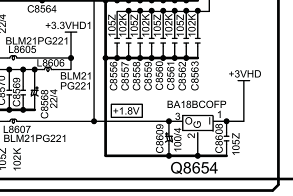


<Note>
Refer to SCHEMATIC DIAGRAM-17 (SD-17)
for HDMI signal waveforms.

E F G H

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

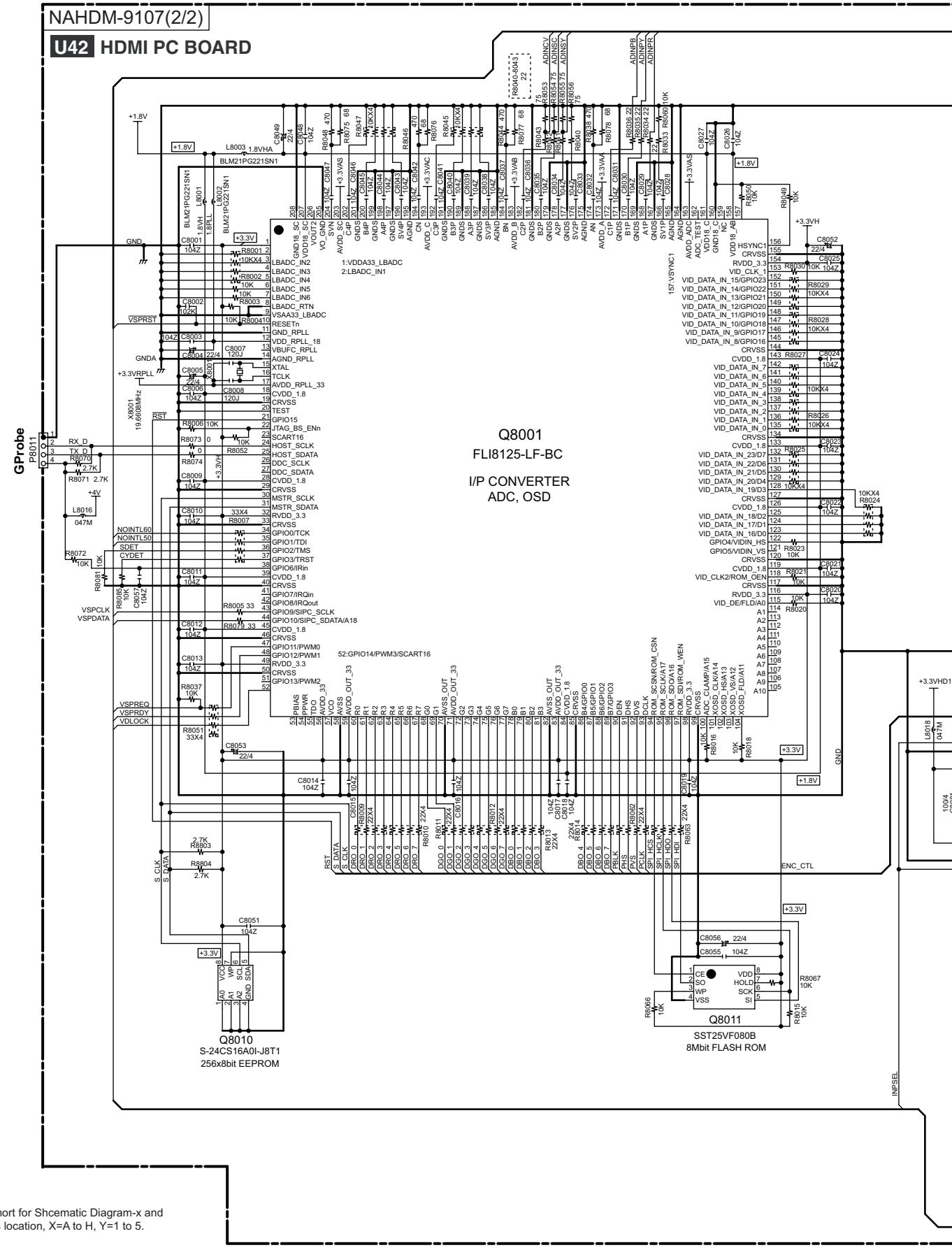




Q8401 SII9134 / Q8501 SII9135 Pin Connection Chart

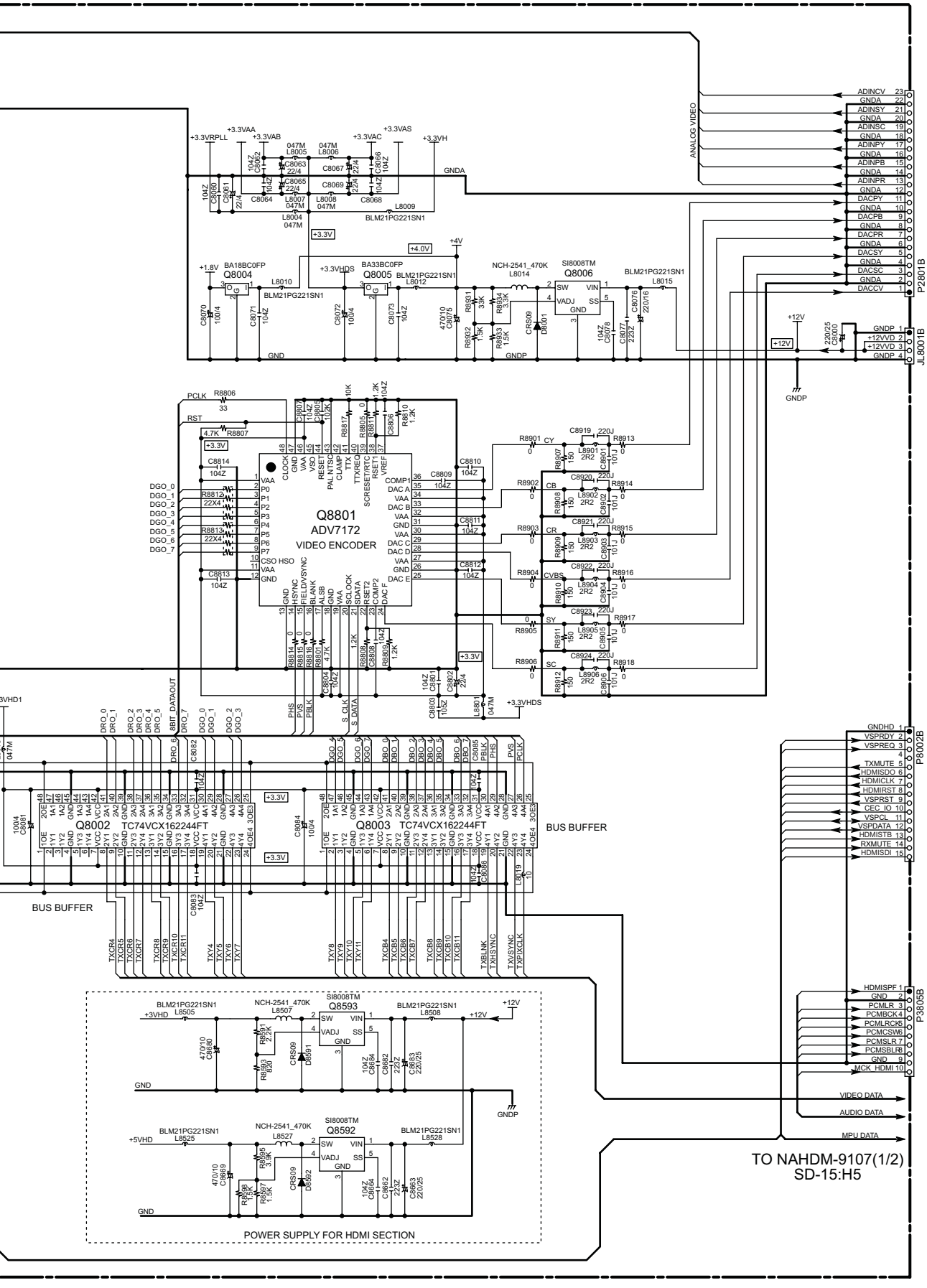
Q8501 SII9135 Pin No.	Q8501 SII9135 Signal Name	Q8401 SII9134 Signal Name	Q8401 SII9134 Pin No.
5	RXPIXCLK	TXPIXCLK	88
21	RXVSYNC	TXVSYNC	83
20	RXHSYNC	TXHSYNC	82
19	RXBLNK	TXBLNK	81
16	RXCB0	TXCB0	98
15	RXCB1	TXCB1	97
14	RXCB2	TXCB2	96
13	RXCB3	TXCB3	95
10	RXCB4	TXCB4	94
9	RXCB5	TXCB5	93
8	RXCB6	TXCB6	92
7	RXCB7	TXCB7	91
3	RXCB8	TXCB8	90
2	RXCB9	TXCB9	86
1	RXCB10	TXCB10	85
144	RXCB11	TXCB11	84
141	RXY0	TXY0	83
140	RXY1	TXY1	82
139	RXY2	TXY2	81
138	RXY3	TXY3	80
135	RXY4	TXY4	79
134	RXY5	TXY5	78
133	RXY6	TXY6	77
132	RXY7	TXY7	75
129	RXY8	TXY8	74
128	RXY9	TXY9	73
127	RXY10	TXY10	72
126	RXY11	TXY11	71
123	RXCR0	TXCR0	70
122	RXCR1	TXCR1	69
121	RXCR2	TXCR2	68
120	RXCR3	TXCR3	67
117	RXCR4	TXCR4	63
116	RXCR5	TXCR5	62
115	RXCR6	TXCR6	61
114	RXCR7	TXCR7	60
111	RXCR8	TXCR8	59
110	RXCR9	TXCR9	58
109	RXCR10	TXCR10	57
108	RXCR11	TXCR11	56

SCHEMATIC DIAGRAM-16 (SD-16)
HDMI SECTION-2



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

E F G H


Q8801
ADV7172
VIDEO ENCODER
Q8002 TC74VCX162244FT
Q8003 TC74VCX162244FT
BUS BUFFER
Q8004 BA18BC0FP
Q8005 BA33BC0FP
Q8006 NCH-2541_470K
Q8593 SI8008TM
Q8592 SI8008TM
POWER SUPPLY FOR HDMI SECTION
ANALOG VIDEO
TO NAVD-9052 SD-6:F2
TO NAVD-9052 SD-6:H3
TO NAAR-9075 SD-8:G1
TO NADSP-9072(1/2) SD-10:B1
TO NAHDM-9107(1/2) SD-15:H5
VIDEO DATA
AUDIO DATA
MPU DATA