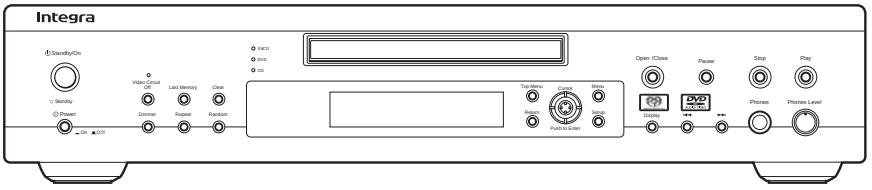
Ref. No. 3743

Integra SERVICE MANUAL

Oct., 2002

SACD & DVD AUDIO/VIDEO PLAYER

MODEL DPS-8.3



RC-499DV

Black model

BMDD	120V AC, 60Hz
MPA4P	230-240V AC, 50Hz

SAFETY-RELATED COMPONENT WARNING!!

THE MARK ⚠ FOUND ON SOME COMPONENT PARTS INDICATES THE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK.

WHEN REPLACING, BE SURE TO USE PARTS OF IDENTICAL DESIGNATION.

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.

SPECIFICATIONS

General

Power supply	USA & Canadian models Australian model	AC 120 V, 60 Hz AC 230 – 240, V 50 Hz
Power consumption	USA & Canadian models Australian model	43 W 39 W
Power consumption in standby mode	USA & Canadian models Australian model	9.3 W 9.9 W
Weight	5.0 kg, 11.0 lbs.	
External dimensions	435 x 91 x 317 mm (W/H/D), 17-1/8" x 3-9/16" x 12-1/2"	

DVD Player

Signal system	USA & Canadian models Australian model	Standard NTSC PAL/AUTO
Regional restriction code	USA & Canadian areas Australian areas	1 4
Laser	Semiconductor laser, wavelength 650/780 nm	
Frequency range (digital audio)	DVD linear sound: DVD-Audio: Audio CD: SACD:	48 kHz sampling 4 Hz to 22 kHz 96 kHz sampling 4 Hz to 44 kHz 192 kHz sampling 4 Hz to 96 kHz 4 Hz to 20 kHz 4 Hz to 96 kHz
Signal-to-noise ratio (digital audio)	More than 118 dB	
Audio dynamic range (digital audio)	More than 100 dB	
Harmonic distortion (digital audio)	Less than 0.001 %	
Wow and flutter	Below measurable level (less than ±0.001 % (W.PEAK))	
Operating conditions	Temperature: 5˚C to 35˚C, Operation status: Horizontal	

Outputs

Video output	1.0 V (p-p), 75 ohm, negative sync., pin jack x 2
S-video output	(Y) 1.0 V (p-p), 75 ohm, negative sync., Mini DIN 4-pin x 2 (C) 0.286 V (p-p), 75 ohm
Component Signal output	(Y) 1.0 V (p-p), 75 ohm, negative sync., pin jack x 1, BNC x 1 (Pb)/ (Pr) 0.7 V (p-p), 75 ohm
Audio output (digital output Optical)	– 22.5 dBm x 2
Audio output (digital output Coaxial)	0.5 V (p-p), 75 ohm, pin jack x 1
Audio output (analog audio)	2.0 V (rms), 440 ohm, pin jack (L, R) x 2
Audio output (5.1 channel analog audio)	2.0 V (rms), 440 ohm, pin jack (Lo/Lt, Ro/Rt, SL1, SR1, C, SW) x 1 1.4 V (rms), 440 ohm, pin jack (SL2, SR2) x 1

Specifications and features are subject to change without notice.

SERVICE PROCEDURES-1

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs a laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

SERVICE WARNING : DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION, BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICKUP BLOCK.

Laser Diode Properties

CD
Wavelength: 650 nm
Laser output: 0.43 mW

DVD
Wavelength: 780 nm
Laser output: 0.14 mW

WARNING

WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION:
TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

LASER WARNING

This unit contains a semiconductor laser system and is classified as a "CLASS 1 LASER PRODUCT". So, to use this model properly, read this Instruction Manual carefully. In case of any trouble, please contact the store where you purchased the unit. To prevent being exposed to the laser beam, do not try to open the enclosure.

CAUTION:
VISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK FAILED OR DEFEATED. DO NOT STARE INTO BEAM.

CAUTION:
THIS PRODUCT UTILIZES A LASER. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

The label on the right is applied on the rear panel except for USA and Canadian models.

1. This unit is a CLASS 1 LASER PRODUCT and employs a laser inside the cabinet.
2. To prevent the laser from being exposed, do not remove the cover. Refer servicing to qualified personnel.

LASER BEAM CAUTION LABEL

SERVICE PROCEDURE

1. Replacing the fuses

This symbol located near the fuse indicates that the fuse used is show operating type, For continued protection against fire hazard, replace with same type fuse , For fuse rating, refer to the marking adjest 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 apposre.

CIRCUIT NO.	DESCRIPTION	PART NO.
F911, F912	2.5A-ULSE-TL250	252300

2. Safety-check out

(Only U.S.A. model)
After correcting the original service problem perform the following safety check before releasing the set to the customer
Connect the insulating-resistance tester between the plug of power supply cord and terminal GND on the back panel.
Specifications: More than 10M ohm at 500V

SERVICE PROCEDURES-2

INITIALIZING

Factory-shipped condition

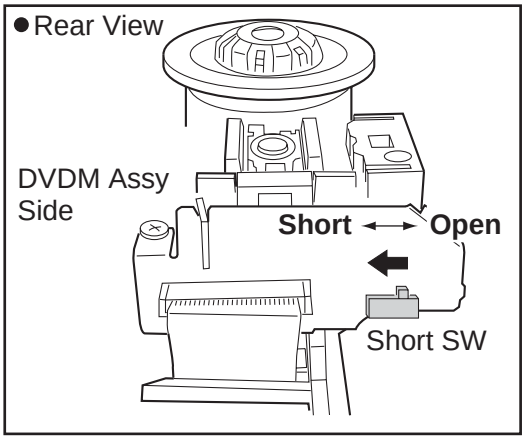
Push button "ON" (Mechanical SW)
Press the [**STOP**] and [**STANDBY**] same time.
(Wait until FL display "No Disc") .
Push button "**STANDBY**".

Others

Phones level volume -------- MIN.
SURR. switch ---------- 1
Mechanical power switch -- ON

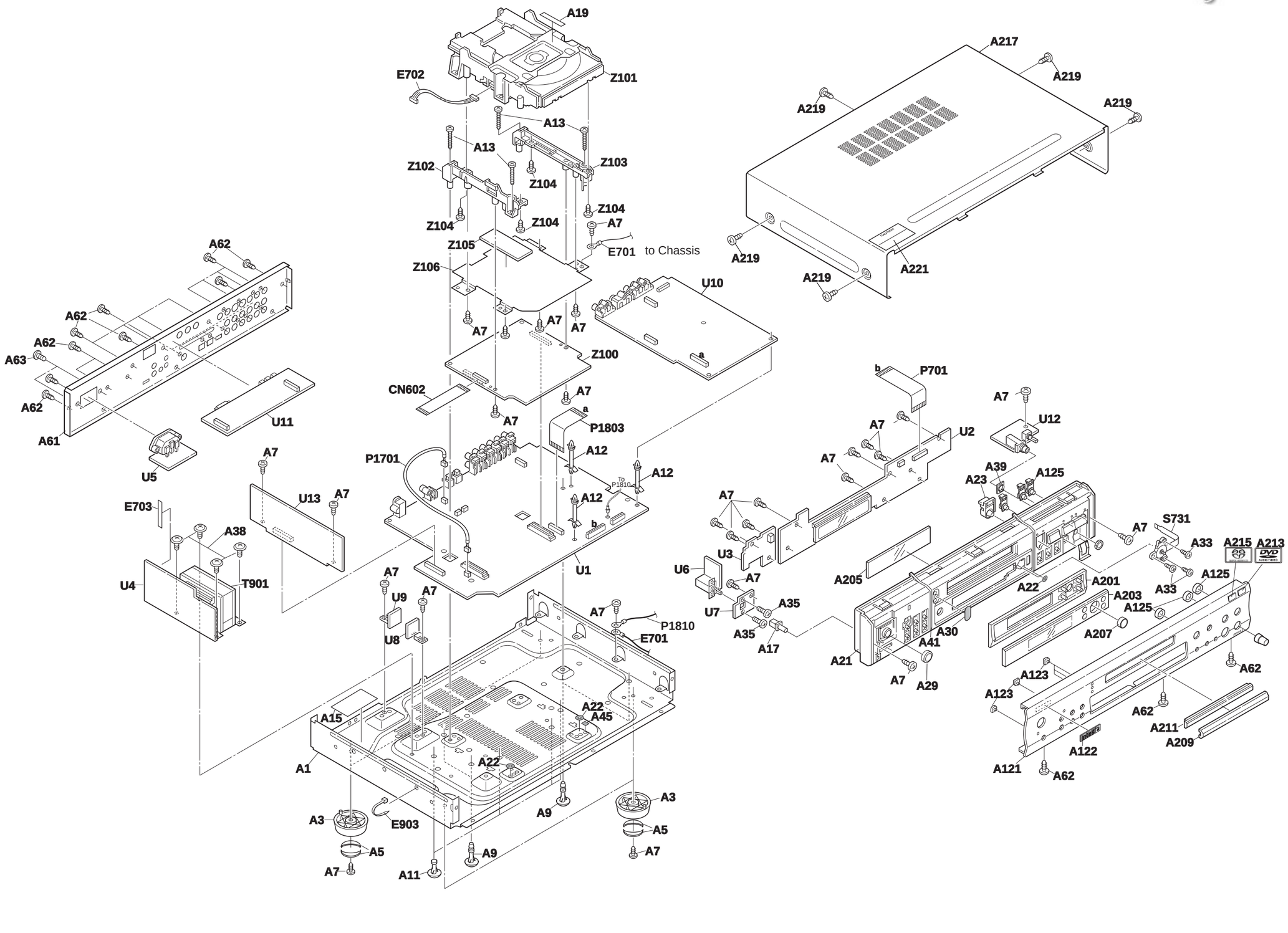
Remove the solder of Laser Diode shorting

1-1 Connect Pickup and DVD main circuit PC board by FFC (3 pcs).
1-2 Fix it with the DVD Mechanism
1-3 Remove the solder of Laser Diode shorting on Pickup.
1-4 Connect total unit of DVD Mechanism (DVD Main PCB + Mechanism) to output terminal.



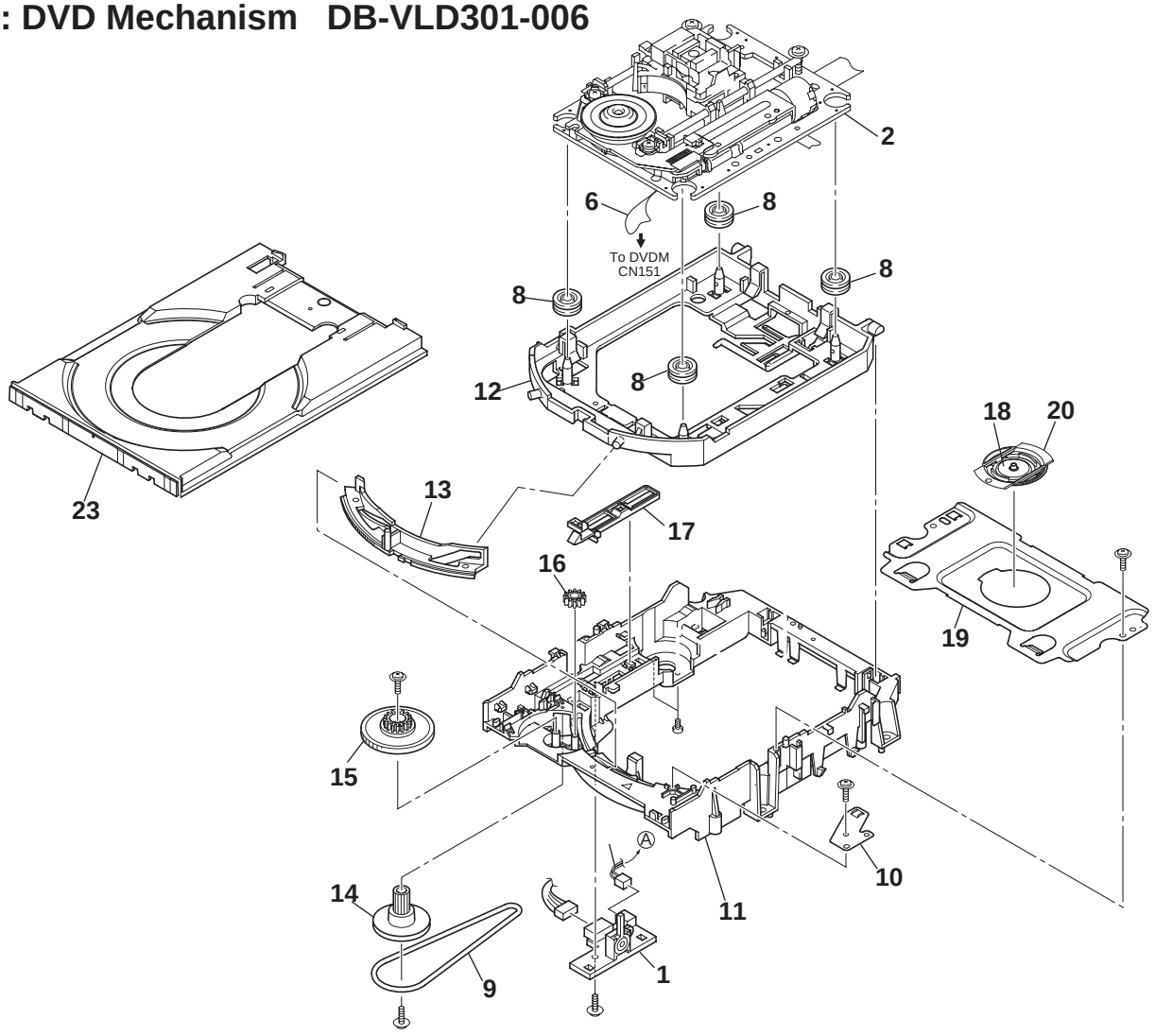
EXPLODED VIEW-1

CHASSIS



EXPLODED VIEW (LOADING MECHANISM) / PARTS LIST

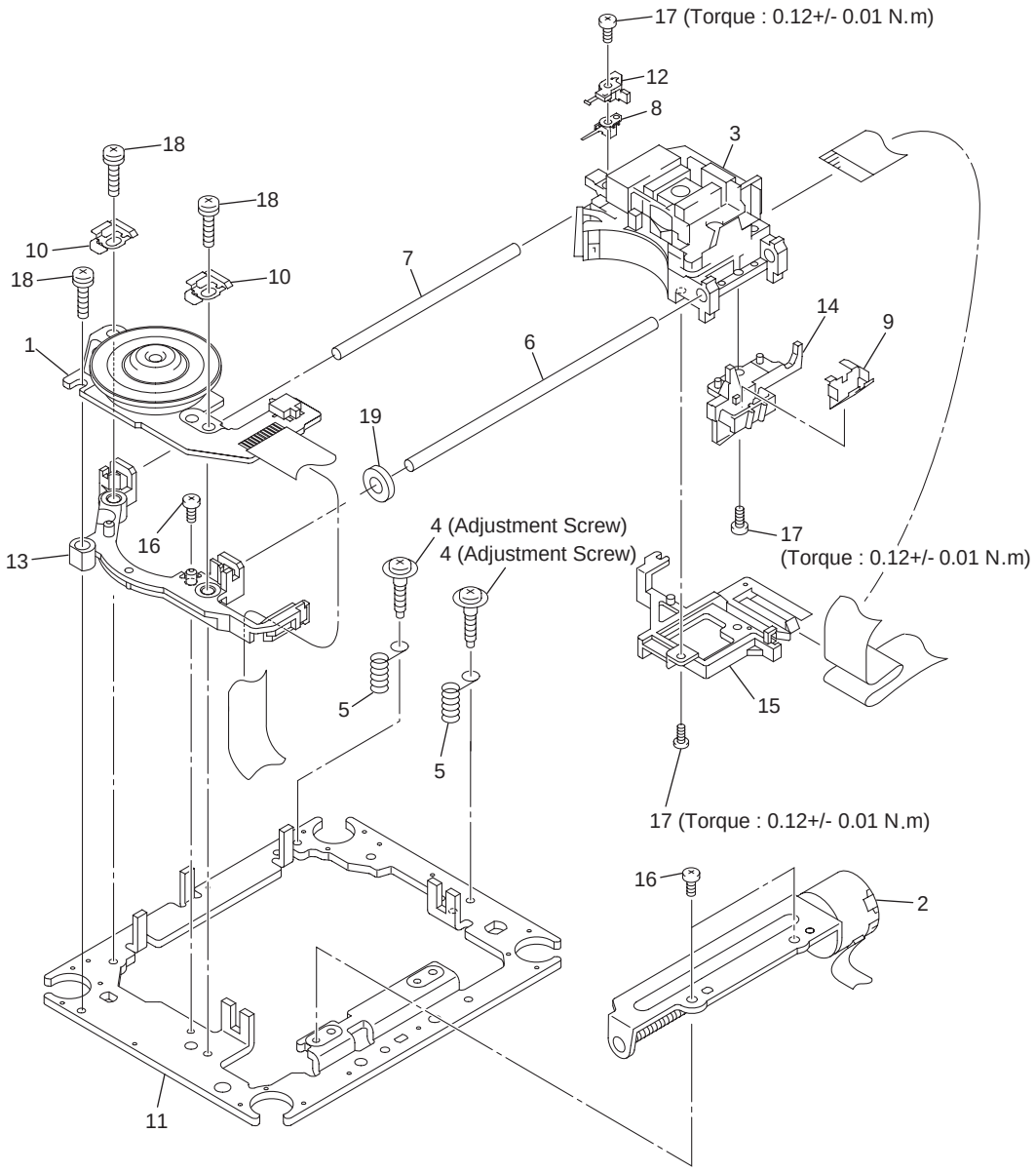
Z101 : DVD Mechanism DB-VLD301-006



Parts list

REF.NO	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
1	VKN1790	Loading PC board assy	12	VNL1918	Float base DVD
2	VXX2782	Traverse mechanism assy	13	VNL1919	Drive cam
6	VDA1864	FFC 26P	14	VNL1921	Gear pulley
8	VEB1327	Rubber	15	VNL1922	Loading gear
9	VEB1328	Belt	16	VNL1923	Drive gear
10	VNE2253	Stabilizer	17	VNL1925	Lever switch
11	VNL1917	Loading base	18	VNE2251	Clamper plate
			19	VNE2252	Bridge
			20	VNL1924	Clamper
			23	VNL1920	Tray

EXPLODED VIEW / PARTS LIST
TRAVERSE MECHANISM ASSY

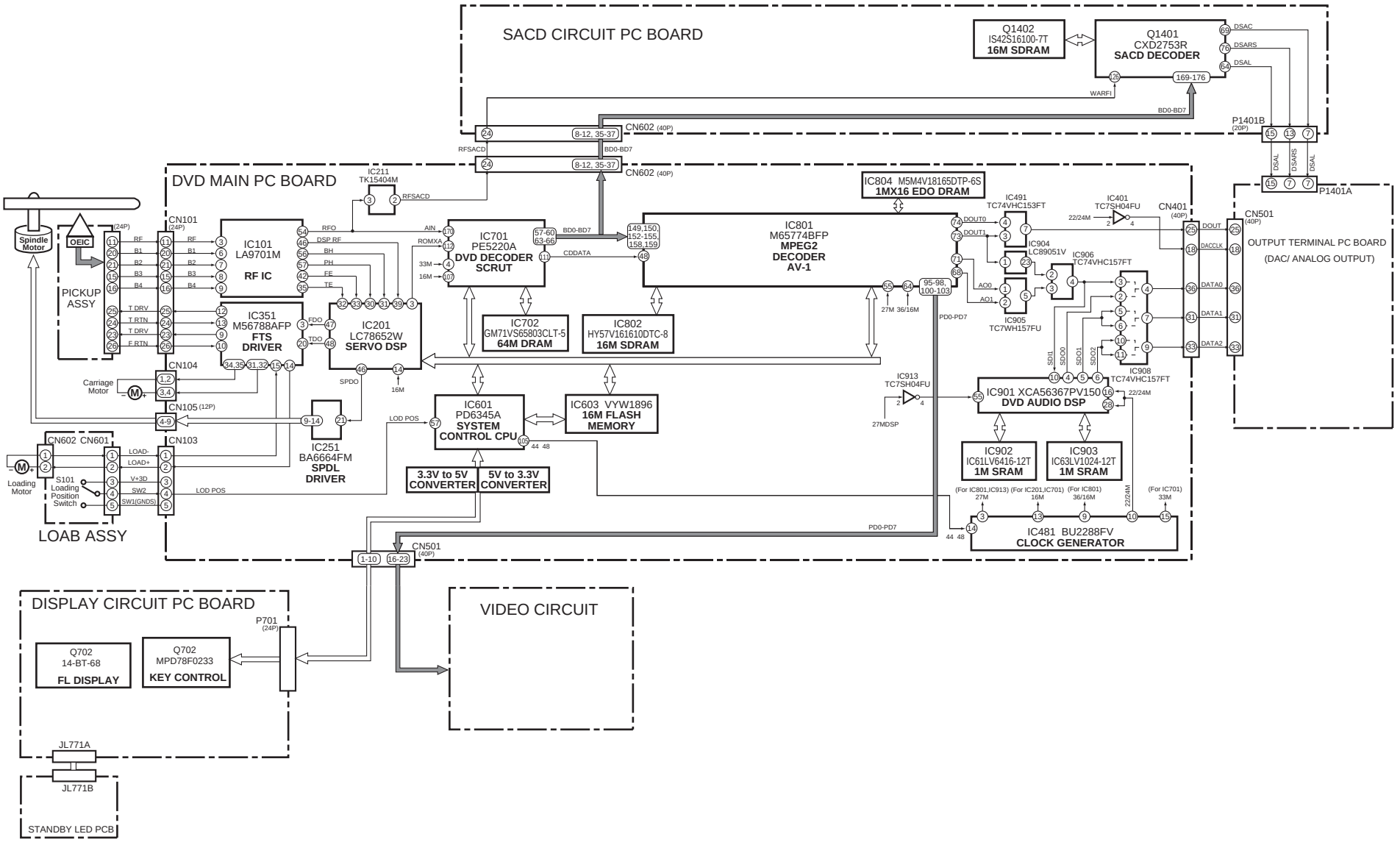


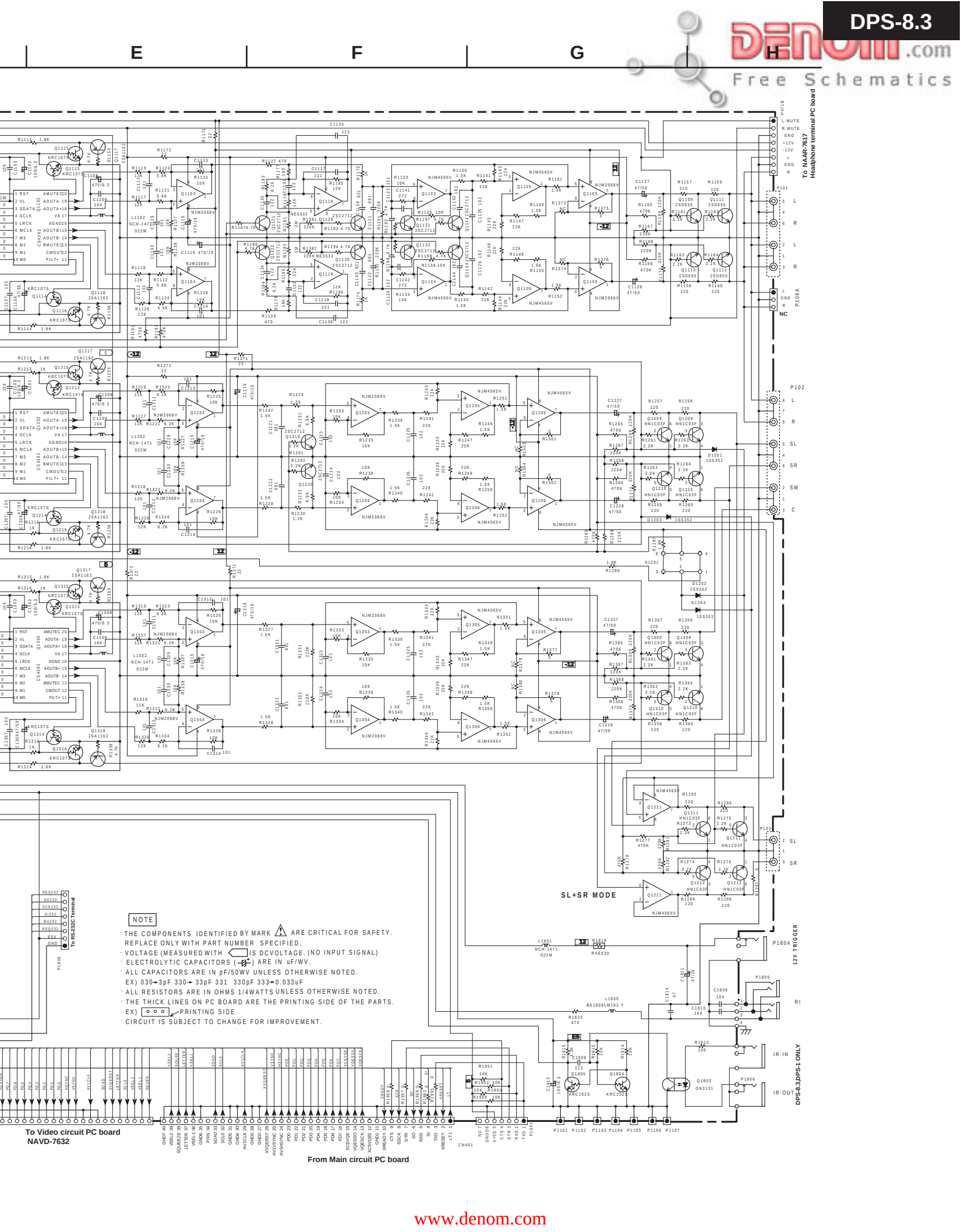
PARTS LIST

Mark	No.	Description	Part No.
	1	Spindle Motor	VXM1088 (or VXM1089)
	2	Stepping Motor (CARRIAGE)	VXM1090 (or VXM1091)
	3	Pickup Assy-S	OXX8003
	4	Skew Screw	VBA1080
	5	Skew Spring	VBH1335
	6	Guide Bar	VLL1514
	7	Sub Guide Bar	VLL1515
	8	Hold Spring	VNC1017
	9	Joint Spring	VNC1019
	10	Support Spring	VNC1020
NSP	11	Mechanism Chassis	VNE2248
	12	Slider	VNL1811
	13	Spacer	VNL1913
	14	Joint	VNL1914
	15	FFC Holder	VNL1915
	16	Screw	BBZ20P050FZK
	17	Screw	OBA8009
	18	Screw	PMA26P100FMC
	19	Damper Sheet	VEB1335

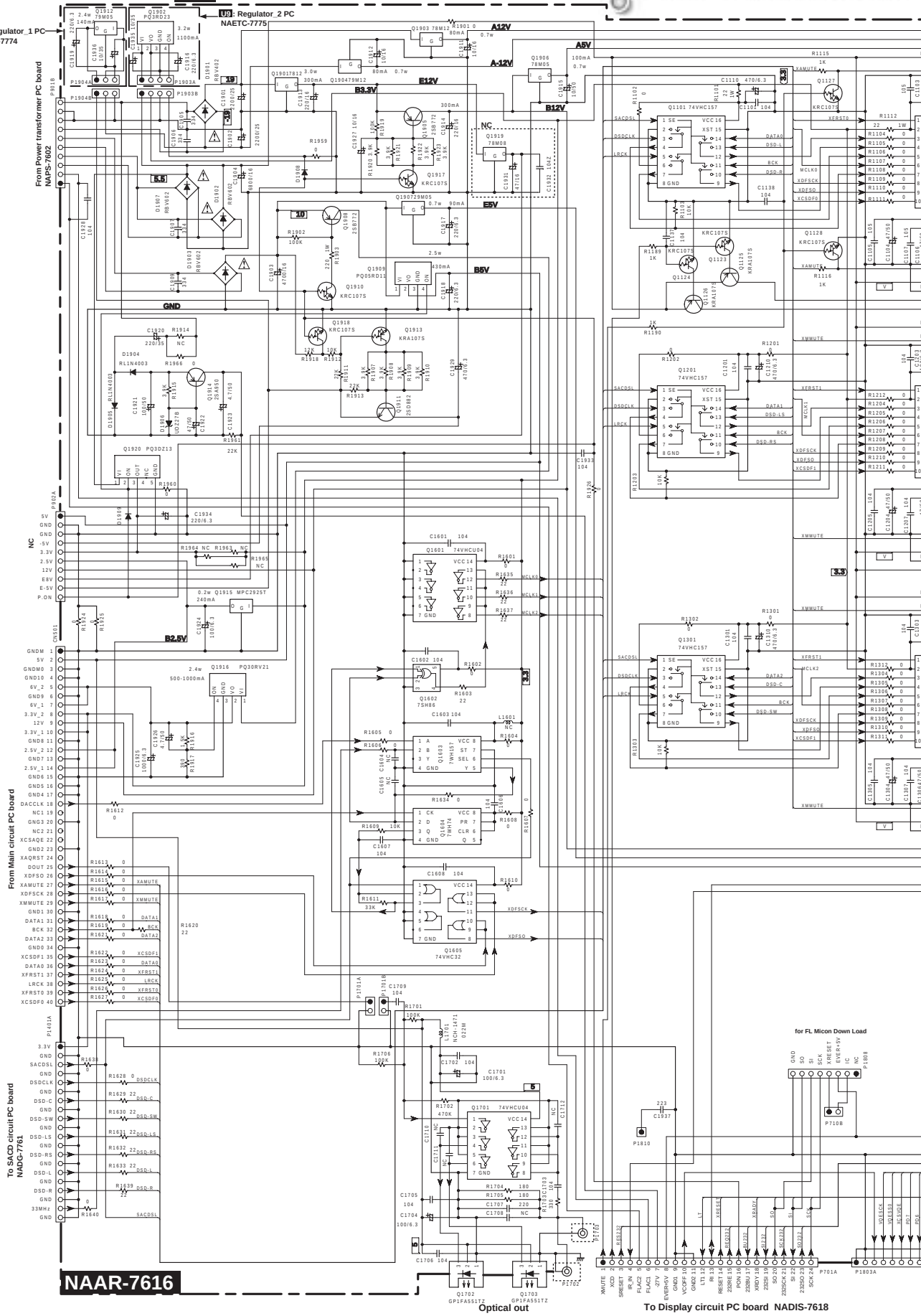
NSP : Not service part

BLOCK DIAGRAM OVERALL

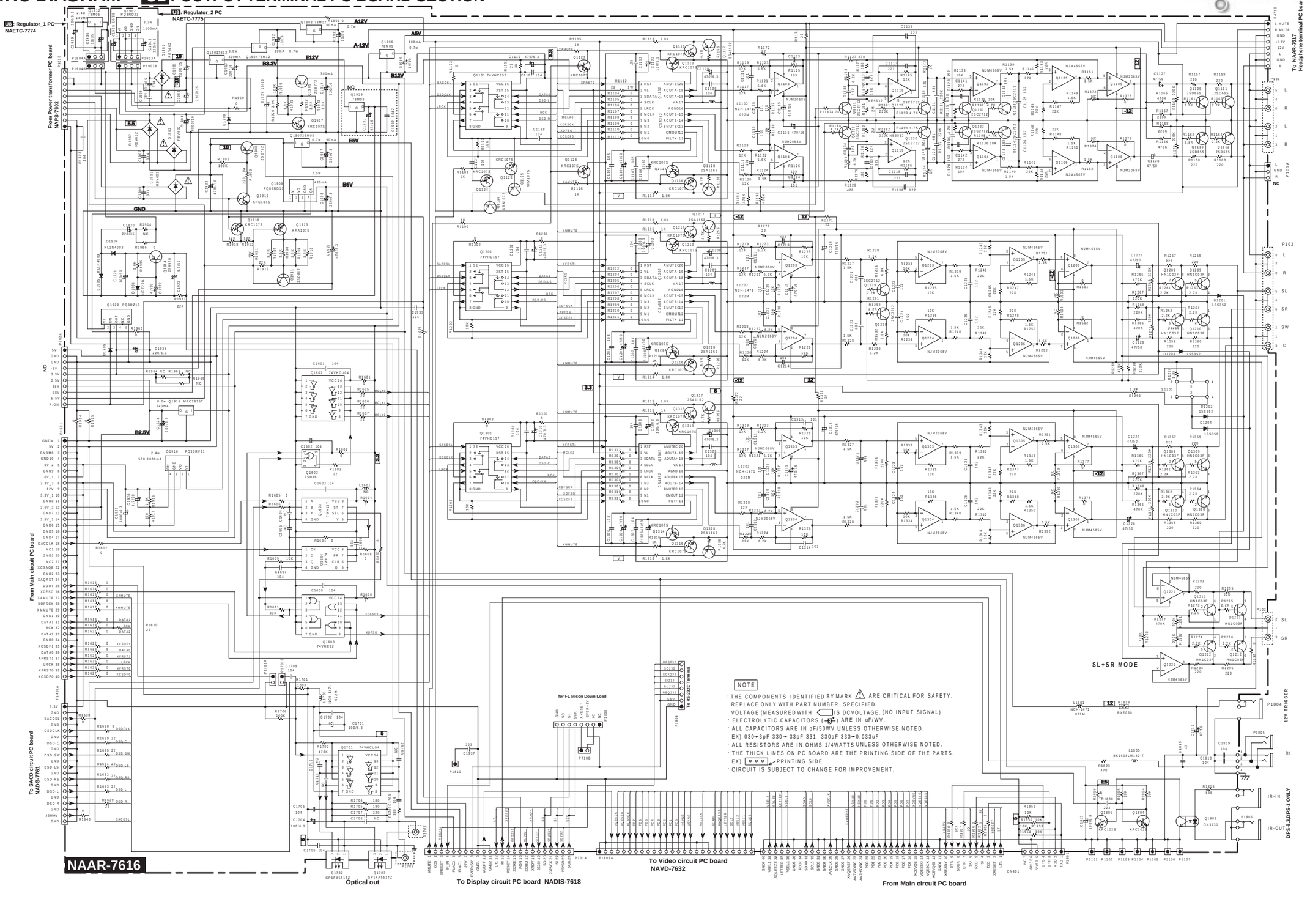




SCHEMATIC DIAGRAM U1 : OUTPUT TERMINAL PC BOARD SECTION



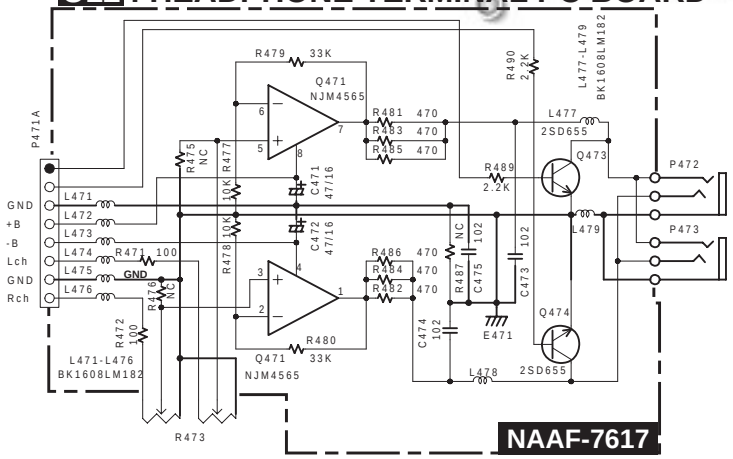
SCHEMATIC DIAGRAM U1: OUTPUT TERMINAL PC BOARD SECTION



E F G H

U12 : HEADPHONE TERMINAL PC BOARD

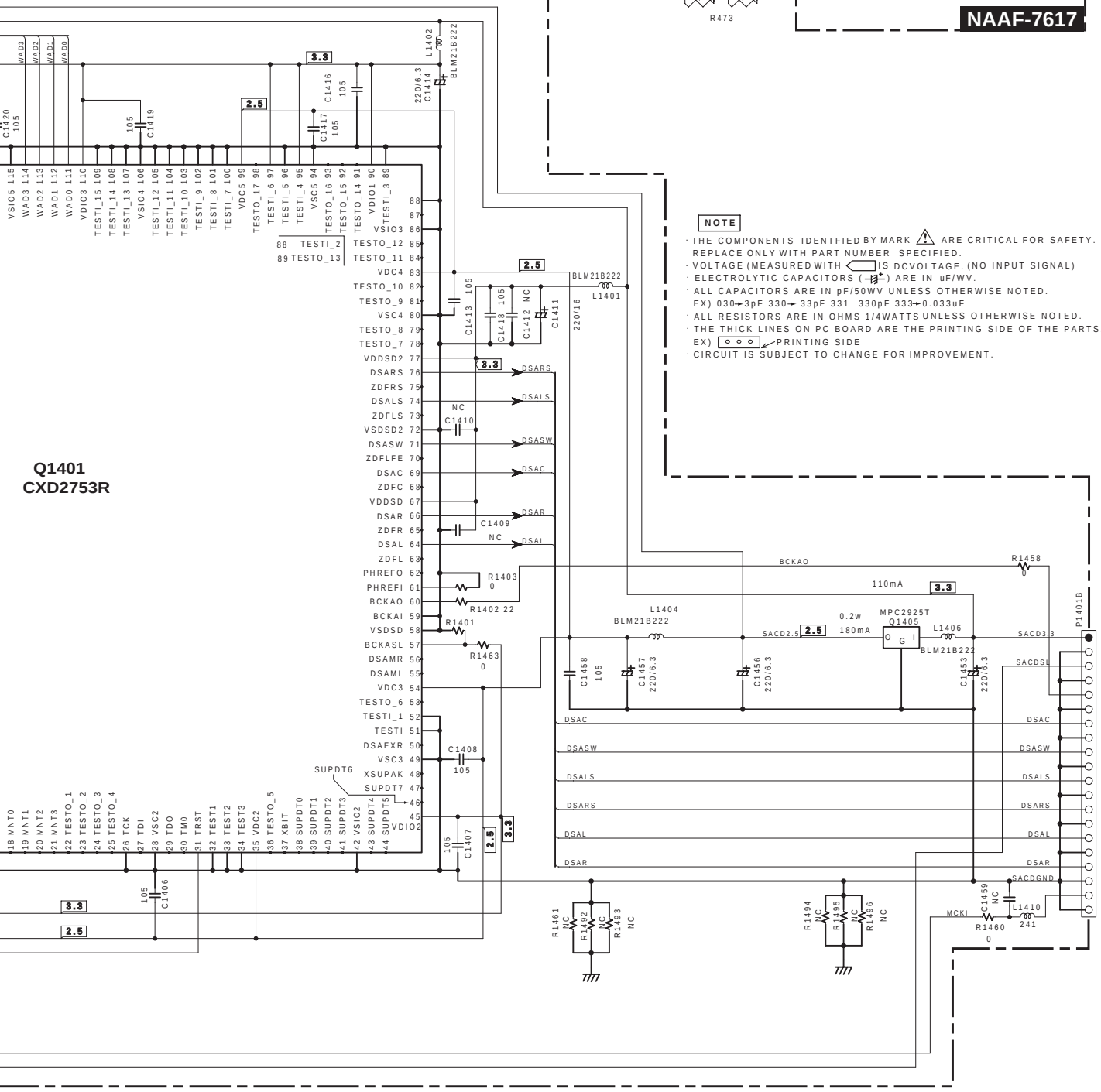
NADG-7761



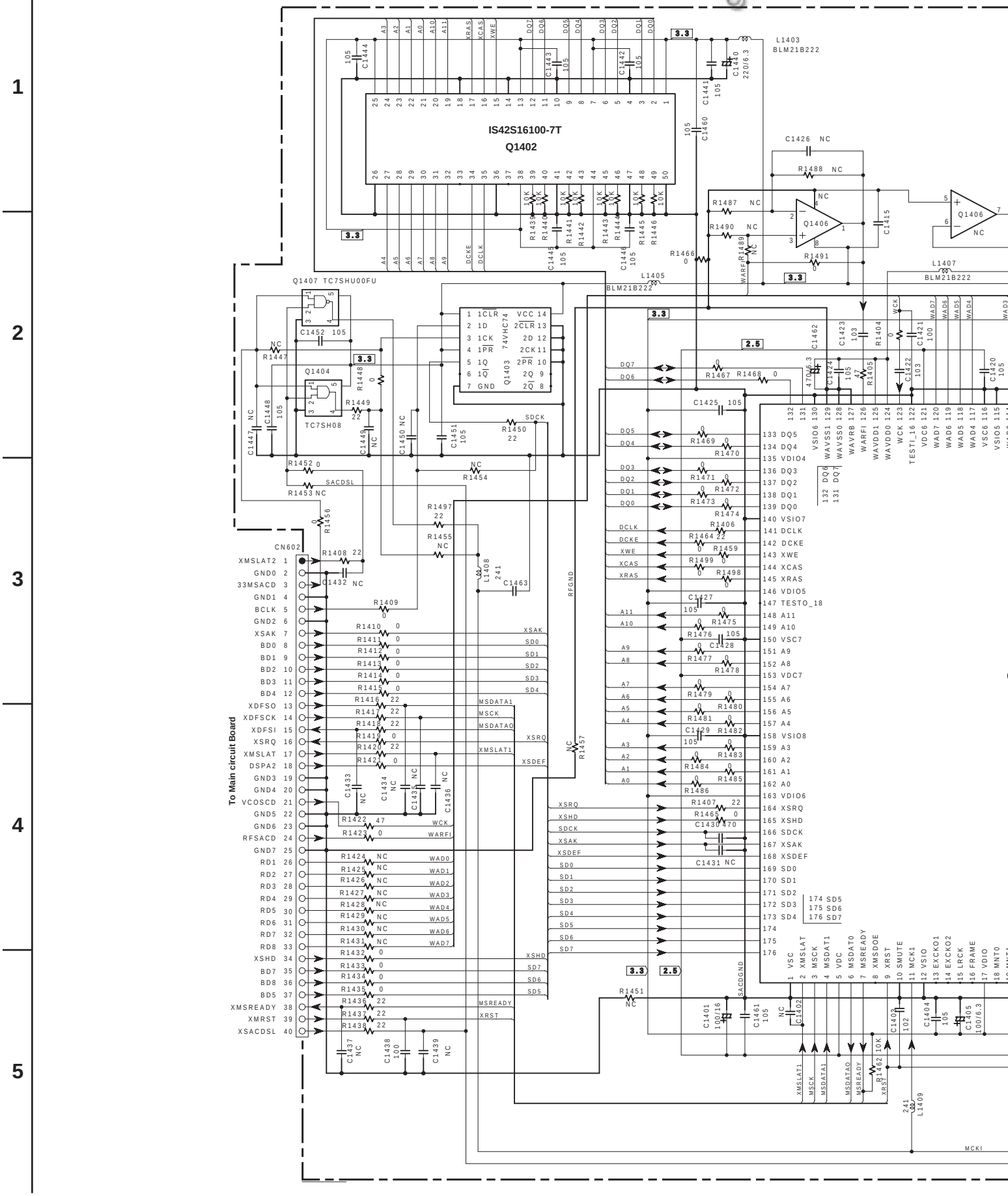
NOTE

- THE COMPONENTS IDENTFIED BY MARK ⚠ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH ▭ IS DCVOLTAGE. (NO INPUT SIGNAL)
- 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.

Q1401
CXD2753R



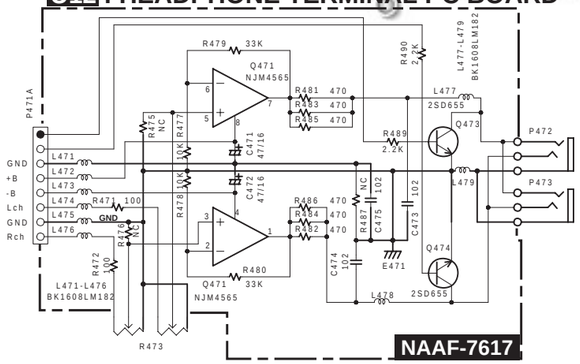
SCHEMATIC DIAGRAM U13:SACD CIRCUIT PC BOARD SECTION



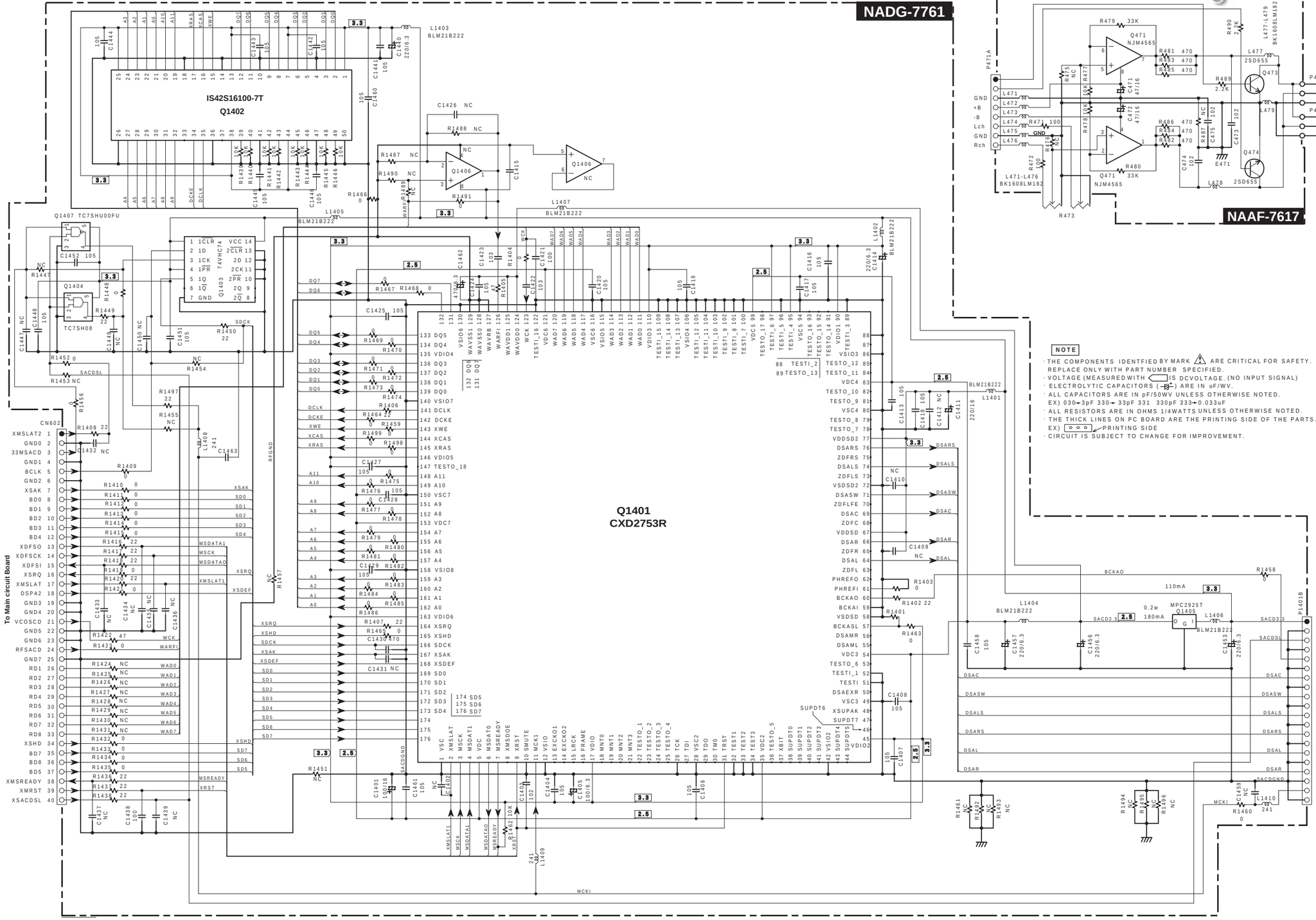
SCHEMATIC DIAGRAM U13 :SACD CIRCUIT PC BOARD SECTION

NADG-7761

U12 : HEADPHONE TERMINAL PC BOARD



NAAF-7617

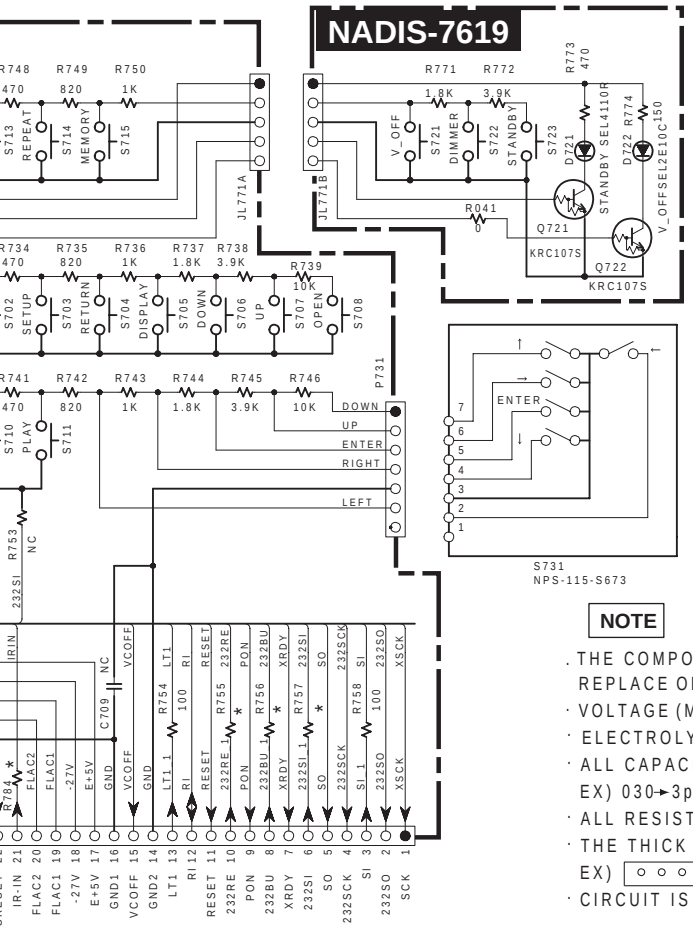


NOTE

- THE COMPONENTS IDENTFIED BY MARK ⚠ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH ▭ IS DCVOLTAGE. (NO INPUT SIGNAL)
- 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

U3 : STANDBY LED PC BOARD



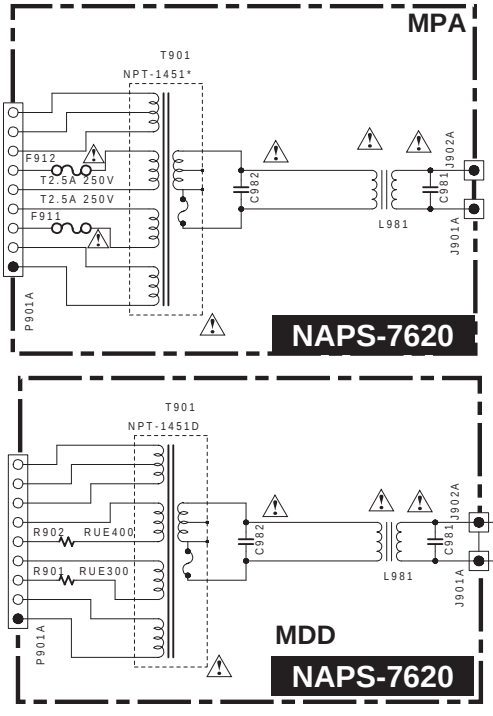
NOTE

. THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
· VOLTAGE (MEASURED WITH ⬭ IS DCVOLTAGE. (NO INPUT SIGNAL)
· 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.

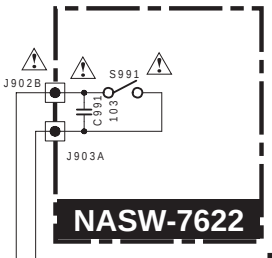
	R755,R756,R757 R776,R777	R709,R710,R711,R712 R713,R784	R791	R789,R790 R795	R726	R728,R729,R760	R730 R731	R727 R783
PS-8.3	100	0	NC	10K	NC	470	NC	1K

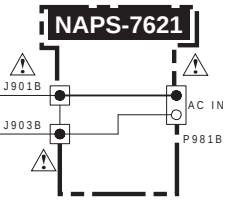
	D704,D705	D706,D707,D708	D709,D710
PS-8.3	NC	SEL4910D	SEL2E10C

U4 : POWER TRANSFORMER PC BOARD



U6 : POWER SWITCH PC BOARD

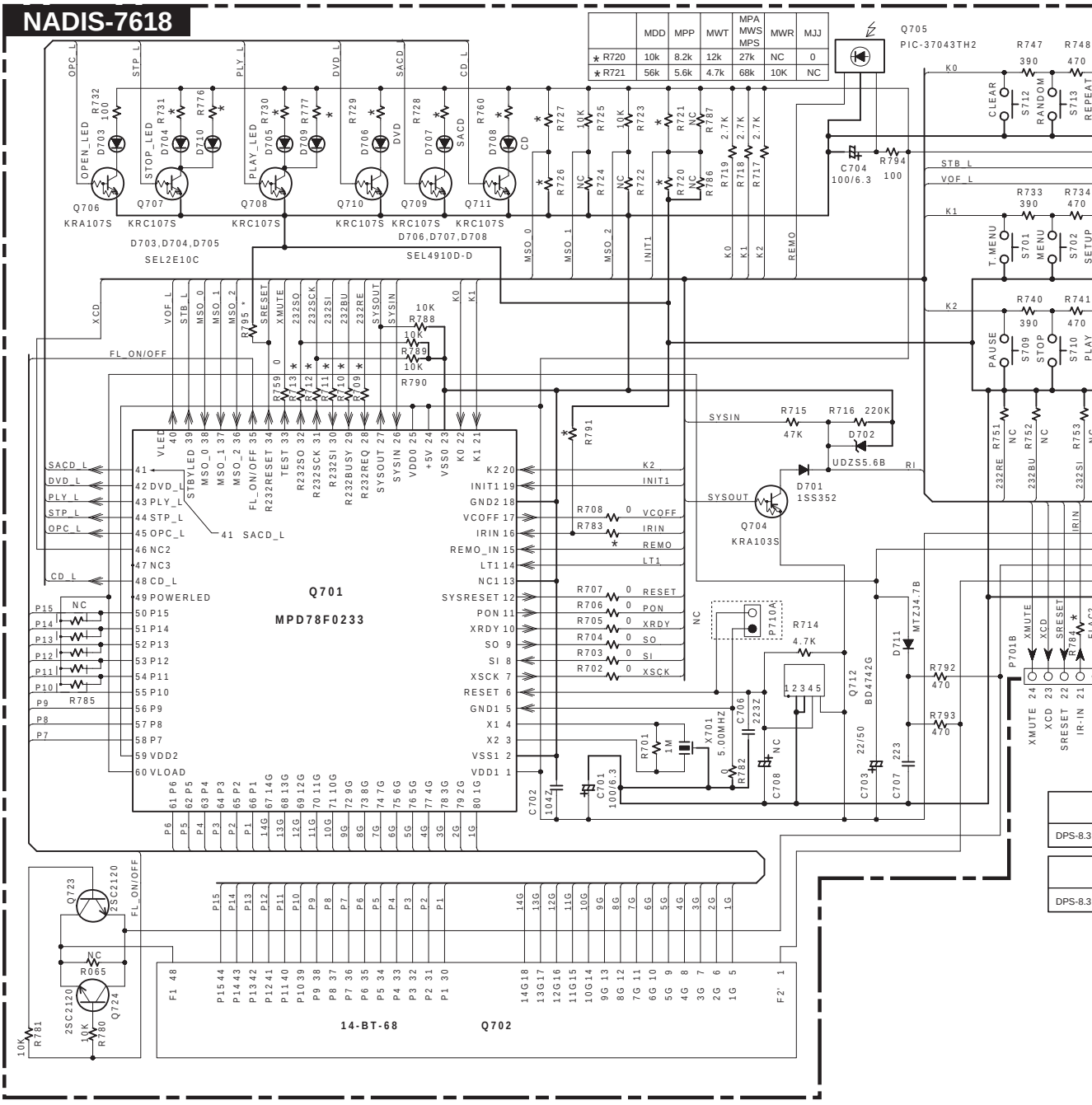




U5 : INLET TERMINAL PC BOARD

SCHEMATIC DIAGRA U2: DISPLAY CIRCUIT PC BOARD SECTION

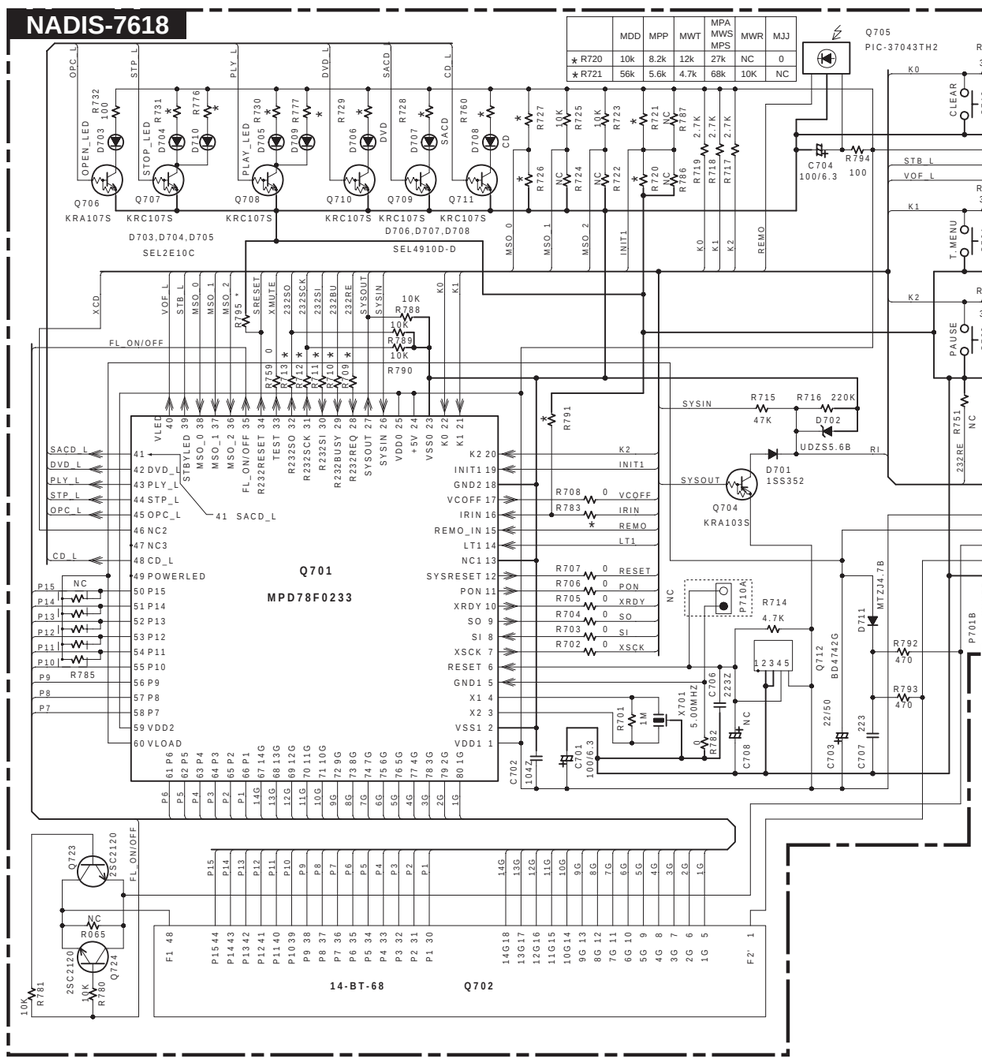
NADIS-7618



	MDD	MPP	MWT	MPA MWS MPS	MWR	MJJ
⁎ R720	10k	8.2k	12k	27k	NC	0
⁎ R721	56k	5.6k	4.7k	68k	10K	NC

SCHEMATIC DIAGRA U2: DISPLAY CIRCUIT PC BOARD SECTION

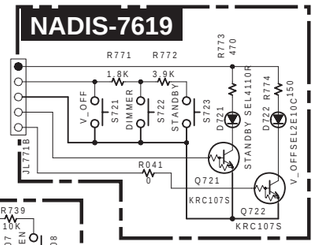
NADIS-7618

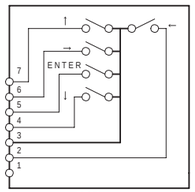


	MDD	MPP	MWT	MPA MWS MPS	MWR	MJJ
★R720	10k	8.2k	12k	27k	NC	0
★R721	56k	5.6k	4.7k	68k	10K	NC

U3: STANDBY LED PC BOARD

NADIS-7619





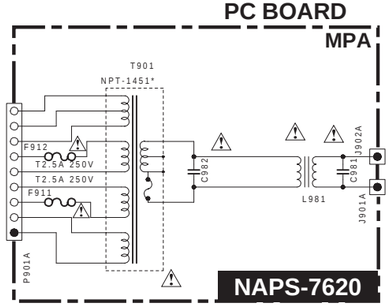
NOTE

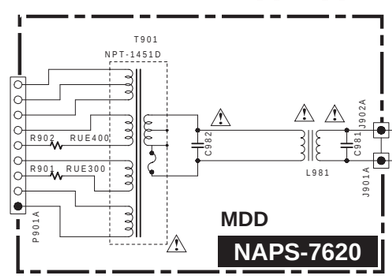
- THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH ▭ IS DCVOLTAGE. (NO INPUT SIGNAL)
- ELECTROLYTIC CAPACITORS (⊣⊢) ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED. EX) 030→3pF 330→33pF 331 330pF 333→0.033uF
- 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.

	R755,R756,R757 R776,R777	R709,R710,R711,R712 R713,R784	R791	R789,R790 R795	R726	R728,R729,R760	R730 R731	R727 R783
DPS-8.3	100	0	NC	10K	NC	470	NC	1K

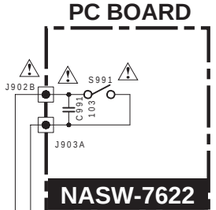
	D704,D705	D706,D707,D708	D709,D710
DPS-8.3	NC	SEL4910D	SEL2E10C

U4: POWER TRANSFORMER PC BOARD

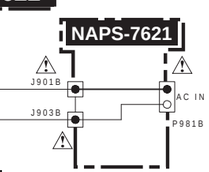




U6: POWER SWITCH PC BOARD



NAPS-7621



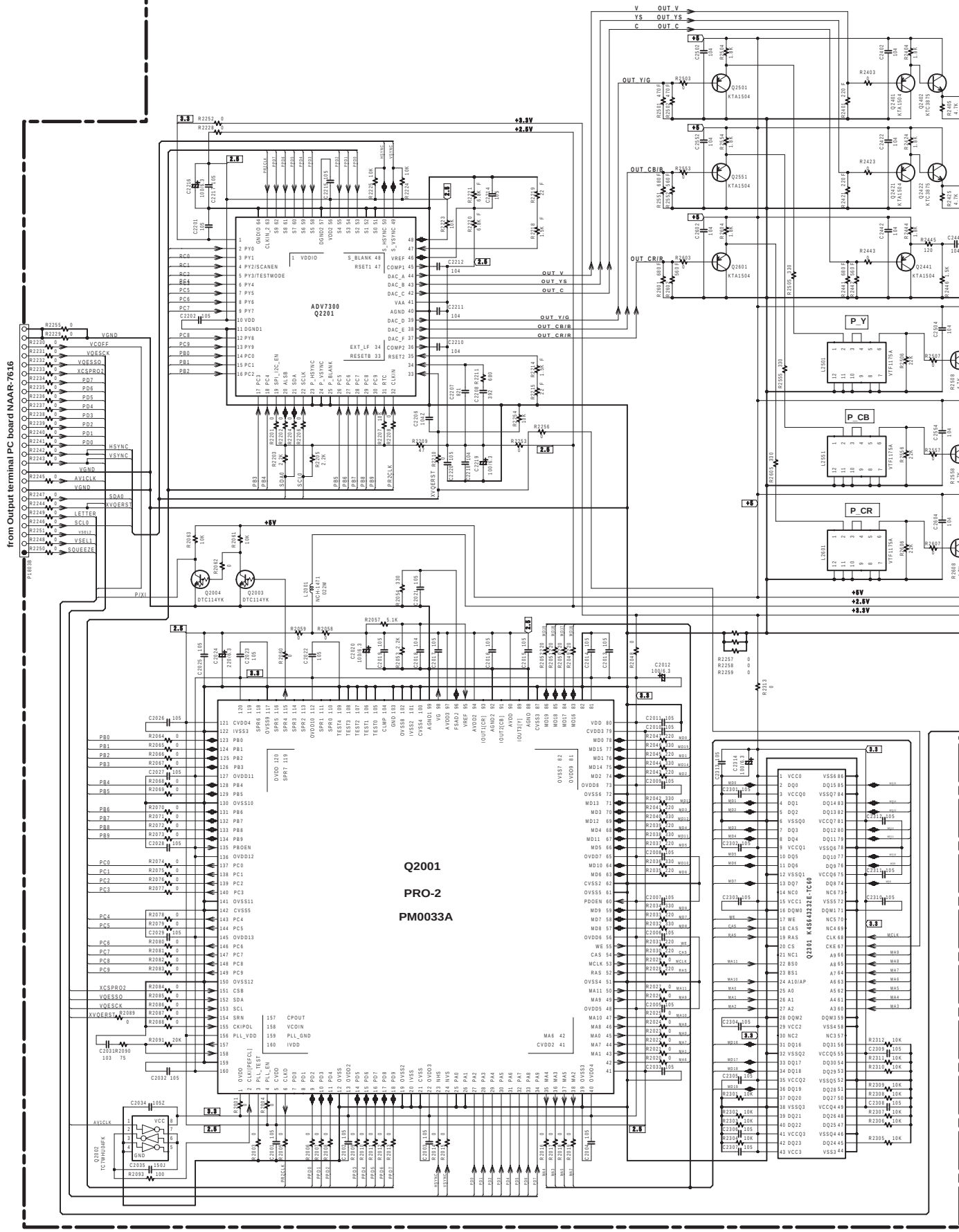
U5: INLET TERMINAL PC BOARD

SCHEMATIC DIAGRAM

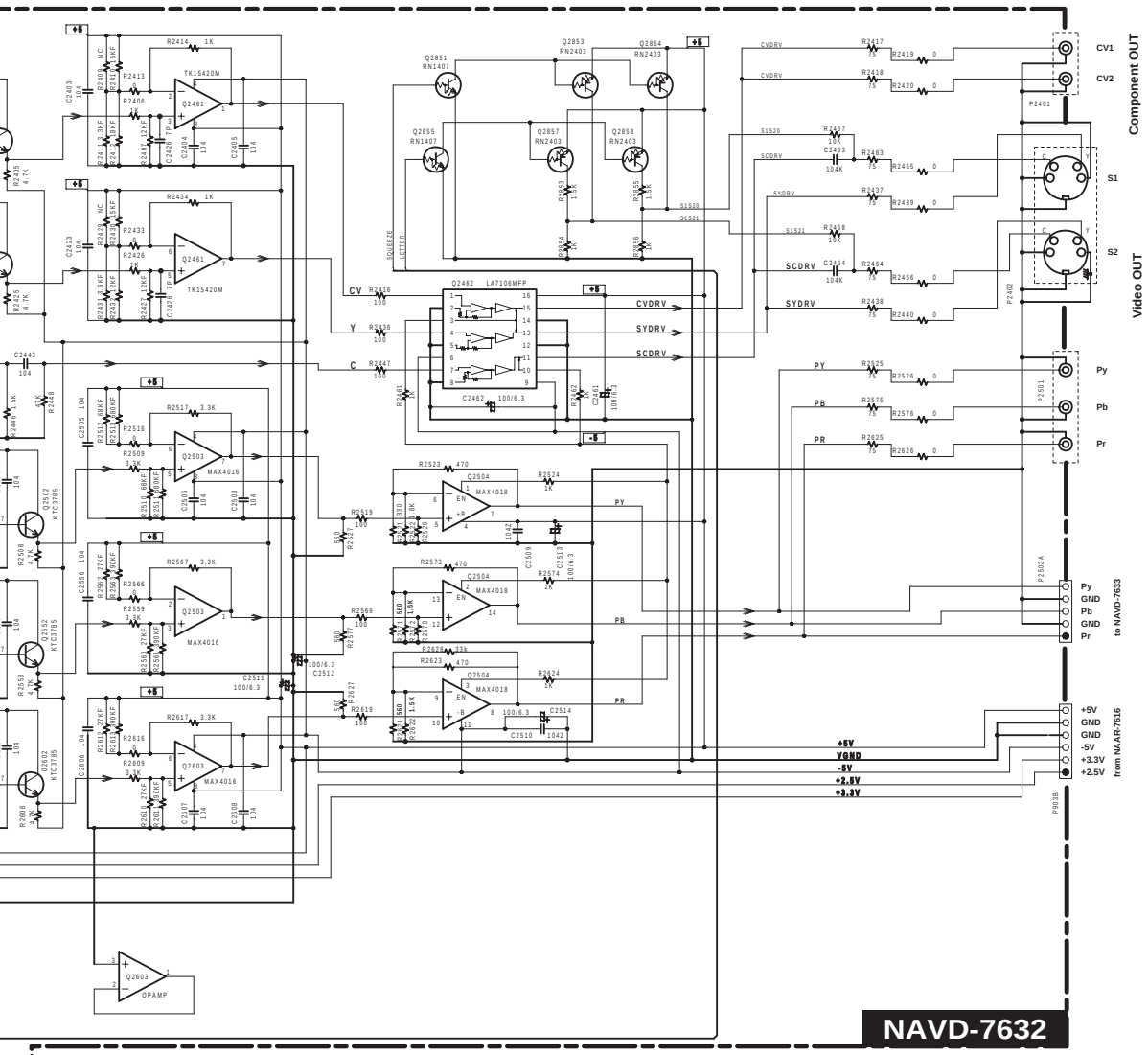
VIDEO SECTION

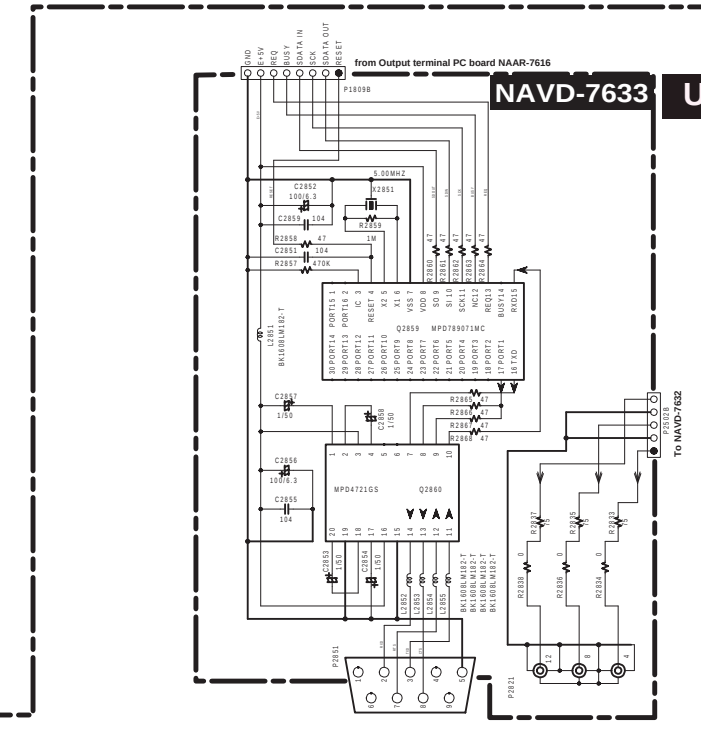
U10 : VIDEO CIRCUIT PC BOARD NAVD-7632

MPA4P only



E F G H





U11: RS-232C TERMINAL PC BOARD

NOTE

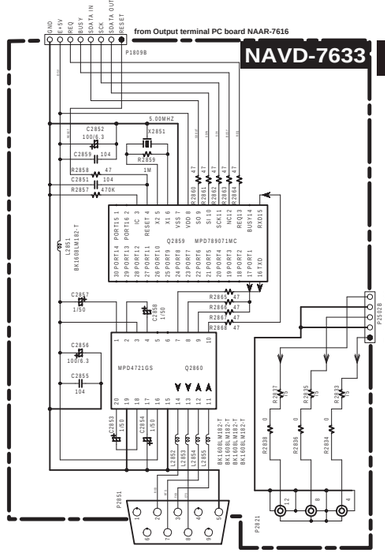
. THE COMPONENTS IDENTIFIEDBY MARK ⚠ ARE CRITICAL FOR SAFETY.
REPLACE ONLY WITH PART NUMBER SPECIFIED.
· VOLTAGE (MEASURED WITH ⬭ IS DCVOLTAGE. (NO INPUT SIGNAL)
· ELECTROLYTIC CAPACITORS (⊣+) ARE IN uF/WV.
· ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
EX) 030→3pF 330→ 33pF 331 330pF 333→0.033uF
· 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
VIDEO SECTION

U10 : VIDEO CIRCUIT PC BOARD NAVD-7632

MPA4P only

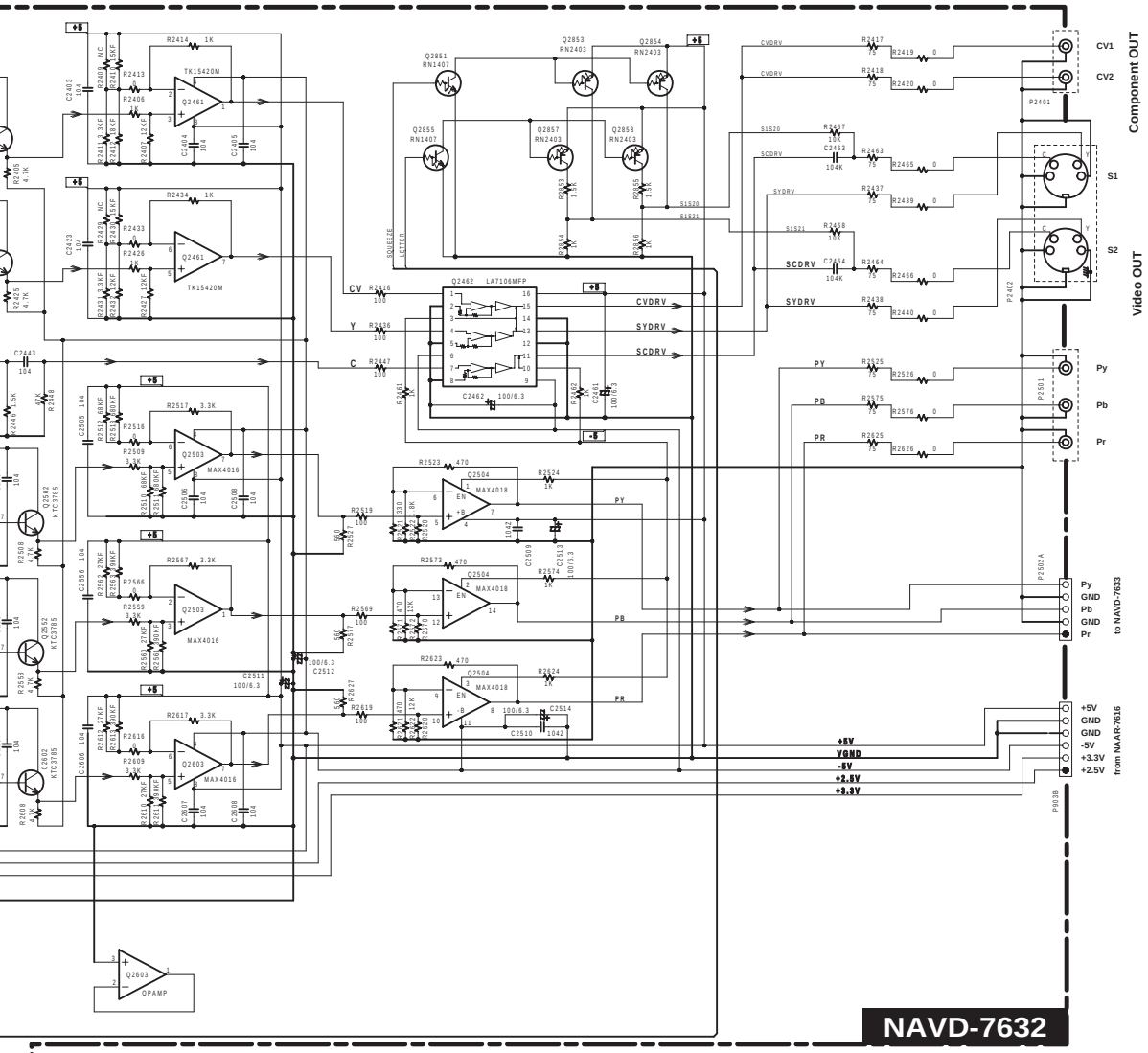
NAVD-7633 U11 : RS-232C TERMINAL PC BOARD



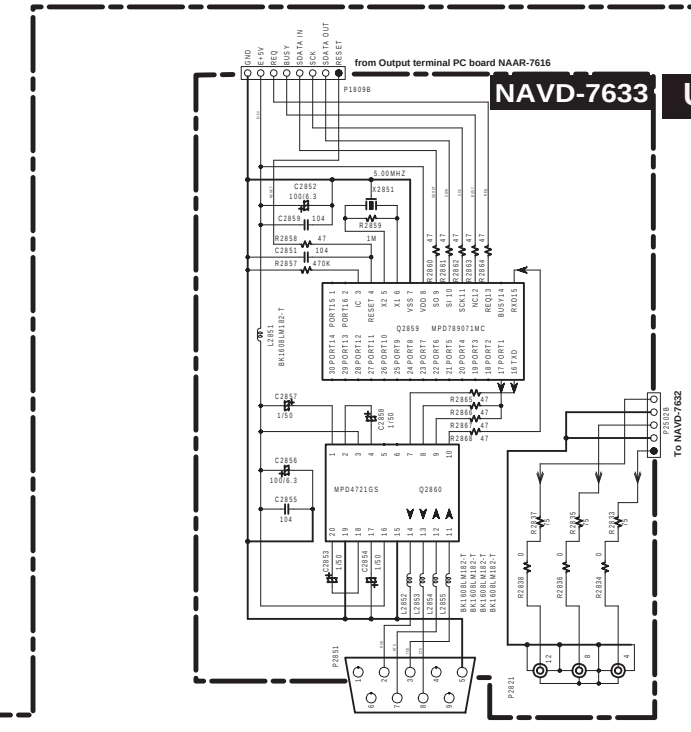
NOTE

- THE COMPONENTS IDENTIFIEDBY MARK ⚠ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH ⬭ IS DCVOLTAGE. (NO INPUT SIGNAL)
- 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



NAVD-7632



NAVD-7633

U11 : RS-232C TERMINAL PC BOARD

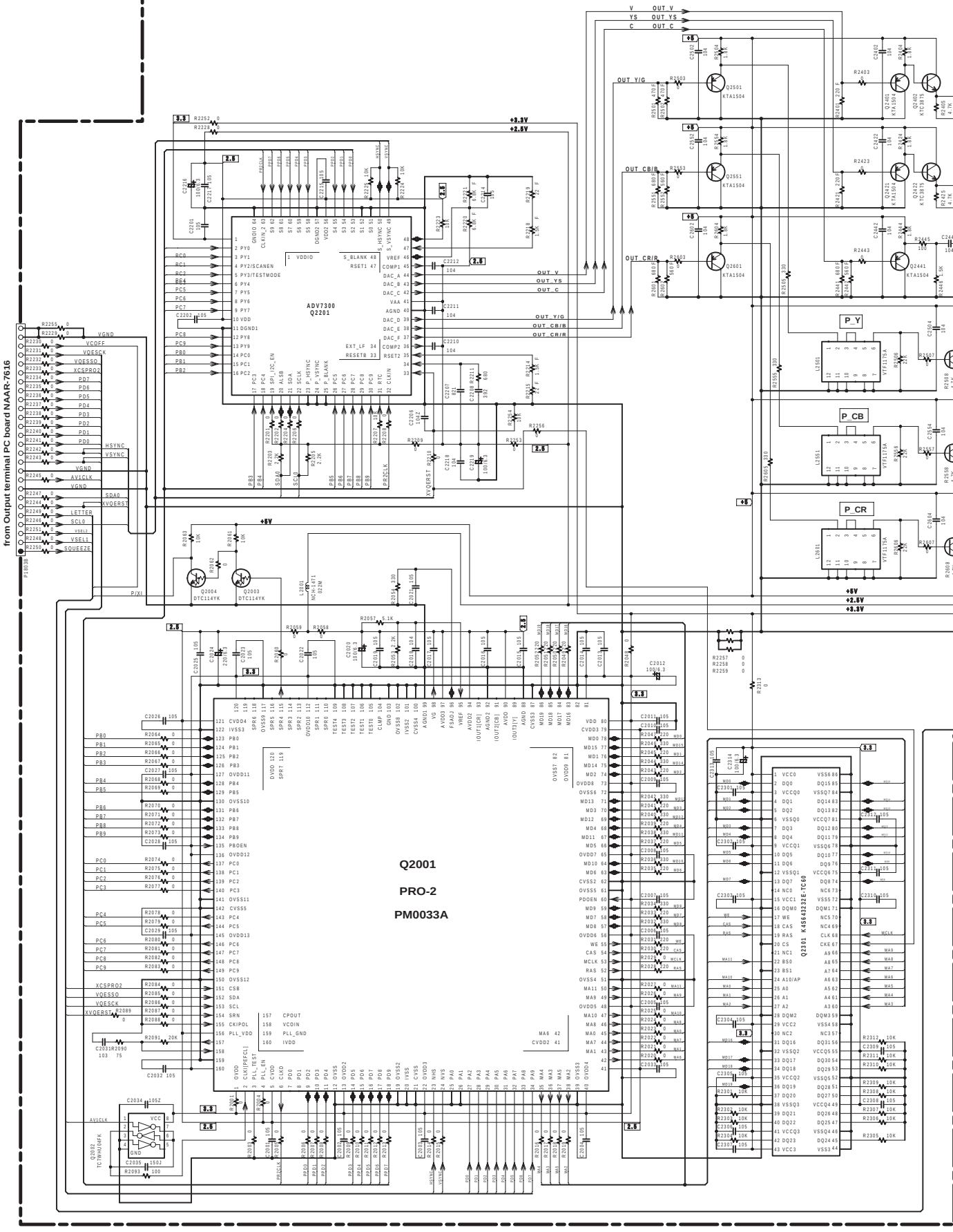
NOTE

- THE COMPONENTS IDENTIFIEDBY MARK ⚠ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH ⟨ ⟩ IS DCVOLTAGE. (NO INPUT SIGNAL)
- 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

VIDEO SECTION

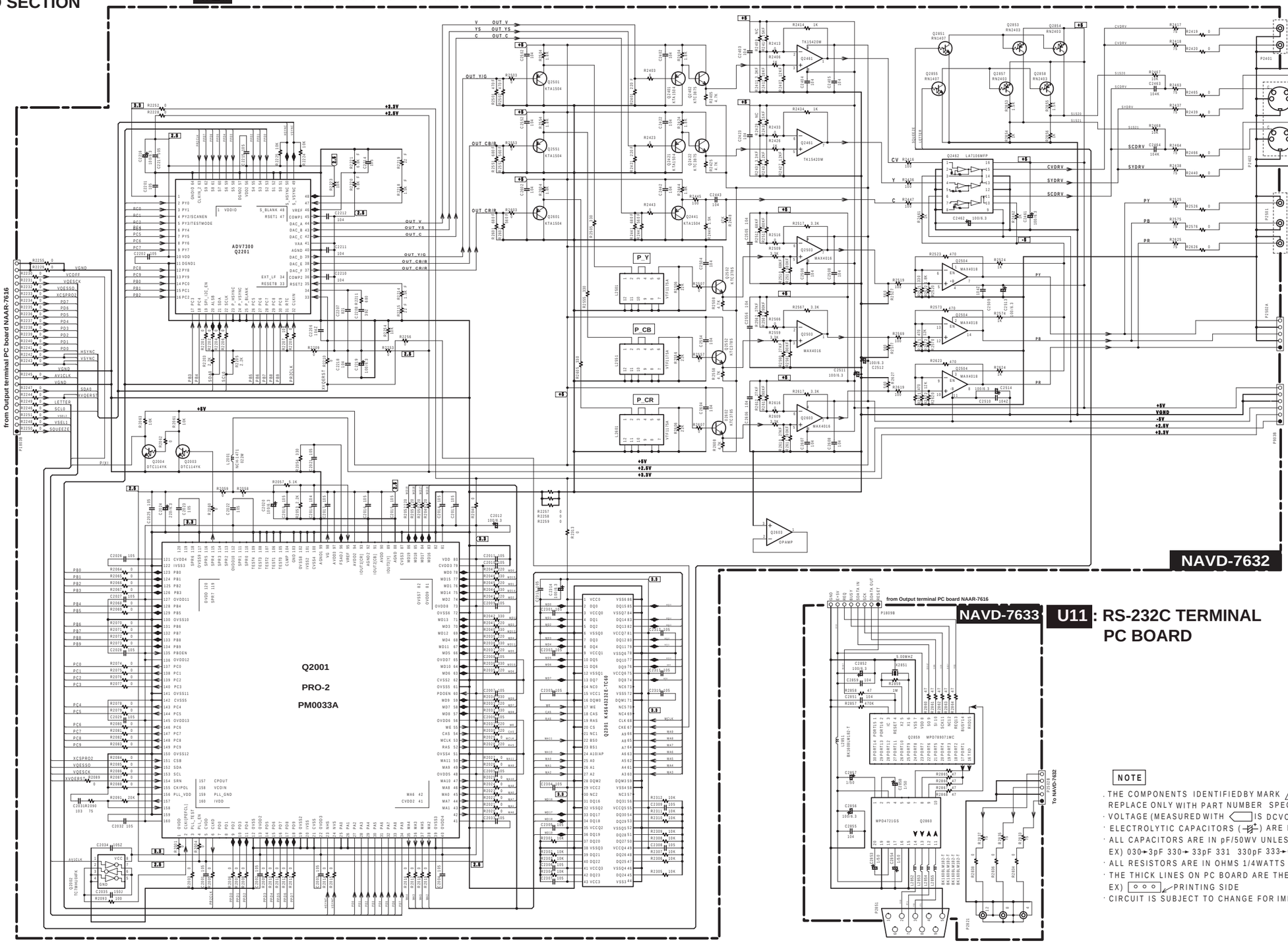
U10 : VIDEO CIRCUIT PC BOARD NAVD-7632



SCHEMATIC DIAGRAM

VIDEO SECTION

U10 : VIDEO CIRCUIT PC BOARD NAVD-7632



NAVD-7633 U11 : RS-232C TERMINAL PC BOARD

NOTE

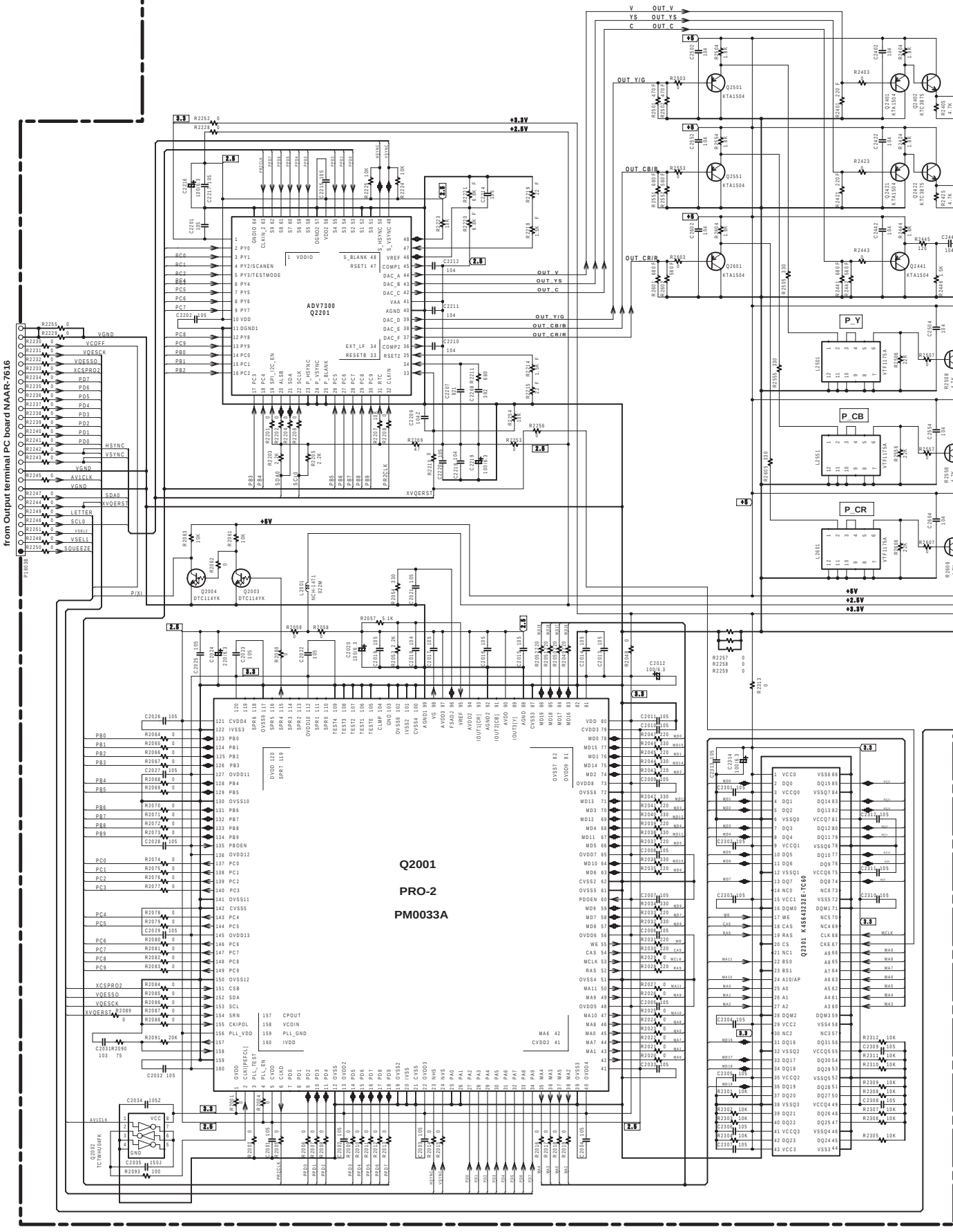
- THE COMPONENTS IDENTIFIEDBY MARK ⚠ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH ⬭ IS DCVOLTAGE. (NO INPUT SIGNAL)
- ELECTROLYTIC CAPACITORS (⊣⊢) ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED. EX) 030→3pF 330→ 33pF 331 330pF 333→0.033uF
- 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

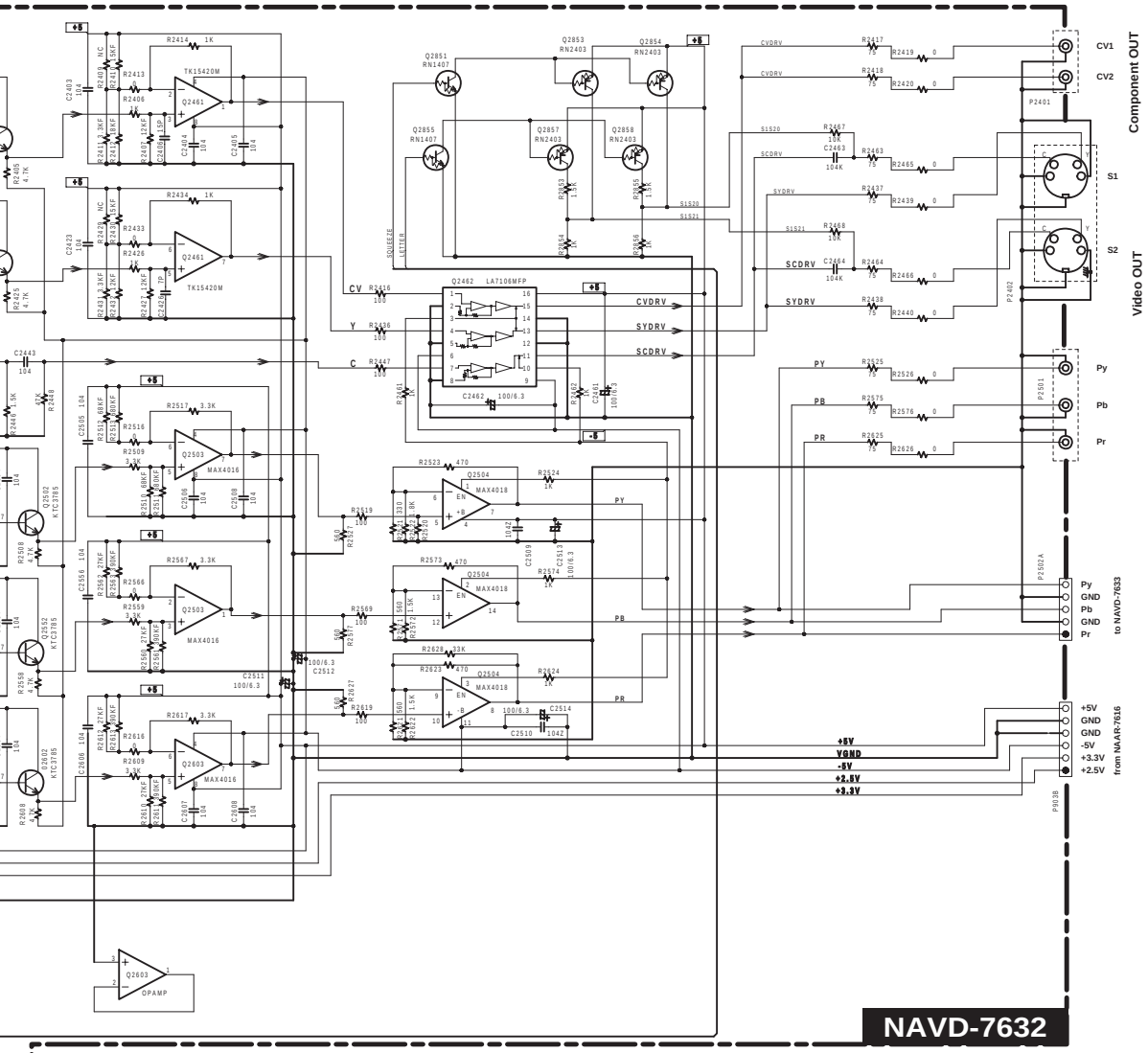
VIDEO SECTION

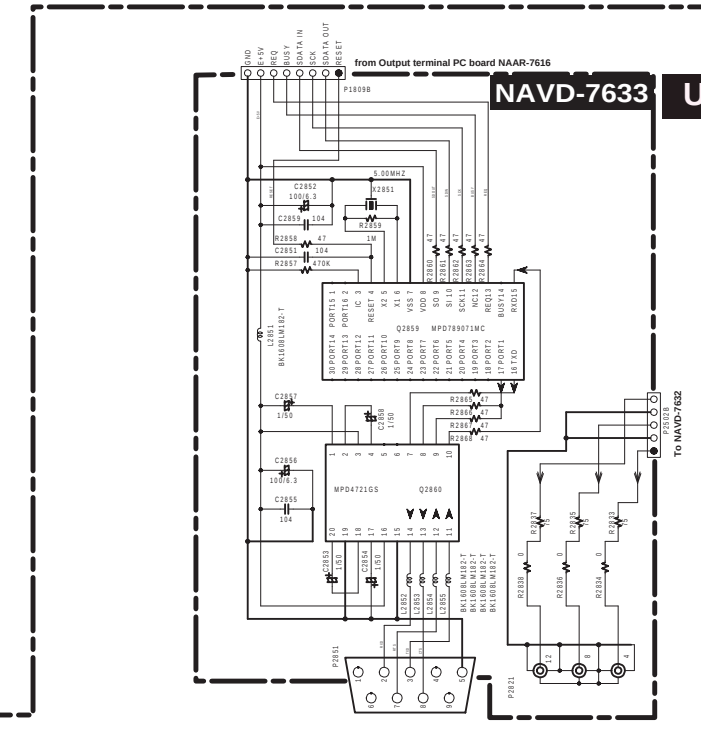
U10 : VIDEO CIRCUIT PC BOARD NAVD-7632

MDD1N only



E F G H





U11 : RS-232C TERMINAL PC BOARD

NOTE

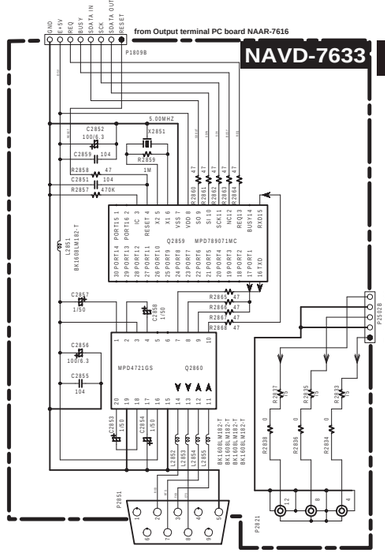
. THE COMPONENTS IDENTIFIEDBY MARK ⚠ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
· VOLTAGE (MEASURED WITH ⟨ ⟩ IS DCVOLTAGE. (NO INPUT SIGNAL)
· ELECTROLYTIC CAPACITORS (⊣+) ARE IN uF/WV.
· ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
EX) 030→3pF 330→ 33pF 331 330pF 333→0.033uF
· 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
VIDEO SECTION

U10 : VIDEO CIRCUIT PC BOARD NAVD-7632

MDD1N only

NAVD-7633 U11 : RS-232C TERMINAL PC BOARD

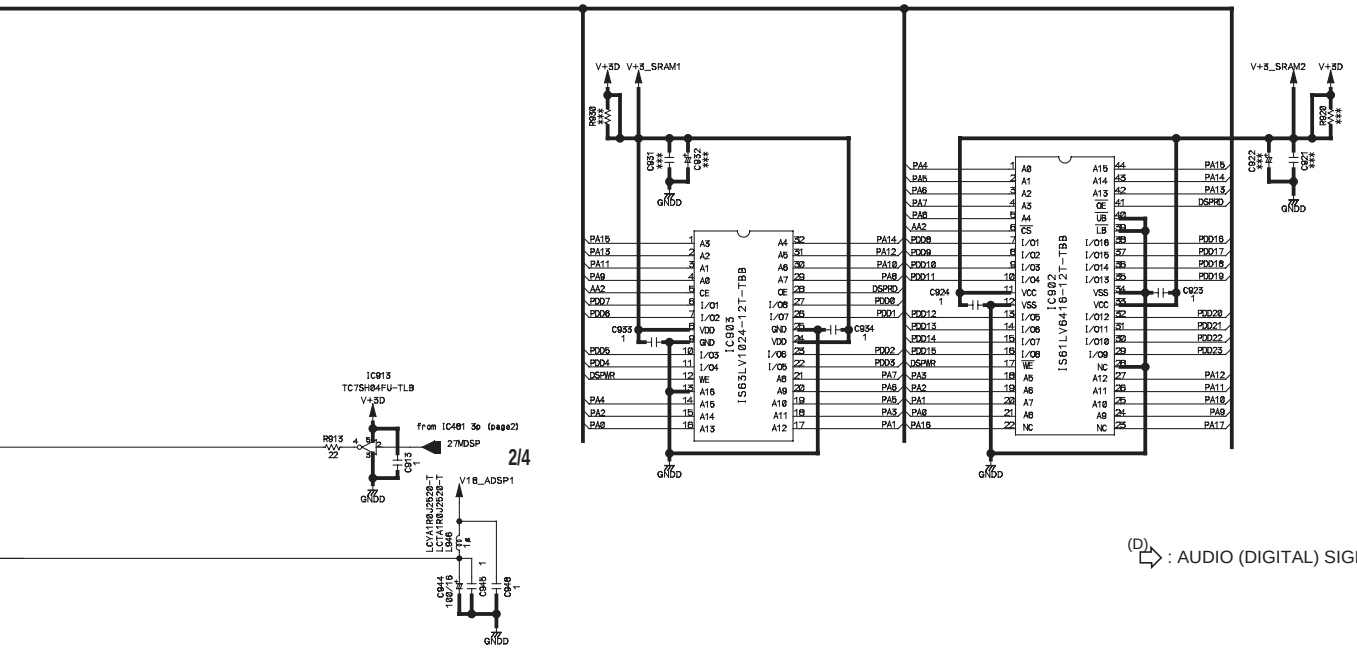


NOTE

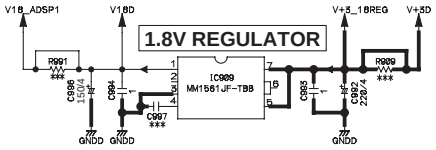
- THE COMPONENTS IDENTIFIEDBY MARK ⚠ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH ⬭ IS DCVOLTAGE. (NO INPUT SIGNAL)
- ELECTROLYTIC CAPACITORS (⊣⊢) ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED. EX) 030→3pF 330→ 33pF 331 330pF 333→0.033uF
- 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

: The power supply is shown with the marked box.



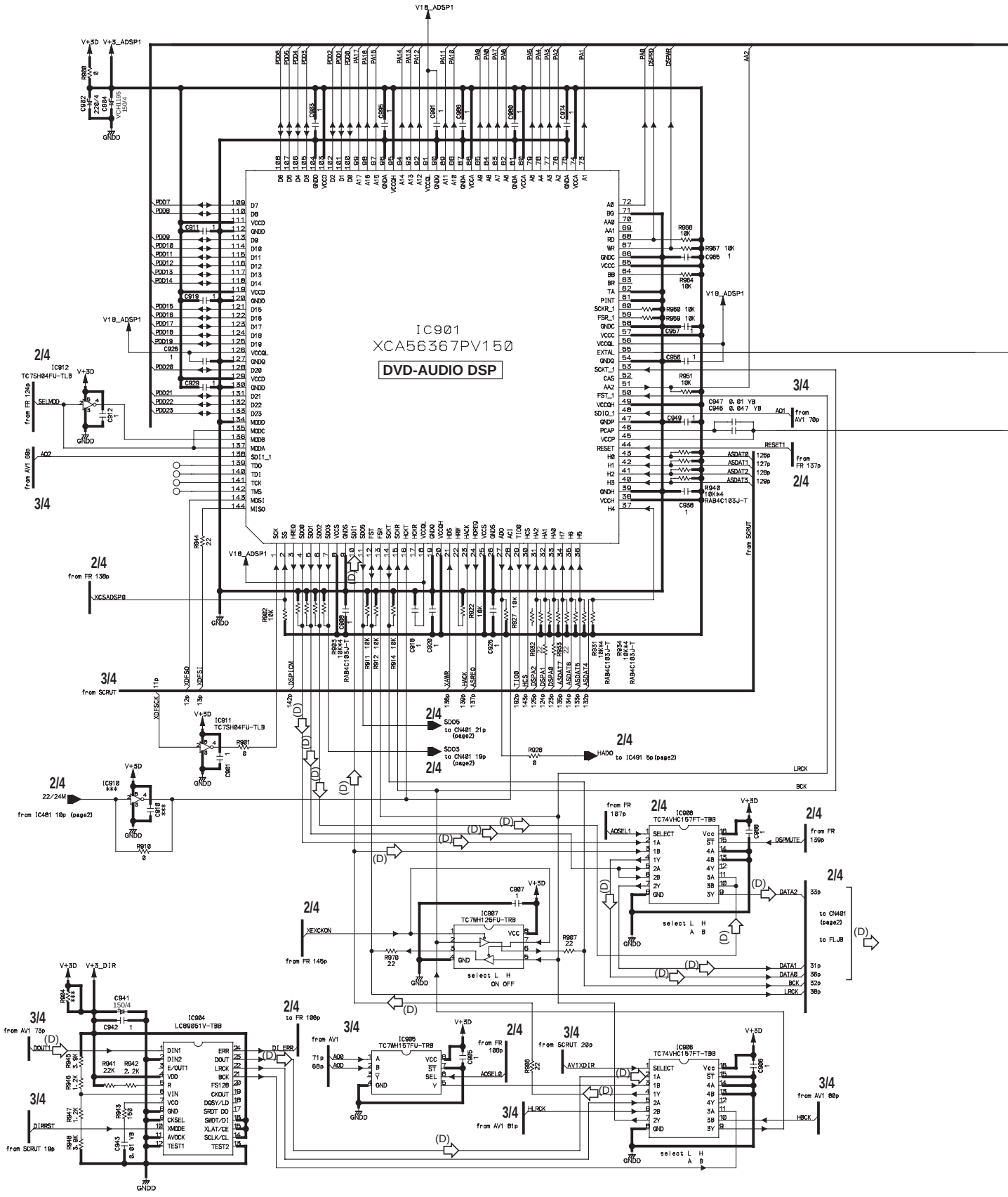
(D) : AUDIO (DIGITAL) SIGNAL ROUTE



*** : parts not mounted

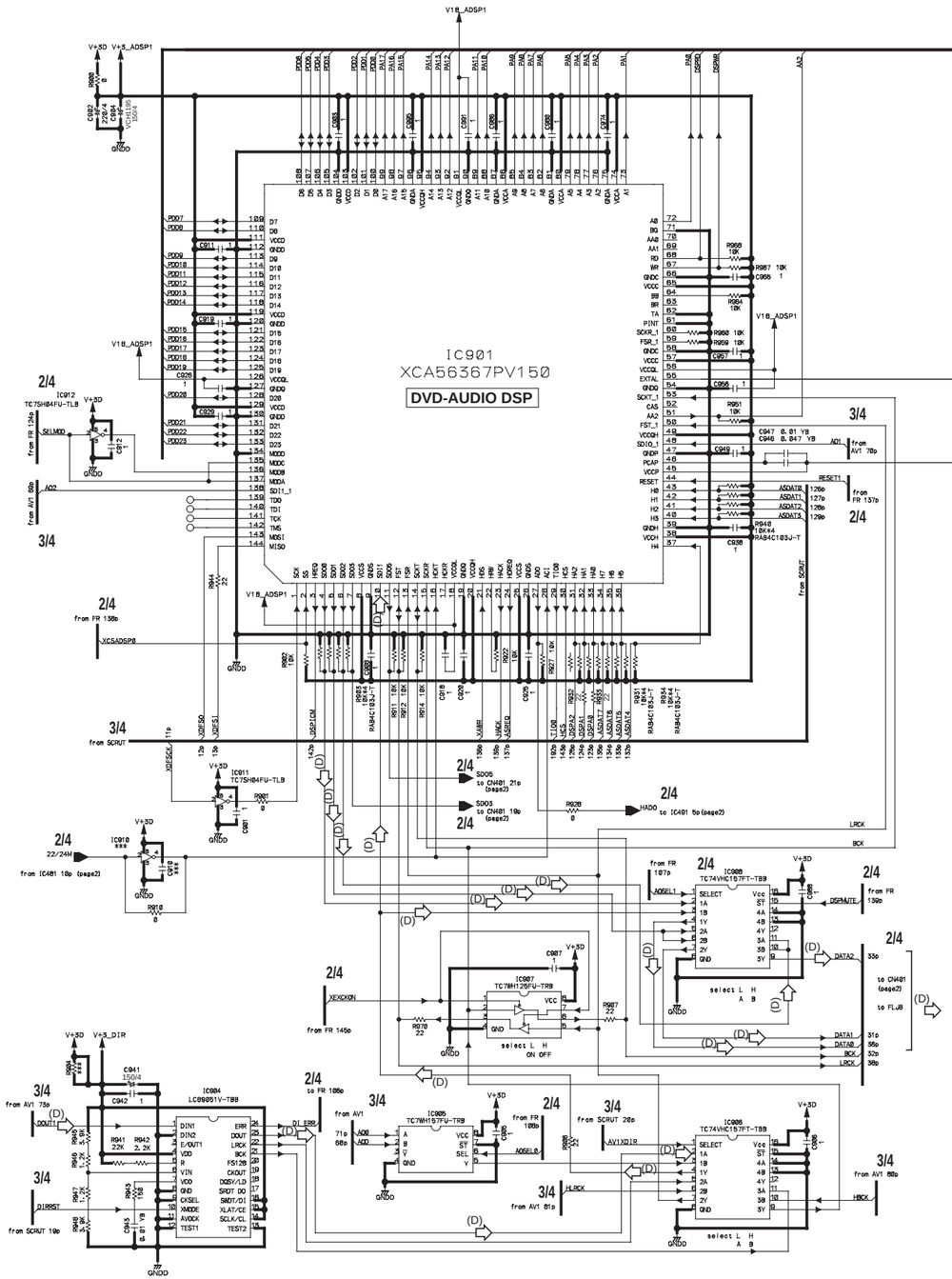
4/4

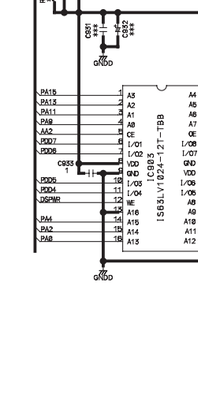
SCHEMATIC DIAGRAM MAIN PC BOARD-4

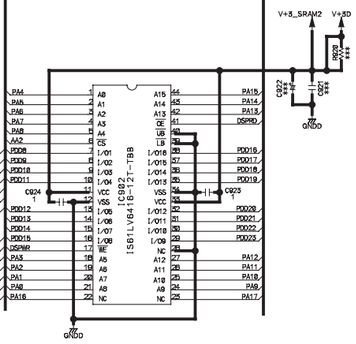


SCHEMATIC DIAGRAM MAIN PC BOARD-4

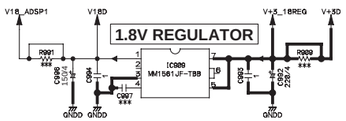
: The power supply is shown with the marked box.







(D) : AUDIO (DIGITAL) SIGNAL ROUTE



*** : parts not mounted

4/4

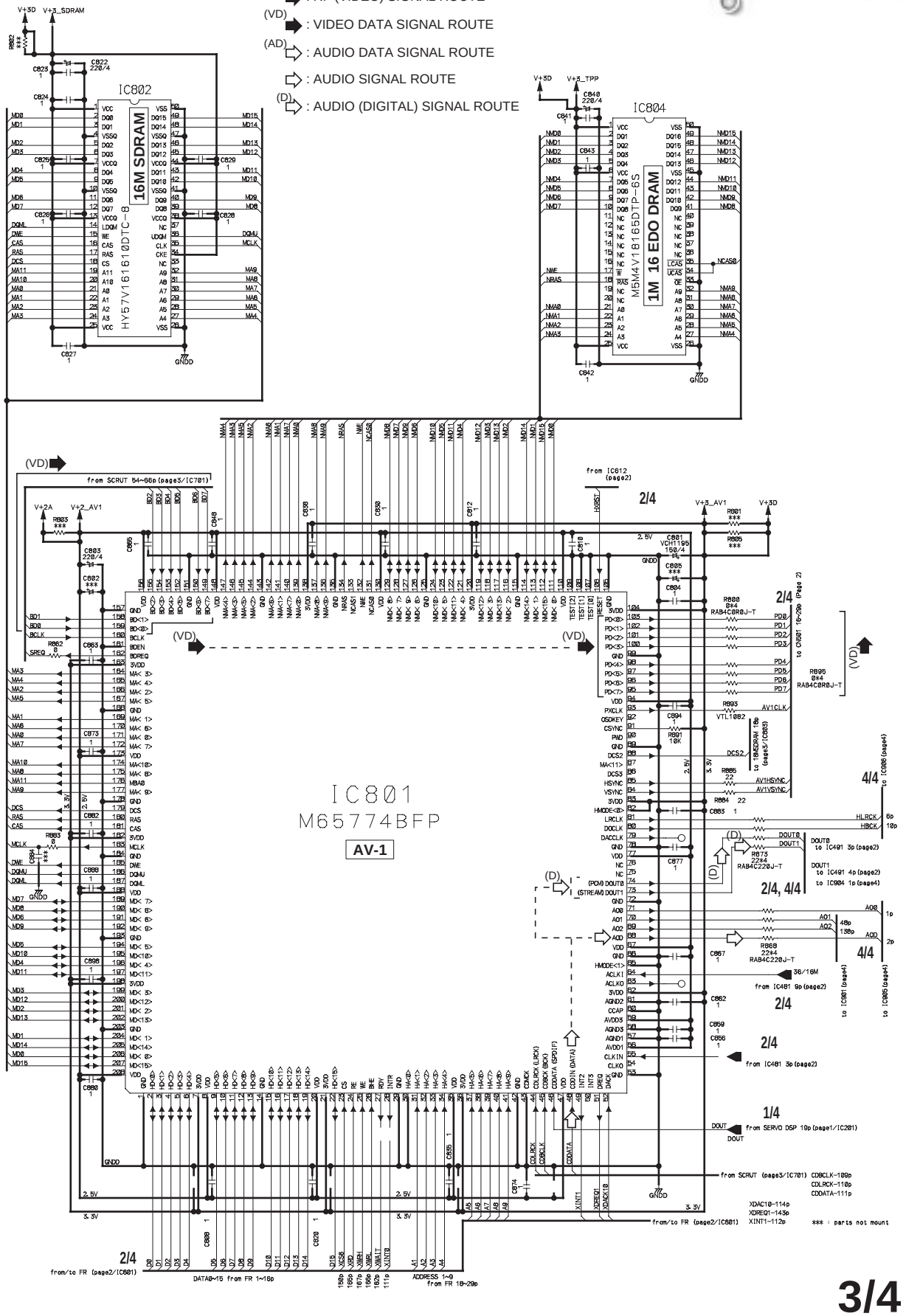
(V) : RF (VIDEO) SIGNAL ROUTE

(VD) : VIDEO DATA SIGNAL ROUTE

(AD) : AUDIO DATA SIGNAL ROUTE

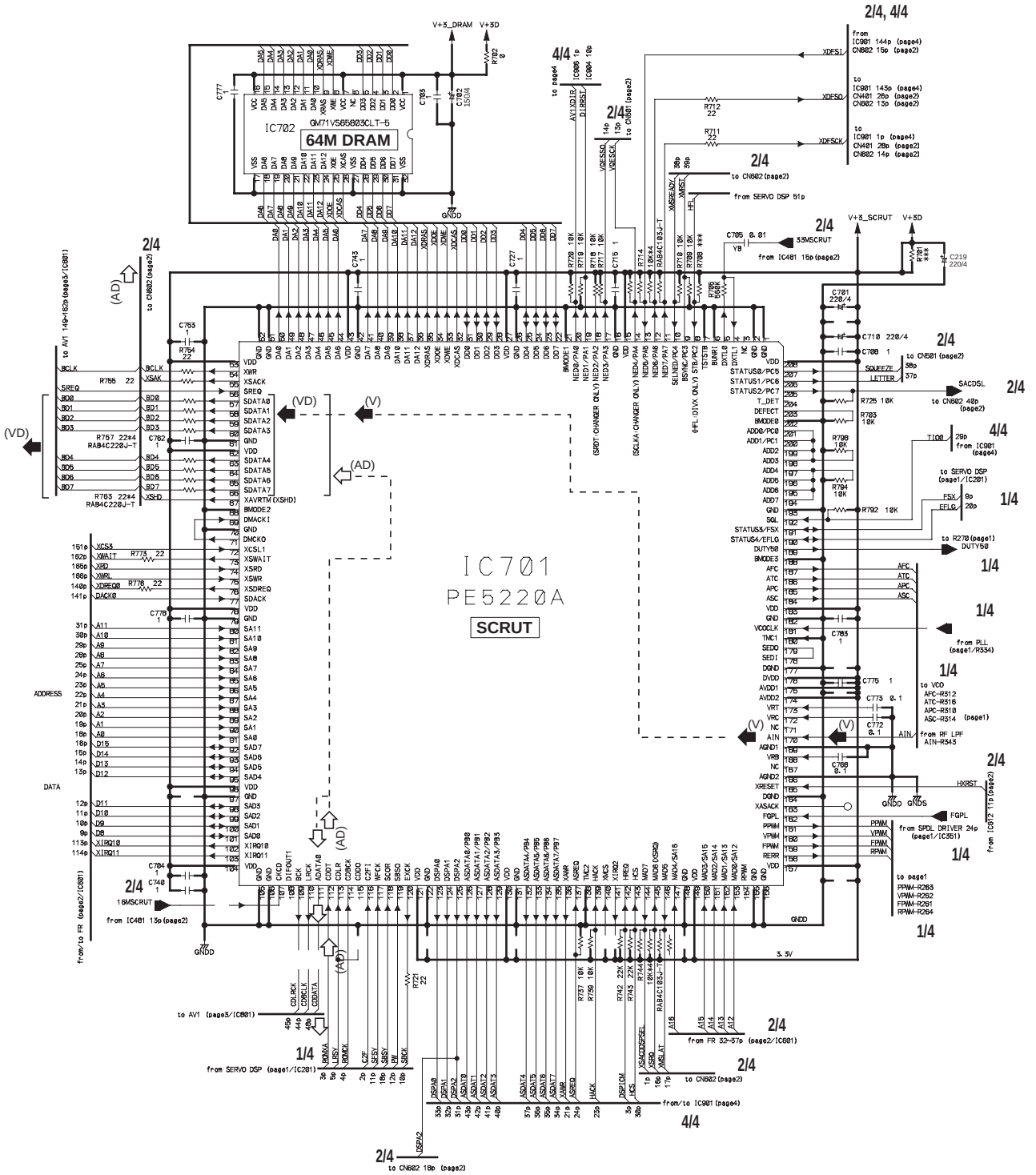
: AUDIO SIGNAL ROUTE

(D) : AUDIO (DIGITAL) SIGNAL ROUTE



3/4

SCHEMATIC DIAGRAM MAIN PC BOARD-3



3/4

SCHEMATIC DIAGRAM MAIN PC BOARD-3

(V) : RF (VIDEO) SIGNAL ROUTE
(VD) : VIDEO DATA SIGNAL ROUTE
(AD) : AUDIO DATA SIGNAL ROUTE
: AUDIO SIGNAL ROUTE
(D) : AUDIO (DIGITAL) SIGNAL ROUTE

IC701
PE5220A
SCRUT

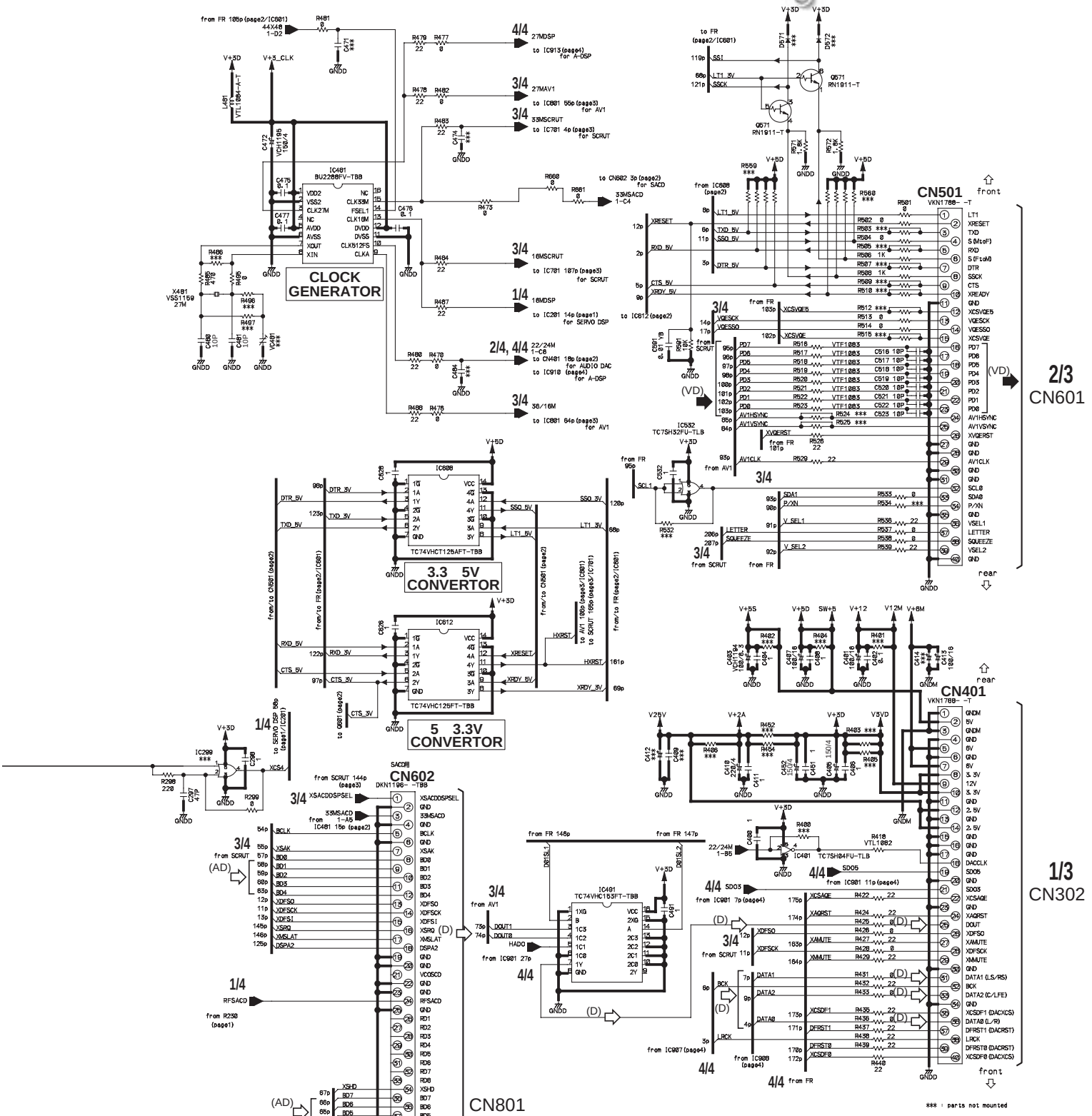
IC802
16M SDRAM
HY57V161610DTC-B

IC804
1M 16 EDO DRAM
M5M4V1816DTP-6S

IC801
M65774BFP
AV-1

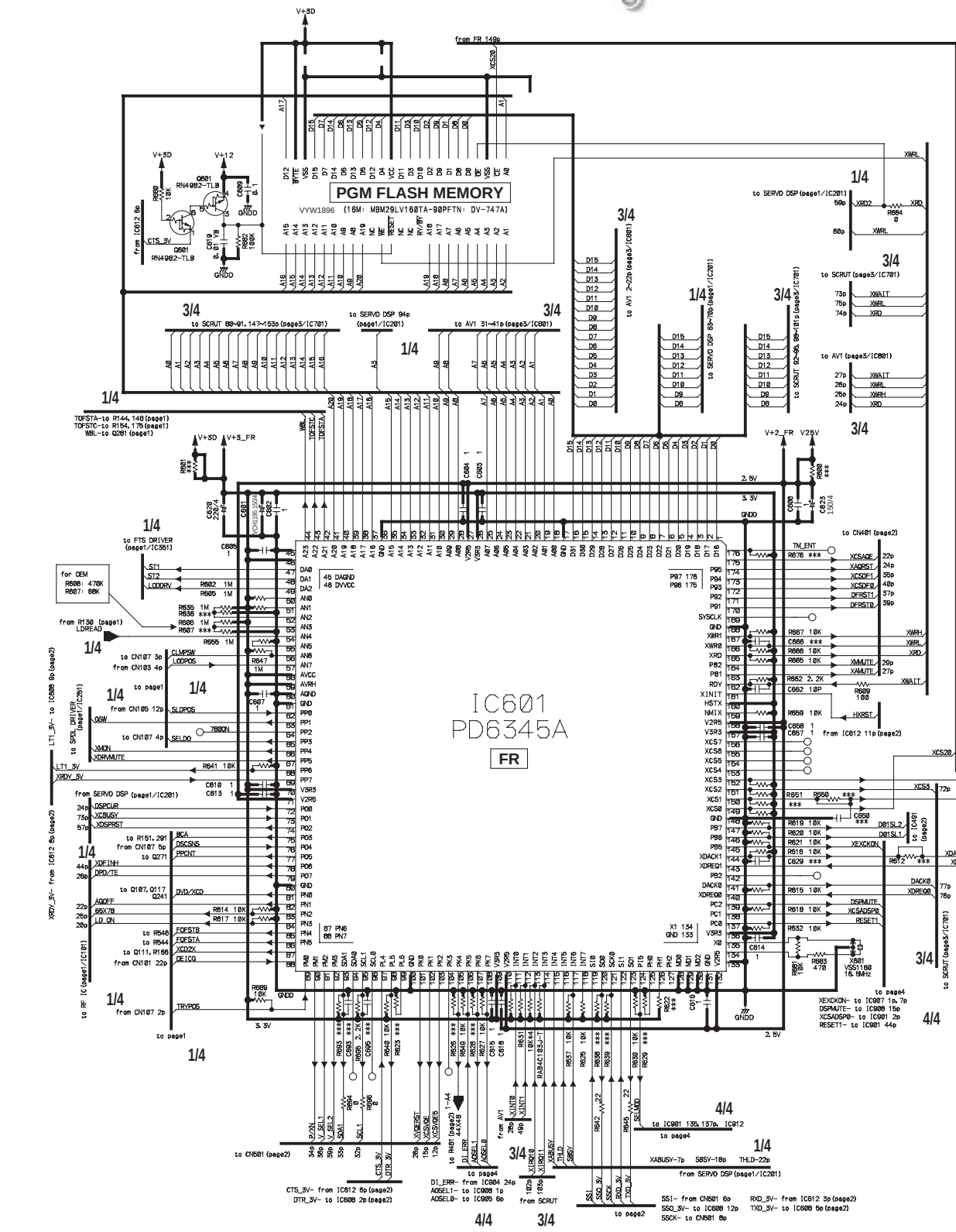
E F G H

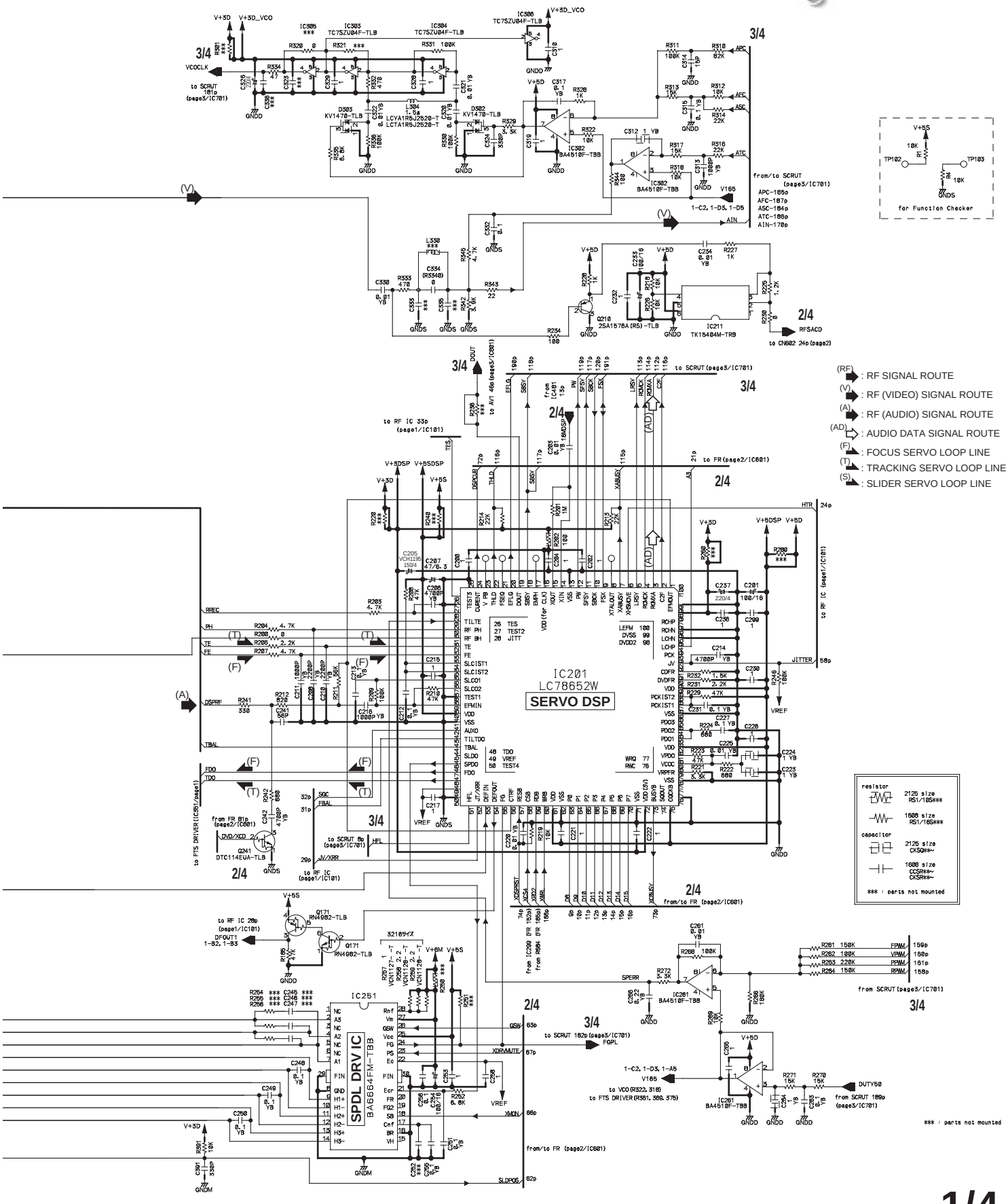
: The power supply is shown with the marked box.



2/4

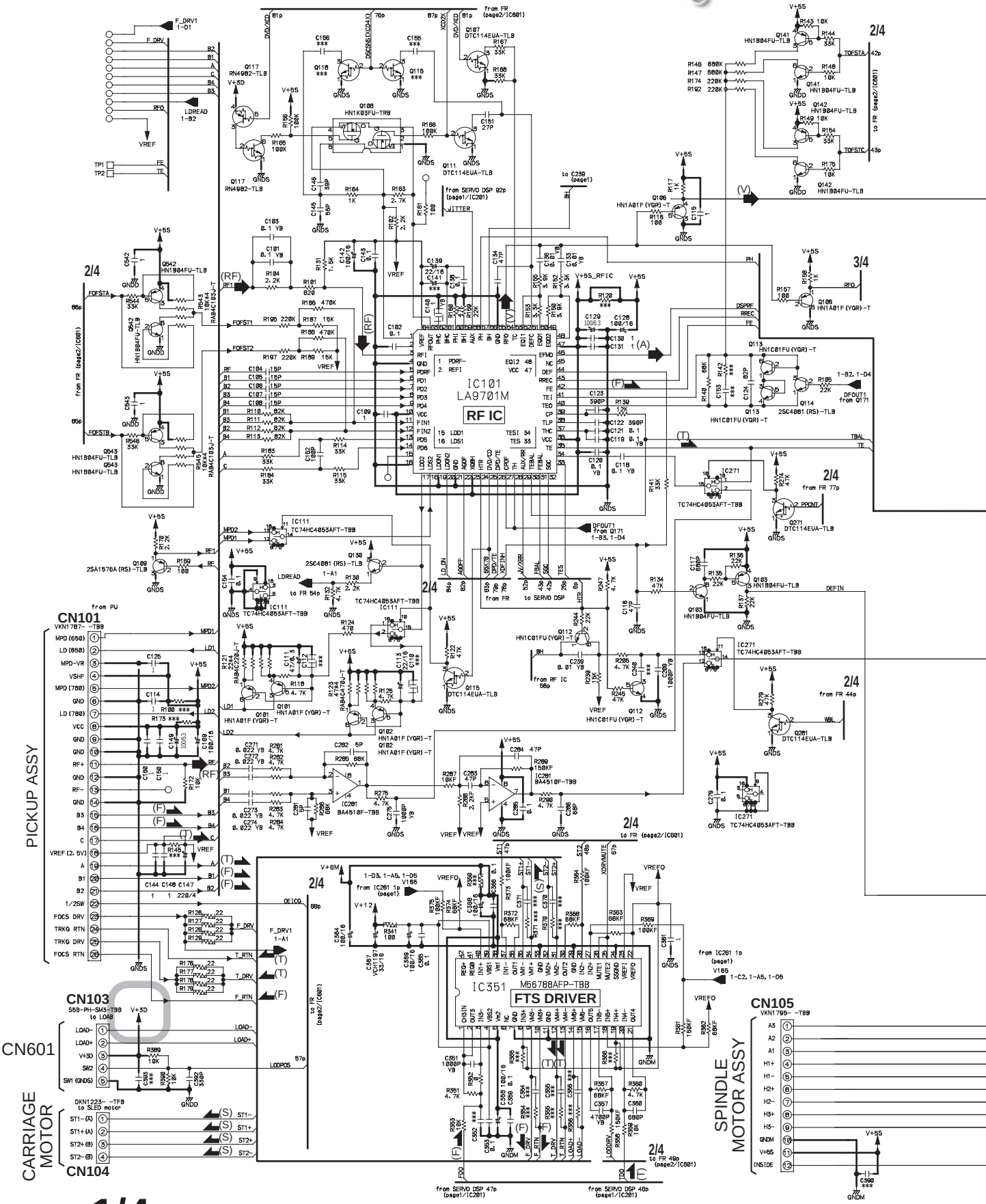
SCHEMATIC DIAGRAM MAIN PC BOARD-2



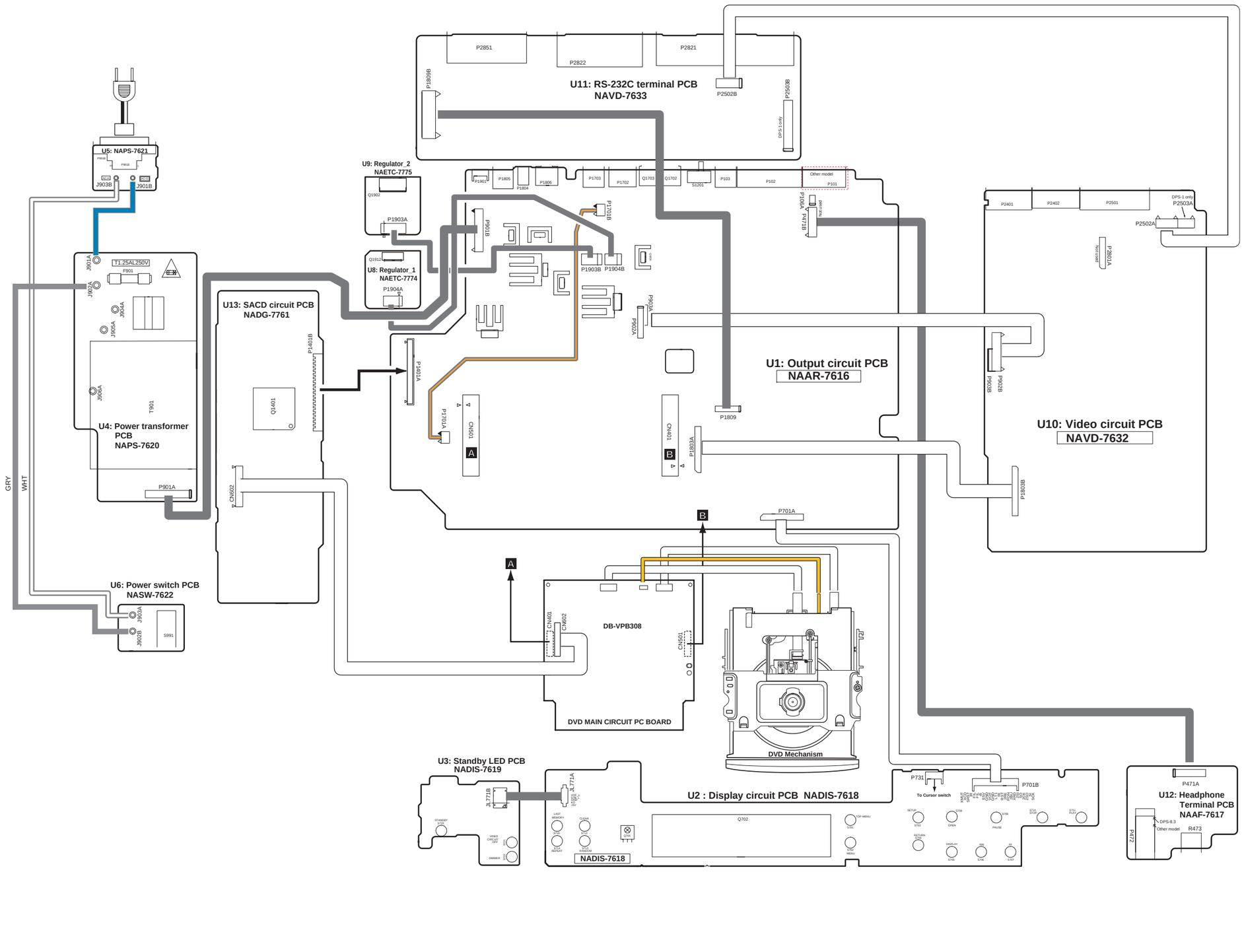


1/4

SCHEMATIC DIAGRAM MAIN PC BOARD-1



WIRING CONNECTION DIAGRAM



A B C D E F G H

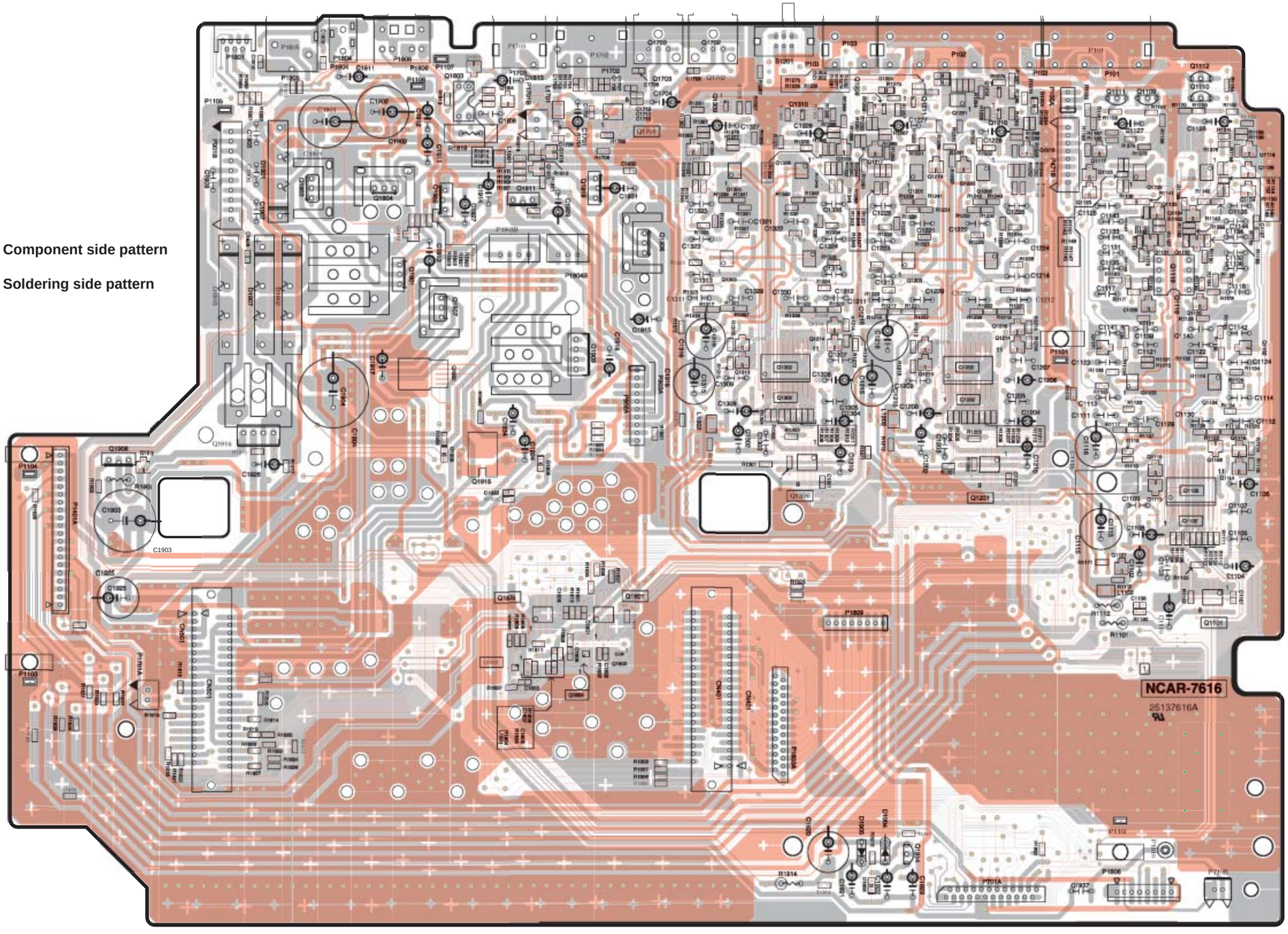
1 2 3 4 5

PRINTED CIRCUIT BOARD VIEW

U1: OUTPUT CIRCUIT PC BOARD NAAR-7616

: Component side pattern

: Soldering side pattern



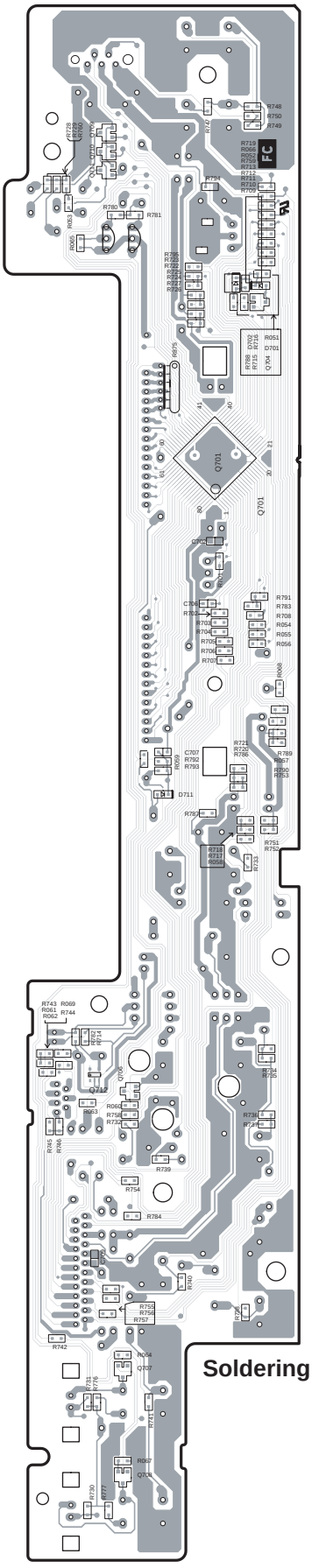
Component side view

A B C D

1 2 3 4 5

PRINTED CIRCUIT VIEW
From soldering side view

U2: Display circuit PC board NADIS-7618



Soldering side

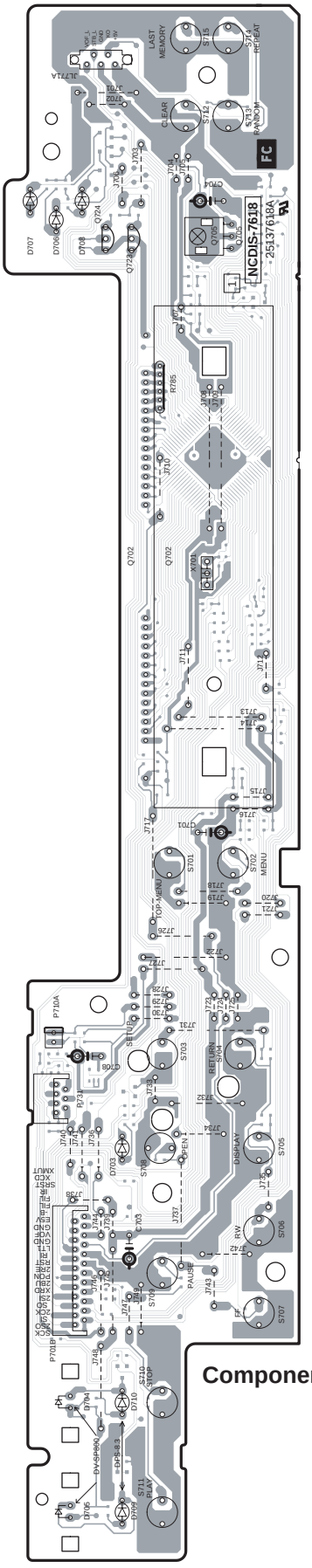
A B C D

1 2 3 4 5

PRINTED CIRCUIT VIEW

From soldering side view

U2: Display circuit PC board NADIS-7618



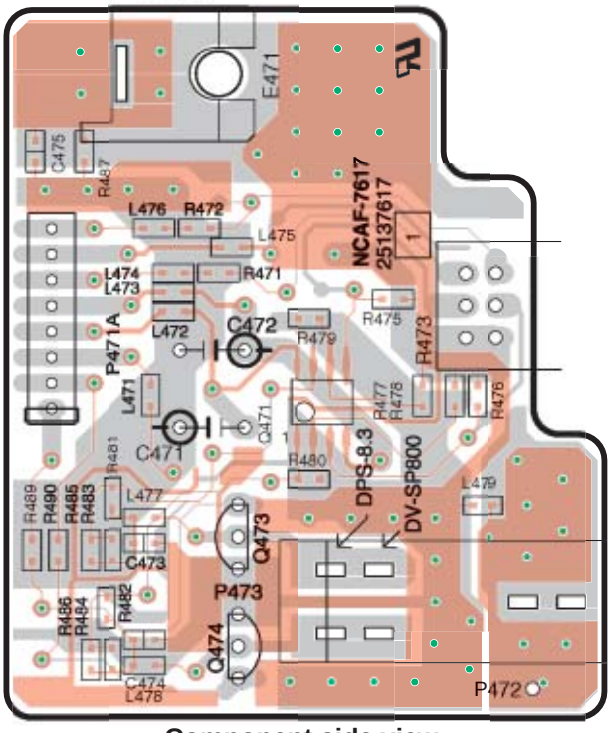
Component side

A B C D

1 2 3 4 5

PRINTED CIRCUIT VIEW

U12: HEADPHONE TERMINAL PC BOARD
NAAF-7617

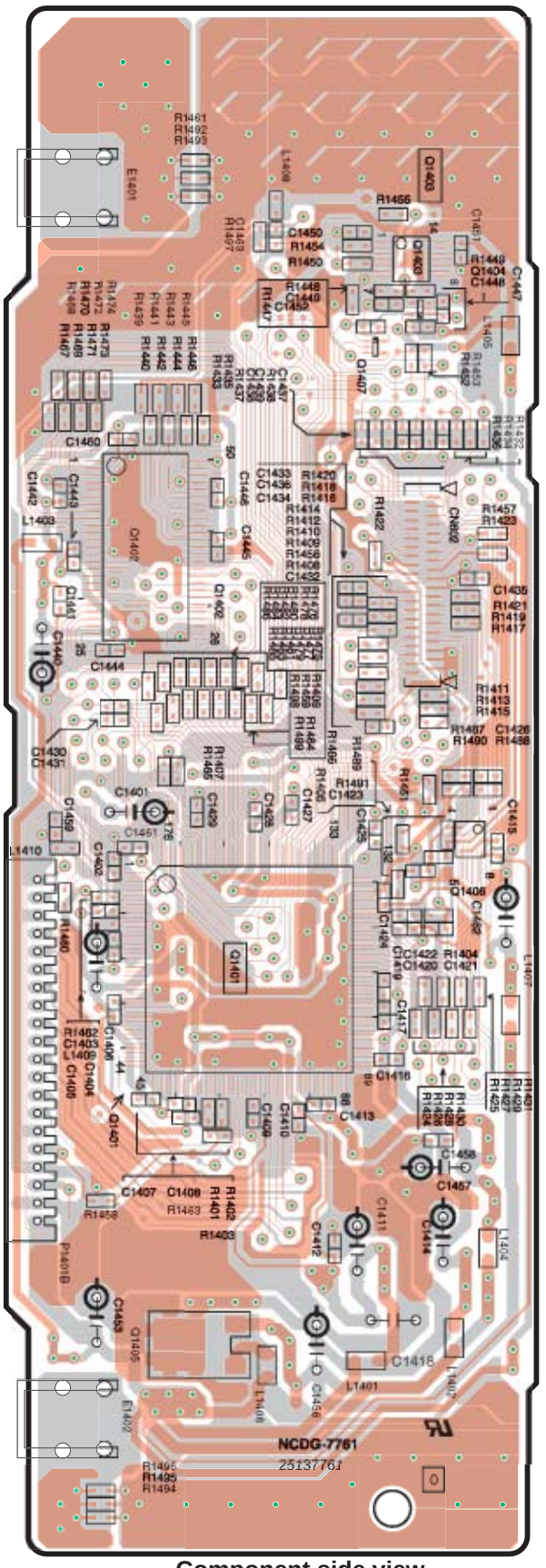


Component side view

: Component side pattern

: Soldering side pattern

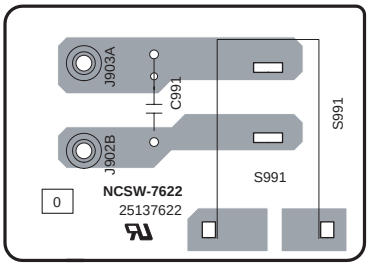
U13: SACD CIRCUIT PC BOARD
NADG-7761



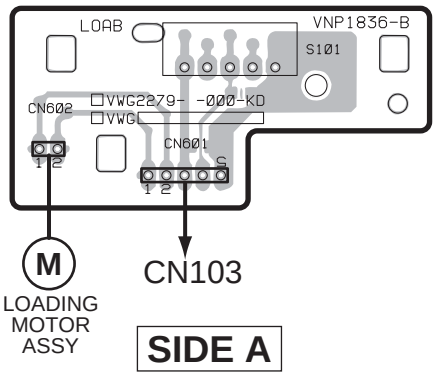
Component side view

PRINTED CIRCUIT BOARD VIEW
From Soldering side view

U6: POWER SWITCH PC BOARD
NASW-7622

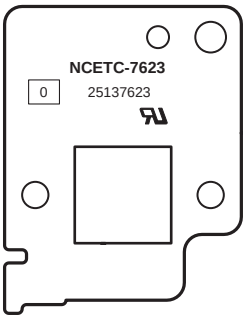


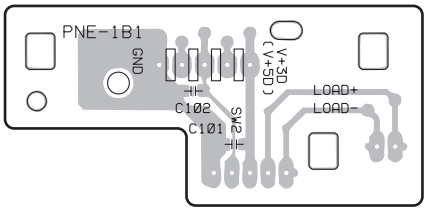
LOAB ASSY (DVD MECHANISM)



SIDE A

U7: SUPPORT PC BOARD

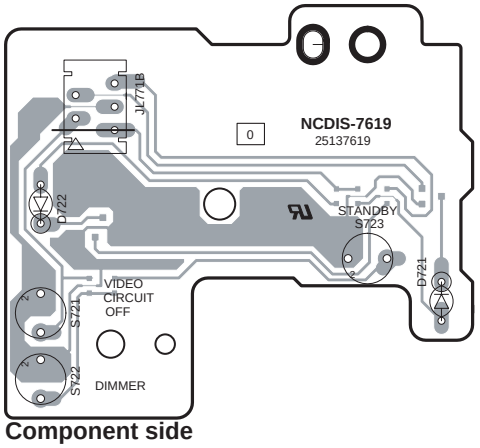




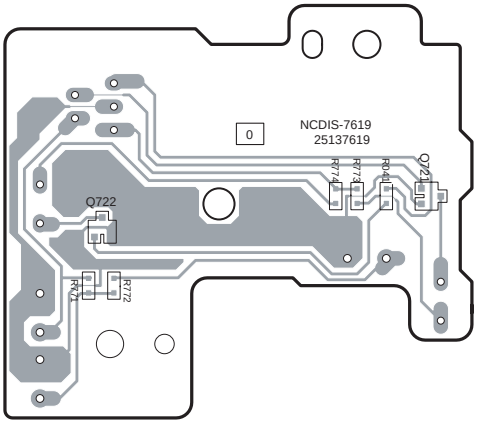
SIDE B

PRINTED CIRCUIT BOARD VIEW
From Soldering side view

U3: STANDBY LED PC BOARD NADIS-7619

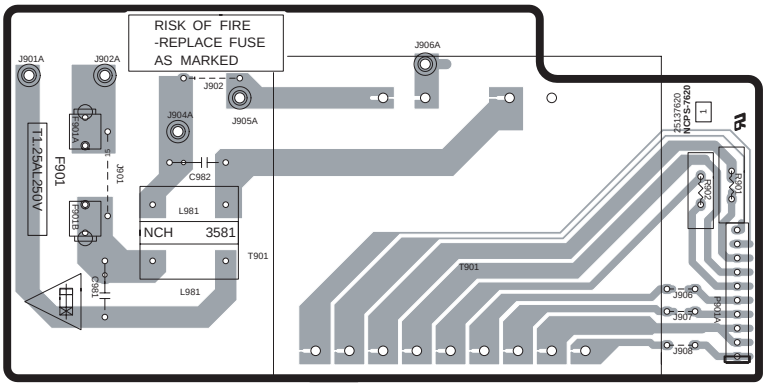


Component side

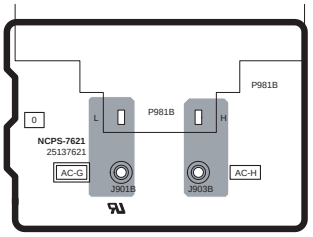


Soldering side

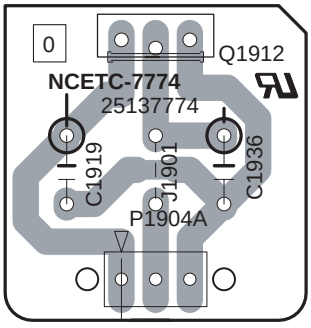
U4: POWER TRANSFORMER PC BOARD NAPS-7620



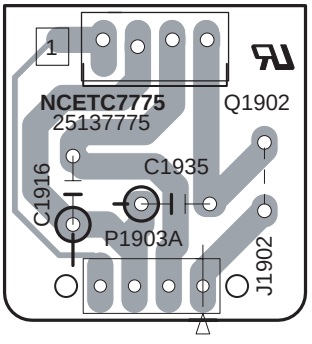
U5: INLET TERMINAL PC BOARD NAPS-7621



U8: REGULATOR_1 PC BOARD NAETC-7774



U9: REGULATOR_2 PC BOARD NAETC-7775

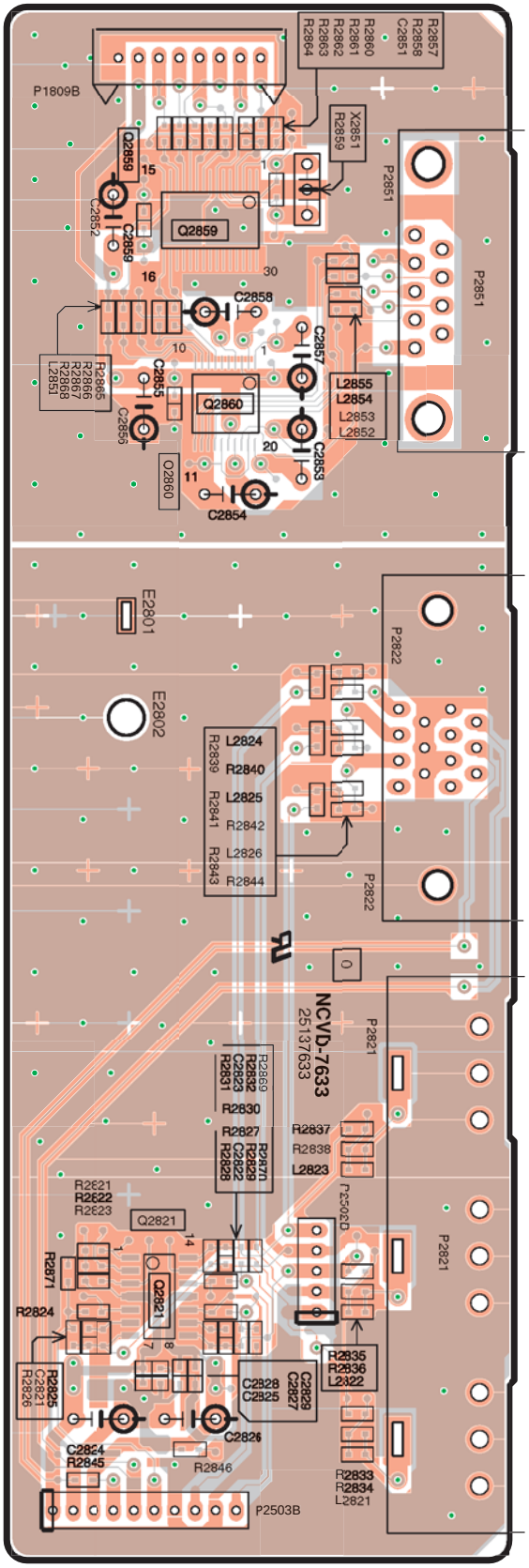


A B C D

1 2 3 4 5

PRINTED CIRCUIT BOARD VIEW

U11: RS-232C TERMINAL PC BOARD
NAVD-7633



Component side view

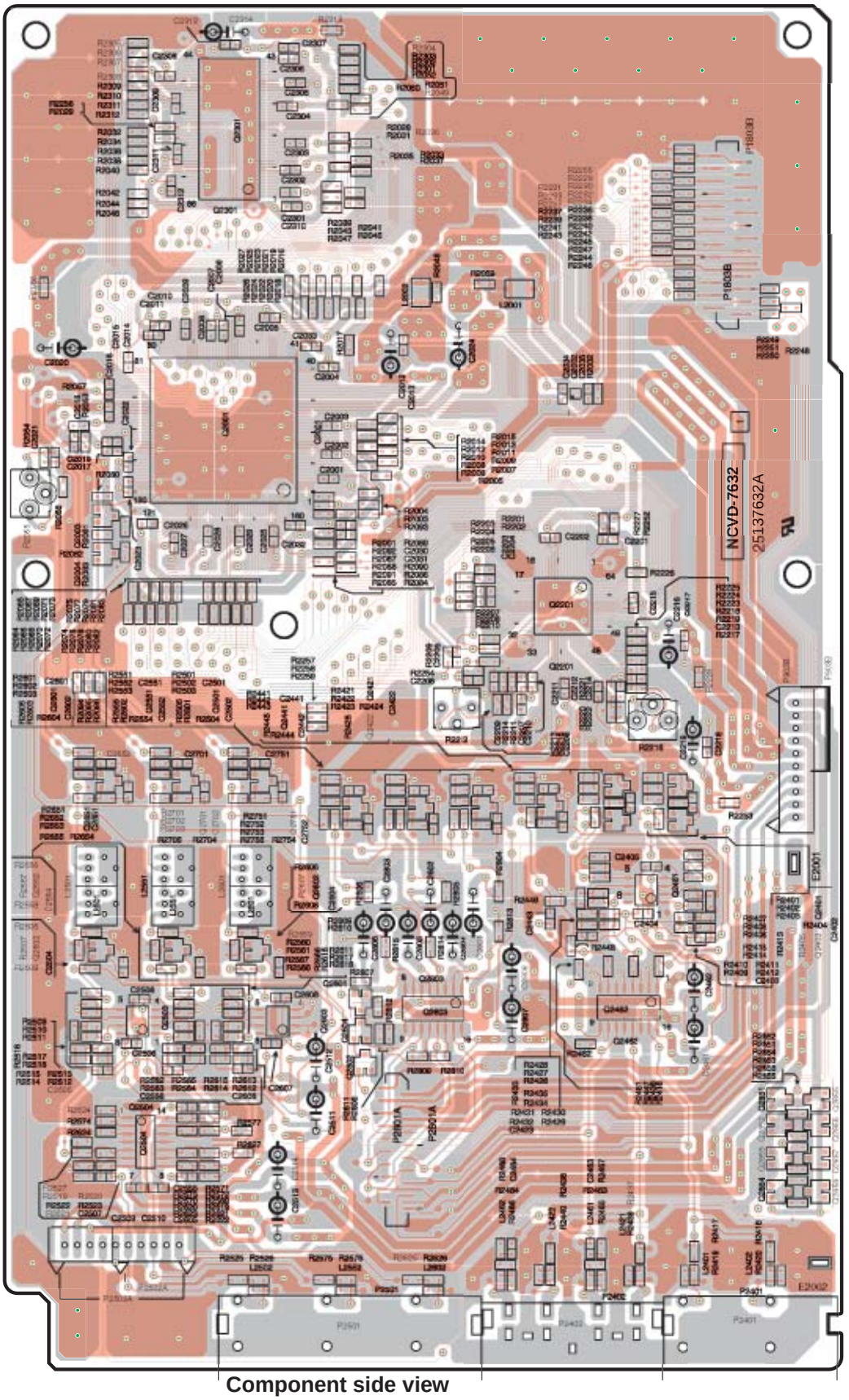
A B C D

PRINTED CIRCUIT BOARD VIEW

U10: VIDEO CIRCUIT PC BOARD
NAVD-7632

: Component side pattern
: Soldering side pattern

1 2 3 4 5

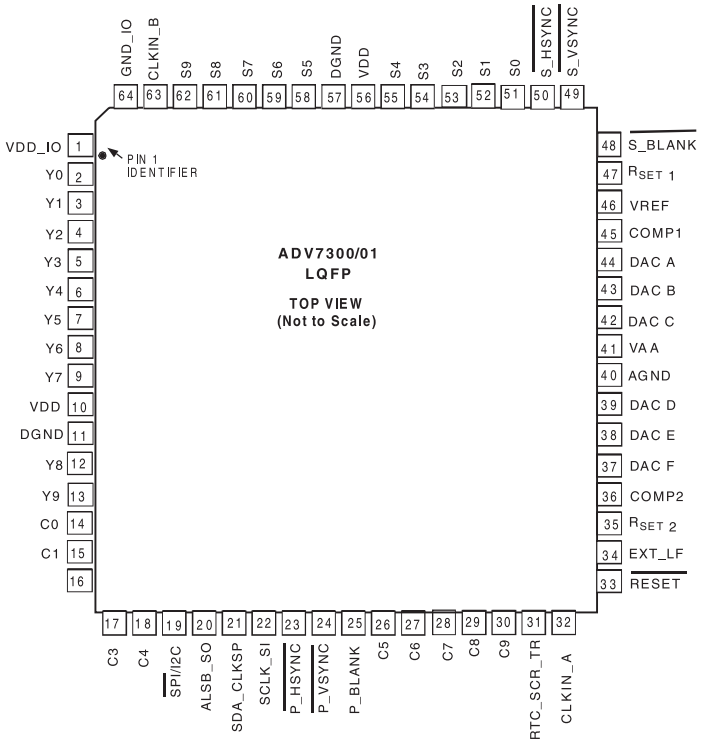


Component side view

IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

Q2201: ADV7300KST Video Encoder IC

Pin Arrangement



Pin Function

Pin Mnemonic	Input/Output	Function
DGND	G	Digital Ground
AGND	G	Analog Ground
GND IO	G	Digital Ground
CLKIN_B	I	Pixel Clock Input. Requires a 27MHz reference clock for Progressive Scan Mode or a 74.25MHz (74.1758MHz) reference clock in HDTV mode. This clock input pin is only used in simultaneous SD and HD mode.
CLKIN_A	I	Pixel Clock Input for HD only or SD only modes.
COMP	O	Compensation Pin for DACs. Connect 0.1μF Capacitor from COMP pin to V_{AA}.
DAC A	O	CVBS/ GREEN/ Y SD analog output.
DAC B	O	Luma/ BLUE/ U SD analog output.
DAC C	O	Chroma/ RED/ V SD analog output.
DAC D	O	in SD only mode: CVBS/GREEN/ Y analog output in HD only mode and simultaneous HD/SD : Y/ GREEN (HD) analog output.
DAC E	O	in SD only mode: Luma/BLUE/ U analog output in HD only mode and simultaneous HD/SD : Pr/ RED (HD) analog output.

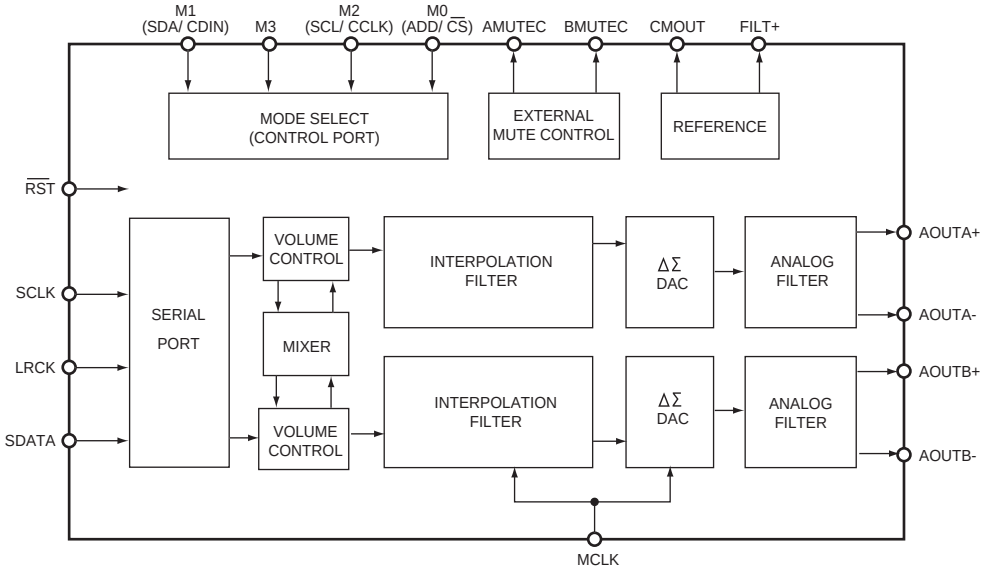
IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

Pin Mnemonic	Input/Output	Function
DAC F	O	in SD only mode: Chroma RED: V analog output in HD only mode and simultaneous HD/SD : Pb: BLUE (HD) analog output.
P_BLANK	I	Video Blanking Control Signal for HD sync in simultaneous SD/HD mode and HD HD only mode.
$\overline{P\_HSYNC}$	I	Video Horizontal Sync Control Signal for HD sync in simultaneous SD/HD mode and HD only mode.
$\overline{P\_VSYNC}$	I	Video Vertical Sync Control Signal for HD sync in simultaneous SD/HD mode and HD only mode.
$\overline{S\_BLANK}$	I/O	Video Blanking Control Signal for SD.
$\overline{S\_HSYNC}$	I/O	Video Horizontal Control Signal for SD. Option to o/p SD HSYNC or HD HSYNC in SD Slave Mode 0 and/or any HD mode.
$\overline{S\_VSYNC}$	I/O	Video Blanking Control Signal for SD. Option to o/p SD VSYNC or SD HSYNC in SD Slave Mode 0 and/or any HD mode.
C9-0	I	10-Bit Progressive scan/ HDTV input port for CrCb color data in 4:2:2 input mode In 4:4:4 input mode this input port is used for the Cb [Blue/U] data. The LSBs are set up on pins C0, C1. In default mode the input on this port is output on DAC E.
Y9-0	I	10-Bit Progressive scan/ HDTV input port for Y data. The LSBs are set up on pins Y0, Y1. In default mode the input on this port is output on DAC D.
S9-S0	I	10-Bit Standard Definition input port. Or Progressive Scan/ HDTV input port for Cr [Red/V] color data in 4:4:4 input mode. The LSBs are set up on pins S0, S1. In default mode the input on this port is output on DAC F.
$\overline{RESET}$	I	This input resets the on-chip timing generator and sets the ADV7300/01 into Default Register setting. Reset is an active low signal.
R_{SET}	I	A 1520 Ohms resistor must be connected from this pin to AGND and is used to control the amplitudes of the DAC outputs.
SCL_SI	I	Multifunctional input: MPU Port Serial Interface Clock Input or SPI input.
SDA_CLKSP	I/O	Multifunctional pin: MPU Port Serial Data Input/Output or SPI clock input.
ALSB SO	I/O	Multifunctional pin. TTL Address Input. This signal sets up the LSB of the MPU address. When this pin is tied low the I2C filter is activated which reduces noise on the I2C interface. When this pin is tied high, the input bandwidth on the I2C lines is increased. SPI output.
$\overline{SPI}$/I2C	I	When this input pin is brought low, the ADV7300/01 interfaces over the SPI port and uses this input as part of the 4 wire SPI interface. When this input pin is tied high [Vdd_IO], the ADV7300/01 interfaces over the I2C port.
V_{DD_IO}	P	Digital power supply
V_{DD}	P	Digital power supply
V_{AA}	P	Analog power supply
V_{REF}	I/O	Optional External Voltage Reference Input for DACs or Voltage Reference Output (1.235V).
EXT_LF	I	External Loop filter for the internal PLL.
RTC_SCR_TR	I	Multifunctional Input: Real Time Control (RTC) input, Timing Reset input, Subcarrier Reset input.

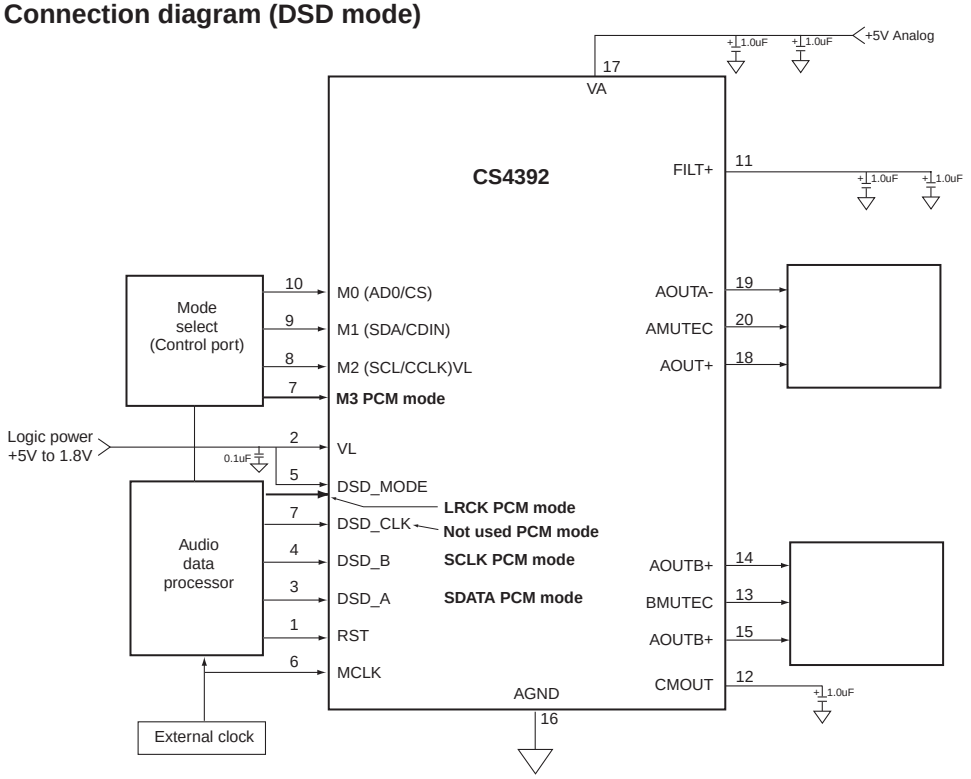
IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

Q1102, Q1202, Q1302: CS4392-LS 24-Bit, 192 kHz DAC

Block diagram



Connection diagram (DSD mode)

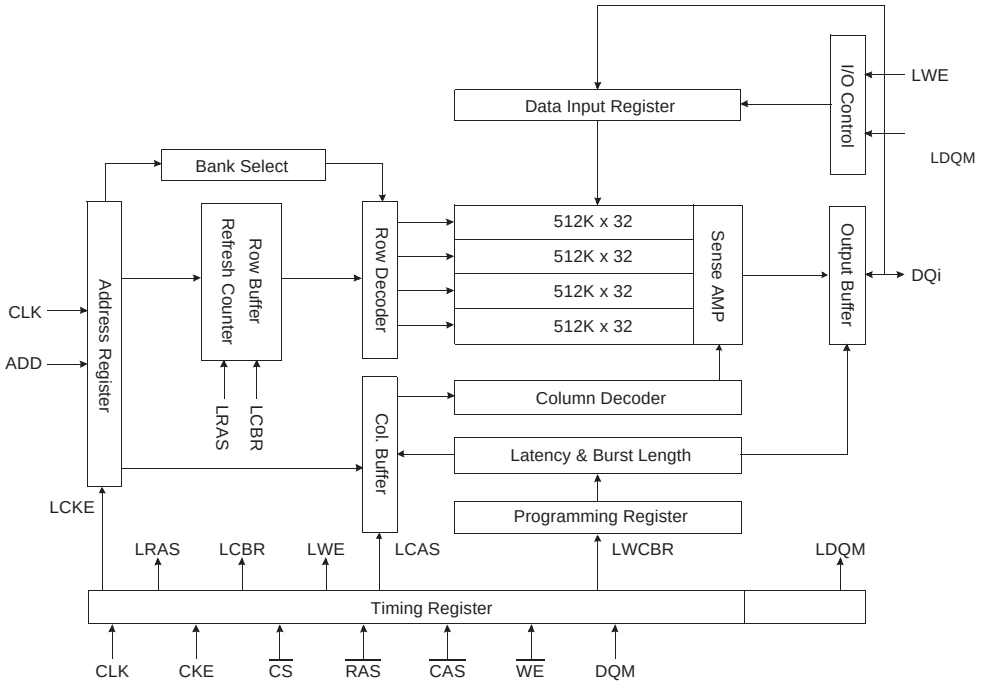


IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

Q2301 : K4S643232E

512K x 32Bit x 4 Banks Synchronous DRAM

FUNCTIONAL BLOCK DIAGRAM



PIN CONFIGURATION

(Top view)

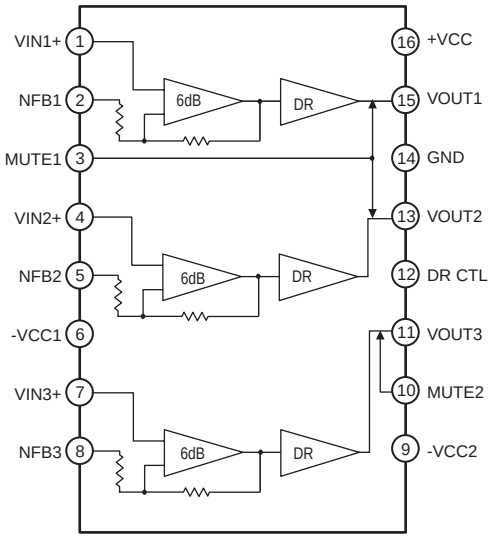
VDD	1	○	86	VSS
DQ0	2		85	DQ15
VDDQ	3		84	VSSQ
DQ1	4		83	DQ14
DQ2	5		82	DQ13
VSSQ	6		81	VDDQ
DQ3	7		80	DQ12
DQ4	8		79	DQ11
VDDQ	9		78	VSSQ
DQ5	10		77	DQ10
DQ6	11		76	DQ9
VSSQ	12		75	VDDQ
DQ7	13		74	DQ8
N.C	14		73	N.C
VDD	15		72	VSS
DQM0	16		71	DQM1
WE	17		70	N.C
CAS	18		69	N.C
RAS	19		68	CLK
CS	20		67	CKE
N.C	21		66	A9
BA0	22		65	A8
BA1	23		64	A7
A10/AP	24		63	A6
A0	25		62	A5
A1	26		61	A4
A2	27		60	A3
DQM2	28		59	DQM3
VDD	29		58	VSS
N.C	30		57	N.C
DQ16	31		56	DQ31
VSSQ	32		55	VDDQ
DQ17	33		54	DQ30
DQ18	34		53	DQ29
VDDQ	35		52	VSSQ
DQ19	36		51	DQ28
DQ20	37		50	DQ27
VSSQ	38		49	VDDQ
DQ21	39		48	DQ26
DQ22	40		47	DQ25
VDDQ	41		46	VSSQ
DQ23	42		45	DQ24
VDD	43		44	VSS

PIN FUNCTION DESCRIPTION

Pin	Name	Input Function
CLK	System clock	Active on the positive going edge to sample all inputs.
$\overline{CS}$	Chip select	Disables or enables device operation by masking or enabling all inputs except CLK, CKE and DQM.
CKE	Clock enable	Masks system clock to freeze operation from the next clock cycle. CKE should be enabled at least one cycle prior to new command. Disables input buffers for power down mode.
A_0 ~ A_{10}	Address	Row/column addresses are multiplexed on the same pins. Row address : RA_0 ~ RA_{10}, Column address : CA_0 ~ CA_7
BA0,1	Bank select address	Selects bank to be activated during row address latch time. Selects bank for read/write during column address latch time.
$\overline{RAS}$	Row address strobe	Latches row addresses on the positive going edge of the CLK with $\overline{RAS}$ low. Enables row access & precharge.
$\overline{CAS}$	Column address strobe	Latches column addresses on the positive going edge of the CLK with $\overline{CAS}$ low. Enables column access.
$\overline{WE}$	Write enable	Enables write operation and row precharge. Latches data in starting from CAS, WE active.
DQM0 ~ 3	Data input/output mask	Makes data output Hi-Z, t_{SHZ} after the clock and masks the output. Blocks data input when DQM active.
$DQ_{0 \sim 31}$	Data input/output	Data inputs/outputs are multiplexed on the same pins.
V_{DD}/V_{SS}	Power supply/ground	Power and ground for the input buffers and the core logic.
V_{DDQ}/V_{SSQ}	Data output power/ground	Isolated power supply and ground for the output buffers to provide improved noise immunity.
NC	No Connection	This pin is recommended to be left No connection on the device.

IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

Q2462 : LA7106MFP
(3-ch Video amp.)



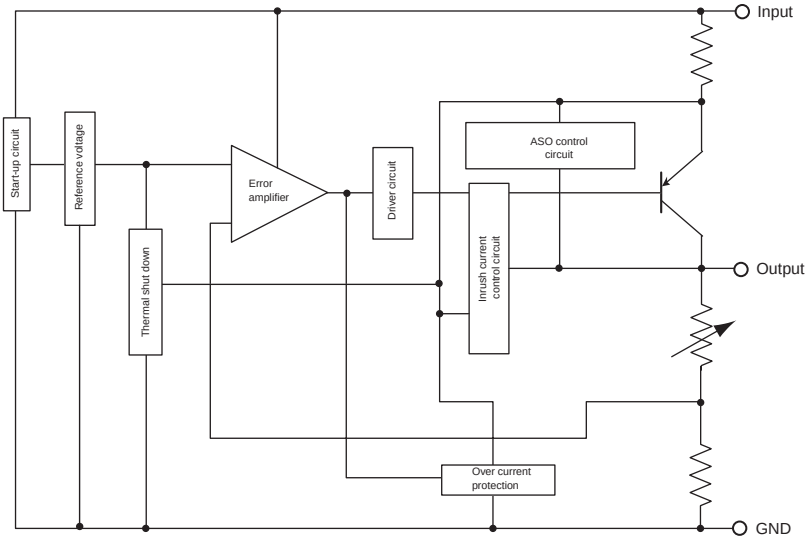
Truth Table

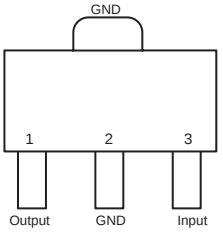
	Pins 3 , 10	Pins 12
H	Truth	150 ohm Driver
L	Mute	75 ohm Drive

IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

Q1405, Q1915: uPC2925T/ uPC2933T

Three Terminal Low Dropout Voltage Regulator

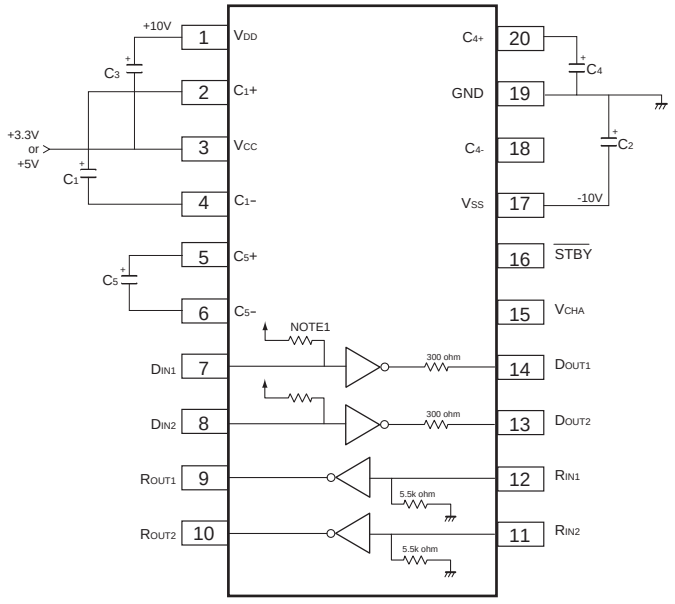




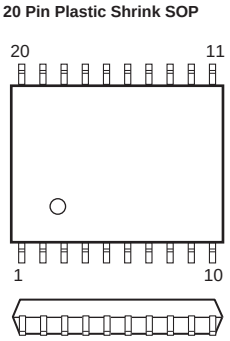
IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

Q2860: MPD4721GS RS-232C LINE DRIVER/ RECEIVER

Block diagram



Top View



NOTE 1: The pull-up resistors at driver input are active resistors.

Truth Table

Driver

$\overline{STBY}$	DIN	DOUT	Remarks
L	x	Z	Standby mode (DC/DC converter is stopped)
H	L	H	Space level output
H	H	L	Mark level output

Receiver

$\overline{STBY}$	RIN	ROUT	Remarks
L	x	H	Standby mode (DC/DC converter is stopped)
H	L	H	Mark level input
H	H	L	Space level input

3V ⟷ 5V switching NOTE 2

VCHA	Operating mode
L	5 V mode (double step-up)
H	3 V mode (3 times step-up)

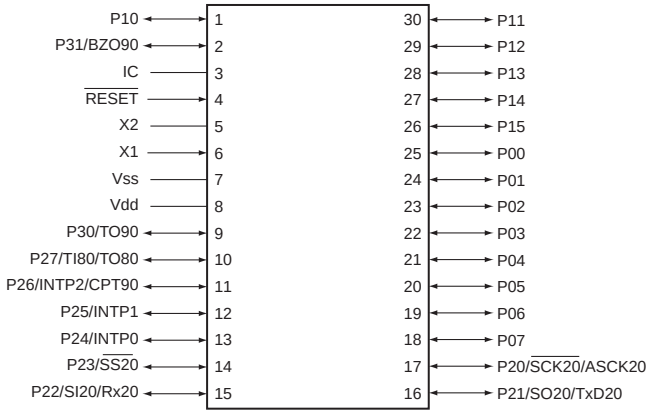
H : high-level, L : low-level, Z : high-impedance, x : H or L

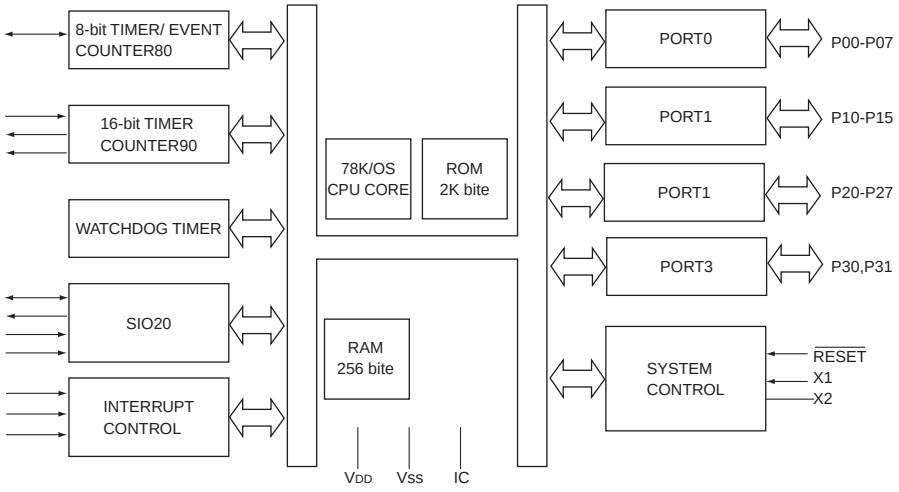
NOTE 2 : When switching VCHA, standby mode must be selected ($\overline{STBY}$ = L).

IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

Q2859 : MPD789071MC 8-Bit Microprocessor

PIN LAYOUT

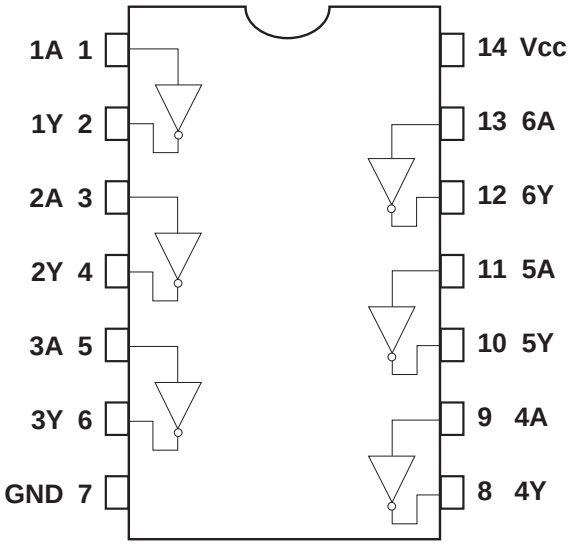




IC BLOCK DIAGRAM / TERMINAL DESCRIPTION

Q352 : TC74VHCU04FT
Hex inverter

Pin layout

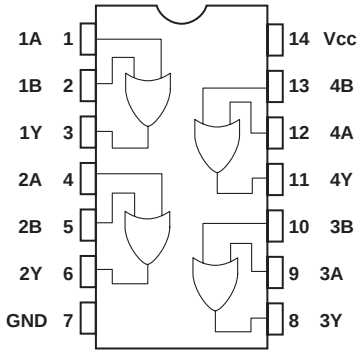


Truth table

A	Y
L	H
H	L

IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

Q1605: TC74VHC32 2-INPUT OR-GATE

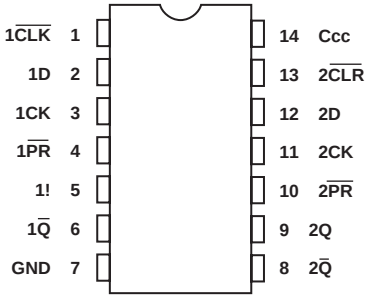


TOP VIEW

TRUTH TABLE

A	B	Y
H	H	H
L	H	H
H	L	H
L	L	L

Q1403: TC74VHC74F DUAL D-TYPE FLIP FLOP



TRUTH TABLE

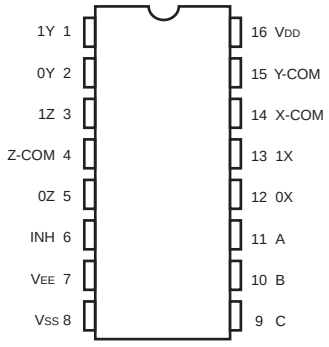
INPUT				OUTPUT		FUNCTION
CLR	PR	D	CK	Q	$\bar{Q}$	CLEAR
L	H	X	X	L	H	PRESET
H	L	X	X	H	L	-
L	L	C	X	H	H	-
H	H	L	⎍	L	H	-
H	H	H	⎍	H	L	NO CHANGE
H	H	X	⎏	Qn	$\bar{Q}$n	

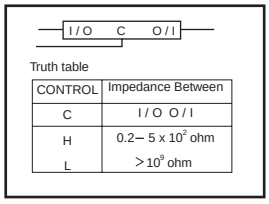
X: Don't Care

IC BLOCK DIAGRAM / TERMINAL DESCRIPTION

Q601 : TC4053BF

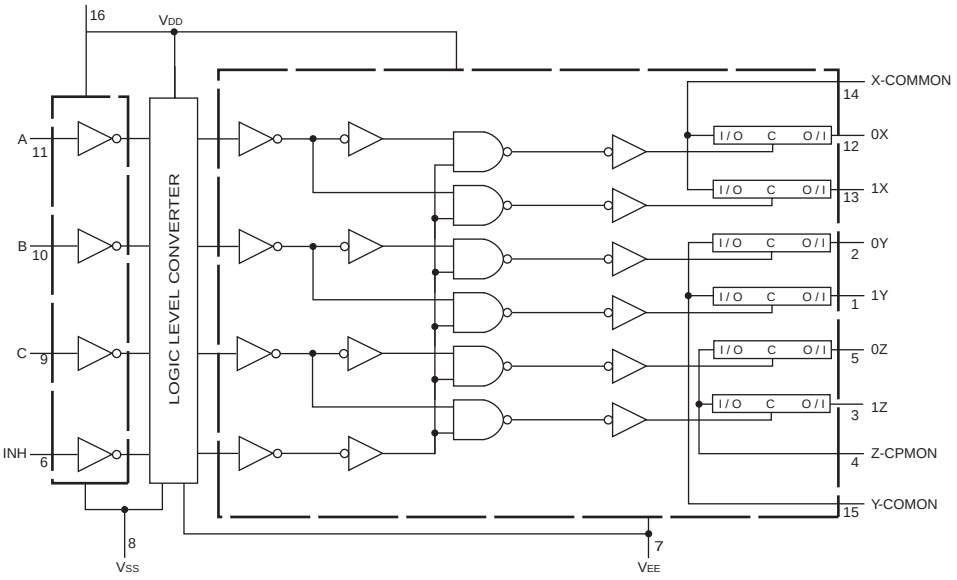
Triple 2-Channel multiplexer / demultiplexer





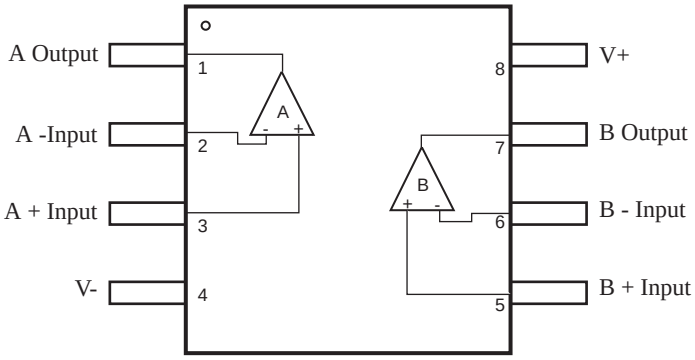
Truth table

CONTROL	Impedance Between
C	I / O O / I
H	0.2– 5 x 10^2 ohm
L	>10^9 ohm

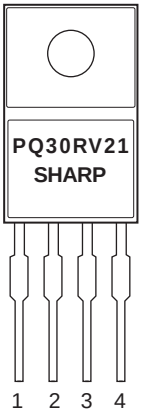


IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

Q1105, 1106, 1205, 1206, 1221, 1305, 1306: NJM4565V
Dual Operational Amplifier

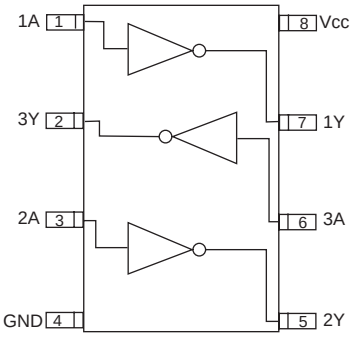


Q1916: PQ30RV21
(Regulated power supply)



1: Input
2: Output
3: GND
4: Variable adjust

Q2002: TC7WU04FU BUFFER

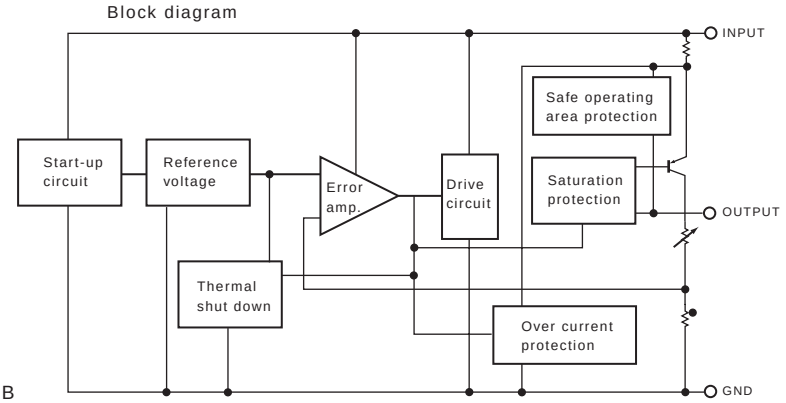


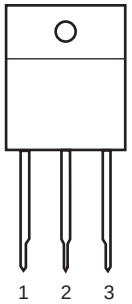
TRUTH TABLE

A	Y
L	H
H	L

Q1907: uPC29M05HF
(3-Terminal regulator)

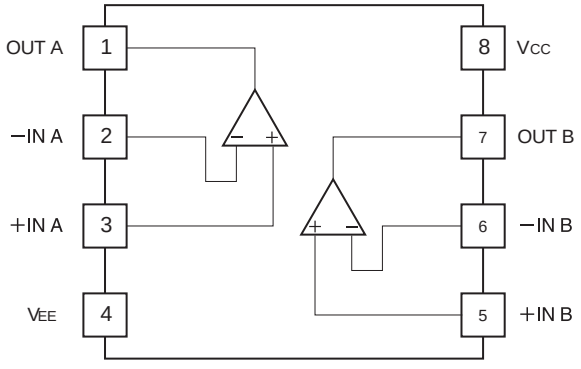
Block diagram





1: Input
2: GND
3: Output

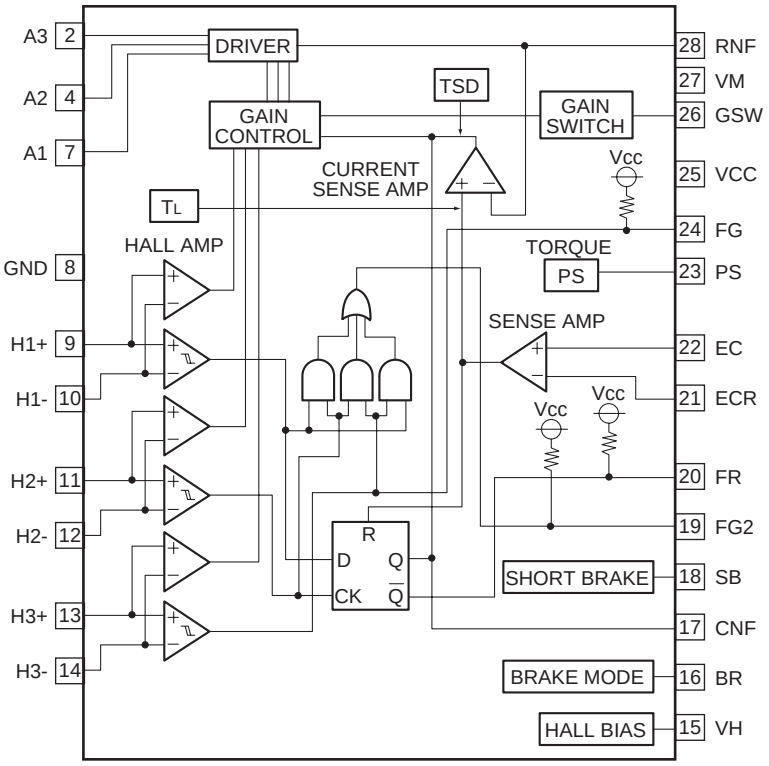
Q2461: TK15420M
(Video amp.)



IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

IC251: BA6664FM Three-phase Motor Driver

Block Diagram



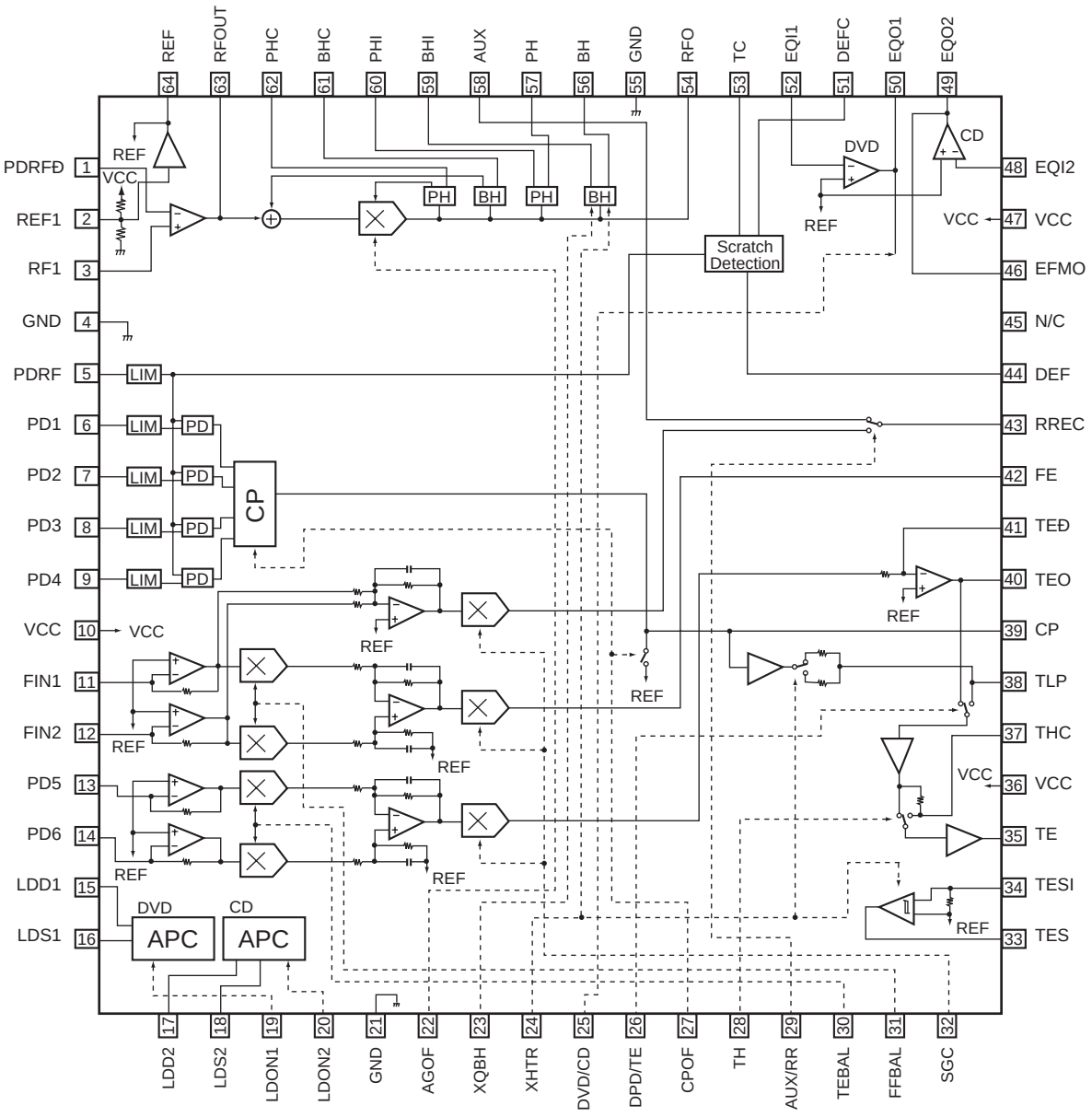
Block Diagram

No.	Pin Name	Pin Function	No.	Pin Name	Pin Function
1	N.C.	N.C.	16	BR	Brake mode switching pin
2	A3	Output pin	17	CNF	Capacitor connection pin for phase compensation
3	N.C.	N.C.	18	SB	Short brake pin
4	A2	Output pin	19	FG2	FG 3-phase mix signal output pin
5	N.C.	N.C.	20	FR	Rotation detecting pin
6	N.C.	N.C.	21	ECR	Control reference pin of output voltage
7	A1	Output pin	22	EC	Output voltage control pin
8	GND	GND pin	23	PS	Power save pin
9	H1+	Hall signal input pins	24	FG	FG signal output pin
10	H1-		25	VCC	Power supply pin
11	H2+		26	GSW	Gain switching pin
12	H2-		27	VM	Motor power pin
13	H3+		28	RNF	Resistor connection pin for output current detection
14	H3-		FIN	FIN	GND
15	VH	Hall bias pin			

IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

IC101: LA9701M
RF IC

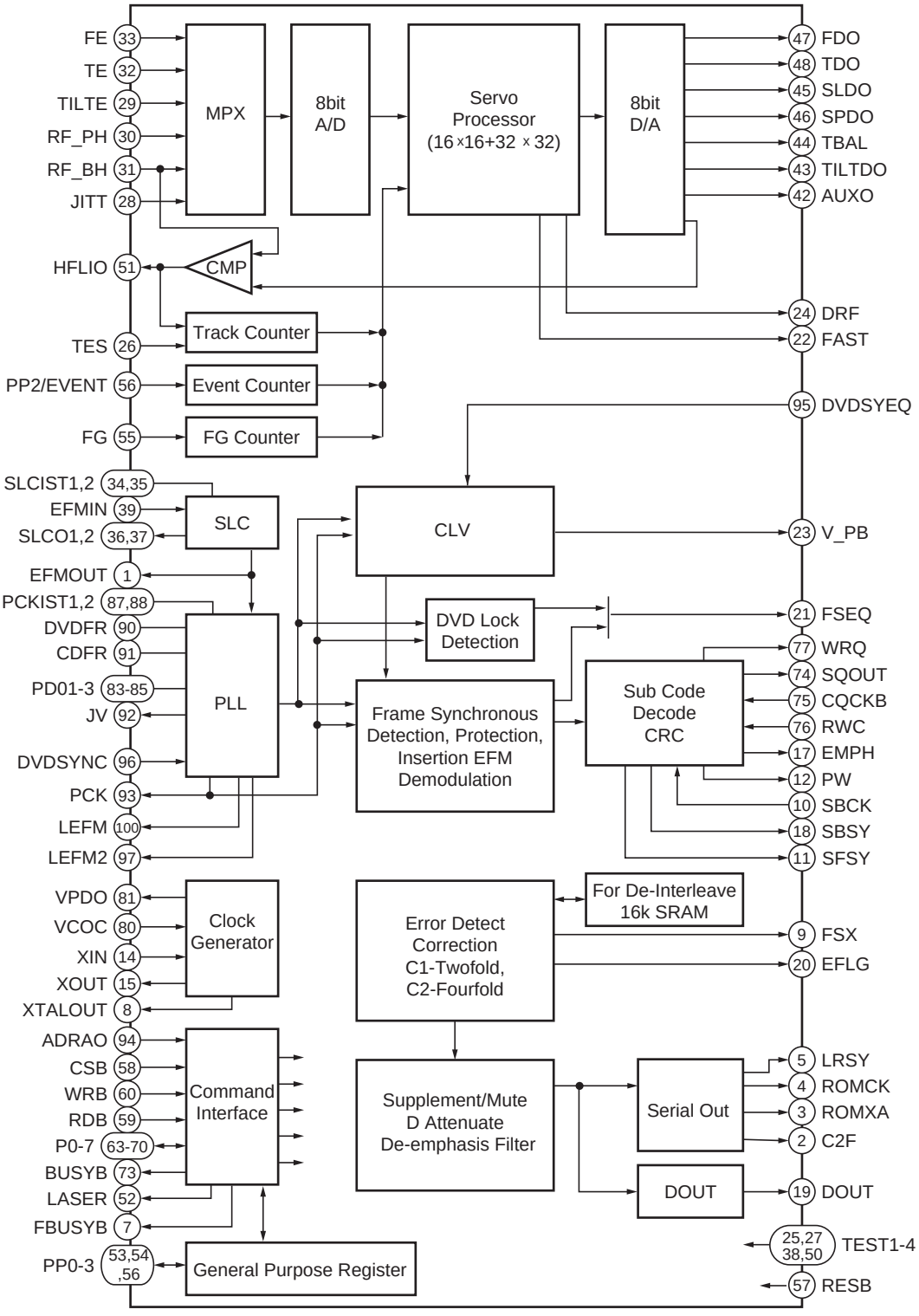
Block Diagram



IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

IC201: LC78652W Servo DSP IC

Block Diagram



IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

Pin Function

No.	Pin Name	I/O	Pin Function
1	EFMOUT	O	Output the state that was binary-stated value EFM
2	C2F	O	C2 flag output
3	ROMXA	O	CD-ROM data output
4	ROMCK	O	Shift clock output for CD-ROM data output
5	LRSY	O	L/R clock output for CD-ROM data output
6	PP3	I/O	General-purpose port input/output / DVD sync. signal input N ch-OD output
7	FBUSYB	O	Busy signal output of DSP process operation N ch-OD output
8	XTALOUT	O	External system clock output
9	FSX	O	CD 1 frame sync. signal output
10	SBCK	I	Subcode reading out clock input
11	SFSY	O	Frame sync. signal output of subcode
12	PW	O	Subcode P, Q, R, S, T, U, V and W output
13	VSS		GND pin
14	XIN	I	Connect a crystal resonator (16.9344MHz)
15	XOUT	O	Connect a crystal resonator
16	DVDD1		3.3V power supply of the oscillation circuit
17	EMPH	O	Monitor pin of the deemphasis
18	SBSY	O	Sync. signal output of the subcode block
19	DOUT	O	Audio EIAJ data output
20	EFLG	O	Error correction state monitor of the error correction C1 and C2
21	FSEQ	O	Detection monitor of the CD/DVD frame sync. signal
22	FAST	O	Playback speed monitor N ch-OD output
23	V_PB	O	Monitor output of the rough servo/CLV control
24	DRF	O	In focus monitor
25	TEST3	I	Test input 3
26	TES	I	Tracking error signal input
27	TEST2	I	Test input 2
28	JITT	I	Jitter quantity detecting signal input of EFM PLL
29	TILTE	I	Tilt error signal input
30	RF_PH	I	RF peak hold signal input
31	RF_BH	I	RF bottom hold signal input
32	TE	I	Tracking error signal input
33	FE	I	Focus error signal input
34	SLCIST1		Current setting pin 1 of the constant current charge pump for SLC
35	SLCIST2		Current setting pin 2 of the constant current charge pump for SLC
36	SLCO1	O	Control output 1 for SLC
37	SLCO2	O	Control output 2 for SLC
38	TEST1	I	Test input 1
39	EFMIN	I	EFM/EFM + input
40	AVDD		5V power supply of A/D and D/A for servo
41	AVSS		GND of A/D and D/A for servo
42	AUXO	O	DA auxiliary output
43	TILTDO	O	Tilt control signal output
44	TBAL	O	Tracking balance control signal output
45	SLDO	O	Sled control signal output
46	SPDO	O	Spindle control signal output
47	FDO	O	Focus control signal output
48	TDO	O	Tracking control signal output
49	VREF		Reference level of D/A for servo
50	TEST4	I	Test input 4

IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

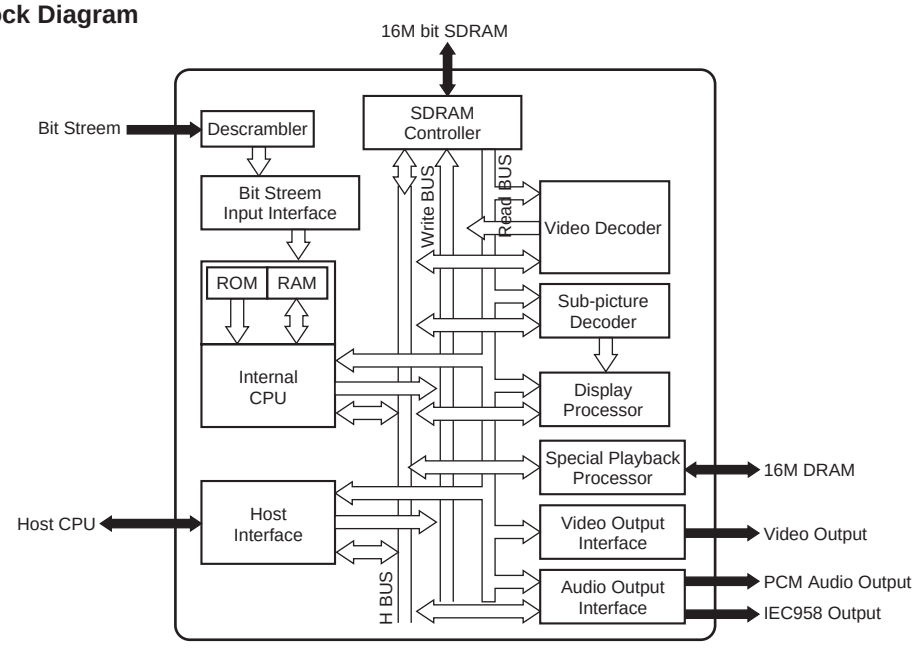
No.	Pin Name	I/O	Pin Function
51	HFLIO	I/O	Mirror detection signal input/output
52	LASER	O	Output pin for laser ON/OFF control
53	PP0/DVD_CDB	I/O	General-purpose port input/output / Disc discrimination signal output
54	PP1/CRCERRB	I/O	General-purpose port input/output / Subcode CRC result signal output
55	FG	I	FG counter input
56	PP2/EVENT	I/O	General-purpose port input/output / Event counter input
57	RESB	I	Reset input
58	CSB	I	Chip select input
59	RDB	I	Internal state reading signal input
60	WRB	I	Command / data writing signal input
61	DVDD2		5V power supply
62	VSS		GND
63	P0	I/O	Command / data input/output
64	P1		
65	P2		
66	P3		
67	P4		
68	P5		
69	P6		
70	P7		
71	VSS		GND
72	DVDD1		3.3V power supply for internal
73	BUSYB	O	Busy signal output of command process
74	SQOUT	O	Serial output of subcode Q
75	CQCKB	I	Shift clock input for subcode Q data output
76	RWC	I	Update permission input of subcode Q
77	WRQ	O	Read out ready monitor of subcode Q
78	AVSS		PLL GND for internal system clock
79	VRPFR		VCO oscillation range setting of PLL for system clock
80	VCOC	I	Connect a PLL filter for system clock
81	VPDO	O	
82	AVDD		PLL 5V power supply for system clock
83	PDO1	I/O	PLL filter connection pin 1 for EFM playback
84	PDO2	I/O	PLL filter connection pin 2 for EFM playback
85	PDO3	I/O	PLL filter connection pin 3 for EFM playback
86	AVSS		PLL GND for EFM playback
87	PCKIST1		Current setting 1 of PLL constant current charge pump for EFM playback
88	PCKIST2		Current setting 2 of PLL constant current charge pump for EFM playback
89	AVDD		PLL 5V power supply for EFM playback
90	DVDFR		VCO oscillation range setting of PLL for EFM playback 1
91	CDFR		VCO oscillation range setting of PLL for EFM playback 2
92	JV	O	Jitter output of PLL clock for EFM playback
93	PCK	O	Bit clock output for EFM playback
94	ADRAO	I	Address input
95	DVDSYEQ	I	DVD synchronize pulse input
96	DVDSYNC	I	DVD synchronous signal input
97	LEFM2	O	Output the state that cut and out a signal which was binary-stated value EFM with PCK 2
98	DVDD1		3.3V power supply for I/O
99	VSS		GND
100	LEFM	O	Output the state that cut and out a signal which was binary-stated value EFM with PCK 1

IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

IC801: M65774BFP

MPEG2 Decoder IC

Block Diagram



Pin Function

No.	Pin Name	I/O	Pin Function	No.	Pin Name	I/O	Pin Function
1	GND	I	Ground	21	5VDD	I	5V power supply
2	HD0	I/O	Data input and output port	22	HD15	I/O	Data input and output port
3	HD1			23	CS	I	Chip select signal input
4	HD2			24	RE	I	Read Enable signal input
5	HD3			25	WE	I	Write Enable signal input
6	HD4			26	BHE	I	Byte High Enable signal input
7	5VDD	I	5V power supply	27	RDY	O	Acknowledge signal which is indicated the finish of data reading or writing via the host bus
8	VDD	I	Power supply	28	INTR	O	Interrupt request signal against to the external CPU from M65773FP
9	HD5	I/O	Data input and output port	29	GND	I	Ground
10	HD6			30	HA0	I	Address input port
11	HD7			31	HA1		
12	HD8			32	HA2		
13	HD9			33	HA3		
14	GND	I	Ground	34	HA4		
15	HD10	I/O	Data input and output port	35	VDD	I	Power supply
16	HD11			36	5VDD	I	5V power supply
17	HD12			35	HA5	I	Address input port
18	HD13			36	HA6		
19	HD14			37	HA7		
20	VDD	I	Power supply	48	HA8		

IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

No.	Pin Name	I/O	Pin Function	No.	Pin Name	I/O	Pin Function
41	HA9	I	Address input port	83	VDD	I	Power supply
42	GND	I	Ground	84	VSYNC	O	Vertiacl sync. signal output
43	CDMCK	I	Connect to ground	85	HSYNC	O	Horizontal sync. signal output
44	CDLRCK	I	L/R clock clock input from CDDSP	86	PICSTRT		
45	CDBCK	I	PCM bit clock input from CDDSP	87	MBSTRT		
46	CDDATA	I	Digital audio interface input	88	MBDATA		
47	VDD	I	Power supply	89	GND	I	Ground
48	CDDIN	I	PCM audio data input from CDDSP	90	PWD	O	Phase comparator output for external sync. operation
49	INT2	O	Interrupt request signal against to the external CPU from M65773FP	91	CSYNC	I	Composite SYNC signal input
50	INT3			92	OSDKEY	O	OSD key flag output
51	DREQ	O	DMA request signal for OSD bitmap transfer	93	PXCLK	O	Pixel clock (27MHz free-running clock)
52	DACK	I	DMA acknowledge signal for OSD bitmap transfer	94	VDD	I	Power supply
53	GND	I	Ground	95	PD7	O	Digital pixel data
54	CLKO	O	27MHz clock output	96	PD6		
55	CLKIN	I	System clock input	97	PD5		
56	AVDD1	I	Analog power supply	98	PD4		
57	AGND1	I	Analog ground	99	GND	I	Ground
58	AGND3			100	PD3	O	Digital pixel data
59	AVDD3	I	Analog power supply	101	PD2		
60	CCAP	I	Connect to ground	102	PD1		
61	AGND2	I	Analog ground	103	PD0		
62	AVDD2	I	Analog power supply	104	VDD	I	Power supply
63	ACLKO		Open	105	GND	I	Ground
64	ACLKI	I	Audio clock input	106	RESET	I	Hardware reset input
65	HMODE1	I	Setting pin of host interface operating mode	107	TEST0	I	Connect to ground normally
66	GND	I	Ground	108	TEST1		
67	VDD	I	Power supply	109	TEST2		
68	AOD	O	PCM output of audio data	110	VDD	I	Power supply
69	AO2			111	NMD0	I/O	Data transfer line with DRAM
70	AO1			112	NMD15		
71	AO0			113	NMD1		
72	GND	I	Ground	114	NMD14		
73	DOUT1	O	Digital audio interface output	115	GND	I	Ground
74	DOUT0			116	NMD2	I/O	Data transfer line with DRAM
75	SDA		Open	117	NMD13		
76	SCL		Open	118	NMD3		
77	VDD	I	Power supply	119	NMD12		
78	GND	I	Ground	120	VDD	I	Power supply
79	DACCLK	O	Over-sampling operating clock output	121	NMD4	I/O	Data transfer line with DRAM
80	DOCLK	O	PCM bit clock output	122	NMD11		
81	LRCLK	O	Clock output for discriminating the channel (L/R) of PCM audio data	123	NMD5		
82	HMODE0	I	Setting pin of host interface operating mode	124	NMD10		

IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

No.	Pin Name	I/O	Pin Function	No.	Pin Name	I/O	Pin Function
125	GND	I	Ground	167	MA5	O	Address line with SDRAM
126	NMD6	I/O	Data transfer line with DRAM	168	GND	I	Ground
127	NMD9			169	MA1	O	Address line with SDRAM
128	NMD7			170	MA6		
129	NMD8			171	MA0		
130	VDD	I	Power supply	172	MA7		
131	NCAS0	O	CAS (Column Address Strobe) control line of DRAM	173	VDD	I	Power supply
132	NWE	O	WE control line of DRAM	174	MA10	O	Address line with SDRAM
133	NCAS1	O	CAS (Column Address Strobe) control line of DRAM	175	MA8		
134	NRAS	O	RAS (Row Address Strobe) control line of DRAM	176	MA11		
135	GND	I	Ground	177	MA9		
136	NMA9	O	Address line with DRAM	178	GND	I	Ground
137	NMA8			179	DCS	O	Chip select of SDRAM
138	VDD	I	Power supply	180	RAS	O	RAS (Row Address Strobe) control line of SDRAM
139	NMA0	O	Address line with DRAM	181	CAS	O	CAS (Column Address Strobe) control line of SDRAM
140	NMA7			182	VDD	I	Power supply
141	NMA1			183	MCLK	O	Operation clock of SDRAM
142	NMA6			184	GND	I	Ground
143	GND	I	Ground	185	DWE	O	WE control line of SDRAM
144	NMA2	O	Address line with DRAM	186	DQMU	O	DQM control line of SDRAM Use for mask of upper byte output.
145	NMA5			187	DQML	O	DQM control line of SDRAM Use for mask of lower byte output.
146	NMA3			188	VDD	I	Power supply
147	NMA4			189	MD7	I/O	Data transfer line with SDRAM
148	VDD	I	Power supply	190	MD8		
149	BD7	I	Bit stream input port	191	MD6		
150	BD6			192	MD9		
151	GND	I	Ground	193	GND	I	Ground
152	BD5	I	Bit stream input port	194	MD5	I/O	Data transfer line with SDRAM
153	BD4			195	MD10		
154	BD3			196	MD4		
155	BD2			197	MD11		
156	VDD	I	Power supply	198	VDD	I	Power supply
157	GND	I	Ground	199	MD3	I/O	Data transfer line with SDRAM
158	BD1	I	Bit stream input port	200	MD12		
159	BD0			201	MD2		
160	BCLK	I	Strobe signal (clock) of BD port	202	MD13		
161	BDEN	I	Indicates the effective or invalid data which is sampled from BD port	203	GND	I	Ground
162	BDREQ	O	Output permission signal against to the device (channel decoder) which connecting to BD port	204	MD1	I/O	Data transfer line with SDRAM
163	VDD	I	Power supply	205	MD14		
164	MA3	O	Address line with SDRAM	206	MD0		
165	MA4			207	MD15		
166	MA2			208	VDD	I	Power supply

IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

IC601: PD6345A FR CPU

Pin Function

No.	Mark	Pin Name	I/O	Pin Function
1	P20/D16	D0	I/O	Data bus input/output
2	P21/D17	D1		
3	P22/D18	D2		
4	P23/D19	D3		
5	P24/D20	D4		
6	P25/D21	D5		
7	P26/D22	D6		
8	P27/D23	D7		
9	P30/D24	D8		
10	P31/D25	D9		
11	P32/D26	D10		
12	P33/D27	D11		
13	P34/D28	D12		
14	P35/D29	D13		
15	P36/D30	D14		
16	P37/D31	D15		
17	VSS	GND		Ground
18	P40/A00	A0	O	Address bus output
19	P41/A01	A1		
20	P42/A02	A2		
21	P43/A03	A3		
22	P44/A04	A4		
23	P45/A05	A5		
24	P46/A06	A6		
25	P47/A07	A7		
26	VCC3	V+3.3D		Power supply
27	VCC2	V+2.5D		Power supply
28	P50/A08	A8	O	Address bus output
29	P51/A09	A9		
30	P52/A10	A10		
31	P53/A11	A11		
32	P54/A12	A12		
33	P55/A13	A13		
34	P56/A14	A14		
35	P57/A15	A15		
36	VSS	GND		Ground
37	P60/A16	A16	O	Address bus output
38	P61/A17	A17		
39	P62/A18	A18		
40	P63/A19	A19		
41	P64/A20	A20		
42	P65/A21	TOFSTA	O	Tracking offset injection -A for servo
43	P66/A22	TOFSTC	O	Tracking offset injection -C for servo
44	P67/A23	WBL	O	For Wobble detection corresponding to DVD R/W (main)
45	DAVS	GND		Ground
46	DAVC	V+3.3D		Power supply
47	DA0	STEP1	I	For stepping motor control
48	DA1	STEP2	I	
49	DA2	LODRV	I	Loading, door and select motor drive

IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

No.	Mark	Pin Name	I/O	Pin Function
50	AN0	STEP2	I	For stepper control 2 For offset cancel of D/A output
51	AN1	STEP1	I	For stepper control 1 For offset cancel of D/A output
52	AN2	NAP SW	I	Rear panel H/M/L=M/A/P
53	AN3	XOEM	I	OEM model protection input
54	AN4	LD CUR	I	Input for LD current value indication
55	AN5	SELPOS	I	Tray selector input of microchanger
56	AN6	CLAMPSW		Clamp position SW input
57	AN7	LODPOS	I	Loading clamp position SW input
58	AVCC	V+3.3D		Power supply
59	AVRH	V+3.3D		Power supply
60	AVSS/AVRI	GND		Ground
61	VSS	GND		Ground
62	PP0/ATGX	SLDPOS	I	SW input of slider inside position
63	PP1/FRCK	GSW	O	Gain up at ACBR (at ACBR: H, others: L)
64	PP2/IN0	780ON	I	ON/OFF control signal of 780nm laser diode
65	PP3/IN1	SEDO	O	Tray rotation drive output
66	PP4/IN2	XMON	O	Mute of DRV (spindle motor ON: H)
67	PP5/IN3	XDRVMUT	O	FTS driver mute output
68	PP6	LT1	O	Communication response to the FL controller
69	PP7	XRDY	I	Communication request from the FL controller
70	VCC3	V+3.3D		Power supply
71	VCC2	V+2.5D		Power supply
72	PO0/OC0	XCURDET	I	Actuator current detection input Servo OFF for "L" 300ms
73	PO1/OC1	XCBUSY	I	Busy signal of command process Command acceptable : "L"
74	PO2/OC2	XDSPRST	O	Servo DSP reset
75	PO3/OC3	BCA		BCA read signal (at BCA read: H) (Not used)
76	PO4/OC4	DSCSNS/ XCD4X	I/O	Disc detection pulse "L": Disc exist Correspond to fourth speed CD playback ("L": Fourth speed)
77	PO5/OC5	PPCNT	O	Switch of TZC in WBL traversal (at PP: H)
78	PO6/OC6	XDFINH	O	Defect signal control (DEFECT ON: Hi-Z; OFF: "L")
79	PO7/OC7	DPD/TE	O	H=1 beam, L=3 beams
80	VSS	GND		Ground
81	PN0/AIN0	DVD/XCD	O	RF EQ switching signal at DVD/CD "H": DVD, "L": CD
82	PN1/BIN0	AGOFF	O	"H": Turn off AGC of RFIC
83	PN2/AIN1	650X780	O	780nm/650nm switching signal
84	PN3/BIN1	LD ON	O	ON/OFF control signal of laser diode
85	PN4/AIN2	FOFST2	O	Focus offset adjustment 1 (Tri-value control "H", "L", Hi-Z)
86	PN5/BIN2	FOFST1	O	Focus offset adjustment 2 (Tri-value control "H", "L", Hi-Z)
87	PN6/AIN3	XCD2X	O	For VCD double speed playback
88	PN7/BIN3	OEICG	O	"H": Gain of OEIC up to 6dB
89	PM0/ZIN0	TRYPOS	I	Count input of disc number
90	PM1/ZIN1	N/XP SW	O	Video encoder control port (NTSC/PAL)
91	PM2/ZIN2	V SEL	O	(Composite, S) / (YCbCr) or (RGB) switch
92	PM3/ZIN3	V SEL2	O	(Composite) of skirt terminal / (S) switch
93	PL0/SDA1	SDAI		12C control lines
94	PL1/SDA0	SDAO		
95	PL2/SCL1	SCLI		
96	PL3/SCL0	SCLO		
97	PL4	CTS	I	RS-232C clear to send input
98	PL5	DTR	O	RS-232C clear to send output
99	PL6/UC0	-		
100	VSS	GND		Ground

IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

No.	Mark	Pin Name	I/O	Pin Function
101	PK0/TIN0	XVQERST	O	VQE3 reset signal
102	PK1/TIN1	XCSPRO1		Serial communication enable of the progressive converter IC
103	PK2/TIN2	XCSVQE5		Serial communication enable of VQE5 IC
104	PK3/TIN3	N.C.		N.C.
105	PK4/TOT0	44X48	O	DAC and DASP supply clock fs 44/48 selection
106	PK5/TOT1	DI ERR	I	DIR reception error (unlock signal) input
107	PK6/TOT2	XMICON2 AOSEL1	O	Mic center MIX signal for multi CH AV-1/audio DSP switch (front L/R data)
108	PK7/TOT3	AOSEL0		AV1 output AOD and AO0 switch
109	VCC3	V+3.3D		Power supply
110	VCC2	V+2.5D		Power supply
111	PJ0/INT0	XINT0	I	
112	PJ1/INT1	XINT1	I	
113	PJ2/INT2	XIRQ10	I	MY chip interrupt #0
114	PJ3/INT3	XIRQ11	I	MY chip interrupt #1
115	PJ4/INT4	XABUSY	I	Busy signal of DSP process operation "L"
116	PJ5/INT5	THLD	I	Playback speed monitoring signal
117	PJ6/INT6	SBSY	I	Sync. signal of subcode block (period SO+SI "H")
118	PJ7/INT7	N.C.	I	N.C.
119	PI0/SI0	SSI	I	Serial bus data input
120	PI1/SO0	SSO	O	Serial bus data output
121	PI2/SCK0	SSCK	I	Serial bus clock input
122	PI3/SI1	RXD	I	RS-232C RXD
123	PI4/SO1	TXD	O	RS-232C TXD
124	PI5/SCK1	SELMOD		Audio DSP mode switch
125	PH0/SI2	RESET2		Reset for DSP 2
126	PH1/SO2	XCSADSP1	O	CS for DSP 2
127	PH2/SCK2	XCSSPD		Latch signal of serial/parallel IC for generating audio DSP control signal
128	MD0	GND		Ground
129	MD1	GND		
130	MD2	GND		
131	VSS	GND		Ground
132	VCC2	V+2.5D		Power supply
133	VSS	GND		Ground
134	X1	EXTAL	O	
135	X0	XTAL	I	
136	VCC3	V+3.3D		Power supply
137	PC0/DREQ2	LFEON RESET1	O	Select Mix to front L/R of LFE element DSP 1 reset
138	PC1/DACK2	XMICON1 AV1/XSDSP	O	Mic front L/R MIX signal for 2 ch AV-1/servo DSP switch
139	PC2/DEOP2	6CHMD	O	DAC output 2 ch/6 ch switch (XDVRST2)
140	PB0/DREQ0	XDREQ0	I	DMA response output to BY Chip
141	PB1/DACK0	DACK0	O	DMA request input from BY Chip
142	PB2/DEOP0	N.C.		N.C.
143	PB3/DREQ1	XDREQ1	I	DMA response output to AV-1 Chip
144	PB4/DACK1	XDACK1	O	DMA request input from AV-1 Chip
145	PB5/DEOP1	XEXCKON	O	ON/OFF switch of DSP external clock
146	PB6/IOWRX	DOISEL1	O	Digital output switch 1 of audio DSP (AV-1. DSP and GND)
147	PB7/IORDX	DOISEL2	O	Digital output switch 2 of audio DSP (AV-1. DSP and GND)
148	VSS	GND		Ground
149	PA0/CSOX	XCS20	O	Chip select output to Flash ROM
150	PA1/CS1X	XCS6	O	AV-1 Chip select

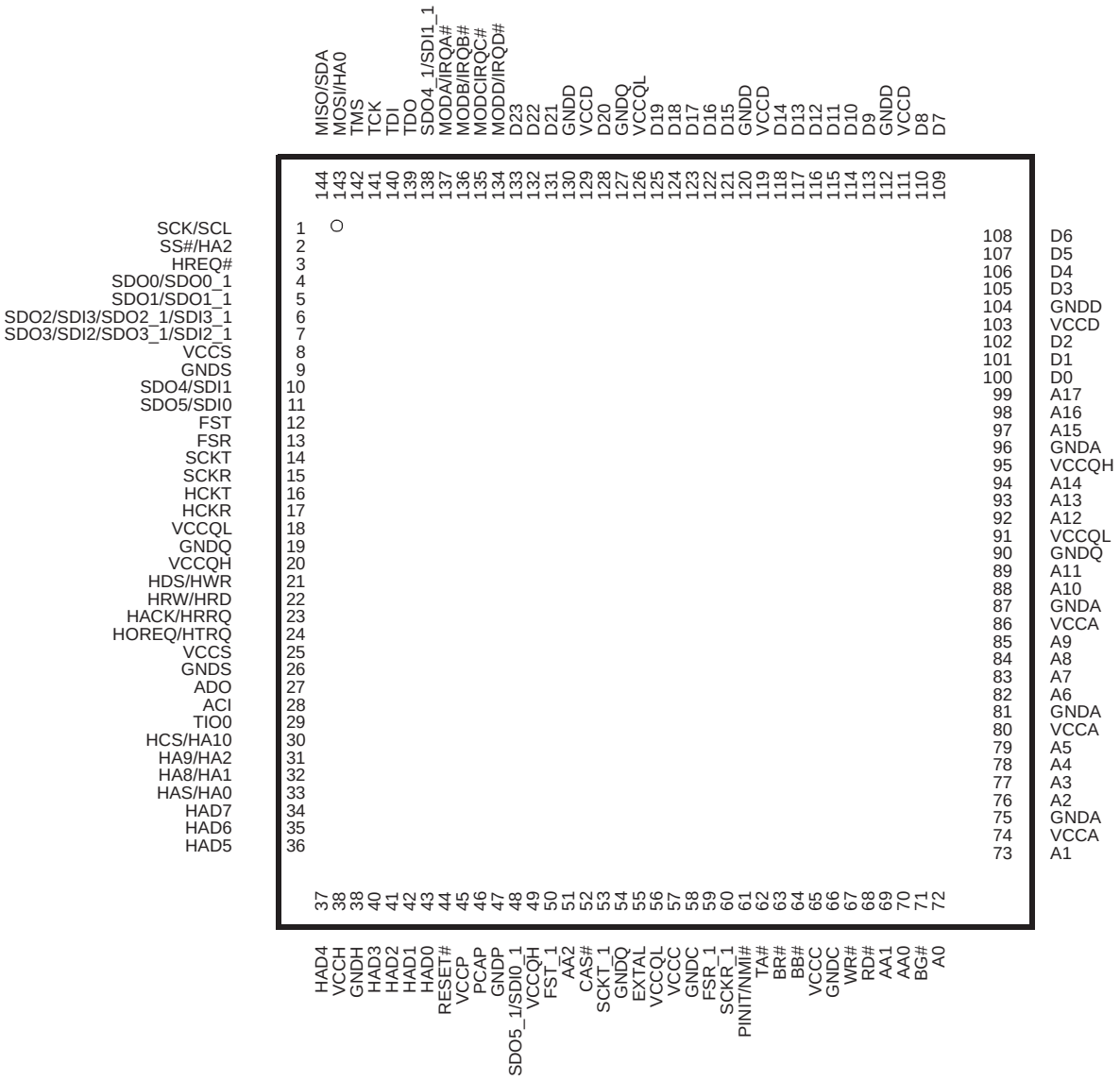
IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

No.	Mark	Pin Name	I/O	Pin Function
151	PA2/CS2X	XCS3	O	Chip select of PD4995A (MY Chip)
152	PA3/CS3X	XCS4	O	Chip select of servo DSP
153	PA4/CS4X	XCS23	O	Chip select output to SRAM (1M)
154	PA5/CS5X	N.C.	O	N.C.
155	PA6/CS6X	N.C.	O	N.C.
156	PA7/CS7X	N.C.	O	N.C.
157	VCC3	V+3.3D		Power supply
158	VCC2	V+2.5D		Power supply
159	NMIX			V+3.3D fixed
160	HSTX			V+2.5D fixed
161	INITX	XINIT	I	
162	P80/RDY	RDY	I	
163	P81/BGRNTX	XAMUTE	I	Final stage mute of 2 ch audio output
164	P82/BRQ	XMMUTE	O	Audio multi channel mute
165	P83/RDX	XRD	O	
166	P84/WR0X	XWR0	O	
167	P85/WR1X	XWR1	O	
168	VSS	GND		Ground
169	P90/SYSCLK	SYSCLK	O	
170	P91	DFRST		DAC reset (for front L/R)
171	P92/MCLK	DFRST1		DAC reset (for center, surround and LFE)
172	P93	XCSDF0	O	DAC chip select (XLAT3)
173	P94/LBAX	XCSDF1	O	DAC chip select for center, surround and LFE
174	P95/BAAX	XAQRST	O	AQE reset
175	P96	XCSAQE	O	AQE chip select
176	P97/WEX	TM ENT	I	Test mode entry

IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

IC901: XCA56367PV150 DVD-Audio decoder

Pin Arrangement



IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

Pin Function

No.	Pin Name	I/O	Function
1	SCK	I	A clock for host serial communication
2	SS		for serial communication
3	HREQ#	O	SHI transfer permission information
4	SDO0	O	ESAI Lf/Rf, L/R 2ch data output
5	SDO1	O	ESAI Ls/Rs, (surround system data) output
6	SDO2	O	ESAI center /Lfe output
7	SDO3	O	N.C.
8	VCCS		ESSI, SCI, Timer Power
9	GNDS		ESSI, SCI, Timer GND
10	SDI1	I	N.C.
11	SDO5	O	down mixture output
12	FST	I/O	LRCK input/output
13	FSR	O	N.C.
14	SCKT	I/O	BCK input/output
15	SCKR		N.C.
16	HCKT	I	HCK input
17	HCKR	O	N.C.
18	VCCQL		Quiet Core Power 1.8V
19	GNDQ		Quiet GND
20	VCCQH		Quiet External Power
21	HDS	I	Data strike rope from My Chip
22	HRW	I	Port which selects a data transfer course between Digital Signal Processor as MyChip
23	HACK	O	GPIO output (for error notice to a microcomputer)
24	HOREQ	O	GPIO output (a request to SCRUT)
25	VCCS		ESSI, SCI, Timer Power
26	GNDS		ESSI, SCI, Timer GND
27	ADO	O	DAX data output
28	ACI	I	A clock for DAX
29	TIO0	O	SHI transfer permission information
30	HCS	O	GPIO output (decode buffer full information) GPIO output (Digital Signal Processor active state information)
31	HA2	I	Host Address Input 2
32	HA1	I	Host Address Input 1
33	HA0	I	Host Address Input 0
34	HAD7	I	Address/Data Bus
35	HAD6		
36	HAD5		

IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

No.	Pin Name	I/O	Function
37	HAD4	I	Address/Data Bus
38	VCCH		Host Power
39	GNDH		Host GND
40	HAD3	I	Address/Data Bus
41	HAD2		
42	HAD1		
43	HAD0		
44	RESET	I	RESET
45	VCCP		PLL POWER
46	PCAP	I	Capacitor connection for PLL loop filter
47	GNDP		PLL GND
48	SDI0_1	I	Ls/Rs input
49	VCCQH		Quiet External Power
50	FST_1	I	LRCK
51	AA2	O	Chip select for memory
52	CAS	O	N.C.
53	SCKT_1	I	BCK
54	GNDQ		Quiet GND
55	EXTAL	I	27MHz clock
56	VCCQL		Quiet Core Power
57	VCCC		Bus Control Power
58	GNDC		Bus Control GND
59	FSR_1		N.C.
60	SCKR_1		N.C.
61	PINT	I	PLL Intial
62	TA	I	N.C.
63	BR	O	
64	BB	I	
65	VCCC		Bus Control Power
66	GNDC		Bus Control GND
67	WR	O	Wright signal for memory
68	RD	O	Read signal for memory
69	AA1	O	N.C.
70	AA0	O	
71	BG	I	
72	A0	O	Address Bus

IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

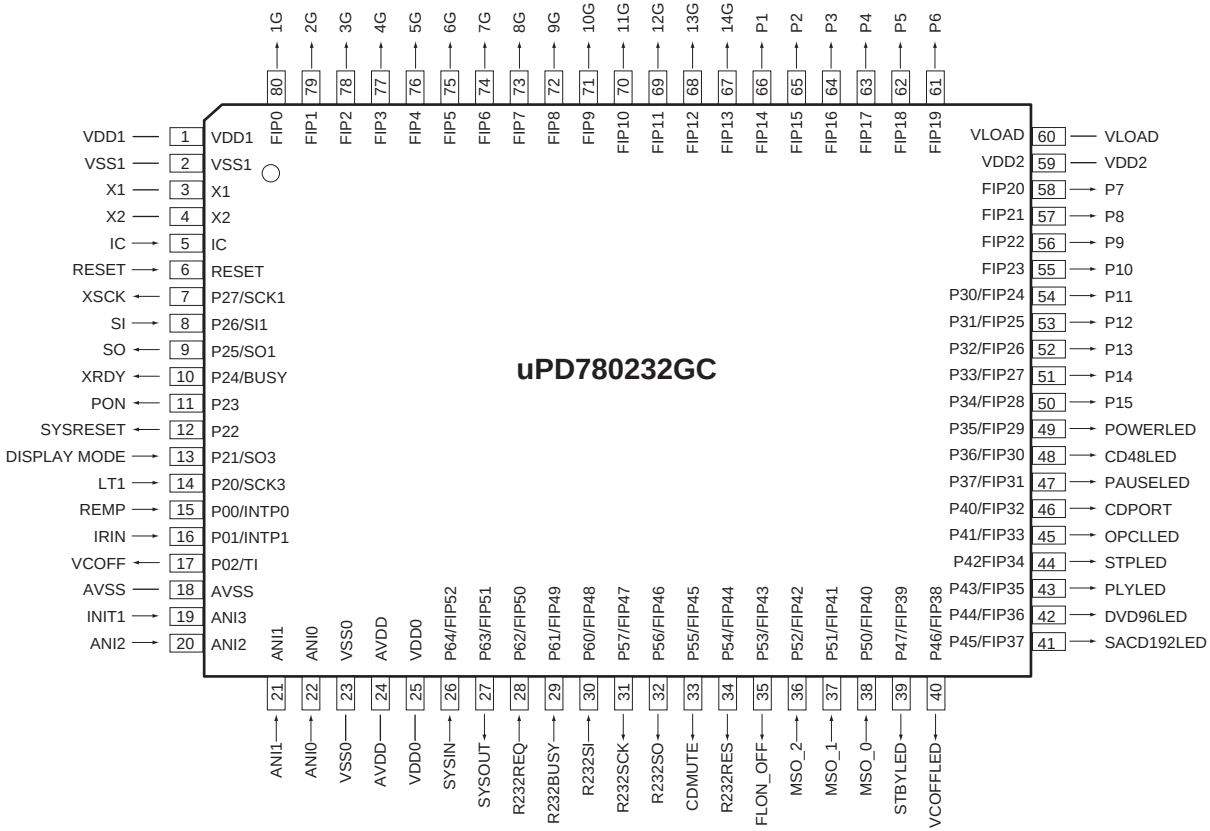
No.	Pin Name	I/O	Function
73	A1	O	Address Bus
74	VCCA		Address Bus Power
75	GNDA		Address Bus GND
76	A2	O	Address Bus
77	A3		
78	A4		
79	A5		
80	VCCA		Address Bus Power
81	GNDA		Address Bus GND
82	A6	O	Address Bus
83	A7		
84	A8		
85	A9		
86	VCCA		Address Bus Power
87	GNDA		Address Bus GND
88	A10	O	Address Bus
89	A11		
90	GNDQ		Quiet GND
91	VCCQL		Quiet Core Power 1.8V
92	A12	O	Address Bus
93	A13		
94	A14		
95	VCCQH		Quiet External Power
96	GNDA		Address Bus GND
97	A15	O	Address Bus
98	A16		
99	A17		
100	D0	I/O	Data Bus
101	D1		
102	D2		
103	VCCD		Data Bus Power
104	GNDD		Data Bus GND
105	D3	I/O	Data Bus
106	D4		
107	D5		
108	D6		

IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

No.	Pin Name	I/O	Function
109	D7	I/O	Data Bus
110	D8		
111	VCCD		Data Bus Power
112	GNDD		Data Bus GND
113	D9	I/O	Data Bus
114	D10		
115	D11		
116	D12		
117	D13		
118	D14		
119	VCCD		Data Bus Power
120	GNDD		Data Bus GND
121	D15	I/O	Data Bus
122	D16		
123	D17		
124	D18		
125	D19		
126	VCCQL		Quiet Core Power 1.8V
127	GNDQ		Quiet GND
128	D20	I/O	Data Bus
129	VCCD		Data Bus Power
130	GNDD		Data Bus GND
131	D21	I/O	Data Bus
132	D22		
133	D23		
134	MODD	I	Mode of operation choice
135	MODC		
136	MODB		
137	MODA		
138	SDI1_1	I	C/Lfe input
139	TDO	O	JTAG Test Data Output
140	TDI	I	JTAG Test Data Input
141	TCK	I	JTAG Test Clock
142	TMS	I	JTAG Test Mode Select
143	MOSI	I	SH serial data input
144	MOSO	O	SH serial data output

MICROPROCESSOR TERMINAL DESCRIPTION/ BLOCK DIAGRAM

Q701 : (uPD780232GC)



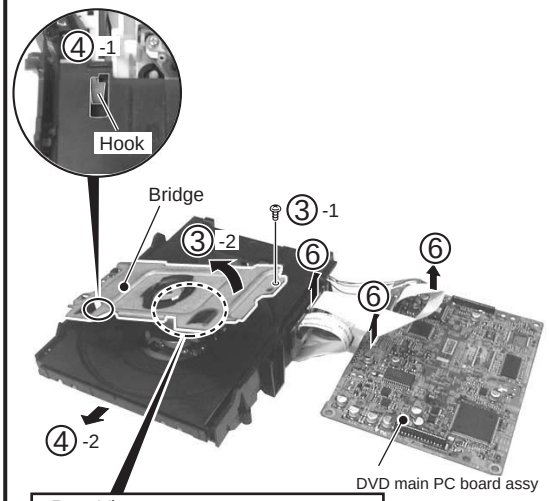
MICROPROCESSOR TERMINAL DESCRIPTION

Q701 : uPD780232GC

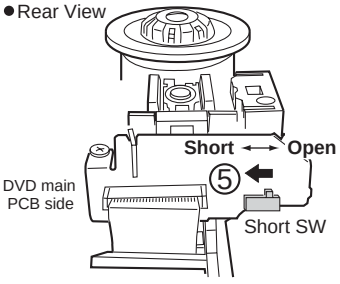
No.	SYMBOL	FUNCTION	I/O	DESCRIPTION	No.	SYMBOL	FUNCTION	I/O	DESCRIPTION
1	VDD1	VDD1		Power supply, +5V	41	P45/FIP37	SMP192LED	O	Sampling rate 192LED control output pin
2	VSS1	VSS1		Ground pin	42	P44/FIP36	SAMP96LED	O	Sampling rate 96LED control output pin
3	X1	X1		Main clock input pin (5MHz)	43	P43/FIP35	PLYLED	O	Play LED control output pin
4	X2	X2		Main clock input pin (5MHz)	44	P42/FIP34	STPLED	O	Stop LED control output pin
5	IC	IC	I	Ground pin	45	P41/FIP33	OPCLLED	O	Open/ Close LED control output pin
6	$\overline{\text{RESET}}$	$\overline{\text{RESET}}$	I	Reset pin of microprocessor	46	P40/FIP32	LED0	O	General LED control pin
7	P27/~SCK1	XSCK	O	Clock output pin for writing of flash ROM	47	P37/FIP31	PAUSELED	O	Pause LED control output pin
8	P26/SI1	SI	I	Data input pin for writing of flash ROM	48	P36/FIP30	SMP48LED	O	Sampling rate 48kHz LED control output pin
9	P25/SO1	SO	O	Data output pin for writing of flash ROM	49	P35/FIP29	POWERLED	O	Power LED control output pin
10	P24/BUSY	XRDY	O	XRDY output pin	50	P34/FIP28	P15	O	FL segment (P15) control output pin
11	P23	PON	O	Power ON control signal output pin (Power on: "H")	51	P33/FIP27	P14	O	FL segment (P14) control output pin
12	P22	SYSRESET	O	Reset control output pin	52	P32/FIP26	P13	O	FL segment (P13) control output pin
13	P21/SO3	---	I	Not used	53	P31/FIP25	P12	O	FL segment (P12) control output pin
14	P20/~SCK3	LT1	I	LT1 data input pin	54	P30/FIP24	P11	O	FL segment (P11) control output pin
15	P00/INTP0	~REMO	I	Remote signal input pin. Active "L"	55	FIP23	P10	O	FL segment (P10) control output pin
16	P01/INTP1	~IRIN	I	RI remote control input signal.	56	FIP22	P9	O	FL segment (P9) control output pin
17	P02/TI	VCOFF	O	Video circuit off control output pin	57	FIP21	P8	O	FL segment (P8) control output pin
18	AVSS	AVSS		Ground pin for D/A converter	58	FIP20	P7	O	FL segment (P7) control output pin
19	ANI3	INIT1	I	Initializing input pin (Analog signal)	59	VDD2	VDD2		Power supply pin (+5V)
20	ANI2	ANI2	I	Analog input pin for A/D converter	60	VLOAD	VLOAD		FIP control pin to connect pull down resistor.
21	ANI1	ANI1	I	Analog input pin for A/D converter	61	FIP19	P6	O	FL segment (P6) control output pin
22	ANI0	ANI0	I	Analog input pin for A/D converter	62	FIP18	P5	O	FL segment (P5) control output pin
23	VSS0	VSS0		Ground pin	63	FIP17	P4	O	FL segment (P4) control output pin
24	AVDD	AVDD		Power supply pin of D/A converter, +5V	64	FIP16	P3	O	FL segment (P3) control output pin
25	VDD0	VDD0		Power supply. +5V	65	FIP15	P2	O	FL segment (P2) control output pin
26	P64/FIP52	SYSIN	I	System buss input pin	66	FIP14	P1	O	FL segment (P1) control output pin
27	P63/FIP51	~SYSOUT	O	System buss output pin	67	FIP13	14G	O	FL grid (G14) output pin
28	P62/FIP50	R232REQ	I	REQ input pin from microprocessor of RS-232C driver	68	FIP12	13G	O	FL grid (G13) output pin
29	P61/FIP49	R232BUSY	I	BUSY input pin from microprocessor of RS-232C driver	69	FIP11	12G	O	FL grid (G12) output pin
30	P60/FIP48	R232SI	I	SI input pin from microprocessor of RS-232C driver	70	FIP10	11G	O	FL grid (G11) output pin
31	P57/FIP47	R232SCK	O	SCK output pin from microprocessor of RS-232C driver	71	FIP9	10G	O	FL grid (G10) output pin
32	P56/FIP46	R232SO	O	SO output pin from microprocessor of RS-232C driver	72	FIP8	9G	O	FL grid (G9) output pin
33	P55/FIP45	TEST	I	Testing pin	73	FIP7	8G	O	FL grid (G8) output pin
34	P54/FIP44	R232RES	O	Reset control output pin to microprocessor of RS-232C driver	74	FIP6	7G	O	FL grid (G7) output pin
35	P53/FIP43	FLON_OFF	O	FL filament on/off control output pin	75	FIP5	6G	O	FL grid (G6) output pin
36	P52/FIP42	MSO_2	I	Model select input pin 2	76	FIP4	5G	O	FL grid (G5) output pin
37	P51/FIP41	MSO_1	I	Model select input pin 1	77	FIP3	4G	O	FL grid (G4) output pin
38	P50/FIP40	MSO_0	I	Model select input pin 0	78	FIP2	3G	O	FL grid (G3) output pin
39	P47/FIP39	STBYLED	O	Standby LED control output pin	79	FIP1	2G	O	FL grid (G2) output pin
40	P46/FIP38	VCOFFLED	O	Video circuit off control output pin	80	FIP0	1G	O	FL grid (G1) output pin

Disassembly of the Traverse Mechanism Assy-1

① Remove the top cover and Tray Panel.
② Remove the Tray panel and Front Panel.
③ Remove the Bridge (Screw1).
④ Pull out the Tray and remove it while unhooking a Hook.
⑤ Turn the Short SW to Short side.
⑥ Remove three connectors.

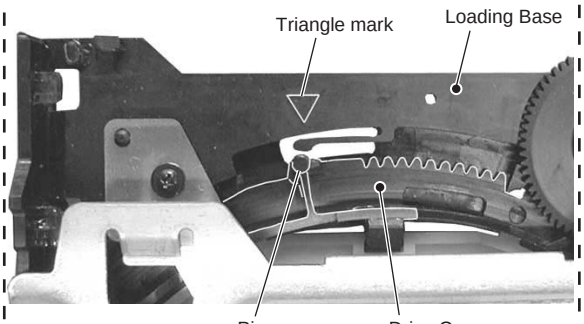


● Rear View



☞ **Caution in the tray insertion**

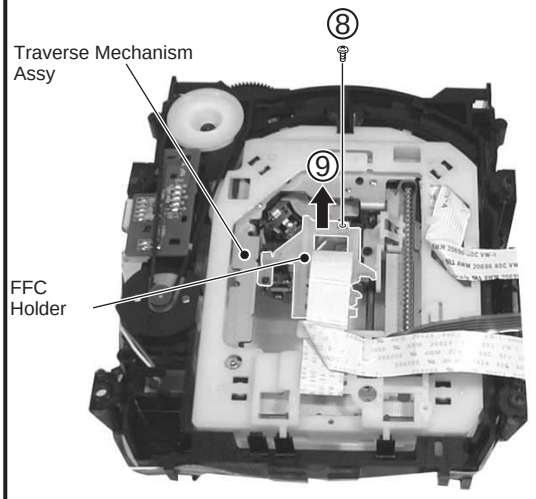
In the Tray insertion, insert it after matching a triangle mark of the Loading Base and a position of pin of the Drive Cam.



⑦ Remove the Loading Mechanism Assy (Screws 4).
⑧ Remove a screw.

Cautions:
Screw is locked with Silicone Adhesive.
Please lock it with Silicone Adhesive when installs it.

⑨ Remove the FFC Holder with the state which Flexible Cable was attached.

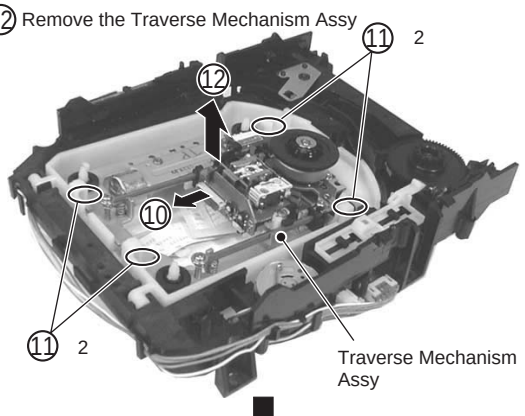


● Bottom View

Pickup assy

● **When Removing The Traverse Mechanism Assy**

⑩ Remove the Pickup Flexible Cable
⑪ Unhook (4)
⑫ Remove the Traverse Mechanism Assy



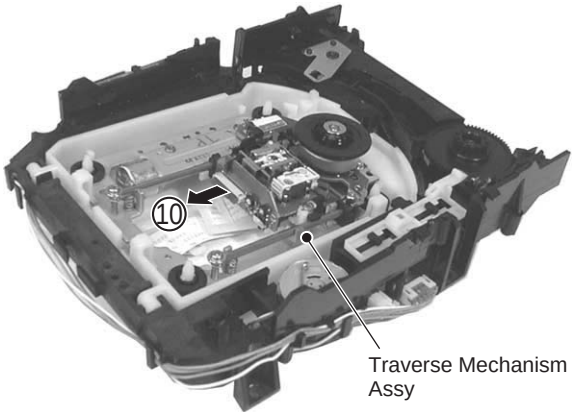
Exchange

Next

Disassembly of the Traverse Mechanism Assy-2

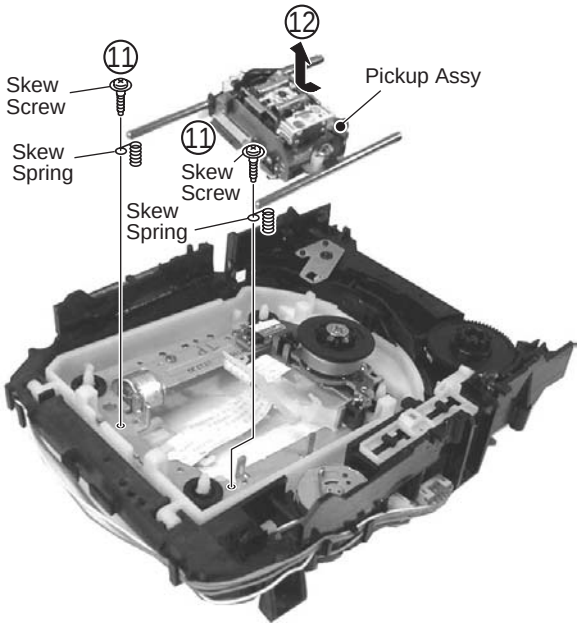
● **When Removing The Pickup Assy**

⑩ Remove the Pickup Flexible Cable.



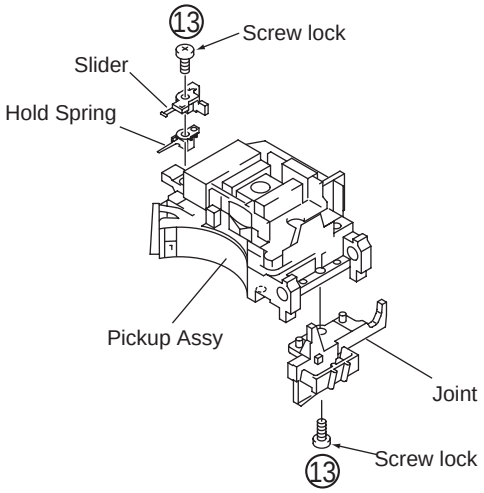
⑪ Remove two Skew Screws and two Skew Springs.

⑫ Remove the Pickup Assy.



⑬ Remove two screws.

Cautions:
Screw is locked with Screw Lock.
Please lock it with Screw Lock when installs it.



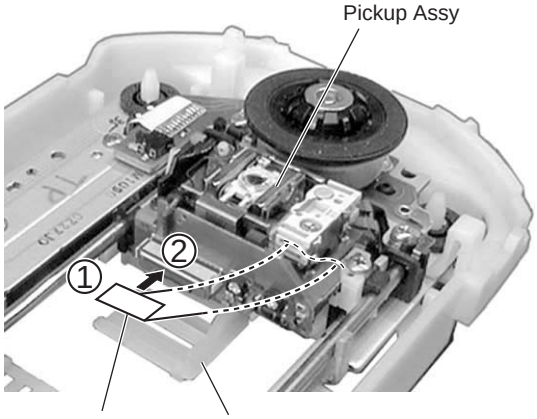
Exchange

Disassembly of the Traverse Mechanism Assy-3

☞Styling the Pickup Flexible Cable

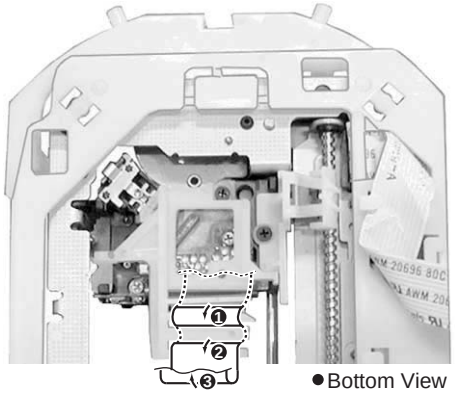
① Fold a edge of lining part of the Pickup Flexible Cable.

② Insert the Pickup Flexible Cable in connector, and lock it surely.



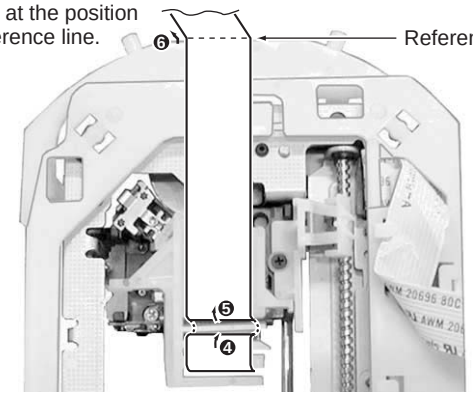
Caution:
Move the Pickup to the innermost of the disc.

③ Perform the styling as shown in figure below.

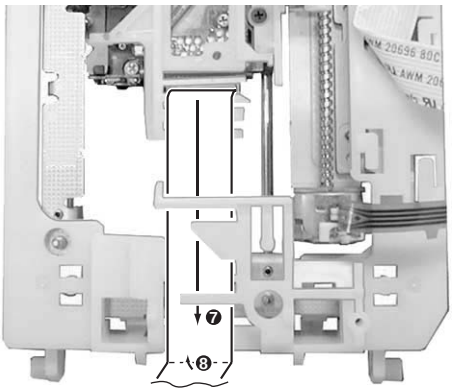


● Bottom View

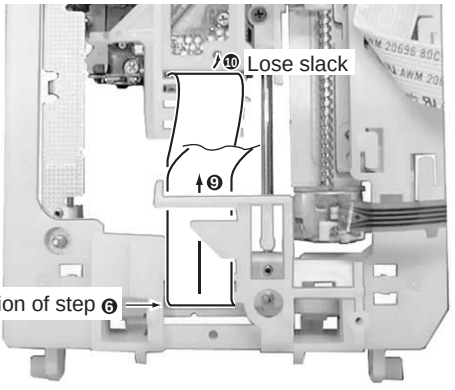
Fold it at the position of reference line.



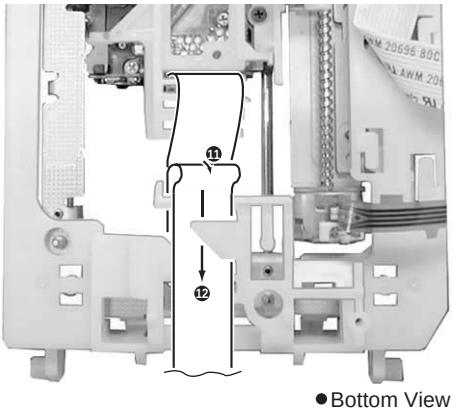
● Bottom View



● Bottom View



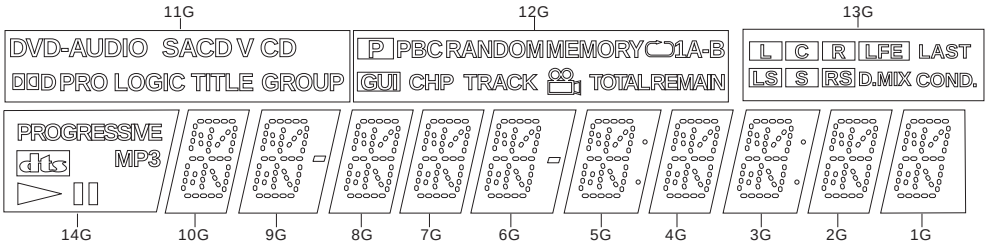
● Bottom View

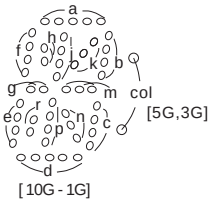


● Bottom View

FL TUBE VIEW

Pin connection





PIN CONNECTION

48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
F 2	N X	N P	N P	P 15	P 14	P 13	P 12	P 11	P 10	P 9	P 8	P 7	P 6	P 5	P 4	P 3	P 2	P 1	N X	N X	N X	N X	N X	N X	N X	N X	N X	N X	N X	N X	14 G	13 G	12 G	11 G	10 G	9 G	8 G	7 G	6 G	5 G	4 G	3 G	2 G	1 G	N P	N P	N X	F 1

ANODE CONNECTION

	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	12G	13G	14G
P1	a	a	a	a	a	a	a	a	a	a	GROUP	REMAIN	L	–
P2	h	h	h	h	h	h	h	h	h	h	TITLE	TOTAL	C	–
P3	l	j	j	j	j	j	j	j	j	j	PRO LOGIC		R	–
P4	k	k	k	k	k	k	k	k	k	k	D	TRACK	LS	–
P5	b	b	b	b	b	b	b	b	b	b		CHP	S	–
P6	f	f	f	f	f	f	f	f	f	f	CD	GUI	RS	–
P7	m	m	m	m	m	m	m	m	m	m	V	- B	LFE	–
P8	g	g	g	g	g	g	g	g	g	g	SACD	A	D.MIX	–
P9	c	c	c	c	c	c	c	c	c	c	AUDIO	1	LAST	–
P10	e	e	e	e	e	e	e	e	e	e	DVD		COND	–
P11	r	r	e	r	r	r	r	r	r	r	–	MEMORY	–	PROGRESSIVE
P12	p	p	p	p	p	p	p	p	p	p	–	RANDOM	–	
P13	n	n	n	n	n	n	n	n	n	n	–	PBC	–	MP3
P14	d	d	d	d	d	d	d	d	d	d	–	P	–	
P15	–	–	col	–	col		–	–		–	–	–	–	

ADJUSTMENT PROCEDURES-1

ADJUSTMENT OF DVD MECHANISM-1

1. Adjustment items and location

❶ **Tangential and Radial Height Coarse Adjustment**

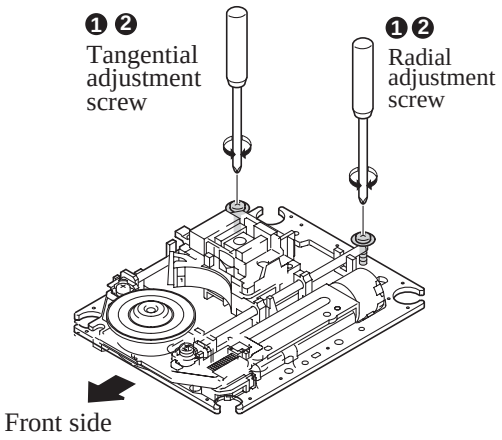
❷ **DVD Jitter Adjustment**

❸ **How to initialize the Focus Sweep Setting**

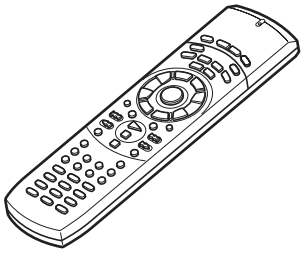
[Electrical Part]
Electrical adjustments are not required.

Adjustment Points (Mechanism Part)

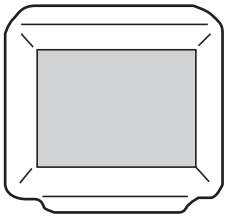
Cautions: After adjustment, lock all adjusted screws with screw tightening agent.



2. JIGs and measuring equipment

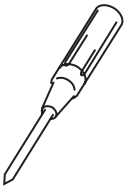


Remote controller
RC-484M
Part No. 24140484

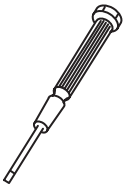


TV monitor

DVD test disc
(GGV1025)



⊕ Screw driver (medium)



⊕ Precise screw driver

3. Necessary adjustment points

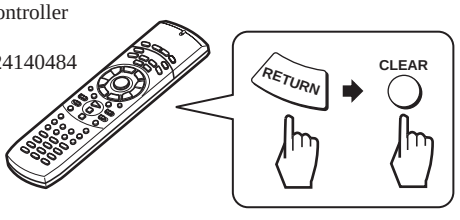
When Exchange Parts of Mechanism Assy Parts	Adjustment Points		
Pickup	Mechanical point	❶❷✻❸	After adjustment, screw locks with the Screw tight.
	Electric point	———	
Traverse Mechanism	Mechanical point	❸	After adjustment, screw locks with the Screw tight.
	Electric point	———	
Spindle Motor	Mechanical point	❷✻❸	After adjustment, screw locks with the Screw tight.
	Electric point	———	
■ Exchange of PCB Assy			
Exchange PC Board SSIB, LOAB, DVDM ASSY	Mechanical point	———	After adjustment, screw locks with the Screw tight.
	Electric point	———	

✻ Purpose: To adjust individual Traverse Mechanism to it best sweep.

When you replace Pickup, Traverse Mechanism or Spindle Motor press RETURN and then press CLEAR at the last stage.

(It is necessary when you performed procedure ❷ adjustment.)

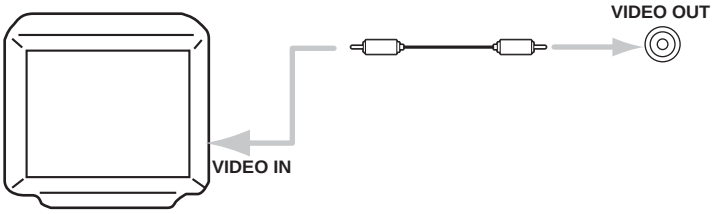
Remote controller
RC-484M
Part No. 24140484



ADJUSTMENT PROCEDURES-2

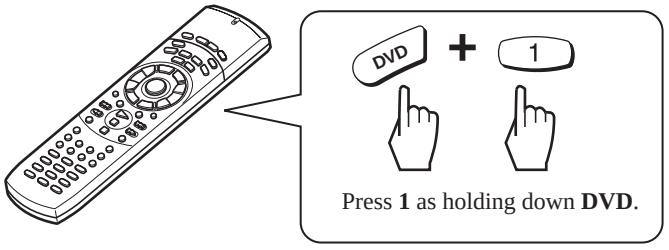
ADJUSTMENT OF DVD MECHANISM-2

A. Connection



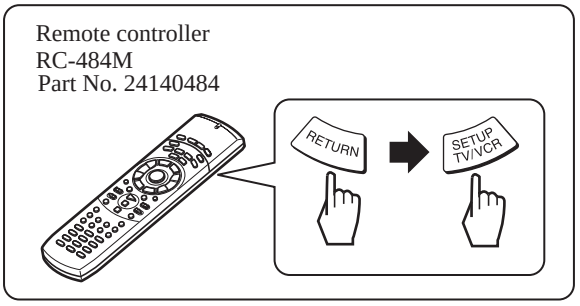
B. Test mode

SETTING THE REMOTE CONTROLLER



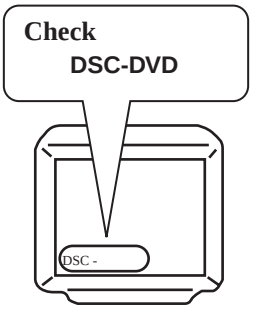
C: TEST MODE: ON

STANDBY⏻switch is ON.
Press "RETURN" and "SETUP TV/VCR" button of the remote controller (RC-484M)



D: TEST MODE

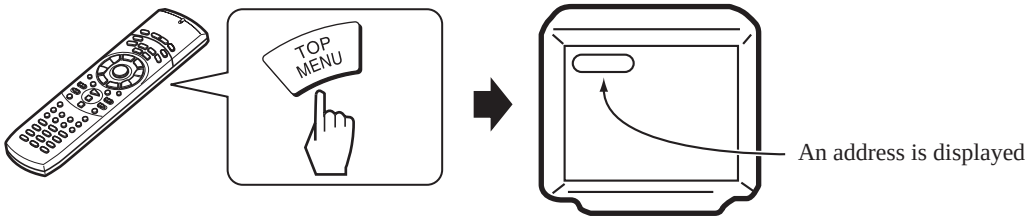
Setting the test disc.
Display is "DISC-DVD" on the TV monitor.



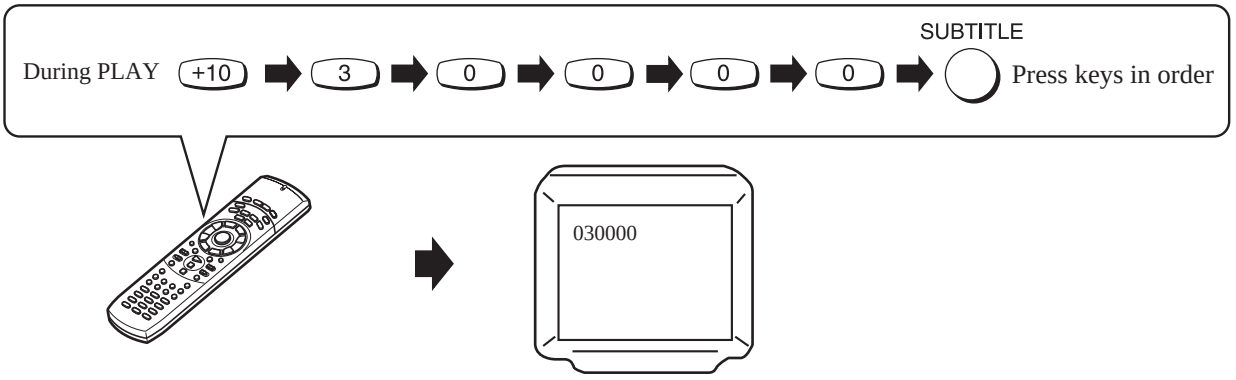
ADJUSTMENT PROCEDURES-3

ADJUSTMENT OF DVD MECHANISM-3

TEST MODE: PLAY



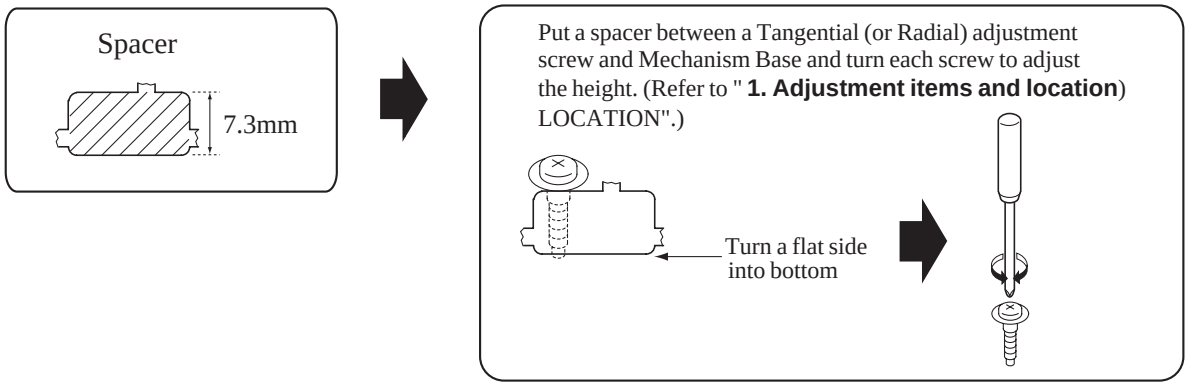
< When playback with the target address of disc (DVD)>
For example, when playback with # 30000



TEST MODE: OFF

Press the "STANDBY" key on the unit or
press the "RETURN" key on the remote controller.

❶ Tangential and Radial Height Coarse Adjustment



ADJUSTMENT PROCEDURES-4

ADJUSTMENT OF DVD MECHANISM-4

❷ DVD Jitter Adjustment

- Playback method of inner and outer address for the purpose is refer to "**5. TEST MODE**".

Use disc: GGV1025

Test mode
Play the DVD test disc at outer track
(around #200000)
J4 : Min

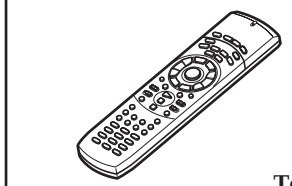
Mechanism Assy
Adjust the **Tangential Adjustment** Screw so that jitter becomes minimum.

Test mode
Play the DVD test disc at inner outer track
(around #30000)
J4 : Min

Mechanism Assy
Adjust the **Radial Adjustment** Screw so that jitter becomes minimum.

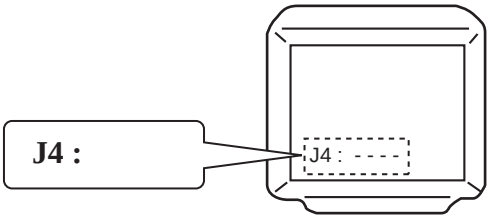
Test mode
Play the DVD test disc at outer track
(around #200000)
J4 : Min

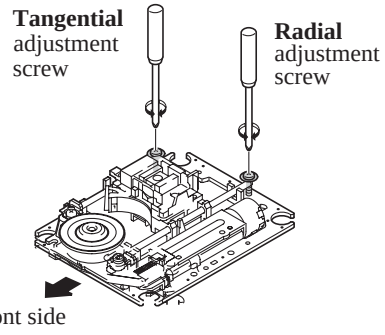
Mechanism Assy
Adjust the **Tangential Adjustment** Screw so that jitter becomes minimum.



Test mode end

Monitor





If error rate is OK, locks a root of tangential and radial adjustment screws with the Screw tight, and go to step ❸

Screw tight : GYL1001

Turn the POWER OFF in case of NG once, and perform the adjustment once again.

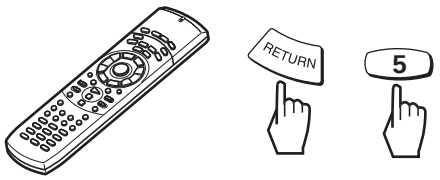
OK

NG

Check

Confirm the error rate that is displayed "**OK**"
(Example **ER (av): 2.5e - 5-*OK**)

Disc playback normally.
The measurement of block error rate

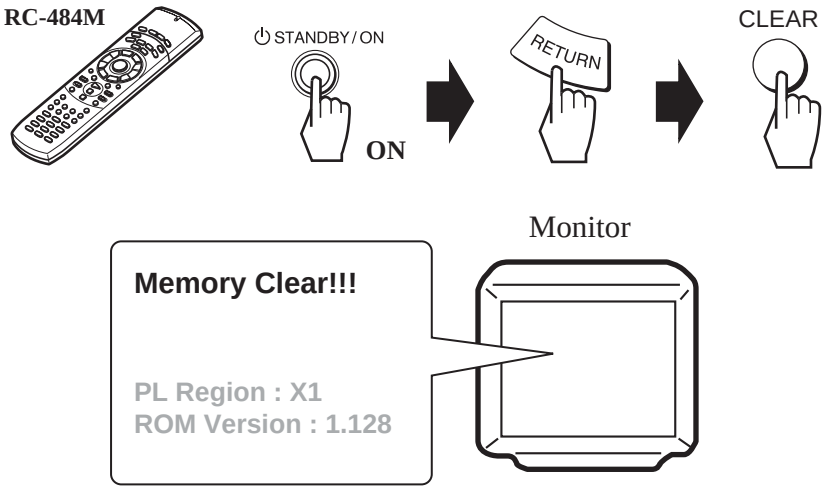


ADJUSTMENT PROCEDURES-5

ADJUSTMENT OF DVD MECHANISM-5

❸ Initialize the Focus Sweep Setting

Purpose: To set the sweep which was correct with the individual Traverse mechanism.

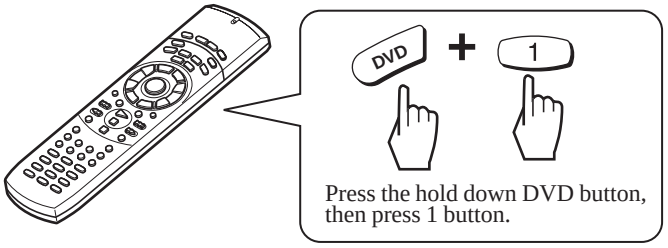


NOTE: When Change the mechanism or pickup mechanism,
you must resetting the FOCUS SWEEP at no disc condition.

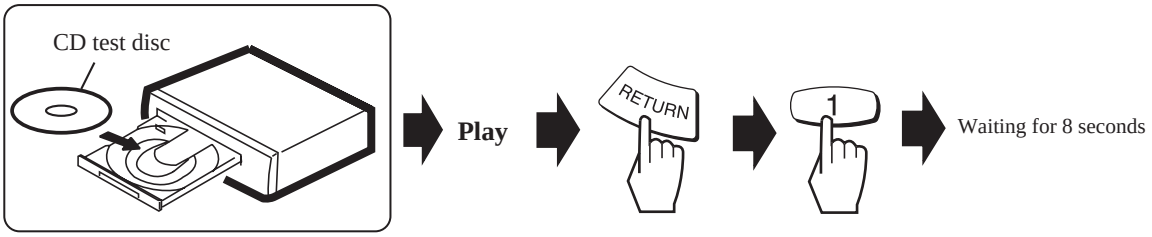
ADJUSTMENT PROCEDURES-6

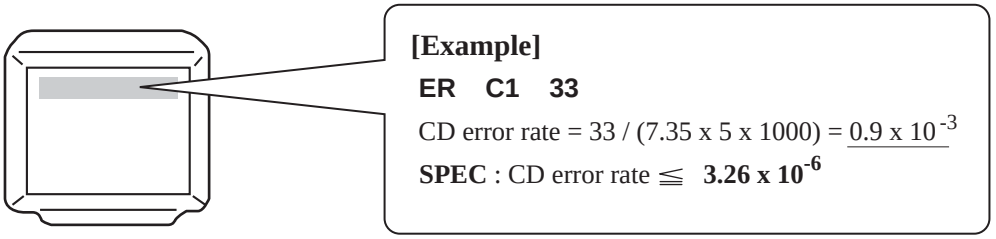
CHECKING THE ERROR RATE

Setting remote controller

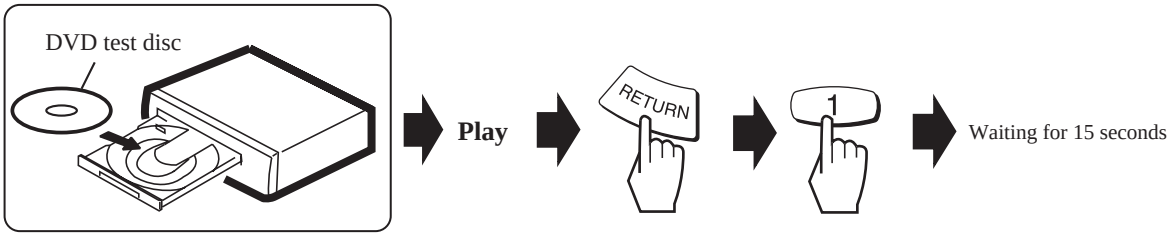


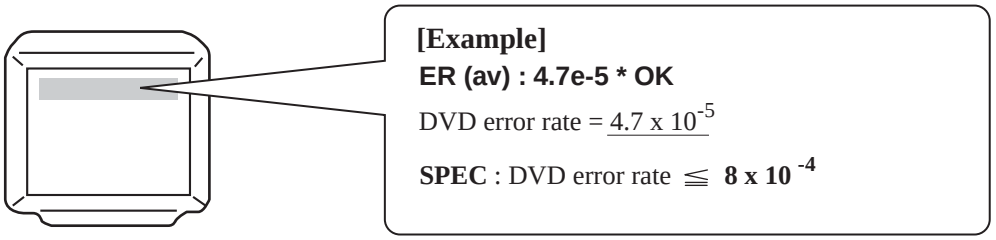
Check the CD error rate



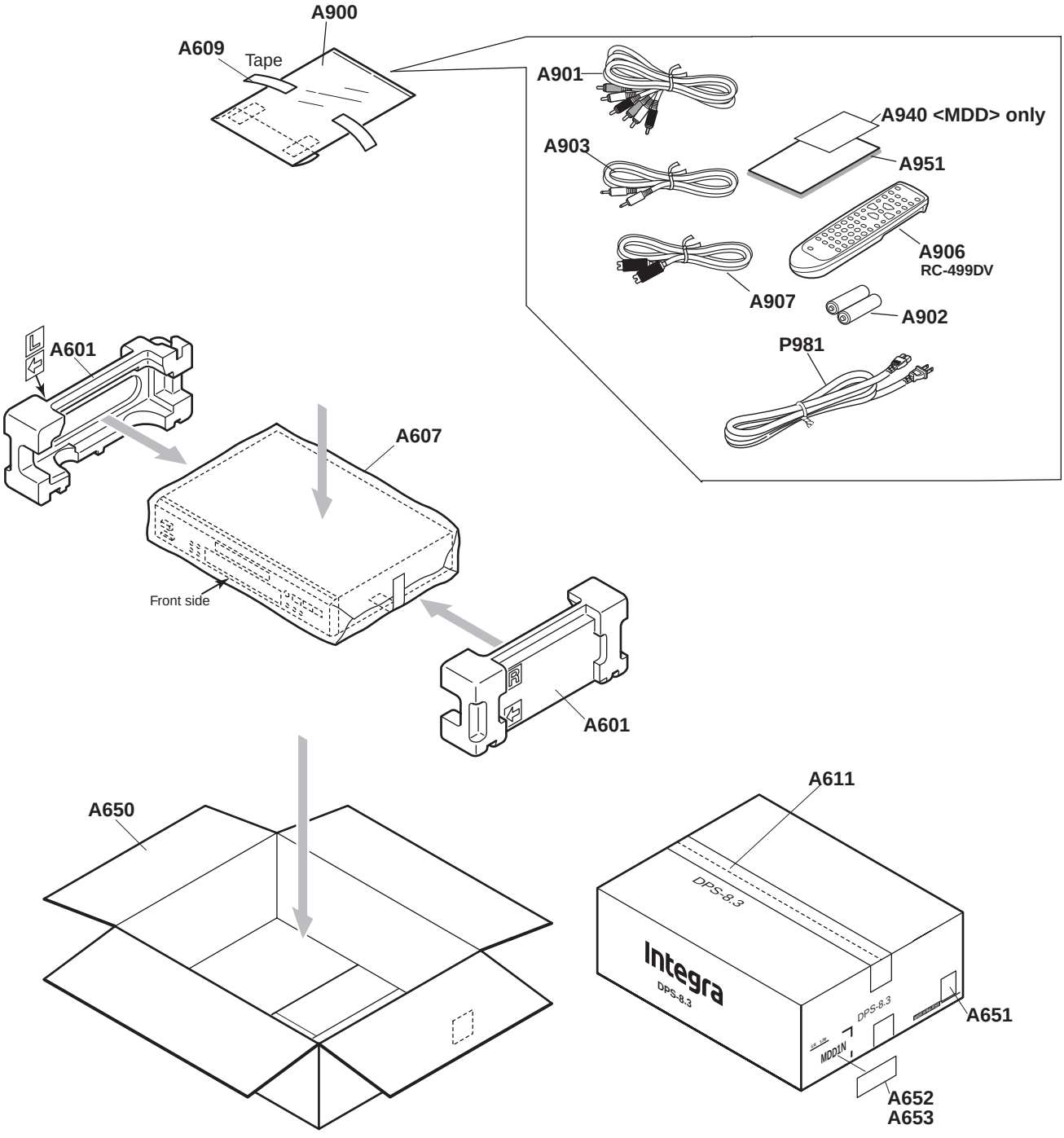


Check the DVD error rate





PACKING VIEW



<MDD1N>: U.S.A. and Canadian model only
<MPS4P> : South American model only
! : Safety par

	REF. NO.	PART NAME	DESCRIPTION	PART NO.	REMARK
Chassis	A1	CHASSIS		27100425A	
Chassis	A3	LEG	LEG	27175316C	
Chassis	A5	CUSHION		28141494	
Chassis	A7	SCREW	3TTB+8B	838130088	
Chassis	A9	HOLDER	KGLS-6RF	27190693A	
Chassis	A11	HOLDER	KGPS-6RF	27191112	
Chassis	A12	HOLDER	HOLDER KGLS-18S	27190470	
Chassis	A13	ST SCREW	3TTB+20B	838130208	
Chassis	A15	LABEL(DVD2)		29362648	
Chassis	A17	KNOB	(POW)	28325753	
Chassis	A19	LABEL	(ID)	29363026	
Chassis	A21	F BRACKET		27111221B	
Chassis	A22	SPACER	SPACER 8X3X0.188	27270147	
Chassis	A23	KNOB	(OPEN)AS	28325958A	
Chassis	A29	KNOB	(STANDBY)	28325756	
Chassis	A30	CUSHION		28141517	
Chassis	A33	SCREW	2.6TTB+8B(BC)	838426088	
Chassis	A35	SCREW	3P+10FN(BC)	82143010	
Chassis	A38	SCREW	4TTC+6C(BC)	830440069	
Chassis	A39	HOLDER	(HP)	27191155	
Chassis	A41	TAPE		29110161	
Chassis	A45	SPACER	SPACER 8X3X0.1	27270146	
Chassis	A61	REAR PANEL	<MDD1N>	27123013	
Chassis	A61	REAR PANEL	<MPA4P>	27123046	
Chassis	A62	SCREW	3TTB+8B(BC)	838430088	
Chassis	A63	SCREW	4TTB+8C(BC)	838440089	
Chassis	A121	F PANEL		27212421	
Chassis	A122	BADGE		28135278	
Chassis	A123	FACET	(S)	28198906	
Chassis	A125	GUIDE	(KNOB)	27268054	
Chassis	A201	HOLDER	(PLT)	27191142A	
Chassis	A203	CLEAR PLT		28191928	
Chassis	A205	B PLATE		28133398	
Chassis	A207	KNOB	(CRS)	28325933	
Chassis	A209	DOOR	(PANEL)	28148514	
Chassis	A211	DOOR	(MOULD)	28148518A	
Chassis	A213	BADGE	(DVD-AUDIO)	28135284	
Chassis	A215	BADGE	(SACD)	28135288	
Chassis	A217	COVER		28184845	
Chassis	A219	SCREW	3TTB+8B(BC)	838430088	
Chassis	A221	LABEL	(COVER)	29362772	
Chassis	A223	KNOB	(MIC)	28325452	
Chassis	CN602	FFC	NCFCC-400812	204C400812	
Chassis	E701	CRIMP AS	CRIMP AS DX730M	2061112160UL	
Chassis	E702	SOCKET AS	NSAS-10P0978	2009990702UL	
Chassis	E903	WIRE TIE	BINDER(CLAMPER)UL	260208	
Chassis	P1701	SOCKET AS	NSAS-4P1037	2009990742UL	
Chassis	P1803	FFC	NCFC5-260812	2045260812	
Chassis	P701	FFC	NCFC5-241012	2045241012	
Chassis	S731	JOY STICK	NPS-115-S673	25035710	
Chassis	T901	P TRANS	NPT-1451D **<MDD1N>**	2301640A	!
Chassis	T901	P TRANS	NPT-1451P **<MPA4P>**	2301641A	!
Chassis	F911	FUSE	2.5A-ULSE-TL250 **<MPS4P>**	252300	!
Chassis	F912	FUSE	2.5A-ULSE-TL250 **<MPS4P>**	252300	!
Chassis	E703	FUSE LABEL	T2.5A 250V_F911,F912 **<MPS4P>**	29363314	
Chassis	U1	Output circuit PC board assy	NAAR-7616-1H	1H490516-1H	
Chassis	U2	Display circuit PC board assy	NADIS-7618-1H **<MDD1N>**	1H490518-1H	
Chassis	U2	Display circuit PC board assy	NADIS-7618-1J **<MPA4P>**	1H490518-1J	
Chassis	U3	Standby LED PC board assy	NADIS-7619-1H **<MDD1N>**	1H490519-1H	
Chassis	U3	Standby LED PC board assy	NADIS-7619-1J **<MPA4P>**	1J490519-1J	
Chassis	U4	Power transformer PC board assy	NAPS-7620-1H **<MDD1N>**	1H490520-1H	
Chassis	U4	Power transformer PC board assy	NAPS-7620-1J **<MPA4P>**	1J490520-1J	
Chassis	U5	Inlet terminal PC board assy	NAPS-7621-1H **<MDD1N>**	1H490521-1H	
Chassis	U5	Inlet terminal PC board assy	NAPS-7621-1J **<MPA4P>**	1J490521-1J	
Chassis	U6	Power switch PC board assy	NASW-7622-1H **<MDD1N>**	1H490522-1H	
Chassis	U6	Power switch PC board assy	NASW-7622-1J **<MPA4P>**	1J490522-1J	
Chassis	U7	Support PC board	NAETC-7623-1H **<MDD1N>**	1H490523-1H	
Chassis	U7	Support PC board	NAETC-7623-1J **<MPA4P>**	1J490523-1J	
Chassis	U8	Regurator_1 PC board assy	NAETC-7774-1H **<MDD1N>**	1H490574-1H	
Chassis	U8	Regurator_1 PC board assy	NAETC-7774-1J **<MPA4P>**	1J490574-1J	
Chassis	U9	Regurator_2 PC board assy	NAETC-7775-1H **<MDD1N>**	1H490575-1H	
Chassis	U9	Regurator_2 PC board assy	NAETC-7775-1J **<MPA4P>**	1J490575-1J	

	REF. NO.	PART NAME	DESCRIPTION	PART NO.	REMARK
Chassis	U10	Video circuit PC board assy	NAVD-7632-1K **<MDD1N>**	1H490532-1K	
Chassis	U10	Video circuit PC board assy	NAVD-7632-1H **<MPA4P>**	1H490532-1H	
Chassis	U11	RS-232C terminal PC board assy	NAVD-7633-1K **<MDD1N>**	1H490533-1K	

Chassis	U11	RS-232C terminal PC board assy	NAVD-7633-1H **<MPA4P>**	1H490533-1H	
Chassis	U12	Headphone terminal PC board assy	NAAF-7617-1K **<MDD1N>**	1H490517-1K	
Chassis	U12	Headphone terminal PC board assy	NAAF-7617-1H **<MPA4P>**	1H490517-1H	
Chassis	U13	SACD circuit PC board assy	NADG-7761-1K **<MDD1N>**	1H490561-1K	
Chassis	U13	SACD circuit PC board assy	NADG-7761-1H **<MPA4P>**	1H490561-1H	
Chassis	Z100	DVD Main PC board assy	DB-VPB308/XJ	24150030	
Chassis	Z101	DVD Mechanism assy	DB-VLD301-006	24801010	
Chassis	Z102	ADAPTOR (L)	DB-VAC301	24840149A	
Chassis	Z103	ADAPTOR (R)	DB-VAC302	24840150A	
Chassis	Z104	SCREW	3TTB+8B	838130088	
Chassis	Z105	ISO PLT		28175287	
Chassis	Z106	SHLD CASE	VNE2266-B	27225147	

PACKING VIEW PARTS LIST

	REF. NO.	PART NAME	DESCRIPTION	PART NO.	REMARK
Packing	A601	PAD	(AS)	29092071A	
Packing	A607	POLY BAG	650 x 500	29100037-1A	
Packing	A609	TAPE	(SEROHAN)NITTO NO.29	29110149	
Packing	A611	PP TAPE		29110071	
Packing	A650	CARTON		29053959	
Packing	A651	UPC LABEL	**<MDD1N>**	29363180	
Packing	A651	EAN LABEL	**<MPS4P>**	29363219	
Packing	A652	LABEL	**<MDD1N>**	29362938	
Packing	A653	LABEL	(RE) **<MPA4P>**	29363247	
Packing	A900	POLY BAG	350*250	29100097-1A	
Packing	A901	PIN CORD AS	RCA3P(YWR)	2010379	
Packing	A902	BATTERY	UM-3	3010054	
Packing	A903	PLUG CORD	3.5-MINI PLUG (RI)	2010200	
Packing	A906	REMO CON	RC-499DV	24140499	
Packing	A907	CORD AS	(S CORD)	2010380	
Packing	A907 or	CORD AS	TPX3000	2010360	
Packing	A940	WRNTY CARD	(INTEGRA) **<MDD1N>**	29365089	
Packing	A951	INS MANUAL	E(DPS8.3)	29343366A	
Packing	P981	AC CORD	AS-UC-2 **<MDD1N>**	253297KAW	!
Packing	P981	AC CORD	AS-SAA **<MPA4P>**	253311VOL	!
Packing	P981 or	AC CORD	AS-UC-2 **<MPA4P>**	253352TES	!

PRINTED CIRCUIT BOARD PARTS LIST

<MDD1N>: U.S.A. and Canadian model only
<MPS4P> : South American model only
! : Safety part
: Replacement for transistor mark #, if neccessory must be made from the same beta group (Fhe) as the original type.

AR-7616 **U1: OUTPUT CIRCUIT PC BOARD NAAR-7616**

	CIRCUIT N	PART NAME	DESCRIPTION	PART NO.	REMARK
AR-7616	C1102	ELECT C	CE04W6.3V-100M	354721019	
AR-7616	C1103	MKS C	MKS92-63V-105J	374491054	
AR-7616	C1104	VX C	CE04W50V-47M(VX)	393384707	
AR-7616	C1105	MKS C	MKS92-63V-105J	374491054	
AR-7616	C1106	VX C	CE04W50V-47M(VX)	393384707	
AR-7616	C1107	MKS C	MKS92-63V-105J	374491054	
AR-7616	C1108	VX C	CE04W6.3V-470M(VX)	393324717	
AR-7616	C1109	TF C	ECQ-V50V-104J	374721044	
AR-7616	C1110	VX C	CE04W6.3V-470M(VX)	393324717	
AR-7616	C1111	TF C	ECQ-B50V-101K	374721015	
AR-7616	C1112	TF C	ECQ-B50V-101K	374721015	
AR-7616	C1113	TF C	ECQ-B50V-101K	374721015	
AR-7616	C1114	TF C	ECQ-B50V-101K	374721015	
AR-7616	C1115	VX C	CE04W16V-470M(VX)	393344717	
AR-7616	C1116	VX C	CE04W16V-470M(VX)	393344717	
AR-7616	C1117	TF C	ECQ-B50V-221K	374722215	
AR-7616	C1118	TF C	ECQ-B50V-221K	374722215	
AR-7616	C1121	TF C	ECQ-B50V-681J	374726814	
AR-7616	C1122	TF C	ECQ-B50V-681J	374726814	
AR-7616	C1123	TF C	ECQ-B50V-152J	374721524	
AR-7616	C1124	TF C	ECQ-B50V-152J	374721524	
AR-7616	C1125	TF C	ECQ-B50V-102J	374721024	
AR-7616	C1126	TF C	ECQ-B50V-102J	374721024	
AR-7616	C1127	VX C	CE04W50V-47M(VX)	393384707	
AR-7616	C1128	VX C	CE04W50V-47M(VX)	393384707	
AR-7616	C1129	TF C	ECQ-B50V-101K	374721015	
AR-7616	C1130	TF C	ECQ-B50V-101K	374721015	

AR-7616	C1131	TF C	ECQ-B50V-122J	374721224	
AR-7616	C1132	TF C	ECQ-B50V-122J	374721224	
AR-7616	C1133	TF C	ECQ-B50V-122J	374721224	
AR-7616	C1134	TF C	ECQ-B50V-122J	374721224	
AR-7616	C1135	TF C	ECQ-B50V-122J	374721224	
AR-7616	C1136	TF C	ECQ-B50V-122J	374721224	
AR-7616	C1139	TF C	ECQ-B50V-152J	374721524	
AR-7616	C1140	TF C	ECQ-B50V-152J	374721524	
AR-7616	C1141	TF C	ECQ-B50V-392J	374723924	
AR-7616	C1142	TF C	ECQ-B50V-392J	374723924	
AR-7616	C1143	TF C	ECQ-B50V-272J	374722724	
AR-7616	C1144	TF C	ECQ-B50V-272J	374722724	
AR-7616	C1202	ELECT C	CE04W6.3V-100M	354721019	
AR-7616	C1203	TF C	ECQ-V50V-104J	374721044	
AR-7616	C1204	VX C	CE04W50V-47M(VX)	393384707	
AR-7616	C1205	TF C	ECQ-V50V-104J	374721044	
AR-7616	C1206	VX C	CE04W50V-47M(VX)	393384707	
AR-7616	C1207	TF C	ECQ-V50V-104J	374721044	
AR-7616	C1208	VX C	CE04W6.3V-470M(VX)	393324717	
AR-7616	C1209	TF C	ECQ-V50V-104J	374721044	
AR-7616	C1210	VX C	CE04W6.3V-470M(VX)	393324717	
AR-7616	C1211	TF C	ECQ-B50V-101K	374721015	
AR-7616	C1212	TF C	ECQ-B50V-101K	374721015	
AR-7616	C1213	TF C	ECQ-B50V-101K	374721015	
AR-7616	C1214	TF C	ECQ-B50V-101K	374721015	
AR-7616	C1215	VX C	CE04W16V-470M(VX)	393344717	
AR-7616	C1216	VX C	CE04W16V-470M(VX)	393344717	
AR-7616	C1221	TF C	ECQ-B50V-681J	374726814	
AR-7616	C1222	TF C	ECQ-B50V-681J	374726814	
AR-7616	C1223	TF C	ECQ-B50V-152J	374721524	
AR-7616	C1224	TF C	ECQ-B50V-152J	374721524	
AR-7616	C1225	TF C	ECQ-B50V-102J	374721024	
AR-7616	C1226	TF C	ECQ-B50V-102J	374721024	
AR-7616	C1227	VX C	CE04W50V-47M(VX)	393384707	
AR-7616	C1228	VX C	CE04W50V-47M(VX)	393384707	
AR-7616	C1229	TF C	ECQ-B50V-101K	374721015	
AR-7616	C1230	TF C	ECQ-B50V-101K	374721015	
AR-7616	C1302	ELECT C	CE04W6.3V-100M	354721019	
AR-7616	C1303	TF C	ECQ-V50V-104J	374721044	
AR-7616	C1304	VX C	CE04W50V-47M(VX)	393384707	
AR-7616	C1305	TF C	ECQ-V50V-104J	374721044	
AR-7616	C1306	VX C	CE04W50V-47M(VX)	393384707	
AR-7616	C1307	TF C	ECQ-V50V-104J	374721044	
AR-7616	C1308	VX C	CE04W6.3V-470M(VX)	393324717	
AR-7616	C1309	TF C	ECQ-V50V-104J	374721044	
AR-7616	C1310	VX C	CE04W6.3V-470M(VX)	393324717	
AR-7616	C1311	TF C	ECQ-B50V-101K	374721015	
AR-7616	C1312	TF C	ECQ-B50V-101K	374721015	
AR-7616	C1313	TF C	ECQ-B50V-101K	374721015	
AR-7616	C1314	TF C	ECQ-B50V-101K	374721015	
AR-7616	C1315	VX C	CE04W16V-470M(VX)	393344717	
AR-7616	C1316	VX C	CE04W16V-470M(VX)	393344717	
AR-7616	C1321	TF C	ECQ-B50V-681J	374726814	
AR-7616	C1322	TF C	ECQ-B50V-681J	374726814	
AR-7616	C1323	TF C	ECQ-B50V-152J	374721524	
AR-7616	C1324	TF C	ECQ-B50V-152J	374721524	
AR-7616	C1325	TF C	ECQ-B50V-102J	374721024	
AR-7616	C1326	TF C	ECQ-B50V-102J	374721024	
AR-7616	C1327	VX C	CE04W50V-47M(VX)	393384707	
AR-7616	C1328	VX C	CE04W50V-47M(VX)	393384707	
AR-7616	C1329	TF C	ECQ-B50V-101K	374721015	
AR-7616	C1330	TF C	ECQ-B50V-101K	374721015	
AR-7616	C1701	ELECT C	CE04W6.3V-100M	354721019	
AR-7616	C1704	ELECT C	CE04W6.3V-100M	354721019	
AR-7616	C1808	TF C	ECQ-B50V-223J **<MDD1N>**	374722234	
AR-7616	C1811	ELECT C	CE04W16V-47M **<MDD1N>**	354744709	
AR-7616	C1813	ELECT C	CE04W6.3V-100M **<MDD1N>**	354721019	
AR-7616	C1901	ELECT C	CE04W25V-2200M(VZ)	394552227S	
AR-7616	C1902	ELECT C	CE04W25V-2200M(VZ)	394552227S	

AR-7616	C1903	ELECT C	CE04W16V-4700M	3547447295	
AR-7616	C1904	ELECT C	CE04W16V-6800M(VZ)	394546827S	
AR-7616	C1905	TF C	ECQ-V50V-334J	374723344	
AR-7616	C1906	TF C	ECQ-V50V-334J	374723344	
AR-7616	C1907	TF C	ECQ-V50V-334J	374723344	
AR-7616	C1909	TF C	ECQ-V50V-334J	374723344	
AR-7616	C1911	VX C	CE04W16V-10M(VX)	393341007	
AR-7616	C1912	VX C	CE04W16V-10M(VX)	393341007	
AR-7616	C1913	ELECT C	CE04W16V-220M(VZ)	394542217	
AR-7616	C1914	ELECT C	CE04W16V-220M(VZ)	394542217	
AR-7616	C1915	VX C	CE04W50V-10M(VX)	393381007	
AR-7616	C1917	ELECT C	CE04W6.3V-220M(VZ)	394522217	
AR-7616	C1918	ELECT C	CE04W6.3V-220M(VZ)	394522217	
AR-7616	C1920	ELECT C	CE04W35V-220M	354762219	
AR-7616	C1921	ELECT C	CE04W50V-100M	354781019	
AR-7616	C1922	ELECT C	CE04W50V-47M	354784709	
AR-7616	C1923	ELECT C	CE04W50V-4.7M	354780479	
AR-7616	C1924	ELECT C	CE04W6.3V-100M	354721019	
AR-7616	C1925	ELECT C	CE04W6.3V-1000M	354721029	
AR-7616	C1926	ELECT C	CE04W50V-4.7M	354780479	
AR-7616	C1927	ELECT C	CE04W16V-10M(VZ)	394541007	
AR-7616	C1929	ELECT C	CE04W6.3V-470M(VZ)	394524717	
AR-7616	C1934	ELECT C	CE04W6.3V-220M(VZ)	394522217	
AR-7616	CN401	SOCKET	NSCT-40P2509	25052612	
AR-7616	CN501	SOCKET	NSCT-40P2509	25052612	
AR-7616	D1201	C-DIODE	1SS352	223234R2	
AR-7616	D1201 or	C-DIODE	1SS355	223269R2	
AR-7616	D1202	C-DIODE	1SS352	223234R2	
AR-7616	D1202 or	C-DIODE	1SS355	223269R2	
AR-7616	D1203	C-DIODE	1SS352	223234R2	
AR-7616	D1203 or	C-DIODE	1SS355	223269R2	
AR-7616	D1204	C-DIODE	1SS352	223234R2	
AR-7616	D1204 or	C-DIODE	1SS355	223269R2	
AR-7616	D1901	DIODE	RBV402	22380022F	
AR-7616	D1901 or	DIODE	D3SBA20	22380271	
AR-7616	D1902	DIODE	RBV602	22380038S	
AR-7616	D1903	DIODE	RBV602	22380038S	
AR-7616	D1904	DIODE	RL1N4003	22380260	
AR-7616	D1904 or	DIODE	1SR139-100	22380032	
AR-7616	D1904 or	DIODE	GP104003E	22380035	
AR-7616	D1905	DIODE	RL1N4003	22380260	
AR-7616	D1905 or	DIODE	1SR139-100	22380032	
AR-7616	D1905 or	DIODE	GP104003E	22380035	
AR-7616	D1906	ZENER D	UDZ27B	224492700R2	
AR-7616	D1907	DIODE	RBV602	22380038S	
AR-7616	D1908	C-DIODE	1SS352	223234R2	
AR-7616	D1908 or	C-DIODE	1SS355	223269R2	
AR-7616	D1909	C-DIODE	1SS352	223234R2	
AR-7616	D1909 or	C-DIODE	1SS355	223269R2	
AR-7616	L1102	CHOKE COIL	NCH-1471	231237M022R2	
AR-7616	L1202	CHOKE COIL	NCH-1471	231237M022R2	
AR-7616	L1302	CHOKE COIL	NCH-1471	231237M022R2	
AR-7616	L1701	CHOKE COIL	NCH-1471	231237M022R2	
AR-7616	L1801	CHOKE COIL	NCH-1471 **<MDD1N>**	231237M022R2	
AR-7616	L1805	EMIFIL	BK1608LM182-T	230958R1	
AR-7616	P101	PIN JACK	NPJ-4PDRW469	25045671	
AR-7616	P102	PIN JACK	NPJ-6PDWRLEGP506	25045715	
AR-7616	P103	PIN JACK	NPJ-2PDLE507	25045716	
AR-7616	P1101	HOLDER	(CRAMP) UA-0 V0	27190608-1	
AR-7616	P1102	HOLDER	(CRAMP) UA-0 V0	27190608-1	
AR-7616	P1401A	PLUG	NPLG-20P0975	25056025	
AR-7616	P1701A	PLUG	NPLG-2P1098	25056159	
AR-7616	P1701B	PLUG	NPLG-2P1098	25056159	
AR-7616	P1702	PIN JACK	NPJ-1PDOR442 **<MDD1N>**	25045636	
AR-7616	P1803A	SOCKET	NSCT-26P2223	25052326	
AR-7616	P1804	ST JACK	LGY2502-0200C **<MDD1N>**	25045696	
AR-7616	P1805	PIN JACK	NPJ-2PDB400	25045589	
AR-7616	P1806	ST JACK	HSJ1002-01-1020 **<MDD1N>**	25045647	
AR-7616	P1809	SOCKET AS	NSAS-16P1035 **<MDD1N>**	2002A391630	

AR-7616	P1810	CRIMP AS	CRIMP AS TXSV70	20617I2100UL	
AR-7616	P1901	SOCKET	NSCT-7P2241	25052344	
AR-7616	P1903B	SOCKET	NSCT-4P96	25050268	
AR-7616	P1904B	SOCKET	NSCT-3P95	25050267	
AR-7616	P471B	PLUG	NPLG-8P136 **<MDD1N>**	25055152	
AR-7616	P701A	SOCKET	NSCT-24P2221	25052324	
AR-7616	P901B	PLUG	NPLG-10P124	25055140	
AR-7616	P903A	SOCKET-AS	NSAS-12P0235 **<MDD1N>**	2002391210	
AR-7616	Q1101	IC(REGURATOR)	74VHC157FT	22274157ER2	
AR-7616	Q1102	IC	CS4392-KS	22241635R2	
AR-7616	Q1103	IC	NJM2068V	22241869R2	
AR-7616	Q1104	IC	NJM2068V	22241869R2	
AR-7616	Q1105	IC	NJM4565V	22241554R2	
AR-7616	Q1106	IC	NJM4565V	22241554R2	
AR-7616	Q1109	TR	2SD655-E	2211705	
AR-7616	Q1109 or	TR	2SD655-F	2211706	
AR-7616	Q1110	TR	2SD655-E	2211705	
AR-7616	Q1110 or	TR	2SD655-F	2211706	
AR-7616	Q1111	TR	2SD655-E	2211705	
AR-7616	Q1111 or	TR	2SD655-F	2211706	
AR-7616	Q1112	TR	2SD655-E	2211705	
AR-7616	Q1112 or	TR	2SD655-F	2211706	
AR-7616	Q1113	TR	KRC107S	2216340R2	
AR-7616	Q1113 or	TR	RN1407	2216260R2	
AR-7616	Q1114	TR	KRC107S	2216340R2	
AR-7616	Q1114 or	TR	RN1407	2216260R2	
AR-7616	Q1115	TR	KRC107S	2216340R2	
AR-7616	Q1115 or	TR	RN1407	2216260R2	
AR-7616	Q1116	TR	KRC107S	2216340R2	
AR-7616	Q1116 or	TR	RN1407	2216260R2	
AR-7616	Q1117	TR	2SA1162-O	2214373R2	
AR-7616	Q1117 or	TR	2SA1162-Y	2214374R2	
AR-7616	Q1117 or	TR	KTA1504-GR	2216185R2	
AR-7616	Q1118	TR	2SA1162-O	2214373R2	
AR-7616	Q1118 or	TR	2SA1162-Y	2214374R2	
AR-7616	Q1118 or	TR	KTA1504-GR	2216185R2	
AR-7616	Q1119	IC	NE5532AN	22240656	
AR-7616	Q1121	TR	2SC2712-O	2213143R2	
AR-7616	Q1121 or	TR	2SC2712-Y	2213144R2	
AR-7616	Q1121 or	TR	2SC2712-GR	2213145R2	
AR-7616	Q1122	TR	2SC2712-O	2213143R2	
AR-7616	Q1122 or	TR	2SC2712-Y	2213144R2	
AR-7616	Q1122 or	TR	2SC2712-GR	2213145R2	
AR-7616	Q1123	TR	KRC107S	2216340R2	
AR-7616	Q1123 or	TR	RN1407	2216260R2	
AR-7616	Q1124	TR	KRC107S	2216340R2	
AR-7616	Q1124 or	TR	RN1407	2216260R2	
AR-7616	Q1125	TR	KRA107S	2216350R2	
AR-7616	Q1125 or	TR	RN2407	2216360R2	
AR-7616	Q1126	TR	KRA107S	2216350R2	
AR-7616	Q1126 or	TR	RN2407	2216360R2	
AR-7616	Q1127	TR	KRC107S	2216340R2	
AR-7616	Q1127 or	TR	RN1407	2216260R2	
AR-7616	Q1128	TR	KRC107S	2216340R2	
AR-7616	Q1128 or	TR	RN1407	2216260R2	
AR-7616	Q1129	TR	2SC2712-O	2213143R2	
AR-7616	Q1129 or	TR	2SC2712-Y	2213144R2	
AR-7616	Q1129 or	TR	2SC2712-GR	2213145R2	
AR-7616	Q1130	TR	2SC2712-O	2213143R2	
AR-7616	Q1130 or	TR	2SC2712-Y	2213144R2	
AR-7616	Q1130 or	TR	2SC2712-GR	2213145R2	
AR-7616	Q1131	TR	2SC2712-O	2213143R2	
AR-7616	Q1131 or	TR	2SC2712-Y	2213144R2	
AR-7616	Q1131 or	TR	2SC2712-GR	2213145R2	
AR-7616	Q1132	TR	2SC2712-O	2213143R2	
AR-7616	Q1132 or	TR	2SC2712-Y	2213144R2	
AR-7616	Q1132 or	TR	2SC2712-GR	2213145R2	
AR-7616	Q1133	TR	2SC2712-O	2213143R2	
AR-7616	Q1133 or	TR	2SC2712-Y	2213144R2	

AR-7616	Q1133 or	TR	2SC2712-GR	2213145R2	
AR-7616	Q1134	TR	2SC2712-O	2213143R2	
AR-7616	Q1134 or	TR	2SC2712-Y	2213144R2	
AR-7616	Q1134 or	TR	2SC2712-GR	2213145R2	
AR-7616	Q1201	IC(REGURATOR)	74VHC157FT	22274157ER2	
AR-7616	Q1202	IC	CS4392-KS	22241635R2	
AR-7616	Q1203	IC	NJM2068V	22241869R2	
AR-7616	Q1204	IC	NJM2068V	22241869R2	
AR-7616	Q1205	IC	NJM4565V	22241554R2	
AR-7616	Q1206	IC	NJM4565V	22241554R2	
AR-7616	Q1209	TR	HN1C03F-B	2216141R2	
AR-7616	Q1210	TR	HN1C03F-B	2216141R2	
AR-7616	Q1211	TR	HN1C03F-B	2216141R2	
AR-7616	Q1212	TR	HN1C03F-B	2216141R2	
AR-7616	Q1213	TR	KRC107S	2216340R2	
AR-7616	Q1213 or	TR	RN1407	2216260R2	
AR-7616	Q1214	TR	KRC107S	2216340R2	
AR-7616	Q1214 or	TR	RN1407	2216260R2	
AR-7616	Q1215	TR	KRC107S	2216340R2	
AR-7616	Q1215 or	TR	RN1407	2216260R2	
AR-7616	Q1216	TR	KRC107S	2216340R2	
AR-7616	Q1216 or	TR	RN1407	2216260R2	
AR-7616	Q1217	TR	2SA1162-O	2214373R2	
AR-7616	Q1217 or	TR	2SA1162-Y	2214374R2	
AR-7616	Q1217 or	TR	KTA1504-GR	2216185R2	
AR-7616	Q1218	TR	2SA1162-O	2214373R2	
AR-7616	Q1218 or	TR	2SA1162-Y	2214374R2	
AR-7616	Q1218 or	TR	KTA1504-GR	2216185R2	
AR-7616	Q1219	TR	2SC2712-O	2213143R2	
AR-7616	Q1219 or	TR	2SC2712-Y	2213144R2	
AR-7616	Q1219 or	TR	2SC2712-GR	2213145R2	
AR-7616	Q1220	TR	2SC2712-O	2213143R2	
AR-7616	Q1220 or	TR	2SC2712-Y	2213144R2	
AR-7616	Q1220 or	TR	2SC2712-GR	2213145R2	
AR-7616	Q1221	IC	NJM4565V	22241554R2	
AR-7616	Q1301	IC(REGURATOR)	74VHC157FT	22274157ER2	
AR-7616	Q1302	IC	CS4392-KS	22241635R2	
AR-7616	Q1303	IC	NJM2068V	22241869R2	
AR-7616	Q1304	IC	NJM2068V	22241869R2	
AR-7616	Q1305	IC	NJM4565V	22241554R2	
AR-7616	Q1306	IC	NJM4565V	22241554R2	
AR-7616	Q1309	TR	HN1C03F-B	2216141R2	
AR-7616	Q1310	TR	HN1C03F-B	2216141R2	
AR-7616	Q1313	TR	KRC107S	2216340R2	
AR-7616	Q1313 or	TR	RN1407	2216260R2	
AR-7616	Q1314	TR	KRC107S	2216340R2	
AR-7616	Q1314 or	TR	RN1407	2216260R2	
AR-7616	Q1315	TR	KRC107S	2216340R2	
AR-7616	Q1315 or	TR	RN1407	2216260R2	
AR-7616	Q1316	TR	KRC107S	2216340R2	
AR-7616	Q1316 or	TR	RN1407	2216260R2	
AR-7616	Q1317	TR	2SA1162-O	2214373R2	
AR-7616	Q1317 or	TR	2SA1162-Y	2214374R2	
AR-7616	Q1317 or	TR	KTA1504-GR	2216185R2	
AR-7616	Q1318	TR	2SA1162-O	2214373R2	
AR-7616	Q1318 or	TR	2SA1162-Y	2214374R2	
AR-7616	Q1318 or	TR	KTA1504-GR	2216185R2	
AR-7616	Q1601	IC	TC74VHCU04FT	22274004HR2O	
AR-7616	Q1602	IC	TC7SH86FU-TCB	22241753R2	
AR-7616	Q1603	IC	TC7WH157FK	22241836R2	
AR-7616	Q1604	IC	TC7WH74FK	22241839R2	
AR-7616	Q1605	IC	TC74VHC32FT	22274032ER2O	
AR-7616	Q1701	IC	TC74VHCU04FT	22274004HR2O	
AR-7616	Q1702	PHT CP	GP1FA551TZ	24120085	
AR-7616	Q1703	PHT CP	GP1FA551TZ	24120085	
AR-7616	Q1803	PHT CP	ON3131 <MDD1N>	24120043	
AR-7616	Q1804	TR	KRC102S <MDD1N>	2216190R2	
AR-7616	Q1804 or	TR	RN1402 <MDD1N>	2214470R2	
AR-7616	Q1805	TR	KRC102S <MDD1N>	2216190R2	

AR-7616	Q1805 or	TR	RN1402 <MDD1N>	2214470R2	
AR-7616	Q1901	IC(REGULATOR)	7812	222780124	
AR-7616	Q1901A	HEAT SINK	RAD-178	27160518	
AR-7616	Q1901B	SCREW	3P+10FN(BC)	82143010	
AR-7616	Q1903	IC(REGULATOR)	78M12HF	222780125	
AR-7616	Q1903A	RADIATOR	HEAT-SINK(RAD-51(B))	27160220	
AR-7616	Q1903B	SCREW	3P+10FN(BC)	82143010	
AR-7616	Q1904	IC(REGULATOR)	79M12HF	222790125	
AR-7616	Q1904A	RADIATOR	HEAT-SINK(RAD-51(B))	27160220	
AR-7616	Q1904B	SCREW	3P+10FN(BC)	82143010	
AR-7616	Q1905	TR	2SB772-Q	2201275	
AR-7616	Q1905 or	TR	2SB772-P	2201276	
AR-7616	Q1906	IC(REGULATOR)	78M05HF	222780055	
AR-7616	Q1906A	RADIATOR	HEAT-SINK(RAD-51(B))	27160220	
AR-7616	Q1906B	SCREW	3P+10FN(BC)	82143010	
AR-7616	Q1907	IC(REGULATOR)	MPC29M05HF	22278005ENE	
AR-7616	Q1907A	RADIATOR	HEAT-SINK(RAD-51(B))	27160220	
AR-7616	Q1907B	SCREW	3P+10FN(BC)	82143010	
AR-7616	Q1908	TR	2SB772-Q	2201275	
AR-7616	Q1908 or	TR	2SB772-P	2201276	
AR-7616	Q1909	IC	PQ05RD11	22241495	
AR-7616	Q1909A	HEAT SINK	RAD-178	27160518	
AR-7616	Q1909B	SCREW	3P+10FN(BC)	82143010	
AR-7616	Q1910	TR	KRC107S	2216340R2	
AR-7616	Q1910 or	TR	RN1407	2216260R2	
AR-7616	Q1911	TR	2SD882-Q	2201285	
AR-7616	Q1911 or	TR	2SD882-P	2201286	
AR-7616	Q1913	TR	KRA107S	2216350R2	
AR-7616	Q1913 or	TR	RN2407	2216360R2	
AR-7616	Q1914	TR	2SA950-Y	2211504	
AR-7616	Q1914 or	TR	2SA950-O	2211503	
AR-7616	Q1915	IC(REGULATOR)	MPC2925T	22278025DR2NE	
AR-7616	Q1915 or	IC(REGULATOR)	NJM2391DL1-25	22278025DR2JR	
AR-7616	Q1916	IC	PQ30RV21	22241526	
AR-7616	Q1916A	HEAT SINK	HEAT-SINK(RAD-076)	27160227	
AR-7616	Q1916B	SCREW	3P+10FN(BC)	82143010	
AR-7616	Q1917	TR	KRC107S	2216340R2	
AR-7616	Q1917 or	TR	RN1407	2216260R2	
AR-7616	Q1918	TR	KRC107S	2216340R2	
AR-7616	Q1918 or	TR	RN1407	2216260R2	
AR-7616	Q1920	IC	PQ033EZ01Z	22241877R2	
AR-7616	R1101	METAL O R	RS1WBJ-22	443622204	
AR-7616	R1112	METAL O R	RS1WBJ-22	443622204	
AR-7616	R1819	THERMISTOR	RXE030 **<MDD1N>**	4000195	
AR-7616	R1903	METAL O R	RS1WBJ-220	443622214	
AR-7616	S1201	SLIDE SW	NSS-22155	25065414	

U2: DISPLAY CIRCUIT PC BOARD NADIS-7618

	CIRCUIT N	PART NAME	DESCRIPTION	PART NO.	REMARK
DIS-7618	C701	ELECT C	CE04W6.3V-100M	355721019	
DIS-7618	C703	ELECT C	CE04W50V-22M	355782209	
DIS-7618	C704	ELECT C	CE04W6.3V-100M	355721019	
DIS-7618	D701	C-DIODE	1SS352	223234R2	
DIS-7618	D701 or	C-DIODE	1SS355	223269R2	
DIS-7618	D702	ZENER D	UDZS5.6B	224550560R2	
DIS-7618	D703	LED	SEL2E10C	225374	
DIS-7618	D706	LED	SEL4910D-D	225291D	
DIS-7618	D707	LED	SEL4910D-D	225291D	
DIS-7618	D708	LED	SEL4910D-D	225291D	
DIS-7618	D709	LED	SEL2E10C	225374	
DIS-7618	D710	LED	SEL2E10C	225374	
DIS-7618	D711	ZENER D	UDZS4.7B	224550470R2	
DIS-7618	E101	PWB	NCDIS-7618	25137618A	
DIS-7618	JL771	JUMP LEAD	JL5 100 B	5J100606B15	
DIS-7618	JL771A	WIRE HOLD	NSCT-5P876	25051089	
DIS-7618	L981	CHOKE COIL	NCH-3581	231301	
DIS-7618	P1903	JUMPER LEAD	JL4 200 H	4J200606H	
DIS-7618	P1904	JUMPER LEAD	JL3 250 H	3J250606H	
DIS-7618	P701B	SOCKET	NSCT-24P2258	25052361	

DIS-7618	P701B or	SOCKET	NSCT-24P1693	25051906	
DIS-7618	P701B or	SOCKET	NSCT-24P2442	25052545	
DIS-7618	P731	SOCKET	NSCT-7P2241	25052344	
DIS-7618	P731 or	SOCKET	NSCT-7P1676	25051889	
DIS-7618	P731 or	SOCKET	NSCT-7P2425	25052528	
DIS-7618	P901A	SOCKET AS	NSAS-20P1072	2003B192025UL	
DIS-7618	Q701	IC	MPD780232GC-077-8BT	22241880R3	
DIS-7618	Q702	FL TUBE	14-BT-100GNK	212233	
DIS-7618	Q702A	HOLDER	(FL)	27191141	
DIS-7618	Q704	TR	KRA103S	2216230R2	
DIS-7618	Q704 or	TR	RN2403	2214540R2	
DIS-7618	Q705	REMO SENSE	PIC-37043TH2	241336	
DIS-7618	Q706	TR	KRC107S	2216340R2	
DIS-7618	Q706 or	TR	RN1407	2216260R2	
DIS-7618	Q707	TR	KRC107S	2216340R2	
DIS-7618	Q707 or	TR	RN1407	2216260R2	
DIS-7618	Q708	TR	KRC107S	2216340R2	
DIS-7618	Q708 or	TR	RN1407	2216260R2	
DIS-7618	Q709	TR	KRC107S	2216340R2	
DIS-7618	Q709 or	TR	RN1407	2216260R2	
DIS-7618	Q710	TR	KRC107S	2216340R2	
DIS-7618	Q710 or	TR	RN1407	2216260R2	
DIS-7618	Q711	TR	KRC107S	2216340R2	
DIS-7618	Q711 or	TR	RN1407	2216260R2	
DIS-7618	Q712	IC	BD4746G	22241841R2	
DIS-7618	Q723	TR	2SC2120-O	2211163	
DIS-7618	Q723 or	TR	2SC2120-Y	2211164	
DIS-7618	Q724	TR	2SC2120-O	2211163	
DIS-7618	Q724 or	TR	2SC2120-Y	2211164	
DIS-7618	S701	PUSH SW	NPS-111-S662	25035699	
DIS-7618	S702	PUSH SW	NPS-111-S662	25035699	
DIS-7618	S703	PUSH SW	NPS-111-S662	25035699	
DIS-7618	S704	PUSH SW	NPS-111-S662	25035699	
DIS-7618	S705	PUSH SW	NPS-111-S662	25035699	
DIS-7618	S706	PUSH SW	NPS-111-S662	25035699	
DIS-7618	S707	PUSH SW	NPS-111-S662	25035699	
DIS-7618	S708	PUSH SW	NPS-111-S662	25035699	
DIS-7618	S709	PUSH SW	NPS-111-S662	25035699	
DIS-7618	S710	PUSH SW	NPS-111-S662	25035699	
DIS-7618	S711	PUSH SW	NPS-111-S662	25035699	
DIS-7618	S712	PUSH SW	NPS-111-S662	25035699	
DIS-7618	S713	PUSH SW	NPS-111-S662	25035699	
DIS-7618	S714	PUSH SW	NPS-111-S662	25035699	
DIS-7618	S715	PUSH SW	NPS-111-S662	25035699	
DIS-7618	X701	CERA LOCK	CST5.00MGW	3010242	

U3: STANDBY LED PC BOARD NADIS-7619

	CIRCUIT N	PART NAME	DESCRIPTION	PART NO.	REMARK
DIS-7619	D721	LED	SEL4110R	225290	
DIS-7619	D722	LED	SEL2E10C	225374	
DIS-7619	JL771B	WIRE TRAP	NPLG-5P588	25055626	
DIS-7619	Q721	TR	KRC107S	2216340R2	
DIS-7619	Q721 or	TR	RN1407	2216260R2	
DIS-7619	Q722	TR	KRC107S	2216340R2	
DIS-7619	Q722 or	TR	RN1407	2216260R2	
DIS-7619	S721	PUSH SW	NPS-111-S662	25035699	
DIS-7619	S722	PUSH SW	NPS-111-S662	25035699	
DIS-7619	S723	PUSH SW	NPS-111-S662	25035699	

U4: POWER TRANSFORMER PC BOARD NAPS-7620

	CIRCUIT N	PART NAME	DESCRIPTION	PART NO.	REMARK
PS-7620	C981	IS C	DE1307E472M-KH	3300030	
PS-7620	C982	IS C	DE1307E472M-KH	3300030	
PS-7620	F911	FUSE	2.5A-ULSE-TL250 **<MPS4P>**	252300	!
PS-7620	F912	FUSE	2.5A-ULSE-TL250 **<MPS4P>**	252300	!
PS-7620	J901	CRIMP AS	CRIMP AS	2069943106UL	
PS-7620	J902	CRIMP AS	CRIMP AS	2069943358UL	
PS-7620	J903	CRIMP AS	CRIMP AS	2069943359UL	
PS-7620	R901	THERMISTOR	RUE300 <MDD1N>	4000210	

PS-7620	R902	THERMISTOR	RUE400 <MDD1N>	4000211	
DIS-7618	E703	FUSE LABEL	T2.5A 250V_F911,F912 **<MPS4P>**	29363314	

U5: INLET TERMINAL PC BOARD NAPS-7621

	CIRCUIT N	PART NAME	DESCRIPTION	PART NO.	REMARK
PS-7621	P981B	AC INLET	NPLG-2P913	25055960	

U6: POWER SWITCH PC BOARD NASW-7622

	CIRCUIT N	PART NAME	DESCRIPTION	PART NO.	REMARK
SW-7622	C991	IS C	RE275V-103M	3500196S	!
SW-7622	S991	PUSH SW	NPS-111-L666P	25035703	!
SW-7622	S991 or	P SW	NPS-111-L512P	25035550	!

U8: REGULATOR_1 PC BOARD NAETC-7774

	CIRCUIT N	PART NAME	DESCRIPTION	PART NO.	REMARK
ETC-7774	C1919	ELECT C	CE04W6.3V-220M	355722219	
ETC-7774	C1936	ELECT C	CE04W35V-10M(S)	353761009	
ETC-7774	P1904A	WIRE HOLD	NSCT-3P894	25051107	
ETC-7774	Q1912	IC (REGULATOR)	79M05FA	222790055	

U9: REGULATOR_2 PC BOARD NAETC-7775

	CIRCUIT N	PART NAME	DESCRIPTION	PART NO.	REMARK
ETC-7775	C1916	ELECT C	CE04W6.3V-220M	355722219	
ETC-7775	C1935	ELECT C	CE04W35V-10M(S)	353761009	
ETC-7775	P1903A	WIRE HOLD	NSCT-4P895	25051108	
ETC-7775	Q1902	IC	PQ3RD23	22241771	

U10: VIDEO CIRCUIT PC BOARD NAVD-7632

	CIRCUIT N	PART NAME	DESCRIPTION	PART NO.	REMARK
VD-7632	C2012	ELECT C	CE04W6.3V-100M	354721019	
VD-7632	C2020	ELECT C	CE04W6.3V-100M	354721019	
VD-7632	C2024	ELECT C	CE04W6.3V-220M	354722219	
VD-7632	C2216	ELECT C	CE04W6.3V-100M	354721019	
VD-7632	C2219	ELECT C	CE04W6.3V-100M	354721019	
VD-7632	C2314	ELECT C	CE04W6.3V-100M	354721019	
VD-7632	C2461	ELECT C	CE04W6.3V-100M	354721019	
VD-7632	C2462	ELECT C	CE04W6.3V-100M	354721019	
VD-7632	C2511	ELECT C	CE04W6.3V-100M	354721019	
VD-7632	C2512	ELECT C	CE04W6.3V-100M	354721019	
VD-7632	C2513	ELECT C	CE04W6.3V-100M	354721019	
VD-7632	C2514	ELECT C	CE04W6.3V-100M	354721019	
VD-7632	L2001	CHOKE COIL	NCH-1471	231237M022R2	
VD-7632	L2501	LC BLOCK	VTF-1175A	3030047	
VD-7632	L2551	LC BLOCK	VTF-1175A	3030047	
VD-7632	L2601	LC BLOCK	VTF-1175A	3030047	
VD-7632	P1803B	SOCKET	NSCT-26P2489	25052592R2	
VD-7632	P2401	PIN JACK	NPJ-2PDY496	25045701	
VD-7632	P2402	SOCKET	NSCT-8P1743	25051956	
VD-7632	P2501	PIN JACK	NPJ-3PDGLR429	25045622	
VD-7632	P2502A	PLUG	NPLG-5P133 **<MPS4P>**	25055149	
VD-7632	P903B	PLUG	NPLG-6P134	25055150	
VD-7632	Q2001	IC	PM0033A	22241827R3	
VD-7632	Q2002	IC	TC7WHU04FK	22241649R2	
VD-7632	Q2003	TR	KRC107S	2216340R2	
VD-7632	Q2003 or	TR	DTC114YKA	2216470R2	
VD-7632	Q2004	TR	KRC107S	2216340R2	
VD-7632	Q2004 or	TR	DTC114YKA	2216470R2	
VD-7632	Q2201	IC	ADV7300A	22241828R3	
VD-7632	Q2301	IC	K4S643232E-TC60	22241837R3	
VD-7632	Q2301 or	IC	K4S643232F-TC60	22241913R3	
VD-7632	Q2401	TR	KTA1504-GR	2216185R2	#
VD-7632	Q2401 or	TR	2SA1162-GR	2214375R2	#
VD-7632	Q2401 or	TR	KTA1504-Y	2216184R2	#
VD-7632	Q2401 or	TR	2SA1162-Y	2214374R2	#
VD-7632	Q2402	TR	KTC3875-GR	2216175R2	#
VD-7632	Q2402 or	TR	2SC2712-GR	2213145R2	#
VD-7632	Q2402 or	TR	KTC3875-Y	2216174R2	#
VD-7632	Q2402 or	TR	2SC2712-Y	2213144R2	#
VD-7632	Q2421	TR	KTA1504-GR	2216185R2	#

VD-7632	Q2421 or	TR	2SA1162-GR	2214375R2	#
VD-7632	Q2421 or	TR	KTA1504-Y	2216184R2	#
VD-7632	Q2421 or	TR	2SA1162-Y	2214374R2	#
VD-7632	Q2422	TR	KTC3875-GR	2216175R2	#
VD-7632	Q2422 or	TR	2SC2712-GR	2213145R2	#
VD-7632	Q2422 or	TR	KTC3875-Y	2216174R2	#
VD-7632	Q2422 or	TR	2SC2712-Y	2213144R2	#
VD-7632	Q2441	TR	KTA1504-GR	2216185R2	#
VD-7632	Q2441 or	TR	2SA1162-GR	2214375R2	#
VD-7632	Q2441 or	TR	KTA1504-Y	2216184R2	#
VD-7632	Q2441 or	TR	2SA1162-Y	2214374R2	#
VD-7632	Q2461	IC	TK15420M	22241443R2	
VD-7632	Q2462	IC	LA7106MFP	22241465R2	
VD-7632	Q2501	TR	KTA1504-GR	2216185R2	#
VD-7632	Q2501 or	TR	2SA1162-GR	2214375R2	#
VD-7632	Q2501 or	TR	KTA1504-Y	2216184R2	#
VD-7632	Q2501 or	TR	2SA1162-Y	2214374R2	#
VD-7632	Q2502	TR	KTC3875-GR	2216175R2	#
VD-7632	Q2502 or	TR	2SC2712-GR	2213145R2	#
VD-7632	Q2502 or	TR	KTC3875-Y	2216174R2	#
VD-7632	Q2502 or	TR	2SC2712-Y	2213144R2	#
VD-7632	Q2503	IC	MAX4016ESA	22241441R2	
VD-7632	Q2504	IC	MAX4018ESD	22241440R2	
VD-7632	Q2551	TR	KTA1504-GR	2216185R2	#
VD-7632	Q2551 or	TR	2SA1162-GR	2214375R2	#
VD-7632	Q2551 or	TR	KTA1504-Y	2216184R2	#
VD-7632	Q2551 or	TR	2SA1162-Y	2214374R2	#
VD-7632	Q2552	TR	KTC3875-GR	2216175R2	#
VD-7632	Q2552 or	TR	2SC2712-GR	2213145R2	#
VD-7632	Q2552 or	TR	KTC3875-Y	2216174R2	#
VD-7632	Q2552 or	TR	2SC2712-Y	2213144R2	#
VD-7632	Q2601	TR	KTA1504-GR	2216185R2	#
VD-7632	Q2601 or	TR	2SA1162-GR	2214375R2	#
VD-7632	Q2601 or	TR	KTA1504-Y	2216184R2	#
VD-7632	Q2601 or	TR	2SA1162-Y	2214374R2	#
VD-7632	Q2602	TR	KTC3875-GR	2216175R2	#
VD-7632	Q2602 or	TR	2SC2712-GR	2213145R2	#
VD-7632	Q2602 or	TR	KTC3875-Y	2216174R2	#
VD-7632	Q2602 or	TR	2SC2712-Y	2213144R2	#
VD-7632	Q2603	IC	MAX4016ESA	22241441R2	
VD-7632	Q2851	TR	RN1407	2216260R2	
VD-7632	Q2853	TR	RN2403	2214540R2	
VD-7632	Q2854	TR	RN2403	2214540R2	
VD-7632	Q2855	TR	RN1407	2216260R2	
VD-7632	Q2857	TR	RN2403	2214540R2	
VD-7632	Q2858	TR	RN2403	2214540R2	

U11: RS-232C TERMINAL PC BOARD NAVD-7633

	CIRCUIT N	PART NAME	DESCRIPTION	PART NO.	REMARK
VD-7633	C2852	ELECT C	CE04W6.3V-100M	354721019	
VD-7633	C2853	ELECT C	CE04W50V-1M	354780109	
VD-7633	C2854	ELECT C	CE04W50V-1M	354780109	
VD-7633	C2856	ELECT C	CE04W6.3V-100M	354721019	
VD-7633	C2857	ELECT C	CE04W50V-1M	354780109	
VD-7633	C2858	ELECT C	CE04W50V-1M	354780109	
VD-7633	L2851	EMIFIL	BK1608LM182-T	230958R1	
VD-7633	L2852	EMIFIL	BK1608LM182-T	230958R1	
VD-7633	L2853	EMIFIL	BK1608LM182-T	230958R1	
VD-7633	L2854	EMIFIL	BK1608LM182-T	230958R1	
VD-7633	L2855	EMIFIL	BK1608LM182-T	230958R1	
VD-7633	P1809B	PLUG	NPLG-8P136	25055152	
VD-7633	P2502B	SOCKET-AS	NSAS-10P0034	2002341020	
VD-7633	P2821	BNC JACK	P2298	25045634	
VD-7633	P2851	SOCKET	NSCT-9P2277	25052379	
VD-7633	Q2859	IC	MPD789071MC-011-5A4	22241624R2	
VD-7633	Q2860	IC	MPD4721GS	22241537R2	
VD-7633	X2851	CERA LOCK	CST5.00MGW	3010242	

U12: HEADPHONE TERMINAL PC BOARD NAAF-7617

	CIRCUIT N	PART NAME	DESCRIPTION	PART NO.	REMARK
AF-7617	C471	ELECT C	CE04W16V-47M	354744709	
AF-7617	C472	ELECT C	CE04W16V-47M	354744709	
AF-7617	L471	EMIFIL	BK1608LM182-T	230958R1	
AF-7617	L472	EMIFIL	BK1608LM182-T	230958R1	
AF-7617	L473	EMIFIL	BK1608LM182-T	230958R1	
AF-7617	L474	EMIFIL	BK1608LM182-T	230958R1	
AF-7617	L475	EMIFIL	BK1608LM182-T	230958R1	
AF-7617	L476	EMIFIL	BK1608LM182-T	230958R1	
AF-7617	L477	EMIFIL	BK1608LM182-T	230958R1	
AF-7617	L478	EMIFIL	BK1608LM182-T	230958R1	
AF-7617	L479	EMIFIL	BK1608LM182-T	230958R1	
AF-7617	P471A	SOCKET AS	NSAS-16P1036	2009990741UL	
AF-7617	P473	JACK	YKB26-5138	25045257	
AF-7617	Q471	IC	NJM4565M-D	22241383R2	
AF-7617	Q473	TR	2SD655-E	2211705	
AF-7617	Q473 or	TR	2SD655-F	2211706	
AF-7617	Q474	TR	2SD655-E	2211705	
AF-7617	Q474 or	TR	2SD655-F	2211706	
AF-7617	R473	VARI R	N09RGL20KB20M	5112463	

U13: SACS CIRCUIT PC BOARD NADG-7761

	CIRCUIT N	PART NAME	DESCRIPTION	PART NO.	REMARK
DG-7761	C1401	ELECT C	CE04W16V-100M	354741019	
DG-7761	C1405	ELECT C	CE04W6.3V-100M	354721019	
DG-7761	C1411	ELECT C	CE04W16V-220M	354742219	
DG-7761	C1414	ELECT C	CE04W6.3V-220M	354722219	
DG-7761	C1418	MKS C	MKS92-63V-105J	374491054	
DG-7761	C1440	ELECT C	CE04W6.3V-220M	354722219	
DG-7761	C1453	ELECT C	CE04W6.3V-220M	354722219	
DG-7761	C1456	ELECT C	CE04W6.3V-220M	354722219	
DG-7761	C1457	ELECT C	CE04W6.3V-220M	354722219	
DG-7761	C1462	ELECT C	CE04W6.3V-470M	354724719	
DG-7761	CN602	SOCKET	NSCT-40P2601	25052705R2	
DG-7761	L1401	CHOKE COIL	BLM21B222SPT	230921R2	
DG-7761	L1402	CHOKE COIL	BLM21B222SPT	230921R2	
DG-7761	L1403	CHOKE COIL	BLM21B222SPT	230921R2	
DG-7761	L1404	CHOKE COIL	BLM21B222SPT	230921R2	
DG-7761	L1405	CHOKE COIL	BLM21B222SPT	230921R2	
DG-7761	L1406	CHOKE COIL	BLM21B222SPT	230921R2	
DG-7761	L1407	CHOKE COIL	BLM21B222SPT	230921R2	
DG-7761	L1408	EMIFIL	BK1608LL241-T	230959R1	
DG-7761	L1409	EMIFIL	BK1608LL241-T	230959R1	
DG-7761	L1410	EMIFIL	BK1608LL241-T	230959R1	
DG-7761	P1401B	SOCKET	NSCT-20P2200	25052303	
DG-7761	Q1401	IC	CXD2753R	22241829R3	
DG-7761	Q1402	IC	IS42S16100-7T	22241686R2	
DG-7761	Q1403	IC	TC74VHC74FT	22274074ER2O	
DG-7761	Q1404	IC	TC7SH08FU	22241830R2O	
DG-7761	Q1405	IC (REGULATOR)	MPC2925T	22278025DR2NE	
DG-7761	Q1405 or	IC (REGULATOR)	NJM2391DL1-25	22278025DR2JR	
DG-7761	Q1407	IC	TC7SH00FU	22241873R2O	

Integra Division of
ONKYO CORPORATION
Sales & Product Planning Div. : 2-1, Nisshin-cho, Neyagawa-shi, OSAKA 572-8540, JAPAN
Tel: 072-831-8111 Fax: 072-833-5222 http://www.onkyo.co.jp/

Integra Division of
ONKYO U.S.A. CORPORATION
18 Park Way, Upper Saddle River, N.J. 07458, U.S.A.
Tel: 201-785-2600 Fax: 201-785-2650 E-mail: integra@onkyousa.com http://www.integrahometheater.com