

Service Manual

DV2100/N1S, /C1S

DVD Player

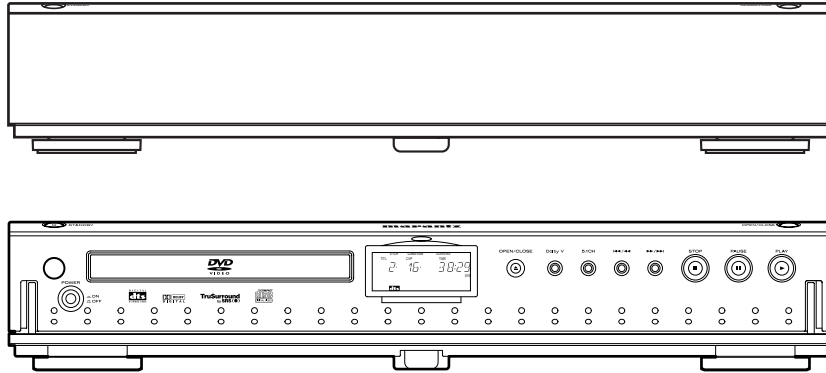


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Please use this service manual with referring to the user guide (D.F.U) without fail.

marantz®

DV2100

MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, **MARANTZ** company has created the ultimate in stereo sound. Only original **MARANTZ** parts can insure that your **MARANTZ** product will continue to perform to the specifications for which it is famous.

Parts for your **MARANTZ** equipment are generally available to our National Marantz Subsidiary or Agent.

ORDERING PARTS :

Parts can be ordered either by mail or by Fax.. In both cases, the correct part number has to be specified.

The following information must be supplied to eliminate delays in processing your order :

1. Complete address
2. Complete part numbers and quantities required
3. Description of parts
4. Model number for which part is required
5. Way of shipment
6. Signature : any order form or Fax. must be signed, otherwise such part order will be considered as null and void.

USA

MARANTZ AMERICA, INC.
1100 MAPLEWOOD DRIVE
ITASCA, IL. 60143
USA
PHONE : 630 - 741 - 0300
FAX : 630 - 741 - 0301

EUROPE / TRADING

MARANTZ EUROPE B.V.
P.O.BOX 80002, BUILDING SFF2
5600 JB EINDHOVEN
THE NETHERLANDS
PHONE : +31 - 40 - 2732241
FAX : +31 - 40 - 2735578

BRAZIL

PHILIPS DA AMAZONIA IND. ELET. ITDA
CENTRO DE INFORMACOES AO
CEP 04698-970
SAO PAULO, SP, BRAZIL
PHONE : 0800 - 123123(Discagem Direta Gratuita)
FAX : +55 11 534. 8988

PROFESSIONAL AMERICAS

SUPERSCOPE TECHNOLOGIES, INC.
MARANTZ PROFESSIONAL PRODUCTS
2640 WHITE OAK CIRCLE, SUITE A
AURORA, ILLINOIS 60504 USA
PHONE : 630 - 820 - 4800
FAX : 630 - 820 - 8103

PROFESSIONAL AUSTRALIA

TECHNICAL AUDIO GROUP PTY, LTD
558 DARLING STREET,
BALMAIN, NSW 2041,
AUSTRALIA
PHONE : 61 - 2 - 9810 - 5300
FAX : 61 - 2 - 9810 - 5355

CANADA

LENBROOK INDUSTRIES LIMITED
633 GRANITE COURT,
PICKERING, ONTARIO L1W 3K1
CANADA
PHONE : 905 - 831 - 6333
FAX : 905 - 831 - 6936

AUSTRALIA

QualiFI Pty Ltd,
24 LIONEL ROAD,
MT. WAVERLEY VIC 3149
AUSTRALIA
PHONE : +61 - (0)3 - 9543 - 1522
FAX : +61 - (0)3 - 9543 - 3677

THAILAND

MRZ STANDARD CO.,LTD
746 - 754 MAHACHAI ROAD.,
WANGBURAPAPIROM, PHRANAKORN,
BANGKOK, 10200 THAILAND
PHONE : +66 - 2 - 222 9181
FAX : +66 - 2 - 224 6795

SINGAPORE

WO KEE HONG DISTRIBUTION PTE LTD
130 JOO SENG ROAD
#03-02 OLIVINE BUILDING
SINGAPORE 368357
PHONE : +65 858 5535 / +65 381 8621
FAX : +65 858 6078

NEW ZEALAND

WILDASH AUDIO SYSTEMS NZ
14 MALVERN ROAD MT ALBERT
AUCKLAND NEW ZEALAND
PHONE : +64 - 9 - 8451958
FAX : +64 - 9 - 8463554

TAIWAN

PAI- YUING CO., LTD.
6 TH FL NO, 148 SUNG KIANG ROAD,
TAIPEI, 10429, TAIWAN R.O.C.
PHONE : +886 - 2 - 25221304
FAX : +886 - 2 - 25630415

MALAYSIA

WO KEE HONG ELECTRONICS SDN. BHD.
SUITE 8.1, LEVEL 8, MENARA GENESIS,
NO. 33, JALAN SULTAN ISMAIL,
50250 KUALA LUMPUR, MALAYSIA
PHONE : +60 3 - 2457677
FAX : +60 3 - 2458180

JAPAN *Technical*

MARANTZ JAPAN, INC.
35- 1, 7- CHOME, SAGAMIONO
SAGAMIHARA - SHI, KANAGAWA
JAPAN 228-8505
PHONE : +81 42 748 1013
FAX : +81 42 741 9190

日本マランツ株式会社

本社 〒228-8505
神奈川県相模原市相模大野7-35-1
営業本部 〒150-0022
東京都渋谷区恵比寿南1-11-9

KOREA

MK ENTERPRISES LTD.
ROOM 604/605, ELECTRO-OFFICETEL, 16-58,
3GA, HANGANG-RO, YONGSAN-KU, SEOUL
KOREA
PHONE : +822 - 3232 - 155
FAX : +822 - 3232 - 154

SHOCK, FIRE HAZARD SERVICE TEST :

CAUTION : After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins (with unit NOT connected to AC mains and its Power switch ON), and the face or Front Panel of product and controls and chassis bottom.

Any resistance measurement less than 1 Megohms should cause unit to be repaired or corrected before AC power is applied, and verified before it is return to the user/customer.

Ref. UL Standard No. 1492.

In case of difficulties, do not hesitate to contact the Technical Department at above mentioned address.

1. TECHNICAL SPECIFICATIONS

General

System.....	DVD system and Compact Disc digital audio system
Power requirements	
N Version.....	AC230V, 50Hz, 17W
C Version.....	AC220V, 60Hz, 16W
Weight.....	4.2kg
Dimensions.....	420 (W) x 309 (D) x 76 (H) mm (Not including protruding cables, etc.)
Operating temperature.....	+5°C to 35°C (+36°F to 96°F)
Operating humidity.....	5% to 85% (no condensation)

S-Video output

Y (luminance) - Output level.....	1 Vp-p (75 Ω)
C (color) -Output level.....	.286 mVp-p (75 Ω)
Jacks.....	S-VIDEO jack

Video output

Output level.....	1 Vp-p (75 Ω)
Jacks.....	RCA jack

RGB output in SCART jack (N1S Version)

Output level.....	0.7 Vp-p (75 Ω)
Jacks.....	SCART jacks

Component video output (C1S Version)

(Y, C _B , C _R) Output level.....	Y : 1.0 Vp-p (75 Ω) C _B , C _R : 0.7 Vp-p (75 Ω)
Jacks.....	RCA jacks

SYSTEM Audio output

Output level	
During audio output.....	200 mVrms (1kHz, -20 dB)
Number of channels.....	2
Jacks.....	RCA jacks

5.1 CH SURROUND Audio output

Output level	
During audio output.....	200 mVrms (1 kHz, -20 dB)
Number of channels.....	6
Jacks.....	RCA jacks

Digital audio characteristics

Frequency response.....	4 Hz to 44 kHz (DVD fs : 96kHz)
S/N ratio.....	More than 100 dB
Dynamic range.....	More than 100 dB
Total harmonic distortion.....	0.0025 %
Wow and flutter.....	Limit of measurement (±0.001% W, PEAK) or lower

Digital output

Optical digital output.....	Optical digital jack
Coaxial digital output.....	RCA jack

Accessories

Remote control unit.....	1
AA (R6P) dry cell battery.....	2
Audio/Video Cable.....	1
Audio Cable.....	2
Euro SCART Cable (N1S Version).....	1
Power Cable.....	1
Remote Control Cable.....	1
Operating Instructions.....	1

Note

The specifications and design of this product are subject to change without, due to improvement.

2. CONNECTION FACILITIES

SCART (/N1S versions only)

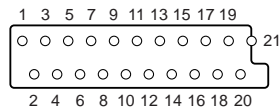
Full according PQR3 IMS

Connector implementation according EN50049-1; color = black; dual SCART

Fully according to prEN1057-2-1

Signal switching is P50 controlled; supported features of mode 3 see survey of applicable standards.

2-1 Video performance (/N1S only)



2-1-1 SCART II (connected to TV)

Pin signals:

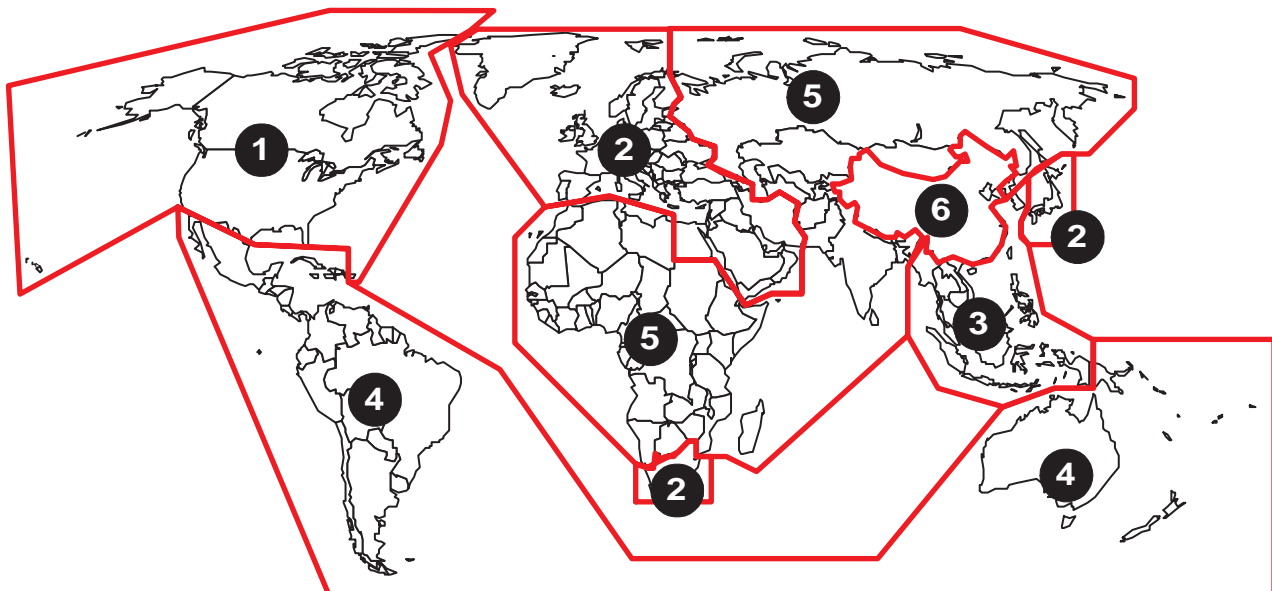
1	Output	Audio R	1.8V RMS
2		not connected	
3	Output	Audio L	1.8V RMS
4		Audio GND	
5		Blue/Chroma GND	
6		not connected	
7	Bi-dir	Blue out/Chroma in	0.7Vpp +/-0.1V into 75 Ohm (*)
8	Output	Function switch	<2V = TV >4.5V / <7V = asp. ratio 16:9 DVD >9.5V / <12V = asp. ratio 4:3 DVD
9		Green GND	
10		Bi-dir P50 control	
11	Output	Green	0.7Vpp +/-0.1V into 75 Ohm (*)
12		not connected	
13		Red/Chroma GND	
14		fast switch GND	
15	Output	Red out/Chroma out	0.7Vpp +/-0.1V into 75 Ohm (*) +/-3dB 0.3Vpp in case of Chroma
16	Output	fast switch RGB /CVBS or Y	>1V / <3V into 75 Ohm = RGB 0.4V into 75 Ohm = CVBS
17		Y/CVBS GND	
18		fast switching GND	
19	Output	CVBS/Y/RGB sync	1Vpp +/-0.1V into 75 Ohm (*)
20		not connected	
21		Shield	

(*) for 100% white

What are "regional codes"?

Motion picture studios want to control the home release of movies in different countries because theater releases aren't simultaneous (a movie may come out on DVD in the US when it's just hitting screens in Europe). Therefore they have required that the DVD standard include codes which can be used to lock out the playback of certain discs in certain geographical regions. Players sold in each region will have that region's code built into the player. The player will refuse to play these "region coded" discs which are not allowed in the region. However, regional codes are entirely optional. Discs without codes will play on any player in any country. Some studios have already announced that only their new releases will have regional codes. There are six regions:

- | | |
|------------------------------------|-------------------------------|
| 1. United States and Canada | 4. South America and Oceania |
| 2. Europe and Japan | 5. Africa and the Middle East |
| 3. Far East (except Japan & China) | 6. China (except Hong Kong) |



Map of DVD Regions





3. INFORMATIONS

REGION CODE

VERSION	REGION CODE	COUNTRY
/N1S	2	EUROPE
/C1S	3	ASIAN PACIFIC

THE DISCS THAT THE DV2100 CAN HANDLE

The following discs can be played back with a DV2100.

disc	mark	playback capability	size	side
DVD		Audio/Video	12 cm 8 cm	single/double
CD		Audio	12 cm 8 cm	single
VCD	 	Audio/Video	12 cm 8 cm	single

Note: The regional code of the discs must meet to the regional code of the DV2100.

DVD INFORMATION

Below is a glossary of the new terms related to DVD.

Title:

A disc may have more than one story/movie on it, so each story/movie is called a "title".

For example, if there are 2 movies on the disc, they are separated into Title 1 and Title 2.

Chapter:

A title may also be separated into chapters.

For example, a movie (title) may be separated into 3 scenes (chapters).

Title 1			Title 2		
Chapter 1	Chapter 2	Chapter 3	Chapter 1	Chapter 2	Chapter 3

Subtitles:

DVDs are recorded with up to 32 different subtitle languages. If a disc has more than one subtitle language, you can select the subtitle language that you want to read.

Soundtrack language:

DVDs are recorded with up to 8 different soundtrack languages. If a disc has more than one language, you can select the soundtrack language that you want to listen to.

Multi-angles:

On some DVDs, scenes have been filmed from different angles (up to a maximum of 9). On these discs, you can select the angle that you want to watch. Please refer to the DVD's manual to see which scenes have multi-angles.



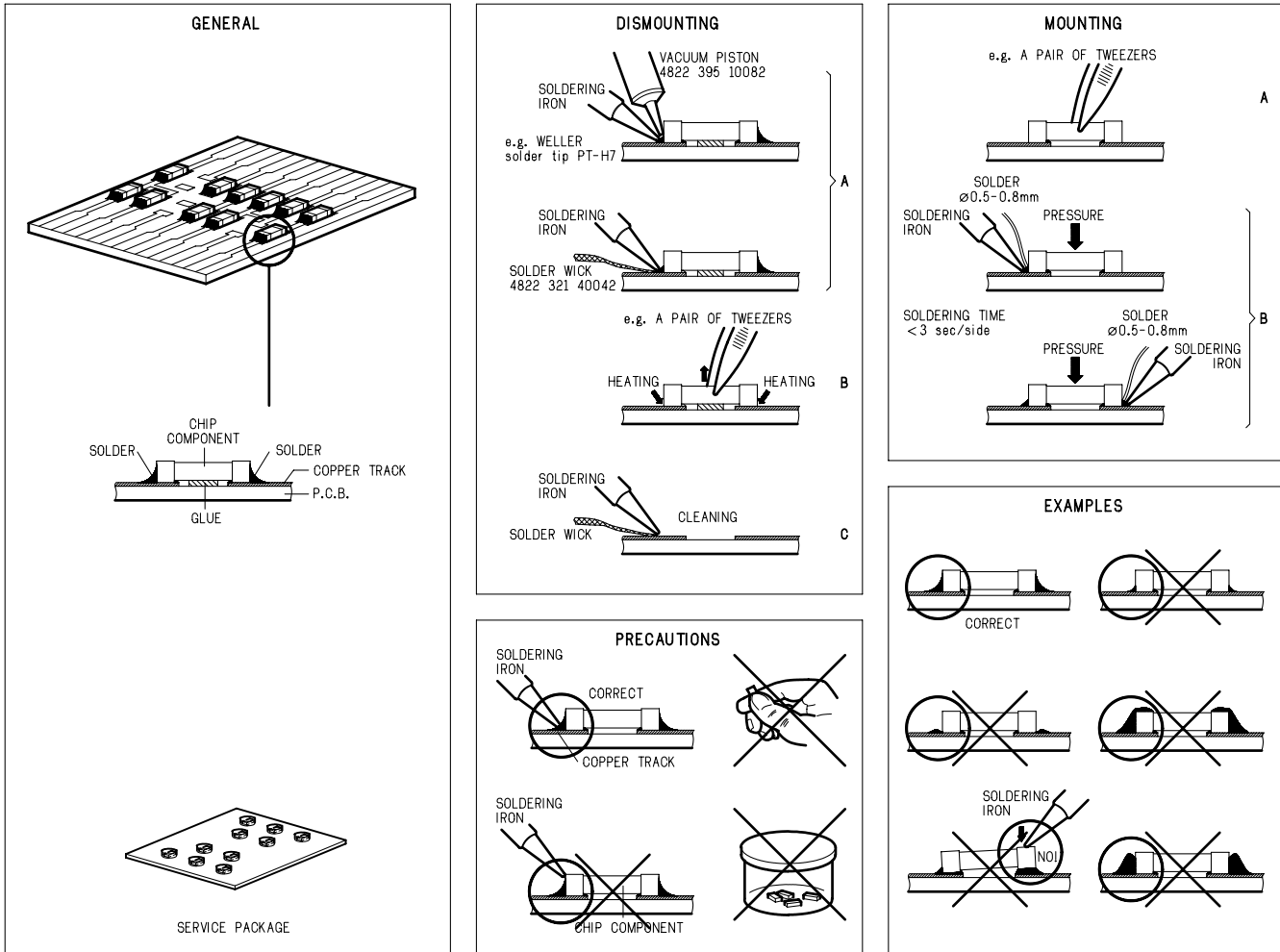
* It is important to note that CD-R, CD-RW discs must be FINALIZED before they can be played on this player. The disc types which run on the player feature one or more of these logos on the disc packaging.

Resetting the Player to System Settings

To reset the player, press and hold **stop button** on the front panel when pressing **Power button** to turn the power on.

All program memory, saved settings from functions such as last memory and condition memory are cleared, and all setup screen menus are returned to factory settings.

4. SERVICE HINTS AND TOOLS



SERVICE TOOLS

The tools listed below are standard test tools that can be used for repairing and testing Marantz CD Players & Recorders.

Audio signals disc	4822 397 30184
Disc without errors (SBC444)+	
Disc with DO errors, black spots and fingerprints (SBC444A)	4822 397 30245
Disc (65 min 1kHz) without no pause	4822 397 30155
Max. diameter disc (58.0 mm)	4822 397 60141
Torx screwdrivers	
Set (straight)	4822 395 50145
Set (square)	4822 395 50132
13th order filter	4822 395 30204
Hexagon socket screw button (No. 1.5)	

5. WARNING AND LASER SAFETY INSTRUCTIONS

(GB) WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.
When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance.
Keep components and tools also at this potential.



(NL) WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor elektrostatische ontladingen (ESD).
Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen.
Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat.
Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

(F) ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD).
Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation.
Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfiler le bracelet serti d'une résistance de sécurité.
Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

(D) WARNUNG

Alle IC und viele andere Halbleiter sind empfindlich gegen elektrostatische Entladungen (ESD).
Unvorsichtige Behandlung bei der Reparatur kann die Lebensdauer drastisch vermindern.
Sorgen sie dafür, das Sie im Reparaturfall über ein Pulsarmband mit Widerstand mit dem Massepotential des Gerätes verbunden sind.
Halten Sie Bauteile und Hilfsmittel ebenfalls auf diesem Potential.

(I) AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD).
La loro longevita potrebbe essere fortemente ridatta in caso di non osservazione della piu grande cauzione alla loro manipolazione.
Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza.
Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

(GB)

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

(NL)

Veiligheidsbepalingen vereisen, dat het apparaat in zijn oorspronkelijke toestand wordt terug gebracht en dat onderdelen, identiek aan de gespecificeerde worden toegepast.

(D)

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten.
Der Originalzustand des Gerats darf nicht verändert werden.
Für Reparaturen sind Original-Ersatzteile zu verwenden.

(I)

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati pezzi di ricambiaggio idetici a quelli specificati.



(F)

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.

SHOCK, FIRE HAZARD SERVICE TEST:

CAUTION: After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins (with unit NOT connected to AC mains and its Power switch ON), and the face or Front Panel of product and controls and chassis bottom,
Any resistance measurement less than 1 Megohms should cause unit to be repaired or corrected before AC power is applied, and verified before return to user/customer.
Ref.UL Standard NO.1492.

NOTE ON SAFETY:

Symbol  : Fire or electrical shock hazard. Only original parts should be used to replace any part with symbol 
Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

LASER SAFETY

This unit employs a laser. Only a qualified service person should remove the cover or attempt to service this device, due to possible eye injury.

LASER DEVICE UNIT

Type: SemiconductorlaserGaAlAs
Wave length: 650 nm (DVD)
780 nm (VCD/CD)
Output Power: 7 mW (DVD)
10 mW (VCD/CD)
Beam divergence: 60 degree



USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURE OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

AVOID DIRECT EXPOSURE TO BEAM

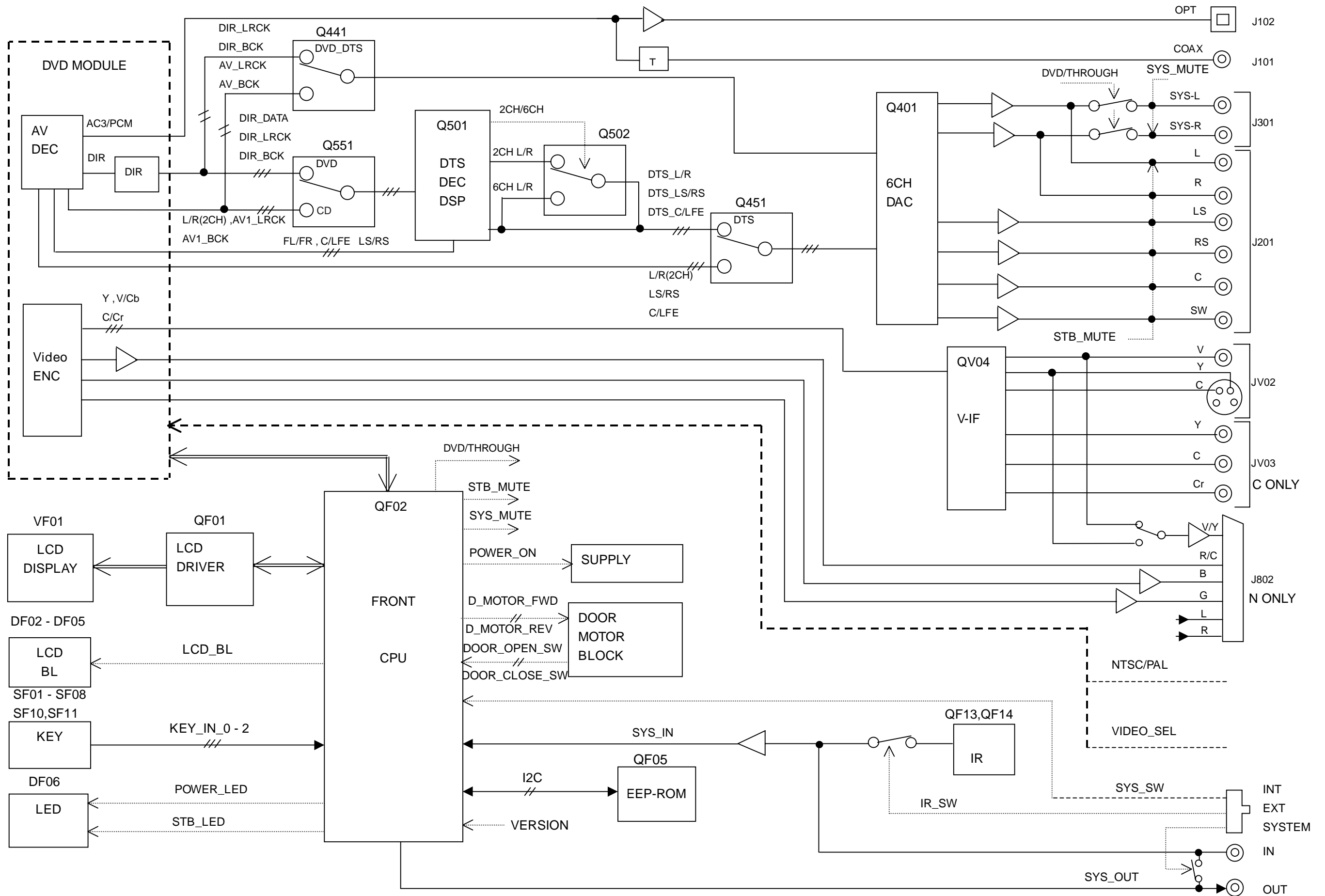
WARNING

The use of optical instruments with this product will increase eye hazard.
Repair handling should take place as much as possible with a disc loaded inside the player

WARNING LOCATION: INSIDE ON LASER COVERSIELD

CAUTION VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN AVOID EXPOSURE TO BEAM
ADVARSEL SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING UNDGÅ UDSÆTTELSE FOR STRÅLING
ADVARSEL SYNLIG OG USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES UNNGÅ EKSPONERING FOR STRÅLEN
VARNING SYNLIG OCH OSYNLIG LASERSTRÅLNING NÅR DENNA DEL ÄR ÖPPNAD BETRAKTA EJ STRÅLEN
VARO! AVATT AESSA OLET ALTTIINA NÄKYVÄLLE JA NÄKYMÄTTÖMÄLLE LASER SÄTEILYLLE. ÄLÄ KAT SO SÄTEESEEN
VORSICHT SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETSEN
DANGER VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN AVOID DIRECT EXPOSURE TO BEAM
ATTENTION RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE EXPOSITION DANGEREUSE AU FAISCEAU

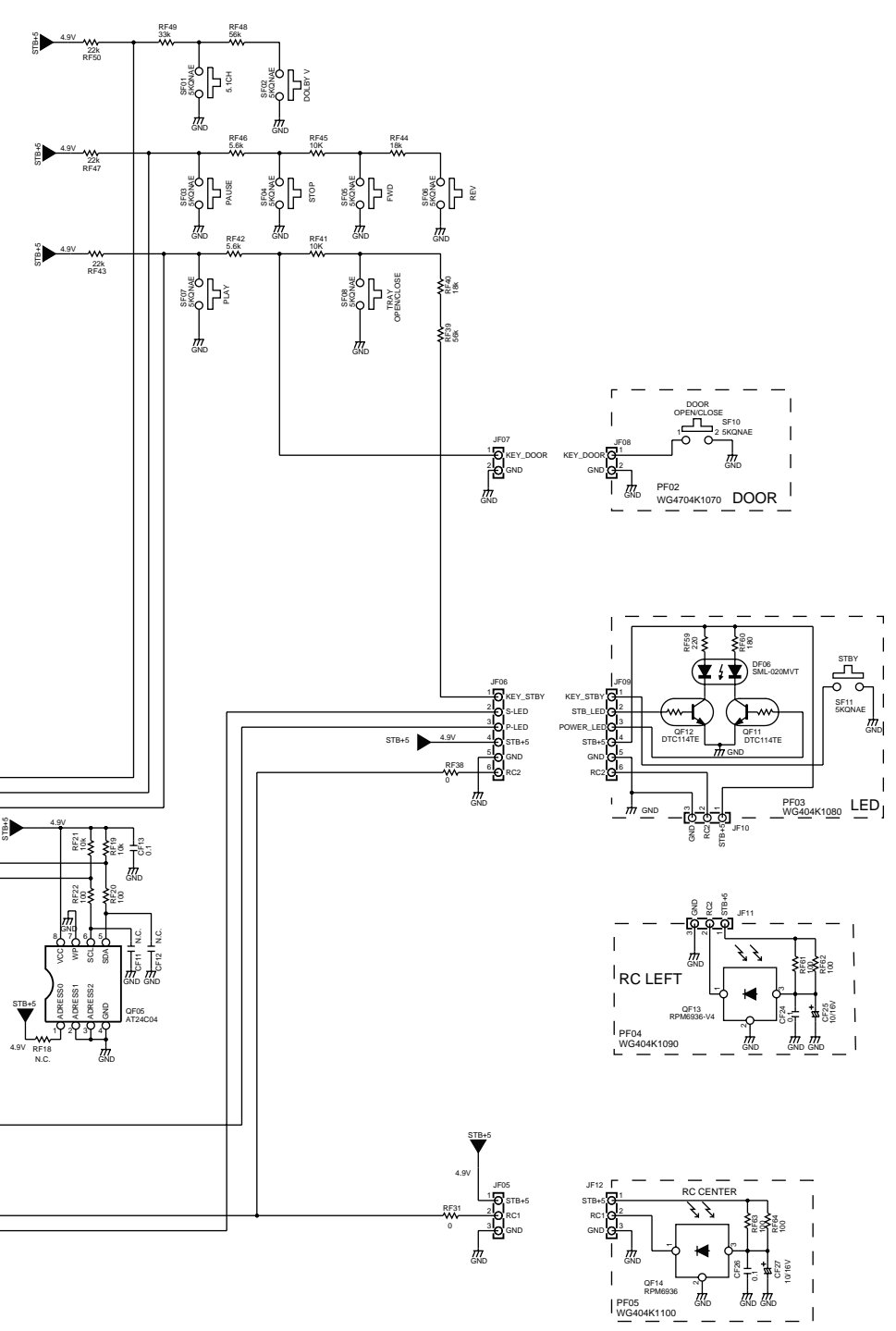
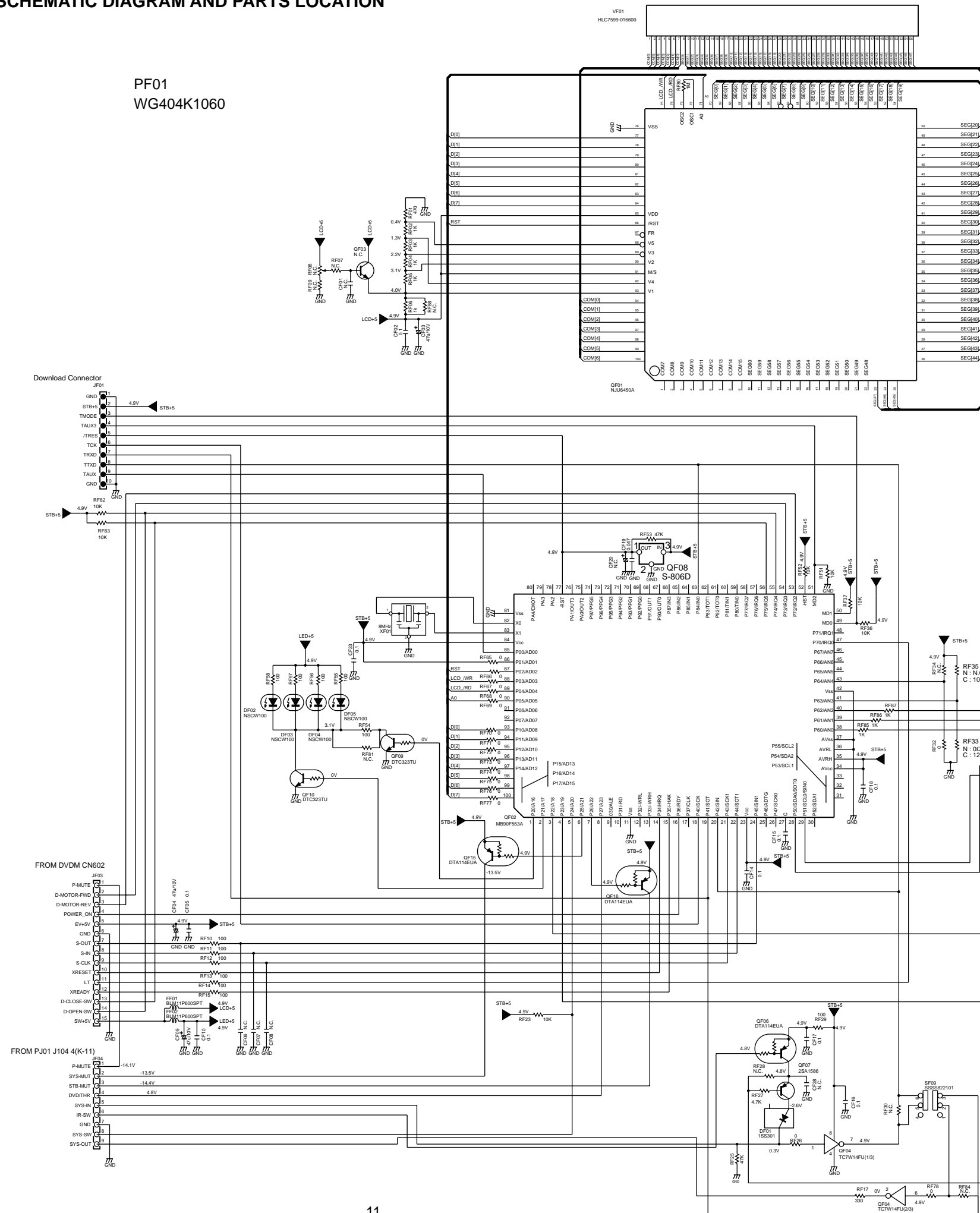
6. BLOCK DIAGRAM



8. SCHEMATIC DIAGRAM AND PARTS LOCATION

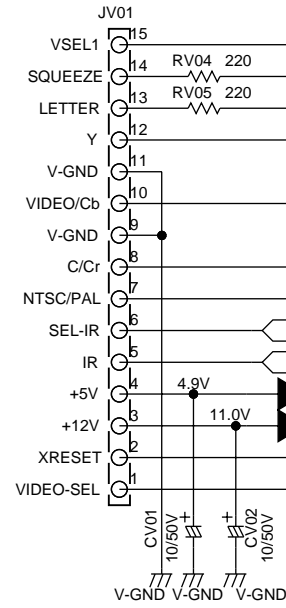
PF01
WG404K1060

	0	1	2	3	4
KEY0	PLAY	DOOR	TRAY		
KEY1	PAUSE	STOP	FWD	REV	
KEY2			5.1CH	DOLBY V	

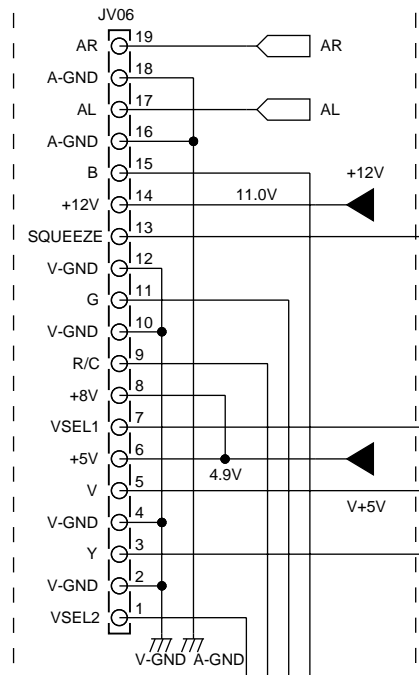


PJ01
WG404K1010

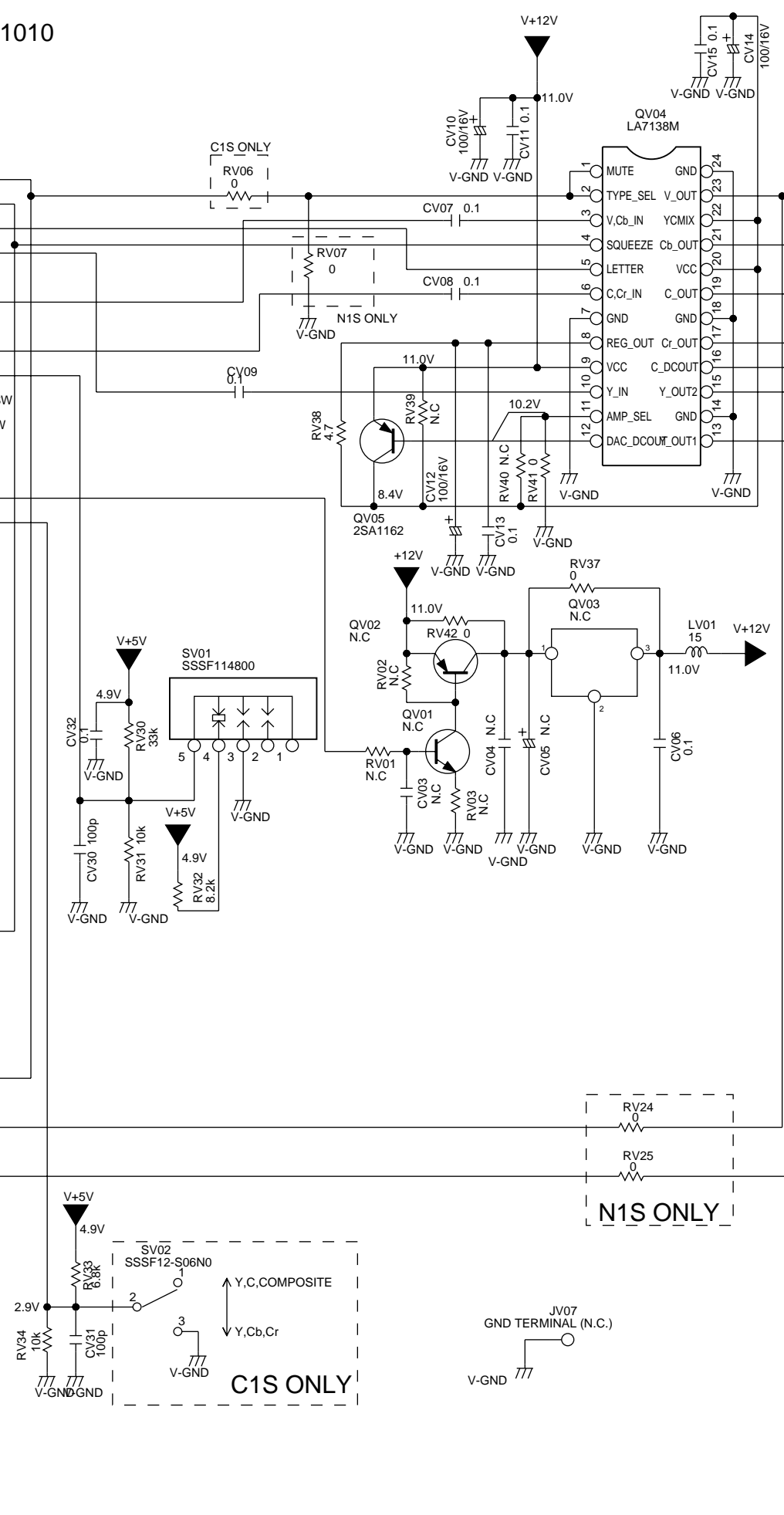
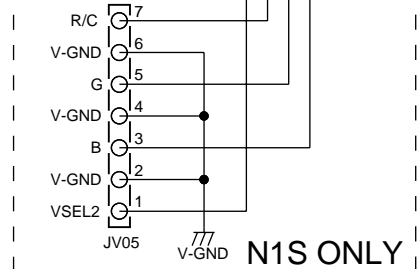
FROM DVDM CN901



TO PC01 J801 5(D-1)



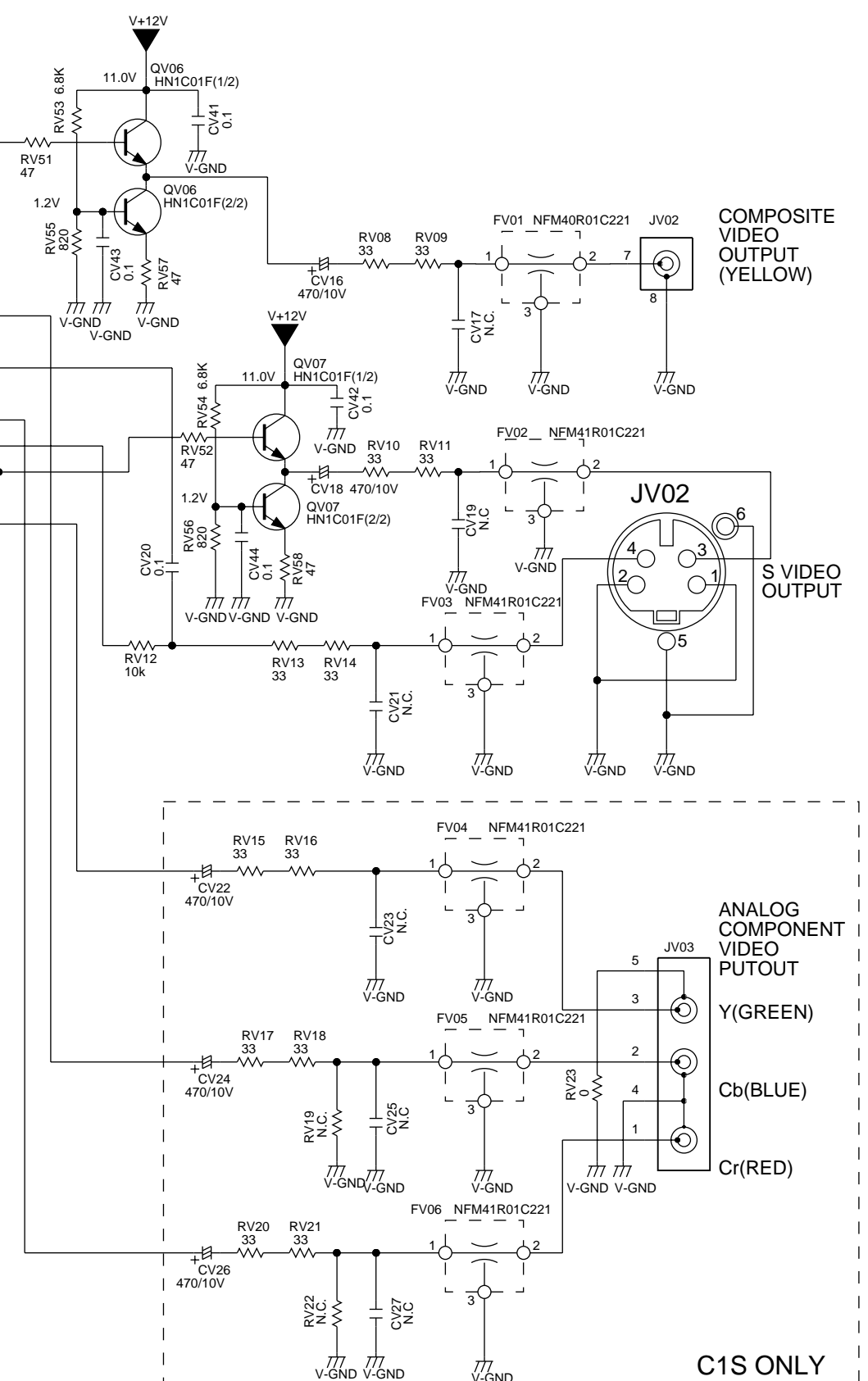
FROM DVDM CN904



N1S ONLY

C1S ONLY

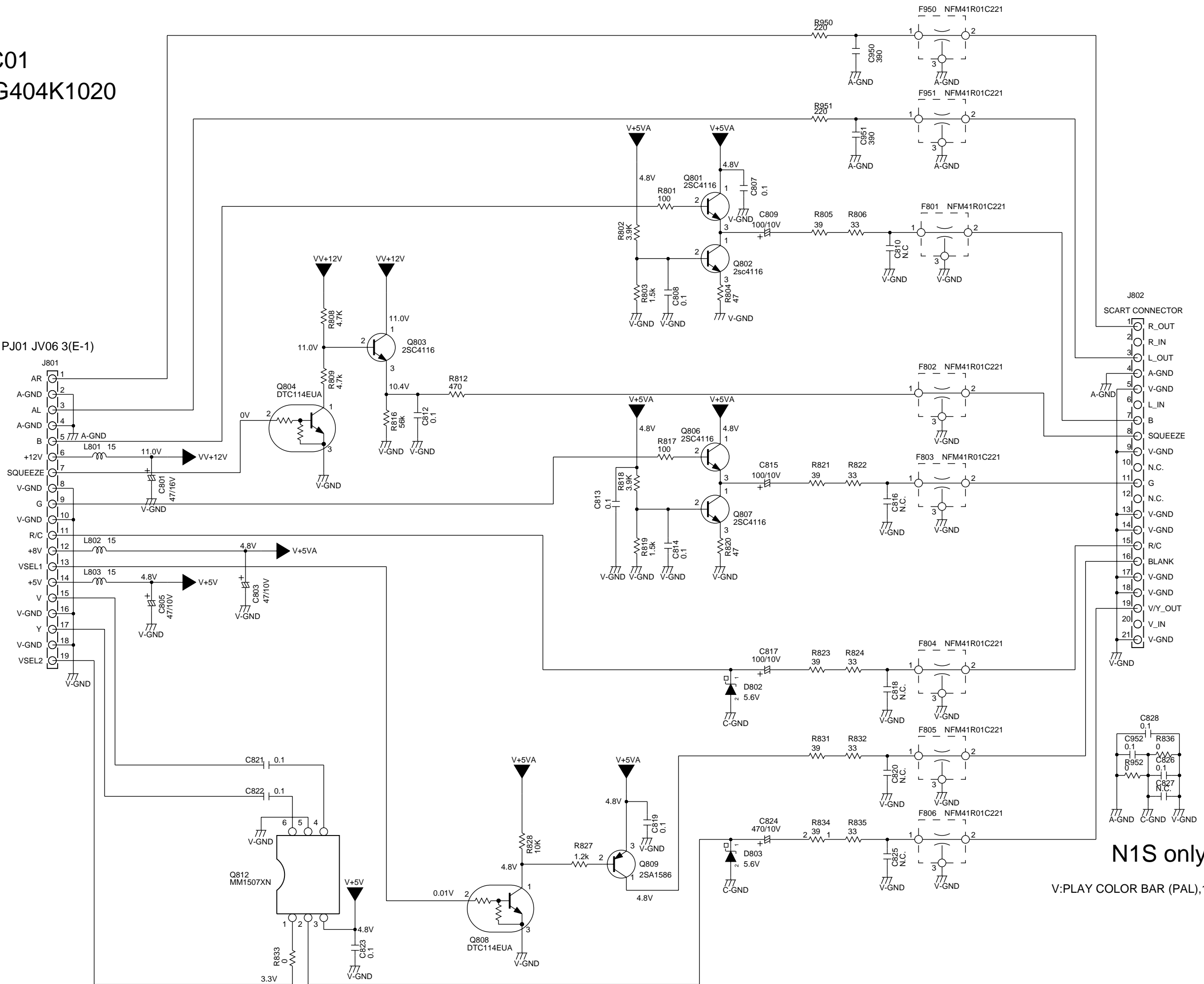
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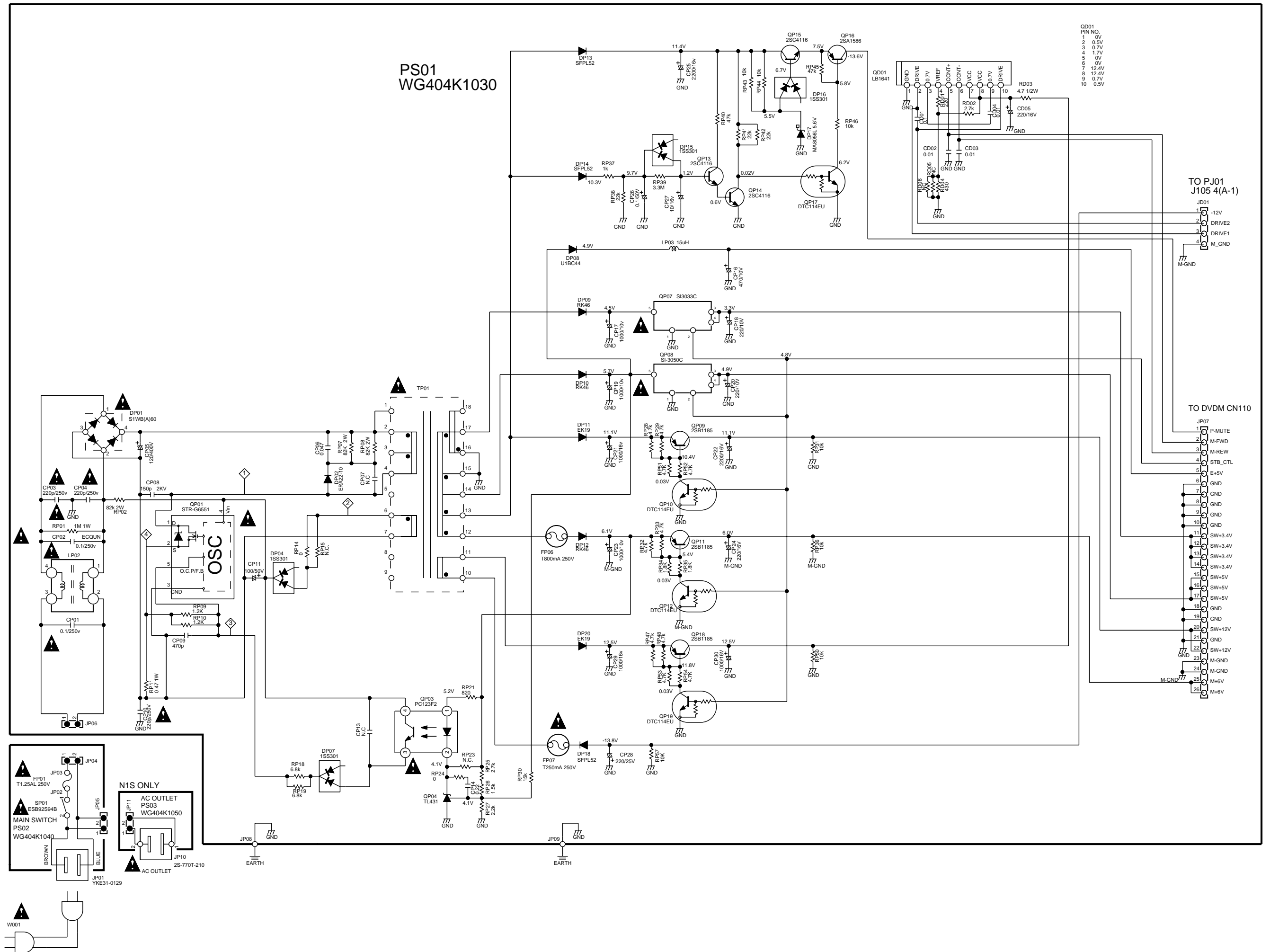


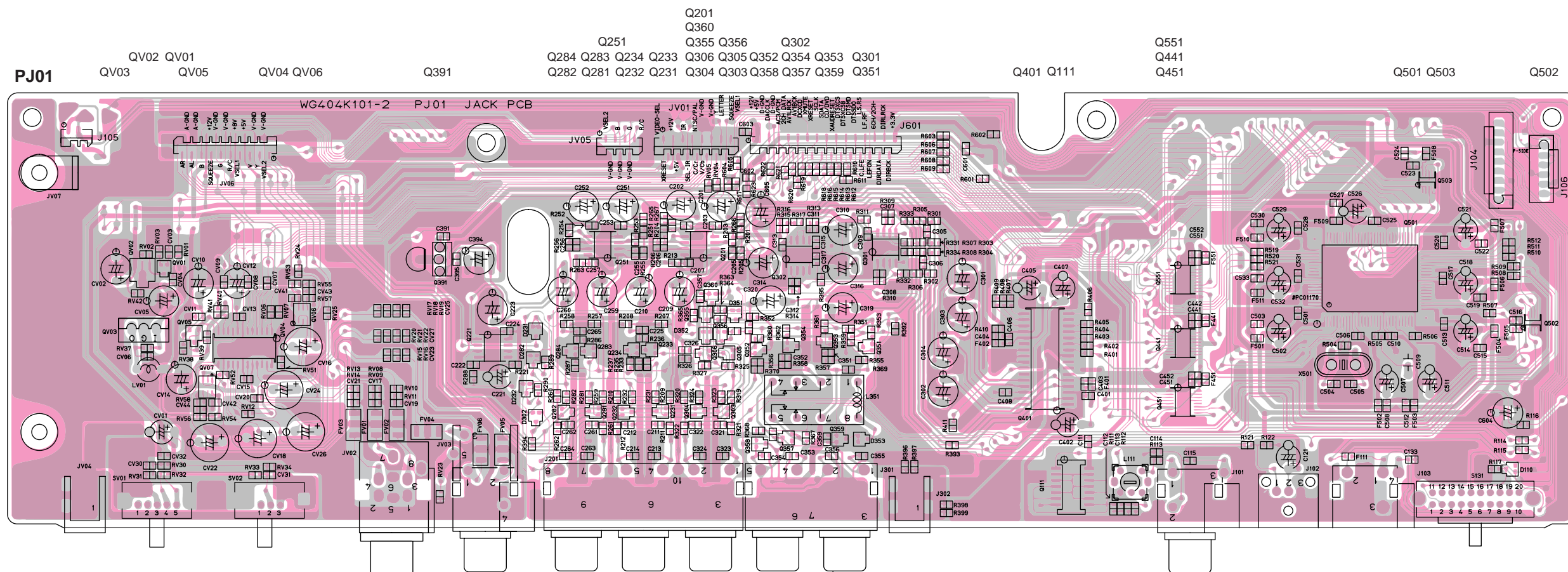
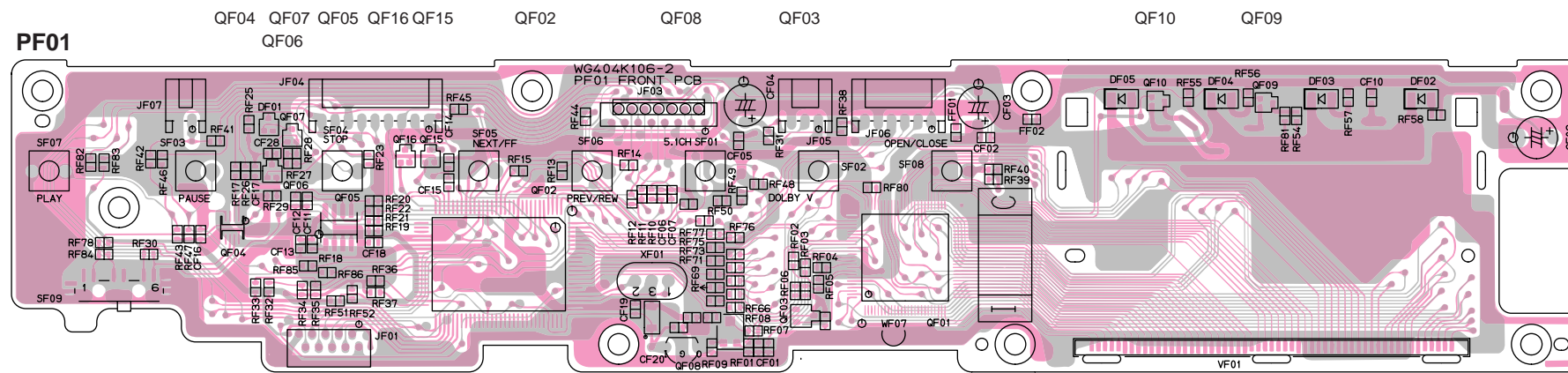
C1S ONLY

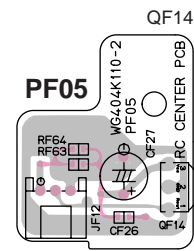
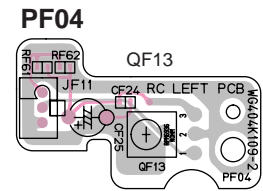
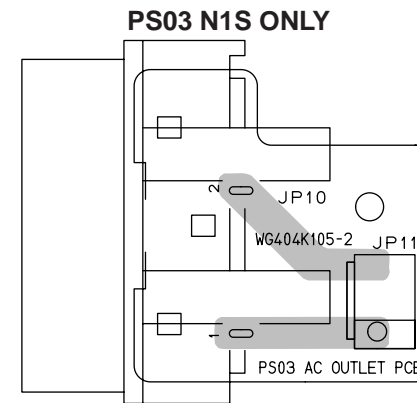
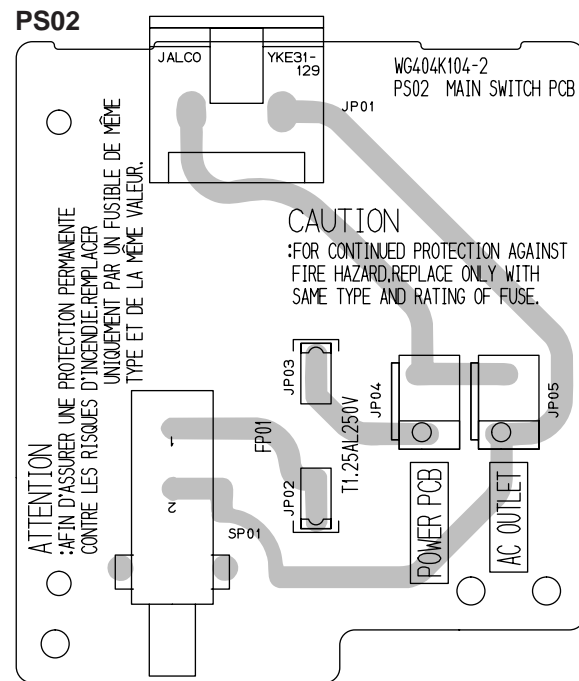
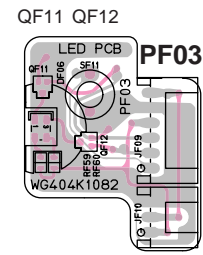
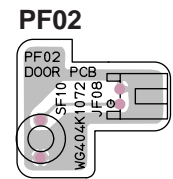
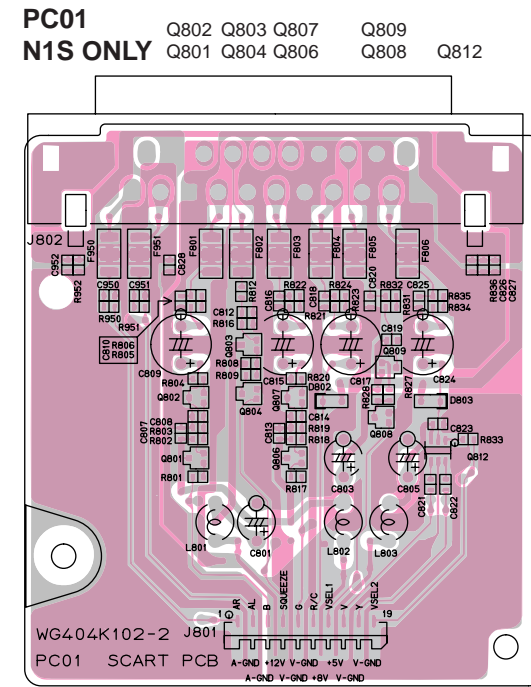
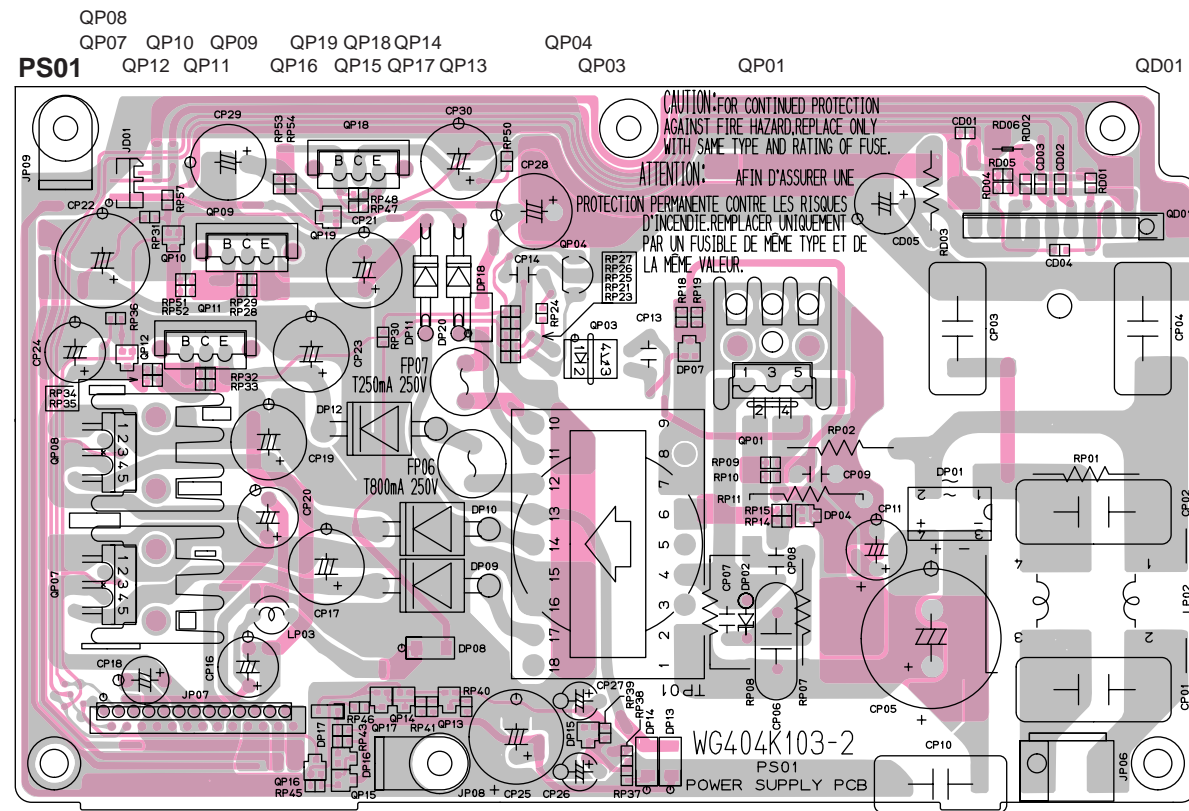
PC01
WG404K1020

FROM PJ01 JV06 3(E-1)

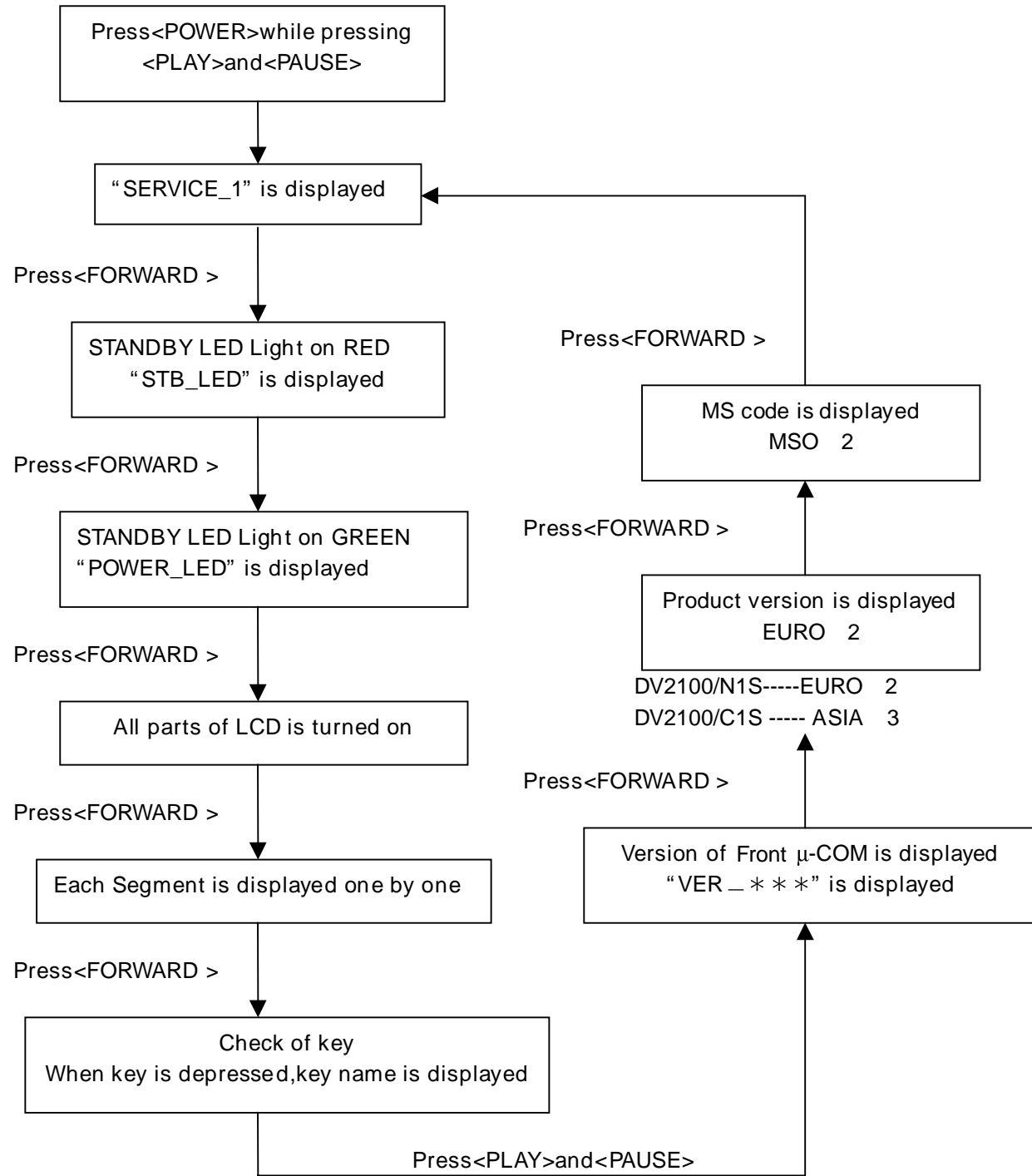








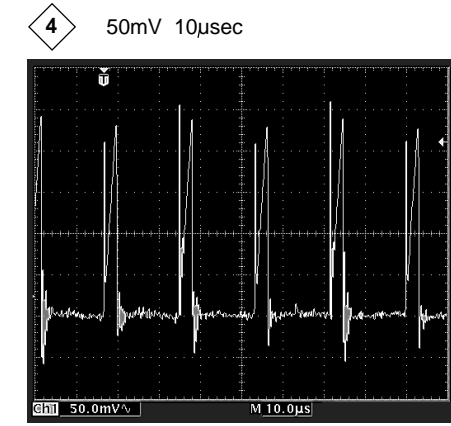
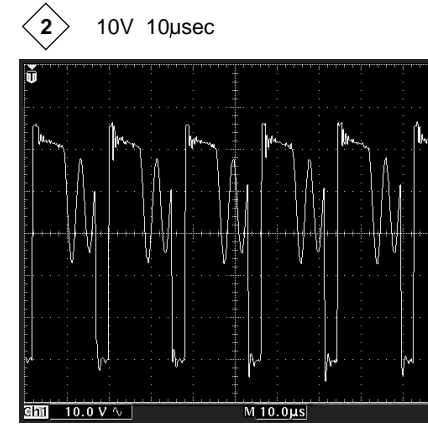
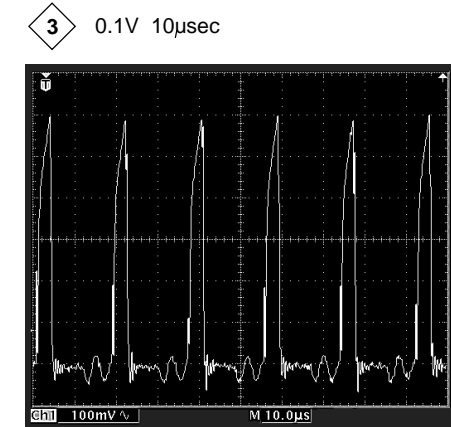
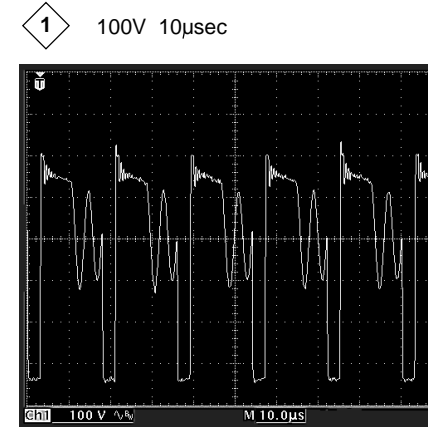
9. SERVICE MODE



Canceling the Service Mode
The Service Mode is canceled by turning the power off.

10. WAVEFORM

Power requirements (Refer the circuitdiagram page 19 and 20)



11. REMOVE THE DVD MECHANISM

Taking the disk out for **EMERGENCY**. (For example: when it is not possible to turn on the product. The disc can not be taken out from the loader.)

1. Remove the front left leg. (See Fig. 1)
2. The hole is visible under the leg. (See Fig. 2)
3. Insert a screwdriver (minus) into the hole.
4. Move a screwdriver from rear to front, and turn the gear pulley in the hole. (See Fig. 3)
5. then the tray is moved a little. Pull the tray with your hand at this time.

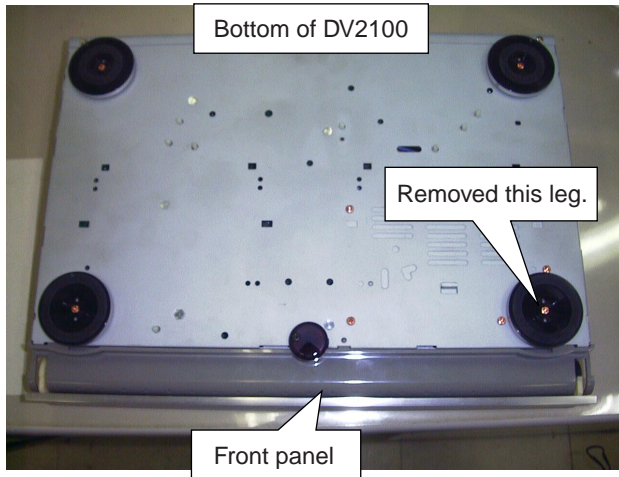


Fig. 1

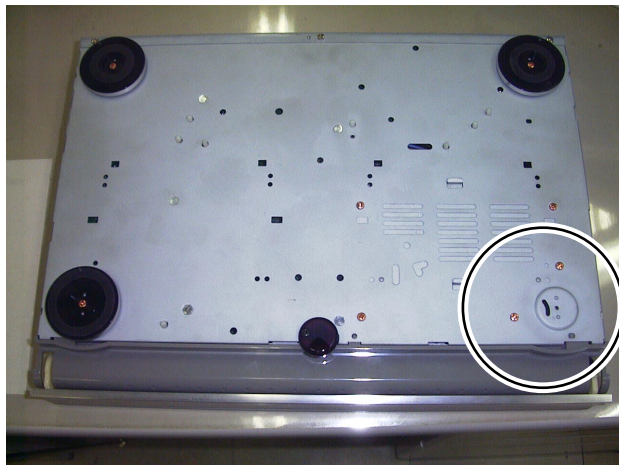


Fig. 2

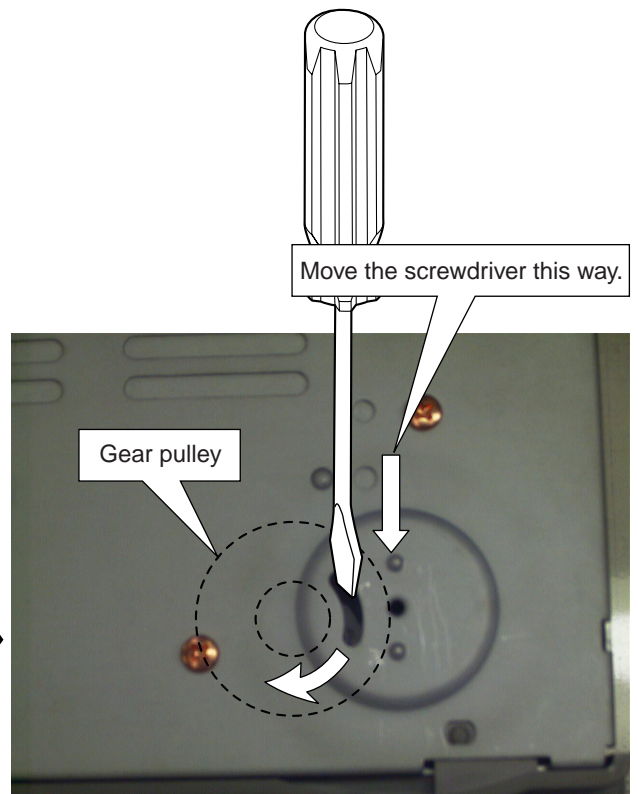
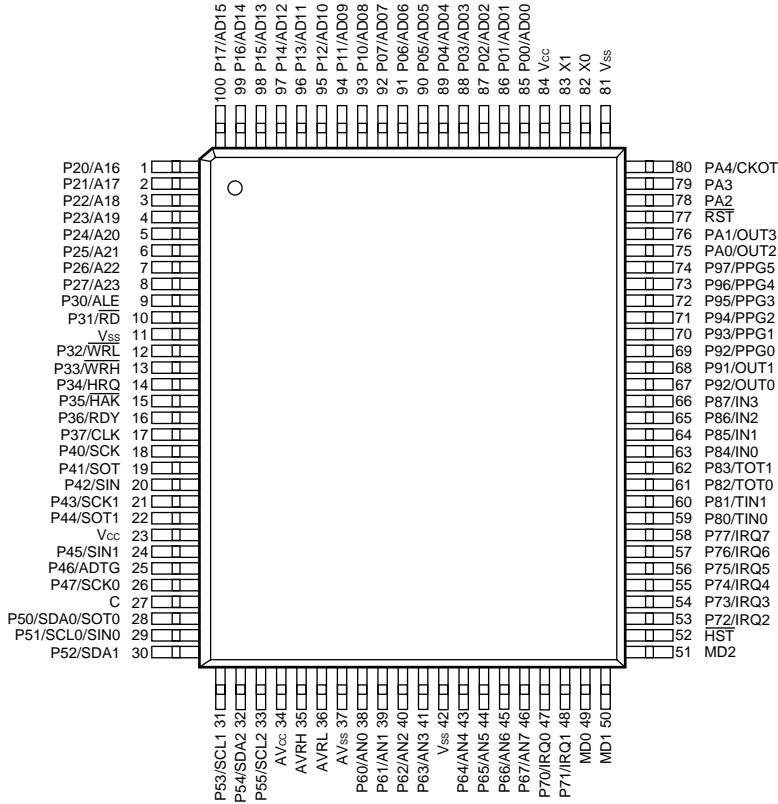


Fig. 3

12. IC DATA

QF02 : MB9055A PIN CONFIGURATION

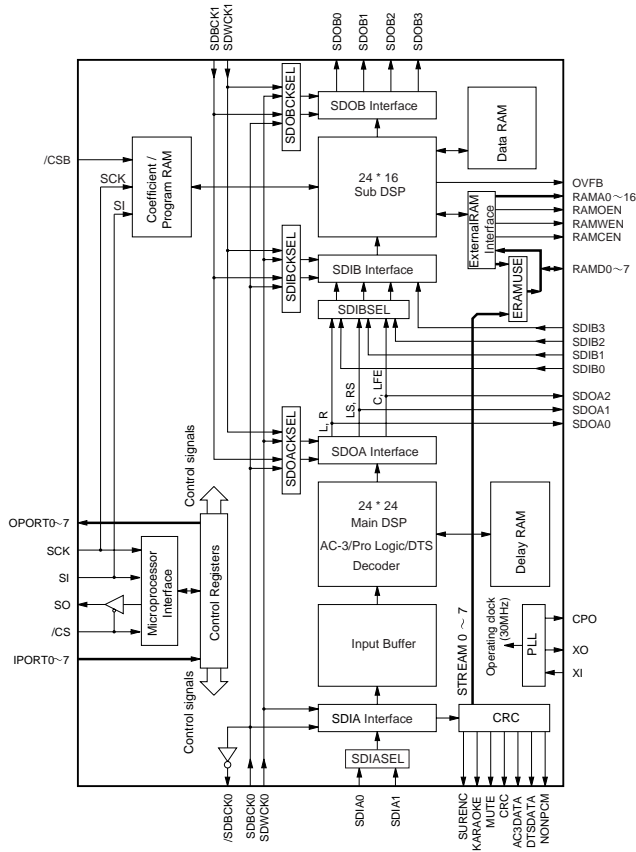


PIN FUNCTION

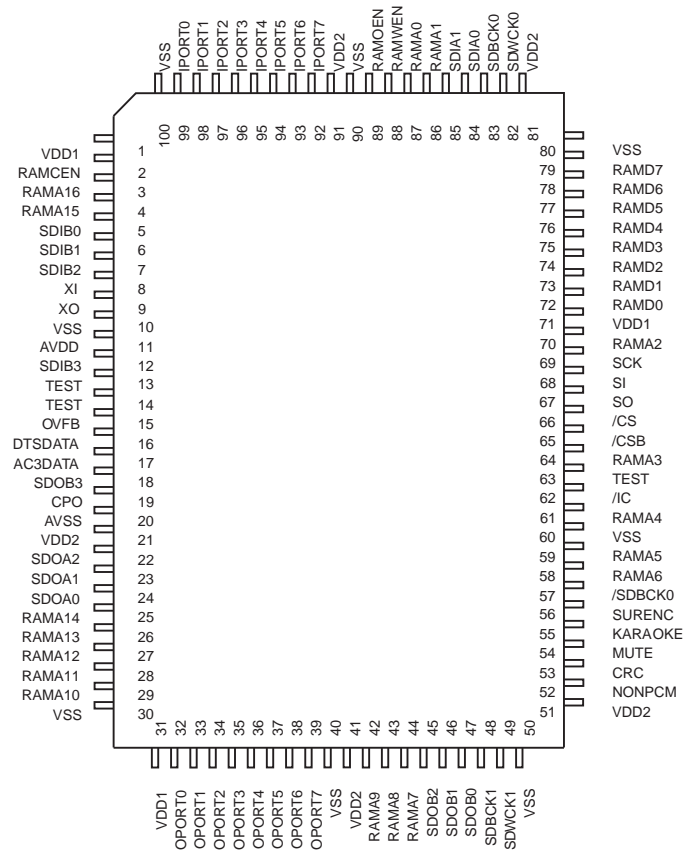
Pin	PORT NAME	I/O	FUNCTION
1	LCD_DIM	O	LCD backlight dimmer control
2	LCD_BL	O	LCD backlight ON/OFF control
3	POWER_LED	O	Power ON LED control
4	STB_LED	O	Standby LED control
5	SYS_SW	I	Bus select SW
6	SYS_MUTE	O	System mute
7	STB_MUTE	O	Standby mute
8	DVD/THROUGH	O	Line out select
9	N.C.	I	
10	N.C.	I	
11	GND		GND
12	N.C.	I	
13	N.C.	I	
14	XRESET	O	Reset signal for Mecha unit
15	XREADY	O	Communication handshake line for Mecha unit
16	POWER_ON	O	Power control
17	N.C.	I	
18	TCK	I/O	Connect to Flash ROM writer
19	SYS_OUTTRXD	O	Connect to Flash ROM writer
20	SYS_INTTXD	I	Connect to Flash ROM writer
21	S_CLK	O	Serial clock output for Mecha unit
22	S_IN	O	Serial data output for Mecha unit
23	STB+5	--	Power supply
24	SOUT	I	Serial data input from Mecha unit
25	N.C.	I	
26	N.C.	I	
27	C		
28	ROM_SDA	I/O	Serial data input/output for EEPROM (I2C)
29	ROM_SCL	O	Serial clock output for EEPROM (I2C)
30	N.C.	I	
31	N.C.	I	
32	N.C.	I	
33	N.C.	I	
34	STB+5	--	Power supply
35	STB+5	--	Power supply
36	GND		GND
37	GND		GND
38	KEY_IN_0	I	Key scan input
39	KEY_IN_1	I	Key scan input
40	KEY_IN_2	I	Key scan input
41	VERSION	I	Destination setting
42	GND		GND
43	MODEL	I	GND
44	N.C.	I	
45	N.C.	I	
46	N.C.	I	
47	LT	I	Communication response signal input from Mecha unit
48	N.C.	O	
49	TMODE	I	CPU mode select
50	MD1	I	CPU mode select

Pin	PORT NAME	I/O	FUNCTION
51	TAUX3	I	CPU mode select
52	HST	I	Standby signal input
53	D_MOTOR_REV	O	Door control signal output (OPEN)
54	D_MOTOR_FWD	O	Door control signal output (CLOSE)
55	D_OPEN_SW	I	Door position detect (OPEN)
56	D_CLOSE_SW	I	Door position detect (CLOSE)
57	N.C.	I	
58	N.C.	I	
59	N.C.	I	
60	N.C.	I	
61	N.C.	I	
62	N.C.	I	
63	TTXD	I	Remote signal input
64	N.C.	I	
65	N.C.	I	
66	N.C.	I	
67	N.C.	I	
68	N.C.	I	
69	N.C.	I	
70	N.C.	I	
71	N.C.	I	
72	N.C.	I	
73	N.C.	I	
74	N.C.	I	
75	N.C.	I	
76	N.C.	I	
77	/TRES	I	Reset signal input
78	N.C.	I	
79	N.C.	I	
80	N.C.	I	
81	GND		GND
82	8MHz X'tal		8MHz Oscillator connecting
83	8MHz X'tal		8MHz Oscillator connecting
84	STB+5	--	Power supply
85	TAUX	I	Connect to Flash ROM writer
86	---	I	CPU mode select
87	RST_LCD	O	LCD driver reset signal
88	LCD_W/R	O	Read/Write control signal to LCD driver
89	LCD_RD	O	Chip enable to LCD driver
90	AO	O	LCD driver mode select
91	N.C.	I	
92	N.C.	I	
93	D0	I/O	Display data for LCD driver
94	D1	I/O	Display data for LCD driver
95	D2	I/O	Display data for LCD driver
96	D3	I/O	Display data for LCD driver
97	D4	I/O	Display data for LCD driver
98	D5	I/O	Display data for LCD driver
99	D6	I/O	Display data for LCD driver
100	D7	I/O	Display data for LCD driver

Q501:YSS912C
BLOCK DIAGRAM



PIN CONFIGURATION



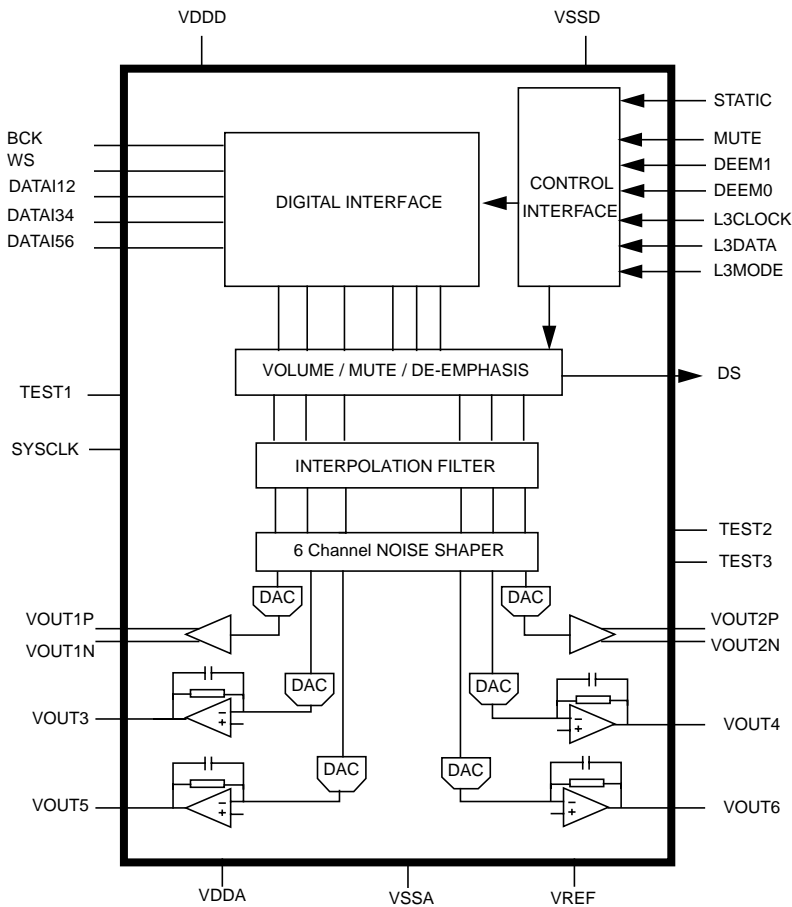
PIN FUNCTION

No.	NAME	I/O	FUNCTION
1	VDD1	-	+5V power supply (for I/Os)
2	RAMCEN	O	External SRAM Interface /CE
3	RAMA16	O	External SRAM Interface address 16
4	RAMA15	O	External SRAM Interface address 15
5	SDIB0	I+	PCM input 0 to Sub DSP
6	SDIB1	I+	PCM input 1 to Sub DSP
7	SDIB2	I+	PCM input 2 to Sub DSP
8	XI	I	Crystal oscillator connection or input external clock (12.288 MHz)
9	XO	O	Crystal oscillator connection
10	VSS	-	Ground
11	AVDD	-	+3.3V power supply (for PLL circuit)
12	SDIB3	I+	PCM input 3 to Sub DSP
13	TEST	O	Test terminal (to be open in normal use)
14	TEST	O	Test terminal (to be open in normal use)
15	OVFB	O	Detection of overflow at Sub DSP
16	DTSDATA	O	DTS data detection (Refer to "Status Register".)
17	AC3DATA	O	AC-3 data detection (Refer to "Status Register".)
18	SDOB3	O	PCM output from Sub DSP
19	CPO	A	Output terminal for PLL. To be connected to ground through the external analog filter circuit. (Refer to "External Circuit for PLL".)
20	AVSS	-	Ground (for PLL circuit)
21	VDD2	-	+3.3V power supply (for core logic)
22	SDOA2	O	PCM output from Main DSP (C, LFE)
23	SDOA1	O	PCM output from Main DSP (LS, RS)
24	SDOA0	O	PCM output from Main DSP (L, R)
25	RAMA14	O	External SRAM Interface address 14
26	RAMA13	O	External SRAM Interface address 13
27	RAMA12	O	External SRAM Interface address 12
28	RAMA11	O	External SRAM Interface address 11
29	RAMA10	O	External SRAM Interface address 10
30	VSS	-	Ground
31	VDD1	-	+5V power supply (for I/Os)
32	OPORT0	O	Output port for general purpose. (Refer to "OPORT Register")
33	OPORT1	O	Output port for general purpose. (Refer to "OPORT Register")
34	OPORT2	O	Output port for general purpose. (Refer to "OPORT Register")
35	OPORT3	O	Output port for general purpose. (Refer to "OPORT Register")
36	OPORT4	O	Output port for general purpose. (Refer to "OPORT Register")
37	OPORT5	O	Output port for general purpose. (Refer to "OPORT Register")
38	OPORT6	O	Output port for general purpose. (Refer to "OPORT Register")
39	OPORT7	O	Output port for general purpose. (Refer to "OPORT Register")
40	VSS	-	Ground
41	VDD2	-	+3.3V power supply (for core logic)
42	RAMA9	O	External SRAM interface address 9
43	RAMA8	O	External SRAM interface address 8
44	RAMA7	O	External SRAM interface address 7
45	SDOB2	O	PCM output from Sub DSP
46	SDOB1	O	PCM output from Sub DSP
47	SDOB0	O	PCM output from Sub DSP
48	SDBCK1	I+	Bit clock input for SDOA, SDIB, SDOB. (Refer to "SDOA, SDIB, SDOB Register")
49	SDWCK1	I+	Word clock input for SDOA, SDIB, SDOB. (Refer to "SDOA, SDIB, SDOB Register")
50	VSS	-	Ground

No.	NAME	I/O	FUNCTION
51	VDD2	-	+3.3V power supply (for core logic)
52	NONPCM	O	Detection of non PCM data. (Refer to "Status Register")
53	CRC	O	Detection of AC-3 CRC error. (Refer to "Status Register")
54	MUTE	O	Detection of auto-mute. (Refer to "Status Register")
55	KARAOKE	O	Detection of AC-3 karaoke data. (Refer to "Status Register")
56	SURENC	O	Detection of AC-3 2/0 mode Dolby surround encoded input (Refer to "Status Register")
57	/SDBCK0	O	Inverted SDBCK0 clock output (refer to "Block diagram")
58	RAMA6	O	External SRAM Interface address 6
59	RAMA5	O	External SRAM Interface address 5
60	VSS	-	Ground
61	RAMA4	O	External SRAM Interface address 4
62	/IC	Is	Initial clear
63	TEST	O	Test terminal (to be open in normal use)
64	RAMA3	O	External SRAM Interface address 3
65	/CSB	Is+	Sub DSP Chip select
66	/CS	Is	Microprocessor interface Chip select
67	SO	Ot	Microprocessor interface Serial data output
68	SI	Is	Microprocessor interface/Sub DSP Serial data input
69	SCK	Is	Microprocessor interface/Sub DSP clock input
70	RAMA2	O	External SRAM Interface address 2
71	VDD1	-	+5V power supply (for I/Os)
72	RAMD0	I+/O	External SRAM Interface data (STREAM 0 output when External SRAM is not in use)
73	RAMD1	I+/O	External SRAM Interface data (STREAM 1 output when External SRAM is not in use)
74	RAMD2	I+/O	External SRAM Interface data (STREAM 2 output when External SRAM is not in use)
75	RAMD3	I+/O	External SRAM Interface data (STREAM 3 output when External SRAM is not in use)
76	RAMD4	I+/O	External SRAM Interface data (STREAM 4 output when External SRAM is not in use)
77	RAMD5	I+/O	External SRAM Interface data (STREAM 5 output when External SRAM is not in use)
78	RAMD6	I+/O	External SRAM Interface data (STREAM 6 output when External SRAM is not in use)
79	RAMD7	I+/O	External SRAM Interface data (STREAM 7 output when External SRAM is not in use)
80	VSS	-	Ground
81	VDD2	-	+3.3V power supply (for core logic)
82	SDWCK0	I	Word clock input for SDIA, SDOA, SDIB, SDOB (Refer to "SDIA, SDOA, SDIB, SDOB Register")
83	SDBCK0	I	Bit clock input for SDIA, SDOA, SDIB, SDOB (Refer to "SDIA, SDOA, SDIB, SDOB Register")
84	SDIA0	I	AC-3/DTS bitstream (or PCM) data input for Main DSP (Refer to "SDIA Register")
85	SDIA1	I	AC-3/DTS bitstream (or PCM) data input for Main DSP (Refer to "SDIA Register")
86	RAMA1	O	External SRAM Interface address 1
87	RAMA0	O	External SRAM Interface address 0
88	RAMWEN	O	External SRAM Interface /WE
89	RAMOEN	O	External SRAM Interface /OE
90	VSS	-	Ground
91	VDD2	-	+3.3V power supply (for core logic)
92	IPORT7	I+	Input port for general purpose (Refer to "IPORT Register")
93	IPORT6	I+	Input port for general purpose (Refer to "IPORT Register")
94	IPORT5	I+	Input port for general purpose (Refer to "IPORT Register")
95	IPORT4	I+	Input port for general purpose (Refer to "IPORT Register")
96	IPORT3	I+	Input port for general purpose (Refer to "IPORT Register")
97	IPORT2	I+	Input port for general purpose (Refer to "IPORT Register")
98	IPORT1	I+	Input port for general purpose (Refer to "IPORT Register")
99	IPORT0	I+	Input port for general purpose (Refer to "IPORT Register")
100	VSS	-	Ground

Note) Is : Schmidt trigger input terminal
 I+ : Input terminal with a pull-up resistor
 O : Digital output terminal
 Ot : Tri-state digital output terminal
 A : Analog terminal

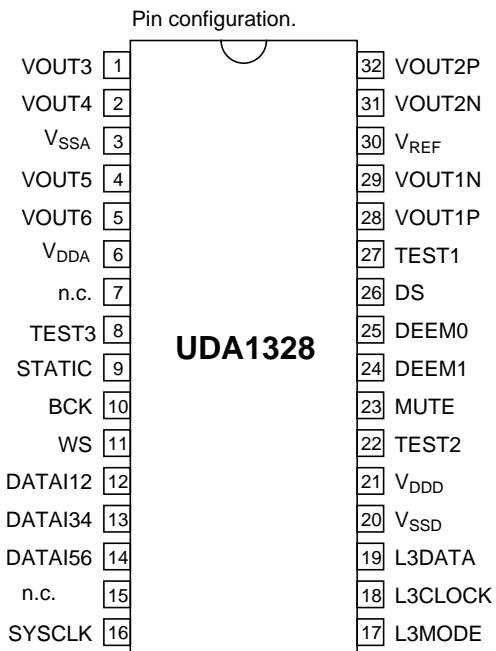
Q401:UDA1328T
BLOCK DIAGRAM



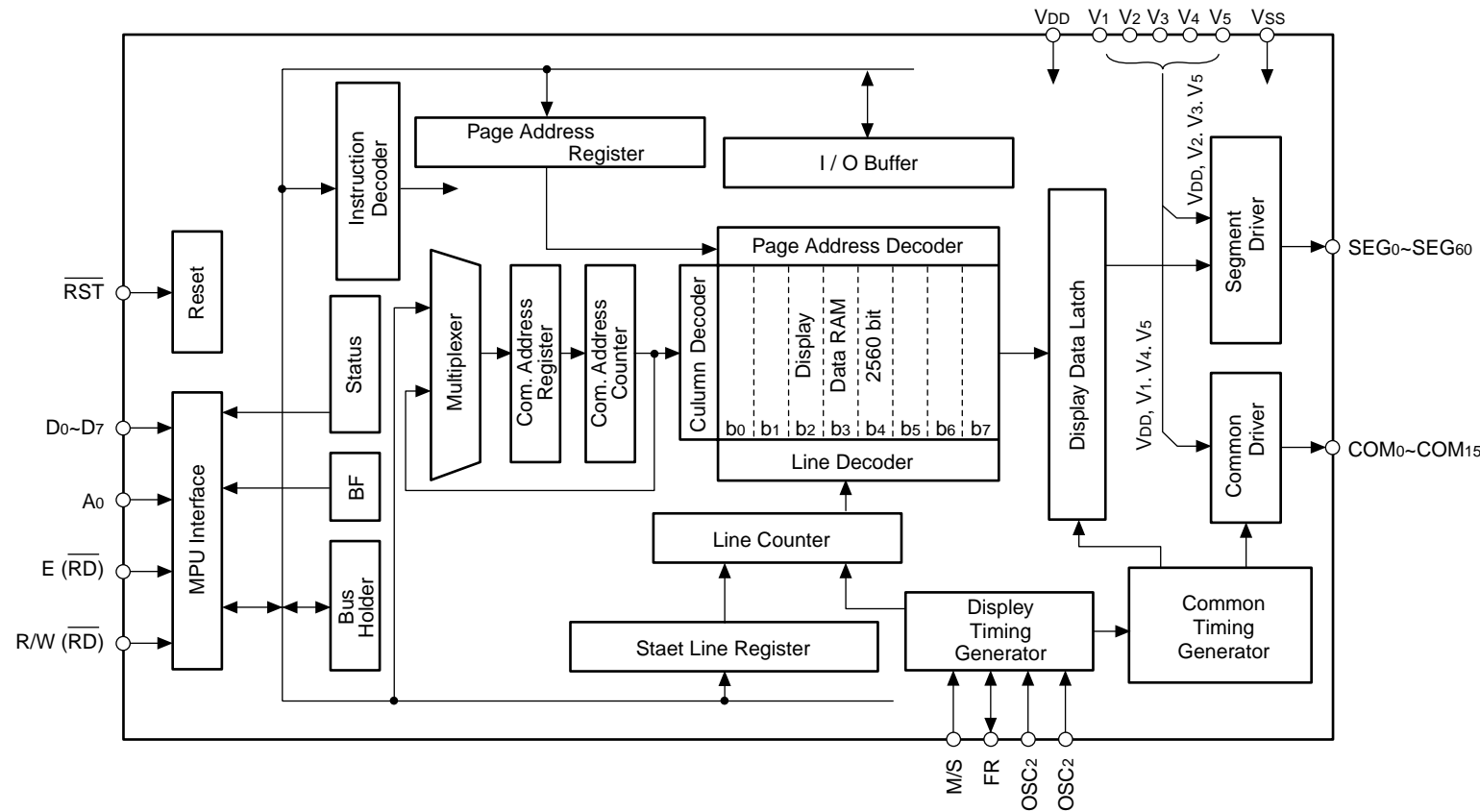
PIN FUNCTION

SYMBOL	PIN	DESCRIPTION
VOUT3	1	channel 3 analog output
VOUT4	2	channel 4 analog output
V _{SSA}	3	analog ground
VOUT5	4	channel 5 analog output
VOUT6	5	channel 6 analog output
V _{DDA}	6	analog power supply
n.c.	7	not connected (reserved)
TEST3	8	test output 3
STATIC	9	static mode / L3 mode switch
BCK	10	bit clock
WS	11	word select
DATAI12	12	data input channel 1 and 2
DATAI34	13	data input channel 3 and 4
DATAI56	14	data input channel 5 and 6
n.c.	15	not connected (reserved)
SYSClk	16	system clock: 256f _s , 384f _s , 512f _s , 768f _s
L3MODE	17	L3 mode selection
L3CLOCK	18	L3 clock input
L3DATA	19	L3 data input
V _{SSD}	20	digital ground
V _{DDD}	21	digital power supply
TEST2	22	test output 2
MUTE	23	static Mute control
DEEM1	24	DEEM control 1 (static mode)
DEEM0	25	L3 address select (L3 mode) / DEEM control 0 (static mode)
DS	26	digital silence detect
TEST1	27	test input 1
VOUT1P	28	channel 1 analog output P
VOUT1N	29	channel 1 analog output N
V _{REF}	30	DAC reference voltage
VOUT2N	31	channel 2 analog output N
VOUT2P	32	channel 2 analog output P

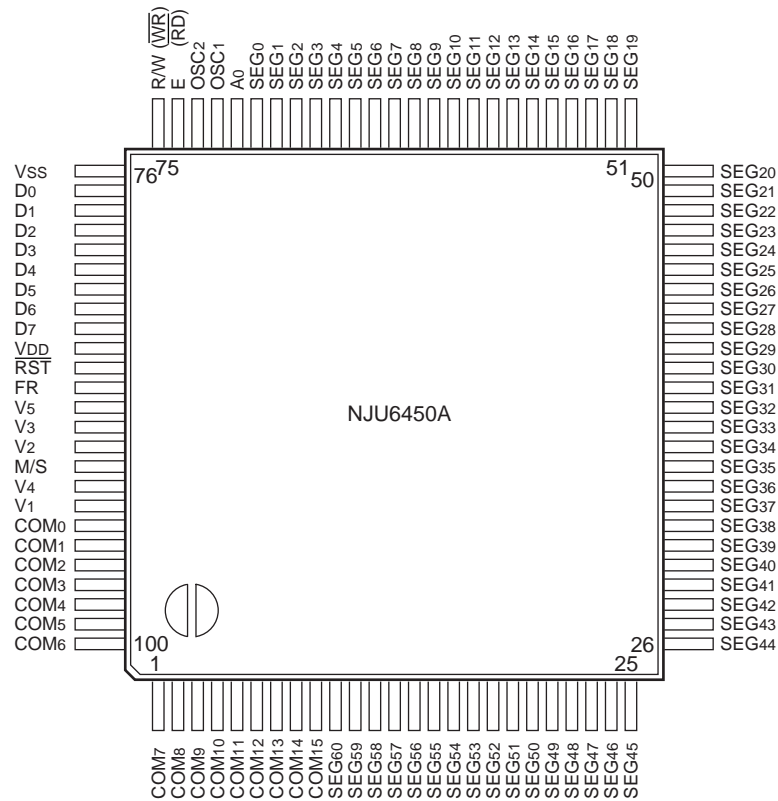
PIN CONFIGURATION



**QF01:NJU6450A
BLOCK DIAGRAM**



PIN CONFIGURATION



PIN FUNCTION

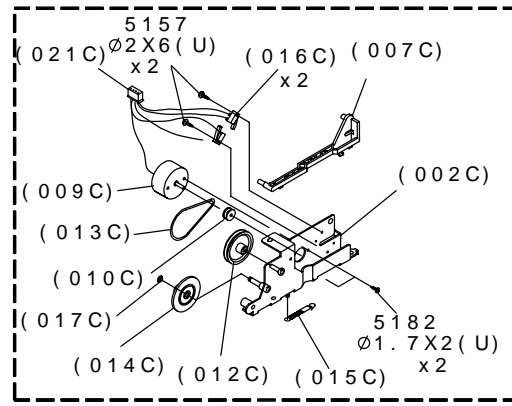
Chip Size 4860um x 4160um(Chip Center X=0um,Y=0um)

No.	Terminal Name	X=(um)	Y=(um)
1	COM ₅	-2130	-1865
2	COM ₆	-1970	-1865
3	COM ₇	-1810	-1865
4	COM ₈	-1650	-1865
5	COM ₉	-1490	-1865
6	COM ₁₀	-1330	-1865
7	COM ₁₁	-1190	-1865
8	COM ₁₂	-1050	-1865
9	COM ₁₃	- 910	-1865
10	COM ₁₄	- 770	-1865
11	COM ₁₅	- 630	-1865
12	SEG ₆₀	- 490	-1865
13	SEG ₅₉	- 350	-1865
14	SEG ₅₈	- 210	-1865
15	SEG ₅₇	- 70	-1865
16	SEG ₅₆	70	-1865
17	SEG ₅₅	210	-1865
18	SEG ₅₄	350	-1865
19	SEG ₅₃	490	-1865
20	SEG ₅₂	630	-1865
21	SEG ₅₁	770	-1865
22	SEG ₅₀	910	-1865
23	SEG ₄₉	1050	-1865
24	SEG ₄₈	1190	-1865
25	SEG ₄₇	1330	-1865
26	SEG ₄₆	1490	-1865
27	SEG ₄₅	1650	-1865
28	SEG ₄₄	1810	-1865
29	SEG ₄₃	1970	-1865
30	SEG ₄₂	2130	-1865
31	SEG ₄₁	2213	-1354
32	SEG ₄₀	2213	-1214
33	SEG ₃₉	2213	-1074
34	SEG ₃₈	2213	- 934
35	SEG ₃₇	2213	- 794
36	SEG ₃₆	2213	- 654
37	SEG ₃₅	2213	- 514
38	SEG ₃₄	2213	- 374
39	SEG ₃₃	2213	- 234
40	SEG ₃₂	2213	- 94
41	SEG ₃₁	2213	46
42	SEG ₃₀	2213	186
43	SEG ₂₉	2213	326
44	SEG ₂₈	2213	466
45	SEG ₂₇	2213	606
46	SEG ₂₆	2213	746
47	SEG ₂₅	2213	886
48	SEG ₂₄	2213	1026
49	SEG ₂₃	2213	1166
50	SEG ₂₂	2213	1306

* Pad Size 92um x 92um

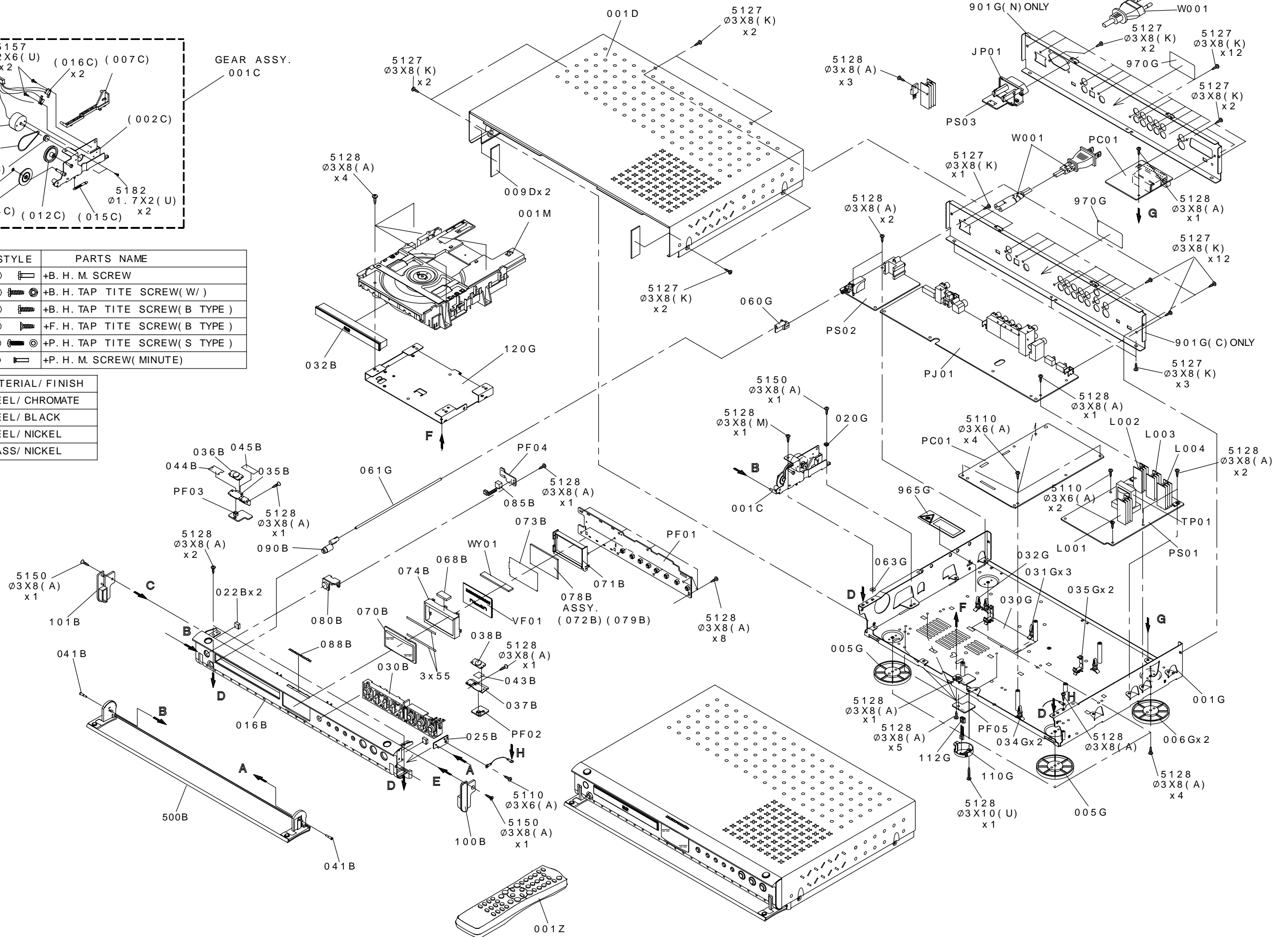
No.	Terminal Name	X=(um)	Y=(um)
51	SEG ₂₁	2130	1865
52	SEG ₂₀	1970	1865
53	SEG ₁₉	1810	1865
54	SEG ₁₈	1650	1865
55	SEG ₁₇	1490	1865
56	SEG ₁₆	1330	1865
57	SEG ₁₅	1190	1865
58	SEG ₁₄	1050	1865
59	SEG ₁₃	910	1865
60	SEG ₁₂	770	1865
61	SEG ₁₁	630	1865
62	SEG ₁₀	490	1865
63	SEG ₉	350	1865
64	SEG ₈	210	1865
65	SEG ₇	70	1865
66	SEG ₆	- 70	1865
67	SEG ₅	- 210	1865
68	SEG ₄	- 350	1865
69	SEG ₃	- 490	1865
70	SEG ₂	- 630	1865
71	SEG ₁	- 770	1865
72	SEG ₀	- 910	1865
73	A ₀	-1050	1865
74	OSC ₁	-1190	1865
75	OSC ₂	-1330	1865
76	E	-1490	1865
77	R/W	-1650	1865
78	V _{SS}	-1810	1865
79	DB ₀	-1970	1865
80	DB ₁	-2130	1865
81	DB ₂	-2213	1330
82	DB ₃	-2213	1190
83	DB ₄	-2213	1050
84	DB ₅	-2213	910
85	DB ₆	-2213	770
86	DB ₇	-2213	630
87	V _{DD}	-2213	490
88	RST	-2213	350
89	FR	-2213	210
90	V ₅	-2213	70
91	V ₃	-2213	- 70
92	V ₂	-2213	- 210
93	M/S	-2213	- 350
94	V ₄	-2213	- 490
95	V ₁	-2213	- 630
96	COM ₀	-2213	- 770
97	COM ₁	-2213	- 910
98	COM ₂	-2213	-1050
99	COM ₃	-2213	-1190
100	COM ₄	-2213	-1330

13. EXPLODED VIEW AND PARTS LIST



SYMBOL	STYLE	PARTS NAME
5110	\oplus	+B. H. M. SCREW
5127	\oplus \oplus	+B. H. TAP TITE SCREW(W /)
5128	\oplus \oplus	+B. H. TAP TITE SCREW(B TYPE)
5150	\oplus \oplus	+F. H. TAP TITE SCREW(B TYPE)
5157	\oplus \oplus	+P. H. TAP TITE SCREW(S TYPE)
5182	\oplus \oplus	+P. H. M. SCREW(MINUTE)

MARK	MATERIAL/ FINISH
(A)	STEEL/ CHROMATE
(U)	STEEL/ BLACK
(K)	STEEL/ NICKEL
(E)	BRASS/ NICKEL



POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
016B		9965 000 08334	FRONT PANEL	404K248010
022B		4822 526 20213	MAGNET ASSY	271K305500
030B		9965 000 08335	BUTTON OPERATION	404K270020
032B		9965 000 08336	TRY ESCUTCHEON	404K063010
035B		9965 000 08205	STANDBY BUTTON	327J270010
036B		9965 000 08206	STANDBY BUTTON LENS	327J355010
037B		9965 000 08337	OPEN/CLOSE BUTTON	404K270030
038B		9965 000 08208	OPEN/CLOSE BUTTON LENS	327J355020
041B		9965 000 08209	SCREW FOR DOOR	327J010110
070B		9965 000 08210	WINDOW	399K158010
074B		9965 000 08338	LCD COVER	399K053010
078B		9965 000 08339	LD INTRODUCER ASSY	399K151500
080B		9965 000 08211	IR LENS FOR FRONT PANEL	327J355030
088B		9965 000 08212	BADGE	327J251110
090B		9965 000 08340	POWER BUTTON	404K270010
100B		9965 000 08215	SIDE BUSHING R	327J259010
101B		9965 000 08216	SIDE BUSHING L	327J259020
500B		9965 000 08333	ESCUTCHEONDOOR PANEL ASSY	404K063500
001C		4822 522 33389	GEAR ASSY	446T058500
007C		4822 404 21283	LEVER	446T354010
008C		9965 000 00694	D.C MOTOR ASSY	*MM000630R
009C		4822 361 11027	D.C.MOTOR	MM00200010
012C		4822 528 40363	PULLEY	446T262020
013C		4822 358 31264	BELT	446T264010
014C		4822 522 33388	GEAR	446T058010
015C		4822 492 33411	SPRING	446T115010
016C		4822 271 30768	MINI LEAF SW	SM01011530
017C		4822 462 71954	STOPPER WASHER	204K114210
005G		9965 000 08217	LEG FRONT	271K057270
006G		9965 000 08218	LEG REAR	271K057280
060G		9965 000 08341	POWER BUTTON LINK	404K121010
061G		9965 000 08342	SHAFT POWER BUTTON	404K112010
110G		9965 000 01079	IR LENS MAIN CHASSIS BOTTOM	282J355020
▲ W001	C		MAINS CORD 3A 250V	ZC02009020
▲ W001	N	4822 321 11211	MAINS CORD 250V 2.5A	ZC02003150
PC01	C		DVD PCB MODULE ASSY DB-VPB220	ZK404K0220
PC01	N	9965 000 10316	DVD PCB MODULE ASSY DB-VPB221	ZK404K0210
			PACKING	
001T	C		USER GUIDE DV2100	404K851350
001T	N	9965 000 08343	USER GUIDE DV2100 EURO	404K851310
001Z		9965 000 08373	REMOTE CONTROLLER RC2100DV	ZK404K0010
			NOT STANDARD SPARE PARTS	
001S			PACKING CASE	404K801010
002S			CUSHION L SIDE	399K809010
003S			CUSHION R SIDE	399K809020
013S			CUSHION FOR SET TOP SIDE	327J809110
001M			DVD MECHANISM (DB-VLD101)	404K304500

NOTE : "nsp" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

14. ELECTRICAL PARTS LIST

ASSIGNMENT OF COMMON PARTS CODES.

RESISTORS

R*** : 1) GD05 x x x 140, Carbon film fixed resistor, ±5% 1/4W
 R*** : 2) GD05 x x x 160, Carbon film fixed resistor, ±5% 1/6W
 ↓ Resistance value

Examples
 ① Resistance value
 0.1Ω 001 10Ω 100 1kΩ 102 100kΩ 104
 0.5Ω 005 18Ω 180 2.7kΩ 272 680kΩ 684
 1Ω 010 100Ω 101 10kΩ 103 1MΩ 105
 6.8Ω 068 390Ω 391 22kΩ 223 4.7MΩ 475

Note : Please distinguish 1/4W from 1/6W by the shape of parts used actually.

CAPACITORS

C*** : CERAMIC CAP.

3) DD1 x x x x 370, Ceramic capacitor
 ↓ Disc type
 ↓ Temp. coeff. P350~N1000, 50V
 ↓ Capacity value
 ↓ Tolerance

Examples
 ② Tolerance (Capacity deviation)
 ±0.25 pF 0
 ±0.5 pF 1
 ±5 % 5
 Tolerance of COMMON PARTS handled here are as follows :
 0.5 pF - 5 pF ± 0.25 pF
 6 pF - 10 pF ± 0.5 pF
 12 pF - 560 pF ... ± 5 %

③ Capacity value
 0.5 pF 005 3 pF 030 100 pF 101
 1 pF 010 10 pF 100 220 pF 221
 1.5 pF 015 47 pF 470 560 pF 561

C*** : CERAMIC CAP.

4) DK16 x x x 300, High dielectric constant ceramic capacitor
 ↓ Disc type
 ↓ Temp. chara. 2B4, 50V
 ↓ Capacity value

Examples
 ④ Capacity value
 100 pF 101 1000 pF 102 10000 pF 103
 470 pF 471 2200 pF 222

C*** : 5) ELECTROLY CAP. (), 6) FILM CAP ()

5) EA x x x x x 10, Electrolytic capacitor
 ↓ One-way lead type, Tolerance ±20%
 ↓ Working voltage
 ↓ Capacity value

Examples
 ⑤ Capacity value
 0.1 μF 104 4.7 μF 475 100 μF 107
 0.33 μF 334 10 μF 106 330 μF 337
 1 μF 105 22 μF 226 1100 μF 118
 2200 μF 228

⑥ Working voltage
 6.3 V 006 25 V 025
 10 V 010 35 V 035
 16 V 016 50 V 050

6) DF15 x x x 350 → Plastic film capacitor
 DF15 x x x 310 → One-way type, Mylar ±5% 50V
 DF16 x x x 310 → Plastic film capacitor
 ↓ One-way type, Mylar ±10% 50V
 ↓ Capacity value

Examples
 ⑦ Capacity value
 0.001 μF (1000 pF) 102 0.1 μF 104
 0.0018 μF 182 0.56 μF 564
 0.01 μF 103 1 μF 105
 0.015 μF 153

NOTE 1) The above CODES (R***, R***, C***, C*** and C***) are omitted on the schematic diagram in some case.
 2) On the occasion, be confirmed the common parts on the parts list.
 3) Refer to "Common Parts List" for the other common parts (RI05, DD4, DK4).

NOTE ON SAFETY FOR FUSIBLE RESISTOR :

The suppliers and their type numbers of fusible resistors are as follows ;

1. KOA Corporation
 Part No.(MJI) Type No.(KOA) Description
 NH05 x x x 140 RF25S x x x x Ω J ±5% (1/4W)
 NH05 x x x 120 RF50S x x x x Ω J ±5% (1/2W)
 NH85 x x x 110 RF73B2A x x x x Ω J ±5% (1/10W)
 NH95 x x x 140 RF73B2E x x x x Ω J ±5% (1/4W)
 ↓ ↓
 * Resistance value Resistance value(0.1Ω - 10kΩ)



2. Matsushita Electronic Components Co., Ltd
 Part No.(MJI) Type No.(MEC) Description
 NF05 x x x 140 ERD-2FCJ x x x (±5% 1/4W)
 RF05 x x x 140 ↓
 NF02 x x x 140 ERD-2FCG x x x (±2% 1/4W)
 RF02 x x x 140 ↓
 * Resistance value

Examples
 * Resistance value
 0.1Ω 001 10Ω 100 1kΩ 102 100kΩ 104
 0.5Ω 005 18Ω 180 2.7kΩ 272 680kΩ 684
 1Ω 010 100Ω 101 10kΩ 103 1MΩ 105
 6.8Ω 068 390Ω 391 22kΩ 223 4.7MΩ 475


ABBREVIATION AND MARKS

ANT. : ANTENNA	BATT. : BATTERY
CAP. : CAPACITOR	CER. : CERAMIC
CONN. : CONNECTING	DIG. : DIGITAL
HP : HEADPHONE	MIC. : MICROPHONE
μ-PRO : MICROPROCESSOR	REC. : RECORDING
RES. : RESISTOR	SPK : SPEAKER
SW : SWITCH	TRANSF. : TRANSFORMER
TRIM. : TRIMMING	TRS. : TRANSISTOR
VAR. : VARIABLE	X' TAL : CRYSTAL

NOTE ON SAFETY:

Symbol  Fire or electrical shock hazard. Only original parts should be used to replaced any part marked with symbol  Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

安全上の注意 :

 がついている部品は、安全上重要な部品です。必ず指定されている部品番号の部品を使用して下さい。

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJJ)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJJ)
			PC01-SCART CIRCUIT BOARD						
			PC01-CAPACITORS						
C801	N	4822 124 41539	ELECT 47µF M 16V	OA47601620	Q804	N	4822 130 61906	SEMICON.COMP DTC114EU	BA20035210
C803	N	4822 124 22275	ELECT 47µF M 10V	OA47601020	Q806	N	4822 130 60669	CHIP TRS. 2SC4081(Q R)	HX300012A0
C805	N	4822 124 22275	ELECT 47µF M 10V	OA47601020	Q807	N	4822 130 60669	CHIP TRS. 2SC4081(Q R)	HX300012A0
C807	N	4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	Q808	N	4822 130 61906	SEMICON.COMP DTC114EU	BA20035210
C808	N	4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	Q809	N	4822 130 10698	CHIP TRS. 2SA1586 (Y GR)	HX100012A0
C809	N	4822 124 90353	ELECT 100µF M 10V	OA10701020	Q812	N	9965 000 08367	2SA1576A (Q R)	HC10085550
C812	N	4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200				IC MM1507XNRE	
C813	N	4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200					
C814	N	4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200					
C815	N	4822 124 90353	ELECT 100µF M 10V	OA10701020					
C817	N	4822 124 90353	ELECT 100µF M 10V	OA10701020					
C819	N	4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200					
								PC01-MISCELLANEOUS	
C821	N	4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	F801				
C822	N	4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	}	N	9965 000 04998	EMI FILTER NFM41R01C221	FM31221020
C823	N	4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	F806				
C824	N	4822 124 90371	ELECT 470µF M 10V	OA47701020	F950	N	9965 000 04998	EMI FILTER NFM41R01C221	FM31221020
C826	N	4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	F951	N	9965 000 04998	EMI FILTER NFM41R01C221	FM31221020
C828	N	4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	J801	N	9965 000 08365	JACK 19FMN-BMTTN-TFT	YJ07014250
C950	N	4822 126 13395	CER. 390pF ±10 % B 50V	DK96391300	J802	N	9965 000 08366	TERMINAL YKF41-5040	YT02210070
C951	N	4822 126 13395	CER. 390pF ±10 % B 50V	DK96391300	L801	N	4822 157 60445	CHOKE COIL 15µH J%	LC11533900
C952	N	4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	L802	N	4822 157 60445	CHOKE COIL 15µH J%	LC11533900
					L803	N	4822 157 60445	CHOKE COIL 15µH J%	LC11533900
			PC01-RESISTORS CHIP						
R801	N	4822 051 30101	100 Ω ±5% 1/16W	NN05101610				PF01-FRONT CIRCUIT BOARD	
R802	N	4822 051 30392	3.9k Ω ±5% 1/16W	NN05392610				PF01-CAPACITORS	
R803	N	4822 051 30152	1.5k Ω ±5% 1/16W	NN05152610	CF02		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
R804	N	4822 051 30479	47 Ω ±5% 1/16W	NN05470610	CF03		4822 124 23056	ELECT 47µF 10V	EJ47601010
R805	N	4822 051 30399	39 Ω ±5% 1/16W	NN05390610	CF04		4822 124 23056	ELECT 47µF 10V	EJ47601010
R806	N	4822 051 30339	33 Ω ±5% 1/16W	NN05330610	CF05		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
R808	N	4822 051 30472	4.7k Ω ±5% 1/16W	NN05472610	CF09		4822 124 23056	ELECT 47µF 10V	EJ47601010
R809	N	4822 051 30472	4.7k Ω ±5% 1/16W	NN05472610	CF10		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
R812	N	4822 051 30471	470 Ω ±5% 1/16W	NN05471610	CF13				
R816	N	4822 051 30563	56k Ω ±5% 1/16W	NN05563610	}		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
R817	N	4822 051 30101	100 Ω ±5% 1/16W	NN05101610	CF18				
R818	N	4822 051 30392	3.9k Ω ±5% 1/16W	NN05392610	CF19		9965 000 01912	CER. 0.047µF +80 -20% 50V F	DK98473300
R819	N	4822 051 30152	1.5k Ω ±5% 1/16W	NN05152610	CF23		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
R820	N	4822 051 30479	47 Ω ±5% 1/16W	NN05470610					
R821	N	4822 051 30399	39 Ω ±5% 1/16W	NN05390610	RF01		4822 051 30471	470 Ω ±5% 1/16W	NN05471610
R822	N	4822 051 30339	33 Ω ±5% 1/16W	NN05330610	RF02				
R823	N	4822 051 30399	39 Ω ±5% 1/16W	NN05390610	}		4822 051 30102	1k Ω ±5% 1/16W	NN05102610
R824	N	4822 051 30339	33 Ω ±5% 1/16W	NN05330610	RF06				
R827	N	4822 116 83207	1.2k Ω ±5% 1/16W	NN05122610	RF10				
R828	N	4822 051 30103	10k Ω ±5% 1/16W	NN05103610	RF15		4822 051 30101	100 Ω ±5% 1/16W	NN05101610
R831	N	4822 051 30399	39 Ω ±5% 1/16W	NN05390610	RF17		4822 051 30331	330 Ω ±5% 1/16W	NN05331610
R832	N	4822 051 30339	33 Ω ±5% 1/16W	NN05330610	RF19		4822 051 30103	10k Ω ±5% 1/16W	NN05103610
R833	N	4822 116 82487	0 Ω ±5% 1/16W	NN05000610	RF20		4822 051 30101	100 Ω ±5% 1/16W	NN05101610
R834	N	4822 051 30399	39 Ω ±5% 1/16W	NN05390610	RF21		4822 051 30103	10k Ω ±5% 1/16W	NN05103610
R835	N	4822 051 30339	33 Ω ±5% 1/16W	NN05330610	RF22		4822 051 30101	100 Ω ±5% 1/16W	NN05101610
R836	N	4822 116 82487	0 Ω ±5% 1/16W	NN05000610	RF23		4822 051 30103	10k Ω ±5% 1/16W	NN05103610
R950	N	4822 051 30221	220 Ω ±5% 1/16W	NN05221610	RF25		4822 051 30473	47k Ω ±5% 1/16W	NN05473610
R951	N	4822 051 30221	220 Ω ±5% 1/16W	NN05221610	RF26		4822 116 82487	0 Ω ±5% 1/16W	NN05000610
R952	N	4822 116 82487	0 Ω ±5% 1/16W	NN05000610	RF27		4822 051 30472	4.7k Ω ±5% 1/16W	NN05472610
					RF29		4822 051 30101	100 Ω ±5% 1/16W	NN05101610
			PC01-SEMICONDUCTORS						
D802	N	9965 000 07632	CHIP DIODE ZENER MA8056L 5.6V	HZ30007020	RF31		4822 116 82487	0 Ω ±5% 1/16W	NN05000610
D803	N	9965 000 07632	CHIP DIODE ZENER MA8056L 5.6V	HZ30007020	RF32		4822 116 82487	0 Ω ±5% 1/16W	NN05000610
Q801	N	4822 130 60669	CHIP TRS. 2SC4081(Q R)	HX300012A0	RF33	C		12k Ω ±5% 1/16W	NN05123610
Q802	N	4822 130 60669	CHIP TRS. 2SC4081(Q R)	HX300012A0	RF33	N	4822 116 82487	0 Ω ±5% 1/16W	NN05000610
Q803	N	4822 130 60669	CHIP TRS. 2SC4081(Q R)	HX300012A0	RF35	C	4822 051 30103	10k Ω ±5% 1/16W	NN05103610
					RF36		4822 051 30103	10k Ω ±5% 1/16W	NN05103610
					RF37		4822 051 30103	10k Ω ±5% 1/16W	NN05103610
					RF38		4822 116 82487	0 Ω ±5% 1/16W	NN05000610
					RF39		4822 051 30563	56k Ω ±5% 1/16W	NN05563610
					RF40		4822 116 83819	18k Ω ±5% 1/16W	NN05183610
					RF41		4822 051 30103	10k Ω ±5% 1/16W	NN05103610
					RF42		4822 116 83215	5.6k Ω ±5% 1/16W	NN05562610

NOTE : *nsp* PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
RF43		4822 051 30223	22k Ω ±5% 1/16W	NN05223610				PF03-SEMICONDUCTORS L.E.D. SML-020MVT	
RF44		4822 116 83819	18k Ω ±5% 1/16W	NN05183610	DF06		4822 130 70023		HI10096210
RF45		4822 051 30103	10k Ω ±5% 1/16W	NN05103610					
RF46		4822 116 83215	5.6k Ω ±5% 1/16W	NN05562610	QF11		9965 000 01659	SEMICON.COMP DTC114TE	BA20066210
RF47		4822 051 30223	22k Ω ±5% 1/16W	NN05223610	QF12		9965 000 01659	SEMICON.COMP DTC114TE	BA20066210
RF48		4822 051 30563	56k Ω ±5% 1/16W	NN05563610				PF03-MISCELLANEOUS PUSH SWITCH SKQNAE	
RF49		4822 051 30333	33k Ω ±5% 1/16W	NN05333610	SF11		4822 276 14009		SP01013310
RF50		4822 051 30223	22k Ω ±5% 1/16W	NN05223610				PF04-RC LEFT CIRCUIT BOARD PF04-CAPACITORS	
RF51		4822 051 30103	10k Ω ±5% 1/16W	NN05103610	CF24		4822 126 11687		CER 0.1μF +80 -20% 25V
RF52		4822 051 30103	10k Ω ±5% 1/16W	NN05103610	CF25		4822 124 21894	ELECT 10μF 16V	EJ10601610
RF53		4822 051 30473	47k Ω ±5% 1/16W	NN05473610				PF04-RESISTORS CHIP	
RF54		4822 051 30101	100 Ω ±5% 1/16W	NN05101610	RF61		4822 051 30101		100 Ω ±5% 1/16W
RF58		4822 116 82487	0 Ω ±5% 1/16W	NN05000610	RF62		4822 051 30101	100 Ω ±% 1/16W	NN05101610
RF65								PF04-SEMICONDUCTOR PHOTO UNIT RPM6936-V4	
RF78		4822 051 30105	1M Ω ±5% 1/16W	NN05105610	QF13		4822 130 11494		HW10004210
RF80		4822 051 30103	10k Ω ±5% 1/16W	NN05103610				PF05-RC CENTER CIRCUIT BOARD PF05-CAPACITORS	
RF82		4822 051 30103	10k Ω ±5% 1/16W	NN05103610	CF26		4822 126 11687		CER 0.1μF +80 -20% 25V
RF83		4822 051 30103	10k Ω ±5% 1/16W	NN05103610	CF27		4822 124 21894	ELECT 10μF 16V	EJ10601610
RF85		4822 051 30102	1k Ω ±5% 1/16W	NN05102610				PF05-RESISTORS CHIP	
RF86		4822 051 30102	1k Ω ±5% 1/16W	NN05102610	RF63		4822 051 30101		100 Ω ±5% 1/16W
RF87		4822 051 30102	1k Ω ±5% 1/16W	NN05102610	RF64		4822 051 30101	100 Ω ±% 1/16W	NN05101610
DF01		4822 130 83715	PF01-SEMICONDUCTORS CHIP DIODE 1SS301 DAN202U	HZ21005000	QF14		4822 130 11515	PHOTO UNIT RPM6936	HW10005210
DF02		9965 000 08222	L.E.D. NSCW100	HI10002980				PF05-SEMICONDUCTOR PHOTO UNIT RPM6936	
DF05					CV01		4822 124 22571		ELECT 10μF M 50V
QF01		9965 000 08223	IC NJU6450A	HC10215090	CV02		4822 124 22571	ELECT 10μF M 50V	OA10605020
QF02		9965 000 08358	IC PROGRAMMED MICROPROCESSOR	*HU100470R	CV06		4822 126 11687	CER. 0.1μF +80 -20% 25V F	DK98104200
QF04		5322 209 13487	IC TC7W14FU	HC10442050	CV09		4822 124 90354	ELECT 100μF M 16V	OA10701620
QF05		9965 000 08235	IC AT24C04N-10SI-2.5	HC10033990	CV10		4822 124 90354	ELECT 100μF M 16V	OA10701620
QF06		4822 130 61903	SEMICON.COMP DTA114EUA	BA10026210	CV11		4822 124 90354	ELECT 100μF M 16V	OA10701620
QF07		4822 130 10698	CHIP TRS. 2SA1586(Y GR) 2SA1576A(Q R)	HX100012A0	CV12		4822 126 11687	CER. 0.1μF +80 -20% 25V F	DK98104200
QF08		4822 209 15921	IC S-806D-Z RESET IC	HC10077530	CV13		4822 126 11687	CER. 0.1μF +80 -20% 25V F	DK98104200
QF09		9965 000 08224	SEMICON.COMP DTC323TU	BA20080210	CV14		4822 124 90354	ELECT 100μF M 16V	OA10701620
QF10		9965 000 08224	SEMICON.COMP DTC323TU	BA20080210	CV15		4822 126 11687	CER. 0.1μF +80 -20% 25V F	DK98104200
QF15		4822 130 61903	SEMICON.COMP DTA114EUA	BA10026210	CV16		4822 124 90371	ELECT 470μF M 10V	OA47701020
QF16		4822 130 61903	SEMICON.COMP DTA114EUA	BA10026210	CV18		4822 124 90371	ELECT 470μF M 10V	OA47701020
FF01		4822 157 11499	PF01-MISCELLANEOUS BLM11P600SPT	FN31010060	CV20		4822 126 11687	CER. 0.1μF +80 -20% 25V F	DK98104200
FF02		4822 157 11499	BLM11P600SPT	FN31010060	CV22	C	4822 124 90371	ELECT 470μF M 10V	OA47701020
JF01		9965 000 08356	JACK 10FMN-STK	YJ07026140	CV24	C	4822 124 90371	ELECT 470μF M 10V	OA47701020
JF03		9965 000 08357	JACK 15FMN-BTK	YJ07026120	CV26	C	4822 124 90371	ELECT 470μF M 10V	OA47701020
SF01		4822 276 14009	PUSH SWITCH SKQNAE	SP01013310	CV30		4822 126 11759	CER. 100pF ±5 % 50V	DD95101300
SF08		9965 000 08359	SLIDE SWITCH SSSS822101	SS02021660	CV31		4822 126 11759	CER. 100pF ±5 % 50V	DD95101300
SF09					CV32		4822 126 11687	CER. 0.1μF +80 -20% 25V F	DK98104200
VF01		9965 000 08225	DISPLAY UNIT HLC7599-016600	HQ21202800	CV41		4822 126 11687	CER. 0.1μF +80 -20% 25V F	DK98104200
XF01		9965 000 08360	CERAMIC VIB. CST0800MG6 8MHz ±5%	FQ08004080	CV44				
SF10		4822 276 14009	PF02-DOOR CIRCUIT BOARD PUSH SWITCH SKQNAE	SP01013310	C111		4822 126 11703	CER. 0.01μF +80 -20% 50V F	DK98103300
RF59		4822 051 30221	220 Ω ±5% 1/16W	NN05221610	C112		4822 126 11687	CER. 0.1μF +80 -20% 25V F	DK98104200
RF60		4822 051 30181	180 Ω ±5% 1/16W	NN05181610	C113		4822 122 33777	CER. 47pF ±5% 50V	DD95470300
					C114		4822 126 11685	CER. 4700pF ±10% B 50V	DK96472300
					C115		4822 126 11704	CER. 0.022μF +80 -20% 50V F	DK98223300
					C121		4822 124 41539	ELECT 47μF M 16V	OA47601620
					C133		9965 000 08352	CER. 0.1μF +80 -20% 50V F	DK98104300
					C201		4822 124 23052	ELECT 100μF 16V	EJ10701610

NOTE : *nsp* PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
C202		4822 124 23052	ELECT 100µF 16V	EJ10701610	C501		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C203		4822 126 13883	CER. 220pF ±5% 50V	DD95221300	C502		4822 124 90353	ELECT 100µF M 10V	OA10701020
C204		4822 126 13883	CER. 220pF ±5% 50V	DD95221300	C503		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C205		4822 126 11671	CER. 33pF ±5% 50V	DD95330300	C504		4822 122 33761	CER. 22pF ±5% 50V	DD95220300
C206		4822 126 11671	CER. 33pF ±5% 50V	DD95330300	C505		4822 122 33761	CER. 22pF ±5% 50V	DD95220300
C207		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	C506		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C209		4822 124 22571	ELECT 10µF M 50V	OA10605020	C507		4822 124 90353	ELECT 100µF M 10V	OA10701020
C210		4822 124 22571	ELECT 10µF M 50V	OA10605020	C508		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C213		4822 126 11759	CER. 100pF ±5% 50V	DD95101300	C509		4822 121 42327	FILM 470pF J M 50V	DF15471350
C214		4822 126 11759	CER. 100pF ±5% 50V	DD95101300	C510		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C221		4822 124 41539	ELECT 47µF M 16V	OA47601620	C511		4822 124 90353	ELECT 100µF M 10V	OA10701020
C222		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	C512		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C223		4822 124 41539	ELECT 47µF M 16V	OA47601620	C513		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C224		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	C514		4822 124 90353	ELECT 100µF M 10V	OA10701020
C225		9965 000 08352	CER. 0.1µF +80 -20% 50V F	DK98104300	C515		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C251		4822 124 23052	ELECT 100µF 16V	EJ10701610	C516		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C252		4822 124 23052	ELECT 100µF 16V	EJ10701610	C517		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C253		4822 126 13883	CER. 220pF ±5% 50V	DD95221300	C518		4822 124 90353	ELECT 100µF M 10V	OA10701020
C255		4822 126 11671	CER. 33pF ±5% 50V	DD95330300	C519		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C256		9965 000 01912	CER. 0.047µF +80 -20% 50V F	DK98473300	C520		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C257		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	C521		4822 124 90353	ELECT 100µF M 10V	OA10701020
C259		4822 124 22571	ELECT 10µF M 50V	OA10605020	C522		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C260		4822 124 90354	ELECT 100µF M 16V	OA10701620	∫		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C263		4822 126 11759	CER. 100pF ±5% 50V	DD95101300	C525		4822 124 90353	ELECT 100µF M 10V	OA10701020
C264		4822 126 11759	CER. 100pF ±5% 50V	DD95101300	C526		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C265		9965 000 08352	CER. 0.1µF +80 -20% 50V F	DK98104300	C527		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C301					C528		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
∫		4822 124 90354	ELECT 100µF M 16V	OA10701620	C529		4822 124 90353	ELECT 100µF M 10V	OA10701020
C304					C530		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C305		4822 122 33785	CER. 680µF J 50V	DD95680300	C531		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C306		4822 122 33785	CER. 680µF J 50V	DD95680300	C532		4822 124 90353	ELECT 100µF M 10V	OA10701020
C307		4822 126 11671	CER. 33pF ±5% 50V	DD95330300	C533		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C308		4822 126 11671	CER. 33pF ±5% 50V	DD95330300	C551		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C309		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	C552		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C310		4822 124 23056	ELECT 47µF 16V	EJ47601610	C601		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C311		4822 126 11671	CER. 33pF ±5% 50V	DD95330300	C602		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C312		4822 126 11671	CER. 33pF ±5% 50V	DD95330300	C603		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200
C313		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	C604		4822 124 90354	ELECT 100µF M 16V	OA10701620
C314		4822 124 23052	ELECT 100µF 16V	EJ10701610					
C315		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	RV04		4822 051 30221	CHIP 220 Ω ±5% 1/16W	NN05221610
C316		4822 124 23056	ELECT 47µF 16V	EJ47601610	RV05		4822 051 30221	CHIP 220 Ω ±5% 1/16W	NN05221610
C317		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	RV06	C	4822 116 82487	CHIP 0 Ω ±5% 1/16W	NN05000610
C319		4822 124 90354	ELECT 100µF M 16V	OA10701620	RV07	N	4822 116 82487	CHIP 0 Ω ±5% 1/16W	NN05000610
C320		4822 124 90354	ELECT 100µF M 16V	OA10701620	RV08				
C323		4822 126 11759	CER. 100pF ±5% 50V	DD95101300	∫		4822 051 30339	CHIP 33 Ω ±5% 1/16W	NN05330610
C324		4822 126 11759	CER. 100pF ±5% 50V	DD95101300	RV11				
C326		9965 000 08352	CER. 0.1µF +80 -20% 50V F	DK98104300	RV12		4822 051 30103	CHIP 10k Ω ±5% 1/16W	NN05103610
C351		4822 126 11759	CER. 100pF ±5% 50V	DD95101300	RV13		4822 051 30339	CHIP 33 Ω ±5% 1/16W	NN05330610
C352		4822 126 11759	CER. 100pF ±5% 50V	DD95101300	RV14		4822 051 30339	CHIP 33 Ω ±5% 1/16W	NN05330610
C357		9965 000 08352	CER. 0.1µF +80 -20% 50V F	DK98104300	RV15				
C359		9965 000 08352	CER. 0.1µF +80 -20% 50V F	DK98104300	∫	C	4822 051 30339	CHIP 33 Ω ±5% 1/16W	NN05330610
C391		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	RV18				
C394		4822 124 90364	ELECT 220µF M 16V	OA22701620	RV20	C	4822 051 30339	CHIP 33 Ω ±5% 1/16W	NN05330610
C395		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	RV21	C	4822 051 30339	CHIP 33 Ω ±5% 1/16W	NN05330610
C401		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	RV22	C	4822 116 82487	CHIP 0 Ω ±5% 1/16W	NN05000610
C402		4822 124 90353	ELECT 100µF M 10V	OA10701020	RV23	C	4822 116 82487	CHIP 0 Ω ±5% 1/16W	NN05000610
C403		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	RV24	N	4822 116 82487	CHIP 0 Ω ±5% 1/16W	NN05000610
C404		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	RV25	N	4822 116 82487	CHIP 0 Ω ±5% 1/16W	NN05000610
C405		4822 124 90353	ELECT 100µF M 10V	OA10701020	RV30		4822 051 30333	CHIP 33k Ω ±5% 1/16W	NN05333610
C406		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	RV31		4822 051 30103	CHIP 10k Ω ±5% 1/16W	NN05103610
C407		4822 124 90353	ELECT 100µF M 10V	OA10701020	RV32		4822 051 30822	CHIP 8.2k Ω ±5% 1/16W	NN05822610
C408		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	RV33		4822 051 30682	CHIP 6.8k Ω ±5% 1/16W	NN05682610
C441		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	RV34		4822 051 30103	CHIP 10k Ω ±5% 1/16W	NN05103610
C442		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	RV37		4822 116 82487	CHIP 0 Ω ±5% 1/16W	NN05000610
C451		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	RV38		4822 051 30478	CHIP 4.7 Ω ±5% 1/16W	NN05047610
C452		4822 126 11687	CER. 0.1µF +80 -20% 25V F	DK98104200	RV41		4822 116 82487	CHIP 0 Ω ±5% 1/16W	NN05000610
					RV42		4822 116 82487	CHIP 0 Ω ±5% 1/16W	NN05000610
					RV51		4822 051 30479	CHIP 47 Ω ±5% 1/16W	NN05470610
					RV52		4822 051 30479	CHIP 47 Ω ±5% 1/16W	NN05470610

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POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
RV53		4822 051 30682	CHIP 6.8k Ω \pm 5% 1/16W	NN05682610	R319				
RV54		4822 051 30682	CHIP 6.8k Ω \pm 5% 1/16W	NN05682610	}		4822 051 30151	CHIP 150 Ω \pm 5% 1/16W	NN05151610
RV55		4822 117 12968	CHIP 820 Ω \pm 5% 1/16W	NN05821610	R322				
RV56		4822 117 12968	CHIP 820 Ω \pm 5% 1/16W	NN05821610	R323		4822 051 30222	CHIP 2.2k Ω \pm 5% 1/16W	NN05222610
RV57		4822 051 30479	CHIP 47 Ω \pm 5% 1/16W	NN05470610	R324		4822 051 30222	CHIP 2.2k Ω \pm 5% 1/16W	NN05222610
RV58		4822 051 30479	CHIP 47 Ω \pm 5% 1/16W	NN05470610	R325		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610
					R326		4822 051 30102	CHIP 1k Ω \pm 5% 1/16W	NN05102610
R111		4822 051 30101	CHIP 100 Ω \pm 5% 1/16W	NN05101610	R327		4822 051 30472	CHIP 4.7k Ω \pm 5% 1/16W	NN05472610
R113		4822 051 30759	CHIP 75 Ω \pm 5% 1/16W	NN05750610	R331				
R114		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610	}		4822 051 30222	CHIP 2.2k Ω \pm 5% 1/16W	NN05222610
R115		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610	R334				
R116		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610	R351		4822 051 30104	CHIP 100k Ω \pm 5% 1/16W	NN05104610
R117		4822 051 30473	CHIP 47k Ω \pm 5% 1/16W	NN05473610	R352		4822 051 30104	CHIP 100k Ω \pm 5% 1/16W	NN05104610
R121		4822 051 30221	CHIP 220 Ω \pm 5% 1/16W	NN05221610	R353				
R201		4822 051 30153	CHIP 15k Ω \pm 5% 1/16W	NN05153610	}		4822 051 30151	CHIP 150 Ω \pm 5% 1/16W	NN05151610
R202		4822 051 30153	CHIP 15k Ω \pm 5% 1/16W	NN05153610	R356				
R203		4822 051 30103	CHIP 10k Ω \pm 5% 1/16W	NN05103610	R357		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610
R204		4822 051 30103	CHIP 10k Ω \pm 5% 1/16W	NN05103610	R358		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610
R205		4822 051 30333	CHIP 33k Ω \pm 5% 1/16W	NN05333610	R359				
R206		4822 051 30333	CHIP 33k Ω \pm 5% 1/16W	NN05333610	}		4822 051 30222	CHIP 2.2k Ω \pm 5% 1/16W	NN05222610
R207		4822 051 30104	CHIP 100k Ω \pm 5% 1/16W	NN05104610	R362				
R208		4822 051 30104	CHIP 100k Ω \pm 5% 1/16W	NN05104610	R363		4822 051 30102	CHIP 1k Ω \pm 5% 1/16W	NN05102610
R209					R364		4822 051 30102	CHIP 1k Ω \pm 5% 1/16W	NN05102610
}		4822 051 30151	CHIP 150 Ω \pm 5% 1/16W	NN05151610	R365		4822 116 83207	CHIP 1.2k Ω \pm 5% 1/16W	NN05122610
R212					R366		4822 051 30472	CHIP 4.7k Ω \pm 5% 1/16W	NN05472610
R213		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610	R367		4822 051 30222	CHIP 2.2k Ω \pm 5% 1/16W	NN05222610
R221		4822 051 30473	CHIP 47k Ω \pm 5% 1/16W	NN05473610	R368		4822 051 30222	CHIP 2.2k Ω \pm 5% 1/16W	NN05222610
R231		4822 051 30222	CHIP 2.2k Ω \pm 5% 1/16W	NN05222610	R369		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610
R232		4822 051 30222	CHIP 2.2k Ω \pm 5% 1/16W	NN05222610	R370	N	4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610
R233		4822 051 30103	CHIP 10k Ω \pm 5% 1/16W	NN05103610	R392		4822 051 30474	CHIP 470k Ω \pm 5% 1/16W	NN05474610
R235		4822 051 30103	CHIP 10k Ω \pm 5% 1/16W	NN05103610	R393		4822 051 30104	CHIP 100k Ω \pm 5% 1/16W	NN05104610
R236		4822 051 30102	CHIP 1k Ω \pm 5% 1/16W	NN05102610	R394		4822 051 30474	CHIP 470k Ω \pm 5% 1/16W	NN05474610
R237		4822 051 30103	CHIP 10k Ω \pm 5% 1/16W	NN05103610	R395		4822 051 30473	CHIP 47k Ω \pm 5% 1/16W	NN05473610
					R396				
R251		4822 051 30153	CHIP 15k Ω \pm 5% 1/16W	NN05153610	}		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610
R252		4822 117 12968	CHIP 820 Ω \pm 5% 1/16W	NN05821610	R399				
R253		4822 051 30103	CHIP 10k Ω \pm 5% 1/16W	NN05103610	R401				
R254		4822 051 30222	CHIP 2.2k Ω \pm 5% 1/16W	NN05222610	}		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610
R255		4822 051 30333	CHIP 33k Ω \pm 5% 1/16W	NN05333610	R411				
R256		4822 051 30682	CHIP 6.8k Ω \pm 5% 1/16W	NN05682610	R504		4822 051 30105	CHIP 1M Ω \pm 5% 1/16W	NN05105610
R257		4822 051 30104	CHIP 100k Ω \pm 5% 1/16W	NN05104610	R505		4822 051 30103	CHIP 10k Ω \pm 5% 1/16W	NN05103610
R258		4822 051 30104	CHIP 100k Ω \pm 5% 1/16W	NN05104610	R506				
R259					}		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610
}		4822 051 30151	CHIP 150 Ω \pm 5% 1/16W	NN05151610	R512				
R262					R519		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610
R263		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610	R520		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610
R265		4822 051 30222	CHIP 2.2k Ω \pm 5% 1/16W	NN05222610	R521		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610
R266		4822 051 30222	CHIP 2.2k Ω \pm 5% 1/16W	NN05222610	R601				
R267		4822 051 30222	CHIP 2.2k Ω \pm 5% 1/16W	NN05222610	}		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610
R281		4822 051 30222	CHIP 2.2k Ω \pm 5% 1/16W	NN05222610	R605				
R282		4822 051 30102	CHIP 1k Ω \pm 5% 1/16W	NN05102610	R606		4822 051 30101	CHIP 100 Ω \pm 5% 1/16W	NN05101610
R286		4822 051 30222	CHIP 2.2k Ω \pm 5% 1/16W	NN05222610	R607		4822 051 30101	CHIP 100 Ω \pm 5% 1/16W	NN05101610
R287		4822 051 30103	CHIP 10k Ω \pm 5% 1/16W	NN05103610	R608		4822 051 30101	CHIP 100 Ω \pm 5% 1/16W	NN05101610
R288		4822 051 30473	CHIP 47k Ω \pm 5% 1/16W	NN05473610	R609				
R289		4822 051 30474	CHIP 470k Ω \pm 5% 1/16W	NN05474610	}		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610
R290		4822 051 30474	CHIP 470k Ω \pm 5% 1/16W	NN05474610	R618				
R301					R619		4822 051 30101	CHIP 100 Ω \pm 5% 1/16W	NN05101610
}		4822 051 30223	CHIP 22k Ω \pm 5% 1/16W	NN05223610	R620		4822 051 30101	CHIP 100 Ω \pm 5% 1/16W	NN05101610
R308					R621		4822 051 30101	CHIP 100 Ω \pm 5% 1/16W	NN05101610
R309		4822 051 30473	CHIP 47k Ω \pm 5% 1/16W	NN05473610	R622		4822 157 11808	FERRITE CORE BLM11B601S	FC90020110
R310		4822 051 30473	CHIP 47k Ω \pm 5% 1/16W	NN05473610	R623		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610
R311		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610					
R313		4822 051 30473	CHIP 47k Ω \pm 5% 1/16W	NN05473610					
R314		4822 051 30473	CHIP 47k Ω \pm 5% 1/16W	NN05473610					
R315		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610					
R316		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610					
R317		4822 051 30473	CHIP 47k Ω \pm 5% 1/16W	NN05473610					
								PJ01-SEMICONDUCTORS	
					D110		4822 130 83715	CHIP DIODE 1SS301 DAN202U	HZ21005000
					D231		4822 130 83715	CHIP DIODE 1SS301 DAN202U	HZ21005000
					D232		4822 130 83715	CHIP DIODE 1SS301 DAN202U	HZ21005000
					D282		4822 130 83715	CHIP DIODE 1SS301 DAN202U	HZ21005000
					D302		4822 130 83715	CHIP DIODE 1SS301 DAN202U	HZ21005000
					D351		4822 130 83715	CHIP DIODE 1SS301 DAN202U	HZ21005000

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POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
D352		4822 130 83715	CHIP DIODE 1SS301 DAN202U	HZ21005000	J101		4822 265 10328	TERMINAL RCA JACK 1P	YT02010780
D353		4822 130 83715	CHIP DIODE 1SS301 DAN202U	HZ21005000	J102		4822 267 31369	OPT. CONNECTOR GP1F32T OUTPUT	YJ15000090
QV04		9965 000 08371	IC LA7138M	HC10406030	J103		4822 267 41009	TERMINAL RCA JACK 2P ORG	YT02020890
QV05		4822 130 61311	CHIP TRS. 2SA1162 0 Y	HX111622A0	J105		9965 000 08353	JACK 04FMN-BMTTN-TFT	YJ07014100
QV06		4822 111 92186	SEMICON.COMP HN1C01F G	BA20015050	J201		4822 265 10681	TERMINAL RCA JACK 6P	YT02060540
QV07		4822 111 92186	SEMICON.COMP HN1C01F G	BA20015050	J301		4822 290 81639	TERMINAL RCA JACK 4P	YT02041040
Q111		4822 209 31568	IC CMOS 74HCU04	HC700400Z0	J601		9965 000 08354	JACK 29FMN-BMTTN-TFT	YJ07014350
Q201		4822 209 17155	IC NJM2068	HC10102090	LV01		4822 157 60445	CHOKE COIL 15μH J%	LC11533900
Q221		4822 209 17155	IC NJM2068	HC10102090	L111		4822 142 60422	PULSE TRANSF.	TP41042030
Q231		4822 130 63601	CHIP TRS 2SC4213	HX342132A0	L351		9965 000 01343	RELAY MR62-12USR	LY20120510
Q232		4822 130 63601	CHIP TRS. 2SC4213	HX342132A0	SV01		9965 000 08372	SLIDE SWITCH SSSF114800	SS01030410
Q233		4822 130 61553	SEMICON.COMP DTC124EUA	BA21303000	SV02	C	9965 000 08230	SLIDE SWITCH SSSF12-S06N0	SS01021010
Q234		4822 130 10698	CHIP TRS. 2SA1576A	HX100012A0	S131			SLIDE SWITCH SSSF141700	SS04030350
Q251		4822 209 17155	IC NJM2068	HC10102090	X501		4822 242 10851	CRYSTAL 12.288MHz	JX12013260
Q281		4822 130 63601	CHIP TRS. 2SC4213	HX342132A0				PS01-POWER SUPPLY CIRCUIT BOARD	
Q282		4822 130 63601	CHIP TRS. 2SC4213	HX342132A0				PS01-CAPACITORS	
Q283		4822 130 61553	SEMICON.COMP DTC124EUA	BA21303000	CD01		4822 126 11687	CER. 0.1μF +80 -20% 25V F	DK98104200
Q284		4822 130 10698	CHIP TRS. 2SA1576A	HX100012A0	CD02		4822 126 11703	CER. 0.01μF +80 -20% 50V F	DK98103300
Q301		4822 209 91175	IC NJM2114M	HC10175090	CD03		4822 126 11703	CER. 0.01μF +80 -20% 50V F	DK98103300
Q302		4822 209 17155	IC NJM2068	HC10102090	CD04		4822 126 11703	CER. 0.01μF +80 -20% 50V F	DK98103300
Q303		4822 130 63601	CHIP TRS. 2SC4213	HX342132A0	CD05		4822 124 90364	ELECT 220μF M 16V	OA22701620
Q304		4822 130 63601	CHIP TRS. 2SC4213	HX342132A0	▲ CP01		9965 000 04979	FILM 0.1μF AC 250V	DF17104630
Q305		4822 130 61553	SEMICON.COMP DTC124EUA	BA21303000	▲ CP02		9965 000 04979	FILM 0.1μF AC 250V	DF17104630
Q306		4822 130 10698	CHIP TRS. 2SA1576A	HX100012A0	▲ CP03		9965 000 07801	CER. 220pF 250V	DK17221520
Q351		4822 130 63601	CHIP TRS. 2SC4213	HX342132A0	▲ CP04		9965 000 07801	CER. 220pF 250V	DK17221520
Q354		4822 130 61553	SEMICON.COMP DTC124EUA	BA21303000	CP05		9965 000 04981	ELECT 120μF 400V	EA12740070
Q355		4822 130 10698	CHIP TRS. 2SA1576A	HX100012A0	CP06		4822 126 13091	FILM 0.047μF 250V	DF16473640
Q356		4822 130 10698	CHIP TRS. 2SA1576A	HX100012A0	CP08		9965 000 04982	CER. 150pF 2KV	DK16151910
Q357		4822 130 63601	CHIP TRS. 2SC4213	HX342132A0	CP09		4822 121 42327	FILM 470pF J M 50V	DF15471350
Q358		4822 130 63601	CHIP TRS. 2SC4213	HX342132A0	▲ CP10		9965 000 07801	CER. 220pF 250V	DK17221520
Q359		9965 000 08224	SEMICON.COMP DTC323TU	BA20080210	CP11		4822 124 90355	ELECT 100μF M 50V	OA10705020
Q360		4822 130 61553	SEMICON.COMP DTC124EUA	BA21303000	CP16		4822 124 90371	ELECT 470μF M 10V	OA47701020
▲ Q391		9965 000 08355	IC UPC29M10HB +10V 0.5A	HC36510060	CP17		9965 000 04984	ELECT 1000μF M 10V	OA10801020
Q401		9965 000 00449	IC UDA1328T/S1	HC10178490	CP18		9965 000 01318	ELECT 220μF M 10V	OA22701020
Q441		9965 000 04633	IC TC74VHC157FT	HC005805K0	CP19		9965 000 04984	ELECT 1000μF M 10V	OA10801020
Q451		9965 000 04633	IC TC74VHC157FT	HC005805K0	CP20		9965 000 01318	ELECT 220μF M 10V	OA22701020
Q501		9965 000 01321	IC YSS912C-F	HC10014640	CP21		4822 124 22722	ELECT 1000μF M 16V	OA10801620
Q502		9965 000 02109	IC TC7W53FU	HC007105K0	CP22		4822 124 40723	ELECT 2200μF M 16V	OA22801620
Q503		4822 209 90911	IC TC7W08FU	HC10415050	CP23		9965 000 04984	ELECT 1000μF M 10V	OA10801020
Q551		9965 000 04633	IC TC74VHC157FT	HC005805K0	CP24		4822 124 90364	ELECT 220μF M 16V	OA22701620
			PJ01-MISCELLANEOUS		CP25		4822 124 40723	ELECT 2200μF M 16V	OA22801620
FV01		9965 000 04998	EMI FILTER NFM41R01C221	FM31221020	CP26		4822 124 90351	ELECT 0.1μF M 50V	OA10405020
FV02		9965 000 04998	EMI FILTER NFM41R01C221	FM31221020	CP27		4822 124 90352	ELECT 10μF M 16V	OA10601620
FV03		9965 000 04998	EMI FILTER NFM41R01C221	FM31221020	CP28		4822 124 90365	ELECT 220μF M 25V	OA22702520
FV04	C	9965 000 04998	EMI FILTER NFM41R01C221	FM31221020	CP29		4822 124 22722	ELECT 1000μF M 16V	OA10801620
FV05	C	9965 000 04998	EMI FILTER NFM41R01C221	FM31221020	CP30		4822 124 22722	ELECT 1000μF M 16V	OA10801620
FV06	C	9965 000 04998	EMI FILTER NFM41R01C221	FM31221020				PS01-CAPACITORS(COMMON) PLASTIC FILM CAPACITOR ±5% 50V : CP14	
F111		4822 157 11808	FERRITE CORE BLM11B601S	FC90020110				PS01-RESISTORS	
F401		4822 157 11499	BLM11P600SPT	FN31010060	RD01		4822 051 30221	CHIP 220 Ω ±5% 1/16W	NN05221610
F402		4822 157 11499	BLM11P600SPT	FN31010060	RD02		4822 051 30272	CHIP 2.7k Ω ±5% 1/16W	NN05272610
F441		4822 157 11499	BLM11P600SPT	FN31010060	▲ RD03		4822 050 24708	4.7 Ω ±5% 1/2W	GG05047120
F451		4822 157 11499	BLM11P600SPT	FN31010060	RD04		9965 000 08362	CHIP 430 Ω ±5% 1/16W	NN05431610
F501		4822 157 11499	BLM11P600SPT	FN31010060	▲ RP01		9965 000 00502	1M Ω ±5% 1W	RC05105010
F511		4822 157 11499	BLM11P600SPT	FN31010060	RP02		4822 053 11823	METAL 82k Ω ±5% 2W	NK05823020
F551		4822 157 11499	BLM11P600SPT	FN31010060	RP07		4822 053 11823	METAL 82k Ω ±5% 2W	NK05823020
JV01		9965 000 08368	JACK 15P FMN-BMTTN-TP	YJ07014210	RP08		4822 053 11823	METAL 82k Ω ±5% 2W	NK05823020
JV02		9965 000 08369	TERMINAL YKC22-0535	BY04020020					
JV03	C		TERMINAL RCA JACK 3P	YT02030630					
JV05	N	9965 000 08370	JACK 7P FMN-BMTTN -TD	YJ07014130					
JV06	N	9965 000 08365	JACK 19FMN-BMTTN-TFT	YJ07014250					

NOTE : "nsp" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (PCS)	DESCRIPTION	PART NO. (MJI)
RP09		4822 116 83207	CHIP 1.2k Ω \pm 5% 1/16W	NN05122610	▲ QP08		9965 000 04991	IC SI-3050C +5.0V 1.5A WITH SW	HC10006080
RP10		4822 116 83207	CHIP 1.2k Ω \pm 5% 1/16W	NN05122610	QP09		4822 130 62548	TRS. 2SB1185(E F)	HT211852B0
RP11		9965 000 00402	METAL 0.47 Ω \pm 5% 2W	NL05472020	QP10		4822 130 61906	SEMICON.COMP DTC114EU	BA20035210
RP14		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610	QP11		4822 130 62548	TRS. 2SB1185(E F)	HT211852B0
RP18		4822 051 30682	CHIP 6.8k Ω \pm 5% 1/16W	NN05682610	QP12		4822 130 61906	SEMICON.COMP DTC114EU	BA20035210
RP19		4822 051 30682	CHIP 6.8k Ω \pm 5% 1/16W	NN05682610	QP13		4822 130 60669	CHIP TRS. 2SC4116 2SC4081	HX300012A0
RP21		4822 117 12968	CHIP 820 Ω \pm 5% 1/16W	NN05821610	QP14		4822 130 60669	CHIP TRS. 2SC4116 2SC4081	HX300012A0
RP24		4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610	QP15		4822 130 60669	CHIP TRS. 2SC4116 2SC4081	HX300012A0
RP25		4822 051 30272	CHIP 2.7k Ω \pm 5% 1/16W	NN05272610	QP16		4822 130 10698	CHIP TRS. 2SA1586(Y GR) 2SA1576A(Q R)	HX100012A0
RP26		4822 051 30152	CHIP 1.5k Ω \pm 5% 1/16W	NN05152610	QP17		4822 130 61906	SEMICON.COMP DTC114EU	BA20035210
RP27		4822 051 30222	CHIP 2.2k Ω \pm 5% 1/16W	NN05222610	QP18		4822 130 62548	TRS. 2SB1185(E F)	HT211852B0
RP28		4822 051 30472	CHIP 4.7k Ω \pm 5% 1/16W	NN05472610	QP19		4822 130 61906	SEMICON.COMP DTC114EU	BA20035210
RP29		4822 051 30472	CHIP 4.7k Ω \pm 5% 1/16W	NN05472610					
RP30		4822 051 30153	CHIP 15k Ω \pm 5% 1/16W	NN05153610					
RP31		4822 051 30103	CHIP 10k Ω \pm 5% 1/16W	NN05103610					
RP32		4822 051 30472	CHIP 4.7k Ω \pm 5% 1/16W	NN05472610					
RP33		4822 051 30472	CHIP 4.7k Ω \pm 5% 1/16W	NN05472610	FP06		9965 000 05918	FUSE 0.8A 250V VDE	FS20080200
RP34		4822 116 83211	CHIP 1.8k Ω \pm 5% 1/16W	NN05182610	▲ FP07		4822 071 52501	FUSE T250MA/250V TR5 NO 19372	FS20025200
RP35		4822 116 83211	CHIP 1.8k Ω \pm 5% 1/16W	NN05182610					
RP36		4822 051 30103	CHIP 10k Ω \pm 5% 1/16W	NN05103610					
RP37		4822 051 30102	CHIP 1k Ω \pm 5% 1/16W	NN05102610	JD01		9965 000 08353	JACK 04FMN-BMTTN-TFT	YJ07014100
RP38		4822 051 30223	CHIP 22k Ω \pm 5% 1/16W	NN05223610	JP07		9965 000 08361	JACK 26FMN-BTK	YJ07026130
RP39		9965 000 03193	CHIP 3.3M Ω \pm 5% 1/16W	NN05335610					
RP40		4822 051 30473	CHIP 47k Ω \pm 5% 1/16W	NN05473610	▲ LP02		4822 157 70398	CHOKE COIL LF-4D-223 22 μ H 0.4A	LC22260130
RP41		4822 051 30223	CHIP 22k Ω \pm 5% 1/16W	NN05223610	LP03		4822 157 60445	CHOKE COIL 15 μ H J%	LC11533900
RP42		4822 051 30223	CHIP 22k Ω \pm 5% 1/16W	NN05223610					
RP43		4822 051 30103	CHIP 10k Ω \pm 5% 1/16W	NN05103610	TP01		9965 000 08363	POWER TRANSF. SW AC230V	TS12918030
RP44		4822 051 30103	CHIP 10k Ω \pm 5% 1/16W	NN05103610					
RP45		4822 051 30473	CHIP 47k Ω \pm 5% 1/16W	NN05473610					
RP46		4822 051 30103	CHIP 10k Ω \pm 5% 1/16W	NN05103610					
RP47		4822 051 30472	CHIP 4.7k Ω \pm 5% 1/16W	NN05472610	▲ FP01		4822 070 31252	FUSE 1.25 A 250V BS LISTED	FS10125850
RP48		4822 051 30472	CHIP 4.7k Ω \pm 5% 1/16W	NN05472610	▲ JP01		9965 000 08227	JACK MAINS INLET 2.5A 250V	YJ04002490
RP50		4822 051 30103	CHIP 10k Ω \pm 5% 1/16W	NN05103610	▲ SP01		9965 000 05921	PUSH SWITCH ESB92S94B TV-5	SP01012480
RP51		4822 051 30472	CHIP 4.7k Ω \pm 5% 1/16W	NN05472610					
RP54		4822 051 30103	CHIP 10k Ω \pm 5% 1/16W	NN05103610					
RP57		4822 051 30103	CHIP 10k Ω \pm 5% 1/16W	NN05103610					
			PS01-SEMICONDUCTORS						
▲ DP01		4822 130 32748	DIODE S1WB(A)60 30A 600V	HD20031290	▲ JP10	N	9965 000 08228	JACK MAINS OUTLET S2-770T-210	YJ04002500
DP02		4822 130 81244	DIODE ERA22-10	HD20008130					
DP04		4822 130 83715	CHIP DIODE 1SS301 DAN202U	HZ21005000					
DP07		4822 130 83715	CHIP DIODE 1SS301 DAN202U	HZ21005000					
DP08		9965 000 04986	CHIP DIODE U1BC44(1A)	HZ20032050					
DP09		4822 130 11074	DIODE RK46(SBD)60V 3.5A	HD20050080					
DP10		4822 130 11074	DIODE RK46(SBD)60V 3.5A	HD20050080					
DP11		9965 000 07634	DIODE EK19 90V 1.5A	HD20053080					
DP12		4822 130 11074	DIODE RK46(SBD)60V 3.5A	HD20050080					
DP13		4822 130 82019	CHIP DIODE SFPL-52 200V/0.9A	HZ20002080					
DP14		4822 130 82019	CHIP DIODE SFPL-52 200V/0.9A	HZ20002080					
DP15		4822 130 83715	CHIP DIODE 1SS301 DAN202U	HZ21005000					
DP16		4822 130 83715	CHIP DIODE 1SS301 DAN202U	HZ21005000					
DP17		9965 000 07632	CHIP DIODE ZENER MA8056L 5.6V	HZ30007020					
DP18		4822 130 82019	CHIP DIODE SFPL-52 200V/0.9A	HZ20002080					
DP20		9965 000 07634	DIODE EK19 90V 1.5A	HD20053080					
QD01		4822 209 30193	IC LB1641	HC10279030					
▲ QP01		9965 000 05142	IC STR-G6551 SW. REGULATOR	HC10008080					
▲ QP03		4822 130 10431	PHOTO UNIT COUPLER PC-123F2	HW10032320					
QP04		9965 000 06384	IC TL431CZ	HC33036590					
▲ QP07		9965 000 00399	IC SI-3033C +3.3V 1.5A WITH SW	HC36903080					

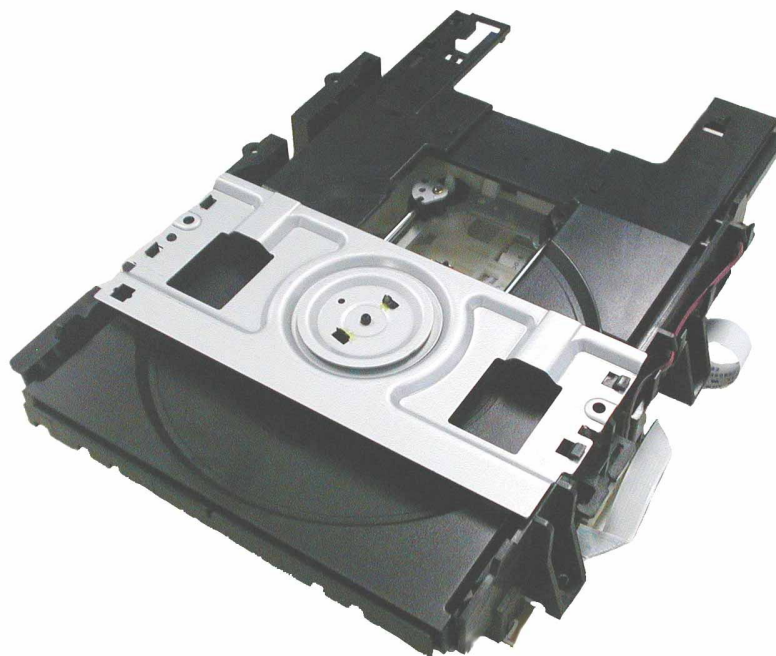
NOTE : "nsp" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

Service Manual

DB-VLD101
DB-VLD102

DVD Loader for MARANTZ

DVD Player : DV2100
DV-12S1



The DVD loader is different with each product.
Refer to the following table.

Model	Vers.
DV2100	DB-VLD101
DV-12S1	DB-VLD102

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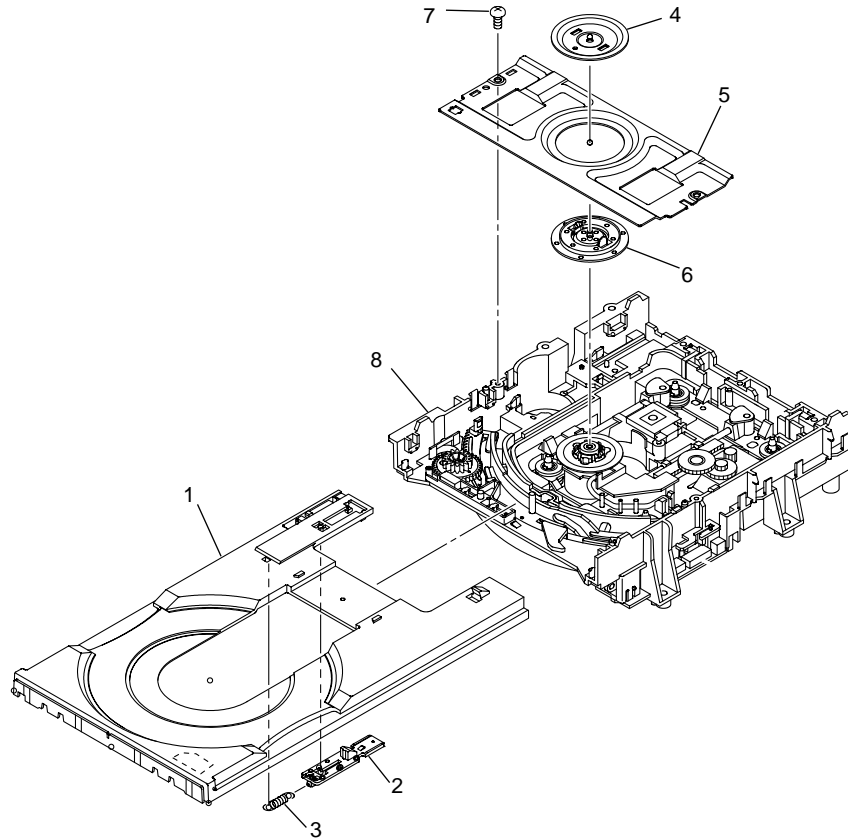
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2. DB-VLD 101/102 (DVD Loader for MARANTZ)	
2.1 EXTERIOR	2-1
2.2 LOADING MECHANISM ASS'Y	2-2
2.3 TRAVERSE MECHANISM ASS'Y	2-3

Please use this service manual with referring to the user guide (D.F.U) without fail.
修理の際は、必ず取り扱い説明書を準備し操作方法を確認の上作業を行ってください。

marantz®

DB-VLD101/102

2.1 EXTERIOR

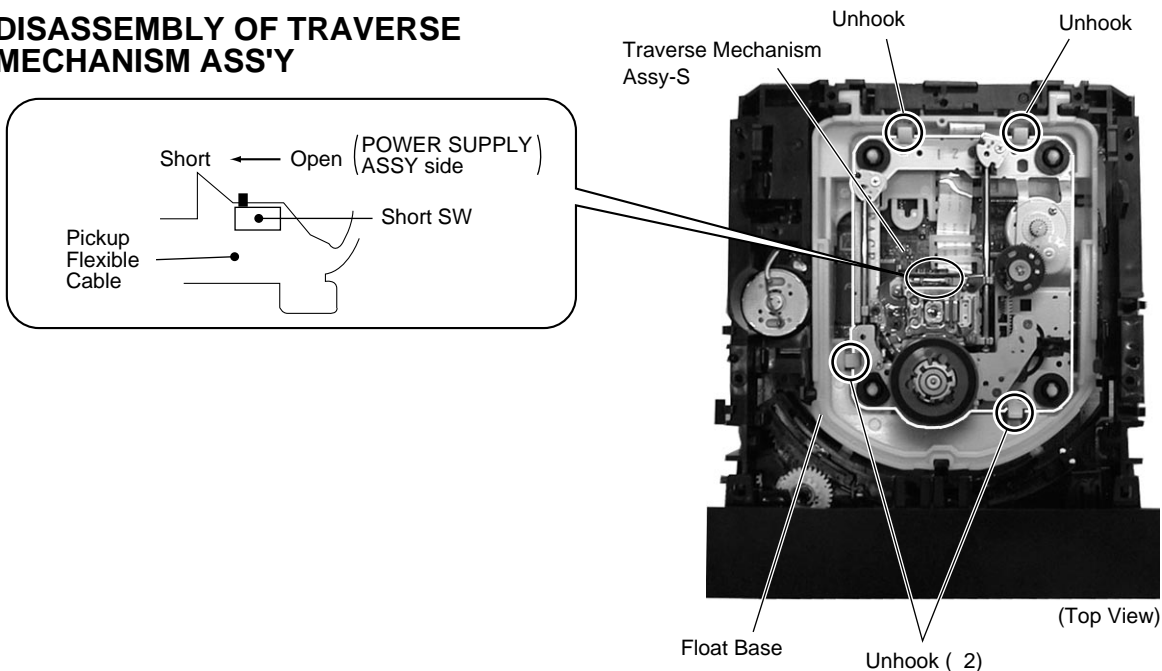


● EXTERIOR PARTS LIST

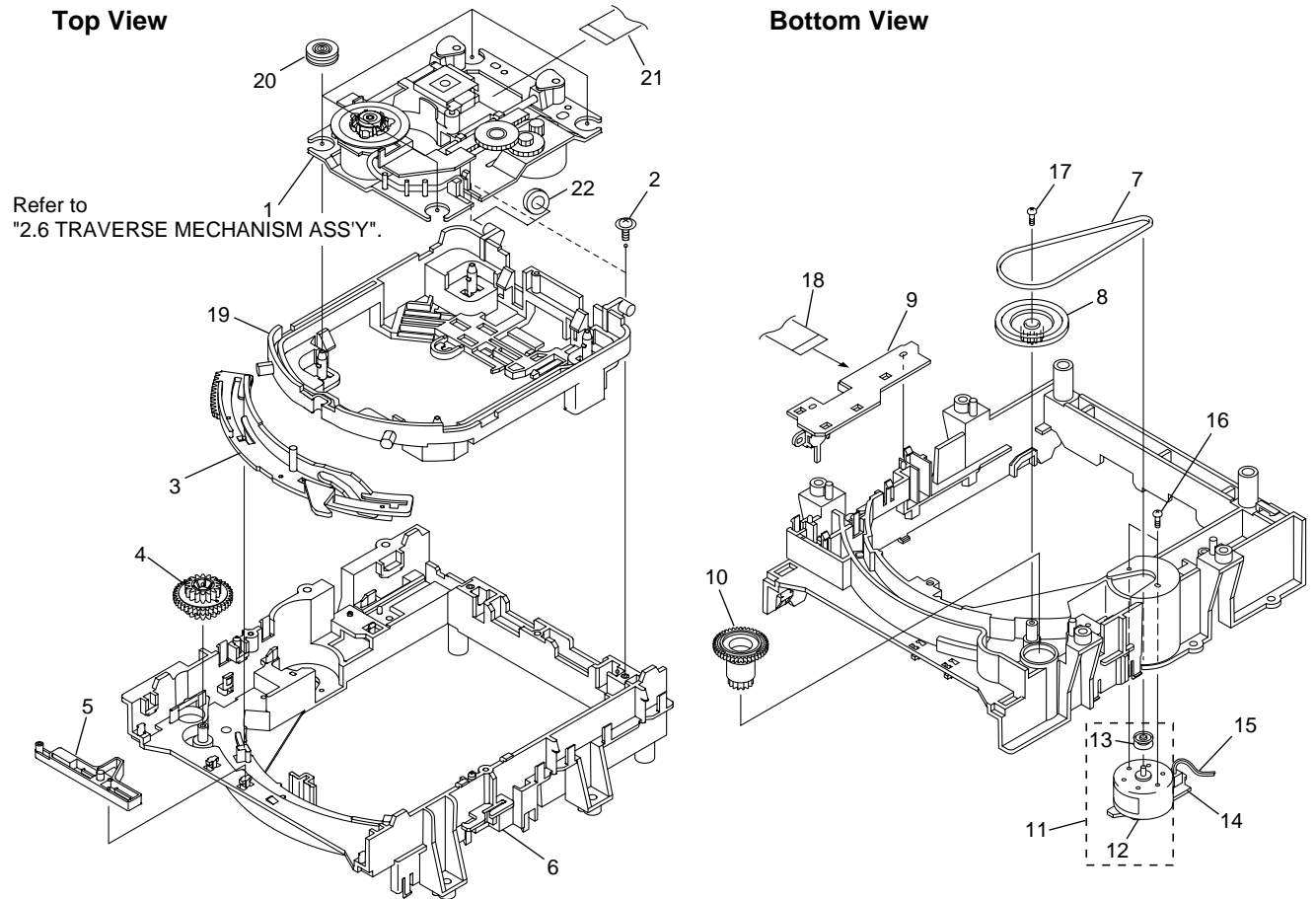
Mark	No.	Ver. (DB-VPBxxx)	Part No. (for PCS)	Description	Part No. (for MJI)
	1	101 (DV2100)	9965 000 10282	VNL1731 Tray (BLACK)	404K163110
	1	102 (DV-12S1)	---	VNK4333 Tray (GRAY)	411K163010
	2		9965 000 10283	VNL1739 Tray Stopper	404K114110
	3		9965 000 10284	VBH1277 Tray Stopper Spring	404K115110
	4		9965 000 10285	VNE2068 Clamper Plate	404K005110
	5		9965 000 10286	VNE2069 Bridge	404K104110
	6		9965 000 07948	VNL1738 Clamper	402K005210
NSP	7		---	BPZ26P080FZK Screw	---
NSP	8		---	VWT1162 Loading Mechanism Assy	---

NOTE : "NSP" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

● DISASSEMBLY OF TRAVERSE MECHANISM ASS'Y



2.2 LOADING MECHANISM ASS'Y



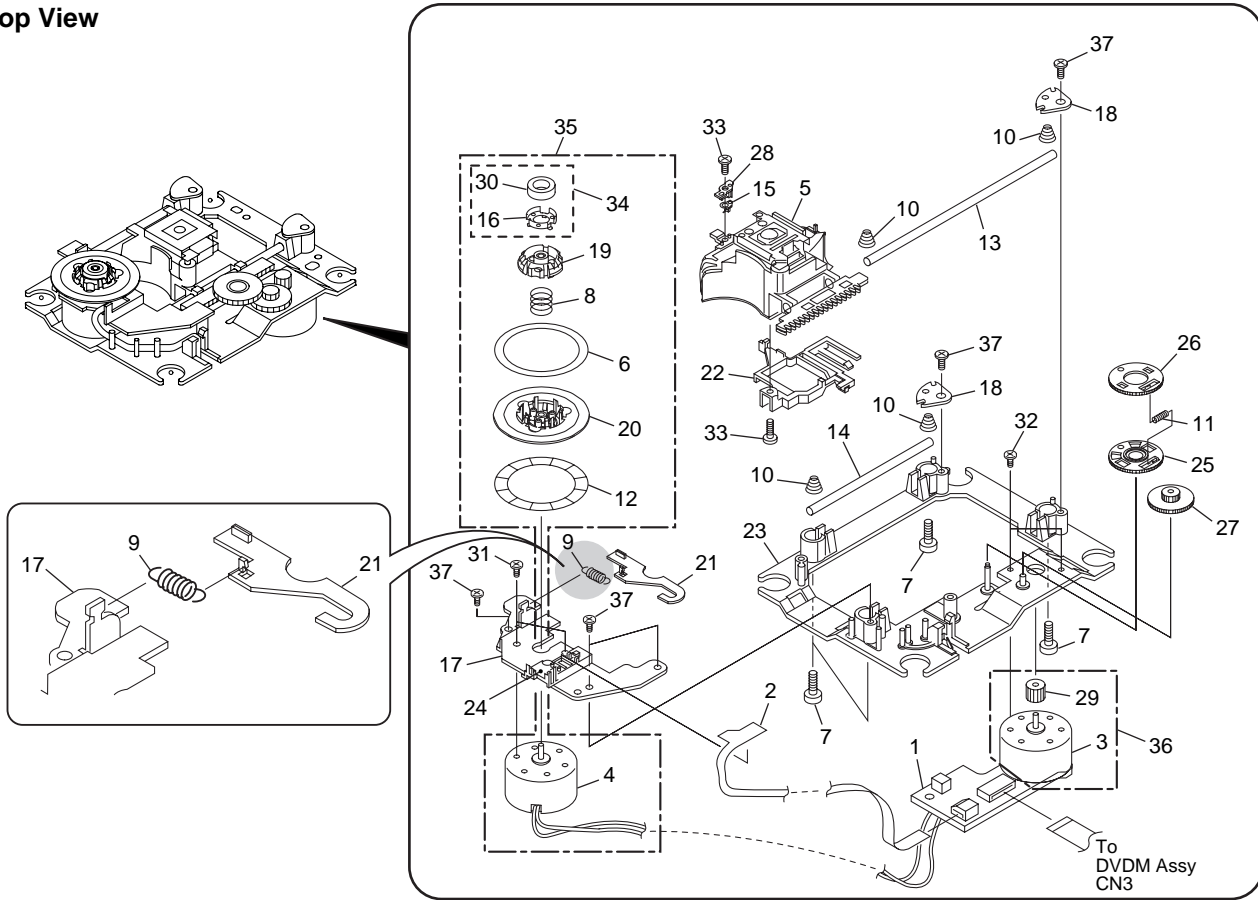
● LOADING MECHANISM ASS'Y PARTS LIST

Mark	No.	Part No. (for PCS)	Description	Part No. (for MJI)
NSP	1	9965 000 07935	VXX2653 Traverse Mechanism Assy-S	*ZK000310R
	2	---	DBA1006 Screw	---
	3	9965 000 10287	VNL1736 Drive Cam	404K054110
NSP	4	9965 000 10288	VNL1735 Drive Gear	404K058110
	5	9965 000 07938	VNL1820 Lock Plate	402K104210
	6	---	VNL1854 Loading Base	404K105110
NSP	7	9965 000 10290	VEB1260 Belt	404K264110
	8	---	VNL1733 Gear Pulley	404K262110
	9	---	VWG1885 LOSB Assy	---
NSP	10	9965 000 10292	VNL1734 Loading Gear	404K058210
	11	9965 000 07942	VXX2505 Loading Motor Assy	*ZZ001600R
	12	---	PXM1027 DC Motor/0.3W	---
NSP	13	---	PNW1634 Motor Pulley	296W262010
NSP	14	---	VWG1886 LOMB Assy	---
NSP	15	---	VKP2218 Connector Assy (LOMB CN401--LOS B CN303)	---
NSP	16	---	VBA1055 Screw	---
NSP	17	---	Z39-019 Screw	---
NSP	18	9965 000 10294	VDA1698 Flexible Cable (08P) (LOS B CN302--SMEB CN202)	*YU000890R
	19	9965 000 10295	VNL1815 Float Base	404K104210
	20	9965 000 07945	VEB1286 Floating Rubber	402K056210
NSP	21	9965 000 10296	VDA1701 (VDA1748) Flexible Cable (24P) (Pickup Assy--DVDM CN4)	*YU000900R
	22	---	VEB1312 Cushion	404K056110

NOTE : "NSP" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

2.3 TRAVERSE MECHANISM ASS'Y

Top View



● TRAVERSE MECHANISM ASS'Y PARTS LIST

Mark	No.	Part No. (for PCS)	Description	Part No. (for MJI)
NSP	1	—	VWG2048, SMEB Assy	—
NSP	2	—	VWG2009, FGSB Assy	—
NSP	3	—	VXM1079, Motor	—
NSP	4	—	VXM1084, Motor	—
△NSP	5	—	VWY1055, Pickup Assy	—
NSP	6	—	DEC2040, Table Sheet	—
NSP	7	—	VBA1058, Screw	—
NSP	8	—	VBH1278, Centering Spring	—
	9	9965 000 07950	VBH1317, Hook Spring	296W115050
	10	9965 000 07951	VBH1303, Skew Spring	296W115060
	11	9965 000 07952	VBH1308, Gear Spring	296W115070
NSP	12	—	VEC1959, Reflected Sheet	—
NSP	13	—	VLL1504, Guide Bar	—
NSP	14	—	VLL1505, Sub-guide Bar	—
	15	9965 000 07953	VNC1017, Hold Spring	296W115080
NSP	16	—	VNE2070, Magnet Holder	—
NSP	17	—	VNE2154, Motor Base	—
NSP	18	—	VNE2155, Cover	—
NSP	19	—	VNL1746, Centering Ring	—

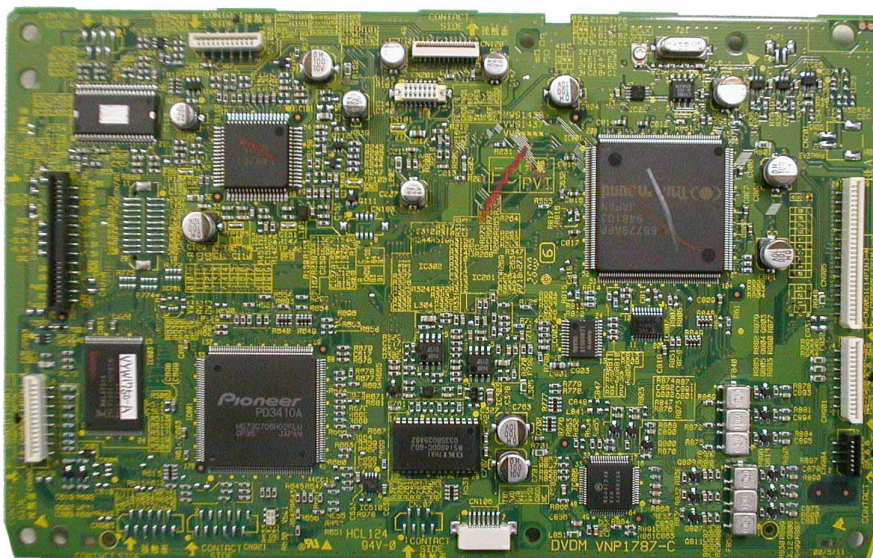
Mark	No.	Part No. (for PCS)	Description	Part No. (for MJI)
NSP	20	—	VNL1747, Disc Table	—
	21	9965 000 07954	VNL1770, Hook	296W258010
NSP	22	—	VNL1802, FFC Holder	—
NSP	23	—	VNL1806, Mechanism Base	—
NSP	24	—	VNL1807, FG Holder	—
	25	9965 000 07955	VNL1808, Gear A	296W058090
	26	9965 000 07956	VNL1809, Gear B	296W058100
	27	9965 000 07957	VNL1810, Gear C	296W058110
	28	9965 000 07958	VNL1811, Slider	296W125010
NSP	29	—	VNL1814, Gear D	—
NSP	30	—	VYM1024, Magnet	—
NSP	31	—	JFZ17P025FZK, Screw	—
NSP	32	—	JGZ17P028FMC, Screw	—
NSP	33	—	VBA1051, Screw	—
NSP	34	—	VXX2507, Magnet Holder Assy	—
	35	9965 000 07959	VXX2649, Spindle Motor Assy	*ZK000290R
	36	9965 000 07960	VXX2650, Carriage Motor Assy	*ZK000300R
NSP	37	—	PBA1069, Screw	—

NOTE : "NSP" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

Service Manual

DB-VPB220 DB-VPB221 DVD PCB Module for MARANTZ

DVD Player : DV2100



The DVD PCB module is different with each version.
Refer to the following table.

Model	Vers.	
	/C1S	/N1S
DV2100	DB-VPB220	DB-VPB221

TABLE OF CONTENTS

SECTION	PAGE
3. DB-VPB220 / 221 (DVD PCB Module for MARANTZ)	
3.1 BLOCK DIAGRAM AND SCHEMATIC DIAGRAM	3-1
3.2 PCB CONNECTION DIAGRAM	3-12
3.3 PCB PARTS LIST	3-25

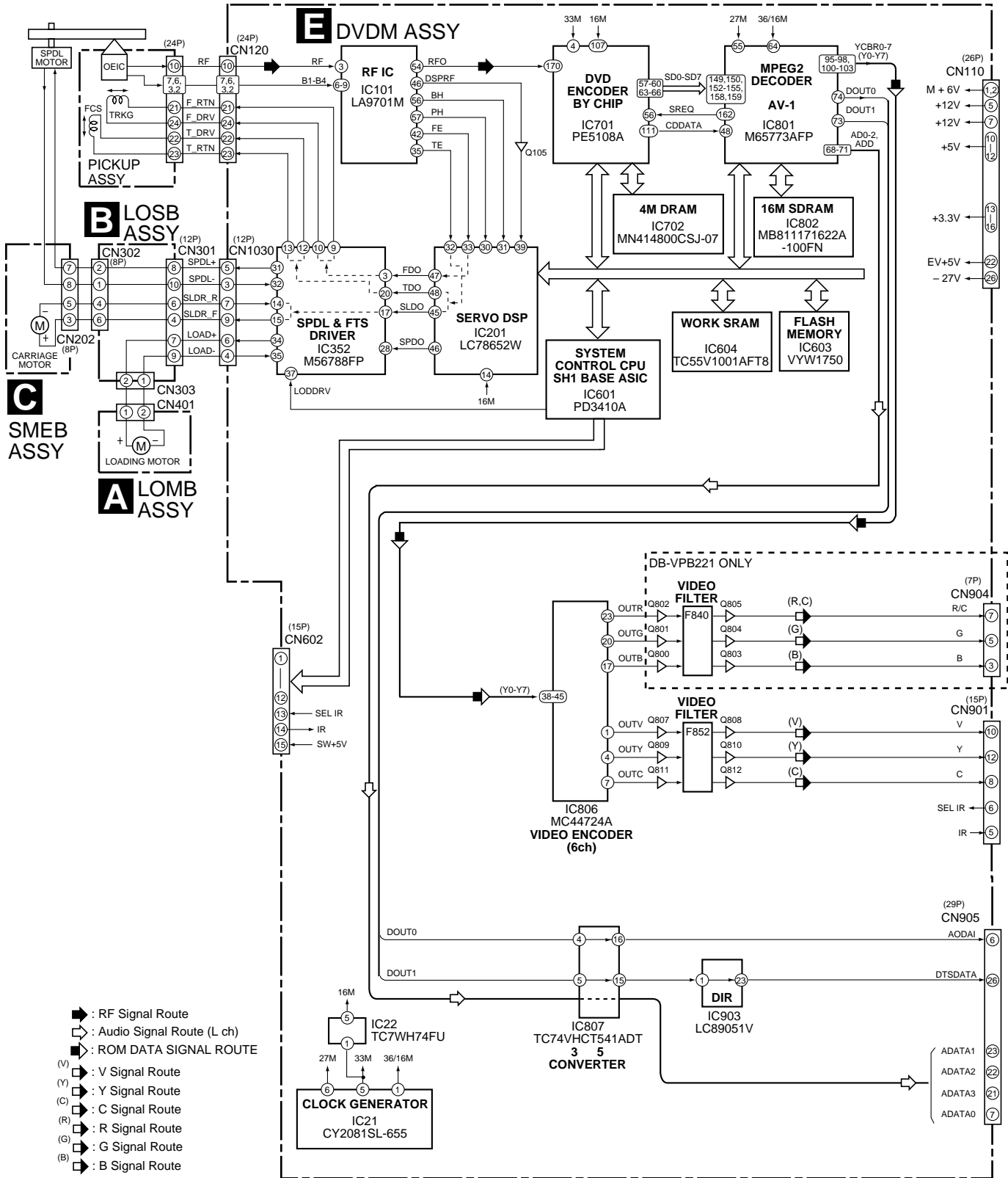
Please use this service manual with referring to the user guide (D.F.U) without fail.

marantz®

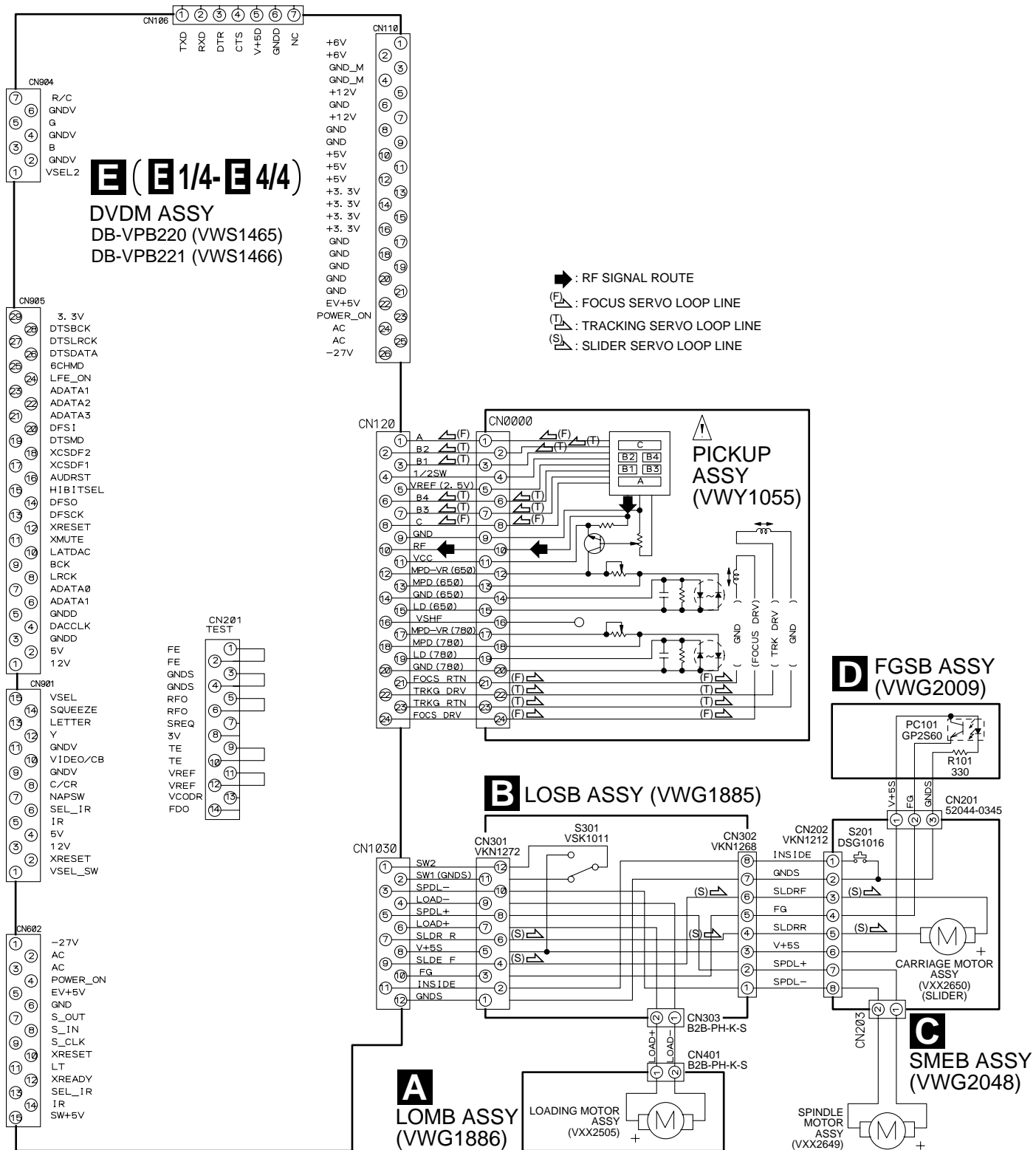
DB-VPB220/221

3.1 BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

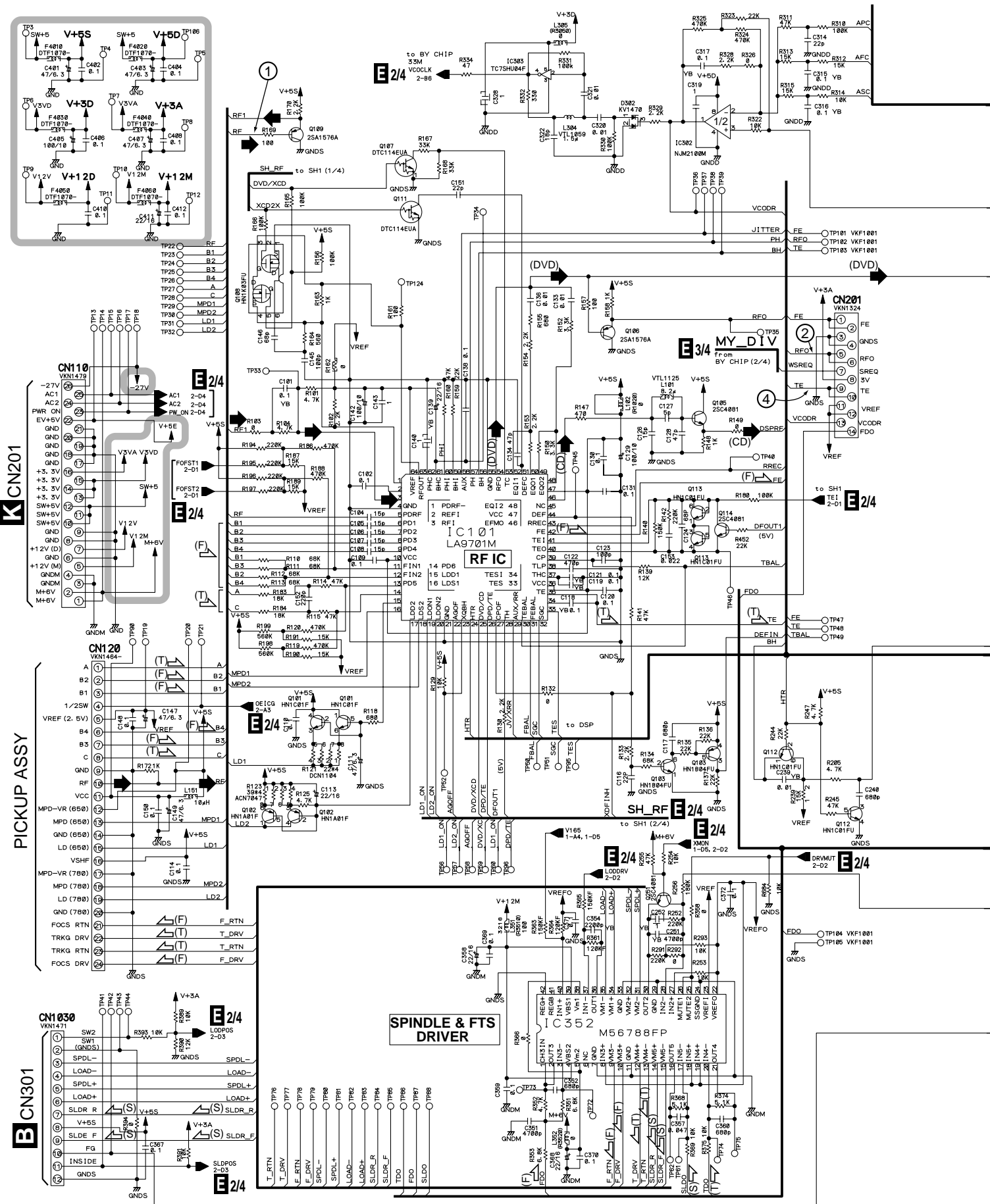
3.1.1 BLOCK DIAGRAM




3.1.2 LOMB, LOSB, SMEB, FGSB ASSYS and OVERALL WIRING DIAGRAM








3.1.3 DVDM ASSY (1/4)

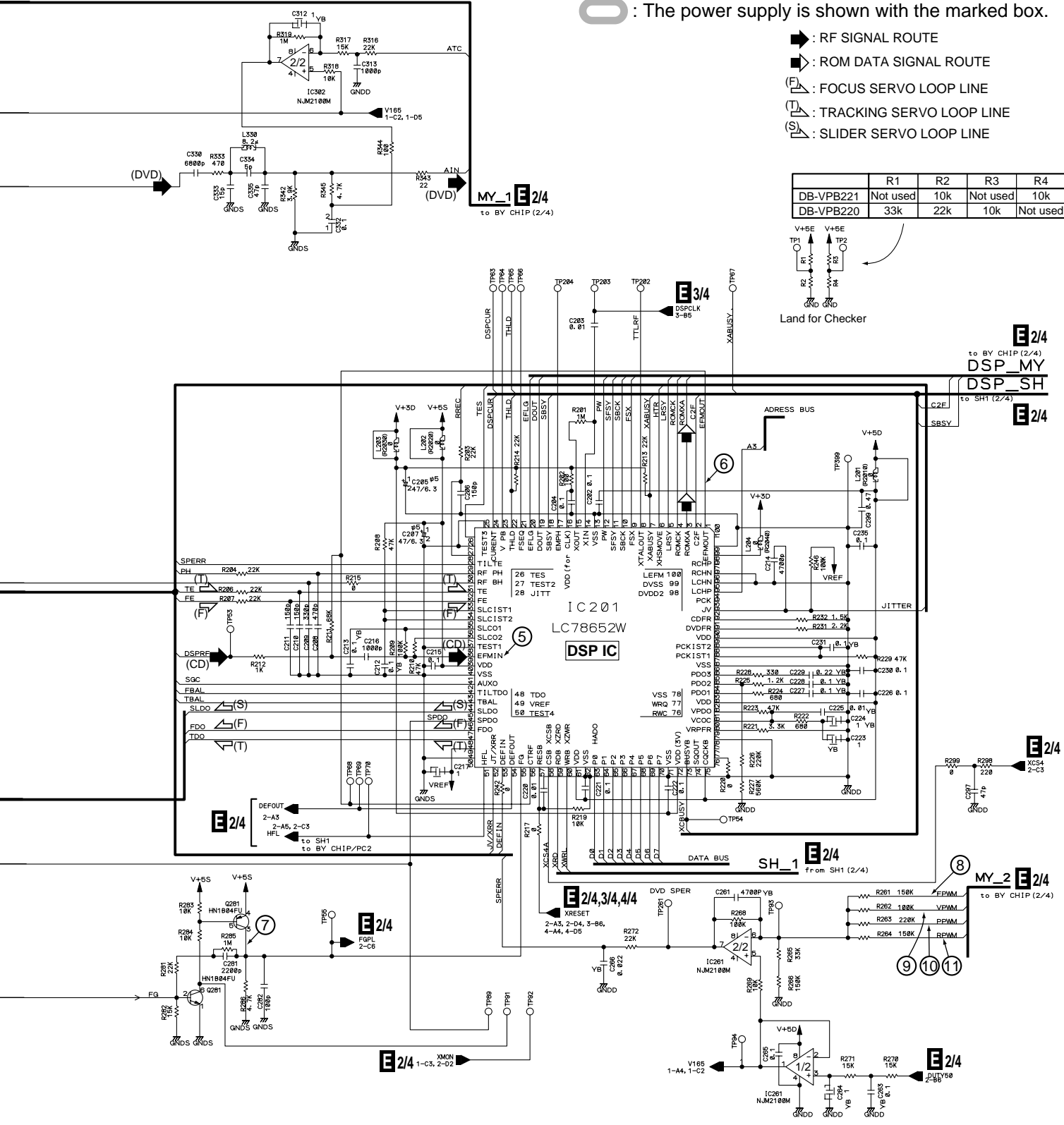
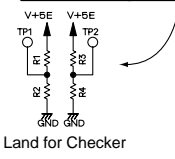


E 1/4 DVDM ASSY (VWS1465, VWS1466)

 : The power supply is shown with the marked box.

-  : RF SIGNAL ROUTE
-  : ROM DATA SIGNAL ROUTE
-  : FOCUS SERVO LOOP LINE
-  : TRACKING SERVO LOOP LINE
-  : SLIDER SERVO LOOP LINE

	R1	R2	R3	R4
DB-VPB221	Not used	10k	Not used	10k
DB-VPB220	33k	22k	10k	Not used



E 2/4
to BY CHIP (2/4)
DSP_MY
DSP_SH
to SH1 (2/4)

E 2/4
DEFOUT
2-A3
2-A5, 2-C3
HFL
to SH1
to BY CHIP/PC2

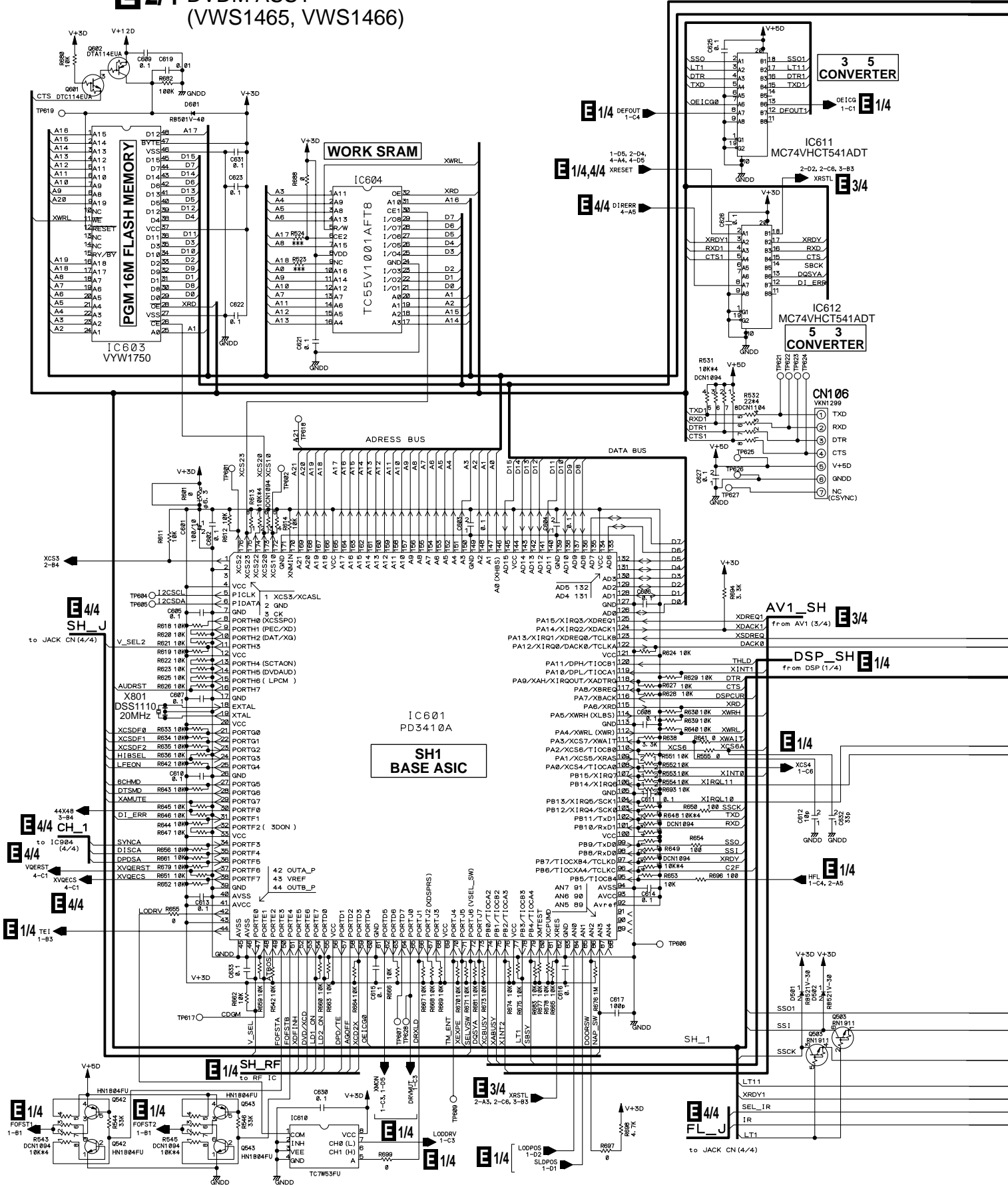
E 2/4
XCS4
2-C3
GND

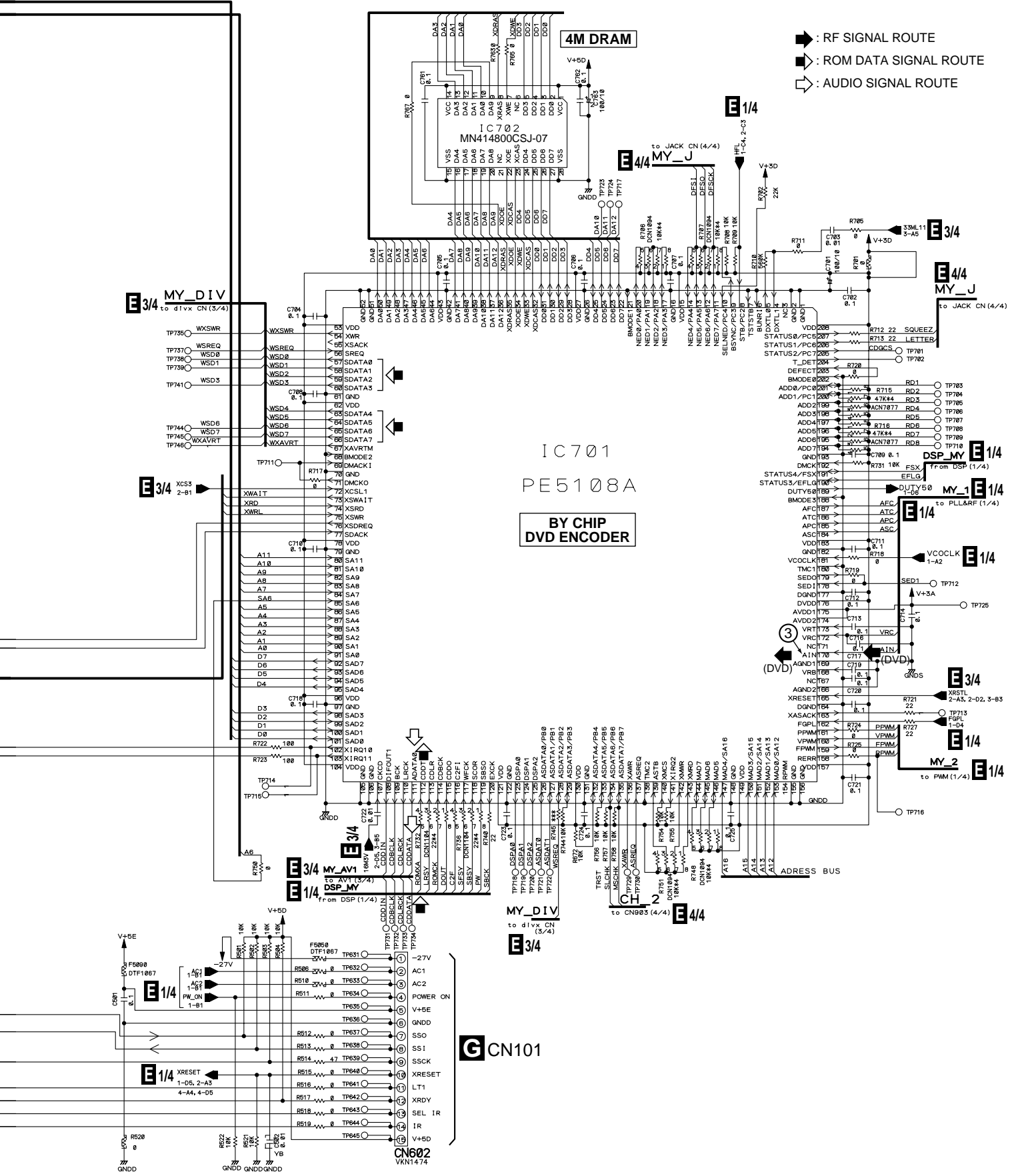
SH_1 E 2/4
from SH1 (2/4)

MY_2 E 2/4
to BY CHIP (2/4)

3.1.4 DVDM ASSY (2/4)

E 2/4 DVDM ASSY (VWS1465, VWS1466)



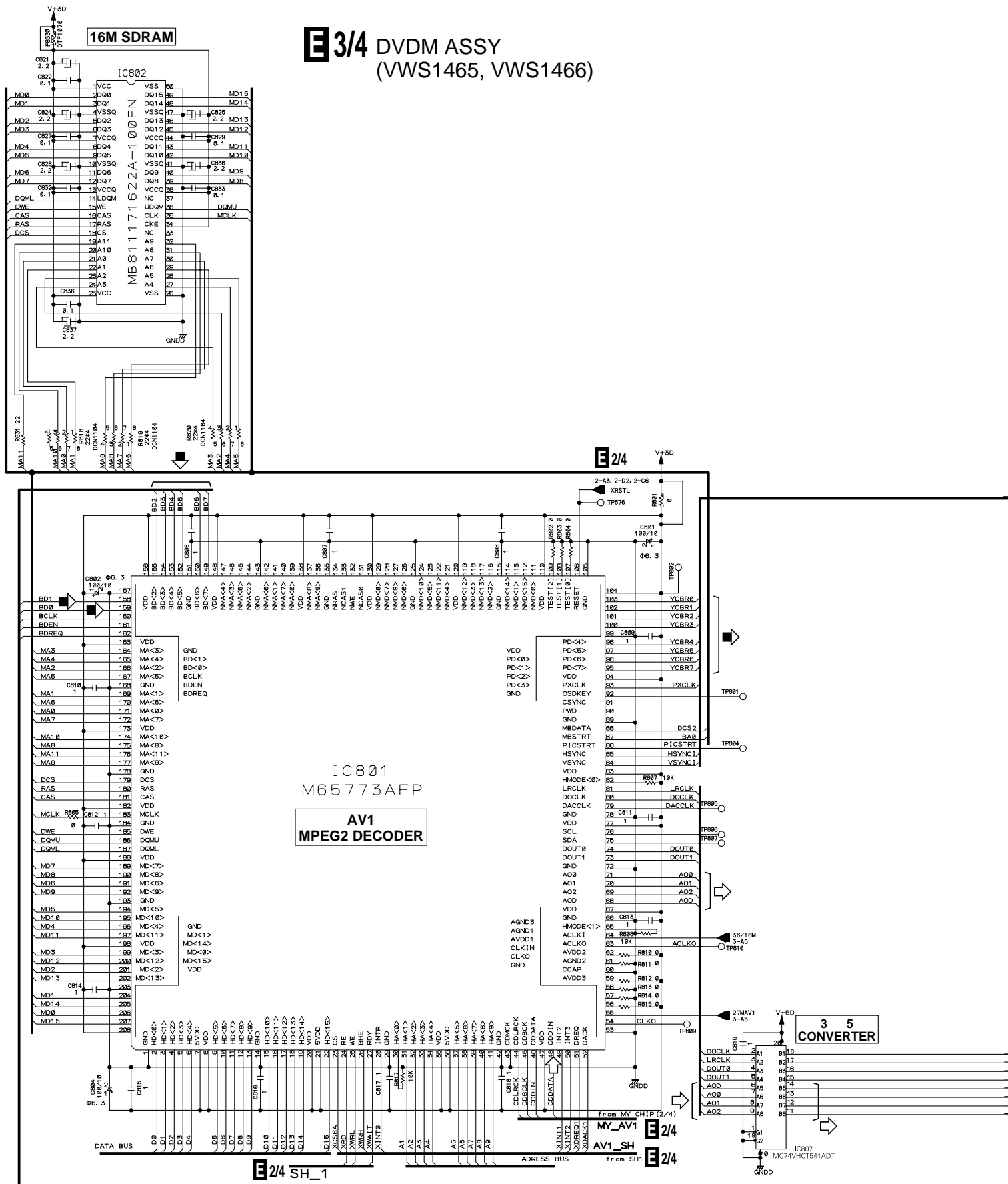


- : RF SIGNAL ROUTE
- : ROM DATA SIGNAL ROUTE
- ⇨: AUDIO SIGNAL ROUTE

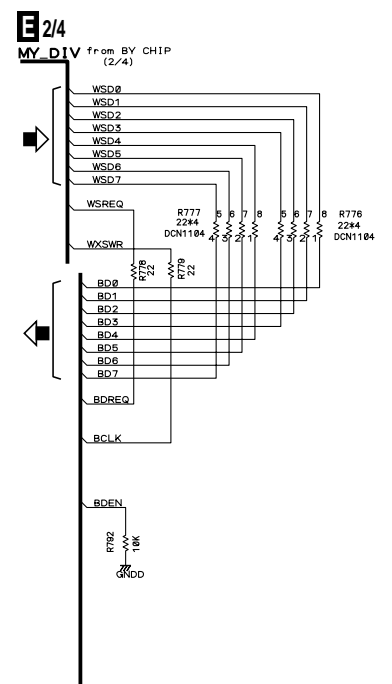
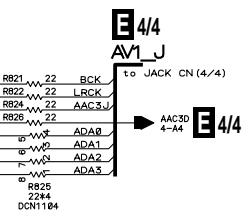
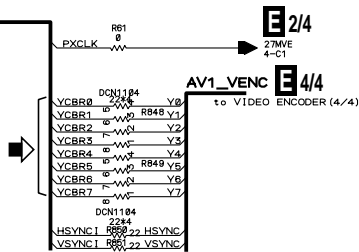
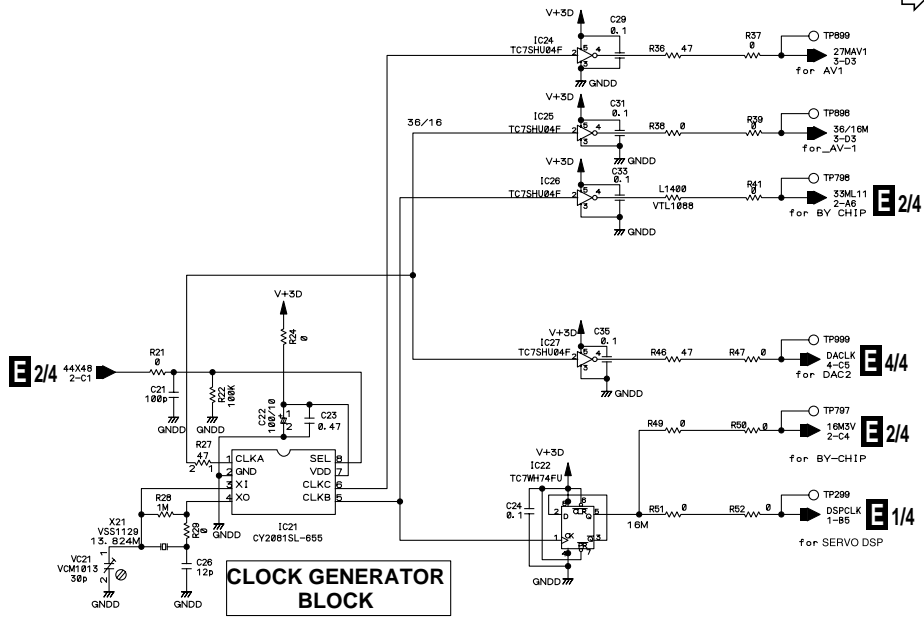
IC701
PE5108A
BY CHIP
DVD ENCODER

3.1.5 DVDM ASSY (3/4)

E 3/4 DVDM ASSY (VWS1465, VWS1466)

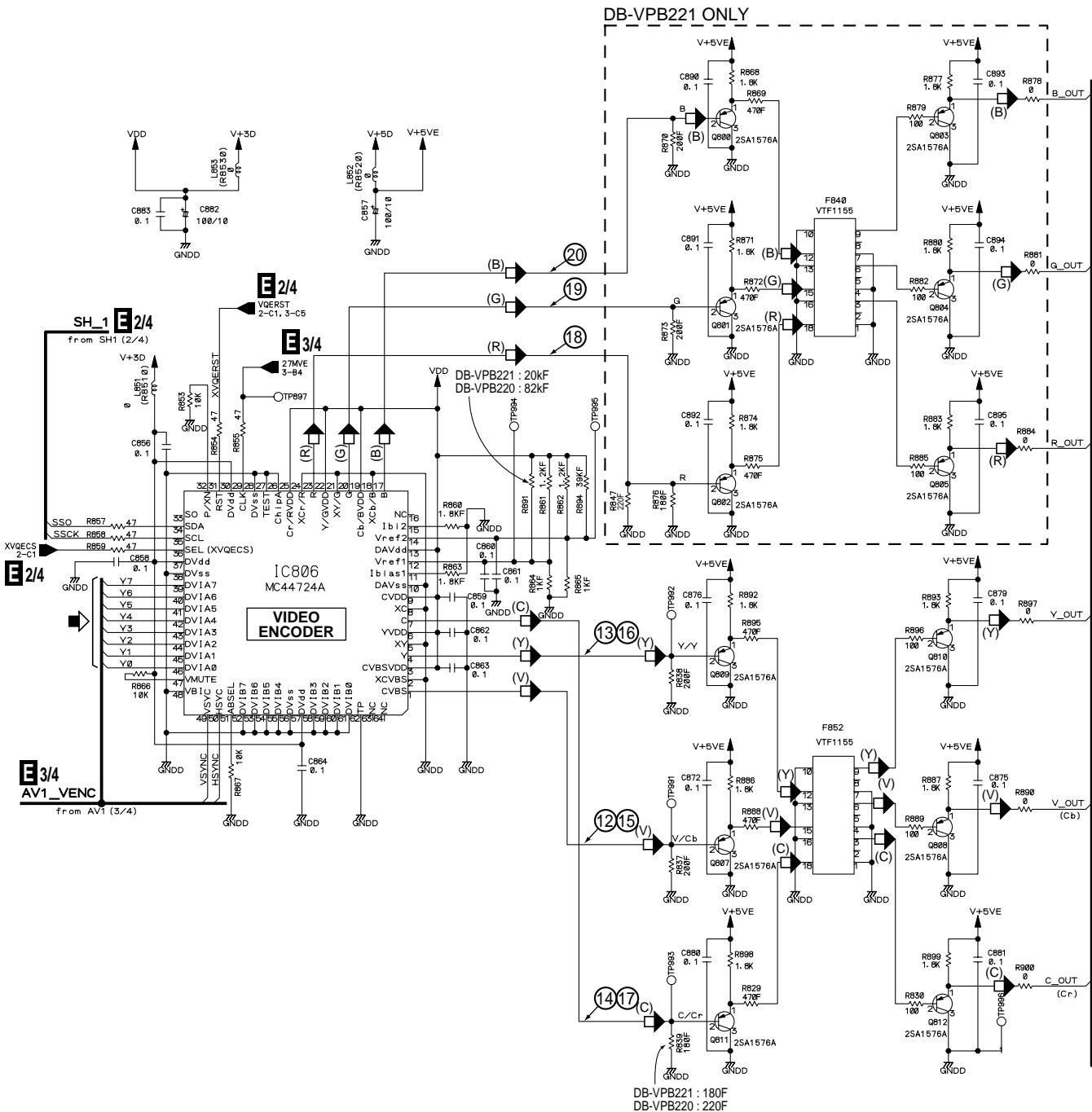


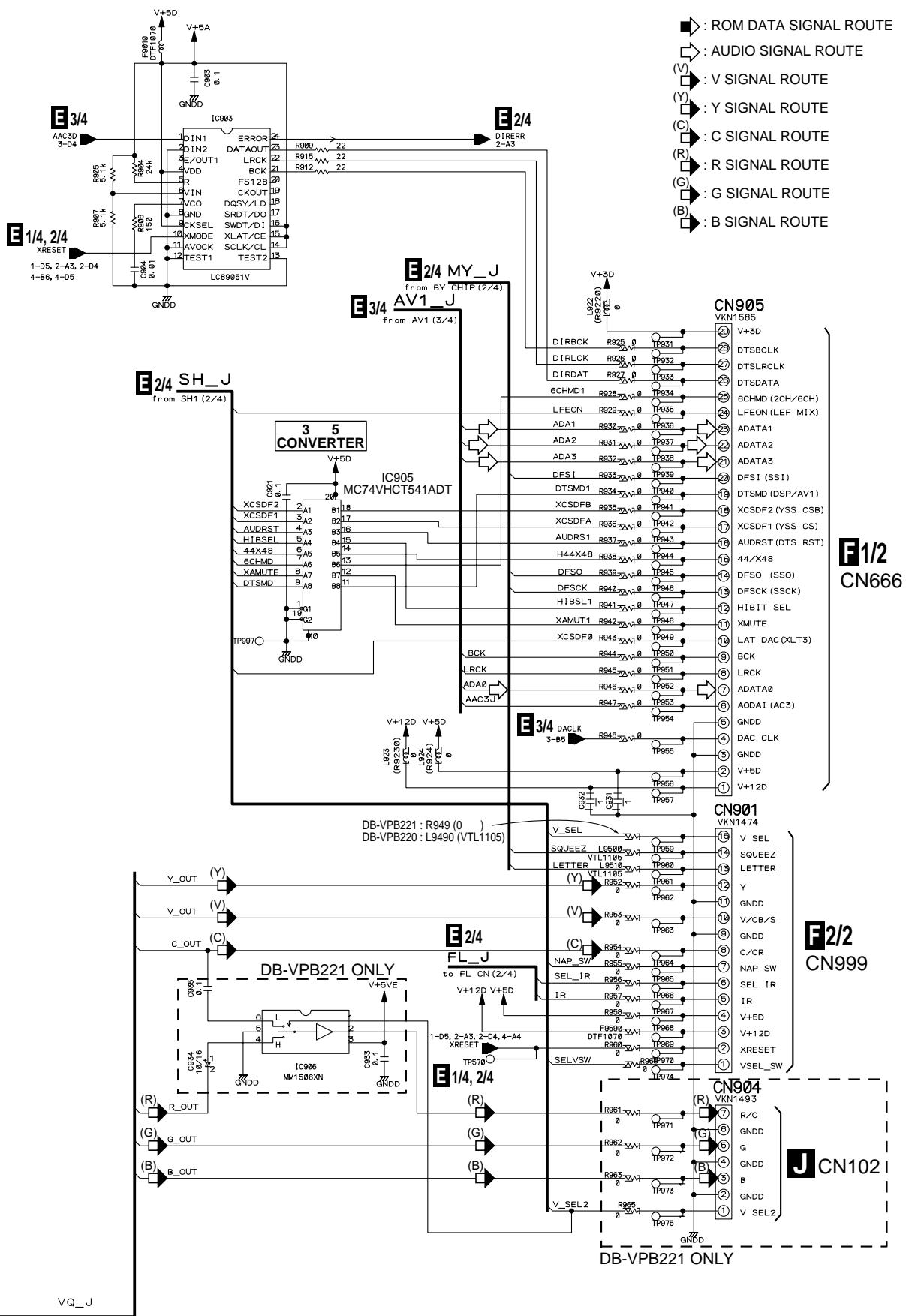
■▶: ROM DATA SIGNAL ROUTE
 □▶: AUDIO SIGNAL ROUTE



3.1.6 DVDM ASSY (4/4)

E 4/4 DVDM ASSY (VWS1465, VWS1466)



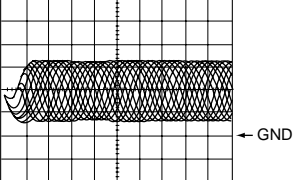
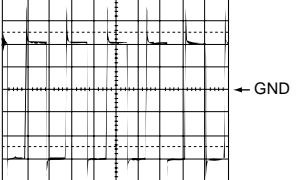
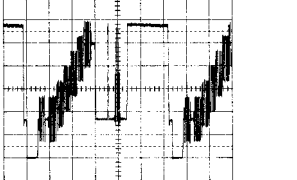
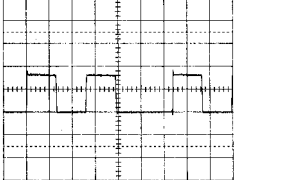
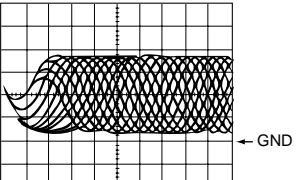
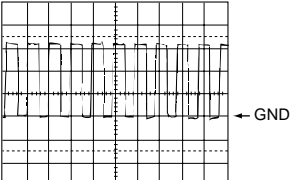
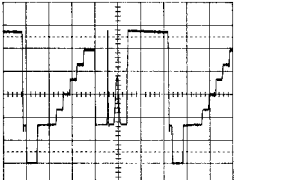
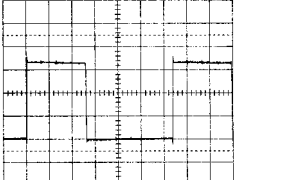
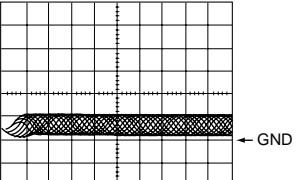
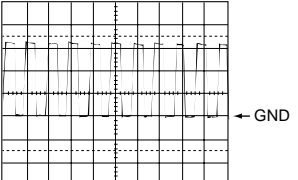
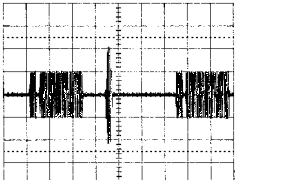
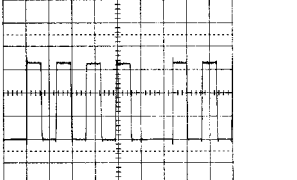
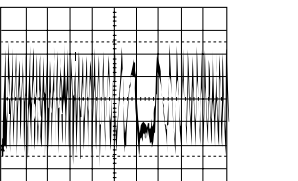
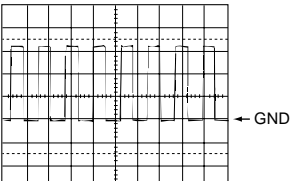
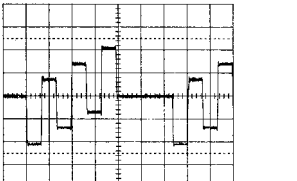
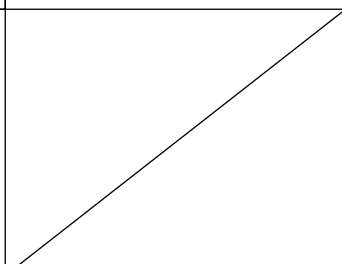
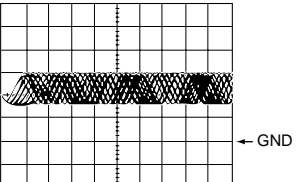
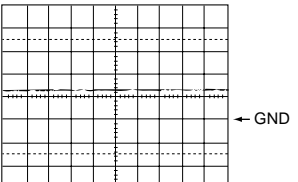
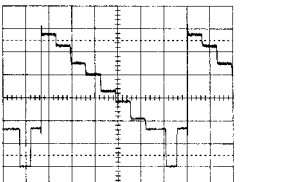
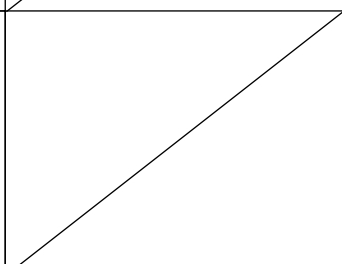
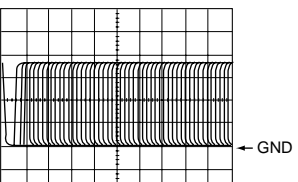
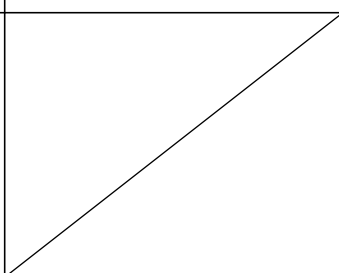
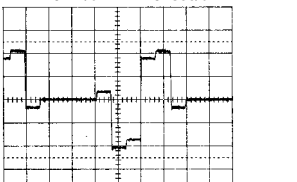
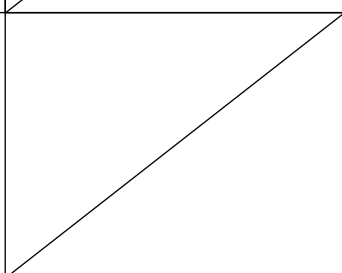


WAVEFORMS

Note : The encircled numbers denote measuring point in the schematic diagram.

Measurement condition : No. 1 to 4 and 6 to 11 : Disc MA1, Title 1-chp 1
 No. 5 : CD, ABEX-784 Track 1
 No. 12 to 14 : MJK1, Title 1-chp 4 or T2-1
 No. 15 to 17 : MJK1, Title 1-chp 5 or T2-19
 No. 18 to 20 : T2-19, Color-bar (WYXJ and WVXJ Types only)

● DVDM ASSY

<p>1 Foot of R169 (RF) V: 100mV/div. H: 0.2 sec/div.</p>  <p>← GND</p>	<p>7 Q281 - Collector (FG) V: 1V/div. H: 5msec/div.</p>  <p>← GND</p>	<p>12 IC806 - pin 1 (Composite Video output) V: 0.2V/div. H: 10 sec/div.</p> 	<p>18 IC806 - pin 23 (R output when select RGB) V: 0.5V/div. H: 10 sec/div.</p> 
<p>2 CN201 - pin 5, 6 (RFO) V: 500mV/div. H: 0.1 sec/div.</p>  <p>← GND</p>	<p>8 Foot of R261 (FPWM) V: 1V/div. H: 5msec/div.</p>  <p>← GND</p>	<p>13 IC806 - pin 4 (Y output) V: 0.2V/div. H: 10 sec/div.</p> 	<p>19 IC806 - pin 20 (G output when select RGB) V: 0.5V/div. H: 10 sec/div.</p> 
<p>3 IC701 - pin 170 (MY CHIP input) V: 1V/div. H: 0.2 sec/div.</p>  <p>← GND</p>	<p>9 Foot of R262 (VPWM) V: 1V/div. H: 5msec/div.</p>  <p>← GND</p>	<p>14 IC806 - pin 7 (C output) V: 0.2V/div. H: 10 sec/div.</p> 	<p>20 IC806 - pin 17 (B output when select RGB) V: 0.5V/div. H: 10 sec/div.</p> 
<p>4 CN201 - pin 9, 10 (Tracking Error) (AI-Inner Tracking Off) V: 500mV/div. H: 2msec/div.</p> 	<p>10 Foot of R263 (PPWM) V: 1V/div. H: 5msec/div.</p>  <p>← GND</p>	<p>15 IC806 - pin 1 (C_s output when selecting color difference output) V: 0.2V/div. H: 10 sec/div.</p> 	
<p>5 IC201 - pin 39 (EFM before slice) V: 1V/div. H: 1 sec/div.</p>  <p>← GND</p>	<p>11 Foot of R264 (RPWM) V: 1V/div. H: 5msec/div.</p>  <p>← GND</p>	<p>16 IC806 - pin 4 (Y output when selecting color difference output) V: 0.2V/div. H: 10 sec/div.</p> 	
<p>6 IC201 - pin 1 (EFM) V: 1V/div. H: 0.2 sec/div.</p>  <p>← GND</p>		<p>17 IC806 - pin 7 (C_r output when selecting color difference output) V: 0.2V/div. H: 10 sec/div.</p> 	

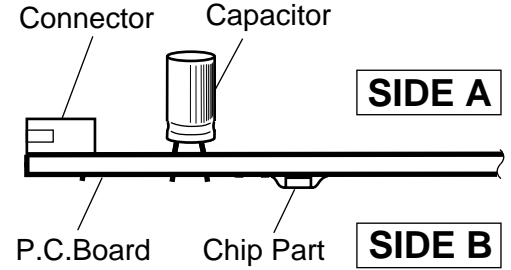
3.2 PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

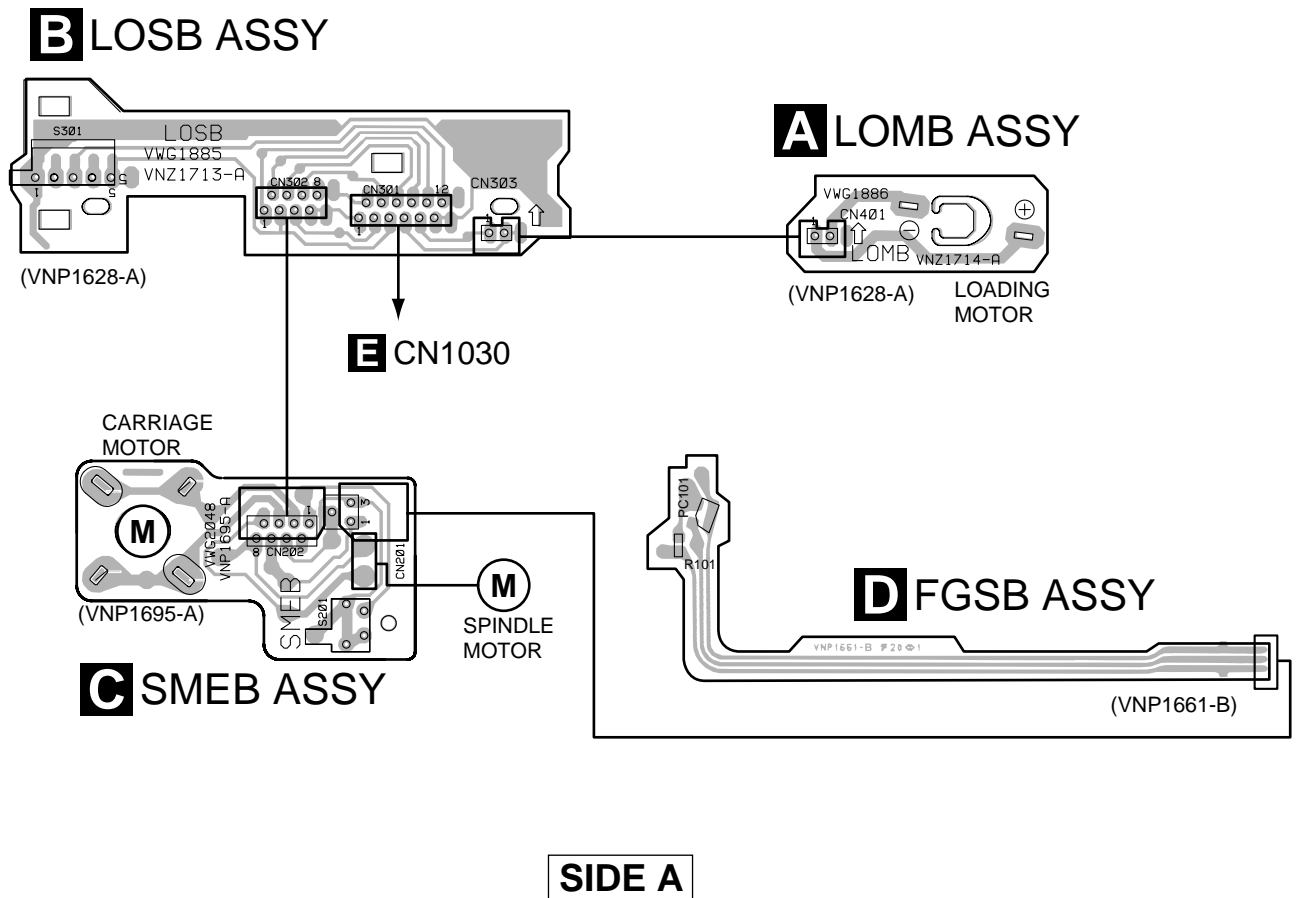
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

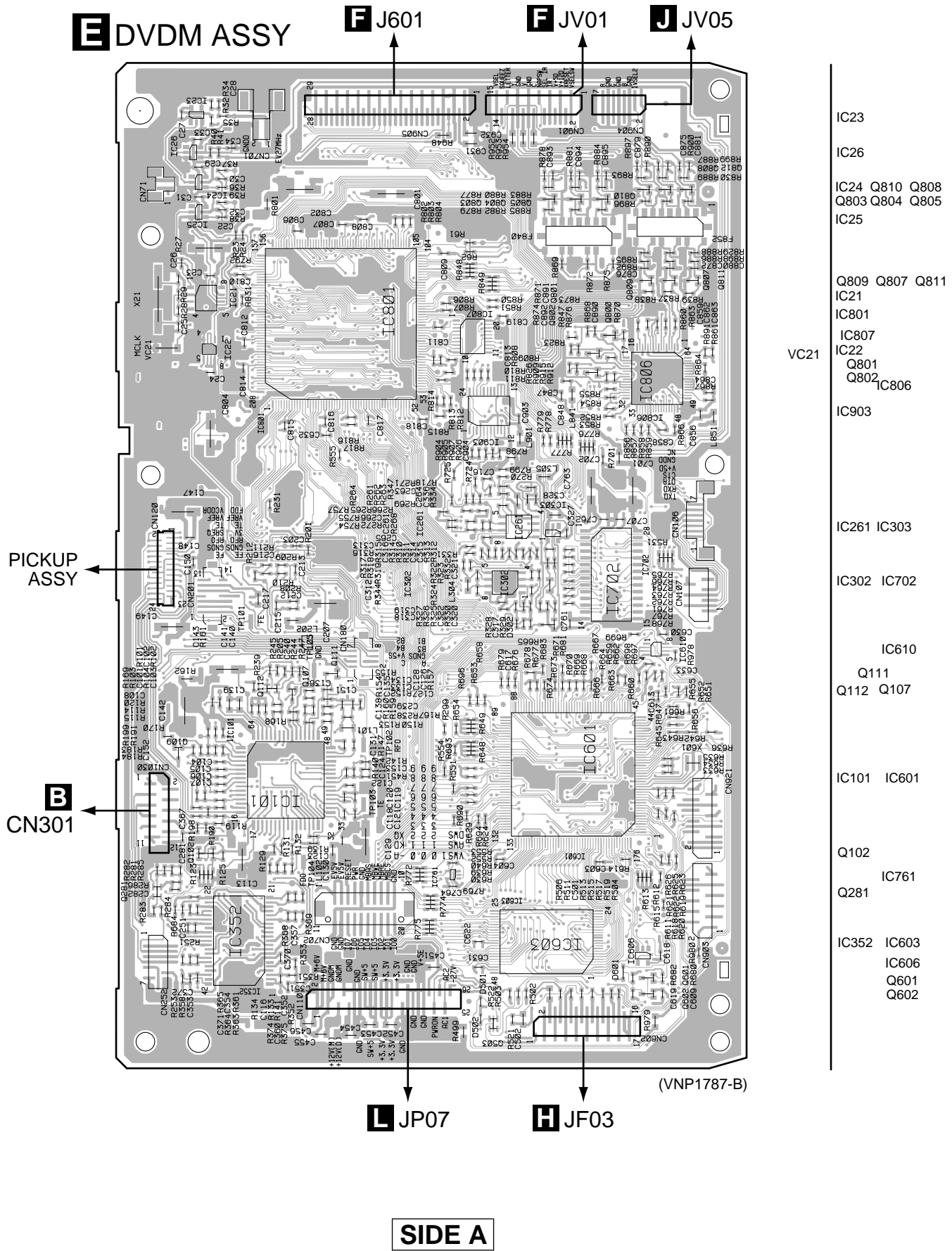
3. The parts mounted on this PCB include all necessary parts for several destinations.
- For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.



3.2.1 LOMB, LOSB, SMEB and FGSB ASSYS

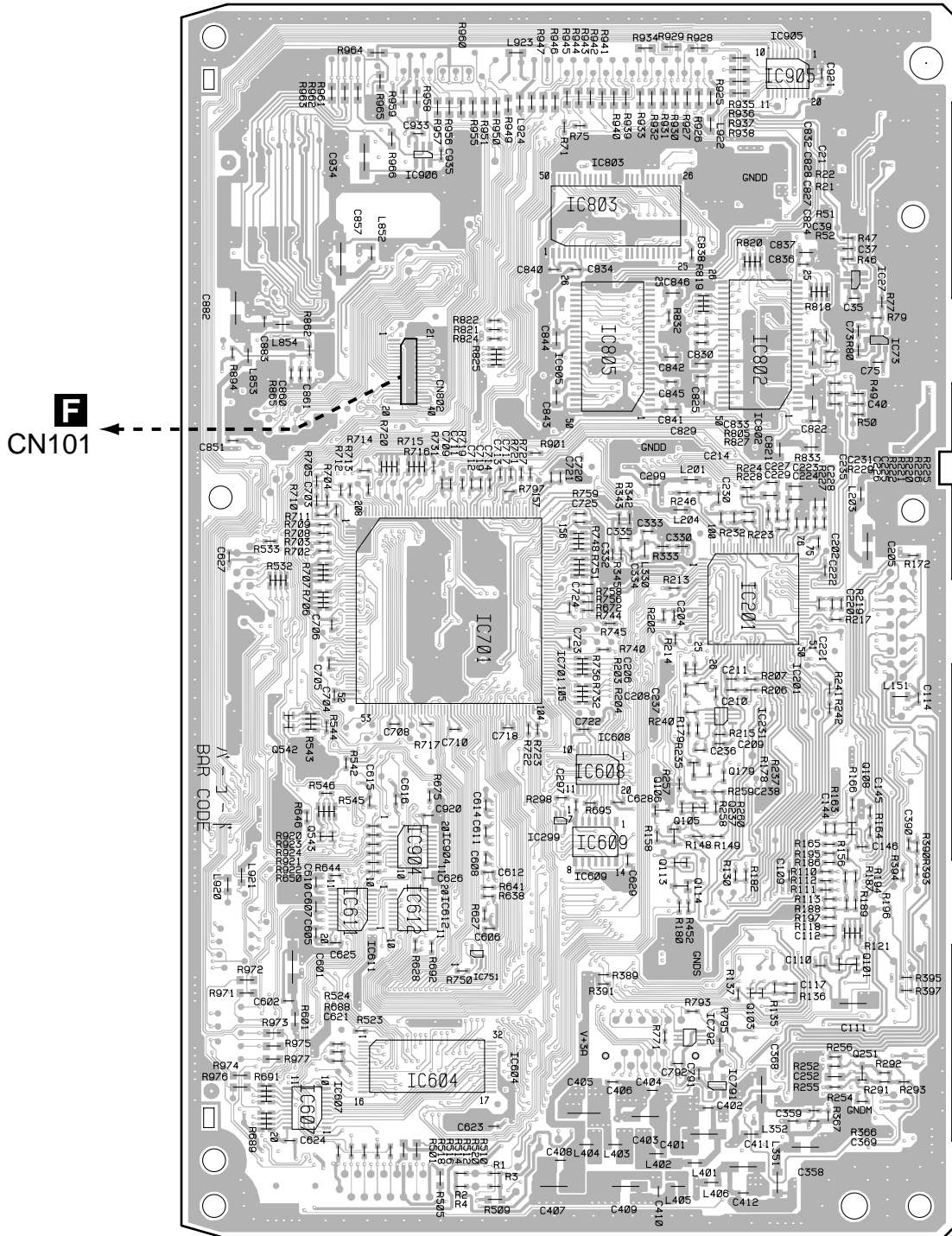


3.2.2 DVDM ASSY



• This PCB is a four-layered board.

E DVDM ASSY



- IC905
- IC906
- IC803
- IC27
- IC805
- IC802 IC73
- IC701 IC201
- Q542 IC231
- IC608 Q179
- Q106
- IC299 Q105 Q108
- Q543 IC904 IC609
- Q113
- Q114
- IC611 IC612
- IC751 Q101
- Q103
- IC792
- IC604 Q251
- IC791
- IC607

(VNP1706-B)

SIDE B

3.2.3 IC

•The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

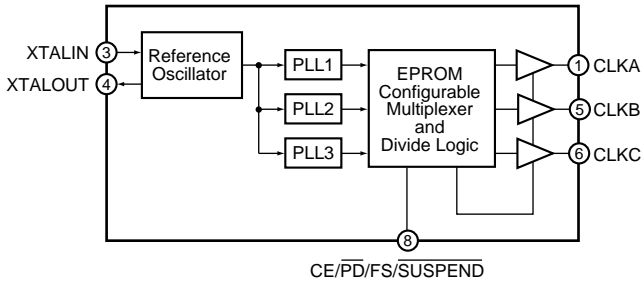
• List of IC

CY2081SL-655, PD3410A, VYW1693, M65773AFP, LC89051V, YSS912C

■ CY2081SL-655 (DVDM ASSY : IC21)

• Clock Generate IC

• Block Diagram



• Pin Function

No.	Pin Name	Pin Function
1	CLKA	Configurable clock output
2	GND	Ground
3	XTALIN	Reference crystal input of external reference clock input
4	XTALOUT	Reference crystal feedback
5	CLKB	Configurable clock output
6	CLKC	Configurable clock output
7	VDD	Voltage supply
8	OE/PD/FS/SUSPEND	Output control pin; either active-HIGH output enable, active-LOW power down, CLKA frequency select, or active-LOW suspend input

■ PD3410A (DVDM ASSY : IC601)

• System Control IC

● Pin Function

No.	Mark	Pin Name	I/O	Function
1	XCS3/XCASL	XCS3	O	PD4995A (MY CHIP) chip select signal output
2	GND	GND	-	GND
3	CK	HCPUCK	O	
4	VCC	V+3D	-	V+3D
5	PICLK	-	I/O	N.C.
6	PIDATA	-	I/O	N.C.
7	GND	GND	-	GND
8	PORTH0	XCSSP0	O	HC74VHCT595FT (Shift register with output latch)
9	PORTH1	33MVH	O	CY2071ASL-371 (Clock generator)
10	PORTH2	36MVH	O	BU2185F (Clock generator)
11	PORTH3	V_SEL2	O	Composite/S switching signal output of the skirt terminal
12	VCC	V+3D	-	V+3D
13	PORTH4	SCTAON	O	
14	PORTH5	27MVH	O	27MHz oscillation control circuit
15	PORTH6	XCSSPD	O	HC74VHCT595FT (Shift register with output latch)
16	PORTH7	XAUDRST/ VPOFF/ ECHO	O	YSS922 (Dolby AC-3/Pro logic, audio DSP built-in DTS decoder) Video system
17	GND	GND	-	GND
18	EXTAL	EXTAL	I	Connect a ceramic resonator
19	XTAL	XTAL	O	
20	VCC	V+3D	-	V+3D
21	PORTG0	XCSDF0	O	DAC chip select signal output
22	PORTG1	XCSDF1/ XCSDASP	O	YSS912 (Dolby AC-3/Pro logic, audio DSP built-in DTS decoder) AD1853 (3D audio processor) TC74VHC595FT (Serial/parallel) SM5847AF (DAC for Mch) YSS922 (DASP)
23	PORTG2	XCSDF2/ DFRST1/ XMIC_ON	O	YSS912 (Dolby AC-3/Pro logic, audio DSP built-in DTS decoder) SM5847AF (DAC for Mch)
24	PORTG3	HIBSEL	O	PD00236AM
25	PORTG4	LFEON/ DFRST0	O	Buffer Audio amp SM5847AF (DAC for Mch)
26	GND	GND	-	GND
27	PORTG5	6CHMD/ XMAOFF	O	Buffer Front DAC selector
28	PORTG6	DTSMD/ XMRST/ XDASP	O	SW (Switch circuit)
29	PORTG7	XAMUTE/ XMUTM	O	Last stage mute signal output of the audio
30	PORTF0	44X48	O	DAC 44/48 FS switching signal output
31	PORTF1	DI_ERR/ XDIGIO	I	DIR1700 (Digital audio interface receiver)
32	PORTF2	3DON/ XMMUTE/ 48X44	O	3D audio ON/bypass switching signal output
33	VCC	V+3D	-	V+3D
34	PORTF3	XCSADSP0/ SYNC1	O	DSP56362 (Audio DSP)
35	PORTF4	XCSADSP1/ XAVS_RT/ DISC	O	DSP56362 (Audio DSP)
36	PORTF5	XCSADSP2/ DPOS/ODD	O	DSP56362 (Audio DSP)

No.	Mark	Pin Name	I/O	Function
37	PORTF6	XVQERST/ XANR	O	Analog NR ON/OFF switching signal output
38	PORTF7	XCSVE/ XCSVQE	O	Serial communication enable signal output of the video encoder
39	GND	GND	–	GND
40	AVSS	GND	–	GND
41	AVCC	V+3D	–	V+3D
42	OUTA_P	LODRV	O	Loading drive output
43	VREF	V+3D	–	V+3D
44	OUTB_P	TEI	O	Tracking offset signal output
45	AVSS	GND	–	GND
46	AVSS	GND	–	GND
47	PORTE0	V_SEL	O	Component/composite switching signal output
48	PORTE1	CDGM	I	PDC016A (Graphic IC)
49	PORTE2	OEM???	I	
50	PORTE3	FOFST1	I/O	Focus offset adjustment output
51	PORTE4	FOFST2	I/O	Focus offset adjustment output
52	PORTE5	XDFINH	I/O	Defect shunt signal output
53	PORTE6	DVD/XCD	O	DVD/CD switching signal output
54	PORTE7	LD1_ON	O	650 nm laser diode ON signal output
55	PORTD0	LD2_ON	O	780 nm laser diode ON signal output
56	VCC	V+3D	–	V+3D
57	PORTD1	DPD/TE	O	1 beam/3 beams switching signal output
58	PORTD2	AGOFF	O	AGC ON/OFF switching signal output of RF IC
59	PORTD3	XCD2X	O	Signal output for switching the double speed playback
60	PORTD4	OEICG	O	OEIC gain switching signal output
61	GND	GND	–	GND
62	PORTD5	XMON	O	Control output ON/OFF switching output of the spindle motor
63	PORTD6	XBCA	O	
64	PORTD7	OPEN_SW/ X??RST	I	Mechanism connector
65	PORTJ0	XDRVMUT	O	Driver mute output
66	PORTJ1	DR/XLD	O	TC7W53F (Analog SW)
67	PORTJ2	XDSPRST	O	LC78652W (Servo DSP)
68	PORTJ3	MNJACK/ MC_MO	I	Mini jack connection check pin
69	VCC	V+3D	–	V+3D
70	PORTJ4	TM_ENT	I	Test mode input
71	PORTJ5	XEXPE	O	TC74VHCT574F/FS (3-state buffer)
72	PORTJ6	VSEL_SW	I	Component/composite SW input
73	PORTJ7	DQSY	I	
74	PB0/TIOCA2	XCBUSY	I	Command busy input
75	PB1/TIOCB2	XABUSY	I	Auto-sequence busy input
76	PB2/TIOCA3	XINT2/ XAVIRQ2	I	Interrupt input 2 (AV-1)
77	VCC	V+3D	–	V+3D
78	PB3/TIOCB3	LT1	O	Communication response signal output to the FL controller
79	PB4/TIOCA4	SBSY	I	Subcode block sync. input
80	XMTEST	–	I	V+3D
81	XCPUMD	–	I	V+3D
82	XRES	XRESET	I	Reset input

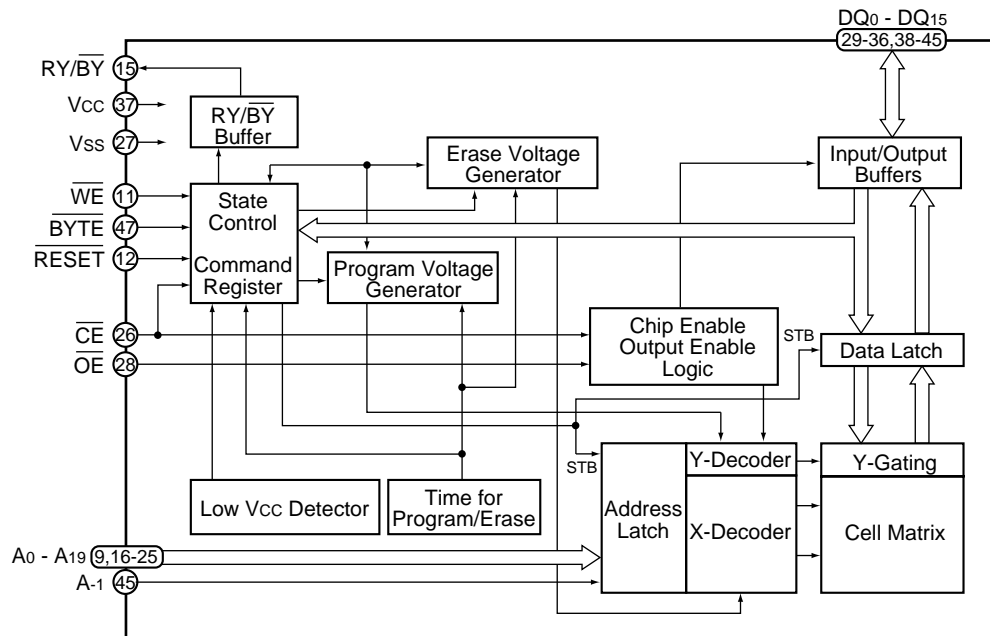
No.	Mark	Pin Name	I/O	Function
83	GND	GND	–	GND
84	AN0	LODPOS	I	Loading position input
85	AN1	SLDPOS	I	Slider position input
86	AN2	DOORSW	I	Mecha. connector
87	AN3	NAP_SW	I	NTSC/AUTO/PAL SW input
88	AN4		I	
89	AN5		I	
90	AN6		I	
91	AN7	525IP_SW	I	
92	Avref	V+3D	–	V+3D
93	AVCC	V+3D	–	V+3D
94	AVSS	GND	–	GND
95	PB5/TIOCB4	DIBLK/HFL/ DCNT	I	DIR1700 (Digital audio interface receiver) LC78652W (Servo DSP)
96	PB6/TIOXA4/TCLK	C2F	I	C2 error input
97	PB7/TIOXB4/TCLK	XRDY	I	Communicatio request input from the FL controller
98	PB8/RxD0	SSI	I	Serial data input (FL controller)
99	PB9/TxD0	SSO	O	Serial data output (FL controller, DAC)
100	VCC	V+3D	–	V+3D
101	PB10/RxD1	RXD	I	Data input of the RS-232C
102	PB11/TxD1	TXD	O	Data output of the RS-232C
103	PB12/XIRQ4/SCK0	SSCK	I/O	Serial clock output (FL controller, DAC)
104	PB13/XIRQ5/SCK1	XIRQL10	I	Interrupt input 1 (MY CHIP)
105	GND	GND	–	GND
106	PB14/XIRQ6	XIRQL11	I	Interrupt input 2 (MY CHIP)
107	PB15/XIRQ7	XINT0/ XAVIRQ0	I	Interrupt input 0 (AV-1)
108	PA0/XCS4/TIOCA0	XCS4	O	Servo DSP chip select signal output
109	PA1/XCS5/XRAS	N.C.	O	Non connection
110	PA2/XCS6/TIOCB0	XCS6	O	AV-1 chip select signal output
111	XWAIT	XWAIT	I	Wait signal input
112	XWRL	XWRL	O	Write pulse output L
113	GND	GND	–	GND
114	XWRH	XWRH	O	Write pulse output H
115	XRD	XRD	O	Read pulse output
116	PA7/XBACK	XCURDET	I	Over-current detection signal input
117	PA8/XBREQ	CTS	I	RS-232C transfer permit input
118	PA9/XAH/XIRQOUT/ XADTRG	DTR	O	RS-232C transfer permit output
119	PA10/DPL/TIOCA1	XAVIRQ1/ XINT1	I	Interrupt input 1 (AV-1)
120	PA11/DPH/TIOCB1	THLD	I	Tracking hold signal input
121	VCC	V+3	–	V+3D
122	PA12/XIRQ0/DACK0/ TCLKA	DACK0	O	DMA response output (MY CHIP)
123	PA13/XIRQ1/ XDREQ0/TCLKB	XDREQ0	I	DMA request input (MY CHIP)
124	PA14/XIRQ2/XDACK1	XDACK1	O	DMA response output (AV-1)
125	PA15/XIRQ3/XDREQ1	XDREQ1	I	DMA request input (AV-1)
126	AD0	D0	I/O	Data bus 0

No.	Mark	Pin Name	I/O	Function
127	GND	GND	–	GND
128	AD1	D1	I/O	Data bus 1
129	AD2	D2	I/O	Data bus 2
130	AD3	D3	I/O	Data bus 3
131	AD4	D4	I/O	Data bus 4
132	AD5	D5	I/O	Data bus 5
133	AD6	D6	I/O	Data bus 6
134	VCC	V+3D	–	V+3D
135	AD7	D7	I/O	Data bus 7
136	AD8	D8	I/O	Data bus 8
137	AD9	D9	I/O	Data bus 9
138	AD10	D10	I/O	Data bus 10
139	GND	GND	–	GND
140	AD11	D11	I/O	Data bus 11
141	AD12	D12	I/O	Data bus 12
142	AD13	D13	I/O	Data bus 13
143	AD14	D14	I/O	Data bus 14
144	VCC	V+3D	–	V+3D
145	AD15	D15	I/O	Data bus 15
146	A0 (XHBS)	A0	O	Address bus 0
147	A1	A1	O	Address bus 1
148	A2	A2	O	Address bus 2
149	GND	GND	–	GND
150	A3	A3	O	Address bus 3
151	A4	A4	O	Address bus 4
152	A5	A5	O	Address bus 5
153	A6	A6	O	Address bus 6
154	A7	A7	O	Address bus 7
155	A8	A8	O	Address bus 8
156	A9	A9	O	Address bus 9
157	A10	A10	O	Address bus 10
158	A11	A11	O	Address bus 11
159	A12	A12	O	Address bus 12
160	A13	A13	O	Address bus 13
161	A14	A14	O	Address bus 14
162	A15	A15	O	Address bus 15
163	A16	A16	O	Address bus 16
164	A17	A17	O	Address bus 17
165	VCC	V+3	–	V+3D
166	A18	A18	O	Address bus 18
167	A19	A19	O	Address bus 19
168	A20	A20	O	Address bus 20
169	A21	A21	O	N.C.
170	XNMI	XNMI	I	V+3D
171	GND	GND	–	GND
172	XCS10	XCS10	O	VHCT574F/FS (3-state buffer)
173	XCS20	XCS20	O	Chip select signal output of the flash ROM
174	XCS22	XCS22	O	(GUI ROM)
175	XCS23	XCS23	O	Chip select signal output of the SRAM
176	XCS2		O	N.C.

■ VYW1750 (DVDM ASSY : IC603)

• 16M bit Flash Memory IC

● Block Diagram



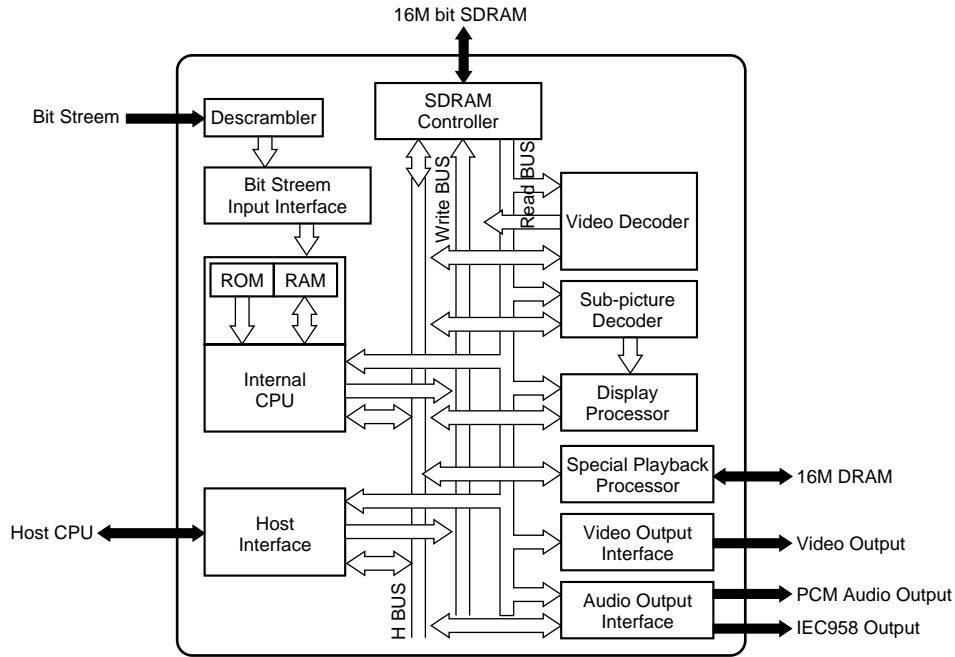
● Pin Function

No.	Pin Name	I/O	Pin Function	No	Pin Name	I/O	Pin Function
1	A15	I	Address inputs	25	A0	I	Address input
2	A14			26	\overline{CE}	I	Chip enable
3	A13			27	VSS	-	Ground
4	A12			28	\overline{OE}	I	Output enable
5	A11			29	DQ0	I/O	Data inputs/outputs
6	A10			30	DQ8		
7	A9			31	DQ1		
8	A8			32	DQ9		
9	A19			33	DQ2		
10	N.C.	-	Non connection	34	DQ10		
11	\overline{WE}	I	Write enable	35	DQ3		
12	\overline{RESET}	I	Hardware reset pin/Temporary sector unprotection	36	DQ11		
13	N.C.	-	Non connection	37	VCC	-	Power supply
14	N.C.	-	Non connection	38	DQ4	I/O	Data inputs/outputs
15	$\overline{RY/BY}$	O	Ready/Busy output	39	DQ12		
16	A18	I	Address inputs	40	DQ5		
17	A17			41	DQ13		
18	A7			42	DQ6		
19	A6			43	DQ14		
20	A5			44	DQ7		
21	A4			45	DQ15/A-1	I/O	Data inputs/outputs / Address input
22	A3			46	VSS	-	Ground
23	A2			47	\overline{BYTE}	I	Selects 8-bit or 16-bit mode
24	A1	48	A16	I	Address input		

■ M65773AFP (DVDM ASSY : IC801)

• 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			37	HA5	I	Address input port
18	HD13			38	HA6		
19	HD14			39	HA7		
20	VDD	I	Power supply	40	HA8		

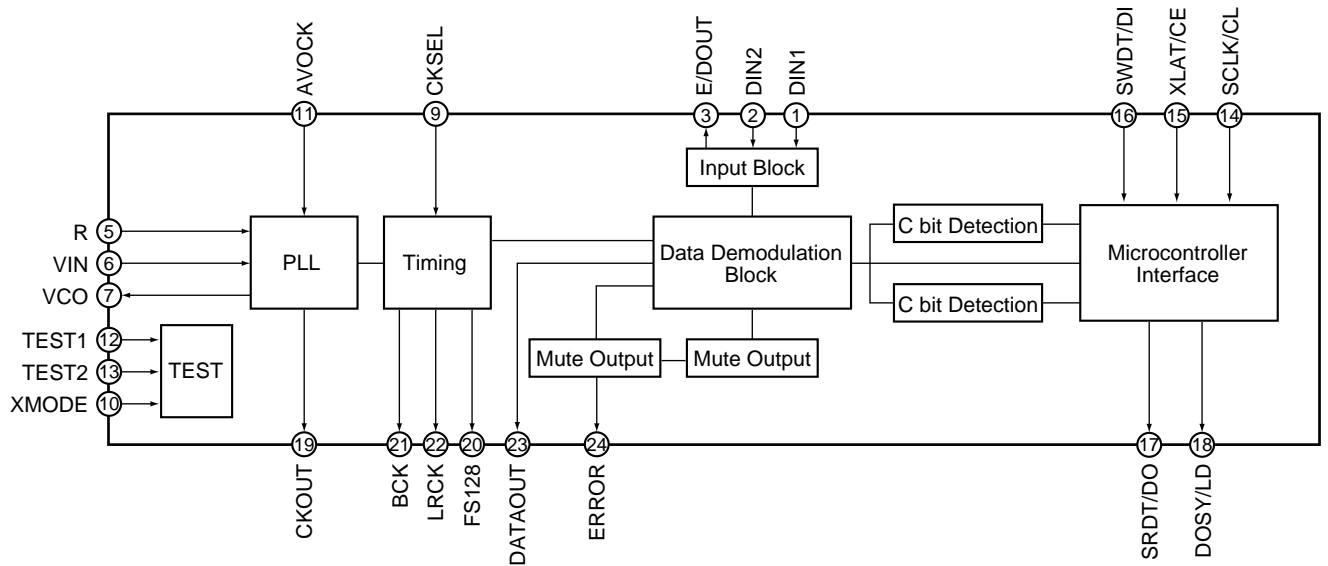
No.	Pin Name	I/O	Pin Function	No	Pin Name	I/O	Pin Function
41	HA9	I	Address input port	83	VDD	I	Power supply
42	GND	I	Ground	84	VSYNC	O	Vertical sync. signal output
43	CDMCK	I	Connect to ground	85	HSYNC	O	Horizontal sync. signal output
44	CDLRCK	I	L/R clock input from CDDSP	86	PICSTRT		
45	CDBCK	I	PCM 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			I/O	Data transfer line with DRAM		
70	AO1					111	NMD0
71	AO0					112	NMD15
72	GND	I	Ground	113	NMD1	I/O	Data transfer line with DRAM
73	DOUT1	O	Digital audio interface output	114	NMD14		
74	DOUT0			115	GND	I	Ground
75	SDA		Open	116	NMD2	I/O	Data transfer line with DRAM
76	SCL		Open	117	NMD13		
77	VDD	I	Power supply	118	NMD3		
78	GND	I	Ground	119	NMD12	I	Power supply
79	DACCLK	O	Over-sampling operating clock output	120	VDD		
80	DOCLK	O	PCM bit clock output	121	NMD4	I/O	Data transfer line with DRAM
81	LRCLK	O	Clock output for discriminating the channel (L/R) of PCM audio data	122	NMD11		
82	HMODE0	I	Setting pin of host interface operating mode	123	NMD5		
				124	NMD10		

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			O	Address line with SDRAM		
128	NMD7						
129	NMD8						
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				
149	BD7	I	Bit stream input port				
150	BD6	I	Bit stream input port	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						
154	BD3						
155	BD2						
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	I	Bit stream input port	201	MD2		
160	BCLK	I	Strobe signal (clock) of BD port	202	MD13		
161	B DEN	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

■ LC89051V (DVDM ASSY : IC903)

• Digital Audio IC

• Block Diagram



• Pin Function

No.	Pin Name	I/O	Pin Function
1	DIN1	I	Data input with built-in amplifier (for coaxial or optical module input)
2	DIN2	I	Data input (for optical module input)
3	E/DOUT	O	Emphasis, input bi-phase, and validity flag output
4	VDD	-	Power supply
5	R	I	VCO gain control input
6	VIN	I	VCO free-running setting input
7	VCO	O	PLL low-pass filter setting
8	GND	-	Ground
9	CKSEL	I	System clock selection input (384fs or 512fs)
10	XMODE	I	Reset input
11	AVOCK	I	PLL error lock avoidance clock input
12	TEST1	I	Test input (Must be connected to ground in normal operation)
13	TEST2	I	Test input (Must be connected to ground in normal operation)
14	SCLK/CL	I	Microcomputer interface clock input
15	XLAT/CE	I	Microcomputer interface latch/chip enable input
16	SWDT/DI	I	Microcomputer interface write data input
17	SRDT/DO	O	Microcomputer interface read data output
18	DOSY/LD	O	Microcomputer interface subcode Q and ID synchronization output
19	CKOUT	O	VCO clock output (free running, 384fs, or 512fs)
20	FS128	O	128fs clock output
21	BCK	O	Bit clock output
22	LRCK	O	L/R clock output (left channel=high, right channel=low)
23	DATAOUT	O	Audio data output
24	ERROR	O	PLL lock error mute output

3.3 PCB PARTS LIST

- NOTES:
- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
 - The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
 - When ordering resistors, first convert resistance values into code form as shown in the following examples.
 Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω \rightarrow 56×10^1 \rightarrow 561..... RD1/4PU

5	6	1
---	---	---

 J
 47k Ω \rightarrow 47×10^3 \rightarrow 473..... RD1/4PU

4	7	3
---	---	---

 J
 0.5 Ω \rightarrow R50..... RN2H

R	5	0
---	---	---

 K
 1 Ω \rightarrow 1R0..... RS1P

1	R	0
---	---	---

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω \rightarrow 562×10^1 \rightarrow 5621..... RN1/4PC

5	6	2	1
---	---	---	---

 F

A LOMB ASSY

Mark	Ver. (DB-VPBxxx)	No.	Part No. (for PCS)	Description	Part No. (for MJI)
NSP		CN401	---	OTHERS B2B-PH-K-S KR CONNECTOR	---

NOTE : "NSP" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

B LOSB ASSY

Mark	Ver. (DB-VPBxxx)	No.	Part No. (for PCS)	Description	Part No. (for MJI)
		S301	9965 000 07961	SWITCH VSK1011	*SM000340R
NSP		CN303	---	OTHERS B2B-PH-K-S KR CONNECTOR	---
NSP		CN302	---	VKN1268 8P FFC CONNECTOR	---
NSP		CN301	---	VKN1272 12P FFC CONNECTOR	---

NOTE : "NSP" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

C SMEB ASSY

Mark	Ver. (DB-VPBxxx)	No.	Part No. (for PCS)	Description	Part No. (for MJI)
		S201	9965 000 07962	SWITCH DSG1016	*SP001020R
NSP		CN201	---	OTHERS 52044-0345 3P FFC CONNECTOR	---
NSP		CN202	---	VKN1212 8P FFC CONNECTOR	---
NSP			---	VNP1722 PC BOARD SMEB	---

NOTE : "NSP" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

D FGSB ASSY

Mark	Ver. (DB-VPBxxx)	No.	Part No. (for PCS)	Description	Part No. (for MJI)
		PC101	9965 000 07963	SEMICONDUCTOR GP2S60	*HW100500R
NSP		R101	---	RESISTOR RS1/10S331J	---

NOTE : "NSP" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

E DVDM ASSY

Mark	Ver. (DB-VPBxxx)	No.	Part No. (for PCS)	Description	Part No. (for MJL)
				SEMICONDUCTOR	
		IC21	9965 000 10299	CY2081SL-655	*HC105840R
		IC101	9965 000 07966	LA9701M	*HC105850R
		IC201	9965 000 07967	LC78652W	*HC105860R
		IC903	9965 000 10300	LC89051V	*HC106800R
		IC352	9965 000 07968	M56788FP	*HC105870R
		IC801	9965 000 10301	M65773AFP	*HC105880R
		IC802	9965 000 07969	MB811171622A-100FN	*HC106040R
		IC806	9965 000 07971	MC44724A	*HC106810R
		IC612	9965 000 10302	MC74VHC541DT	*HC700230R
		IC611,IC807,IC905	9965 000 10303	TC74VHCT541AFT	*HC700240R
	221	IC906	9965 000 10304	MM1506XN	*HC106820R
		IC702	9965 000 07972	MN414800CSJ-07	*HC105900R
		IC261,IC302	4822 209 30455	NJM2100M	HC10085090
		IC601	9965 000 07973	PD3410A	*HU100400R
		IC701	9965 000 07974	PE5108A	*HC106370R
		IC604	9965 000 10305	TC55V1001AFT8	*HC106830R
		IC24-IC27,IC303	4822 209 17359	TC7SHU04F	*HC105940R
		IC610	9965 000 02109	TC7W53FU	HC007105K0
		IC22	9965 000 10306	TC7WH74FU	*HC105950R
		IC603	9965 000 10307	VYW1750	*HC106840R
	221	Q106,Q109	4822 130 10698	2SA1576A	HX100012A0
		Q800-Q805	4822 130 10698	2SA1576A	HX100012A0
		Q807-Q812	4822 130 10698	2SA1576A	HX100012A0
		Q105,Q114,Q251	4822 130 60669	2SC4081	HX300012A0
		Q602	9965 000 10308	DTA114EUA	*BA000900R
		Q107,Q111,Q601	9965 000 07976	DTC114EUA	*BA000910R
		Q102	4822 130 63838	HN1A01F	BA100011050
		Q103,Q281,Q542,Q543	9965 000 07977	HN1B04FU	*BA000920R
		Q101	4822 130 63843	HN1C01F	*BA000930R
		Q112,Q113	9965 000 07978	HN1C01FU	*BA000940R
		Q108	9965 000 10309	HN1K03FU	*BA000950R
		Q503	9965 000 07980	RN1911	*BA000960R
		D302	9965 000 10310	KV1470	*HZ400010R
		D601	9322 154 46685	RB501V-40	*HZ200100R
		D501,D502	9965 000 06882	RB521S-30	*HZ200110R
				COILS AND FILTERS	
		F5050,F5090	9965 000 10311	DTF1067 CHIP BEAD	*FC900220R
		F4010,F4020,F4030,F4040	9965 000 10312	DTF1070 CHIP BEAD	*FC900230R
		F4050			
		F4060,F8330,F9010,F9590	9965 000 10312	DTF1070 CHIP BEAD	*FC900230R
NSP		L151	---	LCYA100J2520	---
NSP		L304	---	LCYA1R5J2520	---
NSP		L101,L330	---	LCYA8R2J2520	---
NSP	221	F840	---	VTF1155 VIDEO FILTER	---
NSP		F852	---	VTF1155 VIDEO FILTER	---
		L1400	9965 000 10313	VTL1088 CHIP BEAD	*FC900250R
	220	L9490	9965 000 10314	VTL1105 CHIP BEAD	*FC900260R
		L9500,L9510	9965 000 10314	VTL1105 CHIP BEAD	*FC900260R
				CAPACITORS	
NSP		C612	---	CCSRCH100D50	---
NSP		C123,C145,C21,C282	---	CCSRCH101J50	---
		C617			
NSP		C26	---	CCSRCH120J50	---
NSP		C104-C108,C126,C333	---	CCSRCH150J50	---
NSP		C206,C210,C211	---	CCSRCH151J50	---
NSP		C322	---	CCSRCH180J50	---
NSP		C116,C151,C314	---	CCSRCH220J50	---
NSP		C152	---	CCSRCH221J50	---

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Mark	Ver. (DB-VPBxxx)	No.	Part No. (for PCS)	Description	Part No. (for MJL)
NSP		C632	---	CCSRCH330J50	---
NSP		C209	---	CCSRCH331J50	---
NSP		C128,C134,C297,C335	---	CCSRCH470J50	---
NSP		C122,C208	---	CCSRCH471J50	---
NSP		C127,C334	---	CCSRCH5R0C50	---
NSP		C124,C146	---	CCSRCH680J50	---
NSP		C117,C240,C352,C360	---	CCSRCH681J25	---
NSP	221	C934	---	CEV100M16	---
NSP		C129,C142,C22,C405	---	CEV101M10	---
		C601			
NSP		C701,C763,C801,C802	---	CEV101M10	---
		C804			
NSP		C857,C882	---	CEV101M10	---
NSP		C113,C139,C358,C368	---	CEV220M16	---
		C411			
NSP		C111,C147,C149,C205	---	CEV470M6R3	---
		C207			
NSP		C401,C403,C407	---	CEV470M6R3	---
NSP		C502	---	CKSQYB103K50	---
NSP		C140,C223,C224,C252	---	CKSQYB105K10	---
		C264			
NSP		C312	---	CKSQYB105K10	---
NSP		C229	---	CKSQYB224K16	---
NSP		C217	---	CKSQYF105Z16	---
NSP		C216,C313	---	CKSRYB102K50	---
NSP		C133,C136,C203,C220	---	CKSRYB103K50	---
		C225			
NSP		C239,C320,C321,C619	---	CKSRYB103K50	---
		C703			
NSP		C722,C904	---	CKSRYB103K50	---
NSP		C101,C102,C114,C118	---	CKSRYB104K16	---
		C119			
NSP		C121,C130,C138,C204	---	CKSRYB104K16	---
NSP		C212,C213,C227,C228	---	CKSRYB104K16	---
		C231			
NSP		C24,C263,C315-C317	---	CKSRYB104K16	---
		C332			
NSP	221	C633	---	CKSRYB104K16	---
NSP		C856,C858-C864,C872	---	CKSRYB104K16	---
NSP		C875,C876,C879-C881	---	CKSRYB104K16	---
		C883			
NSP	221	C890-C895,C933,C935	---	CKSRYB104K16	---
NSP		C281,C354	---	CKSRYB222K50	---
NSP		C153,C266	---	CKSRYB223K25	---
NSP		C214,C251,C261,C351	---	CKSRYB472K50	---
NSP		C357	---	CKSRYB473K16	---
NSP		C330	---	CKSRYB682K50	---
NSP		C109,C110,C120,C131	---	CKSRYF104Z16	---
		C148			
NSP		C150,C202,C215,C221	---	CKSRYF104Z16	---
		C222			
NSP		C226,C230,C235,C265	---	CKSRYF104Z16	---
		C29			
NSP		C31,C33,C35,C359,C367	---	CKSRYF104Z16	---
NSP		C369-C372,C402,C404	---	CKSRYF104Z16	---
		C406			
NSP		C408,C410,C412,C501	---	CKSRYF104Z16	---
NSP		C602-C611,C613-C616	---	CKSRYF104Z16	---
NSP		C621-C623,C625-C627	---	CKSRYF104Z16	---
NSP		C630,C631,C702	---	CKSRYF104Z16	---
		C704-C714			
NSP		C716-C721,C723-C725	---	CKSRYF104Z16	---

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Mark	Ver. (DB-VPBxxx)	No.	Part No. (for PCS)	Description	Part No. (for MJI)
NSP		C761,C762,C822,C827 C829	---	CKSRYF104Z16	---
NSP		C832,C833,C836,C903 C921	---	CKSRYF104Z16	---
NSP		C143,C319,C806-C819	---	CKSRYF105Z10	---
NSP		C328,C821,C824,C825 C828	---	VCG1030 2.2 μ F	---
NSP		C830,C837	---	VCG1030 2.2 μ F	---
NSP		C23,C299	---	VCG1032 0.47 μ F	---
NSP		VC21	---	VCM1013 30pF	---
RESISTORS					
NSP	220	R1	---	RS1/16S333J	---
NSP	221	R2	---	RS1/16S103J	---
NSP	220	R2	---	RS1/16S223J	---
NSP	220	R3	---	RS1/16S103J	---
NSP	221	R4	---	RS1/16S103J	---
NSP		R123	---	ACN7047 (39 Ω x 4)	---
NSP		R715,R716	---	ACN7077 (47 Ω x 4)	---
NSP		R531,R543,R545,R613	---	DCN1094 (10k Ω x 4)	---
NSP		R648,R649,R706,R707 R748	---	DCN1094 (10k Ω x 4)	---
NSP		R751	---	DCN1094 (10k Ω x 4)	---
NSP		R121,R532,R732,R736	---	DCN1104 (22 Ω x 4)	---
NSP		R776,R777,R818-R820 R825	---	DCN1104 (22 Ω x 4)	---
NSP		R848,R849	---	DCN1104 (22 Ω x 4)	---
NSP		R1020,R162,R2010,R2020 R2030	---	RS1/10S0R0J	---
NSP		R2040,R3050,R3520,R506 R510	---	RS1/10S0R0J	---
NSP		R520,R601,R701,R801 R8510	---	RS1/10S0R0J	---
NSP		R8520,R8530,R9220 R9230,R9240	---	RS1/10S0R0J	---
NSP		R925-R948,R952-R958	---	RS1/10S0R0J	---
NSP	221	R949,R961-R963,R965 R960,R964	---	RS1/10S0R0J	---
NSP	221	R878,R881,R884	---	RS1/16S0R0J	---
NSP	221	R879,R882,R885	---	RS1/16S101J	---
NSP	221	R868,R871,R874,R877 R880,R883	---	RS1/16S182J	---
NSP		R864,R865	---	RS1/16S1001F	---
NSP		R861,R862	---	RS1/16S1201F	---
NSP		R361,R364	---	RS1/16S1203F	---
NSP		R363,R365	---	RS1/16S1503F	---
NSP	220	R839	---	RS1/16S2000F	---
NSP	221	R839	---	RS1/16S1800F	---
NSP	221	R876	---	RS1/16S1800F	---
NSP		R860,R863	---	RS1/16S1801F	---
NSP		R837,R838	---	RS1/16S2000F	---
NSP	221	R870,R873	---	RS1/16S2000F	---
NSP	220	R891	---	RS1/16S8202F	---
NSP	221	R891	---	RS1/16S2002F	---
NSP	221	R847	---	RS1/16S2200F	---
NSP		R894	---	RS1/16S3902F	---
NSP		R829,R888	---	RS1/16S4700F	---
NSP	221	R869,R872,R875	---	RS1/16S4700F	---
NSP		R895	---	RS1/16S4700F	---
NSP		R164	---	RS1/16S5600F	---
NSP		R3510	---	VCN1120	---
NSP		Other Resistors	---	RS1/16SxxxJ	---

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Mark	Ver. (DB-VPBxxx)	No.	Part No. (for PCS)	Description	Part No. (for MJI)
				OTHERS	
		X601	9965 000 07985	DSS1110 CHIP CERALOCK (20MHz)	*FQ000450R
NSP			---	VDA1681 FLEXIBLE CABLE 7P	---
NSP		CN106	---	VKN1299 7P FFC CONNECTOR	---
NSP		CN201	---	VKN1324 B TO B CONNECTOR 14P	---
NSP		CN120	---	VKN1464 24P FFC CONNECTOR	---
NSP		CN1030	---	VKN1471 12P FFC CONNECTOR	---
NSP		CN602,CN901	---	VKN1474 15P FFC CONNECTOR	---
NSP		CN110	---	VKN1479 26P FFC CONNECTOR	---
NSP	221	CN904	---	VKN1493 7P FFC CONNECTOR	---
NSP		CN905	---	VKN1585 29P FFC CONNECTOR	---
		X21	9965 000 10315	VSS1129 CRYSTAL RESONATOR (13.824MHz)	*JX000670R
	220	002A	---	VWS1465 DVD PCB MODULE DB-VPB220	ZK404K0220
	221	002A	9965 000 10316	VWS1466 DVD PCB MODULE DB-VPB221	ZK404K0210

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