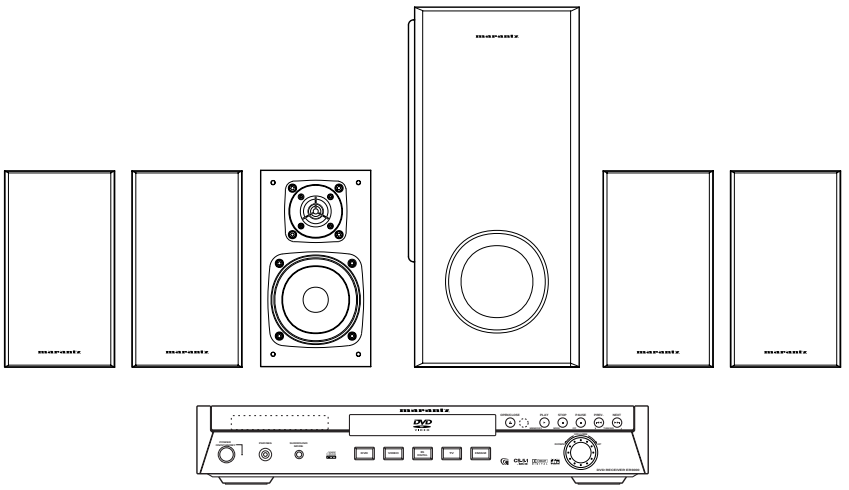
Service Manual

ER3000/F1S

DVD Receiver



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2. DB-VLD210 (DVD Loader for MARANTZ)
3. DB-VPB210 / 211 / 212 / 213 / 214 / 215 (DVD PCB Module for MARANTZ)

修理の際は、必ず取扱説明書を準備し操作方法を確認の上作業を行って下さい。

marantz®

ER3000

400K855010 AO
First Issue:2001.07

Printed in Japan

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.

1.1 TECNICAL SPCIFICATIONS

仕様

DSP部

ＤＳＰモード ..... ドルビーデジタル、ドルビープロロジック、 ＤＴＳ、サークルサラウンド(CS5.1)、MPEG2 AAC

オーディオ部

パワーアンプ部

実用最大出力(6 Ω、EIAJ)

フロント ..... 50W ＋ 50W

センター 50W

サラウンド ..... 50W ＋ 50W

ウーファー 50W

定格出力

フロント ..... 35W ＋35W（20Hz ～20kHz、 T.H.D 0.8%、負荷 6 Ω）

センター ..... 35W（20Hz ～20kHz、 T.H.D 0.8%、負荷 6 Ω）

サラウンド ..... 35W ＋35W（20Hz ～20kHz、 T.H.D 0.8%、負荷 6 Ω）

ウーファー ..... 35W（63Hz 、T.H.D 0.8%、負荷 6 Ω）

アナログ部

入力感度／入力インピーダンス

ビデオ、 BS DIGITAL、テレビ ..... 420 mV / 22 kΩ

定格出力／インピーダンス

ビデオ ..... 370 mV / 1 k Ω

サブウーファー出力 ..... 5.5 V / 1 k Ω

ビデオ部

入力感度／入力インピーダンス(コンポジット信号)

ビデオ、 BS DIGITAL ..... 1 Vp-p、75Ω

入力感度／入力インピーダンス(Ｓビデオ信号)

ビデオ、 BS DIGITAL ..... 輝度(Ｙ)信号 ： 1 Vp-p、75Ω、色(Ｃ)信号 ：0.286Vp-p 、75Ω

定格出力／インピーダンス(コンポジット信号)

ビデオ、モニター ..... 1 Vp-p、75Ω

定格出力／インピーダンス(Ｓビデオ信号)

ビデオ、モニター ..... 輝度(Ｙ)信号 ： 1 Vp-p、75Ω、色(Ｃ)信号 ：0.286Vp-p 、75Ω

定格出力／インピーダンス(コンポーネント信号)

DVD D1 ..... 輝度(Ｙ)信号 ： 1 Vp-p、75Ω、色(CB/CR) 信号 ：0.7Vp-p、 75Ω

ＦＭチューナー部

回路方式 ..... PLL デジタル周波数シンセサイザーフォーツロック方式

受信周波数 ..... 76.0 MHz ～ 90.0 MHz （100 kHz ステップ）

実用感度(モノラル) ..... 1.6 μV / 15.3dBf

高調波歪率 ..... モノラル 0.3%

ステレオ 0.5%

Ｓ / Ｎ比 ..... モノラル 70 dB

ステレオ 65 dB

ＡＭチューナー部

回路方式 ..... PLL デジタル周波数シンセサイザーフォーツロック方式

受信周波数 ..... 531 kHz ～ 1602 kHz (9 kHzステップ)

実用感度(ループアンテナ) ..... 60 dBμV/m

Ｓ／Ｎ比 ..... 50 dB

高調波歪率 ..... 0.7 %

DVD部

再生可能メディア ..... DVD、ビデオ CD(8 / 12 ｃｍ)、CD-DA, CD-R, CD-RW (8 /12cm)

音声特性(ＤＶＤリニア音声再生時、ビデオ音声出力端子)

Ｓ／Ｎ比 ..... 90 dB（EIAJ）

周波数特性 ..... 20 Hz ～ 20 kHz（+0 / -1 dB）

ダイナミックレンジ ..... 90 dB（EIAJ）

全高調波歪率 ..... 0.01 %(EIAJ)

映像特性

信号方式 ..... EIAJ標準 NTSCカラー方式

水平解像度 ..... 500 本以上(DVD再生時)

スピーカー部

フロント、センター、サラウンド スピーカー

2Way 密閉防磁型ツイーター	25mm ドーム型
ウーファー	90mm コーン型
インピーダンス	6Ω
定格入力	40W
最大入力	100W
外形寸法	幅 107 x 高さ 191 x 奥行 137 mm
質量	各1.5 Kg

サブウーファー

バスレフ型	20cm コーン型(防磁)
インピーダンス	6Ω
定格入力	40W
最大入力	80W
外形寸法	幅 160 x 高さ 350 x 奥行 320 mm
質量	5.9 Kg

一般事項

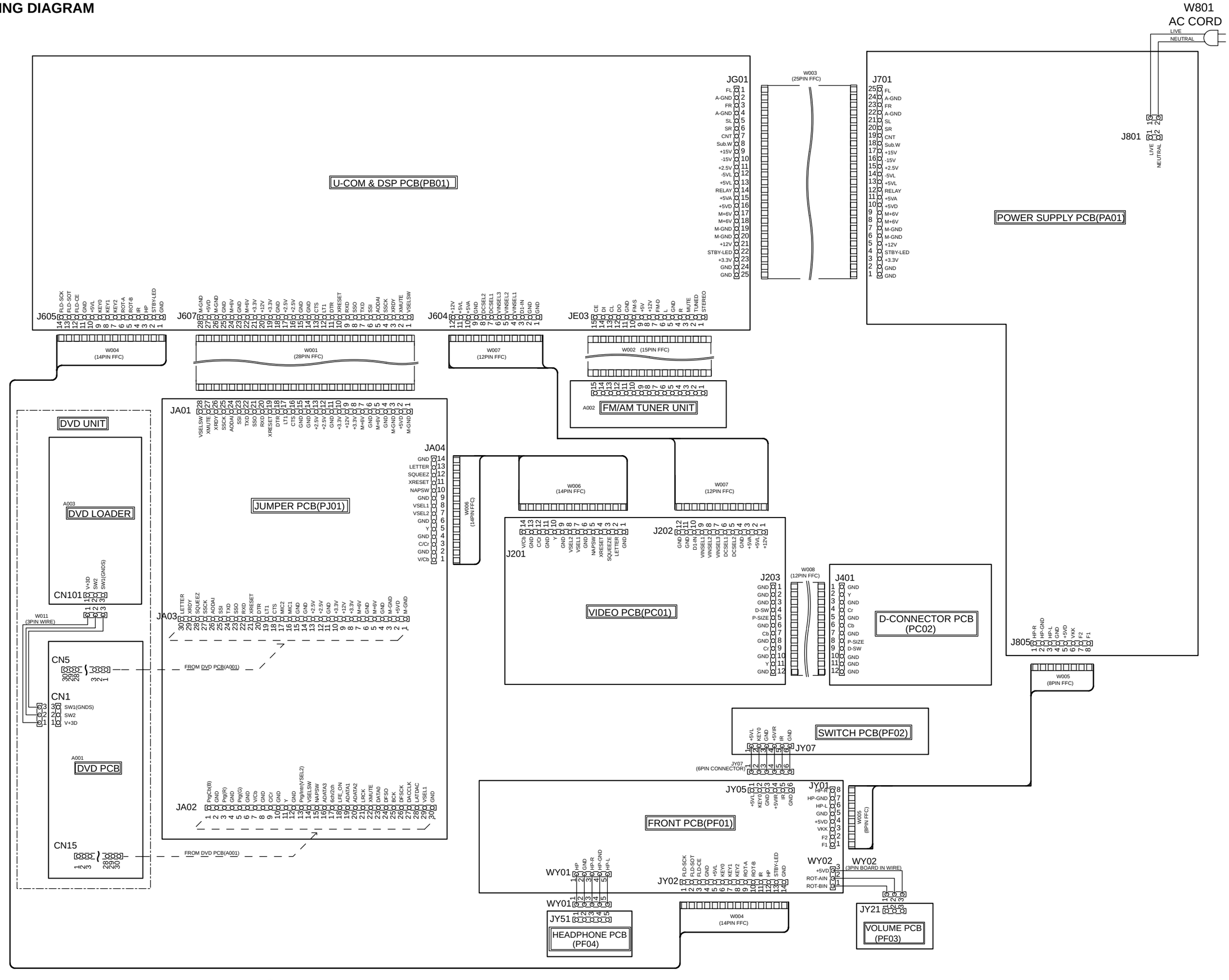
消費電力／待機時電力	120W/ 4 W以下(電気用品取 締法)
外形寸法	幅 435 x 高さ 75.8 x 奥行 302.7 mm
質　　量	本体5.3 Kg
許容動作温度	5 ～35℃

付属品

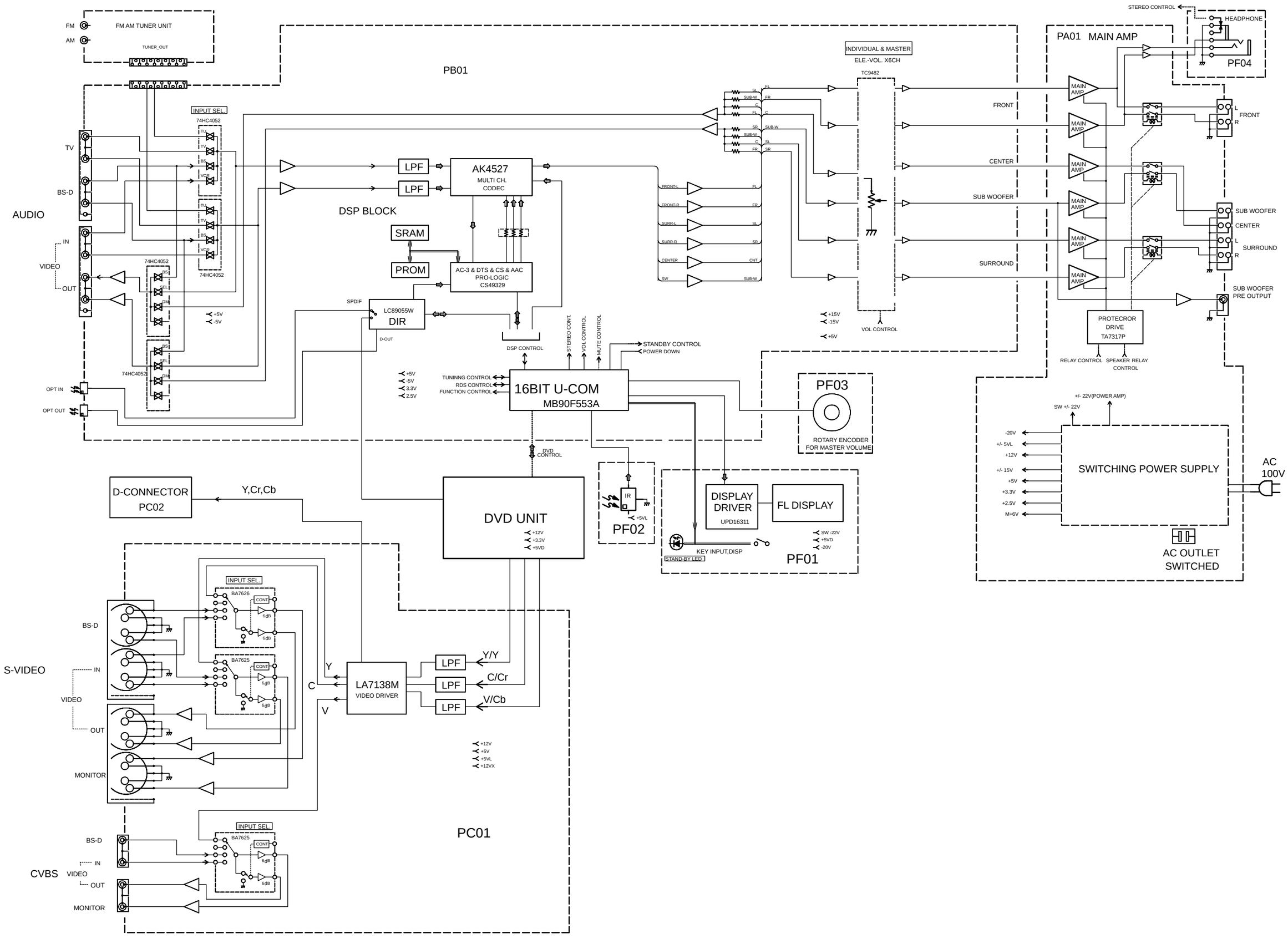
- リモコン送信機 （RC3000ERF） 1 個
- 単 3 形乾電池 2 個
- スピーカーケーブル 5 m x 4 本、 15 m x 2 本
- ビデオケーブル 1 本(ピンプラグ x 1 ― ピンプラグ x 1)
- ＡＭループアンテナ 1 個
- ＦＭワイヤーアンテナ 1 個
- ＦＭアンテナプラグ 1 個
- スピーカー 5 個
- サブウーファー 1 個
- 取扱説明書 1 部
- 保証書 1 部

※仕様および外観は、改良のため、予告なく変更することがあります。

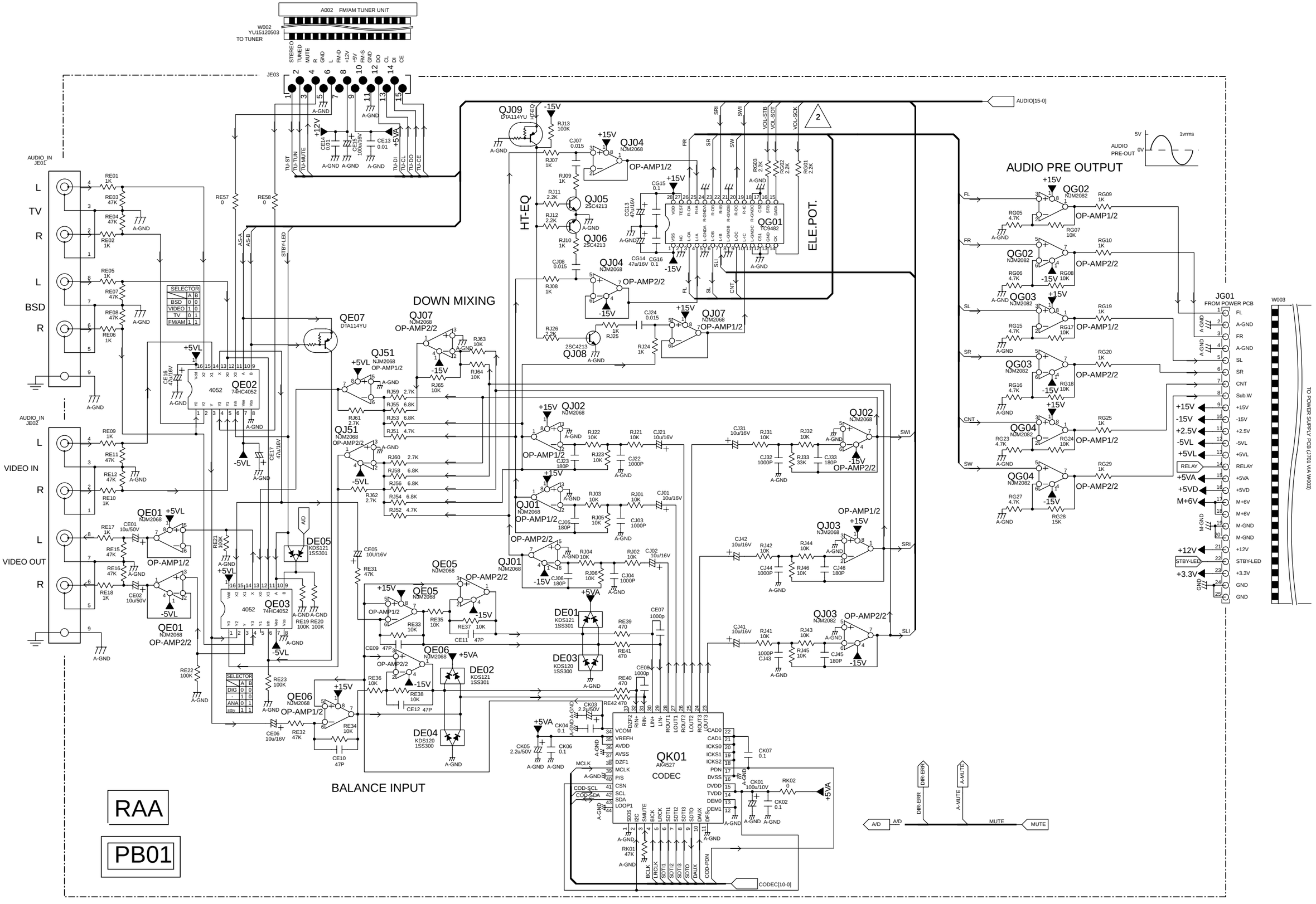
1.2 WIRING DIAGRAM



1.3 BLOCK DIAGRAM



1.4 SHEMATIC DIAGRAM AND PARTS LOCATION



Q601-PIN#13 CKOUT
PIN#20 XMCK
PIN#21 XOUT
PIN#22 XIN

Q601-PIN#14
BCK

Q601-PIN#15
LRCK

RDD

PB01

DSP V3.0
CHK SUM = 69D2H

RVA

PC01

VIDEO DRIVER
Q210
LA7138M

VIDEO SELECTOR
Q230
BA7625

Q231
BA7625

Q232
BA7626F

Q245
74HC4066AF

LPF

RVB

PC02

D-CONNECTOR

BSD VIN

VIDEO VIN

VIDEO VOUT

MONI VOUT

BSD S2IN

VIDEO SIN

VIDEO SOUT

MONI S2OUT

VIDEO INPUT	
Y	0.789Vpp
Cr	0.922Vpp
Cb	0.922Vpp
V	0.789Vpp
C	0.255Vpp

VIDEO OUTPUT	
Y	1.0Vpp
Cb	0.7Vpp
Cr	0.7Vpp
C	0.286Vpp

CONT DC BIAS	
4:3	0V
LETTER BOX	2.3V
16:9	5V

RPA

PA01

AUDIO AMPLIFIER

Q701 TA2022-100

AUDIO AMPLIFIER

Q741 TA2022-100

AUDIO AMPLIFIER

Q901 TA2022-100

W003

TO MICOM & DSP PCB(JG01 VIA W003)

J701

FL, A-GND, FR, A-GND, SL, SR, CNT, SUB.W, +15V, -15V, +2.5V, -5VL, +5VL, RELAY, +5VA, +5VD, M+6V, M+6V, M-GND, M-GND, +12V, STBY-LED, +3.3V, D-GND, D-GND

J702 SURROUND SPK OUT

SUB.W, CNT, SL, SR

J703 FRONT SPK OUT

FL, FR

J704 SUB WOOFER PRE OUT

SPEAKER PROTECTOR

Q902 DTC114EUA

Q905 2SC2240

Q906 2SC4213

QN01 TA7317P

QN02 NJM2068M

QN03 2SC4213

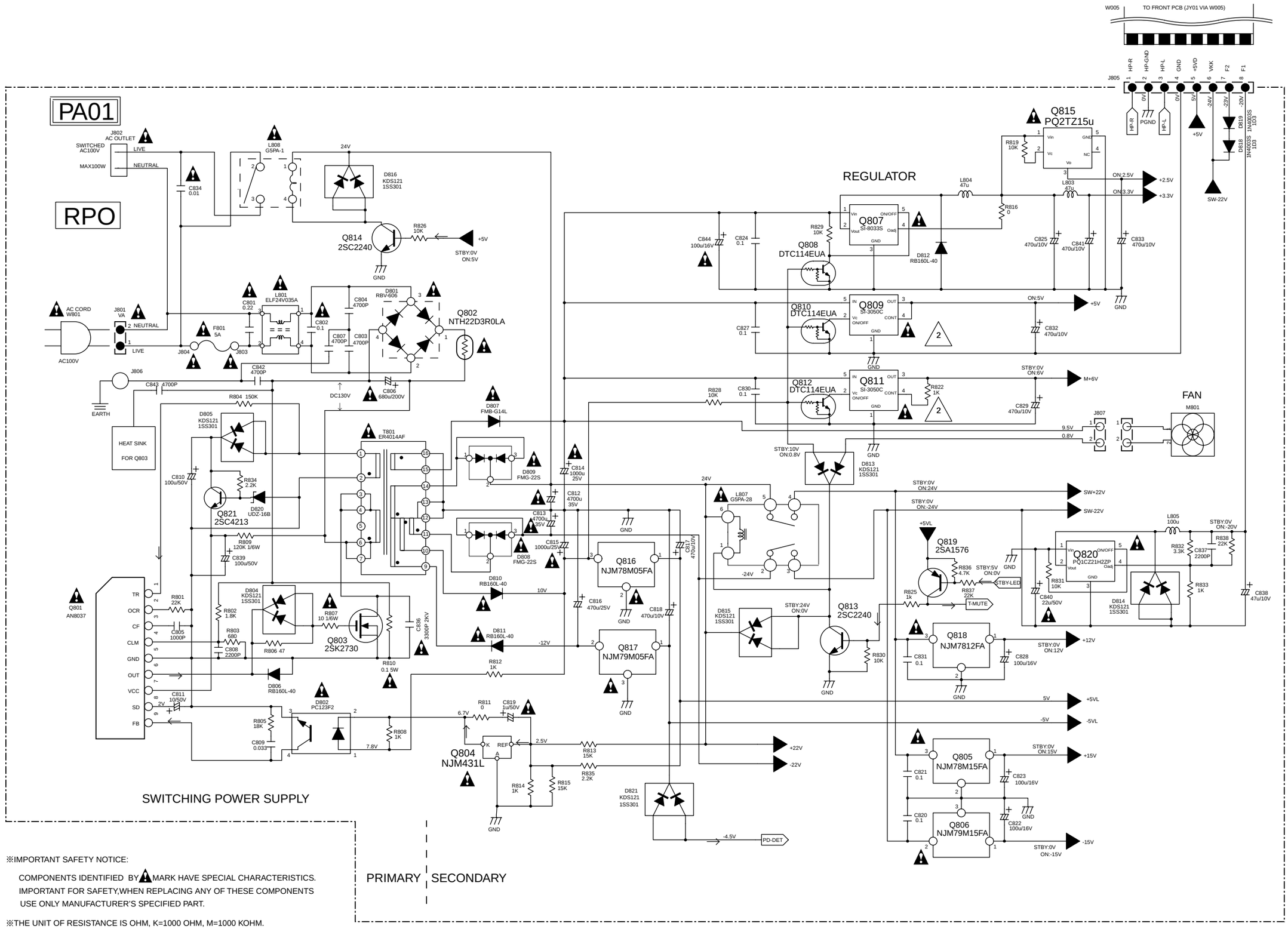
QN04 2SC4213

QN05 DTA114YU

Q701/Q741/Q901 PIN#6,PIN#7 PIN#10,PIN#11 OUT

Q701/Q741/Q901 PIN#5 VN10SW

Q701/Q741/Q901 PIN#1,PIN#13 VB00T



※IMPORTANT SAFETY NOTICE:

COMPONENTS IDENTIFIED BY ⚠ MARK HAVE SPECIAL CHARACTERISTICS. IMPORTANT FOR SAFETY,WHEN REPLACING ANY OF THESE COMPONENTS USE ONLY MANUFACTURER'S SPECIFIED PART.

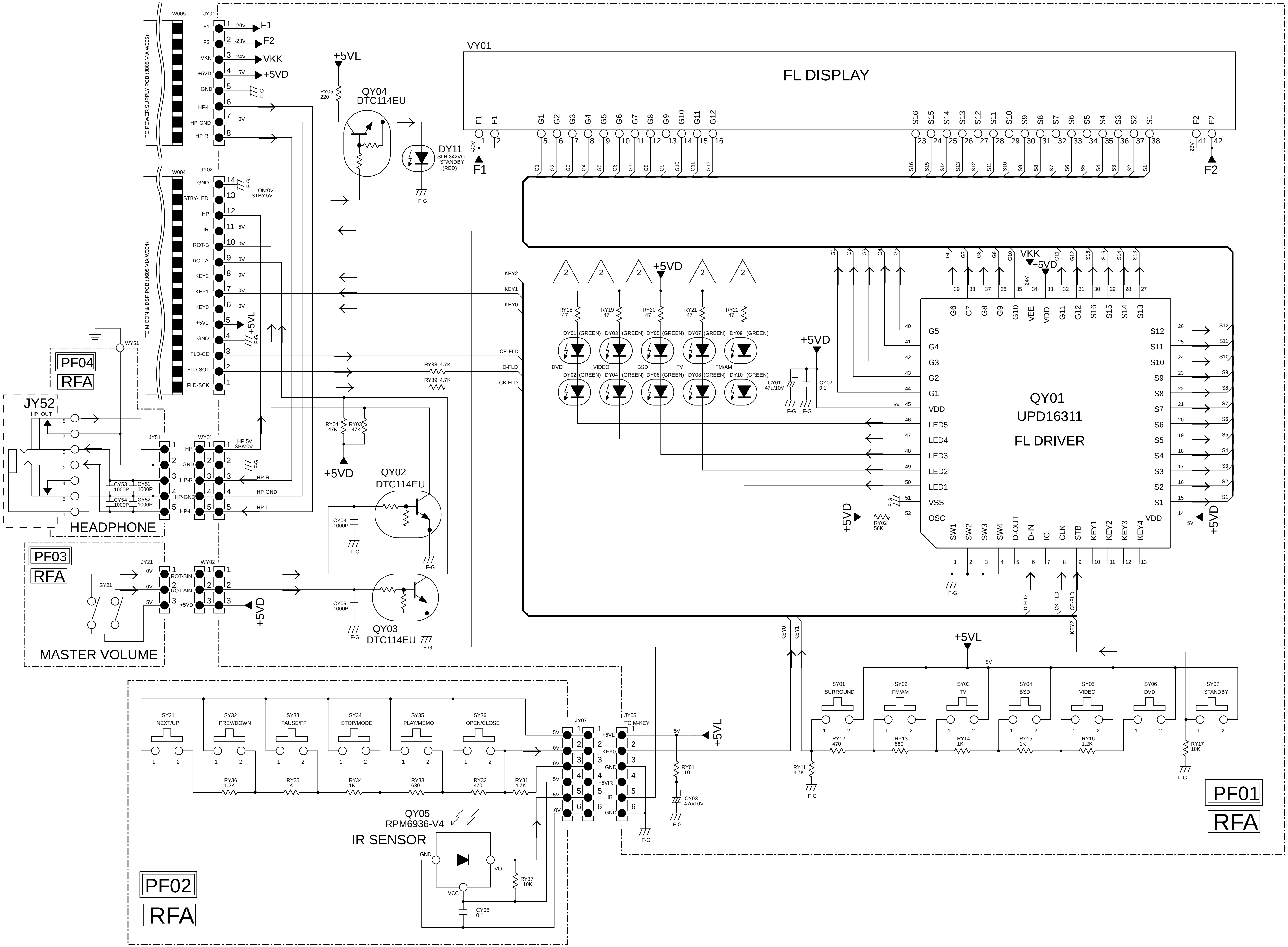
※THE UNIT OF RESISTANCE IS OHM, K=1000 OHM, M=1000 KOHM.

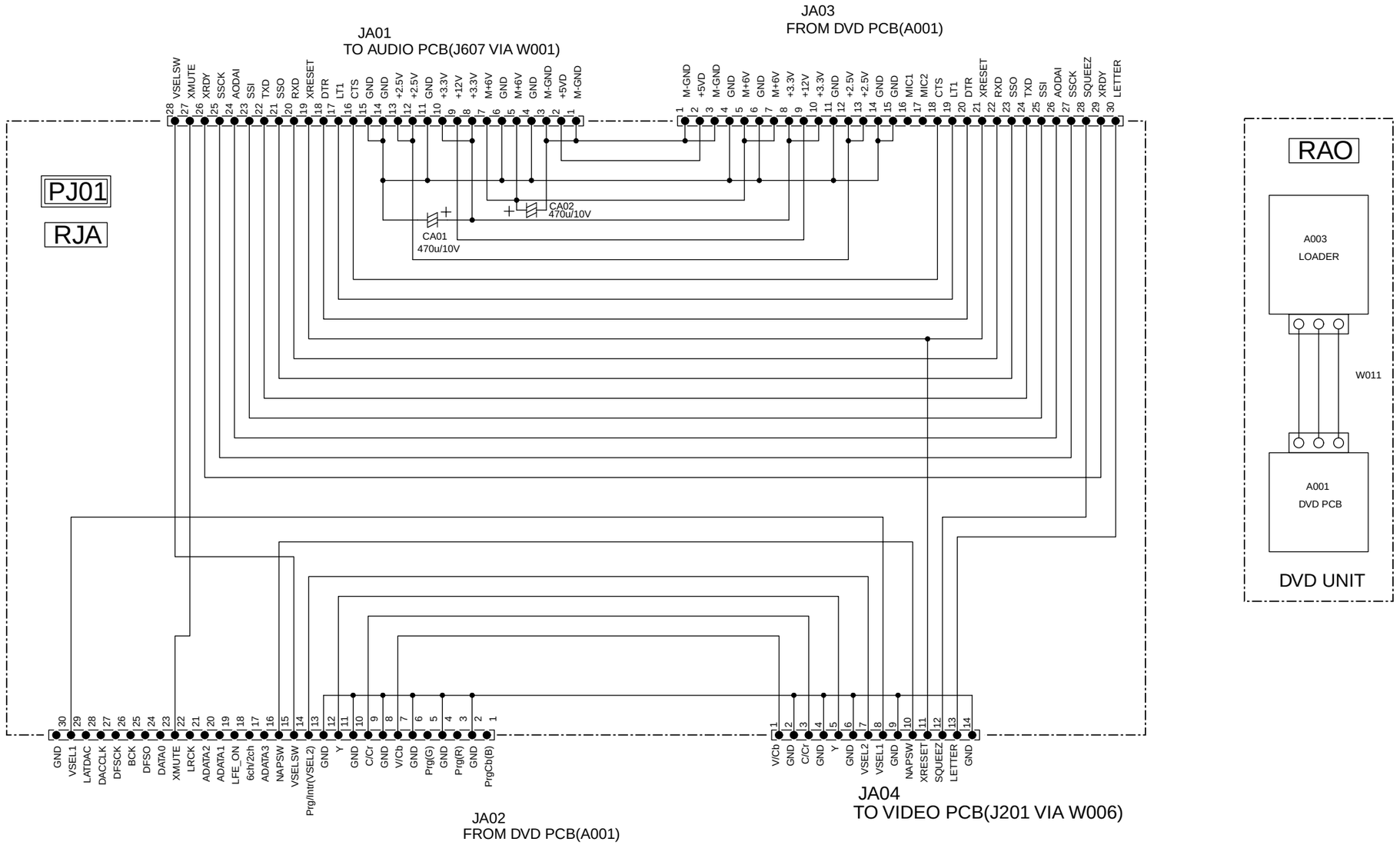
※THE CAPACITANCE IS MICROFARAD P=PICO FARAD.

※THIS SCHEMATIC DIAGRAM MAY BE MODIFIED AT ANY TIME WITH THE IMPROVEMENT OF PERFORMANCE.

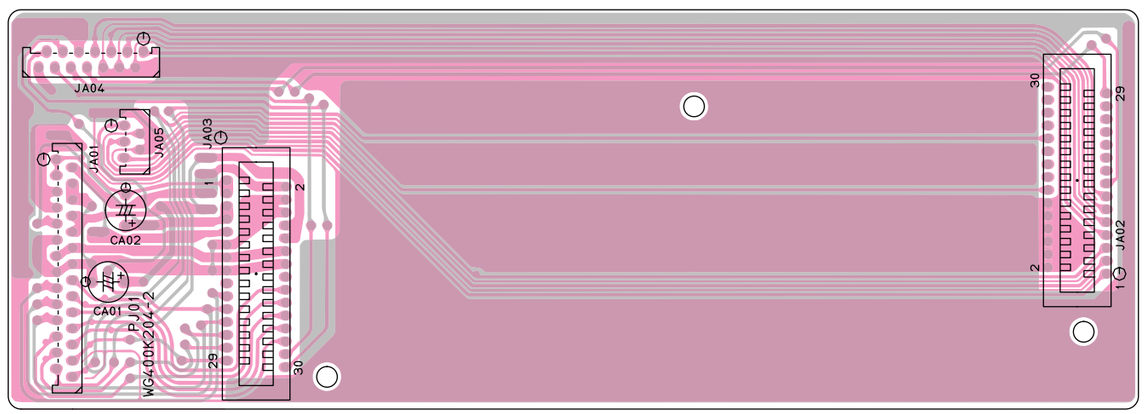
※ALL VOLTAGE ARE MEASURED WITH GROUND.

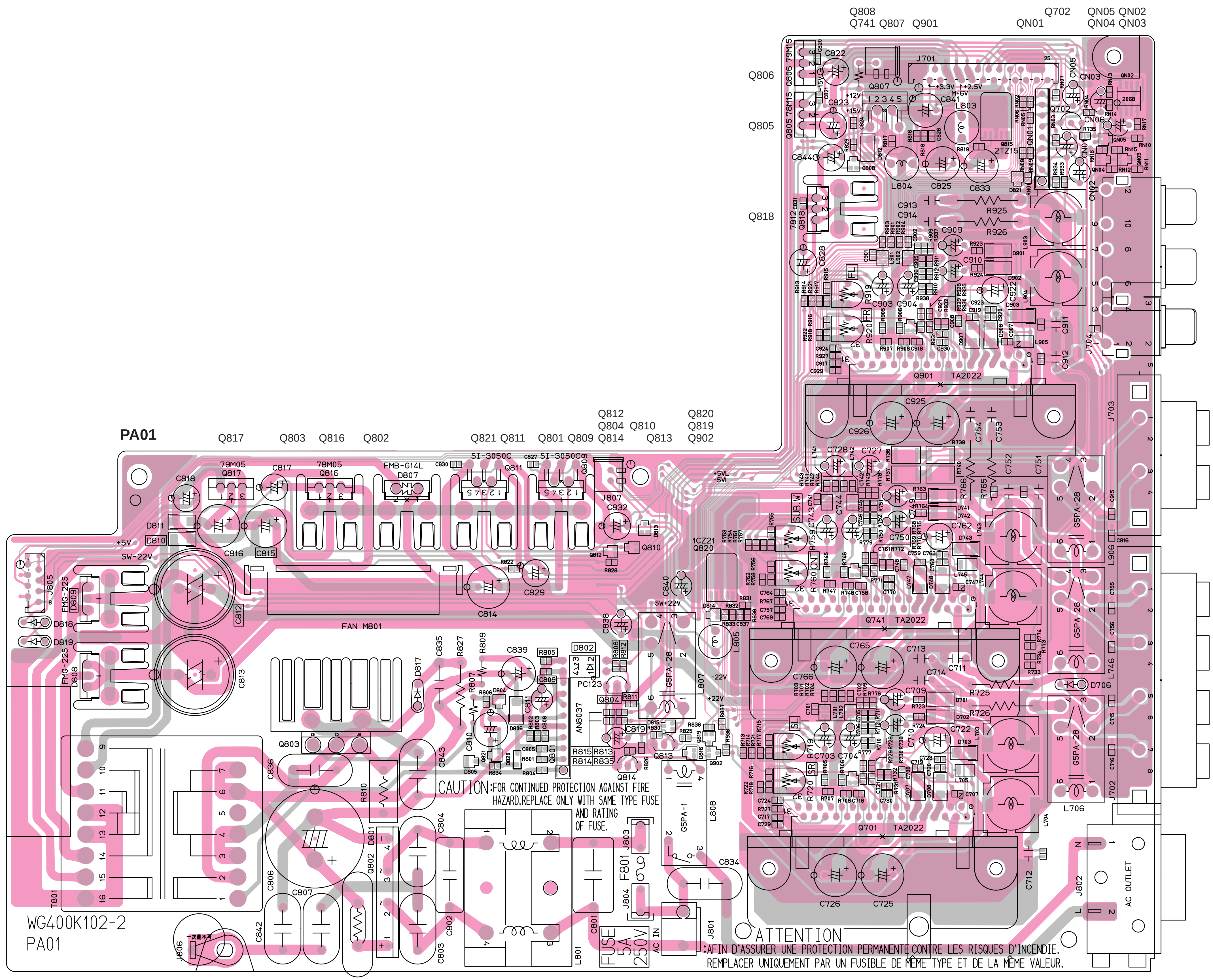
DC:VALUES WITH NO SIGNAL
AC:RMS

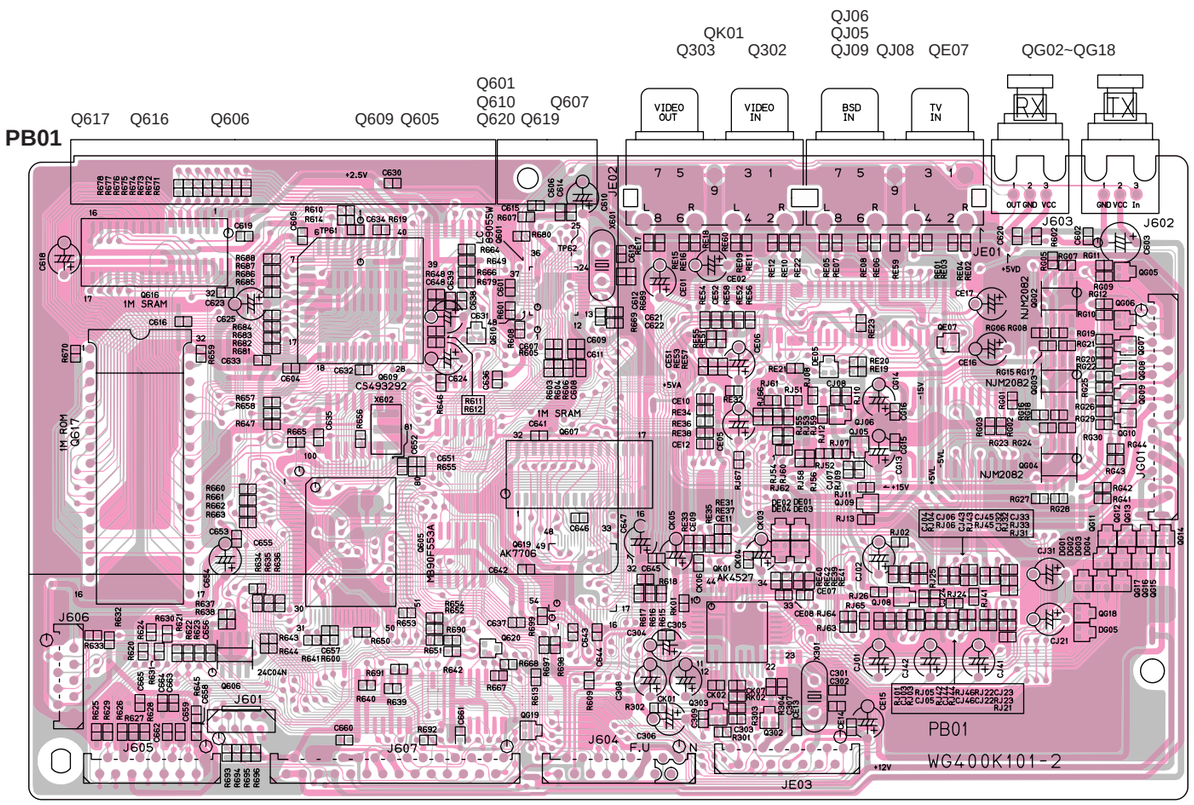

FL DISPLAY
VY01
QY01
UPD16311
FL DRIVER
QY04
DTC114EU
DY11
SLR 342VC
STANDBY
(RED)
QY02
DTC114EU
QY03
DTC114EU
QY05
RPM6936-V4
IR SENSOR
JY52
HEADPHONE
MASTER VOLUME
TO POWER SUPPLY PCB (J805 VIA W005)
TO MICON & DSP PCB (J805 VIA W004)
PF01
RFA
PF02
RFA
PF03
RFA
PF04
RFA
SY01 SURROUND
SY02 FM/AM
SY03 TV
SY04 BSD
SY05 VIDEO
SY06 DVD
SY07 STANDBY
SY31 NEXT/UP
SY32 PREV/DOWN
SY33 PAUSE/FP
SY34 STOP/MODE
SY35 PLAY/MEMO
SY36 OPEN/CLOSE
+5VL
+5VD
VKK
F1
F2

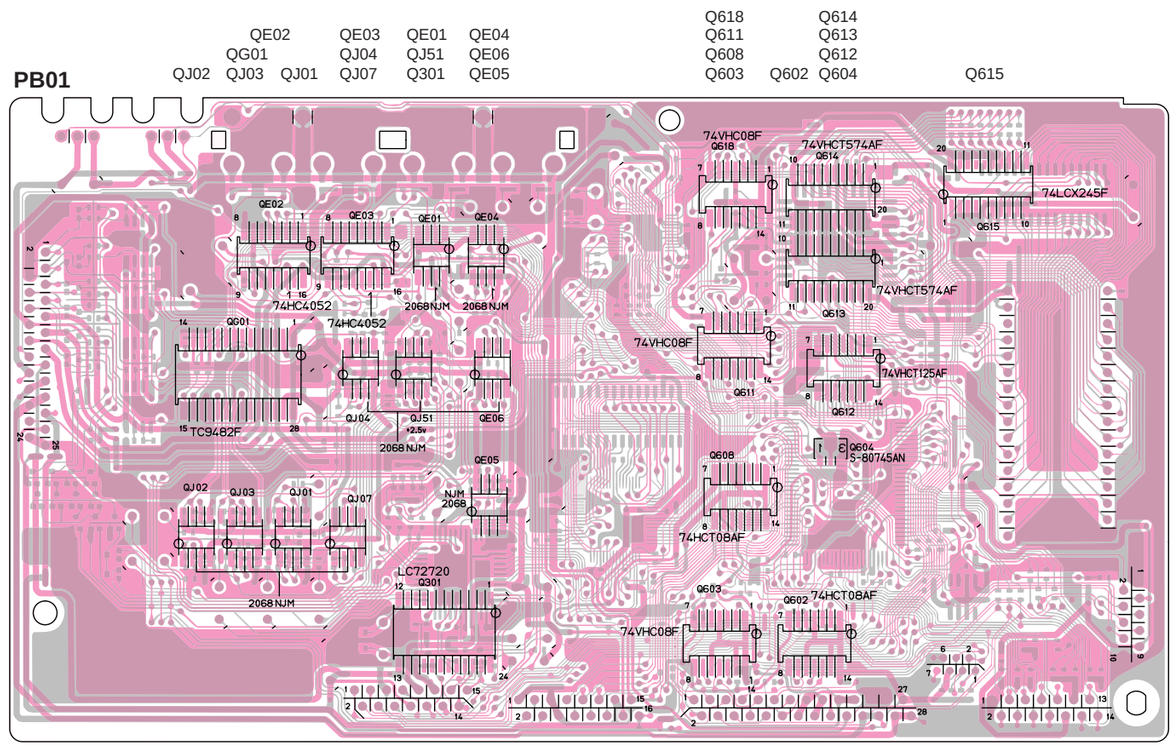

JA01
TO AUDIO PCB(J607 VIA W001)
JA03
FROM DVD PCB(A001)
PJ01
RJA
CA01
470u/10V
CA02
470u/10V
JA02
FROM DVD PCB(A001)
JA04
TO VIDEO PCB(J201 VIA W006)
RAO
A003
LOADER
W011
A001
DVD PCB
DVD UNIT

PJ01

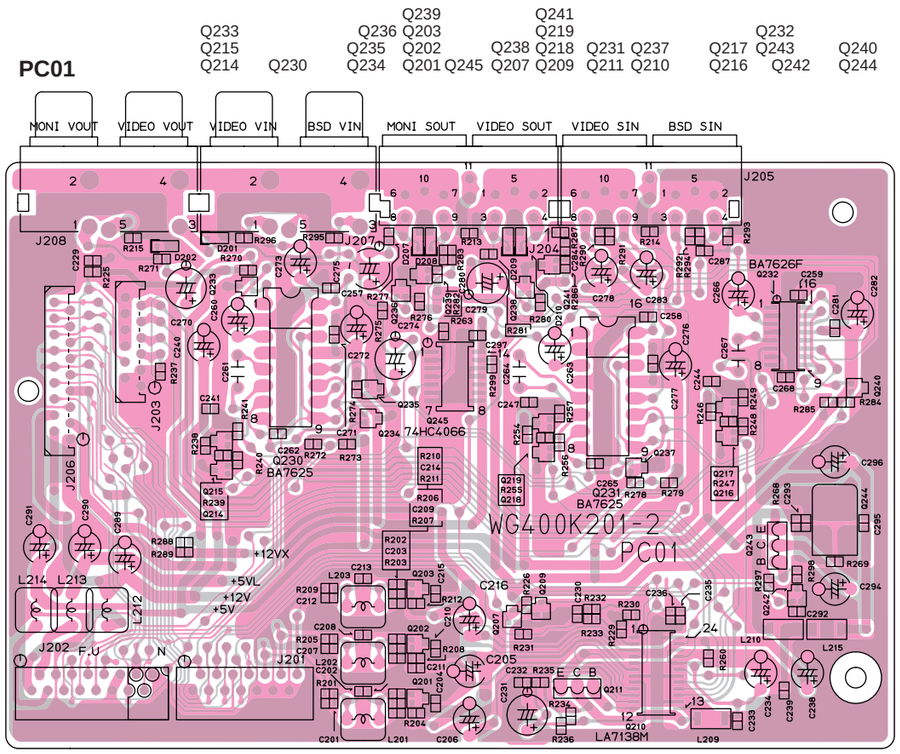

JA04
JA01
JA05
JA03
CA02
CA01
PJ01
WG400K204-2
JA02


PA01
Q808
Q741 Q807 Q901
Q702
QN01
QN05 QN02
QN04 QN03
Q806
Q805
Q818
Q817 Q803 Q816 Q802
Q821 Q811
Q801 Q809
Q812
Q804 Q814
Q810
Q813
Q820
Q819
Q902
CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE FUSE AND RATING OF FUSE.
ATTENTION: AFIN D'ASSURER UNE PROTECTION PERMANENTE CONTRE LES RISQUES D'INCENDIE. REMPLACER UNIQUEMENT PAR UN FUSIBLE DE MÊME TYPE ET DE LA MÊME VALEUR.
FUSE 5A 250V
AC IN
AC OUTLET
FAN M801
WG400K102-2
PA01

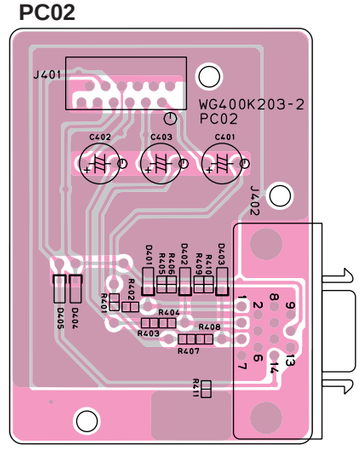

PB01
Q617 Q616 Q606 Q609 Q605 Q601 Q610 Q620 Q619 Q607
QK01 Q303 Q302 QJ06 QJ05 QJ09 QJ08 QE07 QG02~QG18
VIDEO OUT
VIDEO IN
BSD IN
TV IN
RX
TX
J602
J603
J606
J601
J605
J607
J604
F.U
PB01
WG400K101-2
JE03


PB01
QE02 QG01 QJ02 QJ03 QJ01 QE03 QJ04 QJ07 QE01 QJ51 QE04 QE06 QE05 Q301
Q618 Q611 Q608 Q603 Q614 Q613 Q612 Q602 Q604 Q615
74VHC08F
74VHCT574AF
74LCX245F
74HC4052
74VHCT125AF
74HCT08AF
LC72720
2068NJM
TC9482F

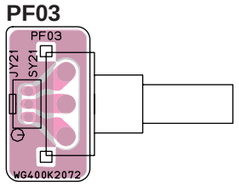
PC01



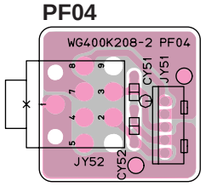
PC02



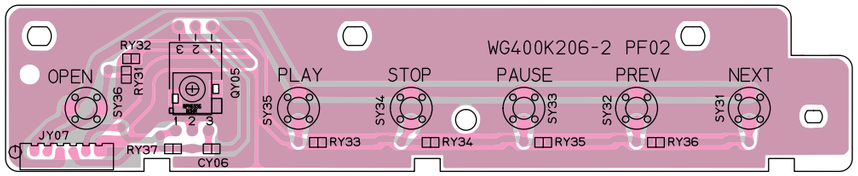
PF03



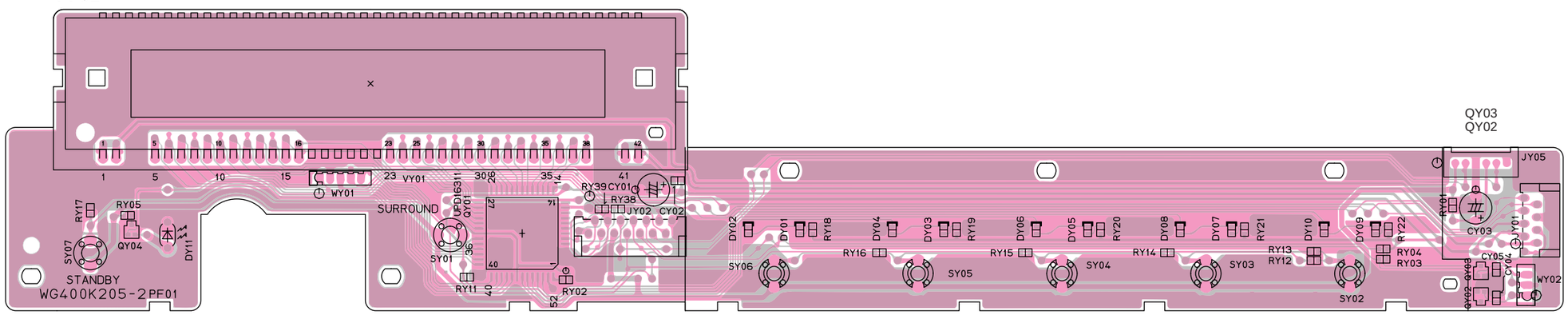
PF04



PF02



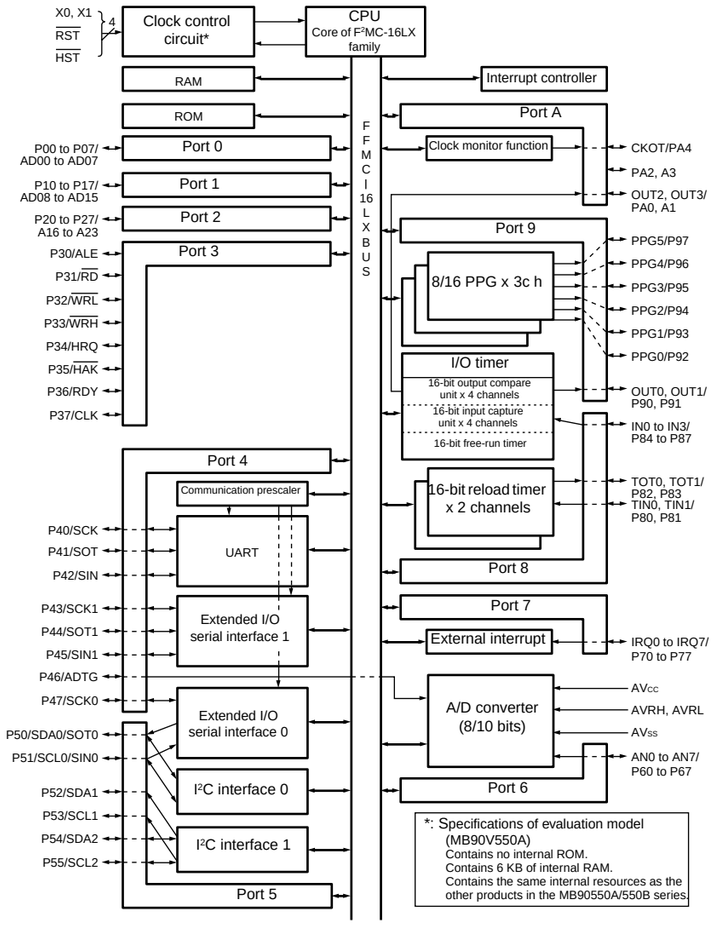
PF01



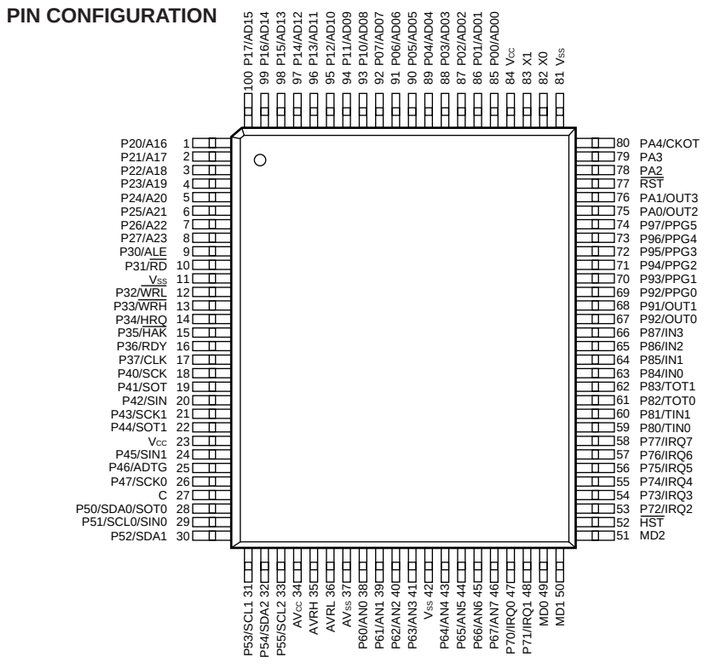
1.5 MICROPROCESSOR AND IC DATA

Q605 :MB90F553A

BLOCK DIAGRAM



PIN CONFIGURATION

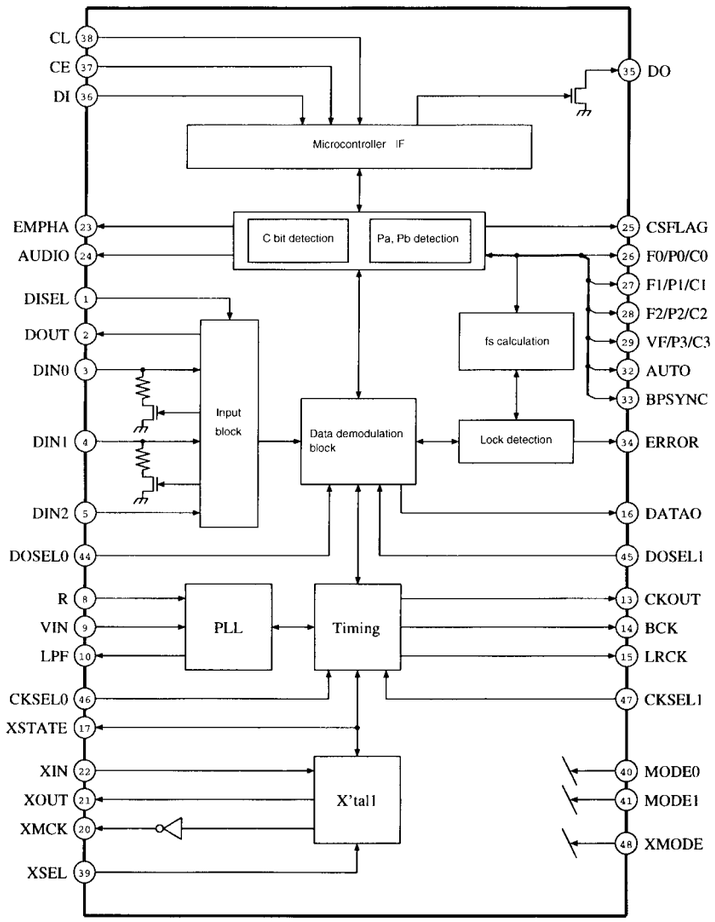


PIN FUNCTION

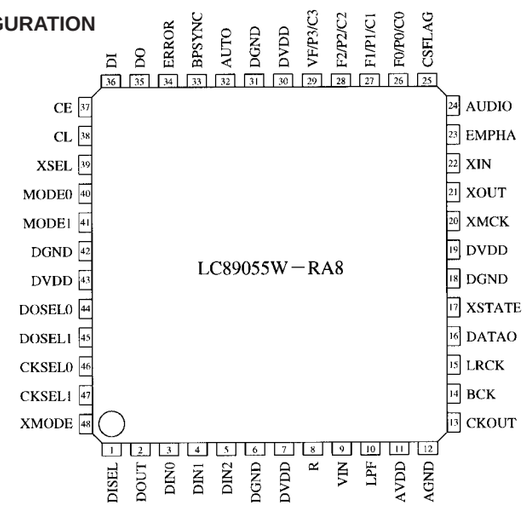
Pin No.	Port Name	I/O	Name	Active	機能	主な接続先のデバイス
1	P20/A16	O	A/D	H(Analog)	ADC入力時:H、DIR入力時:L	
2	P21/A17	O	TU-CL	-	CCB BUS CLK(PLL,RDS DECODER)	Tuner Pack (PLL:LC72131),RDS:LC72720
3	P22/A18	O	TU-DO	-	CCB BUS DO(PLL,RDS DECODER)	Tuner Pack (PLL:LC72131),RDS:LC72720
4	P23/A19	O	TU-CE	L	CCB BUS CE(PLL,RDS DECODER)	Tuner Pack (PLL:LC72131),RDS:LC72720
5	P24/A20	I	TU-ST	L	TUNER用STEREO信号入力	Tuner Pack (LC1837M)
6	P25/A21	I	TU-TUN	L	Station Ditecte信号入力	Tuner Pack (LC1837M)
7	P26/A22	O	TU-MUTE	H	TUNER用IF MUTE出力	Tuner Pack (LC1837M)
8	P27/A23	O	RDS-OSCK	L	RDS用X'tal OSC KILL信号出力(LowでKill)	RDS:LC72720
9	P30/ALE	I	TU-DI	-	CCB BUS DI(PLL DECODER)	Tuner Pack (PLL:LC72131)
10	P31/RD	I	RDS-DI	-	RDS用DATA入力	RDS:LC72720
11	Vss	I	Vss	-	GND	
12	P32/WRL	O	FLD-CE	L	FL Driver用CE出力(立ち下がりでＬａｃｈ)	FL Driver:UPD16311
13	P33/WRH	O	COD-PDN	L	CODEC用RESET出力	CODEC:AK4527
14	P34/HRQ	O	DVD-XRST	L	DVD用RESET出力	DVD UNIT:DV535
15	P35/HAK	O	DVD-XRDY	L	DVD用XREADY出力	DVD UNIT:DV535
16	P36/RDY	O	VOL-STB	L	VOLUME用STOROBE出力(立ち下がりでLach)	System E_Volume:TC9482
17	P37/CLK	O	VOL-SOT	-	VOLUME用DATA出力	System E_Volume:TC9482
18	P40/SCK	O	FLD-SCK	-	FL Driver用CLK出力	FL Driver:UPD16311, Flash ROM Writer
19	P41/SOT	O	FLD-SOT	-	FL Driver用DATA出力	FL Driver:UPD16311, Flash ROM Writer
20	P42/SIN	I	FLD-SIN	-	Flash ROM Writer用DATA入力	Flash ROM Writer
21	P43/SCK1	O	DVD-SCK	-	DVD用CLK出力	DVD UNIT:DV535
22	P44/SOT1	O	DVD-SOT	-	DVD用DATA出力	DVD UNIT:DV535
23	Vcc	I	Vcc	-	＋5V	
24	P45/SIN1	I	DVD-SIN	-	DVD用DATA入力	DVD UNIT:DV535
25	P46/ADTG	O	ABOOT	L(OD)	CS49329用AUTO BOOTトリガー信号	DSP:CS49329
26	P47/SCK0	O	DSP-SCK	-	DSP,DIR用CLK出力	DSP:CS49329,AK7706,DIR:LC89055
27	C		C	-		
28	P50/SDA0/SOT0	O	DSP-SOT	-	DSP,DIR用DATA出力	DSP:CS49329,AK7706,DIR:LC89055
29	P51/SCL0/SIN0	I	DSP-SIN	-	DSP,DIR用DATA入力	DSP:CS49329,AK7706,DIR:LC89055
30	P52/SDA1	I/O	ROM-SDA	-	EE-PROM用DATA入出力	EEPROM:AT24C04N
31	P53/SCL1	O	ROM-SCL	-	EE-PROM用CLK出力	EEPROM:AT24C04N
32	P54/SDA2	I/O	COD-SDA	-	CODEC用DATA入出力	CODEC:AK4527
33	P55/SCL2	O	COD-SCL	-	CODEC用CLK出力	CODEC:AK4527
34	Avcc	I	Avcc	-	＋5V	
35	AVRH	I	AVRH	-	＋5V	
36	AVRL	I	AVRL	-	GND	
37	Avss	I	Avss	-	GND	
38	P60/AN0	I	MS0	-	機種設定用電圧入力	
39	P61/AN1	I	MS1	-	仕向け設定用電圧入力	
40	P62/AN2	I	KEY0	-	8分割 A/D KEY入力0	
41	P63/AN3	I	KEY1	-	8分割 A/D KEY入力1	
42	Vss	I	Vss	-	GND	
43	P64/AN4	I	KEY2	-	STANDBY KEY入力	通常：プルダウンKEY押下時＋5V
44	P65/AN5		NC	-		
45	P66/AN6		NC	-		
46	P67/AN7		NC	-		
47	P70/IRQ0	I	DVD-LT1	H	DVD用LT1信号入力	DVD UNIT:DV535
48	P71/IRQ1	I	DIR-XSTA	L	DIR用XSTATE信号入力	DIR:LC89055
49	MD0	I	TMODE	-	動作モード設定	
50	MD1	I	MD1	-	動作モード設定	
51	MD2	I	TAUX3	-	動作モード設定	
52	HST	I	HST	L	HST	
53	P72/IRQ2	I	DIR-AUDIO	L(PCM)	DIR用AUDIO信号入力	DIR:LC89055
54	P73/IRQ3	I	CS-INT	L	CS49329用割り込み要求入力	DSP:CS49300
55	P74/IRQ4	I	DIR-AUTO	H	DIR用AUTO信号入力	DIR:LC89055
56	P75/IRQ5	I	DIR-ERR	H	DIR用ERROR信号入力	DIR:LC89055
57	P76/IRQ6	I	ROT-B	-	ROTALY ENCORDER B 信号入力	Encoder:EC16B24304
58	P77/IRQ7	I	ROT-A	-	ROTALY ENCORDER A 信号入力	Encoder:EC16B24304
59	P80/TIN0	I	AK-RDY	H	AK7706用RDY信号入力	DSP:AK7706
60	P81/TIN1	O	A-MUTE	H	ANALOG回路用MUTE信号出力	
61	P82/TOT0	O	HT-EQ	H	HT-EQがONの時にHigh	
62	P83/TOT1		NC	-		
63	P84/IN0	I	IR	-	IR Receiver 信号入力	
64	P85/IN1	O	AS-A	-	AUDIO SELECT A信号出力	Selector:74HC4052
65	P86/IN2	O	AS-B	-	AUDIO SELECT B信号出力	Selector:74HC4052
66	P87/IN3		NC	-		
67	P90/OUT0	I	HP	L	ヘッドフォンSENS信号入力	
68	P91/OUT1	O	STBY-LED	H	STANBY-LED点灯信号	
69	P92/PPG0	O	RELAY	H	RELAY制御信号	
70	P93/PPG1	O	ROM-A15	-	DL用ROMアドレス制御信号	ROM
71	P94/PPG2	O	ROM-A16	-	DL用ROMアドレス制御信号	ROM
72	P95/PPG3		NC	-		
73	P96/PPG4	0	D1-OUT	H	D1、Composit出力選択信号出力	DVD UNIT:DV535
74	P97/PPG5	I	D1-IN	L	D1 Connect 検出信号入力	D1 Connector
75	PA0/OUT2	O	VINSEL1	-	Video Selector制御信号出力 1	Video Selecter:BA7625,BA7626
76	PA1/OUT3	O	VINSEL2	-	Video Selector制御信号出力 2	Video Selecter:BA7625,BA7626
77	RST	I	RESET	L	RESET入力	
78	PA2	O	VINSEL3	-	Video Selector制御信号出力 3	Video Selecter:BA7625,BA7626
79	PA3	O	DCSEL1	-	DC Selector制御信号出力 1	DC Selecter:74HC4066
80	PA4/CKOT	O	DCSEL2	-	DC Selector制御信号出力 2	DC Selecter:74HC4066
81	Vss		Vss	-	GND	
82	XO	O	X'tal OUT	-	X'tal発振器出力	
83	XI	I	X'tal IN	-	X'tal発振器入力	
84	Vcc		Vcc	-	＋5V	
85	P00/AD00	I	TAUX			Rom Writer
86	P01/AD01	I		PU		
87	P02/AD02	O	DIR-CE	L	DIR用CE信号出力	DIR:LC89055
88	P03/AD03	I	DIR-EMP	H	DIR用EMPHASIS信号入力	DIR:LC89055
89	P04/AD04	O	DIR-XMD	L	DIR用XMODE信号出力	DIR:LC89055
90	P05/AD05	I	DIR-P0	H	DIR用P0信号入力	DIR:LC89055
91	P06/AD06	I	DIR-P1	H	DIR用P1信号入力	DIR:LC89055
92	P07/AD07	I	DIR-P2	H	DIR用P2信号入力	DIR:LC89055
93	P10/AD08	I	DIR-P3	H	DIR用P3信号入力	DIR:LC89055
94	P11/AD09	O	CS-CE	L	CS49329用 Chip Enable信号出力	DSP:CS49329
95	P12/AD10	O	CS-DL	L	CS49329用 DOWNLoad信号出力	DSP:CS49329
96	P13/AD11	O	CS-RES	H	CS49329用 RESET信号出力	DSP:CS49329
97	P14/AD12	O	AK-DRST	L	AK7706用DSP_RESET信号出力	DSP:AK7706
98	P15/AD13	O	AK-RST	L	AK7706用INIT_RESET信号出力	DSP:AK7706
99	P16/AD14	O	VOL-SCK	-	VOLUME用CLK出力	System E_Volume:TC9482
100	P17/AD15	O	AK-RQ	L	AK7706用RQ信号出力	DSP:AK7706

Q601 : LC89055W-RA8

BLOCK DIAGRAM



PIN CONFIGURATION



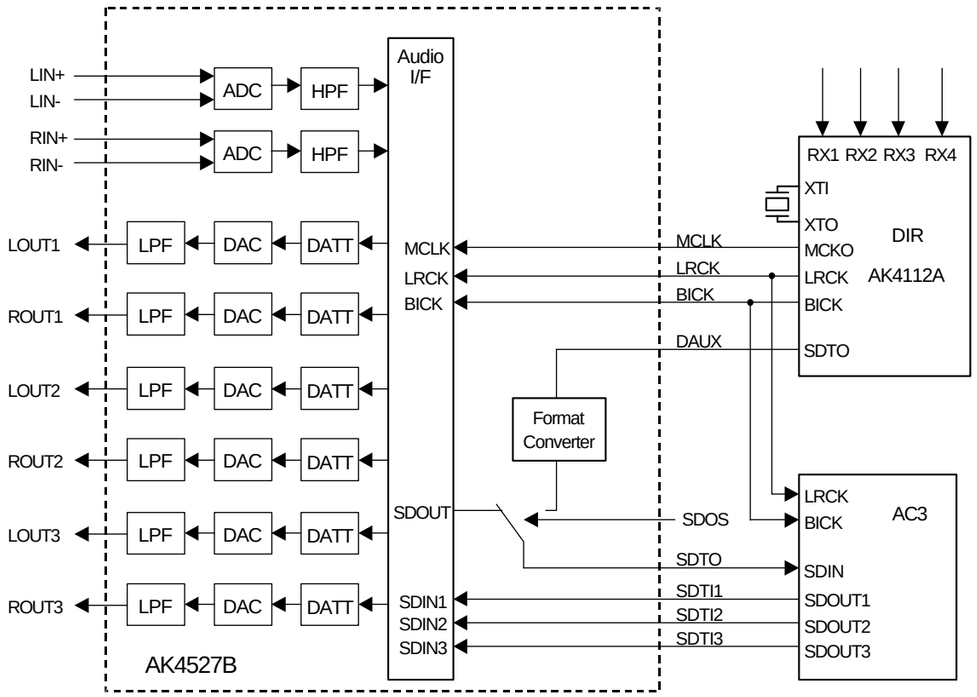
PIN FUNCTION

No.	Pin name	I/O	Function
1	DISEL	I	Data input pin (DIN0, DIN1) selection input pin
2	DOUT	O	Input bi-phase data through output pin
3	DIN0	I	Digital data input pin (CMOS level, with pull-down resistance when no selected)
4	DIN1	I	Digital data input pin (CMOS level, with pull-down resistance when no selected)
5	DIN2	I	Digital data input pin (TTL level)
6	DGND		Digital GND
7	DVDD		Digital power supply
8	R	I	VCO gain control input pin
9	VIN	I	VCO free-running frequency setting input pin
10	LPF	O	PLL loop filter setting pin
11	AVDD		Analog power supply
12	AGND		Analog GND
13	CKOUT	O	Clock output pin (256 fs, 384 fs, 512 fs, crystal oscillation, VCO free-running oscillation)
14	BCK	O	64 fs clock output pin
15	LRCK	O	fs clock output pin (L = R-ch, H = L-ch, I^2S = inverted)
16	DATAO	O	Data output pin
17	XSTATE	O	Source clock switch monitor output pin
18	DGND		Digital GND
19	DVDD		Digital power supply
20	XMCK	O	Crystal oscillation clock output pin (24.576 MHz or 12.288 MHz)
21	XOUT	O	Crystal oscillator connection output pin
22	XIN	I	Crystal oscillator connection input pin, external signal input supported (24.576 MHz or 12.288 MHz)
23	EMPHA	O	Channel status emphasis information output pin
24	AUDIO	O	Channel status bit 1 (non-PCM data detection bit) output pin
25	CSFLAG	O	First 40 channel status bits update flag output pin
26	F0/P0/C0	O	Input fs calculation signal output/Pc data type output/input word length information output pin
27	F1/P1/C1	O	Input fs calculation signal output/Pc data type output/input word length nformation output pin
28	F2/P2/C2	O	Input fs calculation signal output/Pc data type output/input word length information output pin
29	VF/P3/C3	O	Validity flag output/Pc data type output/input word length information output pin
30	DVDD		Digital GND
31	DGND		Digital power supply
32	AUTO	O	Non-PCM burst data transfer detection signal (Pa, Pb detection) output pin
33	BPSYNC	O	Non-PCM burst preamble Pa, Pb, Pc, Pd sync signal output pin
34	ERROR	O	PLL lock error or data error flag output pin
35	DO	O	Microcontroller IF/read data output pin
36	DI	I	Microcontroller IF/write data input pin
37	CE	I	Microcontroller IF/Chip enable input pin
38	CL	I	Microcontroller IF/clock input pin
39	XSEL	I	[XIN] crystal oscillation selection input pin (24.576 MHz or 12.288 MHz)
40	MODE0	I	Mode setting input pin
41	MODE1	I	Mode setting input pin
42	DGND		Digital GND
43	DVDD		Digital power supply
44	DOSEL0	I	Output data format selection input pin
45	DOSEL1	I	Output data format selection input pin
46	CKSEL0	I	Output clock selection input pin
47	CKSEL1	I	Output clock selection input pin
48	XMODE	I	System reset input pin

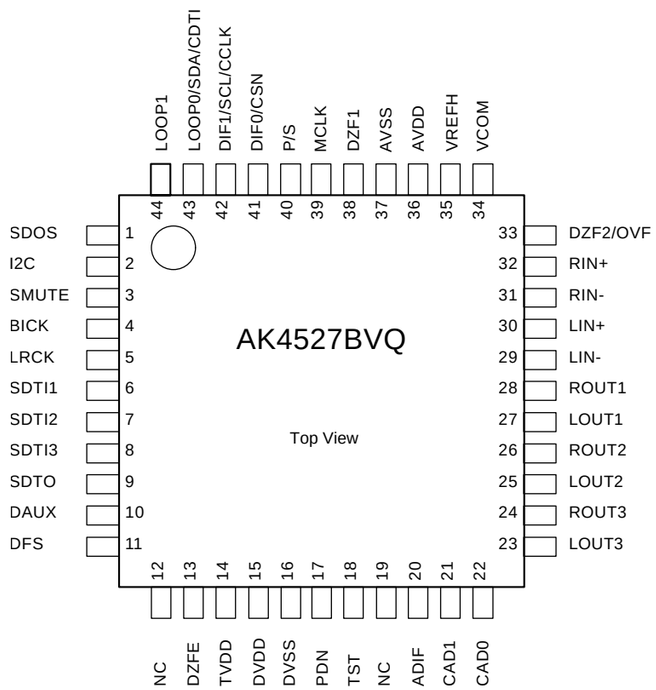
Note: * Perform digital power supply (DVDD) and analog power supply (AVDD) ON/OFF with the same potential and the same timing as a latch-up countermeasure.

QK01 : AK4527

BLOCK DIAGRAM



PIN CONFIGURATION



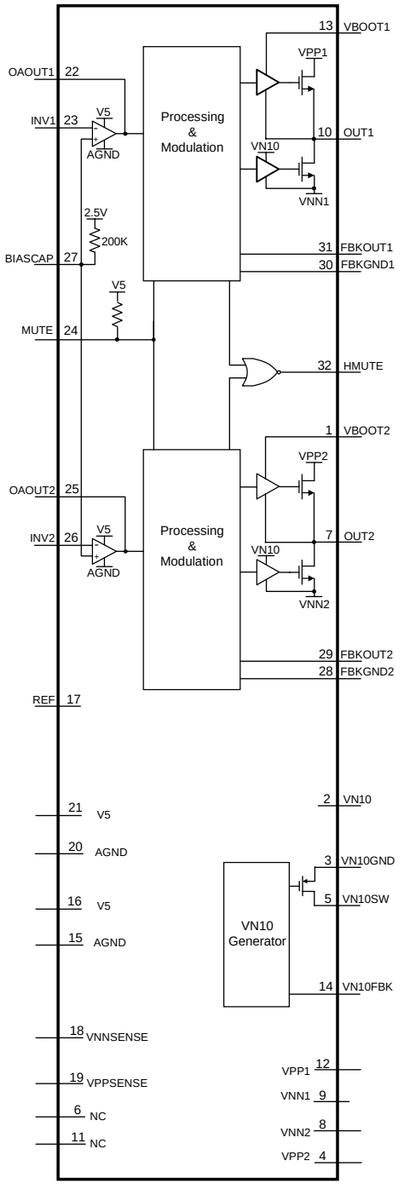
PIN FUNCTION

No.	Pin Name	I/O	Function
1	SDOS	I	SDTO Source Select Pin (Note 1) "L": Internal ADC output, "H": DAUX input
2	I2C	I	Control Mode Select Pin "L": 3-wire Serial, "H": I²C Bus
3	SMUTE	I	Soft Mute Pin (Note 1) When this pin goes to "H", soft mute cycle is initialized. When returning to "L", the output mute releases.
4	BICK	I	Audio Serial Data Clock Pin
5	LRCK	I	Input Channel Clock Pin
6	SDTI1	I	DAC1 Audio Serial Data Input Pin
7	SDTI2	I	DAC2 Audio Serial Data Input Pin
8	SDTI3	I	DAC3 Audio Serial Data Input Pin
9	SDTO	O	Audio Serial Data Output Pin
10	DAUX	I	AUX Audio Serial Data Input Pin
11	DFS	I	Double Speed Sampling Mode Pin (Note 1) "L": Normal Speed, "H": Double Speed
12	NC	-	No Connect No internal bonding.
13	DZFE	I	Zero Input Detect Enable Pin "L": mode 7 (disable) at parallel mode, zero detect mode is selectable by DZFM2-0 bits at serial mode "H": mode 0 (DZF1 is AND of all six channels)
14	TVDD	-	Output Buffer Power Supply Pin, 2.7V~5.5V
15	DVDD	-	Digital Power Supply Pin, 4.5V~5.5V
16	DVSS	-	Digital Ground Pin, 0V
17	PDN	I	Power-Down & Reset Pin When "L", the AK4527B is powered-down and the control registers are reset to default state. If the state of P/S or CAD0-1 changes, then the AK4527B must be reset by PDN.
18	TST	I	Test Pin This pin should be connected to DVSS.
19	NC	-	No Connect No internal bonding.
20	ADIF	I	Analog Input Format Select Pin "H": Full-differential input, "L": Single-ended input
21	CAD1	I	Chip Address 1 Pin
22	CAD0	I	Chip Address 0 Pin
23	LOUT3	O	DAC3 Lch Analog Output Pin
24	ROUT3	O	DAC3 Rch Analog Output Pin
25	LOUT2	O	DAC2 Lch Analog Output Pin
26	ROUT2	O	DAC2 Rch Analog Output Pin
27	LOUT1	O	DAC1 Lch Analog Output Pin
28	ROUT1	O	DAC1 Rch Analog Output Pin
29	LIN-	I	Lch Analog Negative Input Pin
30	LIN+	I	Lch Analog Positive Input Pin
31	RIN-	I	Rch Analog Negative Input Pin
32	RIN+	I	Rch Analog Positive Input Pin
33	DZF2	O	Zero Input Detect 2 Pin (Note 2) When the input data of the group 1 follow total 8192 LRCK cycles with "0" input data, this pin goes to "H".
	OVF	O	Analog Input Overflow Detect Pin (Note 3) This pin goes to "H" if the analog input of Lch or Rch is overflows.
34	VCOM	O	Common Voltage Output Pin, AVDD/2 Large external capacitor around 2.2μF is used to reduce power-supply noise.
35	VREFH	I	Positive Voltage Reference Input Pin, AVDD
36	AVDD	-	Analog Power Supply Pin, 4.5V~5.5V
37	AVSS	-	Analog Ground Pin, 0V
38	DZF1	O	Zero Input Detect 1 Pin (Note 2) When the input data of the group 1 follow total 8192 LRCK cycles with "0" input data, this pin goes to "H".
39	MCLK	I	Master Clock Input Pin
40	P/S	I	Parallel/Serial Select Pin "L": Serial control mode, "H": Parallel control mode
41	DIF0	I	Audio Data Interface Format 0 Pin in parallel control mode
	CSN	I	Chip Select Pin in 3-wire serial control mode This pin should be connected to DVDD at I²C bus control mode
42	DIF1	I	Audio Data Interface Format 1 Pin in parallel control mode
	SCL/CCLK	I	Control Data Clock Pin in serial control mode I2C = "L": CCLK (3-wire Serial), I2C = "H": SCL (I²C Bus)
43	LOOP0	I	Loopback Mode 0 Pin in parallel control mode Enables digital loop-back from ADC to 3 DACs.
	SDA/CDTI	I/O	Control Data Input Pin in serial control mode I2C = "L": CDTI (3-wire Serial), I2C = "H": SDA (I²C Bus)
44	LOOP1	I	Loopback Mode 1 Pin (Note 1) Enables all 3 DAC channels to be input from SDTI1.

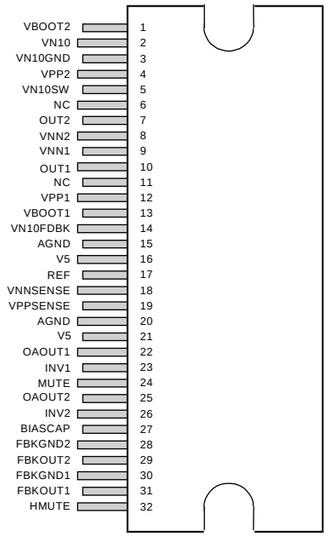
Notes:
1. SDOS, SMUTE, DFS, and LOOP1 pins are ORed with register data if P/S = "L".
2. The group 1 and 2 can be selected by DZFM2-0 bits if P/S = "L" and DZFE = "L".
3. This pin becomes OVF pin if OVFE bit is set to "1" at serial control mode.
4. All input pins should not be left floating.

Q701 : TA2022-100

BLOCK DIAGRAM



PIN CONFIGURATION

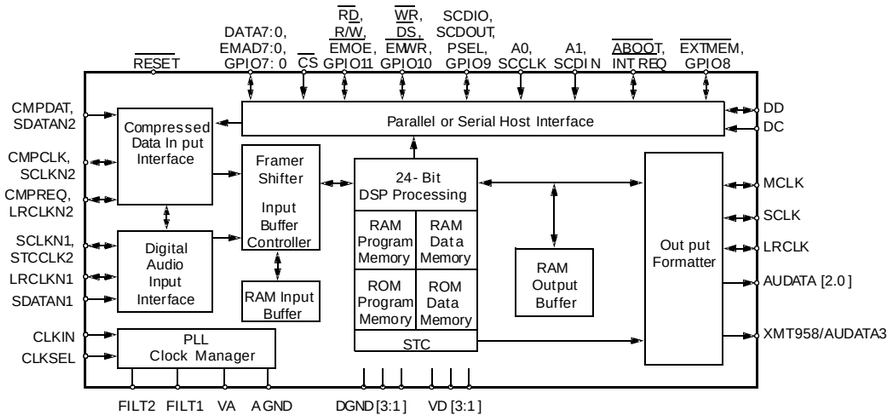


PIN FUNCTION

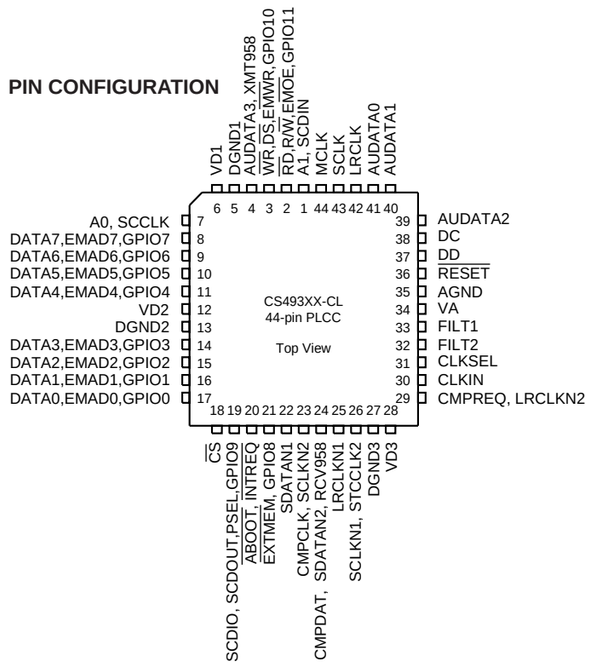
Pin	Function	Description
1, 13	VBOOT2, VBOOT1	Bootstrap voltages for gate drive of high side MOSFET s
2	VN10	Floating supply input. Normally connected to the output of onboard VN10 buck converter. This voltage must be stable and referenced to VNN.
3	VN10GND	Power ground for onboard VN10 generator. Electrically tied to the TA2022 case.
4, 12	VPP2, VPP1	Positive power supply input pins.
5	VN10SW	Switching output voltage for onboard VN10 generator (buck converter).
6	NC	Not connected internally. May be connected to pin 7 without any loss of functionality or performance.
7,10	OUT2, OUT1	Power amplifier outputs.
8, 9	VNN2, VNN1	Negative power supply inputs.
11	NC	Not connected internally. May be connected to pin 10 without any loss of functionality or performance.
14	VN10FDBK	Feedback for onboard VN10 generator (nominally 11V above VNN)
15, 20	AGND	Analog Ground.
16, 21	V5	5V power supply input.
17	REF	Used to set internal bias currents. The pin voltage is typically 1.1V.
18	VNNSENSE	Negative supply voltage sense input. This pin is used for both over and under voltage sensing for the VNN supply.
19	VPPSENSE	Positive supply voltage sense input. This pin is used for both over and under voltage sensing for the VPP supply.
22, 25	OAOUT1, OAOUT2	Outputs of Input Stage op amps.
23, 26	INV1, INV2	Inverting inputs of Input Stage op amps.
24	MUTE	Logic input. A logic high puts the amplifier in mute mode. Ground pin if not used. Please refer to the section, Mute Control, in the Application Information.
27	BIASCAP	Bandgap reference times two (typically 2.5VDC). Used to set the common mode voltage for the input op amps. This pin is not capable of driving external circuitry.
28, 29	FBKGND2, FBKOUT2	Output voltage differential feedback for channel 2.
30,31	FBKGND1, FBKOUT1	Output voltage differential feedback for channel 1.
32	HMUTE	Logic Output. A logic high indicates both amplifiers are muted, due to the mute pin state, or a fault such as an overcurrent, undervoltage, or overvoltage condition.

Q609 : CS493292

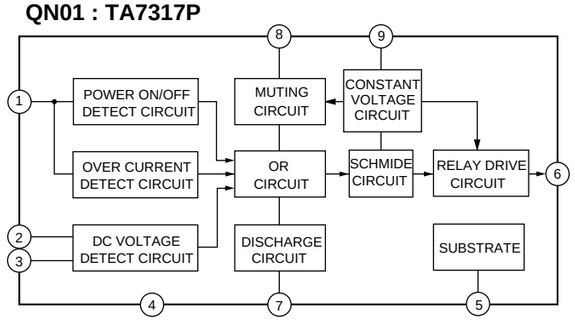
BLOCK DIAGRAM



PIN CONFIGURATION

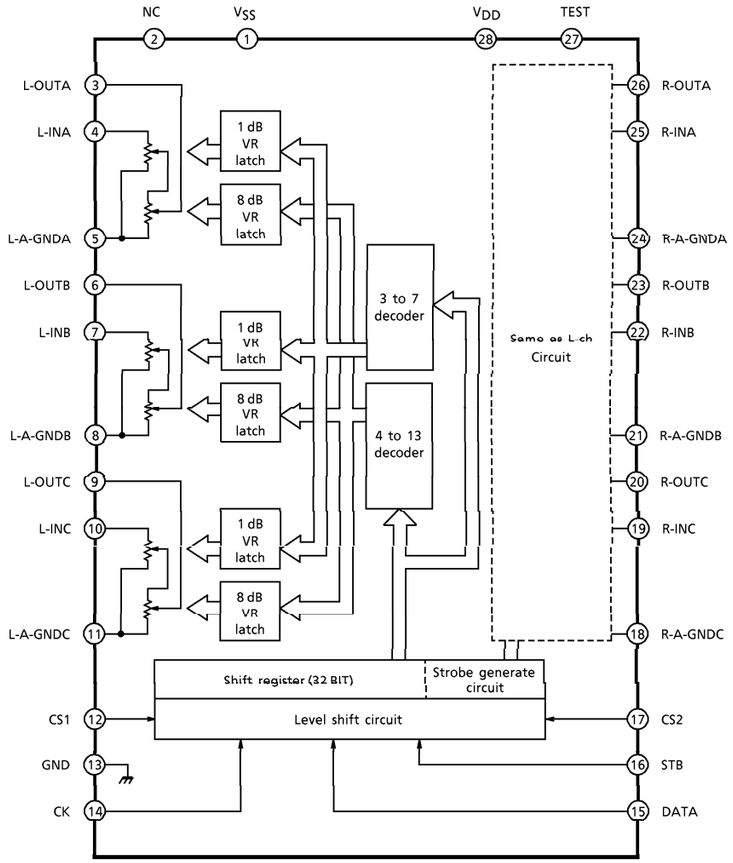


QN01 : TA7317P

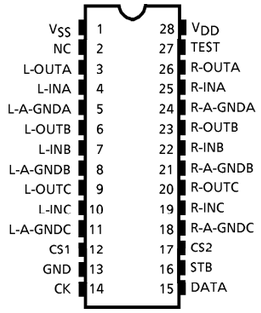


QG01 : TC9482F

BLOCK DIAGRAM



PIN CONFIGURATION

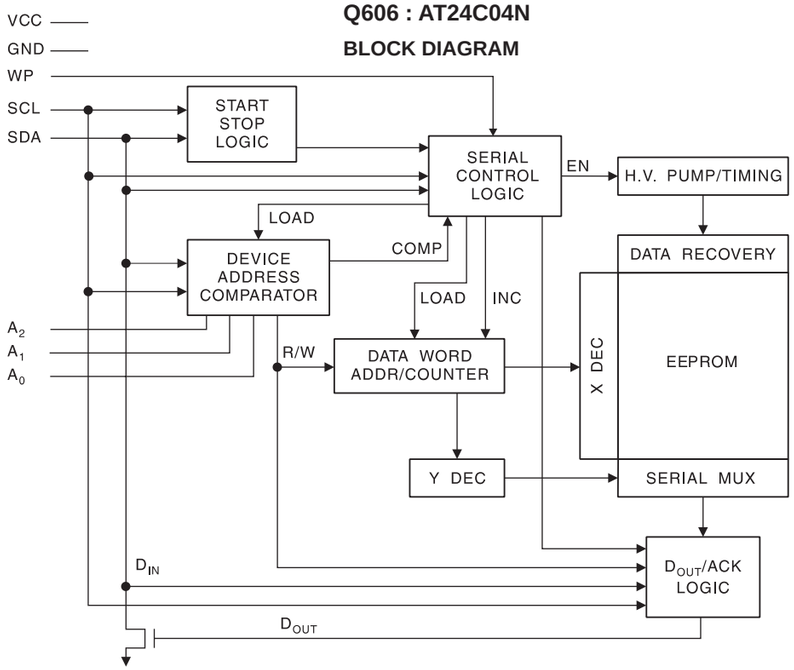


PIN FUNCTION

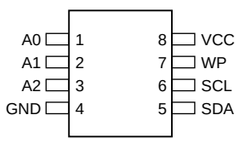
PIN No.	SYMBOL	PIN NAME	FUNCTION	REMARK
1	V_{SS}	Negative power supply pin	● Power Supply Pins	—
28	V_{DD}	Positive power supply pin		
3	L-OUTA	Volume output pin	● Volume circuit	—
26	R-OUTA			
6	L-OUTB			
22	R-OUTB			
9	L-OUTC			
19	R-OUTC			
4	L-INA	Volume input pin		
25	R-INA			
7	L-INB			
22	R-INB			
10	L-INC			
19	R-INC			
5	L-A-GNDA	Analog GND pin		
24	R-A-GNDA			
8	L-A-GNDB			
21	R-A-GNDB			
11	L-A-GNDC			
18	R-A-GNDC			
12	CS1	Chip select input pin	Up to 4 chips on the same bus can be used by switching over chip select code.	—
17	CS2			
14	CK	Clock input pin	Inputs clock for serial data transfer.	Low threshold value input pin
15	DATA	Data input pin	Inputs control data for setting volume.	
16	STB	Strobe input pin	Inputs strobe for writing data.	
13	GND	Digital GND pin	Digital ground pin	—
27	TEST	Test Pin	Normally connect to V_{DD} pin.	—
2	NC	No connection	—	—

Q606 : AT24C04N

BLOCK DIAGRAM

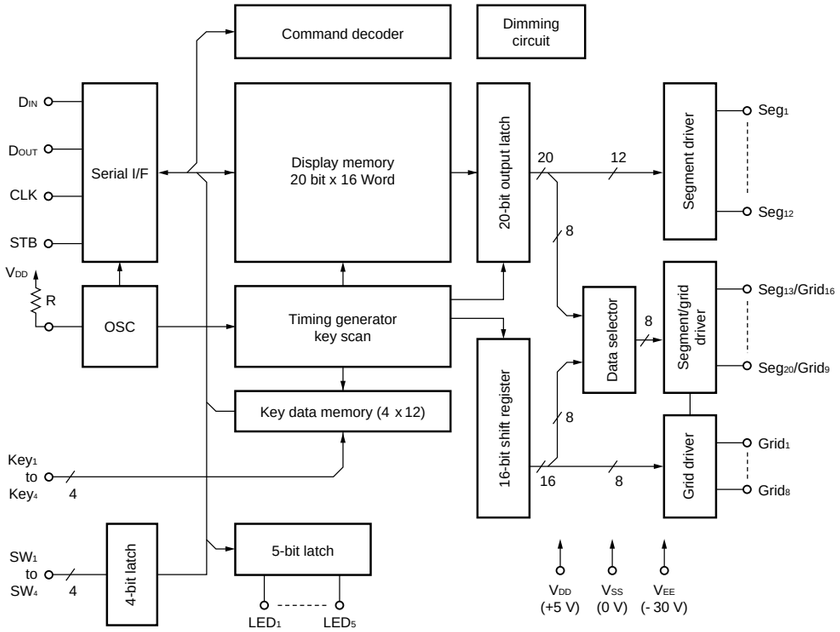


PIN CONFIGURATION

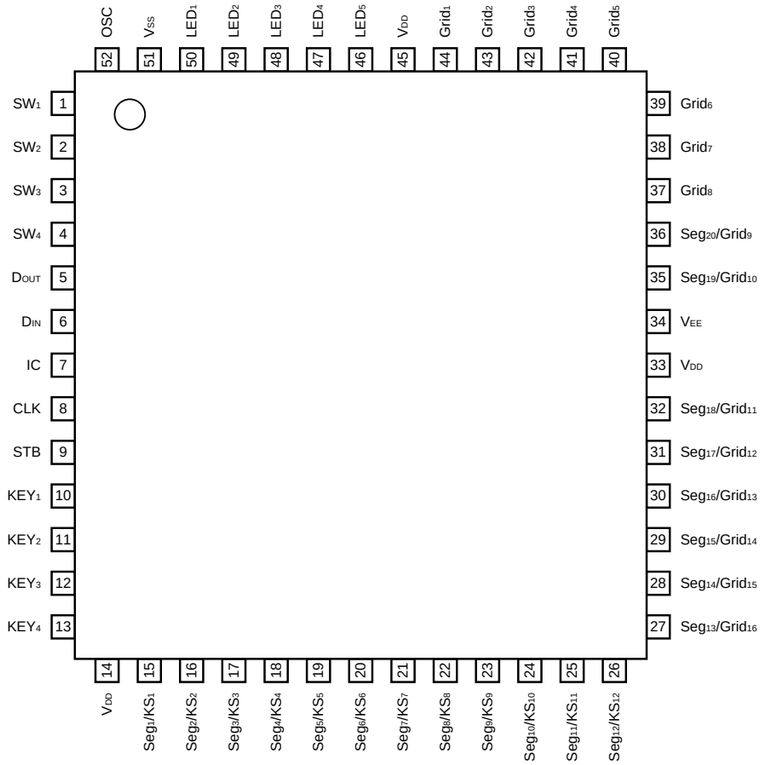


QY01 : µPD16311GC-AB6

BLOCK DIAGRAM



PIN CONFIGURATION

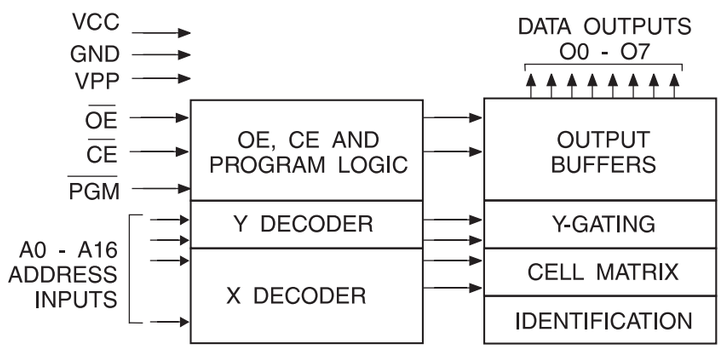


PIN FUNCTION

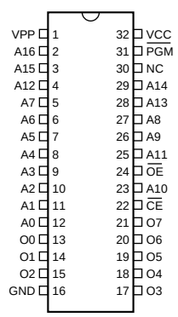
Pin No.	Symbol	Pin Name	Description
6	D_{IN}	Data input	Inputs serial data at rising edge of shift clock, starting from lower bit.
5	D_{OUT}	Data output	Outputs serial data at falling edge of shift clock, starting from lower bit. This is N-ch open-drain output pin.
9	STB	Strobe	Initializes serial interface at rising or falling edge to make PD16311 waiting for reception of command. Data input after STB has fallen is processed as command. While command data is processed, current processing is stopped, and serial interface is initialized. While STB is high, CLK is ignored.
8	CLK	Clock input	Reads serial data at rising edge, and outputs data at falling edge.
52	OSC	Oscillator pin	Connect resistor for determining oscillation frequency to this pin.
15 to 26	Seg_1/KS_1 to Seg_{12}/KS_{12}	High-voltage output (segment)	Segment output pins (Dual function as key source)
44 to 37	$Grid_1$ to $Grid_6$	High-voltage output (grid)	Grid output pins
27 to 32 35 to 36	$Seg_{13}/Grid_{16}$ to $Seg_{20}/Grid_9$	High-voltage output (segment/grid)	These pins are selectable for segment or grid output.
50 to 46	LED_1 to LED_5	LED output	CMOS output. +20 mA max.
10 to 13	Key_1 to Key_4	Key data input	Data input to these pins is latched at end of display cycle.
1 to 4	SW_1 to SW_4	Switch input	These pins constitute 4-bit general-purpose input port.
14, 33, 45	V_{DD}	Logic power	5 V 10 %
51	V_{SS}	Logic ground	Connect this pin to GND of system.
34	V_{EE}	Pull-down level	V_{DD} 35 V max.
7	IC	Internally connected	Be sure to leave this pin open (this pin is at V_{DD} level).

Q617 : AT27C010

BLOCK DIAGRAM



PIN CONFIGURATION



1.6 TECNICAL DESCRIPTION

CLASS-T DIGITAL AUDIO AMPLIFIER TECHNOLOGY (TRIPATH)

A Watershed in Digital Amplification

Tripath amplifiers use a completely new proprietary method of Digital Power Processing“ that provides superior performance to conventional methods of amplification. For the first time, both high signal fidelity AND high power efficiency can be achieved with the same technology. Tripath refers to this DPP“ based amplifier as a Class-T design. The underlying technology of Class-T does not use PWM and is not a pure analog approach (Classes -A and -AB). It combines the benefits of both with a completely new approach.

Tripath s Class-T amplifiers are the first application of this breakthrough approach. Class-T amplifiers provide the signal fidelity of sophisticated discrete-component linear Class-A and -AB designs, while offering high power efficiencies and the potential to need less exotic engineering to achieve high-end audiophile performance. These amplifiers also reduce cost for amplifier overhead at high power levels (such as power supply, filtering, and heat venting). Class-T provides power conversion efficiencies of 80 percent to more than 90 percent, which is equal to or better than Class-D amplifiers.

ＡＡＣとは

ＡＡＣとは信号圧縮規格ＭＰＥＧ２のオーディオ部の仕様である「Advanced Audio Coding」の略称。ＣＤの約１０分の１の圧縮率を持った次世代オーディオの符号化規格である。１２８Ｋｂ／ｓ程度でＣＤ並の高品質マルチチャンネルステレオが可能である。ＭＰＥＧ１のオーディオとの互換性は無いが、ＭＰＥＧ４にも採用された。現在、BSデジタルテレビ放送に使用されており、５.１ｃｈ仕様が可能でマルチサラウンドが実現できるのが特徴です。

ＥＲ３０００は BSデジタル放送で使用される MPEG2-AACのオーディオデコード機能を実現しています。デジタル出力を持ったBSデジタル受信機とダイレクトに接続し５.１ｃｈ仕様のマルチサラウンドが実現できます。

1.7 ADJUSTMENT PROCEDURE

7. 調整手順書

1. FANの動作確認

POWER ON 状態 の時に電源 PCB(PA01)の FAN(M801) が回っている事を確 認する。(STANDBY 状態で停止する。)

2. DVDレーザー・ダイオード保護SWの解除

DVD LOADER(A003)の 中央部にあるレーザー・ダイオード保護 SWを OFFにする。
(ER3000を正面 から見てスライド SWのレバー位置を 左側 にする。)

注意 : レーザー光源 を直視しない事 。

3. スピーカー保護回路の確認とオフセット電圧調整

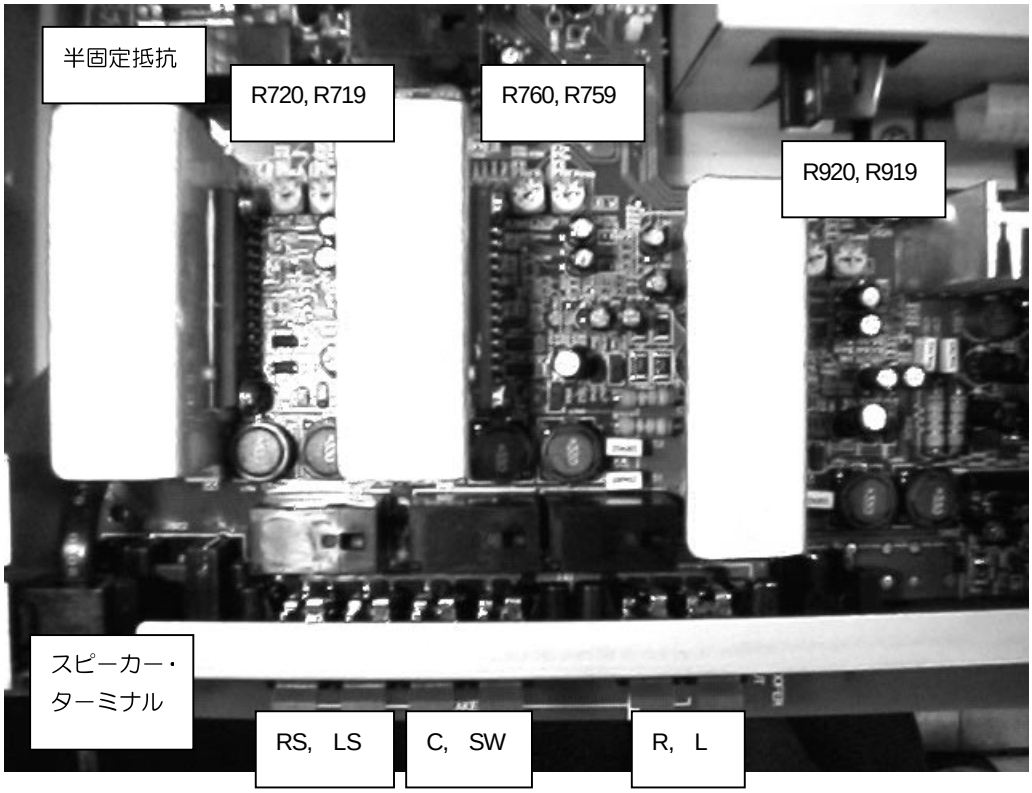
セットの状態 : POWER ON

測 定器 : デジタル・テスター

測定箇所 : 各スピーカー・ターミナル 6 箇所
RS (Right Surround) , LS (Left Surround) , C (Center) , SW (Sub Woofer)
R (Front Right) , L (Front Left)

調整箇所 : 電源 PCB(PA01)の半固 定抵 抗 6 箇所

測定箇所・スピーカー ・ターミナル名		調整箇所・半固定 抵 抗シンボル名
RS	……	R720
LS	……	R719
C	……	R760
SW	……	R759
R	……	R920
L	……	R919



確認方法 1) 各スピーカー・ターミナルにテスター棒をさす。
2) 各々の半固定抵抗をメカニカル・センターより時計方向または反時計方向に除々に回していき、各々のスピーカー・ターミナルのDC電圧が約0Vより ±2 ～ 3V 以上になった時にスピーカー保護回路が動作してリレー(L706, L746, L906) が OFF する事を確認する。この時リレーが跳ねる音（カッチン）がしてスピーカー・ターミナルは開放状態となりテスターの指示電圧が0Vになる。
3) 再度、半固定抵抗をメカニカル・センターに戻す。
4) POWERボタンを2回押し電源を入れ直す。
5) スピーカー保護回路が解除されリレー(L706, L746, L906) がONする事を確認する。この時リレーが跳ねる音（カッチン）がする。

調整方法 1) スピーカー保護回路のリレー動作が確認出来たらオフセット電圧の調整を行なう。
2) 各々の半固定抵抗を回して各々のスピーカー・ターミナルのDC電圧を0V ± 50mV 以内に調整する。

4. 電源保護回路の確認

入力信号 : テスト・ディスク（JVC製VT-501）を再生
セットの状態 : POWERON, DVD ディスク再生

確認方法 1) すべてのスピーカー・ターミナルに 6Ω負荷を接続する。
2) マスター・ボリュームをMINにする。
3) テスト・ディスクでタイトル #50・チャプター#61(L, C, R, LS, RS＝997Hz/0dBfs, LFE=－∞)を再生する。
4) マスター・ボリュームを上げていき MAX にする。
5) 電源保護回路が動作し全てのリレー (L807, L808, L706, L746 , L906) が跳ねる音（カッチン）して、電源がOFFする事を確認する。(STANDBY LEDも消灯する。)
6) ACプラグを抜き5分以上放置し電源保護回路が解除されるのを待つ。（ケミコン(C811)の電荷が放電されると電源保護回路を解除される。ケミコン (C811) が完全に放電される前にACプラグを入れた場合は、充電されてしまうのでACプラグを抜き再度5分以上放置する。）
7) 再度、ACプラグを入れるとSTANDBY LEDが点灯し、POWERボタンを押すと正常に電源が入る事を確認する。

5. STANDBY時のビデオ出力端子（映像、音声）確認

入力信号　：　BSデジタル入力端子
（映像）：ビデオ信号
（音声）：アナログ ・オーディオ信号 (L/R 両方)

セットの状態　：　STANDBY

測定器　：　オシロ・スコープまたは VIDEO/AUDIO 入力付きＴＶ

確認箇所　：　ビデオ出力の映像と音声 /（ＬＲ両方）端子

確認方法　：　BSデジタル入力と同じ映像音声（L/R）が出力されている事を確認する。

6. 光デジタル入力の確認

入力信号　：　光デジタルのＢＳデジタル入力端子にデジタル音声信号を入力

セットの状態　：　POWER ON, BS DIGITAL モード

確認箇所　：　BSデジタル入力端子
ＦＬＤの表示

確認方法　1) 光ＢＳデジタル入力端子にオプチカル ・ケーブルで他の光デジタル出力を持った機器に接続する。
2) BS DIGITALボタンを押してＢＳデジタルを選択する。
3) デジタル入力と同じアナログ音声信号がスピーカーから出力される事を確認する。
4) ＦＬＤ に「DIG－IN」が表示される事を確認する。

7. 光デジタル出力の確認

入力信号　：　テスト ・ディスク（日本オーディオ協会　AUDIO CHECK DVD-V1）を再生

セットの状態　：　POWER ON, DVD ディスク再生

確認箇所　：　光デジタル出力端子

確認方法　1) 光デジタル出力端子をオプチカル・ケーブルで他の光デジタル入力を持った機器に接続する。
2) 接続先の音声出力からＤＶＤ再生音が出力される事を確認する。

8. dtsの確認

入力信号　：　テスト ・ディスク（AUDIO CHECK DVD-V1）を再生

セットの状態　：　POWER ON, DVD ディスク再生

確認箇所　：　スピーカー出力端子
ＦＬＤの表示

確認方法　1) テスト・ディスクで dts のタイトル #4 を選択し再生する。
スピーカーからＤＶＤ再生音が出力される事を確認する。
3) ＦＬＤに「dts」が表示される事を確認する。

9. AACの確認

入力信号　：　テスト・ディスク（MJI 製ＡＡＣ Test Disc for ER3000 [Part No. : *ER3000AAC]）を再生

セットの状態　：　POWER ON, CD再生

確認箇所　：　スピーカー出力端子
FLDの表示

確認方法　1) テスト・ディスクで AACのトラック#1～6 を選択し再生する。
2) スピーカーからCD再生音が出力される事を確認する。
3) FLD に「AAC」が表示される事を確認する。

注意　：　再生中に音飛びやトラック・ジャンプした時にノイズ音が出るが、テスト・ディスクの問題でセットの不良では無い。

10. 電源コンセントの確認

セットの状態　：　POWER ON または STANDBY

確認箇所　：　背面パネルの電源コンセント　（ＡＣアウトレット）

確認方法　1) 電源コンセントに外部負荷を接続する。
2) POWERボタンを押し STANDBY 状態にしたとき外部負荷の電源が OFFする事を確認する。
3) POWER ボタンを押し POWER ON 状態にしたとき外部負荷の電源が ON する事を確認する。

注意　：　外部負荷は 100V/100W以下の電化製品

11. ヘッドフォンの確認

入力信号　：　テスト　・ディスク　（AUDIO CHECK DVD - V1）を再生

セットの状態　：　POWER ON, DVD ディスク再生

確認箇所　：　スピーカー出力端子
ヘッドフォン　・ジャック
FLDの表示

確認方法　1) DOLBY DIGITALまたは dts のトラック再生中にヘッドフォンのプラグをヘッドフォン　・ジャックに差し込む。この時リレー（L706, L746, L906）が OFFし跳ねる音（カッチン）がする。
2) スピーカーより音声が出力されずにヘッドフォンよりステレオ音声が出力される事を確認する。
3) FLD の表示に　「Dolby DIGITAL」または「dts 」に加えて「STEREO」が点灯する事を確認する。

12. マスター・ボリュームの確認

入力信号　：　テスト　・ディスク　（AUDIO CHECK DVD-V1 ）を再生

セットの状態　：　POWER ON, DVD ディスク再生

確認箇所　：　スピーカー出力端子またはヘッドフォン・ジャック
FLDの表示

確認方法　：　マスター　・ボリュームを回すと音量が変化し、FLDの表示が「VOLUME xx」になる事を確認する。（xx はボリュームのレベル　：MIN, 01～ 60 MAX）

13. Factory Modeでの確認

ここではFactory Mode を使い TUNER, FLD 表示 、REGION などの確認を行う 。

手順　　1) STANDBY 状態中に PAUSE ボタンとFM/AMボタンを同時に押しながらPOWER ボタンを押し電源を入れる。
2) Factory Mode の No.0 のニュートラル状 態に入る。
（リモコン ・コード RC166363でも同様に No.0 のニュートラル状態に入る）
3) FLD にマイコン ・ファームウエアーのバージョン名「0_MA_Vxxxx」が 表示される。
（xxxx はバージョン番号 ： 0001～9999）
4) 次に、FM/AM ボタンを 押すと 「TUNER テストモード」に移行する。
NEXT/PREV ボタンを押すと「No.1－6 テストモード」に移行 する。
PAUSE ボタンと DVD ボタンを同時に押すと「REGION チェックモ ード 」に移行する 。
(Cf.: 15 章 F low Chart of Factory Mode)

13.1 TUNER テストモード

手順　　1) ニュートラル状 態のとき FM/AM ボタンを押す。
2) TUNER の PRESET メモリーに自動的にFMまたはＡＭの周波数がス トアーされる。(下記の表 通り。)
3) F/P ボタン（PAUSE ボタン）を 押してPRESET モードにする 。
4) NEXT/PREV ボタンを 押してPRESET No.1 ～ 13 を選択し各々の周 波数が受信出来る事を確認する。
5) 確認が 終了したらDVD ボ タンを押しニュートラル状 態にする 。

PRESET No .	BAND	周波数	PRESET No.	BAND	周波数	PRESET No.	BAND	周波数
1	FM	78.0MHz	11	AM	1531kHz	21	--	--
2	FM	83.0MHz	12	AM	1531kHz	22	--	--
3	FM	88.0MHz	13	AM	1531kHz	23	--	--
4	FM	76.0MHz	14	--	--	24	--	--
5	AM	603kHz	15	--	--	25	--	--
6	AM	999kHz	16	--	--	26	--	--
7	AM	1080kHz	17	--	--	27	--	--
8	AM	1404kHz	18	--	--	28	--	--
9	AM	1531kHz	19	--	--	29	--	--
10	AM	1531kHz	20	--	--	30	--	--

13.2 FLD 表示とKEY 入力などの確認

手順　　1) ニュートラル状態のとき NEXT/PREV ボタンを押して テスト No.1～ 6 を選択する 。
2) 各チェック 項目を 13.2.1 ~ 13.2.6 章の手順に従い 確認する 。
3) 各項目の確認が終了したら NEXT/PREV ボタンを押してテスト No.0 を選択しニュートラル 状態にする。

注意　　:ニュートラル状態 以外ではPOWER ボタン押しても機能しません。

操作	テスト No.	チェック内容
NEXT/PREV ボタン を押 してテスト No. 0～6 を 選択します。	0	ニュートラル状態
	1	FLD, LED Check (Except STANDBY LED)
	2	FLD Bit Pattern Check
	3	Key Input Check
	4	Remote Command Receive Check
	5	OSD & Tag Check
	6	Audio Mute Check

13.2.1 FLD と LED 全点灯の確認（1）

手順　：　NEXT/PREV ボタンを押して No.1 を選択する。

確認　：　FLDの表示が白色に、ボタンのＬＥＤが緑色に全点灯する事を確認する。

13.2.2 FLD ビット・パターンの確認（2）

手順　：　NEXT/PREV ボタンを押して No.2 を選択する。

確認　：　FLDビット・パター ンのセグメントが左より右へ順番に表示する事を確認する。

13.2.3 各キー入力の確認（3）

手順　1) NEXT/PREV ボタンを押してNo.3 を選択する 。
2) FLDに「3」が表示される。
3) 各々のボタンを押す。

確認　1) POWER ON/STADBY ボタンを押している間 だけFLD, に 「3 POWER 」が表示される。
2) SURROUNDボタンを押している間だけ、FLD に 「3 SURROUND 」が表示される。
3) DVDボタンを押している間だけ、FLDに「3 DVD」が表示される。
4) VIDEOボタンを押している間だけ、FLDに「3 VIDEO」が表示される。
5) BSDIGITALボタンを押している間だけ、FLDに「3 BS-D 」が表示される。
6) TV ボタンを押している間だけ、FLDに「3 TV 」が表示される。
7) FM/AMボタンを押している間 だけ、FLDに「3 FM/AM」が表示される。
8) OPEN/CLOSE ボタンを押している間だけ、FLDに「3 OPEN」が表示される。
9) PLAY ボタンを押している間だけ、FLDに「3 PLAY 」が表示される。
10) STOP ボタンを押している間 だけ、 FLDに「3 STOP 」が表示される。
11) PAUSE ボタンを押している間だけ、FLDに「3 PAUSE」が表示される。
12) NEXT/PREV ボタンは、テスト No.0 ～ 6 の選択が出来れば OK とする。

13.2.4 リモコン受信の確認（4）

手順　1) NEXT/PREV ボタンを押してNo.4 を選択する。
2) FLD に「4RC」が表示 される。

確認　:リモコン(RC3000ERF の電源ボタンを押している間だけ、FLDに「4RC 1612」が表示する事を確認する 。

13.2.5 OSD 表示が日本語かつER3000仕様である事の確認（5）

手順　1) NEXT/PREVボタンを押してNo. 5 を選択する。
2) FLD に「5」が表示される。
3) モニター ・ディスプレイに初期設定が ＯSD表示される。

確認　：　OSD表示メ ニューのタグが 「 音声、映像、言 語 、一般 」と日 本語で書かれている事を確認する。(ER3000仕 様とは音声のタグが「音声 」であり 「 音声 1 、音声 2 」で無い事。)

13.2.6 Audio Muteの確認（6）

手順　1) NEXT/PREV ボタンを押して No. 6 を選択する。
2) DSP から各チャンネルに順番にテスト ・トーン（ ピンク ・ノイズ ）が出力される。
3) FLDに「6 MUTE_OFF」が表示される 。

確認　：STOP ボタンを押している間だけ、FLDに「 6 MUTE_ ON」と表 示され、テスト ・トーンがミュートをされる事を確認する。
（リモコン(RC3000ERF) の停止ボタンまたは消音ボタンを押しても同様にミュートを される 。）

注意　：テスト・トーン出力中 にPREV ボタンを押して Audio Mute確認モードより抜けてもテスト・トーンは止まりません。Audio Mute確認終了後は NEXT ボタンを押しニュートラル状 態にして下さい。

13.3 Region 番号の確認

手順　1) ニュートラル状 態 のとき PAUSE ボタンと DVD ボタンを同時に 押す。
2) FLD に「REGION」が 表示される。
3) モニター ・ディスプレイにDVD エンジン情報が OSD 表示（英語 ）される 。

確認　：　OSD 表示の 画面中央右側のRegion 番号が ”REG: 02 ” である事を確認する 。

13.4 EEPROM メモリーの初期化とSTANDBY LED の確認

手順　：　Region Check 中 に POWER ボタンを押す。この時 EEPROM メモリーも初期化される 。

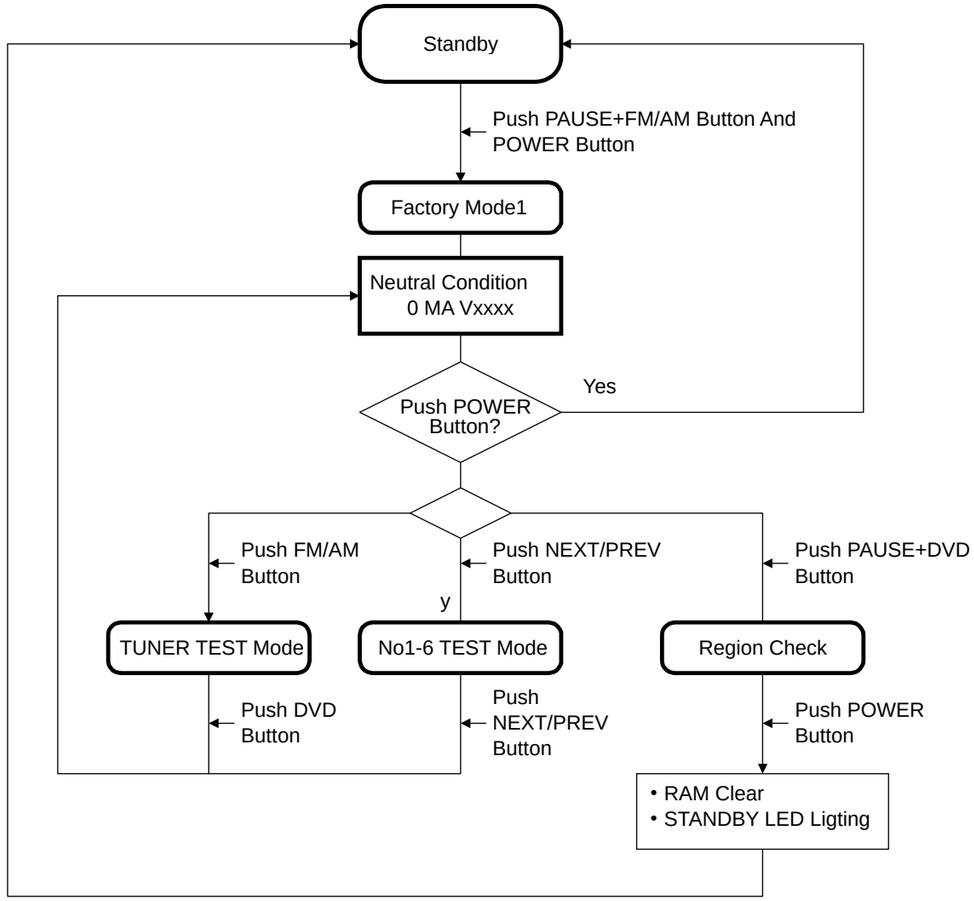
確認　：STANDBY 状態になりFLD 表示とボタンLED が消灯し 、STANDBY LED が 赤色に点灯する事を確認する。

14. すべてのメモリー初期化と工場出荷状態

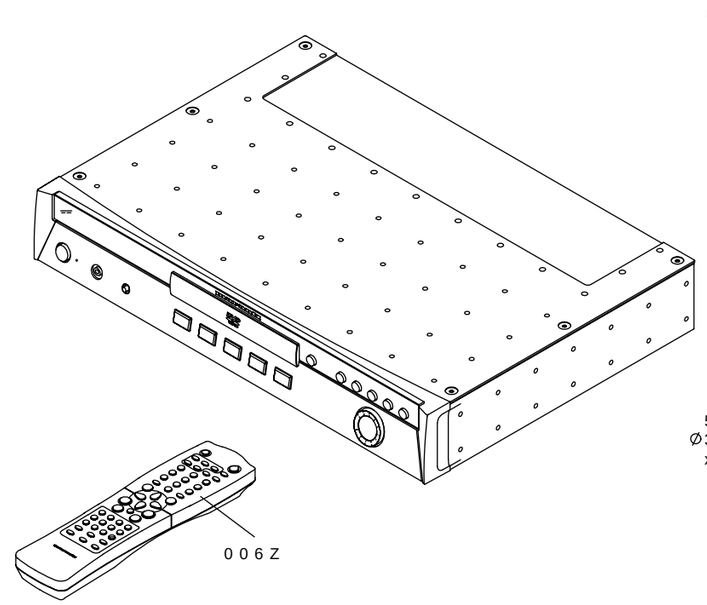
最後にすべ てのメ モリー (EEPROM, DV ユニットの RAM) を初期化する。
これにより工場出荷状態になる。

手順　：STANDBY 状態中にSTOP ボタンを押しながらPOWER ボタンを押し電源を入れる 。

15. Flow Chart of Factory Mode



1.8 EXPLODED VIEW AND PARTS LIST



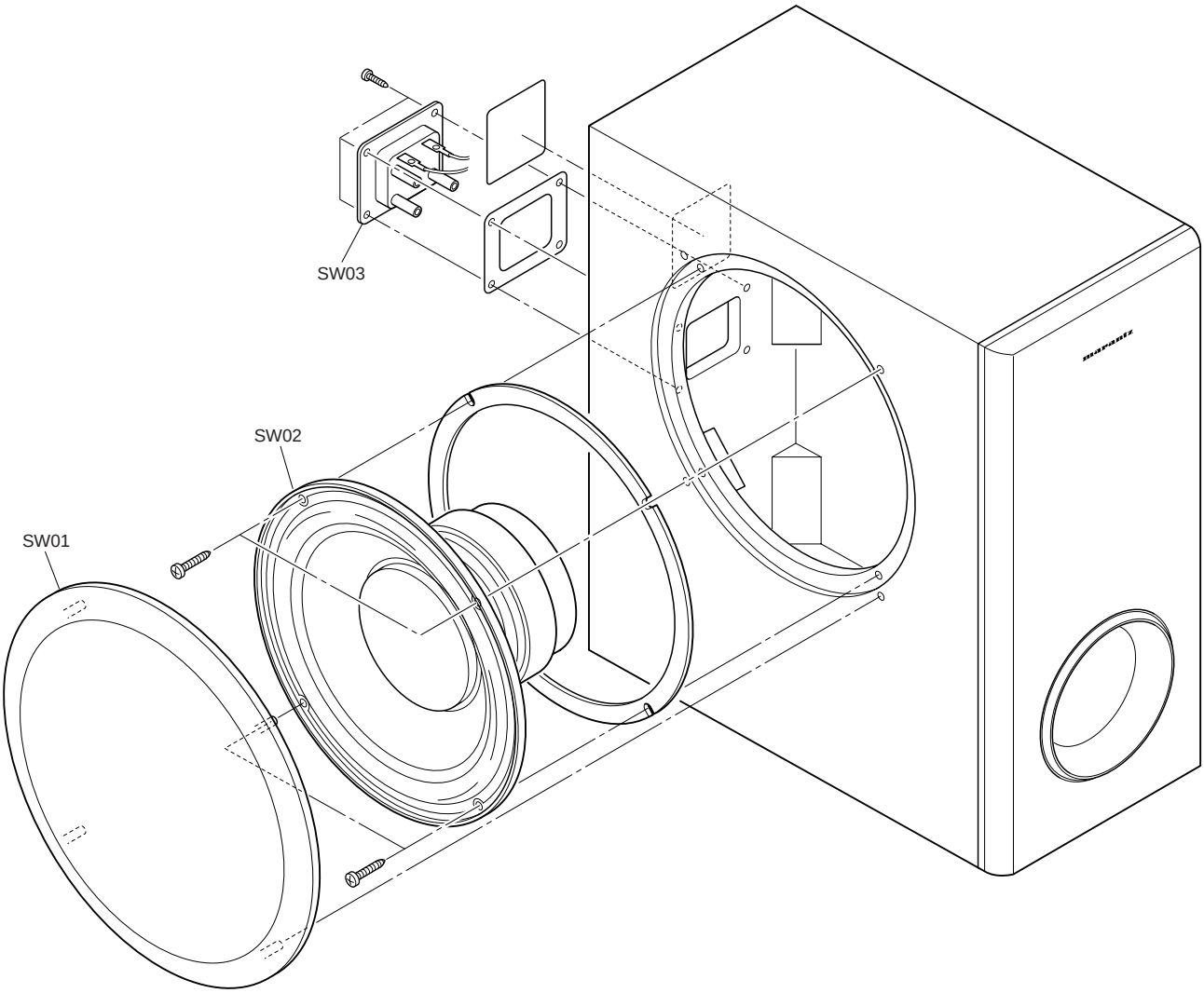
SYMBOL	STYLE	PARTS NAME
5125		+B. H. TAP TITE SCREW(P TYPE)
5126		+B. H. TAP TITE SCREW W/ WASHER
5128		+B. H. TAP TITE SCREW(B TYPE)

MARK	MATERIAL/FINISH
(U)	STEEL/BLACK
(A)	STEEL/CHROMATE

POS. NO	VERS. COLOR	DESCRIPTION		PART NO. (MJI)
001B		KGW1A307M7ZK107	FRONT PANEL	400K248010
002B		KKM1A108ZC30	FRONT AL PANEL	400K063010
005B		BGX1A303ZA	VOL KNOB ASSY	400K154500
007B			WINDOW	400K158020
008B		BGB1A097	MZ BADGE FOR WINDOW	313J251030
009B			ADHESIVE FOR WINDOW	400K122110
010B		KGX1A307	IR FILTER	400K107040
011B			BLIND SHEET	400K107120
013B		KBT1A759ZA	FUNCTION BUTTON ASSY	400K270500
027B		KGL1A191A18	LENS FOR STANDBY	400K355010
031B		KGR1A224M7H39	ESCUTCHEON FOR TRAY	400K063020
001D		KKC1A117ZA	TOP LID ASSY	400K257500
007D		BHD1A031	SCREW(TOP LID FIX)	318K010020
007G		KHG1A039Z	FOOT RUBBER ASSY (FRONT & REAR)	400K107500
021G		KUC1A031K111	SIDE PANEL(R)	400K249010
025G		KUC1A030K111	SIDE PANEL(L)	400K249020
905G		KHR1A028	AC CORD BUSH (SAM JIN SJCH-1)	400K259010
A001		BOP11432B	DB-VPB211 DVD PCB MODULE	ZK324J0210
A002		BNVTFCE1J101A	TFCE1J101A TUNER UNIT FOR JAPAN	AV01201140
⚠ W801		BJA2J049Z	AC CORD F OR U	*YC000520R
		NOT STANDARD SPARE PARTS		
A003		BJDDB-VLD210	DB-VLD210 DVD LOADER	402K304500

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

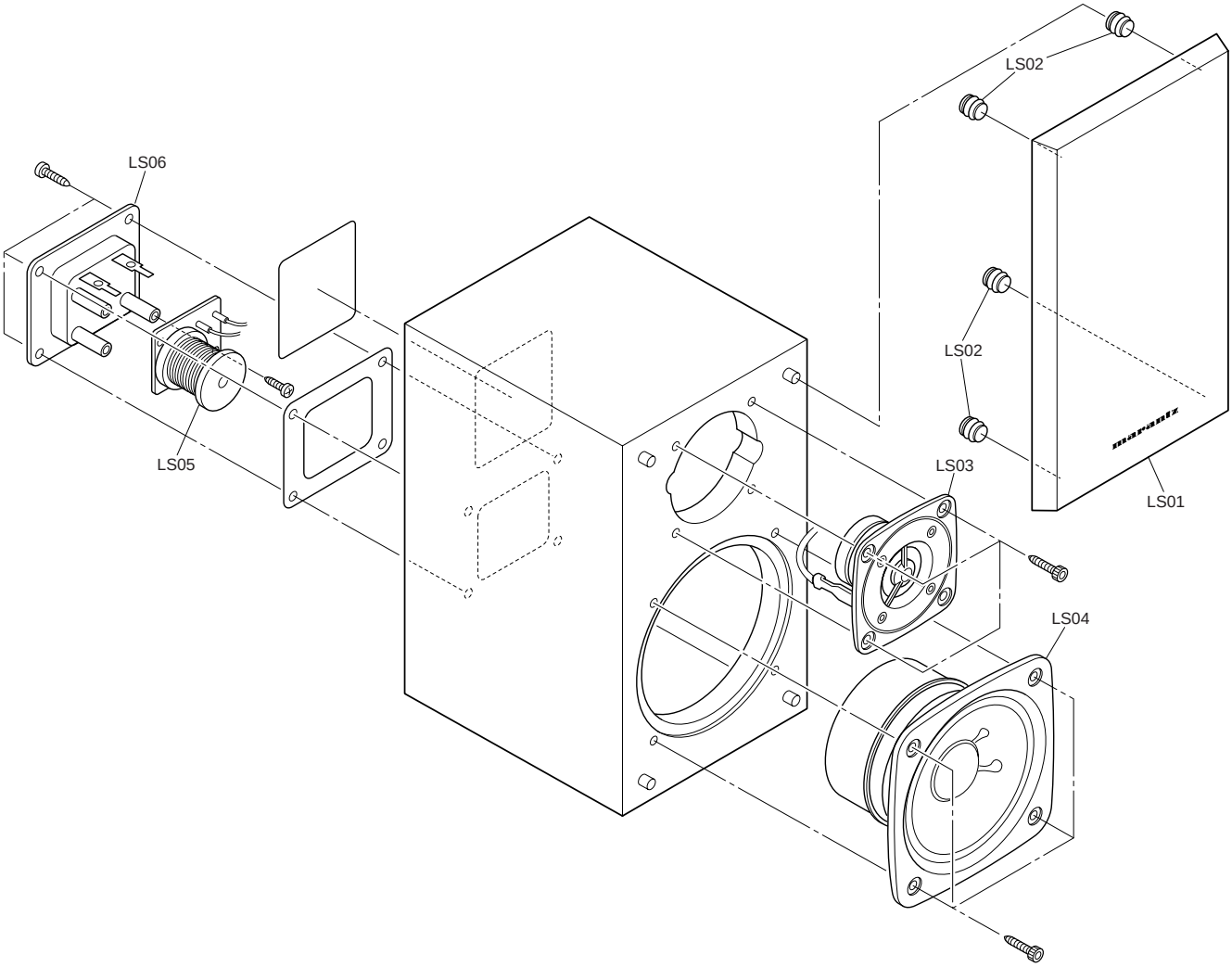
SW10 (SUB WOOFER)



POS. NO	VERS. COLOR	DESCRIPTION		PART NO. (MJI)
SW01		SW10NET	NET ASS'Y (SW10)	400K202510
SW02		KA320LP185SOZ	WOOFER UNIT (SW10)	*QK000050R
SW03		KJJ3N012	SPEAKER TERMINAL	*YT002340R

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

LS100/LS100C (SATELLITE)



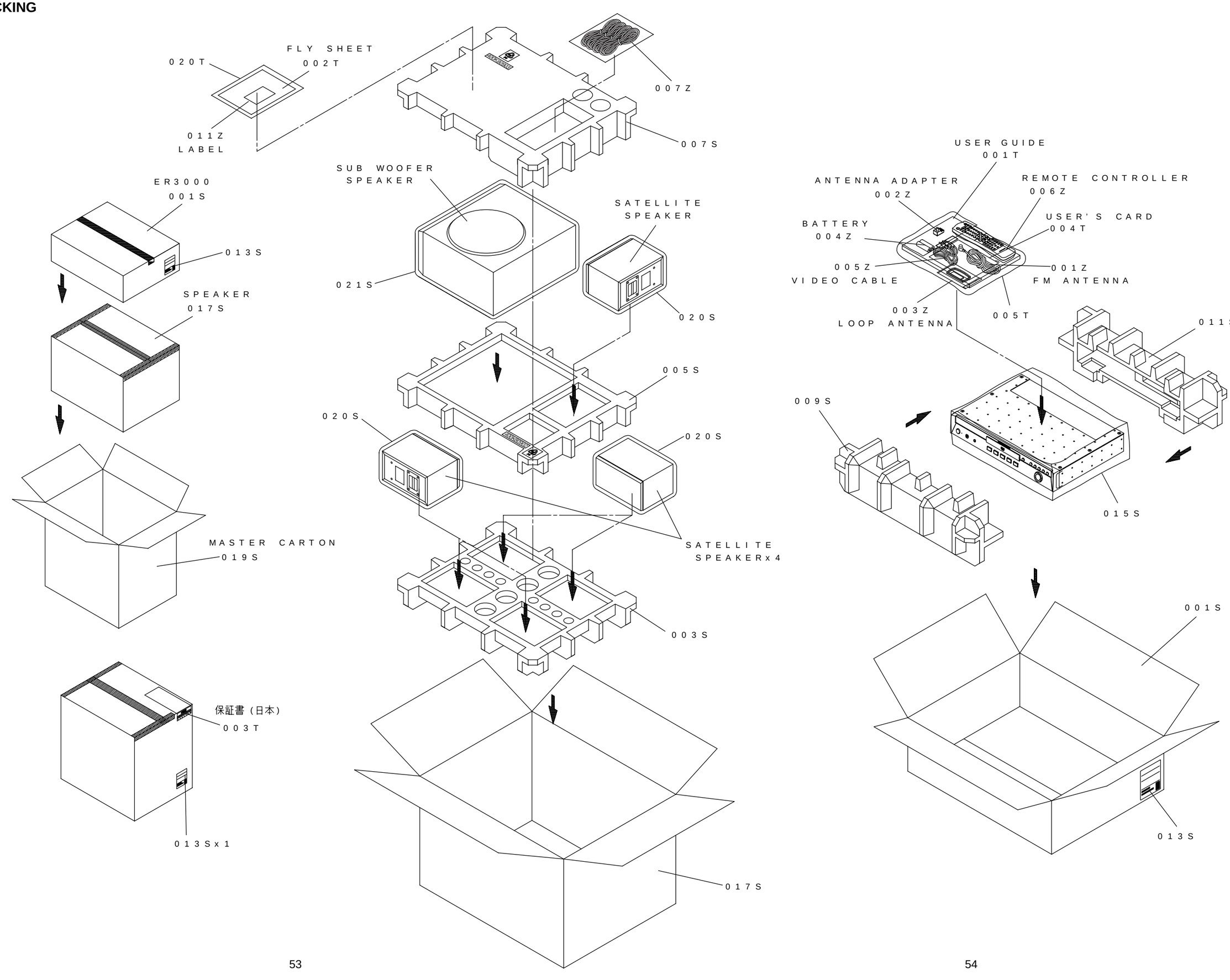
POS. NO	VERS. COLOR	DESCRIPTION		PART NO. (MJI)
LS01		LS100NET	NET ASS'Y (LS100)	400K202520
LS01		LS100CNET	NET ASS'Y (LS100C)	400K202530
LS02		KHG1A187	NET HOLDER (LS100/LS100C)	400K259010
LS03		KAS1HK183SYZA	TWEETER ASS'Y (LS100/LS100C)	*QK000060R
LS04		KAS9LP184SOZA	WOOFER ASS'Y (LS100/LS100C)	*QK000070R
LS05		KSN1ALS100	NETWORK ASS'Y (LS100/LS100C)	*ZZ001730R
LS06		KJJ3N012	SPEAKER TERMINAL	*YT002340R

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

POS. NO	VERS. COLOR	DESCRIPTION		PART NO. (MJI)
		PACKING		
001T		KQX1A673Z	USER GUIDE	400K851110
006Z		BARTER3000F1S	REMOTE CONTROLLER RC3000ERF	AZ400K02F0
		NOT STANDARD SPARE PARTS		
001S		KPG1A632Z	PACKING CASE (UNIT)	400K801010
003S		KPS1A515	CUSHION(SPK,BOTTOM)	400K809010
005S		KPS1A516	CUSHION(SPK,CENTER)	400K809020
007S		KPS1A517	CUSHION(SPK,TOP)	400K809030
009S			CUSHION(UNIT,FRONT)	400K809040
011S			CUSHION(UNIT,REAR)	400K809050
013S		KQB1A323Z	SHIPPING LABEL	nsp
015S		KPB1A013Y	POLYETHYLENE BAG (ER3000)	nsp
017S		KPS1A634	PACKING CASE (SPEAKER)	400K801020
019S		KPG1A633Z	MASTER CARTON	400K805010
020S			POLY BAG (SATELLITE SPEAKER)	nsp
021S			POLY BAG (SUB WOOFER)	nsp
002T			FLY SHEET(SPK)	400K851120
003T		BQE1A133Z	WARRANTY(F)	nsp
004T			USERS CARD	nsp
005T		KPB1061Y	POLY BAG FOR INST	nsp
020T			POLY BAG FOR INST (SPEAKER)	nsp
001Z		KSA267	FM ANTENNA	nsp
002Z		KLR1T201	ANTENNA ADAPTER	nsp
003Z		KSA3A013Z	LOOP ANTENNA	nsp
004Z		KABAAM1.5V	BATTERY R6P KR CP-2	nsp
005Z		KJS4M011Y	VIDEO CABLE (YELLOW) 2.0M	nsp
007Z		KWX1A020 & KWX1A021	SPEAKER CABLE KIT	nsp
011Z			ATTACHED LABEL	nsp

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

PACKING


FLY SHEET
002T
020T
011Z
LABEL
007Z
007S
ER3000
001S
013S
SUB WOOFER
SPEAKER
021S
SATELLITE
SPEAKER
020S
SPEAKER
017S
005S
020S
020S
MASTER CARTON
019S
SATELLITE
SPEAKERx4
003S
保証書（日本）
003T
013Sx1
017S
USER GUIDE
001T
ANTENNA ADAPTER
002Z
REMOTE CONTROLLER
006Z
BATTERY
004Z
USER'S CARD
004T
005Z
VIDEO CABLE
001Z
FM ANTENNA
003Z
LOOP ANTENNA
005T
011S
009S
015S
001S
013S

1.9 TAKING OUT THE DISC FOR EMERGENCY

緊急時の DISCの取り出し方法

（機器の電源が入らず、DISCが取り出せなくなった場合）

1． トップカバー(001D)を取り外します。(Fig.1 参照)

2． ギヤーを矢印方向へ手で回します。(Fig.2 参照)

3． DISCトレーが少し手前に出てきます。

4． DISCトレーを手で手前に引き出します。

5． DISCを取り出します。

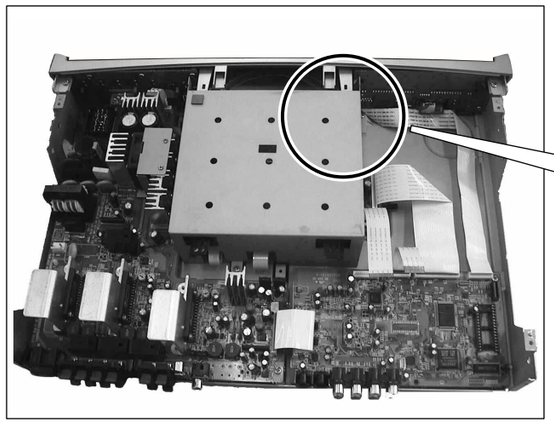


Fig.1

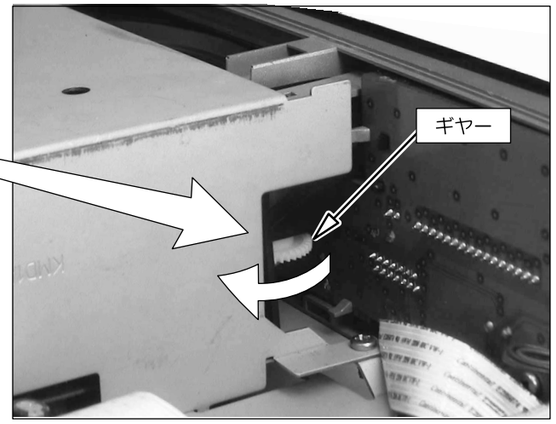


Fig.2

10. 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

(x x x → ① 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
③ Capacity value
② 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
④ Capacity value

Examples

④ Capacity value

100 pF	101	1000 pF	102	10000 pF	103
470 pF	471	2200 pF	222		

$\overline{\text{C＊＊＊}}$: 5) ELECTROLY CAP.(⫢), 6)FILM CAP (⫫)

5) EA x x x x x x 10, Electrolytic capacitor
One-way lead type,Tolerance ±20%
⑥ Working voltage
⑤ Capacity value

Examples

⑤ Capacity value

0.1μF	104	4.7μF	475	100μF	107
0.33μF	334	10μF	106	330μF	337
1μF	105	22μF	226	1100μF	118
2200μF	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
⑦ Capacity value

Examples

⑦ Capacity value

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

NOTE 1) The above CODES(R＊＊＊ ,R＊＊＊ ,C＊＊＊ ,C＊＊＊ and $\overline{\text{C＊＊＊}}$) 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 - 10k Ω)

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	DESCRIPTION		PART NO. (MJI)
		PA01-PWR AMP PWR SUPPLY CIRCUIT BOARD		
		PA01-CAPACITORS		
CN01		KCEA1EH470T	ELECT 47μF M 16V	OA47601620
CN02		KCEA1EH470T	ELECT 47μF M 16V	OA47601620
CN03		KCEA1HHR47T	ELECT 0.47μF M 50V	OA47405020
CN05		KCEA1EH470T	ELECT 47μF M 16V	OA47601620
CN06		KCEA1HH100T	ELECT 10μF M 50V	OA10605020
C701		KCUS1H101JC	CER. CHIP 100pF ±5% 50V	DD95101300
C702		KCUS1H101JC	CER. CHIP 100pF ±5% 50V	DD95101300
C703		KCEA1CAH100T	ELECT 10μF M 16V	OA10601620
C704		KCEA1CAH100T	ELECT 10μF M 16V	OA10601620
C705		KCUS1H561JC	CER. CHIP 560pF ±10%	DK96561300
C706		KCUS1H561JC	CER. CHIP 560pF ±10%	DK96561300
C707		KCUS1H104ZF	CER. CHIP 0.1μF 50V F	DK98104300
C708		KCUS1H104ZF	CER. CHIP 0.1μF 50V F	DK98104300
C709		KCEA1EH470T	ELECT 47μF M 16V	OA47601620
C710		KCEA1EH470T	ELECT 47μF M 16V	OA47601620
C715		KCUS1H102KB	CER. CHIP 1000pF ±10% 50V	DK96102300
C716		KCUS1H102KB	CER. CHIP 1000pF ±10% 50V	DK96102300
C717				
∫		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C721				
C722		KCEA1VH101T	ELECT 100μF M 35V	OA10703520
C723		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C725		KCEA1VH471E	ELECT 470μF M 35V	OA47703520
C726		KCEA1VH471E	ELECT 470μF M 35V	OA47703520
C727		KCEA1HH220T	ELECT 22μF M 50V	OA22605020
C728		KCEA1HH220T	ELECT 22μF M 50V	OA22605020
C729		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C730		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C741		KCUS1H101JC	CER. CHIP 100pF ±5% 50V	DD95101300
C742		KCUS1H101JC	CER. CHIP 100pF ±5% 50V	DD95101300
C743		KCEA1CAH100T	ELECT 10μF M 16V	OA10601620
C744		KCEA1CAH100T	ELECT 10μF M 16V	OA10601620
C745		KCUS1H561JC	CER. CHIP 560pF ±10%	DK96561300
C746		KCUS1H561JC	CER. CHIP 560pF ±10%	DK96561300
C747		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C748		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C749		KCEA1EH470T	ELECT 47μF M 16V	OA47601620
C750		KCEA1EH470T	ELECT 47μF M 16V	OA47601620
C755		KCUS1H102KB	CER. CHIP 1000pF ±10% 50V	DK96102300
C756		KCUS1H102KB	CER. CHIP 1000pF ±10% 50V	DK96102300
C757				
∫		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C761				
C762		KCEA1VH101T	ELECT 100μF M 35V	OA10703520
C763		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C765		KCEA1VH471E	ELECT 470μF M 35V	OA47703520
C766		KCEA1VH471E	ELECT 470μF M 35V	OA47703520
C769		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C770		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C805		KCUS1H102KB	CHIP 1000pF ±10% B 50V	DK96102300
⚠ C806		KCET2DFHX681ND	ELECT 680μF 200V	*EA001040R
C808		KCUS1H222KB	CER. CHIP 2200pF±10%	DK96222300
C809		KCUS1H333KB	CER. CHIP 0.033μF ±10%	DK96333200
C810		KCEA1HH101T	ELECT 100μF M 50V	OA10705020
C811		KCEA1HH100T	ELECT 10μF M 50V	OA10605020
⚠ C812		KCEA1VH472E	ELECT 4700μF 35V	EA47803510
⚠ C813		KCEA1VH472E	ELECT 4700μF 35V	EA47803510
⚠ C814		KCEA1EH102E	ELECT 1000μF 25V	OA10802520
⚠ C815		KCEA1EH102E	ELECT 1000μF 25V	OA10802520
C816		KCEA1EH471E	ELECT 470μF 25V M	OA47702520
C817		KCEA1AH471T	ELECT 470μF M 10V	OA47701020
C818		KCEA1AH471T	ELECT 470μF M 10V	OA47701020
C819		KCEA1HH1R0T	ELECT 1μF M 50V	OA10505020
C820		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300

POS. NO	VERS. COLOR	DESCRIPTION		PART NO. (MJI)
C821		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C822		KCEA1CH101T	ELECT 100μF M 16V	OA10701620
C823		KCEA1CH101T	ELECT 100μF M 16V	OA10701620
C824		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C825		KCEA1AH471T	ELECT 470μF M 10V	OA47701020
C827		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C828		KCEA1CH101T	ELECT 100μF M 16V	OA10701620
C829		KCEA1AH471T	ELECT 470μF M 10V	OA47701020
C830		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C831		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C832		KCEA1AH471T	ELECT 470μF M 10V	OA47701020
C833		KCEA1AH471T	ELECT 470μF M 10V	OA47701020
C837		KCUS1H222KB	CER. CHIP 2200pF±10%	DK96222300
C838		KCEA1EH470T	ELECT 47μF M 10V	OA47601020
C839		KCEA1HH101T	ELECT 100μF M 50V	OA10705020
C840		KCEA1HH220T	ELECT 22μF M 50V	OA22605020
C841		KCEA1AH471T	ELECT 470μF M 10V	OA47701020
C844		KCEA1CH101T	ELECT 100μF M 16V	OA10701620
C901		KCUS1H101JC	CER. CHIP 100pF ±5% 50V	DD95101300
C902		KCUS1H101JC	CER. CHIP 100pF ±5% 50V	DD95101300
C903		KCEA1CAH100T	ELECT 10μF M 16V	OA10601620
C904		KCEA1CAH100T	ELECT 10μF M 16V	OA10601620
C905		KCUS1H561JC	CER. CHIP 560pF ±10%	DK96561300
C906		KCUS1H561JC	CER. CHIP 560pF ±10%	DK96561300
C907		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C908		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C909		KCEA1EH470T	ELECT 47μF M 16V	OA47601620
C910		KCEA1EH470T	ELECT 47μF M 16V	OA47601620
C915		KCUS1H102KB	CER. CHIP 1000pF ±10% 50V	DK96102300
C916		KCUS1H102KB	CER. CHIP 1000pF ±10% 50V	DK96102300
C917				
∫		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C921				
C922		KCEA1VH101T	ELECT 100μF M 35V	OA10703520
C923		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C925		KCEA1VH471E	ELECT 470μF M 35V	OA47703520
C926		KCEA1VH471E	ELECT 470μF M 35V	OA47703520
C929		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
C930		KCUS1H104ZF	CER. CHIP 0.1μF F 50V	DK98104300
			PA01-CAPACITORS(COMMON)	
C***			PLASTIC FILM CAPACITOR ±5% 50V : C711-C714 C751-C754 C911-C914	
			PA01-RESISTORS	
RN01		KRJ10DJ683T	CHIP 68k Ω ±5% 1/16W	NN05683610
RN02		KRJ10DJ473T	CHIP 47k Ω ±5% 1/16W	NN05473610
RN03		KRJ10DJ682T	CHIP 6.8k Ω ±5% 1/16W	NN05682610
RN04		KRJ10DJ473T	CHIP 47k Ω ±5% 1/16W	NN05473610
RN05		KRJ10DJ333T	CHIP 33k Ω ±5% 1/16W	NN05333610
RN06		KRJ10DJ473T	CHIP 47k Ω ±5% 1/16W	NN05473610
RN07		KRJ10DJ682T	CHIP 6.8k Ω ±5% 1/16W	NN05682610
RN08		KRJ10DJ473T	CHIP 47k Ω ±5% 1/16W	NN05473610
RN09		KRJ10DJ473T	CHIP 47k Ω ±5% 1/16W	NN05473610
RN10		KRJ10DJ473T	CHIP 47k Ω ±5% 1/16W	NN05473610
RN11		KRJ10DJ471T	CHIP 470 Ω ±5% 1/16W	NN05471610
RN12		KRJ10DJ471T	CHIP 470 Ω ±5% 1/16W	NN05471610
RN13		KRJ10DJ472T	CHIP 4.7k Ω ±5% 1/16W	NN05472610
RN14		KRJ10DJ472T	CHIP 4.7k Ω ±5% 1/16W	NN05472610
RN15		KRJ10DJ222T	CHIP 2.2k Ω ±5% 1/16W	NN05222610
RN16		KRJ10DJ222T	CHIP 2.2k Ω ±5% 1/16W	NN05222610
RN17		KRJ10DJ104T	CHIP 100k Ω ±5% 1/16W	NN05104610
R701		KRJ10DJ473T	CHIP 47k Ω ±5% 1/16W	NN05473610
R702		KRJ10DJ473T	CHIP 47k Ω ±5% 1/16W	NN05473610
R703		KRJ10DJ102T	CHIP 1k Ω ±5% 1/16W	NN05102610
R704		KRJ10DJ102T	CHIP 1k Ω ±5% 1/16W	NN05102610

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

POS. NO	VERS. COLOR	DESCRIPTION	PART NO. (MJI)
R705		KRJ10DJ682T CHIP 6.8k Ω ±5% 1/16W	NN05682610
R706		KRJ10DJ682T CHIP 6.8k Ω ±5% 1/16W	NN05682610
R707		KRJ10DJ223T CHIP 22k Ω ±5% 1/16W	NN05223610
R708		KRJ10DJ223T CHIP 22k Ω ±5% 1/16W	NN05223610
R709		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R710		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R711		KRJ10DJ122T CHIP 1.2k Ω ±5% 1/16W	NN05122610
R712		KRJ10DJ122T CHIP 1.2k Ω ±5% 1/16W	NN05122610
R713			
∫		KRJ10DJ102T CHIP 1k Ω ±-5% 1/16W	NN05102610
R716			
R717		KRJ10DJ122T CHIP 1.2k Ω ±5% 1/16W	NN05122610
R718		KRJ10DJ122T CHIP 1.2k Ω ±5% 1/16W	NN05122610
R719		KVN1RA473B01T SEMI FIXED 47k Ω	RA04730780
R720		KVN1RA473B01T SEMI FIXED 47k Ω	RA04730780
R721		KRJ10DJ562T CHIP 5.6k Ω ±5% 1/16W	NN05562610
R722		KRJ10DJ562T CHIP 5.6k Ω ±5% 1/16W	NN05562610
R723		KRJ10DJ271T CHIP 270 Ω ±5% 1/16W	NN05271610
R724		KRJ10DJ271T CHIP 270 Ω ±5% 1/16W	NN05271610
R725		KRG2SANJ6R8H METAL OXIDE FILM 6.8 Ω ±5% 2W	NK05068020
R726		KRG2SANJ6R8H METAL OXIDE FILM 6.8 Ω ±5% 2W	NK05068020
R728		KRJ10DJ184T CHIP 180k Ω ±5% 1/16W	NN05184610
R729		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R730		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R731		KRJ10DJ822T CHIP 8.2k Ω ±5% 1/16W	NN05822610
R732		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
R733		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
R734		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
R735		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R736		KRJ12EJ102T CHIP 1k Ω ±5% 1/2W	*RI000200R
R737		KRJ12EJ102T CHIP 1k Ω ±5% 1/2W	*RI000200R
R738		KRJ10DJ184T CHIP 180k Ω ±5% 1/16W	NN05184610
R739		KRJ12EJ392T CHIP 3.9k Ω ±5% 1/2W	RI05392120
R740		KRJ12EJ392T CHIP 3.9k Ω ±5% 1/2W	RI05392120
R741		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
R742		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
R743		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
R744		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
R745		KRJ10DJ682T CHIP 6.8k Ω ±5% 1/16W	NN05682610
R746		KRJ10DJ682T CHIP 6.8k Ω ±5% 1/16W	NN05682610
R747		KRJ10DJ223T CHIP 22k Ω ±5% 1/16W	NN05223610
R748		KRJ10DJ223T CHIP 22k Ω ±5% 1/16W	NN05223610
R749		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R750		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R751		KRJ10DJ122T CHIP 1.2k Ω ±5% 1/16W	NN05122610
R752		KRJ10DJ122T CHIP 1.2k Ω ±5% 1/16W	NN05122610
R753			
∫		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
R756			
R757		KRJ10DJ122T CHIP 1.2k Ω ±5% 1/16W	NN05122610
R758		KRJ10DJ122T CHIP 1.2k Ω ±5% 1/16W	NN05122610
R759		KVN1RA473B01T SEMI FIXED 47k Ω	RA04730780
R760		KVN1RA473B01T SEMI FIXED 47k Ω	RA04730780
R761		KRJ10DJ562T CHIP 5.6k Ω ±5% 1/16W	NN05562610
R762		KRJ10DJ562T CHIP 5.6k Ω ±5% 1/16W	NN05562610
R763		KRJ10DJ271T CHIP 270 Ω ±5% 1/16W	NN05271610
R764		KRJ10DJ271T CHIP 270 Ω ±5% 1/16W	NN05271610
R765		KRG2SANJ6R8H METAL OXIDE FILM 6.8 Ω ±5% 2W	NK05068020
R766		KRG2SANJ6R8H METAL OXIDE FILM 6.8 Ω ±5% 2W	NK05068020
R768		KRJ10DJ184T CHIP 180k Ω ±5% 1/16W	NN05184610
R769		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R770		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R771		KRJ10DJ822T CHIP 8.2k Ω ±5% 1/16W	NN05822610
R772		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610

POS. NO	VERS. COLOR	DESCRIPTION	PART NO. (MJI)
R773		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
R774		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
R775		KRJ10DJ184T CHIP 180k Ω ±5% 1/16W	NN05184610
R776			
∫		KRJ10DJ123T CHIP 12k Ω ±5% 1/16W	NN05123610
R779			
R801		KRJ10DJ223T CHIP 22k Ω ±5% 1/16W	NN05223610
R802		KRJ10DJ182T CHIP 1.8k Ω ±5% 1/16W	NN05182610
R803		KRJ10DJ681T CHIP 680 Ω ±5% 1/16W	NN05681610
R804		KRJ10DJ154T CHIP 150k Ω ±5% 1/16W	NN05154610
R805		KRJ10DJ183T CHIP 18k Ω ±5% 1/16W	NN05183610
R806		KRJ10DJ470T CHIP 47 Ω ±5% 1/16W	NN05470610
R808		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
R811		KRJ10DJ0R0T CHIP 0 Ω ±5% 1/16W	NN05000610
R812		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
R813		KRJ10DJ153T CHIP 15k Ω ±5% 1/16W	NN05153610
R814		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
R815		KRJ10DJ153T CHIP 15k Ω ±5% 1/16W	NN05153610
R816		KRJ10DJ0R0T CHIP 0 Ω ±5% 1/16W	NN05000610
R819		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R822		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
R825		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
R826		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R828			
∫		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R831			
R832		KRJ10DJ332T CHIP 3.3k Ω ±5% 1/16W	NN05332610
R833		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
R834		KRJ10DJ222T CHIP 2.2k Ω ±5% 1/16W	NN05222610
R835		KRJ10DJ682T CHIP 2.2k Ω ±5% 1/16W	NN05682610
R836		KRJ10DJ472T CHIP 4.7k Ω ±5% 1/16W	NN05472610
R837		KRJ10DJ223T CHIP 22k Ω ±5% 1/16W	NN05223610
R838		KRJ10DJ223T CHIP 22k Ω ±5% 1/16W	NN05223610
R901		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
R902		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
R903		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
R904		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
R905		KRJ10DJ682T CHIP 6.8k Ω ±5% 1/16W	NN05682610
R906		KRJ10DJ682T CHIP 6.8k Ω ±5% 1/16W	NN05682610
R907		KRJ10DJ223T CHIP 22k Ω ±5% 1/16W	NN05223610
R908		KRJ10DJ223T CHIP 22k Ω ±5% 1/16W	NN05223610
R909		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R910		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R911		KRJ10DJ122T CHIP 1.2k Ω ±5% 1/16W	NN05122610
R912		KRJ10DJ122T CHIP 1.2k Ω ±5% 1/16W	NN05122610
R913			
∫		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
R916			
R917		KRJ10DJ122T CHIP 1.2k Ω ±5% 1/16W	NN05122610
R918		KRJ10DJ122T CHIP 1.2k Ω ±5% 1/16W	NN05122610
R919		KVN1RA473B01T SEMI FIXED 47k Ω	RA04730780
R920		KVN1RA473B01T SEMI FIXED 47k Ω	RA04730780
R921		KRJ10DJ562T CHIP 5.6k Ω ±5% 1/16W	NN05562610
R922		KRJ10DJ562T CHIP 5.6k Ω ±5% 1/16W	NN05562610
R923		KRJ10DJ271T CHIP 270 Ω ±5% 1/16W	NN05271610
R924		KRJ10DJ271T CHIP 270 Ω ±5% 1/16W	NN05271610
R925		KRG2SANJ6R8H METAL OXIDE FILM 6.8 Ω ±5% 2W	NK05068020
R926		KRG2SANJ6R8H METAL OXIDE FILM 6.8 Ω ±5% 2W	NK05068020
R928		KRJ10DJ184T CHIP 180k Ω ±5% 1/16W	NN05184610
R929		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R930		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R931		KRJ10DJ822T CHIP 8.2k Ω ±5% 1/16W	NN05822610
R932		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
R933		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
R934		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
R935		KRJ10DJ184T CHIP 180k Ω ±5% 1/16W	NN05184610

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POS. NO	VERS. COLOR	DESCRIPTION		PART NO. (MJI)
R936		KRJ10DJ102T	CHIP 1k Ω ±5% 1/16W	NN05102610
R937		KRJ10DJ123T	CHIP 12k Ω ±5% 1/16W	NN05123610
R938		KRJ10DJ123T	CHIP 12k Ω ±5% 1/16W	NN05123610
			PA01-RESISTORS(COMMON)	
R***			CARBON FILM FIXED RES. ±5% 1/6W : R807 R809	
			PA01-SEMICONDUCTORS	
D701		BVDRB160L60TE25	DIODE RB160L-60 TE25 SBD 60V 1A	*HZ200160R
D702		BVDRB160L60TE25	DIODE RB160L-60 TE25 SBD 60V 1A	*HZ200160R
D703		BVDRB160L40TE25	DIODE RB160L-40 TE25 SBD 40V 1A	HZ20061210
D706		KVD1N4003SRT	DIODE TW 1N4003S or 1D3	HD200010AR
D707		BVDRB160L60TE25	DIODE RB160L-60 TE25 SBD 60V 1A	*HZ200160R
D708		BVDRB160L60TE25	DIODE RB160L-60 TE25 SBD 60V 1A	*HZ200160R
D741		BVDRB160L60TE25	DIODE RB160L-60 TE25 SBD 60V 1A	*HZ200160R
D742		BVDRB160L60TE25	DIODE RB160L-60 TE25 SBD 60V 1A	*HZ200160R
D743		BVDRB160L40TE25	DIODE RB160L-40 TE25 SBD 40V 1A	HZ20061210
D747		BVDRB160L60TE25	DIODE RB160L-60 TE25 SBD 60V 1A	*HZ200160R
D748		BVDRB160L60TE25	DIODE RB160L-60 TE25 SBD 60V 1A	*HZ200160R
⚠ D801		BVDGBJ604	DIODE BRIDGE RBV-606 400V 6A	HE20004080
⚠ D802		BVIPC123FY	IC PHOTO COUPLER PC-123F2	HW10032320
D804		BVD1SS301	DIODE CHIP KDS121 or 1SS301	HZ21005000
D805		BVD1SS301	DIODE CHIP KDS121 or 1SS301	HZ21005000
D806		BVDRB160L40TE25	DIODE RB160L-40 TE25 SBD 40V 1A	HZ20061210
D807		KMYBVDFMBG14LZA	DIODE FMB-G14L & HEAT SINK ASSY	*HC200120R
⚠ D808		KMYBVDFMG2SZA	DIODE FMG-22S &HEAT SINK ASSY	*HC200130R
⚠ D809		KMYBVDFMG22SZA	DIODE FMG-22S &HEAT SINK ASSY	*HC200130R
D810		BVDRB160L40TE25	DIODE RB160L-40 TE25 SBD 40V 1A	HZ20061210
D811		BVDRB160L40TE25	DIODE RB160L-40 TE25 SBD 40V 1A	HZ20061210
D812		BVDRB160L40TE25	DIODE RB160L-40 TE25 SBD 40V 1A	HZ20061210
D813				
∫		BVD1SS301	DIODE CHIP	HZ21005000
D816			KDS121 or 1SS301	
D818		KVD1N4003SRT	DIODE TW 1N4003S or 1D3	HD200010AR
D819		KVD1N4003SRT	DIODE TW 1N4003S or 1D3	HD200010AR
D820		BVDUDZ-16B	DIODE ZENER UDZ-16B	HZ31601000
D821		BVD1SS301	DIODE CHIP KDS121 or 1SS301	HZ21005000
D901		BVDRB160L60TE25	DIODE RB160L-60 TE25 SBD 60V 1A	*HZ200160R
D902		BVDRB160L60TE25	DIODE RB160L-60 TE25 SBD 60V 1A	*HZ200160R
D903		BVDRB160L40TE25	DIODE RB160L-40 TE25 SBD 40V 1A	HZ20061210
D907		BVDRB160L60TE25	DIODE RB160L-60 TE25 SBD 60V 1A	*HZ200160R
D908		BVDRB160L60TE25	DIODE RB160L-60 TE25 SBD 60V 1A	*HZ200160R
Q701		KMYBVITA2022ZA	IC TA2022-100	HC10140990
Q702		BVT2SC2240GRT	TRS. 2SC2240 (GR)	HT322401A0
Q741		KMYBVITA2022ZA	IC TA2022-100	HC10140990
⚠ Q801		BVIAN8037	IC SW REGULATOR AN8037	HC10174020
⚠ Q802		BRTNTH22D3R0LA	THERMISTOR POWER NTH22D3R0LA	HH00006230
Q803		KMYBVT2SK270ZA	FET 2SK2730	HF22730000
⚠ Q804		BVINJM431L	IC SHUNT REGULATOR NJM431	HC33136090
⚠ Q805		BVINJM78M15FA	IC REGULATOR NJM78M15FA(0.5A 15V)	HC3851509F
⚠ Q806		BVINJM79M15FA	IC REGULATOR NJM79M15FA(0.5A -15V)	HC3951509F
⚠ Q807		BVISI8033S	IC REGULATOR(SW) SI-8033S	HC91903080
Q808		BVTDTC114EUA	TRS. CHIP DTC114EU	BA20035210
⚠ Q809		KMYBVISI3050CZA	IC SI-3050C	HC10006080
Q810		BVTDTC114EUA	TRS. CHIP DTC114EU	BA20035210
⚠ Q811		KMYBVISI3050CZA	IC SI-3050C	HC10006080
Q812		BVTDTC114EUA	TRS. CHIP DTC114EU	BA20035210
Q813		BVT2SC2240GRT	TRS. 2SC2240 (GR)	HT322401A0
Q814		BVT2SC2240GRT	TRS. 2SC2240 (GR)	HT322401A0
⚠ Q815		BVIPQ2TZ15U	IC CHIP REGULATOR(2.5V) PQ2TZ15U	HC98903320
⚠ Q816		KMYNJM78M05FAZA	IC NJM78M05FA	HC3850509F
⚠ Q817		BVINJM79M05FA	IC REGULATOR NJM79M05FA -5V 0.5A	HC3950509F
⚠ Q818		KMYNJM7812FAYA	IC NJM7812FA +12V	HC3891209F
Q819		BVT2SA1576AQ	TRS. CHIP 2SA1576(FQ)	HX115761A0
⚠ Q820		BVIPQ1CZ21H2ZP	IC CHIP REGULATOR(SW) PQ1CZ21H2ZP	HC91915320
Q821		BVT2SC4213B	TRS. CHIP(MUTING/SW) 2SC4213	HX342132A0
Q901		KMYBVITA2022ZA	IC TA2022-100	HC10140990
Q902		BVTDTC114EUA	TRS. CHIP DTC114EU	BA20035210
QN01		BVITA7317P	IC PROTECTOR TA7317P	HC10042050
QN02		BVINJM2068M	IC OP AMP NJM2068M	HC10102090
QN03		BVT2SC4213B	TRS. CHIP(MUTING/SW) 2SC4213	HX342132A0
QN04		BVT2SC4213B	TRS. CHIP(MUTING/SW) 2SC4213	HX342132A0
QN05		BVTDTA114YUA	TRS. CHIP DTA114YU	BA12307000
			PA01-MISCELLANEOUS	
⚠ F801		KBA2C5000NRJ	FUSE 5A	FS10500360
J702		KJJ5Q009Z	TERMINAL SPEAKER (8P RED/BLK)	*YT002290R
J703		KJJ5P014Z	TERMINAL SPEAKER CN	*YT002300R
J704		KJJ4M036Z	BOARD JACK (1P BLK) JE010003CN	*YT002310R
⚠ J802		KJJ7A012Z	OUTLET AC A2-02-D003-OP	*YJ002350R
L701		BLZ9J003Z	BEAD FERRITE(CHIP) BLM21A05PT	FC90020050
L702		BLZ9J003Z	BEAD FERRITE(CHIP) BLM21A05PT	FC90020050
L703		KLZ9L001Z	COIL CHIP SLF12575-330M3R2	LU80333060
L704		KLZ9L001Z	COIL CHIP SLF12575-330M3R2	LU80333060
L705		BLZ9M001Z	COIL CHIP(100μH K) NLC322522	LU17104010
L706		BSL3B013ZE	RELAY (DC24V) G5PA-28 5A/250VAC	LY20240490
L741		BLZ9J003Z	BEAD FERRITE(CHIP) BLM21A05PT	FC90020050
L742		BLZ9J003Z	BEAD FERRITE(CHIP) BLM21A05PT	FC90020050

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POS. NO	VERS. COLOR	DESCRIPTION		PART NO. (MJI)
L743		KLZ9L001Z	COIL CHIP SLF12575-330M3R2	LU80333060
L744		KLZ9L001Z	COIL CHIP SLF12575-330M3R2	LU80333060
L745		BLZ9M001Z	COIL CHIP(100µH K) NLC322522	LU17104010
L746		BSL3B013ZE	RELAY (DC24V) G5PA-28 5A/250VAC	LY20240490
⚠ L801		KLFKE0901	FILTER LINE	*FN000120R
L803		KLT470K705CT	COIL CHOKE TSL0709-470KR94	*LC107280R
L804		KLT470K705CT	COIL CHOKE TSL0709-470KR94	*LC107280R
L805		KLT101K705CT	COIL CHOKE TSL0709-101KR94	LC11044600
⚠ L807		BSL3B013ZE	RELAY (DC24V) G5PA-28 5A/250VAC	LY20240490
⚠ L808		BSL1B012ZE	RELAY (DC24V) POWER G5PA-1 5A	LY10240280
L901		BLZ9J003Z	BEAD FERRITE(CHIP) BLM21A05PT	FC90020050
L902		BLZ9J003Z	BEAD FERRITE(CHIP) BLM21A05PT	FC90020050
L903		KLZ9L001Z	COIL CHIP SLF12575-330M3R2	LU80333060
L904		KLZ9L001Z	COIL CHIP SLF12575-330M3R2	LU80333060
L905		BLZ9M001Z	COIL CHIP(100µH K) NLC322522	LU17104010
L906		BSL3B013ZE	RELAY (DC24V) G5PA-28 5A/250VAC	LY20240490
M801		KMD1A441ZA	FAN BRACKET ASS'Y	MM01200290
⚠ T801		KLT5K004Z	TRANS POWER(40X45)	TS14157010
			PB01-U-COM DSP CIRCUIT BOARD	
			PB01-CAPACITORS	
CE01		KCEA1HH100T	ELECT 10µF M 50V	OA10605020
CE02		KCEA1HH100T	ELECT 10µF M 50V	OA10605020
CE05		KCEA1CAH100T	ELECT 10µF M 16V	OA10601620
CE06		KCEA1CAH100T	ELECT 10µF M 16V	OA10601620
CE07		KCUS1H102KB	CER. CHIP 1000pF ±10% 50V	DK96102300
CE08		KCUS1H102KB	CER. CHIP 1000pF ±10% 50V	DK96102300
CE09				
∫		KCUS1H470JC	CER. CHIP 47pF ±5% 50V	DD95470300
CE12				
CE13		KCUS1H103KB	CER. CHIP 0.01µF ±10% 25V	DK96103200
CE14		KCUS1H103KB	CER. CHIP 0.01µF ±10% 25V	DK96103200
CE15		KCEA1CH101T	ELECT 100µF M 16V	OA10701620
CE16		KCEA1EH470T	ELECT 47µF M 16V	OA47601620
CE17		KCEA1EH470T	ELECT 47µF M 16V	OA47601620
CG13		KCEA1EH470T	ELECT 47µF M 16V	OA47601620
CG14		KCEA1EH470T	ELECT 47µF M 16V	OA47601620
CG15		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
CG16		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
CJ01		KCEA1CAH100T	ELECT 10µF M 16V	OA10601620
CJ02		KCEA1CAH100T	ELECT 10µF M 16V	OA10601620
CJ03		KCUS1H102KB	CER. CHIP 1000pF ±10% 50V	DK96102300
CJ04		KCUS1H102KB	CER. CHIP 1000pF ±10% 50V	DK96102300
CJ05		KCUS1H181JC	CER. CHIP 180pF ±5% 50V	DD95181300
CJ06		KCUS1H181JC	CER. CHIP 180pF ±5% 50V	DD95181300
CJ07		KCUS1H153KB	CER. CHIP 0.015µF ±10% 16V	DK96153200
CJ08		KCUS1H153KB	CER. CHIP 0.015µF ±10% 16V	DK96153200
CJ21		KCEA1CAH100T	ELECT 10µF M 16V	OA10601620
CJ22		KCUS1H102KB	CER. CHIP 1000pF ±10% 50V	DK96102300
CJ23		KCUS1H181JC	CER. CHIP 180pF ±5% 50V	DD95181300
CJ24		KCUS1H153KB	CER. CHIP 0.015µF ±10% 16V	DK96153200
CJ31		KCEA1CAH100T	ELECT 10µF M 16V	OA10601620
CJ32		KCUS1H102KB	CER. CHIP 1000pF ±10% 50V	DK96102300
CJ33		KCUS1H181JC	CHIP 180pF ±5% 50V	DD95181300

POS. NO	VERS. COLOR	DESCRIPTION		PART NO. (MJI)
CJ41		KCEA1CAH100T	ELECT 10µF M 16V	OA10601620
CJ42		KCEA1CAH100T	ELECT 10µF M 16V	OA10601620
CJ43		KCUS1H102KB	CER. CHIP 1000pF ±10% 50V	DK96102300
CJ44		KCUS1H102KB	CER. CHIP 1000pF ±10% 50V	DK96102300
CJ45		KCUS1H181JC	CER. CHIP 180pF ±5% 50V	DD95181300
CJ46		KCUS1H181JC	CER. CHIP 180pF ±5% 50V	DD95181300
CK01		KCEA1CH101T	ELECT 100µF M 10V	OA10701020
CK02		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
CK03		KCEA1HH2R2T	ELECT 2.2µF M 50V	OA22505020
CK04		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
CK05		KCEA1HH2R2T	ELECT 2.2µF M 50V	OA22505020
CK06		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
CK07		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C601		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C602		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C603		KCEA1CH101T	ELECT 100µF M 10V	OA10701020
C604		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C605		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C606		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C607		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C608		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C609		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C610		KCEA1EH470T	ELECT 47µF M 10V	OA47601020
C611		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C612		KCUS1H220JC	CER. CHIP 22pF ±5% 50V	DD95220300
C613		KCUS1H220JC	CER. CHIP 22pF ±5% 50V	DD95220300
C614		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C615		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C616		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C618		KCEA1CH101T	ELECT 100µF M 10V	OA10701020
C619		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C620		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C622		KCUS1H220JC	CER. CHIP 22pF ±5% 50V	DD95220300
C623		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C624		KCEA1CH101T	ELECT 100µF M 10V	OA10701020
C625		KCEA1CH101T	ELECT 100µF M 10V	OA10701020
C630		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C631		KCEA1HH2R2T	ELECT 2.2µF M 50V	OA22505020
C632				
∫		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C636				
C638		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C639		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C648		KCUS1H471KB	CER. CHIP 470pF ±10%	DK96471300
C651		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C652		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C653		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C654		KCEA1CH101T	ELECT 100µF M 10V	OA10701020
C655				
∫		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C658				
C659		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C660		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C661		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C662				
∫		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C665				
			PB01-RESISTORS	
RE01		KRJ10DJ102T	CHIP 1k Ω ±5% 1/16W	NN05102610
RE02		KRJ10DJ102T	CHIP 1k Ω ±5% 1/16W	NN05102610
RE03		KRJ10DJ473T	CHIP 47k Ω ±5% 1/16W	NN05473610
RE04		KRJ10DJ473T	CHIP 47k Ω ±5% 1/16W	NN05473610
RE05		KRJ10DJ102T	CHIP 1k Ω ±5% 1/16W	NN05102610
RE06		KRJ10DJ102T	CHIP 1k Ω ±5% 1/16W	NN05102610
RE07		KRJ10DJ473T	CHIP 47k Ω ±5% 1/16W	NN05473610
RE08		KRJ10DJ473T	CHIP 47k Ω ±5% 1/16W	NN05473610

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

POS. NO	VERS. COLOR	DESCRIPTION	PART NO. (MJI)
RE09		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
RE10		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
RE11		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
RE12		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
RE15		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
RE16		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
RE17		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
RE18		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
RE19			
∫		KRJ10DJ104T CHIP 100k Ω ±5% 1/16W	NN05104610
RE23			
RE31		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
RE32		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
RE33			
∫		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
RE38			
RE39			
∫		KRJ10DJ471T CHIP 470 Ω ±5% 1/16W	NN05471610
RE42			
RE57		KRJ10DJ0R0T CHIP 0 Ω ±5% 1/16W	NN05000610
RE58		KRJ10DJ0R0T CHIP 0 Ω ±5% 1/16W	NN05000610
RG01		KRJ10DJ222T CHIP 2.2k Ω ±5% 1/16W	NN05222610
RG02		KRJ10DJ222T CHIP 2.2k Ω ±5% 1/16W	NN05222610
RG03		KRJ10DJ222T CHIP 2.2k Ω ±5% 1/16W	NN05222610
RG05		KRJ10DJ472T CHIP 4.7k Ω ±5% 1/16W	NN05472610
RG06		KRJ10DJ472T CHIP 4.7k Ω ±5% 1/16W	NN05472610
RG07		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
RG08		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
RG09		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
RG10		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
RG15		KRJ10DJ472T CHIP 4.7k Ω ±5% 1/16W	NN05472610
RG16		KRJ10DJ472T CHIP 4.7k Ω ±5% 1/16W	NN05472610
RG17		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
RG18		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
RG19		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
RG20		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
RG23		KRJ10DJ472T CHIP 4.7k Ω ±5% 1/16W	NN05472610
RG24		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
RG25		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
RG27		KRJ10DJ472T CHIP 4.7k Ω ±5% 1/16W	NN05472610
RG28		KRJ10DJ153T CHIP 15k Ω ±5% 1/16W	NN05153610
RG29		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
RJ01			
∫		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
RJ06			
RJ07			
∫		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
RJ10			
RJ11		KRJ10DJ222T CHIP 2.2k Ω ±5% 1/16W	NN05222610
RJ12		KRJ10DJ222T CHIP 2.2k Ω ±5% 1/16W	NN05222610
RJ13		KRJ10DJ104T CHIP 100k Ω ±5% 1/16W	NN05104610
RJ21		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
RJ22		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
RJ23		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
RJ24		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
RJ25		KRJ10DJ102T CHIP 1k Ω ±5% 1/16W	NN05102610
RJ26		KRJ10DJ222T CHIP 2.2k Ω ±5% 1/16W	NN05222610
RJ31		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
RJ32		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
RJ33		KRJ10DJ333T CHIP 33k Ω ±5% 1/16W	NN05333610
RJ41			
∫		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
RJ46			
RJ51		KRJ10DJ472T CHIP 4.7k Ω ±5% 1/16W	NN05472610
RJ52		KRJ10DJ472T CHIP 4.7k Ω ±5% 1/16W	NN05472610

POS. NO	VERS. COLOR	DESCRIPTION	PART NO. (MJI)
RJ53			
∫		KRJ10DJ682T CHIP 6.8k Ω ±5% 1/16W	NN05682610
RJ56			
RJ58		KRJ10DJ682T CHIP 6.8k Ω ±5% 1/16W	NN05682610
RJ59			
∫		KRJ10DJ272T CHIP 2.7k Ω ±5% 1/16W	NN05272610
RJ62			
RJ63		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
RJ64		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
RJ65		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
RK01		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
RK02		KRJ10DJ0R0T CHIP 0 Ω ±5% 1/16W	NN05000610
R600		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R601		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
R602		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R603		KRJ10DJ822T CHIP 8.2k Ω ±5% 1/16W	NN05822610
R604		KRJ10DJ472T CHIP 4.7k Ω ±5% 1/16W	NN05472610
R605		KRJ10DJ472T CHIP 4.7k Ω ±5% 1/16W	NN05472610
R606		KRJ10DJ680T CHIP 68 Ω ±5% 1/16W	NN05680610
R607		KRJ10DJ682T CHIP 6.8k Ω ±5% 1/16W	NN05682610
R608		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R609		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R610		KRJ10DJ472T CHIP 4.7k Ω ±5% 1/16W	NN05472610
R611		KRJ10DJ153T CHIP 15k Ω ±5% 1/16W	NN05153610
R612		KRJ10DJ470T CHIP 47 Ω ±5% 1/16W	NN05470610
R613		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R614		KRJ10DJ472T CHIP 4.7k Ω ±5% 1/16W	NN05472610
R619		KRJ10DJ470T CHIP 47 Ω ±5% 1/16W	NN05470610
R620			
∫		KRJ10DJ101T CHIP 100 Ω ±5% 1/16W	NN05101610
R624			
R625		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
R626			
∫		KRJ10DJ105T CHIP 1M Ω ±5% 1/16W	NN05105610
R629			
R630		KRJ10DJ101T CHIP 100 Ω ±5% 1/16W	NN05101610
R631		KRJ10DJ101T CHIP 100 Ω ±5% 1/16W	NN05101610
R632		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R633			
∫		KRJ10DJ101T CHIP 100 Ω ±5% 1/16W	NN05101610
R636			
R637		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R638		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R639		KRJ10DJ101T CHIP 100 Ω ±5% 1/16W	NN05101610
R640		KRJ10DJ101T CHIP 100 Ω ±5% 1/16W	NN05101610
R641		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R643		KRJ10DJ273T CHIP 27k Ω ±5% 1/16W	NN05273610
R644		KRJ10DJ0R0T CHIP 0 Ω ±5% 1/16W	NN05000610
R645		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
R646		KRJ10DJ470T CHIP 47 Ω ±5% 1/16W	NN05470610
R647		KRJ10DJ472T CHIP 4.7k Ω ±5% 1/16W	NN05472610
R648		KRJ10DJ333T CHIP 33k Ω ±5% 1/16W	NN05333610
R649		KRJ10DJ472T CHIP 4.7k Ω ±5% 1/16W	NN05472610
R650			
∫		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R654			
R655		KRJ10DJ684T CHIP 680k Ω ±5% 1/16W	NN05684610
R656		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R657		KRJ10DJ472T CHIP 4.7k Ω ±5% 1/16W	NN05472610
R658		KRJ10DJ472T CHIP 4.7k Ω ±5% 1/16W	NN05472610
R659		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R660			
∫		KRJ10DJ473T CHIP 47k Ω ±5% 1/16W	NN05473610
R663			
R664		KRJ10DJ472T CHIP 4.7k Ω ±5% 1/16W	NN05472610
R665		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610
R666		KRJ10DJ103T CHIP 10k Ω ±5% 1/16W	NN05103610

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

POS. NO	VERS. COLOR	DESCRIPTION		PART NO. (MJI)
R667		KRJ10DJ103T	CHIP 10k Ω ±5% 1/16W	NN05103610
R668		KRJ10DJ682T	CHIP 6.8k Ω ±5% 1/16W	NN05682610
R669		KRJ10DJ101T	CHIP 100 Ω ±5% 1/16W	NN05101610
R670		KRJ10DJ103T	CHIP 10k Ω ±5% 1/16W	NN05103610
R671				
∫		KRJ10DJ470T	CHIP 47 Ω ±5% 1/16W	NN05470610
R678				
R679		KRJ10DJ0R0T	CHIP 0 Ω ±5% 1/16W	NN05000610
R680		KRJ10DJ682T	CHIP 6.8k Ω ±5% 1/16W	NN05682610
R681				
∫		KRJ10DJ472T	CHIP 4.7k Ω ±5% 1/16W	NN05472610
R688				
R689		KRJ10DJ105T	CHIP 1M Ω ±5% 1/16W	NN05105610
R691		KRJ10DJ101T	CHIP 100 Ω ±5% 1/16W	NN05101610
R692		KRJ10DJ101T	CHIP 100 Ω ±5% 1/16W	NN05101610
R693				
∫		KRJ10DJ103T	CHIP 10k Ω ±5% 1/16W	NN05103610
R696				
R697		KRJ10DJ0R0T	CHIP 0 Ω ±5% 1/16W	NN05000610
R698		KRJ10DJ0R0T	CHIP 0 Ω ±5% 1/16W	NN05000610
R699		KRJ10DJ0R0T	CHIP 0 Ω ±5% 1/16W	NN05000610
			PB01-SEMICONDUCTORS	
DE01		BVD1SS301	DIODE CHIP KDS121 or 1SS301	HZ21005000
DE02		BVD1SS301	DIODE CHIP KDS121 or 1SS301	HZ21005000
DE03		BVD1SS300	DIODE CHIP KDS120 or 1SS300	HZ21006000
DE04		BVD1SS300	DIODE CHIP KDS120 or 1SS300	HZ21006000
DE05		BVD1SS301	DIODE CHIP KDS121 or 1SS301	HZ21005000
QE01		BVINJM2068M	IC OP AMP NJM2068M	HC10102090
QE02		BVI74HC4052D	IC 74HC4052	HC705200Z0
QE03		BVI74HC4052D	IC 74HC4052	HC705200Z0
QE05		BVINJM2068M	IC OP AMP NJM2068M	HC10102090
QE06		BVINJM2068M	IC OP AMP NJM2068M	HC10102090
QE07		BVTDTA114YUA	TRS. CHIP DTA114YU	BA12307000
QG01		BVITC9482F	IC ELECT VOL TC9482F	*HC106890R
QG02		BVINJM2082M	IC OP AMP NJM2082M	HC10103090
QG03		BVINJM2082M	IC OP AMP NJM2082M	HC10103090
QG04		BVINJM2082M	IC OP AMP NJM2082M	HC10103090
QJ01		BVINJM2068M	IC OP AMP NJM2068M	HC10102090
QJ02		BVINJM2068M	IC OP AMP NJM2068M	HC10102090
QJ03		BVINJM2068M	IC OP AMP NJM2068M	HC10102090
QJ04		BVINJM2068M	IC OP AMP NJM2068M	HC10102090
QJ05		BVT2SC4213B	TRS. CHIP 2SC4213	HX342132A0
QJ06		BVT2SC4213B	TRS. CHIP 2SC4213	HX342132A0
QJ07		BVINJM2068M	IC OP AMP NJM2068M	HC10102090
QJ08		BVT2SC4213B	TRS. CHIP 2SC4213	HX342132A0
QJ09		BVTDTA114YUA	TRS. CHIP DTA114YU	BA12307000
QJ51		BVINJM2068M	IC OP AMP NJM2068M	HC10102090
QK01		BVIAK4527VQ	IC CODEC AK4527	*HC106900R
Q601		BVILC89055WRA8	IC DIR LC89055W-RA8	HC10405030
Q602		BVITC74HCT08AF	IC QUAD AND GATE(2 IN) TC74HCT08AF	HC700805Q0
Q603		BVITC74VHC08F	IC QUAD AND GATE(2 IN) TC74VHC08F	HC10452050
Q604		BVIS80745AND9	DETECTOR CHIP VOLTAGE S-80745AN-D9	HC10048530
Q605			IC FLASH MB90F553APF	*HS332WF0R
Q606		BVICSI24W04J	IC EEPROM AT24C04N-10SI-2.5	HC10033990
Q609		BVICS493292	IC DSP CS493292	HC10009880

POS. NO	VERS. COLOR	DESCRIPTION		PART NO. (MJI)
Q610		BVTDTC114EUA	TRS. CHIP DTC114EU	BA20035210
Q611		BVITC74VHC08F	IC QUAD AND GATE(2 IN) TC74VHC08F	HC10452050
Q612		BVITC74VHCT125A	IC QUAD BUS BUFFER TC74VHCT125AF	HC712505Q0
Q613		BVITC74VHCT574A	IC OCTAL D FLIP-FLO TC74VHCT574AF	HC008505K0
Q614		BVITC74VHCT574A	IC OCTAL D FLIP-FLO TC74VHCT574AF	HC008505K0
Q615		BVITC74LCX245F	IC OCTAL BUS TRANSCEIVER TC74LCX245F	HC008605K0
Q616		BVIIS61C1024J	IC SRAM (1M) 8X128K 15OR20 NS SOJ	HC10088000
Q617			IC O.T.P EPROM AT27C010-90PC	*HS332WATR
Q618		BVITC74VHC08F	IC QUAD AND GATE(2 IN) TC74VHC08F	HC10452050
Q620		BVTDTC114EUA	TRS. CHIP DTC114EU	BA20035210
			PB01-MISCELLANEOUS	
JE01		KJJ4P028Z	JACK BOARD JE040060	*YT002280R
JE02		KJJ4P028Z	JACK BOARD JE040060	*YT002280R
J602		BJS9L001Z	MODULE TOS LINK OPTICAL OUTPUT	YJ15000110
J603		BJSTORX178B	MODULE OPTICAL RECEIVER	YJ15000160
X601		KOX12288E220TF	CRYSTAL 12.288MHz (AT-49)	JX12013260
X602		BOXCSTCC8000MG	CERALOCK CSTCC8.00MG-TC 8.000MHz	FQ08004070
			PC01-VIDEO CIRCUIT BOARD	
			PC01-CAPACITORS	
C201		KCUS1H060DC	CER. CHIP 6pF ±0.5pF 50V	DD91060300
C202		KCUS1H060DC	CER. CHIP 6pF ±0.5pF 50V	DD91060300
C203		KCUS1H180JC	CER. CHIP 18pF ±5% 50V	DD95180300
C204		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C205		KCEA1CH101T	ELECT 100µF M 16V	OA10701620
C206		KCEA1EH470T	ELECT 47µF M 10V	OA47601020
C207		KCUS1H060DC	CER. CHIP 6pF ±0.5pF 50V	DD91060300
C208		KCUS1H060DC	CER. CHIP 6pF ±0.5pF 50V	DD91060300
C209		KCUS1H180JC	CER. CHIP 18pF ±5% 50V	DD95180300
C210		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C211		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C212		KCUS1H060DC	CER. CHIP 6pF ±0.5pF 50V	DD91060300
C213		KCUS1H060DC	CER. CHIP 6pF ±0.5pF 50V	DD91060300
C214		KCUS1H180JC	CER. CHIP 18pF ±5% 50V	DD95180300
C215		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C216		KCEA1EH470T	ELECT 47µF M 10V	OA47601020
C229		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C230		KCUS1H470JC	CER. CHIP 47pF ±5% 50V	DD95470300
C231		KCEA1AH471T	ELECT 470µF M 10V	OA47701020
C232		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C233		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C234		KCEA1CH101T	ELECT 100µF M 16V	OA10701620
C235		KCUS1H101JC	CER. CHIP 100pF ±5% 50V	DD95101300
C236		KCUS1H101JC	CER. CHIP 100pF ±5% 50V	DD95101300
C238		KCEA1CH101T	ELECT 100µF M 16V	OA10701620
C239		KCUS1H103KB	CER.CHIP 0.01µF ±10% 50V	DK96103300
C240		KCEA1CH101T	ELECT 100µF M 16V	OA10701620
C241		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C244		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C247		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C257		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C258		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C259		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C260		KCEA1HH1R0T	ELECT 1µF 50V	OA10505020
C262		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300

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

POS. NO	VERS. COLOR	DESCRIPTION		PART NO. (MJI)
C263		KCEA1HH1R0T	ELECT 1µF 50V	OA10505020
C265		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C266		KCEA1HH1R0T	ELECT 1µF 50V	OA10505020
C268		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C270		KCEA1AH471T	ELECT 470µF M 10V	OA47701020
C271		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C272		KCEA1EH470T	ELECT 47µF M 10V	OA47601020
C273		KCEA1HH1R0T	ELECT 1µF 50V	OA10505020
C274		KCEA1AH471T	ELECT 470µF M 10V	OA47701020
C275		KCEA1AH471T	ELECT 470µF M 10V	OA47701020
C276		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C277		KCEA1EH470T	ELECT 47µF M 10V	OA47601020
C278		KCEA1HH1R0T	ELECT 1µF 50V	OA10505020
C279		KCEA1AH471T	ELECT 470µF M 10V	OA47701020
C280		KCUS1H104ZF	CER. CHIP 0.1µFF 50V	DK98104300
C281		KCUS1H103KB	CER. CHIP 0.01µF ±10% 50V	DK96103300
C282		KCEA1EH470T	ELECT 47µF M 10V	OA47601020
C283		KCEA1HH1R0T	ELECT 1µF 50V	OA10505020
C284		KCUS1H104ZF	CER.CHIP 0.1µF F 50V	DK98104300
C287		KCUS1H104ZF	CER.CHIP 0.1µF F 50V	DK98104300
C289		KCEA1CH101T	ELECT 100µF M 16V	OA10701620
C290		KCEA1CH101T	ELECT 100µF M 16V	OA10701620
C291		KCEA1CH101T	ELECT 100µF M 16V	OA10701620
C293		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
C297		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
			PC01-CAPACITORS(COMMON)	
C***			PLASTIC FILM CAPACITOR ±5% 50V : C261 C264 C267	
			PC01-RESISTORS	
R201		KRJ10DJ821T	CHIP 820 Ω ±5% 1/16W	NN05821610
R202		KRJ10DJ101T	CHIP 100 Ω ±5% 1/16W	NN05101610
R204		KRJ10DJ222T	CHIP 2.2k Ω ±5% 1/16W	NN05222610
R205		KRJ10DJ821T	CHIP 820 Ω ±5% 1/16W	NN05821610
R206		KRJ10DJ101T	CHIP 100 Ω ±5% 1/16W	NN05101610
R208		KRJ10DJ222T	CHIP 2.2k Ω ±5% 1/16W	NN05222610
R209		KRJ10DJ821T	CHIP 820 Ω ±5% 1/16W	NN05821610
R210		KRJ10DJ101T	CHIP 100 Ω ±5% 1/16W	NN05101610
R212		KRJ10DJ222T	CHIP 2.2k Ω ±5% 1/16W	NN05222610
R213		KRJ10DJ0R0T	CHIP 0 Ω ±5% 1/16W	NN05000610
R214		KRJ10DJ0R0T	CHIP 0 Ω ±5% 1/16W	NN05000610
R215		KRJ10DJ0R0T	CHIP 0 Ω ±5% 1/16W	NN05000610
R225		KRJ10DJ103T	CHIP 10k Ω ±5% 1/16W	NN05103610
R226		KRJ10DJ332T	CHIP 3.3k Ω ±5% 1/16W	NN05332610
R231		KRJ10DJ0R0T	CHIP 0 Ω ±5% 1/16W	NN05000610
R232		KRJ10DJ822T	CHIP 8.2k Ω ±5% 1/16W	NN05822610
R233		KRJ10DJ0R0T	CHIP 0 Ω ±5% 1/16W	NN05000610
R234		KRJ10DJ0R0T	CHIP 0 Ω ±5% 1/16W	NN05000610
R235		KRJ10DJ0R0T	CHIP 0 Ω ±5% 1/16W	NN05000610
R237		KRJ10DJ103T	CHIP 10k Ω ±5% 1/16W	NN05103610
R238		KRJ10DJ221T	CHIP 220 Ω ±5% 1/16W	NN05221610
R239		KRJ10DJ102T	CHIP 1k Ω ±5% 1/16W	NN05102610
R240		KRJ10DJ102T	CHIP 1k Ω ±5% 1/16W	NN05102610
R241		KRJ10DJ182T	CHIP 1.8k Ω ±5% 1/16W	NN05182610
R246		KRJ10DJ821T	CHIP 820 Ω ±5% 1/16W	NN05821610
R247		KRJ10DJ102T	CHIP 1k Ω ±5% 1/16W	NN05102610
R248		KRJ10DJ102T	CHIP 1k Ω ±5% 1/16W	NN05102610
R249		KRJ10DJ182T	CHIP 1.8k Ω ±5% 1/16W	NN05182610
R254		KRJ10DJ331T	CHIP 330 Ω ±5% 1/16W	NN05331610
R255		KRJ10DJ102T	CHIP 1k Ω ±5% 1/16W	NN05102610
R256		KRJ10DJ102T	CHIP 1k Ω ±5% 1/16W	NN05102610
R257		KRJ10DJ182T	CHIP 1.8k Ω ±5% 1/16W	NN05182610
R263		KRJ10DJ103T	CHIP 10k Ω ±5% 1/16W	NN05103610
R269		KRJ10DJ0R0T	CHIP 0 Ω ±5% 1/16W	NN05000610
R270		KRJ10DJ101T	CHIP 100 Ω ±5% 1/16W	NN05101610
R271		KRJ10DJ750T	CHIP 75 Ω ±5% 1/16W	NN05750610
R274		KRJ10DJ101T	CHIP 100 Ω ±5% 1/16W	NN05101610

POS. NO	VERS. COLOR	DESCRIPTION		PART NO. (MJI)
R275		KRJ10DJ750T	CHIP 75 Ω ±5% 1/16W	NN05750610
R276		KRJ10DJ101T	CHIP 100 Ω ±5% 1/16W	NN05101610
R277		KRJ10DJ750T	CHIP 75 Ω ±5% 1/16W	NN05750610
R280		KRJ10DJ101T	CHIP 100 Ω ±5% 1/16W	NN05101610
R281		KRJ10DJ750T	CHIP 75 Ω ±5% 1/16W	NN05750610
R282		KRJ10DJ101T	CHIP 100 Ω ±5% 1/16W	NN05101610
R283		KRJ10DJ750T	CHIP 75 Ω ±5% 1/16W	NN05750610
R286		KRJ10DJ101T	CHIP 100 Ω ±5% 1/16W	NN05101610
R287		KRJ10DJ750T	CHIP 75 Ω ±5% 1/16W	NN05750610
R288		KRJ10DJ682T	CHIP 6.8k Ω ±5% 1/16W	NN05682610
R289		KRJ10DJ103T	CHIP 10k Ω ±5% 1/16W	NN05103610
R290				
ʃ		KRJ10DJ750T	CHIP 75 Ω ±5% 1/16W	NN05750610
R293				
R294		KRJ10DJ104T	CHIP 100k Ω ±5% 1/16W	NN05104610
R295		KRJ10DJ750T	CHIP 75 Ω ±5% 1/16W	NN05750610
R296		KRJ10DJ750T	CHIP 75 Ω ±5% 1/16W	NN05750610
R297		KRJ10DJ103T	CHIP 10k Ω ±5% 1/16W	NN05103610
R298		KRJ10DJ682T	CHIP 6.8k Ω ±5% 1/16W	NN05682610
R299		KRJ10DJ103T	CHIP 10k Ω ±5% 1/16W	NN05103610
			PC01-SEMICONDUCTORS	
Q201		BVT2SA1576AQ	TRS. CHIP 2SA1576(FQ)	HX115761A0
Q202		BVT2SA1576AQ	TRS. CHIP 2SA1576(FQ)	HX115761A0
Q203		BVT2SA1576AQ	TRS. CHIP 2SA1576(FQ)	HX115761A0
Q207		BVTDTC114EUA	TRS. CHIP DTC114EU	BA20035210
Q209		BVTDTC114EUA	TRS. CHIP DTC114EU	BA20035210
Q210		BVILA7138M	IC VIDEO AMP LA7138M	HC10406030
Q211		BVT2SB1237R	TRS. 2SB1237 (R)	HT212371C0
Q214		BVT2SA1576AQ	TRS. CHIP 2SA1576(FQ)	HX115761A0
Q215		BVT2SC4081R	TRS. CHIP 2SC4081 (BR)	HX340811B0
Q216		BVT2SA1576AQ	TRS. CHIP 2SA1576(FQ)	HX115761A0
Q217		BVT2SC4081R	TRS. CHIP 2SC4081 (BR)	HX340811B0
Q218		BVT2SA1576AQ	TRS. CHIP 2SA1576(FQ)	HX115761A0
Q219		BVT2SC4081R	TRS. CHIP 2SC4081 (BR)	HX340811B0
Q230		BVIBA7625	IC VIDEO SW BA7625	HC10189210
Q231		BVIBA7625	IC VIDEO SW BA7625	HC10189210
Q232		BVIBA7626F	IC VIDEO SW BA7626F	*HC106910R
Q233		BVT2SA1576AQ	TRS. CHIP 2SA1576(FQ)	HX115761A0
Q235		BVT2SA1576AQ	TRS. CHIP 2SA1576(FQ)	HX115761A0
Q236		BVT2SA1576AQ	TRS. CHIP 2SA1576(FQ)	HX115761A0
Q238		BVT2SA1576AQ	TRS. CHIP 2SA1576(FQ)	HX115761A0
Q239		BVT2SA1576AQ	TRS. CHIP 2SA1576(FQ)	HX115761A0
Q241		BVT2SA1576AQ	TRS. CHIP 2SA1576(FQ)	HX115761A0
Q242		BVTDTC114EUA	TRS. CHIP DTC114EU	BA20035210
Q243		BVT2SB1237R	TRS. 2SB1237 (R)	HT212371C0
Q245		BVI74HC4066D	IC SWITCHING 74HC4066 AF	HC706600Z0
			PC01-MISCELLANEOUS	
J204		KJJ9N001Z	JACK S-VIDEO (2P/H) 2P S TERMINAL	*YT002320R
J205		KJJ9N001Z	JACK S-VIDEO (2P/H) 2P S TERMINAL	*YT002320R
J207		KJJ4N051Z	JACK IN/OUT(2P YEL) JE0201635N	*YT002330R
J208		KJJ4N051Z	JACK IN/OUT(2P YEL) JE0201635N	*YT002330R
L201		KLQ120J405T	COIL PEAKING(RADIAL) EL0405RA-120	LC11233900
L202		KLQ120J405T	COIL PEAKING(RADIAL) EL0405RA-120	LC11233900
L203		KLQ120J405T	COIL PEAKING(RADIAL) EL0405RA-120	LC11233900
L209		BLZ9O001Z	BEAD FERRITE(CHIP) BLM41P600S PT	FN31060010
L212		KLQ470J405T	COIL PEAKING(RADIAL) EL0405RA-470	LC14733900
L213		KLQ470J405T	COIL PEAKING(RADIAL) EL0405RA-470	LC14733900

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

POS. NO	VERS. COLOR	DESCRIPTION		PART NO. (MJI)
L214		KLQ470J405T	COIL PEAKING(RADIAL) EL0405RA-470	LC14733900
L215		BLZ9O001Z	BEAD FERRITE(CHIP) BLM41P600S PT	FN31060010
			PC02-D CONNECTOR CIRCUIT BOARD	
			PC02-CAPACITORS	
C401		KCEA1AH471T	ELECT 470µF M 10V	OA47701020
C402		KCEA1AH471T	ELECT 470µF M 10V	OA47701020
C403		KCEA1AH471T	ELECT 470µF M 10V	OA47701020
			PC02-RESISTORS	
R401		KRJ10DJ3R3T	CHIP 3.3 Ω ±5% 1/16W	NN05033610
R402		KRJ10DJ470T	CHIP 47 Ω ±5% 1/16W	NN05470610
R403		KRJ10DJ330T	CHIP 33 Ω ±5% 1/16W	NN05330610
R404		KRJ10DJ470T	CHIP 47 Ω ±5% 1/16W	NN05470610
R405		KRJ10DJ122T	CHIP 1.2k Ω ±5% 1/16W	NN05122610
R407		KRJ10DJ330T	CHIP 33 Ω ±5% 1/16W	NN05330610
R408		KRJ10DJ470T	CHIP 47 Ω ±5% 1/16W	NN05470610
R409		KRJ10DJ122T	CHIP 1.2k Ω ±5% 1/16W	NN05122610
R411		KRJ10DJ0R0T	CHIP 0 Ω ±5% 1/16W	NN05000610
			PC02-MISCELLANEOUS	
J402		BJJYKF45-3001	CONNECTOR D TERMINAL YKF45-3001	YJ11000660
			PF01-FRONT DISPLAY CIRCUIT BOARD	
			PF01-CAPACITORS	
CY02		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
CY04		KCUS1H102KB	CER. CHIP 1000pF ±10% 50V	DK96102300
CY05		KCUS1H102KB	CER. CHIP 1000pF ±10% 50V	DK96102300
			PF01-RESISTORS	
RY01		KRJ10DJ100T	CHIP 10 Ω ±5% 1/16W	NN05100610
RY02		KRJ10DJ563T	CHIP 56k Ω ±5% 1/16W	NN05563610
RY03		KRJ10DJ473T	CHIP 47k Ω ±5% 1/16W	NN05473610
RY04		KRJ10DJ473T	CHIP 47k Ω ±5% 1/16W	NN05473610
RY05		KRJ10DJ221T	CHIP 220 Ω ±5% 1/16W	NN05221610
RY11		KRJ10DJ472T	CHIP 4.7k Ω ±5% 1/16W	NN05472610
RY12		KRJ10DJ471T	CHIP 470 Ω ±5% 1/16W	NN05471610
RY13		KRJ10DJ681T	CHIP 680 Ω ±5% 1/16W	NN05681610
RY14		KRJ10DJ102T	CHIP 1k Ω ±5% 1/16W	NN05102610
RY15		KRJ10DJ102T	CHIP 1k Ω ±5% 1/16W	NN05102610
RY16		KRJ10DJ122T	CHIP 1.2k Ω ±5% 1/16W	NN05122610
RY17		KRJ10DJ103T	CHIP 10k Ω ±5% 1/16W	NN05103610
RY18				
∫		KRJ10DJ470T	CHIP 47 Ω ±5% 1/16W	NN05470610
RY22				
RY38		KRJ10DJ472T	CHIP 4.7k Ω ±5% 1/16W	NN05472610
RY39		KRJ10DJ472T	CHIP 4.7k Ω ±5% 1/16W	NN05472610
			PF01-SEMICONDUCTORS	
DY01				
∫		BVDTLGE1008A	L.E.D CHIP TLGE1008A(T04)	*HI100940R
DY10				
DY11		KVD342VCTB7T089	L.E.D RED SLR-342VC	HI10071210
QY01		BVIUPD16311GC	IC FIP DRIVE µPD16311GC-AB6 FTD	HC10283060
QY02		BVTDTC114EUA	TRS. CHIP DTC114EU	BA20035210
QY03		BVTDTC114EUA	TRS. CHIP DTC114EU	BA20035210
QY04		BVTDTC114EUA	TRS. CHIP DTC114EU	BA20035210

POS. NO	VERS. COLOR	DESCRIPTION		PART NO. (MJI)
			PF01-MISCELLANEOUS	
SY01				
∫		BST1A016ZT	SW TACT	SP01013310
SY07				
VY01		KFL12BT123GNK	F.I.P FL DISPLAY 12-BT-123GNK	HQ31005410
			PF02-FRONT SWITCH CIRCUIT BOARD	
			PF02-CAPACITOR	
CY06		KCUS1H104ZF	CER. CHIP 0.1µF F 50V	DK98104300
			PF02-RESISTORS	
RY31		KRJ10DJ472T	CHIP 4.7k Ω ±5% 1/16W	NN05472610
RY32		KRJ10DJ471T	CHIP 470 Ω ±5% 1/16W	NN05471610
RY33		KRJ10DJ681T	CHIP 680 Ω ±5% 1/16W	NN05681610
RY34		KRJ10DJ102T	CHIP 1k Ω ±5% 1/16W	NN05102610
RY35		KRJ10DJ102T	CHIP 1k Ω ±5% 1/16W	NN05102610
RY36		KRJ10DJ122T	CHIP 1.2k Ω ±5% 1/16W	NN05122610
RY37		KRJ10DJ103T	CHIP 10k Ω ±5% 1/16W	NN05103610
			PF02-SEMICONDUCTOR	
QY05		BRVRPM6936V4	SENSOR REMOCON RPM6936-V4 (IR)	HW10004210
			PF02-MISCELLANEOUS	
SY31				
∫		BST1A016ZT	SW TACT	SP01013310
SY36				
			PF03-VOLUME (ROTARY SW) CIRCUIT BOARD	
SY21		BSR2A017Z	VR ENCODER EC16B2410207	SR01240020
			PF04-HEADPHONE JACK CIRCUIT BOARD	
			PF04-CAPACITORS	
CY51		KCUS1H102KB	CER. CHIP 1000pF ±10% 50V	DK96102300
CY52		KCUS1H102KB	CER. CHIP 1000pF ±10% 50V	DK96102300
			PF04-CAPACITORS(COMMON)	
C***			HIGH DIELECTRIC CONSTANT CERAMIC CAPACITORS ±10% 50V : CY53 CY54	
			PF04-MISCELLANEOUS	
JY52		BJJ2D005Z	JACK MINI PHONE TC3B-160-02C	*YJ002340R
			PJ01-JUMPER CIRCUIT BOARD	
			PJ01-CAPACITORS	
CA01		KCEA1AH471T	ELECT 470µF M 10V	OA47701020
CA02		KCEA1AH471T	ELECT 470µF M 10V	OA47701020
			NOT STANDARD SPARE PARTS	
W001		KWC1C4A28B150A	FFC (JA01-J607) 28P X 150mm	YU28150500
W002		KWC1C4A15B150A	FFC (JE03-TUNER) 15P X 150mm	YU15150500
W003		KWC1C4A25B060A	FFC (J601-J701) 25P X 60mm	YU25060500
W004		KWC1C4A14B300A	FFC (J605-JY02) 14P X 300mm	YU14300500
W005		KWC1C4A08B080A	FFC (JY01-J805) 8P X 80mm	YU08080500
W006		KWC1C4A14B100A	FFC (JA04-J201) 14P X 100mm	YU14100500
W007		KWC1C4A12B060A	FFC (J202-J604) 12P X 60mm	YU12060500
W008		KWC1C4A12B060A	FFC (J203-J401) 12P X 60mm	YU12060500

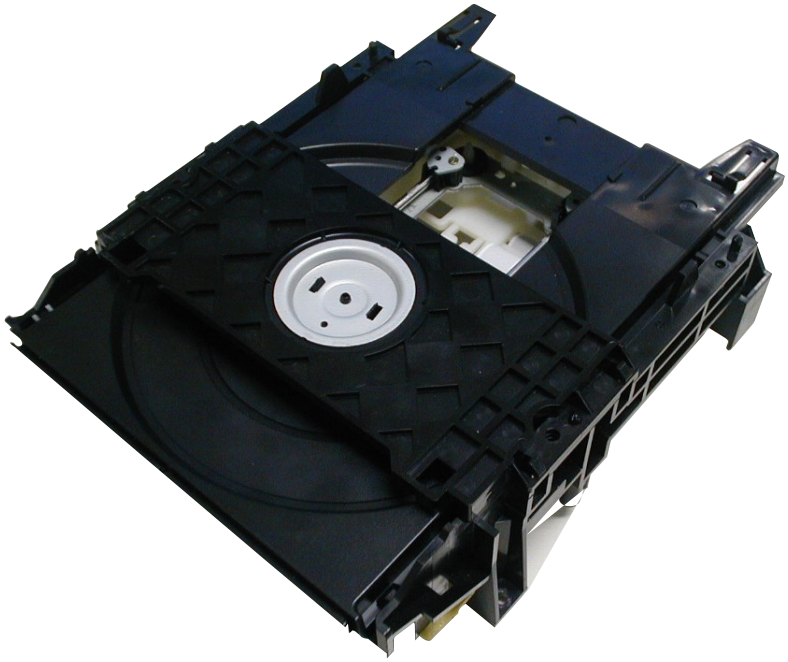
NOTE : "nsp" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

Service Manual

DB-VLD210

DVD Loader for MARANTZ

DVD Player : DV7010
DV7100
DV-18mkII
DV-17
EC1000
ER3000



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2.1 EXTERIOR	2-1
2.2 LOARDING MECHANISM ASSY	2-2
2.3 TRAVERSE MECHANISM ASSYS	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。

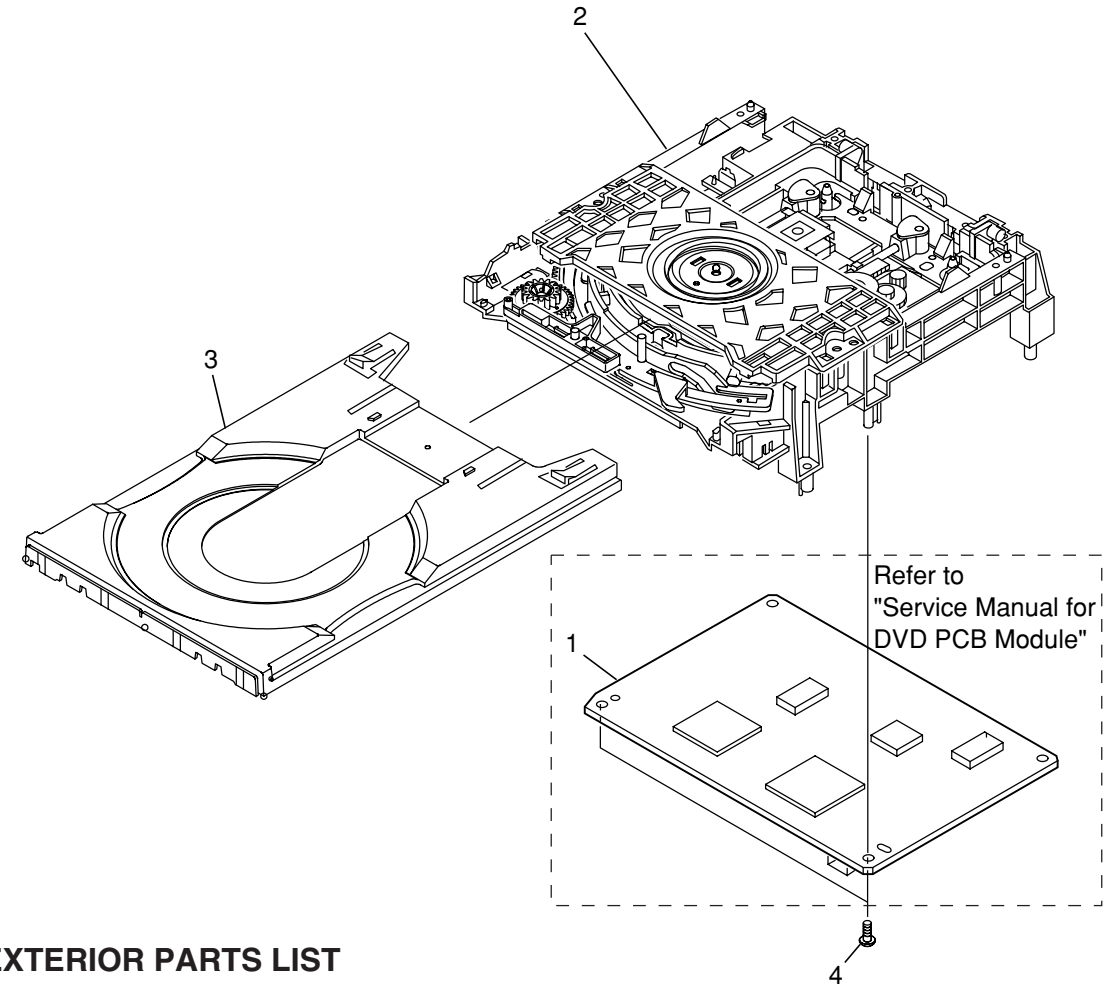
marantz®

DB-VLD210

Printed in Japan

First Issue:2001.04

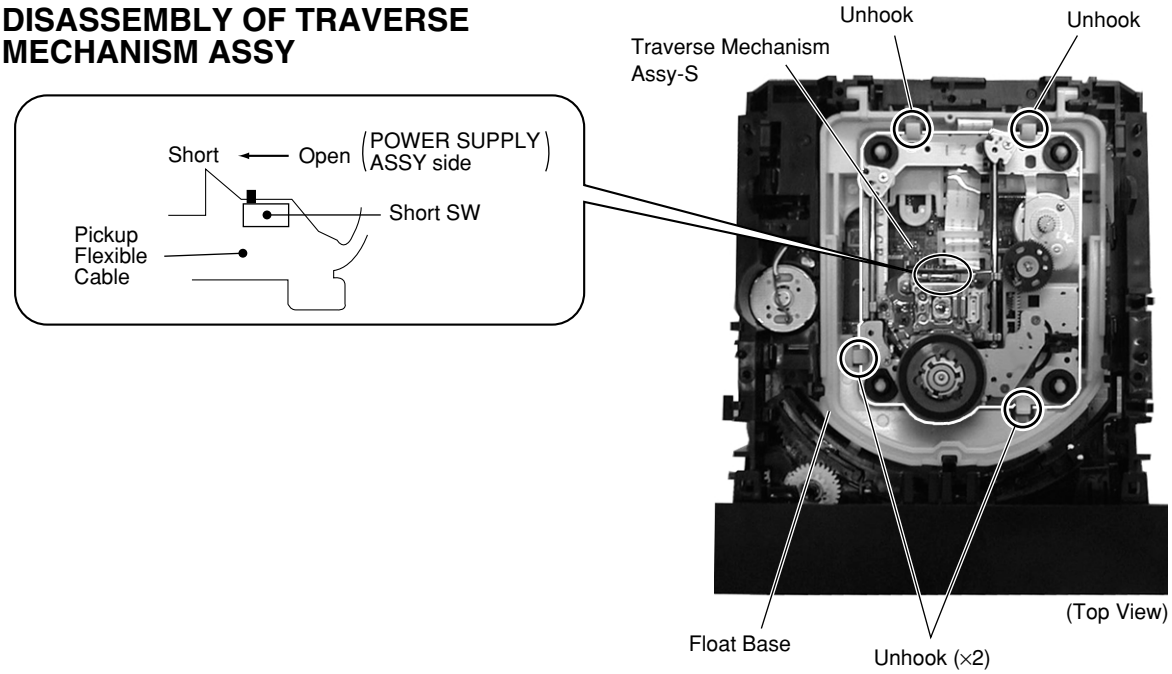
2.1 EXTERIOR



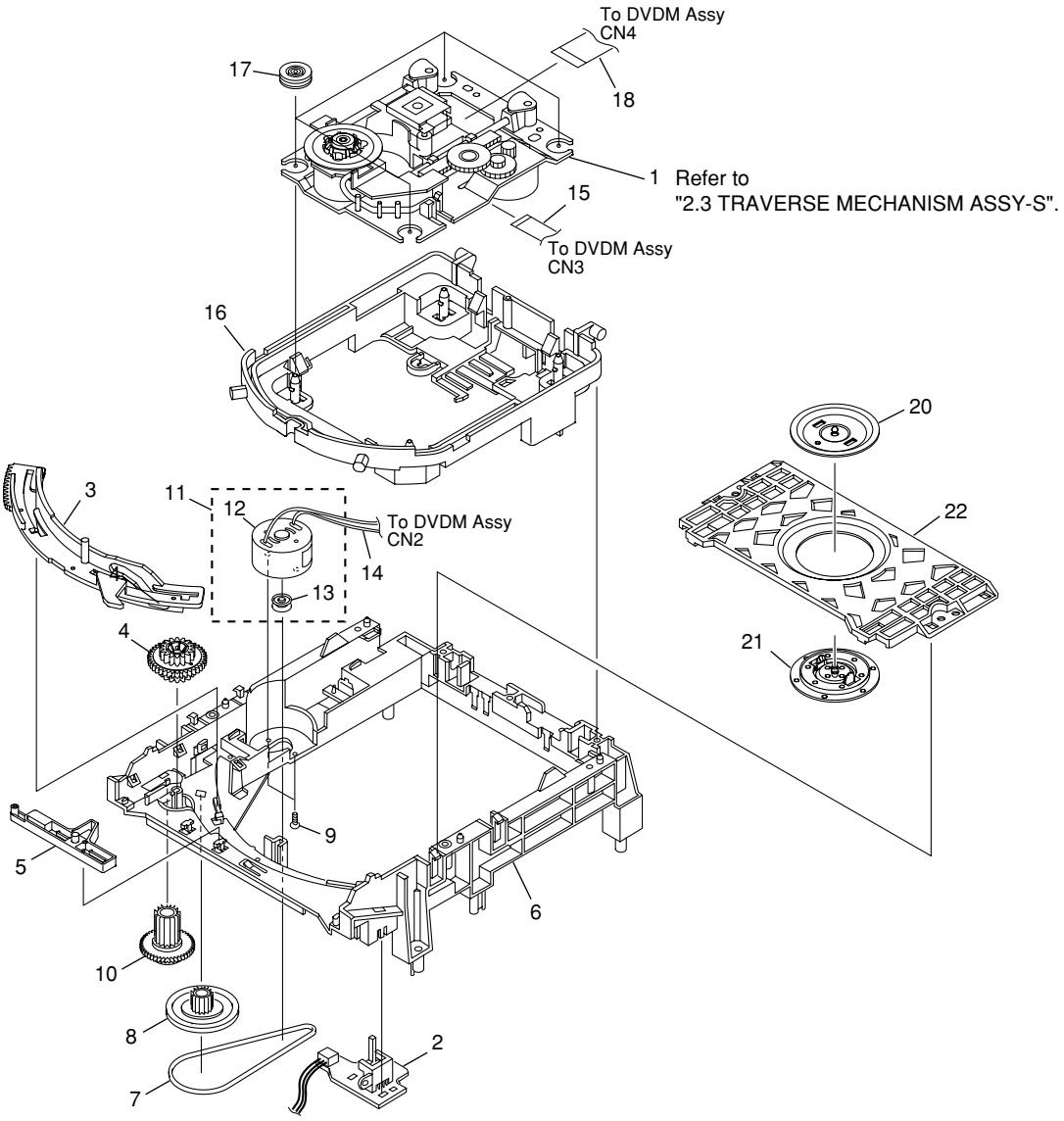
(1) EXTERIOR PARTS LIST

Mark	No.	Part No. (for PCS)	Description	Part No. (for MJI)
	1	—	VWS1446, DVDM Assy DB-VPB210	ZK402K0210
	1	—	VWS1449, DVDM Assy DB-VPB211	ZK324J0210
	1	9965 000 07628	VWS1447, DVDM Assy DB-VPB212	ZK402K0230
	1	—	VWS1448, DVDM Assy DB-VPB213	ZK402K0220
	1	—	VWS1450, DVDM Assy DB-VPB214	ZK324J0220
	1	—	VWS1451, DVDM Assy DB-VPB215	ZK408K0210
NSP	2	—	VWT1174, Loader Assy	—
	3	9965 000 07934	VNL1858, Tray	402K163210
NSP	4	—	PPZ30P080FMC, Screw	—

● DISASSEMBLY OF TRAVERSE MECHANISM ASSY



2.2 LOADING MECHANISM ASSY



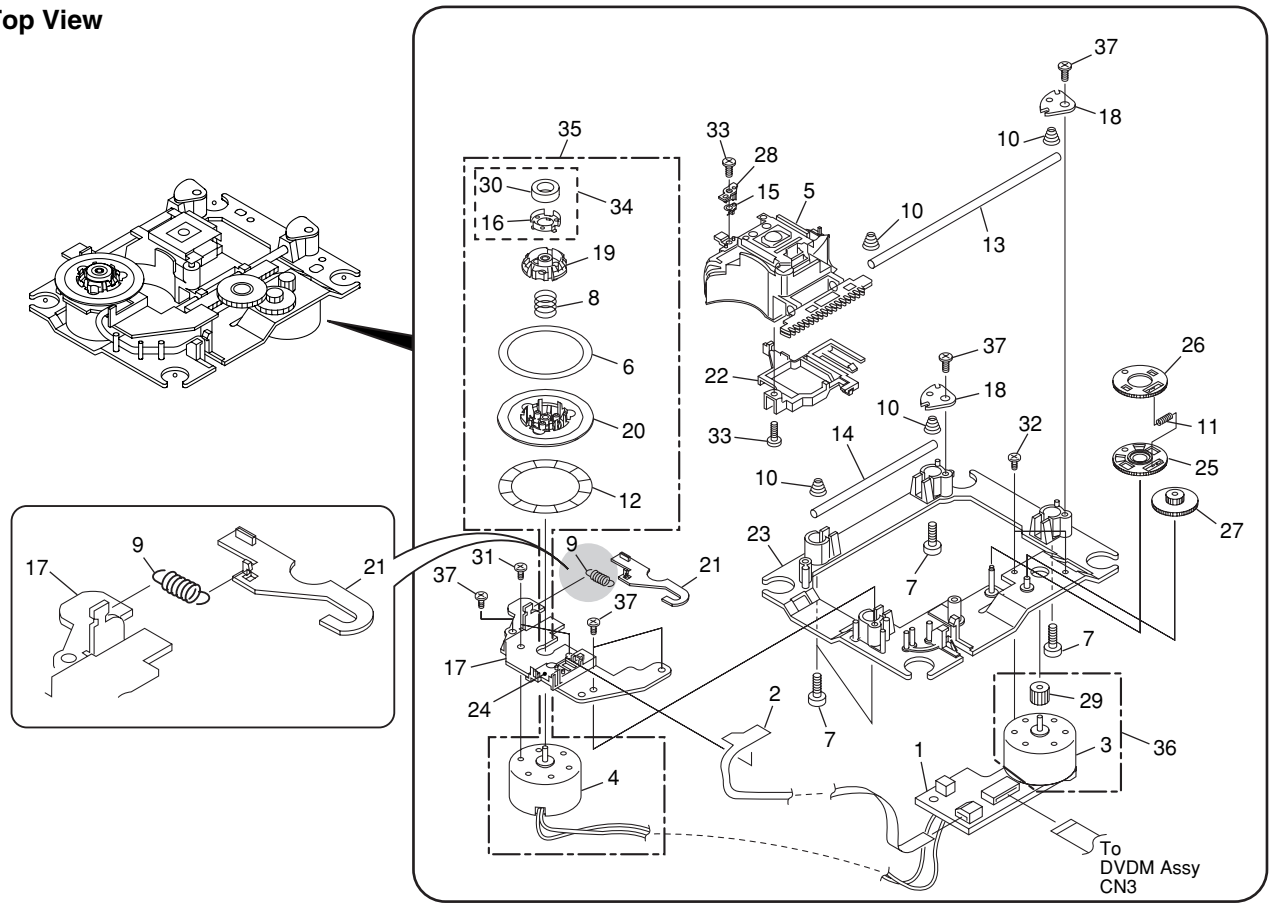
● LOADING MECHANISM ASSY PARTS LIST

Mark	No.	Part No. (for PCS)	Description	Part No. (for MJI)
	1	9965 000 07935	VXX2653, Traverse Mechanism Assy-S	*ZK000310R
NSP	2	—	VWG2171, LOAB Assy	—
	3	9965 000 07936	VNL1862, Drive Cam	402K054210
	4	9965 000 07937	VNL1861, Drive Gear	402K058210
	5	9965 000 07938	VNL1820, Lock Plate	402K104210
NSP	6	—	PNW2968, Loading Bases	—
	7	9965 000 07939	VEB1315, Belt	402K264210
	8	9965 000 07940	VNL1866, Gear Pulley	402K262210
NSP	9	—	JGZ17P028FMC, Screw	—
	10	9965 000 07941	VNL1860, Loading Gear	402K058220
	11	9965 000 07942	VXX2505, Loading Motor Assy	*ZZ001600R

Mark	No.	Part No. (for PCS)	Description	Part No. (for MJI)
NSP	12	—	PXM1027, DC Motor / 0.3W (LOADING)	—
	13	—	PNW1634, Motor Pulley	296W262010
NSP	14	—	VKP2253, Connector Assy	—
	15	9965 000 07943	VDA1842, Flexible Cable (08P)	*YU000790R
	16	9965 000 07944	VNL1865, Float Base	402K105210
	17	9965 000 07945	VEB1286, Floating Rubber	402K056210
	18	9965 000 07946	VDA1843, Flexible Cable (24P)	*YU000800R
	20	9965 000 07947	VNE2162, Clamper Plate	402K104220
	21	9965 000 07948	VNL1738, Clamper	402K005210
	22	9965 000 07949	VNL1859, Bridge	402K104230

2.3 TRAVERSE MECHANISM ASSY-S

• **Top View**



● TRAVERSE MECHANISM ASSY-S PARTS LIST

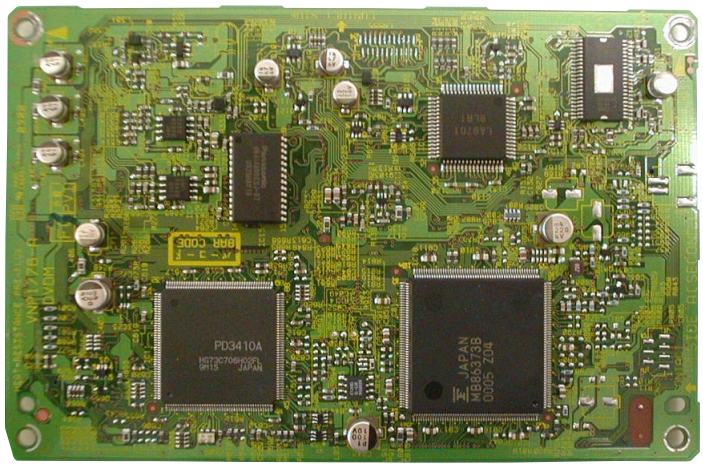
Mark	No.	Part No. (for PCS)	Description	Part No. (for MJI)
NSP	1	—	VWG2048, SMEB Assy	—
NSP	2	—	VWG2009, FGSB Assy	—
NSP	3	—	VXM1079, Motor	—
NSP	4	—	VXM1084, Motor	—
⚠NSP	5	—	VWY1055, Pickup Assy	—
NSP	6	—	DEC2040, Table Sheet	—
NSP	7	—	VBA1058, Screw	—
NSP	8	—	VBH1278, Centering Spring	—
	9	9965 000 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	—-

Service Manual

DB-VPB210, DB-VPB211, DB-VPB212, DB-VPB213, DB-VPB214, DB-VPB215
DVD PCB Module for MARANTZ

DVD Player : DV7010
DV7100
DV-18mkII
DV-17
EC1000
ER3000



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

Model	Vers.		
	/U, /F, /A	/K, /L, /S, /C	/N
DV7010	DB-VPB210	DB-VPB213	DB-VPB212
DV-18mkII	DB-VPB210	DB-VPB213	
DV-17	DB-VPB210	DB-VPB213	DB-VPB212
DV7100	DB-VPB215		

Model	Vers.		
	/F, /A, /S, /C	/K, /L	/N
EC1000	DB-VPB211	DB-VPB214	
ER3000	DB-VPB211	DB-VPB214	(DB-VPB217)

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SECTION **PAGE**

3. DB-VPB210 / 211 / 212 / 213 / 214 / 215 (DVD PCB Module for MARANTZ)
3.1 BLOCK DIAGRAM AND SCHEMATIC DIAGRAM 3-1
3.2 PCB CONNECTION DIAGRAM 3-10
3.3 PCB PARTS LIST 3-24

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®

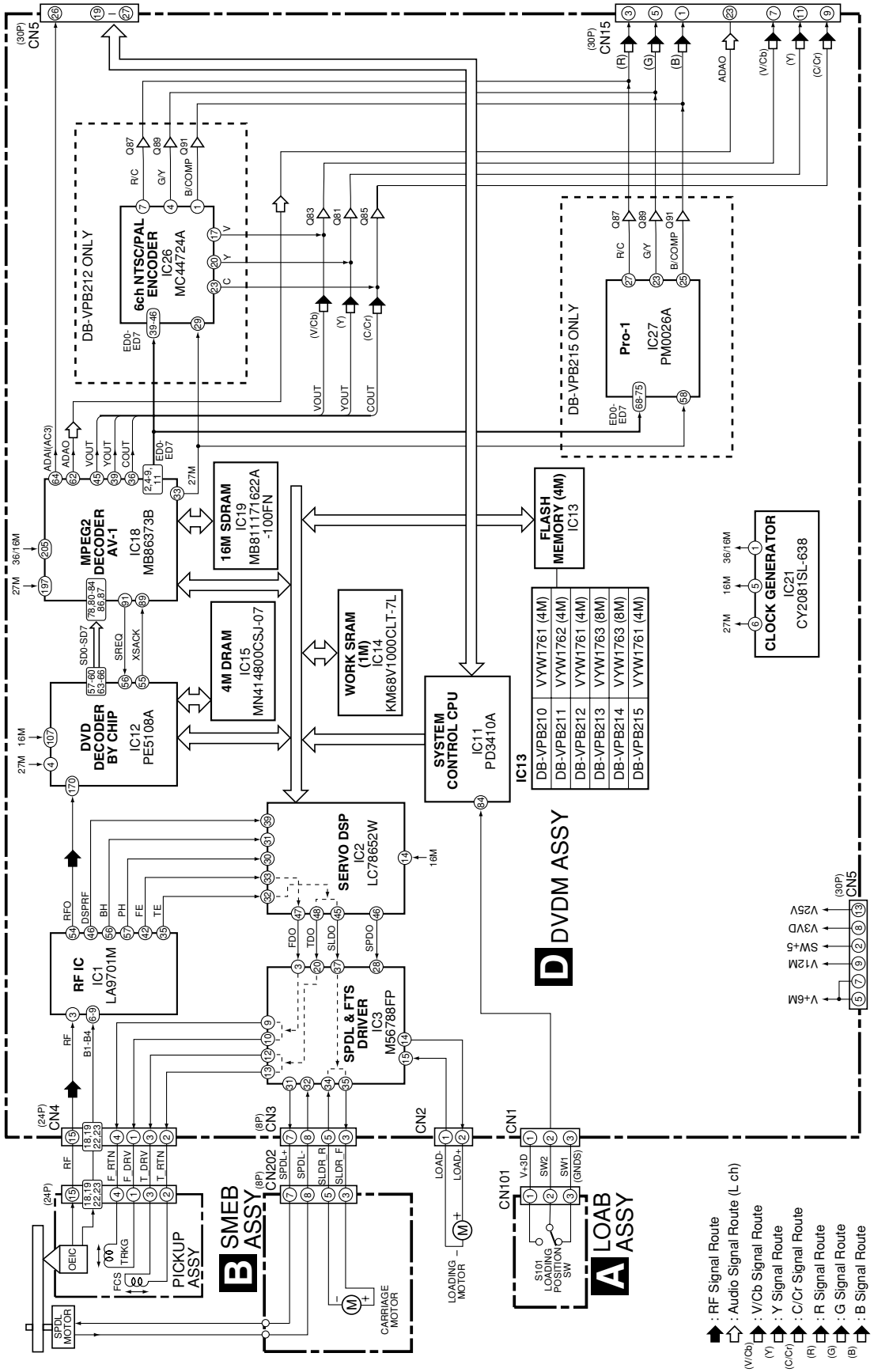
DB-VPB210/211/212/213/214/215

Printed in Japan

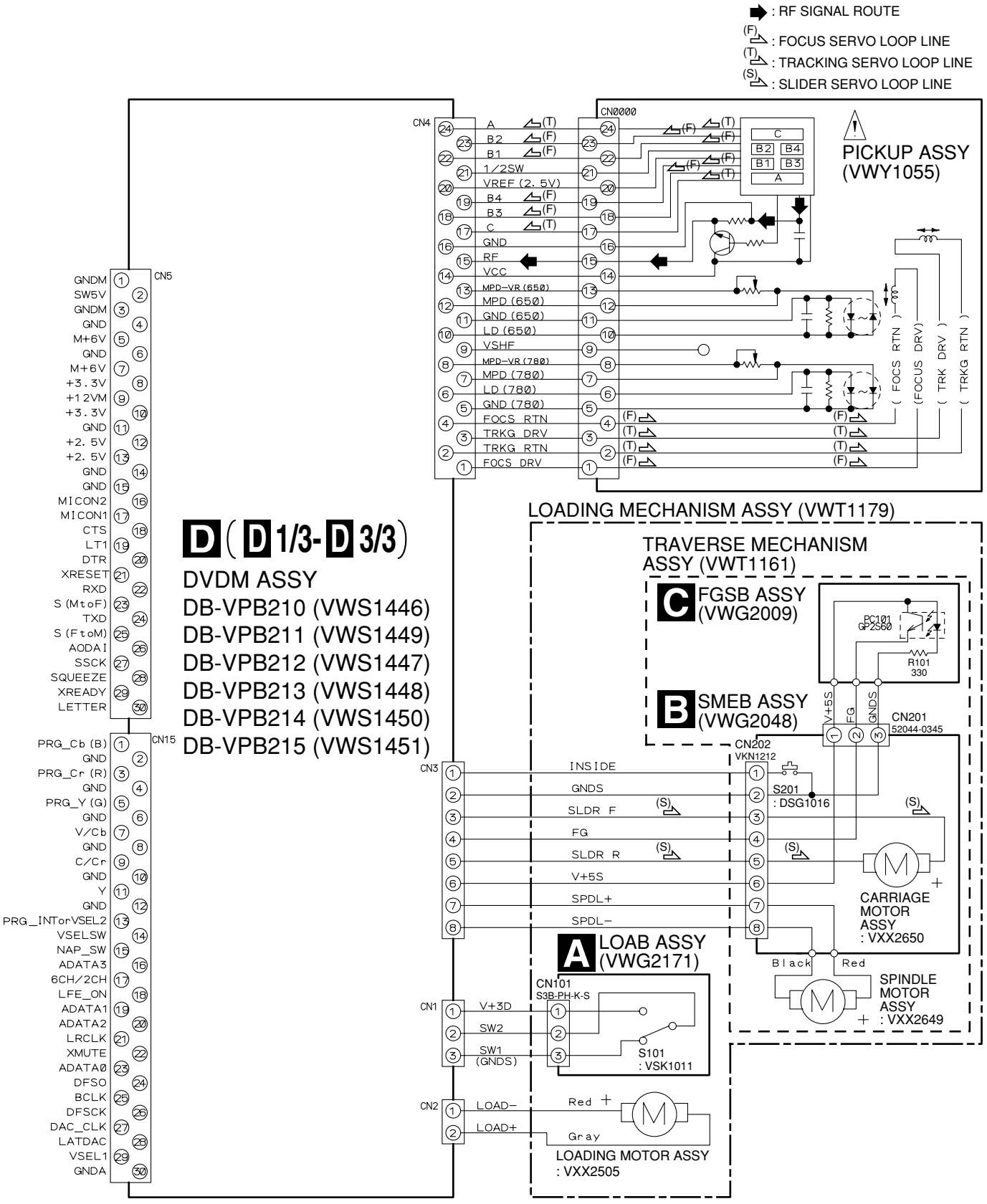
First Issue:2001.05

3.1 BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1.1 BLOCK DIAGRAM

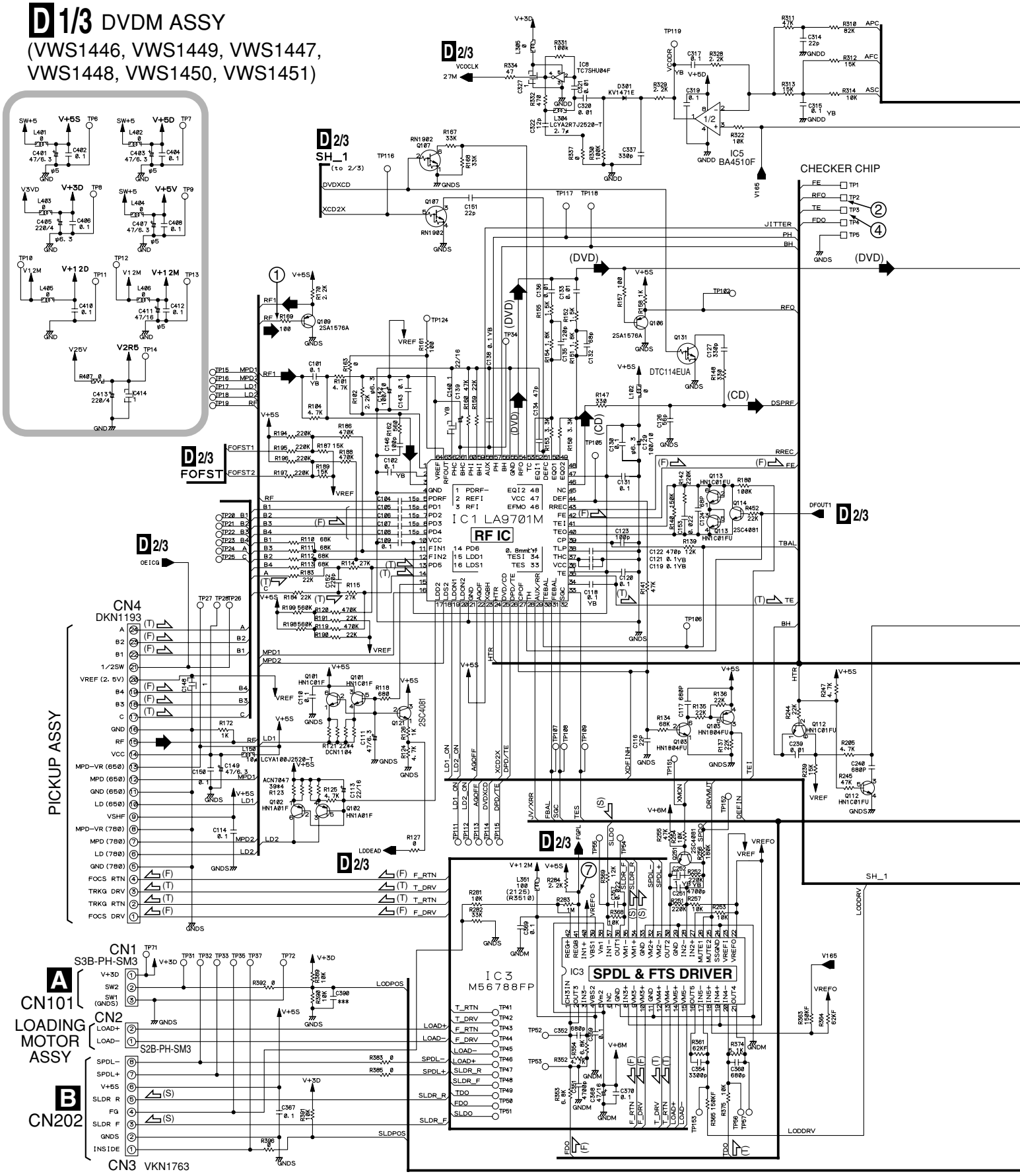


3.1.2 LOAB, SMEB, FGSB ASSYS and OVERALL WIRING DIAGRAM

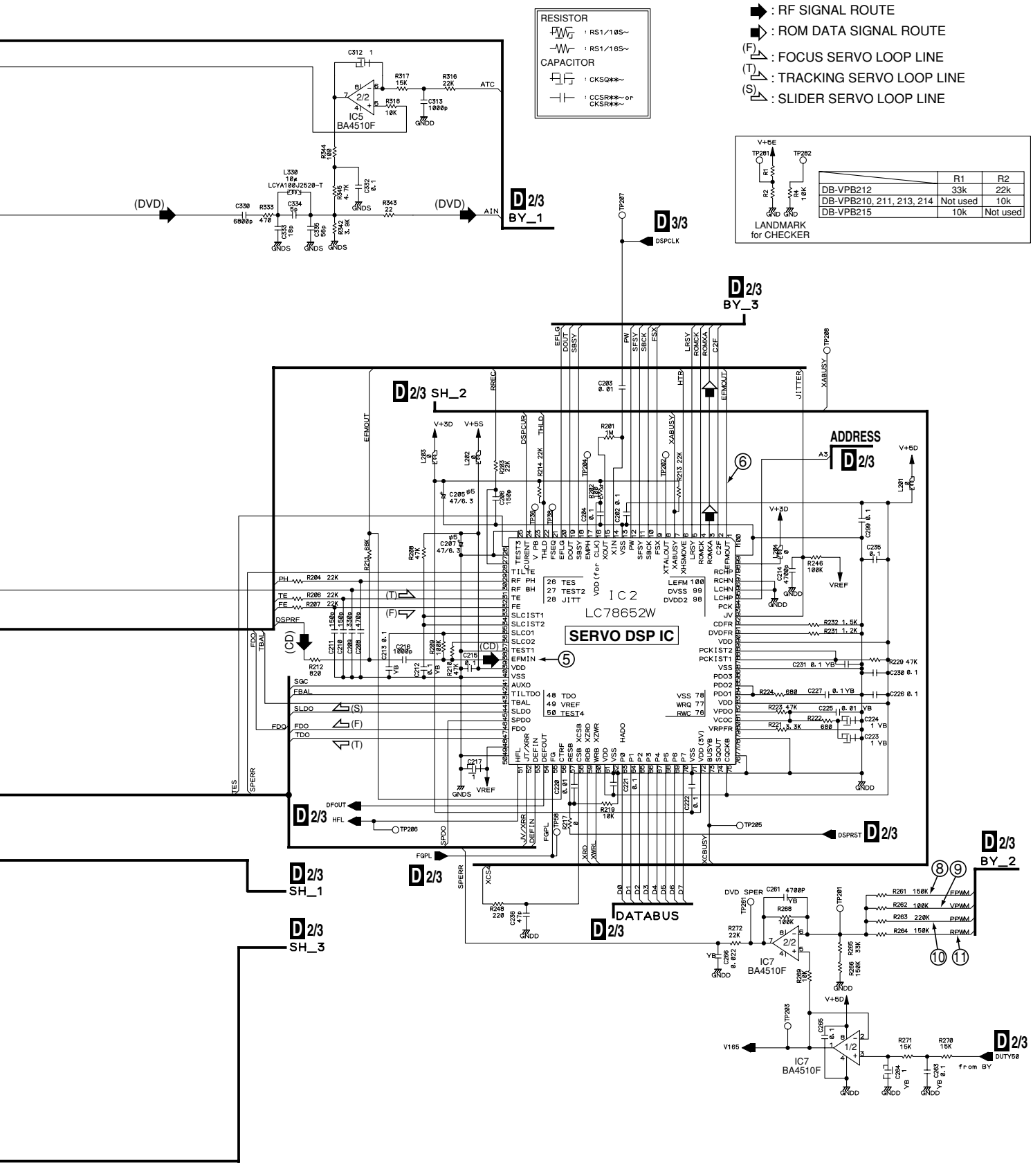


3.1.3 DVDM ASSY (1/3)

D 1/3 DVDM ASSY
(VWS1446, VWS1449, VWS1447,
VWS1448, VWS1450, VWS1451)

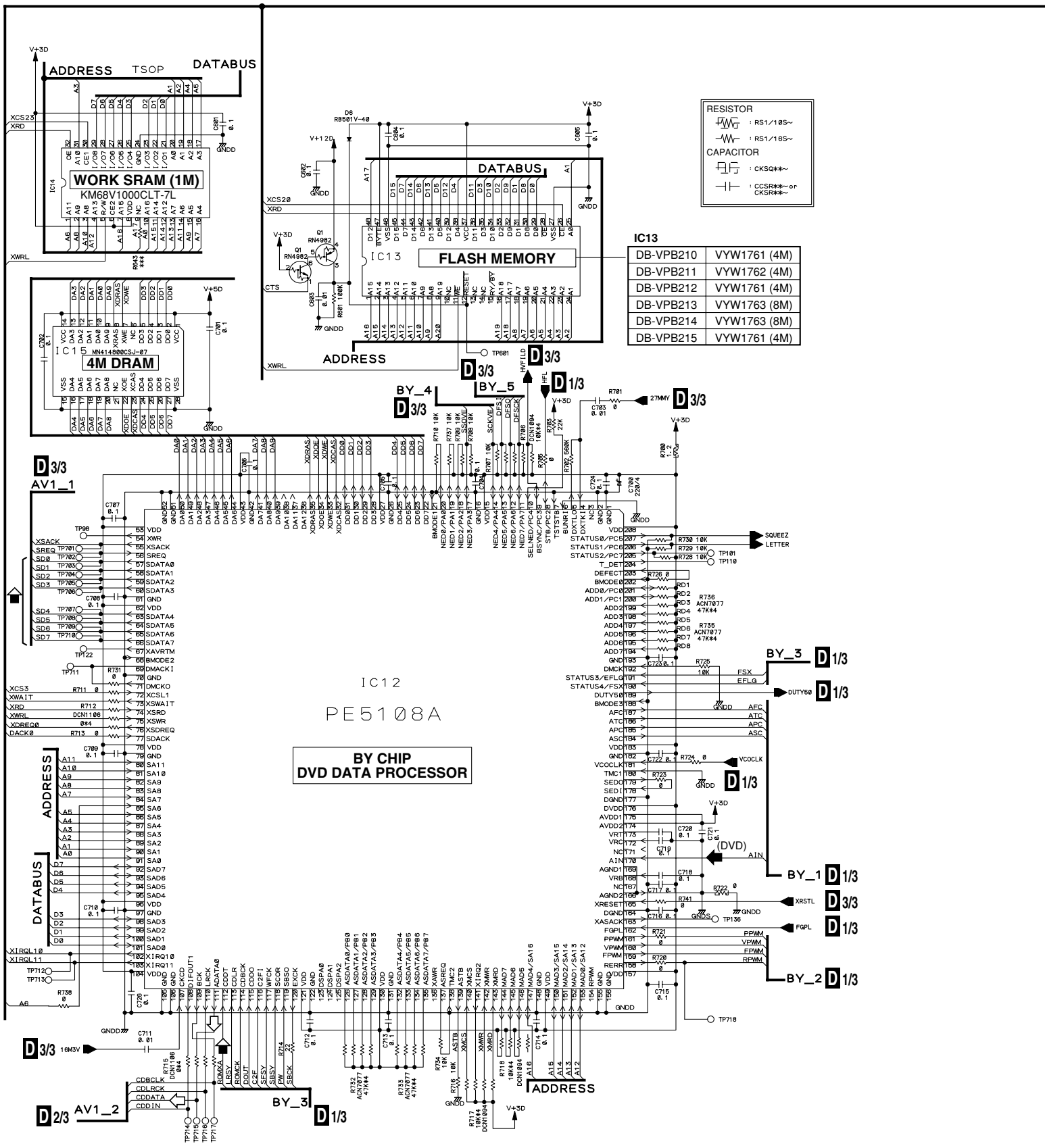


: The power supply is shown with the marked box.



3.1.4 DVDM ASSY (2/3)

D 2/3 DVDM ASSY (VWS1446, VWS1449, VWS1447, VWS1448, VWS1450, VWS1451)

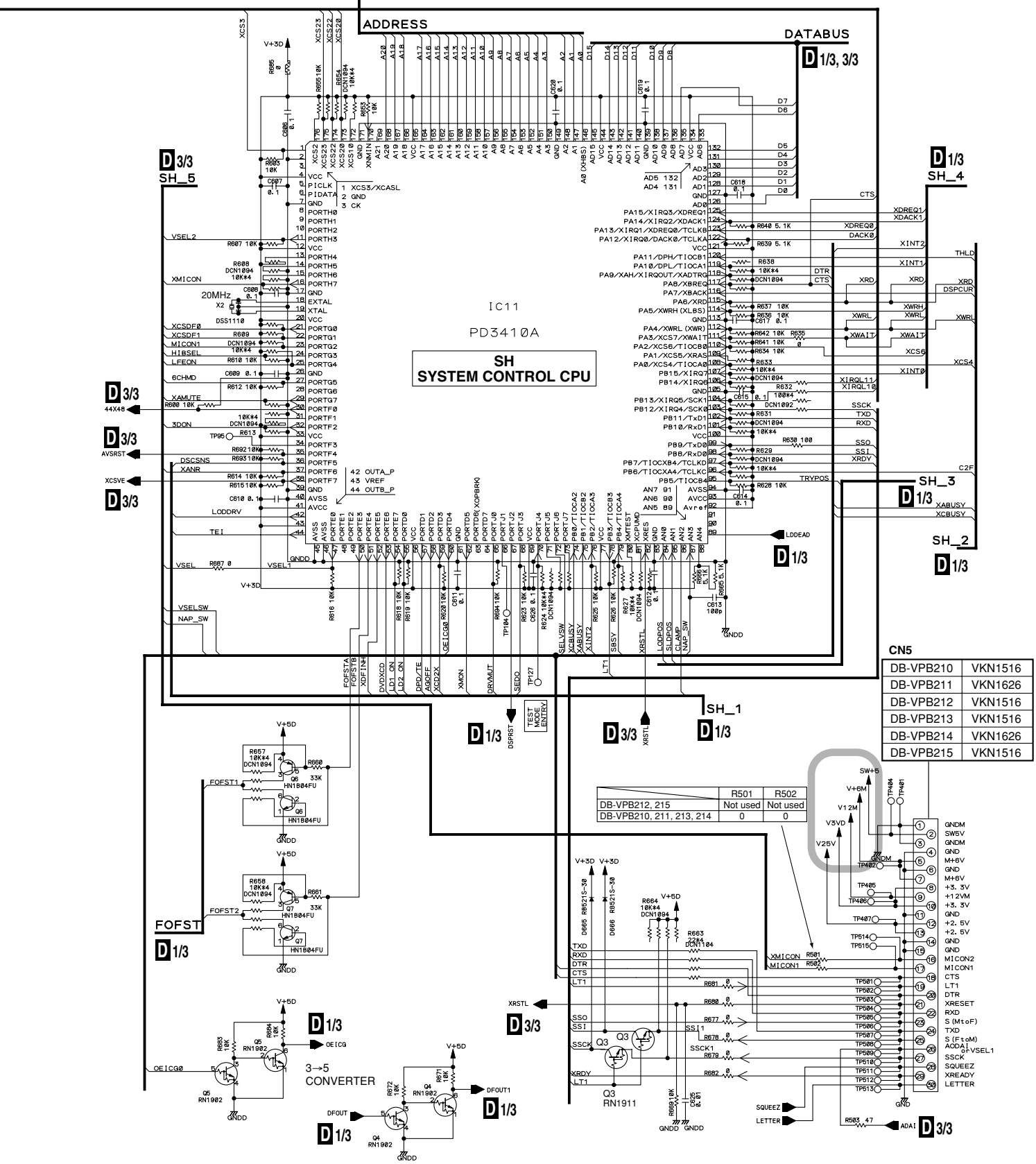


: The power supply is shown with the marked box.

: RF SIGNAL ROUTE

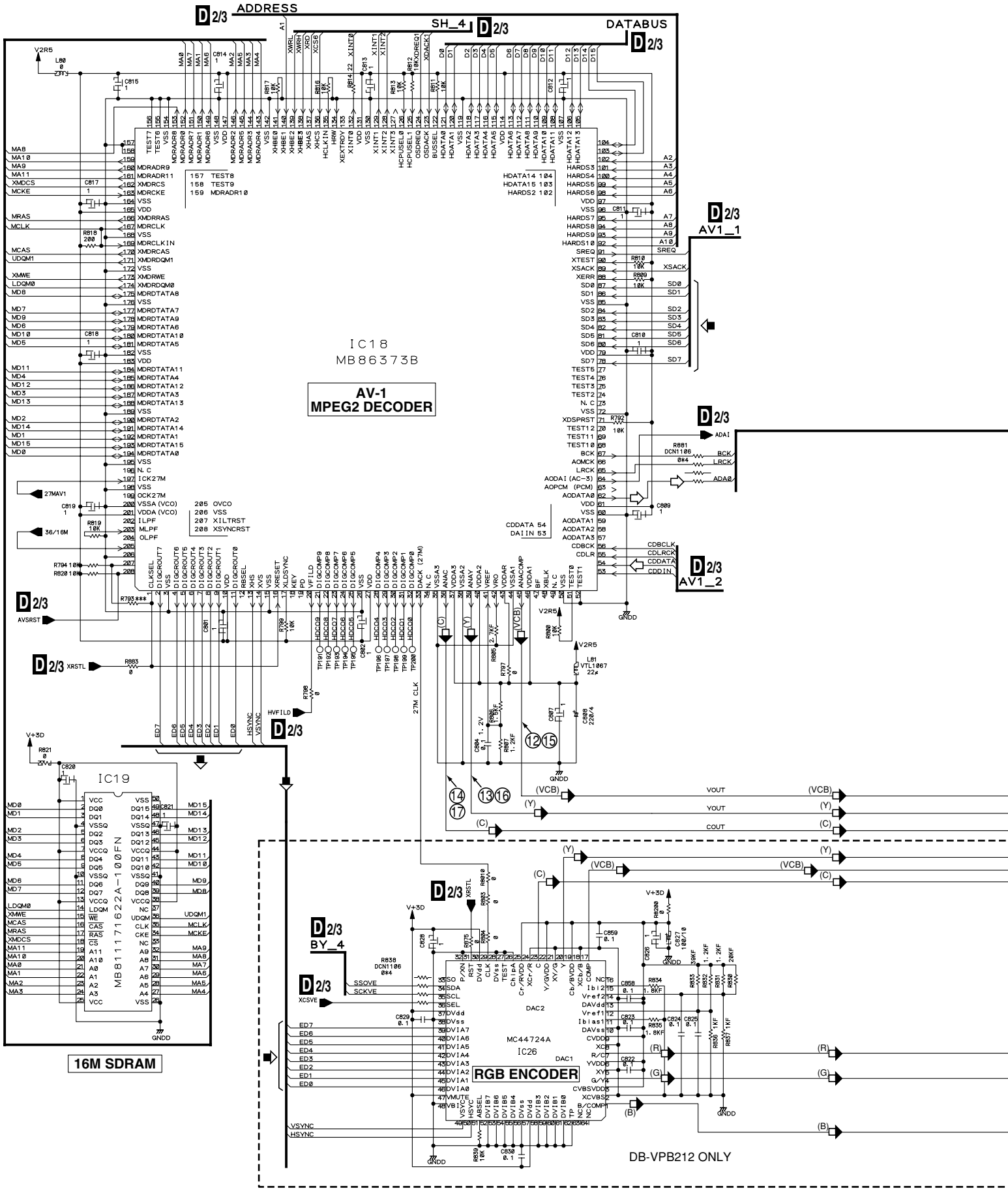
: ROM DATA SIGNAL ROUTE

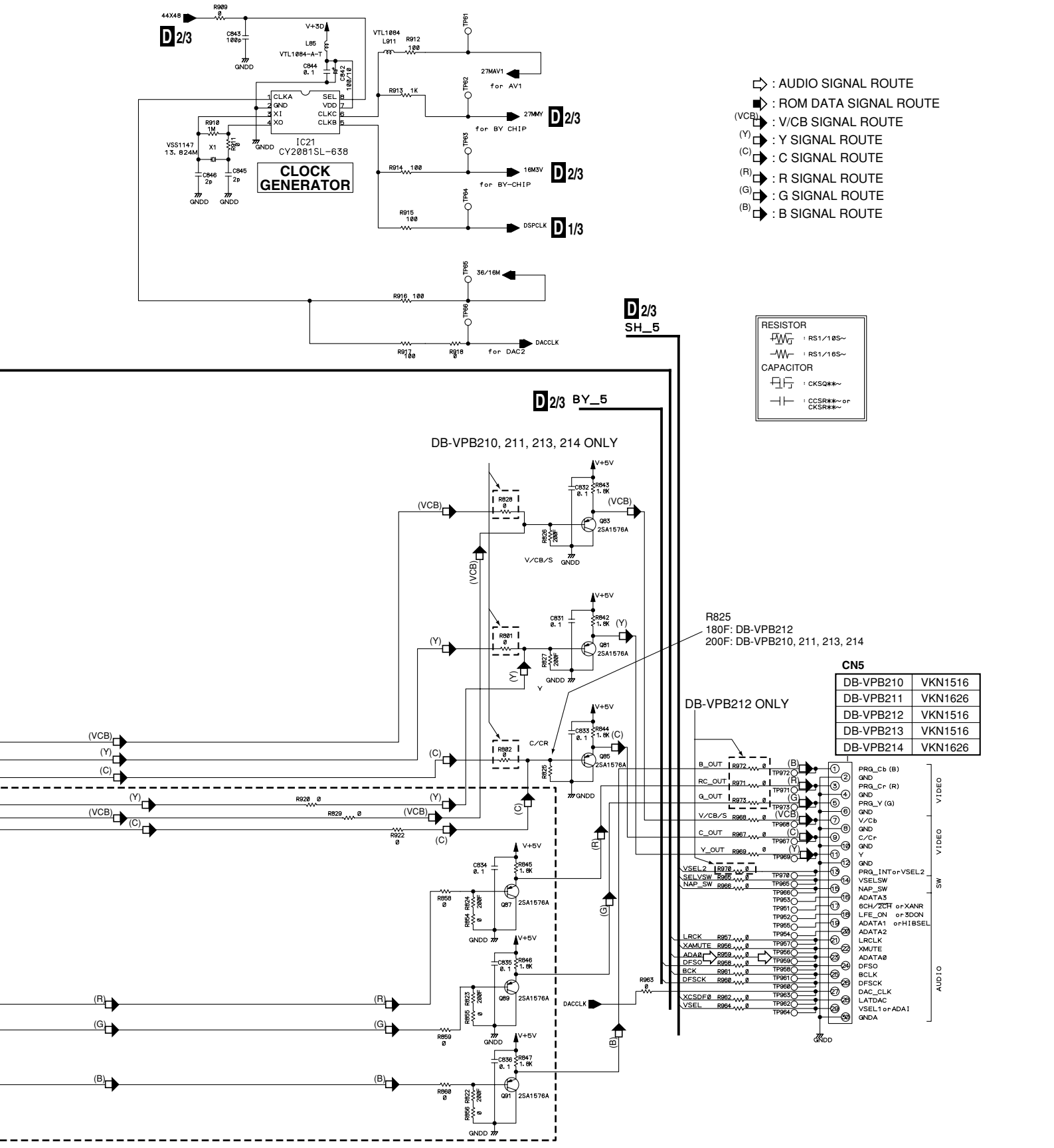
: AUDIO SIGNAL ROUTE



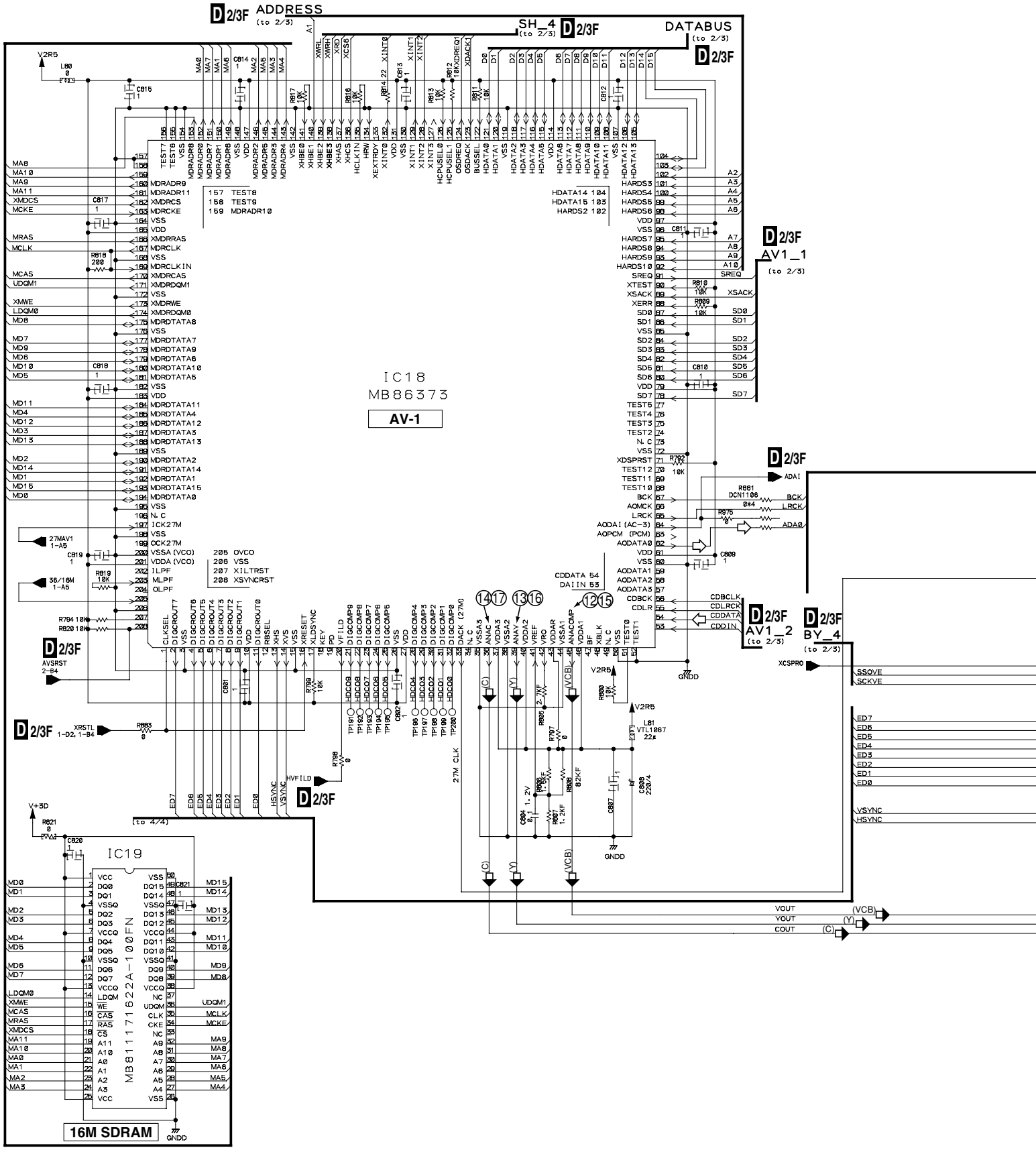
3.1.5 DVDM ASSY (3/3)

D 3/3 DVDM ASSY (VWS1446,VWS1449, VMS1447, VWS1448,VWS1450)
DB-VPB210 / 211 / 212 / 213 / 214 ONLY

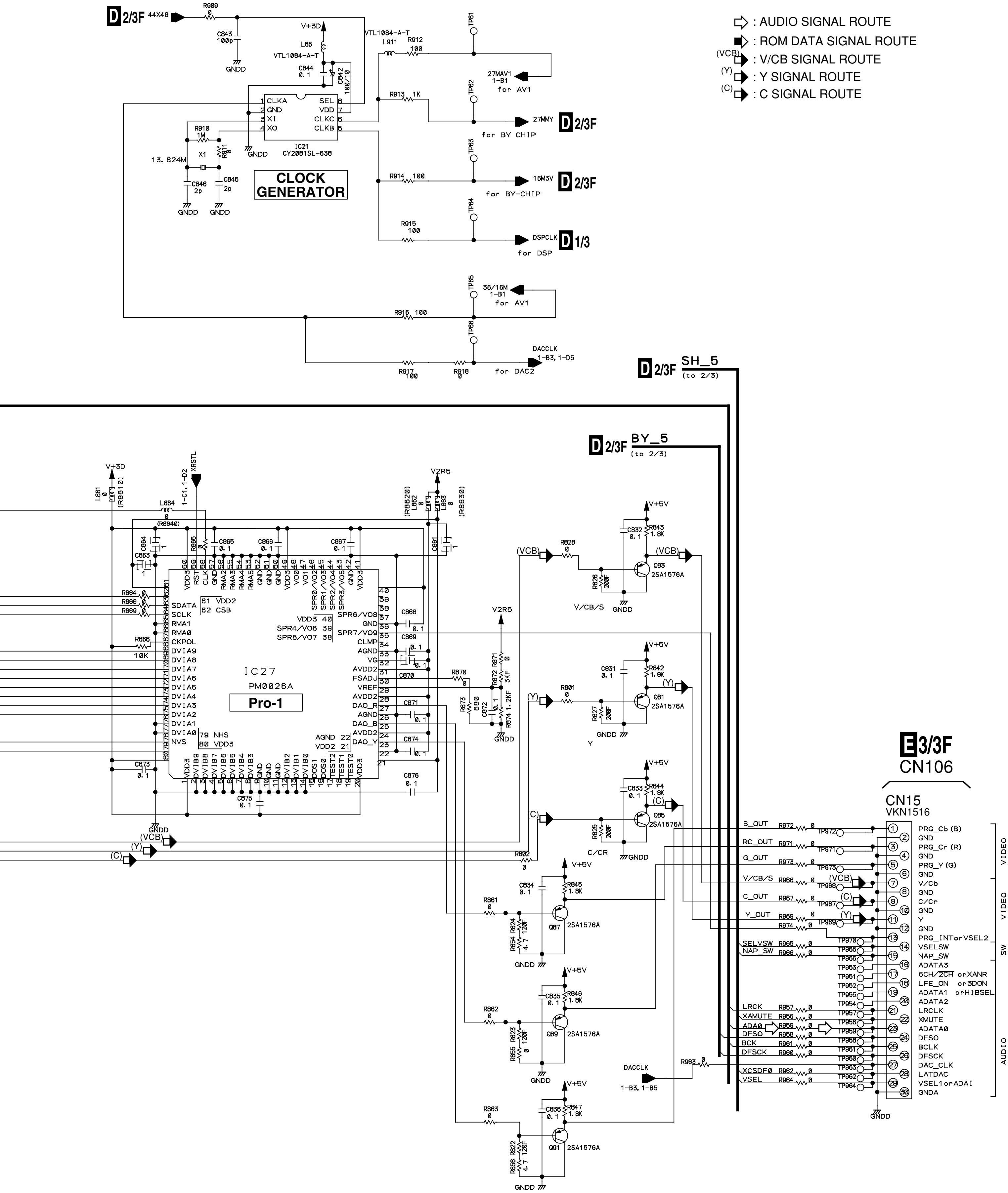



CLOCK GENERATOR
IC21
CY2081SL-638
D 2/3
D 1/3
SH_5
BY_5
: AUDIO SIGNAL ROUTE
: ROM DATA SIGNAL ROUTE
(VCB) : V/CB SIGNAL ROUTE
(Y) : Y SIGNAL ROUTE
(C) : C SIGNAL ROUTE
(R) : R SIGNAL ROUTE
(G) : G SIGNAL ROUTE
(B) : B SIGNAL ROUTE
RESISTOR
CAPACITOR
DB-VPB210, 211, 213, 214 ONLY
DB-VPB212 ONLY
R825
180F: DB-VPB212
200F: DB-VPB210, 211, 213, 214
CN5
DB-VPB210 VKN1516
DB-VPB211 VKN1626
DB-VPB212 VKN1516
DB-VPB213 VKN1516
DB-VPB214 VKN1626
PRG_Cb (B)
PRG_Cr (R)
PRG_Y (G)
V/Cb
C/Cr
Y
PRG_INTorVSEL2
VSELSW
NAP_SW
ADATA3
6CH/2CH orXANR
LFE_ON or3DON
ADATA1 orHIBSEL
ADATA2
LRCLK
XMUTE
ADATA0
DFSO
BCLK
DFSCK
DAC_CLK
LATDAC
VSEL1orADAI
GNDA
VIDEO
SW
AUDIO

D 3/3F DVDM ASSY (VWS1451) **DB-VPB215 ONLY**



: AUDIO SIGNAL ROUTE
: ROM DATA SIGNAL ROUTE
(VCB) : V/CB SIGNAL ROUTE
(Y) : Y SIGNAL ROUTE
(C) : C SIGNAL ROUTE

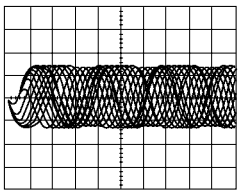


■ WAVEFORMS

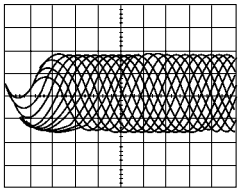
Note : The encircled numbers denote measuring point in the schematic diagram.

Measurement condition : No. 1 to 4 and 6 to 11 : MJK1, Title 1-chp 1 or TDV-540, Title 2-chp1
No. 5 : CD, ABEX-784 Track 1 or PHILIPS SBC 429 Track1
No. 12 to 14 : MJK1, Title 1-chp 4 or TDV-540, Title 2-chp1
No. 15 to 17 : MJK1, Title 1-chp 5 or TDV-540, Title 2-chp1

(1) Foot of R169 (RF)
V: 100mV/div. H: 0.2µsec/div.

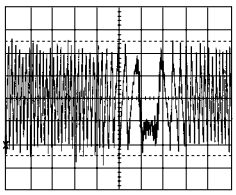


(2) TP2 (RFO)
V: 500mV/div. H: 0.1µsec/div.

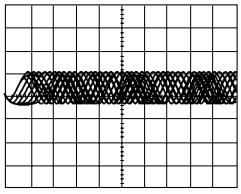


(3)

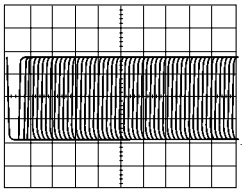
(4) TP3 (Tracking Error)
(Al-Inner Tracking Off)
V: 500mV/div. H: 2msec/div.



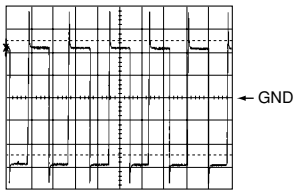
(5) IC2 - pin 39 (EFM before slice)
V: 1V/div. H: 1µsec/div.



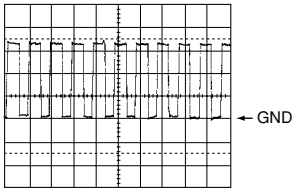
(6) IC2 - pin 1 (EFM)
V: 1V/div. H: 0.2µsec/div.



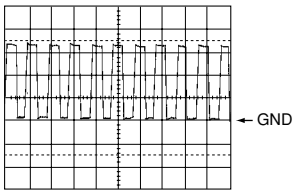
(7) IC3 - pin 41 (REGB)
V: 1V/div. H: 5msec/div.



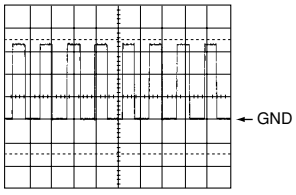
(8) Foot of R261 (FPWM)
V: 1V/div. H: 5msec/div.



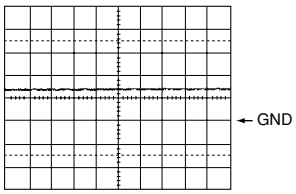
(9) Foot of R262 (VPWM)
V: 1V/div. H: 5msec/div.



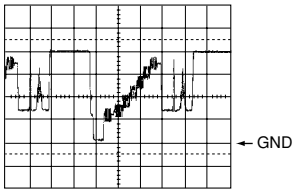
(10) Foot of R263 (PPWM)
V: 1V/div. H: 5msec/div.



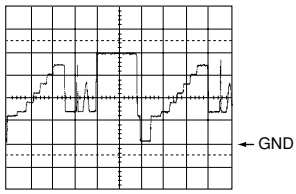
(11) Foot of R264 (RPWM)
V: 1V/div. H: 5msec/div.



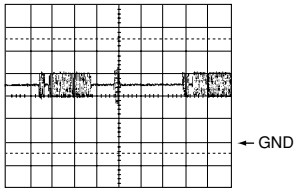
(12) IC18 - pin 45
(Composite Video output)
V: 2V/div. H: 1msec/div.



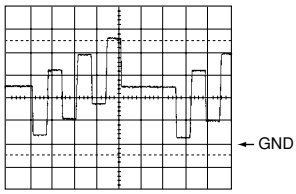
(13) IC18 - pin 39 (Y output)
V: 0.2V/div. H: 5msec/div.



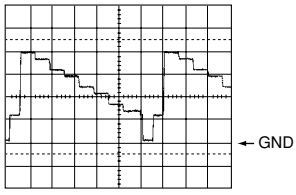
(14) IC18 - pin 36 (C output)
V: 0.2V/div. H: 5msec/div.



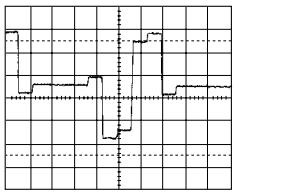
(15) IC18 - pin 45 (C_B output when selecting color difference output)
V: 0.2V/div. H: 5msec/div.



(16) IC18 - pin 39 (Y output when selecting color difference output)
V: 0.2V/div. H: 5msec/div.



(17) IC18 - pin 36 (C_R output when selecting color difference output)
V: 2V/div. H: 5msec/div.



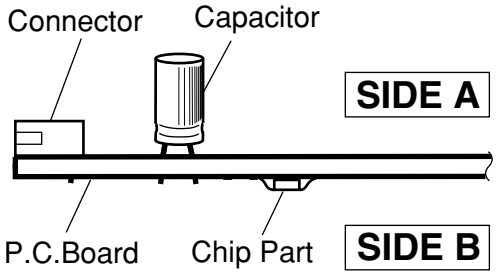
3.2 PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

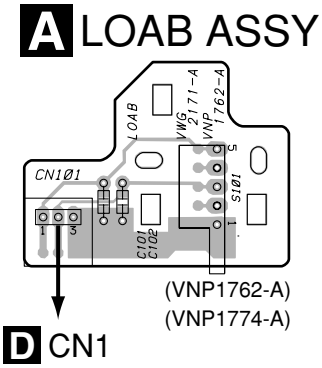
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

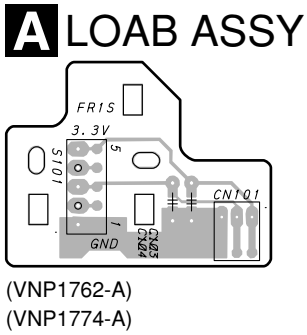
Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
B C E	B C E B C E	Transistor
B C E	B C E B C E	Transistor with resistor
D G S	D G S D G S	Field effect transistor
		Resistor array
		3-terminal regulator

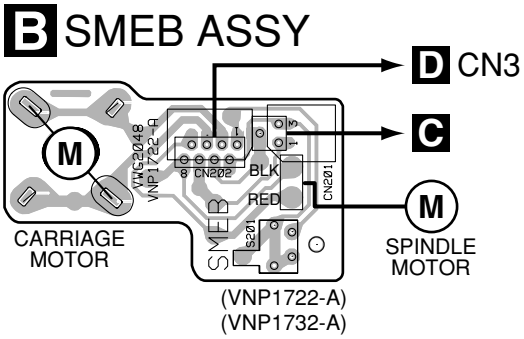
3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.



3.2.1 LOAB and SMEB ASSYS







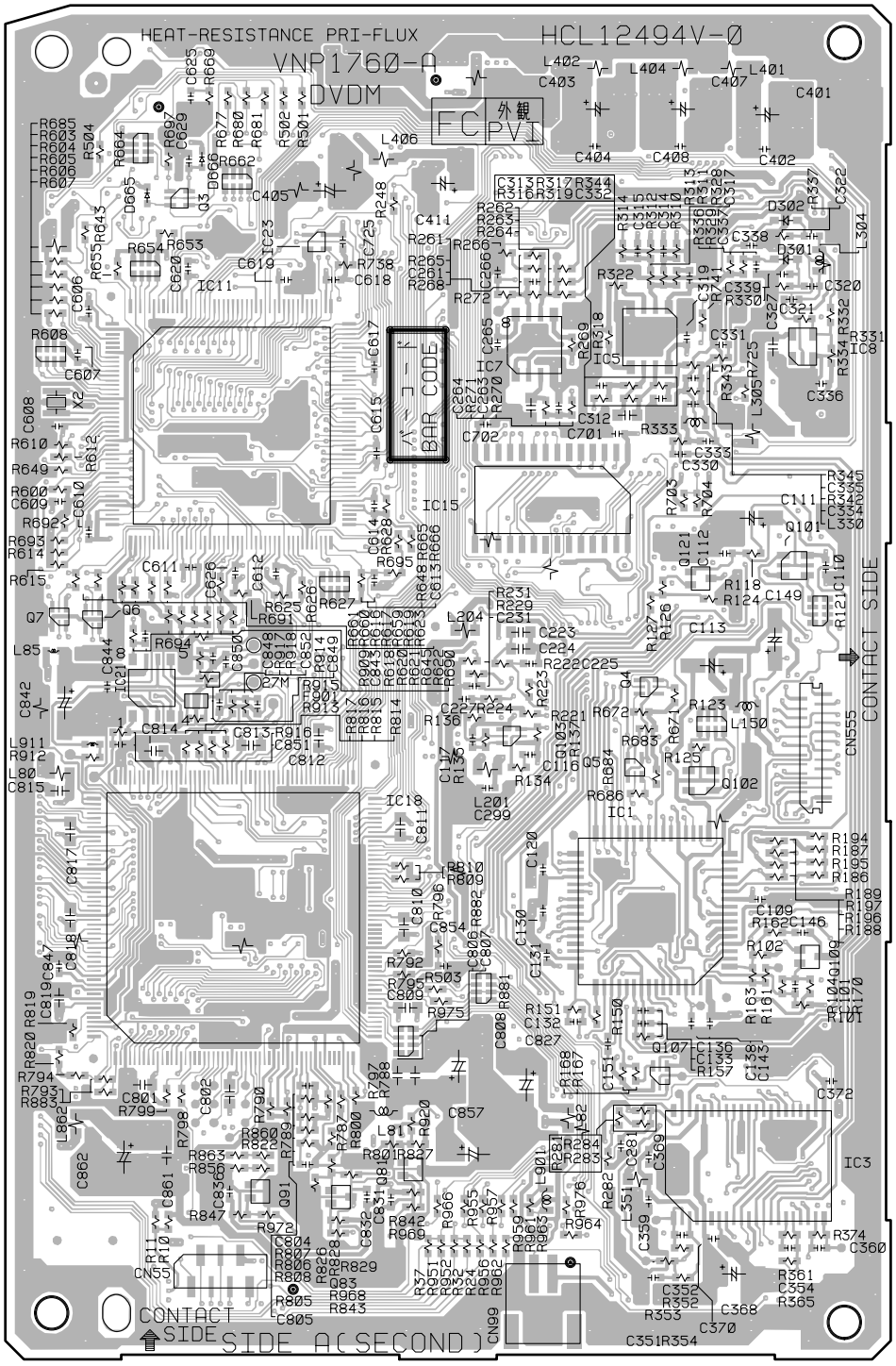
SIDE A

SIDE B

3.2.2 DVDM ASSY

D DVDM ASSY

• This PCB is a four-layered board.



(VNP1760-A)

Q3

IC7 IC5 IC8

IC11

IC15

Q121 Q101
Q7 Q6

IC21 Q4

Q103
Q5 Q102

IC18 IC1

Q109

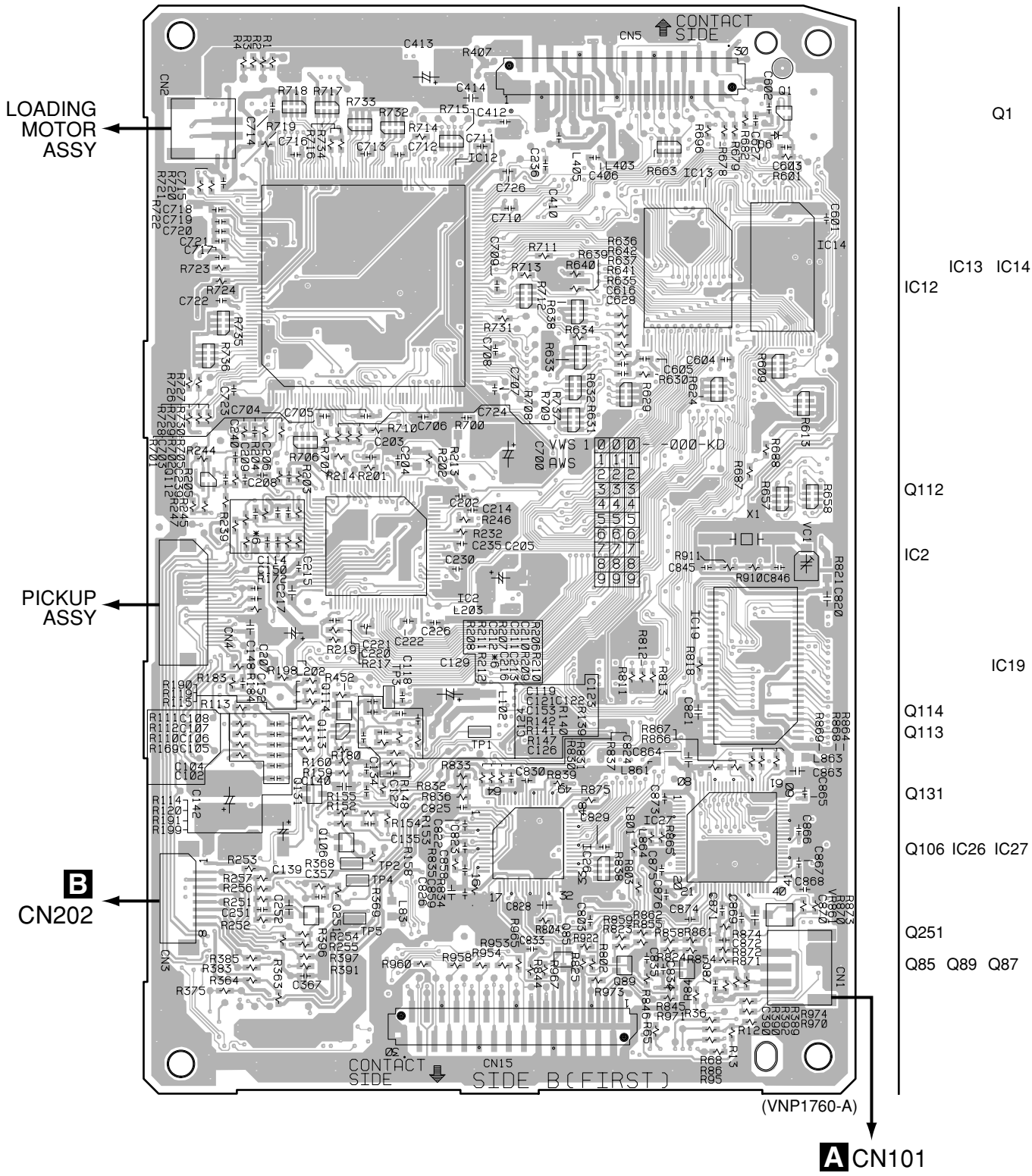
Q107

Q81 IC3
Q91 Q83

SIDE A

D DVDM ASSY

• This PCB is a four-layered board.



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.

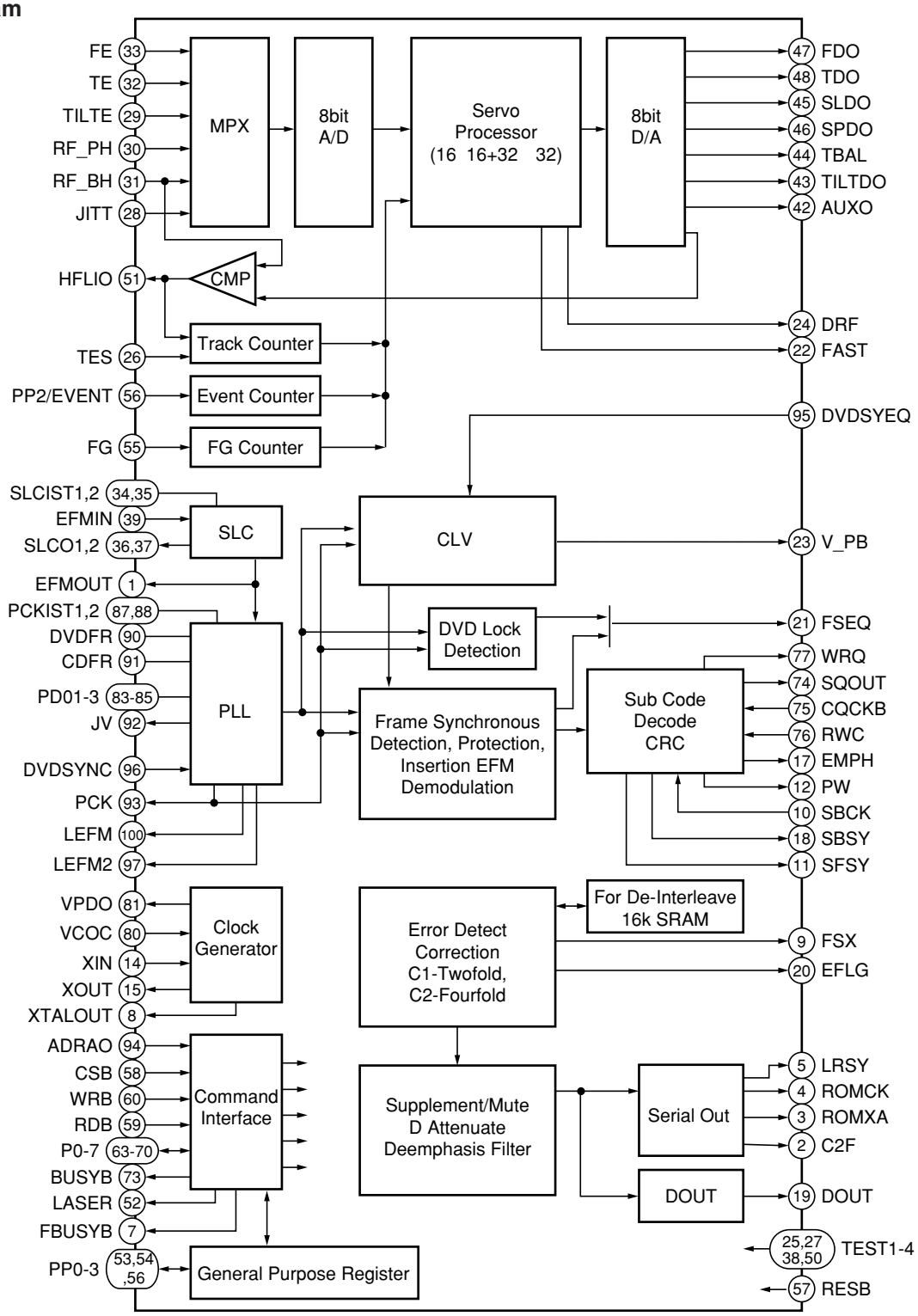
• List of IC

LC78652W, PD3410A, MB86373B

■ LC78652W (DVDM ASSY : IC2)

• DSP IC

Block Diagram



●Pin Function

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

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

■ PD3410A (DVDM ASSY : IC11)

• 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	N.C.
4	VCC	V+3D	–	V+3D
5	PICLK	–	I/O	N.C.
6	PIDATA	–	I/O	N.C.
7	GND	GND	–	GND
8	PORTH0	–	O	N.C.
9	PORTH1	–	O	N.C.
10	PORTH2	36MVH	O	BU2158F (Clock generator)
11	PORTH3	V_SEL2	O	Composite/S switching signal output of the skirt terminal [WY model]
12	VCC	V+3D	–	V+3D
13	PORTH4	–	O	N.C.
14	PORTH5	–	O	N.C.
15	PORTH6	–	O	N.C.
16	PORTH7	–	O	N.C.
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 (←XLAT3)
22	PORTG1	–	O	N.C.
23	PORTG2	–	O	N.C.
24	PORTG3	–	O	N.C.
25	PORTG4	–	O	N.C.
26	GND	GND	–	GND
27	PORTG5	–	O	N.C.
28	PORTG6	–	O	N.C.
29	PORTG7	XAMUTE	O	Last stage mute signal output of the audio
30	PORTF0	44X48	O	DAC 44/48 FS switching signal output
31	PORTF1	–	I	N.C.
32	PORTF2	3DON	O	3D audio ON/bypass switching signal output
33	VCC	V+3D	–	V+3D
34	PORTF3	–	O	N.C.
35	PORTF4	XAVSRST	O	Sync. reset port
36	PORTF5	–	O	N.C.

No.	Mark	Pin Name	I/O	Function
37	PORTF6	–	O	N.C.
38	PORTF7	XCSVE	O	Serial communication enable signal output of the video encoder [WY model]
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	–	I	N.C.
49	PORTE2	–	I	N.C.
50	PORTE3	FOFST1	I/O	Focus offset adjustment output 1
51	PORTE4	FOFST2	I/O	Focus offset adjustment output 2
52	PORTE5	XDFINH	I/O	Defect shunt signal output
53	PORTE6	DVD/XC	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 (VCD)
60	PORTD4	OEICG	O	OEIC gain switching signal output
61	GND	GND	–	GND
62	PORTD5	XMON	O	ON/OFF switching signal output of the spindle motor control output
63	PORTD6	–	O	N.C.
64	PORTD7	–	I	N.C.
65	PORTJ0	XDRVMUT	O	Driver mute output
66	PORTJ1	–	O	N.C.
67	PORTJ2	XDSPRST	O	Servo DSP reset
68	PORTJ3	–	I	N.C.
69	VCC	V+3D	–	V+3D
70	PORTJ4	TM_ENT	I	Test mode entry
71	PORTJ5	–	O	N.C.
72	PORTJ6	VSEL_SW	I	Component/composite SW input
73	PORTJ7	–	I	N.C.
74	PB0/TIOCA2	XCBUSY	I	Command busy input
75	PB1/TIOCB2	XABUSY	I	Auto-sequence busy input
76	PB2/TIOCA3	XINT2	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	Test terminal (V+3D)
81	XCPUMD	–	I	Test terminal (V+3D)
82	XRES	XRESET	I	Reset input

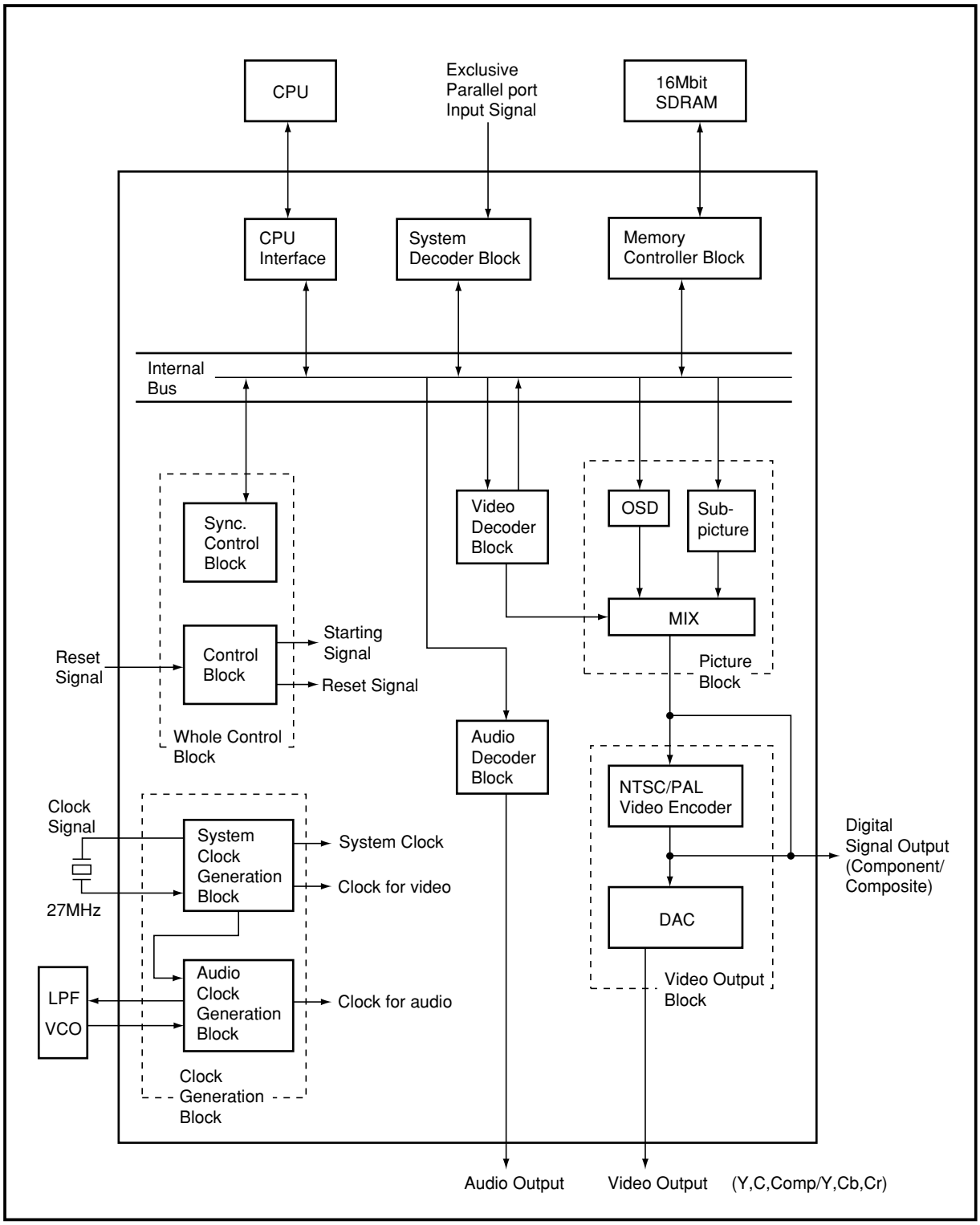
No.	Mark	Pin Name	I/O	Function
83	GND	GND	–	GND
84	AN0	LODPOS	I	Loading position input
85	AN1	SLDPOS	I	Slider position input
86	AN2	–	I	N.C.
87	AN3	NAP_SW	I	NTSC/AUTO/PAL SW input
88	AN4	XOEM	I	Input terminal of OEM model protection
89	AN5	LDDEAD		Input for LD current value display
90	AN6	–	I	N.C.
91	AN7	–	I	N.C.
92	Avref	V+3D	–	V+3D
93	AVCC	V+3D	–	V+3D
94	AVSS	GND	–	GND
95	PB5/TIOCB4	–	I	N.C.
96	PB6/TIOCXA4/TCLKC	C2F	I	C2 error input
97	PB7/TIOCXB4/TCLKD	XRDF	I	Communication 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)
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)
104	PB13/XIRQ5/SCK1	XIRQL10	I	Interrupt input #0 (MY CHIP)
105	GND	GND	–	GND
106	PB14/XIRQ6	XIRQL11	I	Interrupt input #1 (MY CHIP)
107	PB15/XIRQ7	XINT0	I	Interrupt input #0 (AV-1)
108	PA0/XCS4/TIOCA0	XCS4	O	Servo DSP chip select signal output
109	PA1/XCS5/XRAS	–	O	N.C.
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	XINT1	I	Interrupt input 1 (AV-1)
120	PA11/DPH/TIOCB1	THLD	I	Tracking hold signal input
121	VCC	V+3D	–	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	AD1	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+3D	–	V+3D
166	A18	A18	O	Address bus 18
167	A19	A19	O	Address bus 19
168	A20	A20	O	Address bus 20 [RAM model]
169	A21	A21	O	N.C.
170	XNMI	XNMI	I	V+3D
171	GND	GND	–	GND
172	XCS10	–	O	N.C.
173	XCS20	XCS20	O	Chip select signal output of the flash ROM
174	XCS22	–	O	Chip select signal output of the GUI ROM [OEM model
175	XCS23	XCS23	O	Chip select signal output of the SRAM
176	XCS2	–	O	N.C.

■ MB86373B (DVDM ASSY : IC18)

• MPEG2 Decoder IC

● Block Diagram



● Pin Function

No.	Pin Name	I/O	Function	No.	Pin Name	I/O	Function
1	CLKSEL	I	ON/OFF signal of PLL ("H" : ON, "L" : OFF)	27	VDD	–	2.5V power supply
2	DIGCPN7	O	Digital component signal output (MSB) Digital Y signal output (9-bit) (MSB)	28	DIGCOMP4	O	Digital composite signal output Digital C signal output
3	VSS	–	GND	29	DIGCOMP3		
4	DIGCPN6	O	Digital component signal output Digital Y signal output (9-bit)	30	DIGCOMP2		
5	DIGCPN5			31	DIGCOMP1		
6	DIGCPN4			32	DIGCOMP0		Digital composite signal output (LSB) Digital C signal output (LSB)
7	DIGCPN3			33	DACK	O	27 MHz clock output
8	DIGCPN2			34	N.C.	–	Non connection
9	DIGCPN1			35	VSSA3	–	GND (D/A converter)
10	VDD	–	2.5V power supply	36	ANAC	O	Analog color (C) output signal
11	DIGCPN0	O	Digital component signal output (LSB) Digital Y signal output (9-bit) (LSB)	37	VDDA3	–	2.5V power supply (for built-in D/A converter only)
12	RBSEL	O	Cb and Cr discrimination signal at the digital component signal output. LSB at the digital Y signal output.	38	VSSA2	–	GND (D/A converter)
13	XHS	O	Horizontal sync. output signal	39	ANAY	O	Analog luminance (Y) output signal
14	XVS	O	Vertical sync. output signal	40	VDDA2	–	2.5V power supply (for built-in D/A converter only)
15	VSS	–	GND	41	VREF	I	Reference voltage for D/A converte
16	XRESET	I	LSI reset signal	42	VRO	O	Internal current setting pin of D/A converter
17	XLDCSYNC	I	External sync. signal input (LD mode)	43	VDDA4	–	2.5V power supply (for built-in D/A converter only)
18	KEY	O	KEY signal for LD and OSD overlay (LD mode)	44	VSSA1	–	GND (D/A converter)
19	PD	O	Phase comparison result output signal of horizontal sync. (LD mode)	45	ANACOMP	O	Analog composite output signal
20	VFLD	O	Field discrimination signal at the digital signal output H : even field L : odd field	46	VDDA1	–	2.5V power supply (for built-in D/A converter only)
21	DIGCOMP9	O	Digital composite signal output (MSB) Digital C signal output (MSB)	47	BF	O	Burst flag signal
22	DIGCOMP8		Digital composite signal output Digital C signal output	48	XBLK	O	H/V composite blanking signal
23	DIGCOMP7			49	TEST4	O	Normally, set to "open".
24	DIGCOMP6			50	VSS	–	GND
25	DIGCOMP5			51	TEST0	I	Normally, set to "open".
26	VSS	–	GND	52	TEST1	I	"L" status normally

No.	Pin Name	I/O	Function	No.	Pin Name	I/O	Function
53	DAIIN	I	Digital data input of external input (SPDIF)	92	HADRS10	I	CPU address bus signal (MSB)
54	CDDATA	I	Audio data input of external input (correspond to CD)	93	HADRS9	I	CPU address bus signal
55	CDLR	I	Data channel clock input of external input (correspond to CD)	94	HADRS8		
56	CDBCK	I	Data clock input of external input (correspond to CD)	95	HADRS7		
57	AODATA3	O	Audio decode data	96	VSS	–	GND
58	AODATA2			97	VDD	–	2.5V power supply
59	AODATA1			98	HADRS6	I	CPU address bus signal
60	VSS	–	GND	99	HADRS5		
61	VDD	–	2.5V power supply	100	HADRS4		
62	AODATA0	O	Audio decode data	101	HADRS3		
63	AOPCM	O	Digital audio interface output (compression data)	102	HADRS2		CPU address bus signal (LSB)
64	AODAI	O	Digital audio interface output (decode data)	103	HDATA15	I/O	CPU data bus signal (MSB)
65	LRCK	O	Data channel clock for D/A and digital filter	104	HDATA14		CPU data bus signal
66	AOMCK	O	Master clock for D/A and digital filter	105	HDATA13		
67	BCK	O	Bit clock for D/A and digital filter	106	HDATA12		
68	TEST2	I	Normally, set to "open"	107	VSS	–	GND
69	TEST3			108	HDATA11	I/O	CPU data bus signla
70	NC	–	Non connection	109	HDATA10		
71	XDSPRST	I	Normally, set to "open".	110	HDATA9		
72	VSS	–	GND	111	HDATA8		
73	TEST5	O	Normally, set to "open".	112	HDATA7		
74	NC	–	Normally, set to "open".	113	HDATA6		
75	NC			114	VDD	–	2.5V power supply
76	NC			115	HDATA5	I/O	CPU data bus signla
77	NC			116	HDATA4		
78	SD7	I	Parallel data input	117	HDATA3		
79	VDD	–	2.5V power supply	118	HDATA2		
80	SD6	I	Parallel data input	119	VSS	–	GND
81	SD5			120	HDATA1	I/O	CPU data bus signal
82	SD4			121	HDATA0		CPU data bus signal (LSB)
83	SD3			122	BUSSEL	I	Bus width selection signal (0 : 8-bit bus, 1 : 16-bit bus)
84	SD2			123	XOSDACK	I	OSD data acknowledge signal
85	VSS	–	GND	124	XOSDREQ	O	OSD data request signal
86	SD1	I	Parallel data input	125	HCPUSEL1	I	CPU selection signal (00 :SPARC, 01 :86 system, 10 :68 system, 11 :Reserve)
87	SD0			126	HCPUSEL0		
88	XERR	I	Error input signal	127	XINT3	O	Interrupt request signal to the CPU
89	XSACK	I	Acknowledge signal	128	XINT2		
90	XTEST	I	Set to "H" at normal use	129	XINT1		
91	SREQ	O	Data request signal	130	VSS	–	GND

No.	Pin Name	I/O	Function	No.	Pin Name	I/O	Function
131	VDD	–	2.5V power supply	170	XMDRCAS	O	CAS signal for SDRAM
132	XINT0	O	Interrupt request signal to CPU	171	XMDRDQM1	O	Input mask / output enable signal for SDRAM
133	XEXTRDY	O	SPARC, 68 system : Ready signal to CPU 86 system : Acknowledge (ACK) signal to CPU	172	VSS	–	GND
134	HRW	I	CPU read / write signal	173	XMDRWE	O	Write enable signal for SDRAM
135	HCLKIN	I	Host clock input	174	XMDRDQM0	O	Input mask / output enable signal for SDRAM
136	XHCS	I	LSI chip select signal	175	MDRDAT8	I/O	Data bus signal for SDRAM
137	XHAS	I	SPARC, 68 system : CPU address strobe 86 system : CPU address status	176	VSS	–	GND
138	XHBE3	I	CPU byte enable signal	177	MDRDAT7	I/O	Data bus signal for SDRAM
139	XHBE2			178	MDRDAT9		
140	XHBE1			179	MDRDAT6		
141	XHBE0			180	MDRDAT10		
142	VSS	–	GND	181	MDRDAT5		
143	MDRADR4	O	Address signal for SDRAM	182	VSS	–	GND
144	MDRADR3			183	VDD	–	2.5V power supply
145	MDRADR5			184	MDRDAT11	I/O	Data bus signal for SDRAM
146	MDRADR2			185	MDRDAT14		
147	VDD	–	2.5V power supply	186	MDRDAT12		
148	VSS	–	GND	187	MDRDAT3		
149	MDRADR6	O	Address signal for SDRAM	188	MDRDAT13		
150	MDRADR1			189	VSS	–	GND
151	MDRADR7			190	MDRDAT2	I/O	Data bus signal for SDRAM
152	MDRADR0		Address signal for SDRAM (LSB)	191	MDRDAT14		
153	MDRADR8		Address signal for SDRAM	192	MDRDAT1		
154	VSS	–	GND	193	MDRDAT15		Data bus signal for SDRAM (MSB)
155	TEST6	I	"L" status normally	194	MDRDAT0	I/O	Data bus signal for SDRAM (LSB)
156	TEST7			195	VSS	–	GND
157	TEST8			196	N.C.	–	Non connection
158	TEST9			197	ICK27M	I	System clock input
159	MDRADR10	O	Address signal for SDRAM	198	VSS	–	GND
160	MDRADR9			199	OCK27M	O	System clock output
161	MDRADR11		Address signal for SDRAM (MSB)	200	VSSA(VCO)	–	GND (for VCO only)
162	XMDRCS	O	Chip select signal for SDRAM	201	VDDA(VCO)	–	2.5V power supply (for VCO only)
163	MDRCKE	O	Clock enable signal for SDRAM	202	ILPF	O	PLL block inverter output for audio
164	VSS	–	GND	203	MLPF	I	PLL block inverter input for audio
165	VDD	–	2.5V power supply	204	OLPF	O	Phase detector output for audio
166	XMDRRAS	O	RAS signal for SDRAM	205	OVCO	I	VCO input for audio clock
167	MDRCLK	O	Clock output signal for SDRAM	206	VSS	–	GND
168	VSS	–	GND	207	XPLLRST	I	PLL section reset signal
169	MDRCLKIN	I	Clock input signal for SDRAM	208	XSYNCRST	I	SYNC reset signal

3.3 PCB PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ 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 → 56 x 10^1 → 561 ..... RD1/4PU 5 6 1 J
47k Ω → 47 x 10^3 → 473 ..... RD1/4PU 4 7 3 J
0.5 Ω → R50 ..... RN2H R 5 0 K
1 Ω → 1R0 ..... RS1P 1 R 0 K

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

5.62k Ω → 562 x 10^1 → 5621 ..... RN1/4PC 5 6 2 1 F

A LOAB ASSY

Mark	Ver. (DB-VPBxxx)	No.	Part No. (for PCS)	Description	Part No. (for MJI)
		SWITCH			
		S101	9965 000 07961	VSK1011	*SM000340R
		OTHERS			
NSP		CN101	—	S3B-PH-K-S, KR CONNECTOR	—
NSP		—	—	VNP1762, PC BOARD LOAB	—

B SMEB ASSY

Mark	Ver. (DB-VPBxxx)	No.	Part No. (for PCS)	Description	Part No. (for MJI)
		SWITCH			
		S201	9965 000 07962	DSG1016	*SP001020R
		OTHERS			
NSP		CN201	—	52044-0345, 3P FFC CONNECTOR	—
NSP		CN202	—	VKN1212, 8P FFC CONNECTOR	—
NSP	210,211,213,214,215	—	—	VNP1695, PC BOARD SMEB	—
NSP	212	—	—	VNP1722, PC BOARD SMEB	—

C FGSB ASSY

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

D DVDM ASSY

Mark	Ver. (DB-VPBxxx)	No.	Part No. (for PCS)	Description	Part No. (for MJI)
		SEMICONDUCTORS			
		IC21	9965 000 07964	CY2081SL-638	*HC106340R
		IC14	9965 000 07965	KM68V1000CLT-7L	*HC106350R
		IC1	9965 000 07966	LA9701M	*HC105850R
		IC2	9965 000 07967	LC78652W	*HC105860R
		IC3	9965 000 07968	M56788FP	*HC105870R
		IC19	9965 000 07969	MB811171622A-100FN	*HC106040R
		IC18	9965 000 07970	MB86373B	*HC106360R
	212	IC26	9965 000 07971	MC44724A	*HC106640R
		IC15	9965 000 07972	MN414800CSJ-07	*HC105900R
		IC5,IC7	4822 209 30455	NJM2100M (or BA4510F)	HC10085090
		IC11	9965 000 07973	PD3410A	*HU100400R
	215	IC27	—	PM0026A	*HC106770R

Mark	Ver. (DB-VPBxxx)	No.	Part No. (for PCS)	Description	Part No. (for MJI)
		IC12	9965 000 07974	PE5108A	*HC106370R
		IC8	4822 209 17539	TC7SHU04F	*HC105940R
	210,212,215	IC13	9965 000 07975	VYW1761 (4M)	*HC106750R
	211	IC13	—	VYW1762 (4M)	*HC106760R
	213,214	IC13	—	VYW1763 (8M)	*HC106380R
		Q106,Q109,Q81,Q83,Q85	4822 130 10698	2SA1576A	HX100012A0
	212,215	Q87,Q89,Q91	4822 130 10698	2SA1576A	HX100012A0
		Q114,Q121,Q251	4822 130 60669	2SC4081	HX300012A0
		Q131	9965 000 07976	DTC114EUA	*BA000910R
		Q102	4822 130 63838	HN1A01F	BA10011050
		Q103,Q6,Q7	9965 000 07977	HN1B04FU	*BA000920R
		Q101	4822 130 63843	HN1C01F	*BA000930R
		Q112,Q113	9965 000 07978	HN1C01FU	*BA000940R
		Q107,Q4,Q5	9965 000 07979	RN1902	*BA001020R
		Q3	9965 000 07980	RN1911	*BA000960R
		Q1	9965 000 07981	RN4982	*BA001030R
		D301	9965 000 07982	KV1471E	*HZ400020R
		D6	9322 154 46685	RB501V-40	*HZ200100R
		D665,D666	9965 000 06882	RB521S-30	*HZ200110R
		COILS			
NSP		L150,L330	—	LCYA100J2520	—
NSP		L304	—	LCYA2R7J2520	—
NSP		L81	—	VTL1067, CHIP COIL	—
		L85,L911	9965 000 07983	VTL1084, CHIP BEADS	*FC900240R
		CAPACITORS			
NSP		C123,C146,C613,C843	—	CCSRCH101J50	—
NSP		C322	—	CCSRCH120J50	—
NSP		C135	—	CCSRCH121J50	—
NSP		C104-C108	—	CCSRCH150J50	—
NSP		C206,C210,C211	—	CCSRCH151J50	—
NSP		C333	—	CCSRCH180J50	—
NSP		C116,C151,C314	—	CCSRCH220J50	—
NSP		C152	—	CCSRCH221J50	—
NSP		C127,C209,C337	—	CCSRCH331J50	—
NSP		C134,C236	—	CCSRCH470J50	—
NSP		C122,C208	—	CCSRCH471J50	—
NSP		C126,C335	—	CCSRCH560J50	—
NSP		C334	—	CCSRCH5R0C50	—
NSP		C124,C132	—	CCSRCH680J50	—
NSP		C117,C240,C352,C360	—	CCSRCH681J25	—
NSP		C845,C846	—	CCSRCK2R0C50	—
NSP		C129,C142,C842	—	CEV101M10	—
NSP	212	C827	—	CEV101M10	—
NSP		C113,C139	—	CEV220M16	—
NSP		C405,C413,C700,C808	—	CEV221M4	—
NSP		C111,C149,C205,C207,C401	—	CEV470M6R3	—
NSP		C403,C407	—	CEV470M6R3	—
NSP		C140,C223,C224,C252,C264	—	CKSQYB105K10	—
NSP		C312	—	CKSQYB105K10	—
NSP		C148,C217,C327,C414	—	CKSQYF105Z16	—
NSP		C801,C802,C807,C809-C815	—	CKSQYF105Z16	—
NSP		C817-C821	—	CKSQYF105Z16	—
NSP	212	C826,C828	—	CKSQYF105Z16	—
NSP		C216,C313	—	CKSRYB102K50	—
NSP		C133,C136,C203,C220,C225	—	CKSRYB103K50	—
NSP		C239,C320,C321,C603,C625	—	CKSRYB103K50	—
NSP		C703,C711	—	CKSRYB103K50	—
NSP		C101,C102,C114,C118,C119	—	CKSRYB104K16	—
NSP		C121,C138,C204,C212,C213	—	CKSRYB104K16	—
NSP		C227,C231,C263,C315,C317	—	CKSRYB104K16	—
NSP		C332,C804	—	CKSRYB104K16	—
NSP		C153,C266	—	CKSRYB223K25	—
NSP		C357	—	CKSRYB223K50	—
NSP		C354	—	CKSRYB332K50	—
NSP		C214,C251,C261,C351	—	CKSRYB472K50	—
NSP		C330	—	CKSRYB682K50	—
NSP		C109,C110,C120,C130,C131	—	CKSRYF104Z16	—
NSP		C143,C150,C202,C215	—	CKSRYF104Z16	—
NSP		C221,C222,C226,C230,C235	—	CKSRYF104Z16	—

Mark	Ver. (DB-VPBxxx)	No.	Part No. (for PCS)	Description	Part No. (for MJI)
NSP		C265,C299,C319,C359,C367	—	CKSRYF104Z16	—
NSP		C369,C370,C402,C404,C406	—	CKSRYF104Z16	—
NSP		C408,C410,C412,C601,C602	—	CKSRYF104Z16	—
NSP		C604-C612,C614,C615	—	CKSRYF104Z16	—
NSP		C617-C620,C626,C701,C702	—	CKSRYF104Z16	—
NSP		C704-C710,C712-C724,C726	—	CKSRYF104Z16	—
NSP		C831-C833,C844	—	CKSRYF104Z16	—
NSP	212	C822-C825,C829,C830	—	CKSRYF104Z16	—
NSP	212	C834-C836,C858,C859	—	CKSRYF104Z16	—
NSP	215	C834-C836,C865-C869,C871-C876	—	CKSRYF104Z16	—
NSP	215	C861-C864	—	CKSRYF105Z16	—
NSP	215	C870	—	CKSQYB104Z25	—
NSP		C368,C411 (47mF/16V)	—	VCH1166	—
		RESISTORS			
NSP		R123 (39 OHM)	—	ACN7047	—
NSP		R732,R733,R735,R736 (47k OHM)	—	ACN7077	—
NSP		R632 (100OHM)	—	DCN1092	—
NSP		R608,R609,R613,R624,R627 (10k OHM)	—	DCN1094	—
NSP		R629,R631,R633,R638,R654 (10k OHM)	—	DCN1094	—
NSP		R657,R658,R664,R706 (10kOHM)	—	DCN1094	—
NSP		R717,R718 (10k OHM)	—	DCN1094	—
NSP		R121,R663 (10k OHM)	—	DCN1104	—
NSP		R712,R715,R881 (0 OHM)	—	DCN1106	—
NSP	212	R838 (0 OHM)	—	DCN1106	—
NSP		R1020,R2010,R2020,R2030,R2040	—	RS1/10S0R0J	—
NSP		R3050,R4010,R4020,R4030,R4040	—	RS1/10S0R0J	—
NSP		R4050,R4060,R407,R685,R722	—	RS1/10S0R0J	—
NSP		R8000,R821	—	RS1/10S0R0J	—
NSP	210,211,213,214	R501,R502,R801,R802,R828	—	RS1/10S0R0J	—
NSP	212	R803,R304,R829,R854 -R856,R858-R860	—	RS1/10S0R0J	—
NSP	212	R875,R920,R922,R970 -R973,R8010	—	RS1/10S0R0J	—
NSP	212	R8200	—	RS1/10S0R0J	—
NSP		R202,R3510	—	RS1/10S101J	—
NSP	212	R839	—	RS1/16S103J	—
NSP	210,211,213,214	R2	—	RS1/16S103J	—
NSP	212	R2	—	RS1/16S223J	—
NSP	212	R1	—	RS1/16S333J	—
NSP	215	R1	—	RS1/16S103J	—
NSP		R700	—	RS1/10S1R2J	—
NSP	212	R836,R837	—	RS1/16S1001F	—
NSP		R807	—	RS1/16S1201F	—
NSP	212	R831,R832	—	RS1/16S1201F	—
NSP		R806	—	RS1/16S1501F	—
NSP		R363,R365	—	RS1/16S1503F	—
NSP	212	R825	—	RS1/16S1800F	—
NSP	212	R834,R385	—	RS1/16S1801F	—
NSP	210,211,213,214,215	R825	—	RS1/16S2000F	—
NSP	212	R822-R824	—	RS1/16S2000F	—
NSP		R826,R827	—	RS1/16S2000F	—
NSP	212	R830	—	RS1/16S2002F	—
NSP		R805	—	RS1/16S2701F	—
NSP	212	R833	—	RS1/16S3902F	—
NSP		R361,R364	—	RS1/16S6202F	—
NSP	215	R866	—	RS1/16S103J	—
NSP	215	R808	—	RS1/16S8202F	—
NSP	215	R822-R824	—	RS1/16S1200F	—
NSP	215	R845-R847	—	RS1/16S182J	—
NSP	215	R854,R856	—	RS1/16S4R7J	—
NSP	215	R855,R861-R865,R868-R871	—	RS1/16S0R0J	—
NSP	215	R971-R974,R8640	—	RS1/16S0R0J	—
NSP	215	R872	—	RS1/16S3001F	—
NSP	215	R873	—	RS1/16S6800F	—
NSP	215	R874	—	RS1/16S1201F	—
NSP	215	R8610,R8620,R8630	—	RS1/10S0R0J	—
NSP		Other Resistors	—	RS1/16SxxxJ	—

Mark	Ver. (DB-VPBxxx)	No.	Part No. (for PCS)	Description	Part No. (for MJI)
		OTHERS			
		CN4	9965 000 07984	DKN1193, FLEXIBLE CONNECTOR	*YJ002230R
		X2	9965 000 07985	DSS1110, CHIP CERALOCK (20MHz)	*FQ000450R
NSP		CN2	—	S2B-PH-SM3, PH CONNECTOR	—
NSP		CN1	—	S3B-PH-SM3, PH CONNECTOR	—
NSP		—	—	VDA1681, FLEXIBLE CABLE (07P)	—
NSP	210,212,213,215	CN15,CN5	—	VKN1516, CONNECTOR 30P	—
NSP	211,214	CN15,CN5	—	VKN1626, B TO B CONNECTOR 30P	—
NSP		CN3	—	VKN1763, 8P FFC CONNECTOR	—
NSP		—	—	VRW1773, BAR-CODE LABEL	—
		X1	9965 000 07986	VSS1147, CRYSTAL RESONATOR (13.824MHz)	*JX000700R
	210	—	—	VWS1446, DVDM Assy DB-VPB210	ZK402K0210
	211	—	—	VWS1449, DVDM Assy DB-VPB211	ZK324J0210
	212	—	9965 000 07628	VWS1447, DVDM Assy DB-VPB212	ZK402K0230
	213	—	—	VWS1448, DVDM Assy DB-VPB213	ZK402K0220
	214	—	—	VWS1450, DVDM Assy DB-VPB214	ZK324J0220
	215	—	—	VWS1451, DVDM Assy DB-VPB215	ZK408K0210