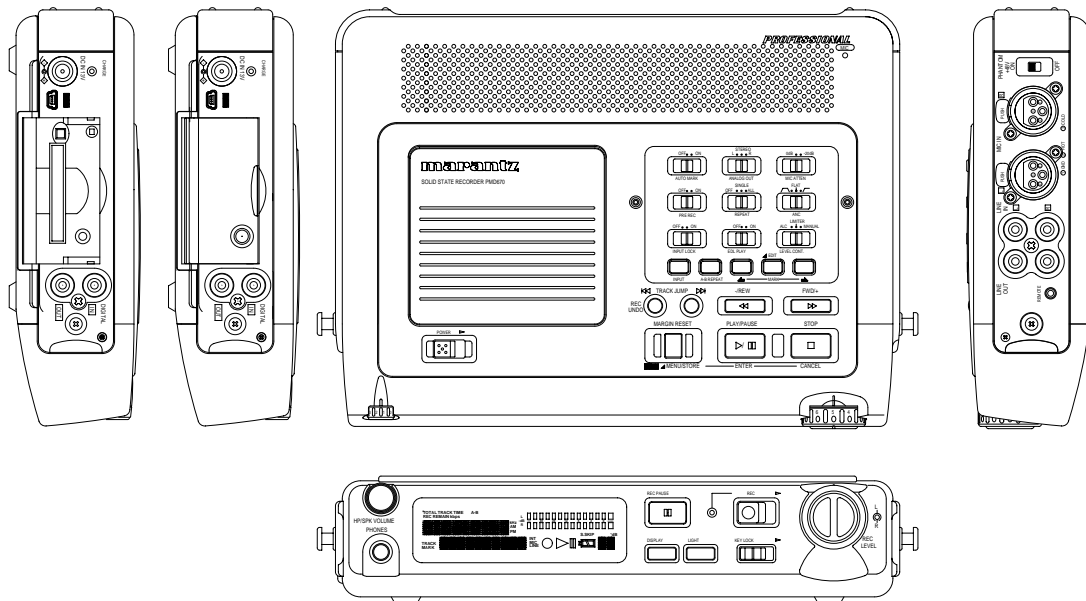


# Service Manual

PMD670 /W1B/U1B/F1B

Solid State Recorder



## TABLE OF CONTENTS

SECTION	PAGE
1. TECHNICAL SPECIFICATIONS .....	1
2. FACTORY/SERVICE MODE .....	2
3. LCD CONTRAST ADJUSTMENT .....	3
4. HOW TO DISASSEMBLE .....	3
5. DSP(QD01) FIRMWARE UPDATE PROCEDURE .....	7
6. MAIN MICROPROCESSOR (QU01) UPDATE PROCEDURE .....	9
7. WIRING DIAGRAM .....	15
8. BLOCK DIAGRAM .....	17
9. SCHEMATIC DIAGRAM .....	19
10. PARTS LOCATION .....	43
11. MICROPROCESSOR AND IC DATA .....	49
12. EXPLODED VIEW AND PARTS LIST .....	63
13. ELECTRICAL PARTS LIST .....	65

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

# marantz®



## PMD670

PMD670

## 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 8744, BUILDING SILVERPOINT  
BEEMDSTRAAT 11, 5653 MA EINDHOVEN  
THE NETHERLANDS  
PHONE : +31 - 40 - 2507844  
FAX : +31 - 40 - 2507860

#### CANADA

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

#### 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**  
43-53 Bridge Rd.,  
STANMORE NSW 2048  
AUSTRALIA  
PHONE : +61 - (0)2 - 9519 - 0900  
FAX : +61 - (0)2 - 9519 - 0600

#### PROFESSIONAL HONG KONG

**Jolly ProAudio Broadcast Engineering Ltd.**  
UNIT 2, 10F, WAH HUNG CENTRE,  
41 HUNG TO ROAD, KWUN TONG, KLN.,  
HONG KONG  
PHONE : 852 - 21913660  
FAX : 852 - 21913990

#### 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 6858 5535 / +65 6381 8621  
FAX : +65 6858 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.**  
2ND FLOOR BANGUNAN INFINITE CENTRE  
LOT 1, JALAN 13/6, 46200 PETALING JAYA  
SELANGOR DARUL EHSAN, MALAYSIA  
PHONE : +60 - 3 - 7954 8088  
FAX : +60 - 3 - 7954 7088

#### 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

#### KOREA

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

### SHOCK, FIRE HAZARD SERVICE TEST :

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

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

Ref. UL Standard No. 1492.

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

# 1. TECHNICAL SPECIFICATIONS

## Digital audio system

### System

Solid State recorder

### Usable Media

IC memory cards and HDD(Micro Drive) cards

### Recording and reading method

MPEG1 Layer 2/3 compression

16 bit linear PCM

### Recording Bit rate (Selectable by preset)

MONO/STEREO

768 kbps (PCM), 192, 128, 96, 64, 48, 32 kbps

(MPEG2/MPEG3)

192, 128, 96, 64 kbps (MPEG, Joint Stereo)

The amount of memory required per hour of recording:

### Example : 64MB IC memory Card

Bit Rate (kbps)	STEREO(imit)	
	PCM	MP2/MP3
32	28	280
48	21	210
64	14	140
96	10.5	105
128	7	70
192	5.25	52.5
256	3.5	35
512	1.75	17.5

## Sampling frequency

### Analog

48 kHz/44.1 kHz/32 kHz/22.14 kHz/16 kHz

### Digital

48 kHz/44.1 kHz

## Number of channels

2/1 (stereo/mono)

## Frequency Response

20,000 Hz  $\pm$ 3.0 dB (at digital)

## Signal - to - Noise Ratio ( IEC - Aweighted)

80 dB

## Total Harmonic Distortion (at 0 VU)

0.03 %

## Dynamic Range

85dB

## Inputs

MIC/LINE IN L/R

Type: XLR (1:GND, 2:HOT, 3:COLD)

Input Sensitivity (MIC): -68 dBu/9 kohms

Input Sensitivity (LINE): -20 dBu/47 kohms

LINE OUT L/R

Type: RCA jack

Input Sensitivity (LINE): -20 dBu/47 kohms

## Outputs

LINE OUT L/R

Type: RCA jack

Standard level: 2 Vrms max./2 kohms

DIGITAL OUT

Type: RCA jack

Output impedance: 75 ohms

Standard output level: 0.5 Vp-p

Sampling frequency: 44.1/48 kHz

Format: SPDIF (IEC-958 Type II)

## GENERAL

### Headphone Output power

15 mW/32 ohms

### Speaker Output Power

200 mW

### Phantom Power

+48V, 5mA

### Power Requirement

13 V, 1.0 A

### Power Consumption

Recording: 5.2 W

Charging: 12 W

Power off: 3.5 W (Battery mode : 2 mW)

### Dimensions (W x H x D)

264 x 52 x 185 mm

(10.4" x 2.0" x 7.3")

### Weight

1.3 kg (2 lbs. 14 oz.)

### Included Accessories

AC adaptor: 1

Battery holder: 1

Carrying Strap: 1

User Guide: 1

### Optional Accessories

Ni-Cad Battery pack (RB1100PMD)

Carrying Case (CLC670PMD)

Interface cable

## 2. FACTORY/SERVICE MODE

### A. FACTORY MODE

To reset all settings to default status ,follow the procedure below.

1. When Power Standby mode, While pressing **A-B REPEAT** and **INPUT** buttons, Slide **POWER** switch to turn on the unit.
2. FACTORY name is displayed on LCD. The unit becomes the setup of default automatically.

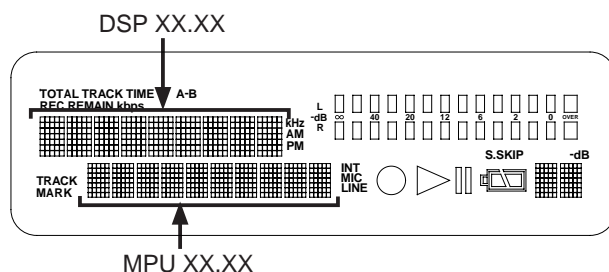
### B. SERVICE MODE

#### 1. Micro-Processor Version check

- 1) When Power Standby mode, While pressing **A-B REPEAT** and **▲EDIT** buttons, Slide **POWER** switch to turn on the unit.
- 2) VIRSION name is displayed on LCD with blink, then press **PLAY/PAUSE** button, VIRSION is displayed on LCD.

Example : DSP 01.20

MPU B0022



3) Turn off power to quit Service mode.

#### 2. CompactFlash read/write speed check

- 1) Insert the *CompactFlash*, While pressing **A-B REPEAT** and **▲EDIT** buttons, Slide **POWER** switch to turn on the unit.
- 2) VIRSION name is displayed on LCD with blink, then press **FWD/+ ►►** or **-REW ◄◄** button. **CARD CHECK** name is displayed on LCD.
- 3) Then press **PLAY/PAUSE** button. **CARD CHECK** name is displayed on LCD. after Good or No Good is displayed on LCD.

If "No good " is displayed, the *CompactFlash* is not correct. Insert the correct *CompactFlash*.

Because read/write speed is slow, the unit has the possibility that sound is interrupted and stop during recording.

4) Turn off power to quit Service mode.

## 2. FACTORY/SERVICE モード

### A. FACTORY モード

1. スタンバイ状態から、**A-B REPEAT** ボタンと **INPUT** ボタンを押しながら **POWER** スイッチをスライドします。
2. FACTORY と表示がでます。自動的に出荷時の設定になります。

### B. SERVICE モード

#### 1. VERSION 確認

- 1) **A-B REPEAT** ボタンと **▲EDIT** ボタンを押しながら **POWER** スイッチをスライドします。
- 2) DISPLAY に VERSION と点滅表示されたら **PLAY/PAUSE** ボタンを押してバージョン確認をします。

表示例 DSP 01.20

MPU B0022

3) SERVICE モード解除は、電源を切ります。

#### 2. CompactFlash 書き換え速度確認

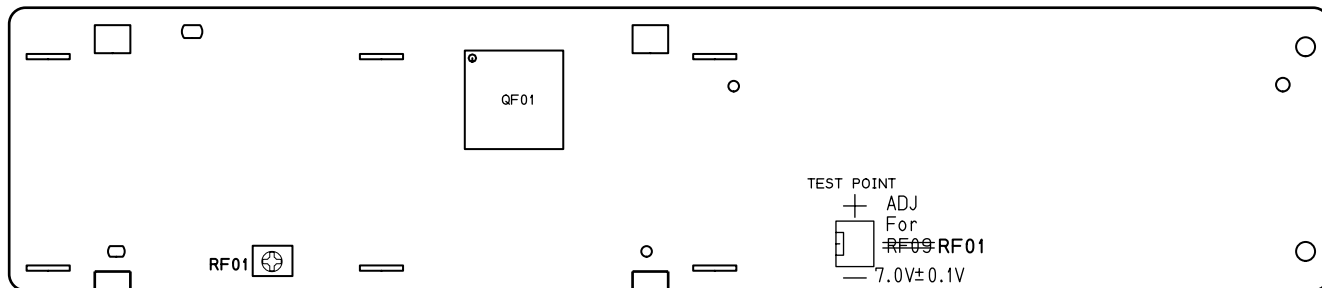
- 1) *CompactFlash* が挿入されている状態で、**A-B REPEAT** ボタンと **▲EDIT** ボタンを押しながら **POWER** スイッチをスライドします。
- 2) DISPLAY に VERSION と点滅表示されたら **FWD/+ ►►** ボタンまたは **-REW ◄◄** ボタンを押すと、DISPLAY に **CARD CHECK** と表示されます。
- 3) さらに、**PLAY/PAUSE** ボタンを押すと、DISPLAY に **Check speed** と表示されたのち、Good または No Good が表示されます。  
No Good の場合: 書き換え速度が遅い為、録音途中で止まる、または音切れが発生する可能性があります。*CompactFlash* を別の物に交換して下さい。
- 4) SERVICE モード解除は、電源を切ります。

### 3. LCD CONTRAST ADJUSTMENT

1. Connect the TEST POINT (See below) with the tester.
2. Turn the variable resistor RF01(RF09) so that the reading of the tester becomes  $7.0\text{ V} \pm 0.1\text{ V}$  and confirm the contrast of the LCD becomes maximum.

### 3. LCD 輝度電圧調整

1. LCD モジュールとメイン基板 (PM01) をペアーとして以下の調整をおこなってください。
2. TEST POINT にテスターを接続し、輝度電圧を測りながらボリューム RF01(RF09) の抵抗値を調整します。
3. LCD を正面から見て、コントラストが最大になることを確認しながら輝度電圧を  $7.0\text{ V} \pm 0.1\text{ V}$  に調整します。

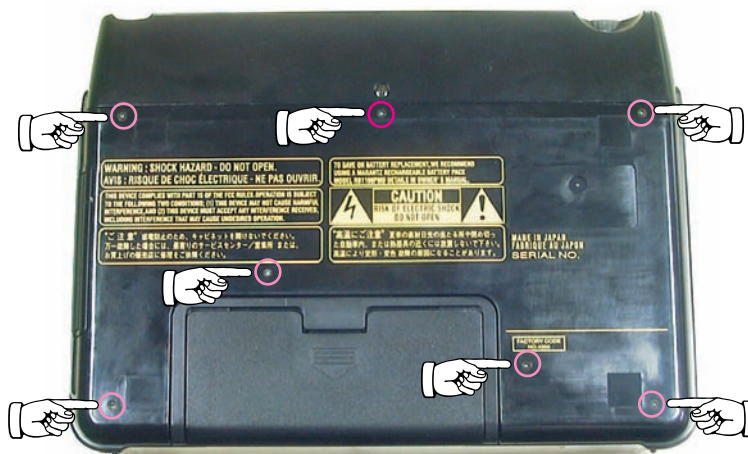


### 4. HOW TO DISASSEMBLE

- 1) Remove 7 screws as shown in Fig.1.

### 4. 分解方法

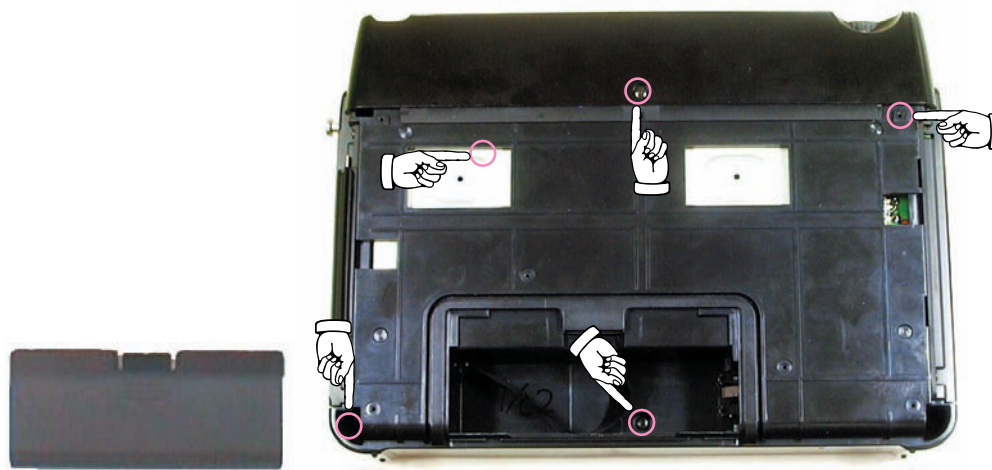
- 1) 下図 1 に示すセット底面のネジ 7 本を外します。底蓋を外します。



<Fig.1 Position of 7 screws>

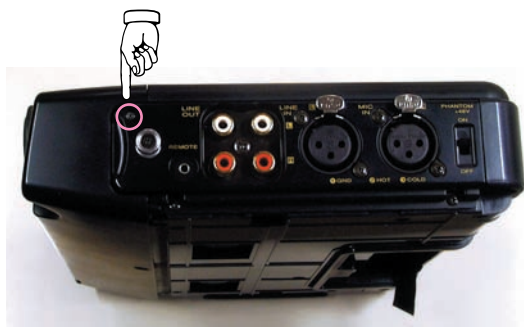
- 2) Remove the battery cover.
- 3) Remove 4 screws as shown in Fig.2.

- 2) バッテリーカバーを外します。
- 3) 下図 2 に示すネジ 4 本を外します。



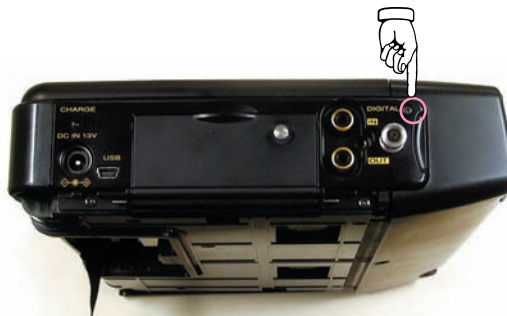
<Fig.2 Position of 4 screws>

4) Remove 2 screws from both sides as shown in Fig.3 and Fig.4.



<Fig.3 Position of screw>

4) 下図 3～4 に示す両サイドのネジ計 2 本を外します。



<Fig.4 Position of screw>

5) Remove the front panel, holding it and pushing down with thumb as shown in Fig.5 and Fig.6.

Cautions :

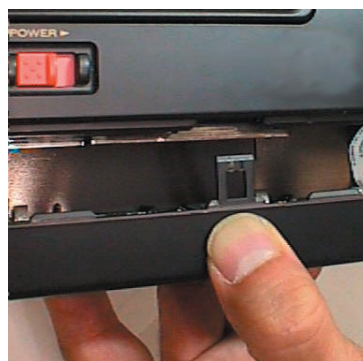
When removing the front panel, take care not to damage the cable and connectors.

5) フロントパネルを下図 5～6 の位置を指で押さえながら外します。爪を外すように押さえながら前方向に引きフロントパネルを外します。

注意：勢いよく引くとフロントパネルに繋がる FPC が引っ張られてコネクタが破損する恐れがあります。



<Fig.5 Holding position>



<Fig.6 Removing the front panel>

6) Remove 2 screws as shown in Fig.7.

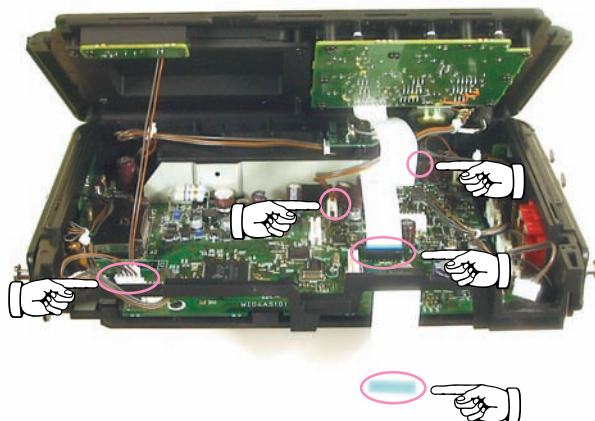
6) 下図 7 に示すネジ 2 本を外します。



<Fig.7 Position of 2 screws>

7) Remove 5 connectors as shown in Fig.8. And remove the top case.

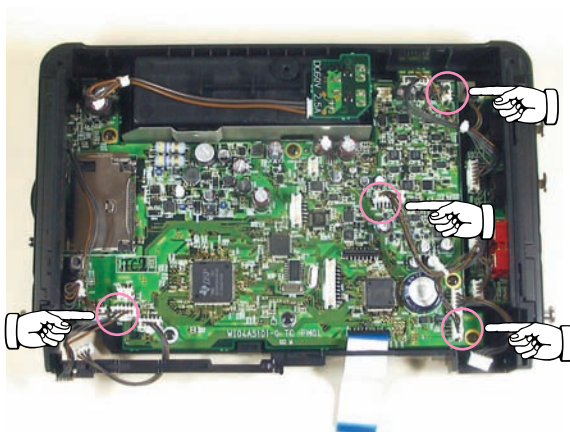
7) トップケースを持ち上げます。下図8に示す5ヶ所のコネクタを外し、トップケースを外します。



<Fig.8 Position of connectors>

8) Remove 4 connectors as shown in Fig.9.

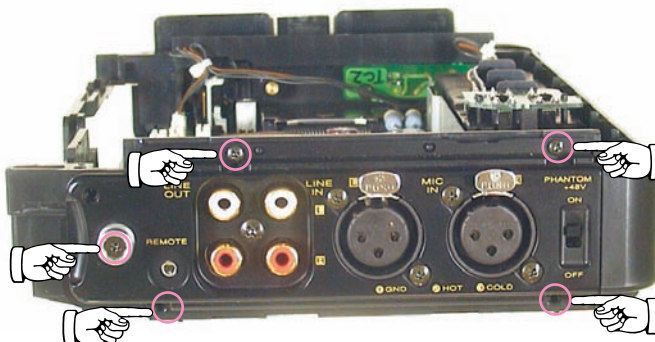
8) 下図9に示すコネクタ4ヶ所を外します。



<Fig.9 Position of 4 connectors>

9) Remove 5 screws.  
Then remove side panel of Audio I/O side.

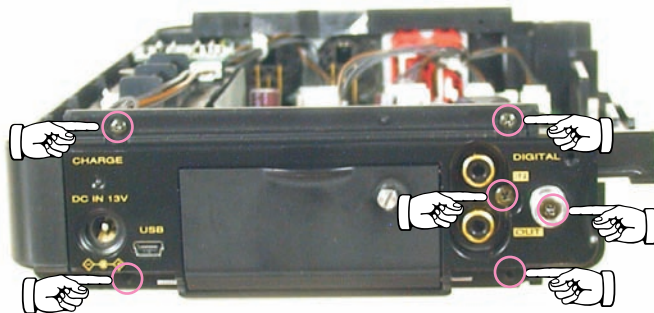
9) ネジ5本を外し Audio 入出力側のサイドパネルを外します。



<Fig.10 Position of 5 screws>

10) Remove 6 screws.  
Then remove side panel of CompactFlash side.

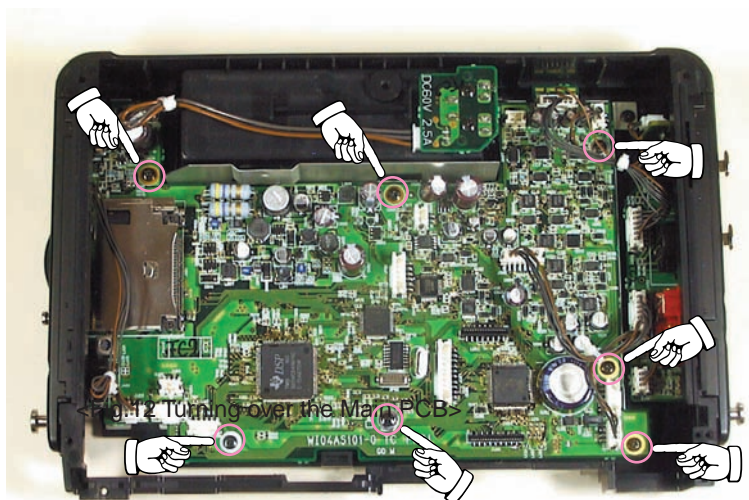
10) ネジ 6 本を外しコンパクトフラッシュ側のサイドパネルを外します。



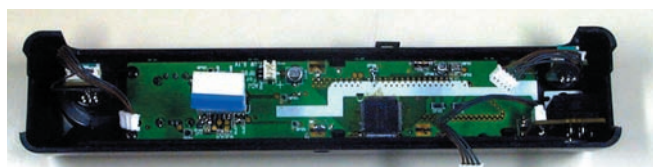
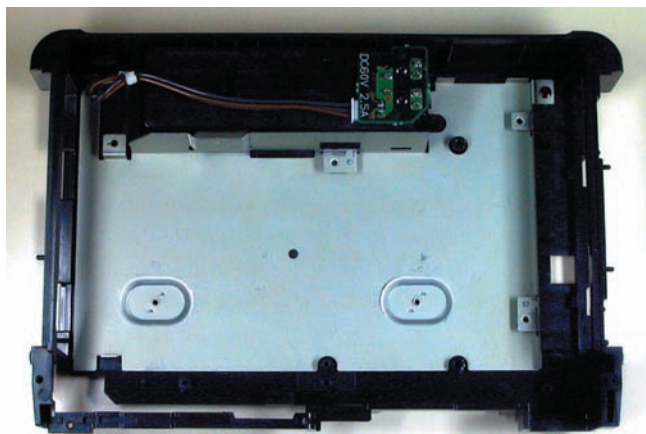
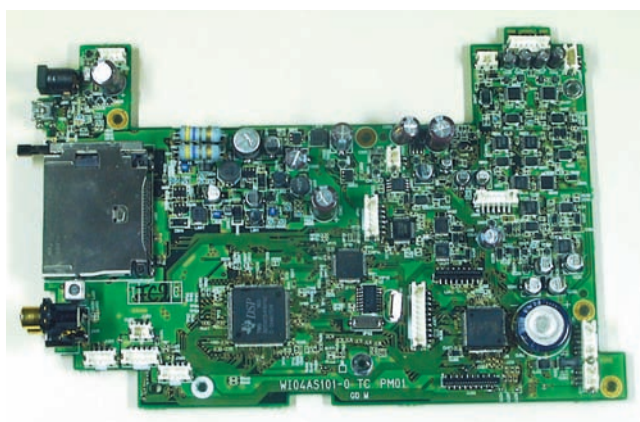
<Fig.11 Position of 6 screws>

11) Remove 7 screws.  
Then remove the PCB.

11) ネジ 7 本を外し基板を外します。



<Fig.12 Position of 7 screws>





## 5. DSP(QD01) FIRMWARE UPDATE PROCEDURE

### Necessary Equipment

- Windows PC(Windows20 or WindowsXP)
- USB cable (USB 4Pin - mini USB 5pin)
- CompactFlash (with format)
- Update Disc (\*PMD670CDR)

### Connection

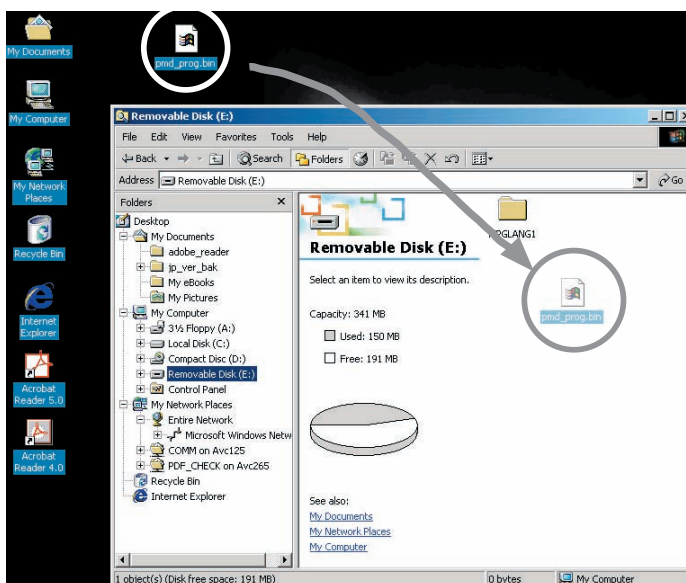
1. Connect Windows PC and PMD670 with USB cable
2. Insert the CompactFlash



### Writing procedure

NOTICE : Don't turn off the power during the update. When turn off the power, you must change Flash Rom (QD01).

1. While pressing **MARGIN RESET** button, Slide **POWER** switch to turn on the unit.
2. "USB ONLINE" is displayed on LCD.
3. It confirms that it was recognized as Removable Disk (CompactFlash) by a PC.
4. "pmd\_prog.bin" of the update disk is copied to the route of Removable Disk(CompactFlash).



5. Disconnect USB cable from the unit, then turn off **POWER** switch.
6. Keep inserting the CompactFlash, turn on **POWER** switch.
7. DSP Firmware updating will be done automatically.
8. Light up all the LCD dot.
9. Uploading takes about one minute.

## 5. DSP (QD01) firmware のアップデート方法

### 必要機器

- Windows PC (Windows2000 または WindowsXP)
- USB ケーブル (USB 4Pin - USB ミニ 5pin)
- コンパクトフラッシュ CompactFlash (フォーマット済み)
- アップデートディスク (\*PMD670CDR)

### 接続方法

1. Windows PC と PMD670 とを USB ケーブルで接続します。
2. コンパクトフラッシュを PMD670 に差し込みます。

### アップデート方法

注) アップデート中は電源を切らないでください。電源を切ると Flash ROM(QD01) を交換する必要があります。

1. PMD670 の **MARGIN RESET** ボタンを押しながら **POWER** スイッチをスライドし電源を入れます。
2. PMD670 のディスプレイに USB ONLINE と表示されます。
3. Windows PC にリムーバブルディスク (CompactFlash) として認識されたのを確認します。
4. アップデートディスクの pmd\_prog.bin をリムーバブルディスク (CompactFlash) のルートにコピーします。

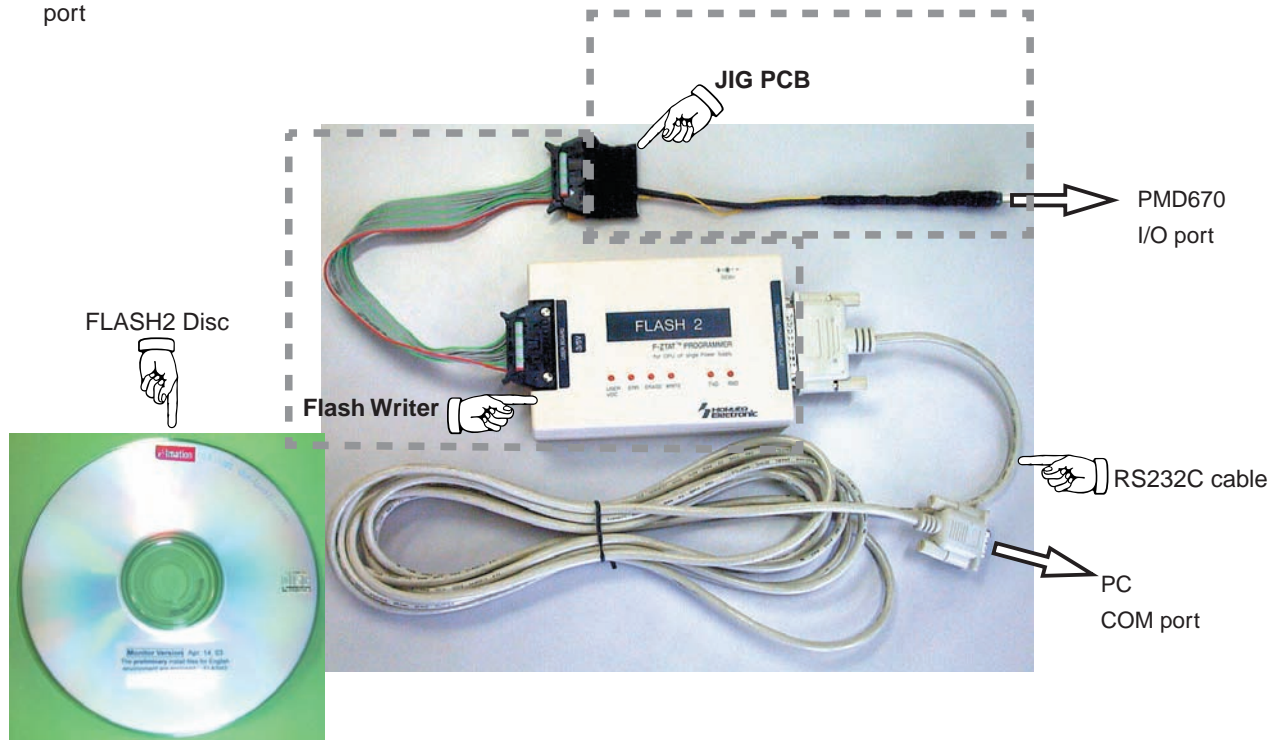
5. USB ケーブルを PMD670 から外して電源を切ります。
6. コンパクトフラッシュを差し込んだまま PMD670 の電源を入れます。
7. 自動的に DSP の firmware を書き換えます。
8. このときディスプレイは全点灯します。
9. 書換時間は約 1 分ほどです。

10. When the updating is finished, information of CompactFlash is displayed on LCD.
11. Turn off POWER switch.  
*The firmware has been updated. Do the next procedure.*
12. Connect Windows PC and PMD670 with USB cable
13. Repeat the same procedure No1., No2. and No3.
14. "pmd\_prog.bin" which wrote it in the Removable Disk(CompactFlash) is delete from the Windows PC.  
NOTICE :  
When "pmd\_prog.bin" isn't delete from the *compactFlash*,  
The set becomes the mode of update of firmware every time to turn on the unit.
15. Disconnect USB cable from the PMD670, then turn off POWER switch.
16. Check the version number of the firmware  
Refer to 2-page "SERVICE MODE" for "Micro-Processor Version check" confirmation.
10. 書き換えが終わるとディスプレイにカード情報が表示されます。
11. PMD670 の電源を切ります。  
*以上で書き換え作業は終了です。つづけて、pmd\_prog.bin の削除作業します。*
12. USB ケーブルを接続します。
13. 再度、上記 1、2、3 の操作をします。
14. リムーバブルディスク(*CompactFlash*) 内に書き込んだ pmd\_prog.bin を Windows PC から削除します。  
注) この操作をしないと PMD670 の電源入れた時、毎回 firmware の書き換え動作に入ってしまいます。
15. PMD670 の電源を切り USB ケーブルを外します。
16. VERSION の確認をします。  
2 ページ "**B. SERVICE モード**" の "**1. VERSION 確認**" で確認をします。
17. 書き込んだ firmware のバージョンが正しければ書き換え完了です。

## 6. MAIN MICROPROCESSOR (QU01) UPDATE PROCEDURE

### Necessary Equipment

- Flash Writer (FLASH2 Disc and Parallel cable are packed together)
- JIG PCB with the cable(5 pin USB mini cable)
- RS232C cable (25pin-9Pin )
- Update Disc (\*PMD670CDR)
- Windows PC (Windows2000 or WindowsXP) with COM port



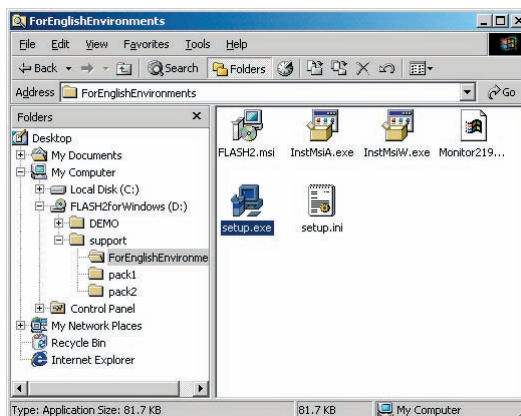
### Connection

1. Connect COM port of Windows PC and Flash Writer with RS232C cable
2. Connect Flash Writer and JIG PCB with Parallel cable
3. Connect 5pin USB mini cable to I/O port of PMD670.

### Preparation (The installation procedure of the Update software)

Open FLASH2 Disc , and double click "Setup.exe", and writing software is installed in the PC.

There is English edition of holder of "ForEnglishEnvironme"



## 6. Main microprocessor (QU01) のアップデート方法

### 必要機器

- Windows PC (OS:Windows2000 または WindowsXP) で COM port のあるもの
- Flash Writer (FLASH2 ディスク、パラレル ケーブル同梱)
- 治具基板 (5 Pin USB ミニケーブル付)
- RS232C ケーブル (25pin-9pin)
- マイコンアップデートディスク (\*PMD670CDR)

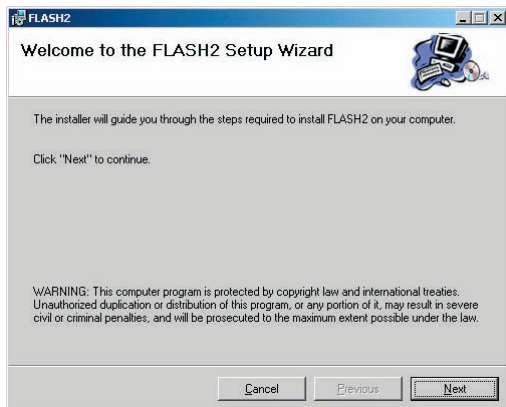
### 接続方法

- 1 Flash Writer と Windows PC の COM ポートを RS232C ケーブルで接続します。
- 2 Flash Writer と治具基板をパラレル ケーブルで接続します。
- 3 治具基板の 5 Pin USB ミニケーブルを PMD670 の I/O ポートに接続します。

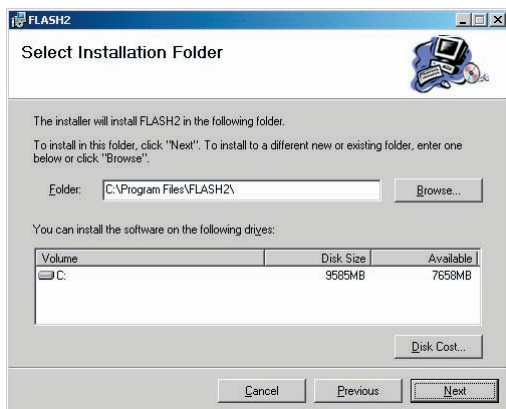
### 準備 (アップデートソフトの Windows PC へ、インストール)

Flash Writer 付属の FLASH2 ディスクを CD-ROM ドライブにセットし開きます。そこにある Setup.exe (日本語版) をダブルクリックします。(英語版は図のフォルダー: ForEnglishEnvironme にあります。)

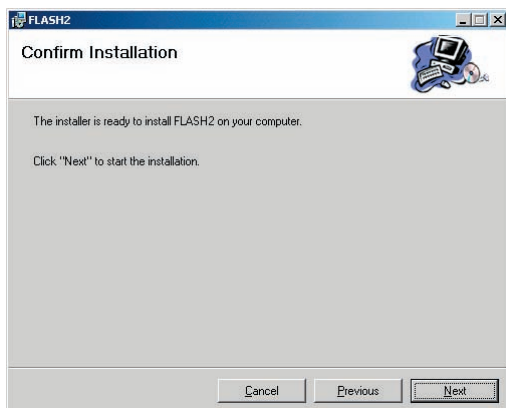
Start Installation . Click **Next**



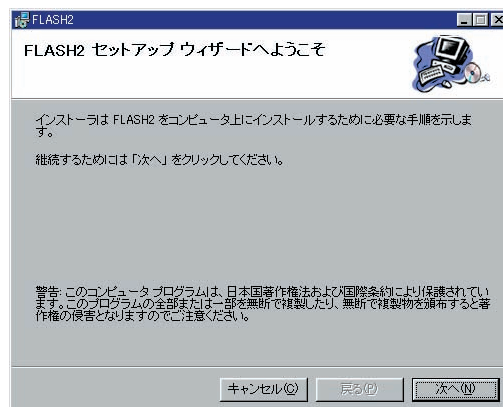
Click **Next** (when you must change the installation Folder, Select the Folder )



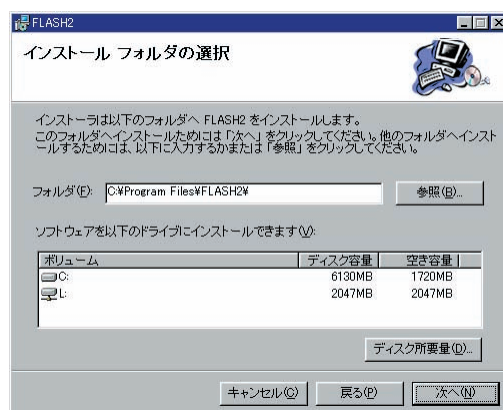
Click **Next**



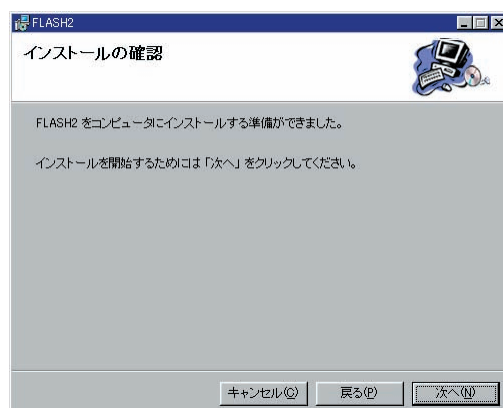
ダブルクリックをするとインストールを開始し下の様な画面が出ます。 **次へ** をクリックします。



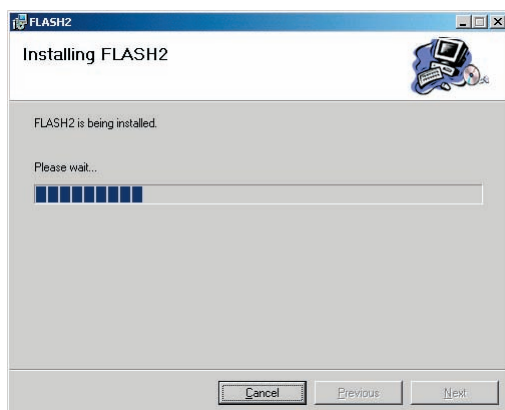
**次へ** をクリックします。  
(インストール先を聞いてきますので変更する場合は参照からインストール先を決定して、**次へ** をクリックします。)



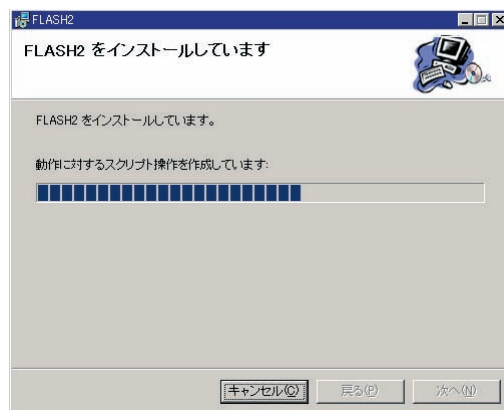
**次へ** をクリックします。



The screen becomes the installation condition.

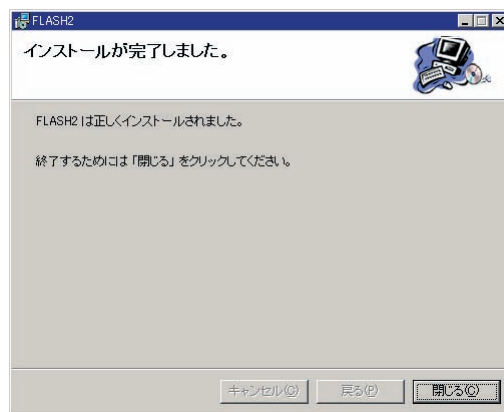
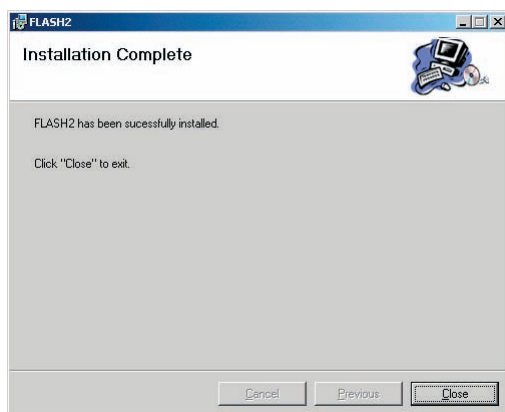


インストールを開始すると下の画面が出てインストール状態を表示します。



Click **Close**

**閉じる** をクリックします。



Installation was completed in the PC.  
The icon of Flash2 is made in the desk-top computer.

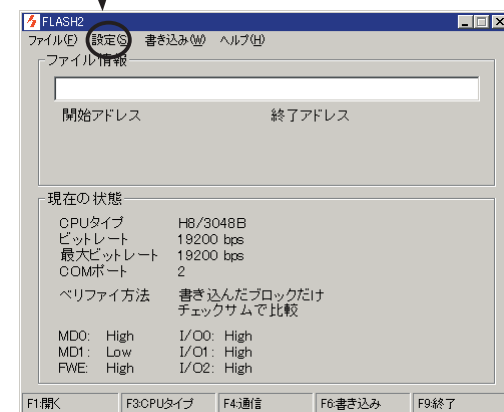
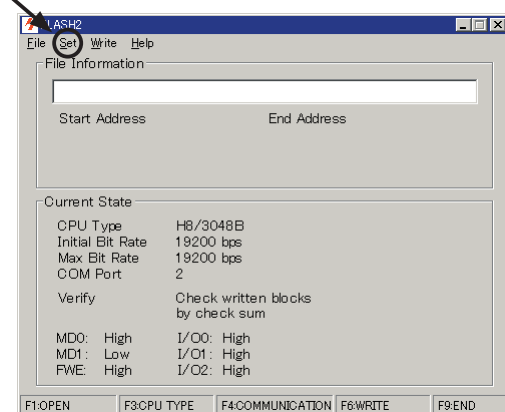
以上で Windows PC にインストールが完了し、PC デスクトップに書き込みソフト Flash2 起動用のアイコンが作成されます。

### Configuration

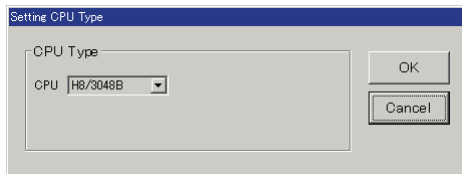
- Connect AC adapter to PMD670 and turn off (power standby mode) the unit.
- Confirm the connection of the PMD670, Flash Writer and the PC.
- Then, double click Flash2 icon.
- Setup screen appears.
- Click **Set** from Menu bar.

### 設定 (PC と PMD670 通信)

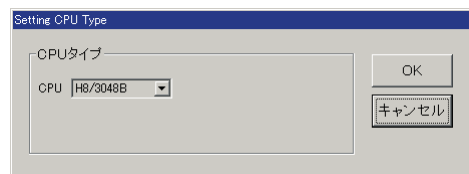
- PMD670 に AC アダプターを接続し Power Off 状態 (スタンバイ) にします。
- 全ての接続を確認したら、PC デスクトップの Flash2 アイコンをダブルクリックして起動します。
- PC と PMD670 通信のための設定画面となります。
- メニューバーの **設定** をクリックします。



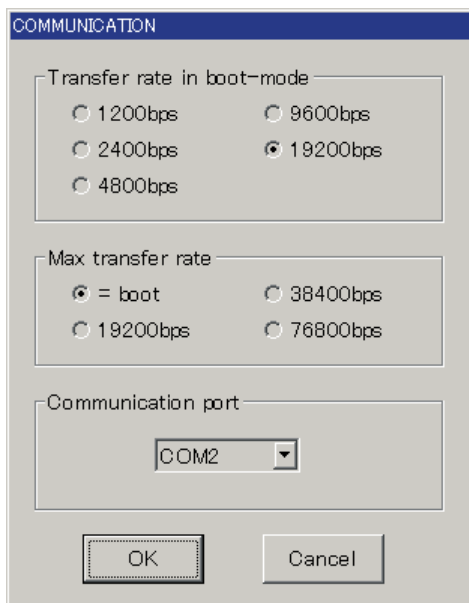
Select **H8/3048B** from **CPU type**  
Click **OK**



**CPUタイプ** を選択し **H8/3048B** を選びます。  
**OK** をクリックします。



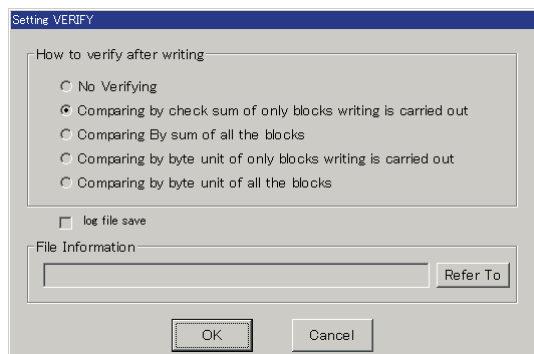
Click **Set** from Menu bar.  
Select **COMMUNICATION**  
Select Transfer rate in boot-mode : 19200bps  
Select Max transfer rate : =boot  
Select Communication port : COMx  
(Select the same COM Port number that the RS232C cable is connected.)  
Click **OK**



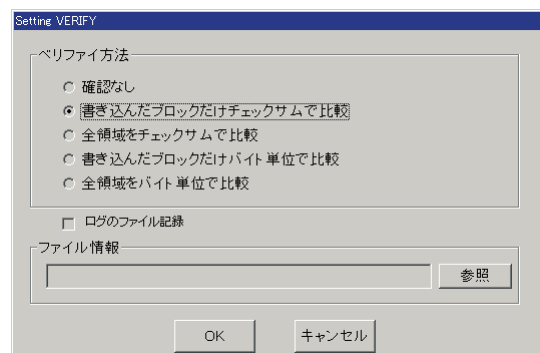
メニューバーの **設定** をクリックします。  
**COMMUNICATION** を選択し転送レート、最大転送レートおよび COM ポートを下記の設定します。  
転送レート：19200bps  
最大転送レート：=boot  
COM ポート：接続している COM ポート  
**OK** をクリックします。



Click **Set** from Menu bar.  
Select **VERIFY**  
Select **Comparing by check sum of only blocks writing is carried out** )  
Click **OK**



メニューバーの **設定** をクリックします。  
**VERIFY** を選択してバリファイ方法の **書き込んだブロックだけチェックサムで比較** を選びます。  
**OK** をクリックします。



Click **Set** from Menu bar.

Select **Terminal State**

Select **High** or **Low** from Setting Terminal State

MD0: High

MD1: Low

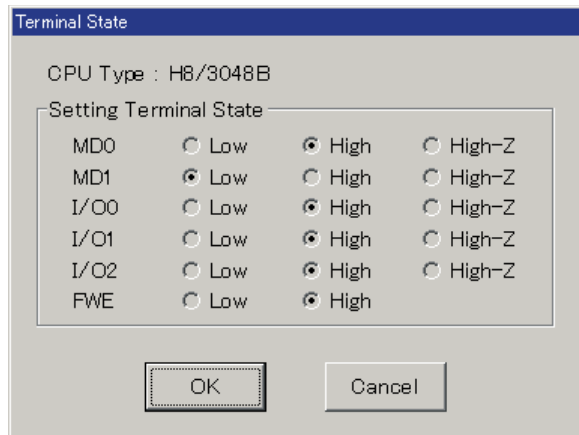
I/O0: High

I/O1: High

I/O2: High

FWE: High

Click **OK**



Finish Configuration, the next process starts uploading.

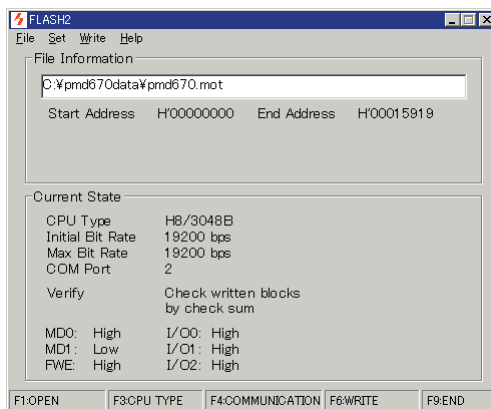
## Writing

Insert the update disc (part no : \*PMD670CDR) in to CD-R drive.

Select file name of "pmd670.mot" from the update disc.

Click **Write** from Menu bar

Select **Write**



メニューバーの **設定** をクリックします。

**Terminal State** を選択し端子設定をします。

MD0: High

MD1: Low

I/O0: High

I/O1: High

I/O2: High

FWE: High

**OK** をクリックします。



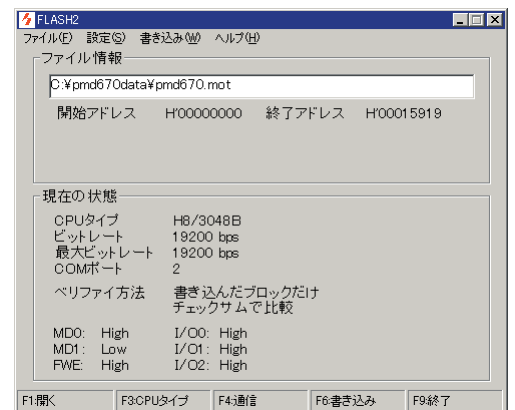
以上で設定は完了です。次に書き込みを行います。

## 書き込み

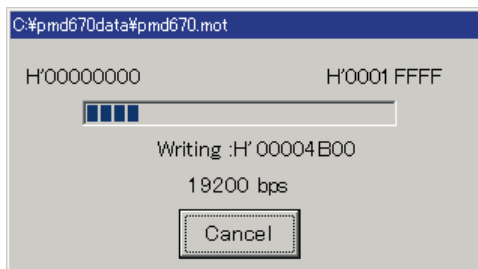
マイコンアップデートディスク (\*PMD670CDR) を CD-ROM ドライブにセットします。

メニューバーの **ファイル** をクリックして **開く** をクリックします。アップデートディスクからファイル "pmd670.mot" を選択します。

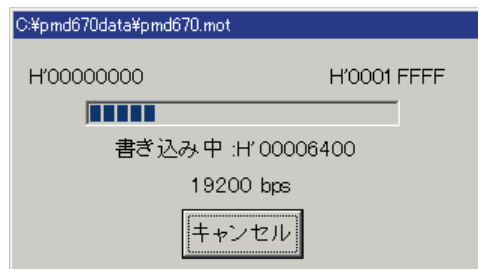
メニューバーの **書き込み** をクリックして **書き込み** を選択します。



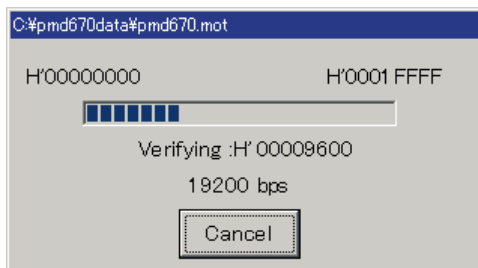
The screen becomes the uploading condition.



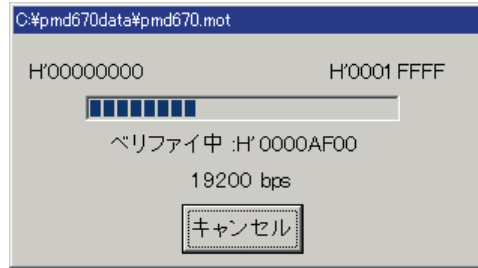
書き込みが始まると下のような画面が出て状態を表示します。



Verifing is started when writing is finished.

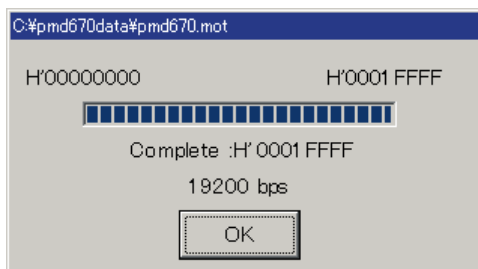


書き込みが終わると下図のようにベリファイをします。

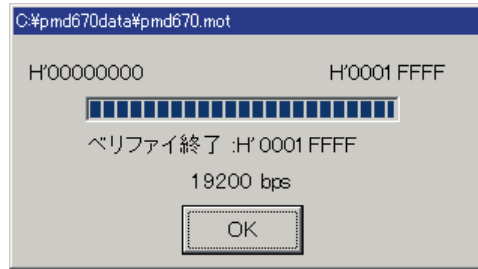


Click

The upload procedure is completed.



ベリファイ動作が完了したら  をクリックして終了します。



Disconnect USB cable from the PMD670, then turn off **POWER** switch.

PPMD670 の電源を切り USB ケーブルを外します。

### Check the version number of the firmware

Refer to 2-page "**SERVICE MODE**" for "**Micro-Processor Version check**" confirmation.

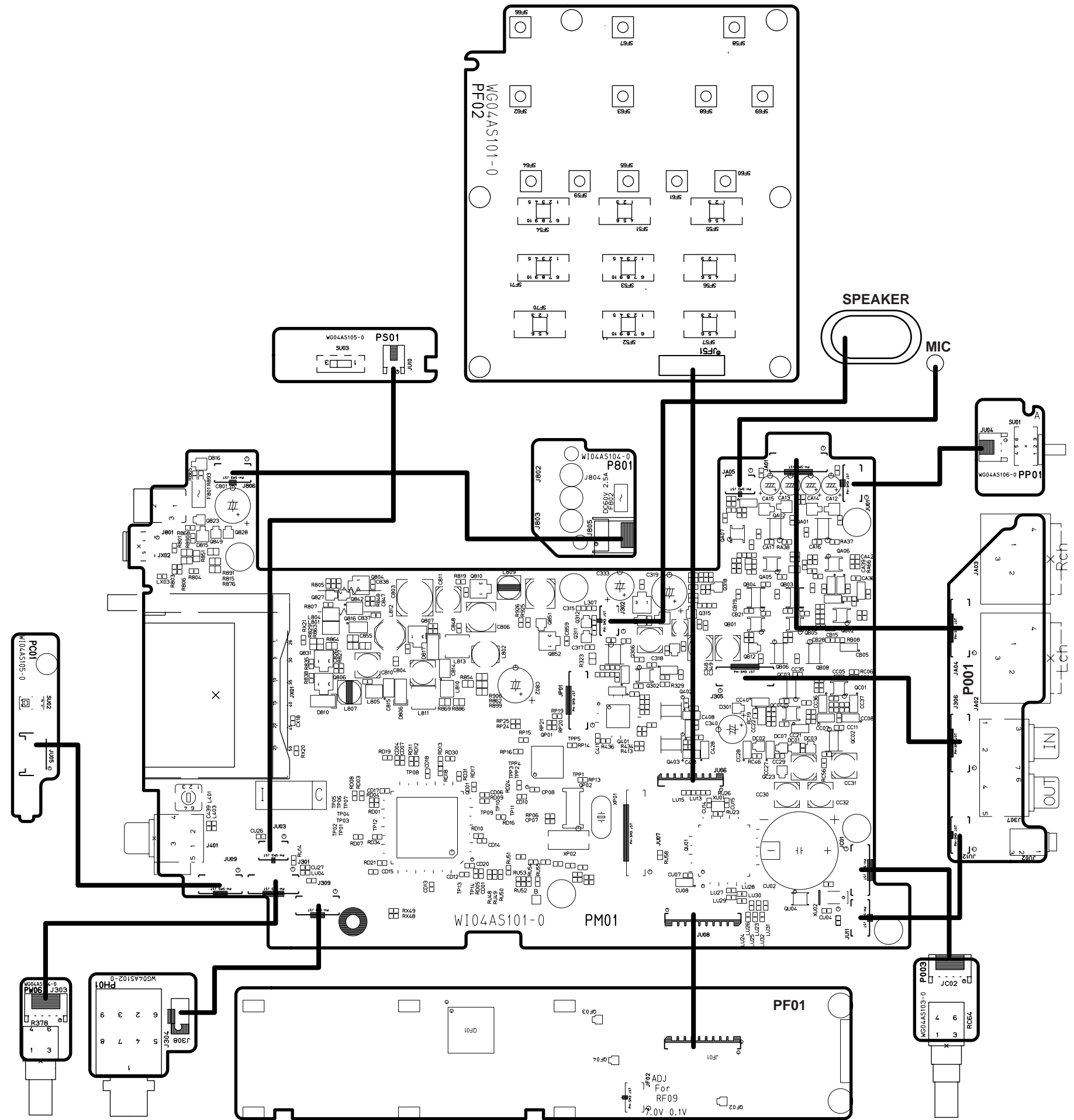
### VERSION の確認

2 ページ "**B. SERVICE モードの 1. VERSION 確認**" で確認をします。

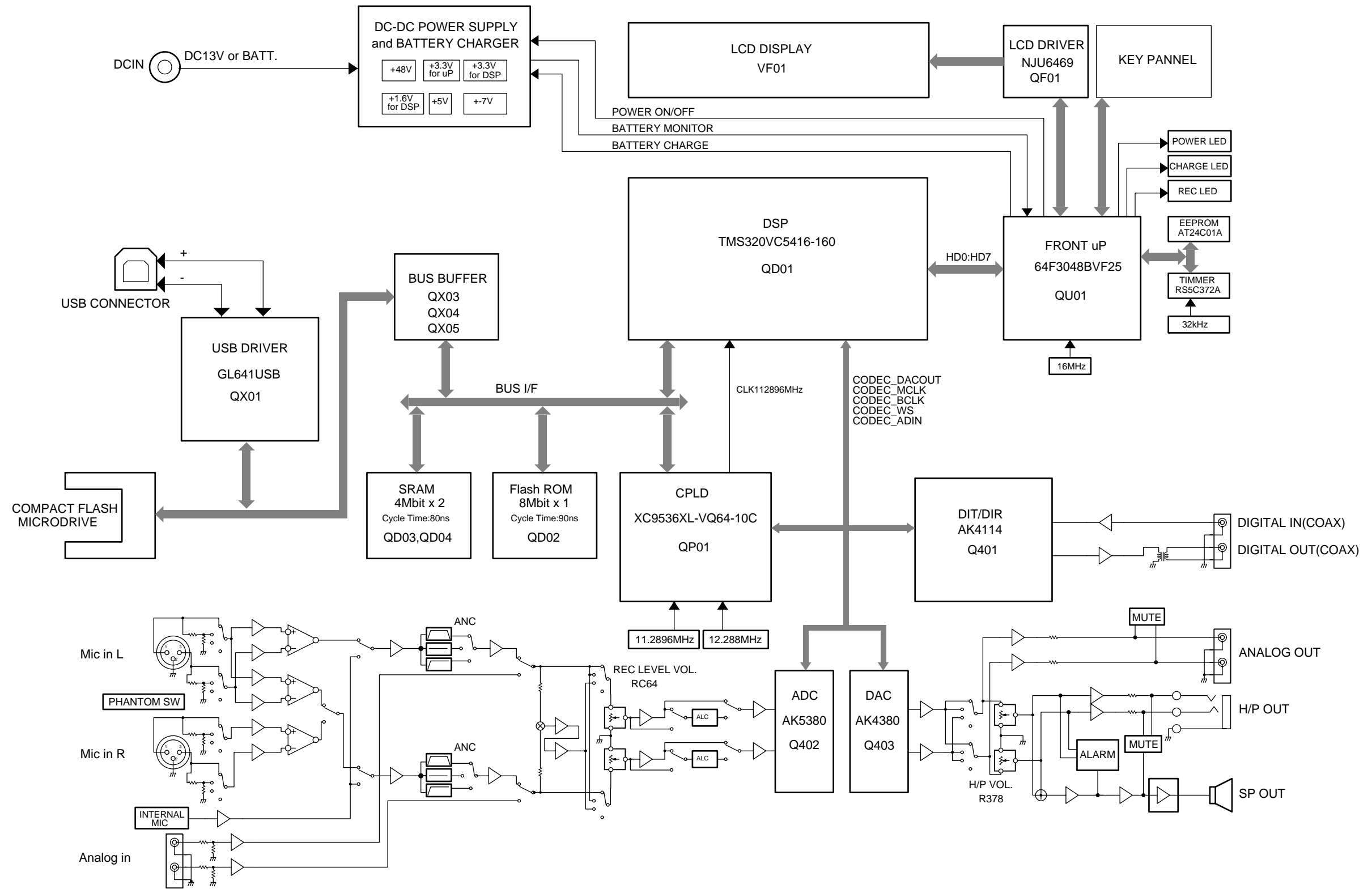
書き込んだ firmware のバージョンが正しければ書き換え完了です。



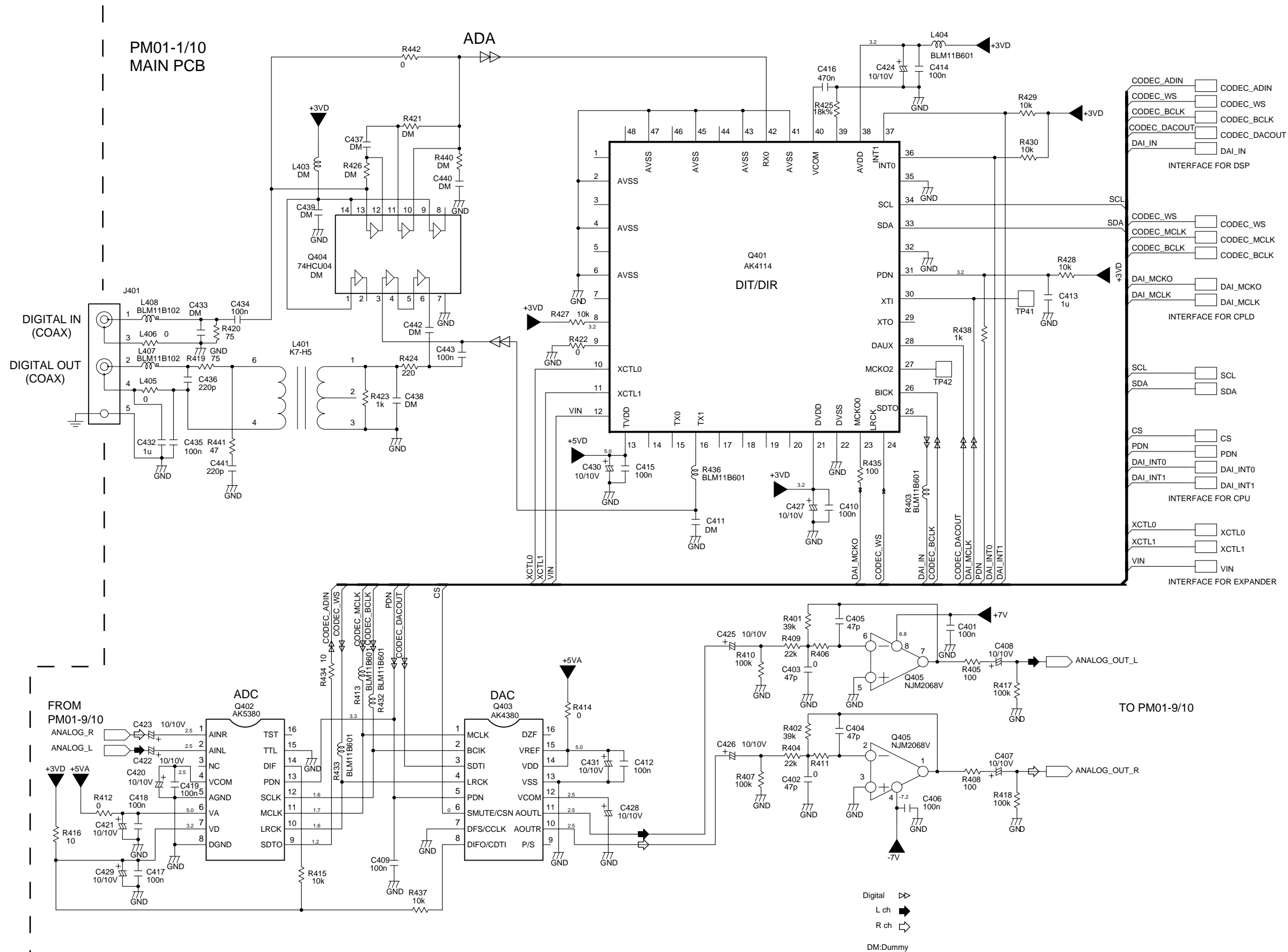
7. WIRING DIAGRAM

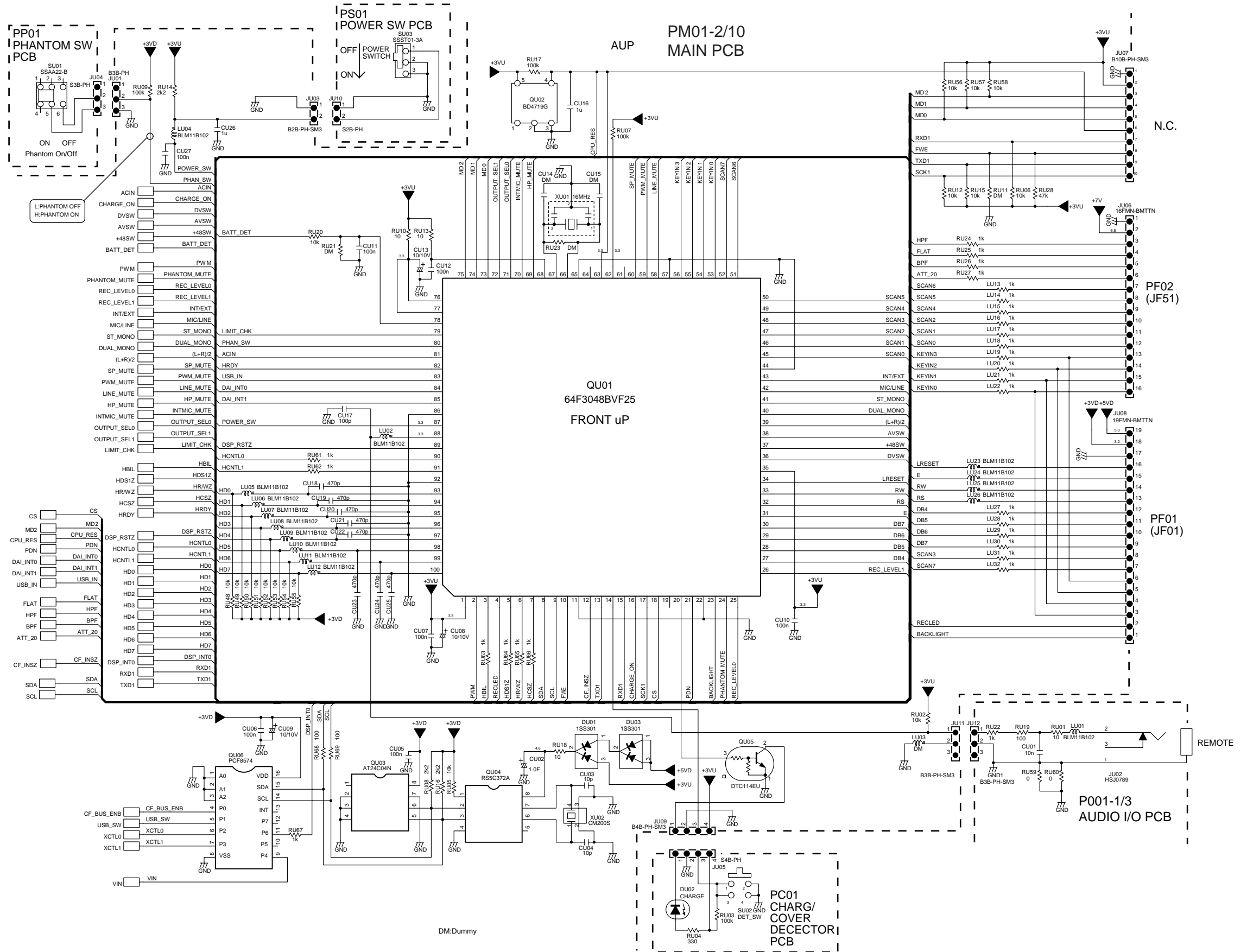


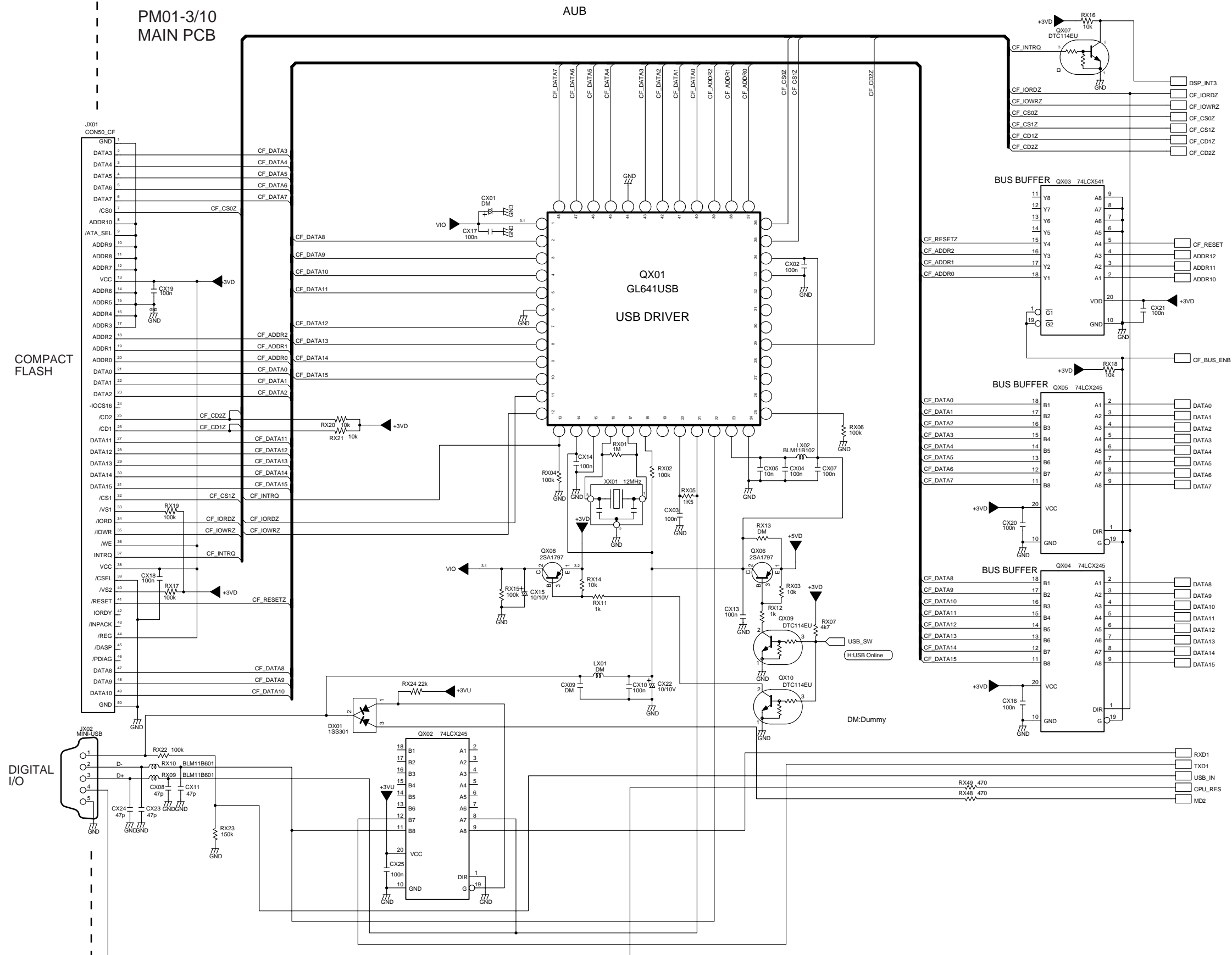
## 8. BLOCK DIAGRAM



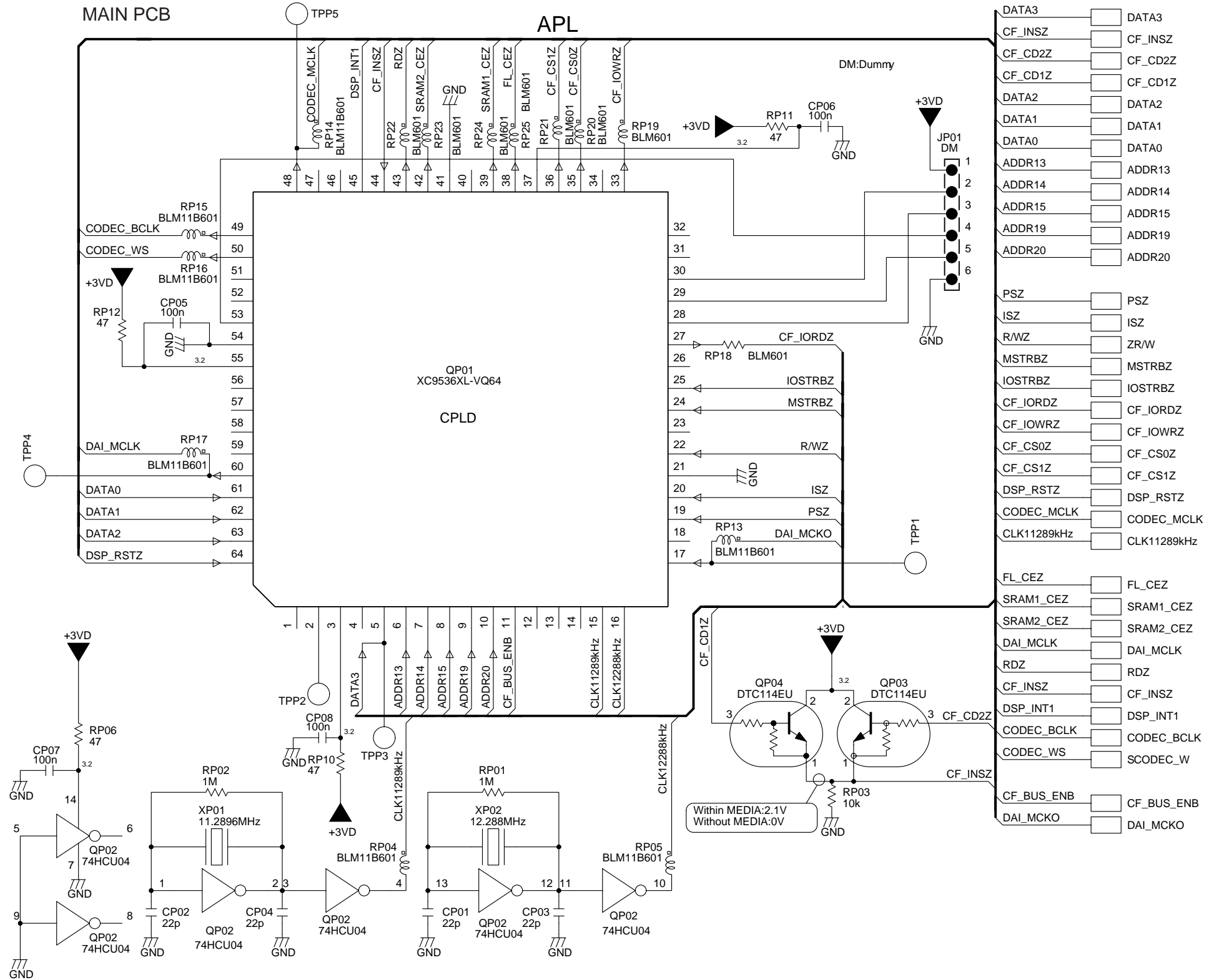
# 9. SCHEMATIC DIAGRAM



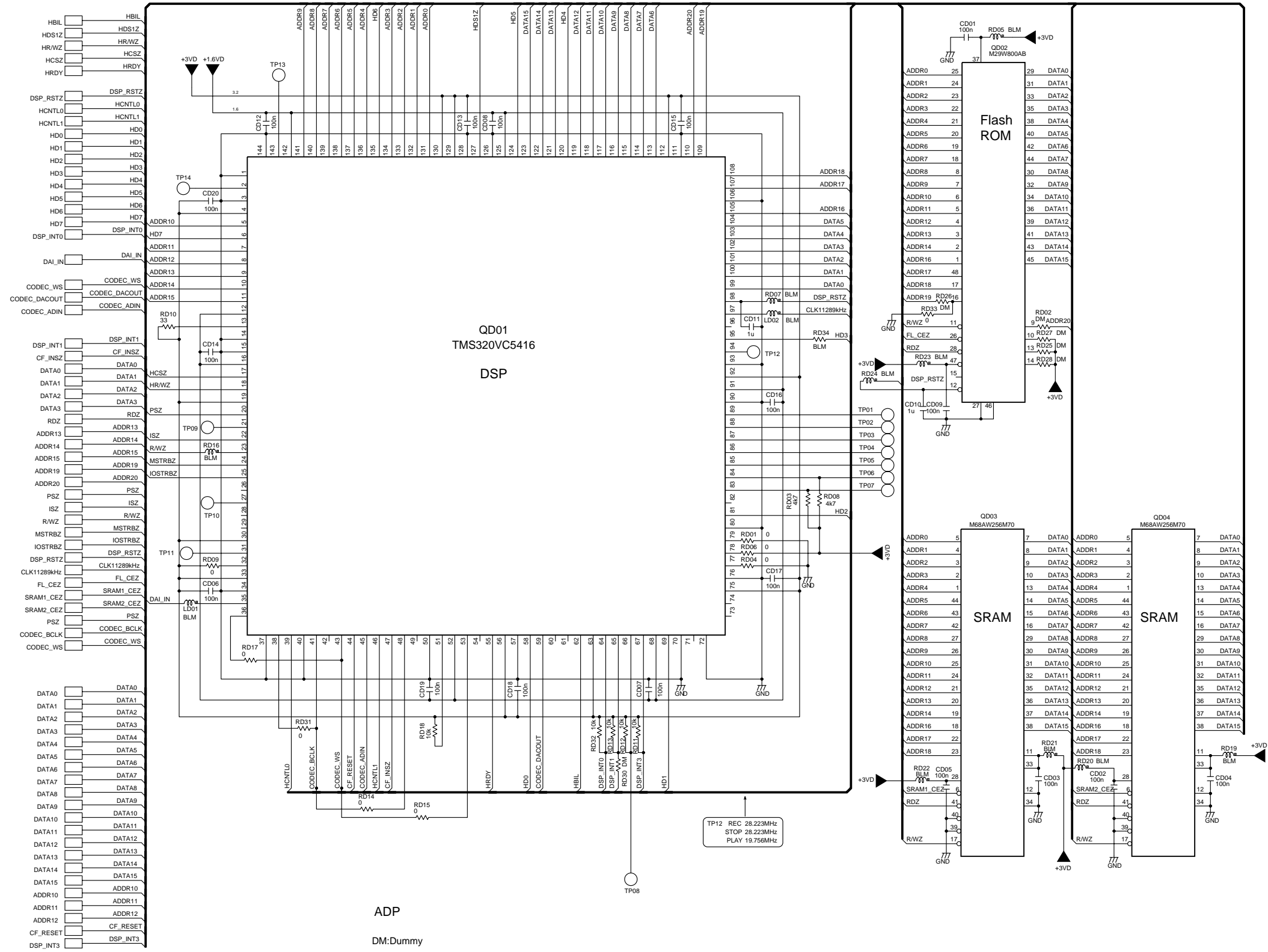


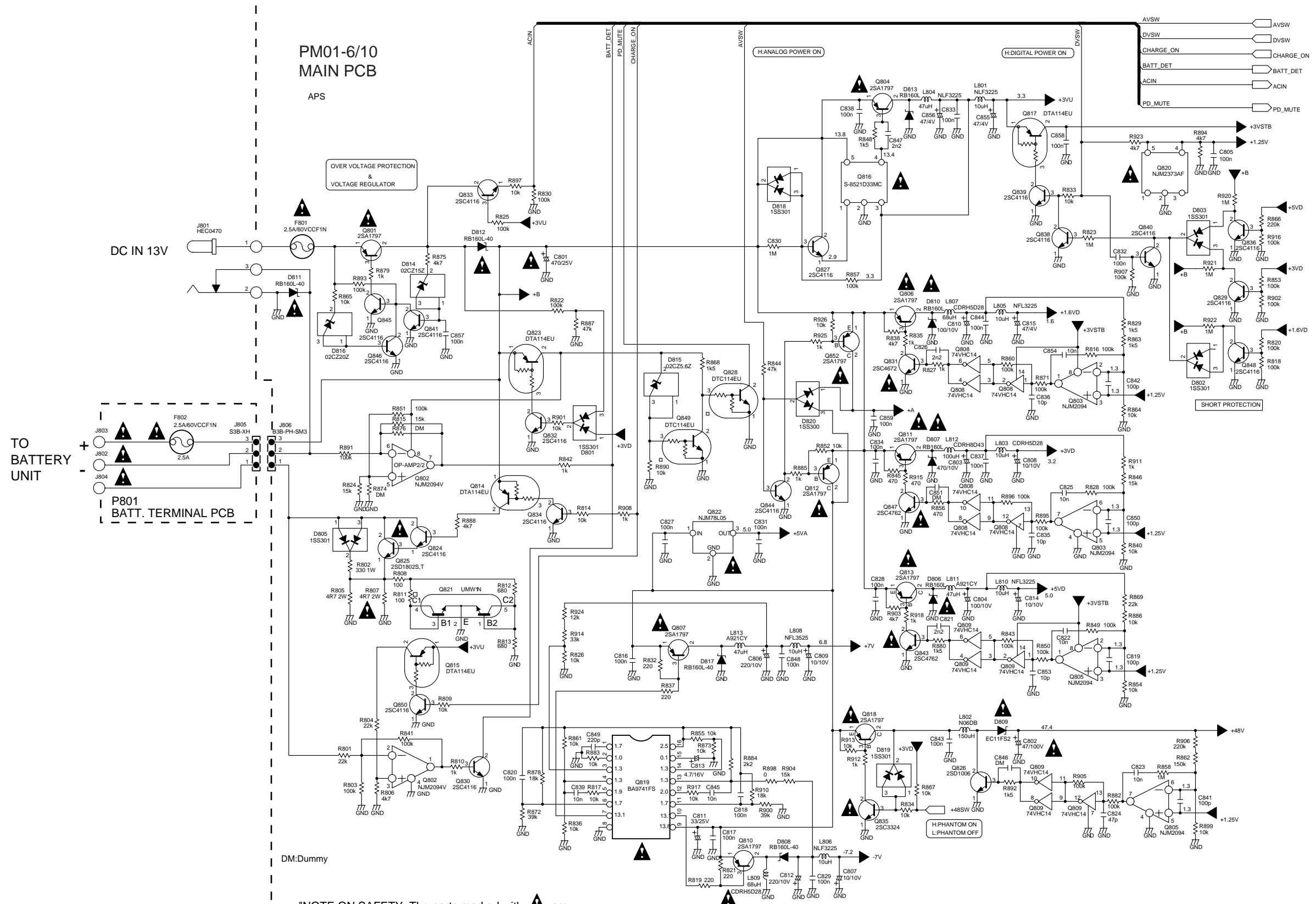


PM01-4/10  
MAIN PCB



PM01-5/10  
MAIN PCB






PM01-6/10  
MAIN PCB

APS

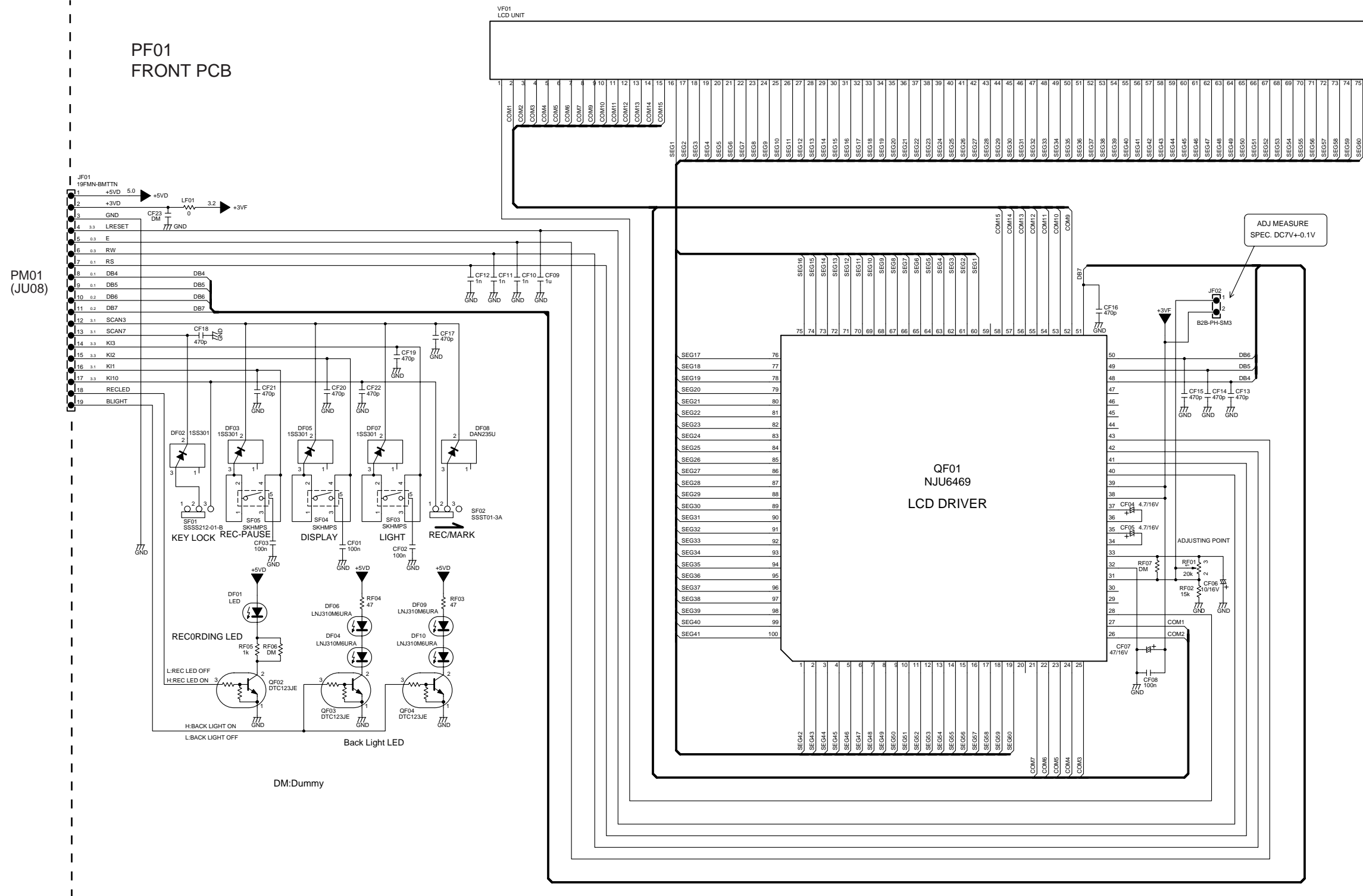
TO BATTERY UNIT

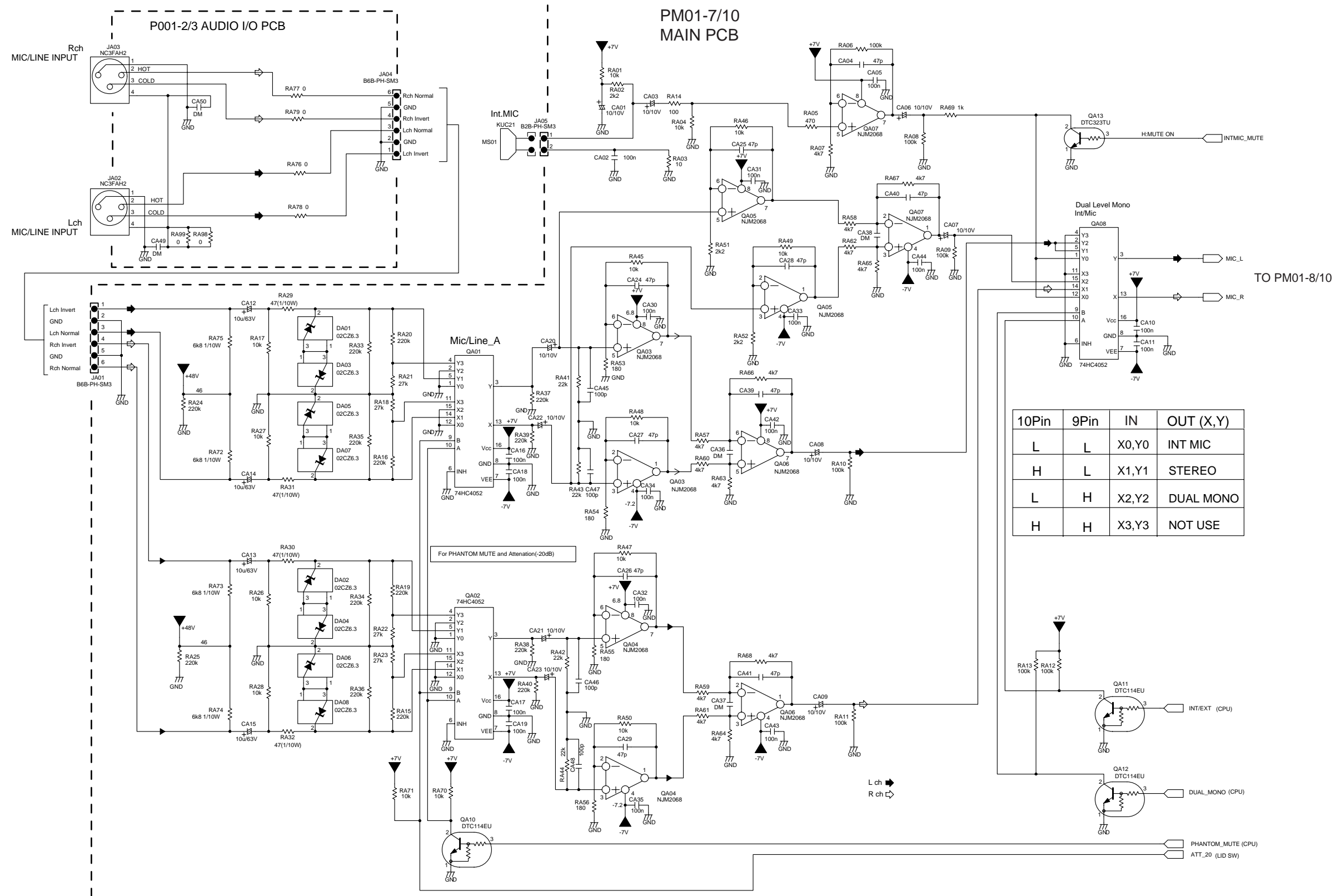
P801  
BATT. TERMINAL PCB

DM:Dummy

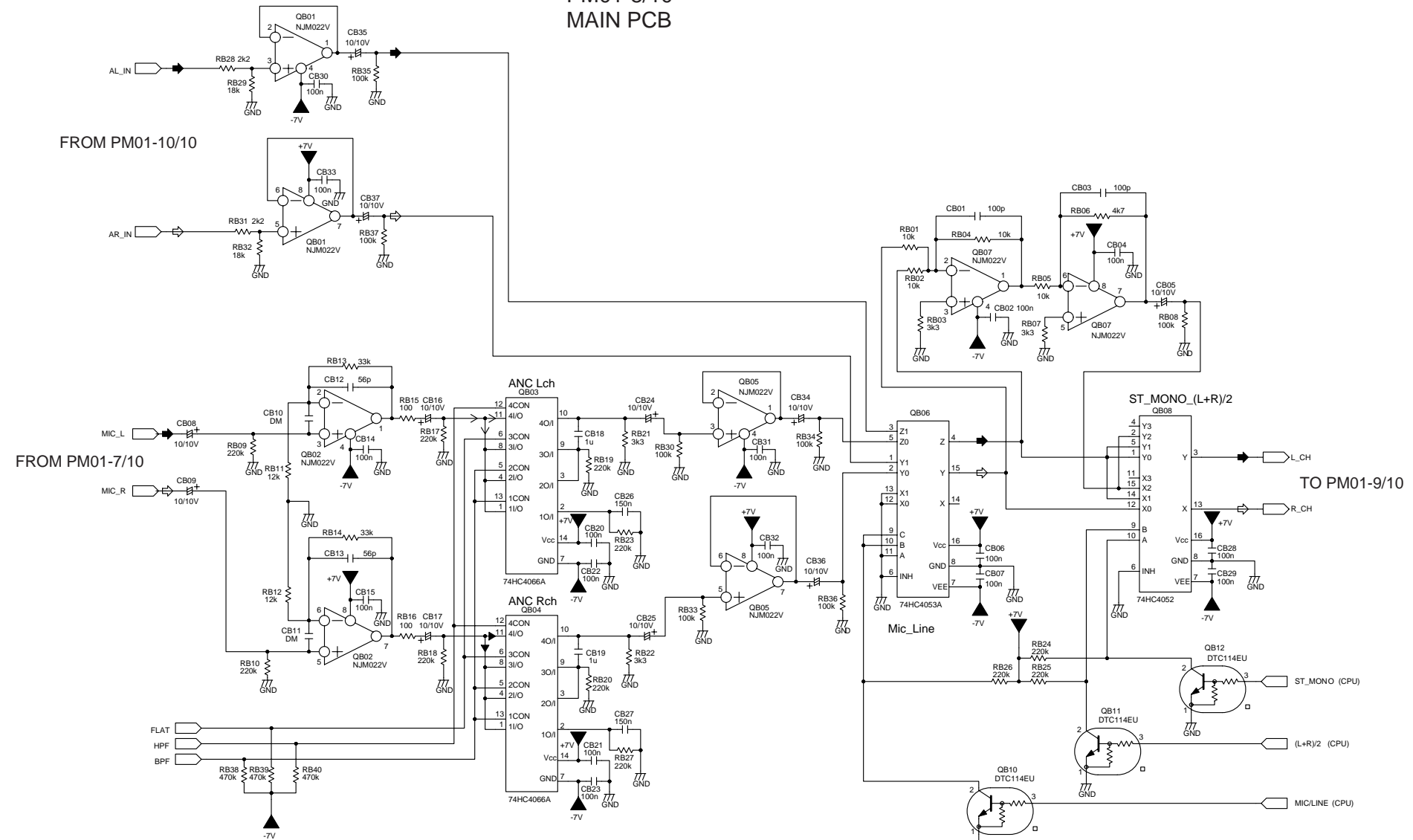
"NOTE ON SAFETY: The parts marked with  are IMPORTANT PARTS on the safety. Please use the parts having the designated parts number without fail.









PM01-8/10  
MAIN PCB

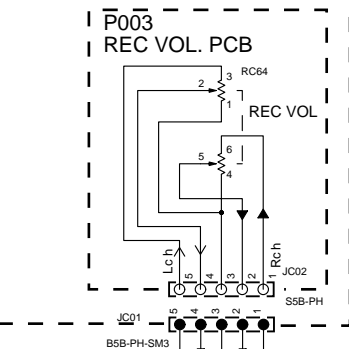
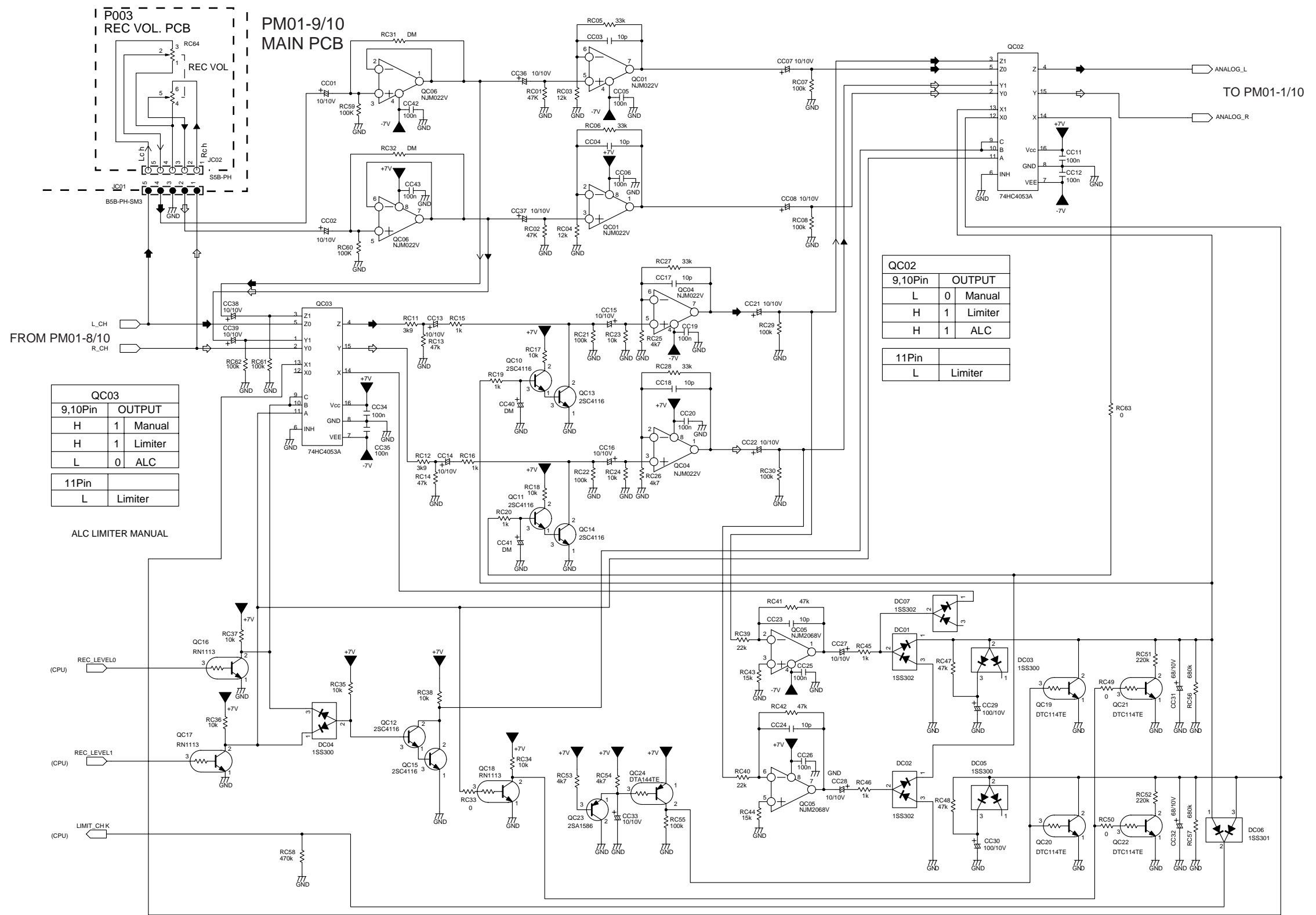


QB03 QB04	ANC (4066)			
	12	6	5	13
BPF	L	L	H	H
FLAT	H	L	L	L
HPF	L	H	L	L

QB06			
9Pin	10Pin	IN	OUT (X,Y)
L	L	Z0,Y0	Mic
L	H		NOT USE
H	L		NOT USE
H	H	Z1,Y1	Line

QB08			
9Pin	10Pin	IN	OUT (X,Y)
L	L	X0,Y0	Stereo
L	H	X1,Y1	Mono
H	L	X2,Y2	ST mono
H	H	X3,Y3	NOT USE

L ch   
R ch 



**PM01-9/10  
MAIN PCB**

**QC03**

9,10Pin	OUTPUT
H	1 Manual
H	1 Limiter
L	0 ALC

**11Pin**

L	Limiter
---	---------

ALC LIMITER MANUAL

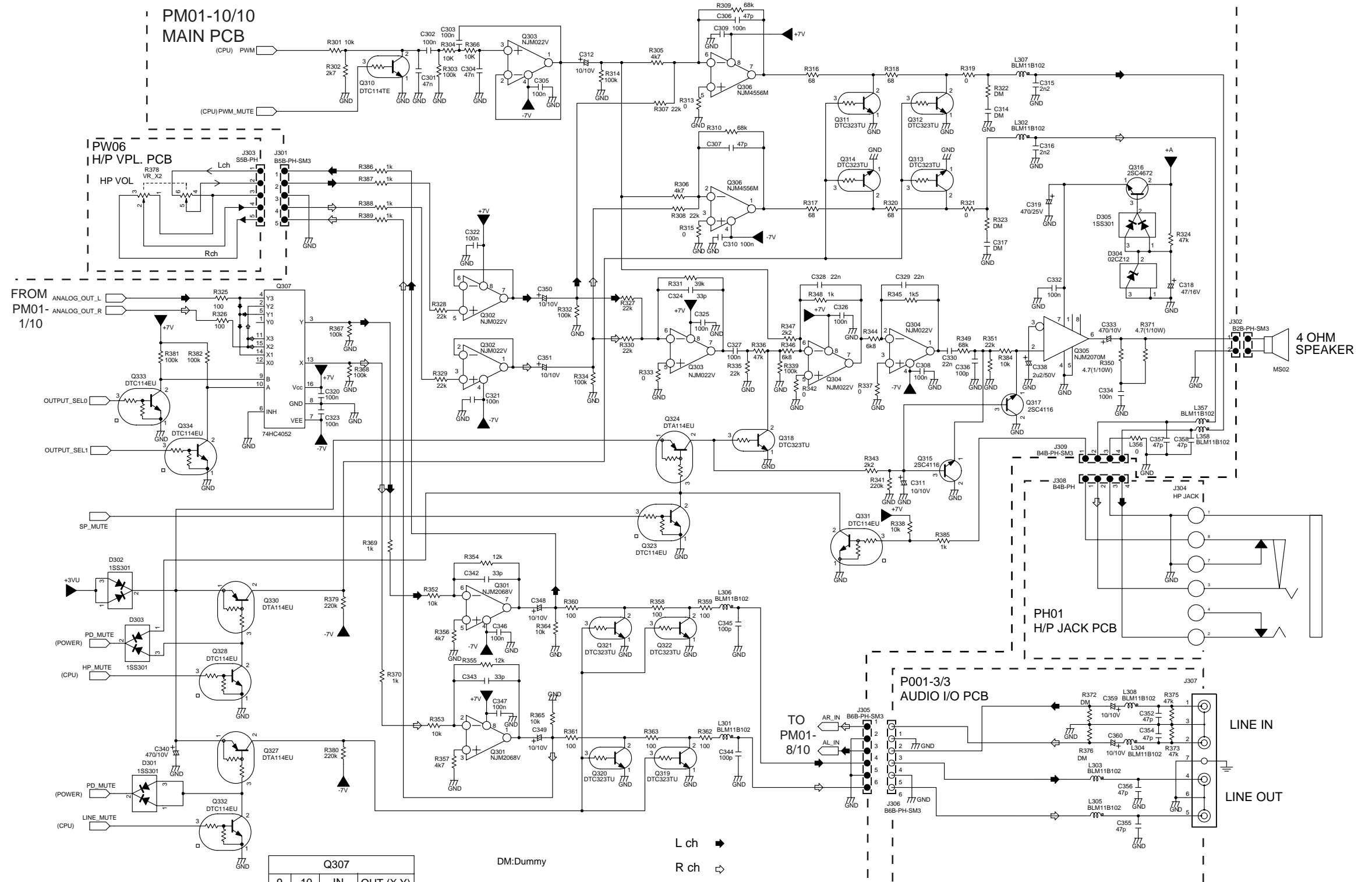
**QC02**

9,10Pin	OUTPUT
L	0 Manual
H	1 Limiter
H	1 ALC

**11Pin**

L	Limiter
---	---------

L ch →  
R ch ⇐ DM:Dummy



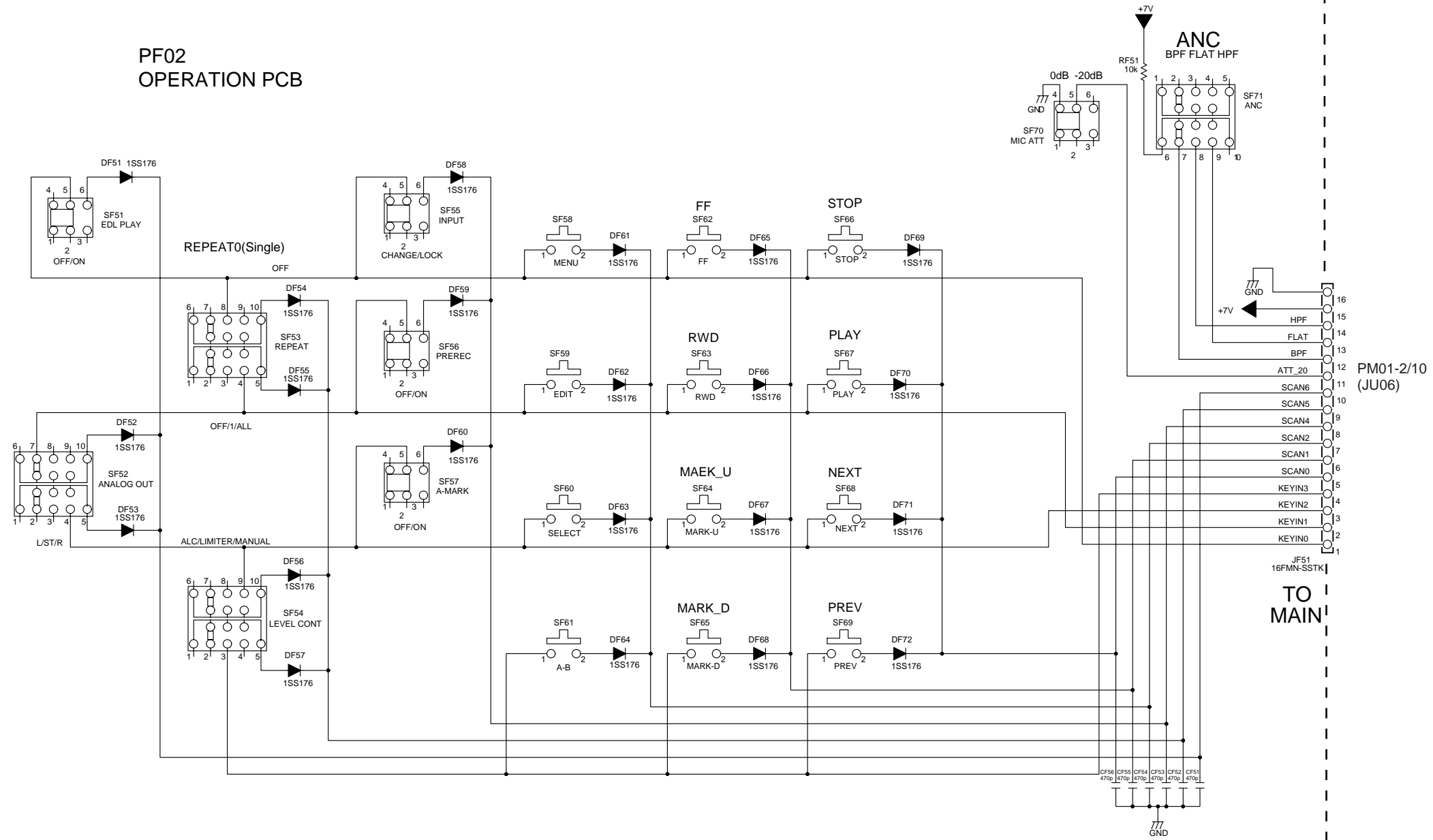
Q307

9	10	IN	OUT (X,Y)
L	H	X1,Y1	L
H	H	X3,Y3	STEREO
H	L	X2,Y2	R

DM: Dummy

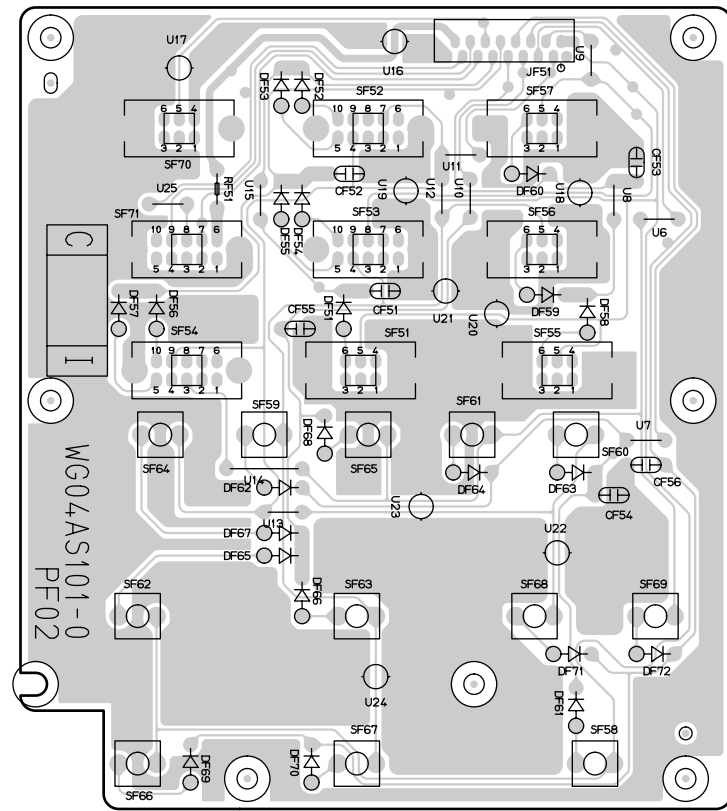
L ch →  
R ch ⇐

PF02  
OPERATION PCB

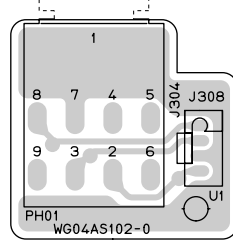


# 10. PARTS LOCATION

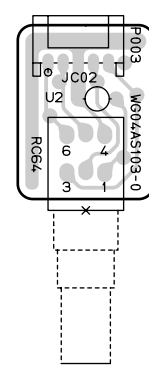
PF02



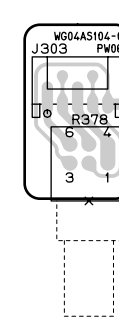
PH01



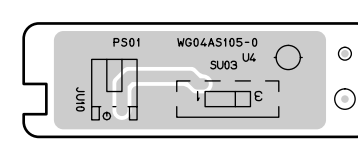
P003



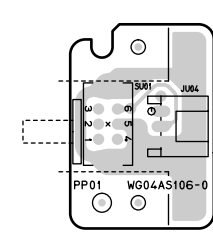
PW06



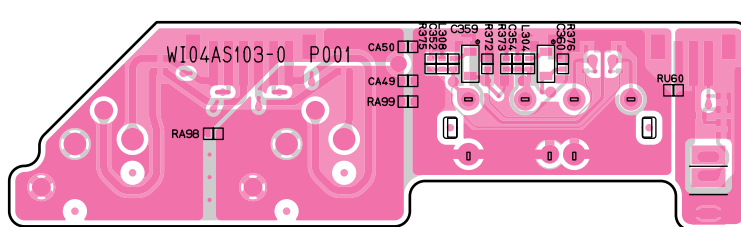
PS01



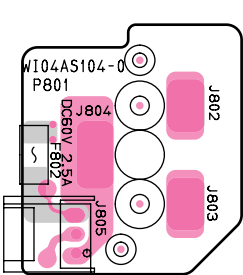
PP01



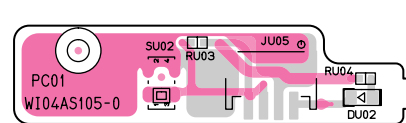
P001



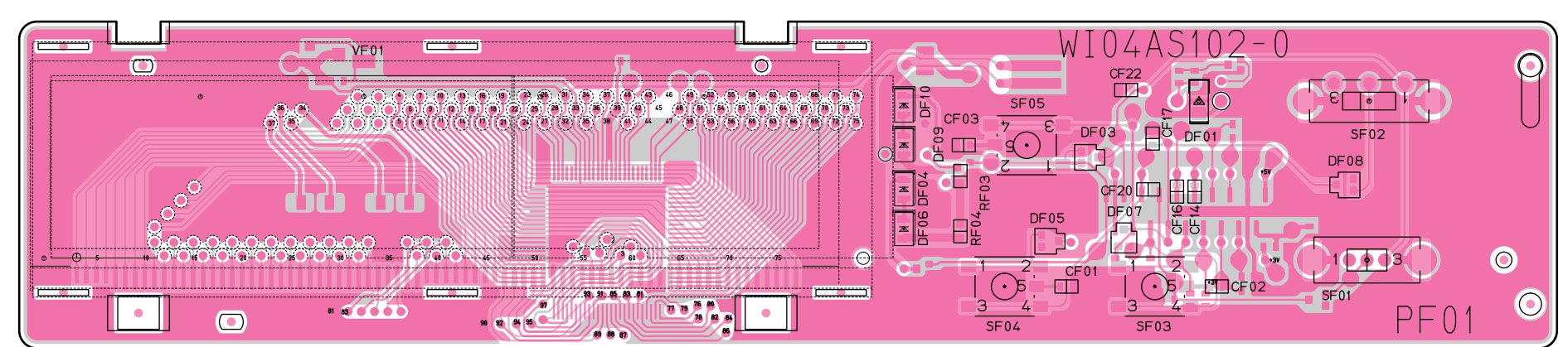
P801



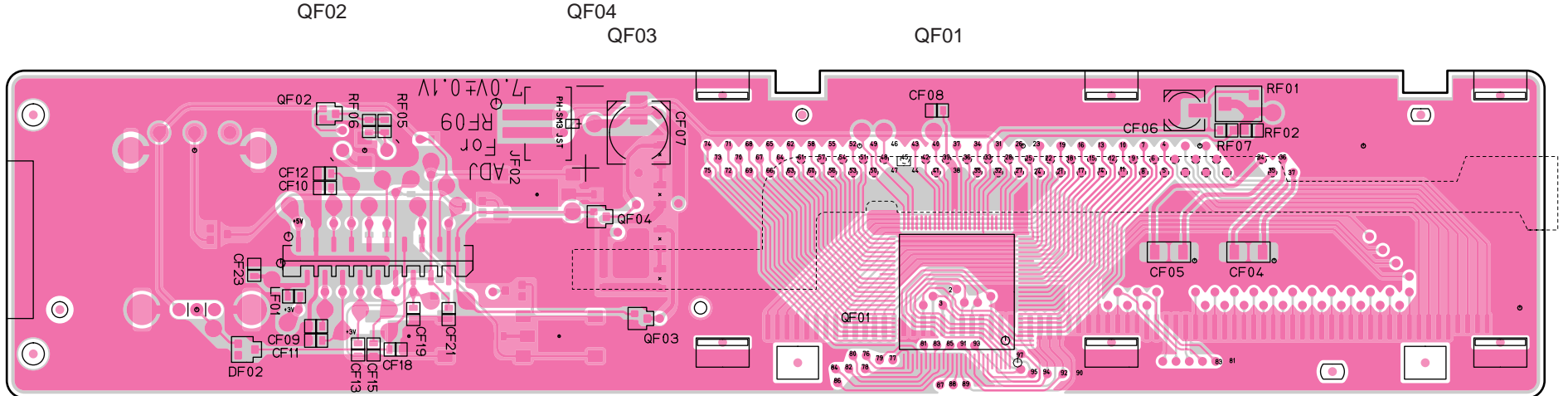
PC01



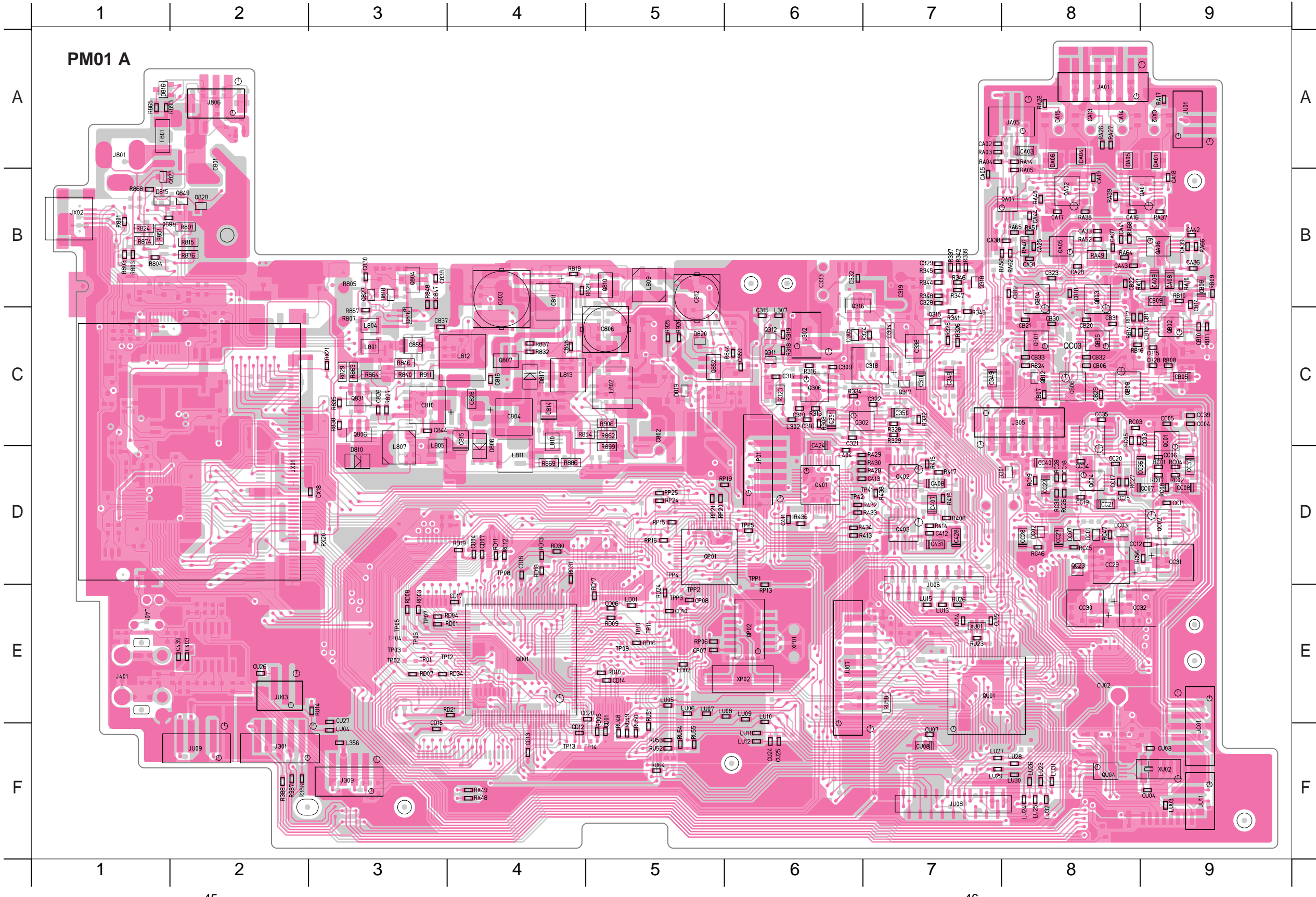
PF01 A



PF01 B



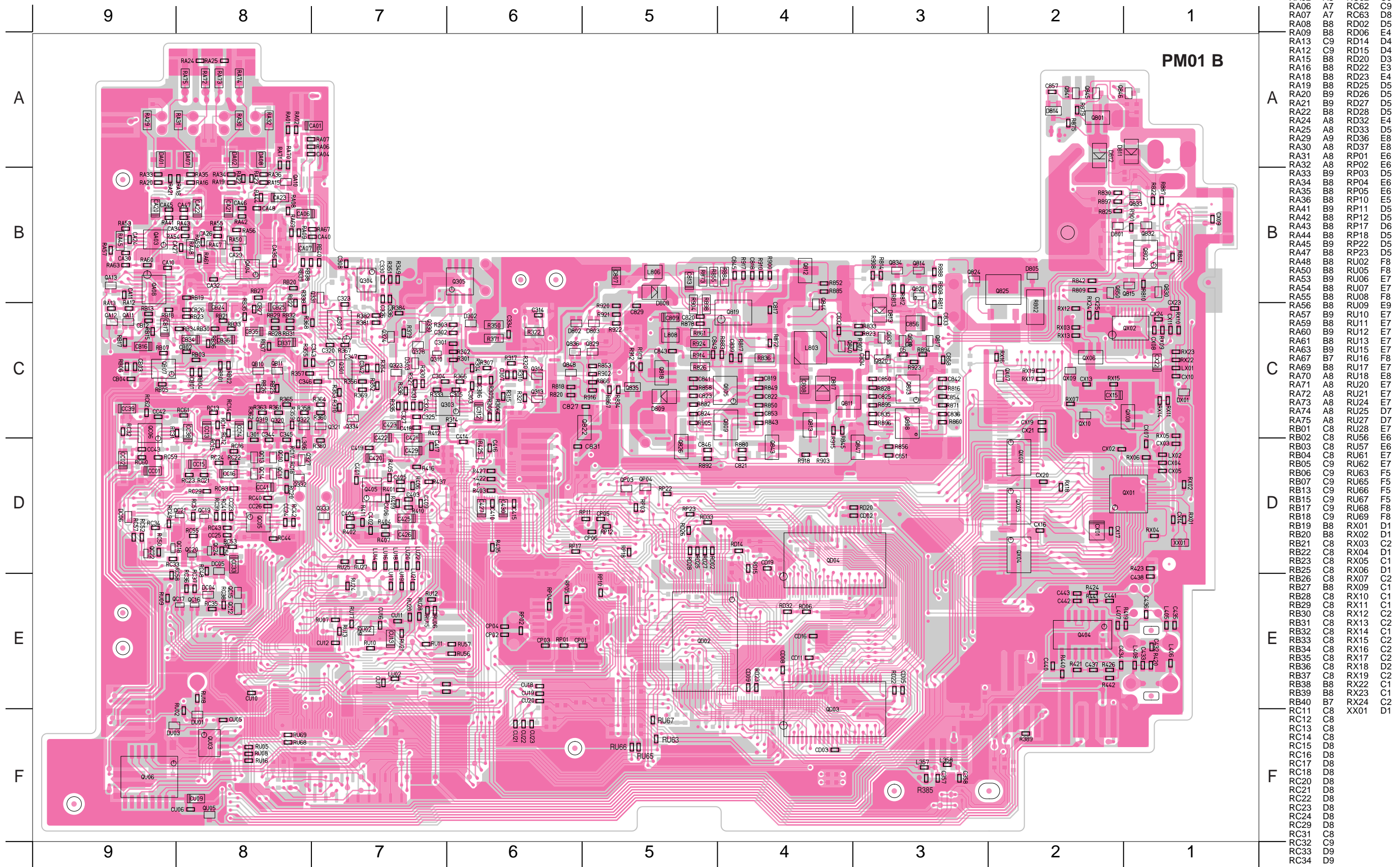
C309	C6	CC11	D9	L813	C4	LU24	F8	Q318	B7	QA02	B8	QC23	D8	R334	C6	R414	D7	R806	B1	R851	B1	R906	C5	RA39	B8	RB12	C8	RC45	D8	RD17	E5	RP25	D5	RX48	F4	TP41	D7
C310	C6	CC12	D9	LD01	E5	LU25	F8	Q401	D6	QA05	B8	QD01	E4	R337	B7	R415	D7	R807	C3	R854	C5	R911	C3	RA40	B8	RB14	C8	RC46	D8	RD18	D4	RU14	E3	RX49	F4	TP42	D6
C311	C7	CC17	D8	LD02	E5	LU26	F8	Q402	D7	QA06	B9	QP01	D5	R339	B7	R417	D7	R815	B2	R857	C3	R925	C5	RA46	B8	RB16	C8	RC47	D8	RD19	D4	RU23	E7	TP01	E3	TPP1	D6
C315	C6	CC18	D8	LU03	F9	LU27	F7	Q403	D7	QA07	B8	QP02	E6	R341	C7	R418	D7	R819	B4	R862	C5	R926	C5	RA49	B8	RB24	C8	RC56	D9	RD21	E4	RU26	E7	TP02	E3	TPP2	E5
C316	C6	CC19	D8	LU04	F3	LU28	F8	Q804	B3	QB01	C8	QU01	E7	R342	B7	R428	D7	R821	B4	R863	C3	RA03	A7	RA51	B8	RC02	D9	RD01	E3	RU24	E3	TP03	E3	TPP3	E5		
C317	C6	CC20	D8	LU05	E5	LU29	F7	Q806	C3	QB02	C9	QU04	F8	R343	C7	R429	D7	R824	B1	R864	C3	RA04	A7	RA52	B8	RC03	C8	RD03	E3	RU25	F5	TP04	E3	TPP4	D5		
C318	C7	CC22	D8	LU06	E5	LU30	F8	Q807	C4	QB03	B8	R308	C6	R344	B7	R430	D7	R827	C3	R865	A1	RA05	B8	RA58	B8	RC04	D9	RD04	E3	RU26	F5	TP05	E3	TPP5	D6		
C319	B7	CC27	D8	LU07	E5	LU31	F8	Q810	B5	QB04	B8	R313	C6	R345	B7	R432	D6	R829	C3	R868	B1	RA10	B9	RA62	B8	RC05	C8	RD05	F5	RU51	F5	TP06	E3	XP01	E6		
C321	C6	CC28	D8	LU08	E6	LU32	F8	Q816	C3	QB05	C8	R316	C6	R346	B7	R433	D6	R832	C4	R869	D4	RA11	B9	RA64	B8	RC06	C9	RD07	E3	RU52	F5	TP07	E3	XP02	E6		
C322	C7	CC29	D8	LU09	E6	Q302	C6	Q823	B1	QB06	C8	R323	C6	R347	B7	R434	D6	R835	C3	R874	B1	RA14	A8	RA65	B8	RC07	D9	RD08	E3	RU53	F5	TP08	D4	XU01	E7		
C328	B7	CC30	E8	LU10	E6	Q306	C6	Q827	B3	QB08	C8	R324	C7	R348	B7	R436	D6	R837	C4	R876	B2	RA17	A9	RA66	B9	RC08	D9	RD09	E5	RU54	F5	TP09	E5	XU02	F9		
C329	B7	CC31	D9	LU11	F6	Q311	C6	Q828	B2	QB12	C8	R325	C7	R386	F2	R438	D7	R838	C3	R886	D4	RA26	A8	RA68	B8	RC19	D8	RD10	E5	RU55	F5	TP10	E5				
C332	B6	CC32	E9	LU12	F6	Q312	C6	Q831	C3	QC01	C9	R326	C7	R387	F2	R801	B1	R840	C3	R890	B1	RA27	A8	RB08	C9	RC26	D8	RD11	D4	RU58	E7	TP11	E5				
C333	B6	CC34	D8	LU13	E7	Q315	C7	Q849	B2	QC02	D9	R328	C7	R388	F2	R803	B1	R844	C6	R891	B2	RA28	A8	RB09	B9	RC27	D8	RD12	D4	RU64	F5	TP12	E3				
C338	C7	CC35	C8	LU15	E7	Q316	B6	Q852	C5	QC03	C8	R329	C7	R408	D7	R804	B1	R846	C3	R893	A1	RA37	B9	RB10	B9	RC28	D8	RD13	D4	RX20	D3	TP13	F4				
C348	C7	CC36	D9	LU23	F8	Q317	C7	QA01	B9	QC04	D8	R332	C7	R413	D6	R805	B3	R848	B3	R899	D5	RA38	B8	RB11	C9	RC30	D8	RD16	E5	RX21	C3	TP14	F5				



C401	D6	CD07	D4
C412	D7	CD10	E5
C413	D7	CD12	F4
C424	D6	CD13	F4
C428	D7	CD14	E5
C431	D7	CD15	F3
C439	E2	CD17	E4
C801	A2	CD18	D4
C802	C5	CD20	E5
C803	B4	CP07	E5
C804	C4	CP08	E5
C806	C5	CU02	E9
C810	C3	CU03	F9
C811	B4	CU04	F9
C812	B5	CU07	F7
C814	C4	CU08	F7
C815	C4	CU14	E7
C816	C4	CU15	E7
C826	C3	CU24	F6
C828	C4	CU25	F6
C830	B3	CU26	E2
C837	C3	CU27	E3
C838	B3	CX18	D3
C844	C3	D301	D8
C847	B3	D304	C7
C848	C4	D305	C6
C855	C3	D806	D4
C859	C6	D810	D3
CA02	A7	D815	B1
CA03	A8	D816	A1
CA05	B7	D817	C4
CA08	B9	D818	B3
CA09	B9	D819	C5
CA12	A9	D820	C5
CA13	A8	DA03	A9
CA14	A8	DA04	A8
CA15	A8	DA05	A8
CA16	B8	DA06	A8
CA17	B8	DC01	D8
CA19	B8	DC02	D8
CA25	B8	DC03	D8
CA31	B8	DC07	D8
CA33	B8	FB01	A1
CA36	B9	J301	F2
CA37	B8	J305	C8
CA38	B8	J309	F3
CA39	B9	J401	E1
CA41	B8	J801	A1
CA42	B9	J806	A2
CA43	B8	JA01	A8
CA44	B8	JA05	A8
CB05	C9	JC01	E9
CB06	C8	JP01	D6
CB07	C8	JU01	A9
CB08	B9	JU03	E2
CB09	B9	JU06	E7
CB10	C9	JU07	E6
CB11	C9	JU08	F7
CB13	C9	JU09	F2
CB14	B9	JU11	F9
CB15	C9	JX01	D2
CB18	B8	JX02	B1
CB19	B8	L302	C6
CB20	C8	L307	C6
CB21	C8	L356	F3
CB22	B8	L401	E1
CB23	B8	L403	E2
CB28	C9	L404	D6
CB30	C8	L801	C3
CB31	C8	L802	C5
CB32	C8	L804	C3
CB33	C8	L805	D3
CC03	C8	L807	D3
CC04	C9	L809	B5
CC05	C9	L810	C4
CC07	D9	L811	D4
CC08	D9	L812	C4



C301	C6	C343	C7	C418	C7	C443	E2	C835	C3	CA20	B9	CB04	C9	CC26	D8	CP06	D5	CX07	D1	D802	C6	L301	D8	LX04	D1	Q332	D8	Q821	B3	Q847	D3	QC15	E8	QX03	D2	R320	C6	R360	C7	R403	D6	R437	D7	R828	C3	R871	C3	R902	C5	RC35	E8
C302	C6	C344	D8	C419	D7	C805	C3	C836	C4	CA21	B8	CB12	C9	CC33	D8	CU05	D5	CX08	D1	D803	C5	L305	D8	LX04	D1	Q333	D8	Q822	B3	Q848	D3	QC16	E8	QX04	D2	R321	C6	R361	C7	R404	D6	R440	D7	R830	C3	R872	C4	R903	C5	RC36	E8
C303	C6	C345	D8	C420	D7	C807	B5	C839	C4	CA22	B8	CB16	C9	CC38	D8	CU06	D5	CX09	B1	D805	C5	L357	D8	LX04	D1	Q334	D7	Q824	B2	Q850	C6	QC17	E8	QX05	D2	R322	C6	R362	C7	R405	D7	R833	C3	R873	C5	R904	C5	RC37	D8		
C305	C6	C346	C7	C421	C7	C808	C4	C841	C5	CA23	B9	CB17	C9	CC39	D9	CU09	F8	CX10	C1	D807	C4	L358	D8	LX04	D1	Q335	D7	Q825	B2	Q851	B9	QC18	D9	QX06	C2	R323	C7	R363	C8	R406	D7	R834	C5	R875	C5	R905	C5	RC40	D8		
C306	C6	C347	F3	C422	C7	C813	B5	C842	C3	CA24	B9	CB24	C9	CC41	D8	CU10	E8	CX11	C1	D808	C5	L405	D8	LX04	D1	Q336	D7	Q826	D5	Q852	B8	QC19	D9	QX07	C2	R330	C7	R364	C8	R407	D7	R835	C2	R878	C5	R907	C3	RC41	D8		
C307	C6	C357	F3	C423	C7	C817	C4	C845	B4	CA26	B8	CB25	C8	CC42	C9	CU11	E7	CX13	C2	D809	C5	L406	D8	LX04	D1	Q337	D7	Q827	C5	Q853	B9	QC20	D8	QX08	C1	R331	C7	R366	C7	R409	D7	R836	B3	R841	B1	R880	D4	R908	B3	RC42	D8
C308	B7	C358	F3	C425	D7	C818	B4	C846	D5	CA27	B8	CB26	C8	CC43	D9	CU12	E7	CX14	D2	D811	A1	L407	E2	Q307	C7	Q802	B1	Q830	B1	QA11	C9	QC21	D8	QX09	C2	R335	C7	R367	C7	R410	D7	R809	B2	R842	B2	R882	C5	R910	B4	RC43	D8
C308	B7	C401	D7	C426	D7	C819	C4	C850	C3	CA29	B8	CB27	C8	CC43	D3	CU13	E7	CX15	C2	D812	A2	L408	E1	Q310	C7	Q803	C3	Q832	B1	QA12	C9	QC22	D9	QX10	C2	R336	C7	R368	C7	R411	D7	R810	B1	R843	C4	R883	C4	R912	C5	RC44	D8
C312	C6	C402	D7	C427	D6	C820	C5	C851	D3	CA30	B9	CB34	C8	CC44	D3	CU16	E7	CX16	D2	D814	A2	L803	C4	Q313	C6	Q805	C4	Q833	B1	QA12	C9	QC24	D8	R301	C6	R338	C8	R369	C7	R412	C7	R811	C3	R845	C4	R884	B4	R913	C5	RC48	D8
C314	C6	C403	D7	C429	D7	C821	D4	C853	C3	CA32	B8	CB35	C8	CC45	E3	CU17	E7	CX17	D2	D831	C3	L806	B5	Q314	C6	Q808	C3	Q834	B3	QA13	B9	QC25	E5	R302	C6	R349	B7	R370	C7	R416	D7	R812	B3	R849	C4	R885	B4	R914	C5	RC49	D9
C320	C7	C404	D7	C430	D6	C822	C4	C854	C3	CA34	B8	CB36	C8	CC48	E4	CU18	E6	CX19	C2	DA01	A9	LU02	E7	Q319	C8	Q809	C4	Q835	C5	QB07	F4	R303	C6	R350	C6	R356	C7	R371	C6	R419	E1	R813	B3	R850	C4	R887	B1	R915	C4	RC50	D9
C323	B7	C405	D7	C432	E1	C823	C5	C856	C3	CA35	B7	CB37	C8	CC49	E4	CU19	E6	CX20	D2	DA02	A8	LU14	D7	Q320	C8	Q811	C4	Q836	C6	QB10	C8	QC04	D4	R304	C6	R351	B7	R379	C7	R420	E1	R814	B3	R852	B4	R888	B3	R916	C5	RC51	D8
C323	C7	C406	D7	C433	E1	C824	C5	C857	A2	CA40	B8	CB37	C8	CC49	E4	CU20	E6	CX21	C2	DA07	A8	LU16	D7	Q321	C7	Q812	B4	Q838	C4	QB11	C8	QC03	D5	R305	C6	R352	C7	R380	D7	R421	E2	R816	C3	R853	C5	R892	D5	R917	B4	RC52	D9
C324	C7	C409	D7	C434	E2	C825	C3	C858	C3	CA45	B9	CC13	C8	CC16	E4	CU22	F6	CX22	C1	DA08	A8	LU17	D7	Q322	C8	Q813	C4	Q839	C3	QC05	D8	QC04	D5	R306	C6	R353	C7	R381	C7	R422	E2	R817	C4	R855	B5	R894	C3	R918	D4	RC53	D8
C325	C7	C410	D6	C435	E1	C827	C5	CA01	A7	CA46	B8	CC14	C8	CC19	D4	CU21	F6	CX23	C1	DC04	E8	LU18	D7	Q323	C7	Q814	B3	Q840	C4	QC06	C9	QC02	E7	R307	C6	R354	C7	R382	C7	R424	E2	R818	C6	R856	D3	R895	C3	R920	C5	RC54	D8
C326	B7	C441	E2	C436	E1	C829	C5	CA04	A7	CA47	B8	CC15	D8	CP01	E5	CU23	F6	CX24	C1	DC05	D8	LU19	D7	Q324	C7	Q815	B1	Q841	A2	QC10	D8	QC03	F8	R309	C6	R355	C8	R384	C7	R425	D6	R820	C6	R858	C5	R896	C3	R921	C5	RC55	D8
C327	C7	C414	D6	C437	E1	C831	D6	CA06	B8	CA48	B8	CC16	D8	CP02	E6	CU24	D2	CX25	C2	DC06	D9	LU20	D7	Q327	D8	Q817	C3	Q843	D4	QC11	D8	QC05	F8	R310	C6	R356	C7	R385	F3	R426	E2	R822	B1	R860	C3	R897	C2	R922	C5	RC57	D9
C334	C6	C415	D6	C438	E1	C832	C4	CA07	B8	CB01	C8	CC23	D8	CP03	E6	CU25	D2	CX26	C6	DU01	F8	LU21	E7	Q328	C7	Q818	C5	Q844	C4	QC12	E8	QC06	F9	R314	C6	R357	C8	R389	F2	R427	D6	R823	C3	R861	C5	R898	C5	RC59	D9		
C336	B7	C416	D6	C440	E1	C833	C3	CA10	B9	CB02	C8	CC24	D8	CP04	E6	CX02	D1	D303	C7	DU03	F9	LU22	D7	Q330	C7	Q819	C4	Q845	A2	QC13	D8	QC07	F9	R315	C6	R358	C8	R401	F7	R423	D1	R825	B2	R866	C5	R900	B4	R924	C5	RC60	D9
C342	C7	C417	D7	C442	E2	C834	C3	CA11	B9	CB03	C9	CC25	D8	CP05	D5	CX05	D1	D801	B2	DX01	C1	LX01	C1	Q331	D7	Q820	C3	Q846	A1	QC14	D8	QC08	C1	R317	C6	R359	C8	R402	D7	R435	D6	R826	C5	R867	C5	R901	B1	RA01	A8	RC61	C8



## 11. MICROPROCESSOR AND IC DATA

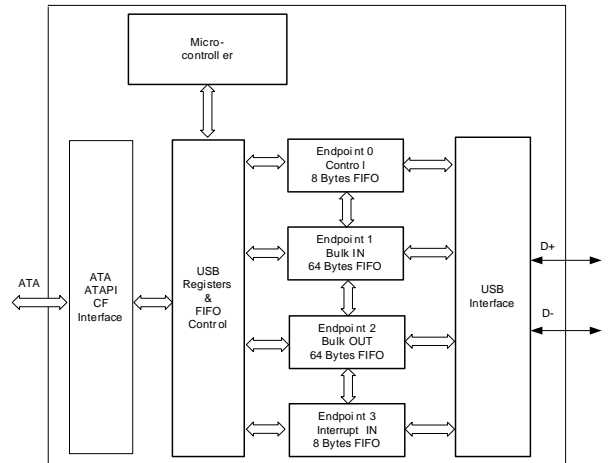
QU01 : 64F3048BVF25(FRONT uP)

No	Port Name	I/O	USE	Sig. Name	ACT	INI	RST	PUP	Description
1	Vcc	-	-	+3.3V			-		
2	TIOCA3	I/O	O	PWM	PLS	L	Z		Buzzer
3	PB1	I/O	O	HBIL	H	L	Z		For DSP
4	TIOCA4	I/O	O	REC LED	H	L	Z		RED LED
5	PB3	I/O	O	HDS1Z	L	H	Z		For DSP
6	PB4	I/O	O	HR/WZ	L	H	Z		For DSP
7	PB5	I/O	O	HCSZ	L	H	Z		For DSP
8	PB6	I/O	O	SDA	-	H	Z	OFF	I2C Bus
9	PB7	I/O	O	SCL	-	H	Z	OFF	I2C Bus
10	FWE	I	-	FWE	-	-	-	-	for Flash Writing
11	VSS	I	-	GND	-	-	-	-	
12	P90	I	I	CF_INSZ	H	-	Z		C/F detect
13	TXD1	O	O	TXD1	-	H	Z		for Flash Writing
14	P92	I/O	I	LID SW	L	H	Z		LID detect
15	RXD1	I	I	RXD1	-	Z	Z		for Flash Writing
16	P94	I/O	O	CHARGE_ON	H	L	Z		Battery charge
17	SCK1	I/O	O	SCK1	L	H	Z		for Flash Writing
18	P40	I/O	O	CS	H	L	Z	OFF	for DAC mute
19	P41	I/O	O	N.C.	-	-	-	-	No connection
20	P42	I/O	O	CHARGE LED	H	L	Z	OFF	Charge LED on
21	P43	I/O	O	PDN	L	H	Z	OFF	DIT,DAC,ADC RST
22	VSS	-	-	GND	-	-	-	-	
23	P44	I/O	O	BACKLIGHT	H	L		OFF	for LCD
24	P45	I/O	O	PHANTOM-MUTE	-	-		OFF	Phantom mute cont.
25	P46	I/O	O	REC LEVEL 0	H	L	Z	OFF	Man/Lim/ALC
26	P47	I/O	O	REC LEVEL 1	H	L	Z	OFF	
27	P30	I/O	O	DB4	H	L	Z	OFF	for LCD
28	P31	I/O	O	DB5	H	L	Z	OFF	for LCD
29	P32	I/O	O	DB6	H	L	Z	OFF	for LCD
30	P33	I/O	O	DB7	H	L	Z	OFF	for LCD
31	P34	I/O	O	E	H	L	Z	OFF	for LCD
32	P35	I/O	O	RS	H	L	Z	OFF	for LCD
33	P36	I/O	O	RW	H	L	Z	OFF	for LCD
34	P37	I/O	O	LRESET	H	L	Z	OFF	for LCD
35	VCC	I	-	+3.3V			-		
36	P10	I/O	O	DVSW	H	L	Z	OFF	+3VD,+5VD.+1.6V SW
37	P11	I/O	O	+48SW	H	L	Z	OFF	+48V SW
38	P12	I/O	O	AVSW	H	L	Z	OFF	+7V,SP power SW
39	P13	I/O	O	(L+R)/2	H	L	Z	OFF	
40	P14	I/O	O	DUAL MONO	H	L	Z	OFF	
41	P15	I/O	O	ST_MONO	H	L	Z	OFF	
42	P16	I/O	O	MIC/LINE	H	L	Z	OFF	H: MIC / L: LINE
43	P17	I/O	O	INT/EXT	H	L	Z	OFF	H: INT / L: EXT
44	VSS	I	-	GND			-		
45	P20	I/O	O	SCAN0	H	L	Z	OFF	Key scan
46	P21	I/O	O	SCAN1	H	L	Z	OFF	Key scan
47	P22	I/O	O	SCAN2	L	H	Z	OFF	Key scan
48	P23	I/O	O	SCAN3	L	H	Z	OFF	Key scan
49	P24	I/O	O	SCAN4	L	H	Z	OFF	Key scan
50	P25	I/O	O	SCAN5	L	H	Z	OFF	Key scan

No	Port Name	I/O	USE	Sig. Name	ACT	INI	RST	PUP	Description
51	P26	I/O	O	SCAN6	L	H	Z	OFF	Key scan
52	P27	I/O	O	SCAN7	L	H	Z	OFF	Key scan
53	P50	I/O	I	KEYIN0	L	H	Z	ON	Key scan
54	P51	I/O	I	KEYIN1	L	H	Z	ON	Key scan
55	P52	I/O	I	KEYIN2	L	H	Z	ON	Key scan
56	P53	I/O	I	KEYIN3	L	H	Z	ON	Key scan
57	VSS	I	-	GND			-		
58	P60	I/O	O	LINE-MUTE	H	L	Z		Mute for Line
59	P61	I/O	O	PWM-MUTE	H	L	Z		Mute for Beep
60	P62	I/O	O	SP-MUTE	H	L	Z		Mute for Speaker
61	CK	O	-	-N.C.	-	-	-	-	No connection
62	STBY	I	I	-			I		Pull Up
63	RES	I	I	CPU RESET			I		Pull Up
64	NMI	I	I	-			I		Pull Up
65	VSS	I	-	GND			-		
66	EXTAL	I	I	16MHz			I		X-TAL IN
67	XTAL	O	O	16MHz			O		X-TAL OUT
68	VCC	I	-	3.3V			-		
69	P63	I/O	O	HP-MUTE	H	L	Z		Mute for earphone
70	P64	I/O	O	INTMIC-MUTE	H	L	Z		Mute for internal MIC
71	P65	I/O	O	OUTPUT SEL 0	-	L	Z		L/R/ST select
72	P66	I/O	O	OUTPUT SEL 1	-	L	Z		L/R/ST select
73	MD0	I	I	MD0			I		For Debug
74	MD1	I	I	MD1			I		For Debug
75	MD2	I	I	MD2			I		For Debug
76	AVCC	I	-	+3.3V			-		ADC power
77	AREFF	I	-	+3.3V			-		ADC reference
78	AN0	I	AN	BATT_DET	-	-	Z		Battery detect
79	AN1	I	AN	LIMIT_CHK	-	-	Z		For ALC
80	P72	I	I	PHAN_SW	-	-	Z		Detect for phantom SW
81	P73	I	I	ACIN	-	-	Z		Detect for AC IN
82	P74	I	I	HRDY	-	-	Z		for DSP
83	P75	I	I	USB_IN	H	L	Z	OFF	Detect USB
84	P76	I	I	DIR_INT0	-	L	Z	OFF	for DIT/DIR
85	P77	I	I	DIR_INT1	-	L	Z	OFF	for DIT/DIR
86	AVSS	I	-	GND	-	-	-		
87	_IRQ0	I/O	I	POWER_SW	L	H	Z		Detect for Power SW
88	P81	I/O	I	REMOTE IN	L	H	Z		REMOTE cont.
89	P82	I/O	O	DSP_RSTZ	L	H	Z		Reset for DSP
90	P83	I/O	O	HCNTL0	H	H	Z		For DSP
91	P84	I/O	O	HCNTL1	H	H	Z		For DSP
92	VSS	I	-	GND			-		
93	PA0	I/O	I/O	HPI HD0	-	-	Z		For DSP
94	PA1	I/O	I/O	HPI HD1	-	-	Z		For DSP
95	PA2	I/O	I/O	HPI HD2	-	-	Z		For DSP
96	PA3	I/O	I/O	HPI HD3	-	-	Z		For DSP
97	PA4	I/O	I/O	HPI HD4	-	-	Z		For DSP
98	PA5	I/O	I/O	HPI HD5	-	-	Z		For DSP
99	PA6	I/O	I/O	HPI HD6	-	-	Z		For DSP
100	PA7	I/O	I/O	HPI HD7	-	-	Z		For DSP

**QX01:GL641USB**

Pin No.	Name	I/O	Description
1	PVDD	PWR	Power supplier for storage device interface
2	D8	I/O	Storage device data bus bit 8*
3	D9	I/O	Storage device data bus bit 9*
4	D10	I/O	Storage device data bus bit 10*
5	D11	I/O	Storage device data bus bit 11*
6	PGND	PWR	Ground for storage device interface
7	D12	I/O	Storage device data bus bit 12*
8	D13	I/O	Storage device data bus bit 13*
9	D14	I/O	Storage device data bus bit 14*
10	D15	I/O	Storage device data bus bit 15*
11	DIOR#	O	Storage device read strobe signal*
12	DIOW#	O	Storage device write strobe signal*
13	INTRQ	I	Storage device interrupt request signal*
14	DVDD	PWR	5V power supplier for internal logic
15	DGND	PWR	Ground for internal logic
16	Crystal out	CLK	Crystal clock output
17	Crystal in	CLK	Crystal clock input
18	GPIO1	I/O	General purpose I/O 1
19	GPIO2	I/O	General purpose I/O 2
20	V3.3	USB	3.3v power supplier for USB bus
21	D+	USB	D+ signal for USB
22	D-	USB	D- signal for USB
23	AVDD	PWR	5V power supplier for USB interface
24	AGND	PWR	Ground for USB interface
25	GPIO3	I/O	General purpose I/O 3
26	GPIO4	I/O	General purpose I/O 4
27	TSTMODE	I	Used at test mode only
28	EXTRST#	I	Used at test mode only
29	GPIO8	I/O	General purpose I/O 8
30	GPIO7	I/O	General purpose I/O 7
31	GPIO6	I/O	General purpose I/O 6
32	GPIO5	I/O	General purpose I/O 5
33	DGND	PWR	Ground for internal logic
34	DVDD	PWR	5V power supplier for internal logic
35	CS3FX#	O	Storage device register bank 3 selector*
36	CS1FX#	O	Storage device register bank 1 selector*
37	A0	O	Storage device address bus bit 0*
38	A1	O	Storage device address bus bit 1*
39	A2	O	Storage device address bus bit 2*
40	D0	I/O	Storage device data bus bit 0*
41	D1	I/O	Storage device data bus bit 1*
42	D2	I/O	Storage device data bus bit 2*
43	D3	I/O	Storage device data bus bit 3*
44	PGND	PWR	Ground for storage device interface
45	D4	I/O	Storage device data bus bit 4*
46	D5	I/O	Storage device data bus bit 5*
47	D6	I/O	Storage device data bus bit 6*
48	D7	I/O	Storage device data bus bit 7*



\* Output voltage of this pin is equivalent to voltage supplied by PVDD.  
 Input voltage of this pin can be from 0v to 5v, and its threshold is 1v ~ 2v.  
 Therefore, these pins can support 3v/5v interface according to voltage of PVDD.

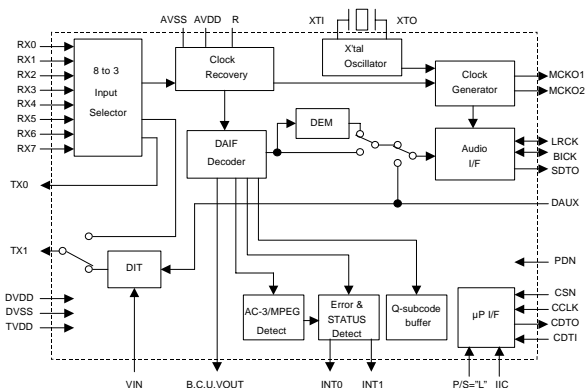
Q401 : AK4114 DIT

No.	Pin Name	I/O	Function
1	IPS0	I	Input Channel Select 0 Pin in Parallel Mode
	RX4	I	Receiver Channel 4 Pin in Serial Mode (Internal biased pin)
2	NC(AVSS)	I	No Connect No internal bonding. This pin should be connected to AVSS.
3	DIF0	I	Audio Data Interface Format 0 Pin in Parallel Mode
	RX5	I	Receiver Channel 5 Pin in Serial Mode (Internal biased pin)
4	TEST2	I	TEST 2 pin This pin should be connect to AVSS.
5	DIF1	I	Audio Data Interface Format 1 Pin in Parallel Mode
	RX6	I	Receiver Channel 6 Pin in Serial Mode (Internal biased pin)
6	NC(AVSS)	I	No Connect No internal bonding. This pin should be connected to AVSS.
7	DIF2	I	Audio Data Interface Format 2 Pin in Parallel Mode
	RX7	I	Receiver Channel 7 Pin in Serial Mode (Internal biased pin)
8	IPS1	I	Input Channel Select 1 Pin in Parallel Mode
	IIC I		IIC Select Pin in Serial Mode. “L”: 4-wire Serial, “H”: IIC
9	P/SN	I	Parallel/Serial Select Pin “L”: Serial Mode, “H”: Parallel Mode
10	XTL0	I	X'tal Frequency Select 0 Pin
11	XTL1	I	X'tal Frequency Select 1 Pin
12	VIN	I	V-bit Input Pin for Transmitter Output
13	TVDD	I	Input Buffer Power Supply Pin, 3.3V or 5V
14	NC	I	No Connect No internal bonding. This pin should be open or connected to DVSS.
15	TX0	O	Transmit Channel (Through Data) Output 0 Pin
16	TX1	O	When TX bit = “0”, Transmit Channel (Through Data) Output 1 Pin. When TX bit = “1”, Transmit Channel (DAUX Data) Output Pin (Default).
17	BOUT	O	Block-Start Output Pin for Receiver Input “H” during first 40 frames.
18	COUT	O	C-bit Output Pin for Receiver Input
19	UOUT	O	U-bit Output Pin for Receiver Input
20	VOOUT	O	V-bit Output Pin for Receiver Input
21	DVDD	I	Digital Power Supply Pin, 3.3V
22	DVSS	I	Digital Ground Pin
23	MCKO1	O	Master Clock Output 1 Pin
24	LRCK	I/O	Channel Clock Pin
25	SDTO	O	Audio Serial Data Output Pin
26	BICK	I/O	Audio Serial Data Clock Pin
27	MCKO2	O	Master Clock Output 2 Pin
28	DAUX	I	Auxiliary Audio Data Input Pin
29	XTO	O	X'tal Output Pin
30	XTI	I	X'tal Input Pin

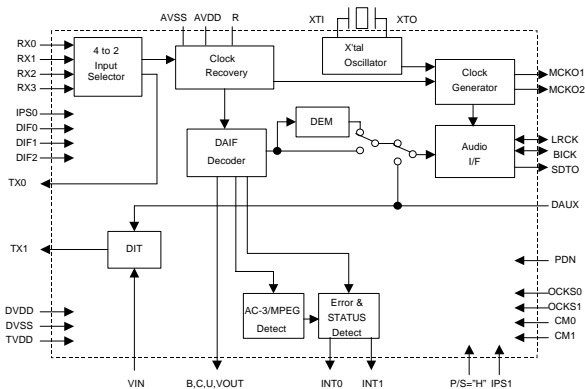
**Q401 : AK4114 DIT**

No.	Pin Name	I/O	Function
31	PDN	I	Power-Down Mode Pin When "L", the AK4114 is powered-down and reset.
32	CM0	I	Master Clock Operation Mode 0 Pin in Parallel Mode
	CDTO	O	Control Data Output Pin in Serial Mode, IIC="L".
	CAD1	I	Chip Address 1 Pin in Serial Mode, IIC="H".
33	CM1	I	Master Clock Operation Mode 1 Pin in Parallel Mode
	CDTI	I	Control Data Input Pin in Serial Mode, IIC="L".
	SDA	I/O	Control Data Pin in Serial Mode, IIC="H".
34	OCKS1	I	Output Clock Select 1 Pin in Parallel Mode
	CCLK	I	Control Data Clock Pin in Serial Mode, IIC="L"
	SCL	I	Control Data Clock Pin in Serial Mode, IIC="H"
35	OCKS0	I	Output Clock Select 0 Pin in Parallel Mode
	CSN	I	Chip Select Pin in Serial Mode, IIC="L".
	CAD0	I	Chip Address 0 Pin in Serial Mode, IIC="H".
36	INT0	O	Interrupt 0 Pin
37	INT1	O	Interrupt 1 Pin
38	AVDD	I	Analog Power Supply Pin, 3.3V
39	R	-	External Resistor Pin 18k +/-1% resistor should be connected to AVSS externally.
40	VCOM	-	Common Voltage Output Pin 0.47μF capacitor should be connected to AVSS externally.
41	AVSS	I	Analog Ground Pin
42	RX0	I	Receiver Channel 0 Pin (Internal biased pin) This channel is default in serial mode.
43	NC(AVSS)	I	No Connect No internal bonding. This pin should be connected to AVSS.
44	RX1	I	Receiver Channel 1 Pin (Internal biased pin)
45	TEST1	I	TEST 1 pin. This pin should be connected to AVSS.
46	RX2	I	Receiver Channel 2 Pin (Internal biased pin)
47	NC(AVSS)	I	No Connect No internal bonding. This pin should be connected to AVSS.
48	RX3	I	Receiver Channel 3 Pin (Internal biased pin)

Note 1. All input pins except internal biased pins should not be left floating.

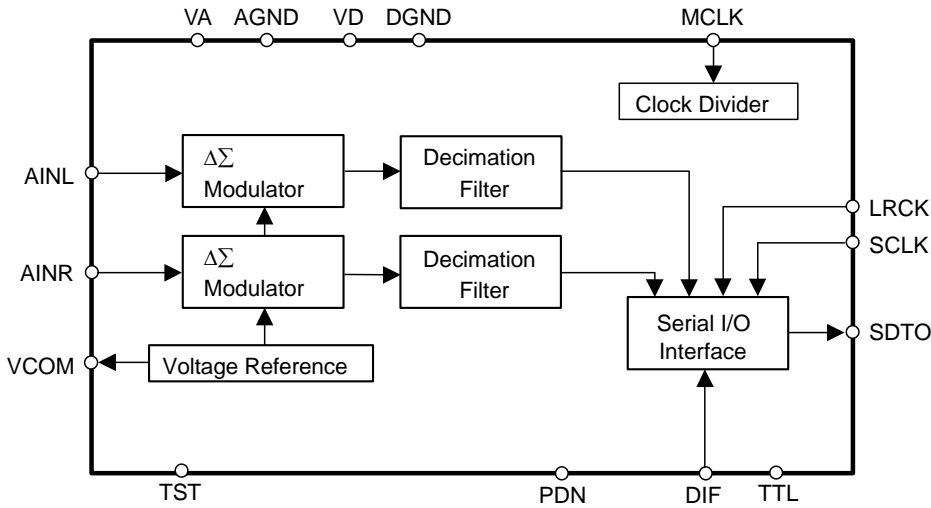


Serial Control Mode



Parallel Control Mode

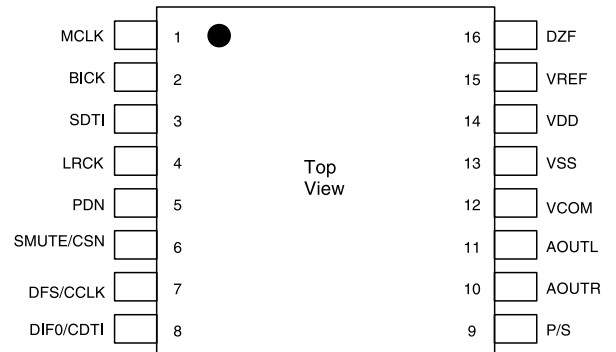
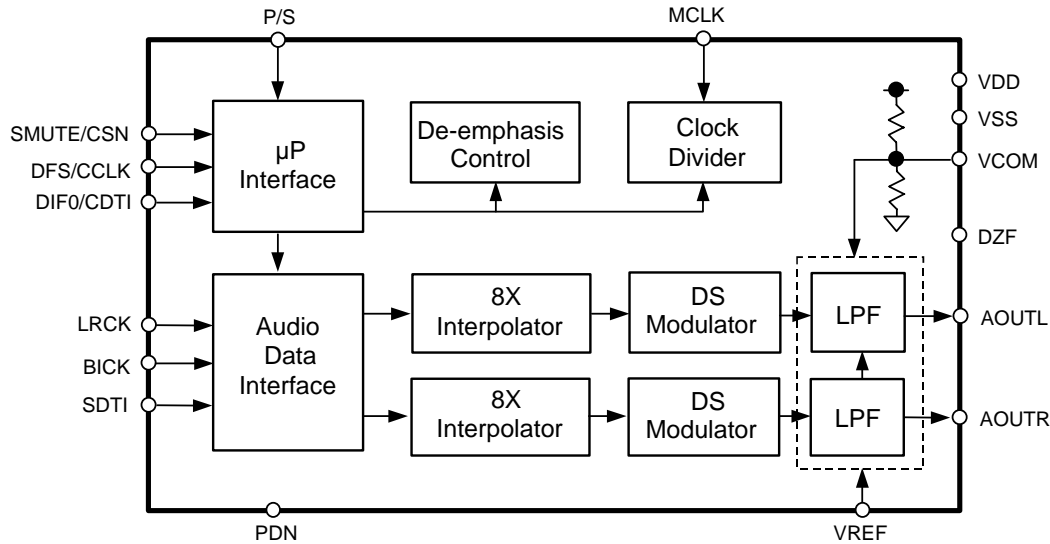
Q402:AK5380VT



No.	Pin Name	I/O	Description
1	AINR	I	Rch Analog Input Pin
2	AINL	I	Lch Analog Input Pin
3	NC	-	NC Pin No internal bonding.
4	VCOM	O	Common Voltage Output Pin Normally connected to AGND with a 0.1 $\mu$ F ceramic capacitor in parallel with an electrolytic capacitor less than 2.2 $\mu$ F.
5	AGND	-	Analog Ground Pin, 0V
6	VA	-	Analog Power Supply Pin, +4.5 to +5.5V
7	VD	-	Digital Power Supply Pin, +2.7 to +5.5V(fs=48kHz), +4.5 to +5.5V(fs=96kHz)
8	DGND	-	Digital Ground Pin, 0V
9	SDTO	O	Serial Data Output Pin Data bits are presented MSB first, in 2's complement format. This pin is "L" in the power-down mode.
10	LRCK	I	Left/Right Channel Select Pin The fs clock is input to this pin.
11	MCLK	I	Master Clock Input Pin
12	SCLK	I	Serial Data Input Pin Output data is clocked out on the falling edge of SCLK.
13	PDN	I	Power-Down Pin When "L", the circuit is in power-down mode. The AK5380 should always be reset upon power-up.
14	DIF	I	Serial Interface Format Pin "L": MSB justified, "H": I <sup>2</sup> S
15	TTL	I	Digital Input Level Select Pin "L": CMOS level (VD=2.7 to 5.5V), "H": TTL level (VD=4.5 to 5.5V)
16	TST	I	Test Pin (Internal pull-down pin) This pin should be left open.

Note: All input pins except pull-down pins should not be left floating.

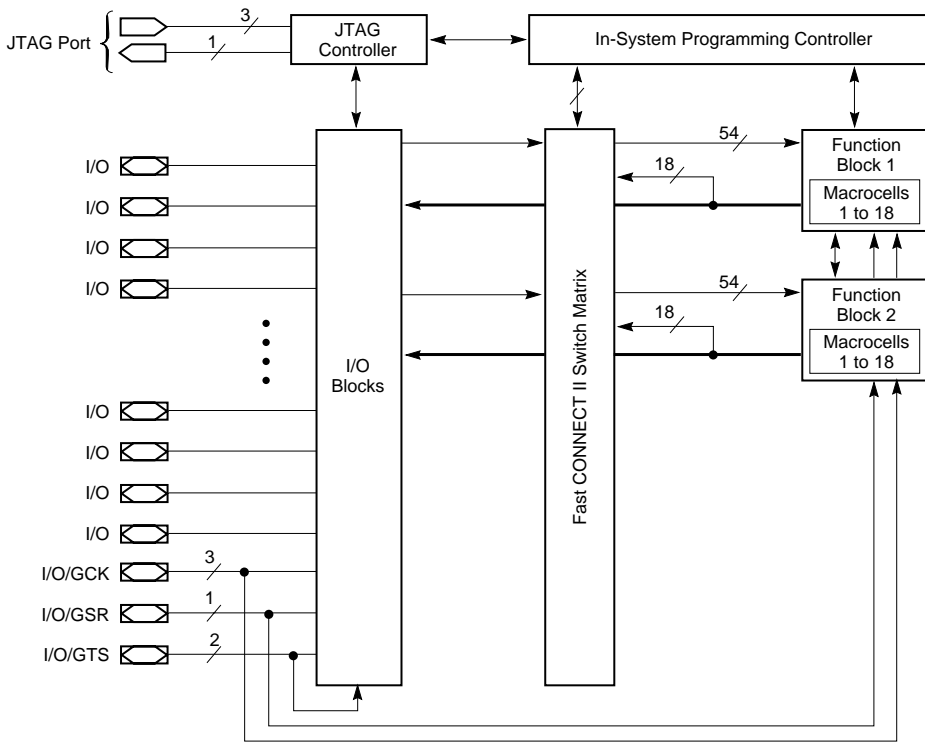
**Q403:AK4380VT-E2**



No.	Pin Name	I/O	Function
1	MCLK	I	Master Clock Input Pin An external TTL clock should be input on this pin.
2	BICK	I	Audio Serial Data Clock Pin
3	SDTI	I	Audio Serial Data Input Pin
4	LRCK	I	L/R Clock Pin
5	PDN	I	Power-Down Mode Pin When at "L", the AK4380 is in the power-down mode and is held in reset. The AK4380 should always be reset upon power-up.
6	SMUTE	I	Soft Mute Pin in parallel mode "H": Enable, "L": Disable
	CSN	I	Chip Select Pin in serial mode
7	DFS	I	Double Speed Sampling Mode Pin in parallel mode "L": Normal Speed, "H": Double Speed
	CCLK	I	Control Data Input Pin in serial mode
8	DIF0	I	Audio Data Interface Format Pin in parallel mode
	CDTI	I	Control Data Input Pin in serial mode
9	P/S	I	Parallel/Serial Select Pin (Internal pull-up pin) "L": Serial control mode, "H": Parallel control mode
10	AOUTR	O	Rch Analog Output Pin
11	AOUTL	O	Lch Analog Output Pin
12	VCOM	O	Common Voltage Pin, VDD/2 Normally connected to VSS with a 0.1 $\mu$ F ceramic capacitor in parallel with a 10 $\mu$ F electrolytic cap.
13	VSS	-	Ground Pin
14	VDD	-	Power Supply Pin
15	VREF	I	Voltage Reference Input Pin
16	DZF	O	Data Zero Input Detect Pin When SDTI of both channels follow a total 8192 LRCK cycles with "0" input data, this spin goes to "H".

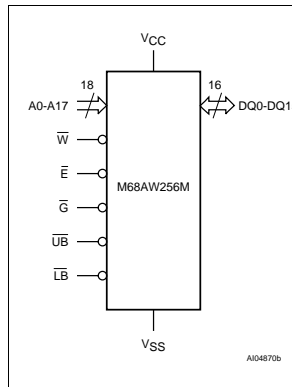
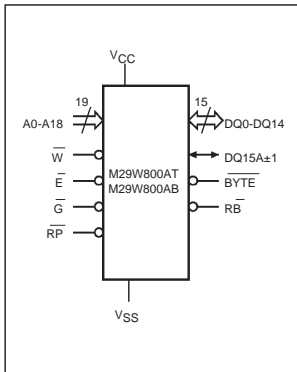
Note: All input pins except pull-up pin should not be left floating.

**QP01:XC9536XL-VQ64-10C**



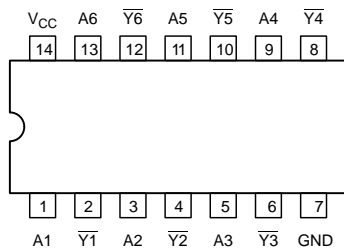
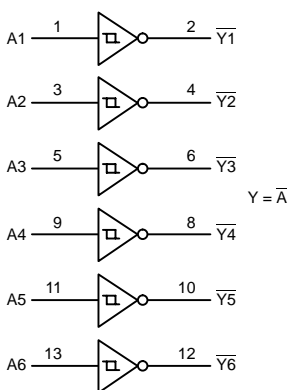
**QD02:M29W800AB80N5**

**QD03/QD04:M68AW256M70ND1**



A0-A17	Address Inputs
DQ0-DQ15	Data Input/Output
$\bar{E}$	Chip Enable
$\bar{G}$	Output Enable
$\bar{W}$	Write Enable
$\bar{UB}$	Upper Byte Enable Input
$\bar{LB}$	Lower Byte Enable Input
Vcc	Supply Voltage
Vss	Ground
NC	Not Connected Internally
DU	Don't Use as Internally Connected

**Q808/Q809:MC74VHC14DT**



Inputs	Outputs
A	$\bar{Y}$
L	H
H	L



**QX02/QX04/QX05 : MC74LVX245DT**

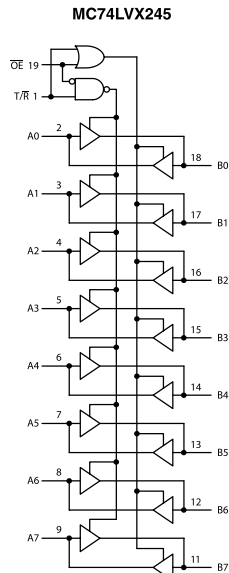
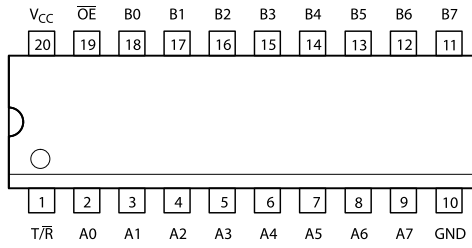


Figure 2. Logic Diagram



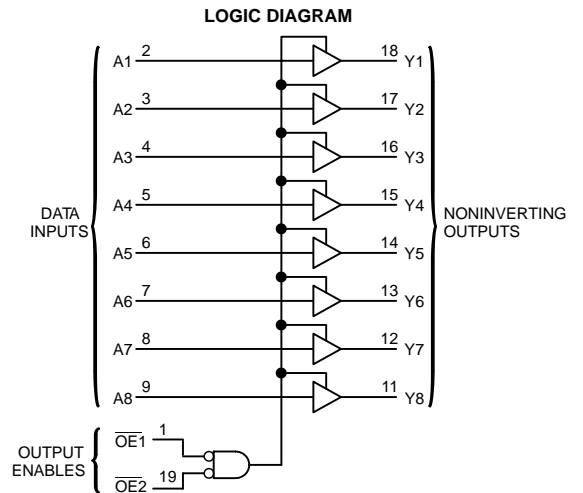
Pins	Function
$\overline{OE}$	Output Enable Input
T/R	Transmit/Receive Input
A0±A7	Side A 3±State Inputs or 3±State Outputs
B0±B7	Side B 3±State Inputs or 3±State Outputs

INPUTS		OPERATING MODE Non-Inverting
$\overline{OE}$	T/R	
L	L	B Data to A Bus
L	H	A Data to B Bus
H	X	Z

H = High Voltage Level; L = Low Voltage Level; Z = High Impedance State; X = High or Low Voltage Level and Transitions are Acceptable; For  $I_{CC}$  reasons, Do Not Float Inputs

**QX03 : MC74LVX541DT**

**MC74LVX541**



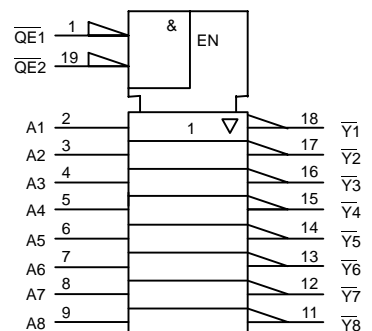
**PIN ASSIGNMENT**

$\overline{OE1}$	1	20	$V_{CC}$
A1	2	19	$\overline{OE2}$
A2	3	18	Y1
A3	4	17	Y2
A4	5	16	Y3
A5	6	15	Y4
A6	7	14	Y5
A7	8	13	Y6
A8	9	12	Y7
GND	10	11	Y8

**FUNCTION TABLE**

Inputs			Output Y
$\overline{OE1}$	$\overline{OE2}$	A	
L	L	L	L
L	L	H	H
H	X	X	Z
X	H	X	Z

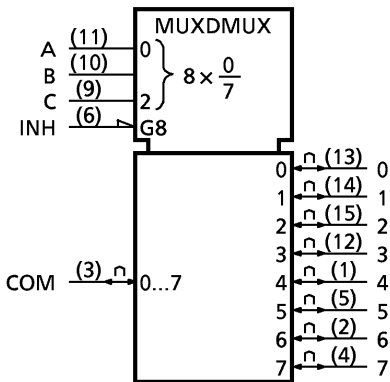
**IEC LOGIC DIAGRAM**



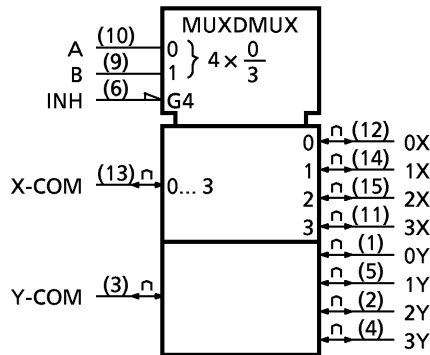
CONTROL INPUTS				"ON" CHANNEL		
INHIBIT	C*	B	A	HC4051A	HC4052A	HC4053A
L	L	L	L	0	0X, 0Y	0X,0Y,0Z
L	L	L	H	1	1X, 1Y	1X,0Y,0Z
L	L	H	L	2	2X, 2Y	0X,1Y,0Z
L	L	H	H	3	3X, 3Y	1X,1Y,0Z
L	H	L	L	4	--	0X,0Y,1Z
L	H	L	H	5	--	1X,0Y,1Z
L	H	H	L	6	--	0X,1Y,1Z
L	H	H	H	7	--	1X,1Y,1Z
H	X	X	X	NONE	NONE	NONE

X: Don't care, \*: Except HC4052A

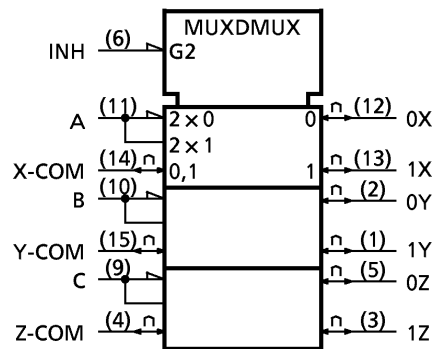
TC74HC4051A



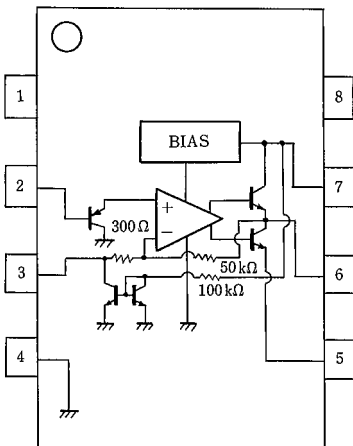
TC74HC4052A



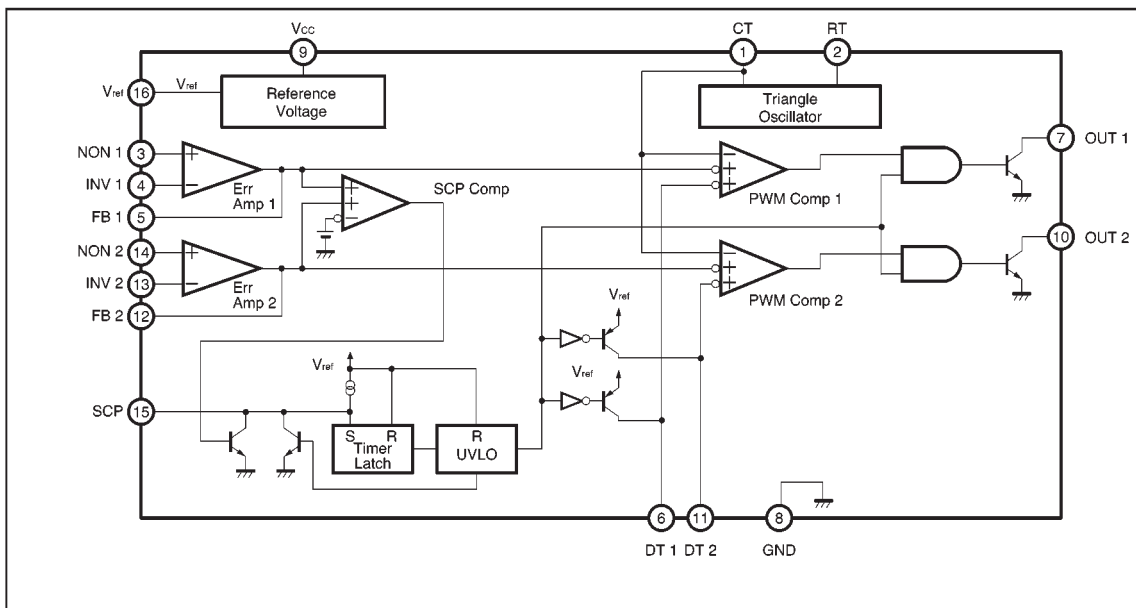
TC74HC4053A



Q305:NJM2070M

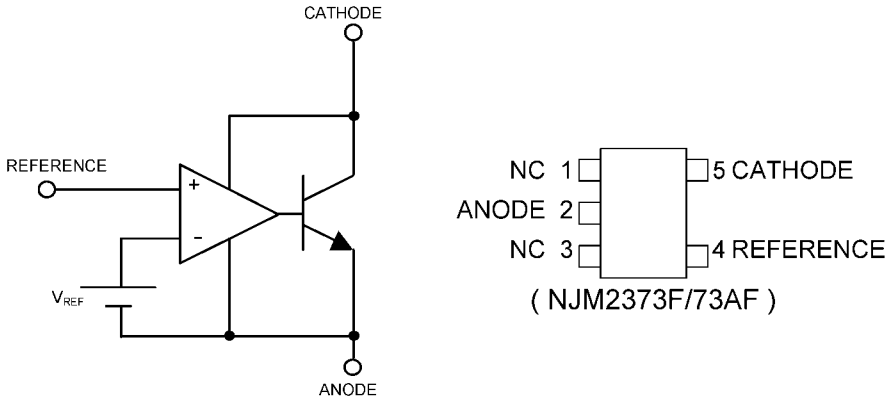


- 1. NC
- 2. +INPUT
- 3. -INPUT
- 4. GND
- 5. GND
- 6. OUTPUT
- 7. V+
- 8. NC

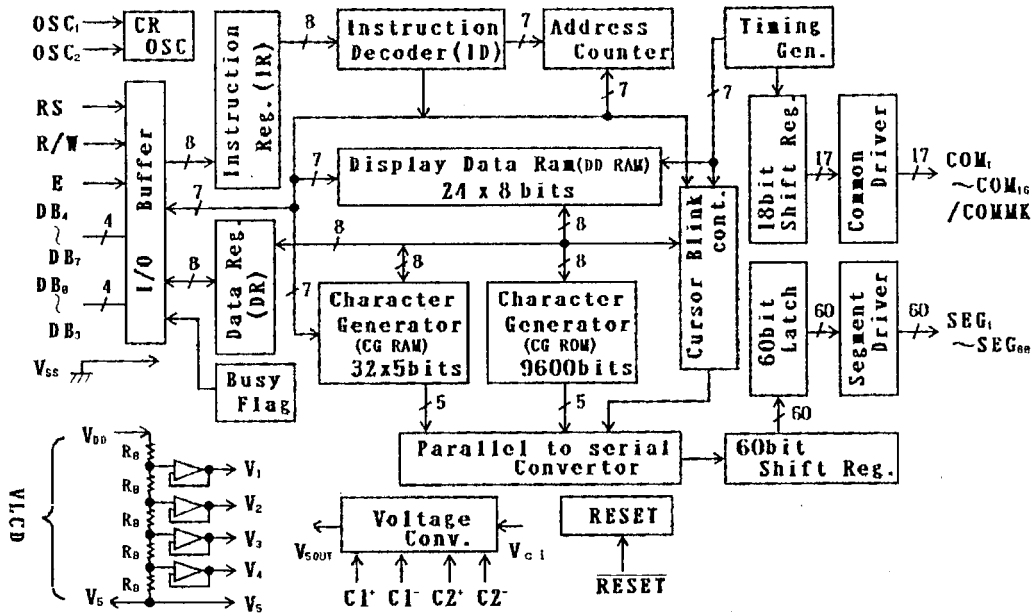


Pin No.	Pin name	Function
1	CT	External timing capacitor
2	RT	External timing resistor
3	NON1	Positive input for error amplifier 1
4	INV1	Negative input for error amplifier 1
5	FB1	Error amplifier 1 output
6	DT1	Output 1 dead time / soft start setting
7	OUT1	Output 1
8	GND	Ground
9	Vcc	Power supply
10	OUT2	Output 2
11	DT2	Output 2 dead time / soft start setting
12	FB2	Error amplifier 2 output
13	INV2	Negative input for error amplifier 2
14	NON2	Positive input for error amplifier 2
15	SCP	Time latch setting
16	Vref	Reference voltage output (2.5V)

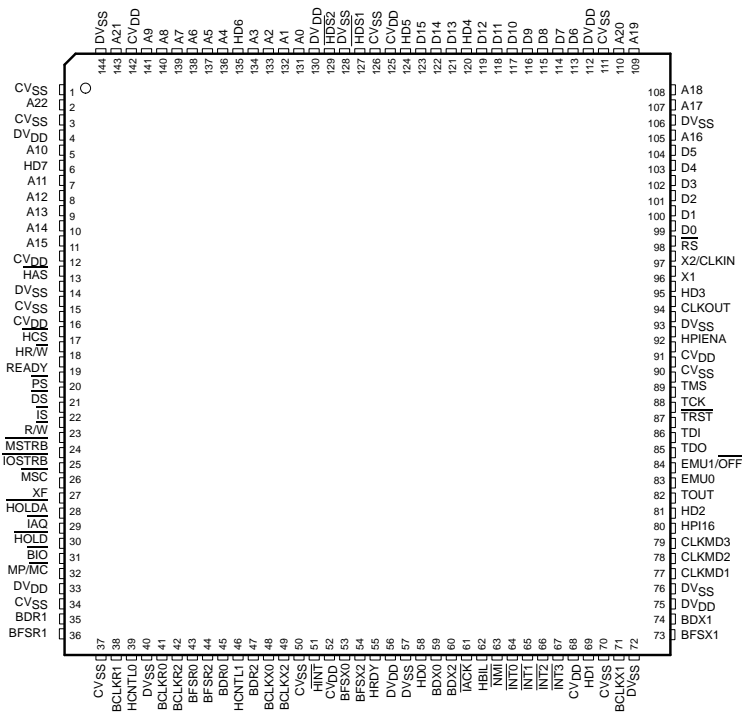
Q820 : NJM2373AF



QF01 : NJU6469LFG1



The TMS320VC5416PGE 144-pin low-profile quad flatpack (LQFP) pin assignments are shown in Figure 2-2.



### 2.3 Signal Descriptions

Table 2-2 lists each signal, function, and operating mode(s) grouped by function. See Section 2.2 for exact pin locations based on package type.

Table 2-2. Signal Descriptions

TERMINAL NAME	I/O†	DESCRIPTION
<b>DATA SIGNALS</b>		
A22 (MSB) A21 A20 A19 A18 A17 A16 A15 A14 A13 A12 A11 A10 A9 A8 A7 A6 A5 A4 A3 A2 A1 A0 (LSB)	I/O/Z‡§	Parallel address bus A22 [most significant bit (MSB)] through A0 [least significant bit (LSB)]. The sixteen LSB lines, A0 to A15, are multiplexed to address external memory (program, data) or I/O. The seven MSB lines, A16 to A22, address external program space memory. A22–A0 is placed in the high-impedance state in the hold mode. A22–A0 also goes into the high-impedance state when <b>OFF</b> is low. A17–A0 are inputs in HPI16 mode. These pins can be used to address internal memory via the host-port interface (HPI) when the HPI16 pin is high. These pins also have Schmitt trigger inputs. The address bus has a bus holder feature that eliminates passive components and the power dissipation associated with them. The bus holder keeps the address bus at the previous logic level when the bus goes into a high-impedance state.
D15 (MSB) D14 D13 D12 D11 D10 D9 D8 D7 D6 D5 D4 D3 D2 D1 D0 (LSB)	I/O/Z‡§	Parallel data bus D15 (MSB) through D0 (LSB). D15–D0 is multiplexed to transfer data between the core CPU and external data/program memory or I/O devices or HPI in HPI16 mode (when HPI16 pin is high). D15–D0 is placed in the high-impedance state when not outputting data or when <b>RS</b> or <b>HOLD</b> is asserted. D15–D0 also goes into the high-impedance state when <b>OFF</b> is low. These pins also have Schmitt trigger inputs. The data bus has a bus holder feature that eliminates passive components and the power dissipation associated with them. The bus holder keeps the data bus at the previous logic level when the bus goes into the high-impedance state. The bus holders on the data bus can be enabled/disabled under software control.

† I = Input, O = Output, Z = High-impedance, S = Supply  
‡ These pins have Schmitt trigger inputs.  
§ This pin has an internal bus holder controlled by way of the BSCR register.  
¶ This pin has an internal pullup resistor.  
# This pin has an internal pulldown resistor.

Table 2-2. Signal Descriptions (Continued)

TERMINAL NAME	I/O†	DESCRIPTION
<b>INITIALIZATION, INTERRUPT AND RESET OPERATIONS</b>		
IACK	O/Z	Interrupt acknowledge signal. IACK indicates receipt of an interrupt and that the program counter is fetching the interrupt vector location designated by A15–A0. IACK also goes into the high-impedance state when <b>OFF</b> is low.
INT0‡ INT1‡ INT2‡ INT3‡	I	External user interrupt inputs. INT0–INT3 are maskable and are prioritized by the interrupt mask register (IMR) and the interrupt mode bit. INT0–INT3 can be polled and reset by way of the interrupt flag register (IFR).
NMI‡	I	Nonmaskable interrupt. NMI is an external interrupt that cannot be masked by way of the INTM or the IMR. When NMI is activated, the processor traps to the appropriate vector location.
RS‡	I	Reset. RS causes the digital signal processor (DSP) to terminate execution and forces the program counter to 0FF80h. When RS is brought to a high level, execution begins at location 0FF80h of program memory. RS affects various registers and status bits.
MP/MC	I	Microprocessor/microcomputer mode select. If active low at reset, microcomputer mode is selected, and the internal program ROM is mapped into the upper 16K words of program memory space. If the pin is driven high during reset, microprocessor mode is selected, and the on-chip ROM is removed from program space. This pin is only sampled at reset, and the MP/MC bit of the processor mode status (PMST) register can override the mode that is selected at reset.
<b>MULTIPROCESSING SIGNALS</b>		
BIO‡	I	Branch control. A branch can be conditionally executed when BIO is active. If low, the processor executes the conditional instruction. The BIO condition is sampled during the decode phase of the pipeline for the XC instruction, and all other instructions sample BIO during the read phase of the pipeline.
XF	O/Z	External flag output (latched software-programmable signal). XF is set high by the SSBX XF instruction, set low by RSBX XF instruction or by loading ST1. XF is used for signaling other processors in multiprocessor configurations or used as a general-purpose output pin. XF goes into the high-impedance state when <b>OFF</b> is low, and is set high at reset.
<b>MEMORY CONTROL SIGNALS</b>		
DS PS IS	O/Z	Data, program, and I/O space select signals. DS, PS, and IS are always high unless driven low for communicating to a particular external space. Active period corresponds to valid address information. DS, PS, and IS are placed into the high-impedance state in the hold mode; these signals also go into the high-impedance state when <b>OFF</b> is low.
MSTRB	O/Z	Memory strobe signal. MSTRB is always high unless low-level asserted to indicate an external bus access to data or program memory. MSTRB is placed in the high-impedance state in the hold mode; it also goes into the high-impedance state when <b>OFF</b> is low.
READY	I	Data ready. READY indicates that an external device is prepared for a bus transaction to be completed. If the device is not ready (READY is low), the processor waits one cycle and checks READY again. Note that the processor performs ready detection if at least two software wait states are programmed. The READY signal is not sampled until the completion of the software wait states.
R/W	O/Z	Read/write signal. R/W indicates transfer direction during communication to an external device. R/W is normally in the read mode (high), unless it is asserted low when the DSP performs a write operation. R/W is placed in the high-impedance state in the hold mode; and it also goes into the high-impedance state when <b>OFF</b> is low.
IOSTRB	O/Z	I/O strobe signal. IOSTRB is always high unless low-level asserted to indicate an external bus access to an I/O device. IOSTRB is placed in the high-impedance state in the hold mode; it also goes into the high-impedance state when <b>OFF</b> is low.
HOLD	I	Hold input. HOLD is asserted to request control of the address, data, and control lines. When acknowledged by the 5416, these lines go into the high-impedance state.

† I = Input, O = Output, Z = High-impedance, S = Supply  
‡ These pins have Schmitt trigger inputs.  
§ This pin has an internal bus holder controlled by way of the BSCR register.  
¶ This pin has an internal pullup resistor.  
# This pin has an internal pulldown resistor.

Table 2-2. Signal Descriptions (Continued)

TERMINAL NAME	I/O†	DESCRIPTION
<b>MEMORY CONTROL SIGNALS (CONTINUED)</b>		
HOLDA	O/Z	Hold acknowledge. HOLDA indicates to the external circuitry that the processor is in a hold state and that the address, data, and control lines are in the high-impedance state, allowing them to be available to the external circuitry. HOLDA also goes into the high-impedance state when <b>OFF</b> is low.
MSC	O/Z	Microstate complete. MSC indicates completion of all software wait states. When two or more software wait states are enabled, the MSC pin goes active at the beginning of the first software wait state and goes inactive high at the beginning of the last software wait state. If connected to the READY input, MSC forces one external wait state after the last internal wait state is completed. MSC also goes into the high-impedance state when <b>OFF</b> is low.
IAQ	O/Z	Instruction acquisition signal. IAQ is asserted (active low) when there is an instruction address on the address bus and goes into the high-impedance state when <b>OFF</b> is low.
<b>TIMER SIGNALS</b>		
CLKOUT	O/Z	Clock output signal. CLKOUT can represent the machine-cycle rate of the CPU divided by 1, 2, 3, or 4 as configured in the bank-switching control register (BSCR). Following reset, CLKOUT represents the machine-cycle rate divided by 4.
CLKMD1‡ CLKMD2‡ CLKMD3‡	I	Clock mode select signals. CLKMD1–CLKMD3 allow the selection and configuration of different clock modes such as crystal, external clock, and PLL mode. The external CLKMD1–CLKMD3 pins are sampled to determine the desired clock generation mode while RS is low. Following reset, the clock generation mode can be reconfigured by writing to the internal clock mode register in software.
X2/CLKIN‡	I	Clock/oscillator input. If the internal oscillator is not being used, X2/CLKIN functions as the clock input. (This is revision-dependent; see Section 3.10 for additional information.)
X1	O	Output pin from the internal oscillator for the crystal. If the internal oscillator is not used, X1 should be left unconnected. X1 does not go into the high-impedance state when <b>OFF</b> is low. (This is revision-dependent; see Section 3.10 for additional information.)
TOUT	O/Z	Timer output. TOUT signals a pulse when the on-chip timer counts down past zero. The pulse is one CLKOUT cycle wide. TOUT also goes into the high-impedance state when <b>OFF</b> is low.
<b>MULTICHANNEL BUFFERED SERIAL PORT 0 (McBSP #0), MULTICHANNEL BUFFERED SERIAL PORT 1 (McBSP #1), AND MULTICHANNEL BUFFERED SERIAL PORT 2 (McBSP #2) SIGNALS</b>		
BCLKR0‡ BCLKR1‡ BCLKR2‡	I/O/Z	Receive clock input. BCLKR can be configured as an input or an output; it is configured as an input following reset. BCLKR serves as the serial shift clock for the buffered serial port receiver.
BDR0 BDR1 BDR2	I	Serial data receive input
BFSR0 BFSR1 BFSR2	I/O/Z	Frame synchronization pulse for receive input. BFSR can be configured as an input or an output; it is configured as an input following reset. The BFSR pulse initiates the receive data process over BDR.
BCLKX0‡ BCLKX1‡ BCLKX2‡	I/O/Z	Transmit clock. BCLKX serves as the serial shift clock for the McBSP transmitter. BCLKX can be configured as an input or an output, and is configured as an input following reset. BCLKX enters the high-impedance state when <b>OFF</b> goes low.
BDX0 BDX1 BDX2	O/Z	Serial data transmit output. BDX is placed in the high-impedance state when not transmitting, when RS is asserted, or when <b>OFF</b> is low.
BFSX0 BFSX1 BFSX2	I/O/Z	Frame synchronization pulse for transmit input/output. The BFSX pulse initiates the data transmit process over BDX. BFSX can be configured as an input or an output, and is configured as an input following reset. BFSX goes into the high-impedance state when <b>OFF</b> is low.

† I = Input, O = Output, Z = High-impedance, S = Supply  
‡ These pins have Schmitt trigger inputs.  
§ This pin has an internal bus holder controlled by way of the BSCR register.  
¶ This pin has an internal pullup resistor.  
# This pin has an internal pulldown resistor.

Table 2-2. Signal Descriptions (Continued)

TERMINAL NAME	I/O†	DESCRIPTION
<b>HOST-PORT INTERFACE SIGNALS</b>		
HD0–HD7‡§	I/O/Z	Parallel bidirectional data bus. The HPI data bus is used by a host device bus to exchange information with the HPI registers. These pins can also be used as general-purpose I/O pins. HD0–HD7 is placed in the high-impedance state when not outputting data or when <b>OFF</b> is low. The HPI data bus includes bus holders to reduce the static power dissipation caused by floating, unused pins. When the HPI data bus is not being driven by the 5416, the bus holders keep the pins at the previous logic level. The HPI data bus holders are disabled at reset and can be enabled/disabled via the HBH bit of the BSCR. These pins also have Schmitt trigger inputs.
HCNTL0‡ HCNTL1‡	I	Control inputs. HCNTL0 and HCNTL1 select a host access to one of the three HPI registers. The control inputs have internal pullups that are only enabled when HPIENA = 0. These pins are not used when HPI16 = 1.
HBIL‡	I	Byte identification. HBIL identifies the first or second byte of transfer. The HBIL input has an internal pullup resistor that is only enabled when HPIENA = 0. This pin is not used when HPI16 = 1.
HCS‡¶	I	Chip select. HCS is the select input for the HPI and must be driven low during accesses. The chip select input has an internal pullup resistor that is only enabled when HPIENA = 0.
HDS1‡¶ HDS2‡¶	I	Data strobe. HDS1 and HDS2 are driven by the host read and write strobes to control the transfer. The strobe inputs have internal pullup resistors that are only enabled when HPIENA = 0.
HAS‡¶	I	Address strobe. Host with multiplexed address and data pins requires HAS to latch the address in the HPIA register. HAS input has an internal pullup resistor that is only enabled when HPIENA = 0.
HR/W‡	I	Read/write. HR/W controls the direction of the HPI transfer. HR/W has an internal pullup resistor that is only enabled when HPIENA = 0.
HRDY	O/Z	Ready output. HRDY goes into the high-impedance state when <b>OFF</b> is low. The ready output informs the host when the HPI is ready for the next transfer.
HINT	O/Z	Interrupt output. This output is used to interrupt the host. When the DSP is in reset, HINT is driven high. HINT goes into the high-impedance state when <b>OFF</b> is low. This pin is not used when HPI16 = 1.
HPIENA#	I	HPI module select. HPIENA must be tied to DVDD to have HPI selected. If HPIENA is left open or connected to ground, the HPI module is not selected, internal pullup for the HPI input pins are enabled, and the HPI data bus has holders set. HPIENA is provided with an internal pullup resistor that is always active. HPIENA is sampled when RS goes high and is ignored until RS goes low again.
HPI16#	I	HPI16 mode selection
<b>SUPPLY PINS</b>		
CVSS	S	Ground. Dedicated ground for the core CPU
CVDD	S	+VDD. Dedicated power supply for the core CPU
DVSS	S	Ground. Dedicated ground for I/O pins
DVDD	S	+VDD. Dedicated power supply for I/O pins

† I = Input, O = Output, Z = High-impedance, S = Supply  
‡ These pins have Schmitt trigger inputs.  
§ This pin has an internal bus holder controlled by way of the BSCR register.  
¶ This pin has an internal pullup resistor.  
# This pin has an internal pulldown resistor.

Table 2-2. Signal Descriptions (Continued)

TERMINAL NAME	I/O†	DESCRIPTION
<b>TEST PINS</b>		
TCK‡¶	I	IEEE standard 1149.1 test clock. TCK is normally a free-running clock signal with a 50% duty cycle. The changes on test access port (TAP) of input signals TMS and TDI are clocked into the TAP controller, instruction register, or selected test data register on the rising edge of TCK. Changes at the TAP output signal (TDO) occur on the falling edge of TCK.
TDI‡	I	IEEE standard 1149.1 test data input. Pin with internal pullup device. TDI is clocked into the selected register (instruction or data) on a rising edge of TCK.
TDO	O/Z	IEEE standard 1149.1 test data output. The contents of the selected register (instruction or data) are shifted out of TDO on the falling edge of TCK. TDO is in the high-impedance state except when the scanning of data is in progress. TDO also goes into the high-impedance state when <b>OFF</b> is low.
TMS‡	I	IEEE standard 1149.1 test mode select. Pin with internal pullup device. This serial control input is clocked into the TAP controller on the rising edge of TCK.
TRST#	I	IEEE standard 1149.1 test reset. TRST, when high, gives the IEEE standard 1149.1 scan system control of the operations of the device. If TRST is not connected or driven low, the device operates in its functional mode, and the IEEE standard 1149.1 signals are ignored. Pin with internal pulldown device.
EMU0	I/O/Z	Emulator 0 pin. When TRST is driven low, EMU0 must be high for activation of the <b>OFF</b> condition. When TRST is driven high, EMU0 is used as an interrupt to or from the emulator system and is defined as input/output by way of the IEEE standard 1149.1 scan system.
EMU1/OFF	I/O/Z	Emulator 1 pin/disable all outputs. When TRST is driven high, EMU1/OFF is used as an interrupt to or from the emulator system and is defined as input/output by way of IEEE standard 1149.1 scan system. When TRST is driven low, EMU1/OFF is configured as <b>OFF</b> . The EMU1/OFF signal, when active low, puts all output drivers into the high-impedance state. Note that <b>OFF</b> is used exclusively for testing and emulation purposes (not for multiprocessing applications). Therefore, for the <b>OFF</b> condition, the following apply: TRST = low, EMU0 = high EMU1/OFF = low

† I = Input, O = Output, Z = High-impedance, S = Supply  
‡ These pins have Schmitt trigger inputs.  
§ This pin has an internal bus holder controlled by way of the BSCR register.  
¶ This pin has an internal pullup resistor.  
# This pin has an internal pulldown resistor.

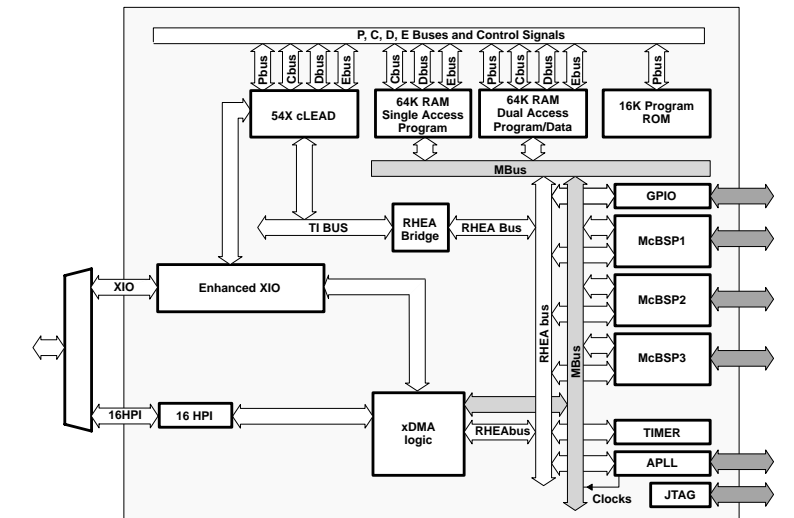
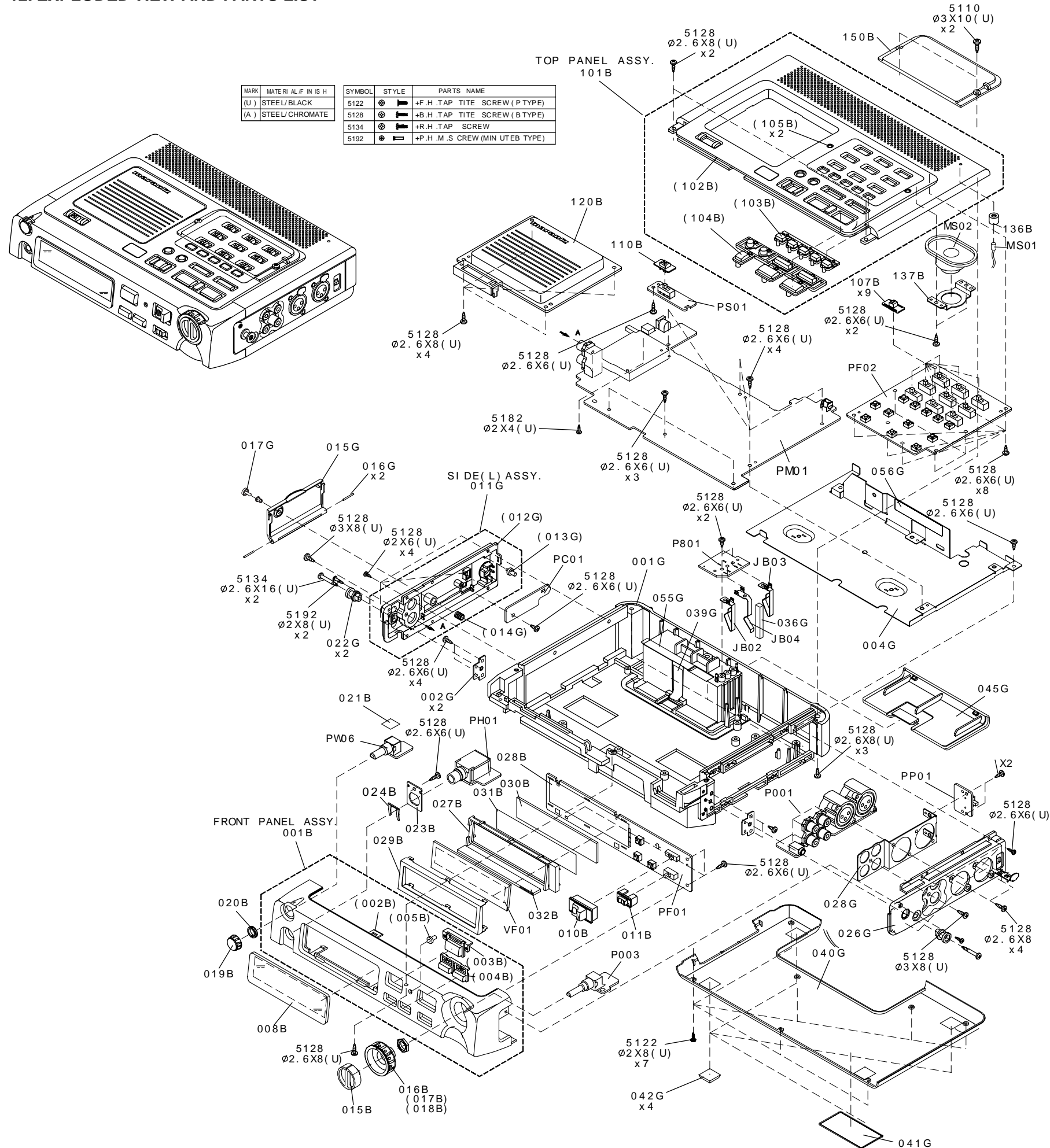


Figure 3-4. TMS320VC5416 Functional Block Diagram

## 12. EXPLODED VIEW AND PARTS LIST



POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MUJ)
001B		04AS248500	FRONT PANEL K	04AS248500
008B		409S158020	WINDOW LCD	409S158020
010B		409S154010	KNOB REC	409S154010
011B		409S154020	KNOB KEY LOCK	409S154020
015B		409S154030	KNOB REC VOL. R	409S154030
016B		409S154540	KNOB REC VOL. L ASSY	409S154540
017B		409S154040	KNOB REC VOL. L	409S154040
018B		377V066010	RUBBER RING	377V066010
019B		378V154040	KNOB PHONE VOL.	378V154040
101B		04AS064500	TOP CASE K	04AS064500
107B		378V154030	KNOB SLIDE	378V154030
			FOR TOP SW PCB PS01	
110B		378V154160	KNOB POWER	378V154160
120B		04AS053010	COVER UPPER	04AS053010
136B		305H056010	BUFFER MIC BUSH	305H056010
150B		04AS053020	COVER SLIDE SW	04AS053020
011G		04AS249500	SIDE PANEL(L)ASSY	04AS249500
015G		04AS162010	DOOR	04AS162010
016G		04AS112010	SHAFT FOR DOOR	04AS112010
017G		2912259020	BUSHING	2912259020
			DOOR SCREW HOLE MASKING	
026G		04AS249020	SIDE PANEL(R)	04AS249020
040G		04AS257010	BOTTOM COVER	04AS257010
042G		153T057000	LEG	153T057000
045G		378V053030	COVER BATTERY	378V053030
MS01		MS50000150	MIC.UNIT ECM	MS50000150
MS02		QJ00508140	SPEAKER 4Ω 0.5W S12E2A	QJ00508140
WA13		nsp	FFC 16P MAIN-TOP	YU16210520
WA14		nsp	FFC 19P MAIN-FRONT	YU19060520
			<b>PACKING</b>	
001T	/F	nsp	USER GUIDE F	04AS851110
001T	/U/W	04AS851250	UESR GUIDE 4LANGUAGES	04AS851250
002T	/U/W	04AS851010	USER GUIDE	04AS851010
			CD-ROM 8 LANGUAGE	
005Z		377V064500	CASE BATT.CASE ASSY	377V064500
▲010Z	/F	nsp	AC ADAPTOR	AA10013040
			DA600PMDF 13V 1.0A	
▲010Z	/W	AZ259W01N0	AC ADAPTOR	AZ259W01N0
			DA600PMDN 13V 1.0A	
▲010Z	/U	nsp	AC ADAPTOR	AA12013020
			DA600PMDU 13V 1.0A	
			<b>NOT STANDARD SPARE PART</b>	
001S		nsp	CUSHION	378V809010
002S		nsp	CUSHION(LID)	378V809020
003S		nsp	PACKING CASE	04AS801010
010S		nsp	MASTER CARTON	04AS805010

### 13. ELECTRICAL PARTS LIST

#### ASSIGNMENT OF COMMON PARTS CODES.

#### RESISTORS

R\*\*\*: 1) GD05 × × × 140, Carbon film fixed resistor, ±5% 1/4W

R\*\*\*: 2) GD05 × × × 160, Carbon film fixed resistor, ±5% 1/6W

① — Resistance value

Examples ;

① Resistance value

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

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

#### CAPACITORS

C\*\*\*: CERAMIC CAP.

3) DD1 × × × × 370, Ceramic capacitor  
 Disc type  
 Temp.coeff.P350 ~ N1000, 50V  
 ② — Capacity value  
 ③ — 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 × × × × 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

C\*\*\* : 5) ELECTROLY CAP. (  $\frac{\square}{\square}$  ), 6) FILM CAP. (  $\frac{\square}{\square}$  )

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

Examples ;

⑤ Capacity value

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

⑥ Working voltage

6.3V .... 006    25V .... 025  
 10V .... 010    35V .... 035  
 16V .... 016    50V .... 050

6) DF15 × × × × 350 — Plastic film capacitor  
 DF15 × × × × 310 — One-way type, Mylar ±5% 50V  
 DF16 × × × × 310 — Plastic film capacitor  
 One-way type, Mylar ±10% 50V  
 ⑦ — Capacity value

Examples ;

⑦ Capacity value

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

**NOTE :** 1) The above CODES ( R\*\*\*, R\*\*\*, C\*\*\*, C\*\*\* and C\*\*\* ) are omitted on the schematic diagram in some case.

2) On the occasion, be confirmed the common parts on the parts list.

3) Refer to "Common Parts List" for the other common parts (RI05, DD4, DK4).

#### NOTE ON SAFETY FOR FUSIBLE RESISTOR :

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

1. KOA Corporation

Part No. (MJI)	Type No. (KOA)	Description
NH05 × × × 140	RF25S × × × × ΩJ	(±5% 1/4W)
NH05 × × × 120	RF50S × × × × ΩJ	(±5% 1/2W)
NH85 × × × 110	RF73B2A × × × × ΩJ	(±5% 1/10W)
NH95 × × × 140	RF73B2E × × × × ΩJ	(±5% 1/4W)

\* Resistance value      Resistance value (0.1 Ω – 10 kΩ)

2. Matsushita Electronic Components Co., Ltd

Part No. (MJI)	Type No. (MEC)	Description
NF05 × × × 140	ERD-2FCJ × × ×	(±5% 1/4W)
RF05 × × × 140		
NF02 × × × 140	ERD-2FCG × × ×	(±2% 1/4W)
RF02 × × × 140		

\* Resistance value      \* Resistance value

Examples ;

\* Resistance value

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

Regarding to all parts of parts code **FS20xxx2xx**, replace only with Wickmann-Werke GmbH, Type 372 non glass type fuse.

#### NOTE ON SAFETY :

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

#### 安全上の注意 :

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

POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJ)	POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJ)	
			<b>P001-AUDIO I/O CIRCUIT BOARD</b>							
			<b>P001-CAPACITORS</b>							
C352		nsp	CER. CHIP 47pF ±5% CG 50V	DD95470300	CF06		EY10601620	ELECT. CHIP 10µF 16V	EY10601620	
C354		nsp	CER. CHIP 47pF ±5% CG 50V	DD95470300	CF07		EY47601620	ELECT. CHIP 47µF 16V	EY47601620	
C355		nsp	CER. CHIP 47pF ±5% CG 50V	DD95470300	CF08		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	
C356		nsp	CER. CHIP 47pF ±5% CG 50V	DD95470300	CF09		nsp	CER. CHIP 1µF 10V F	DK98105200	
C359		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CF10		nsp	CER. CHIP 1000pF ±10% B 50V	DK96102300	
C360		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CF11		nsp	CER. CHIP 1000pF ±10% B 50V	DK96102300	
CU01		nsp	CER. CHIP 0.01µF ±10% 50V C1608JB1H103K	DK96103300	CF12		nsp	CER. CHIP 1000pF ±10% B 50V	DK96102300	
			<b>P001-RESISTORS</b>		CF13		}	nsp	CER. CHIP 470pF (GR39)	DK96471300
					CF22					
R373		nsp	CHIP 47kΩ ±5% 1/16W	NN05473610	RF01		NY02030160	<b>PF01-RESISTORS</b> TRIMM. 20kΩ	NY02030160	
R375		nsp	CHIP 47kΩ ±5% 1/16W	NN05473610				EVM1S/TMC3KE/RH03AD		
RA76		nsp	CHIP 0Ω ±5% 1/16W	NN05000610	RF02		nsp	CHIP 15kΩ ±5% 1/16W	NN05153610	
RA77		nsp	CHIP 0Ω ±5% 1/16W	NN05000610	RF03		nsp	CHIP 47Ω ±5% 1/16W	NN05470610	
RA78		nsp	CHIP 0Ω ±5% 1/16W	NN05000610	RF04		nsp	CHIP 47Ω ±5% 1/16W	NN05470610	
RA79		nsp	CHIP 0Ω ±5% 1/16W	NN05000610	RF05		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610	
RA98		nsp	CHIP 0Ω ±5% 1/16W	NN05000610				<b>PF01-SEMICONDUCTORS</b>		
RA99		nsp	CHIP 0Ω ±5% 1/16W	NN05000610	DF01		HI10079300	L.E.D. BR1102W CHIP LED	HI10079300	
RU01		nsp	CHIP 10Ω ±5% 1/16W	NN05100610	DF02		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000	
RU19		nsp	CHIP 100Ω ±5% 1/16W	NN05101610	DF03		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000	
RU22		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610	DF04		HI10086020	L.E.D. LNJ310M6URA GREEN	HI10086020	
RU59		nsp	CHIP 0Ω ±5% 1/16W	NN05000610	DF05		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000	
RU60		nsp	CHIP 0Ω ±5% 1/16W	NN05000610	DF06		HI10086020	L.E.D. LNJ310M6URA GREEN	HI10086020	
			<b>P001-SEMICONDUCTORS</b>		DF07		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000	
J307		YT02041280	TERMINAL 14X14 RA 2L4 WH+RE AU F-FROUND	YT02041280	DF08		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000	
JA02		YJ01004340	JACK NC3FAH2 4P CANON TYPE	YJ01004340	DF09		HI10086020	L.E.D. LNJ310M6URA GREEN	HI10086020	
JA03		YJ01004340	JACK NC3FAH2 4P CANON TYPE	YJ01004340	DF10		HI10086020	L.E.D. LNJ310M6URA GREEN	HI10086020	
JU02		YJ01002440	JACK 2.5MM MINI	YJ01002440	QF01		HC12243090	IC NJU6469LFG1	HC12243090	
L303		FN31010030	EMI FILTER BLM11B102S 1608	FN31010030	QF02		BA21105000	DIG.TR.S. DTC123JE,RN1105	BA21105000	
L304		FN31010030	EMI FILTER BLM11B102S 1608	FN31010030	QF03		BA21105000	DIG.TR.S. DTC123JE,RN1105	BA21105000	
L305		FN31010030	EMI FILTER BLM11B102S 1608	FN31010030	QF04		BA21105000	DIG.TR.S. DTC123JE,RN1105	BA21105000	
L308		FN31010030	EMI FILTER BLM11B102S 1608	FN31010030				<b>PF01-MISCELLANEOUS</b>		
LU01		FN31010030	EMI FILTER BLM11B102S 1608	FN31010030	LF01		nsp	CHIP RES. 0Ω ±5% 1/16W	NN05000610	
			<b>P003-REC VOL CIRCUIT BOARD</b>		SF01		SS01020800	SLIDE SWITCH SSSS9-1-2(C)	SS01020800	
RC64		RM01031140	VAR. RES.10 kΩ B RK0972220 REC VOL	RM01031140	SF02		SS01021060	SLIDE SWITCH SSST01-3A	SS01021060	
			<b>P801-BATTEERY TERMINAL CIRCUIT BOARD</b>		SF03		SP01013320	TACT SWITCH SKHMPW	SP01013320	
					SF04		SP01013320	TACT SWITCH SKHMPW	SP01013320	
					SF05		SP01013320	TACT SWITCH SKHMPW	SP01013320	
					VF01		HQ21902980	DISPLAY LCD STN 1/18DUTY 1/5BIAS	HQ21902980	
▲ F802		FS10250940	FUSE 2.5A/60V CCF1N2.5 TE	FS10250940				<b>PF02-TOP OPERATION CIRCUIT BOARD</b>		
J802		378V123010	CONTACTOR	378V123010				<b>PF02-SEMICONDUCTORS</b>		
J803		378V123010	CONTACTOR	378V123010	DF51		nsp	DIODE	HD20002000	
J804		378V123020	CONTACTOR	378V123020	DF72			1SS176,MA165,1SS254 30V 0.1A		
			<b>PC01-CHARGE/COVER DEECTOR CIRCUIT BOARD</b>					<b>PF02-MISCELLANEOUS</b>		
DU02		HI10079300	L.E.D. BR1102W CHIP LED	HI10079300	SF51		SS02021680	SLIDE SWITCH SSSF022-S06N0 EDL PLAY	SS02021680	
RU03		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	SF52		SS02030680	SLIDE SWITCH SSSF 2-3	SS02030680	
RU04		nsp	CHIP 330Ω ±5% 1/16W	NN05331610	SF53		SS02030680	SLIDE SWITCH SSSF 2-3	SS02030680	
SU02		SP01012420	PUSH SWITCH ESE11SV1 DETECT SW	SP01012420	SF54		SS02030680	SLIDE SWITCH SSSF 2-3	SS02030680	
			<b>PF01-FRONT (LCD) CIRCUIT BOARD</b>		SF55		SS02021680	SLIDE SWITCH SSSF022-S06N0 INPUT SW	SS02021680	
CF01		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	SF56		SS02021680	SLIDE SWITCH SSSF022-S06N0 PRE REC	SS02021680	
CF02		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	SF57		SS02021680	SLIDE SWITCH SSSF022-S06N0 A-MARK	SS02021680	
CF03		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	SF58		}	PUSH SWITCH	SP01013370	
CF04		EY47501670	TANTL. CHIP 4.7µF 16V	EY47501670	SF69		SP01013370	EVQ11L05R H/5MM,160GF		
CF05		EY47501670	TANTL. CHIP 4.7µF 16V	EY47501670	SF70		SS02021680	SLIDE SW. SSSF022-S06N0 ATT	SS02021680	

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



POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJI)
SF71		SS02030680	SLIDE SW. SSSF 2-3 ANC	SS02030680	C358		nsp	CER. CHIP 47pF ±5% CG 50V	DD95470300
			<b>PH01-H/P JACK CIRCUIT BOARD</b>		C401		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300
J304		YJ01004540	JACK HLJ5305-01-4170 HP JACK	YJ01004540	C402		nsp	CER. CHIP 47pF ±5% CG 50V	DD95470300
			<b>PM01-MAIN CIRCUIT BOARD PM01-CAPACITORS</b>		C403		nsp	CER. CHIP 47pF ±5% CG 50V	DD95470300
C301	nsp		CER. CHIP 0.047µF ±10% X7R 16V	DK96473200	C404		nsp	CER. CHIP 47pF ±5% CG 50V	DD95470300
C302	nsp		CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	C405		nsp	CER. CHIP 47pF ±5% CG 50V	DD95470300
C303	nsp		CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	C406		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300
C304	nsp		CER. CHIP 0.047µF ±10% X7R 16V	DK96473200	C407	EY10601070	TANTL. CHIP 10µF 10V	EY10601070	
C305	nsp		CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	C408	EY10601070	TANTL. CHIP 10µF 10V	EY10601070	
C306	nsp		CER. CHIP 47pF ±5% CG 50V	DD95470300	C409	nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	
C307	nsp		CER. CHIP 47pF ±5% CG 50V	DD95470300	C410	nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	
C308	nsp		CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	C412	nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	
C309	nsp		CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	C413	nsp	CER. CHIP 1µF 10V F	DK98105200	
C310	nsp		CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	C414	nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	
C311	EY10601070		TANTL. CHIP 10µF 10V	EY10601070	C415	nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	
C312	EY10601070		TANTL. CHIP 10µF 10V	EY10601070	C416	nsp	CER. CHIP 0.47µF 10V B(BJ) ±10%	DK96474200	
C315	nsp		CER. CHIP 2200pF (GR39)	DK96222300	C417	nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	
C316	nsp		CER. CHIP 2200pF (GR39)	DK96222300	C418	nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	
C318	EY47601620		ELECT. CHIP 47µF 16V	EY47601620	C419	nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	
C319	EA47702510		ELECT. 470µF 25V	EA47702510	C420	∫	EY10601070	TANTL. CHIP 10µF 10V	
C320	nsp		CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	C431				
C321	nsp		CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	C432	nsp	CER. CHIP 1µF 10V F	DK98105200	
C322	nsp		CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	C433	nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	
C323	nsp		CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	C435	nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	
C324	nsp		CER. CHIP 33pF ±5% CG 50V	DD95330300	C436	nsp	CER. CHIP 220pF (GR39)	DK96221300	
C325	nsp		CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	C441	nsp	CER. CHIP 220pF (GR39)	DK96221300	
C326	nsp		CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	C443	nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	
C327	nsp		CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	C801	EA47702510	ELECT. 470µF 25V	EA47702510	
C328	nsp		CER. CHIP 0.022UF	DK98223300	C802	EA47610010	ELECT. 47µF 100V	EA47610010	
C329	nsp		CER. CHIP 0.022UF	DK98223300	C803	EY47701020	ELECT. CHIP 470µF 10V	EY47701020	
C330	nsp		CER. CHIP 0.022UF	DK98223300	C804	EY10701020	ELECT. CHIP 100µF 10V	EY10701020	
C332	nsp		CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	C805	nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	
C333	EA47701010		ELECT. 470µF 10V	EA47701010	C806	EY22701020	ELECT. CHIP 220µF 10V	EY22701020	
C334	nsp		CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	C807	EY10601070	TANTL. CHIP 10µF 10V	EY10601070	
C336	nsp		CER. CHIP 100pF ±5% CG 50V	DD95101300	C808	EY10601070	TANTL. CHIP 10µF 10V	EY10601070	
C338	EY22505020		ELECT. CHIP 2.2µF 50V	EY22505020	C809	EY10601070	TANTL. CHIP 10µF 10V	EY10601070	
C340	EA47701010		ELECT. 470µF 10V	EA47701010	C810	EY10701020	ELECT. CHIP 100µF 10V	EY10701020	
C342	nsp		CER. CHIP 33pF ±5% CG 50V	DD95330300	C811	EY33602520	ELECT. CHIP 33µF 25V	EY33602520	
C343	nsp		CER. CHIP 33pF ±5% CG 50V	DD95330300	C812	EY22701020	ELECT. CHIP 220µF 10V	EY22701020	
C344	nsp		CER. CHIP 100pF ±5% CG 50V	DD95101300	C813	EY47501670	TANTL. CHIP 4.7µF 16V	EY47501670	
C345	nsp		CER. CHIP 100pF ±5% CG 50V	DD95101300	C814	EY10601070	TANTL. CHIP 10µF 10V	EY10601070	
C346	nsp		CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	C815	EY47600470	TANTL. CHIP 47µF 4V	EY47600470	
C347	nsp		CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	C816	nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	
C348	EY10601070		TANTL. CHIP 10µF 10V	EY10601070	C817	nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	
C349	EY10601070		TANTL. CHIP 10µF 10V	EY10601070	C818	nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	
C350	EY10601070		TANTL. CHIP 10µF 10V	EY10601070	C819	nsp	CER. CHIP 100pF ±5% CG 50V	DD95101300	
C351	EY10601070		TANTL. CHIP 10µF 10V	EY10601070	C820	nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	
C357	nsp		CER. CHIP 47pF ±5% CG 50V	DD95470300	C821	nsp	CER. CHIP 2200pF (GR39)	DK96222300	
					C822	nsp	CER. CHIP 0.01µF ±10% 50V C1608JB1H103K	DK96103300	

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

POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJI)
C823		nsp	CER. CHIP 0.01µF ±10% 50V C1608JB1H103K	DK96103300	CA11		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300
C824		nsp	CER. CHIP 47pF ±5% CG 50V	DD95470300	CA12		EA10606310	ELECT. 10µF 63V	EA10606310
C825		nsp	CER. CHIP 0.01µF ±10% 50V C1608JB1H103K	DK96103300	CA13		EA10606310	ELECT. 10µF 63V	EA10606310
C826		nsp	CER. CHIP 2200pF (GR39)	DK96222300	CA14		EA10606310	ELECT. 10µF 63V	EA10606310
C827		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	CA15		EA10606310	ELECT. 10µF 63V	EA10606310
C828		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	CA16		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300
C829		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	CA17		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300
C830		nsp	RES. CHIP 1MΩ ±5% 1/16W	NN05105610	CA18		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300
C831		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	CA19		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300
C832		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	CA20		EY10601070	TANTL. CHIP 10µF 10V	EY10601070
C833		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	CA21		EY10601070	TANTL. CHIP 10µF 10V	EY10601070
C834		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	CA22		EY10601070	TANTL. CHIP 10µF 10V	EY10601070
C835		nsp	CER. CHIP 10pF ±0.5pF CH 50V	DD91100300	CA23		EY10601070	TANTL. CHIP 10µF 10V	EY10601070
C836		nsp	CER. CHIP 10pF ±0.5pF CH 50V	DD91100300	CA24		CA24		
C837		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	CA29		CA29		
C838		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	CA30		CA30		
C839		nsp	CER. CHIP 0.01µF ±10% 50V C1608JB1H103K	DK96103300	CA35		CA35		
C841		nsp	CER. CHIP 100pF ±5% CG 50V	DD95101300	CA39		CA39		
C842		nsp	CER. CHIP 100pF ±5% CG 50V	DD95101300	CA40		CA40		
C843		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	CA41		CA41		
C844		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	CA42		CA42		
C845		nsp	CER. CHIP 0.01µF ±10% 50V C1608JB1H103K	DK96103300	CA43		CA43		
C846		nsp	CER. CHIP 0.01µF ±10% 50V C1608JB1H103K	DK96103300	CA44		CA44		
C847		nsp	CER. CHIP 2200pF (GR39)	DK96222300	CA45		CA45		
C848		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	CA46		CA46		
C849		nsp	CER. CHIP 220pF (GR39)	DK96222300	CA47		CA47		
C850		nsp	CER. CHIP 100pF ±5% CG 50V	DD95101300	CA48		CA48		
C853		nsp	CER. CHIP 10pF ±0.5pF CH 50V	DD91100300	CB01		CB01		
C854		nsp	CER. CHIP 0.01µF ±10% 50V C1608JB1H103K	DK96103300	CB02		CB02		
C855		EY47600470	TANTL. CHIP 47µF 4V	EY47600470	CB03		CB03		
C856		EY47600470	TANTL. CHIP 47µF 4V	EY47600470	CB04		CB04		
C857		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	CB05		CB05		
C858		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	CB06		CB06		
C859		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	CB07		CB07		
CA01		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CB08		CB08		
CA02		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	CB09		CB09		
CA03		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CB12		CB12		
CA04		nsp	CER. CHIP 47pF ±5% CG 50V	DD95470300	CB13		CB13		
CA05		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	CB14		CB14		
CA06		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CB15		CB15		
CA07		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CB16		CB16		
CA08		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CB17		CB17		
CA09		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CB18		CB18		
CA10		nsp	CER. CHIP 0.1µF ±10% 50V C1608X7R1H104K	DK96104300	CB19		CB19		
					CB20		CB20		
					CB21		CB21		
					CB22		CB22		
					CB23		CB23		
					CB24		CB24		

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

POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJI)
CB25		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CD12		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
CB26		nsp	CER. CHIP 0.15µF ±10% B 10V	DK96154200				C1608X7R1H104K	
CB27		nsp	CER. CHIP 0.15µF ±10% B 10V	DK96154200	CD13		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
CB28		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300	}				
CB29		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300	CD20		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
}			C1608X7R1H104K		CP01		nsp	CER. CHIP 22pF ±5% CG 50V	DD95220300
CB33		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CP02		nsp	CER. CHIP 22pF ±5% CG 50V	DD95220300
CB34		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CP03		nsp	CER. CHIP 22pF ±5% CG 50V	DD95220300
CB35		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CP04		nsp	CER. CHIP 22pF ±5% CG 50V	DD95220300
CB36		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CP05		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
CB37		EY10601070	TANTL. CHIP 10µF 10V	EY10601070				C1608X7R1H104K	
CC01		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CP06		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
CC02		EY10601070	TANTL. CHIP 10µF 10V	EY10601070				C1608X7R1H104K	
CC03		nsp	CER. CHIP 10pF ±0.5pF CH 50V	DD91100300	CP07		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
CC04		nsp	CER. CHIP 10pF ±0.5pF CH 50V	DD91100300	CP08		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
CC05		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300				C1608X7R1H104K	
CC06		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300	CU02		EX10500530	BIG ELECT CAP 1F/5.5V	EX10500530
			C1608X7R1H104K					DB-5R5D105(ELNA)	
CC07		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CU03		nsp	CER. CHIP 10pF ±0.25pF CK 50V	DD91100300
CC08		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CU04		nsp	CER. CHIP 10pF ±0.25pF CK 50V	DD91100300
CC11		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300	CU05		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
			C1608X7R1H104K					C1608X7R1H104K	
CC12		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300	CU06		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
			C1608X7R1H104K					C1608X7R1H104K	
CC13		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CU07		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
CC14		EY10601070	TANTL. CHIP 10µF 10V	EY10601070				C1608X7R1H104K	
CC15		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CU08		EY10601070	TANTL. CHIP 10µF 10V	EY10601070
CC16		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CU09		EY10601070	TANTL. CHIP 10µF 10V	EY10601070
CC17		nsp	CER. CHIP 10pF ±0.5pF CH 50V	DD91100300	CU10		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
CC18		nsp	CER. CHIP 10pF ±0.5pF CH 50V	DD91100300				C1608X7R1H104K	
CC19		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300	CU11		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
			C1608X7R1H104K					C1608X7R1H104K	
CC20		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300	CU12		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
			C1608X7R1H104K					C1608X7R1H104K	
CC21		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CU13		EY10601070	TANTL. CHIP 10µF 10V	EY10601070
CC22		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CU16		nsp	CER. CHIP 1µF 10V F	DK98105200
CC23		nsp	CER. CHIP 10pF ±0.5pF CH 50V	DD91100300	CU17		nsp	CER. CHIP 100pF ±5% CG 50V	DD95101300
CC24		nsp	CER. CHIP 10pF ±0.5pF CH 50V	DD91100300	CU18		nsp	CER. CHIP 470pF (GR39)	DK96471300
CC25		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300	CU19		nsp	CER. CHIP 470pF (GR39)	DK96471300
			C1608X7R1H104K		CU20		nsp	CER. CHIP 470pF (GR39)	DK96471300
CC26		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300	CU21		nsp	CER. CHIP 470pF (GR39)	DK96471300
			C1608X7R1H104K		CU22		nsp	CER. CHIP 470pF (GR39)	DK96471300
CC27		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CU23		nsp	CER. CHIP 470pF (GR39)	DK96471300
CC28		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CU24		nsp	CER. CHIP 470pF (GR39)	DK96471300
CC29		EY10701020	ELECT. CHIP 100µF 10V	EY10701020	CU25		nsp	CER. CHIP 470pF (GR39)	DK96471300
CC30		EY10701020	ELECT. CHIP 100µF 10V	EY10701020	CU26		nsp	CER. CHIP 1µF 10V F	DK98105200
CC31		EY68601020	ELECT. CHIP 68µF 10V	EY68601020	CU27		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
CC32		EY68601020	ELECT. CHIP 68µF 10V	EY68601020				C1608X7R1H104K	
CC33		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CX02		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
CC34		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300				C1608X7R1H104K	
			C1608X7R1H104K		CX03		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
CC35		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300				C1608X7R1H104K	
			C1608X7R1H104K		CX04		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
CC36		EY10601070	TANTL. CHIP 10µF 10V	EY10601070				C1608X7R1H104K	
CC37		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CX05		nsp	CER. CHIP 0.01µF ±10% 50V	DK96103300
CC38		EY10601070	TANTL. CHIP 10µF 10V	EY10601070				C1608JB1H103K	
CC39		EY10601070	TANTL. CHIP 10µF 10V	EY10601070	CX07		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
CC42		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300				C1608X7R1H104K	
			C1608X7R1H104K		CX08		nsp	CER. CHIP 47pF ±5% CG 50V	DD95470300
CC43		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300	CX10		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
			C1608X7R1H104K					C1608X7R1H104K	
CD01		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300	CX11		nsp	CER. CHIP 47pF ±5% CG 50V	DD95470300
}			C1608X7R1H104K		CX13		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
CD09		nsp	CER. CHIP 1µF 10V F	DK98105200				C1608X7R1H104K	
CD10		nsp	CER. CHIP 1µF 10V F	DK98105200	CX14		nsp	CER. CHIP 0.1µF ±10% 50V	DK96104300
CD11		nsp	CER. CHIP 1µF 10V F	DK98105200				C1608X7R1H104K	
					CX15		EY10601070	TANTL. CHIP 10µF 10V	EY10601070

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

POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJJ)	POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJJ)
CX16		nsp	CER. CHIP 0.1μF ±10% 50V	DK96104300	R368		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
CX21			C1608X7R1H104K		R369		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610
CX22	EY10601070		TANTL. CHIP 10μF 10V	EY10601070	R370		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610
CX23		nsp	CER. CHIP 47pF ±5% CG 50V	DD95470300	R371	NI05047110	NI05047110	CHIP 4.7Ω ±5% 1/10W	NI05047110
CX24		nsp	CER. CHIP 47pF ±5% CG 50V	DD95470300	R379		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610
CX25		nsp	CER. CHIP 0.1μF ±10% 50V	DK96104300	R380		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610
			C1608X7R1H104K		R381		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
			<b>PM01-RESISTORS</b>		R382		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
R301		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	R384		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R302		nsp	CHIP 2.7kΩ ±5% 1/16W	NN05272610	R385		}		
R303		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610	
R304		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	R401		nsp	CHIP 39kΩ ±5% 1/16W	NN05393610
R305		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610	R402		nsp	CHIP 39kΩ ±5% 1/16W	NN05393610
R306		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610	R403	FC90020110	FC90020110	FERRITE CHIP BLM11B601S	FC90020110
R307		nsp	CHIP 22kΩ ±5% 1/16W	NN05223610	R404		nsp	CHIP 22kΩ ±5% 1/16W	NN05223610
R308		nsp	CHIP 22kΩ ±5% 1/16W	NN05223610	R405		nsp	CHIP 100Ω ±5% 1/16W	NN05101610
R309		nsp	CHIP 68kΩ ±5% 1/16W	NN05683610	R406		nsp	CHIP 0Ω ±5% 1/16W	NN05000610
R310		nsp	CHIP 68kΩ ±5% 1/16W	NN05683610	R407		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
R313		nsp	CHIP 0Ω ±5% 1/16W	NN05000610	R408		nsp	CHIP 100Ω ±5% 1/16W	NN05101610
R314		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	R409		nsp	CHIP 22kΩ ±5% 1/16W	NN05223610
R315		nsp	CHIP 0Ω ±5% 1/16W	NN05000610	R410		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
R316		nsp	CHIP 68Ω ±5% 1/16W	NN05680610	R411		nsp	CHIP 0Ω ±5% 1/16W	NN05000610
R317		nsp	CHIP 68Ω ±5% 1/16W	NN05680610	R412		nsp	CHIP 0Ω ±5% 1/16W	NN05000610
R318		nsp	CHIP 68Ω ±5% 1/16W	NN05680610	R413	FC90020110	FC90020110	FERRITE CHIP BLM11B601S	FC90020110
R319		nsp	CHIP 0Ω ±5% 1/16W	NN05000610	R414		nsp	CHIP 0Ω ±5% 1/16W	NN05000610
R320		nsp	CHIP 68Ω ±5% 1/16W	NN05680610	R415		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R321		nsp	CHIP 0Ω ±5% 1/16W	NN05000610	R416		nsp	CHIP 10Ω ±5% 1/16W	NN05100610
R324		nsp	CHIP 47kΩ ±5% 1/16W	NN05473610	R417		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
R325		nsp	CHIP 100Ω ±5% 1/16W	NN05101610	R418		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
R326		nsp	CHIP 100Ω ±5% 1/16W	NN05101610	R419		nsp	CHIP 75Ω ±5% 1/16W	NN05750610
R327		nsp	CHIP 22kΩ ±5% 1/16W	NN05223610	R420		nsp	CHIP 75Ω ±5% 1/16W	NN05750610
R328		nsp	CHIP 22kΩ ±5% 1/16W	NN05223610	R422		nsp	CHIP 0Ω ±5% 1/16W	NN05000610
R329		nsp	CHIP 22kΩ ±5% 1/16W	NN05223610	R423		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610
R330		nsp	CHIP 22kΩ ±5% 1/16W	NN05223610	R424		nsp	CHIP 220Ω ±5% 1/16W	NN05221610
R331		nsp	CHIP 39kΩ ±5% 1/16W	NN05393610	R425	NI05183110	NI05183110	CHIP 18kΩ ±5% 1/10W	NI05183110
R332		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	R427		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R333		nsp	CHIP 0Ω ±5% 1/16W	NN05000610	R428		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R334		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	R429		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R335		nsp	CHIP 22kΩ ±5% 1/16W	NN05223610	R430		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R336		nsp	CHIP 47kΩ ±5% 1/16W	NN05473610	R432	FC90020110	FC90020110	FERRITE CHIP BLM11B601S	FC90020110
R337		nsp	CHIP 0Ω ±5% 1/16W	NN05000610	R433	FC90020110	FC90020110	FERRITE CHIP BLM11B601S	FC90020110
R338		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	R434		nsp	CHIP 10Ω ±5% 1/16W	NN05100610
R339		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	R435		nsp	CHIP 100Ω ±5% 1/16W	NN05101610
R341		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610	R436	FC90020110	FC90020110	FERRITE CHIP BLM11B601S	FC90020110
R342		nsp	CHIP 0Ω ±5% 1/16W	NN05000610	R437		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R343		nsp	CHIP 2.2kΩ ±5% 1/16W	NN05222610	R438		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610
R344		nsp	CHIP 6.8kΩ ±5% 1/16W	NN05682610	R441		nsp	CHIP 47Ω ±5% 1/16W	NN05470610
R345		nsp	CHIP 1.5kΩ ±5% 1/16W	NN05152610	R442		nsp	CHIP 0Ω ±5% 1/16W	NN05000610
R346		nsp	CHIP 6.8kΩ ±5% 1/16W	NN05682610	R801		nsp	CHIP 22kΩ ±5% 1/16W	NN05223610
R347		nsp	CHIP 2.2kΩ ±5% 1/16W	NN05222610	R802	RI05331010	RI05331010	CHIP 330Ω ±5% 1W	RI05331010
R348		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610	R803		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
R349		nsp	CHIP 68kΩ ±5% 1/16W	NN05683610	R804		nsp	CHIP 22kΩ ±5% 1/16W	NN05223610
R350	NI05047110		CHIP 4.7Ω ±5% 1/10W	NI05047110	R806		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610
R351		nsp	CHIP 22kΩ ±5% 1/16W	NN05223610	R808		nsp	CHIP 100Ω ±5% 1/16W	NN05101610
R352		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	R809		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R353		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	R810		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610
R354		nsp	CHIP 12kΩ ±5% 1/16W	NN05123610	R811		nsp	CHIP 100Ω ±5% 1/16W	NN05101610
R355		nsp	CHIP 12kΩ ±5% 1/16W	NN05123610	R812		nsp	CHIP 680Ω ±5% 1/16W	NN05681610
R356		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610	R813		nsp	CHIP 680Ω ±5% 1/16W	NN05681610
R357		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610	R814		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R358		nsp	CHIP 100Ω ±5% 1/16W	NN05101610	R815	NI01153110	NI01153110	CHIP 15kΩ ±1% 1/10W	NI01153110
R363					R816		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
R364		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	R817		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R365		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	R818		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
R366		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	R819		nsp	CHIP 220Ω ±5% 1/16W	NN05221610
R367		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	R820		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
					R821		nsp	CHIP 220Ω ±5% 1/16W	NN05221610

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

POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJI)
R822		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	R900		nsp	CHIP 39kΩ ±5% 1/16W	NN05393610
R823		nsp	CHIP 1MΩ ±5% 1/16W	NN05105610	R901		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R824		NI01153110	CHIP 15kΩ ±1% 1/10W	NI01153110	R902		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
R825		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	R903		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610
R826		NI01103110	CHIP 10kΩ ±1% 1/10W	NI01103110	R904		NI01153110	CHIP 15kΩ ±1% 1/10W	NI01153110
R827		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610	R905		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
R828		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	R906		NI01224110	CHIP 220kΩ ±1% 1/10W	NI01224110
R829		NI01152110	CHIP 1.5kΩ ±1% 1/10W	NI01152110	R907		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
R830		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	R908		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610
R832		nsp	CHIP 220Ω ±5% 1/16W	NN05221610	R910		nsp	CHIP 18kΩ ±5% 1/16W	NN05183610
R833		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	R911		NI01102110	CHIP 1kΩ ±1% 1/10W	NI01102110
R834		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	R912		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610
R835		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610	R913		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R836		NI01103110	CHIP 10kΩ ±1% 1/10W	NI01103110	R914		NI01333110	CHIP 33kΩ ±1% 1/10W	NI01333110
R837		nsp	CHIP 220Ω ±5% 1/16W	NN05221610	R915		nsp	CHIP 470Ω ±5% 1/16W	NN05471610
R838		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610	R916		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
R840		NI01103110	CHIP 10kΩ ±1% 1/10W	NI01103110	R917		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R841		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	R918		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610
R842		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610	R920		nsp	CHIP 1MΩ ±5% 1/16W	NN05105610
R843		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	R921		nsp	CHIP 1MΩ ±5% 1/16W	NN05105610
R844		nsp	CHIP 47kΩ ±5% 1/16W	NN05473610	R922		nsp	CHIP 1MΩ ±5% 1/16W	NN05105610
R845		nsp	CHIP 470Ω ±5% 1/16W	NN05471610	R923		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610
R846		NI01153110	CHIP 15kΩ ±1% 1/10W	NI01153110	R924		NI01123110	CHIP 12kΩ ±1% 1/10W	NI01123110
R848		nsp	CHIP 1.5kΩ ±5% 1/16W	NN05152610	R925		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610
R849		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	R926		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R850		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	RA01		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R851		NI01104110	CHIP 100kΩ ±1% 1/10W	NI01104110	RA02		nsp	CHIP 2.2kΩ ±5% 1/16W	NN05222610
R852		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	RA03		nsp	CHIP 10Ω ±5% 1/16W	NN05100610
R853		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	RA04		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R854		NI01103110	CHIP 10kΩ ±1% 1/10W	NI01103110	RA05		nsp	CHIP 470Ω ±5% 1/16W	NN05471610
R855		NI01103110	CHIP 10kΩ ±1% 1/10W	NI01103110	RA06		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
R856		nsp	CHIP 470Ω ±5% 1/16W	NN05471610	RA07		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610
R857		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	RA08		}		
R858		nsp	CHIP 1MΩ ±5% 1/16W	NN05105610			nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
R860		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	RA13				
R861		NI01103110	CHIP 10kΩ ±1% 1/10W	NI01103110	RA14		nsp	CHIP 100Ω ±5% 1/16W	NN05101610
R862		NI05154110	CHIP 150kΩ ±5% 1/10W	NI05154110	RA15		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610
R863		NI01152110	CHIP 1.5kΩ ±1% 1/10W	NI01152110	RA16		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610
R864		NI01103110	CHIP 10kΩ ±1% 1/10W	NI01103110	RA17		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R865		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	RA18		nsp	CHIP 27kΩ ±5% 1/16W	NN05273610
R866		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610	RA19		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610
R867		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	RA20		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610
R868		nsp	CHIP 1.5kΩ ±5% 1/16W	NN05152610	RA21		nsp	CHIP 27kΩ ±5% 1/16W	NN05273610
R869		NI01223110	CHIP 22kΩ ±1% 1/10W	NI01223110	RA22		nsp	CHIP 27kΩ ±5% 1/16W	NN05273610
R871		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	RA23		nsp	CHIP 27kΩ ±5% 1/16W	NN05273610
R872		nsp	CHIP 39kΩ ±5% 1/16W	NN05393610	RA24		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610
R873		NI01103110	CHIP 10kΩ ±1% 1/10W	NI01103110	RA25		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610
R875		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610	RA26		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R878		nsp	CHIP 18kΩ ±5% 1/16W	NN05183610	RA27		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R879		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610	RA28		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
R880		nsp	CHIP 1.5kΩ ±5% 1/16W	NN05152610	RA29		NI05470110	CHIP 47Ω ±5% 1/10W	NI05470110
R882		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	RA30		NI05470110	CHIP 47Ω ±5% 1/10W	NI05470110
R883		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	RA31		NI05470110	CHIP 47Ω ±5% 1/10W	NI05470110
R884		NI01222110	CHIP 2.2kΩ ±1% 1/10W	NI01222110	RA32		NI05470110	CHIP 47Ω ±5% 1/10W	NI05470110
R885		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610	RA33				
R886		NI01103110	CHIP 10kΩ ±1% 1/10W	NI01103110			nsp	CHIP 220kΩ ±5% 1/16W	NN05224610
R887		nsp	CHIP 47kΩ ±5% 1/16W	NN05473610	RA40				
R888		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610	RA41		nsp	CHIP 22kΩ ±5% 1/16W	NN05223610
R890		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	RA42		nsp	CHIP 22kΩ ±5% 1/16W	NN05223610
R891		NI01104110	CHIP 100kΩ ±1% 1/10W	NI01104110	RA43		nsp	CHIP 22kΩ ±5% 1/16W	NN05223610
R892		nsp	CHIP 1.5kΩ ±5% 1/16W	NN05152610	RA44		nsp	CHIP 22kΩ ±5% 1/16W	NN05223610
R893		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	RA45				
R894		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610			NI01103110	CHIP 10kΩ ±1% 1/10W	NI01103110
R895		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	RA50				
R896		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	RA51		nsp	CHIP 2.2kΩ ±5% 1/16W	NN05222610
R897		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	RA52		nsp	CHIP 2.2kΩ ±5% 1/16W	NN05222610
R898		NI05000110	CHIP 0Ω ±5% 1/10W	NI05000110	RA53		nsp	CHIP 180Ω ±5% 1/16W	NN05181610
R899		NI01103110	CHIP 10kΩ ±1% 1/10W	NI01103110	RA54		nsp	CHIP 180Ω ±5% 1/16W	NN05181610
					RA55		nsp	CHIP 180Ω ±5% 1/16W	NN05181610

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

POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJI)
RA56		nsp	CHIP 180Ω ±5% 1/16W	NN05181610	RC20		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610
RA57					RC21		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
RA68		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610	RC22		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
RA69		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610	RC23		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
RA70		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	RC24		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
RA71		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	RC25		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610
RA72		NI05682110	CHIP 6.8kΩ ±5% 1/10W	NI05682110	RC26		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610
RA73		NI05682110	CHIP 6.8kΩ ±5% 1/10W	NI05682110	RC27		nsp	CHIP 33kΩ ±5% 1/16W	NN05333610
RA74		NI05682110	CHIP 6.8kΩ ±5% 1/10W	NI05682110	RC28		nsp	CHIP 33kΩ ±5% 1/16W	NN05333610
RA75		NI05682110	CHIP 6.8kΩ ±5% 1/10W	NI05682110	RC29		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
RB01		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	RC30		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
RB02		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	RC33		nsp	CHIP 0Ω ±5% 1/16W	NN05000610
RB03		nsp	CHIP 3.3kΩ ±5% 1/16W	NN05332610	RC34		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
RB04		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	RC35		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
RB05		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	RC36		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
RB06		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610	RC37		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
RB07		nsp	CHIP 3.3kΩ ±5% 1/16W	NN05332610	RC38		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610
RB08		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	RC39		nsp	CHIP 22kΩ ±5% 1/16W	NN05223610
RB09		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610	RC40		nsp	CHIP 22kΩ ±5% 1/16W	NN05223610
RB10		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610	RC41		nsp	CHIP 47kΩ ±5% 1/16W	NN05473610
RB11		nsp	CHIP 12kΩ ±5% 1/16W	NN05123610	RC42		nsp	CHIP 47kΩ ±5% 1/16W	NN05473610
RB12		nsp	CHIP 12kΩ ±5% 1/16W	NN05123610	RC43		nsp	CHIP 15kΩ ±5% 1/16W	NN05153610
RB13		nsp	CHIP 33kΩ ±5% 1/16W	NN05333610	RC44		nsp	CHIP 15kΩ ±5% 1/16W	NN05153610
RB14		nsp	CHIP 33kΩ ±5% 1/16W	NN05333610	RC45		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610
RB15		nsp	CHIP 100Ω ±5% 1/16W	NN05101610	RC46		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610
RB16		nsp	CHIP 100Ω ±5% 1/16W	NN05101610	RC47		nsp	CHIP 47kΩ ±5% 1/16W	NN05473610
RB17		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610	RC48		nsp	CHIP 47kΩ ±5% 1/16W	NN05473610
RB18		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610	RC49		nsp	CHIP 0Ω ±5% 1/16W	NN05000610
RB19		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610	RC50		nsp	CHIP 0Ω ±5% 1/16W	NN05000610
RB20		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610	RC51		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610
RB21		nsp	CHIP 3.3kΩ ±5% 1/16W	NN05332610	RC52		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610
RB22		nsp	CHIP 3.3kΩ ±5% 1/16W	NN05332610	RC53		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610
RB23		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610	RC54		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610
RB24		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610	RC55		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
RB25		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610	RC56		nsp	CHIP 680kΩ ±5% 1/16W	NN05684610
RB26		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610	RC57		nsp	CHIP 680kΩ ±5% 1/16W	NN05684610
RB27		nsp	CHIP 220kΩ ±5% 1/16W	NN05224610	RC58		nsp	CHIP 470kΩ ±5% 1/16W	NN05474610
RB28		nsp	CHIP 2.2kΩ ±5% 1/16W	NN05222610	RC59		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
RB29		nsp	CHIP 18kΩ ±5% 1/16W	NN05183610	RC60		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
RB30		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	RC61		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
RB31		nsp	CHIP 2.2kΩ ±5% 1/16W	NN05222610	RC62		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610
RB32		nsp	CHIP 18kΩ ±5% 1/16W	NN05183610	RC63		nsp	CHIP 0Ω ±5% 1/16W	NN05000610
RB33		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	RD01		nsp	CHIP 0Ω ±5% 1/16W	NN05000610
RB34		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	RD03		nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610
RB35		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	RD04		nsp	CHIP 0Ω ±5% 1/16W	NN05000610
RB36		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	RD05	FC90020110	FERRITE CHIP BLM11B601S	FC90020110	
RB37		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	RD06	nsp	CHIP 0Ω ±5% 1/16W	NN05000610	
RB38		nsp	CHIP 470kΩ ±5% 1/16W	NN05474610	RD07	FN31010030	EMI FILTER BLM11B102S 1608	FN31010030	
RB39		nsp	CHIP 470kΩ ±5% 1/16W	NN05474610	RD08	nsp	CHIP 4.7kΩ ±5% 1/16W	NN05472610	
RB40		nsp	CHIP 470kΩ ±5% 1/16W	NN05474610	RD09	nsp	CHIP 0Ω ±5% 1/16W	NN05000610	
RC01		nsp	CHIP 47kΩ ±5% 1/16W	NN05473610	RD10	nsp	CHIP 33Ω ±5% 1/16W	NN05330610	
RC02		nsp	CHIP 47kΩ ±5% 1/16W	NN05473610	RD11	nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	
RC03		nsp	CHIP 12kΩ ±5% 1/16W	NN05123610	RD12	nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	
RC04		nsp	CHIP 12kΩ ±5% 1/16W	NN05123610	RD13	nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	
RC05		nsp	CHIP 33kΩ ±5% 1/16W	NN05333610	RD14	nsp	CHIP 0Ω ±5% 1/16W	NN05000610	
RC06		nsp	CHIP 33kΩ ±5% 1/16W	NN05333610	RD15	nsp	CHIP 0Ω ±5% 1/16W	NN05000610	
RC07		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	RD16	FC90020110	FERRITE CHIP BLM11B601S	FC90020110	
RC08		nsp	CHIP 100kΩ ±5% 1/16W	NN05104610	RD17	nsp	CHIP 0Ω ±5% 1/16W	NN05000610	
RC11		nsp	CHIP 3.9kΩ ±5% 1/16W	NN05392610	RD18	nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	
RC12		nsp	CHIP 3.9kΩ ±5% 1/16W	NN05392610	RD19				
RC13		nsp	CHIP 47kΩ ±5% 1/16W	NN05473610	RD23	FC90020110	FERRITE CHIP BLM11B601S	FC90020110	
RC14		nsp	CHIP 47kΩ ±5% 1/16W	NN05473610	RD24	FN31010030	EMI FILTER BLM11B102S 1608	FN31010030	
RC15		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610	RD31	nsp	CHIP 0Ω ±5% 1/16W	NN05000610	
RC16		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610	RD32	nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	
RC17		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	RD33	nsp	CHIP 0Ω ±5% 1/16W	NN05000610	
RC18		nsp	CHIP 10kΩ ±5% 1/16W	NN05103610	RD34	FC90020110	FERRITE CHIP BLM11B601S	FC90020110	
RC19		nsp	CHIP 1kΩ ±5% 1/16W	NN05102610	RP01		nsp	CHIP 1MΩ ±5% 1/16W	NN05105610

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

POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJJ)	POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJJ)
RP02		nsp	CHIP 1M $\Omega$ $\pm$ 5% 1/16W	NN05105610	D304		HZ30027050	CHIP DIODE 02CZ12-Y	HZ30027050
RP03		nsp	CHIP 10k $\Omega$ $\pm$ 5% 1/16W	NN05103610	D305		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000
RP04		FC90020110	FERRITE CHIP BLM11B601S	FC90020110					
RP05		FC90020110	FERRITE CHIP BLM11B601S	FC90020110	D801		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000
RP06		nsp	CHIP 10 $\Omega$ $\pm$ 5% 1/16W	NN05100610	D802		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000
RP10		nsp	CHIP 47 $\Omega$ $\pm$ 5% 1/16W	NN05470610	D803		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000
RP11		nsp	CHIP 47 $\Omega$ $\pm$ 5% 1/16W	NN05470610	D805		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000
RP12		nsp	CHIP 47 $\Omega$ $\pm$ 5% 1/16W	NN05470610	D806		HZ20061210	CHIP DIODE RB160L-40 TE25 SBD 40V 1A PMDS	HZ20061210
RP13									
}									
RP25		FC90020110	FERRITE CHIP BLM11B601S	FC90020110	D807		HZ20061210	CHIP DIODE RB160L-40 TE25 SBD 40V 1A PMDS	HZ20061210
					D808		HZ20061210	CHIP DIODE RB160L-40 TE25 SBD 40V 1A PMDS	HZ20061210
RU02		nsp	CHIP 10k $\Omega$ $\pm$ 5% 1/16W	NN05103610	D809		HZ20012100	CHIP DIODE EC11FSZ 200V 1A	HZ20012100
RU05		nsp	CHIP 10k $\Omega$ $\pm$ 5% 1/16W	NN05103610	D810		HZ20061210	CHIP DIODE RB160L-40 TE25 SBD 40V 1A PMDS	HZ20061210
RU06		nsp	CHIP 10k $\Omega$ $\pm$ 5% 1/16W	NN05103610					
RU07		nsp	CHIP 100k $\Omega$ $\pm$ 5% 1/16W	NN05104610	D811		HZ20061210	CHIP DIODE RB160L-40 TE25 SBD 40V 1A PMDS	HZ20061210
RU08		nsp	CHIP 2.2k $\Omega$ $\pm$ 5% 1/16W	NN05222610	D812		HZ20061210	CHIP DIODE RB160L-40 TE25 SBD 40V 1A PMDS	HZ20061210
RU09		nsp	CHIP 100k $\Omega$ $\pm$ 5% 1/16W	NN05104610	D813		HZ20061210	CHIP DIODE RB160L-40 TE25 SBD 40V 1A PMDS	HZ20061210
RU10		nsp	CHIP 10 $\Omega$ $\pm$ 5% 1/16W	NN05100610					
RU12		nsp	CHIP 10k $\Omega$ $\pm$ 5% 1/16W	NN05103610	D814		HZ30021050	CHIP DIODE 02CZ15Y	HZ30021050
RU13		nsp	CHIP 10 $\Omega$ $\pm$ 5% 1/16W	NN05100610	D815		HZ30006050	CHIP DIODE 02CZ5.6Y	HZ30006050
RU14		nsp	CHIP 2.2k $\Omega$ $\pm$ 5% 1/16W	NN05222610	D816		HZ30010050	CHIP DIODE 02CZ20Z	HZ30010050
RU15		nsp	CHIP 10k $\Omega$ $\pm$ 5% 1/16W	NN05103610	D817		HZ20061210	CHIP DIODE RB160L-40 TE25 SBD 40V 1A PMDS	HZ20061210
RU16		nsp	CHIP 2.2k $\Omega$ $\pm$ 5% 1/16W	NN05222610	D818		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000
RU17		nsp	CHIP 100k $\Omega$ $\pm$ 5% 1/16W	NN05104610	D819		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000
RU18		nsp	CHIP 10 $\Omega$ $\pm$ 5% 1/16W	NN05100610	D820		HZ21006000	CHIP DIODE 1SS300,DAP202U	HZ21006000
RU20		nsp	CHIP 10k $\Omega$ $\pm$ 5% 1/16W	NN05103610	DA01	}	HZ30016050	CHIP ZENER DIODE 02CZ6.2Z	HZ30016050
RU24		nsp	CHIP 1k $\Omega$ $\pm$ 5% 1/16W	NN05102610	DA08				
RU25		nsp	CHIP 1k $\Omega$ $\pm$ 5% 1/16W	NN05102610	DC01		HZ20018050	CHIP DIODE 1SS302 (TOSHIBA)	HZ20018050
RU26		nsp	CHIP 1k $\Omega$ $\pm$ 5% 1/16W	NN05102610	DC02		HZ20018050	CHIP DIODE 1SS302 (TOSHIBA)	HZ20018050
RU27		nsp	CHIP 1k $\Omega$ $\pm$ 5% 1/16W	NN05102610	DC03		HZ21006000	CHIP DIODE 1SS300,DAP202U	HZ21006000
RU28		nsp	CHIP 47k $\Omega$ $\pm$ 5% 1/16W	NN05473610	DC04		HZ21006000	CHIP DIODE 1SS300,DAP202U	HZ21006000
RU48					DC05		HZ21006000	CHIP DIODE 1SS300,DAP202U	HZ21006000
}					DC06		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000
RU58		nsp	CHIP 10k $\Omega$ $\pm$ 5% 1/16W	NN05103610	DC07		HZ20018050	CHIP DIODE 1SS302 (TOSHIBA)	HZ20018050
RU61					DU01		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000
}					DU03		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000
RU67		nsp	CHIP 1k $\Omega$ $\pm$ 5% 1/16W	NN05102610	DX01		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000
RU68		nsp	CHIP 100 $\Omega$ $\pm$ 5% 1/16W	NN05101610	Q301		HC10168090	IC NJM2068V (OP-AMP)	HC10168090
RU69		nsp	CHIP 100 $\Omega$ $\pm$ 5% 1/16W	NN05101610	Q302		HC12242090	IC NJM022V (NJR)	HC12242090
					Q303		HC12242090	IC NJM022V (NJR)	HC12242090
RX01		nsp	CHIP 1M $\Omega$ $\pm$ 5% 1/16W	NN05105610	Q304		HC12242090	IC NJM022V (NJR)	HC12242090
RX02		nsp	CHIP 100k $\Omega$ $\pm$ 5% 1/16W	NN05104610	Q305		HC10098090	IC NJM2070M	HC10098090
RX03		nsp	CHIP 10k $\Omega$ $\pm$ 5% 1/16W	NN05103610	Q306		HC10045090	IC NJM-4556MB	HC10045090
RX04		nsp	CHIP 100k $\Omega$ $\pm$ 5% 1/16W	NN05104610	Q307		HC705205Y0	IC TC74HC4052AFT	HC705205Y0
RX05		nsp	CHIP 1.5k $\Omega$ $\pm$ 5% 1/16W	NN05152610	Q310		BA21111000	DIG.TRS. DTC114TE,RN1111	BA21111000
RX06		nsp	CHIP 100k $\Omega$ $\pm$ 5% 1/16W	NN05104610	Q311		BA20080210	DIG.TRS. DTC323TU	BA20080210
RX07		nsp	CHIP 4.7k $\Omega$ $\pm$ 5% 1/16W	NN05472610	Q312		BA20080210	DIG.TRS. DTC323TU	BA20080210
RX09		FC90020110	FERRITE CHIP BLM11B601S	FC90020110	Q313		BA20080210	DIG.TRS. DTC323TU	BA20080210
RX10		FC90020110	FERRITE CHIP BLM11B601S	FC90020110	Q314		BA20080210	DIG.TRS. DTC323TU	BA20080210
RX11		nsp	CHIP 1k $\Omega$ $\pm$ 5% 1/16W	NN05102610	Q315		HX300012A0	CHIP TRS.	HX300012A0
RX12		nsp	CHIP 1k $\Omega$ $\pm$ 5% 1/16W	NN05102610					
RX14		nsp	CHIP 10k $\Omega$ $\pm$ 5% 1/16W	NN05103610	Q316		HX346721A0	CHIP TRS. 2SC4672 Q	HX346721A0
RX15		nsp	CHIP 100k $\Omega$ $\pm$ 5% 1/16W	NN05104610	Q317		HX300012A0	CHIP TRS.	HX300012A0
RX16		nsp	CHIP 10k $\Omega$ $\pm$ 5% 1/16W	NN05103610					
RX17		nsp	CHIP 100k $\Omega$ $\pm$ 5% 1/16W	NN05104610	Q318		BA20080210	DIG.TRS. DTC323TU	BA20080210
RX18		nsp	CHIP 10k $\Omega$ $\pm$ 5% 1/16W	NN05103610	Q319		BA20080210	DIG.TRS. DTC323TU	BA20080210
RX19		nsp	CHIP 100k $\Omega$ $\pm$ 5% 1/16W	NN05104610	Q320		BA20080210	DIG.TRS. DTC323TU	BA20080210
RX20		nsp	CHIP 10k $\Omega$ $\pm$ 5% 1/16W	NN05103610	Q321		BA20080210	DIG.TRS. DTC323TU	BA20080210
RX21		nsp	CHIP 10k $\Omega$ $\pm$ 5% 1/16W	NN05103610	Q322		BA20080210	DIG.TRS. DTC323TU	BA20080210
RX22		nsp	CHIP 100k $\Omega$ $\pm$ 5% 1/16W	NN05104610	Q323		BA20035210	DIG.TRS. DTC114EU	BA20035210
RX23		nsp	CHIP 150k $\Omega$ $\pm$ 5% 1/16W	NN05154610	Q324		BA10026210	DIG.TRS. DTA114EU	BA10026210
RX24		nsp	CHIP 22k $\Omega$ $\pm$ 5% 1/16W	NN05223610	Q327		BA10026210	DIG.TRS. DTA114EU	BA10026210
RX48		nsp	CHIP 470 $\Omega$ $\pm$ 5% 1/16W	NN05471610	Q328		BA20035210	DIG.TRS. DTC114EU	BA20035210
RX49		nsp	CHIP 470 $\Omega$ $\pm$ 5% 1/16W	NN05471610					
			<b>PM01-SEMICONDUCTORS</b>						
D301		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000					
D302		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000					
D303		HZ21005000	CHIP DIODE 1SS301,DAN202U	HZ21005000					

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

POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJI)
Q330		BA10026210	DIG.TR.S. DTA114EU	BA10026210	QA01		HC705205Y0	IC TC74HC4052AFT	HC705205Y0
Q331		BA20035210	DIG.TR.S. DTC114EU	BA20035210	QA02		HC705205Y0	IC TC74HC4052AFT	HC705205Y0
Q332		BA20035210	DIG.TR.S. DTC114EU	BA20035210	QA03				
Q333		BA20035210	DIG.TR.S. DTC114EU	BA20035210	QA07		HC10168090	IC NJM2068V (0P-AMP)	HC10168090
Q334		BA20035210	DIG.TR.S. DTC114EU	BA20035210	QA08		HC705205Y0	IC TC74HC4052AFT	HC705205Y0
Q401		HC10037480	IC AK4114 DIT	HC10037480	QA10		BA20035210	DIG.TR.S. DTC114EU	BA20035210
Q402		HC10035480	IC ADC AK5380VT 24BIT DR=105DB	HC10035480	QA11		BA20035210	DIG.TR.S. DTC114EU	BA20035210
Q403		HC10036480	IC AK4380VT-E2 DAC	HC10036480	QA12		BA20035210	DIG.TR.S. DTC114EU	BA20035210
Q405		HC10168090	IC NJM2068V (0P-AMP)	HC10168090	QA13		BA20080210	DIG.TR.S. DTC323TU	BA20080210
Q801		HX117971A0	CHIP TR.S. 2SA1797	HX117971A0	QB01		HC12242090	IC NJM022V (NJR)	HC12242090
Q802		HC10036090	IC NJM2904M	HC10036090	QB02		HC12242090	IC NJM022V (NJR)	HC12242090
Q803		HC10036090	IC NJM2904M	HC10036090	QB03		HC406621Y0	DIGITAL C-MOS BU4066BCFV	HC406621Y0
Q804		HX117971A0	CHIP TR.S. 2SA1797	HX117971A0	QB04		HC406621Y0	DIGITAL C-MOS BU4066BCFV	HC406621Y0
Q805		HC10036090	IC NJM2904M	HC10036090	QB05		HC12242090	IC NJM022V (NJR)	HC12242090
Q806		HX117971A0	CHIP TR.S. 2SA1797	HX117971A0	QB06		HC405321Y0	DIGITAL C-MOS BU4053BCFV	HC405321Y0
Q807		HX117971A0	CHIP TR.S. 2SA1797	HX117971A0	QB07		HC12242090	IC NJM022V (NJR)	HC12242090
Q808		HC011017K0	IC MC74VHC14DT	HC011017K0	QB08		HC705205Y0	IC TC74HC4052AFT	HC705205Y0
Q809		HC011017K0	IC MC74VHC14DT	HC011017K0	QB10		BA20035210	DIG.TR.S. DTC114EU	BA20035210
Q810		HX117971A0	CHIP TR.S. 2SA1797	HX117971A0	QB11		BA20035210	DIG.TR.S. DTC114EU	BA20035210
Q811		HX117971A0	CHIP TR.S. 2SA1797	HX117971A0	QB12		BA20035210	DIG.TR.S. DTC114EU	BA20035210
Q812		HX117971A0	CHIP TR.S. 2SA1797	HX117971A0	QC01		HC12242090	IC NJM022V (NJR)	HC12242090
Q813		HX117971A0	CHIP TR.S. 2SA1797	HX117971A0	QC02		HC405321Y0	DIGITAL C-MOS BU4053BCFV	HC405321Y0
Q814		BA10026210	DIG.TR.S. DTA114EU	BA10026210	QC03		HC405321Y0	DIGITAL C-MOS BU4053BCFV	HC405321Y0
Q815		BA10026210	DIG.TR.S. DTA114EU	BA10026210	QC04		HC12242090	IC NJM022V (NJR)	HC12242090
Q816		HC10106530	IC S-8521D33MC-BXS	HC10106530	QC05		HC10168090	IC NJM2068V (0P-AMP)	HC10168090
Q817		BA10026210	DIG.TR.S. DTA114EU	BA10026210	QC06		HC12242090	IC NJM022V (NJR)	HC12242090
Q818		HX117971A0	CHIP TR.S. 2SA1797	HX117971A0	QC10				
Q819		HC10226210	IC BA9741FS-E2 2CH DC-DC	HC10226210	QC15		HX300012A0	CHIP TR.S.	HX300012A0
Q820		HC12241090	IC NJM2373AF	HC12241090	QC16			2SC4081 (Q,R) 2SC4116 (Y,GR)	
Q821		BA21001000	DIG.TR.S. UMW1N 2	BA21001000	QC17		BA21113050	DIG.TR.S. RN1113 (TOSHIBA)	BA21113050
Q822		HC90005090	IC NJM78L05UA CHIP REG (JRC)	HC90005090	QC18		BA21113050	DIG.TR.S. RN1113 (TOSHIBA)	BA21113050
Q823		BA10026210	DIG.TR.S. DTA114EU	BA10026210	QC19		BA21111000	DIG.TR.S. DTC114TE,RN1111	BA21111000
Q824		HX300012A0	CHIP TR.S.	HX300012A0	QC20		BA21111000	DIG.TR.S. DTC114TE,RN1111	BA21111000
Q825		HT418022B0	TRS. 2SD1802S/T-TL	HT418022B0	QC21		BA21111000	DIG.TR.S. DTC114TE,RN1111	BA21111000
Q826		HX410062A0	CHIP TR.S. 2SD1006 HK HL	HX410062A0	QC22		BA21111000	DIG.TR.S. DTC114TE,RN1111	BA21111000
Q827		HX300012A0	CHIP TR.S.	HX300012A0	QC23		HX100012A0	CHIP TR.S.	HX100012A0
Q828		BA20035210	DIG.TR.S. DTC114EU	BA20035210	QC24		BA12113000	DIG.TR.S.	BA12113000
Q829		HX300012A0	CHIP TR.S.	HX300012A0	QD01		HC10133370	IC TMS320VC5416PGE-160	HC10133370
Q830		HX300012A0	CHIP TR.S.	HX300012A0	QD02		HS04ASX000	ONE TIME PROM	HS04ASX000
Q831		HX346721A0	CHIP TR.S. 2SC4672 Q	HX346721A0	QD03		HC10015590	IC M68AW256M70ND1	HC10015590
Q832		HX300012A0	CHIP TR.S.	HX300012A0	QD04		HC10015590	IC M68AW256M70ND1	HC10015590
Q833		HX300012A0	CHIP TR.S.	HX300012A0	QP01		HC10232990	IC XC9536XL-VQ64-10C	HC10232990
Q834		HX300012A0	CHIP TR.S.	HX300012A0	QP02		HC700400Z0	IC CMOS 74HCU04 FLAT	HC700400Z0
Q835		HX333241B0	CHIP TR.S. 2SC3324 (B)	HX333241B0	QP03		BA20035210	DIG.TR.S. DTC114EU	BA20035210
Q836		HX300012A0	CHIP TR.S.	HX300012A0	QP04		BA20035210	DIG.TR.S. DTC114EU	BA20035210
Q841		HX346721A0	CHIP TR.S. 2SC4672 Q	HX346721A0	QU01		*HS04ASH0R	MICROPROCESSOR	*HS04ASH0R
Q843		HX300012A0	CHIP TR.S.	HX300012A0	QU02		HC10227210	IC BD4719G-TR RESET 1.9V	HC10227210
Q844		HX300012A0	CHIP TR.S.	HX300012A0	QU03		HC10033990	IC AT24C04N-10SI-2.5	HC10033990
Q845		HX300012A0	CHIP TR.S.	HX300012A0	QU04		HC10036770	IC RS5C372A-E2	HC10036770
Q846		HX300012A0	CHIP TR.S.	HX300012A0	QU05		BA20035210	DIG.TR.S. DTC114EU	BA20035210
Q847		HX346721A0	CHIP TR.S. 2SC4672 Q	HX346721A0	QU06		HC10068490	IC PCF8574(I/O EXPANDER)	HC10068490
Q848		HX300012A0	CHIP TR.S.	HX300012A0	QX01		HC10233990	IC GL641USB	HC10233990
Q849		BA20035210	DIG.TR.S. DTC114EU	BA20035210	QX02		HC010717K0	IC MC74LVX245DT	HC010717K0
Q850		HX300012A0	CHIP TR.S.	HX300012A0	QX03		HC010817K0	IC MC74LVX541DT	HC010817K0
Q852		HX117971A0	CHIP TR.S. 2SA1797	HX117971A0	QX04		HC010717K0	IC MC74LVX245DT	HC010717K0
					QX05		HC010717K0	IC MC74LVX245DT	HC010717K0
					QX06		HX117971A0	CHIP TR.S. 2SA1797	HX117971A0
					QX07		BA20035210	DIG.TR.S. DTC114EU	BA20035210

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



POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (FOR EUR)	DESCRIPTION	PART NO. (MJI)
QX08		HX117971A0	CHIP TRS. 2SA1797	HX117971A0	LX02		FN31010030	EMIFILTER BLM11B102S 1608	FN31010030
QX09		BA20035210	DIG. TRS. DTC114EU	BA20035210	XP01		JX11001260	CRYSTAL 11.2896MHz	JX11001260
QX10		BA20035210	DIG. TRS. DTC114EU	BA20035210	XP02		JX12001350	CRYSTAL 12.288MHz (SMD-49)	JX12001350
			<b>PM01-MISCELLANEOUS</b>		XU01		FQ01605120	CERAMIC VIB. CSTCE16M0V53-R0	FQ01605120
▲ F801		FS10250940	FUSE 2.5A/60V CCF1N2.5 TE	FS10250940	XU02		JX00002370	CRYSTAL 32.768kHz CM200S	JX00002370
J401		YT02021130	CINCH JACK 2P YKC21-3255 (GOLD)	YT02021130	XX01		FQ01205040	CERAMIC VIB. CSTCE12M0G15-R0 FOR USB1.1	FQ01205040
J801		YJ04001060	JACK DC JACK 2A	YJ04001060				<b>PP01-PHANTOM SW CIRCUIT BOARD</b>	
JX01		YJ90014570	JACK 55358-5021 C/F CARD HEADER	YJ90014570	SU01		SS02021710	SLIDE SWITCH SSAA22-B NON-SHORTING PHANTOM	SS02021710
JX02		YJ90014560	JACK TCX0101-110100 MINI-B USB	YJ90014560				<b>PS01-POWER SW CIRCUIT BOARD</b>	
JX03		ZK04AS0010	UNIT KIT 55364-0011 C/F CARD EJECTOR	ZK04AS0010	SU03		SS01021060	SLIDE SWITCH SSST01-3A POWER SW	SS01021060
L301		FN31010030	EMIFILTER BLM11B102S 1608	FN31010030				<b>PW06-H/P VOL CIRCUIT BOARD</b>	
L302		FN31010030	EMIFILTER BLM11B102S 1608	FN31010030	R378		RM01031130	VAR. RES. 10 kΩ A RK0971220 HP VOL	RM01031130
L306		FN31010030	EMIFILTER BLM11B102S 1608	FN31010030					
L307		FN31010030	EMIFILTER BLM11B102S 1608	FN31010030					
L356		nsp	CHIP RES. 0Ω ±5% 1/16W	NN05000610					
L357		FN31010030	EMIFILTER BLM11B102S 1608	FN31010030					
L358		FN31010030	EMIFILTER BLM11B102S 1608	FN31010030					
L401		TP41042010	PULSE TRANSF. PULS TRANS FOR CD	TP41042010					
L404		FC90020110	FERRITE CHIP BLM11B601S	FC90020110					
L405		nsp	CHIP RES. 0Ω ±5% 1/16W	NN05000610					
L406		nsp	CHIP RES. 0Ω ±5% 1/16W	NN05000610					
L407		FN31010030	EMIFILTER BLM11B102S 1608	FN31010030					
L408		FN31010030	EMIFILTER BLM11B102S 1608	FN31010030					
L801		LU12103010	CHIP INDUCTANCE NL322522-100K	LU12103010					
L802		LC11540170	CHOKO COIL 150μH N06DB151K	LC11540170					
L803		LU83103030	CHIP INDUCTANCE CDRH5D28 10μH ±30%	LU83103030					
L804		LU12473010	CHIP INDUCTANCE 47μH	LU12473010					
L805		LU12103010	CHIP INDUCTANCE NL322522-100K	LU12103010					
L806		LU12103010	CHIP INDUCTANCE NL322522-100K	LU12103010					
L807		LU83683030	CHIP INDUCTANCE CDRH5D28 680 68μH ±30% 520MA	LU83683030					
L808		LU12103010	CHIP INDUCTANCE NL322522-100K	LU12103010					
L809		LU83683030	CHIP INDUCTANCE CDRH5D28 680 68μH ±30% 520MA	LU83683030					
L810		LU12103010	CHIP INDUCTANCE NL322522-100K	LU12103010					
L811		LU80473060	CHIP INDUCTANCE D63LCB A921CY-470M	LU80473060					
L812		LU80104020	CHIP INDUCTANCE CDRH8D43-101NC	LU80104020					
L813		LU80473060	CHIP INDUCTANCE D63LCB A921CY-470M	LU80473060					
LD01		FC90020110	FERRITE CHIP BLM11B601S	FC90020110					
LD02		FC90020110	FERRITE CHIP BLM11B601S	FC90020110					
LU02		FN31010030	EMIFILTER BLM11B102S 1608	FN31010030					
LU12									
LU13		nsp	CHIP RES. 1kΩ ±5% 1/16W	NN05102610					
LU22		FN31010030	EMIFILTER BLM11B102S 1608	FN31010030					
LU23		FN31010030	EMIFILTER BLM11B102S 1608	FN31010030					
LU24		FN31010030	EMIFILTER BLM11B102S 1608	FN31010030					
LU25		FN31010030	EMIFILTER BLM11B102S 1608	FN31010030					
LU26		FN31010030	EMIFILTER BLM11B102S 1608	FN31010030					
LU27		nsp	CHIP RES. 1kΩ ±5% 1/16W	NN05102610					
LU32									

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