

Service Manual

ES7001 /F B/K1B/N1B/U1B

Home Theater System

2nd EDITION

1. The model no. ES7001/N1B was added in this service manual.
2. The SCHEMATIC DIAGRAM (page45, 46, 57, 58, 59, 60, 61, 62) was changed.
3. The PARTS LIST was changed.

1. ES7001/N1B仕向けを追加しました。
2. 回路図(45, 46, 57, 58, 59, 60, 61, 62頁)が変更となりました。
3. パーツリストが変更となりました。

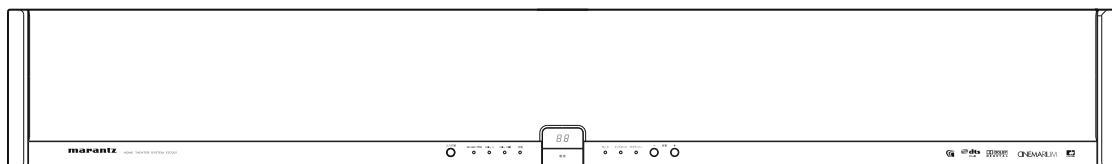


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Please use this service manual with referring to the user guide (D.F.U.) without fail.

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®

ES7001

Part no. 90M20AJ855020
First Issue 2007.09
MZ

ES7001

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
100 CORPORATE DRIVE
MAHWAH, NEW JERSEY 07430
USA

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

D&M CANADA INC.
5-505 APPLE CREEK BLVD.
MARKHAM, ONTARIO L3R 5B1
CANADA

JAPAN

D&M Holdings Inc.
D&M BUILDING, 2-1 NISSHIN-CHO,
KAWASAKI-KU, KAWASAKI-SHI,
KANAGAWA, 210-8569 JAPAN

株式会社 ディーアンドエムホールディングス
本 社 〒210-8569
神奈川県川崎市川崎区日進町2-1 D&Mビル

KOREA

D&M SALES AND MARKETING KOREA LTD.
CHUNG JIN B/D., #1001,
53-5, WONHYORO 3 GA, YONGSAN-GU,
SEOUL, 140-719, KOREA
PHONE : +82 - 2 - 323 - 2155
FAX : +82 - 2 - 323 - 2154

CHINA

MARANTZ SHANGHAI TRADING LTD.
ROOM.506 SHANGHAI LIGHT INDUSTRY MANSION
1578 NANJING (WEST) ROAD SHANGHAI
CHINA
TEL : 021 - 6248 - 1064
FAX : 021 - 6248 - 3565

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ものをして下さい。

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. 60065.

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

1. TECHNICAL SPECIFICATIONS

Audio power amplifier

Rated power output

(20 Hz-20 kHz / THD = 0.05%) 26 W/ch 6

Maximum power output (1 kHz/JEITA) 30 W/ch 6

Frequency characteristics

Analog input: ANALOG IN 1 20 Hz-20 kHz (± 3 dB)

Digital input: PCM 44.1 kHz 20 Hz-20 kHz (± 3 dB)

S/N ratio: PCM 44.1 kHz 100 dB

Decoding

Compatible playback signal formats

PCM audio (fs = 32 kHz, 44.1 kHz, 48 kHz)

DOLBY DIGITAL

DTS

AAC

Binaural

Power supply

Power requirements

[F] AC 100 V, 50/60 Hz

[K] AC 220 V, 50/60 Hz

[N] AC 230 V, 50 Hz

[U] AC 120 V, 60 Hz

Power consumption 40 W

..... 125 W (6Ω, 30 W x 2 outputs)

Power consumption in standby mode 0.8 W

Input

OPT IN (optical digital) 3 inputs

HDMI IN (Version 1.1) 2 inputs

ANALOG IN 2 inputs (stereo)

Output

HDMI OUT (Version 1.1) 1 output

SUB W. PREOUT 1 output

REMOTE OUT 1 output

Speakers

Tweeter 1.9 cm (3/4 inches) dome x 2

Midrange 8 cm (3 1/4 inches) cone x 2

Woofer 12 cm (4 3/4 inches) cone x 2

Dimensions (unit)

Width 1,080 mm (42 5/8 inches)

Height 153 mm (6 1/8 inches)

Depth 144 mm (5 3/4 inches)

Mass (unit) 12 kg (26 lb 7 oz)

Supplied accessories

Remote controller

RC001ES [/F] 1

RC002ES [/K/N/U] 1

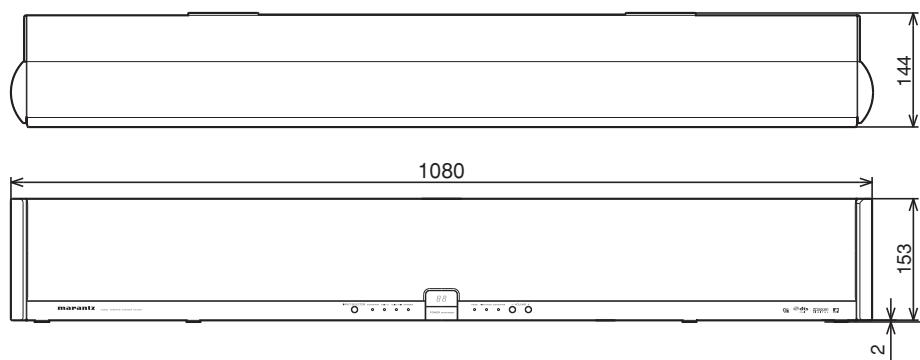
AAA batteries 2

Optical fiber cable [/F] 1

Note:

The speaker nets cannot be removed.

サランネットは取り外せません。



2. CAUTION

The layout of this amplifier is well concerned for sound quality.

- When screws and washers are removed, those parts must be set to the same places.
- When wires are removed, the wires must be installed in the same roots, same places.

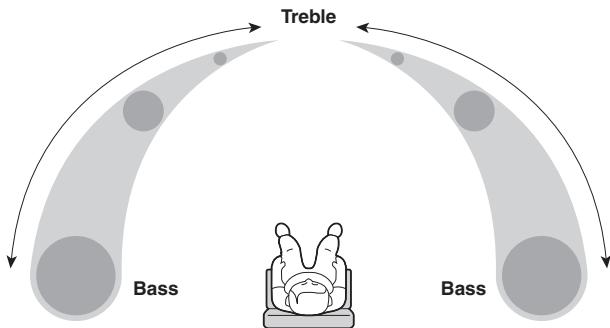
2. 注意

当機は音質を考慮したレイアウトになっています。

- ネジやワッシャ類を取り外した場合、元の位置に取り付けてください。
- ワイヤ類を取り外した場合の配線ルートは、元のルート通りに戻してください。

3. FEATURES

● What is OPSODIS?



OPSODIS (Optimal Source Distribution) is a new virtual surround technology developed by the Institute of Sound and Vibration Research (ISVR) and Kajima Corporation. OPSODIS technology has been united with Marantz's high-quality sound technology to realize a superior surround environment than ever before.

The ES7001 realizes reproduction of omni-directional sound only with the speakers built in this unit.

The ES7001 releases listeners from the conventional surround environment that has required complex installation of five or more speakers. As a result, installing the AV system in a room has little effect on their lifestyle or living environment.

The unit incorporates a 6-channel digital power amplifier, allowing direct drive of the speakers' tweeter, midrange and woofer.

The digital audio signals are input to the digital amplifier of the unit through the optical digital and the HDMI connectors without digital-analog conversion.

[PWM PROCESSOR SECTION]

Using digital filters for cutoff frequency of the 6 channel digital power amplifier enables extreme filter precision that cannot be achieved with conventional analog filters, providing the OPSODIS effects more efficiently.

[POWER SUPPLY SECTION]

The R-core transformer is adopted for the power supply section of this unit. Thanks to the features of the R-core transformer—less leakage magnetic flux, less heat generation and quick response to overload variation—the unit produces a high quality and powerful sound.

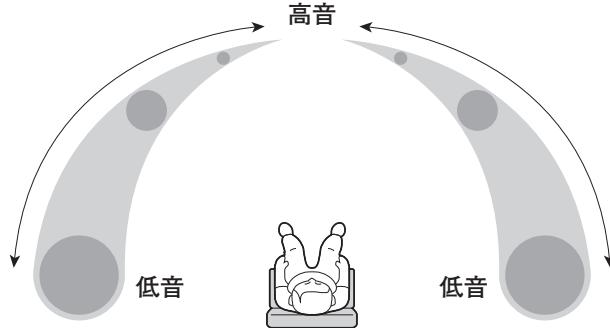
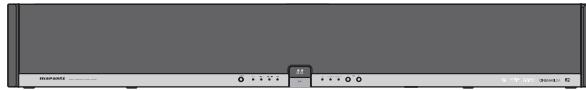
[CABINET]

Adoption of high-rigidity aluminum for the cabinet of the unit provides a sophisticated stiff construction, allowing reproduction of beautiful crystalline sound.

[OTHER FEATURES]

- The OPT IN and HDMI IN connectors are compatible with Dolby Digital 5.1ch, DST and AAC audio inputs.
- Supports Dolby PL II feature for 2-channel signal input and for digital signal input.
- Binaural recording* sources can be reproduced through the front speaker.
* Binaural recording is a method of recording audio which uses two microphones mounted in the ears of a dummy head in the shape of the human head and ears.
Binaural recording can reproduce location of sound behind, ahead, above and below. It makes you feel a real sense of distance.
Normally, a dramatic binaural effect can be achieved only with headphones.
However, a similar or more stereophonic effect can be achieved by playback of a binaural recording source using this unit than that with headphones.
- The newest 32 bit DSP circuits adopted (one for decoding of Dolby, DST, ACC and PCM, and two dedicated for OPSODIS circuits)

● OPSODIS とは



OPSODIS (OPTimal SOurce DIStribution technology:オプソーディス) とは、英国 サウサンプトン大学 音響技術研究所 (ISVR)、および鹿島建設株式会社が開発した立体音響技術です。

このOPSODISテクノロジーとマランツの高音質開発技術が、これまでに無いサラウンド環境の提案を目的に融合しました。

CINEMARIUM ES7001は本機搭載のスピーカーのみで全方位の音の再現が可能になります。

今までの5本以上のスピーカー設置が必要とされるサラウンド環境からリスナーを開放し、ライフスタイルやインテリアに対するAVシステムの影響を大きく軽減することができます。

【デジタルアンプ部】

6チャンネルデジタルアンプを搭載し、スピーカーのツイーターレンジ、ミッドレンジ、ウーハーレンジをダイレクトに駆動しています。

HDMI及び光デジタル接続されたデジタル音声信号はアナログ変換することなく、デジタルアンプに入力されます。

【PWM プロセッサー部】

6チャンネルデジタルアンプのカットオフ周波数に於いて、デジタルフィルターを使用することにより、従来のアナログフィルターでは成し得なかった精度の高いフィルターが構成できるので、OPSODISの効果をより効率良く引き出しています。

【電源部】

電源部は漏洩磁束や発熱が少なく、過負荷変動に対して応答性が高いRコアトランスを採用し、高音質で迫力のある音を実現しています。

【キャビネット】

本体キャビネットには高剛性のアルミニウムを採用することにより、精巧かつ強靭なキャビネット構造を実現しています。この結果、透明度の高い高音質なサウンドを再生しています。

【その他の特徴】

- OPT. 入力およびHDMI入力はDolby Digital 5.1ch.DTSおよびAAC入力に対応。
- 2ch ソースはDolby PL IIに対応。(Digital入力にも対応します)
- バイノーラル録音*のソースをフロントスピーカーで体験できるバイノーラルモード機能。
※ バイノーラル録音とは、人間の頭や耳の形をしたダミーヘッドの耳の部分に2本のマイクロホンをセットして録音した方式をいいます。
その音源をヘッドホンで聞くと、音源の前後左右上下方向や距離感がリアルに再現できますが、通常、バイノーラル録音されたソースはヘッドホンでしか大きな効果を得られません。
本機を使って音源を再生すると、ヘッドホン使用時と同等以上の立体音響効果を得ることができます。
- 32ビット最新DSPを3系統使用(1系統はDolby / DTS / AAC / PCMのデコードに使用。
残りの2系統はOPSODIS処理専用に使用。)

● DOLBY

Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic", and the double-D symbol are trademarks of Dolby Laboratories.



● AAC

AAC is a format of the MPEG2 standard. This features excellent high-compression encoding and high-quality sound, enabling reproduction of 2-channel stereo sound and 5.1-channel surround, and bilingual broadcast. The following is the patent numbers of this format.

5848391	5,291,557	5,451,954	5 400 433	5,222,189
5,357,594	5 752 225	5,394,473	5,583,962	5,274,740
5,633,981	5 297 236	4,914,701	5,235,671	07/640,550
5,579,430	08/678,666	98/03037	97/02875	97/02874
98/03036	5,227,788	5,285,498	5,481,614	5,592,584
5,781,888	08/039,478	08/211,547	5,703,999	08/557,046
08/894,844	5,299,238	5,299,239	5,299,240	5,197,087
5,490,170	5,264,846	5,268,685	5,375,189	5,581,654
5,548,574	5,717,821	08/937,950	05-183,988	08/506,729
08/576,495	08/392,756			

● DTS

"DTS" and "DTS VIRTUAL" are registered trademarks of Digital Theater Systems, Inc.



Manufactured under license under U.S. Patent #s: 5,451,942; 5,956,674; 5,974,380; 5,978,762; 6,487,535 & other U.S. and worldwide patents issued & pending. DTS is a registered trademark and the DTS logos, Symbol and DTS Virtual are trademarks of DTS, Inc. © 1996-2007 DTS, Inc. All Rights Reserved.

● OPSODIS

OPSODIS is a registered trademark of the OPSODIS LTD.



■ About the Protective Circuit

This unit incorporates a protective circuit that protects the amplifier circuits and speaker system against damage.

As soon as the protective circuit works, the unit goes into standby mode and the STANDBY indicator flashes at the same time.

● For power-on

For 3 or 4 seconds after the power of the unit is turned on the protective circuit works and the sound is muted. Once the amplifier circuits are stabilized, the protective circuit is released and the sound is restored.

● For heat-up of the power amplifier

When the power amplifier of the unit heats up under the following conditions, the protective circuit works and the unit goes into the standby mode.

- The unit is kept used with excessive signal input, and the temperature of the main amplifier section exceeds the set operating temperature.
- Since the ventilation holes at the rear of the unit are blocked or the unit is installed in a narrow rack, the internal temperature of the unit exceeds the set operating temperature. In this case, wait until the temperature is sufficiently lowered, then turn on the unit and operate it at a lower volume.

● DOLBY

ドルビーラボラトリーズからのライセンスに基づき製造されています。 Dolby、ドルビー、Pro Logic及びダブルD記号及び“AAC”ロゴは、ドルビーラボラトリーズの商標です。



● AAC (Advanced Audio Coding)

BSデジタル放送および地上波デジタル放送が採用している音声方式で、MPEG2規格のひとつです。高圧縮率と高音質が特長で、2CHステレオ音声に加え、5.1CHサラウンド音声や多言語放送を可能にしています。以下はパテントナンバーです。

5848391	5,291,557	5,451,954	5 400 433	5,222,189
5,357,594	5 752 225	5,394,473	5,583,962	5,274,740
5,633,981	5 297 236	4,914,701	5,235,671	07/640,550
5,579,430	08/678,666	98/03037	97/02875	97/02874
98/03036	5,227,788	5,285,498	5,481,614	5,592,584
5,781,888	08/039,478	08/211,547	5,703,999	08/557,046
08/894,844	5,299,238	5,299,239	5,299,240	5,197,087
5,490,170	5,264,846	5,268,685	5,375,189	5,581,654
5,548,574	5,717,821	08/937,950	05-183,988	08/506,729
08/576,495	08/392,756			

● DTS

DTSおよびDTS VIRTUALは、Digital Theater System, Inc.の登録商標です。



● OPSODIS

OPSODISは、OPSODIS LTD.の登録商標です。



■ 保護回路について

本機にはアンプ回路およびスピーカーユニットを破損から保護する「保護回路」を搭載しています。

保護回路が動作するとすぐに待機状態になり、待機インジケーターが点滅します。

● 電源投入時

電源投入後からアンプ回路が安定するまでの約3~4秒間、保護回路が働き、ミューティング状態になります。

その後、アンプ回路が安定すると保護回路を解除し、音が出る状態になります。

● パワーアンプが加熱した時

下記の様にパワーアンプが加熱した時、保護回路が働き、すぐに待機状態になります。

- 過大な信号が入力された状態で連続使用し、メインアンプ部の温度が設定以上の温度になった時。

- 後面の通風孔を塞いで使用したり、狭いラックに入れて使用し、設定以上の温度になった時。

この時、温度が下がってから電源を入れ、ボリュームを少し絞ってください。

4. SERVICE MODE

Microprocessor (QU01), CS DSP (Q102) and TI DSP (Q202, Q302) Version and LED Segment Check Mode.

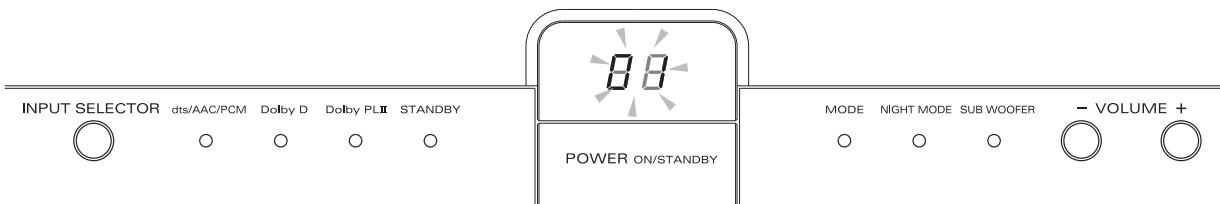
1. While the power is on, press **ON/STANDBY** and **VOLUME (-)** buttons simultaneously more than 3 seconds.

The software version of the microprocessor (QU01) is displayed.

Microprocessor (QU01)、CS DSP (Q102)および、TI DSP (Q202、Q302)のVersion表示および、LED点灯を確認するモードです。

1. 本機の電源を入れます。電源と音量(ー)ボタンを同時に3秒以上押します。

マイコン(QU01)のバージョンが表示されます。



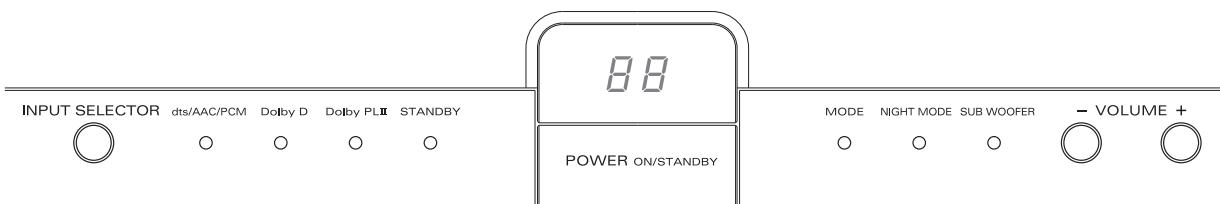
2. Push the **MODE** button of remote controller, all of the LED segments and LED indicators lights. (Exclude STANDBY LED)

2. リモコンの**MODE**ボタンを押します。LEDが全点灯します。(待機LEDは除く)



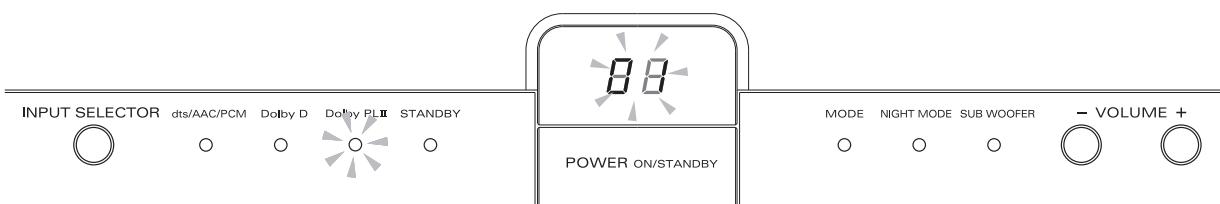
3. Push the **MODE** button of remote controller, all of the LED segments and LED indicators turn off.

3. リモコンの**MODE**ボタンを押します。LEDが全消灯します。

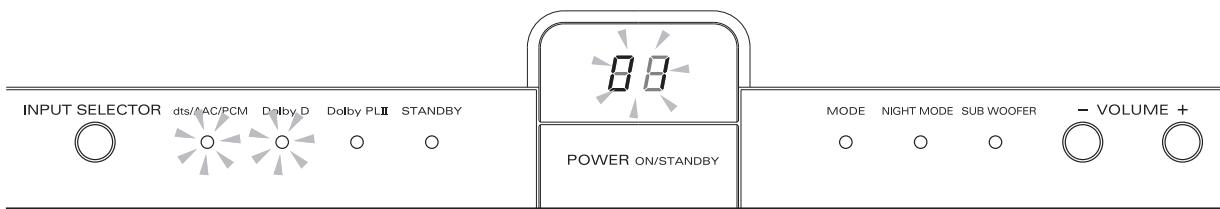


4. Push the **MODE** button of remote controller, the software version of the CS DSP Flash (Q102) is displayed. And the Dolby PLII indicator lights.

4. リモコンの**MODE**ボタンを押します。CS DSP用Flash (Q102)のバージョンが表示されます。Dolby PLIIのLEDが点灯します。

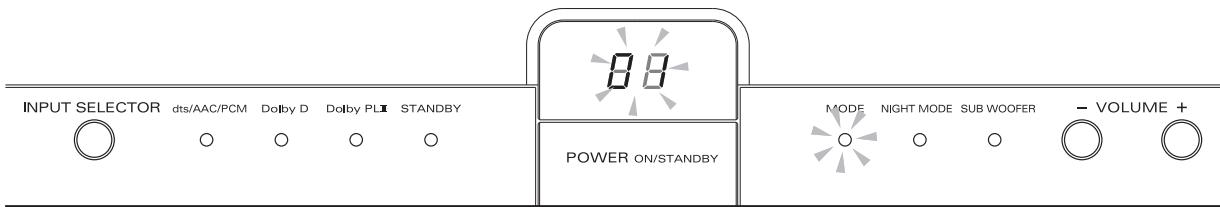


5. Push the **MODE** button of remote controller, the software version of the TI DSP Flash (Q202) is displayed. And the dts/AAC/PCM and Dolby D indicators lights.



6. Push the **MODE** button of remote controller, the software version of the TI DSP Flash (Q302) is displayed. And the MODE indicator lights.

5. リモコンの**MODE**ボタンを押します。TI DSP用Flash (Q202)のバージョンが表示されます。dts/AAC/PCMとDolby DのLEDが点灯します。



7. Push the **MODE** button of remote controller, turn off the service mode. And volume level is displayed.

6. リモコンの**MODE**ボタンを押します。TI DSP 用Flash (Q302)のバージョンが表示されます。MODEのLEDが点灯します。

7. リモコンの**MODE**ボタンを押します。サービスモードが解除され、現在の音量を表示します。

Product Reset

To reset the back up memory of the unit into the default status, follow the procedure below.

1. Turn on the unit and press **ON/STANDBY** and **VOLUME (+)** buttons simultaneously more than 3 seconds.
2. After "dF"(dF) is displayed on the display about 2 seconds.
3. After 2 seconds, power is turned off automatically.
4. The unit is turned on immediately after, "on"(on), "CL"(CL), "00"(00) are displayed in order on the LED display, and EEPROM is cleared to the default status.

■ Initial settings of unit

Power	ON
Input selector.....	DVD
Display window	volume level indication
Volume level	00

■ Initial settings of setting items

Speaker installation height	L (installed in a lower place than the connected TV)
Number of audience	2P (2 or more persons)
Viewing/listening distance	-- (2 m)
Subwoofer ..	On (subwoofer output activated)
Binaural mode	off
Dolby PL II.....	P1 (PL II MOVIE)
Multi-channel broadcast	b1 (main channel)
Night mode	off
Dimmer	normal brightness
Muting	off

初期状態にするには

1. 本機の電源を立ち上げます。電源と音量(+)ボタンを同時に3秒以上押します。
2. 約2秒後にLEDディスプレイに"dF"(dF)が表示されます。
3. 約2秒後に自動的に電源が切れます。
4. 直後に自動的に電源が入り、"on"(on), "CL"(CL), "00"(00)の順にLEDディスプレイに表示され、初期化が終了します。

■ 本機の初期状態

電源	ON
入力切替	DVD
表示部	音量表示
音量	00

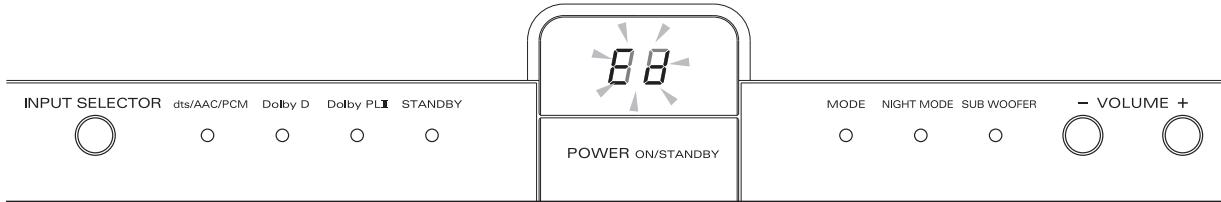
■ 設定項目初期状態

スピーカー高さ	L (テレビより下に設置)
視聴人数	2P (2人以上)
視聴距離	-- (2m)
サブウーハー ..	On (サブウーハー 出力オン)
バイノーラルモード	オフ状態
Dolby PL II	P1 (PL II MOVIE)
音声多重	b1 (主音声)
ナイトモード	オフ状態
ディマー	明
消音	オフ状態

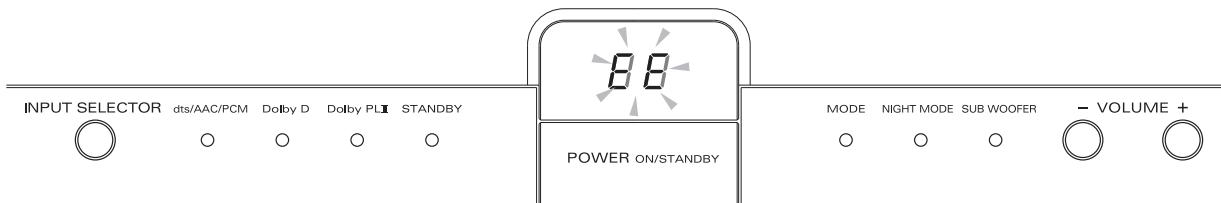
5. SYSTEM ERROR

When the microprocessor detects a trouble, the following information is displayed on the Seven-segment display.

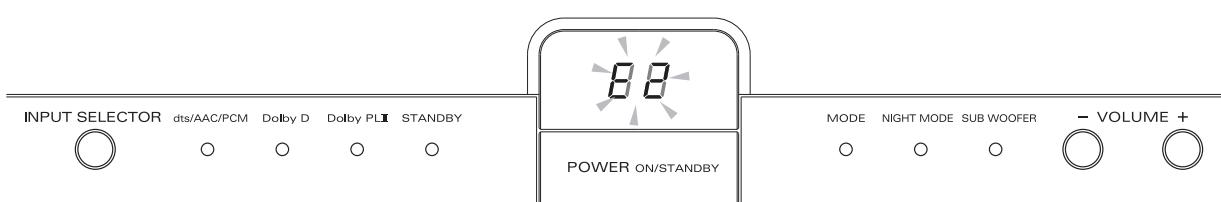
- The contents of the ERROR indication are the followings.
- 1. Trouble in DSP Code.
A mismatch between the group code of Main microprocessor and DSP. (Indication is as it is, sound muted and operation prohibition state.)
- 1. DSP Code異常時。
メインマイコンとDSPのグループコードが不一致。
プログラムデータが破損した可能性があり。
(表示状態は保持、音声はMute、操作禁止状態)



- 2. Trouble in EEPROM.
The data from EEPROM does not match.
Processing: Initialize EEPROM.
- 2. EEPROM異常検出時。
EEPROM のデータが不整合。
メインマイコンがロムのデータを正しく書き換えますので、設定した内容は全てクリアされて工場出荷時の設定にもどります。(処理：EEPROMを初期化)



- 3. Trouble in EEPROM interface.
The Communication trouble between Main microprocessor and EEPROM was found. The possibility of EEPROM breakage.
- 3. EEPROMインターフェースの異常検出時。
メインマイコンとEEPROMの通信が出来ない。
EEPROM破損の可能性あり。



- 4. Trouble in Amplifier power supply.
Turn on the unit, trouble in Amplifier power supply.
(Refer to page 3.)
- 4. Power ONのアンプ電源異常時。
電源オン時の電源異常表示。処理：スタンバイにする。
(3ページを参照)
- 5. Trouble in Amplifier.
Short-circuit of speaker cable and amplifier is high temperature state. (Refer to page 3.)
- 5. アンプ異常時。
スピーカーケーブルのショートやアンプが高温状態。
(3ページを参照)

6. WRITING AND UPDATE SOFTWARE

CPU (QU01) needs writing software, when a CPU (QU01) is replaced.

Software for CPU and DSP (CS and TI) can be updated.

Have update application software. ("UpgradeDSP.exe", "da610_writer.exe" and "H8Download.exe")

There are three mode of download, regarding to the target of software as bellow.

Mode 1: Update CS-DSP's software to 4M Flash-ROM.

This mode is to update the software for CS-DSP.

The target devise is 4M Flash-ROM (Q102) on PD01 (DSP PWB).

Unit needs connection to connection JIG with pushed switch.

Unit needs to be set update condition, by two front keys.
The updating of software (DSP1) takes about 2 minutes.

Mode 2: Update TI-DSP's software to 4M Flash-ROM.

This mode is to update the software for TI-DSP.

The target devise is 4M Flash-ROM (Q202 and Q302) on PD01 (DSP PWB).

Unit needs connection to connection JIG with pushed switch.

Unit needs to be set update condition, by two front keys.
The updating of software (DSP2) takes about 2 minutes.
The updating of software (DSP3) takes about 9 minutes.

Mode 3: Update CPU's software to internal Flash-ROM.

This mode is to update the software for CPU.

The target devise is internal flash ROM of CPU (QU01) on PD01 (DSP PWB).

Unit needs to be set to writing condition, by no pushing switch of connection JIG.

The updating of software takes about 1 minute.

The following items are required for updating.

(NECESSARY EQUIPMENT)

- Windows PC (OS: Windows2000 or WindowsXP) with Serial port.
- RS-232C Dsub-9 pin cable (female to female/straight type)
- Update software to CPU. (H8Download.exe, etc... in CPU folder)
- Update software to CS_DSP. (UpgradeDSP.exe, etc... in CS_DSP folder)
- Update software to TI_DSP. (da610_writer.exe, etc... in TI_DSP folder)
- Connection JIG (90M-ES150AJIG)

Use RS232C Dsub-9 pin cable (female to female/straight type) to connect PC and the connection JIG.

Serial port on PC needs to be set by dialog box for each program. Serial port can be set from COM1 to COM5.

CPU (QU01)を交換する際は、CPU (QU01)へのソフトウェアの書き込みが必要になります。

CPUおよびDSP(CSとTI)のソフトウェアのアップデートを行います。

ソフトウェアのアップデートにはUpgradeDSP.exeとda610_writer.exe、およびH8Download.exeが必要です。

アップデートには次の3つのモードがあります。

Mode 1:CS-DSP用Flash-ROMのアップデート

このモードはCS-DSPのソフトウェアをアップデートするモードです。

PD01(DSP PWB)の基板上にあるFlash-ROM (Q102)のソフトウェアをアップデートします。

接続治具内のスイッチをオンにして接続します。

本機のフロントパネルにある2つのボタンを押してアップデートモードにします。

このDSP1用Flash ROMの書き換え時にかかる時間はおよそ2分です。

Mode 2:TI-DSP用Flash-ROMのアップデート

このモードはTI-DSPのソフトウェアをアップデートするモードです。

PD01(DSP PWB)の基板上にあるFlash-ROM (Q202とQ302)のソフトウェアをアップデートします。

接続治具内のスイッチをオンにして接続します。

本機のフロントパネルにある2つのボタンを押してアップデートモードにします。

このDSP2用Flash ROMの書き換え時にかかる時間はおよそ2分です。

このDSP3用Flash ROMの書き換え時にかかる時間はおよそ9分です。

Mode 3:CPUの内部Flash-ROMのアップデート

このモードはCPUのソフトウェアをアップデートするモードです。

PD01(DSP PWB)の基板上にあるCPU(QU01)の内部Flash-ROMのソフトウェアをアップデートします。

接続治具内のスイッチをオフにしてアップデートモードにします。

このCPUの内部Flash-ROMの書き換え時にかかる時間はおよそ1分です。

アップデートには下記の機器が必要です。(必要機器)

- RS-232Cストレートケーブル(9Pinメス-9Pinメス)
- Windows PC Serial Port付き(OS: Windows2000, WindowsXP)
- CPU用アップデートソフトウェア(CPUフォルダ内 H8Download.exe、他)
- CS-DSP用アップデートソフトウェア(CS_DSPフォルダ内 UpgradeDSP.exe、他)
- TI-DSP用アップデートソフトウェア(TI_DSPフォルダ内 da610_writer.exe、他)
- 接続治具(90M-ES150AJIG)

RS-232Cケーブルで接続治具と接続するPCのCOMポート番号を設定してください。

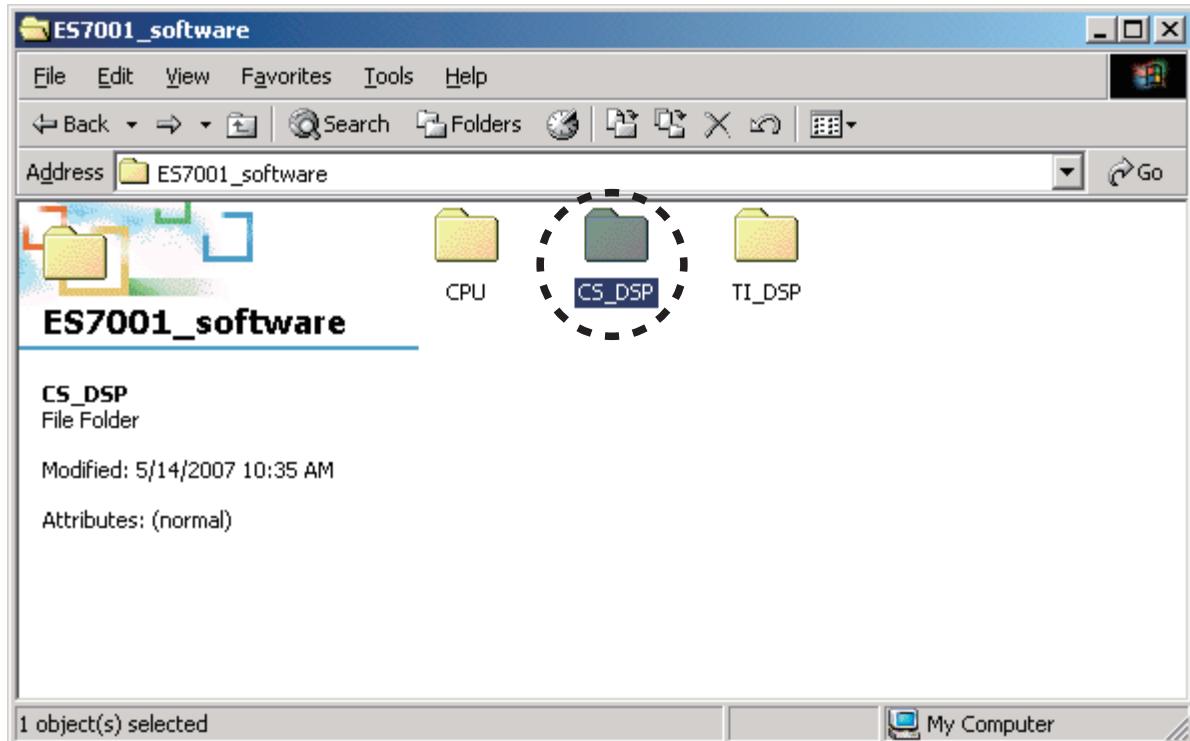
COMポート番号はCOM1からCOM5まで設定できます。

Download Firmware for CS-DSP (Mode 1)

1. Put the "CS_DSP" folder into anywhere on your PC's hard disc.

CS-DSPのアップデート方法(Mode 1)

1. "CS_DSP"フォルダをPCのハードディスクにコピーします。



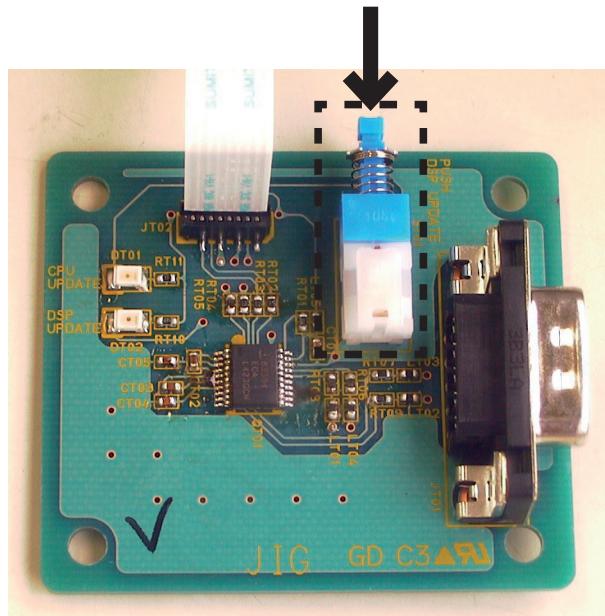
2. Connect PC and the connection JIG with the RS-232C cable. And connect FPC (upside contact) to the connector (JU05) into the rear lid of the unit from connection JIG.

2. 本機と接続治具をRS-232Cで接続し、接続治具のFPCを接続端子を上にして本機のリアカバー内のコネクタ(JU05)に接続します。

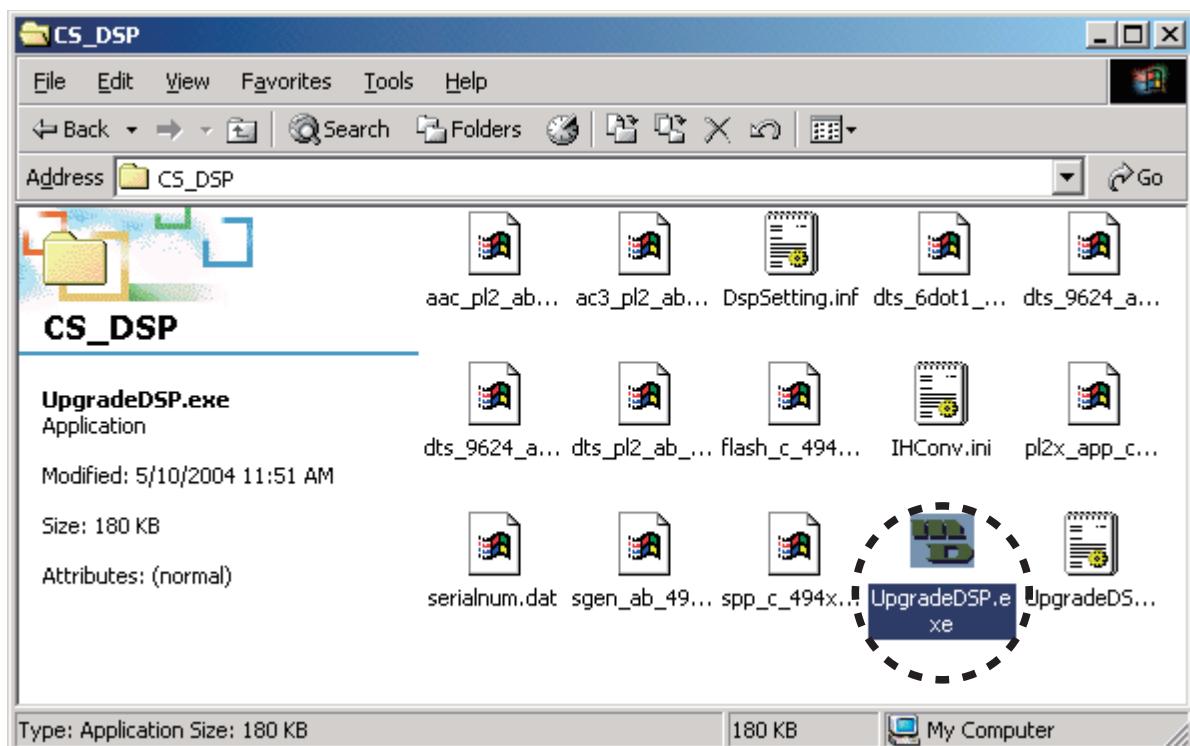


3. Push the switch (ST01) of the connection JIG inside to turn on the switch.

3. 接続治具のスイッチ(ST01)を押し込みます。

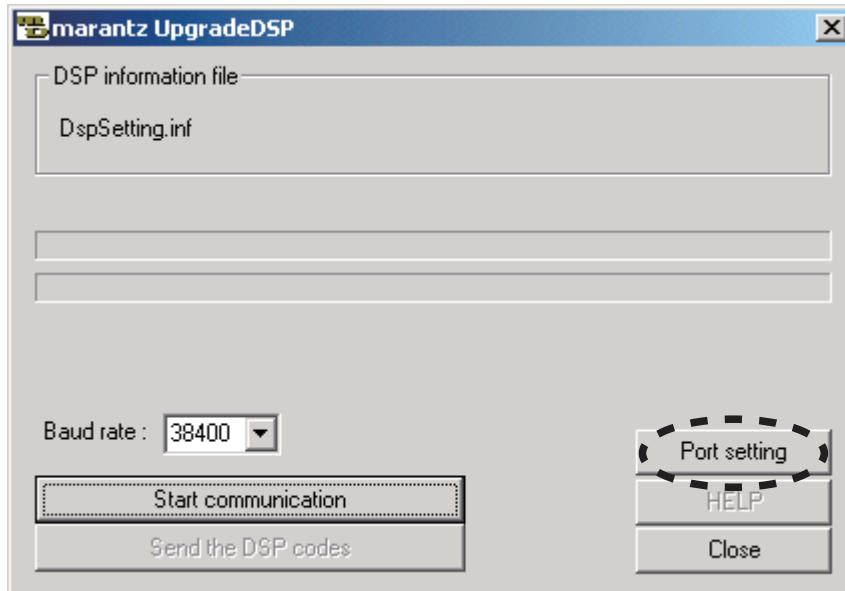


4. Connect the mains cord into the unit and turn on the unit. And then red LED (DT02) of connection JIG lights up.
 5. Double click the UpgradeDSP.exe. And Launch the "marantz UpgradeDSP".
 4. 電源ケーブルを本機に接続し、本機の電源を入れます。接続治具にあるLED(DT02)が赤く点灯します。
 5. PCからUpgradeDSP.exeをダブルクリックして"marantz UpgradeDSP"を起動させます。



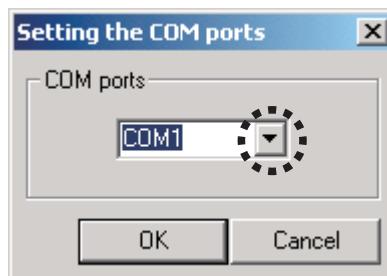
6. Click **Port setting**.

6. **Port setting**をクリックします。



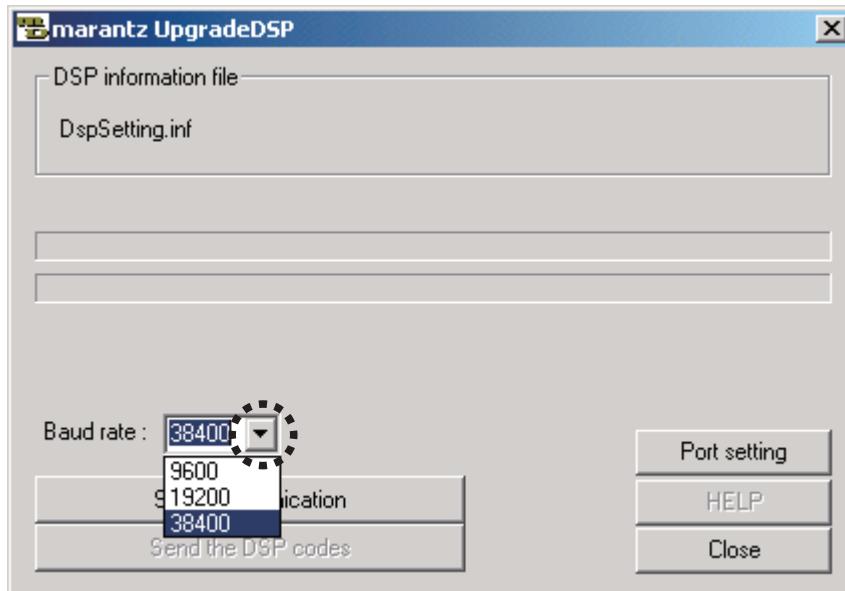
7. Choose the **COM Port No.**

7. **COMポート番号**を選択します。

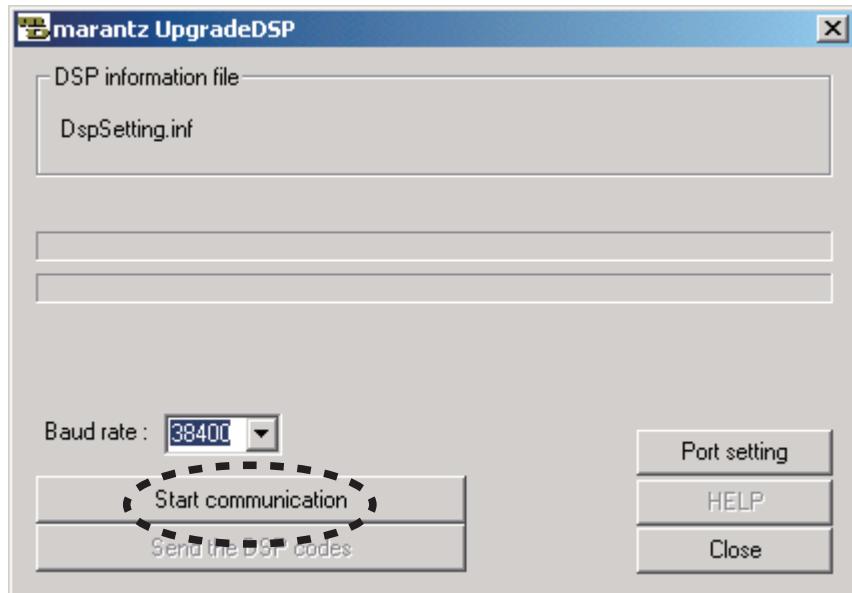


8. Choose **38400** in the Baud rate.

8. **Baud rate**を**38400**に設定します。



9. Press **INPUT SELECTOR** and **VOLUME (-)** buttons simultaneously more than 5 seconds to turn the unit into Loading Mode.
10. "Ld"(Ld) is shown on LED display. And the LED displays "d1"(d1) after several seconds.
11. Press **INPUT SELECTOR** button. And then "S1"(S1) is shown on LED display.
12. Click **Start communication**.
9. 入力切替、音量(-)の2つのボタンを同時に5秒以上押し続けてLoading Modeにします。
10. LEDディスプレイに接続"ld"(Ld)と表示され、さらに数秒後に"d1"(d1)と表示されます。
11. 本機のフロントパネルにある入力切替ボタンを押し"S1"(S1)と表示させます。
12. **Start communication**をクリックします。



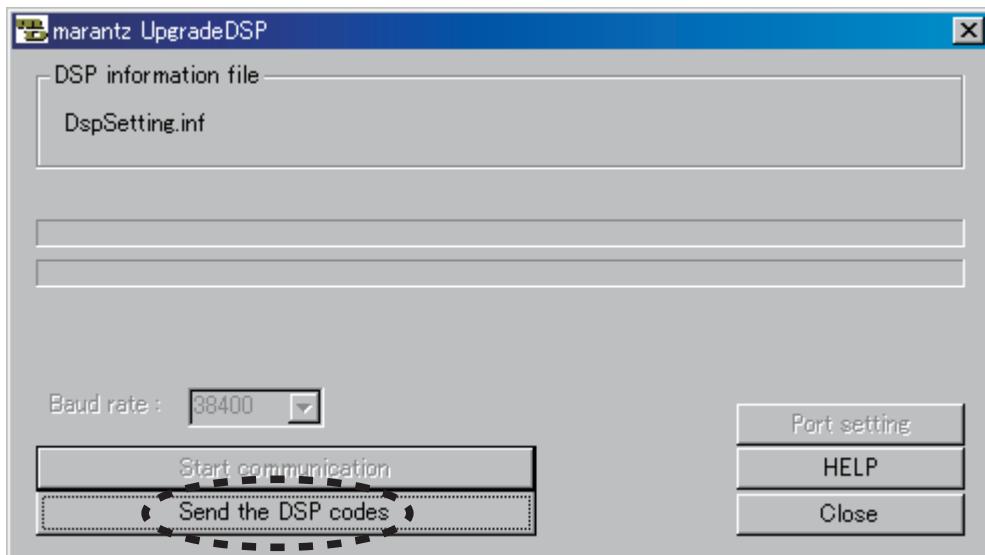
13. If the connection is made successfully, a dialog box saying "Success to connect" appears and "cn"(cn) is displayed on LED display. Click **OK**.

13. 通信接続に成功すると下記のダイアログボックスが表示され、LEDディスプレイには"cn"(cn)が表示されます。**OK**をクリックします。



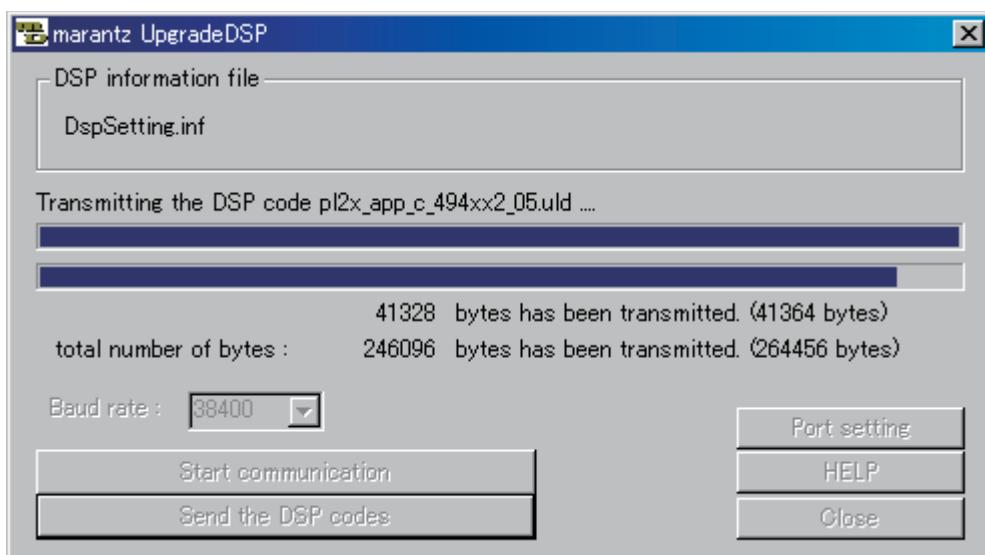
14. Click **Send the DSP codes**.

14. **Send the DSP codes**をクリックします。



15. Progress status of updating will be shown on PC and "Lo"(Lo) is displayed on LED display.

15. アップデートのステータスバーが表示され、LEDディスプレイには"Lo"(Lo)が表示されます。



16. If updating is completed successfully, "En"(En) is displayed on LED display. And a dialog box saying "Finished the DSP code transmitting" appears. Click **OK** and then Application is closed automatically.

16. アップデートが成功するとLEDディスプレイに"En"(En)と表示されます。同時に"Finished the DSP code transmitting"のダイアログボックスが表示されます。 **OK**をクリックすると自動的にアプリケーションが閉じます。



17. Press **ON/STANDBY** button. The unit is turned off, and then it is turned on automatically. The unit is reset at that time. "on"(on), "CL"(CL) and "00"(00) are displayed in order on LED display.

NOTE : Press **ON/STANDBY** button, when "Er"(Er) (ERROR) is shown on LED display.

18. Disconnect the mains cord from the unit. And disconnect FPC of the connection JIG from the unit.

17. 本機の電源ボタンを押します。本機の電源が切れた後、自動的に電源が入り、リセットされます。このときLEDディスプレイには"on"(on), "CL"(CL), "00"(00)の順に表示されます。

注意 : LEDディスプレイに"Er"(Er) (ERROR)が表示されたときも電源ボタンを押してください。

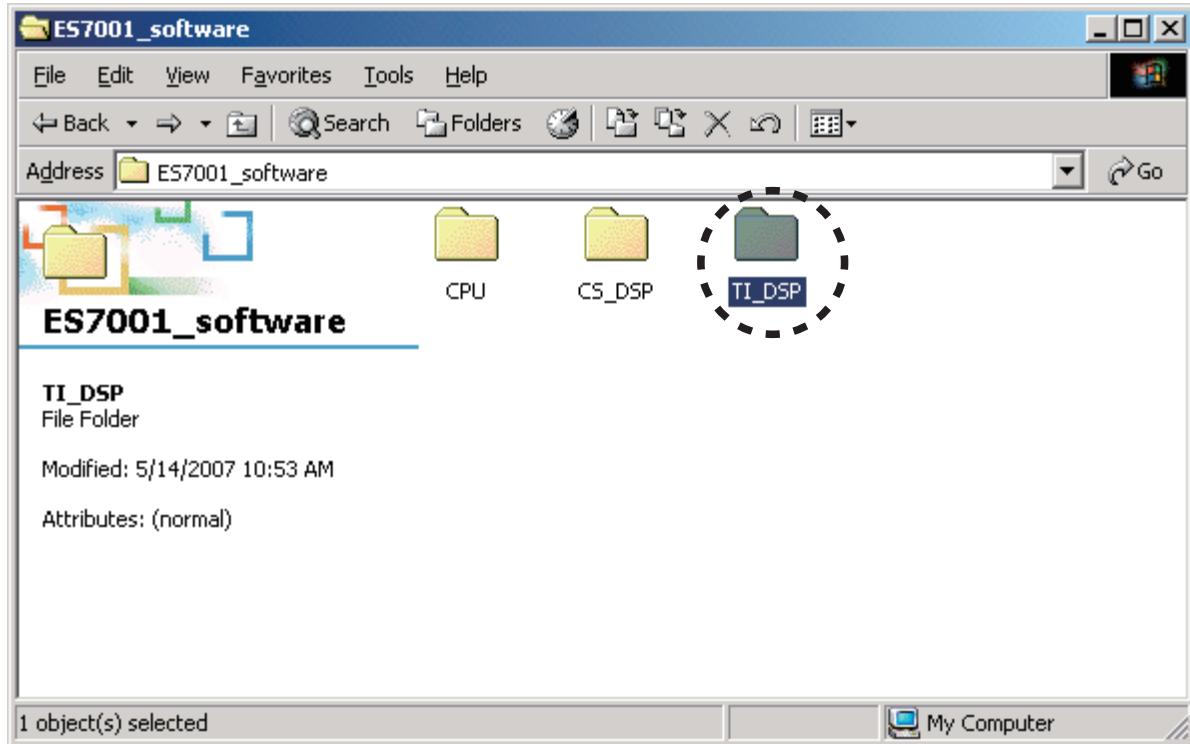
18. 本機から電源ケーブルを外します。その後、接続治具のFPCを外します。

Download Firmware for TI-DSP (Mode 2)

1. Put the "TI_DSP" folder into anywhere on your PC's hard disc.

TI-DSPのアップデート方法(Mode 2)

1. "TI_DSP"フォルダをPCのハードディスクにコピーします。



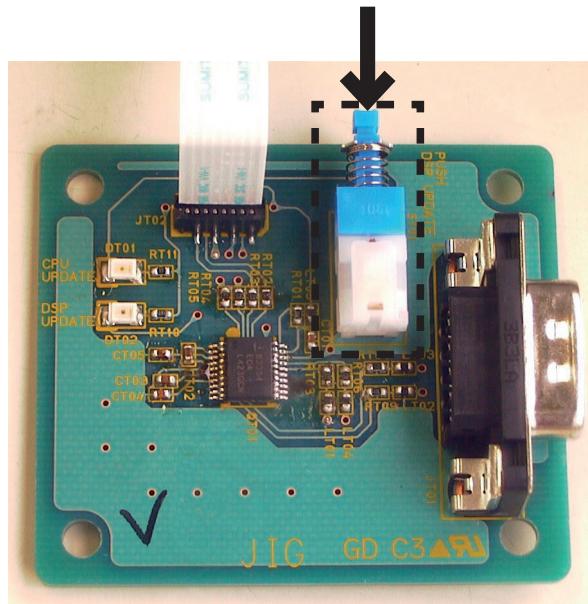
2. Connect PC and the connection JIG with the RS-232C cable. And connect FPC (upside contact) to the connector (JU05) into the rear lid of the unit from connection JIG.

2. 本機と接続治具をRS-232Cで接続し、接続治具のFPCを接続端子を上にして本機のリアカバー内のコネクタ(JU05)に接続します。



3. Push the switch (ST01) of the connection JIG inside to turn on the switch.

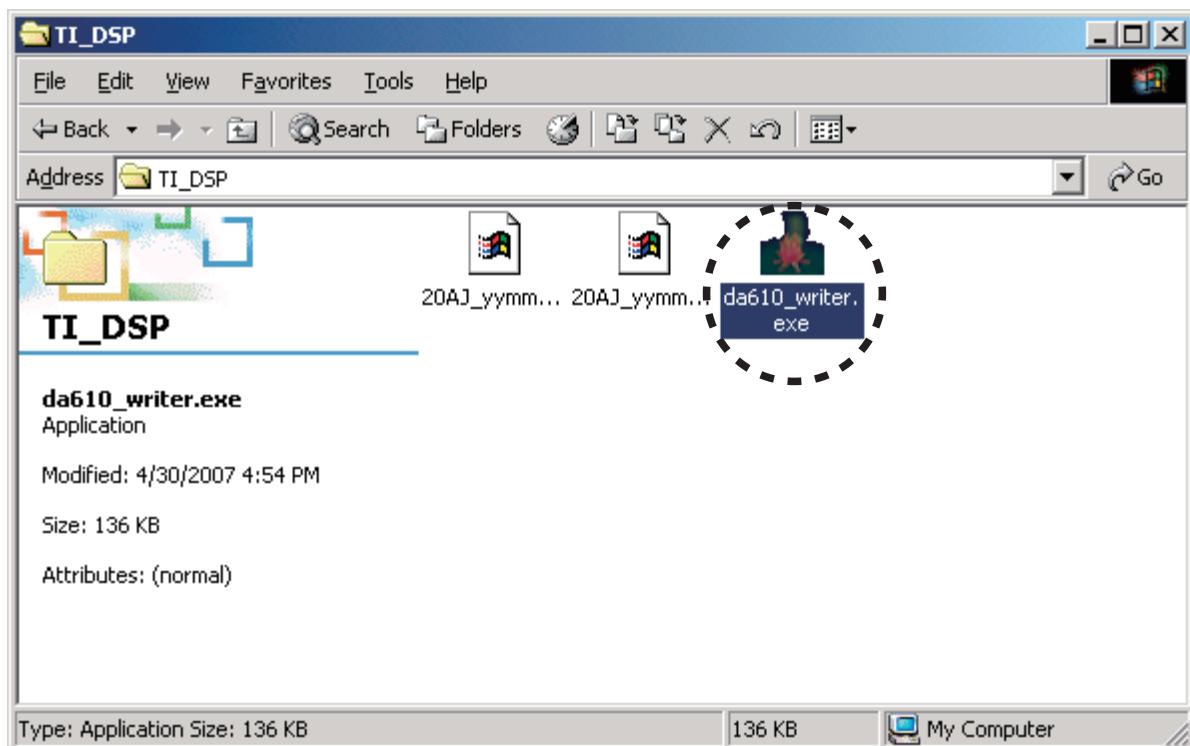
3. 接続治具のスイッチ(ST01)を押し込みます。



4. Connect the mains cord into the unit and turn on the unit. And then red LED (DT02) of connection JIG lights up.
5. Press **INPUT SELECTOR** and **VOLUME (-)** buttons simultaneously more than 5 seconds to turn the unit into Loading Mode.
6. "Ld"(Ld) is shown on LED display. And the LED displays "d1"(d1) after several seconds.
7. Press **VOLUME (-)** button until "d2"(d2) is displayed on LED display.
8. Press **INPUT SELECTOR** button. And then "S2"(S2) is shown on LED display.

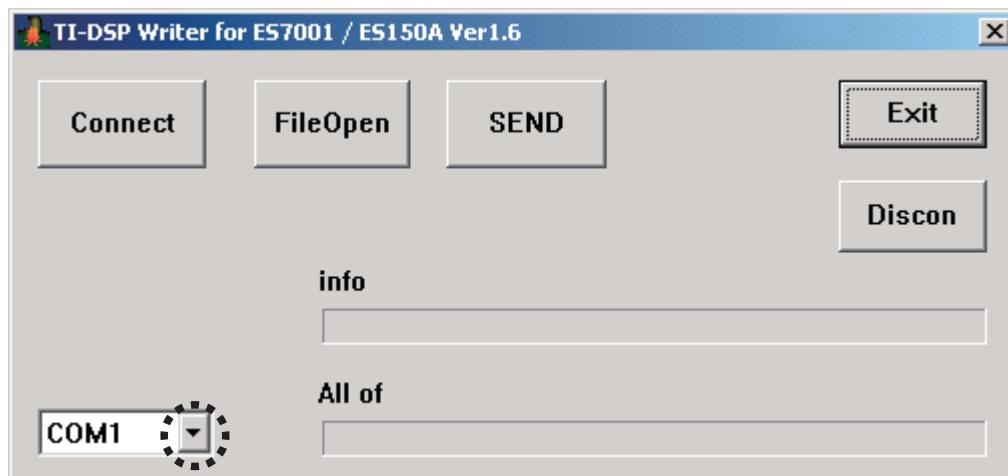
4. 電源ケーブルを本機に接続し、本機の電源を入れます。接続治具にあるLED(DT02)が赤く点灯します。
5. 入力切替、音量(-)の2つのボタンを同時に5秒以上押し続けてLoading Modeにします。
6. LEDディスプレイに "Ld"(Ld) と表示され、さらに数秒後に "d1"(d1) と表示されます。
7. 音量(-)ボタンを押し、LEDディスプレイに "d2"(d2) と表示させます。
8. 入力切替ボタンを押し、LEDディスプレイに "S2"(S2) と表示させます。

9. Double click the da610_writer.exe. And Launch the "TI-DSP Writer for ES7001 / ES150A ver1.6".
9. PCからda610_writer.exeをダブルクリックして"TI-DSP Writer for ES7001 / ES150A Ver1.6"を起動させます。



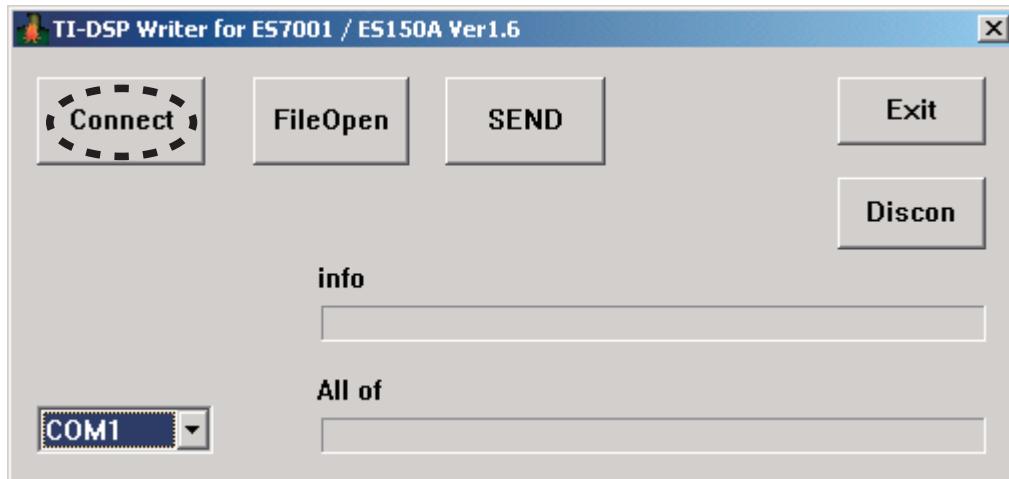
10. Choose the COM Port No.

10. COMポート番号を選択します。



11. Click **Connect**.

11. **Connect**をクリックします。



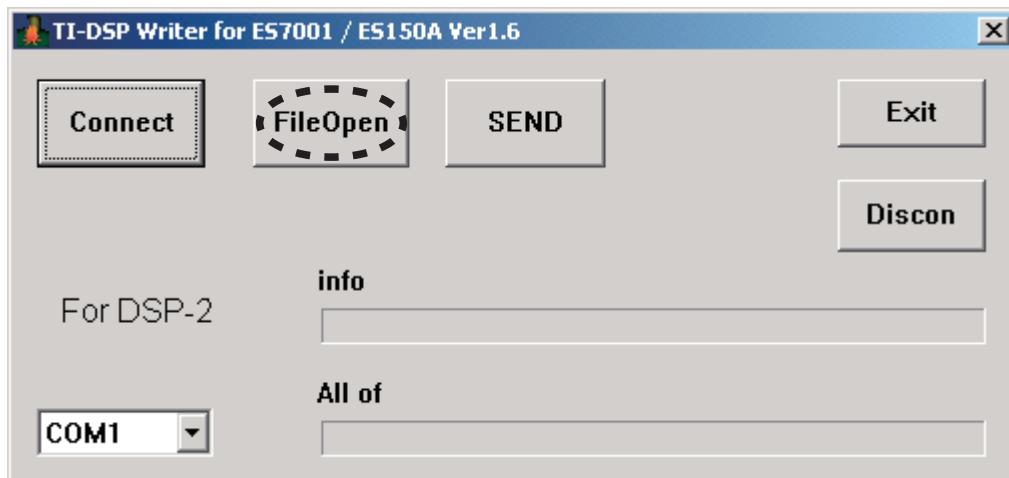
12. If the connection is made successfully, a dialog box saying "ConnectMPU for DSP2 OK" appears and "cn" (cn) is displayed on LED display. Click **OK**.

12. 通信接続に成功すると"ConnectMPU for DSP2 OK"のダイアログボックスが表示され、LEDディスプレイには "cn"(cn)が表示されます。**OK**をクリックします。



13. Click **FileOpen**.

13. **FileOpen**をクリックします。

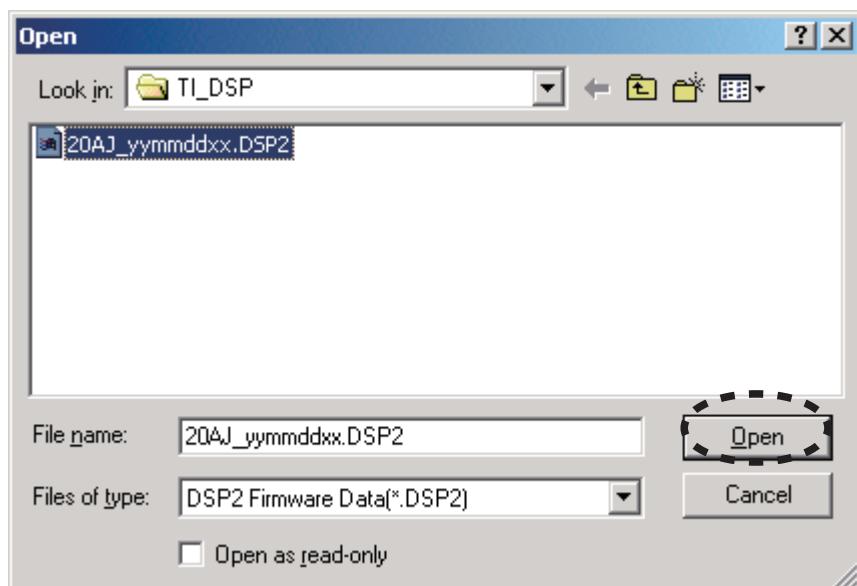


14. Choose **20AJ_yymmddxx.DSP2**. And click **Open**.

NOTE : yy is two digits of year. mm is month. dd is date. xx is version.

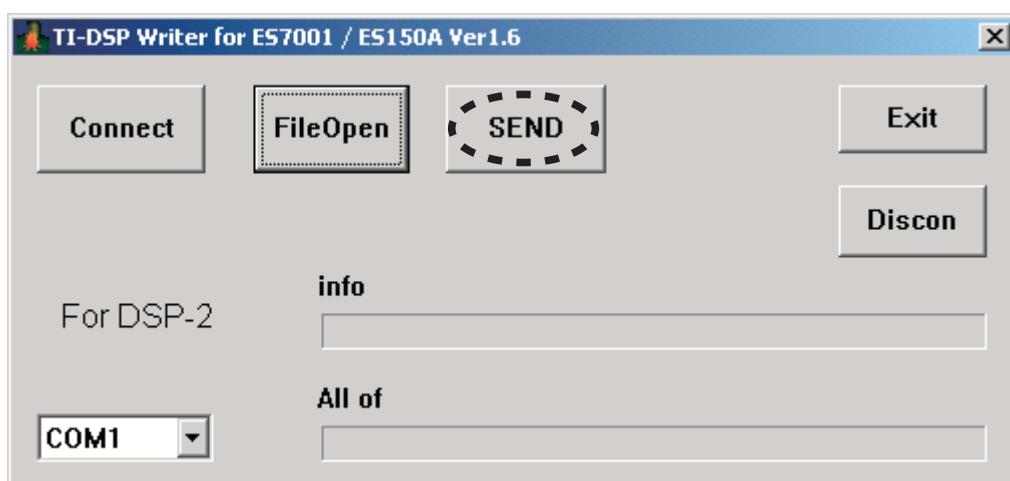
14. **20AJ_yymmddxx.DSP2**を選択し、**Open**をクリックします。

注意 : yyは年の下2桁、mmは月、ddは日、xxはバージョンを表します。



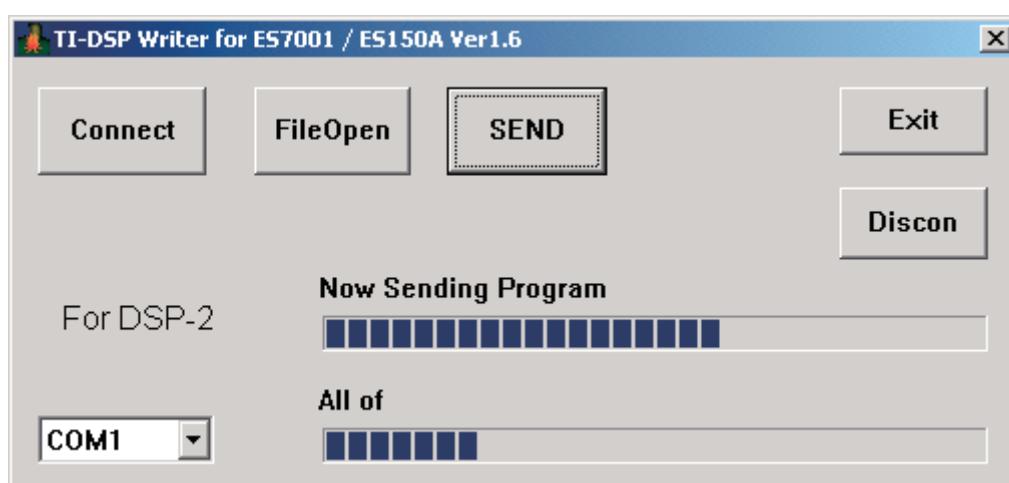
15. Click **SEND**.

15. **SEND**をクリックします。



16. Progress status of updating will be shown on PC and "Lo"(Lo) is displayed on LED display.

16. アップデートのステータスバーが表示され、LEDディスプレイには"Lo"(Lo)が表示されます。



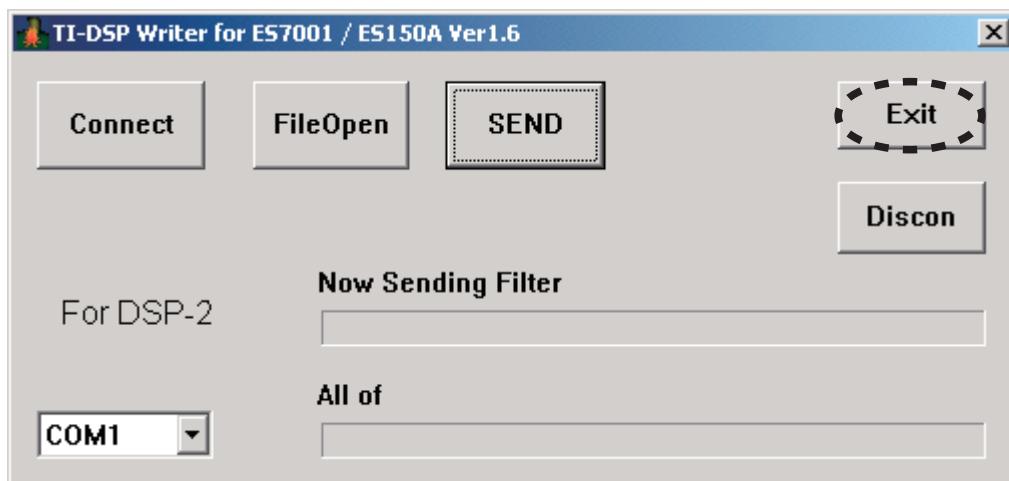
17. If updating is completed successfully, "En"(Eη) is displayed on LED display. And a dialog box saying "Pre Filter updated successfully" appears. And click **OK**.

17. アップデートが成功するとLEDディスプレイに"En"(Eη)と表示されます。同時に"Pre Filter updated successfully"のダイアログボックスが表示されます。**OK**をクリックします。



18. Click **Exit**.

18. **Exit**をクリックします。



19. Press **ON/STANDBY** button. The unit is turned off, and then it is turned on automatically. The unit is reset at that time. "on(οη), "CL"(LCL) and "00"(00) are displayed in order on LED display.

NOTE : Press **ON/STANDBY** button, when "Er"(Eη) (ERROR) is shown on LED display.

20. Press **INPUT SELECTOR** and **VOLUME (-)** buttons simultaneously more than 5 seconds to turn the unit into Loading Mode.

21. "Ld"(Ld) is shown on LED display. And the LED displays "d1"(d1) after several seconds.

22. Press **VOLUME (-)** button until "d3"(d3) is displayed on LED display.

23. Press **INPUT SELECTOR** button. And then "S3"(S3) is shown on LED display.

19. 本機の**電源**ボタンを押します。本機の電源が切れた後、自動的に電源が入り、リセットされます。このときLEDディスプレイには"on"(οη), "CL"(LCL), "00"(00)の順に表示されます。

注意 : LEDディスプレイに"Er"(Eη) (ERROR) が表示されたときも**電源**ボタンを押してください。

20. 入力切替、音量(-)の2つのボタンを同時に5秒以上押し続けてLoading Modeにします。

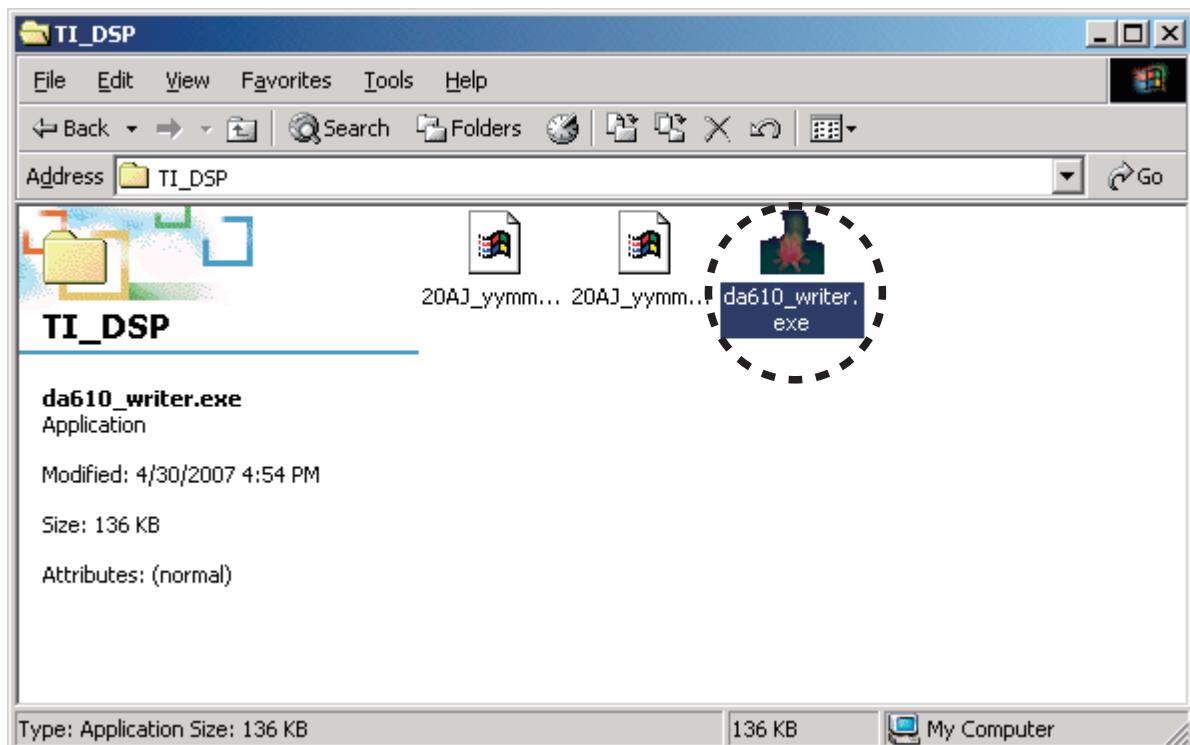
21. LEDディスプレイに"Ld"(Ld)と表示され、さらに数秒後に "d1"(d1)と表示されます。

22. 音量(-)ボタンを押し、FLディスプレイに"d3"(d3)と表示させます。

23. 入力切替ボタンを押し、LEDディスプレイに"S3"(S3)と表示させます。

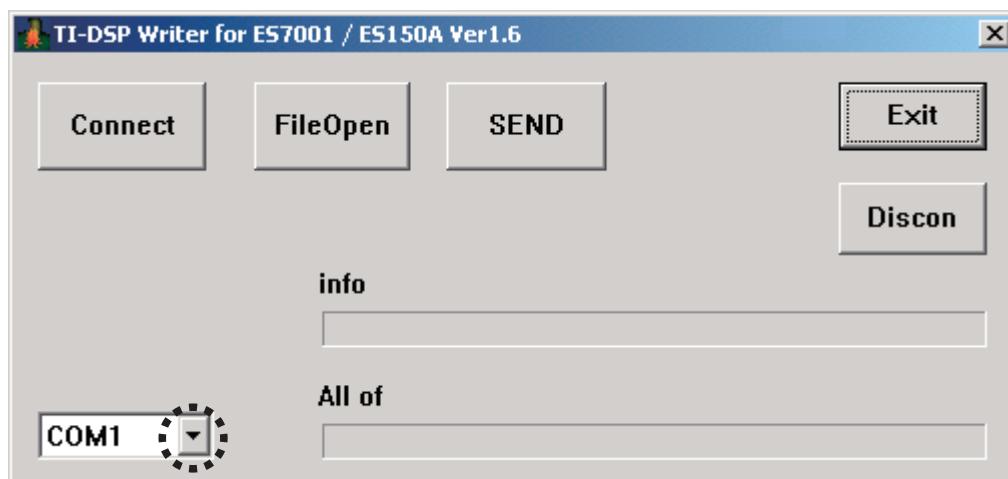
24. Double click the da610_writer.exe. And Launch the "TI-DSP Writer for ES7001 / ES150A Ver1.6".

24. PCからda610_writer.exeをダブルクリックして"TI-DSP Writer for ES7001 / ES150A Ver1.6"を起動させます。



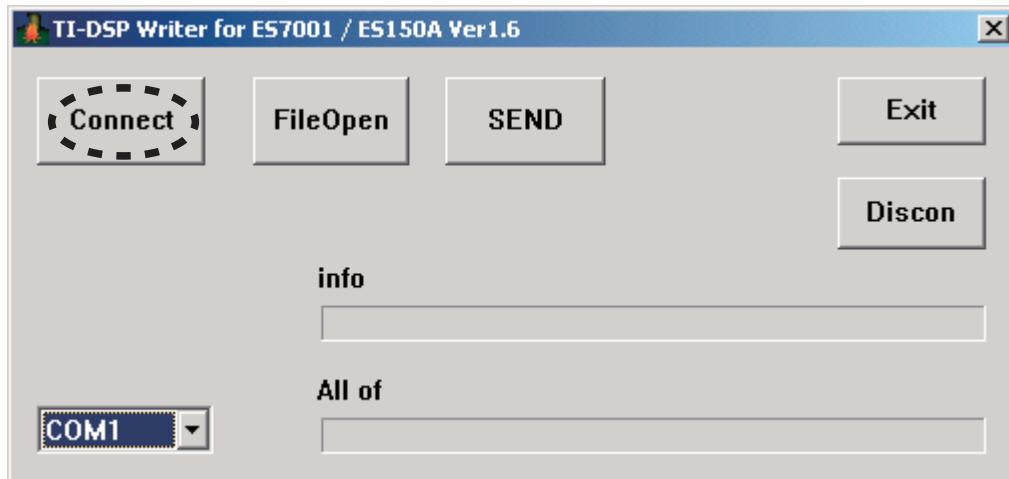
25. Choose the COM Port No.

25. COMポート番号を選択します。



26. Click **Connect**.

26. **Connect**をクリックします。



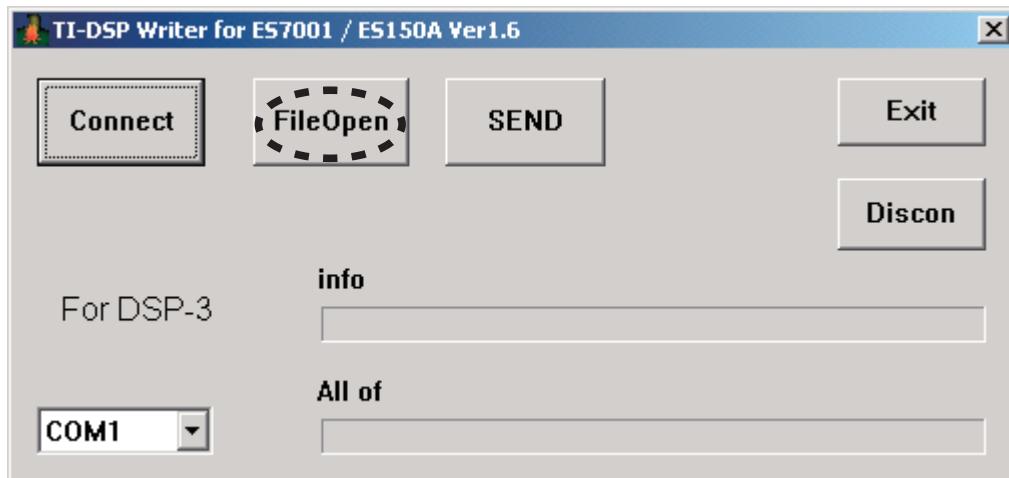
27. If the connection is made successfully, a dialog box saying "ConnectMPU for DSP3 OK" appears and "cn"(cn) is displayed on LED display. Click **OK**.

27. 通信接続に成功すると"ConnectMPU for DSP3 OK"のダイアログボックスが表示され、LEDディスプレイには"cn"(cn)が表示されます。**OK**をクリックします。



28. Click **File Open**.

28. **FileOpen**をクリックします。

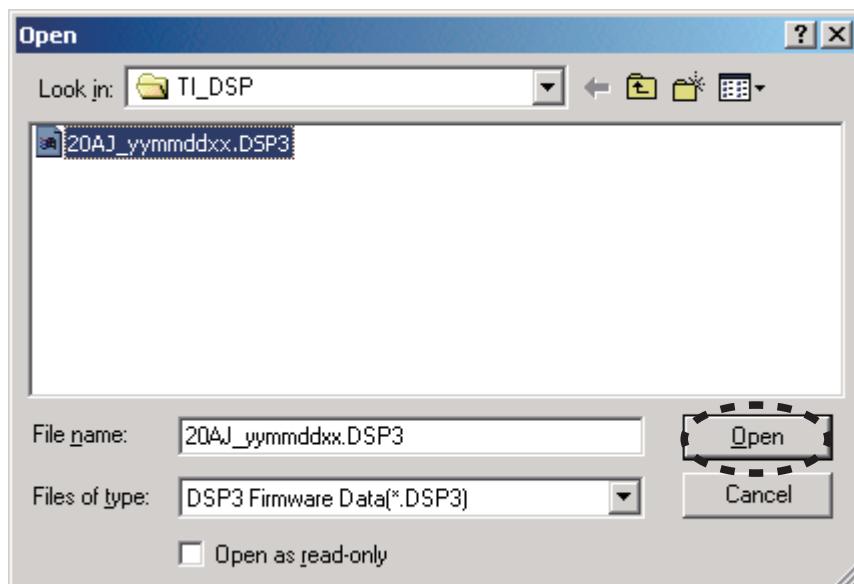


29. Choose **20AJ_yymmddxx.DSP3**. And click **Open**.

NOTE : yy is two digits of year. mm is month. dd is date. xx is version.

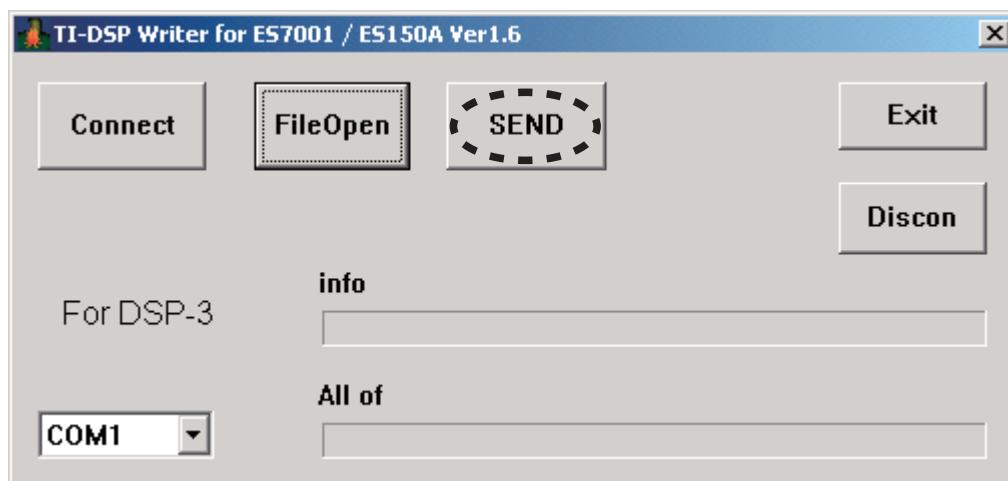
29. **20AJ_yymmddxx.DSP3**を選択し、**Open**をクリックします。

注意 : yyは年の下2桁、mmは月、ddは日、xxはバージョンを表します。



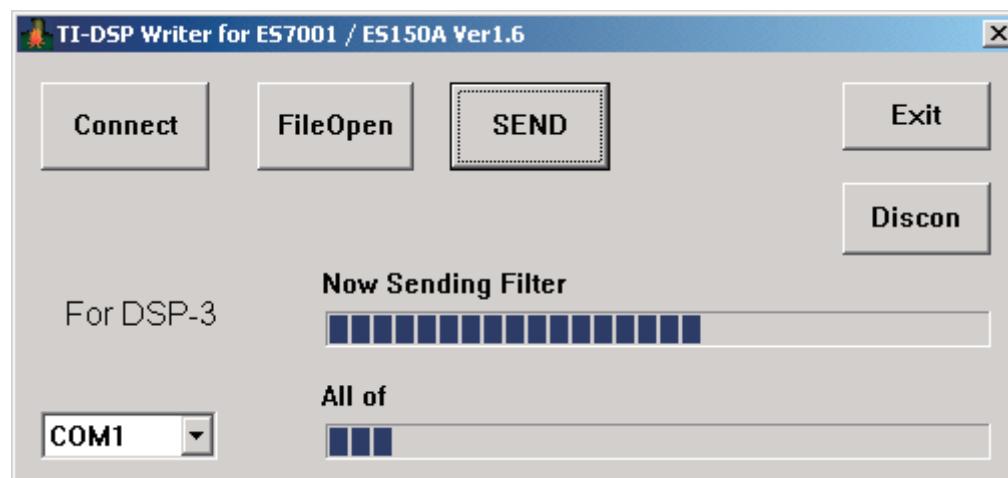
30. Click **SEND**.

30. **SEND**をクリックします。



31. Progress status of updating will be shown on PC and "Lo"(ロー) is displayed on LED display.

31. アップデートのステータスバーが表示され、LEDディスプレイには"Lo"(ロー)が表示されます。



32. If updating is completed successfully, "En"(Eη) is displayed on LED display. And a dialog box saying "Pre Filter updated successfully" appears. And click **OK**.

32. アップデートが成功するとLEDディスプレイに"En"(Eη)と表示されます。同時に"Pre Filter updated successfully"のダイアログボックスが表示されます。**OK**をクリックします。



33. Click **Exit**.

33. **Exit**をクリックします。



34. Press **ON/STANDBY** button. The unit is turned off, and then it is turned on automatically. The unit is reset at that time. "on"(οη), "CL"(CL) and "00"(00) are displayed in order on LED display.

NOTE : Press **ON/STANDBY** button, when "Er"(Er) (ERROR) is shown on LED display.

35. Disconnect the mains cord from the unit. And disconnect FPC of the connection JIG from the unit.

34. 本機の電源ボタンを押します。本機の電源が切れた後、自動的に電源が入り、リセットされます。このときLEDディスプレイには"on"(οη), "CL"(CL), "00"(00)の順に表示されます。

注意 : LEDディスプレイに"Er"(Er) (ERROR)が表示されたときも電源ボタンを押してください。

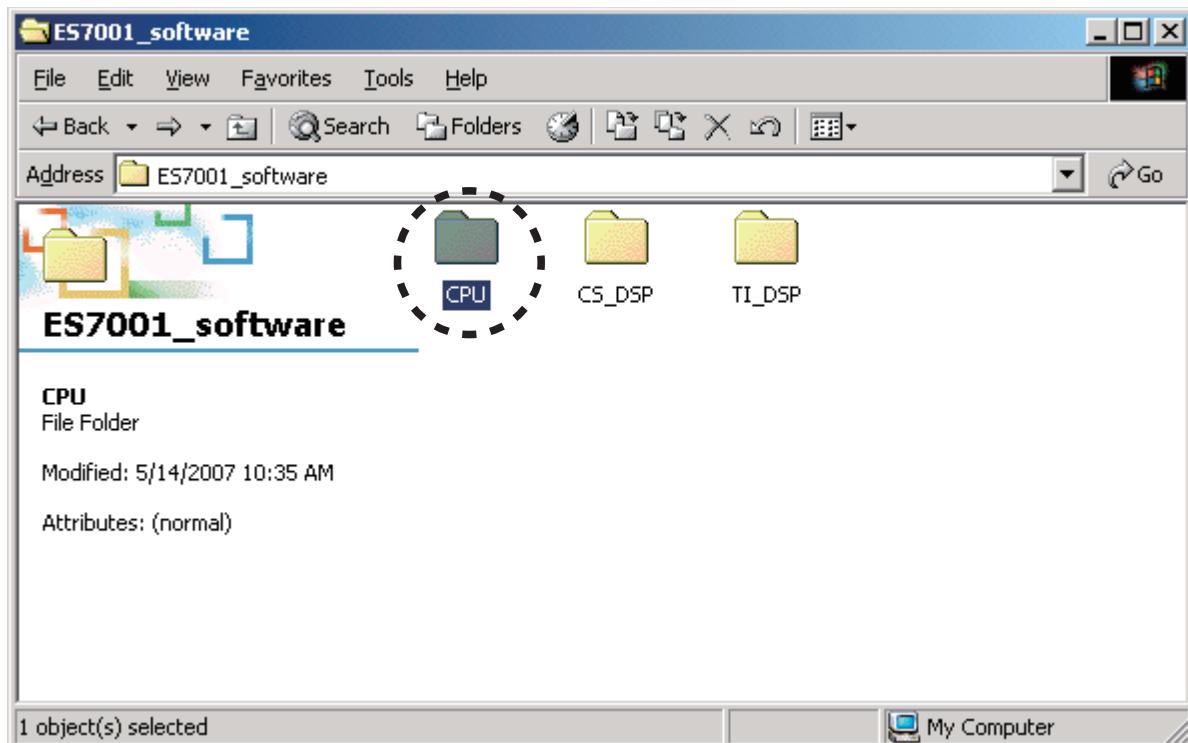
35. 本機から電源ケーブルを外します。その後、接続治具のFPCを外します。

Download Firmware for CPU (Mode 3)

1. Put the "CPU" folder into anywhere on your PC's hard disc.

CPUのアップデート方法(Mode 3)

1. "CPU"フォルダをPCのハードディスクにコピーします。

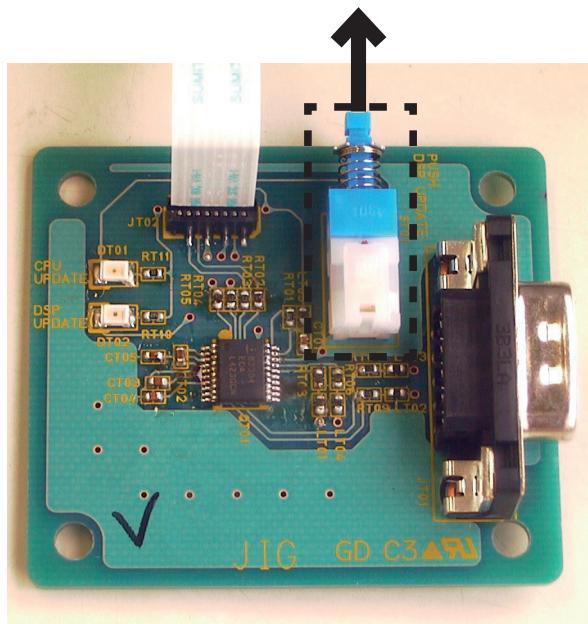


2. Connect PC and the connection JIG with the RS-232C cable. And connect FPC (upside contact) to the connector (JU05) into the rear lid of the unit from connection JIG.

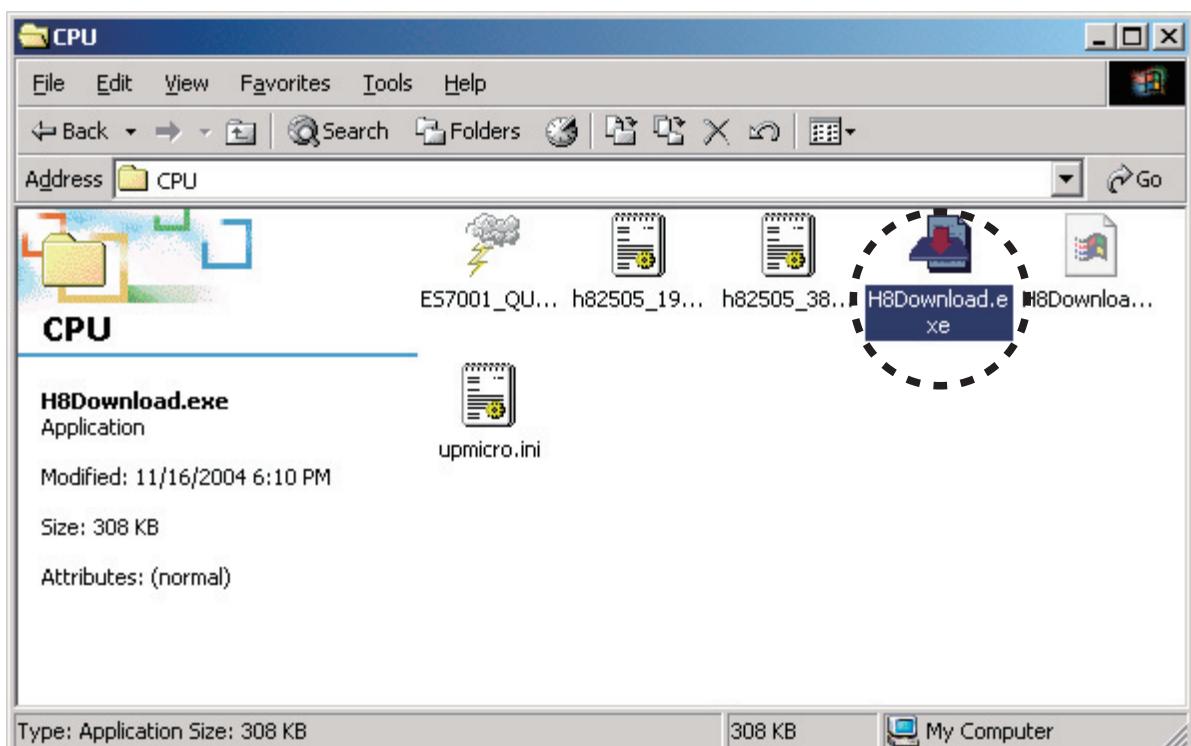
2. 本機と接続治具をRS-232Cで接続し、接続治具のFPCを接続端子を上にして本機のリアカバー内のコネクタ(JU05)に接続します。



3. Check the switch (ST01) of the connection JIG, it is not pushed. It becomes boot mode.
3. 接続治具のスイッチ(ST01)が押し込まれていないか確認します。押し込まれていなければブートモードになります。

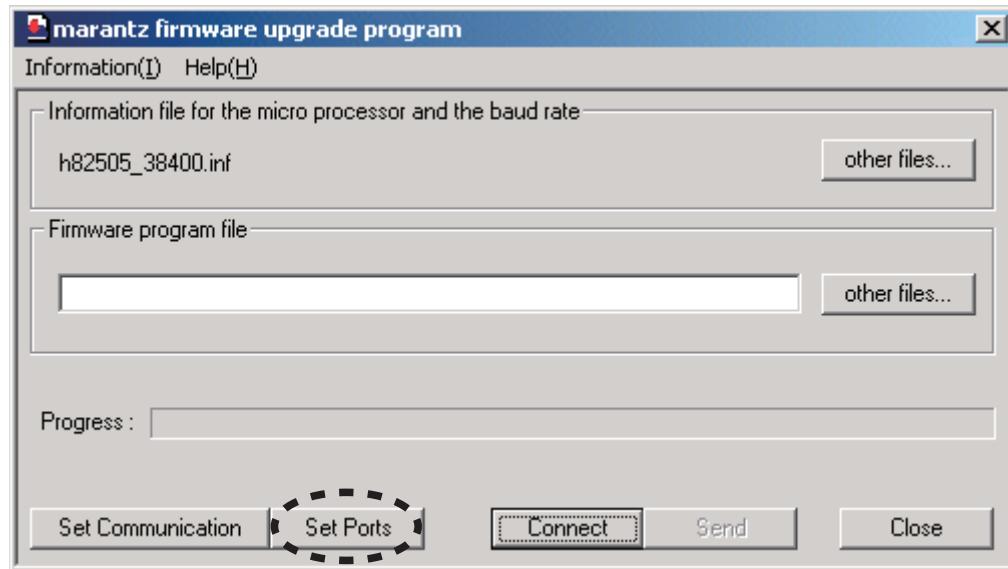


4. Connect the mains cord into the unit. And then green LED (DT01) of connection JIG lights up.
- NOTE :** No indication of LED display and No light up LED of the unit, when the unit is into boot mode.
4. 電源ケーブルを本機に接続します。接続治具のLED(DT01)が緑に点灯します。
- 注意 :** 本機はブートモードになり、本機のLEDディスプレイ、LEDは点灯しません。
5. Double click H8Download.exe, and launch "marantz firmware upgrade program".
5. PCからH8Download.exeをダブルクリックして"marantz firmware upgrade program"を起動させます。



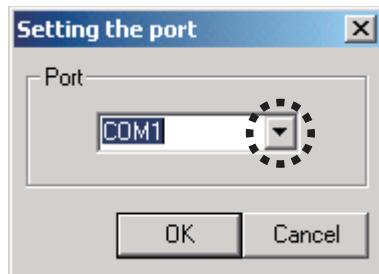
6. Click **Set ports**.

6. **Set Ports**をクリックします。



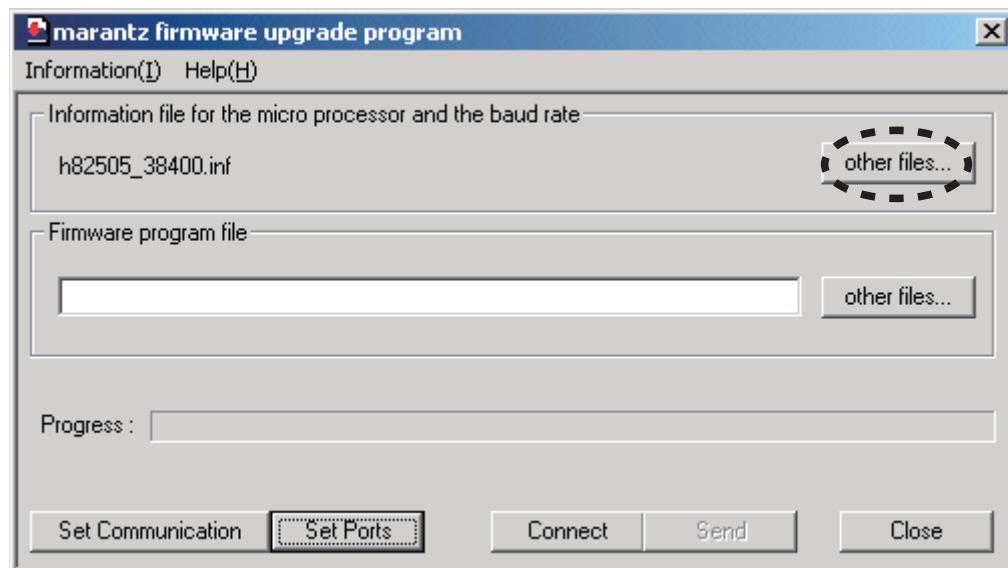
7. Choose the **COM Port No.**

7. **COMポート番号**を選択します。



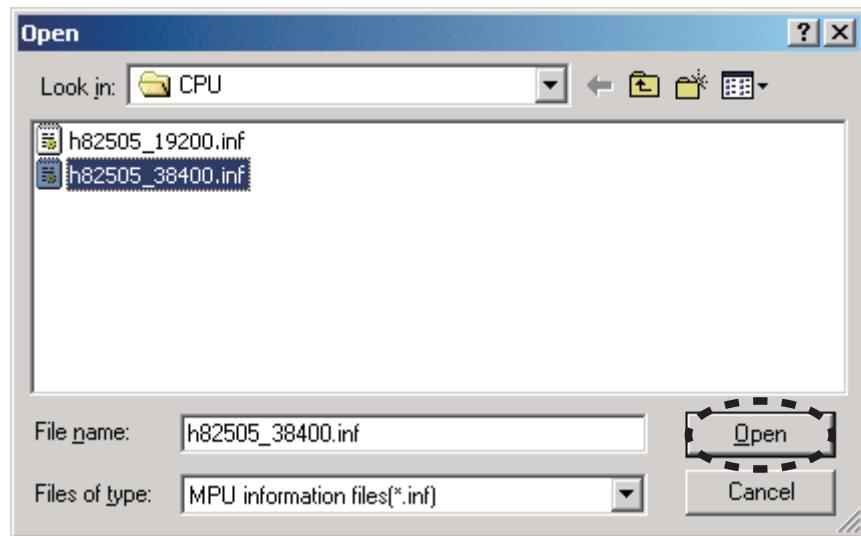
8. Click **other files...** from Information file for the micro processor and the baud rate.

8. Information file for the micro processor and the baud rate内の**other files...**をクリックします。



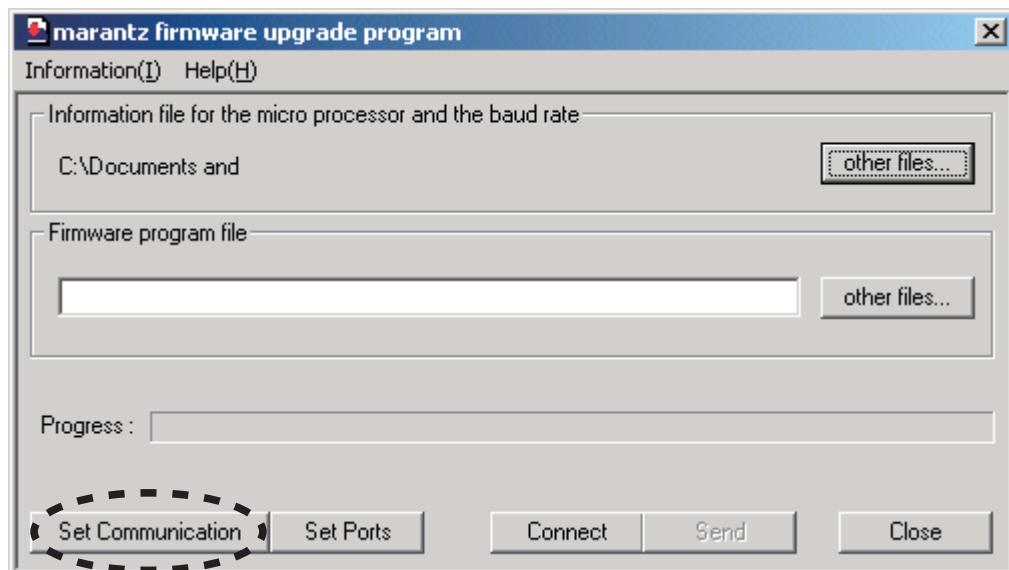
9. Choose **h82505_38400.inf**. And click **Open**.

9. **h82505_38400.inf**を選択し、**Open**をクリックします。



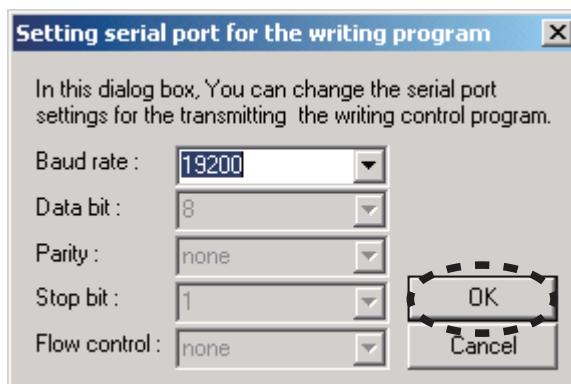
10. Click **Set Communication**.

10. **Set Communication**をクリックします。



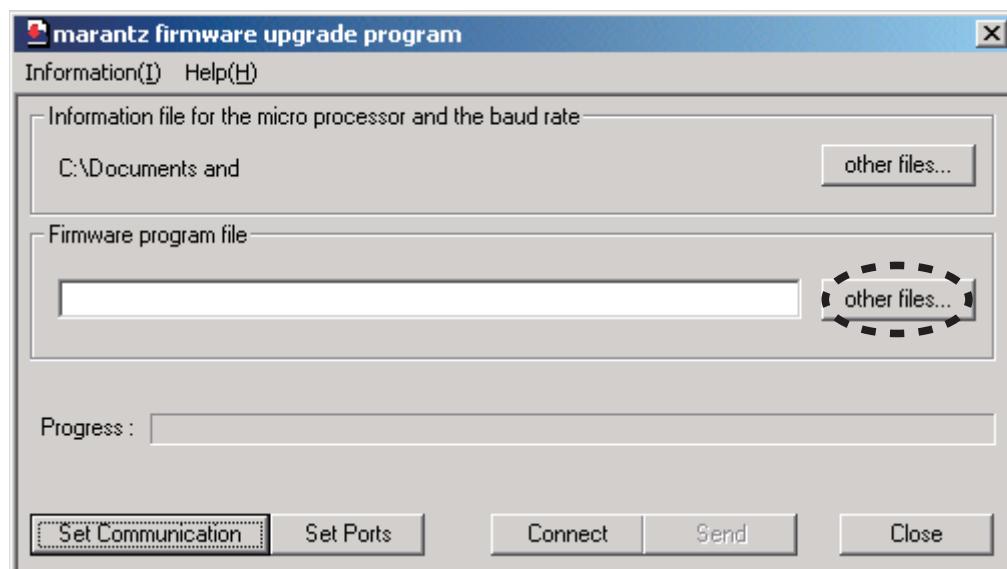
11. Choose **19200** in the Baud rate. And click **OK**.

11. Baud rateから**19200**を選択し、**OK**をクリックします。



12. Click **other files...** from Firmware program file.

12. Firmware program file内の**other files...**をクリックします。

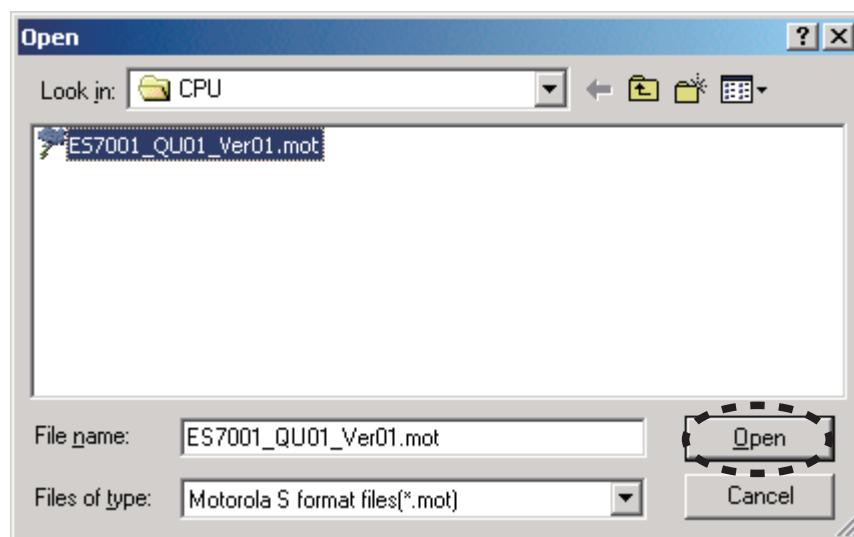


13. Choose **ES7001_QU01_Ver1.mot**. And click **Open**.

NOTE : Version number changes whenever software released.

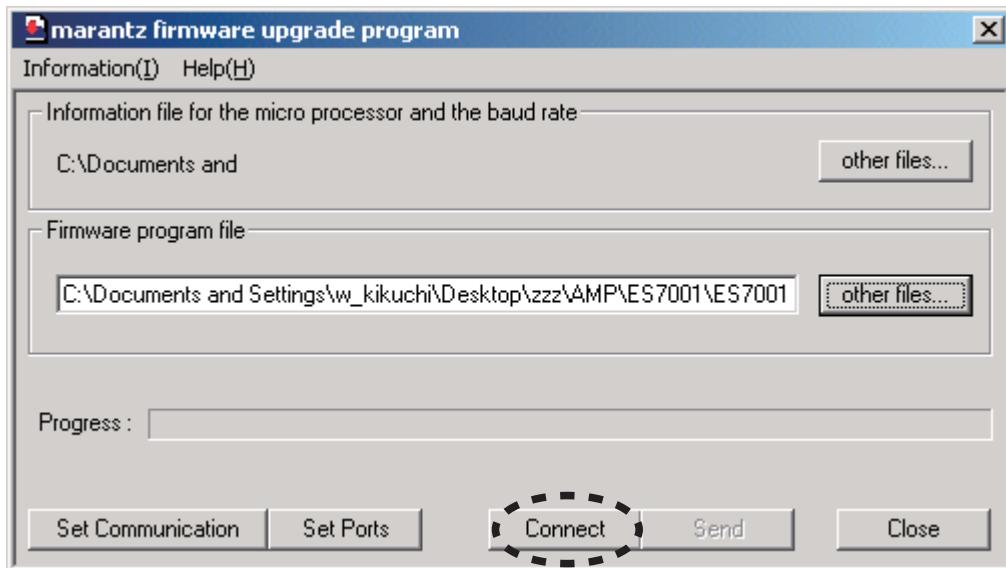
13. **ES7001_QU01_Ver1.mot**を選択し、**Open**をクリックします。

注意 : ソフトウェアの発行のたびにバージョンは変更されます。



14. Click **Connect**.

14. **Connect**をクリックします。



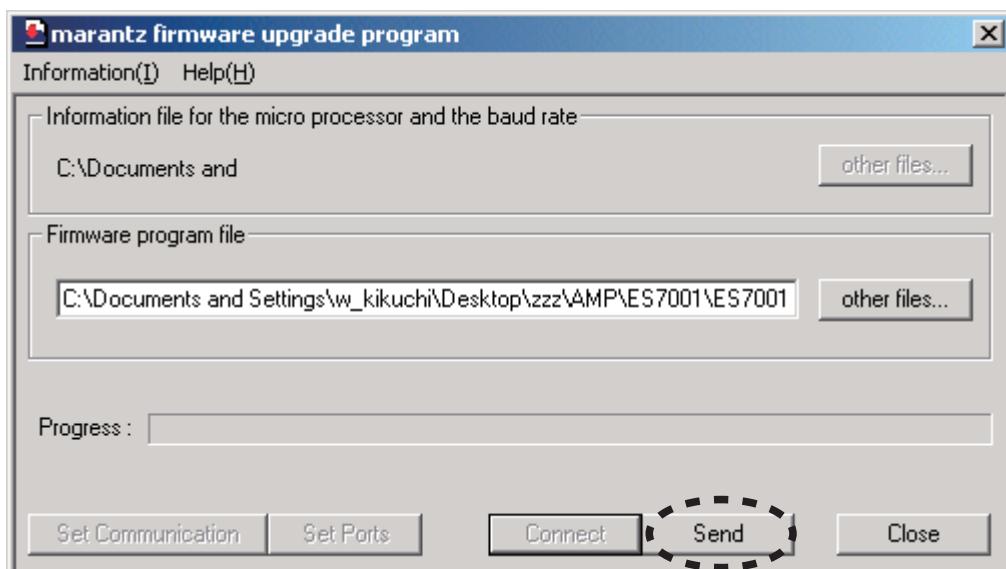
15. If the connection with the H8 μ-P is successfully made, a dialogue box saying "Success to the H8 micro processor connection" appears. (If the connection fails, error message will appear.) Click **OK**.

15. H8 u-Pと通信接続に成功すると"Success to the H8 micro processor connection"のダイアログが表示されます。(通信に失敗するとエラーメッセージが表示されます。) **OK**をクリックします。



16. Click **Send** to start update.

16. **Send**をクリックしアップデートを開始します。



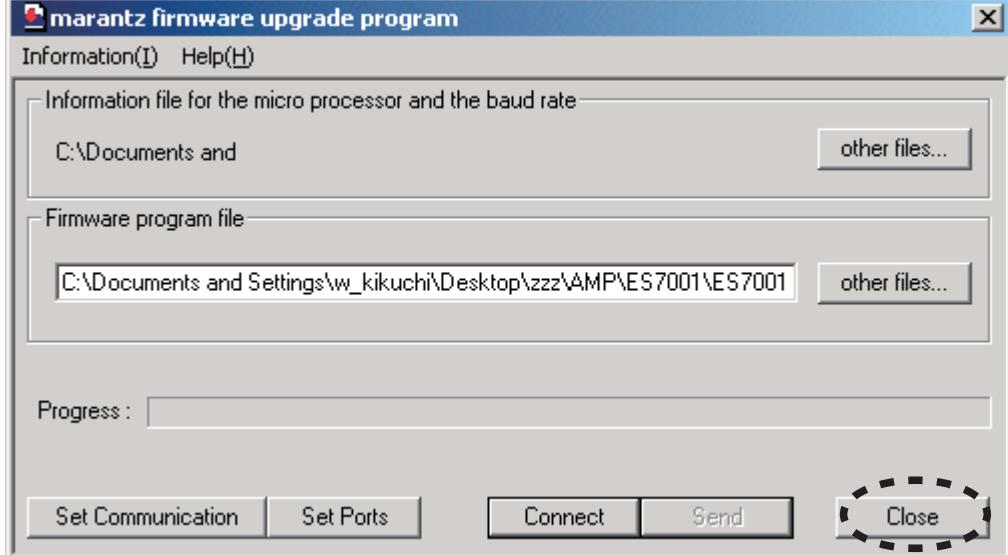
17. If the firmware is updated successfully, a dialog box saying "Finished the firmware program sending" appears.
Click **OK**.



18. Click **Close** to close the application.

17. ソフトウェアのアップデートが成功すると、"Finished the firmware program sending"のダイアログボックスが表示されます。**OK**をクリックします。

18. **Close**をクリックしてアプリケーションを閉じます。



19. Disconnect the mains cord from the unit. And disconnect FPC of the connection JIG from the unit.

Firmware Version Check

To check the versions of the firmware, see "Microprocessor (CPU), DSP Version and FLD Segment Check Mode" in "**4. SERVICE MODE**" section.

19. 本機から電源ケーブルを外し、接続治具のFPCを外します。

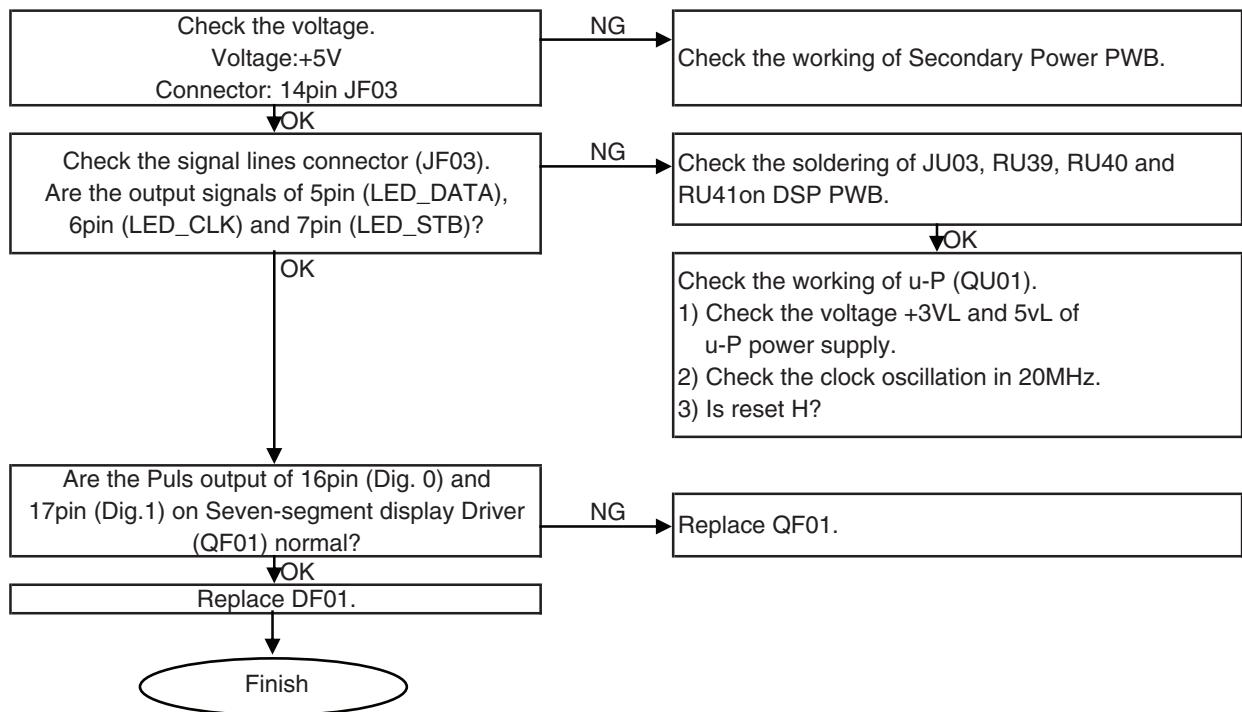
バージョンの確認

ソフトウェアのバージョンを確認します。
確認方法は "**4. SERVICE MODE**"内の"Microprocessor (CPU), DSP Version and FLD Segment Check Mode"を参照してください。

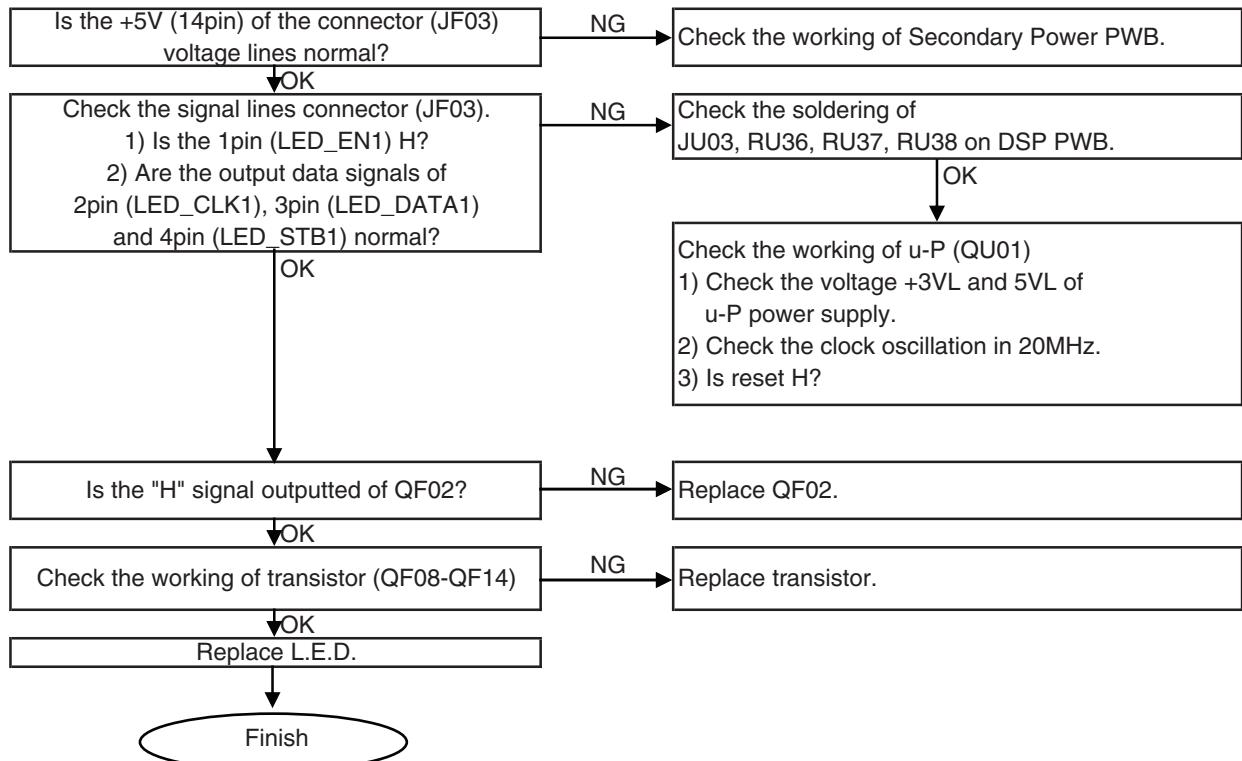
7. TROUBLESHOOTING

1. FRONT (Display) PWB (PF01)

1-1 No Seven-segment display output

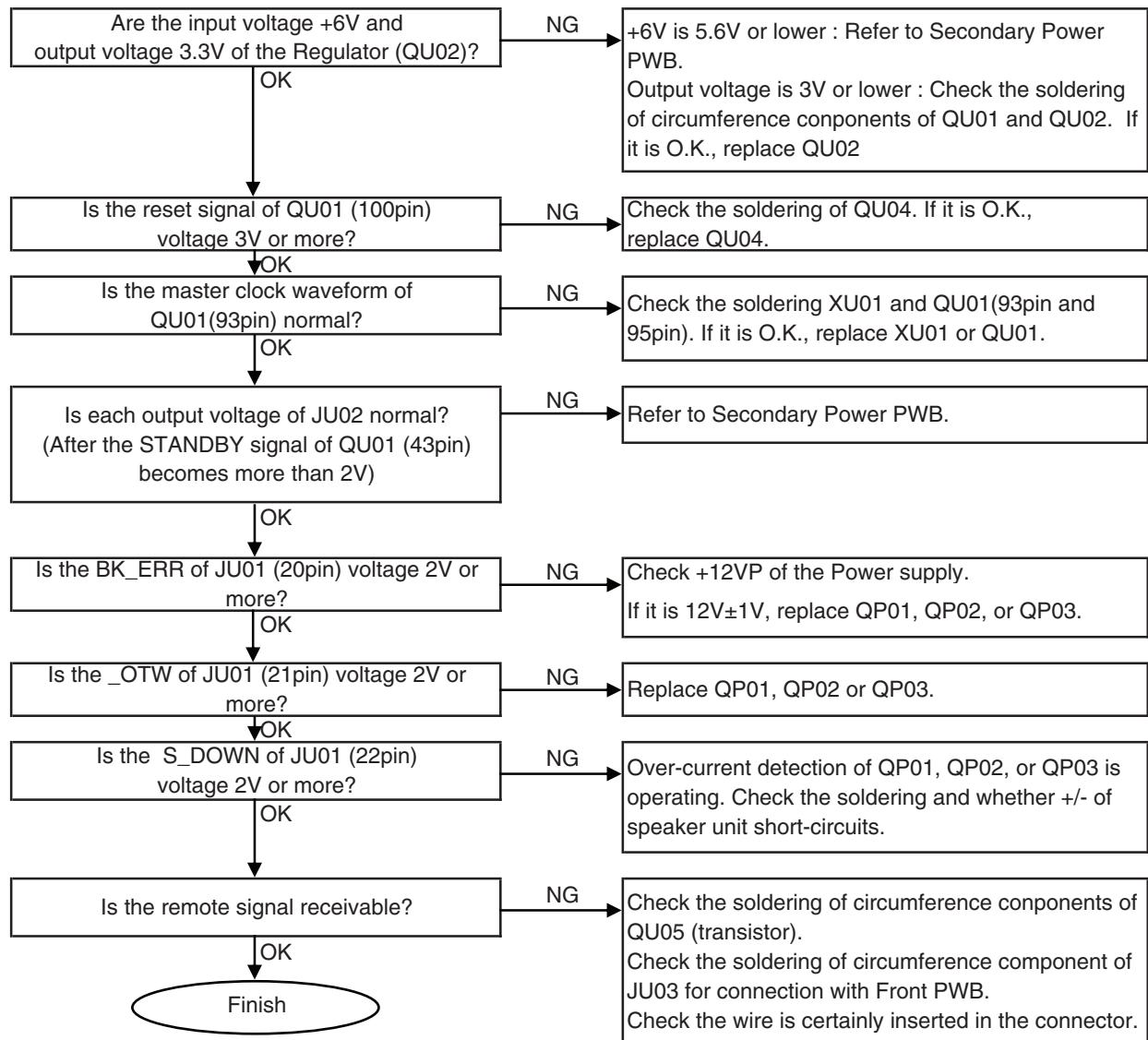


1-2 L.E.D. is not working

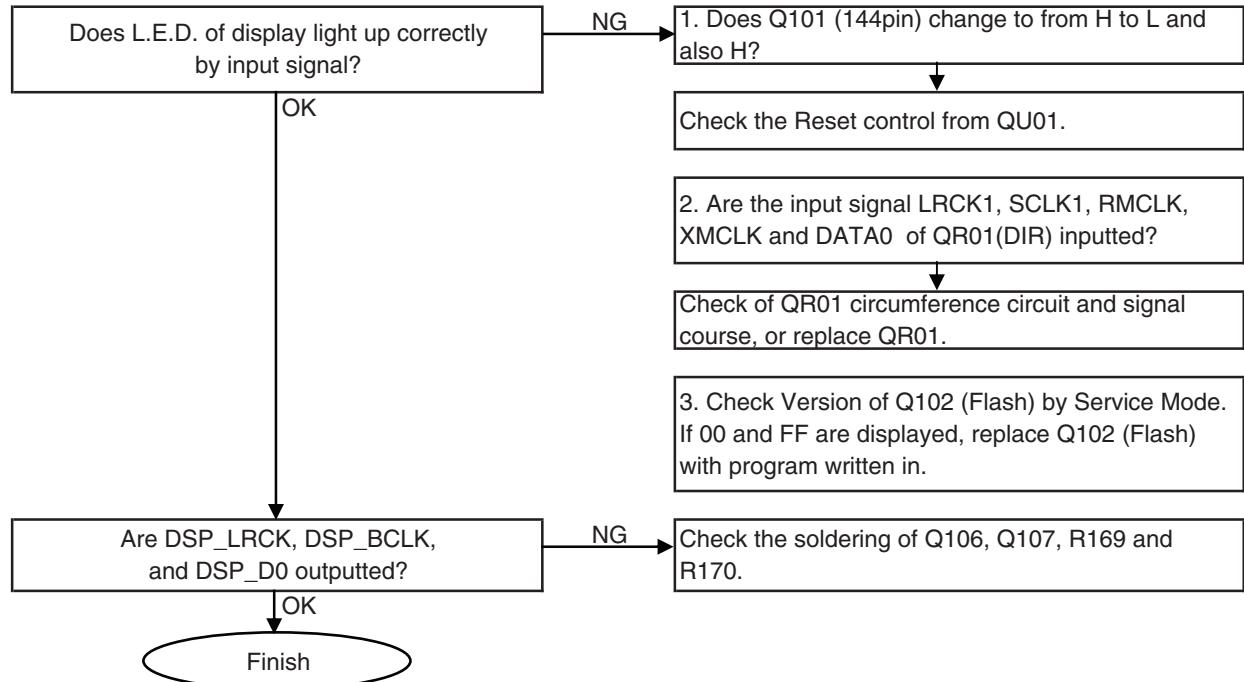


2. DSP PWB (PD01)

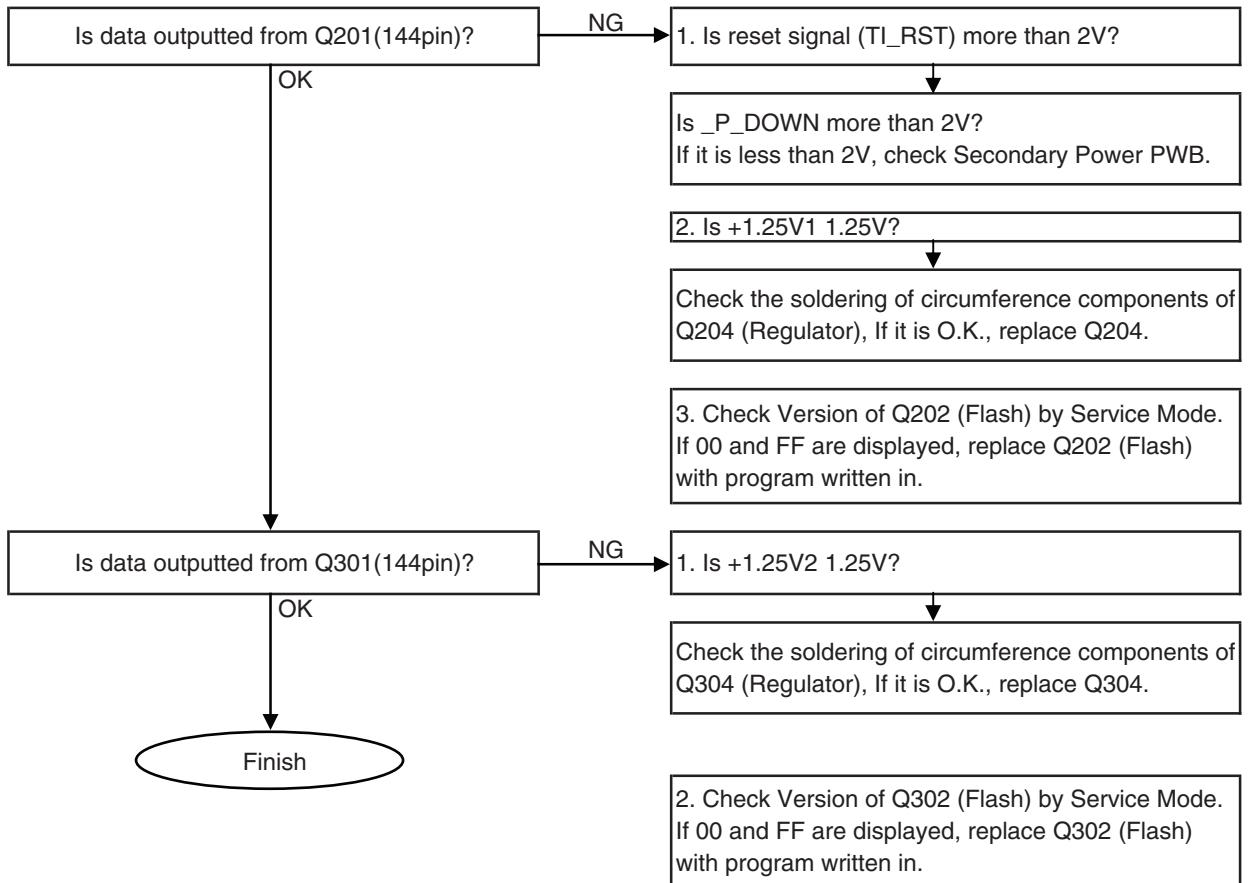
2-1 Check the Main u-P(QU01)



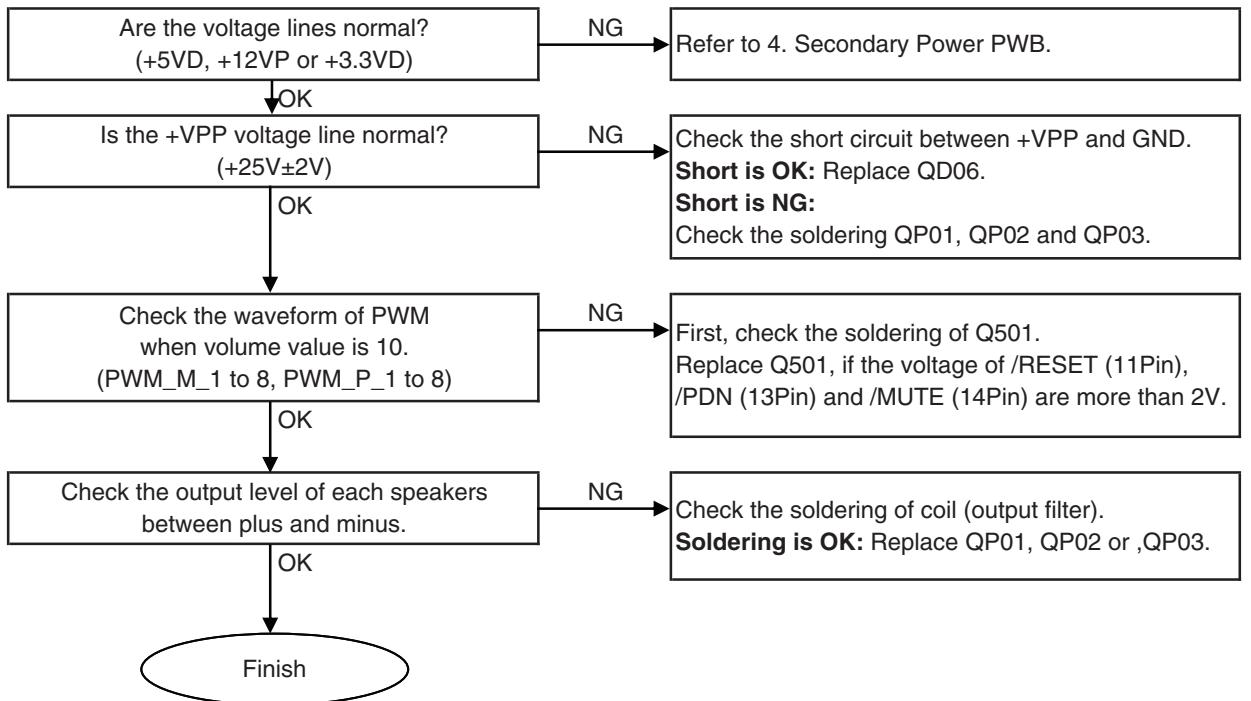
2-2 Check the Dolby Decoder (Q101)



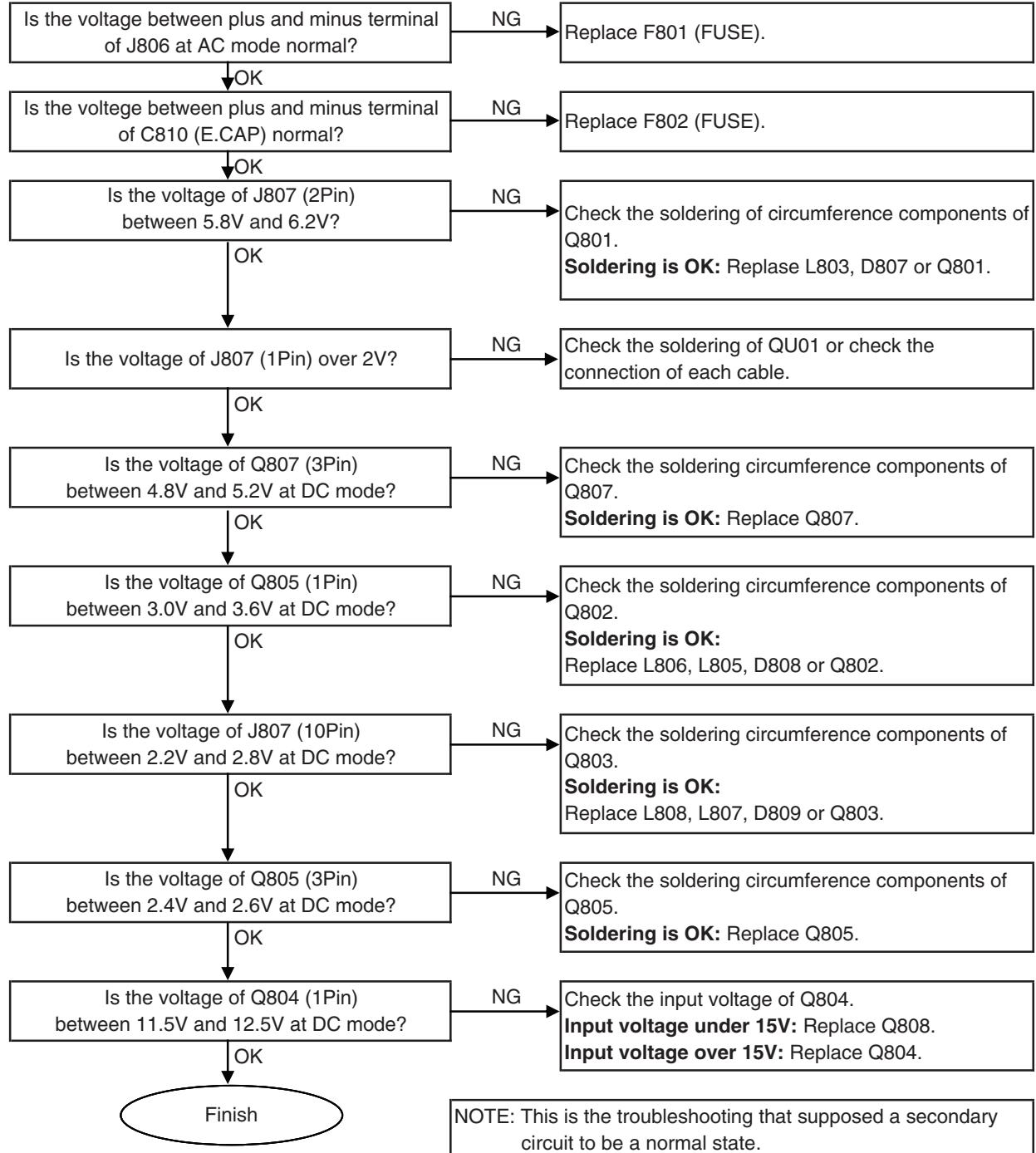
2-3 Check the OPSODIS Filter (Q201, Q202)



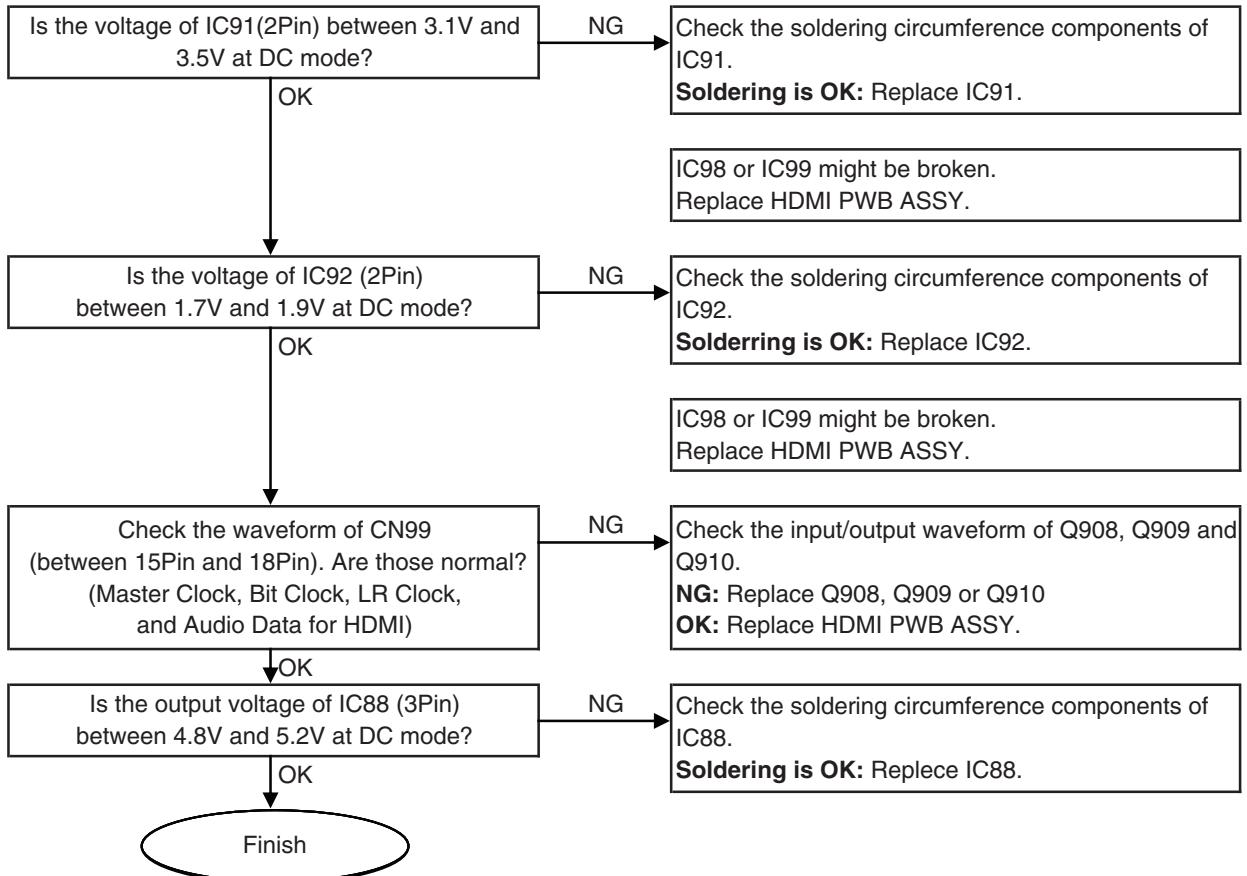
3. DIGITAL AMP PWB (PP01)



4. Secondary Power PWB (P802)

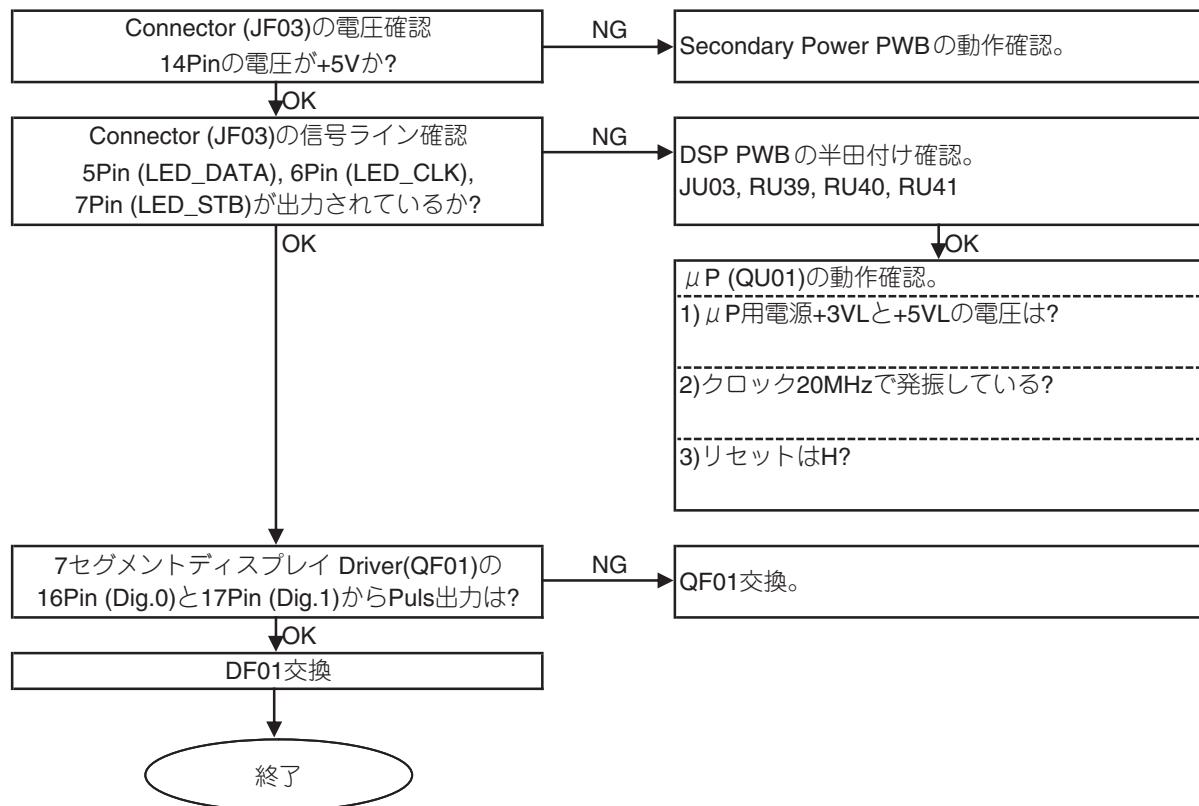


5. HDMI PWB (PX14)

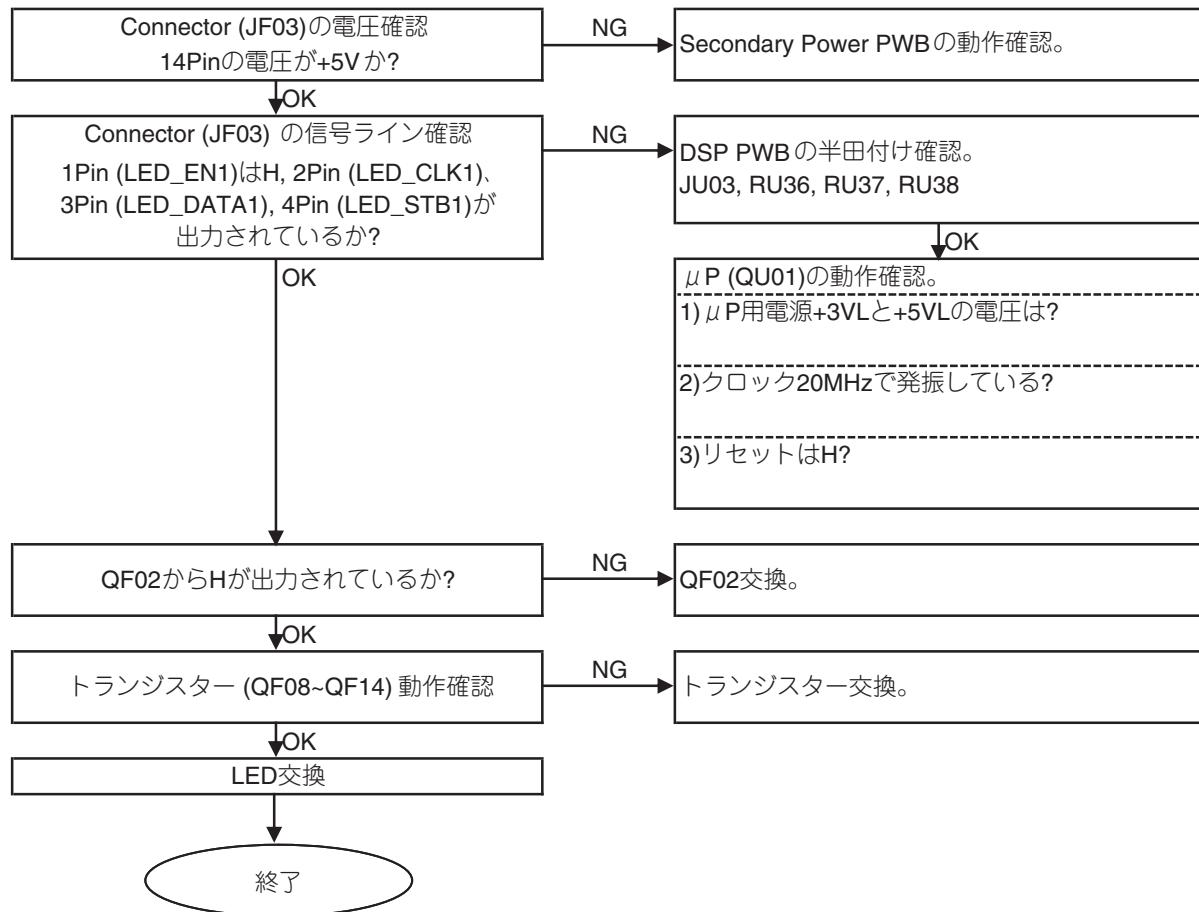


1. FRONT (Display) PWB (PF01)

7セグメントディスプレイ表示せず

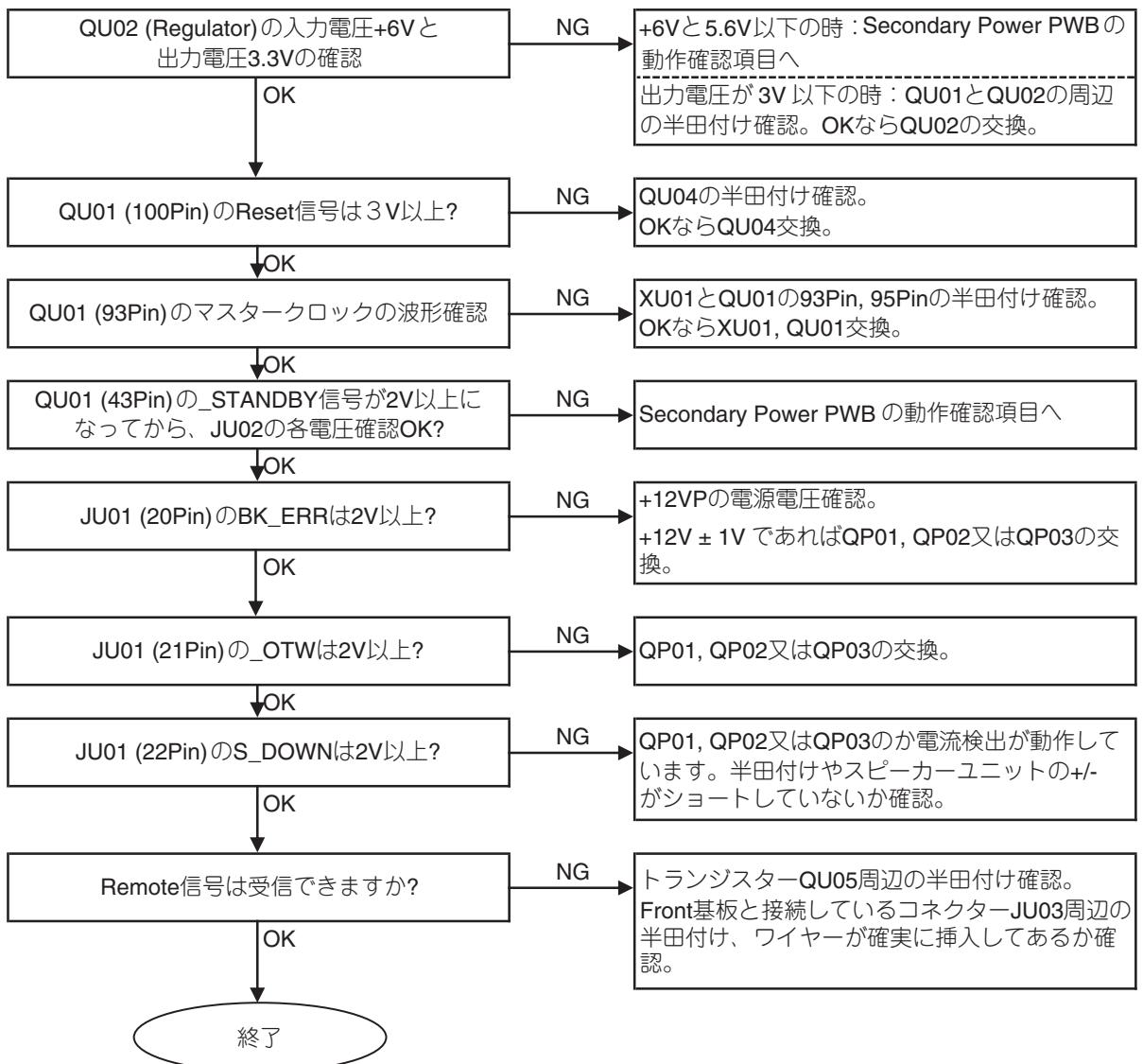


1-2 LED点灯せず

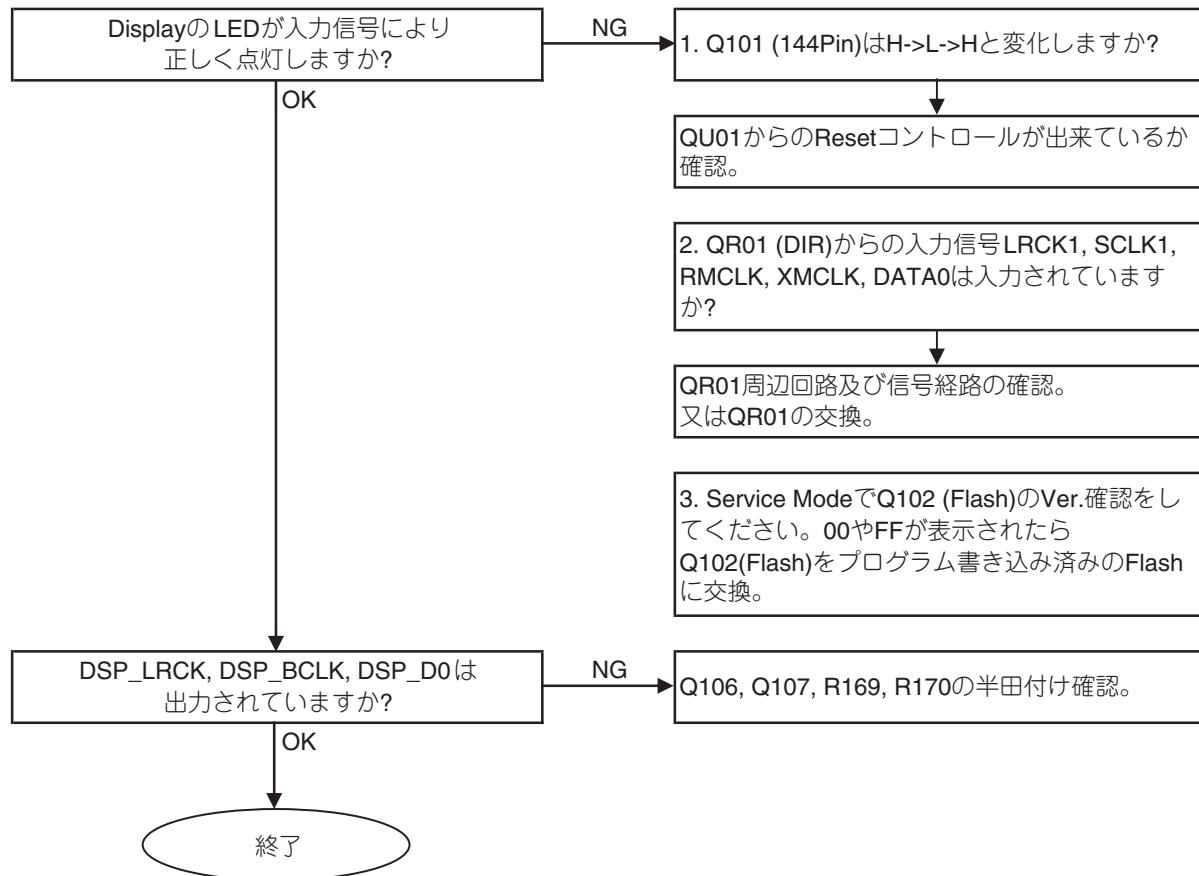


2. DSP PWB (PD01)

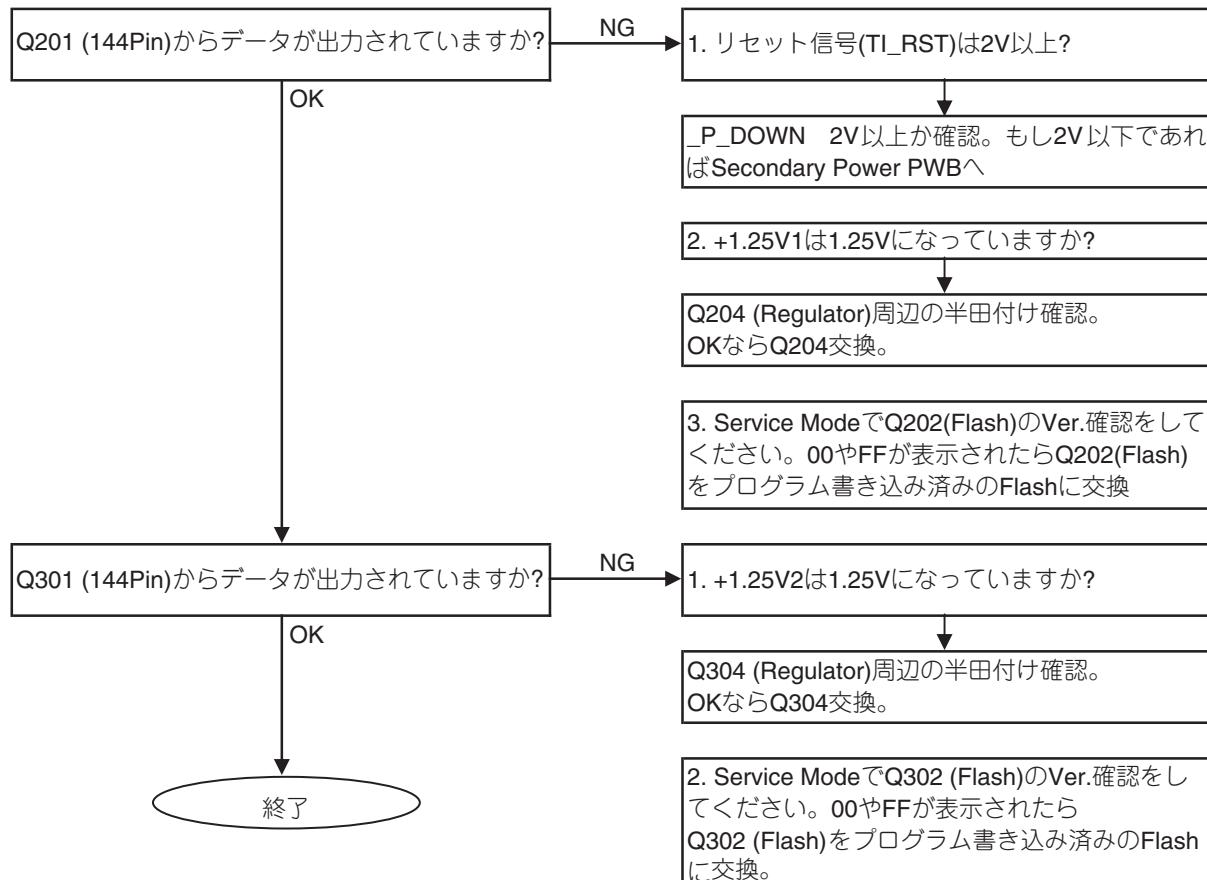
2-1 Main u-P (QU01)の動作確認



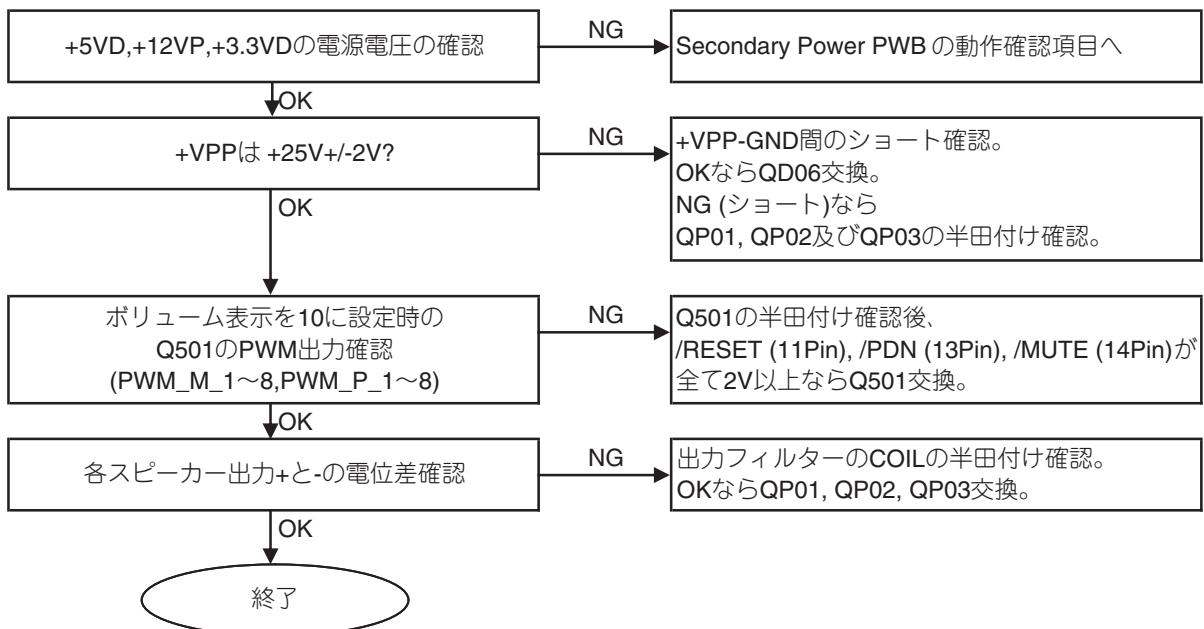
2-2 Dolby Decoder (Q101) の動作確認



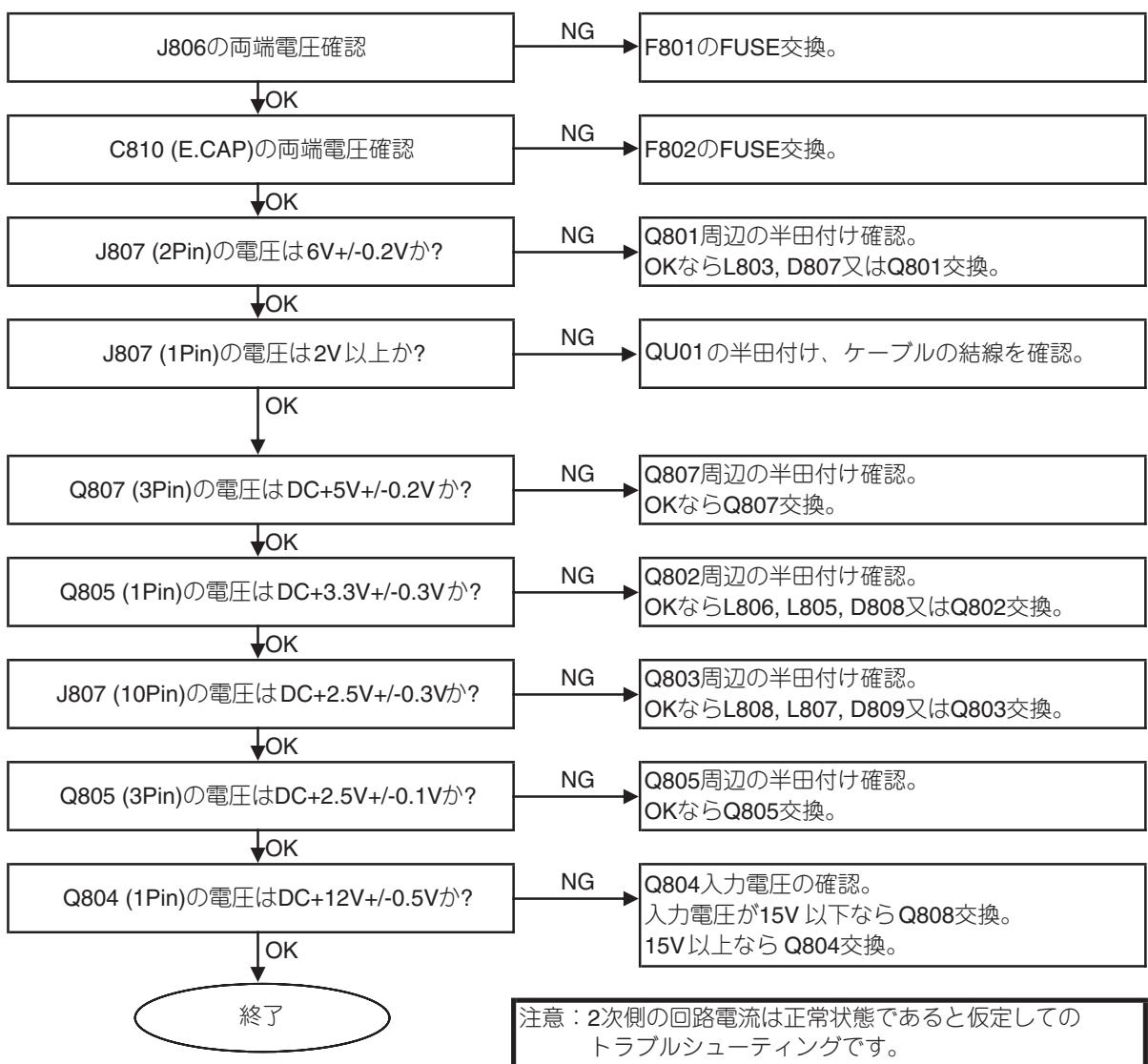
2-3 OPSODIS Filter (Q201, Q202) の動作確認



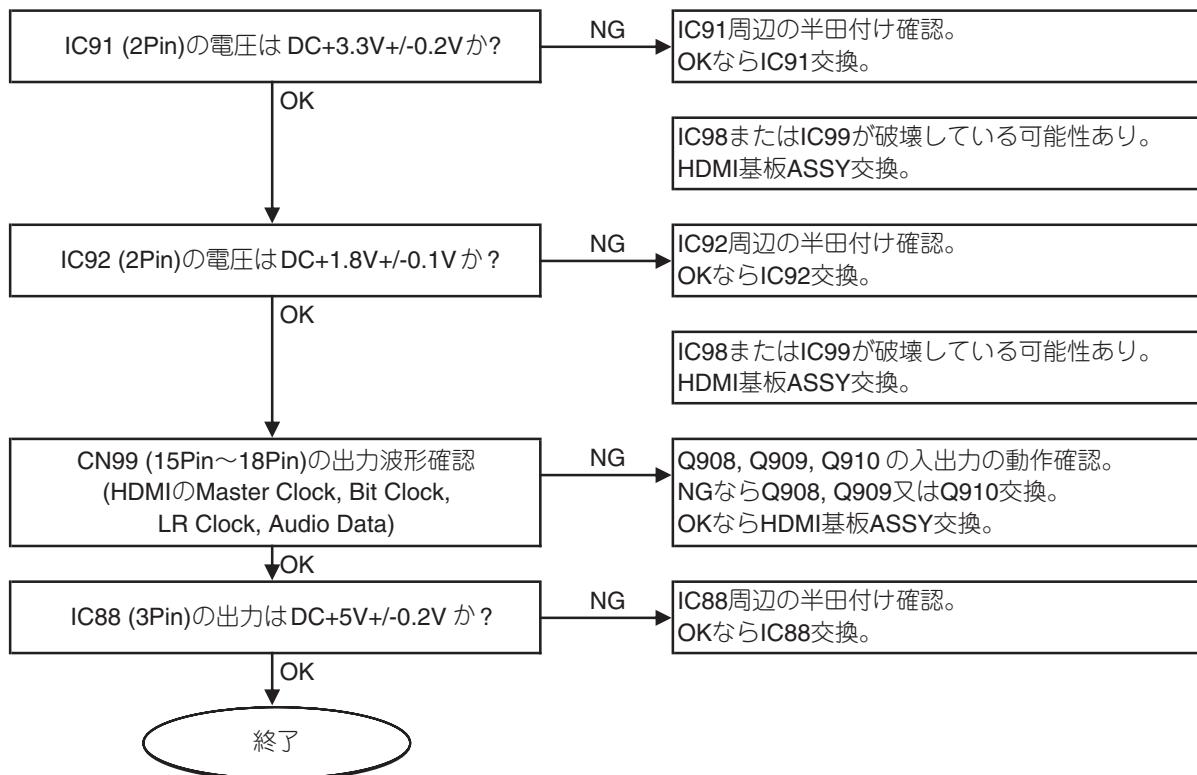
3. DIGITAL AMP PWB (PP01)



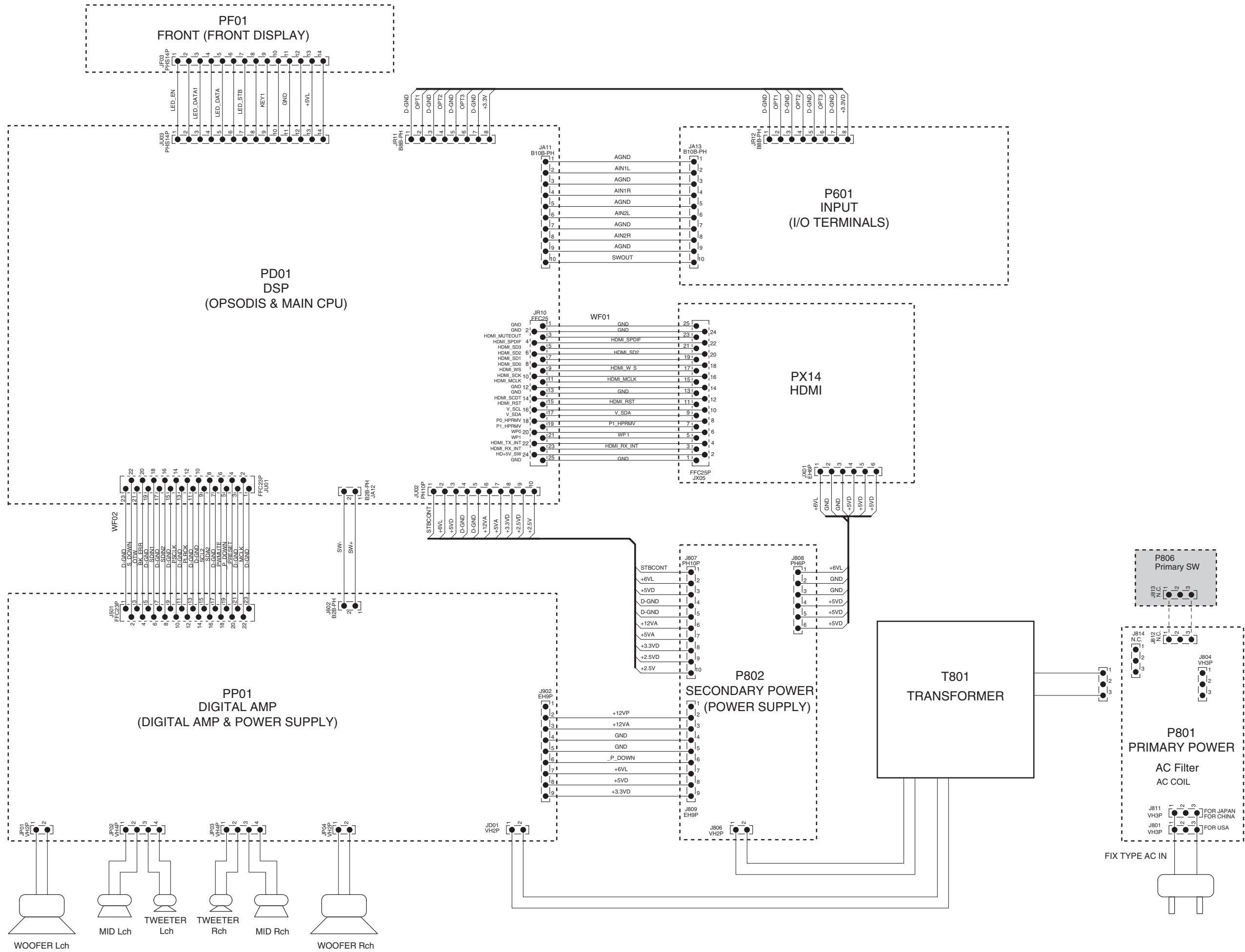
4. Secondary Power PWB (P802)



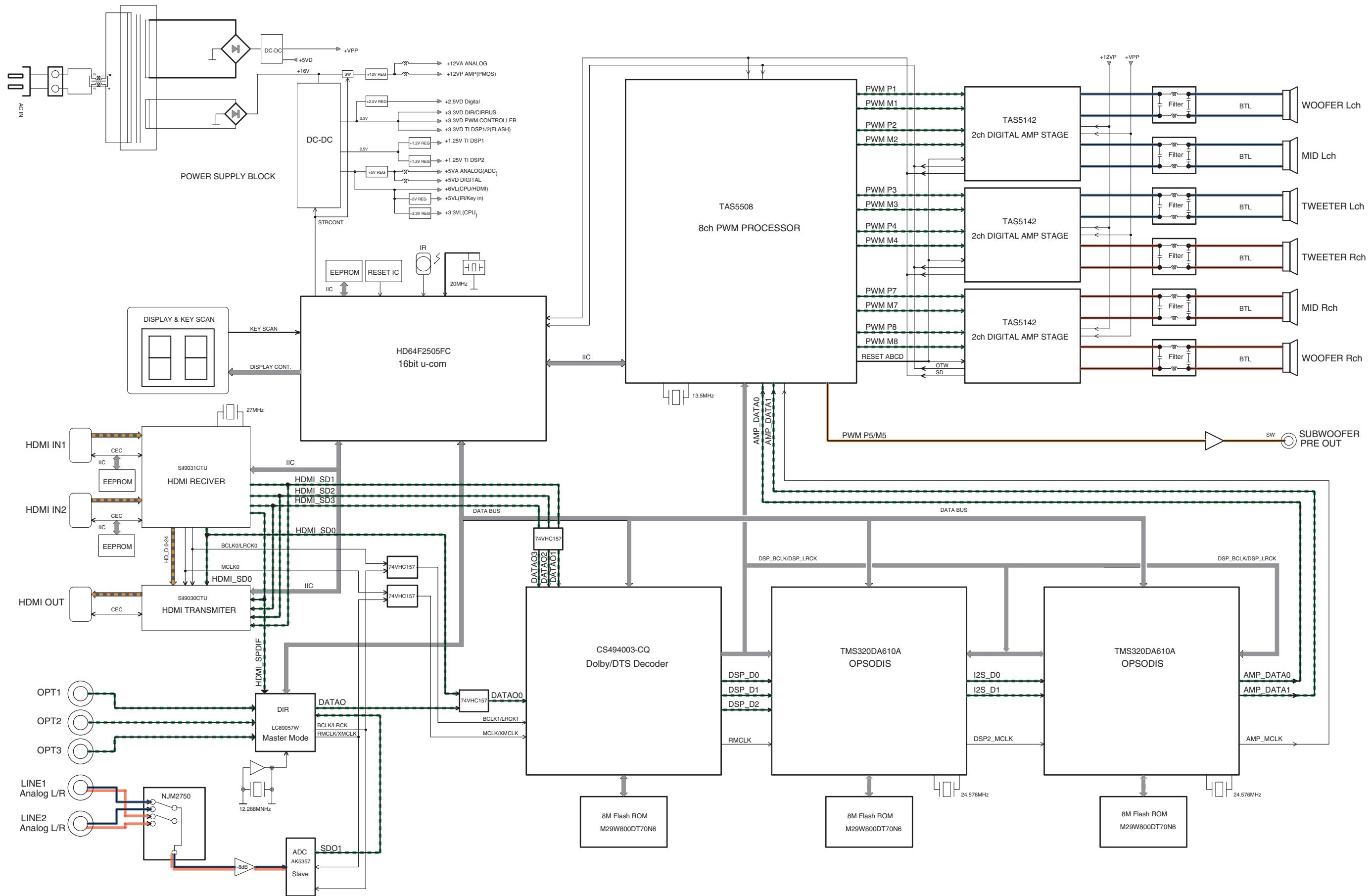
5. HDMI PWB (PX14)



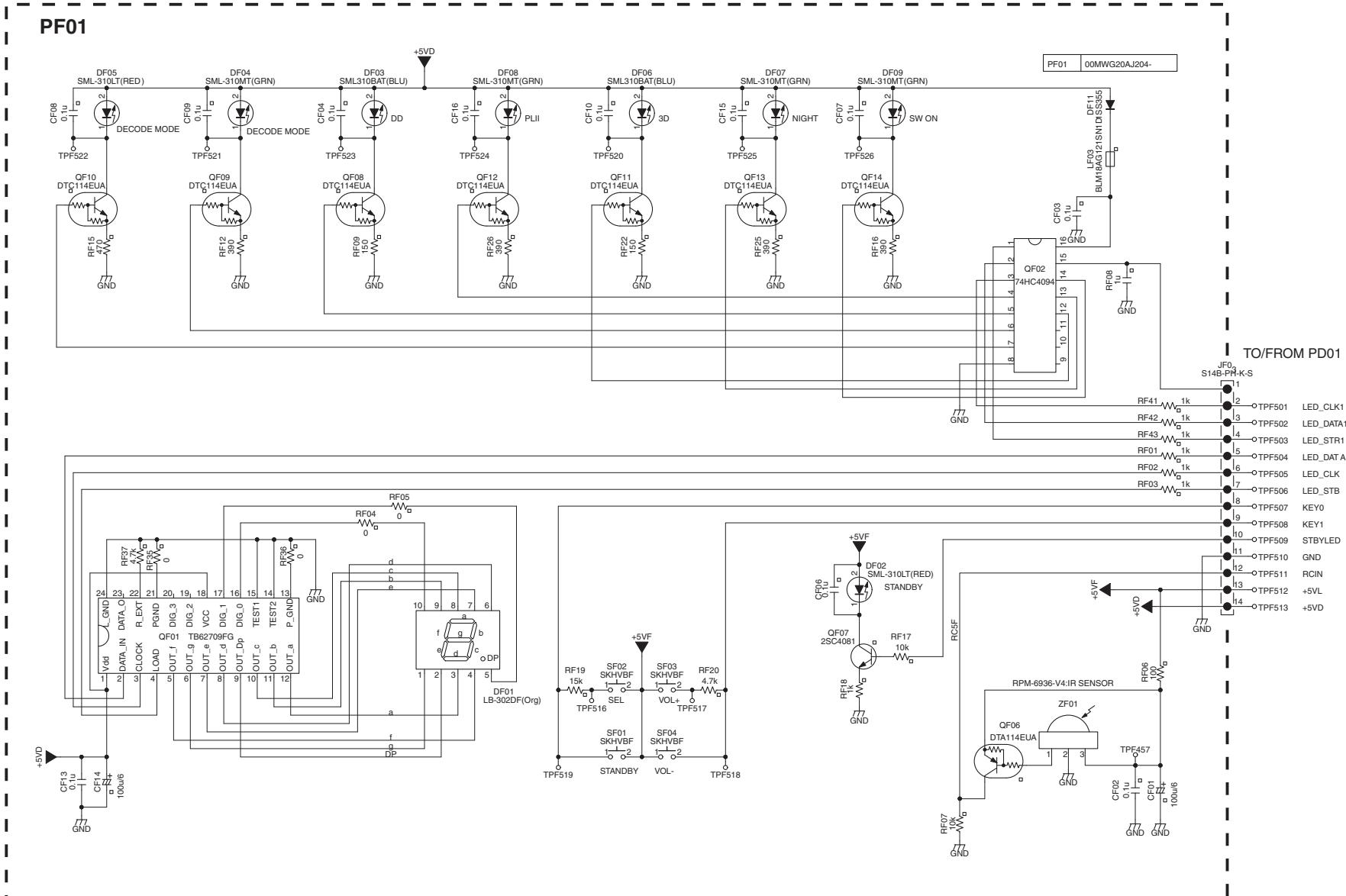
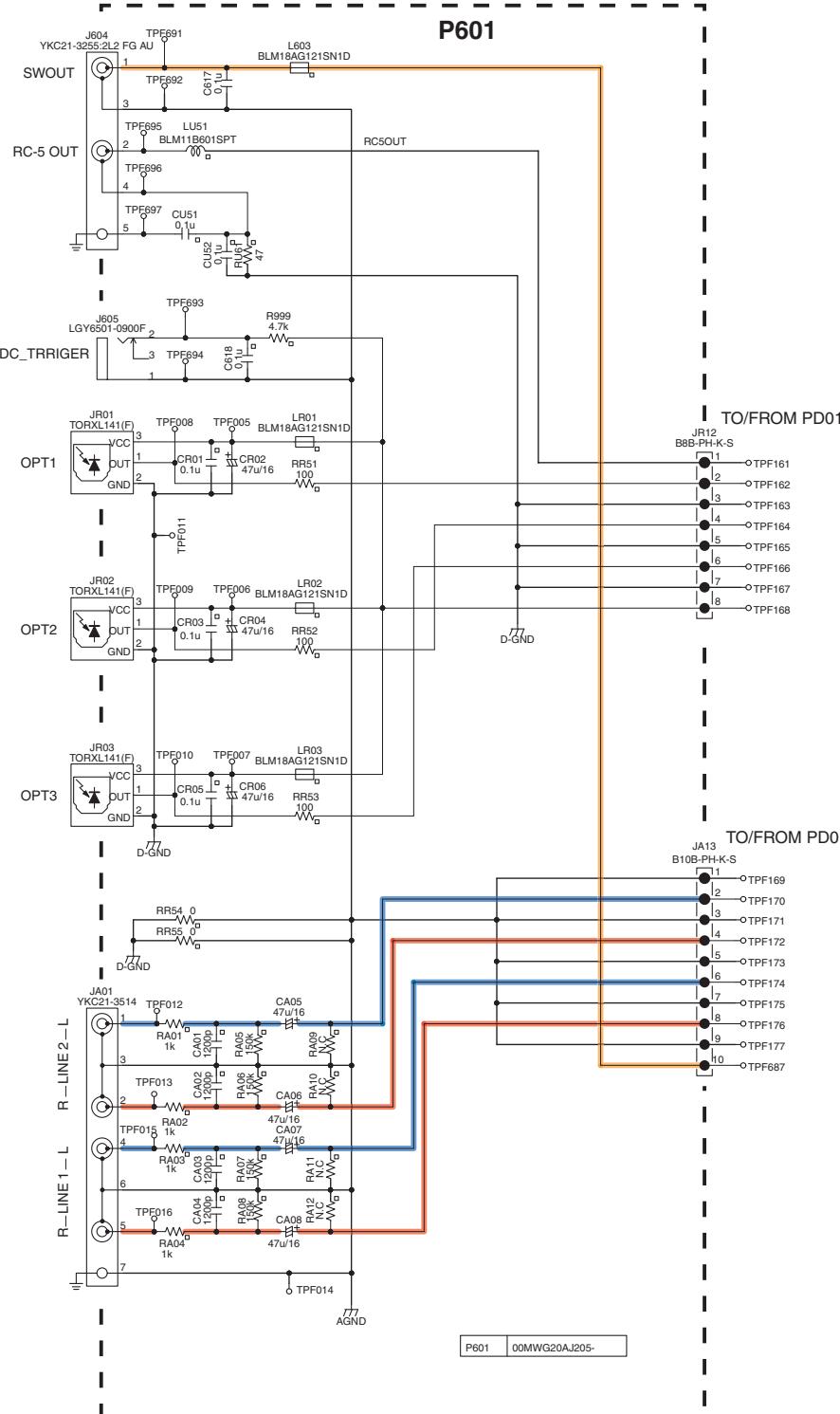
8. WIRING DIAGRAM



9. BLOCK DIAGRAM

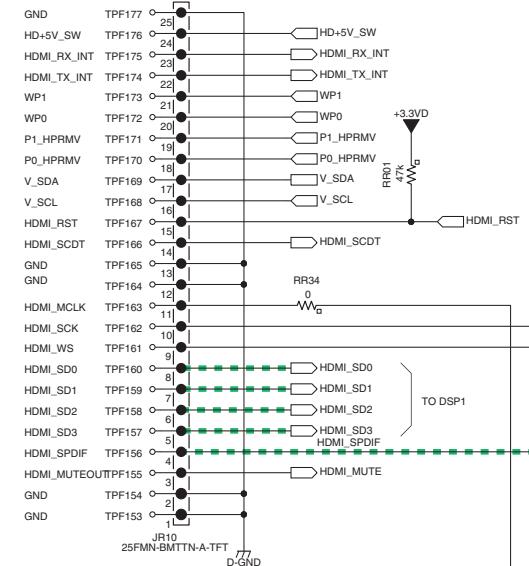


10. SCHEMATIC DIAGRAM



PD01 1/5 (DIF)

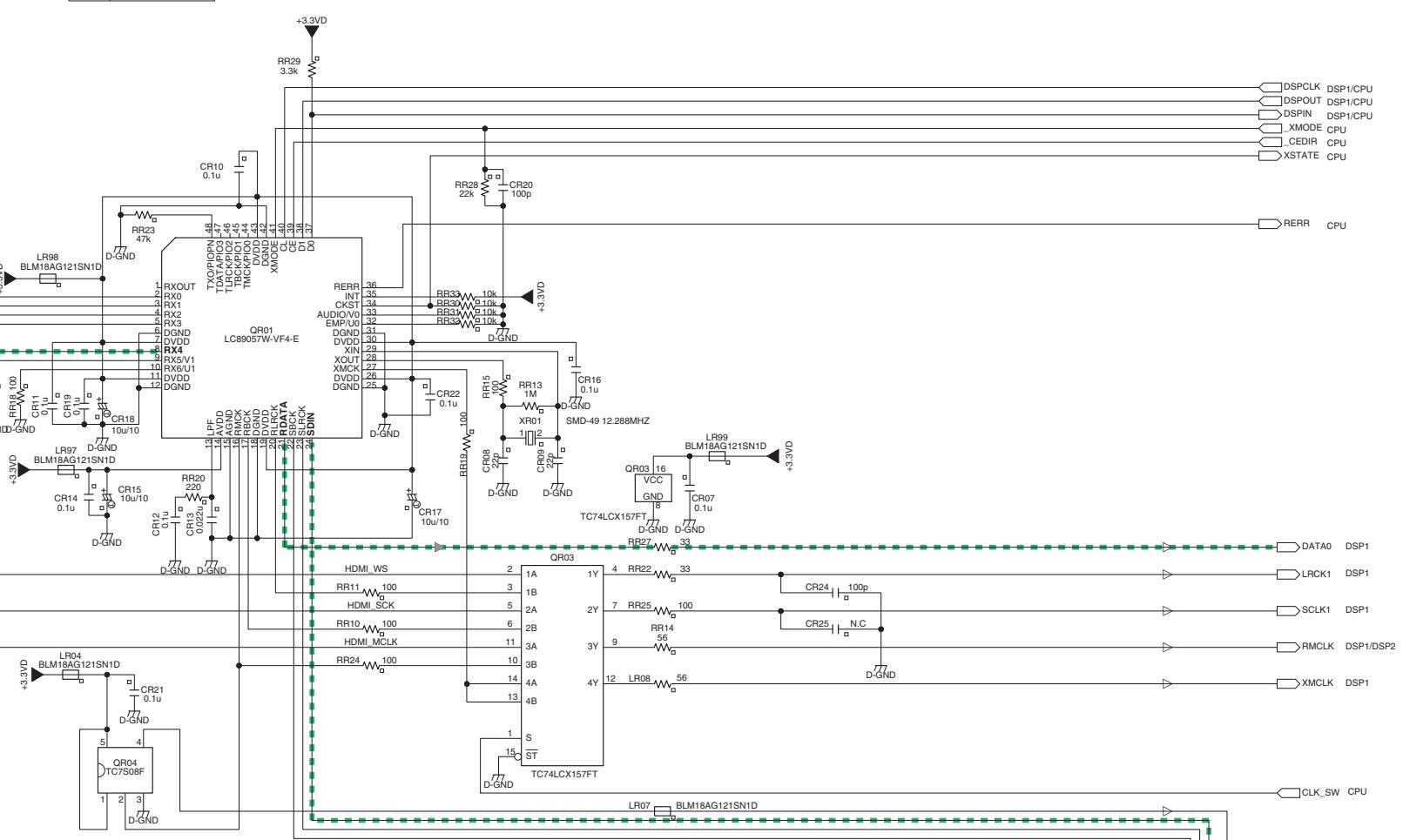
TO/FROM PX14



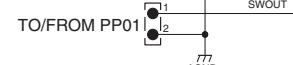
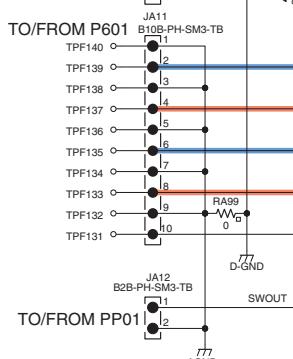
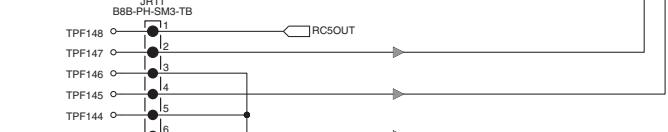
DIF : PD01 1/5
DSP1 : PD01 2/5
DSP2 : PD01 3/5
DSP3 : PD01 4/5
CPU : PD01 5/5

PD01 00MWI20AJ101-

TO CPU PART

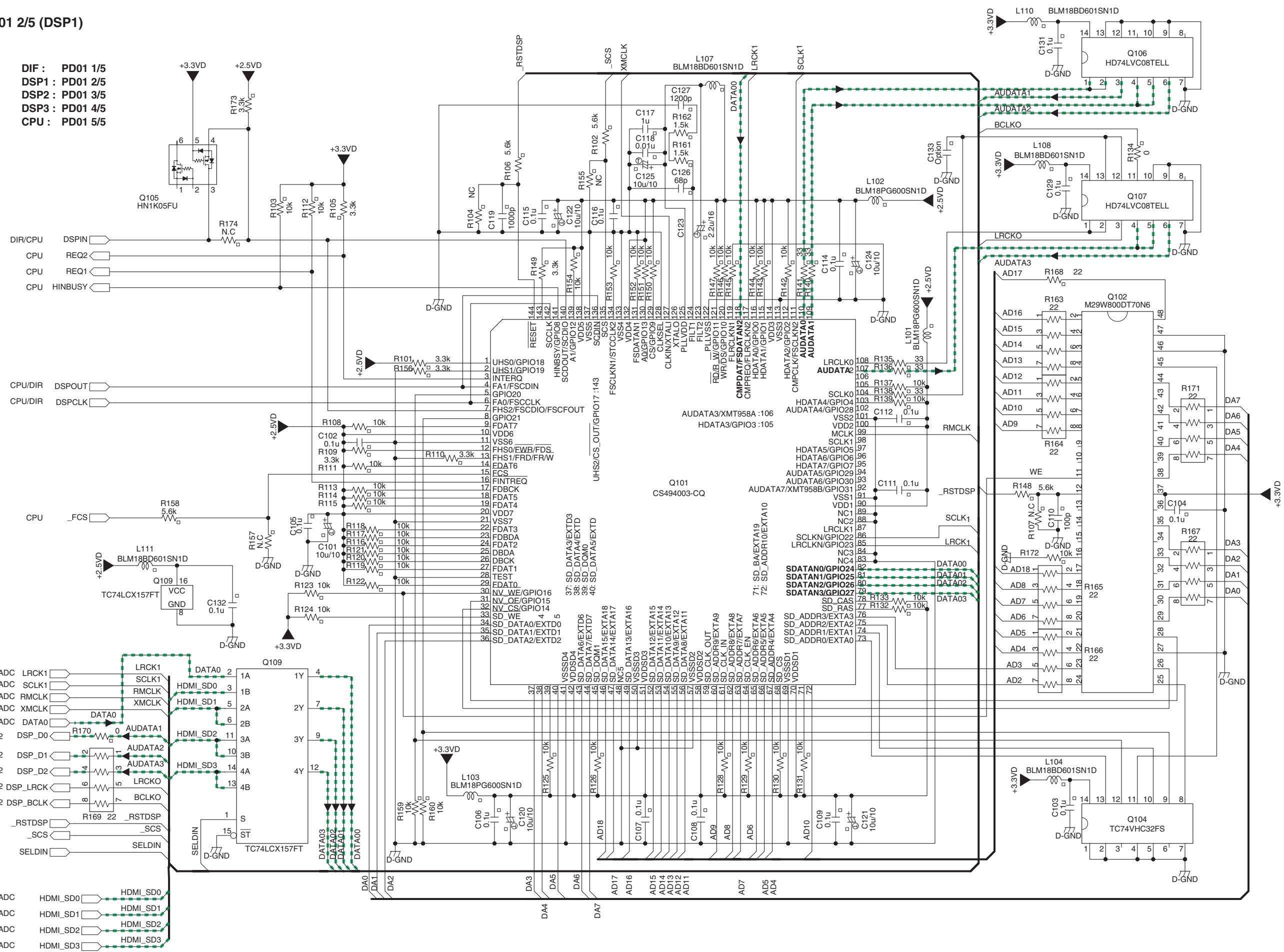


TO/FROM P601



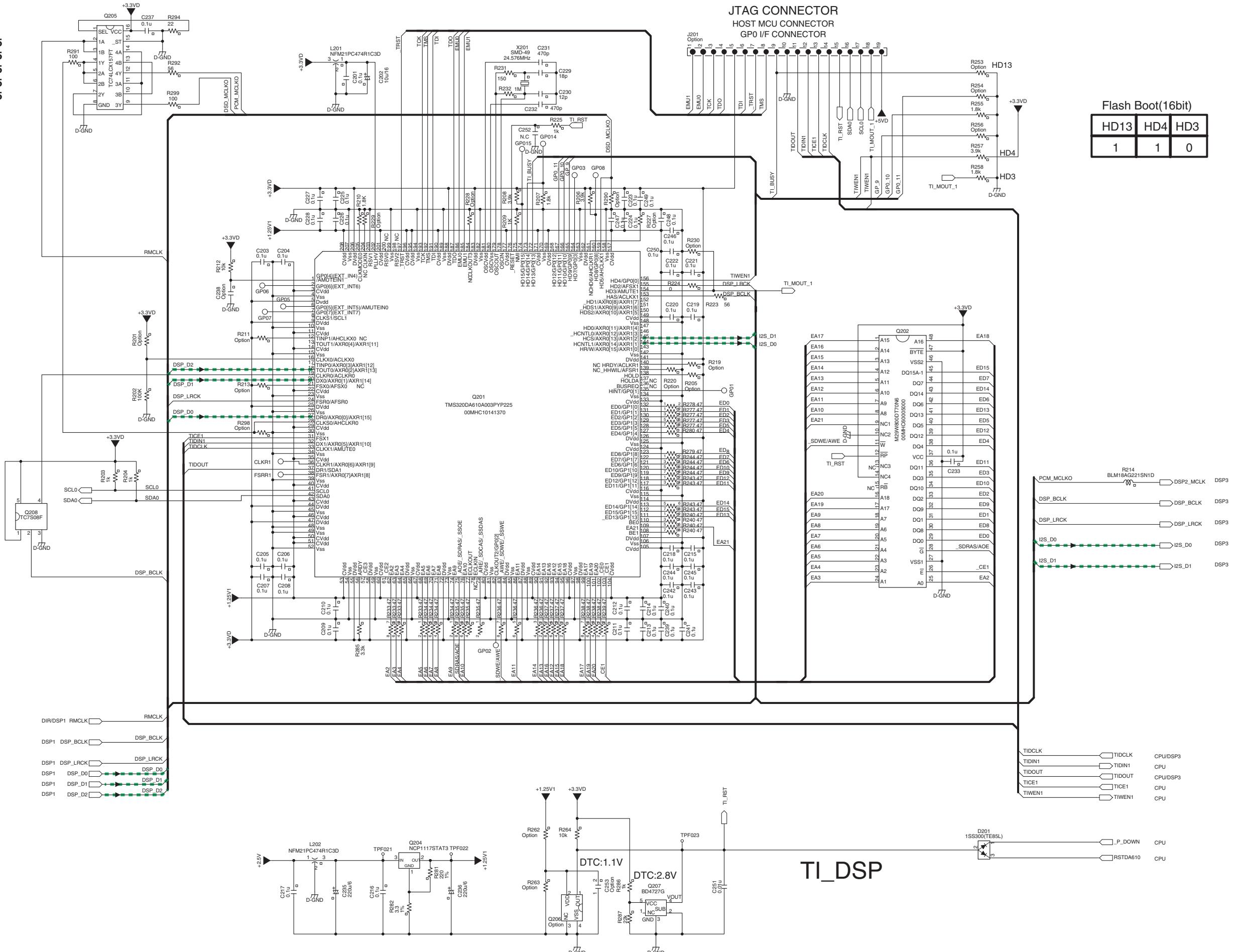
PD01 2/5 (DSP1)

DIF : PD01 1/5
 DSP1 : PD01 2/5
 DSP2 : PD01 3/5
 DSP3 : PD01 4/5
 CPU : PD01 5/5



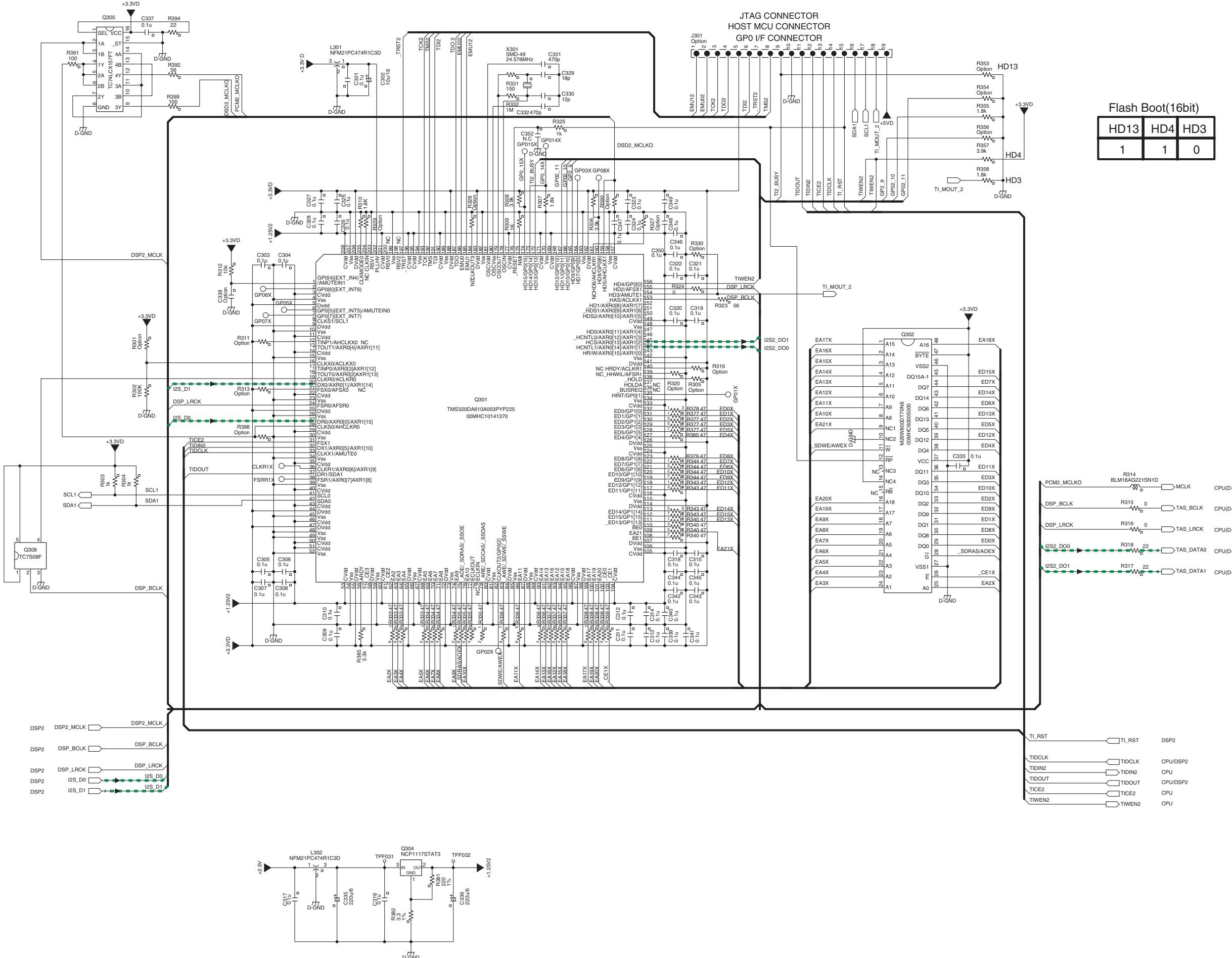
PD01 3/5 (DSP2)

DIF : PD01 1/5
DSP1 : PD01 2/5
DSP2 : PD01 3/5
DSP3 : PD01 4/5
CPU : PD01 5/5



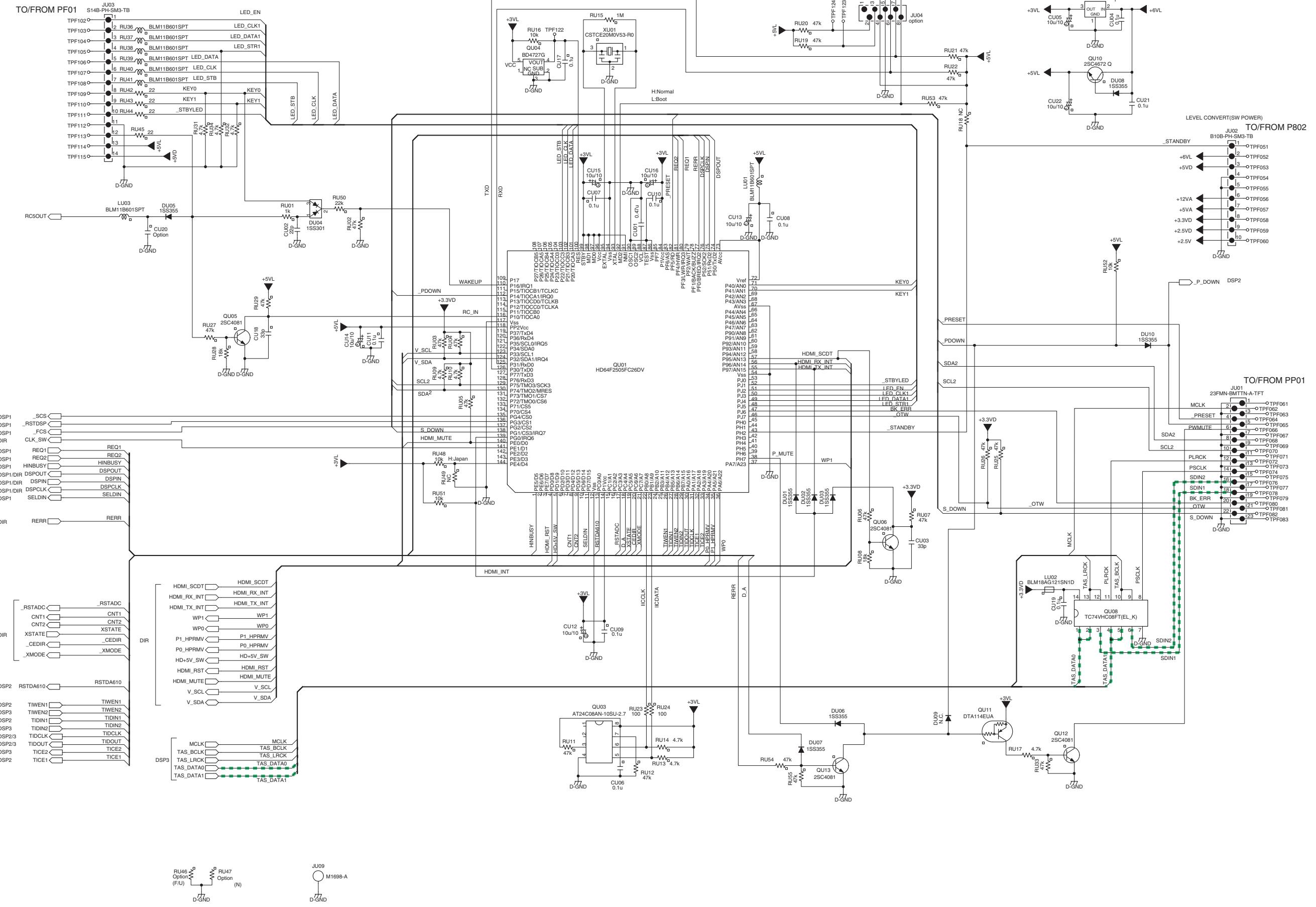
PD01 4/5 (DSP3)

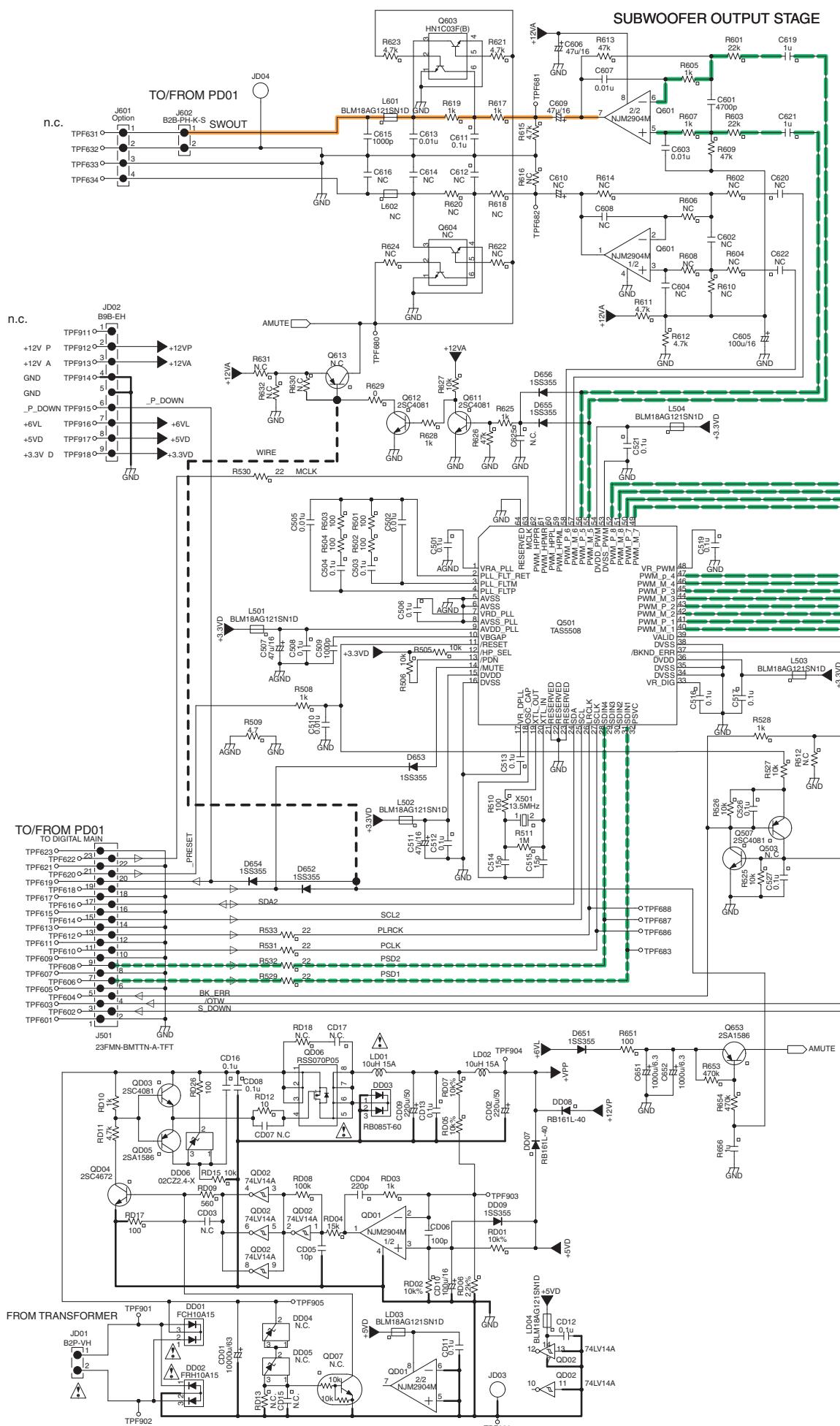
DIF : PD01 1/5
 DSP1 : PD01 2/5
 DSP2 : PD01 3/5
 DSP3 : PD01 4/5
 CPU : PD01 5/5



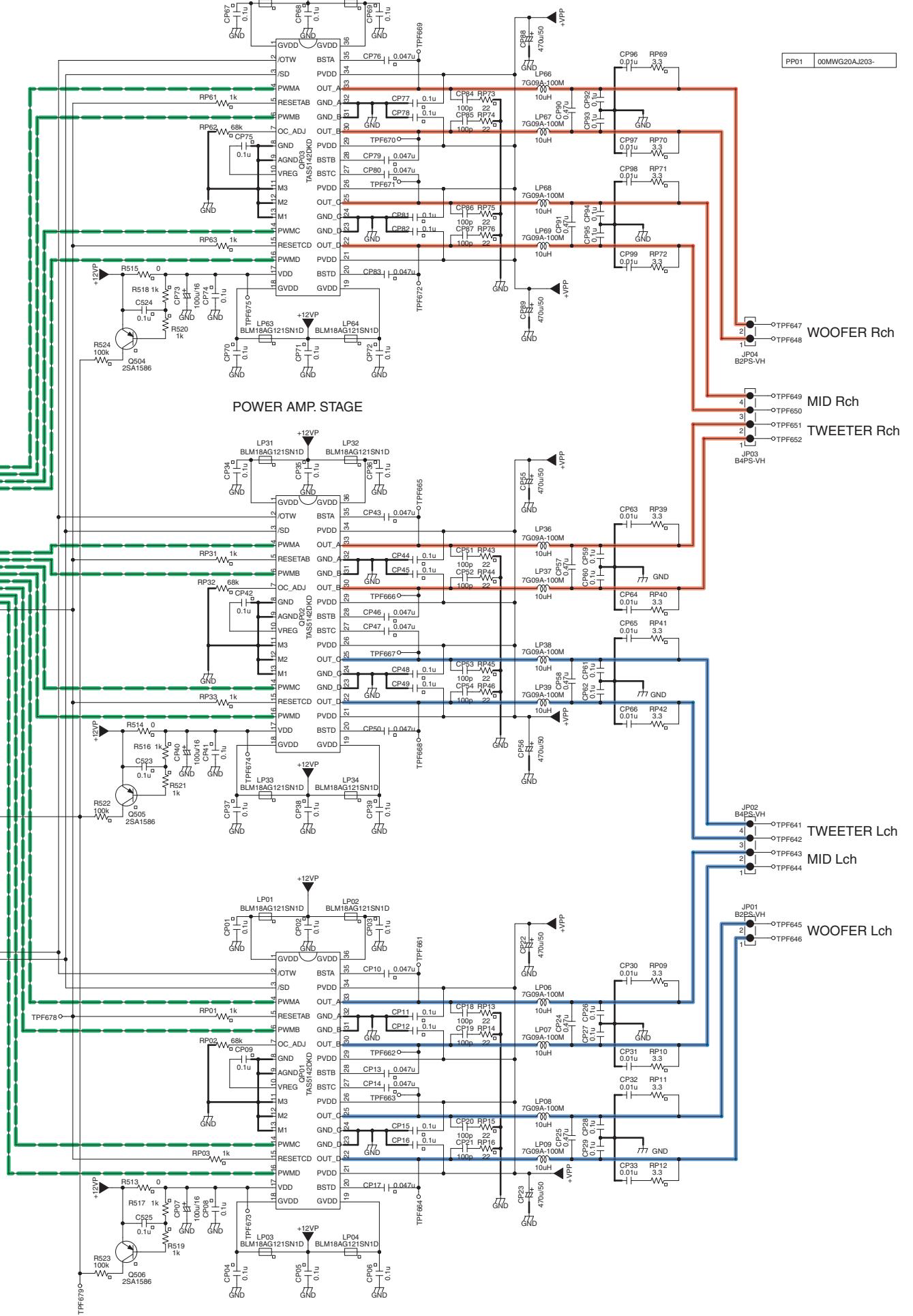
PD01 5/5 (CPU)

DIF : PD01 1/5
DSP1 : PD01 2/5
DSP2 : PD01 3/5
DSP3 : PD01 4/5
CPU : PD01 5/5

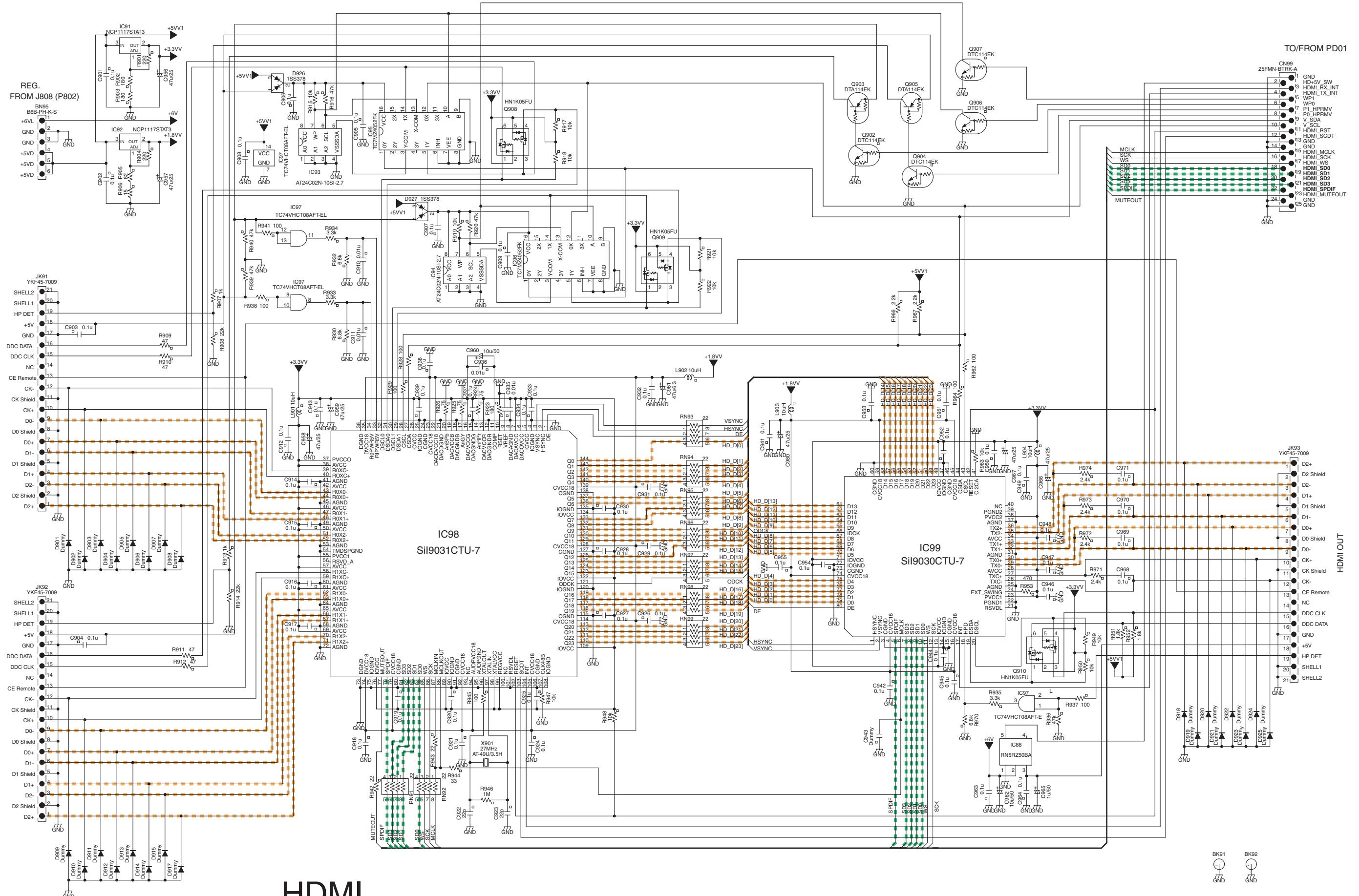


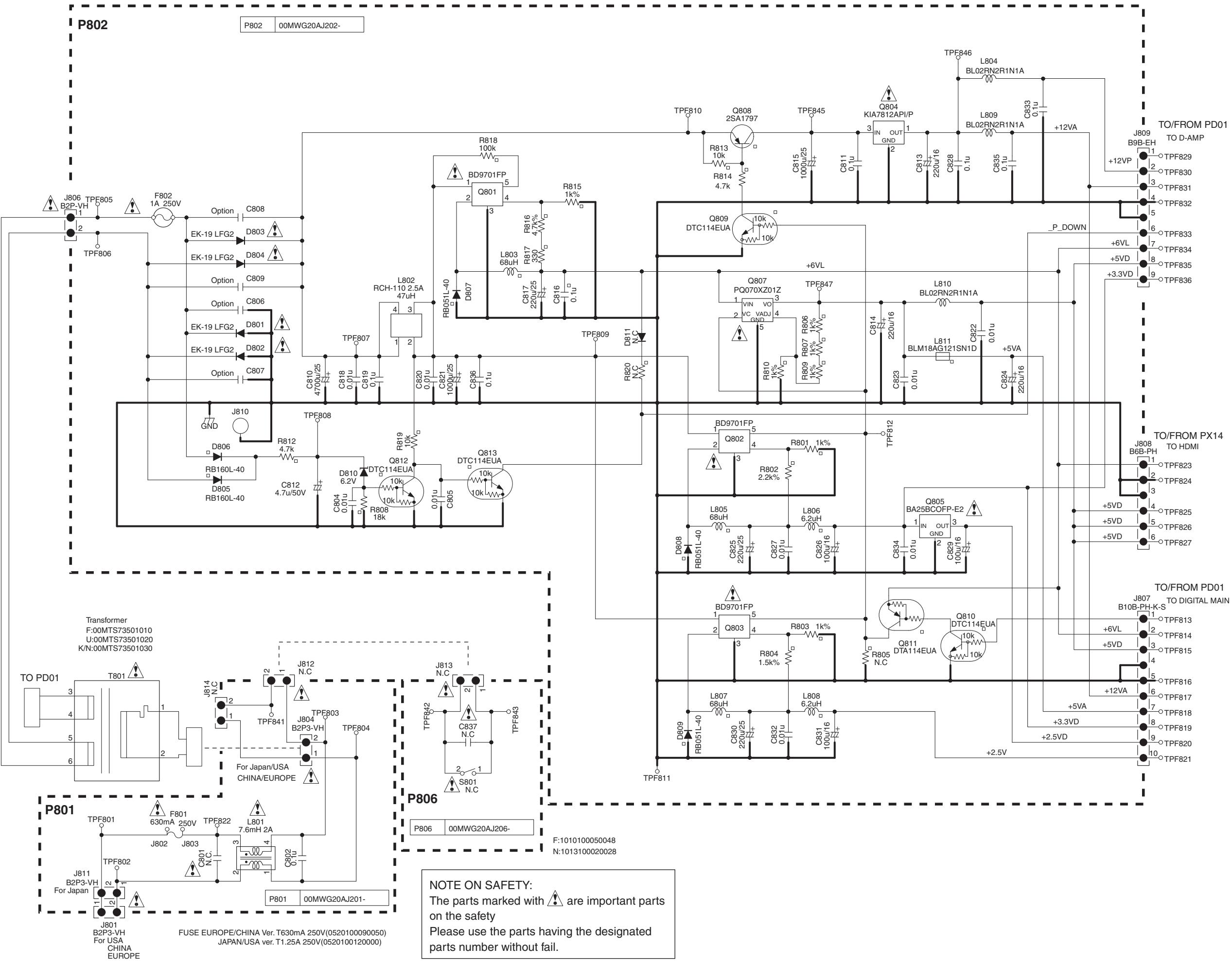


SUBWOOFER OUTPUT STAGE



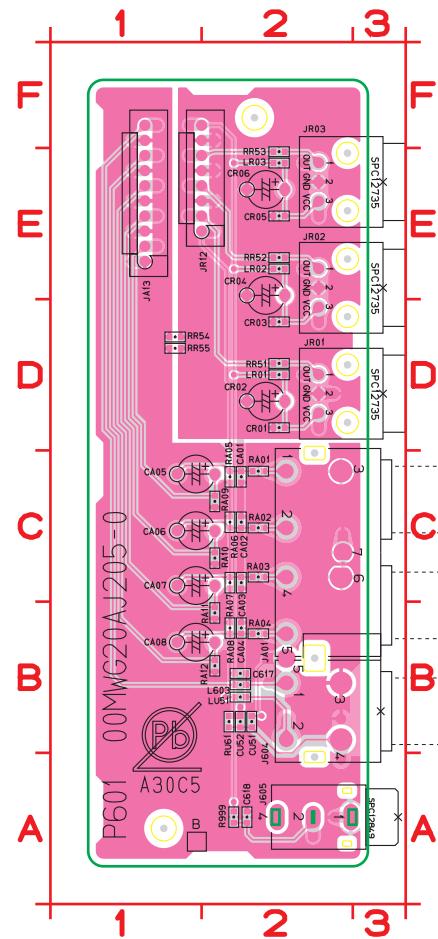
P01 | 00MWG20AJ203-



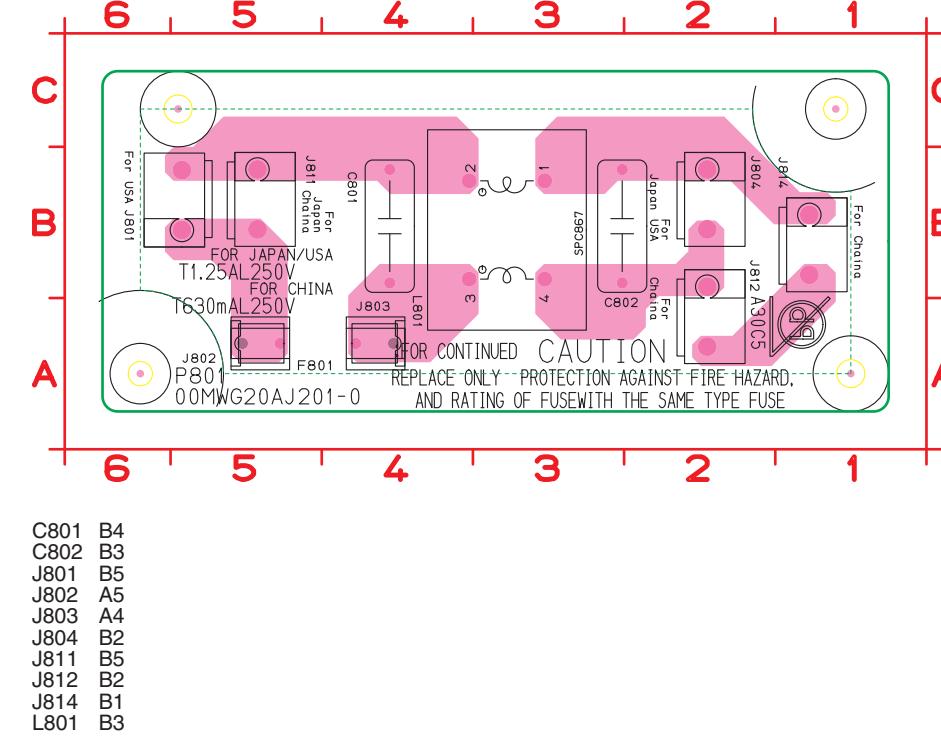


11. PARTS LOCATION

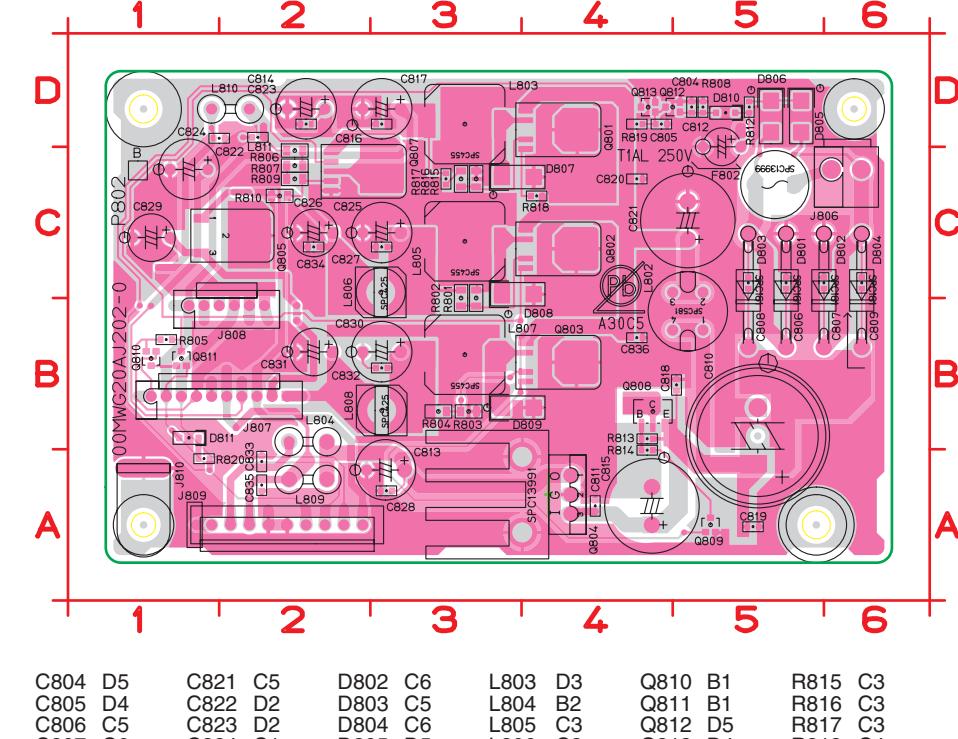
P601 B



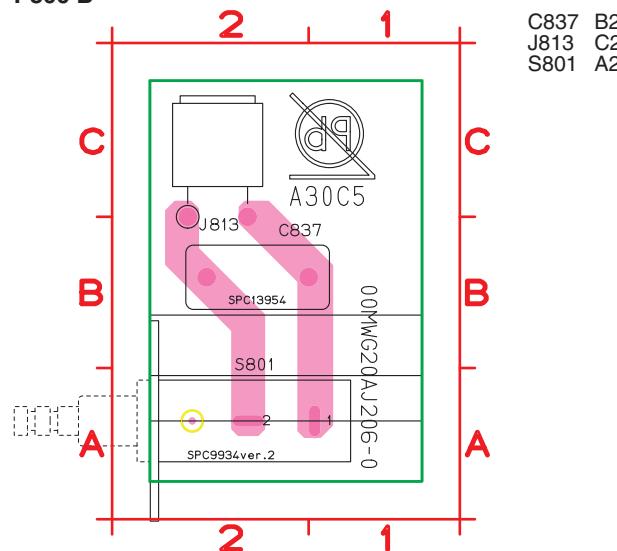
P801 B



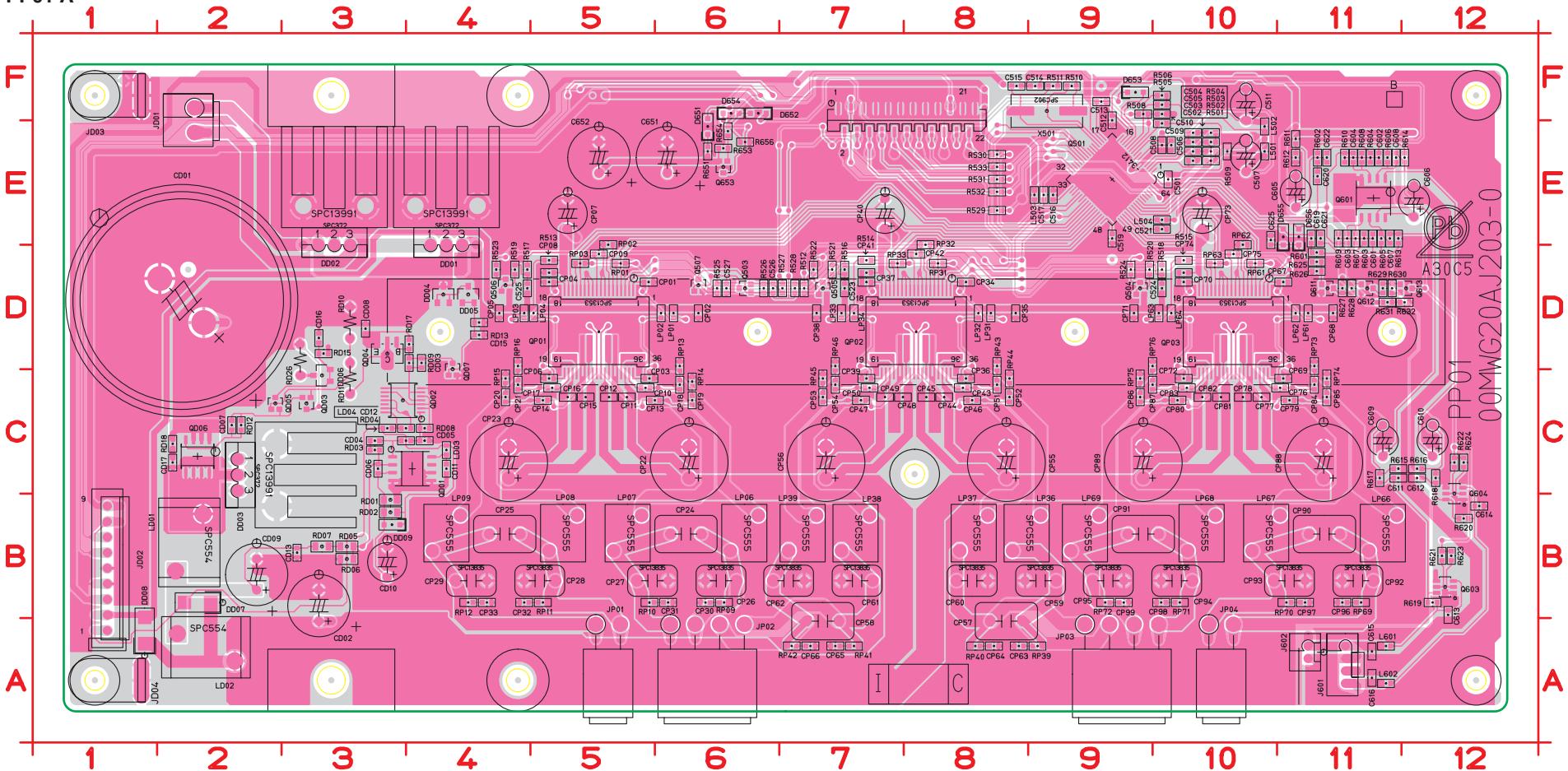
P802 A

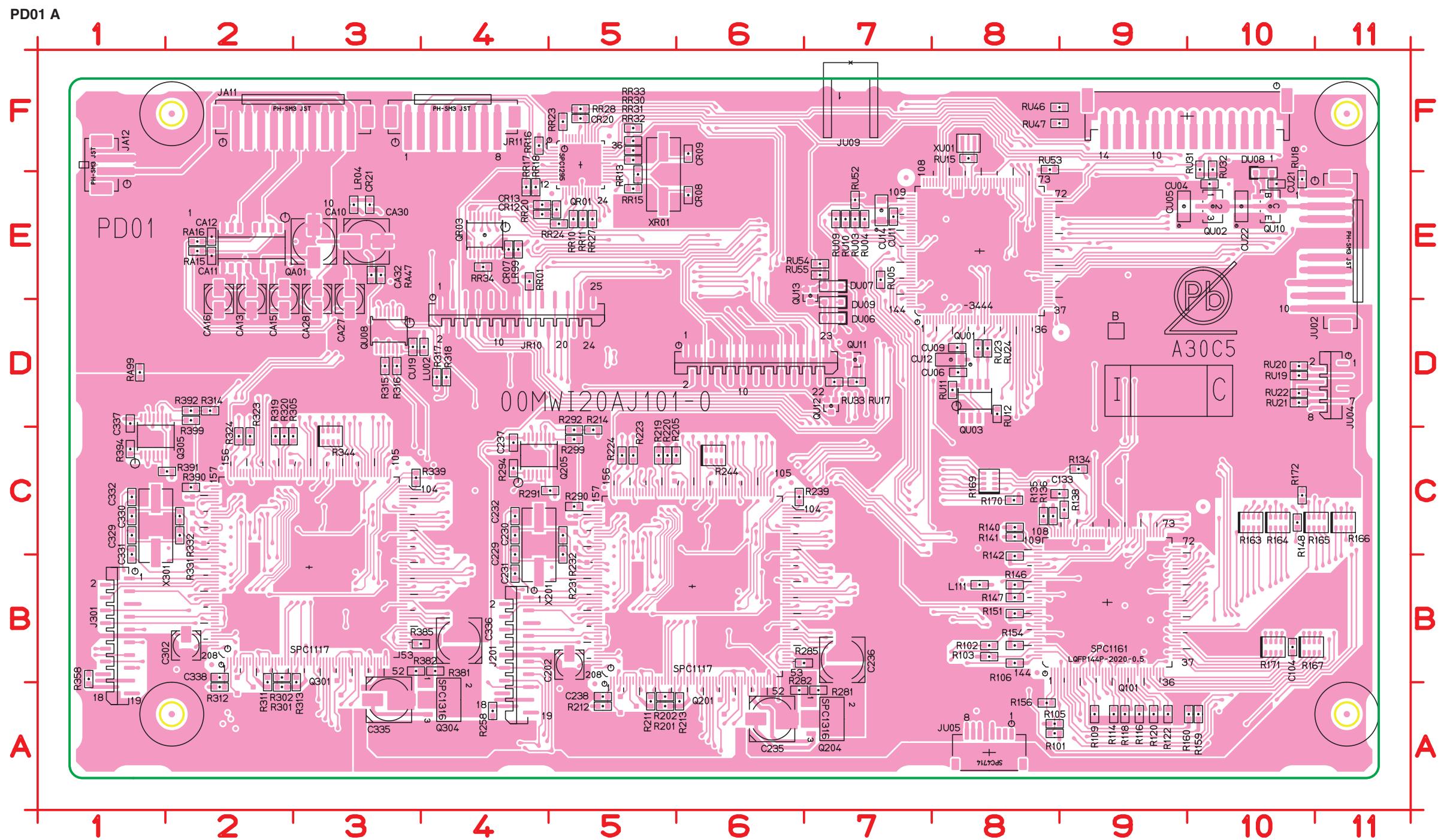


P806 B



PP01 A





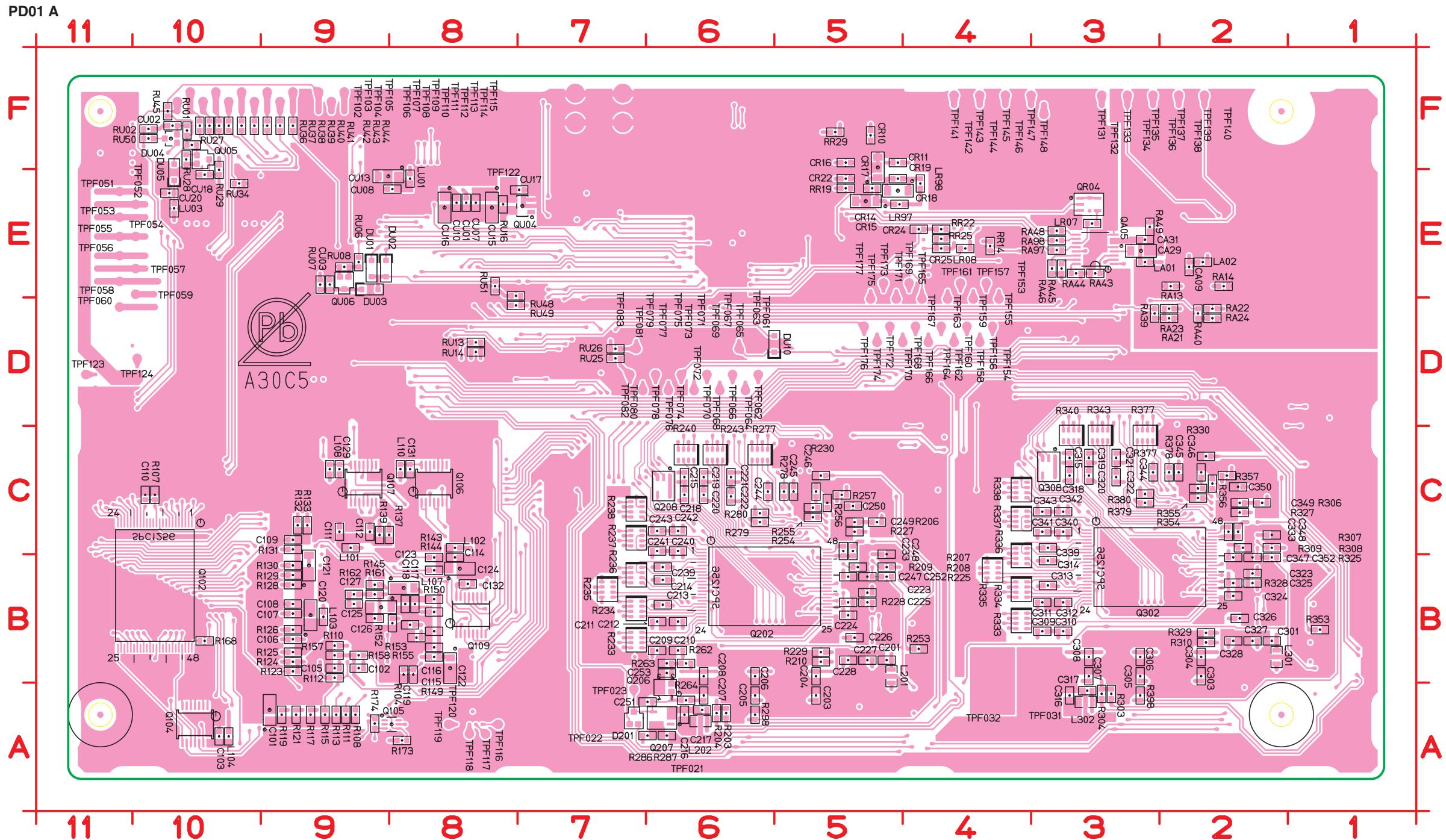
C104	B10	CA11	E2	CU09	D8	GP03	C5	JU09	F7	QU12	D7	R147	B8	R213	A6	R305	C3	R390	C2	RR28	F5	RU24	D8
C133	C9	CA12	E2	CU11	E7	GP03	C2	L111	B8	QU13	E7	R148	C10	R214	C5	R311	B2	R391	C2	RR30	F5	RU31	F10
C202	B5	CA13	E2	CU12	D8	GP05	A5	LR04	E3	R101	A8	R151	B8	R219	C5	R312	A2	R392	D2	RR31	F5	RU32	F10
C229	C4	CA15	E2	CU14	E7	GP05	B2	LR99	E4	R102	B8	R154	B8	R220	C5	R313	B3	R394	C1	RR32	F5	RU33	D7
C230	C4	CA16	E2	CU15	D3	GP06	A5	Q101	B9	R103	B8	R156	A8	R223	C5	R314	D2	R399	F2	RR33	F5	RU46	F9
C231	B4	CA27	E3	CU21	E10	GP06	A2	Q201	B6	R106	B8	R160	A10	R231	C5	R316	D3	RA15	E2	RR34	E4	RU47	F9
C232	C4	CA28	E3	CU22	E10	GP07	A5	Q204	A7	R109	A9	R163	C10	R232	C5	R317	D4	RA47	E3	RU03	E7	RU52	E7
C235	A6	CA30	E3	DU06	D7	GP07	A2	Q205	C4	R114	A9	R164	C10	R239	C6	R318	D4	RA99	D1	RU04	E7	RU53	F8
C236	B7	CA32	E3	DU07	E7	GP08	C5	Q301	B3	R116	A9	R165	C11	R244	C6	R319	C2	RR01	E4	RU09	E7	RU55	E7
C237	C4	CLKR	A6	DU08	E10	GP08	C2	Q302	B2	R118	A9	R166	C11	R258	A4	R320	C2	RR10	E5	RU10	E7	X201	C4
C238	A5	CLKR	B3	DU09	D7	J201	B4	Q304	A4	R119	A9	R167	B10	R281	A7	R323	C2	RR11	E5	RU11	D8	X301	C1
C302	B2	CR07	E4	FSRR	A6	J301	B1	Q305	C1	R120	A9	R169	C8	R282	A6	R324	C2	RR13	E5	RU12	D8	XR01	E5
C329	C1	CR08	E6	FSRR	A3	JA11	F3	QA01	E2	R122	A9	R169	C8	R285	B7	R331	C2	RR15	E5	RU15	F8	XU01	F8
C330	C1	CR09	F6	GP01	C5	JA12	F1	QR01	F5	R134	C9	R170	C8	R285	B7	R332	C2	RR16	F4	RU17	D7		
C331	C1	CR12	E4	GP01	C5	JR10	D4	QR03	E4	R135	C8	R171	B10	R290	C5	R332	C2	RR17	E4	RU18	E10		
C332	C1	CR13	E4	GP01	C2	JR11	F4	QU01	E8	R136	C8	R172	C10	R291	C5	R339	C3	RR17	E4	RU19	D10		
C335	A3	CR20	F5	GP01	B5	JU01	D6	QU02	E10	R138	C9	R201	A5	R292	C5	R344	C3	RR18	E4	RU20	D10		
C336	B4	CR21	E3	GP01	C2	JU02	E11	QU03	D8	R140	C8	R202	A5	R294	C4	R358	B1	RR20	E5	RU21	D10		
C337	D1	CU04	E10	GP01	C2	JU03	F10	QU08	D3	R141	C8	R205	C6	R299	C5	R381	B4	RR23	F5	RU22	D10		
C338	B2	CU05	E9	GP02	B7	JU04	D11	QU10	E10	R142	B8	R211	A5	R301	A2	R382	B3	RR24	E5	RU23	D8		
CA10	E3	CU06	D8	GP02	B4	JU05	A8	QU11	D7	R146	B8	R212	A5	R302	B2	R385	B4	RR27	E5				

鉛フリー半田

半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

Lead-free Solder

When soldering, use the Lead-free Solder (Sn-Ag-Cu).



C101	A9	C124	B8	C216	A6	C246	C5	C315	C3	C345	C2	CU01	E8	L103	B9	Q107	C9	R117	A9	R153	B8	R233	B7	R287	A6	R343	C3	RA45	E3	RU27	F10		
C102	B9	C125	B9	C217	A6	C247	B5	C316	A3	C346	C2	CU02	F10	L104	A10	Q109	B8	R119	A9	R155	B8	R234	B7	R298	A6	R353	B1	RA46	E3	RU28	F10		
C103	A10	C126	B9	C218	C6	C248	C5	C317	A3	C347	B2	CU03	E9	L107	B8	Q202	B6	R121	A9	R157	B9	R235	B7	R303	A3	R354	C2	RA48	E3	RU29	E10		
C105	B9	C127	B9	C219	C6	C249	C5	C318	C3	C348	C2	CU07	E8	L108	C9	Q206	A6	R123	B9	R158	B9	R236	B7	R304	A3	R355	C2	RA49	E3	RU34	E10		
C106	B9	C129	C9	C220	C6	C250	C5	C319	C3	C349	C2	CU08	E8	L110	C8	Q207	A6	R124	B9	R161	B9	R237	C7	R306	C2	R356	C2	RA97	E3	RU36	F10		
C107	B9	C131	C8	C221	C6	C251	A6	C320	C3	C350	C2	CU10	E8	L201	B5	Q208	C6	R125	B9	R162	B9	R238	C7	R307	C2	R357	C2	RA98	E3	RU37	F10		
C108	B9	C132	B8	C222	C6	C252	B5	C321	C3	C352	B2	CU13	E9	L202	A6	Q302	B3	R126	B9	R168	B10	R240	C6	R308	C2	R377	C3	RR14	E4	RU38	F10		
C109	C9	C201	B5	C223	B5	C253	B6	C322	C3	C353	B2	CU15	E8	L301	B2	Q308	C3	R128	B9	R173	A8	R243	C6	R309	C2	R378	C2	RR19	E5	RU39	F10		
C110	C10	C203	A5	C224	B5	C301	B2	C323	B2	C354	B3	CU16	E8	L302	A3	QA05	E3	R129	B9	R174	A9	R253	B4	R310	B2	R379	C3	RR22	E4	RU40	F10		
C111	C9	C204	B5	C225	B5	C303	B2	C324	B2	C355	B3	CU17	E7	LA01	E3	QR04	E3	R130	B9	R203	A6	R254	C5	R325	B2	R380	C3	RR25	E4	RU41	F10		
C112	C9	C205	A6	C226	B5	C304	B2	C325	B2	C356	B3	CU18	E10	LA02	E2	QU04	E7	R131	C9	R204	A6	R255	C5	R327	C2	R398	A3	RR29	F5	RU42	F9		
C114	B8	C206	B6	C227	B5	C305	B3	C326	B2	C357	B2	CU20	E10	LR07	E3	QU05	F10	R132	C9	R206	C5	R328	B2	RA13	E2	RU01	F10	RU43	F9				
C115	B8	C207	A6	C228	B5	C306	B3	C327	B2	C358	B2	CU21	E9	D201	A7	LR08	E4	QU06	E9	R133	C9	R207	C5	R329	B2	RA14	E2	RU02	F10	RU44	F9		
C116	B8	C208	B6	C233	C5	C307	B3	C328	B2	C359	B2	CU22	E5	DU01	E9	LR97	E5	R134	C9	R208	B5	R330	C2	RA21	D2	RU06	E9	RU45	F10				
C117	B8	C209	B6	C239	B6	C308	B3	C330	C2	C360	B2	CU23	E5	DU02	E9	LR98	E4	R135	C9	R209	B5	R331	B4	RA22	D2	RU07	E9	RU48	E8				
C118	B8	C210	B6	C240	C6	C309	B3	C331	C3	C361	B5	CU24	E5	DU03	E9	LU01	E8	R108	A9	R143	B8	R210	B5	R264	A6	RA23	D2	RU08	E9	RU49	D8		
C119	B8	C211	B6	C241	C6	C310	B3	C340	C3	C362	B5	CU25	E5	DU04	F10	LU03	E10	R110	B9	R144	B8	R225	B5	R277	C6	R335	B4	RA24	D2	RU13	D8	RU50	F10
C120	B9	C212	B6	C242	C6	C311	B3	C341	C3	C363	B5	CU26	E5	DU05	E10	Q102	B10	R111	A9	R145	B9	R227	C5	R278	C5	R336	B4	RA39	D3	RU14	D8	RU51	E8
C121	B9	C213	B6	C243	C6	C312	B3	C342	C3	C364	C3	CR22	E5	DU10	D6	Q104	A10	R112	B9	R149	B8	R228	B5	R279	C6	R337	C4	RA40	D2	RU16	E8	RU52	D7
C122	B8	C214	B6	C244	C6	C313	B3	C343	C3	C365	C4	CR24	E4	L101	C9	Q105	A8	R113	A9	R150	B8	R229	B5	R280	C6	R338	C4	RA43	E3	RU25	D7	RU53	D7
C123	B8	C215	C6	C245	C5	C314	B3	C344	C3	C366	C4	CR25	E4	L102	C8	Q106	C8	R115	A9	R152	B8	R230	C5	R340	C3	RA44	E3	RU26	D7	RU54	D7		

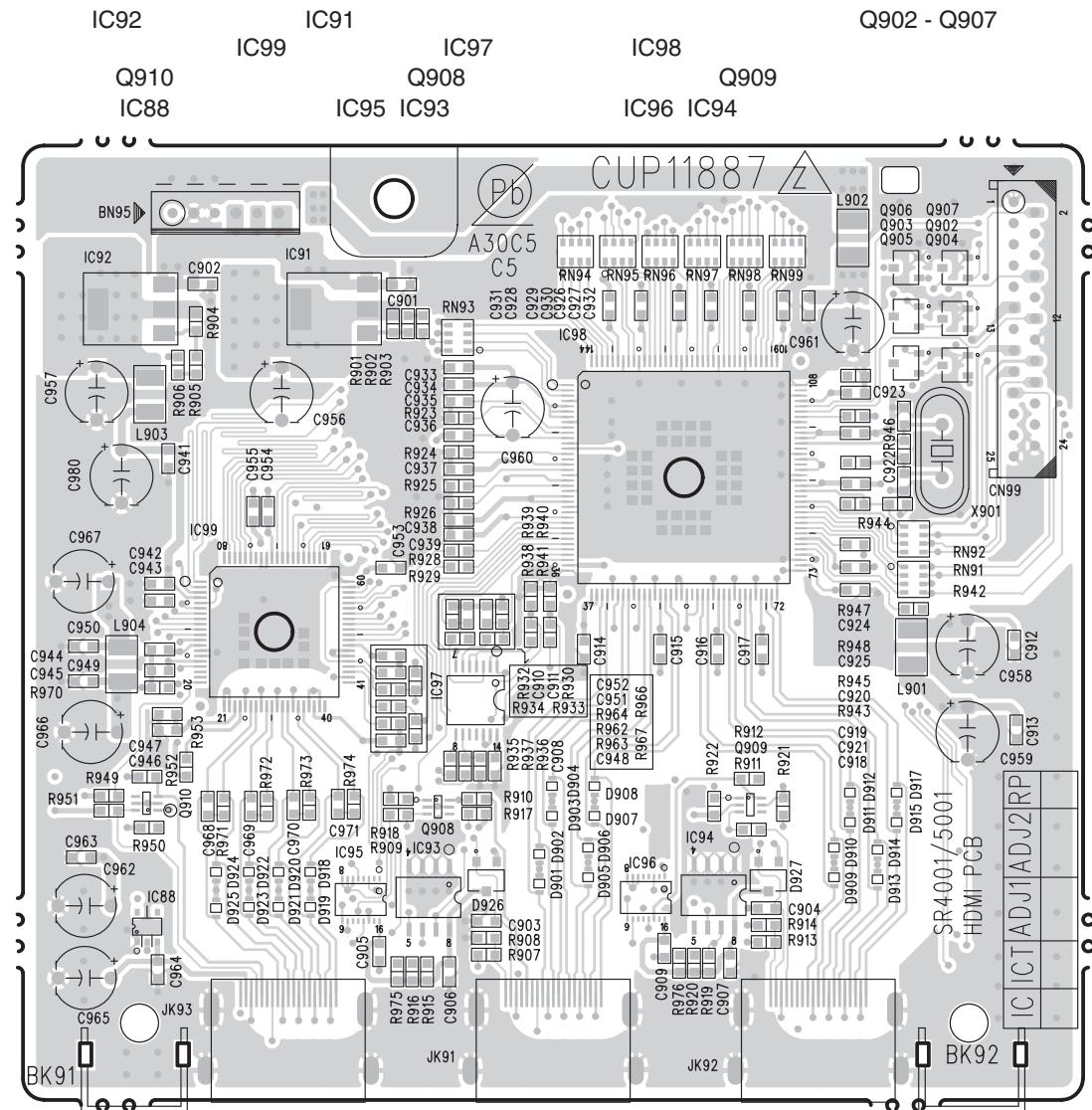
鉛フリー半田

半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

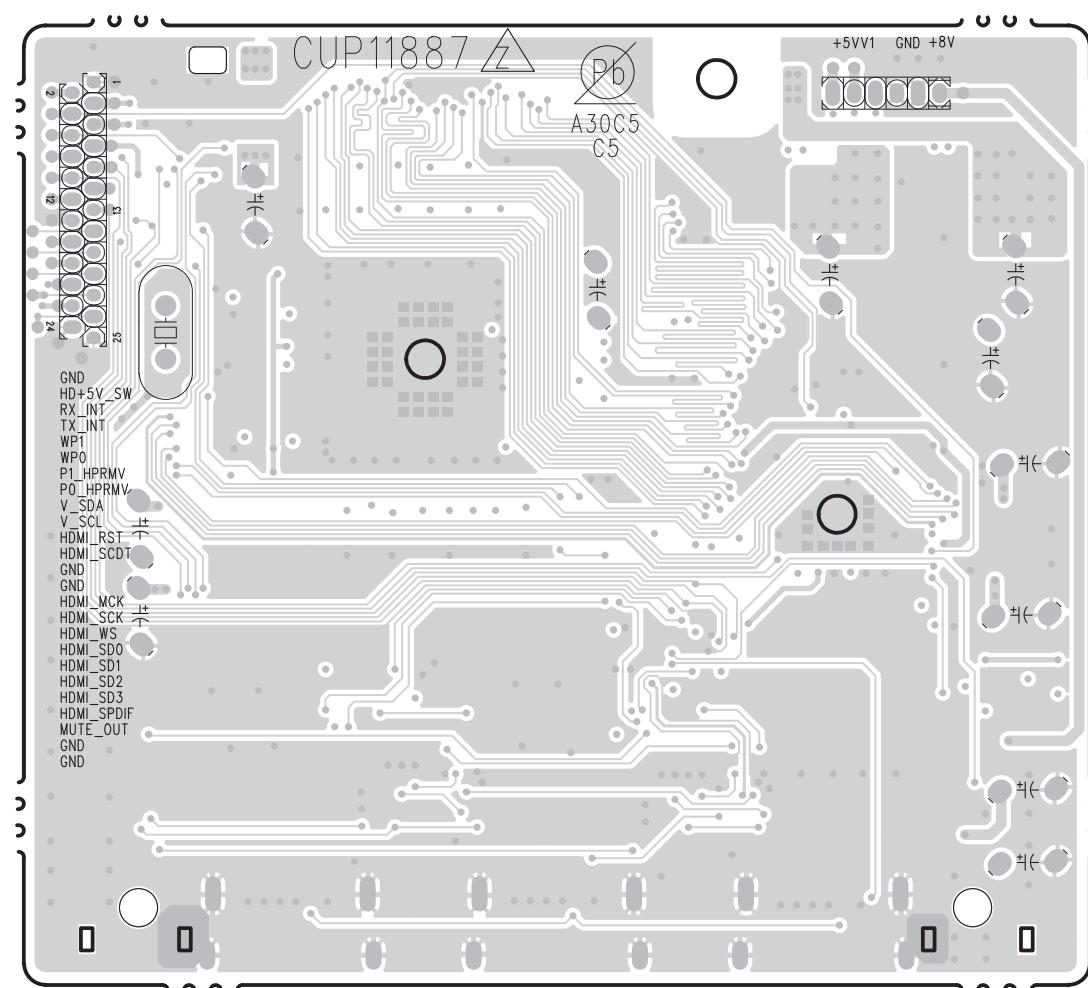
Lead-free Solder

When soldering, use the Lead-free Solder (Sn-Ag-Cu).

PX14 A



PX14 B



鉛フリー半田

半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

Lead-free Solder

When soldering, use the Lead-free Solder (Sn-Ag-Cu).

12. MICROPROCESSOR AND IC DATA

QU01 : HD64F2505FC

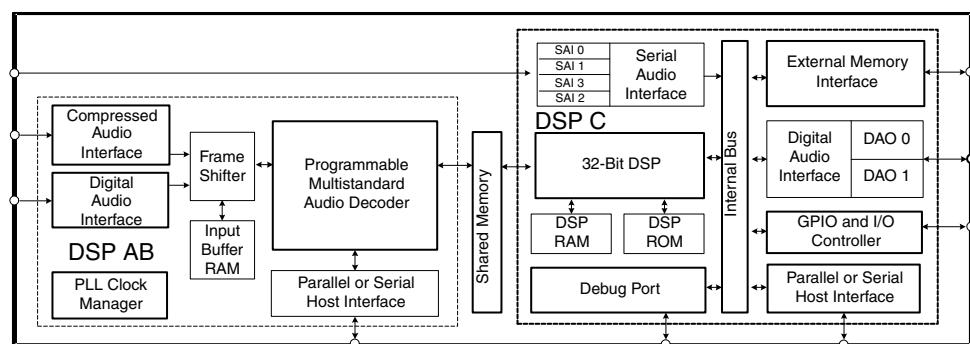
Pin	port mode = 7	I/O	use	STBY	Name	Port Setting		Note
						Act.	init	
1	PE5	I/O	I	I	HINBSY	-	-	DSP Busy Signal
2	PE6	I/O	O	O	NC	-	L	NC
3	PE7	I/O	O	O	NC	-	L	NC
4	PD0	I/O	O	I	HDMI_RST	L	H	RESET for HDMI
5	PD1	I/O	O	I	HD+5V SW	H	L	+5V SW for HPD
6	PD2	I/O	O	O	NC	-	L	NC
7	PD3	I/O	O	O	NC	-	L	NC
8	PD4	I/O	O	I	CNT1	-	L	NJM2750 CONT
9	PD5	I/O	O	I	CNT2	-	L	NJM2750 CONT
10	PD6	I/O	O	O	NC	-	-	NC
11	PD7	I/O	O	I	SELDIN	-	L	Data Sel L=DIR Data H=HDMI Data
12	Vss	I	-	I	VSS	-	-	GND
13	PC0	I/O	O	I	RSTDA610	L	L	TMA320DA610 Reset
14	P1Vcc	I	YES	I	VCC	-	-	+3.3V
15	PC1	I/O	O	O	NC	-	L	NC
16	PC2	I/O	O	O	NC	-	L	NC
17	PC3	I/O	O	I	_RSTADC	L	H	ADC
18	PC4	I/O	O	I	D_A	=	L	DIR or ADC sel
19	PC5	I/O	I	I	XSTATE	-	-	DIR
20	PC6	I/O	O	I	CEDIR	L	L	DIR CHIP ENABLE
21	PC7	I/O	O	I	XMODE	L	L	DIR RESET
22	PB0	I/O	O	O	IICCLK	-	L	I2C for E2PROM
23	PB1	I/O	I/O	I/O	IICDATA	-	L	I2C for E2PROM
24	PB2	I/O	O	O	NC	-	L	NC
25	PB3	I/O	O	O	NC	-	L	NC
26	PB4	I/O	I	I	TIWEN1	-	-	TMA320DA610 Write Enable1
27	PB5	I/O	I	I	TIDIN1	-	-	TMA320DA610 Data In1
28	PB6	I/O	I	I	TIWEN2	-	-	TMA320DA610 Write Enable2
29	PB7	I/O	I	I	TIDIN2	-	-	TMA320DA610 Data In2
30	PA0	I/O	O	I	TIDOUT	-	L	TMA320DA610 Data Out
31	PA1	I/O	O	I	TIDCLK	-	H	TMA320DA610 Data Clock
32	PA2	I/O	O	I	TICE1	L	H	TMA320DA610 Chip Enable1
33	PA3	I/O	O	I	TICE2	L	H	TMA320DA610 Chip Enable2
34	PA4	I/O	O	I	P0_HPRMV	H	L	IN0 HPD SWITCH HDMI 1 HP
35	PA5	I/O	O	I	P1_HPRMV	H	L	IN1 HPD SWITCH HDMI 2 HP
36	PA6	I/O	O	I	WP0	H	L	WRITE PROTECT IN0
37	PA7	I/O	O	I	WP1	H	L	WRITE PROTECT IN1
38	PH7	I/O	O	O	P_MUTE	L	L	ALL MUTE
39	PH6	I/O	O	O	NC	-	L	NC
40	PH5	I/O	O	O	NC	-	L	NC
41	PH4	I/O	O	O	NC	-	L	NC
42	PH3	I/O	O	O	NC	-	L	NC
43	PH2	I/O	O	I	_STANDBY	L	L	Standby Power
44	PH1	I/O	O	O	NC	-	L	NC
45	PH0	I/O	O	O	NC	-	L	NC
46	PJ7	I/O	I	I	OTW	L	-	TAS5142 OVER TEMP L:OVER
47	PJ6	I/O	I	I	BK_ERR	L	-	TAS5508 BACK END ERROR
48	PJ5	I/O	O	I	LED_STB1	H	L	74HC4094 Strobe
49	PJ4	I/O	O	I	LED_DATA1	H	L	74HC4094 Data
50	PJ3	I/O	O	I	LED_CLK1	H	L	74HC4094 Clock
51	PJ2	I/O	O	I	LED_EN	H	L	74HC4094 Output Enable
52	PJ1	I/O	O	O	STBY LED	H	L	Standby LED On
53	PJ0	I/O	O	I	NC	-	L	NC
54	Vss	I	-	I	VSS	-	-	GND
55	P97/AN15/DA1	I,I,O	I	I	HDMI_TX_INT	L	H	INT form HDMI TX
56	P96/AN14/DA0	I,I,O	I	I	HDMI_RX_INT	L	H	INT form HDMI RX
57	P95/AN13	I,I	I	I	HDMI_SCDT	H	-	SCDT IN from HDMI
58	P94/AN12	I,I	I	I	NC	-	-	GND
59	P93/AN11	I,I	I	I	NC	-	-	GND
60	P92/AN10	I,I	I	I	NC	-	-	GND
61	P91/AN9	I,I	I	I	NC	-	-	GND
62	P90/AN8	I,I	I	I	NC	-	-	GND

QU01 : HD64F2505FC

Pin	port mode = 7	I/O	use	STBY	Name	Port Setting		Note
						Act.	init	
63	P47/AN7	I,I	I	I	NC	-	-	GND
64	P46/AN6	I,I	I	I	NC	-	-	GND
65	P45/AN5	I,I	I	I	NC	-	-	GND
66	P44/AN4	I,I	I	I	NC	-	-	GND
67	AVss	I	-	I	AVSS	-	-	GND
68	P43/AN3	I,I	I	I	NC	-	-	GND
69	P42/AN2	I,I	I	I	NC	-	-	GND
70	P41/AN1	I,I	AD	AD	KEY1	-	-	Front Key
71	P40/AN0	I,I	AD	AD	KEY0	-	-	Front Key
72	Vref	I	YES	I	VCC	-	-	+5V'
73	AVcc	I	YES	I	AVCC	-	-	+5V'
74	P50/TxD2	I/O,O	SO	SO	DSPOUT			DSP, DIR Control Data OUT
75	P51/RxD2	I/O,I	SI	SI	DSPIN			DSP, DIR Control Data IN
76	P52/SCK2	I/O,O	SC	SC	DSPCLK			DSP, DIR Control CLOCK
77	PF0/~IRQ2	I/O,I	INT	I	RERR	H	-	DIR ERROR
78	PF1/BUZZ	I/O,O	O	O	NC	-	-	NC
79	PF2	I/O	O	O	NC	-	-	NC
80	PF3/~ADTRG/ ~IRQ3	I/O,I,I	I	I	REQ1	L	-	DSP INTER Q
81	PF4	I/O	I	I	REQ2	L	-	DSP FINTR EQ
82	PF5	I/O	O	O	RESET	L	L	TAS5508 RESET
83	PF6	I/O	O	O	NC	-	-	NC
84	P1Vcc	I	YES	I	VCC	-	-	+3.3V
85	PF7/ϕ	I/O,O	I	I				PULL DOWN
86	Vss	I	-	I	VSS	-	-	GND
87	TEST	I	NO	I	TEST	-	-	GND
88	VCL	I	-	I	VCL	-	-	GND (0.47uF)
89	OSC2	I	NO	I	NC	-	-	Open
90	OSC1	I	NO	I	VSS	-	-	GND
91	NMI	I	NO	I	NMI	-	-	Fix H
92	MD2	I	YES	I	MD2	-	-	Nomal:H, Bool:L
93	XTAL	I	YES	I	XTAL	-	-	Xtal(20MHz)
94	Vss	I	NO	I	VSS	-	-	GND
95	EXTAL	I	YES	I	EXTAL	-	-	Xtal(20MHz)
96	Vcc	I	YES	I	VCC	-	-	+3.3V'
97	MD0	I	YES	I	MD0	-	-	Fix H
98	MD1	I	YES	I	MD1	-	-	Fix H
99	~STBY	I	NO	I	STBY	L	H	Fix H
100	~RES	I	YES	I	RES	L	-	RESET
101	P20/TIOCA3	I/O,I/O	O	I	LED DATA	-	L	TB62709 7Seq Drv Data
102	P21/TIOCB3	I/O,I/O	O	I	LED CLK	-	H	TB62709 7Seq Drv Clock
103	P22/TIOCC3	I/O,I/O	O	I	LED_STB	-	L	TB62709 7Seq Drv Strobe
104	P23/TIOCD3	I/O,I/O	O	O	NC	-	L	NC
105	P24/TIOCA4	I/O,I/O	O	O	NC	-	L	NC
106	P25/TIOCB4	I/O,I/O	O	O	NC	-	-	NC
107	P26/TIOCA5	I/O,I/O	O	O	NC	-	-	NC
108	P27/TIOCB5	I/O,I/O	O	O	NC	-	L	NC
109	P17/TIOCB2/ TCLKD	I/O,I/O,I/O	O	O	NC	-	L	NC
110	P16/TIOCA2/ ~IRQ1	I/O,I/O,I	INT	INT	WAKEUP	↑	-	Standby Mode Release
111	P15/TIOCB1/ TCLKC	I/O,I/O,I/O	O	O	NC	-	L	NC
112	P14/TIOCA1/ ~IRQ0	I/O,I/O,I	INT	I	_P_DOWN	L	-	Power Down Detect
113	P13/TIOCD0/ TCLKB	I/O,I/O,I/O	O	O	NC	L	L	NC
114	P12/TIOCC0/ TCLKA	I/O,I/O,I/O	O	O	NC	-	L	NC
115	P11/TIOCB0	I/O,I/O	O	O	NC	-	L	NC
116	P10/TIOCA0	I/O,I/O	T_IN	I	RC_IN	↑↓	-	IR In for RC-5
117	Vss	I	YES	I	VSS	-	-	GND
118	P2Vcc	I	YES	I	VCC	-	-	+5V'
119	P37/TxD4	I/O,O	O	O	NC	-	L	NC
120	P36/RxD4	I/O,I	O	O	NC	-	L	NC

QU01 : HD64F2505FC

Pin	port mode = 7	I/O	use	STBY	Name	Port Setting		Note
						Act.	init	
121	P35/SCK1/SCK4/ SCL0/~IRQ5	I/O,I/O,I/O,I/ O,I	SCL0	I	NC	-	L	NC
122	P34/RxD1/SDA0	I/O,I/I/O	SDA0	I	NC	-	L	NC
123	P33/TxD1/SCL1	I/O,O,I/O	SCL1	I	V_SCL	-	-	HDMI CLK
124	P32/SCK0/SDA1/ ~IRQ4	I/O,I/O,I/O,I	SDA1	I	V_SDA	-	-	HDMIDATA
125	P31/RxD0	I/O,I	SI	I	RXD			UART for RS232C, Flash WR, Pull UP RESET : H
126	P30/TxD0	I/O,O	SC	I	TXD			UART for RS232C, Flash WR, Pull UP
127	P77/TxD3	I/O,O	O	O	NC	-	L	NC
128	P76/RxD3	I/O,I	O	O	NC	-	L	NC
129	P75/TMO3/SCK3	I/O,I/O,I/O	O	O	SCL2	-	-	TAS5508 Clock
130	P74/TMO2/ ~MRES	I/O,O	O	O	SDA2	-	-	TAS5508 Data
131	P73/TMO1	I/O,O	O	O	NC	-	L	NC
132	P72/TMO0	I/O,O	O	O	NC	-	L	NC
133	P71/TMRI23/ TMC123	I/O,O,O	O	O	NC	-	L	NC
134	P70/TMRI01/ TMC101	I/O,O,O	O	O	NC	-	L	NC
135	PG4	I/O	O	I	_SCS	L	H	DSP CHIP ENABLE
136	PG3	I/O	O	I	_RSTDSP	L	L	DSP
137	PG2	I/O	O	I	_FCS	L	H	DSP CHIP ENABLE
138	PG1/~IRQ7	I/O,I	INT	I	S_DOWN	↓	-	TAS5142 Shutdown(Over Load)
139	PG0/~IRQ6	I/O,I	INT	I	HDMI_INT	?	-	TX or RX or SCDT
140	PE0	I/O	I	I	HDMI_MUTE	H	-	MUTE INPUT for HDMI
141	PE1	I/O	O	I	CLK_SW	L	H	HDMI CLK=0: DIR CLK=1
142	PE2	I/O	O	I	NC	-	L	NC
143	PE3	I/O	O	I	NC	-	L	NC
144	PE4	I/O	I	I	MODE1	-	-	H=F version, L=OTHER version



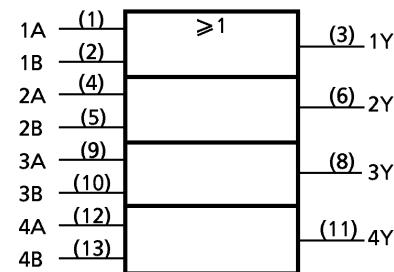
Pin No.	I/O	Function	Description
1	I/O	UHS0, GPIO18	Mode Select Bit 0, General Purpose I/O
2	I/O	UHS1, GPIO19	Mode Select Bit 1, General Purpose I/O
3		INTREQ	Control Port Interrupt Request
4	I	FA1, FSCDIN	Host Address Bit One or SPI Serial Control Data Input
5	I/O	GPIO20	General Purpose I/O
6	I	FA0, FSCCLK	Host Parallel Address Bit Zero or Serial Control Port Clock
7	I/O	FHS2, FSCDIO, FSCDOUT	Mode Select Bit 2 or Serial Control Port Data Input and Output, Parallel Port Type Select
8	I/O	GPIO21	General Purpose I/O
9		FDAT7	DSP AB Bidirectional Data Bus
10		VDD6	2.5V Supply Voltage
11		VSS6	2.5V Ground
12		FHS0, FWR, FDS	Mode Select Bit 0 or Host Write Strobe or Host Data Strobe
13	O	FHS1, FRD, FR/W	Mode Select Bit 1 or Host Parallel Output Enable or Host Parallel R/W
14		FDAT6	DSP AB Bidirectional Data Bus
15	I	FCS	Host Parallel Chip Select, Host Serial SPI Chip Select
16	O	FINTREQ	Control Port Interrupt Request
17		FDBCK	Reserved
18		FDAT5	DSP AB Bidirectional Data Bus
19		FDAT4	DSP AB Bidirectional Data Bus
20		VDD7	2.5V Supply Voltage
21		VSS7	2.5V Ground
22		FDAT3	DSP AB Bidirectional Data Bus
23		FDBDA	Reserved
24		FDAT2	DSP AB Bidirectional Data Bus
25		DBDA	Debug Data
26		DBCK	Debug Clock
27		FDAT1	DSP AB Bidirectional Data Bus
28		TEST	Reserved
29		FDAT0	DSP AB Bidirectional Data Bus
30	I/O	NV_WE, GPIO16	SRAM Write Enable, General Purpose I/O
31	I/O	NV_OE, GPIO15	SRAM Output Enable, General Purpose I/O
32	I/O	NV_CS, GPIO14	SRAM Chip Select, General Purpose I/O
33		SD_WE	SDRAM Write Enable
34		SD_DATA0, EXTD0	SDRAM Data Bus, SRAM External Data Bus
35		SD_DATA1, EXTD1	SDRAM Data Bus, SRAM External Data Bus
36		SD_DATA2, EXTD2	SDRAM Data Bus, SRAM External Data Bus
37		SD_DATA3, EXTD3	SDRAM Data Bus, SRAM External Data Bus
38		SD_DATA4, EXTD4	SDRAM Data Bus, SRAM External Data Bus
39		SD_DQM0	SDRAM Data Mask 2
40		SD_DATA5, EXTD5	SDRAM Data Bus, SRAM External Data Bus
41		VSSSD4	3.3V SDRAM/SRAM/EPROM Interface Ground
42		VDDSD4	3.3V SDRAM/SRAM/EPROM Interface Supply
43		SD_DATA6, EXTD6	SDRAM Data Bus, SRAM External Data Bus
44		SD_DATA7, EXTD7	SDRAM Data Bus, SRAM External Data Bus
45		SD_DQM1	SDRAM Data Mask 1
46		SD_DATA15, EXTA18	SDRAM Data Bus, SRAM External Address Bus
47		SD_DATA14, EXTA17	SDRAM Data Bus, SRAM External Address Bus
48		NC5	No Connect
49		SD_DATA13, EXTA16	SDRAM Data Bus, SRAM External Address Bus
50		VSSSD3	3.3V SDRAM/SRAM/EPROM Interface Ground
51		VDDSD3	3.3V SDRAM/SRAM/EPROM Interface Supply
52		SD_DATA12, EXTA15	SDRAM Data Bus, SRAM External Address Bus

53		SD_DATA11, EXTA14	SDRAM Data Bus, SRAM External Address Bus
54		SD_DATA10, EXTA13	SDRAM Data Bus, SRAM External Address Bus
55		SD_DATA9, EXTA12	SDRAM Data Bus, SRAM External Address Bus
56		SD_DATA8, EXTA11	SDRAM Data Bus, SRAM External Address Bus
57		VSSSD2	3.3V SDRAM/SRAM/EPROM Interface Ground
58		VDDSD2	3.3V SDRAM/SRAM/EPROM Interface Supply
59	O	SD_CLK_OUT	SDRAM Clock Output
60		SD_ADDR9, EXTA9	SDRAM Address Bus, SRAM External Address Bus
61	I	SD_CLK_IN	SDRAM Re-timing Clock Input
62		SD_ADDR8, EXTA8	SDRAM Address Bus, SRAM External Address Bus
63		SD_ADDR7, EXTA7	SDRAM Address Bus, SRAM External Address Bus
64		SD_CLK_EN	SDRAM Clock Enable
65		SD_ADDR6, EXTA6	SDRAM Address Bus, SRAM External Address Bus
66		SD_ADDR5, EXTA5	SDRAM Address Bus, SRAM External Address Bus
67		SD_ADDR4, EXTA4	SDRAM Address Bus, SRAM External Address Bus
68		SD_CS	SDRAM Chip Select
69		VSSSD1	3.3V SDRAM/SRAM/EPROM Interface Ground
70		VDDSD1	3.3V SDRAM/SRAM/EPROM Interface Supply
71		SD_BA, EXTA19	SDRAM Bank Address Select, SRAM External Address Bus
72		SD_ADDR10, EXTA10	SDRAM Address Bus, SRAM External Address Bus
73		SD_ADDR0, EXTA0	SDRAM Address Bus, SRAM External Address Bus
74		SD_ADDR1, EXTA1	SDRAM Address Bus, SRAM External Address Bus
75		SD_ADDR2, EXTA2	SDRAM Address Bus, SRAM External Address Bus
76		SD_ADDR3, EXTA3	SDRAM Address Bus, SRAM External Address Bus
77		SD_RAS	SDRAM Row Address Strobe
78		SD_CAS	SDRAM Column Address Strobe
79	I/O	SDATAN3, GPIO27	PCM Audio Input Data, General Purpose I/O
80	I/O	SDATAN2, GPIO26	PCM Audio Input Data, General Purpose I/O
81	I/O	SDATAN1, GPIO25	PCM Audio Input Data, General Purpose I/O
82	I/O	SDATAN0, GPIO24	PCM Audio Input Data, General Purpose I/O
83		NC4	No Connect
84		NC3	No Connect
85	I/O	LRCLKN, GPIO23	PCM Audio Input Sample Rate Clock, General Purpose I/O
86	I/O	SCLKN, GPIO22	PCM Audio Input Bit Clock, General Purpose I/O
87	O	LRCLK1	Audio Output Sample Rate Clock
88		NC2	No Connect
89		NC1	No Connect
90		VDD1	2.5V Supply Voltage
91		VSS1	2.5V Ground
92	I/O	AUDATA7, XMT958B, GPIO31	Digital Audio Output 7, S/PDIF Transmitter, General Purpose I/O
93	I/O	AUDATA6, GPIO30	Digital Audio Output 6, General Purpose I/O
94	I/O	AUDATA5, GPIO29	Digital Audio Output 5, General Purpose I/O
95	I/O	HDATA7, GPIO17	DSP C Bidirectional Data Bus, General Purpose I/O
96	I/O	HDATA6, GPIO16	DSP C Bidirectional Data Bus, General Purpose I/O
97	I/O	HDATA5, GPIO15	DSP C Bidirectional Data Bus, General Purpose I/O
98	O	SCLK1	Audio Output Bit Clock

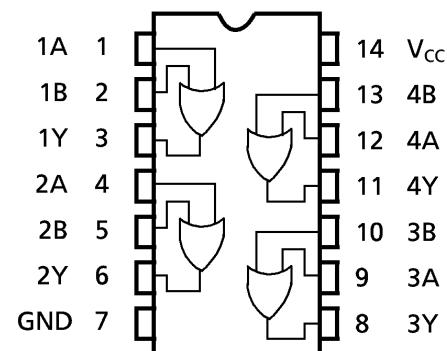
Q101 : CS494003

99	MCLK	Audio Master Clock
100	VDD2	2.5V Supply Voltage
101	VSS2	2.5V Ground
102	I/O AUDATA4, GPIO28	Digital Audio Output 4, General Purpose I/O
103	I/O HDATA4, GPIO4	DSP C Bidirectional Data Bus, General Purpose I/O
104	O SCLK0	Audio Output Bit Clock
105	I/O HDATA3, GPIO3	DSP C Bidirectional Data Bus, General Purpose I/O
106	O AUDATA3, XMT958A	Digital Audio Output 3, S/PDIF Transmitter
107	O AUDATA2	Digital Audio Output 2
108	O LRCLK0	Audio Output Sample Rate Clock
109	O AUDATA1	Digital Audio Output 1
110	O AUDATA0	Digital Audio Output 0
111	I CMPCLK, FSCLKN2	PCM Audio Input Bit Clock
112	I/O HDATA2, GPIO2	DSP C Bidirectional Data Bus, General Purpose I/O
113	VSS3	2.5V Ground
114	VDD3	2.5V Supply Voltage
115	I/O HDATA1, GPIO1	DSP C Bidirectional Data Bus, General Purpose I/O
116	I/O HDATA0, GPIO0	DSP C Bidirectional Data Bus, General Purpose I/O
117	O CMPREQ, FLRCLKN2	Frame Clock Data Request Out
118	I CMPDAT, FSDATAN2	PCM Audio Data Input Number Two
119	I FLRCLKN1	PCM Audio Input Sample Rate Clock
120	I/O WR, DS, GPIO10	Host Write Strobe, Host Data Strobe, General Purpose I/O
121	I/O RD, R/W, GPIO11	Host Parallel Output Enable, Host Parallel R/W, General Purpose I/O
122	PLLVSS	PLL Ground Voltage
123	FILT2	Phase Locked Loop Filter
124	FILT1	Phase-Locked Loop Filter
125	PLLVDD	PLL Supply Voltage
126	O CLKOUT, XTAL0	Crystal Oscillator Output
127	I CLKIN, XTAL1	External Clock Input/Crystal Oscillator Input
128	CLKSEL	DSP Clock Select
129	I/O CS, GPIO9	Host Parallel Chip Select, General Purpose I/O
130	I/O A0, GPIO13	Host Parallel Address Bit 0, General Purpose I/O
131	I FSDATAN1	PCM Audio Data Input One
132	VDD4	2.5V Supply Voltage
133	VSS4	2.5V Ground
134	I FSCLKN1, STCCLK2	PCM Audio Input Bit Clock
135	SCS	Host Serial SPI Chip Select
136	I SCDIN	SPI Serial Control Data Input
137	VSS5	2.5V Ground
138	VDD5	2.5V Supply Voltage
139	I/O A1, GPIO12	Host Address Bit 1, General Purpose I/O
140	I/O SCDOUT, SCDIO	Serial Control Port Data Input and Output
141	I/O HINBSY, GPIO8	Input Host Message Status, General Purpose I/O
142	SCCLK	Serial Control Port Clock
143	I/O UHS2, CS_OUT, GPIO17	Mode Select Bit 2, External Serial Memory Chip Select, General Purpose I/O
144	I RESET	Master Reset Input

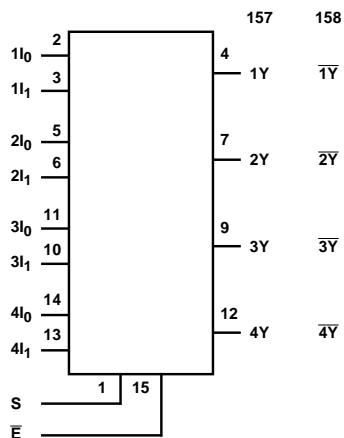
Q104 : TC74VHC32FT



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



(TOP VIEW)

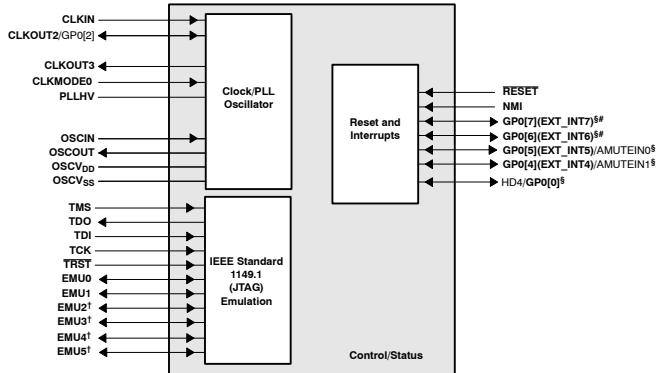


TRUTH TABLE

ENABLE	SELECT INPUT	DATA INPUTS		OUTPUT	
		I ₀	I ₁	Y	Ȳ
H	X	X	X	L	H
L	L	L	X	L	H
L	L	H	X	H	L
L	H	X	L	L	H
L	H	X	H	H	L

NOTE: H = High Voltage Level, L = Low Voltage Level, X = Don't Care

signal groups description

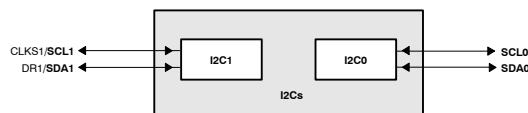
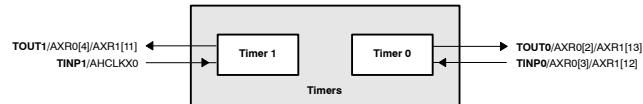
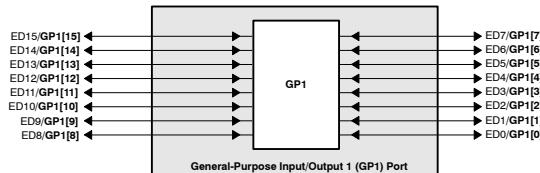
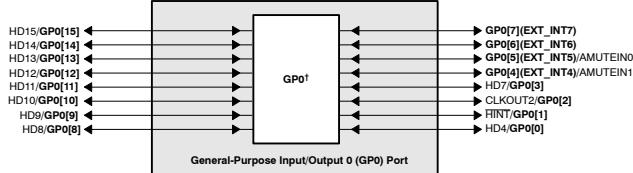


[†] These external pins are applicable to the GDP package only.
[‡] The GPO[15:0] pins, through interrupt sharing, are external interrupt capable via GPOINT0. For more detail, see the external interrupt section of this data sheet. For more detail on interrupt sharing, see the TMS320C6000 DSP Interrupt Selector Reference Guide (literature number SPRU846).

[§] All of these pins are external interrupt sources. For more detail, see the external interrupt sources section of this data sheet.

CPU (DSP Core) and Peripheral Signals

signal groups description (continued)

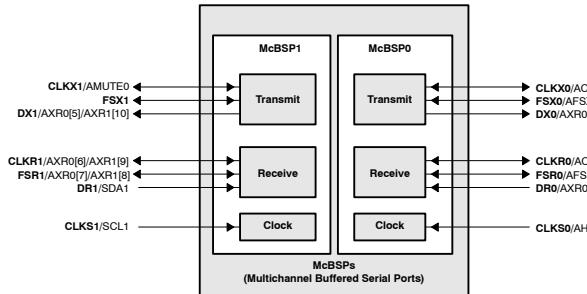
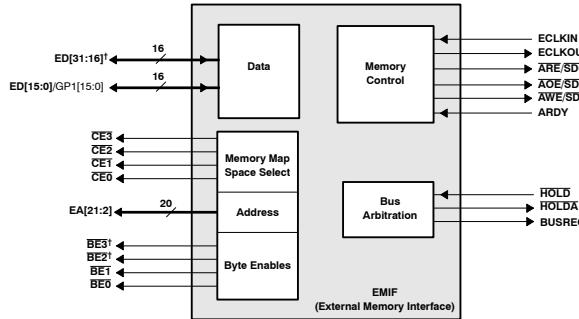


[†] The GPO[15:0] pins, through interrupt sharing, are external interrupt capable via GPOINT0. GPO[15:0] are also external EDMA event source capable. For more detail, see the external interrupt sources and external EDMA event sources sections of this data sheet.

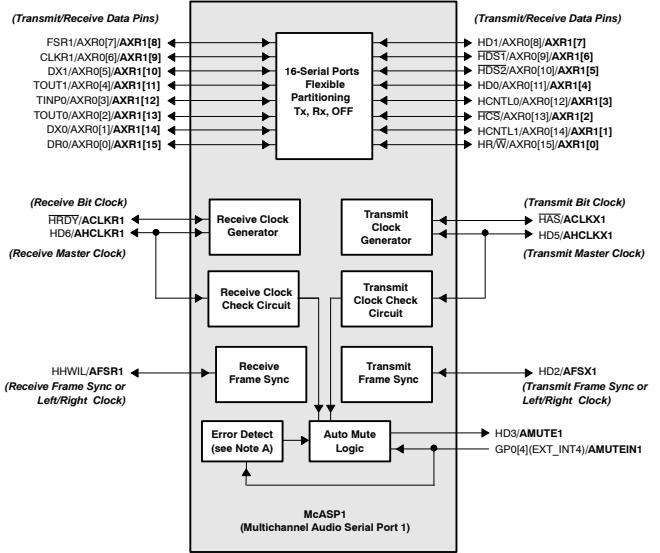
Peripheral Signals

Q201, Q301 : TMS320DA610

signal groups description (continued)



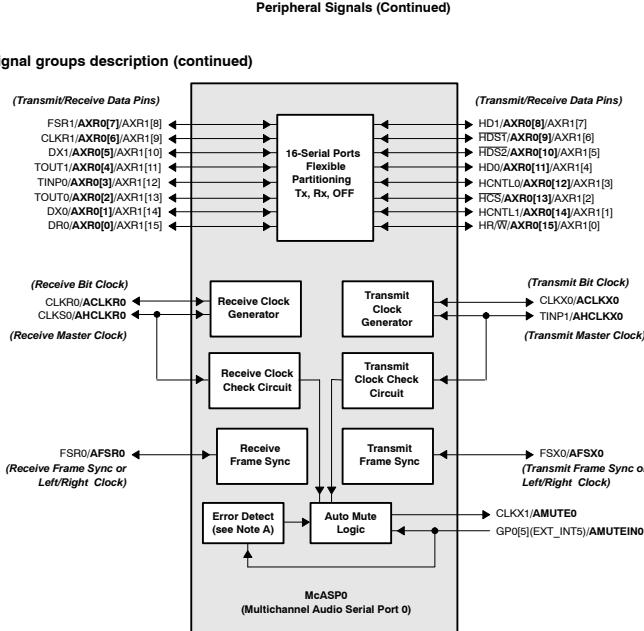
signal groups description (continued)



NOTES:
A. The McBSPs' Error Detect function detects underruns, overruns, early/late frame syncs, DMA errors, and external mute input.
B. On multiplexed pins, bolded text denotes the active function of the pin for that particular peripheral module.
C. Bolded and italicized text within parentheses denotes the function of the pins in an audio system.

Peripheral Signals (Continued)

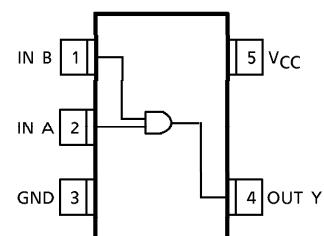
signal groups description (continued)

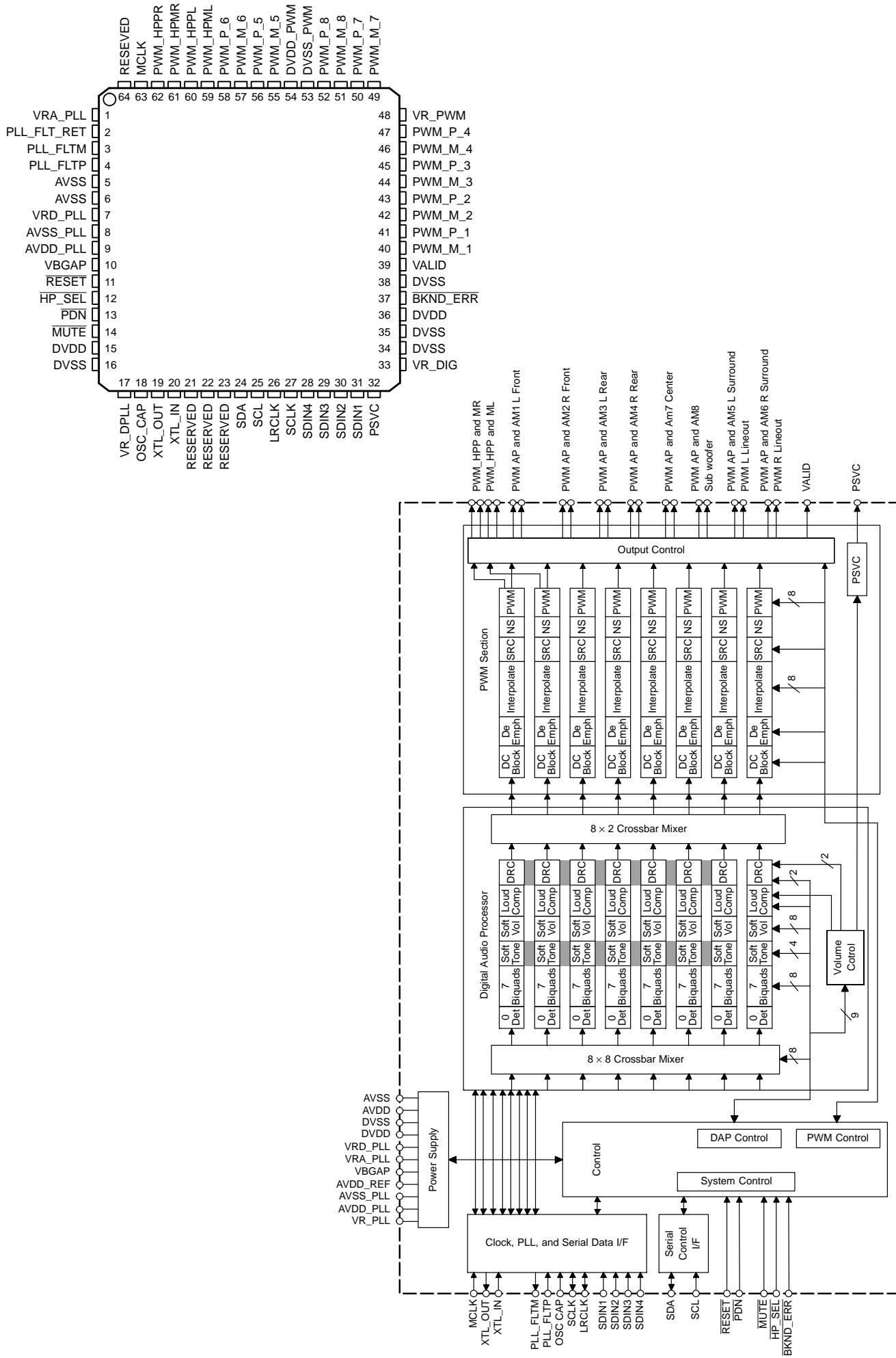


NOTES:
A. The McASP's Error Detect function detects underruns, overruns, early/late frame syncs, DMA errors, and external mute input.
B. On multiplexed pins, bolded text denotes the active function of the pin for that particular peripheral module.
C. Bolded and italicized text within parentheses denotes the function of the pins in an audio system.

Peripheral Signals (Continued)

Q208, Q308, QR04 : TC7S08F





Q501 : TAS5508

TERMINAL		TYPE ⁽¹⁾	5-V TOLERANT	TERMINATION ⁽²⁾	DESCRIPTION
NAME	NO.				
AVDD_PLL	9	P			3.3-V analog power supply for PLL. This terminal can be connected to the same power source used to drive power terminal DVDD, but to achieve low PLL jitter, this terminal should be bypassed to AVSS_PLL with a 0.1- μ F low-ESR capacitor.
AVSS	5, 6	P			Analog ground
AVSS_PLL	8	P			Analog ground for PLL. This terminal should reference the same ground as terminal DVSS, but to achieve low PLL jitter, ground noise at this terminal must be minimized. The availability of the AVSS terminal allows a designer to use optimizing techniques such as star ground connections, separate ground planes, or other quiet ground-distribution techniques to achieve a quiet ground reference at this terminal.
BKND_ERR	37	DI		Pullup	Active-low. A back-end error sequence is generated by applying logic low to this terminal. The BKND_ERR results in no change to any system parameters, with all H-bridge drive signals going to a hard-mute (M) state.
DVDD	15, 36	P			3.3-V digital power supply
DVDD_PWM	54	P			3.3-V digital power supply for PWM
DVSS	16, 34, 35, 38	P			Digital ground
DVSS_PWM	53	P			Digital ground for PWM
HP_SEL	12	DI	5 V	Pullup	Headphone in/out selector. When a logic low is applied, the headphone is selected (speakers are off). When a logic high is applied, speakers are selected (headphone is off).
LRCLK	26	DI	5 V		Serial-audio data left/right clock (sampling-rate clock)
MCLK	63	DI	5 V	Pulldown	MCLK is a 3.3-V master clock input. The input frequency of this clock can range from 4 MHz to 50 MHz.
MUTE	14	DI	5 V	Pullup	Soft mute of outputs, active-low (muted signal = a logic low, normal operation = a logic high). The mute control provides a noiseless volume ramp to silence. Releasing mute provides a noiseless ramp to previous volume.
OSC_CAP	18	AO			Oscillator capacitor
PDN	13	DI	5 V	Pullup	Power down, active-low. PDN powers down all logic and stops all clocks whenever a logic low is applied. The internal parameters are preserved through a power-down cycle, as long as RESET is not active. The duration for system recovery from power down is 100 ms.
PLL_FLT_RET	2	AO			PLL external filter return
PLL_FLTM	3	AO			PLL negative input. Connected to PLL_FLT_RTN via an RC network
PLL_FLTP	4	AI			PLL positive input. Connected to PLL_FLT_RTN via an RC network
PSVC	32	O			Power-supply volume control PWM output
PWM_HPML	59	DO			PWM left-channel headphone (differential -)
PWM_HPMR	61	DO			PWM right-channel headphone (differential -)
PWM_HPPL	60	DO			PWM left-channel headphone (differential +)
PWM_HPPR	62	DO			PWM right-channel headphone (differential +)
PWM_M_1	40	DO			PWM 1 output (differential -)
PWM_M_2	42	DO			PWM 2 output (differential -)
PWM_M_3	44	DO			PWM 3 output (differential -)
PWM_M_4	46	DO			PWM 4 output (differential -)
PWM_M_5	55	DO			PWM 5 output (differential -)
PWM_M_6	57	DO			PWM 6 output (differential -)
PWM_M_7	49	DO			PWM 7 (lineout L) output (differential -)
PWM_M_8	51	DO			PWM 8 (lineout R) output (differential -)
PWM_P_1	41	DO			PWM 1 output (differential +)
PWM_P_2	43	DO			PWM 2 output (differential +)

(1) Type: A = analog; D = 3.3-V digital; P = power/ground/decoupling; I = input; O = output

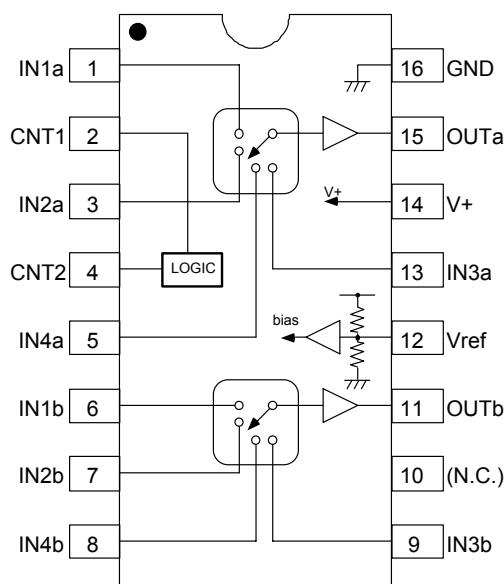
(2) All pullups are 200-mA weak pullups and all pulldowns are 200-mA weak pulldowns. The pullups and pulldowns are included to ensure proper input logic levels if the terminals are left unconnected (pullups => logic-1 input; pulldowns => logic-0 input). Devices that drive inputs with pullups must be able to sink 200 mA, while maintaining a logic-0 drive level. Devices that drive inputs with pulldowns must be able to source 200 mA, while maintaining a logic-1 drive level.

Q501 : TAS5508

TERMINAL		TYPE ⁽¹⁾	5-V TOLERANT	TERMINATION ⁽²⁾	DESCRIPTION
NAME	NO.				
PWM_P_3	45	DO			PWM 3 output (differential +)
PWM_P_4	47	DO			PWM 4 output (differential +)
PWM_P_5	56	DO			PWM 5 output (differential +)
PWM_P_6	58	DO			PWM 6 output (differential +)
PWM_P_7	50	DO			PWM 7 (lineout L) output (differential +)
PWM_P_8	52	DO			PWM 8 (lineout R) output (differential +)
RESERVED	21, 22, 23, 64				Connect to digital ground
RESET	11	DI	5 V	Pullup	System reset input, active-low. A system reset is generated by applying a logic low to this terminal. RESET is an asynchronous control signal that restores the TAS5508 to its default conditions, sets the valid output low, and places the PWM in the hard mute (M) state. Master volume is immediately set to full attenuation. On the release of RESET, if PDN is high, the system performs a 4- to 5-ms device initialization and sets the volume at mute.
SCL	25	DI	5 V		I ² C serial-control clock input/output
SCLK	27	DI	5 V		Serial-audio data clock (shift clock) input
SDA	24	DIO	5 V		I ² C serial-control data-interface input/output
SDIN1	31	DI	5 V	Pulldown	Serial-audio data input 1 is one of the serial-data input ports. SDIN1 supports four discrete (stereo) data formats and is capable of inputting data at 64 Fs.
SDIN2	30	DI	5 V	Pulldown	Serial-audio data input 2 is one of the serial-data input ports. SDIN2 supports four discrete (stereo) data formats and is capable of inputting data at 64 Fs.
SDIN3	29	DI	5 V	Pulldown	Serial-audio data input 3 is one of the serial-data input ports. SDIN3 supports four discrete (stereo) data formats and is capable of inputting data at 64 Fs.
SDIN4	28	DI	5 V	Pulldown	Serial-audio data input 4 is one of the serial-data input ports. SDIN4 supports four discrete (stereo) data formats and is capable of inputting data at 64 Fs.
VALID	39	DO			Output indicating validity of PWM outputs, active-high
VBGAP	10	P			Band-gap voltage reference. A pinout of the internally regulated 1.2-V reference. Typically has a 1-nF low-ESR capacitor between VBGAP and AVSS_PLL. This terminal must not be used to power external devices.
VR_DIG	33	P			Voltage reference for 1.8-V digital core supply. A pinout of the internally regulated 1.8-V power used by digital core logic. A 4.7- μ F low-ESR capacitor ⁽³⁾ should be connected between this terminal and DVSS. This terminal must not be used to power external devices.
VR_DPLL	17	P			Voltage reference for 1.8-V digital PLL supply. A pinout of the internally regulated 1.8-V power used by digital PLL logic. A 0.1- μ F low-ESR capacitor ⁽³⁾ should be connected between this terminal and DVSS_CORE. This terminal must not be used to power external devices.
VR_PWM	48	P			Voltage reference for 1.8-V digital PWM core supply. A pinout of the internally regulated 1.8-V power used by digital PWM core logic. A 0.1- μ F low-ESR capacitor ⁽³⁾ should be connected between this terminal and DVSS_PWM. This terminal must not be used to power external devices.
VRA_PLL	1	P			Voltage reference for 1.8-V PLL analog supply. A pinout of the internally regulated 1.8-V power used by PLL logic. A 0.1- μ F low-ESR capacitor ⁽³⁾ should be connected between this terminal and AVSS_PLL. This terminal must not be used to power external devices.
VRD_PLL	7	P			Voltage reference for 1.8-V PLL digital supply. A pinout of the internally regulated 1.8-V power used by PLL logic. A 0.1- μ F low-ESR capacitor ⁽³⁾ should be connected between this terminal and AVSS_PLL. This terminal must not be used to power external devices.
XTL_IN	20	AI			XTL_OUT and XTL_IN are the only LVCMOS terminals on the device. They provide a reference clock for the TAS5508 via use of an external fundamental-mode crystal. XTL_IN is the 1.8-V input port for the oscillator circuit. A 13.5-MHz crystal (HCM49) is recommended.
XTL_OUT	19	AO			XTL_OUT and XTL_IN are the only LVCMOS terminals on the device. They provide a reference clock for the TAS5508 via use of an external fundamental-mode crystal. XTL_OUT is the 1.8-V output drive to the crystal. A 13.5-MHz crystal (HCM49) is recommended.

(3) If desired, low-ESR capacitance values can be implemented by paralleling two or more ceramic capacitors of equal value. Paralleling capacitors of equal value provides an extended high-frequency supply decoupling. This approach avoids the potential of producing parallel resonance circuits that have been observed when paralleling capacitors of different values.

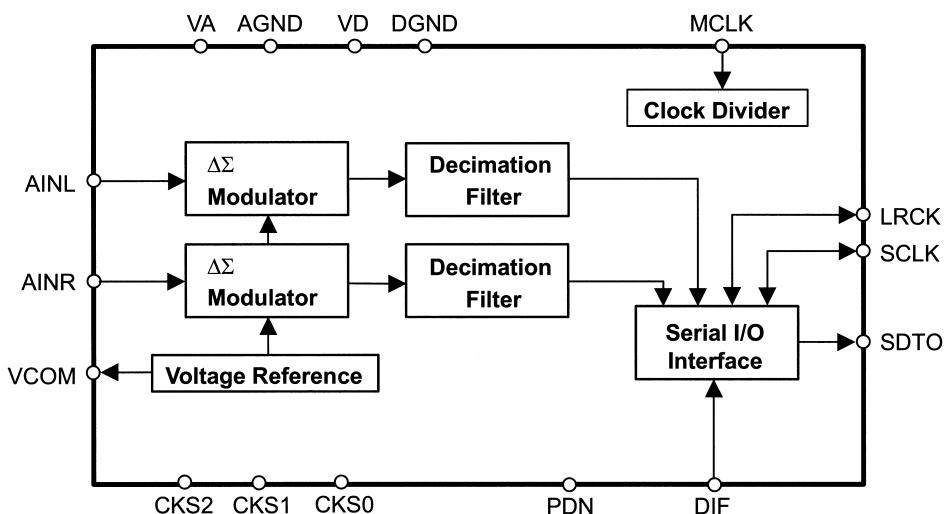
QA01 : NJM2750



PIN No.	SYMBOL	FUNCTION
1	IN1a	Ach INPUT SELECTOR
2	CNT1	CONTROL 1
3	IN2a	Ach INPUT SELECTOR 2
4	CNT2	CONTROL 2
5	IN4a	Ach INPUT SELECTOR 4
6	IN1b	Bch INPUT SELECTOR 1
7	IN2b	Bch INPUT SELECTOR 2
8	IN4b	Bch INPUT SELECTOR 4
9	IN3b	Bch INPUT SELECTOR 3
10	(N.C.)	NO CONNECT
11	OUTb	Bch OUTPUT
12	Vref	REFERENCE VOLTAGE
13	IN3a	Ach INPUT SELECTOR 3
14	V+	POWER SUPPLY
15	OUTa	Ach OUTPUT
16	GND	GROUND

CNT2	CNT1	INPUT SELECTOR Ach / Bch
L	L	1
L	H	2
H	L	3
H	H	4

QA05 : AK5357



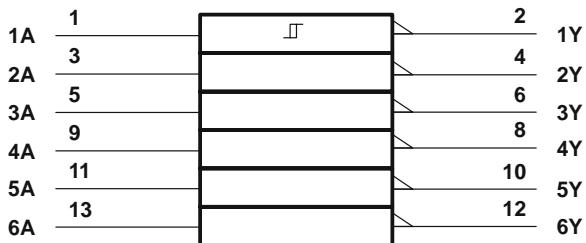
No.	Pin Name	I/O	Function
1	AINR	I	Rch Analog Input Pin
2	AINL	I	Lch Analog Input Pin
3	CKS1	I	Mode Select 1 Pin
4	VCOM	O	Common Voltage Output Pin, VA/2 Bias voltage of ADC input.
5	AGND	-	Analog Ground Pin
6	VA	-	Analog Power Supply Pin, 2.7 ~ 5.5V
7	VD	-	Digital Power Supply Pin, 2.7 ~ 5.5V
8	DGND	-	Digital Ground Pin
9	SDTO	O	Audio Serial Data Output Pin “L” Output at Power-down mode.
10	LRCK	I/O	Output Channel Clock Pin “L” Output in Master Mode at Power-down mode.
11	MCLK	I	Master Clock Input Pin
12	SCLK	I/O	Audio Serial Data Clock Pin “L” Output in Master Mode at Power-down mode.
13	PDN	I	Power Down Mode Pin “H”: Power up, “L”: Power down
14	DIF	I	Audio Interface Format Pin “H”: 24bit I ² S Compatible, “L”: 24bit MSB justified
15	CKS2	I	Mode Select 2 Pin
16	CKS0	I	Mode Select 0 Pin

Note: All digital input pins should not be left floating.

QD02 : TC74LV14APW

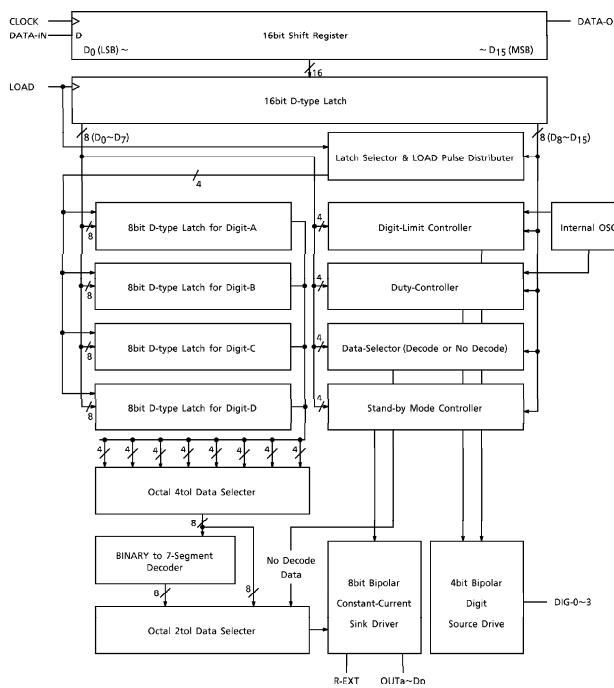
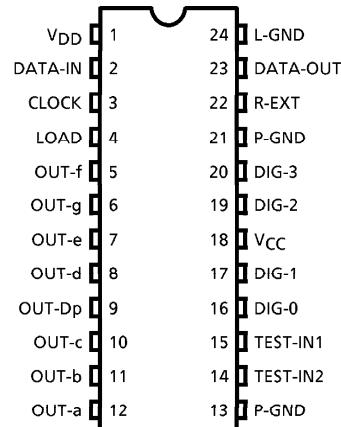
**FUNCTION TABLE
(each inverter)**

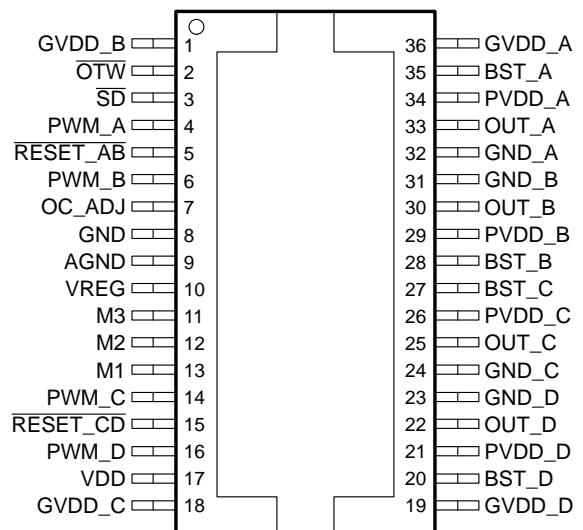
INPUT A	OUTPUT Y
H	L
L	H



QF01 : TB62709FG

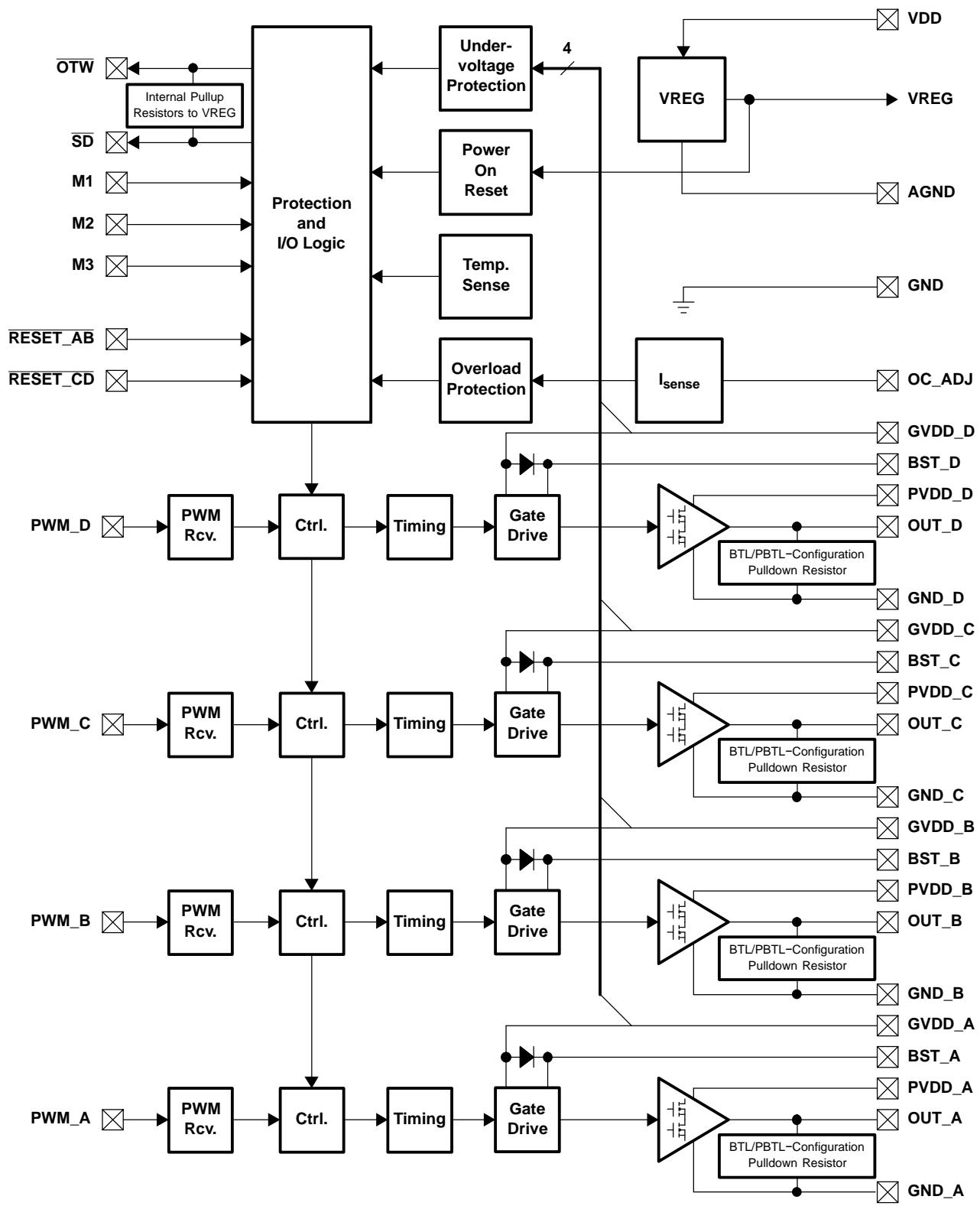
PIN No.	NAME	FUNCTION
1	V _{DD}	Logic Supply Voltage
2	Serial Data IN (S _i)	Serial Data Input To Shift Register
3	Clock (CK)	Clock Input Terminal
4	Load (LD)	Load Input Terminal
5-12	OUT a~DP	Output Terminal to Cathodes of Seven Segment Display
13	P-GND	Power Ground Terminal
14	Test In 2	Test Terminal - Grounded During Normal Operation
15	Test In 1	Test Terminal - Grounded During Normal Operation
6,17,19,2	Digit 0~3	Output Terminal to Anodes of Seven Segment Display
18	V _{CC}	Supply Voltage For LEDs
21	P-GND	Power Ground Terminal
22	Rext	Constant Current Programming Terminal
23	Data Out (DO)	Cascade Connection To Next Display Stage
24	L-GND	Logic Ground Terminal





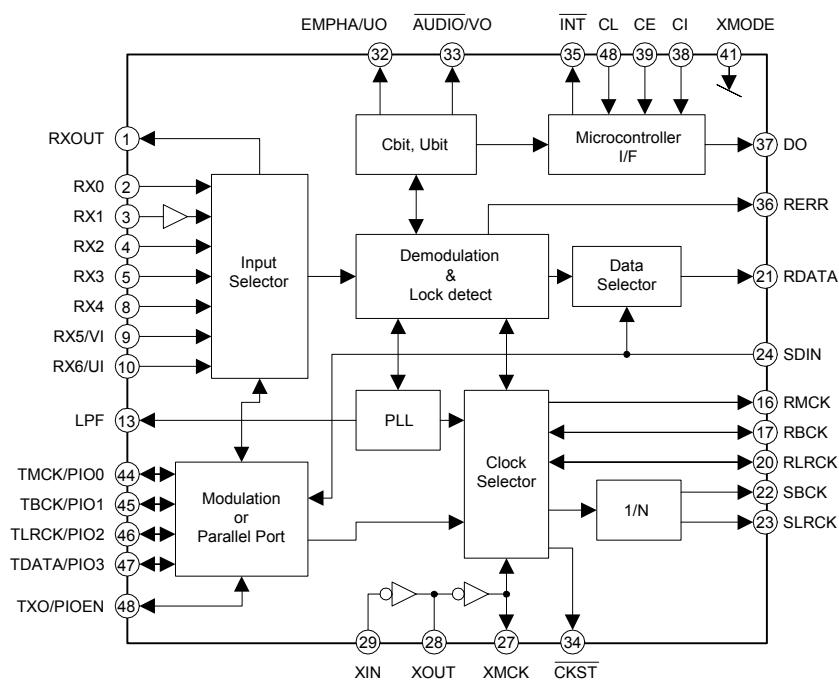
TERMINAL			FUNCTION (1)	DESCRIPTION
NAME	DKD NO.	DDV NO.		
AGND	9	11	P	Analog ground
BST_A	35	43	P	HS bootstrap supply (BST), external capacitor to OUT_A required
BST_B	28	34	P	HS bootstrap supply (BST), external capacitor to OUT_B required
BST_C	27	33	P	HS bootstrap supply (BST), external capacitor to OUT_C required
BST_D	20	24	P	HS bootstrap supply (BST), external capacitor to OUT_D required
GND	8	10	P	Ground
GND_A	32	38	P	Power ground for half-bridge A
GND_B	31	37	P	Power ground for half-bridge B
GND_C	24	30	P	Power ground for half-bridge C
GND_D	23	29	P	Power ground for half-bridge D
GVDD_A	36	44	P	Gate-drive voltage supply requires 0.1- μ F capacitor to AGND
GVDD_B	1	1	P	Gate-drive voltage supply requires 0.1- μ F capacitor to AGND
GVDD_C	18	22	P	Gate-drive voltage supply requires 0.1- μ F capacitor to AGND
GVDD_D	19	23	P	Gate-drive voltage supply requires 0.1- μ F capacitor to AGND
M1	13	15	I	Mode selection pin
M2	12	14	I	Mode selection pin
M3	11	13	I	Mode selection pin
NC	-	3, 4, 19, 20, 25, 42	-	No connect. Pins may be grounded.
OC_ADJ	7	9	O	Analog overcurrent programming pin requires resistor to ground
OTW	2	2	O	Overtemperature warning signal, open-drain, active-low
OUT_A	33	39	O	Output, half-bridge A
OUT_B	30	36	O	Output, half-bridge B
OUT_C	25	31	O	Output, half-bridge C
OUT_D	22	28	O	Output, half-bridge D
PVDD_A	34	40, 41	P	Power supply input for half-bridge A requires close decoupling of 0.1- μ F capacitor to GND_A.
PVDD_B	29	35	P	Power supply input for half-bridge B requires close decoupling of 0.1- μ F capacitor to GND_B.
PVDD_C	26	32	P	Power supply input for half-bridge C requires close decoupling of 0.1- μ F capacitor to GND_C.
PVDD_D	21	26, 27	P	Power supply input for half-bridge D requires close decoupling of 0.1- μ F capacitor to GND_D.
PWM_A	4	6	I	Input signal for half-bridge A
PWM_B	6	8	I	Input signal for half-bridge B
PWM_C	14	16	I	Input signal for half-bridge C
PWM_D	16	18	I	Input signal for half-bridge D
RESET_AB	5	7	I	Reset signal for half-bridge A and half-bridge B, active-low
RESET_CD	15	17	I	Reset signal for half-bridge C and half-bridge D, active-low
SD	3	5	O	Shutdown signal, open-drain, active-low
VDD	17	21	P	Power supply for digital voltage regulator requires 0.1- μ F capacitor to GND.
VREG	10	12	P	Digital regulator supply filter pin requires 0.1- μ F capacitor to AGND.

(1) I = input, O = output, P = power



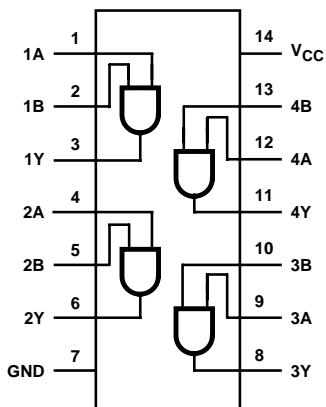
B0034-02

QR01 : LC89057W-VF4-E



QU08 : TC74VHC08FT

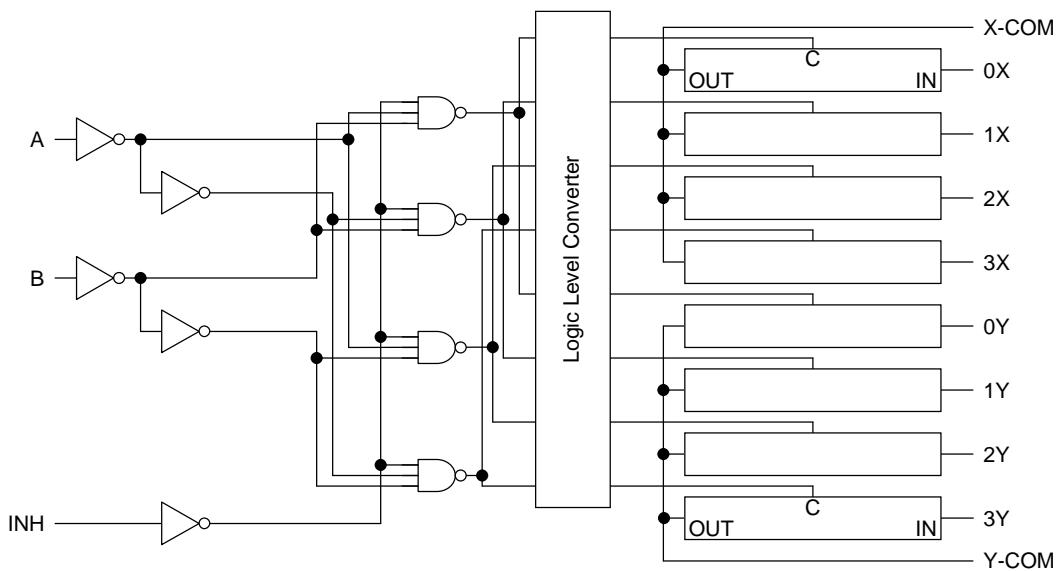
IC97 : TC74VHCT08AFT



TRUTH TABLE

INPUTS		OUTPUT
nA	nB	nY
L	L	L
L	H	L
H	L	L
H	H	H

NOTE: H = High Voltage Level, L = Low Voltage Level



Control Inputs				"ON" Channel		
Inhibit	C*	B	A	MZ4051FK	MZ4052FK	MZ4053FK
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 MZ4052FK



SiI 9031 Features

PanelLink Cinema Receiver

Industry-Standard Compliance

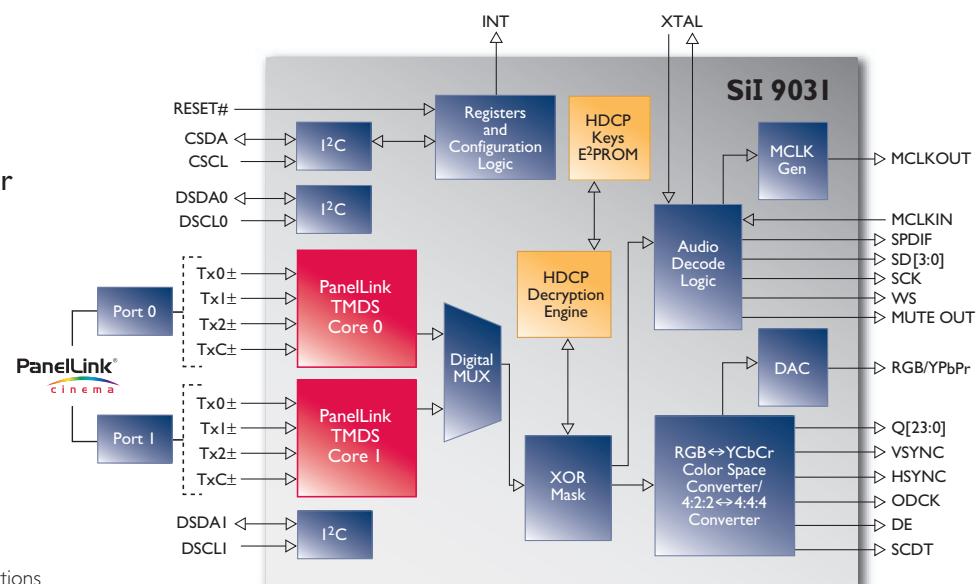
- HDMI 1.0
- DVI 1.0
- EIA/CEA-861B
- HDCP 1.1

Digital Video Output

- Dual integrated PanelLink® cores
- Supports DTV (480i/576i/480p/576p/720p/1080i/1080p) and PC (VGA/XGA/SXGA/WSXGA) resolutions
- Flexible digital video interface
 - 24-bit RGB/YCbCr 4:4:4
 - 16/20/24-bit YCbCr 4:2:2
 - 8/10/12-bit YCbCr 4:2:0 (ITU-R BT.656)
 - 12-bit digital media interface
- Analog RGB and YPbPr output
 - Integrated 10-bit DAC
 - Separate or composite syncs (sync on Y/G)
- Integrated RGB↔CbCr color space conversion
- 4:2:2↔4:4:4 converter

Digital Audio Output

- Industry-standard S/PDIF and I²S output
- Supports high-end audio including DVD-Audio
 - 2-ch. 32-192kHz or
 - 8-ch. 32-96kHz
- Programmable I²S output supports numerous low-cost audio DACs
- Supports IEC60958 2-channel PCM
- Capable of carrying IEC61937 compressed audio (Dolby Digital, DTS, etc.)



Content Protection

- Integrated HDCP cipher engine
- Pre-programmed HDCP keys
 - Simplify manufacturing process
 - Most secure solution available
 - Lower system, manufacturing costs
- Supports HDCP repeater capability
- Decrypts both video and audio

System Operation

- Register-programmable via slave I²C interface
- Auto video mode simplifies design
- Auto audio mode allows more robust system
- Flexible interrupt registers with interrupt pin

Power Management

- 1.8V core provides low-power operation
- Flexible power-down modes

Silicon Image's SiI 9031 Starter Kit (CP9031HDMI)

Contents include:

Hardware

- SiI 9031 Receiver Daughter Board
- HDMI to HDMI cable

Software

- HDMIGear Receiver Software Tool

Documentation

- User's Guide
- Schematics
- Bill of Materials (BOM)



SiI 9030 Features

PanelLink Cinema Transmitter

Industry-Standard Compliance

- HDMI 1.0
- DVI 1.0
- EIA/CEA-861B
- HDCP 1.1

Digital Video Output

- Integrated PanelLink® core
- Supports DTV (480i/576i/480p/576p/720p/1080i/1080p) and PC (VGA/XGA/SXGA/WSXGA) resolutions
- Flexible video interface supports DVD and HD MPEG decoders
 - 12/24-bit RGB YCbCr 4:4:4
 - 16/20/24-bit YCbCr 4:2:2
 - 8/10/12-bit YCbCr 4:2:0 (ITU-R BT.601 & BT.656)
- Integrated YCbCr ↔ RGB color space conversion
- 4:2:2↔4:4:4 up-converter
- Programmable Data Enable (DE) generator

Digital Audio Output

- DVD-Audio support thru 4xI²S inputs
- Supports 2-channel 192kHz or 8-channel 96kHz
- Supports IEC60958 2-channel PCM or IEC61937 compressed audio (Dolby Digital, DTS, etc.)
- Industry-standard S/PDIF input

Content Protection

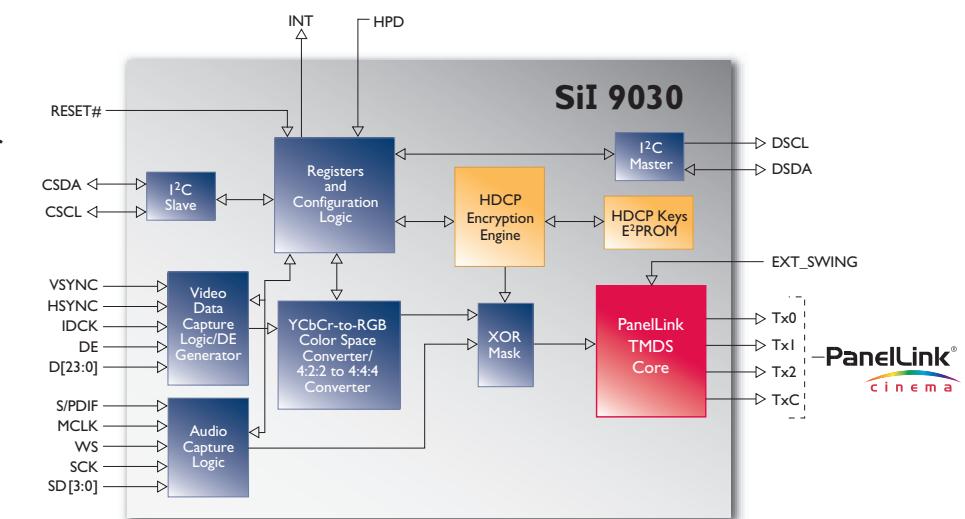
- Integrated HDCP cipher engine
- Pre-programmed HDCP keys
 - Simplify manufacturing process
 - Most secure solution available
 - Lower system, manufacturing costs
- Encrypts both video and audio

System Operation

- Register-programmable via slave I²C interface
- Master I²C simplifies system design
- Flexible interrupt registers with interrupt pin
- Monitor detection supported through hot plug and receiver detection

Power Management

- 1.8V core provides low-power operation
- Flexible power-down modes



Silicon Image's SiI 9030 Starter Kit (CP9030HDMI)

Contents include:

Hardware

- SiI 9030 Transmitter Stand Alone Board
- HDMI to HDMI cable

Software

- HDMIGear Software Tool

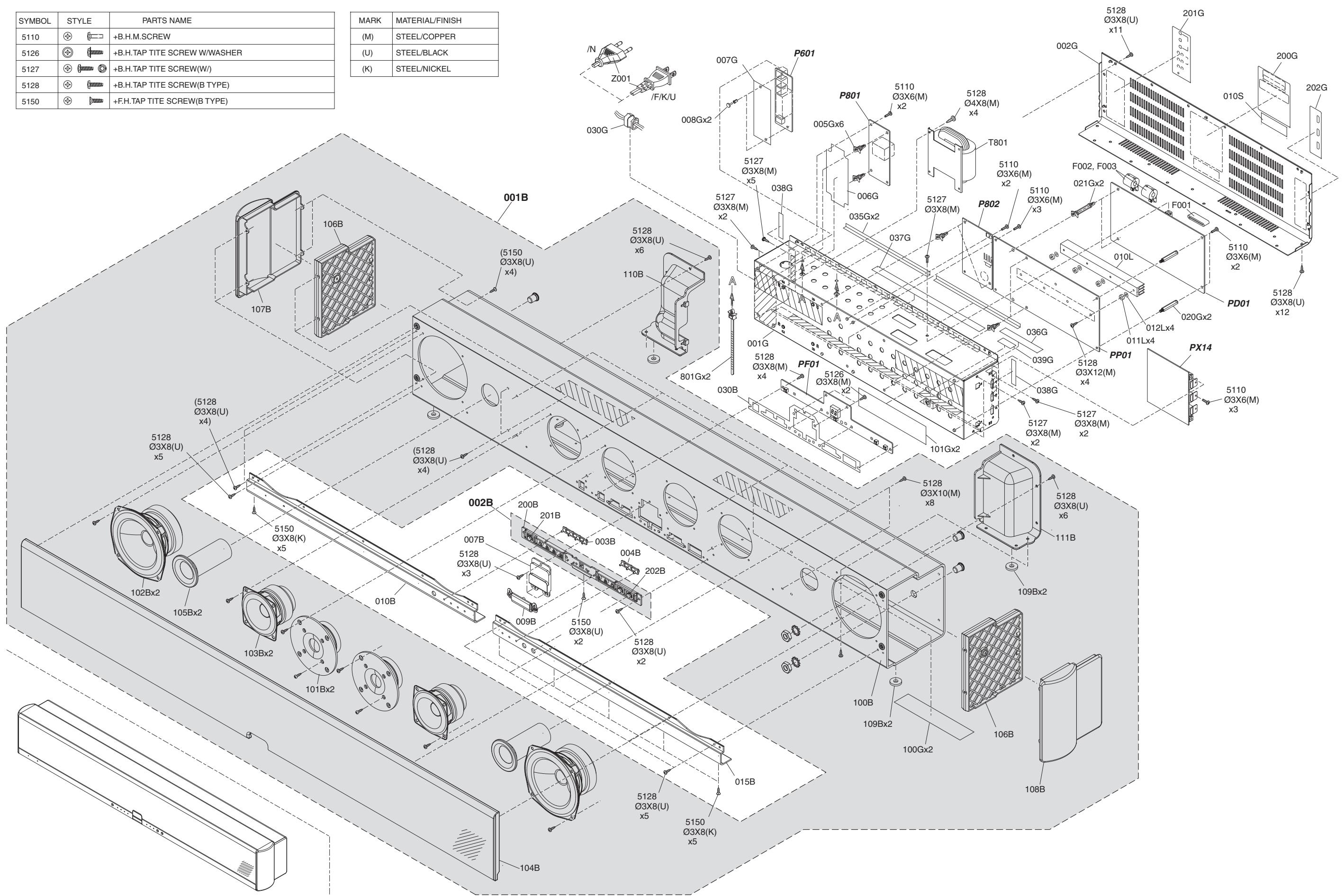
Documentation

- User's Guide
- Schematics
- Bill of Materials (BOM)

13. EXPLODED VIEW AND PARTS LIST

SYMBOL	STYLE	PARTS NAME
5110		+B.H.M.SCREW
5126		+B.H.TAP TITE SCREW W/WASHER
5127		+B.H.TAP TITE SCREW(W/)
5128		+B.H.TAP TITE SCREW(B TYPE)
5150		+F.H.TAP TITE SCREW(B TYPE)

MARK	MATERIAL/FINISH
(M)	STEEL/COPPER
(U)	STEEL/BLACK
(K)	STEEL/NICKEL



P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
	001B		99MZK20AJ0100	99MZK20AJ0100	UNIT KIT	SPEAKER UNIT ASSY ES7001
	002B		00M20AJ270520	00M20AJ270520	BUTTON	BUTTON ASSY
	003B		00M20AJ355010	00M20AJ355010	LENS	LENS 4
	004B		00M20AJ355020	00M20AJ355020	LENS	LENS 3
	007B		00M20AJ158010	00M20AJ158010	WINDOW	WINDOW
	009B	F B	nsp	00M20AJ270010	BUTTON	BUTTON POWER
	009B	/K1B	nsp	00M20AJ270210	BUTTON	BUTTON POWER
	009B	/N1B	00M20AJ270210	00M20AJ270210	BUTTON	BUTTON POWER
	009B	/U1B	nsp	00M20AJ270210	BUTTON	BUTTON POWER
	010B	F B	nsp	00M20AJ248010	FRONT PANEL	FRONT PANEL L ES7001 F (JAPANESE)
	010B	/K1B	nsp	00M20AJ248110	FRONT PANEL	FRONT PANEL L ES7001 U/K (ENGLISH)
	010B	/N1B	00M20AJ248110	00M20AJ248110	FRONT PANEL	FRONT PANEL L ES7001 U/K (ENGLISH)
	010B	/U1B	nsp	00M20AJ248110	FRONT PANEL	FRONT PANEL L ES7001 U/K (ENGLISH)
	015B	F B	nsp	00M20AJ248020	FRONT PANEL	FRONT PANEL R ES7001 F (JAPANESE)
	015B	/K1B	nsp	00M20AJ248120	FRONT PANEL	FRONT PANEL R ES7001 U/K (ENGLISH)
	015B	/N1B	00M20AJ248120	00M20AJ248120	FRONT PANEL	FRONT PANEL R ES7001 U/K (ENGLISH)
	015B	/U1B	nsp	00M20AJ248120	FRONT PANEL	FRONT PANEL R ES7001 U/K (ENGLISH)
	101B		00MZK20AJ0010	00MZK20AJ0010	UNIT KIT	SPEAKER UNIT TW
	102B		00MZK20AJ0020	00MZK20AJ0020	UNIT KIT	SPEAKER UNIT WF
	103B		00MZK20AJ0030	00MZK20AJ0030	UNIT KIT	SPEAKER UNIT MID
	104B		00M20AJ202010	00M20AJ202010	NET	GRILLE NET
	109B		00M20AJ056010	00M20AJ056010	EYELET	LEG
	030G	F B	nsp	00M189J259010	BUSHING	BUSH MAINS COAD NIFCO2272
	030G	/K1B	nsp	00M450H259010	BUSHING	BUSH MAINS COAD NIFCO2271
	030G	/N1B	00M450H259010	00M450H259010	BUSHING	BUSH MAINS COAD NIFCO2271
	030G	/U1B	nsp	00M189J259010	BUSHING	BUSH MAINS CORD NIFCO2272
	056G	F B	nsp	00M130B056050	EYELET	BUFFER FOR HDMI FFC
	056G	/K1B	nsp	00M130B056050	EYELET	BUFFER FOR HDMI FFC
	056G	/N1B	00M130B056050	00M130B056050	EYELET	BUFFER FOR HDMI FFC
	056G	/U1B	nsp	00M365B056010	EYELET	BUFFER FOR WF01
	F001		00MFC90280010	00MFC90280010	FERRITE CORE	HF70SH28X2X10 FPC FOR WF02
	F002		00MFC50220010	00MFC50220010	FERRITE CORE	TFC-16-8-16 FOR W002 AND W003
	F003		00MFC50220010	00MFC50220010	FERRITE CORE	TFC-16-8-16 FOR W002 AND W003
	F004		00MFC50150030	00MFC50150030	FERRITE CORE	TFC-23-11-14 FOR W005 AND W006
	P601		nsp	nsp	PWB ASSY	INPUT PWB ASSY
	P801		nsp	nsp	PWB ASSY	PRIMARY POWER PWB ASSY
	P802		nsp	nsp	PWB ASSY	SECONDARY POWER PWB ASSY
	PD01		nsp	nsp	PWB ASSY	DSP PWB ASSY
	PF01		nsp	nsp	PWB ASSY	FRONT PWB ASSY
	PP01		nsp	nsp	PWB ASSY	DIGITAL AMP PWB ASSY
	PX14		99MZZ20AJ3000	99MZZ20AJ3000	PWB ASSY	HDMI PWB ASSY
⚠ T801	F B	nsp	00MTS73501010	TRANSF.	# POWER TRANS FOR ES7001 F B	
⚠ T801	/K1B	nsp	00MTS73501030	TRANSF.	# POWER TRANS FOR ES7001/K1B	
⚠ T801	/N1B	00MTS73501030	00MTS73501030	TRANSF.	# POWER TRANS FOR ES7001/K1B	
⚠ T801	/U1B	nsp	00MTS73501020	TRANSF.	# POWER TRANS FOR ES7001/U1B	
WF01		nsp	00MYU25140520	FPC	SMCD-25X140-BDX6-P1.0-S4.0+4.0-M JR10 - CN99	
WF02		nsp	00MYU23130520	FPC	SMCD-23X130-BDX6-P1.0-S4.0+4.0-M J501 - JU01	
⚠ Z001	F B	nsp	00MYC01800980	MAINS CORD	# MAINS CORD 7A 125V W/JST MOLDED PLUG	
⚠ Z001	/K1B	nsp	00MYC01800880	MAINS CORD	# MAINS CORD CCEE APP.(AC250V 10A)+ VAR2P	
⚠ Z001	/N1B	00MYC01800790	00MYC01800790	MAINS CORD	# MAINS CORD N (MAYOR)	
⚠ Z001	/U1B	nsp	00MYC02000950	MAINS CORD	# MAINS CORD FOR 7A 125V 2PIN	
PACKING						
	001T	F B	nsp	00M20AJ851110	USER GUIDE	USER GUIDE ES7001 F
	001T	/K1B	nsp	00M20AJ851350	USER GUIDE	USER GUIDE ES7001 K
	001T	/N1B	00M20AJ851310	00M20AJ851310	USER GUIDE	USER GUIDE ES7001 N
	001T	/U1B	nsp	00M20AJ851250	USER GUIDE	USER GUIDE ES7001 U
	001Z	F B	nsp	00MZK20AJ0200	UNIT KIT	REMOTE CONTROLLER RC001ES JAPANESE
	001Z	/K1B	nsp	00MZK20AJ0300	UNIT KIT	REMOTE CONTROLLER RC002ES ENGLISH
	001Z	/N1B	00MZK20AJ0300	00MZK20AJ0300	UNIT KIT	REMOTE CONTROLLER RC002ES ENGLISH
	001Z	/U1B	nsp	00MZK20AJ0300	UNIT KIT	REMOTE CONTROLLER RC002ES ENGLISH
NOT STANDARD SPARE PART						
	001S	F B	nsp	00M20AJ801010	PACKING CASE	PACKING CASE EST001 /F
	001S	/K1B	nsp	00M20AJ801020	PACKING CASE	PACKING CASE EST001 /U/K/N
	001S	/N1B	nsp	00M20AJ801020	PACKING CASE	PACKING CASE EST001 /U/K/N
	001S	/U1B	nsp	00M20AJ801020	PACKING CASE	PACKING CASE EST001 /U/K/N
	005S		nsp	00M20AJ809010	CUSHION	CUSHION
	006S		nsp	00M20AJ809020	CUSHION	CUSHION

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
	002G	nsp	00M20AJ257010	LID	LID	
	003Z	F B	nsp	00MZD01001000	CONN. CORD	OPT CABLE 1M GP1C331

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

14. ELECTRICAL PARTS LIST

PARTS INFORMATION

RESISTORS

- 1) 00MGD05×××140, Carbon film fixed resistor, ±5% 1/4W
 2) 00MGD05×××160, Carbon film fixed resistor, ±5% 1/6W

 Resistance value

Examples ;

① Resistance value

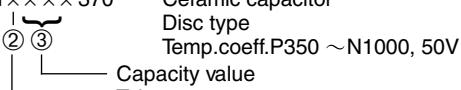
0.1 Ω 001	10 Ω 100	1 kΩ 102	100 kΩ 104
0.5 Ω 005	18 Ω 180	2.7 kΩ 272	680 kΩ 684
1 Ω 010	100 Ω 101	10 kΩ 103	1 MΩ 105
6.8 Ω 068	390 Ω 391	22 kΩ 223	4.7 MΩ 475

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

CAPACITORS

CERAMIC CAP.

- 3) 00MDD1×××370 Ceramic capacitor

 Disc type
 Temp.coeff.P350 ~N1000, 50V

 Capacity value
 Tolerance

Examples ;

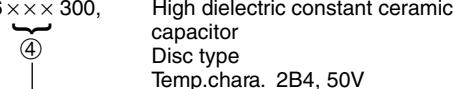
② Tolerance (Capacity deviation)

±0.25 pF 0
±0.5 pF 1
±5% 5

- * Tolerance of COMMON PARTS handled here are as follows :
 0.5 pF ~ 5 pF ±0.25 pF
 6 pF ~ 10 pF ±0.5 pF
 12 pF ~ 560 pF ±5%
- ③ Capacity value
- | | | |
|-----------------|----------------|-----------------|
| 0.5 pF 005 | 3 pF 030 | 100 pF 101 |
| 1 pF 010 | 10 pF 100 | 220 pF 221 |
| 1.5 pF 015 | 47 pF 470 | 560 pF 561 |

CERAMIC CAP.

- 4) 00MDK16×××300, High dielectric constant ceramic capacitor

 Disc type
 Temp.chara. 2B4, 50V

 Capacity value

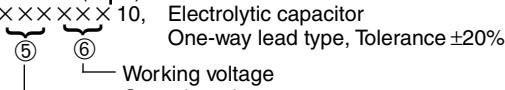
Examples ;

④ Capacity value

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

ELECTROLY CAP. ()

- 5) 00MEA×××××10, Electrolytic capacitor

 One-way lead type, Tolerance ±20%

 Working voltage
 Capacity value

Examples ;

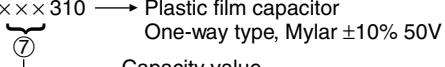
⑤ Capacity value

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

⑥ Working voltage

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

FILM CAP. ()

- 6) 00MDF15×××350 → Plastic film capacitor
 00MDF15×××310 → One-way type, Mylar ±5% 50V
 00MDF16×××310 → Plastic film capacitor

 Capacity value

Examples ;

⑦ Capacity value

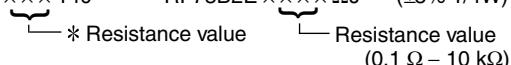
0.001 μF(1000 pF) 102	0.1 μF 104
0.0018 μF 182	0.56 μF 564
0.01 μF 103	1 μF 105
0.015 μF 153	

NOTE 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
00MNH05×××140	RF25S××××ΩJ	(±5% 1/4W)
00MNH05×××120	RF50S××××ΩJ	(±5% 1/2W)
00MNH85××××110	RF73B2A××××ΩJ	(±5% 1/10W)
00MNH95××××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
00MNF05×××140	ERD-2FCJ×××	(±5% 1/4W)
00MRF05×××140	ERD-2FCG×××	(±2% 1/4W)
00MRF02×××140	ERD-2FCG×××	(±2% 1/4W)


 * 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 00MFS20xxx2xx, 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。

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
					INPUT PWB ASSY P601 (00MWG20AJ205-)	
P601	C617		nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z
P601	C618		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
P601	CA01	/K1B	nsp	00MDK96122300	CER. CAP.	1200 PF
P601	CA01	/N1B	nsp	00MDK96122300	CER. CAP.	1200 PF
P601	CA02	/K1B	nsp	00MDK96122300	CER. CAP.	1200 PF
P601	CA02	/N1B	nsp	00MDK96122300	CER. CAP.	1200 PF
P601	CA03	/K1B	nsp	00MDK96122300	CER. CAP.	1200 PF
P601	CA03	/N1B	nsp	00MDK96122300	CER. CAP.	1200 PF
P601	CA04	/K1B	nsp	00MDK96122300	CER. CAP.	1200 PF
P601	CA04	/N1B	nsp	00MDK96122300	CER. CAP.	1200 PF
P601	CA05		nsp	00MOA47601620	ELECT. CAP.	47 UF M 16V RA-2
P601	CA06		nsp	00MOA47601620	ELECT. CAP.	47 UF M 16V RA-2
P601	CA07		nsp	00MOA47601620	ELECT. CAP.	47 UF M 16V RA-2
P601	CA08		nsp	00MOA47601620	ELECT. CAP.	47 UF M 16V RA-2
P601	CR01		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
P601	CR02		nsp	00MOA47601620	ELECT. CAP.	47 UF M 16V RA-2
P601	CR03		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
P601	CR04		nsp	00MOA47601620	ELECT. CAP.	47 UF M 16V RA-2
P601	CR05		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
P601	CR06		nsp	00MOA47601620	ELECT. CAP.	47 UF M 16V RA-2
P601	CU51		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
P601	CU52		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
P601	J604		00MYT02021130	00MYT02021130	TERMINAL	YKC21-3255V 2P CINCH JACK (GOLD)
P601	J605		00MYJ01004670	00MYJ01004670	JACK	LGY6501-0600 3.5 MINI JACK
P601	JA01		00MYT02041280	00MYT02041280	TERMINAL	YKC21-3514V 14X14 RA 2L4 WH+RE AU
P601	JR01		00MYJ15000270	00MYJ15000270	OPT. CONN.	TORX147(F.T.)
P601	JR02		00MYJ15000270	00MYJ15000270	OPT. CONN.	TORX147(F.T.)
P601	JR03		00MYJ15000270	00MYJ15000270	OPT. CONN.	TORX147(F.T.)
P601	L603		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
P601	LR01		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
P601	LR02		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
P601	LR03		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
P601	LU51		00MFC90020110	00MFC90020110	FERRITE CORE	BLM11B601S CHIP FERRITE
P601	R999		nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W
P601	RA01	F B	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
P601	RA01	/K1B	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
P601	RA01	/N1B	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
P601	RA01	/U1B	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
P601	RA02	F B	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
P601	RA02	/K1B	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
P601	RA02	/N1B	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
P601	RA02	/U1B	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
P601	RA03	F B	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
P601	RA03	/K1B	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
P601	RA03	/N1B	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
P601	RA03	/U1B	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
P601	RA04	F B	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
P601	RA04	/K1B	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
P601	RA04	/N1B	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
P601	RA04	/U1B	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
P601	RA05		nsp	00MNN05154610	CHIP RES.	150K OHM +-5% 1/16W
P601	RA06		nsp	00MNN05154610	CHIP RES.	150K OHM +-5% 1/16W
P601	RA07		nsp	00MNN05154610	CHIP RES.	150K OHM +-5% 1/16W
P601	RA08		nsp	00MNN05154610	CHIP RES.	150K OHM +-5% 1/16W
P601	RR51		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
P601	RR52		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
P601	RR53		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
P601	RR54		nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W
P601	RR55		nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W
P601	RU61		nsp	00MNN05470610	CHIP RES.	47 OHM +-5% 1/16W
					PRIMARY POWER PWB ASSY P801 (00MWG20AJ201-)	
P801	▲ C802		00MDF17104630	00MDF17104630	FILM CAP.	# ECOU2A/04ML 0.1 UF/250V
P801	▲ F801	F B	nsp	0520100120010	FUSE	# FUSE T1.25AL/250V
P801	▲ F801	/K1B	nsp	0520100090050	FUSE	# FUSE T630MAL/250V
P801	▲ F801	/N1B	0520100090050	0520100090050	FUSE	# FUSE T630MAL/250V
P801	▲ F801	/U1B	nsp	0520100120010	FUSE	# FUSE T1.25AL/250V

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P801	▲ L801		00MFN01020050	00MFN01020050	EMI FILTER	# SS26V-200076 2.0A 7.6MH
						SECONDARY POWER PWB P802 (00MWG20AJ202-)
P802	C804	nsp	00MDK98103300	CER. CAP.	0.01UF	
P802	C805	nsp	00MDK98103300	CER. CAP.	0.01UF	
P802	C810	nsp	00MOA47802520	ELECT. CAP.	4700UF/25V RA-2	
P802	C811	nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z	
P802	C812	nsp	00MOA47505020	ELECT. CAP.	4.7 UF M 50V RA-2	
P802	C813	nsp	00MOA22701620	ELECT. CAP.	220 UF M 16V RA-2	
P802	C814	nsp	00MOA22701620	ELECT. CAP.	220 UF M 16V RA-2	
P802	C815	nsp	00MOA10802520	ELECT. CAP.	1000 UF M 25V RA-2	
P802	C816	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P802	C817	nsp	00MOA22702520	ELECT. CAP.	220 UF M 25V RA-2	
P802	C818	nsp	00MDK98103300	CER. CAP.	0.01UF	
P802	C819	nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z	
P802	C820	nsp	00MDK98103300	CER. CAP.	0.01UF	
P802	C821	nsp	00MOA10802520	ELECT. CAP.	1000 UF M 25V RA-2	
P802	C822	nsp	00MDK98103300	CER. CAP.	0.01UF	
P802	C823	nsp	00MDK98103300	CER. CAP.	0.01UF	
P802	C824	nsp	00MOA22701620	ELECT. CAP.	220 UF M 16V RA-2	
P802	C825	nsp	00MOA22702520	ELECT. CAP.	220 UF M 25V RA-2	
P802	C826	nsp	00MOA10701620	ELECT. CAP.	100 UF M 16V RA-2	
P802	C827	nsp	00MDK98103300	CER. CAP.	0.01UF	
P802	C828	nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z	
P802	C829	nsp	00MOA10701620	ELECT. CAP.	100 UF M 16V RA-2	
P802	C830	nsp	00MOA22702520	ELECT. CAP.	220 UF M 25V RA-2	
P802	C831	nsp	00MOA10701620	ELECT. CAP.	100 UF M 16V RA-2	
P802	C832	nsp	00MDK98103300	CER. CAP.	0.01UF	
P802	C833	nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z	
P802	C834	nsp	00MDK98103300	CER. CAP.	0.01UF	
P802	C835	nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z	
P802	C836	nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z	
P802	D801	00MHD20053080	00MHD20053080	DIODE	EK19 90V 1.5A	
P802	D802	00MHD20053080	00MHD20053080	DIODE	EK19 90V 1.5A	
P802	D803	00MHD20053080	00MHD20053080	DIODE	EK19 90V 1.5A	
P802	D804	00MHD20053080	00MHD20053080	DIODE	EK19 90V 1.5A	
P802	D805	00MHZ20061210	00MHZ20061210	CHIP DIODE	RB160L-40 TE25 SBD 40V 1A PMDS	
P802	D806	00MHZ20061210	00MHZ20061210	CHIP DIODE	RB160L-40 TE25 SBD 40V 1A PMDS	
P802	D807	00MHZ20058210	00MHZ20058210	CHIP DIODE	RB051L-40	
P802	D808	00MHZ20058210	00MHZ20058210	CHIP DIODE	RB051L-40	
P802	D809	00MHZ20058210	00MHZ20058210	CHIP DIODE	RB051L-40	
P802	D810	00MHZ30621000	00MHZ30621000	CHIP DIODE	6.2V ZENER MA8062-M UDZS6.2B	
P802	▲ F802	00MFS20100200	00MFS20100200	FUSE	# FUSE 1A 250V SEMKO VDE	
P802	L802	00MLC14734500	00MLC14734500	COIL	RCH-110 47UH 2.5A	
P802	L803	00MLU80683010	00MLU80683010	CHIP INDUCTANCE	CDRH104RNP-680	
P802	L804	00MFC90050130	00MFC90050130	FERRITE CORE	BL02RN2-R62T2 FERRITE BEAD	
P802	L805	00MLU80683010	00MLU80683010	CHIP INDUCTANCE	CDRH104RNP-680	
P802	L806	00MLU80622010	00MLU80622010	CHIP INDUCTANCE	CDRH5D28NP-6R2NC	
P802	L807	00MLU80683010	00MLU80683010	CHIP INDUCTANCE	CDRH104RNP-680	
P802	L808	00MLU80622010	00MLU80622010	CHIP INDUCTANCE	CDRH5D28NP-6R2NC	
P802	L809	00MFC90050130	00MFC90050130	FERRITE CORE	BL02RN2-R62T2 FERRITE BEAD	
P802	L810	00MFC90050130	00MFC90050130	FERRITE CORE	BL02RN2-R62T2 FERRITE BEAD	
P802	L811	00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D	
P802	▲ Q801	00MHC91936210	00MHC91936210	IC	! BD9701FP-E2	
P802	▲ Q802	00MHC91936210	00MHC91936210	IC	! BD9701FP-E2	
P802	▲ Q803	00MHC91936210	00MHC91936210	IC	! BD9701FP-E2	
P802	▲ Q804	00MHC3891299F	00MHC3891299F	IC	! KIA7812API/P	
P802	▲ Q805	00MHC98J25210	00MHC98J25210	IC	! BA25BC0FP 2.5V REGULATOR	
P802	▲ Q807	00MHC98907320	00MHC98907320	IC	! PQ070XZ01ZP	
P802	Q808	00MHX117971A0	00MHX117971A0	CHIP TRS.	2SA1797	
P802	Q809	00MBA20035210	00MBA20035210	TRS.	DTC114EU	
P802	Q810	00MBA20035210	00MBA20035210	TRS.	DTC114EU	
P802	Q811	00MBA10026210	00MBA10026210	TRS.	DTA114EU	
P802	Q812	00MBA20035210	00MBA20035210	TRS.	DTC114EU	
P802	Q813	00MBA20035210	00MBA20035210	TRS.	DTC114EU	
P802	R801	00MNI01102110	00MNI01102110	CHIP RES.	1K OHM +-1% 1/10W	
P802	R802	00MNI01222110	00MNI01222110	CHIP RES.	2.2K OHM +-1% 1/10W	
P802	R803	00MNI01102110	00MNI01102110	CHIP RES.	1K OHM +-1% 1/10W	

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P802	R804		00MNI01152110	00MNI01152110	CHIP RES.	1.5 OHM +-1% 1/10W
P802	R806		00MNI01102110	00MNI01102110	CHIP RES.	1K OHM +-1% 1/10W
P802	R807		00MNI01102110	00MNI01102110	CHIP RES.	1K OHM +-1% 1/10W
P802	R808	nsp	00MNN05183610	CHIP RES.		18K OHM +-5% 1/16W
P802	R809		00MNI01102110	00MNI01102110	CHIP RES.	1K OHM +-1% 1/10W
P802	R810		00MNI01102110	00MNI01102110	CHIP RES.	1K OHM +-1% 1/10W
P802	R812	nsp	00MNN05472610	CHIP RES.		4.7K OHM +-5% 1/16W
P802	R813	nsp	00MNN05103610	CHIP RES.		10K OHM +-5% 1/16W
P802	R814	nsp	00MNN05472610	CHIP RES.		4.7K OHM +-5% 1/16W
P802	R815		00MNI01102110	00MNI01102110	CHIP RES.	1K OHM +-1% 1/10W
P802	R816		00MNI01472110	00MNI01472110	CHIP RES.	4.7K OHM +-1% 1/10W
P802	R817	nsp	00MNN05331610	CHIP RES.		330 OHM +-5% 1/16W
P802	R818	nsp	00MNN05104610	CHIP RES.		100K OHM +-5% 1/16W
P802	R819	nsp	00MNN05103610	CHIP RES.		10K OHM +-5% 1/16W
						DSP PWB ASSY PD01 (00MWI20AJ101-)
PD01	C101		00MEY10601070	00MEY10601070	TANTL.CAP CHIP	10UF/ 10V
PD01	C102	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C103	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C104	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C105	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C106	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C107	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C108	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C109	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C110	nsp	00MDD95101300	CER. CAP.		100 PF +-5 % CG 50V GR39
PD01	C111	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C112	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C114	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C115	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C116	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C117	nsp	00MDK98105200	CER. CAP.		1UF 10V F
PD01	C118	nsp	00MDK98103300	CER. CAP.		0.01UF
PD01	C119	nsp	00MDK96102300	CER. CAP.		1000 PF +-10 % B 50V GR36
PD01	C120		00MEY10601070	00MEY10601070	TANTL.CAP CHIP	10UF/ 10V
PD01	C121		00MEY10601070	00MEY10601070	TANTL.CAP CHIP	10UF/ 10V
PD01	C122		00MEY10601070	00MEY10601070	TANTL.CAP CHIP	10UF/ 10V
PD01	C123		00MEY22501670	00MEY22501670	TANTL.CAP CHIP	2.2UF/ 16V
PD01	C124		00MEY10601070	00MEY10601070	TANTL.CAP CHIP	10UF/ 10V
PD01	C125		00MEY10601070	00MEY10601070	TANTL.CAP CHIP	10UF/ 10V
PD01	C126	nsp	00MDD95680300	CER. CAP.		68PF (GR39)
PD01	C127	nsp	00MDK96122300	CER. CAP.		1200 PF
PD01	C129	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C131	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C132	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C201	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C202		00MEY10601620	00MEY10601620	ELECT CAP.	10UF/ 16V
PD01	C203	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C204	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C205	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C206	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C207	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C208	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C209	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C210	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C211	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C212	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C213	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C214	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C215	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C216	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C217	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C218	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C219	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C220	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C221	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C222	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF
PD01	C223	nsp	00MDK98104200	CER. CAP.		GRM39F104Z16 0.1UF

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
PD01	C224	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C225	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C226	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C227	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C228	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C229	nsp	00MDD95180300	CER. CAP.	18PF (GR39)	
PD01	C230	nsp	00MDD95120300	CER. CAP.	12 PF +-5 % CG 50V	
PD01	C231	nsp	00MDD95471300	CER. CAP.	GRM39CH471J50PT	
PD01	C232	nsp	00MDD95471300	CER. CAP.	GRM39CH471J50PT	
PD01	C233	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C235	00MEY22700690	00MEY22700690	ELECT CAP.	220UF/6.3V LOW LEAKAGE 6CE220AX	
PD01	C236	00MEY22700690	00MEY22700690	ELECT CAP.	220UF/6.3V LOW LEAKAGE 6CE220AX	
PD01	C237	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C239	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C240	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C241	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C242	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C243	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C244	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C245	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C246	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C247	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C248	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C249	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C250	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C251	nsp	00MDK98103300	CER. CAP.	0.01UF	
PD01	C301	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C302	00MEY10601620	00MEY10601620	ELECT CAP.	10UF/ 16V	
PD01	C303	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C304	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C305	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C306	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C307	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C308	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C309	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C310	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C311	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C312	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C313	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C314	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C315	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C316	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C317	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C318	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C319	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C320	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C321	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C322	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C323	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C324	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C325	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C326	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C327	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C328	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C329	nsp	00MDD95180300	CER. CAP.	18PF (GR39)	
PD01	C330	nsp	00MDD95120300	CER. CAP.	12 PF +-5 % CG 50V	
PD01	C331	nsp	00MDD95471300	CER. CAP.	GRM39CH471J50PT	
PD01	C332	nsp	00MDD95471300	CER. CAP.	GRM39CH471J50PT	
PD01	C333	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C335	00MEY22700690	00MEY22700690	ELECT CAP.	220UF/6.3V LOW LEAKAGE 6CE220AX	
PD01	C336	00MEY22700690	00MEY22700690	ELECT CAP.	220UF/6.3V LOW LEAKAGE 6CE220AX	
PD01	C337	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C339	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C340	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C341	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C342	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
PD01	C343	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
PD01	C344		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	C345		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	C346		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	C347		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	C348		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	C349		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	C350		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CA10		00MEY47601620	00MEY47601620	ELECT CAP.	47UF/ 16V
PD01	CA11		nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z
PD01	CA12		nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z
PD01	CA13		00MEY10601620	00MEY10601620	ELECT CAP.	10UF/ 16V
PD01	CA15		00MEY10601620	00MEY10601620	ELECT CAP.	10UF/ 16V
PD01	CA16		00MEY10601620	00MEY10601620	ELECT CAP.	10UF/ 16V
PD01	CA27		00MEY10601620	00MEY10601620	ELECT CAP.	10UF/ 16V
PD01	CA28		00MEY10601620	00MEY10601620	ELECT CAP.	10UF/ 16V
PD01	CA29		00MEY10601070	00MEY10601070	TANTL.CAP CHIP	10UF/ 10V
PD01	CA30		00MEY10700620	00MEY10700620	ELECT CAP.	100UF/6.3V
PD01	CA31		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CA32		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CR07		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CR08		nsp	00MDD95220300	CER. CAP.	22 PF +-5 % CG 50V GR39
PD01	CR09		nsp	00MDD95220300	CER. CAP.	22 PF +-5 % CG 50V GR39
PD01	CR10		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CR11		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CR12		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PD01	CR13		nsp	00MDK96223200	CER. CAP.	0.022 UF +-10 % XTR 16V
PD01	CR14		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CR15		00MEY10601070	00MEY10601070	TANTL.CAP CHIP	10UF/ 10V
PD01	CR16		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CR17		00MEY10601070	00MEY10601070	TANTL.CAP CHIP	10UF/ 10V
PD01	CR18		00MEY10601070	00MEY10601070	TANTL.CAP CHIP	10UF/ 10V
PD01	CR19		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CR20		nsp	00MDD95101300	CER. CAP.	100 PF +-5 % CG 50V GR39
PD01	CR21		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CR22		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CR24		nsp	00MDD95101300	CER. CAP.	100 PF +-5 % CG 50V GR39
PD01	CU01		nsp	00MDK98474200	CER. CAP.	GRM39F474Z16PT 0.47UF F 16V
PD01	CU02		nsp	00MDD95220300	CER. CAP.	22 PF +-5 % CG 50V GR39
PD01	CU03		nsp	00MDD95330300	CER. CAP.	33 PF +-5 % CG 50V
PD01	CU04		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CU05		00MEY10601070	00MEY10601070	TANTL.CAP CHIP	10UF/ 10V
PD01	CU06		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CU07		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CU08		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CU09		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CU10		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CU11		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CU12		00MEY10601070	00MEY10601070	TANTL.CAP CHIP	10UF/ 10V
PD01	CU13		00MEY10601070	00MEY10601070	TANTL.CAP CHIP	10UF/ 10V
PD01	CU14		00MEY10601070	00MEY10601070	TANTL.CAP CHIP	10UF/ 10V
PD01	CU15		00MEY10601070	00MEY10601070	TANTL.CAP CHIP	10UF/ 10V
PD01	CU16		00MEY10601070	00MEY10601070	TANTL.CAP CHIP	10UF/ 10V
PD01	CU17		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CU18		nsp	00MDD95330300	CER. CAP.	33 PF +-5 % CG 50V
PD01	CU19		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PD01	CU21		nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF
PD01	CU22		00MEY10601070	00MEY10601070	TANTL.CAP CHIP	10UF/ 10V
PD01	D201		00MHZ20038050	00MHZ20038050	CHIP DIODE	1SS300
PD01	DU01		00MHZ21303210	00MHZ21303210	CHIP DIODE	DIOD 1SS355
PD01	DU02		00MHZ21303210	00MHZ21303210	CHIP DIODE	DIOD 1SS355
PD01	DU03		00MHZ21303210	00MHZ21303210	CHIP DIODE	DIOD 1SS355
PD01	DU04		00MHZ21005000	00MHZ21005000	CHIP DIODE	1SS301 DAN202U UMT TYPE
PD01	DU05		00MHZ21303210	00MHZ21303210	CHIP DIODE	DIOD 1SS355
PD01	DU06		00MHZ21303210	00MHZ21303210	CHIP DIODE	DIOD 1SS355
PD01	DU07		00MHZ21303210	00MHZ21303210	CHIP DIODE	DIOD 1SS355
PD01	DU08		00MHZ21303210	00MHZ21303210	CHIP DIODE	DIOD 1SS355
PD01	DU10		00MHZ21303210	00MHZ21303210	CHIP DIODE	DIOD 1SS355

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P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
PD01	L101		00MFN31010060	00MFN31010060	EMI FILTER	EMI FILTER BLM11P600S
PD01	L102		00MFN31010060	00MFN31010060	EMI FILTER	EMI FILTER BLM11P600S
PD01	L103		00MFN31010060	00MFN31010060	EMI FILTER	EMI FILTER BLM11P600S
PD01	L104		00MFC90020110	00MFC90020110	FERRITE CORE	BLM11B601S CHIP FERRITE
PD01	L107		00MFC90020110	00MFC90020110	FERRITE CORE	BLM11B601S CHIP FERRITE
PD01	L108		00MFC90020110	00MFC90020110	FERRITE CORE	BLM11B601S CHIP FERRITE
PD01	L110		00MFC90020110	00MFC90020110	FERRITE CORE	BLM11B601S CHIP FERRITE
PD01	L111		00MFC90020110	00MFC90020110	FERRITE CORE	BLM11B601S CHIP FERRITE
PD01	L201		00MFM31474010	00MFM31474010	EMI FILTER	NFM2012P13C474R
PD01	L202		00MFM31474010	00MFM31474010	EMI FILTER	NFM2012P13C474R
PD01	L301		00MFM31474010	00MFM31474010	EMI FILTER	NFM2012P13C474R
PD01	L302		00MFM31474010	00MFM31474010	EMI FILTER	NFM2012P13C474R
PD01	LA01		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PD01	LA02		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PD01	LR04		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PD01	LR07		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PD01	LR08	nsp	00MNN05560610	CHIP RES.	56 OHM +5% 1/16W	
PD01	LR97		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PD01	LR98		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PD01	LR99		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PD01	LU01		00MFC90020110	00MFC90020110	FERRITE CORE	BLM11B601S CHIP FERRITE
PD01	LU02		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PD01	LU03		00MFC90020110	00MFC90020110	FERRITE CORE	BLM11B601S CHIP FERRITE
PD01	Q101		00MHC10021880	00MHC10021880	IC	CS494003-CQZ
PD01	Q102		90M-HS20AJ10R	90M-HS20AJ10R	U-PRO	M29W800DT70N1 FLASH FOR CS DSP
PD01			00M20AJ499C00	00M20AJ499C00	SOFTWARE	PROGRAM DATA FOR Q102 VERSION 01
PD01	Q104		00MHC009505K0	00MHC009505K0	IC	TC74VHC32FT
PD01	Q105		00MHY22010050	00MHY22010050	CHIP FET	HN1K05FU 2SK2824 X 2
PD01	Q106		00MHC700801P0	00MHC700801P0	IC	HD74LVC08
PD01	Q107		00MHC700801P0	00MHC700801P0	IC	HD74LVC08
PD01	Q109		00MHC011805K0	00MHC011805K0	IC	TC74LCX157FT(EL.K)
PD01	Q201		00MHC10141370	00MHC10141370	IC	TMS320DA610A003BPYP225
PD01	Q202		90M-HS20AJ20R	90M-HS20AJ20R	U-PRO	M29W800DT70N1 FLASH FOR TI-1 DSP
PD01			00M20AJ499B00	00M20AJ499B00	SOFTWARE	PROGRAM DATA FOR Q202 VERSION 01
PD01	Q204		00MHC98818990	00MHC98818990	IC	NCP1117STAT3 1.25-18.8V ADJ REG.800MA
PD01	Q205		00MHC011805K0	00MHC011805K0	IC	TC74LCX157FT(EL.K)
PD01	Q207		00MHC10229210	00MHC10229210	IC	BD4727G 2.7V RESET IC
PD01	Q208		00MHC700805S0	00MHC700805S0	IC	TC7S08F
PD01	Q301		00MHC10141370	00MHC10141370	IC	TMS320DA610A003BPYP225
PD01	Q302		90M-HS20AJ30R	90M-HS20AJ30R	U-PRO	M29W800DT70N1 FLASH FOR TI-2 DSP
PD01			00M20AJ499D00	00M20AJ499D00	SOFTWARE	PROGRAM DATA FOR Q302 VERSION 01
PD01	Q304		00MHC98818990	00MHC98818990	IC	NCP1117STAT3 1.25-18.8V ADJ REG.800MA
PD01	Q305		00MHC011805K0	00MHC011805K0	IC	TC74LCX157FT(EL.K)
PD01	Q308		00MHC700805S0	00MHC700805S0	IC	TC7S08F
PD01	QA01		00MHC12275090	00MHC12275090	IC	NJM2750M-TE2
PD01	QA05		00MHC10044480	00MHC10044480	IC	AK5357(96KHZ 24BIT ADC)
PD01	QR01		00MHC10418030	00MHC10418030	IC	LC89057W-VF4-E DAIO
PD01	QR03		00MHC011805K0	00MHC011805K0	IC	TC74LCX157FT(EL.K)
PD01	QR04		00MHC700805S0	00MHC700805S0	IC	TC7S08F
PD01	QU01		00MHC60040010	00MHC60040010	U-PRO	HD64F2505FC26DV WITHOUT SOFTWARE
PD01			00M20AJ499A00	00M20AJ499A00	SOFTWARE	PROGRAM DATA FOR QU01 VERSION 03
PD01	QU02		00MHC98203090	00MHC98203090	IC	NJU7222U33-TE1 3.3V REG.
PD01	QU03		00MHC10433990	00MHC10433990	IC	AT24C08AN-10SI-2.7
PD01	QU04		00MHC10229210	00MHC10229210	IC	BD4727G 2.7V RESET IC
PD01	QU05		00MHX300012A0	00MHX300012A0	CHIP TRS.	2SC4081 (Q R) 2SC4116 (Y GR)
PD01	QU06		00MHX300012A0	00MHX300012A0	CHIP TRS.	2SC4081 (Q R) 2SC4116 (Y GR)
PD01	QU08		00MHC008205K0	00MHC008205K0	IC	TC74VHC08FT
PD01	QU10		00MHX346721A0	00MHX346721A0	CHIP TRS.	2SC4672 Q
PD01	QU11		00MBA10026210	00MBA10026210	TRS.	DTA114EU
PD01	QU12		00MHX300012A0	00MHX300012A0	CHIP TRS.	2SC4081 (Q R) 2SC4116 (Y GR)
PD01	QU13		00MHX300012A0	00MHX300012A0	CHIP TRS.	2SC4081 (Q R) 2SC4116 (Y GR)
PD01	R101	nsp	00MNN05332610	CHIP RES.	3.3K OHM +5% 1/16W	
PD01	R102	nsp	00MNN05562610	CHIP RES.	5.6K OHM +5% 1/16W	
PD01	R103	nsp	00MNN05103610	CHIP RES.	10K OHM +5% 1/16W	
PD01	R105	nsp	00MNN05332610	CHIP RES.	3.3K OHM +5% 1/16W	
PD01	R106	nsp	00MNN05562610	CHIP RES.	5.6K OHM +5% 1/16W	
PD01	R108	nsp	00MNN05103610	CHIP RES.	10K OHM +5% 1/16W	

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P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
PD01	R109		nsp	00MNN05332610	CHIP RES.	3.3K OHM +-5% 1/16W
PD01	R110		nsp	00MNN05332610	CHIP RES.	3.3K OHM +-5% 1/16W
PD01	R111		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R112		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R113		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R114		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R115		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R116		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R117		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R118		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R119		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R120		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R121		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R122		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R123		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R124		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R125		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R126		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R128		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R129		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R130		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R131		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R132		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R133		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R134		nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W
PD01	R135		nsp	00MNN05330610	CHIP RES.	33 OHM +-5% 1/16W
PD01	R136		nsp	00MNN05330610	CHIP RES.	33 OHM +-5% 1/16W
PD01	R137		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R138		nsp	00MNN05330610	CHIP RES.	33 OHM +-5% 1/16W
PD01	R139		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R140		nsp	00MNN05330610	CHIP RES.	33 OHM +-5% 1/16W
PD01	R141		nsp	00MNN05330610	CHIP RES.	33 OHM +-5% 1/16W
PD01	R142		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R143		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R144		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R145		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R146		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R147		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R148		nsp	00MNN05562610	CHIP RES.	5.6K OHM +-5% 1/16W
PD01	R149		nsp	00MNN05332610	CHIP RES.	3.3K OHM +-5% 1/16W
PD01	R150		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R151		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R152		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R153		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R154		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R156		nsp	00MNN05332610	CHIP RES.	3.3K OHM +-5% 1/16W
PD01	R158		nsp	00MNN05562610	CHIP RES.	5.6K OHM +-5% 1/16W
PD01	R159		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R160		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R161		nsp	00MNN05152610	CHIP RES.	1.5K OHM +-5% 1/16W
PD01	R162		nsp	00MNN05152610	CHIP RES.	1.5K OHM +-5% 1/16W
PD01	R163		00MBW05220020	00MBW05220020	RES. COMPO.	CN1J4TTD
PD01	R164		00MBW05220020	00MBW05220020	RES. COMPO.	CN1J4TTD
PD01	R165		00MBW05220020	00MBW05220020	RES. COMPO.	CN1J4TTD
PD01	R166		00MBW05220020	00MBW05220020	RES. COMPO.	CN1J4TTD
PD01	R167		00MBW05220020	00MBW05220020	RES. COMPO.	CN1J4TTD
PD01	R168		nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W
PD01	R169		00MBW05220020	00MBW05220020	RES. COMPO.	CN1J4TTD
PD01	R170		nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W
PD01	R171		00MBW05220020	00MBW05220020	RES. COMPO.	CN1J4TTD
PD01	R172		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R173		nsp	00MNN05332610	CHIP RES.	3.3K OHM +-5% 1/16W
PD01	R202		nsp	00MNN05104610	CHIP RES.	100K OHM +-5% 1/16W
PD01	R203		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PD01	R204		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PD01	R206		nsp	00MNN05392610	CHIP RES.	3.9K OHM +-5% 1/16W
PD01	R207		nsp	00MNN05182610	CHIP RES.	1.8K OHM +-5% 1/16W

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P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
PD01	R208		nsp	00MNN05392610	CHIP RES.	3.9K OHM +-5% 1/16W
PD01	R209		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PD01	R210		nsp	00MNN05182610	CHIP RES.	1.8K OHM +-5% 1/16W
PD01	R212		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R214		00MFN31000010	00MFN31000010	EMI FILTER	EMI FILTER BLM11A221S
PD01	R223		nsp	00MNN05560610	CHIP RES.	56 OHM +-5% 1/16W
PD01	R224		nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W
PD01	R225		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PD01	R231		nsp	00MNN05151610	CHIP RES.	150 OHM +-5% 1/16W
PD01	R232		nsp	00MNN05105610	CHIP RES.	1M OHM +-5% 1/16W
PD01	R233		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R234		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R235		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R236		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R237		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R238		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R239		nsp	00MNN05470610	CHIP RES.	47 OHM +-5% 1/16W
PD01	R240		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R243		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R244		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R255		nsp	00MNN05182610	CHIP RES.	1.8K OHM +-5% 1/16W
PD01	R257		nsp	00MNN05392610	CHIP RES.	3.9K OHM +-5% 1/16W
PD01	R258		nsp	00MNN05182610	CHIP RES.	1.8K OHM +-5% 1/16W
PD01	R264		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R277		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R278		nsp	00MNN05470610	CHIP RES.	47 OHM +-5% 1/16W
PD01	R279		nsp	00MNN05470610	CHIP RES.	47 OHM +-5% 1/16W
PD01	R280		nsp	00MNN05470610	CHIP RES.	47 OHM +-5% 1/16W
PD01	R281		00MNM12200020	00MNM12200020	CHIP RES.	RK73H1JTTD2200F 220 OHM +-1% 1/10W
PD01	R282		00MNM1033G020	00MNM1033G020	CHIP RES.	RK73H1JTTD3R30F 3.3 OHM +-1% 1/10W
PD01	R285		nsp	00MNN05332610	CHIP RES.	3.3K OHM +-5% 1/16W
PD01	R286		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PD01	R287		nsp	00MNN05223610	CHIP RES.	22K OHM +-5% 1/16W
PD01	R291		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	R292		nsp	00MNN05560610	CHIP RES.	56 OHM +-5% 1/16W
PD01	R294		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	R299		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	R302		nsp	00MNN05104610	CHIP RES.	100K OHM +-5% 1/16W
PD01	R303		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PD01	R304		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PD01	R306		nsp	00MNN05392610	CHIP RES.	3.9K OHM +-5% 1/16W
PD01	R307		nsp	00MNN05182610	CHIP RES.	1.8K OHM +-5% 1/16W
PD01	R308		nsp	00MNN05392610	CHIP RES.	3.9K OHM +-5% 1/16W
PD01	R309		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PD01	R310		nsp	00MNN05182610	CHIP RES.	1.8K OHM +-5% 1/16W
PD01	R312		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	R314		00MFN31000010	00MFN31000010	EMI FILTER	EMI FILTER BLM11A221S
PD01	R315		nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W
PD01	R316		nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W
PD01	R317		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	R318		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	R323		nsp	00MNN05560610	CHIP RES.	56 OHM +-5% 1/16W
PD01	R324		nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W
PD01	R325		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PD01	R331		nsp	00MNN05151610	CHIP RES.	150 OHM +-5% 1/16W
PD01	R332		nsp	00MNN05105610	CHIP RES.	1M OHM +-5% 1/16W
PD01	R333		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R334		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R335		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R336		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R337		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R338		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R339		nsp	00MNN05470610	CHIP RES.	47 OHM +-5% 1/16W
PD01	R340		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R343		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R344		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R355		nsp	00MNN05182610	CHIP RES.	1.8K OHM +-5% 1/16W

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P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
PD01	R357		nsp	00MNN05392610	CHIP RES.	3.9K OHM +-5% 1/16W
PD01	R358		nsp	00MNN05182610	CHIP RES.	1.8K OHM +-5% 1/16W
PD01	R377		00MBW05470350	00MBW05470350	RES. COMPO.	CN1J4TTD470J 47 OHM +-5% X4
PD01	R378		nsp	00MNN05470610	CHIP RES.	47 OHM +-5% 1/16W
PD01	R379		nsp	00MNN05470610	CHIP RES.	47 OHM +-5% 1/16W
PD01	R380		nsp	00MNN05470610	CHIP RES.	47 OHM +-5% 1/16W
PD01	R381		00MNM12200020	00MNM12200020	CHIP RES.	RK73H1JTTD2200F 220 OHM +-1% 1/10W
PD01	R382		00MNM1033G020	00MNM1033G020	CHIP RES.	RK73H1JTTD3R30F 3.3 OHM +-1% 1/10W
PD01	R385		nsp	00MNN05332610	CHIP RES.	3.3K OHM +-5% 1/16W
PD01	R391		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	R392		nsp	00MNN05560610	CHIP RES.	56 OHM +-5% 1/16W
PD01	R394		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	R399		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	RA13		nsp	00MNN05104610	CHIP RES.	100K OHM +-5% 1/16W
PD01	RA14		nsp	00MNN05104610	CHIP RES.	100K OHM +-5% 1/16W
PD01	RA15		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	RA16		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	RA21		nsp	00MNN05153610	CHIP RES.	15K OHM +-5% 1/16W
PD01	RA22		nsp	00MNN05153610	CHIP RES.	15K OHM +-5% 1/16W
PD01	RA23		nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W
PD01	RA24		nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W
PD01	RA39		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	RA40		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	RA43		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	RA44		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	RA45		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	RA46		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	RA47		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PD01	RA48		nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W
PD01	RA49		nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W
PD01	RA97		nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W
PD01	RA98		nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W
PD01	RA99		nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W
PD01	RR01		nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W
PD01	RR10		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	RR11		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	RR13		nsp	00MNN05105610	CHIP RES.	1M OHM +-5% 1/16W
PD01	RR14		nsp	00MNN05560610	CHIP RES.	56 OHM +-5% 1/16W
PD01	RR15		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	RR16		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	RR17		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	RR18		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	RR19		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	RR20		nsp	00MNN05221610	CHIP RES.	220 OHM +-5% 1/16W
PD01	RR22		nsp	00MNN05330610	CHIP RES.	33 OHM +-5% 1/16W
PD01	RR23		nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W
PD01	RR24		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	RR25		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PD01	RR27		nsp	00MNN05330610	CHIP RES.	33 OHM +-5% 1/16W
PD01	RR28		nsp	00MNN05223610	CHIP RES.	22K OHM +-5% 1/16W
PD01	RR29		nsp	00MNN05332610	CHIP RES.	3.3K OHM +-5% 1/16W
PD01	RR30		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	RR31		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	RR32		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	RR33		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PD01	RR34		nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W
PD01	RU01		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PD01	RU02		nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W
PD01	RU03		nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W
PD01	RU04		nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W
PD01	RU05		nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W
PD01	RU06		nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W
PD01	RU07		nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W
PD01	RU08		nsp	00MNN05183610	CHIP RES.	18K OHM +-5% 1/16W
PD01	RU09		nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W
PD01	RU10		nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W
PD01	RU11		nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W

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P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
PD01	RU12	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
PD01	RU13	nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W	
PD01	RU14	nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W	
PD01	RU15	nsp	00MNN05105610	CHIP RES.	1M OHM +-5% 1/16W	
PD01	RU16	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
PD01	RU17	nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W	
PD01	RU19	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
PD01	RU20	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
PD01	RU21	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
PD01	RU22	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
PD01	RU23	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	
PD01	RU24	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	
PD01	RU25	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
PD01	RU26	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
PD01	RU27	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
PD01	RU28	nsp	00MNN05183610	CHIP RES.	18K OHM +-5% 1/16W	
PD01	RU29	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
PD01	RU31	nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W	
PD01	RU32	nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W	
PD01	RU33	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
PD01	RU34	nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W	
PD01	RU36	00MFC90020110	00MFC90020110	FERRITE CORE	BLM11B601S CHIP FERRITE	
PD01	RU37	00MFC90020110	00MFC90020110	FERRITE CORE	BLM11B601S CHIP FERRITE	
PD01	RU38	00MFC90020110	00MFC90020110	FERRITE CORE	BLM11B601S CHIP FERRITE	
PD01	RU39	00MFC90020110	00MFC90020110	FERRITE CORE	BLM11B601S CHIP FERRITE	
PD01	RU40	00MFC90020110	00MFC90020110	FERRITE CORE	BLM11B601S CHIP FERRITE	
PD01	RU41	00MFC90020110	00MFC90020110	FERRITE CORE	BLM11B601S CHIP FERRITE	
PD01	RU42	nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W	
PD01	RU43	nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W	
PD01	RU44	nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W	
PD01	RU45	nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W	
PD01	RU48	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
PD01	RU50	nsp	00MNN05223610	CHIP RES.	22K OHM +-5% 1/16W	
PD01	RU51	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
PD01	RU52	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
PD01	RU53	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
PD01	RU54	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
PD01	RU55	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
PD01	X201	00MJX24006350	00MJX24006350	X'TAL	SMD-49 24.576MHZ +10 PPM X-TAL	
PD01	X301	00MJX24006350	00MJX24006350	X'TAL	SMD-49 24.576MHZ +10 PPM X-TAL	
PD01	XR01	00MJX12006350	00MJX12006350	X'TAL	SMD-49 12.288MHZ	
PD01	XU01	00MFQ02005070	00MFQ02005070	CER. VIB.	CSTCE20M0V53-R0	
					FRONT PWB ASSY PF01 (00MWG20AJ204-)	
PF01	CF01	00MEY10700620	00MEY10700620	ELECT CAP.	100UF/6.3V	
PF01	CF02	nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z	
PF01	CF03	nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z	
PF01	CF04	nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z	
PF01	CF06	nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z	
PF01	CF07	nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z	
PF01	CF08	nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z	
PF01	CF09	nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z	
PF01	CF10	nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z	
PF01	CF13	nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z	
PF01	CF14	00MEY10700620	00MEY10700620	ELECT CAP.	100UF/6.3V	
PF01	CF15	nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z	
PF01	CF16	nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z	
PF01	DF01	00MHQ10202210	00MHQ10202210	DISPLAY	LB-302DF	
PF01	DF02	00MHI10101210	00MHI10101210	L.E.D.	SML-310LT	
PF01	DF03	00MHI10203210	00MHI10203210	L.E.D.	SML310BAT-T86	
PF01	DF04	00MHI10104210	00MHI10104210	L.E.D.	SML-310MT GREEN CHIP LED	
PF01	DF05	00MHI10101210	00MHI10101210	L.E.D.	SML-310LT	
PF01	DF06	00MHI10203210	00MHI10203210	L.E.D.	SML310BAT-T86	
PF01	DF07	00MHI10104210	00MHI10104210	L.E.D.	SML-310MT GREEN CHIP LED	
PF01	DF08	00MHI10104210	00MHI10104210	L.E.D.	SML-310MT GREEN CHIP LED	
PF01	DF09	00MHI10104210	00MHI10104210	L.E.D.	SML-310MT GREEN CHIP LED	
PF01	DF11	00MHZ21303210	00MHZ21303210	CHIP DIODE	DIOD 1SS355	
PF01	LF03	00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D	

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
PF01	QF01		00MHC12274050	00MHC12274050	IC	TB62709FG-EL
PF01	QF02		00MHC809449R0	00MHC809449R0	IC	74HC4094BT
PF01	QF06		00MBA10026210	00MBA10026210	TRS.	DTA114EU
PF01	QF07		00MHX300012A0	00MHX300012A0	CHIP TRS.	2SC4081 (Q R) 2SC4116 (Y GR)
PF01	QF08		00MBA20035210	00MBA20035210	TRS.	DTC114EU
PF01	QF09		00MBA20035210	00MBA20035210	TRS.	DTC114EU
PF01	QF10		00MBA20035210	00MBA20035210	TRS.	DTC114EU
PF01	QF11		00MBA20035210	00MBA20035210	TRS.	DTC114EU
PF01	QF12		00MBA20035210	00MBA20035210	TRS.	DTC114EU
PF01	QF13		00MBA20035210	00MBA20035210	TRS.	DTC114EU
PF01	QF14		00MBA20035210	00MBA20035210	TRS.	DTC114EU
PF01	RF01	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W	
PF01	RF02	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W	
PF01	RF03	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W	
PF01	RF04	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
PF01	RF05	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
PF01	RF06	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	
PF01	RF07	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
PF01	RF08	nsp	00MDK98105200	CER. CAP.	1UF 10V F	
PF01	RF09	nsp	00MNN05151610	CHIP RES.	150 OHM +-5% 1/16W	
PF01	RF12	nsp	00MNN05391610	CHIP RES.	390 OHM +-5% 1/16W	
PF01	RF15	nsp	00MNN05471610	CHIP RES.	470 OHM +-5% 1/16W	
PF01	RF16	nsp	00MNN05391610	CHIP RES.	390 OHM +-5% 1/16W	
PF01	RF17	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
PF01	RF18	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W	
PF01	RF19	nsp	00MNN05153610	CHIP RES.	15K OHM +-5% 1/16W	
PF01	RF20	nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W	
PF01	RF22	nsp	00MNN05151610	CHIP RES.	150 OHM +-5% 1/16W	
PF01	RF25	nsp	00MNN05391610	CHIP RES.	390 OHM +-5% 1/16W	
PF01	RF26	nsp	00MNN05391610	CHIP RES.	390 OHM +-5% 1/16W	
PF01	RF35	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
PF01	RF36	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
PF01	RF37	nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W	
PF01	RF41	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W	
PF01	RF42	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W	
PF01	RF43	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W	
PF01	SF01	00MSP01012030	00MSP01012030	PUSH SW	SKHVB 260GF RED	
PF01	SF02	00MSP01012030	00MSP01012030	PUSH SW	SKHVB 260GF RED	
PF01	SF03	00MSP01012030	00MSP01012030	PUSH SW	SKHVB 260GF RED	
PF01	SF04	00MSP01012030	00MSP01012030	PUSH SW	SKHVB 260GF RED	
PF01	ZF01	00MHW10004210	00MHW10004210	PHOTO UNIT	RPM6936-V4 (IR SENSOR)	
					DIGITAL AMP PWB PP01 (00MWG20AJ203-)	
PP01	C501	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PP01	C502	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
PP01	C503	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PP01	C504	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PP01	C505	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
PP01	C506	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PP01	C507	nsp	00MOA47601620	ELECT. CAP.	47 UF M 16V RA-2	
PP01	C508	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PP01	C509	nsp	00MDK96102300	CER. CAP.	1000 PF +-10% B 50V GR36	
PP01	C510	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
PP01	C511	nsp	00MOA47601620	ELECT. CAP.	47 UF M 16V RA-2	
PP01	C512	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PP01	C513	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PP01	C514	nsp	00MDD95150300	CER. CAP.	15 PF +-5% CG 50V GR39	
PP01	C515	nsp	00MDD95150300	CER. CAP.	15 PF +-5% CG 50V GR39	
PP01	C516	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PP01	C517	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PP01	C519	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PP01	C521	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PP01	C523	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PP01	C524	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PP01	C525	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PP01	C526	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PP01	C527	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PP01	C601	nsp	00MDK96472300	CER. CAP.	4700 PF +-10% B 50V GR39	

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P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
PP01	C603		nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K
PP01	C605		nsp	00MOA10701620	ELECT. CAP.	100 UF M 16V RA-2
PP01	C606		nsp	00MOA47601620	ELECT. CAP.	47 UF M 16V RA-2
PP01	C607		nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K
PP01	C609		nsp	00MOA47601620	ELECT. CAP.	47 UF M 16V RA-2
PP01	C611		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	C613		nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K
PP01	C615		nsp	00MDK96102300	CER. CAP.	1000 PF +-10 % B 50V GR36
PP01	C619		nsp	00MDK98105200	CER. CAP.	1UF 10V F
PP01	C621		nsp	00MDK98105200	CER. CAP.	1UF 10V F
PP01	C651		nsp	00MOA10800620	ELECT. CAP.	1000UF 6.3V M RA-2
PP01	C652		nsp	00MOA10800620	ELECT. CAP.	1000UF 6.3V M RA-2
PP01	CD01		00MOB10906310	00MOB10906310	ELECT. CAP.	10000UF/63V
PP01	CD02		nsp	00MOA22705020	ELECT. CAP.	220 UF M 50V RA-2
PP01	CD03		nsp	00MDK96102300	CER. CAP.	1000 PF +-10 % B 50V GR36
PP01	CD04		nsp	00MDD95221300	CER. CAP.	220 PF +-5 % CG 50V GR39
PP01	CD05		nsp	00MDD91100300	CER. CAP.	10 PF +-0.5 PF CH 50V GR39
PP01	CD06		nsp	00MDD95101300	CER. CAP.	100 PF +-5 % CG 50V GR39
PP01	CD08		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CD09		nsp	00MOA22705020	ELECT. CAP.	220 UF M 50V RA-2
PP01	CD10		nsp	00MOA10701620	ELECT. CAP.	100 UF M 16V RA-2
PP01	CD11		nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z
PP01	CD12		nsp	00MDK98104300	CER. CAP.	0.1UF 50V F C1608JF1H104Z
PP01	CD13		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CD16		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP01		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP02		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP03		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP04		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP05		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP06		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP07		nsp	00MOA10701620	ELECT. CAP.	100 UF M 16V RA-2
PP01	CP08		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP09		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP10		nsp	00MDK96473300	CER. CAP.	0.047UF +-10% C1608JB1H473K
PP01	CP11		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP12		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP13		nsp	00MDK96473300	CER. CAP.	0.047UF +-10% C1608JB1H473K
PP01	CP14		nsp	00MDK96473300	CER. CAP.	0.047UF +-10% C1608JB1H473K
PP01	CP15		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP16		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP17		nsp	00MDK96473300	CER. CAP.	0.047UF +-10% C1608JB1H473K
PP01	CP18		nsp	00MDD95101300	CER. CAP.	100 PF +-5 % CG 50V GR39
PP01	CP19		nsp	00MDD95101300	CER. CAP.	100 PF +-5 % CG 50V GR39
PP01	CP20		nsp	00MDD95101300	CER. CAP.	100 PF +-5 % CG 50V GR39
PP01	CP21		nsp	00MDD95101300	CER. CAP.	100 PF +-5 % CG 50V GR39
PP01	CP22		nsp	00MOA47705020	ELECT. CAP.	470 UF M 50V RA-2
PP01	CP23		nsp	00MOA47705020	ELECT. CAP.	470 UF M 50V RA-2
PP01	CP24		00MDF15474570	00MDF15474570	FILM CAP.	0.47UF 100V J ECQV1474JM3
PP01	CP25		00MDF15474570	00MDF15474570	FILM CAP.	0.47UF 100V J ECQV1474JM3
PP01	CP26		00MDF15104350	00MDF15104350	FILM CAP.	0.1UF J N 50V
PP01	CP27		00MDF15104350	00MDF15104350	FILM CAP.	0.1UF J N 50V
PP01	CP28		00MDF15104350	00MDF15104350	FILM CAP.	0.1UF J N 50V
PP01	CP29		00MDF15104350	00MDF15104350	FILM CAP.	0.1UF J N 50V
PP01	CP30		nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K
PP01	CP31		nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K
PP01	CP32		nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K
PP01	CP33		nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K
PP01	CP34		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP35		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP36		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP37		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP38		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP39		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP40		nsp	00MOA10701620	ELECT. CAP.	100 UF M 16V RA-2
PP01	CP41		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP42		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
PP01	CP43		nsp	00MDK96473300	CER. CAP.	0.047UF +-10% C1608JB1H473K
PP01	CP44		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP45		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP46		nsp	00MDK96473300	CER. CAP.	0.047UF +-10% C1608JB1H473K
PP01	CP47		nsp	00MDK96473300	CER. CAP.	0.047UF +-10% C1608JB1H473K
PP01	CP48		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP49		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP50		nsp	00MDK96473300	CER. CAP.	0.047UF +-10% C1608JB1H473K
PP01	CP51		nsp	00MDD95101300	CER. CAP.	100 PF +-5 % CG 50V GR39
PP01	CP52		nsp	00MDD95101300	CER. CAP.	100 PF +-5 % CG 50V GR39
PP01	CP53		nsp	00MDD95101300	CER. CAP.	100 PF +-5 % CG 50V GR39
PP01	CP54		nsp	00MDD95101300	CER. CAP.	100 PF +-5 % CG 50V GR39
PP01	CP55		nsp	00MOA47705020	ELECT. CAP.	470 UF M 50V RA-2
PP01	CP56		nsp	00MOA47705020	ELECT. CAP.	470 UF M 50V RA-2
PP01	CP57		00MDF15474570	00MDF15474570	FILM CAP.	0.47UF 100V J ECQV1474JM3
PP01	CP58		00MDF15474570	00MDF15474570	FILM CAP.	0.47UF 100V J ECQV1474JM3
PP01	CP59		00MDF15104350	00MDF15104350	FILM CAP.	0.1UF J N 50V
PP01	CP60		00MDF15104350	00MDF15104350	FILM CAP.	0.1UF J N 50V
PP01	CP61		00MDF15104350	00MDF15104350	FILM CAP.	0.1UF J N 50V
PP01	CP62		00MDF15104350	00MDF15104350	FILM CAP.	0.1UF J N 50V
PP01	CP63		nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K
PP01	CP64		nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K
PP01	CP65		nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K
PP01	CP66		nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K
PP01	CP67		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP68		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP69		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP70		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP71		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP72		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP73		nsp	00MOA10701620	ELECT. CAP.	100 UF M 16V RA-2
PP01	CP74		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP75		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP76		nsp	00MDK96473300	CER. CAP.	0.047UF +-10% C1608JB1H473K
PP01	CP77		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP78		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP79		nsp	00MDK96473300	CER. CAP.	0.047UF +-10% C1608JB1H473K
PP01	CP80		nsp	00MDK96473300	CER. CAP.	0.047UF +-10% C1608JB1H473K
PP01	CP81		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP82		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PP01	CP83		nsp	00MDK96473300	CER. CAP.	0.047UF +-10% C1608JB1H473K
PP01	CP84		nsp	00MDD95101300	CER. CAP.	100 PF +-5 % CG 50V GR39
PP01	CP85		nsp	00MDD95101300	CER. CAP.	100 PF +-5 % CG 50V GR39
PP01	CP86		nsp	00MDD95101300	CER. CAP.	100 PF +-5 % CG 50V GR39
PP01	CP87		nsp	00MDD95101300	CER. CAP.	100 PF +-5 % CG 50V GR39
PP01	CP88		nsp	00MOA47705020	ELECT. CAP.	470 UF M 50V RA-2
PP01	CP89		nsp	00MOA47705020	ELECT. CAP.	470 UF M 50V RA-2
PP01	CP90		00MDF15474570	00MDF15474570	FILM CAP.	0.47UF 100V J ECQV1474JM3
PP01	CP91		00MDF15474570	00MDF15474570	FILM CAP.	0.47UF 100V J ECQV1474JM3
PP01	CP92		00MDF15104350	00MDF15104350	FILM CAP.	0.1UF J N 50V
PP01	CP93		00MDF15104350	00MDF15104350	FILM CAP.	0.1UF J N 50V
PP01	CP94		00MDF15104350	00MDF15104350	FILM CAP.	0.1UF J N 50V
PP01	CP95		00MDF15104350	00MDF15104350	FILM CAP.	0.1UF J N 50V
PP01	CP96		nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K
PP01	CP97		nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K
PP01	CP98		nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K
PP01	CP99		nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K
PP01	D651		00MHZ21303210	00MHZ21303210	CHIP DIODE	DIOD 1SS355
PP01	D652		00MHZ21303210	00MHZ21303210	CHIP DIODE	DIOD 1SS355
PP01	D653		00MHZ21303210	00MHZ21303210	CHIP DIODE	DIOD 1SS355
PP01	D654		00MHZ21303210	00MHZ21303210	CHIP DIODE	DIOD 1SS355
PP01	D655		00MHZ21303210	00MHZ21303210	CHIP DIODE	DIOD 1SS355
PP01	D656		00MHZ21303210	00MHZ21303210	CHIP DIODE	DIOD 1SS355
PP01	▲ DD01		00MHE10003100	00MHE10003100	DIODE	! FCH10A15
PP01	▲ DD02		00MHE10004100	00MHE10004100	DIODE	! FRH10A15
PP01	▲ DD03		00MHE10005210	00MHE10005210	DIODE	! RB085T-60
PP01	DD06		00MHZ30023050	00MHZ30023050	CHIP DIODE	02CZ2.4-X

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
PP01	DD07		00MHZ20061210	00MHZ20061210	CHIP DIODE	RB160L-40 TE25 SBD 40V 1A PMDS
PP01	DD08		00MHZ20061210	00MHZ20061210	CHIP DIODE	RB160L-40 TE25 SBD 40V 1A PMDS
PP01	DD09		00MHZ21303210	00MHZ21303210	CHIP DIODE	DIOD 1SS355
PP01	L501		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	L502		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	L503		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	L504		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	L601		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	LD01		00MLC11034420	00MLC11034420	COIL	7G14D-100M
PP01	LD02		00MLC11034420	00MLC11034420	COIL	7G14D-100M
PP01	LD03		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	LD04		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	LP01		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	LP02		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	LP03		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	LP04		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	LP06		00MLC11034430	00MLC11034430	COIL	7G09A-100M
PP01	LP07		00MLC11034430	00MLC11034430	COIL	7G09A-100M
PP01	LP08		00MLC11034430	00MLC11034430	COIL	7G09A-100M
PP01	LP09		00MLC11034430	00MLC11034430	COIL	7G09A-100M
PP01	LP31		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	LP32		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	LP33		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	LP34		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	LP36		00MLC11034430	00MLC11034430	COIL	7G09A-100M
PP01	LP37		00MLC11034430	00MLC11034430	COIL	7G09A-100M
PP01	LP38		00MLC11034430	00MLC11034430	COIL	7G09A-100M
PP01	LP39		00MLC11034430	00MLC11034430	COIL	7G09A-100M
PP01	LP61		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	LP62		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	LP63		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	LP64		00MFC90020220	00MFC90020220	FERRITE CORE	BLM18AG121SN1D
PP01	LP66		00MLC11034430	00MLC11034430	COIL	7G09A-100M
PP01	LP67		00MLC11034430	00MLC11034430	COIL	7G09A-100M
PP01	LP68		00MLC11034430	00MLC11034430	COIL	7G09A-100M
PP01	LP69		00MLC11034430	00MLC11034430	COIL	7G09A-100M
PP01	Q501		00MHC12273370	00MHC12273370	IC	TAS5508PAG
PP01	Q504		00MHX100012A0	00MHX100012A0	CHIP TRS.	2SA1586 (Y GR) TE85L / 2SA1576A (Q R)
PP01	Q505		00MHX100012A0	00MHX100012A0	CHIP TRS.	2SA1586 (Y GR) TE85L / 2SA1576A (Q R)
PP01	Q506		00MHX100012A0	00MHX100012A0	CHIP TRS.	2SA1586 (Y GR) TE85L / 2SA1576A (Q R)
PP01	Q507		00MHX300012A0	00MHX300012A0	CHIP TRS.	2SC4081 (Q R) 2SC4116 (Y GR)
PP01	Q601		00MHC10036090	00MHC10036090	IC	NJM2904M-TE1
PP01	Q603		00MBA20016050	00MBA20016050	TRS.	HN1C03F(B)(NPNX2(MUTING))
PP01	Q611		00MHX300012A0	00MHX300012A0	CHIP TRS.	2SC4081 (Q R) 2SC4116 (Y GR)
PP01	Q612		00MHX300012A0	00MHX300012A0	CHIP TRS.	2SC4081 (Q R) 2SC4116 (Y GR)
PP01	Q653		00MHX100012A0	00MHX100012A0	CHIP TRS.	2SA1586 (Y GR) TE85L / 2SA1576A (Q R)
PP01	QD01		00MHC10036090	00MHC10036090	IC	NJM2904M-TE1
PP01	QD02		00D2622557900	00D2622557900	IC	SN74LV14APW-EL2 +REF
PP01	QD03		00MHX300012A0	00MHX300012A0	CHIP TRS.	2SC4081 (Q R) 2SC4116 (Y GR)
PP01	QD04		00MHX346721A0	00MHX346721A0	CHIP TRS.	2SC4672 Q
PP01	QD05		00MHX100012A0	00MHX100012A0	CHIP TRS.	2SA1586 (Y GR) TE85L / 2SA1576A (Q R)
PP01	▲ QD06		00MHF50821000	00MHF50821000	F.E.T.	! RSS070P05-TB
PP01	QP01		00D2623503911	00D2623503911	IC	TAS5142DKD
PP01	QP02		00D2623503911	00D2623503911	IC	TAS5142DKD
PP01	QP03		00D2623503911	00D2623503911	IC	TAS5142DKD
PP01	R501	nsp	00MNN05101610	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PP01	R502	nsp	00MNN05101610	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PP01	R503	nsp	00MNN05101610	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PP01	R504	nsp	00MNN05101610	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PP01	R505	nsp	00MNN05103610	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PP01	R506	nsp	00MNN05103610	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PP01	R508	nsp	00MNN05102610	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PP01	R509	nsp	00MNN05047610	00MNN05047610	CHIP RES.	4.7 OHM +-5% 1/16W
PP01	R510	nsp	00MNN05101610	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PP01	R511	nsp	00MNN05105610	00MNN05105610	CHIP RES.	1M OHM +-5% 1/16W
PP01	R513	nsp	00MNN05000610	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W
PP01	R514	nsp	00MNN05000610	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W

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P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
PP01	R515		nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W
PP01	R516		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PP01	R517		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PP01	R518		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PP01	R519		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PP01	R520		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PP01	R521		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PP01	R522		nsp	00MNN05104610	CHIP RES.	100K OHM +-5% 1/16W
PP01	R523		nsp	00MNN05104610	CHIP RES.	100K OHM +-5% 1/16W
PP01	R524		nsp	00MNN05104610	CHIP RES.	100K OHM +-5% 1/16W
PP01	R525		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PP01	R526		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PP01	R527		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PP01	R528		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PP01	R529		nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W
PP01	R530		nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W
PP01	R531		nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W
PP01	R532		nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W
PP01	R533		nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W
PP01	R601		nsp	00MNN05223610	CHIP RES.	22K OHM +-5% 1/16W
PP01	R603		nsp	00MNN05223610	CHIP RES.	22K OHM +-5% 1/16W
PP01	R605		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PP01	R607		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PP01	R609		nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W
PP01	R611		nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W
PP01	R612		nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W
PP01	R613		nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W
PP01	R615		nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W
PP01	R617		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PP01	R619		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PP01	R621		nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W
PP01	R623		nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W
PP01	R625		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PP01	R626		nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W
PP01	R627		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PP01	R628		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PP01	R629		nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W
PP01	R651		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PP01	R653		nsp	00MNN05474610	CHIP RES.	470K OHM +-5% 1/16W
PP01	R654		nsp	00MNN05474610	CHIP RES.	470K OHM +-5% 1/16W
PP01	R656		nsp	00MDK98105200	CER. CAP.	1UF 10V F
PP01	RD01	00MNI01103110	00MNI01103110	CHIP RES.		10K OHM +-1% 1/10W
PP01	RD02	00MNI01103110	00MNI01103110	CHIP RES.		10K OHM +-1% 1/10W
PP01	RD03		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PP01	RD04		nsp	00MNN05153610	CHIP RES.	15K OHM +-5% 1/16W
PP01	RD05	00MNI01103110	00MNI01103110	CHIP RES.		10K OHM +-1% 1/10W
PP01	RD06	00MNI01222110	00MNI01222110	CHIP RES.		2.2K OHM +-1% 1/10W
PP01	RD07	00MNI01103110	00MNI01103110	CHIP RES.		10K OHM +-1% 1/10W
PP01	RD08		nsp	00MNN05104610	CHIP RES.	100K OHM +-5% 1/16W
PP01	RD09		nsp	00MNN05561610	CHIP RES.	560 OHM +-5% 1/16W
PP01	RD12		nsp	00MNN05100610	CHIP RES.	10 OHM +-5% 1/16W
PP01	RD15		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W
PP01	RD17		nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W
PP01	RP01		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PP01	RP02		nsp	00MNN05683610	CHIP RES.	68K OHM +-5% 1/16W
PP01	RP03		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PP01	RP09		nsp	00MNN05033610	CHIP RES.	3.3 OHM +-5% 1/16W
PP01	RP10		nsp	00MNN05033610	CHIP RES.	3.3 OHM +-5% 1/16W
PP01	RP11		nsp	00MNN05033610	CHIP RES.	3.3 OHM +-5% 1/16W
PP01	RP12		nsp	00MNN05033610	CHIP RES.	3.3 OHM +-5% 1/16W
PP01	RP13		nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W
PP01	RP14		nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W
PP01	RP15		nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W
PP01	RP16		nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W
PP01	RP31		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PP01	RP32		nsp	00MNN05683610	CHIP RES.	68K OHM +-5% 1/16W
PP01	RP33		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W

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P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
PP01	RP39	nsp	00MNN05033610	CHIP RES.	3.3 OHM +-5% 1/16W	
PP01	RP40	nsp	00MNN05033610	CHIP RES.	3.3 OHM +-5% 1/16W	
PP01	RP41	nsp	00MNN05033610	CHIP RES.	3.3 OHM +-5% 1/16W	
PP01	RP42	nsp	00MNN05033610	CHIP RES.	3.3 OHM +-5% 1/16W	
PP01	RP43	nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W	
PP01	RP44	nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W	
PP01	RP45	nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W	
PP01	RP46	nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W	
PP01	RP61	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W	
PP01	RP62	nsp	00MNN05683610	CHIP RES.	68K OHM +-5% 1/16W	
PP01	RP63	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W	
PP01	RP69	nsp	00MNN05033610	CHIP RES.	3.3 OHM +-5% 1/16W	
PP01	RP70	nsp	00MNN05033610	CHIP RES.	3.3 OHM +-5% 1/16W	
PP01	RP71	nsp	00MNN05033610	CHIP RES.	3.3 OHM +-5% 1/16W	
PP01	RP72	nsp	00MNN05033610	CHIP RES.	3.3 OHM +-5% 1/16W	
PP01	RP73	nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W	
PP01	RP74	nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W	
PP01	RP75	nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W	
PP01	RP76	nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W	
PP01	X501	00MJX13005350	00MJX13005350	X'TAL	SMD-49 13.500MHZ	
						HDMI PWB ASSY PX14 (00MWI20AJ301-)
PX14	C901	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C902	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C903	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C904	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C905	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C906	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C907	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C908	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C909	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C910	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
PX14	C911	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
PX14	C912	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C913	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C914	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C915	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C916	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C917	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C918	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C919	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C920	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C921	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C922	nsp	00MDD95220300	CER. CAP.	22 PF +-5% CG 50V GR39	
PX14	C923	nsp	00MDD95220300	CER. CAP.	22 PF +-5% CG 50V GR39	
PX14	C924	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C925	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C926	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C927	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C928	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C929	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C930	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C931	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C932	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C933	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C934	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C935	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
PX14	C936	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
PX14	C937	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C938	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C939	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C941	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C942	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C944	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C945	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C946	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C947	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
PX14	C948	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
PX14	C949		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PX14	C950		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PX14	C951		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PX14	C952		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PX14	C953		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PX14	C954		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PX14	C955		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PX14	C956		nsp	00MOA47602520	ELECT. CAP.	47 UF M 25V RA-2
PX14	C957		nsp	00MOA47602520	ELECT. CAP.	47 UF M 25V RA-2
PX14	C958		nsp	00MOA47602520	ELECT. CAP.	47 UF M 25V RA-2
PX14	C959		nsp	00MOA47602520	ELECT. CAP.	47 UF M 25V RA-2
PX14	C960		nsp	00MOA10605020	ELECT. CAP.	10 UF M 50V RA-2
PX14	C961		nsp	00MOA47602520	ELECT. CAP.	47 UF M 25V RA-2
PX14	C962		nsp	00MOA10605020	ELECT. CAP.	10 UF M 50V RA-2
PX14	C963		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PX14	C964		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PX14	C965		nsp	00MOA10505020	ELECT. CAP.	1 UF M 50V RA-2
PX14	C966		nsp	00MOA47602520	ELECT. CAP.	47 UF M 25V RA-2
PX14	C967		nsp	00MOA47602520	ELECT. CAP.	47 UF M 25V RA-2
PX14	C968		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PX14	C969		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PX14	C970		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PX14	C971		nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K
PX14	C980		nsp	00MOA47602520	ELECT. CAP.	47 UF M 25V RA-2
PX14	D926		00MHZ20039050	00MHZ20039050	CHIP DIODE	1SS378
PX14	D927		00MHZ20039050	00MHZ20039050	CHIP DIODE	1SS378
PX14	IC88		00MHC10031770	00MHC10031770	IC	RN5RZ50B-TR
PX14	IC91		00MHC98818990	00MHC98818990	IC	NCP1117STAT3 1.25-18.8V ADJ REG.800MA
PX14	IC92		00MHC98818990	00MHC98818990	IC	NCP1117STAT3 1.25-18.8V ADJ REG.800MA
PX14	IC93		00MHC10028990	00MHC10028990	IC	AT24C02N-10SI-2.7 2KBIT EEPROM
PX14	IC94		00MHC10028990	00MHC10028990	IC	AT24C02N-10SI-2.7 2KBIT EEPROM
PX14	IC95		00MHC011305K0	00MHC011305K0	IC	TC7MZ4052FK(EL)
PX14	IC96		00MHC011305K0	00MHC011305K0	IC	TC7MZ4052FK(EL)
PX14	IC97		00MHC007505K0	00MHC007505K0	IC	TC74VHCT08AFT EL X4 2INPUT AND
PX14	IC98		nsp	nsp	IC	SII9031CTU-7
PX14	IC99		nsp	nsp	IC	SII9030CTU-7
PX14	JK91		00MYJ90014740	00MYJ90014740	JACK	YKF45-7009
PX14	JK92		00MYJ90014740	00MYJ90014740	JACK	YKF45-7009
PX14	JK93		00MYJ90014740	00MYJ90014740	JACK	YKF45-7009
PX14	L901		00MLU17103010	00MLU17103010	CHIP INDUCTANCE	NLC322522 10UH
PX14	L902		00MLU17103010	00MLU17103010	CHIP INDUCTANCE	NLC322522 10UH
PX14	L903		00MLU17103010	00MLU17103010	CHIP INDUCTANCE	NLC322522 10UH
PX14	L904		00MLU17103010	00MLU17103010	CHIP INDUCTANCE	NLC322522 10UH
PX14	Q902		00MBA20005210	00MBA20005210	TRS.	DTC114EK T146 ROHM
PX14	Q903		00MBA10023210	00MBA10023210	TRS.	DTA114EK TAPING
PX14	Q904		00MBA20005210	00MBA20005210	TRS.	DTC114EK T146 ROHM
PX14	Q905		00MBA10023210	00MBA10023210	TRS.	DTA114EK TAPING
PX14	Q906		00MBA20005210	00MBA20005210	TRS.	DTC114EK T146 ROHM
PX14	Q907		00MBA20005210	00MBA20005210	TRS.	DTC114EK T146 ROHM
PX14	Q908		00MHY22010050	00MHY22010050	CHIP FET	HN1K05FU 2SK2824 X 2
PX14	Q909		00MHY22010050	00MHY22010050	CHIP FET	HN1K05FU 2SK2824 X 2
PX14	Q910		00MHY22010050	00MHY22010050	CHIP FET	HN1K05FU 2SK2824 X 2
PX14	R901		00MNM12200020	00MNM12200020	CHIP RES.	RK73H1JTTD220F 220 OHM +-1% 1/10W
PX14	R902		nsp	00MNN05181610	CHIP RES.	180 OHM +-5% 1/16W
PX14	R903		nsp	00MNN05181610	CHIP RES.	180 OHM +-5% 1/16W
PX14	R904		00MNM12200020	00MNM12200020	CHIP RES.	RK73H1JTTD220F 220 OHM +-1% 1/10W
PX14	R905		nsp	00MNN05820610	CHIP RES.	82 OHM +-5% 1/16W
PX14	R906		nsp	00MNN05150610	CHIP RES.	15 OHM +-5% 1/16W
PX14	R907		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PX14	R908		nsp	00MNN05223610	CHIP RES.	22K OHM +-5% 1/16W
PX14	R909		nsp	00MNN05470610	CHIP RES.	47 OHM +-5% 1/16W
PX14	R910		nsp	00MNN05470610	CHIP RES.	47 OHM +-5% 1/16W
PX14	R911		nsp	00MNN05470610	CHIP RES.	47 OHM +-5% 1/16W
PX14	R912		nsp	00MNN05470610	CHIP RES.	47 OHM +-5% 1/16W
PX14	R913		nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W
PX14	R914		nsp	00MNN05223610	CHIP RES.	22K OHM +-5% 1/16W
PX14	R915		nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W

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P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
PX14	R916	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
PX14	R917	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
PX14	R918	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
PX14	R919	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
PX14	R920	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
PX14	R921	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
PX14	R922	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
PX14	R923	nsp	00MNN05181610	CHIP RES.	180 OHM +-5% 1/16W	
PX14	R924	nsp	00MNN05750610	CHIP RES.	75 OHM +-5% 1/16W	
PX14	R925	nsp	00MNN05750610	CHIP RES.	75 OHM +-5% 1/16W	
PX14	R926	nsp	00MNN05750610	CHIP RES.	75 OHM +-5% 1/16W	
PX14	R928	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	
PX14	R929	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	
PX14	R930	nsp	00MNN05682610	CHIP RES.	6.8K OHM +-5% 1/16W	
PX14	R932	nsp	00MNN05682610	CHIP RES.	6.8K OHM +-5% 1/16W	
PX14	R933	nsp	00MNN05332610	CHIP RES.	3.3K OHM +-5% 1/16W	
PX14	R934	nsp	00MNN05332610	CHIP RES.	3.3K OHM +-5% 1/16W	
PX14	R935	nsp	00MNN05332610	CHIP RES.	3.3K OHM +-5% 1/16W	
PX14	R936	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
PX14	R937	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	
PX14	R938	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	
PX14	R939	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
PX14	R940	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
PX14	R941	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	
PX14	R942	nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W	
PX14	R943	nsp	00MNN05220610	CHIP RES.	22 OHM +-5% 1/16W	
PX14	R944	nsp	00MNN05330610	CHIP RES.	33 OHM +-5% 1/16W	
PX14	R945	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	
PX14	R946	nsp	00MNN05105610	CHIP RES.	1M OHM +-5% 1/16W	
PX14	R947	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
PX14	R948	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
PX14	R949	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
PX14	R950	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
PX14	R951	nsp	00MNN05182610	CHIP RES.	1.8K OHM +-5% 1/16W	
PX14	R952	nsp	00MNN05182610	CHIP RES.	1.8K OHM +-5% 1/16W	
PX14	R953	nsp	00MNN05471610	CHIP RES.	470 OHM +-5% 1/16W	
PX14	R962	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	
PX14	R963	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
PX14	R964	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	
PX14	R966	nsp	00MBW05222610	CHIP RES.	2.2K OHM +-5% 1/16W	
PX14	R967	nsp	00MBW05222610	CHIP RES.	2.2K OHM +-5% 1/16W	
PX14	R970	nsp	00MBW05682610	CHIP RES.	6.8K OHM +-5% 1/16W	
PX14	R971	nsp	00MBW05242610	CHIP RES.	2.4K OHM +-5% 1/16W	
PX14	R972	nsp	00MBW05242610	CHIP RES.	2.4K OHM +-5% 1/16W	
PX14	R973	nsp	00MBW05242610	CHIP RES.	2.4K OHM +-5% 1/16W	
PX14	R974	nsp	00MBW05242610	CHIP RES.	2.4K OHM +-5% 1/16W	
PX14	RN91	00MBW05220350	00MBW05220350	RES. COMPO.	CN1J4TTD220J 22 OHM +-5% X4	
PX14	RN92	00MBW05220350	00MBW05220350	RES. COMPO.	CN1J4TTD220J 22 OHM +-5% X4	
PX14	RN93	00MBW05220350	00MBW05220350	RES. COMPO.	CN1J4TTD220J 22 OHM +-5% X4	
PX14	RN94	00MBW05220350	00MBW05220350	RES. COMPO.	CN1J4TTD220J 22 OHM +-5% X4	
PX14	RN95	00MBW05220350	00MBW05220350	RES. COMPO.	CN1J4TTD220J 22 OHM +-5% X4	
PX14	RN96	00MBW05220350	00MBW05220350	RES. COMPO.	CN1J4TTD220J 22 OHM +-5% X4	
PX14	RN97	00MBW05220350	00MBW05220350	RES. COMPO.	CN1J4TTD220J 22 OHM +-5% X4	
PX14	RN98	00MBW05220350	00MBW05220350	RES. COMPO.	CN1J4TTD220J 22 OHM +-5% X4	
PX14	RN99	00MBW05220350	00MBW05220350	RES. COMPO.	CN1J4TTD220J 22 OHM +-5% X4	
PX14	X901	00MJX27007260	00MJX27007260	X'TAL	X-TAL 27MHZ AT-49U/3.5H	

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

15. ABOUT REPLACE THE MICROPROCESSOR WITH A NEW ONE

When replaced of the U-PRO (Microprocessor) or the Flash ROM, confirm contents of the following.

PWB Name	Pos. No.	Description	After replaced	Remark
PD01	Q102	M29W800DT70N1 FRASH FOR CS DSP	B	You can't update when flash ROM is empty.
PD01	Q202	M29W800DT70N1 FRASH FOR TI-1 DSP	B	You can't update when flash ROM is empty.
PD01	Q302	M29W800DT70N1 FRASH FOR TI-2 DSP	B	You can't update when flash ROM is empty.
PD01	QU01	HD64F2505FC26DV WITHOUT SOFTWARE	C	

After replaced

A : Mask ROM (With software). No need write-in of software to the microprocessor.

B : Flash ROM (With software). Usually, no need write-in of software. But, when the software was updated, you should be write-in of the new software to the microprocessor or flash ROM. Please check the software version.

C : Empty Flash ROM (Without software). You should be write-in of the software to the microprocessor or flash ROM. Refer to "Update procedure" or "writing procedure", when you should be write-in the software.

マイコン等を交換した場合の対応について

U-PRO(マイコン)およびFlash ROM等を交換した場合の対応方法を下記の記載します。

PWB Name	Pos. No.	Description	交換時の対応	備考
PD01	Q102	M29W800DT70N1 FRASH FOR CS DSP	B	空のFlash ROMには書き込み出来ません
PD01	Q202	M29W800DT70N1 FRASH FOR TI-1 DSP	B	空のFlash ROMには書き込み出来ません
PD01	Q302	M29W800DT70N1 FRASH FOR TI-2 DSP	B	空のFlash ROMには書き込み出来ません
PD01	QU01	HD64F2505FC26DV WITHOUT SOFTWARE	C	

交換時の対応

A : Mask ROM (ソフトウェア書き込み済み) 交換時にソフトウェアの書き込みは必要ありません。

B : Flash ROM (ソフトウェア書き込み済み) バージョンアップにより交換時にソフトウェアの書き換えが必要な場合があります。バージョンの確認をしてください。

C : 空ROM (Flash ROM) 交換時必ずソフトウェアの書き込みが必要になります。Update、書き込み方法を参照してください。