

Service Manual

CD6002 /F B/N1B/N1S

F N/K1G

CD Player

CD6002

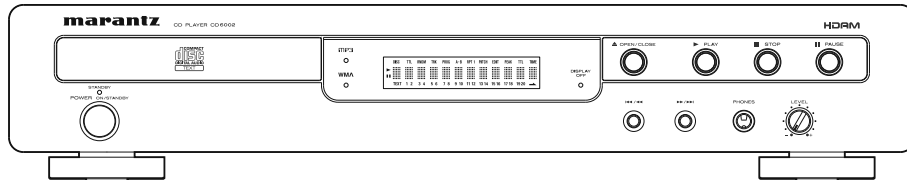


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Please use this service manual with referring to the user guide (D.F.U.) without fail.
修理の際は、必ず取扱説明書を準備し操作方法を確認の上作業を行ってください。

marantz®

CD6002

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

MARANTZ CANADA INC.
5-505 APPLE CREEK BLVD.
MARKHAM, ONTARIO L3R 5B1
CANADA
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JAPAN

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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
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KOREA

D&M SALES AND MARKETING KOREA LTD.
CHUNG JIN B/D., #1001,
53-5, WONHYORO 3 GA, YONGSAN-GU,
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PHONE : +82 - 2 - 323 - 2155
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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使用して下さい。

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.

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

1. TECHNICAL SPECIFICATIONS

Audio characteristics

Channels 2 channels
 Frequency response..... 2 Hz to 20 kHz
 Dynamic range 100 dB
 Signal-to-noise ratio 110 dB
 Channel separation 110 dB (1 kHz)
 Harmonic distortion 0.002% (1 kHz)
 Wow & flutter Precision of quartz
 Error correction system Cross-interleave Reed Solomon code (CIRC)
 Audio output 2.35 V rms, stereo
 Headphone output.... 18 mW/32 ohms (variable maximum)
 Digital output
 Coaxial output (pin jack)..... 0.5 Vp-p, 75 ohms
 Optical output (square optical connector) -19 dBm

Power supply

F version..... AC 100 V 50 /60 Hz
 K version AC 220 V 50 Hz
 N version AC 230 V 50 /60 Hz
 Power consumption 19 W

Cabinet, etc.

Control in/out RCA jack
 Maximum dimensions..... 440(W) x 87(H) x 283(D) mm
 Weight 4.7 kg
 Allowable operating temperature +5 to +35 °C
 Allowable operating humidity..... 5 to 90 % (no condensation)

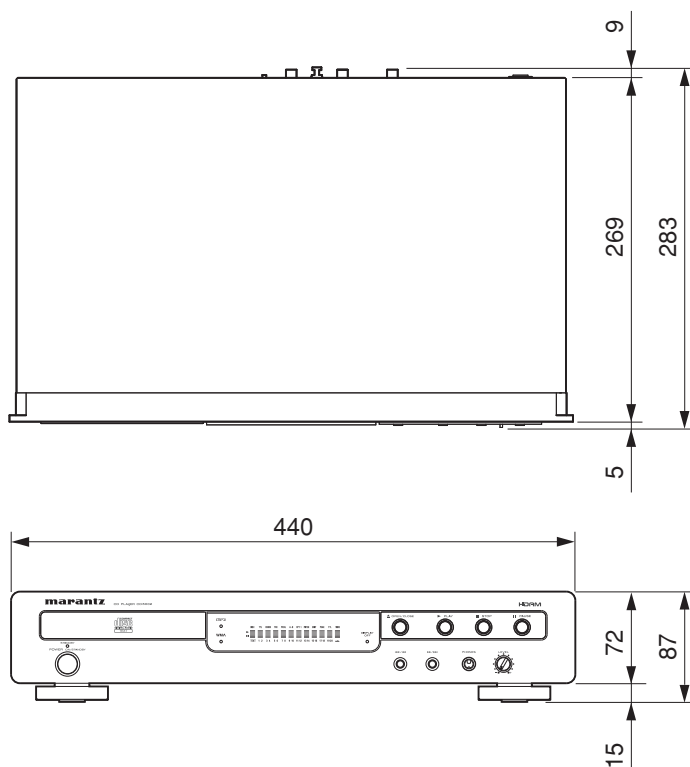
Optical readout system

Laser AlGaAs semiconductor
 Wavelength..... 780 nm

Signal system

Sampling frequency..... 44.1 kHz
 Quantization 16-bit linear/channel

Dimensions (unit: mm)



• Supports CD-Text display

CD-Text is an extension to the existing audio CD standard that enables text information, such as the name of the artist, album title and song titles to be stored on an audio CD.

CDs with the following logos support this function.



Text information is recorded on the parts that are not used in the conventional Audio CDs.

This CD player enables the text information stored on a CD-Text CD to be read (applies only to English alphanumeric text).

■ Playing CD-R/CD-RW discs



This unit can play back the CD-RW (ReWritable) discs as well as ordinary Audio CD and CD-R (Recordable) discs.

- This unit can play back Audio CD format and CD-R/CD-RW discs which contain MP3 music data. However, some discs may have problems such as unable to play, noise or sound distortion.
 - * For details, please read the instruction manual provided with a CD recorder.
- The CD-R and CD-RW discs should contain properly-recorded TOC information so that they can be played back. In CD recorders, the task of writing TOC information is referred to as finalizing the disc. Discs that are not finalized cannot be properly recognized as an Audio CD and played back by regular CD players and Super Audio CD players. For details, please read the instruction manual provided with a CD recorder.
 - * TOC stands for Table Of Contents and contains information such as the total number of tracks and total playing time of the disc.
- This player can only be used to play Audio CD-DA format discs or discs on which MP3 or WMA audio data have been recorded. Do not attempt to play a disc containing other data, such as a CD-ROM for PCs, on this unit.
- As the playback of a CD-RW disc necessitates partial change of the player setup, it may take longer time for reading the TOC information than when an Audio CD or CD-R disc is played.

• CD-TEXT 表示対応

CD-TEXTとは従来の音楽CDにアルバム名、曲名などの文字情報を記録した音楽ディスクです。以下のようなロゴが付いたCDが対応しています。



これらの文字情報は、従来の音楽CDでは使用されていなかった部分に記録されています。本機ではディスクに記録された文字情報を見ることができます。(英数字のみに対応しています。)

■ CD-R/CD-RW ディスクの再生について



本機では従来のオーディオCDやCD-R (Recordable) に加え、CD-RW (ReWritable) ディスクの再生も可能です。

- 本機は音楽CDフォーマット、またはMP3の音楽データが記録されたCD-R/CD-RWディスクを再生することができます。ただし、ディスクによっては「再生できない」、「ノイズが出る」、または「音が歪む」などが起きることがあります。詳しくはレコーダーの取扱説明書をご覧ください。
- CD-RやCD-RWの再生には必ずTOC*が正しく記録されていることが必要です。CDレコーダーではTOC情報を書き込むことをファイナライズ(Finalize)といい、この作業が正常に完了していないディスクは、通常のCDプレーヤーでは音楽CDとして正しく認識されず再生することができませんので十分ご注意ください。詳しくはCDレコーダーの取扱説明書をご覧ください。
 - * TOC(トック)とはTable Of Contentsの略で、ディスクの総曲数や総演奏時間などの目次情報のことです。
- 再生できるのは音楽用のCD-DAフォーマットまたはMP3/WMAの音楽データで記録されたディスクのみです。その他のデータが記録されたディスクは再生しないでください。
- CD-RWディスクを再生する場合、プレーヤーの設定を一部変更するため、音楽CDやCD-Rに比べTOCの読み込みに時間がかかることがあります。

■ MP3/WMA ファイルの再生について

本機はMP3(MPEG Audio Layer3)またはWMA(Windows Media Audio)ファイル形式で記録されたデータファイルをCD-R、CD-RWに書き込んだディスクでの再生が可能です。また、MP3のID3タグに対応しており、ID3タグ情報が記録されているファイルではトラック

■ Playing MP3 or WMA files

This CD player can be used to play CD-R or CD-RW discs on which MP3 (MPEG Audio Layer-3) or WMA (Windows Media Audio) format audio files have been recorded.

Support for MP3 ID3 tags enables display of ID3 information, such as artist names, album titles, track titles and the like, if this information has been recorded with the tracks.



- Windows Media and the Windows Logo are the registered trademark and trademark of Microsoft Corporation in the United States and other countries.
- Music that you have recorded that is subject to copyright laws is for personal use only, and cannot be used otherwise without the permission of the copyright holder.

Caution:

- The sound file specification supported by this CD player is “MPEG-1 Audio Layer-3” (sampling frequency fs 32 kHz, 44.1 kHz, 48 kHz). Other specifications, such as MPEG-2 Audio Layer-3, MPEG-2.5 Audio Layer-3, MP1 or MP2 are not supported.
- Generally the higher the bit rate, the higher the sound quality.
MP3 bit rates are between 32 - 320 kb/s and for WMA between 64 - 160 kb/s. It is recommended that MP3/WMA recordings with a bit rate of at least 128 kb/s be used.
- The text information, such as ID3 tag information and file names that are displayed during playback of MP3s, support English alphanumeric characters only.
- When playing variable bit rate files, it is possible that the playing time may not be displayed accurately.
- When writing onto CD-R or CD-RW discs, please use either ISO9660 mode 1 or ISO9660 mode 2-disc format. Multi-session recording is also supported enabling the playing of data that have been added to a disc.
- MP3/WMA files that have been recorded by “packet writing” cannot be played back.
- Depending on the condition of the recorded data, it may take some time to read song information.
- In the case of an Enhanced or Mixed Mode CD having combined audio format CD-DA along with MP3/WMA files, only the CD-DA audio portion will be played.
- The playback of WMA DRM (Digital Rights Management) files is not supported by this player.

タイトル、アーティスト名、アルバムタイトルなどを表示することができます。



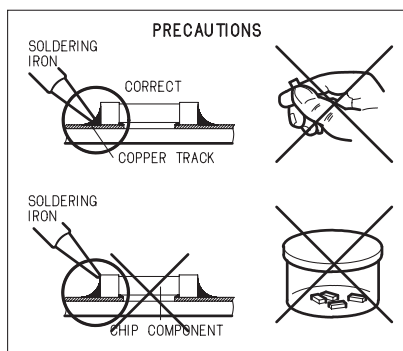
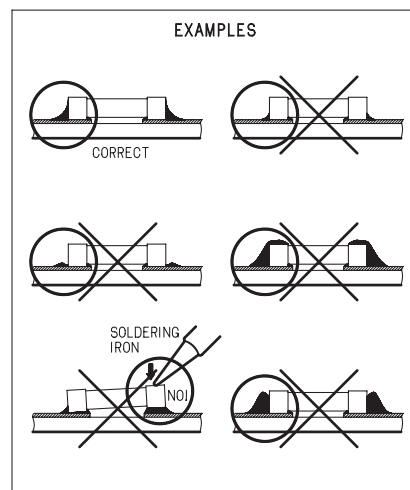
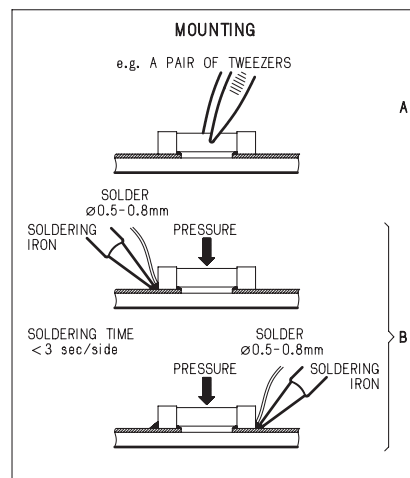
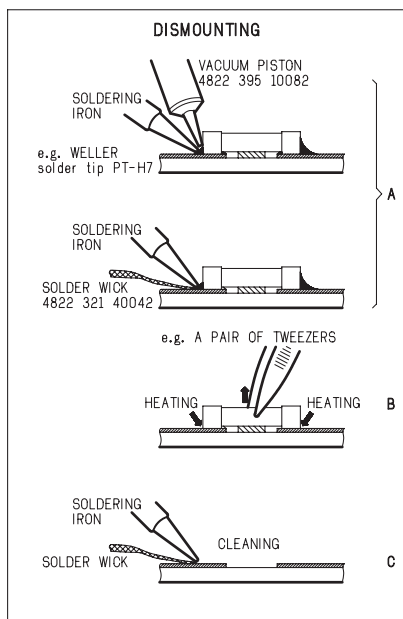
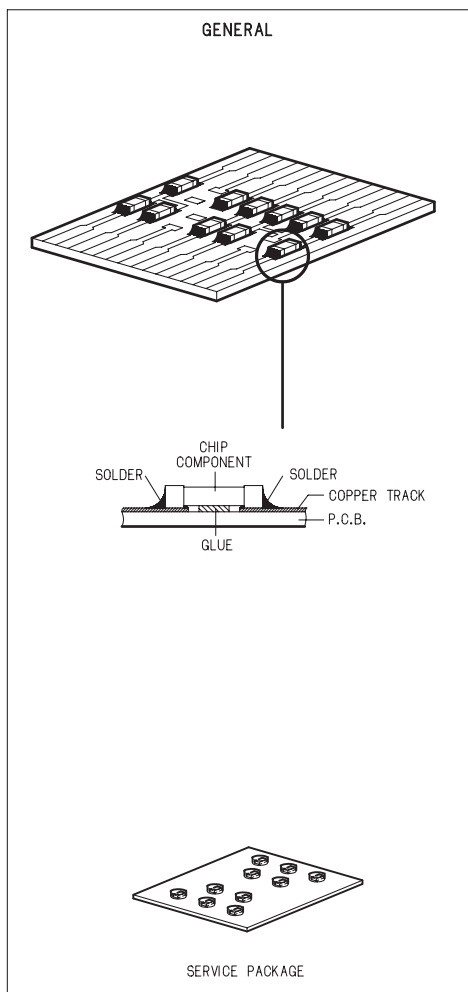
- Windows Media , Windows ロゴ は 米 国、その他の国で、米 国 Microsoft Corporation の登録商標または商標です。
- お客様が録音したものは個人として楽しむなどのほかは著作権法上、権利者に無断で使用できません。

ご注意

- 本機で対応している規格は “MPEG-1 Audio Layer-3” (サンプリング周波数 fs は 32、44.1、48kHz) です。それ以外の “MPEG-2 Audio Layer-3”、 “MPEG-2.5 Audio Layer-3” および MP1、MP2 などには対応していません。
- 一般にビットレートが高いほど音質が良くなります。
MP3 の対応ビットレートは 32 ~ 320 kbps、WMA は 64 ~ 160 kbps です。本機では 128kbps 以上のビットレートで記録された MP3/WMA のご使用をおすすめします。
- MP3/WMA ファイルには必ず拡張子 “.MP3” “.WMA” を付けてください。“ .MP3” “.WMA” 以外の拡張子を付けた場合や拡張子を付けなかった場合はファイルを再生できません。
- プレイリストには対応していません。
- ディスク 1 枚あたりの再生出来るファイル数は最大 255 で、フォルダ数は最大 255 です。
- 本機は 32 文字までのフォルダ名やファイル名を表示できます。
- 本機は、MP3 ID3 タグに対応しています。
- MP3 を再生した時に表示される ID3 タグ情報やファイル名の文字情報は日本語表示に対応していません。英数字をご使用ください。
- 可変ビットレートファイルの再生時には、正しく時間表示されないことがあります。
- CD-R や CD-RW に書き込むフォーマットは ISO9660 モード 1 またはモード 2 で書き込みをしてください。また、マルチセッションに対応していますので、追加で書き込みしたデータの再生もできます。
- パケットライトで記録された MP3/WMA ファイルは再生できません。
- 記録したデータの状態によっては曲情報を読み取るのに時間がかかる場合があります。
- 音楽用のフォーマット CD-DA と MP3/WMA ファイルが混在したエンハンスド CD およびミックス CD は、音楽用のフォーマット CD-DA のみ再生します。
- WMA DRM (著作権保護) ファイルの再生には対応していません。

2. SERVICE HINTS AND TOOLS

SERVICE HINTS



SERVICE TOOLS

Audio signals disc	4822 397 30184 or TCD-784
Disc without errors +	
Disc with DO errors, black spots and fingerprints	4822 397 30245 (SBC444A) or TCD-726
Disc (65 min 1kHz) without no pause	4822 397 30155
Max. diameter disc (58.0 mm)	4822 397 60141
Torx screwdrivers	
Set (straight)	4822 395 50145
Set (square)	4822 395 50132
13th order filter	4822 395 30204
DVD test disc (PAL)	4822 397 10131
DVD test disc (NTSC) ALMEDIO	TDV-540

070703MZ

3. WARNING AND LASER SAFETY INSTRUCTIONS

GB WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.

When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance.

Keep components and tools also at this potential.



NL WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor elektrostatische ontladingen (ESD).

Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen.

Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat.

Houd componenten en hulpmiddelen ook op hetzelfde potentiaal.

F ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD).

Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation.

Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfilez le bracelet muni d'une résistance de sécurité.

Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

D WARNUNG

Alle IC und viele andere Halbleiter sind empfindlich gegen elektrostatische Entladungen (ESD).

Unvorsichtige Behandlung bei der Reparatur kann die Lebensdauer drastisch vermindern. Sorgen sie dafür, das Sie im Reparaturfall über ein Pulsarmband mit Widerstand mit dem Massepotential des Gerätes verbunden sind.

Halten Sie Bauteile und Hilfsmittel ebenfalls auf diesem Potential.

I AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD).

La loro longevità potrebbe essere fortemente ridotta in caso di non osservazione della più grande cautela alla loro manipolazione.

Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza.

Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

GB

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

NL

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

D

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

I

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

"Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agréés, seuls habilités à réparer votre appareil en panne."

F

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

LASER SAFETY

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



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

AVOID DIRECT EXPOSURE TO BEAM

WARNING

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

WARNING LOCATION: INSIDE ON LASER COVERSIELD

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

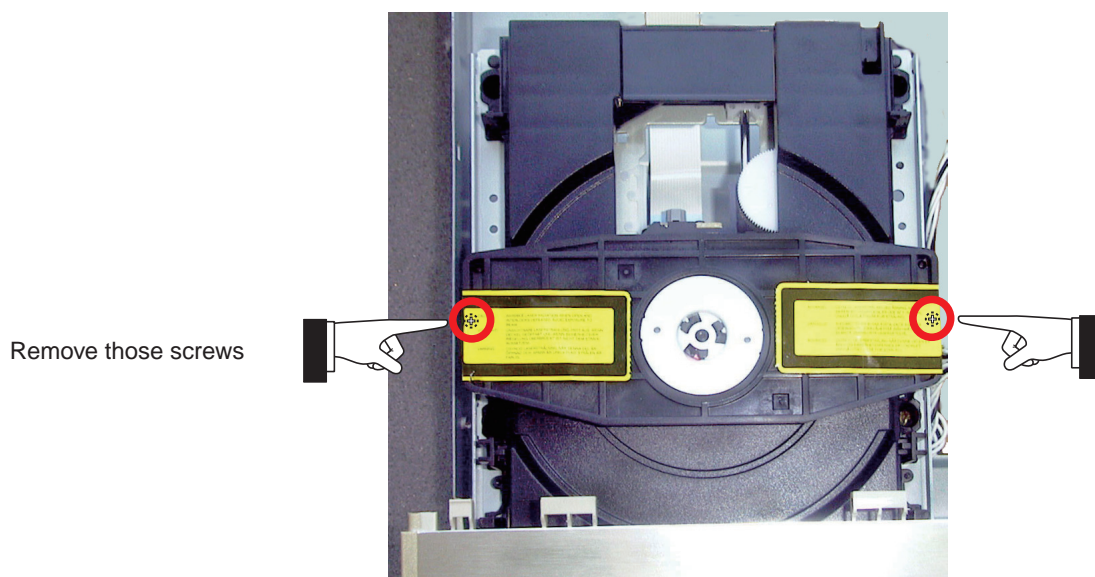
4. SERVICE MODE AND TAKING THE DISC OUT OF EMERGENCY

[A] SERVICE MODE

1. Insert mains cable plug in the outlet and press **POWER** button.
 2. Press the **OPEN/CLOSE** button to open the tray.
 3. Press the **▶▶▶/▶▶▶|** button for about five seconds.
 4. The version number of the microprocessor is displayed
Ex. : 2007 - 06 - 25 - 1
 5. Press the **|◀◀◀◀** button for about five seconds.
 6. Light up all the FL segment.
- Turn off power to quit Service mode.

[B] TAKING THE DISC OUT OF EMERGENCY

1. Remove the top cover of the player.
2. Remove 2 screws under the label shown in the picture follows.
3. Remove the disc clamper.
4. Now you can remove the disc.



5. UPDATE MICROPROCESSOR SOFTWARE PROCEDURE

When microprocessor software was updated, update the software in the following procedure.

Necessary Equipment

- Windows PC (OS: Windows2000 or WindowsXP) with Serial port.
- RS-232C Dsub-9 pin cable (female to female/straight type).
- Connection JIG (90M-SR4500JIG)
- Update tool (FlashProg.exe, other files and folders in Flash Programmer folder)
- Update data (CD6002_yymmdd_x.s24)

NOTE : The yy is two digits of year. The mm is month. The dd is date. The x is release number.

[A] Update Procedure

1. Put the "Flash Programmer" and "software" folder into anywhere on your PC's hard disc.
2. Double click the "Flash Programmer" folder.

5. UPDATE MICROPROCESSOR SOFTWARE PROCEDURE

マイコンのソフトウェアが更新された場合、下記の手順に従ってアップデートしてください。

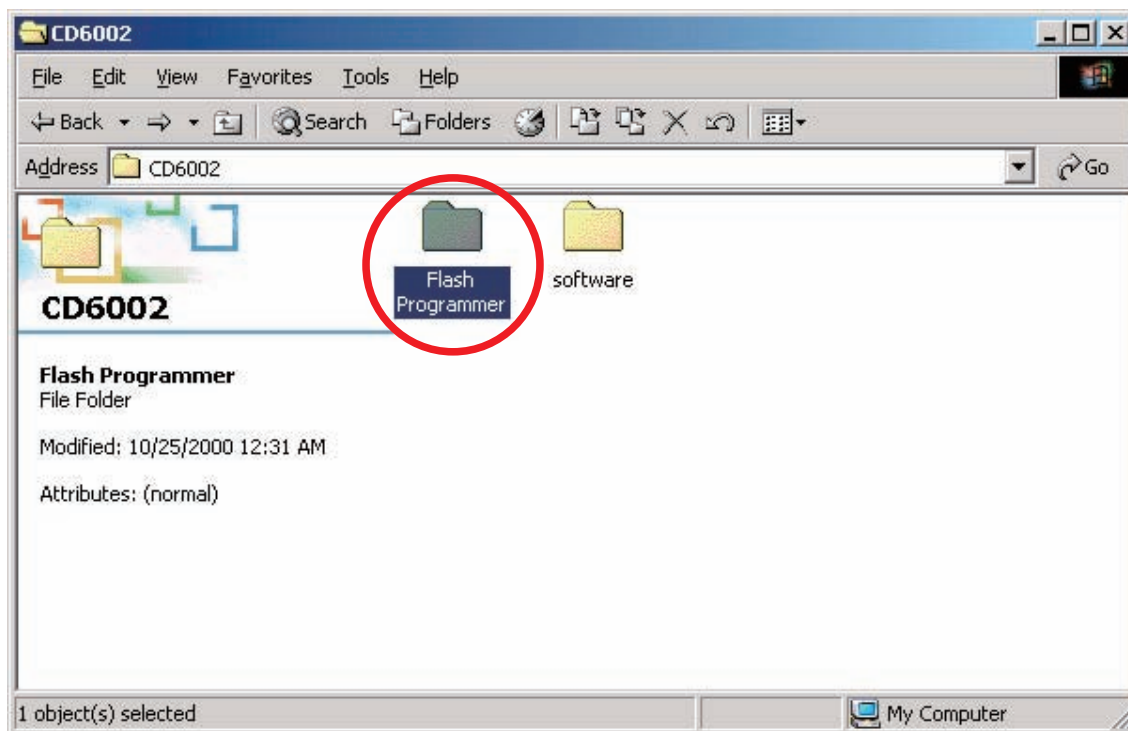
必要機器

- Windows PC (OS: Windows2000またはWindowsXP) で Serialポートのあるもの
- RS-232Cストレートケーブル (9pinメス-9pinメス)
- 接続治具 (90M-SR4500JIG)
- アップデート用書き込みソフトウェア (Flash Programmerフォルダ内 FlashProg.exe、および他のファイルとフォルダ)
- アップデート用データ (CD6002_yymmdd_x.s24)

注意 : yyは年の下二桁、mmは月、ddは日、xはリリースナンバー

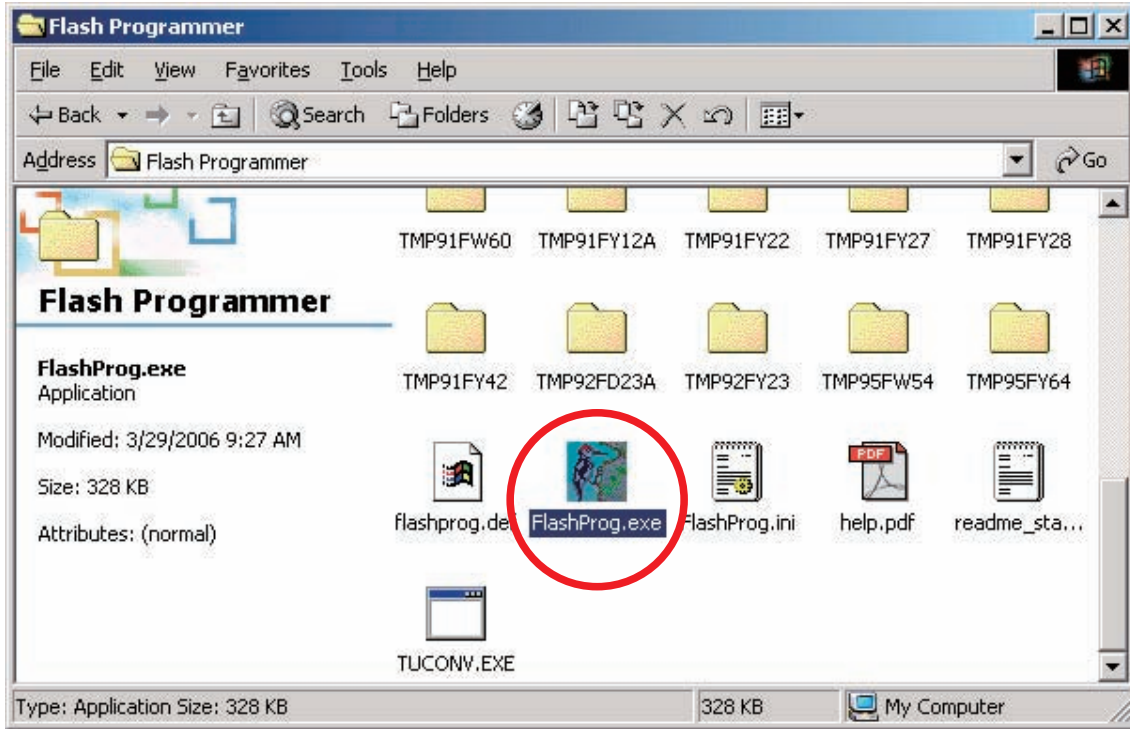
[A] Update Procedure

1. "Flash Programmer"と"software"フォルダをPCの任意のフォルダにコピーします。
2. "Flash Programmer"フォルダをダブルクリックします。



3. Double click FlashProg.exe, and launch the Flash Programmer.

3. FlashProg.exeをダブルクリックし、Flash Programmerを起動します。

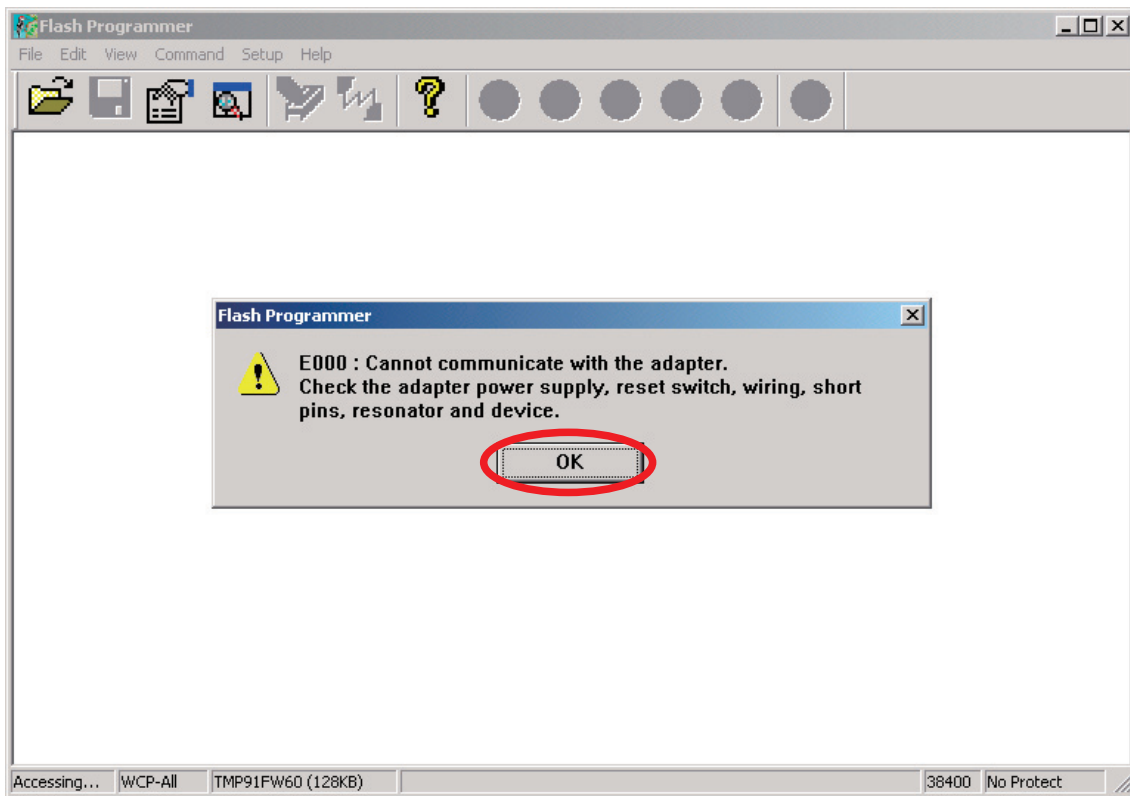


NOTE : When a Flash Programmer does not launch even if double-clicked FlashProg.exe, please refer to "[B] When a Flash Programmer did not launch".

注意 : FlashProg.exeをダブルクリックしてもFlash Programmer が起動しない場合は、"[B] When a Flash Programmer did not launch"を参照してください。

4. Click OK.

4. OKをクリックします。

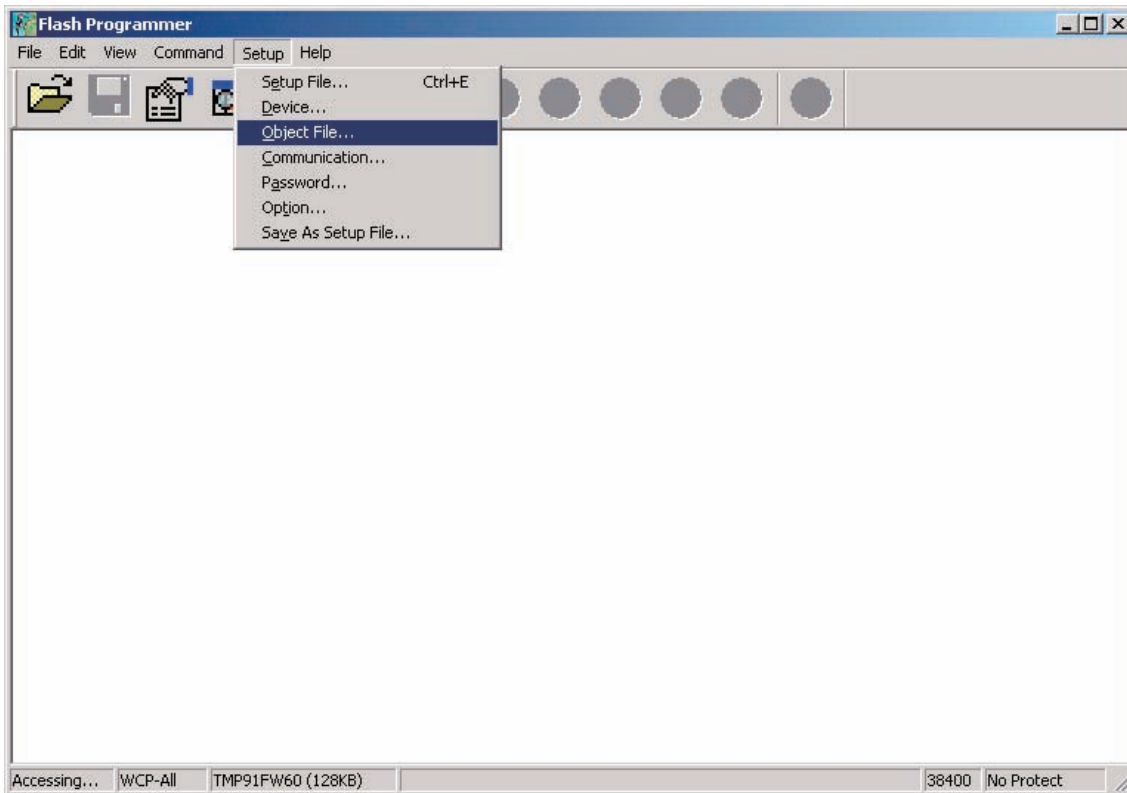


NOTE : Since Flash Programmer communicates with the unit automatically, the following dialog box appears when it fails in communication.

注意 : は本機に自動的に通信接続を行います。このダイアログボックスは通信接続に失敗すると常に表示されます。

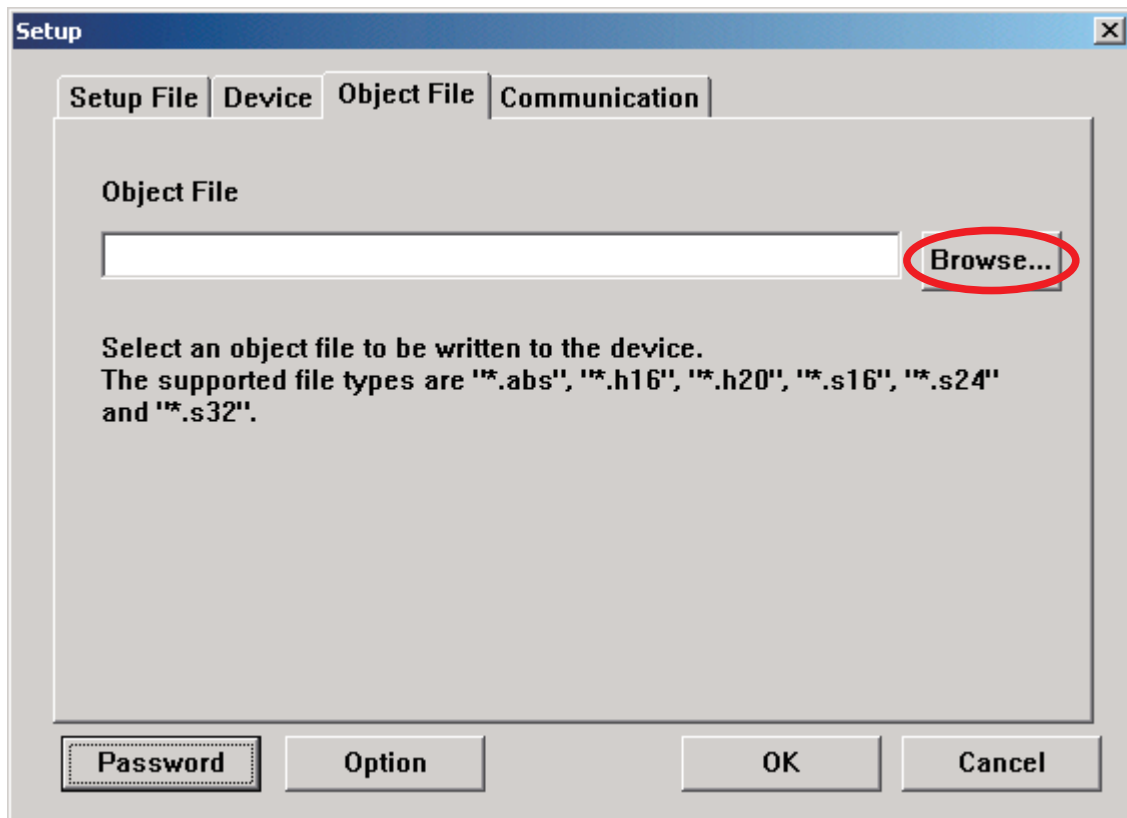
5. Click the **Setup** in the menu bar and select the **Object file**.

5. メニューバーから**Setup**をクリックし、**Object file**を選択します。



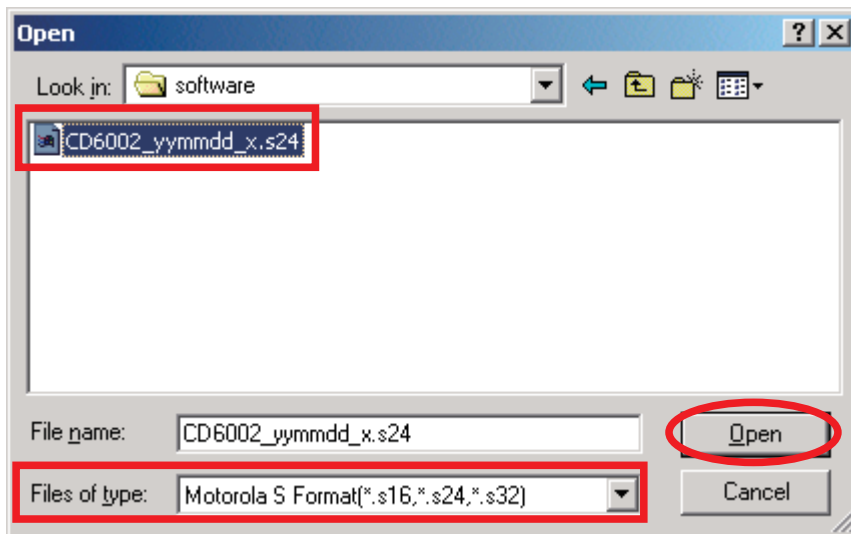
6. Click **Browse**.

6. **Browse**をクリックします。



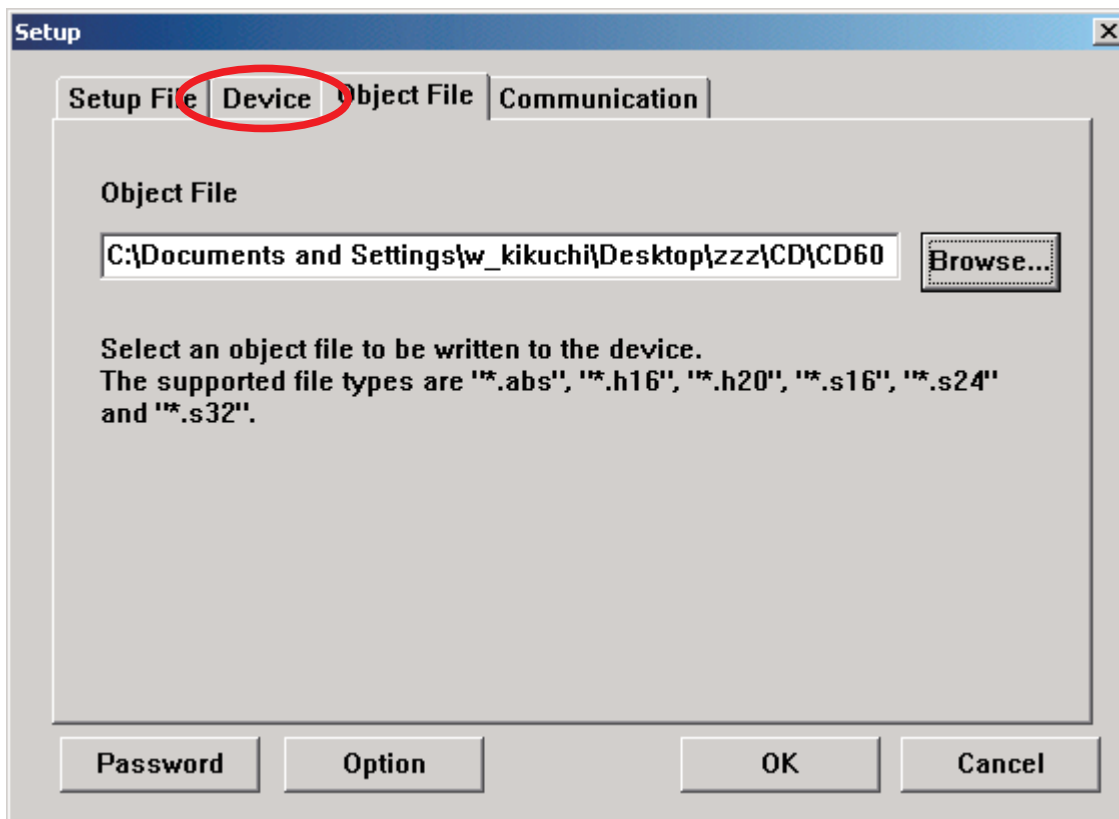
7. Choose the **Motorola S Format(*.s16,*.s24,*.s32)** in Files of type.
 Choose the **CD6002_yymmdd_x.s24**, and click **Open**.
NOTE : The yy is two digits of year. The mm is month. The dd is date. The x is release number.

7. Files of type を**Motorola S Format(*.s16,*.s24,*.s32)**に変更します。
CD6002_yymmdd_x.s24を選択し、**Open**をクリックします。
注意 : yyは年の下二桁、mmは月、ddは日、xはリリースナンバー



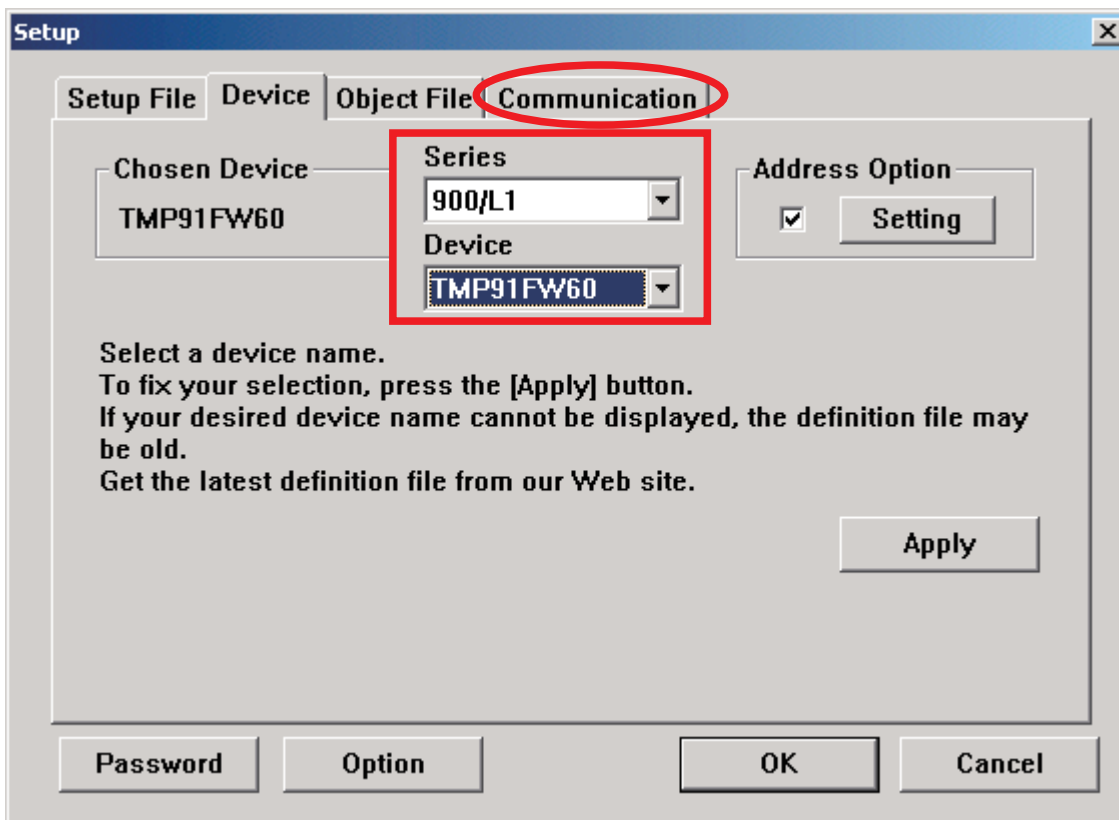
8. Click **Device** tab.

8. **Device**タブをクリックします。



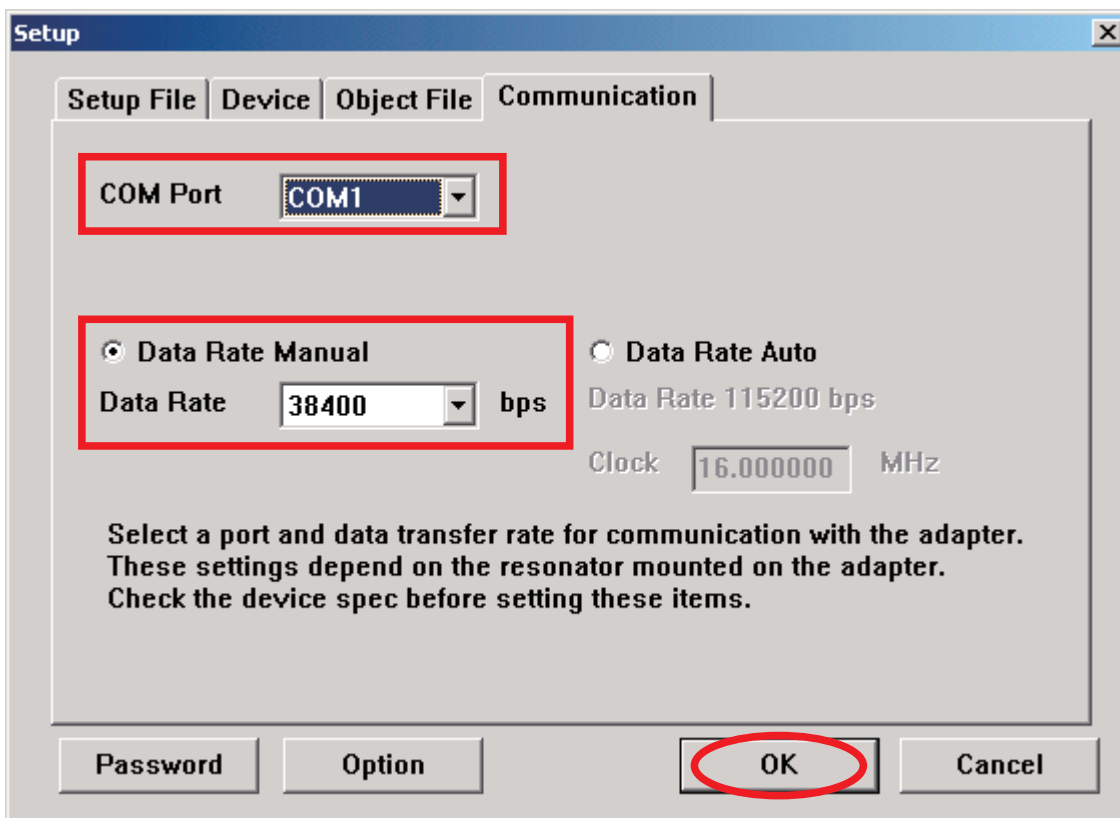
9. Choose the **TMP91FW60** in the Device, and choose the **900/L1** in the Series.
And click **Communication** tab.

9. Deviceから**TMP91FW60**を選び、Seriesから**900/L1**を選択します。
そして、**Communication**タブをクリックします。



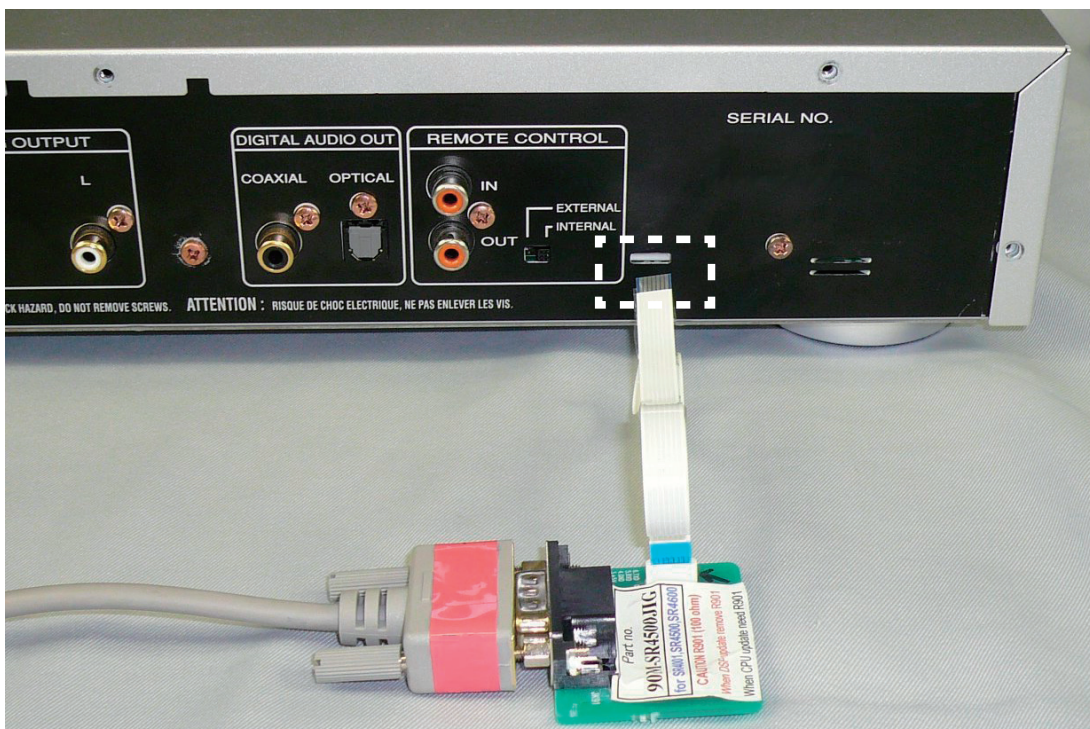
10. Choose the **Serial port number** in the COM Port.
Check the **Data Rate Manual**, and choose the **38400** in the Data Rate.
And Click **OK**.

10. COM Portから使用する**ポート番号**を選択します。
Data Rate Manualにチェックを入れ、**Data Rate**から**38400**を選択します。
OKをクリックします。



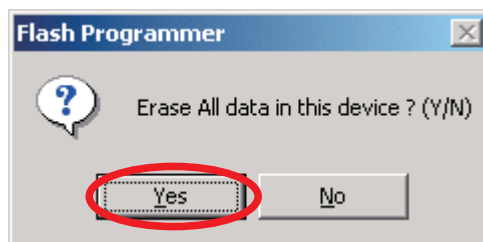
- 11. Disconnect the mains cord from the unit.
- 12. Connect the RS-232C on the connection JIG and the Serial Port of windows PC with RS-232C cable.
- 13. Connect FFC (upside contact) to the rear panel of the unit from connection JIG.

- 11. 本機から電源ケーブルを外します。
- 12. 接続治具のRS-232C端子とPCのSerialポートをRS-232Cケーブルで接続します。
- 13. 本機のリアパネルに接続治具のFFCをコンタクト面を上にして差し込みます。



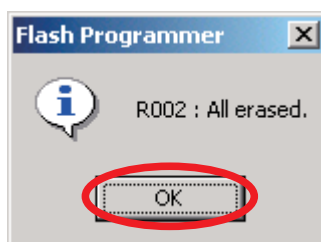
- 14. Connect the mains cord into the unit.
- 15. If the connection with the Flash Programmer is successfully made, a dialogue box saying "Erase All data in this device? (Y/N)" appears automatically. If the connection fails, error message will appear. (Ex.: E000) Click **Yes**.

- 14. 本機に電源ケーブルを接続します。
- 15. Flash Programmerが通信接続に成功すると"Erase All data in this device? (Y/N)"と書かれたダイアログボックスが自動的に表示されます。接続に失敗するとエラーメッセージが表示されます。(例：E000) **Yes**をクリックします。



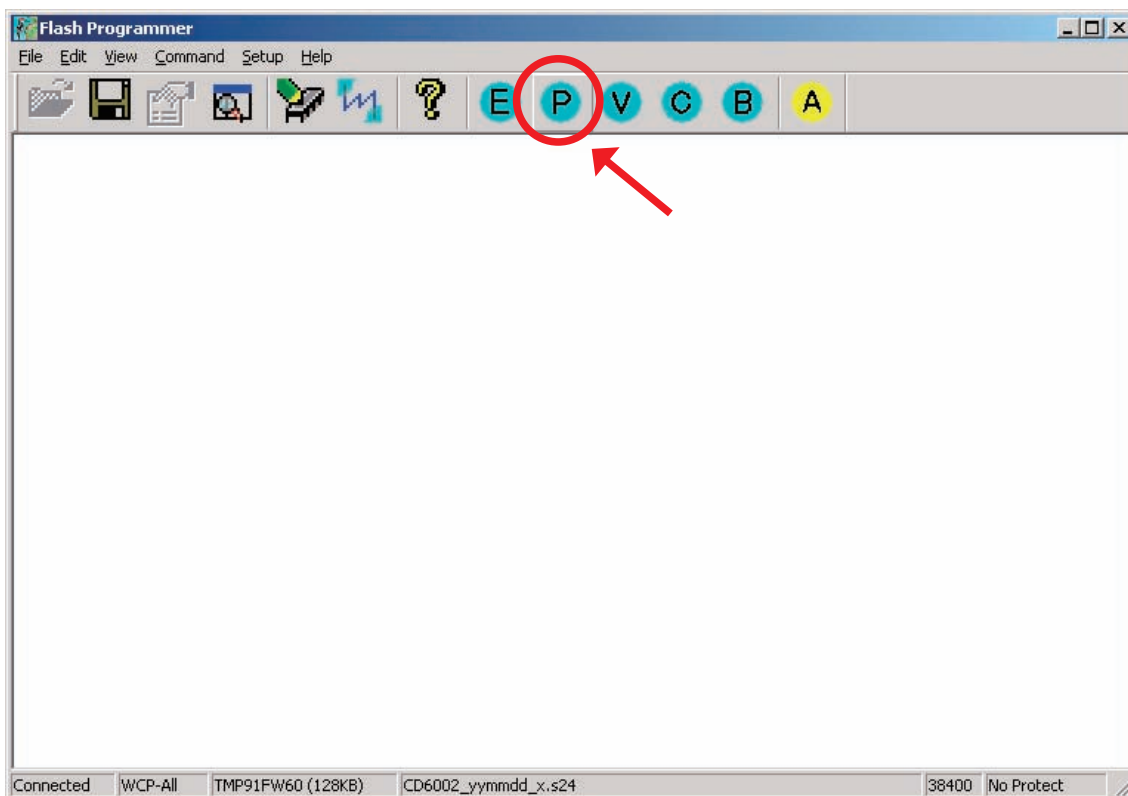
- 16. Click **OK**.

- 16. **OK**をクリックします。



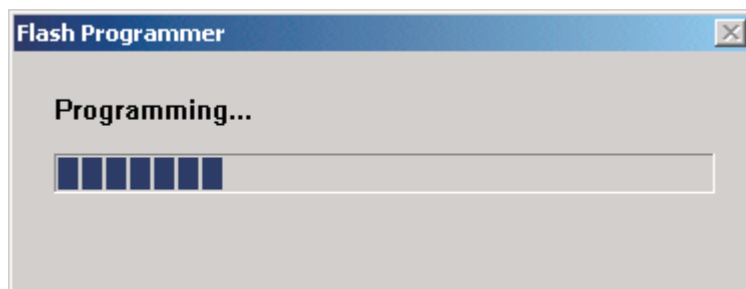
17. Click **P (Program)** to start update.

17. **P (Program)**をクリックし、アップデートを開始します。



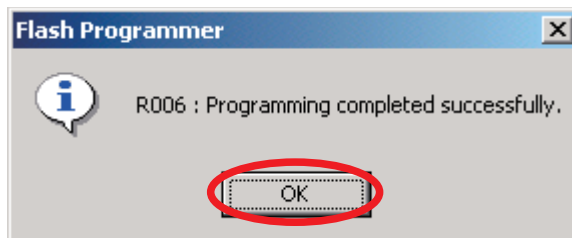
18. Software is written into the microprocessor.
The writing of software takes about 50 seconds.

18. ソフトウェアがマイコンに書き込まれます。
ソフトウェアの書き込みにかかる時間はおよそ50秒です。



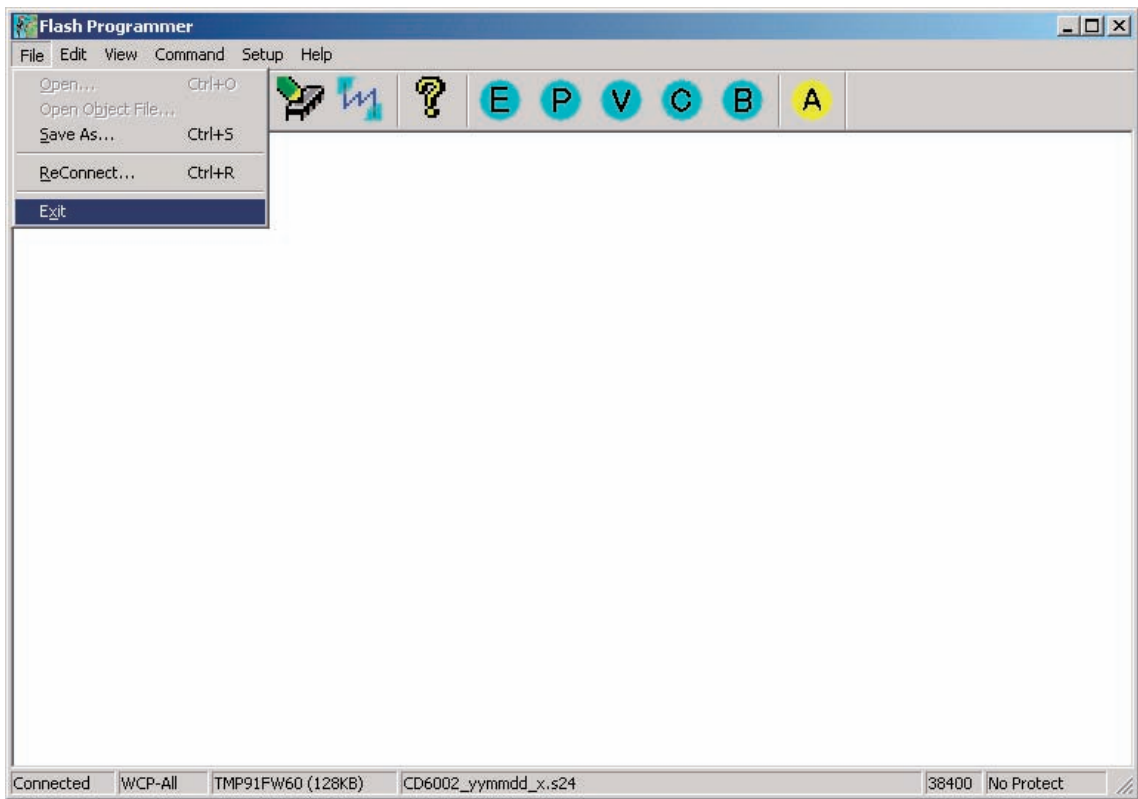
19. If the software is updated successfully, a dialog box saying "R006: Programming completed successfully." appears.
Click **OK**.

19. アップデートが完了すると "R006: Programming completed successfully" と書かれた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。



20. Click the **File** in the menu bar and select the **Exit**.

20. メニューバーの**File**をクリックし、**Exit**を選択します。



21. Disconnect mains cord from the unit, and then disconnect FFC of connection JIG from the unit.

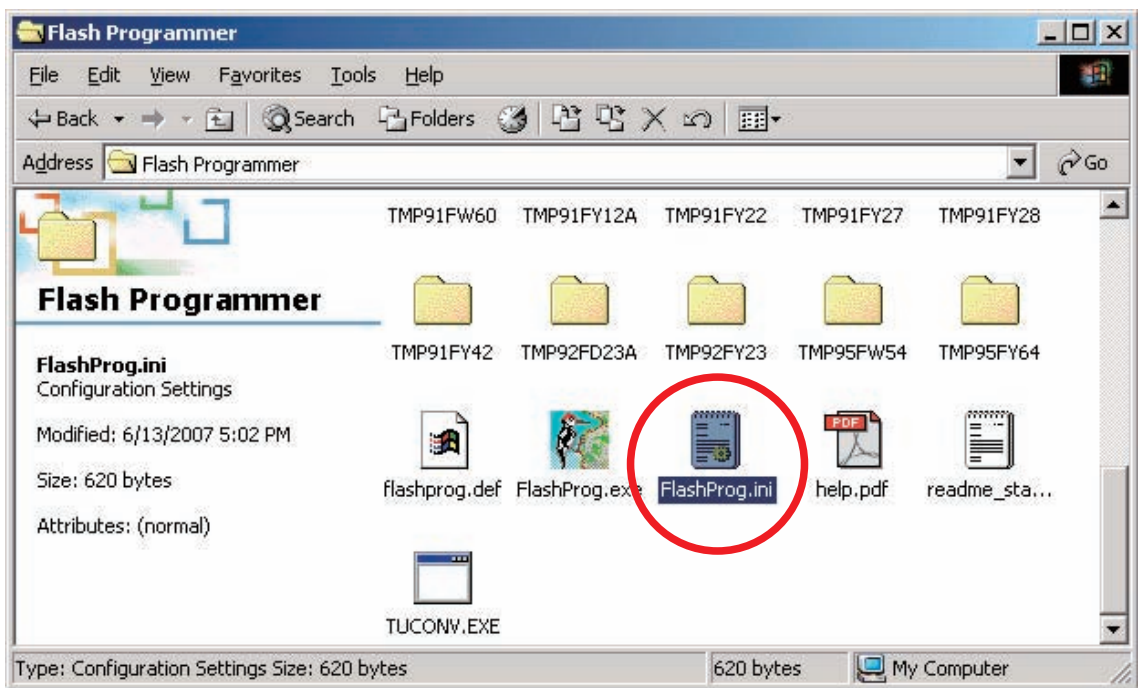
21. 電源ケーブルを本機からはずし、その後接続治具のFFCを本機から外します。

[B] When a Flash Programmer did not launch

[B] When a Flash Programmer did not launch

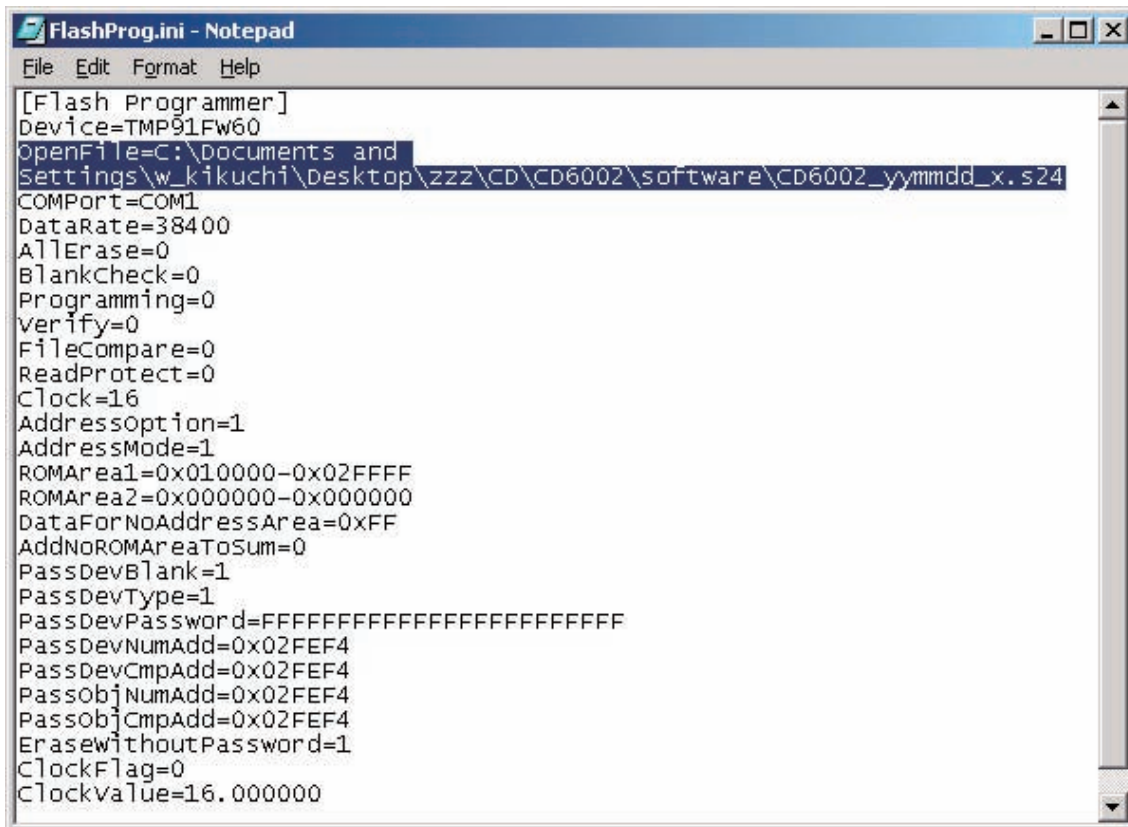
1. Open the FlashProg.ini in the Flash Programmer folder by text editor. (EX.: Notepad, etc)

1. Flash Programmerフォルダ内のFlashProg.iniをテキストエディタで開きます。(メモ帳など)

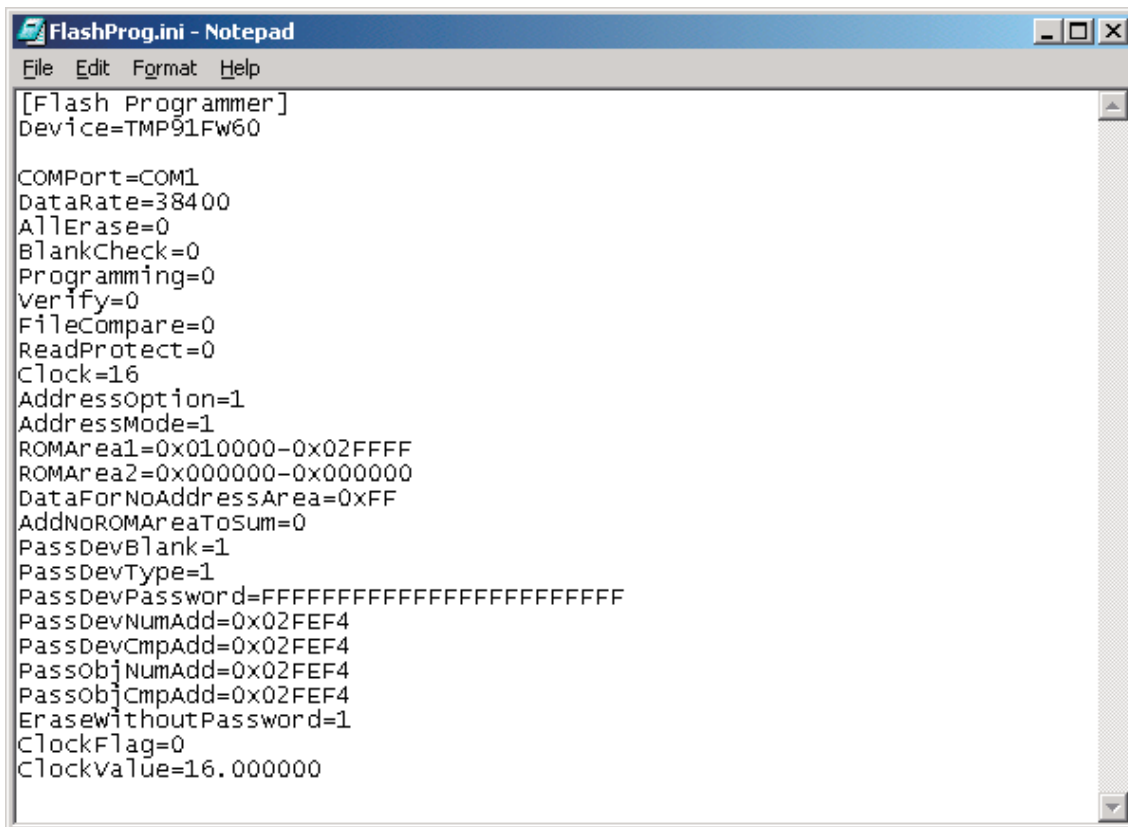


2. Delete the text "OpenFile=C:\...(your PC setting)...\???.s24".

2. テキスト文の” OpenFile=C:\...(PC環境により異なります。)...\???.s24” を削除します。



```
FlashProg.ini - Notepad
File Edit Format Help
[Flash Programmer]
Device=TMP91FW60
OpenFile=C:\Documents and Settings\w_kikuchi\Desktop\zzz\CD\CD6002\software\CD6002_yymmdd_x.s24
COMPort=COM1
DataRate=38400
AllErase=0
BlankCheck=0
Programming=0
Verify=0
FileCompare=0
ReadProtect=0
Clock=16
AddressOption=1
AddressMode=1
ROMArea1=0x010000-0x02FFFF
ROMArea2=0x000000-0x000000
DataForNoAddressArea=0xFF
AddNoROMAreaToSum=0
PassDevBlank=1
PassDevType=1
PassDevPassword=FFFFFFFFFFFFFFFFFFFFFFFF
PassDevNumAdd=0x02FEF4
PassDevCmpAdd=0x02FEF4
PassObjNumAdd=0x02FEF4
PassObjCmpAdd=0x02FEF4
EraseWithoutPassword=1
ClockFlag=0
ClockValue=16.000000
```

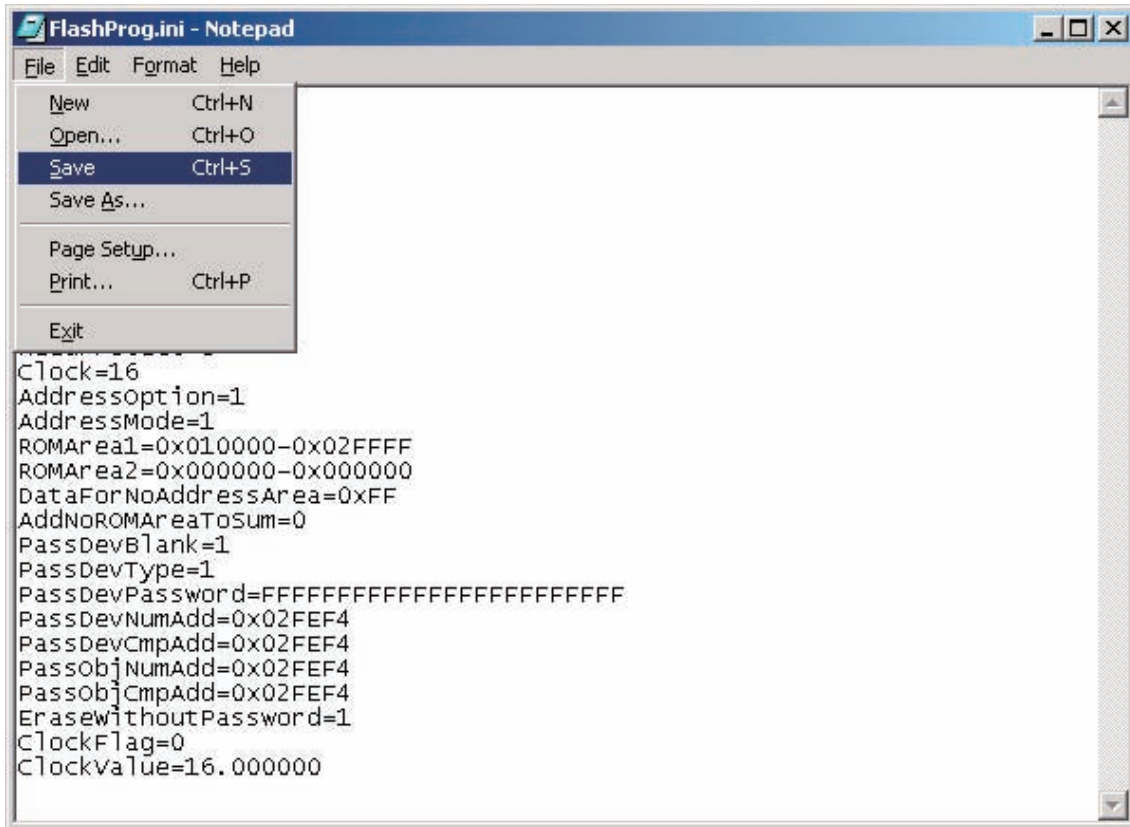


```
FlashProg.ini - Notepad
File Edit Format Help
[Flash Programmer]
Device=TMP91FW60

COMPort=COM1
DataRate=38400
AllErase=0
BlankCheck=0
Programming=0
Verify=0
FileCompare=0
ReadProtect=0
Clock=16
AddressOption=1
AddressMode=1
ROMArea1=0x010000-0x02FFFF
ROMArea2=0x000000-0x000000
DataForNoAddressArea=0xFF
AddNoROMAreaToSum=0
PassDevBlank=1
PassDevType=1
PassDevPassword=FFFFFFFFFFFFFFFFFFFFFFFF
PassDevNumAdd=0x02FEF4
PassDevCmpAdd=0x02FEF4
PassObjNumAdd=0x02FEF4
PassObjCmpAdd=0x02FEF4
EraseWithoutPassword=1
ClockFlag=0
ClockValue=16.000000
```

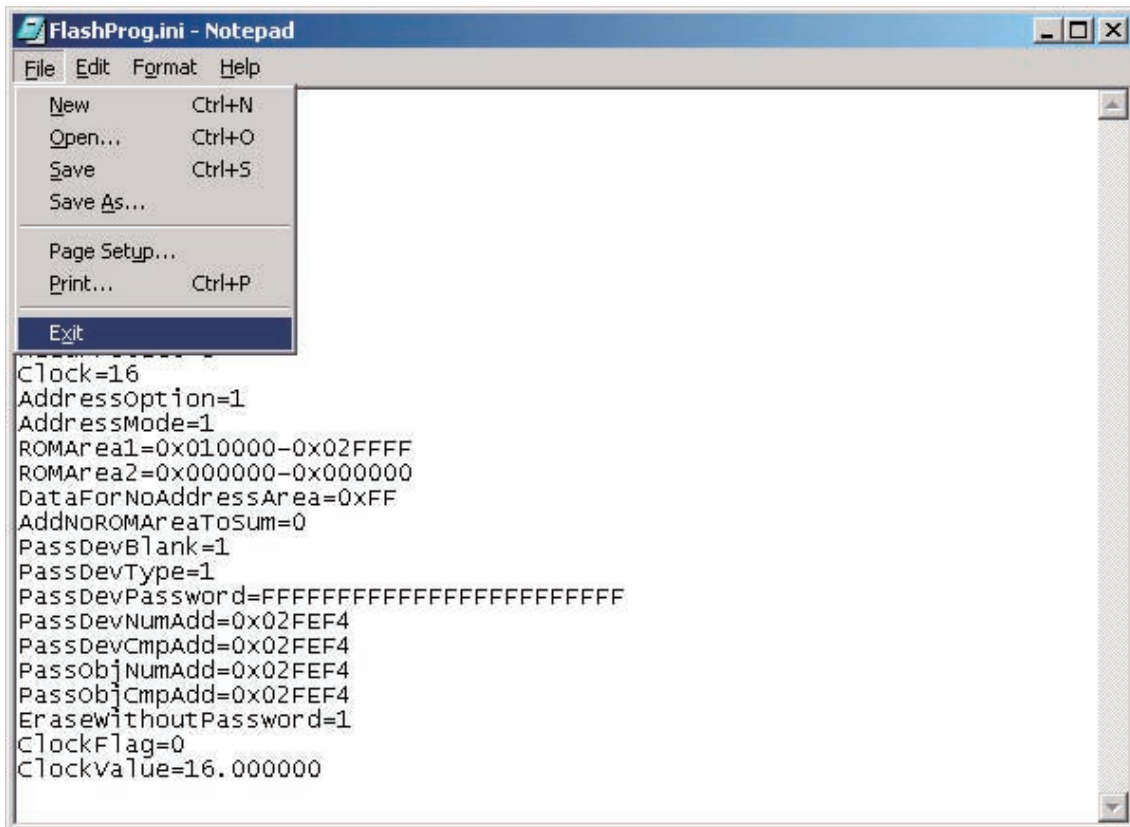

3. Save the FlashProg.ini.

3. FlashProg.iniを上書き保存します。



4. Close the text editor.

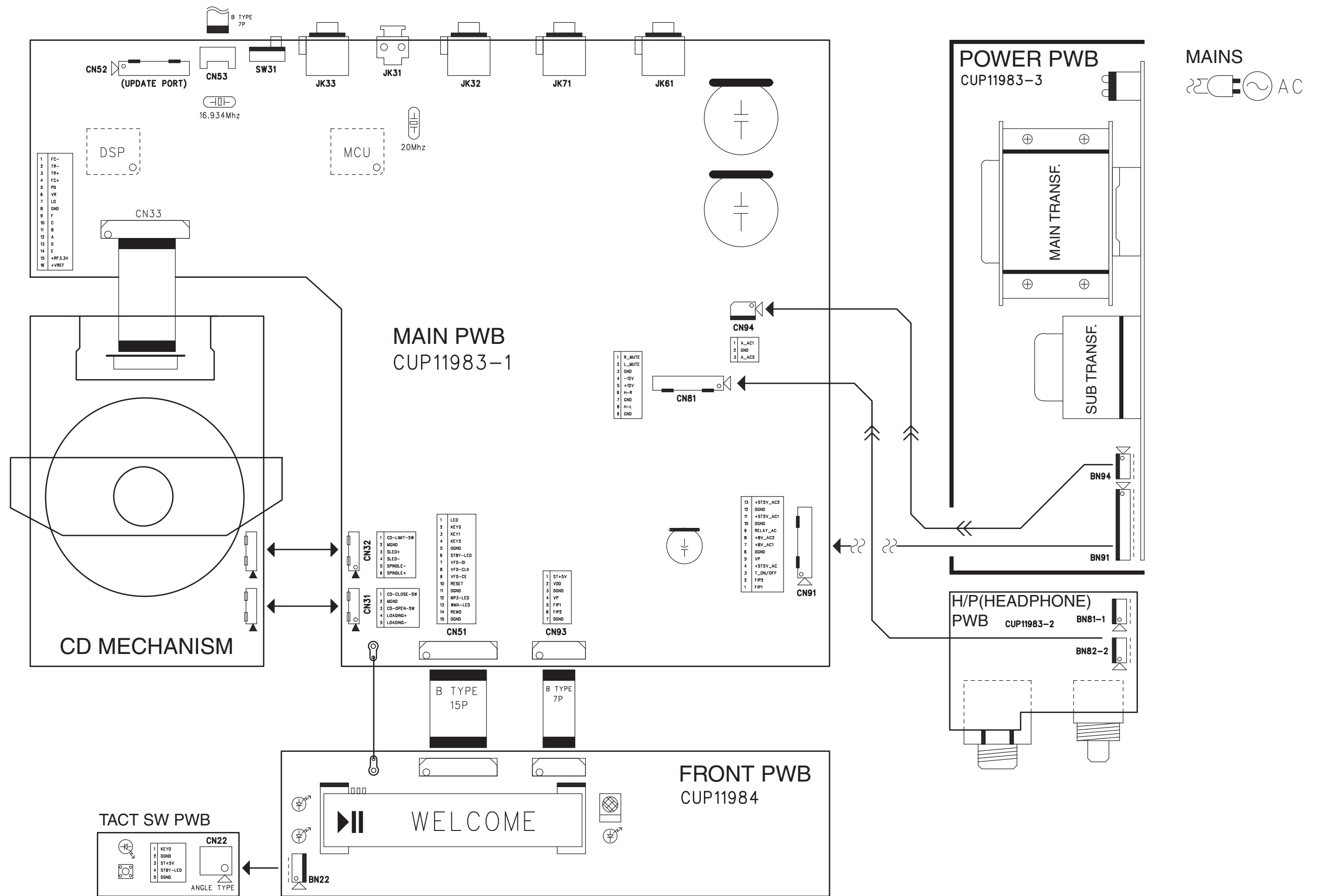
4. テキストエディタを閉じます。



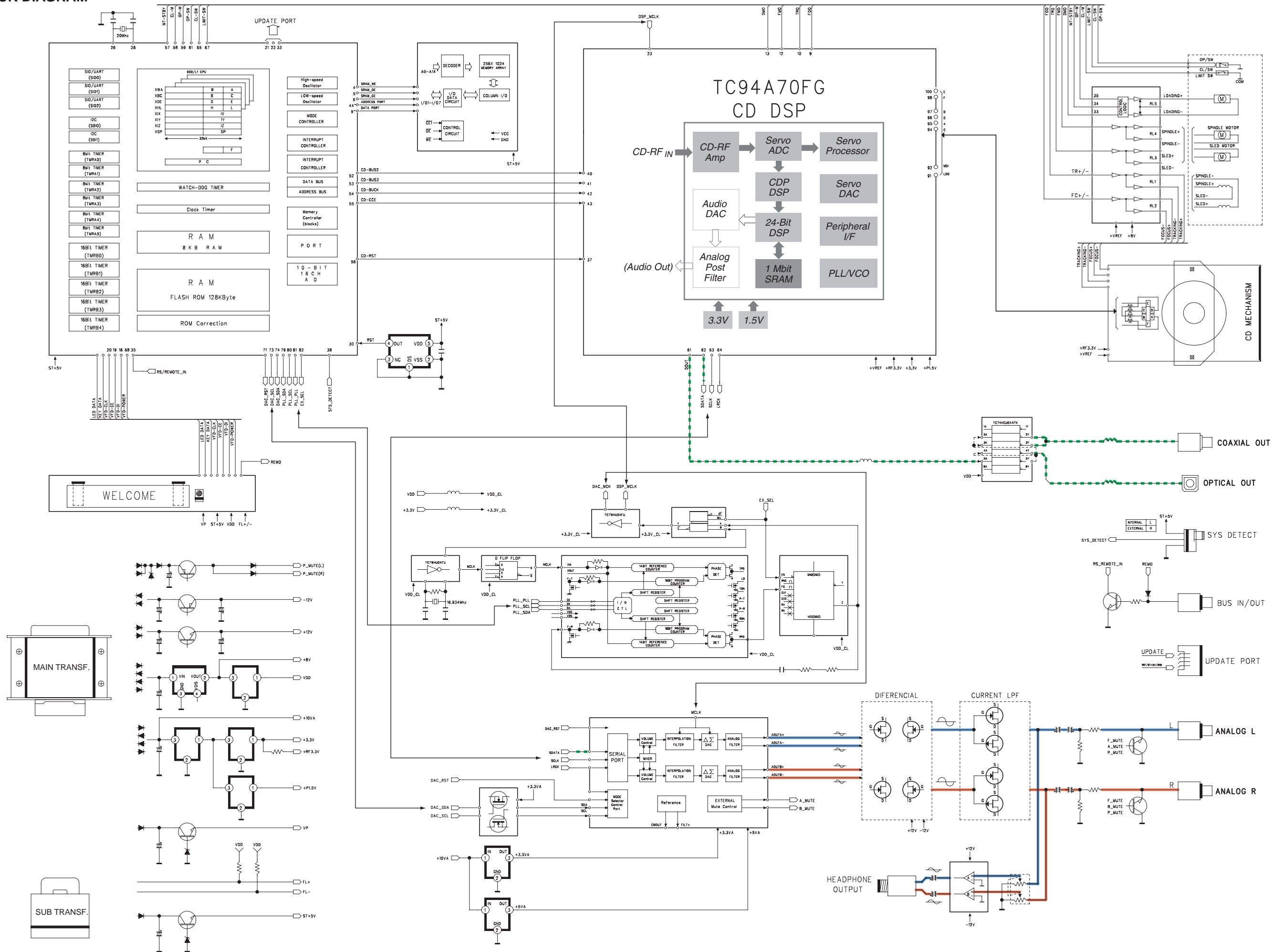
5. Probably you can launch the Flash Programmer. Go to the **[A] Update Procedure** step 3.

5. これでFlash Programmerを起動することが出来ますので **[A] Update Procedure**手順3に戻ってください。 .

6. WIRING DIAGRAM



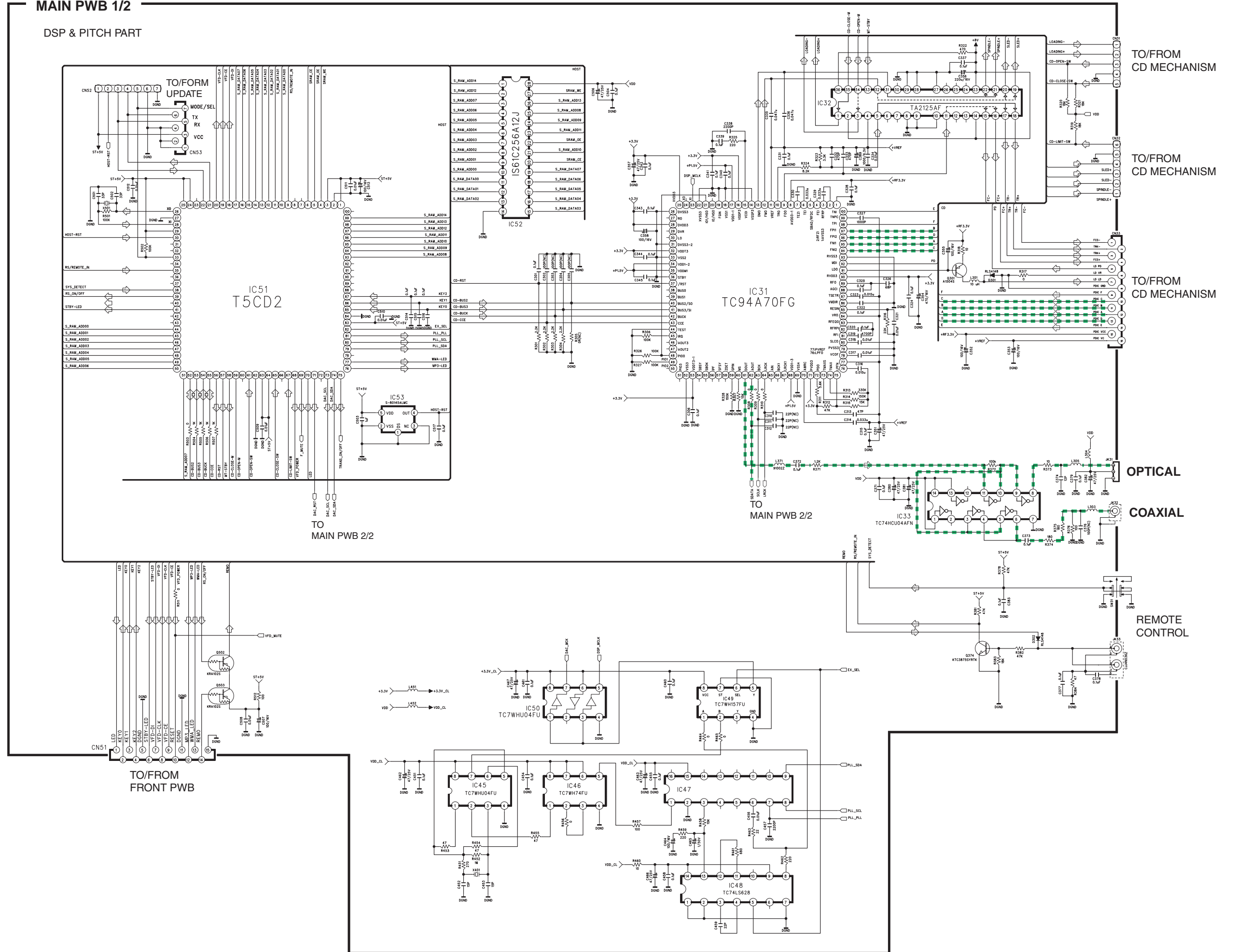
7. BLOCK DIAGRAM



8. SCHEMATIC DIAGRAM

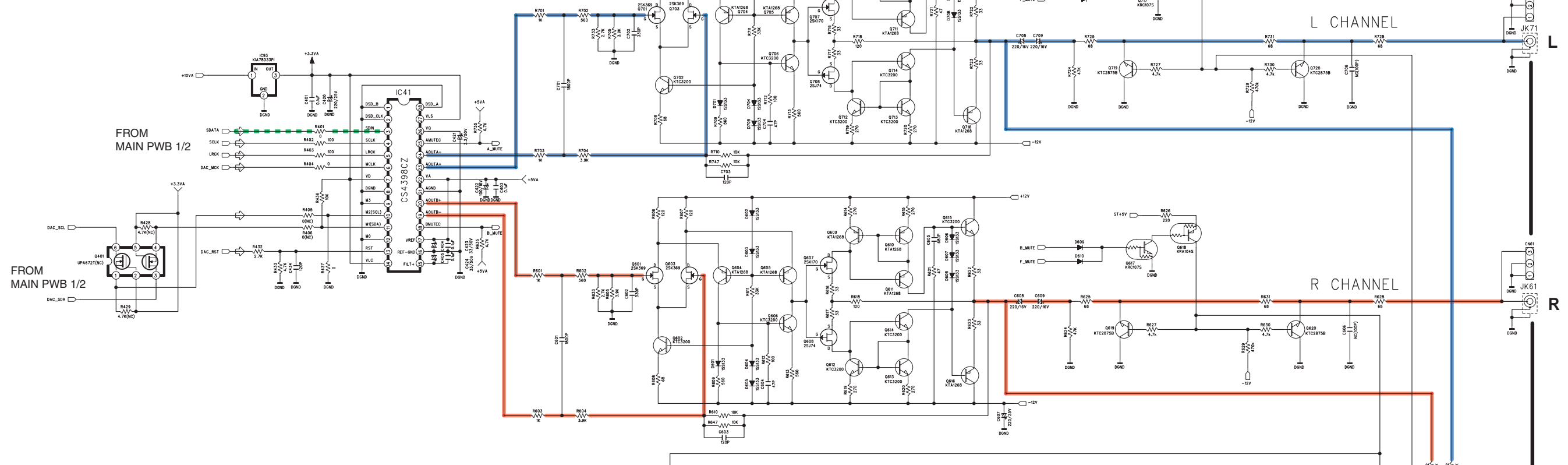
MAIN PWB 1/2

DSP & PITCH PART

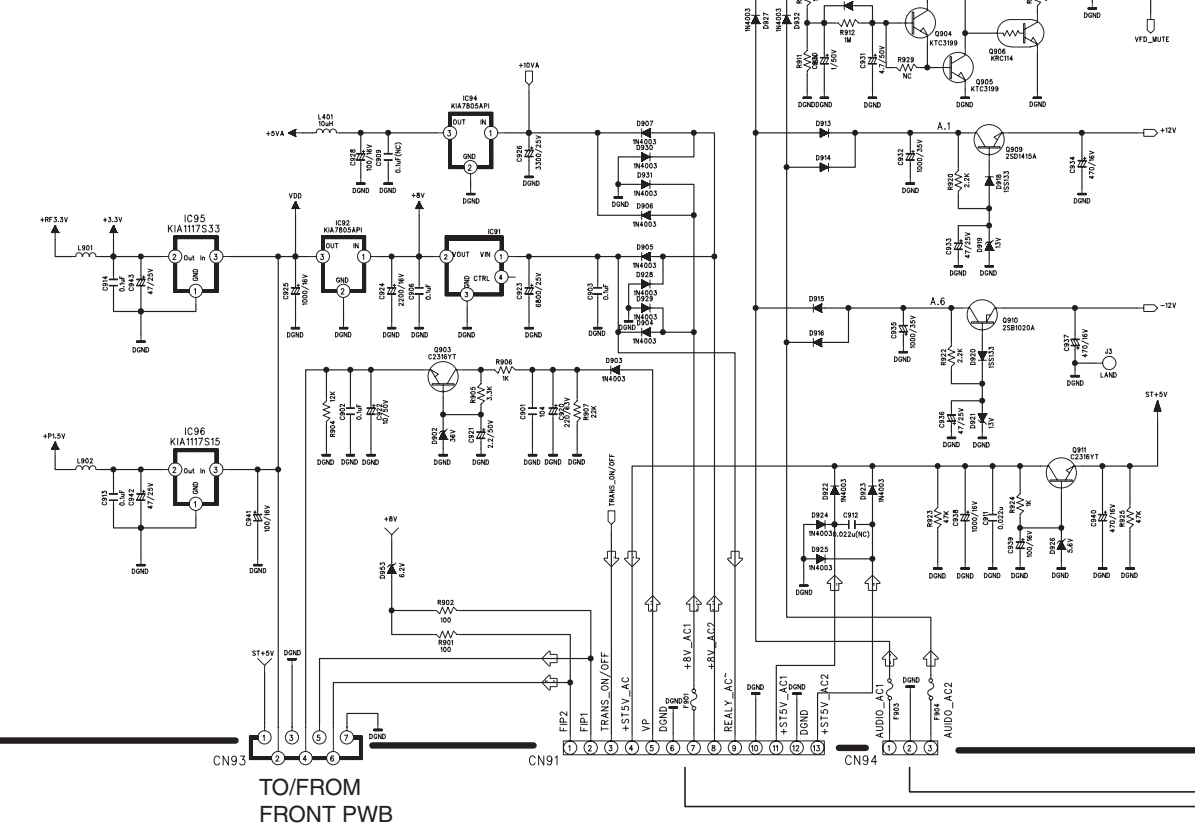


MAIN PWB 2/2

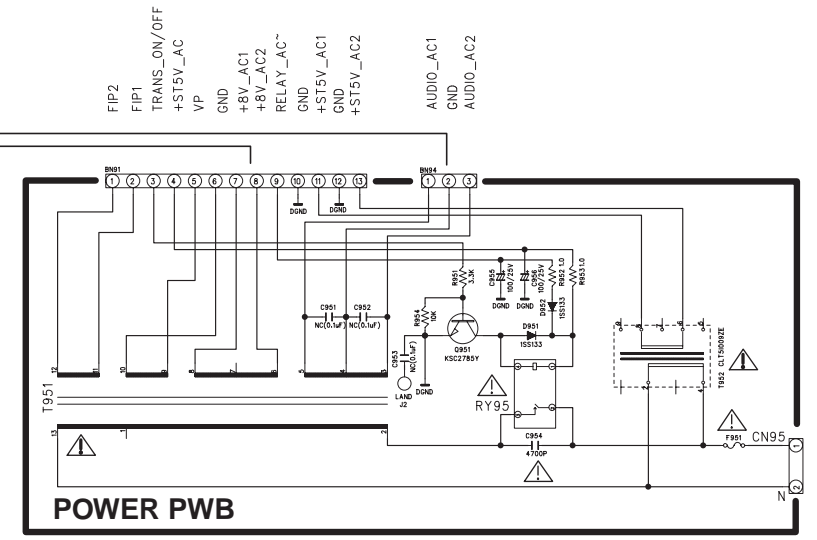
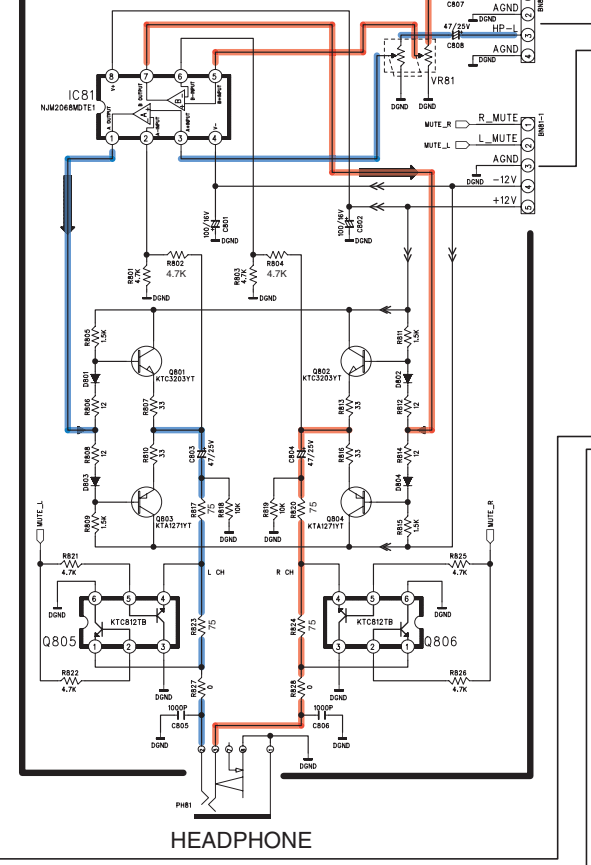
AUDIO PART

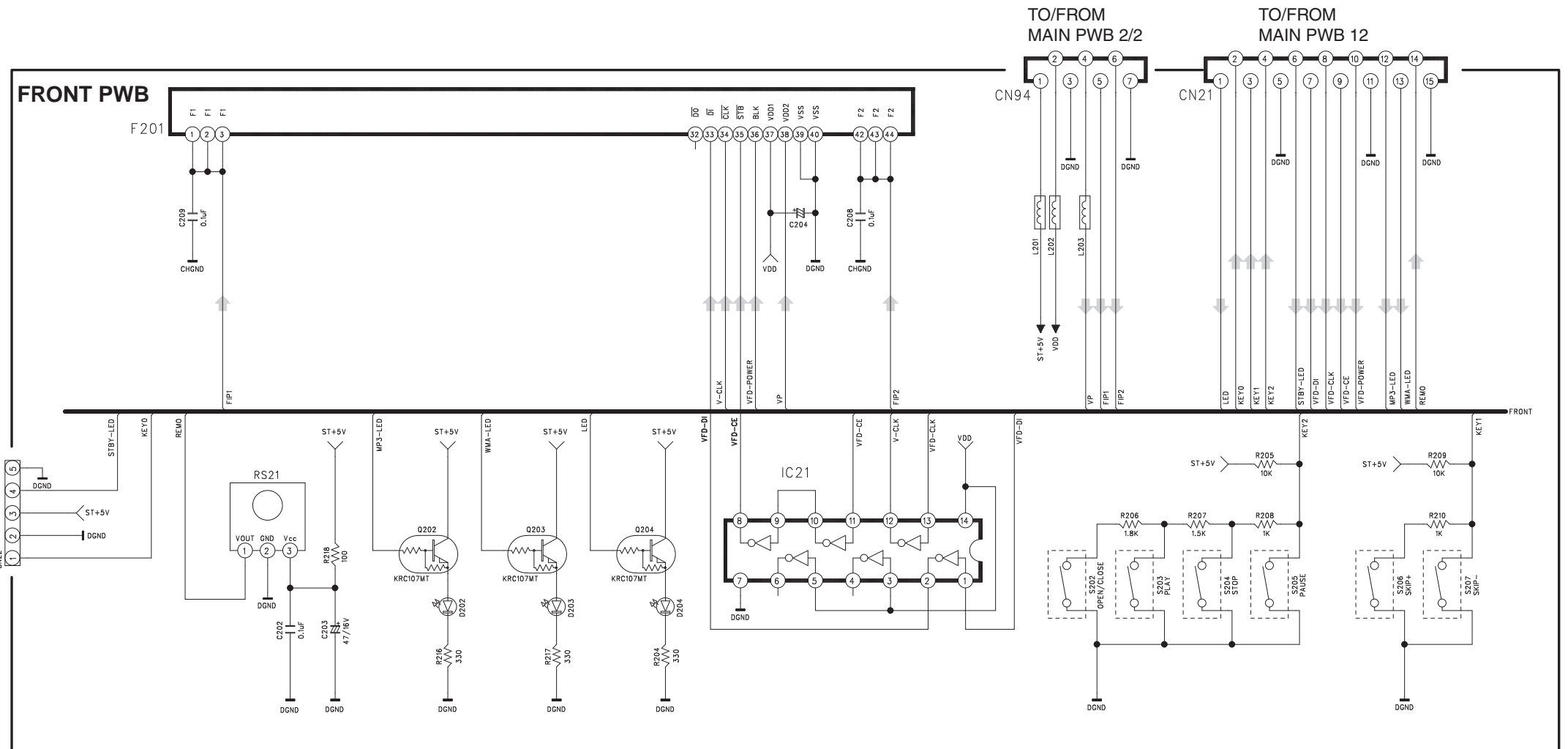
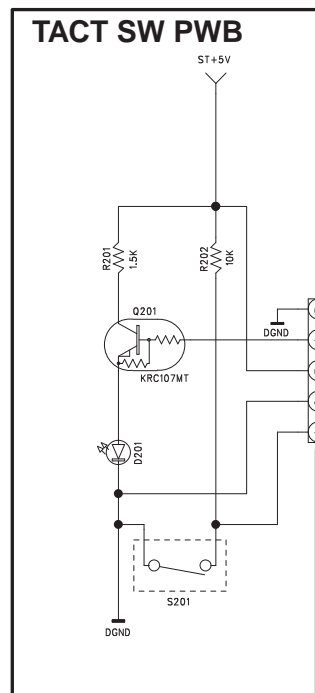


POWER SUPPLY PART



HEADPHONE PWB

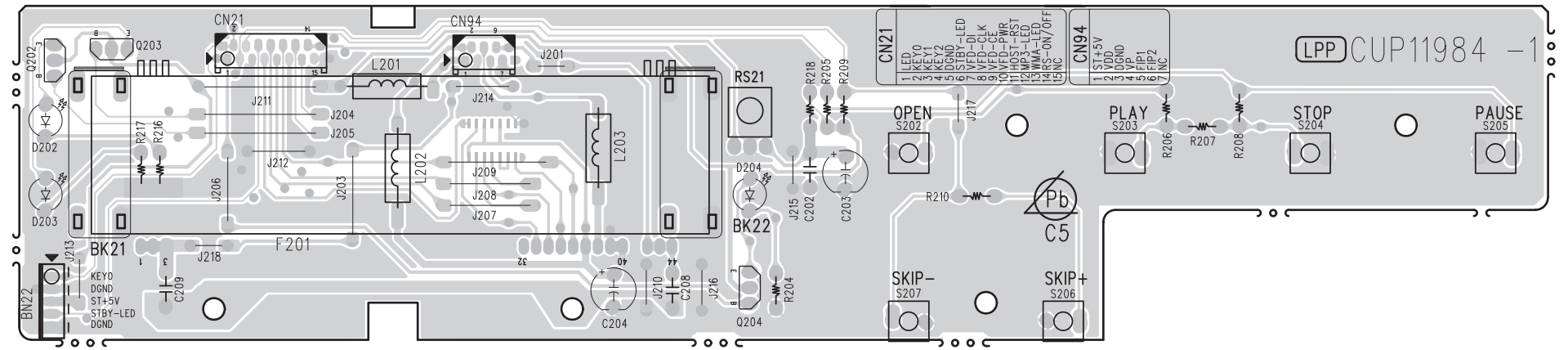




9. PARTS LOCATION

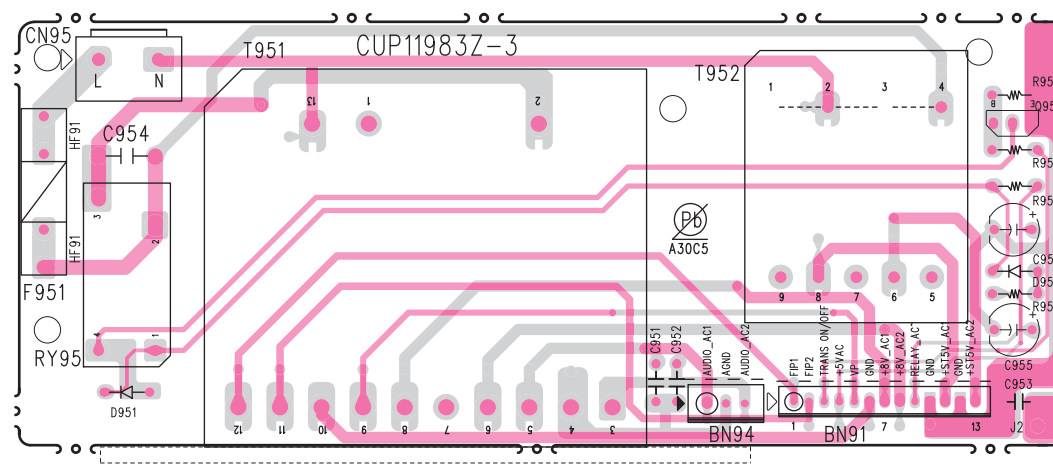
FRONT A
Q202 Q203

Q204

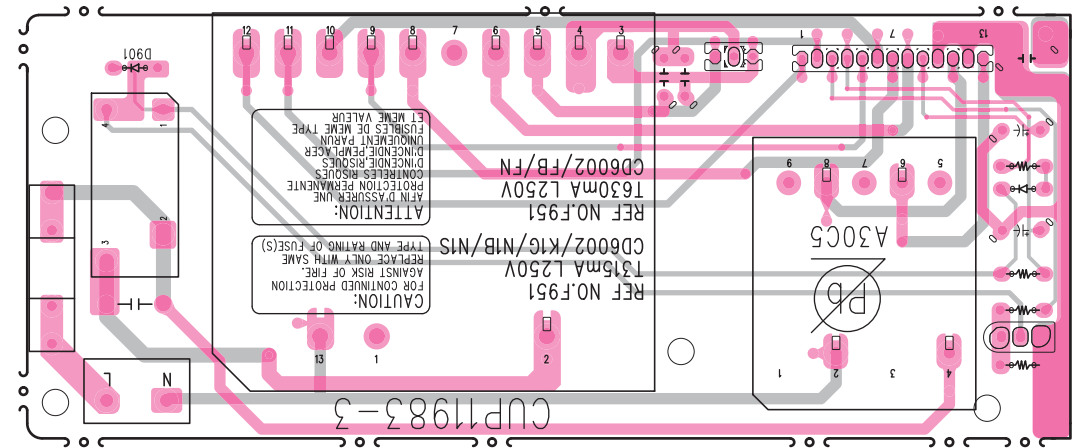


POWER A PWB

Q951



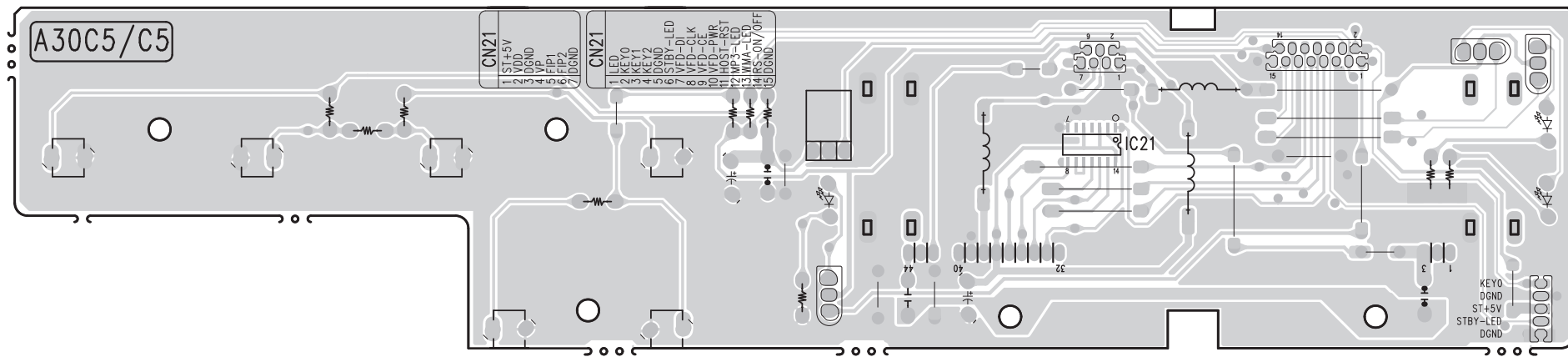
POWER B PWB



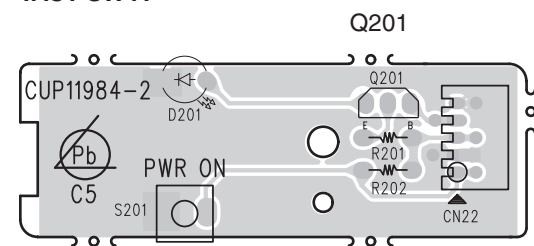
鉛フリー半田
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。
Lead-free Solder
When soldering, use the Lead-free Solder (Sn-Ag-Cu).

FRONT B

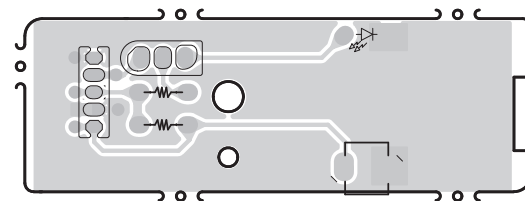
IC21



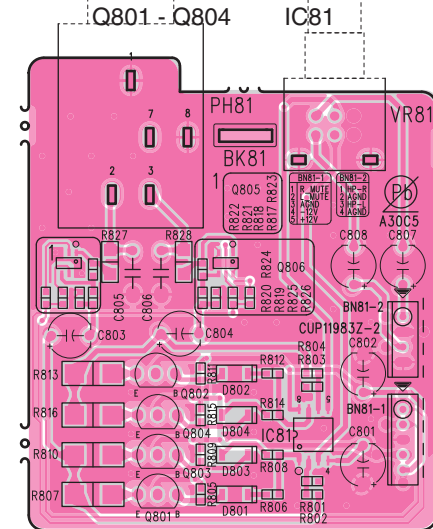
TACT SW A



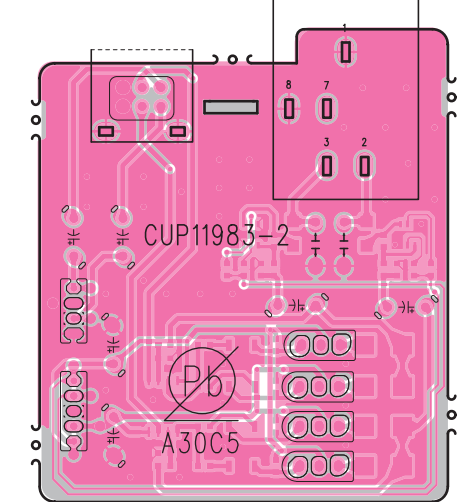
TACT SW B



HEADPHONE A PWB

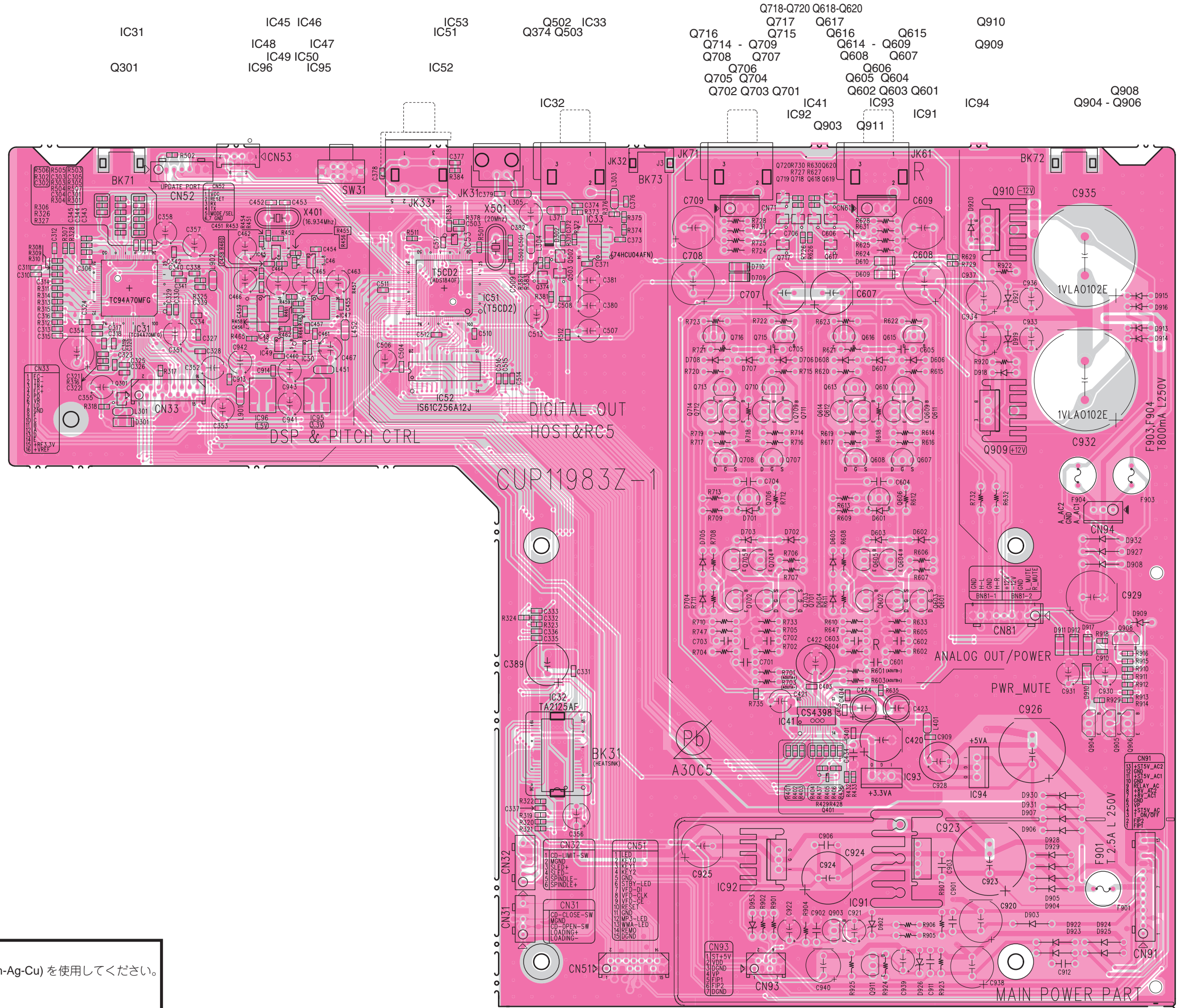


HEADPHONE B PWB



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).

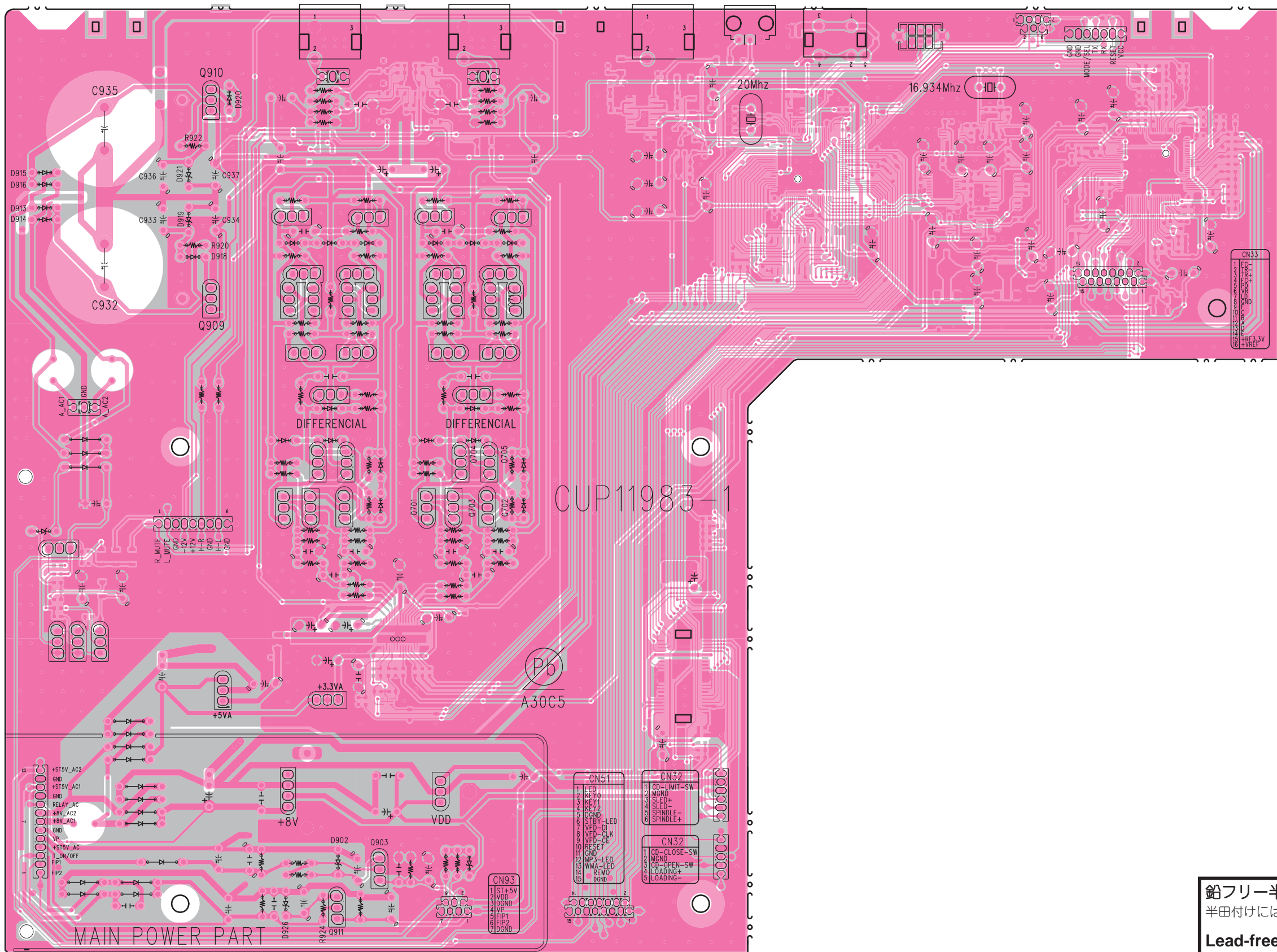
MAIN A PWB



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。

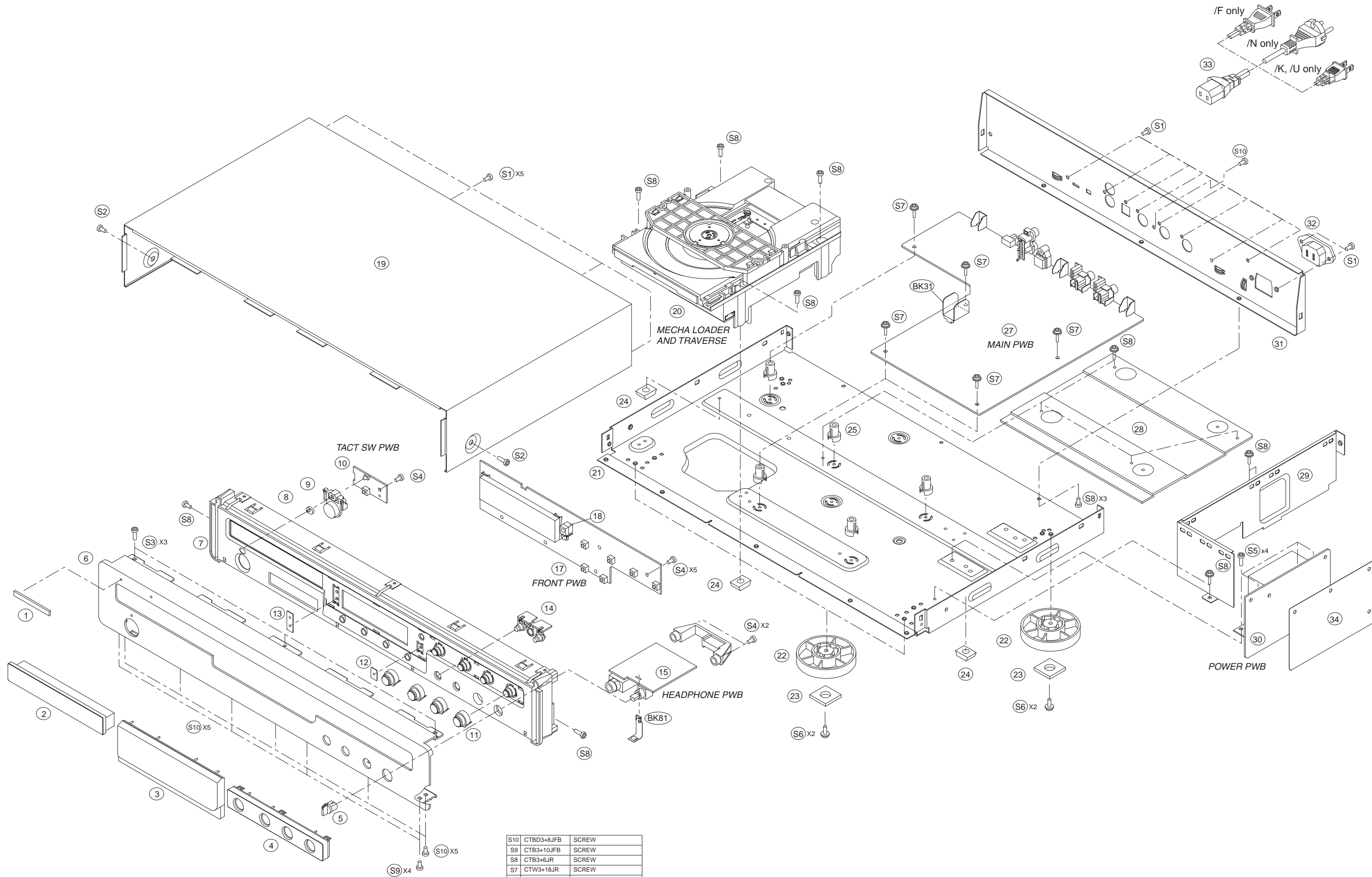
Lead-free Solder
When soldering, use the Lead-free Solder (Sn-Ag-Cu).

MAIN B PWB



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).

10. EXPLODED VIEW AND PARTS LIST



S10	CTBD3+8JFB	SCREW
S9	CTB3+10JFB	SCREW
S8	CTB3+6JR	SCREW
S7	CTW3+18JR	SCREW
S6	CTW3+8JR	SCREW
S5	CTB4+6FFZR	SCREW
S4	CTB3+10JR	SCREW
S3	CTS3+8JR	SCREW
S2	CTB4+6FFZR	SCREW(BLACK Ver.)
	CTB4+6FFC	SCREW(GOLD Ver.)
	CTB4+6FFC	SCREW(SILVER Ver.)
S1	CTB3+8JFB	SCREW
NO.	PARTS NO.	DESCRIPTION

P.C.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION	
	1	F B	nsp	00M24AW251010	BADGE	NEW MZ BADGE	CGB1A117
	1	F N	nsp	00M24AW251010	BADGE	NEW MZ BADGE	CGB1A117
	1	/K1G	nsp	00M24AW251010	BADGE	NEW MZ BADGE	CGB1A117
	1	/N1B	00M24AW251010	00M24AW251010	BADGE	NEW MZ BADGE	CGB1A117
	1	/N1S	00M24AW251020	00M24AW251020	BADGE	NEW MZ BADGE SILVER	CGB1A117G
	2	F B	nsp	00M30CW053010	ESCUTCHEON	ORNAMENT DOOR BLACK	CGR1A427ZH10
	2	F N	nsp	00M30CW053110	ESCUTCHEON	ORNAMENT DOOR GOLD	CGR1A427RFYH40
	2	/K1G	nsp	00M30CW053110	ESCUTCHEON	ORNAMENT DOOR GOLD	CGR1A427RFYH40
	2	/N1B	00M30CW053010	00M30CW053010	ESCUTCHEON	ORNAMENT DOOR BLACK	CGR1A427ZH10
	2	/N1S	00M30CW053210	00M30CW053210	ESCUTCHEON	ORNAMENT DOOR SILVER	CGR1A427R6YH51
	3	F B	nsp	00M30CW158010	WINDOW	WINDOW BLACK/GOLD	CGU1A405Z
	3	F N	nsp	00M30CW158010	WINDOW	WINDOW BLACK/GOLD	CGU1A405Z
	3	/K1G	nsp	00M30CW158010	WINDOW	WINDOW BLACK/GOLD	CGU1A405Z
	3	/N1B	00M30CW158010	00M30CW158010	WINDOW	WINDOW BLACK/GOLD	CGU1A405Z
	3	/N1S	00M30CW158210	00M30CW158210	WINDOW	WINDOW SILVER	CGU1A405Y
	4	F B	nsp	00M30CW053020	ESCUTCHEON	ORNAMENT KNOB BLACK	CGR1A428ZH10
	4	F N	nsp	00M30CW053120	ESCUTCHEON	ORNAMENT KNOB GOLD	CGR1A428RFYH40
	4	/K1G	nsp	00M30CW053120	ESCUTCHEON	ORNAMENT KNOB GOLD	CGR1A428RFYH40
	4	/N1B	00M30CW053020	00M30CW053020	ESCUTCHEON	ORNAMENT KNOB BLACK	CGR1A428ZH10
	4	/N1S	00M30CW053220	00M30CW053220	ESCUTCHEON	ORNAMENT KNOB SILVER	CGR1A428R6YH51
	5	F B	nsp	00M24AW154010	KNOB	KNOB LEVEL BLACK CBN1A170	CBN1A170K92
	5	F N	nsp	00M24AW154110	KNOB	KNOB LEVEL GOLD CBN1A170	CBN1A170RFD4
	5	/K1G	nsp	00M24AW154110	KNOB	KNOB LEVEL GOLD CBN1A170	CBN1A170RFD4
	5	/N1B	00M24AW154010	00M24AW154010	KNOB	KNOB LEVEL BLACK CBN1A170	CBN1A170K92
	5	/N1S	00M24AW154210	00M24AW154210	KNOB	KNOB LEVEL SILVER CBN1A170	CBN1A170R6G13
	6	F B	nsp	00M30CW248010	PANEL	FRONT AL PANEL	CKM1A185ZC23
	6	F N	nsp	00M30CW248110	PANEL	FRONT AL PANEL	CKM1A185YC24
	6	/K1G	nsp	00M30CW248110	PANEL	FRONT AL PANEL	CKM1A185YC24
	6	/N1B	00M30CW248010	00M30CW248010	PANEL	FRONT AL PANEL	CKM1A185ZC23
	6	/N1S	00M30CW248210	00M30CW248210	PANEL	FRONT AL PANEL	CKM1A185YC40
	7	F B	nsp	00M30CW105020	CHASSIS	PANEL SUB BLACK	CGW2A410R4K92
	7	F N	nsp	00M30CW105120	CHASSIS	PANEL SUB GOLD	CGW2A410RFD4
	7	/K1G	nsp	00M30CW105120	CHASSIS	PANEL SUB GOLD	CGW2A410RFD4
	7	/N1B	00M30CW105020	00M30CW105020	CHASSIS	PANEL SUB BLACK	CGW2A410R4K92
	7	/N1S	00M30CW105220	00M30CW105220	CHASSIS	PANEL SUB SILVER	CGW2A410R6G13
	8		00M24AW355010	00M24AW355010	LENS	STANDBY	CGL1A183
	9	F B	nsp	00M24AW270010	BUTTON	KNOB POWER BLACK CBT1A878	CBT1A878K92
	9	F N	nsp	00M24AW270110	BUTTON	KNOB POWER GOLD CBT1A878	CBT1A878RFD4
	9	/K1G	nsp	00M24AW270110	BUTTON	KNOB POWER GOLD CBT1A878	CBT1A878RFD4
	9	/N1B	00M24AW270010	00M24AW270010	BUTTON	KNOB POWER BLACK CBT1A878	CBT1A878K92
	9	/N1S	00M24AW270210	00M24AW270210	BUTTON	KNOB POWER SILVER CBT1A878	CBT1A878R6G13
	10		nsp	nsp	PWB ASSY	TACT SW PWB ASSY	COP11984B
	11	F B	nsp	00M30CW270010	BUTTON	KNOB PLAY BLACK	CBT1A1049C67
	11	F N	nsp	00M30CW270110	BUTTON	KNOB PLAY GOLD	CBT1A1049C68
	11	/K1G	nsp	00M30CW270110	BUTTON	KNOB PLAY GOLD	CBT1A1049C68
	11	/N1B	00M30CW270010	00M30CW270010	BUTTON	KNOB PLAY BLACK	CBT1A1049C67
	11	/N1S	00M30CW270210	00M30CW270210	BUTTON	KNOB PLAY SILVER	CBT1A1049C22
	12		nsp	nsp	SHEET	SHEET LED	CGX1A372Z
	13		nsp	nsp	SHEET	SHEET INDICATOR	CGX1A386Z
	14	F B	nsp	00M45BW270020	BUTTON	KNOB SKIP BLACK	CBT1A996K92
	14	F N	nsp	00M45BW270120	BUTTON	KNOB SKIP GOLD	CBT1A996RFD4
	14	/K1G	nsp	00M45BW270120	BUTTON	KNOB SKIP GOLD	CBT1A996RFD4
	14	/N1B	00M45BW270020	00M45BW270020	BUTTON	KNOB SKIP BLACK	CBT1A996K92
	14	/N1S	00M45BW270220	00M45BW270220	BUTTON	KNOB SKIP SILVER	CBT1A996R6G13
	15	F B	nsp	nsp	PWB ASSY	HEADPHONE PWB ASSY	COP11983C
	15	F N	nsp	nsp	PWB ASSY	HEADPHONE PWB ASSY	COP11983C
	15	/K1G	nsp	nsp	PWB ASSY	HEADPHONE PWB ASSY	COP11983B
	15	/N1B	nsp	nsp	PWB ASSY	HEADPHONE PWB ASSY	COP11983B
	15	/N1S	nsp	nsp	PWB ASSY	HEADPHONE PWB ASSY	COP11983D
	17		nsp	nsp	PWB ASSY	FRONT PWB ASSY	COP11984B
	18		nsp	nsp	BUFFER	BUFFER	CHG2A185
	20		00M24AW304510	00M24AW304510	MECHANISM	MECHA LOADER AND TRAVERSE	CJDKSL2130CCMZ
	21		nsp	nsp	CHASSIS	BOTTOM CHASSIS	CJA2A231
	22	F B	nsp	00M243W057010	LEG	LEG GOLD/BLACK	CKL2A042H11
	22	F N	nsp	00M243W057010	LEG	LEG GOLD/BLACK	CKL2A042H11
	22	/K1G	nsp	00M243W057010	LEG	LEG GOLD/BLACK	CKL2A042H11
	22	/N1B	00M243W057010	00M243W057010	LEG	LEG GOLD/BLACK	CKL2A042H11

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

P.C.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
	22	/N1S	00M243W057210	00M243W057210	LEG	LEG FOR SILVER CKL2A042H46
	23		00M11BW056010	00M11BW056010	BUFFER	CUSHION FOOT KHG1A050
	24		nsp	nsp	BUFFER	RUBBER CHG1A113
	25		nsp	nsp	HOLDER	HOLDER PWB CHE1A030
	27	F B	nsp	nsp	PWB ASSY	MAIN PWB ASSY COP11983C
	27	F N	nsp	nsp	PWB ASSY	MAIN PWB ASSY COP11983C
	27	/K1G	nsp	nsp	PWB ASSY	MAIN PWB ASSY COP11983B
	27	/N1B	nsp	nsp	PWB ASSY	MAIN PWB ASSY COP11983B
	27	/N1S	nsp	nsp	PWB ASSY	MAIN PWB ASSY COP11983D
	28		nsp	nsp	BRACKET	WEIGHT BRACKET CMD1A631
	29		nsp	nsp	BRACKET	SHIELD BRACKET CMD1A627
	30	F B	nsp	nsp	PWB ASSY	POWER PWB ASSY COP11983C
	30	F N	nsp	nsp	PWB ASSY	POWER PWB ASSY COP11983C
	30	/K1G	nsp	nsp	PWB ASSY	POWER PWB ASSY COP11983B
	30	/N1B	nsp	nsp	PWB ASSY	POWER PWB ASSY COP11983B
	30	/N1S	nsp	nsp	PWB ASSY	POWER PWB ASSY COP11983D
	31	F B	nsp	nsp	PANEL	REAR PANEL CD6002 CKF1A330Y
	31	F N	nsp	nsp	PANEL	REAR PANEL CD6002 CKF1A330Y
	31	/K1G	nsp	nsp	PANEL	REAR PANEL CD6002 CKF1A330X
	31	/N1B	nsp	nsp	PANEL	REAR PANEL CD6002 CKF1A330Z
	31	/N1S	nsp	nsp	PANEL	REAR PANEL CD6002 CKF1A330Z
	▲ 32		00MYJ04002640	00MYJ04002640	INLET	! R-301(21) AC INLET CJJ8A006ZW
	34		nsp	nsp	INSULATOR	PROTECTOR CGX1A394Z
			90M-YU003020R	90M-YU003020R	FPC	7P 120MM FFC CWC4F4A07A120B
			90M-YU003030R	90M-YU003030R	FPC	15P 120MM FFC CWC4F4A15A120B
			90M-FC500030R	90M-FC500030R	FERRITE CORE	FERRITE RING 29X7.7X19 CLZ9W003Z
			nsp	nsp	CORD	WIRE ASSY CWZSR4001BN91
			nsp	nsp	CORD	WIRE ASSY CWB1A906090EG
			nsp	nsp	CORD	WIRE ASSY CWB1B905090EG
			90M-YU003010R	90M-YU003010R	FPC	16P 140MM FFC CWC4F2A16A140B
PACKING						
		F B	nsp	00M30CW851110	USER GUIDE	USER GUIDE CD6002 F CQX1A1224Z
		F N	nsp	00M30CW851110	USER GUIDE	USER GUIDE CD6002 F CQX1A1224Z
		/K1G	nsp	00M30CW851350	USER GUIDE	USER GUIDE CD6002 K CQX1A1225Z
		/N1B	00M30CW851310	00M30CW851310	USER GUIDE	USER GUIDE CD6002 N CQX1A1223Z
		/N1S	00M30CW851310	00M30CW851310	USER GUIDE	USER GUIDE CD6002 N CQX1A1223Z
			00MZK27CW0010	00MZK27CW0010	UNIT KIT	REMOTE CONTROLLER RC001CD CARTCD5001
	▲ 33	F B	nsp	90M-ZC000350R	MAINS CORD	! MAINS CORD 12A/125V CJA2J076Z
	▲ 33	F N	nsp	90M-ZC000350R	MAINS CORD	! MAINS CORD 12A/125V CJA2J076Z
	▲ 33	/K1G	nsp	90M-ZC000650R	MAINS CORD	! MAINS CORD FOR K CJA2N075Z
	▲ 33	/N1B	90M-ZC000320R	90M-ZC000320R	MAINS CORD	! MAINS CORD 2WIRE 10A/250V CJA2B054Z
	▲ 33	/N1S	90M-ZC000320R	90M-ZC000320R	MAINS CORD	! MAINS CORD 2WIRE 10A/250V CJA2B054Z
NOT STANDARD SPARE PART						
			nsp	00M30CW801010	PACKING CASE	PACKING CASE CD6002 CPG1A725W
			nsp	00M30CW809010	CUSHION	CUSHION L OR R CPS1A791
	19	F B	nsp	00M24AW257010	LID	TOP COVER (BLACK) CKC1A140K117
	19	F N	nsp	00M24AW257110	LID	TOP COVER (GOLD) CKC1A140K118
	19	/K1G	nsp	00M24AW257110	LID	TOP COVER (GOLD) CKC1A140K118
	19	/N1B	nsp	00M24AW257010	LID	TOP COVER (BLACK) CKC1A140K117
	19	/N1S	nsp	00M24AW257210	LID	TOP COVER (SILVER) CKC1A140G14
			nsp	90M-ZD000440R	CONN. CORD	CORD PIN CJS4M009X
			nsp	90M-ZD000510R	CONN. CORD	CORD PIN CJS4N014Z

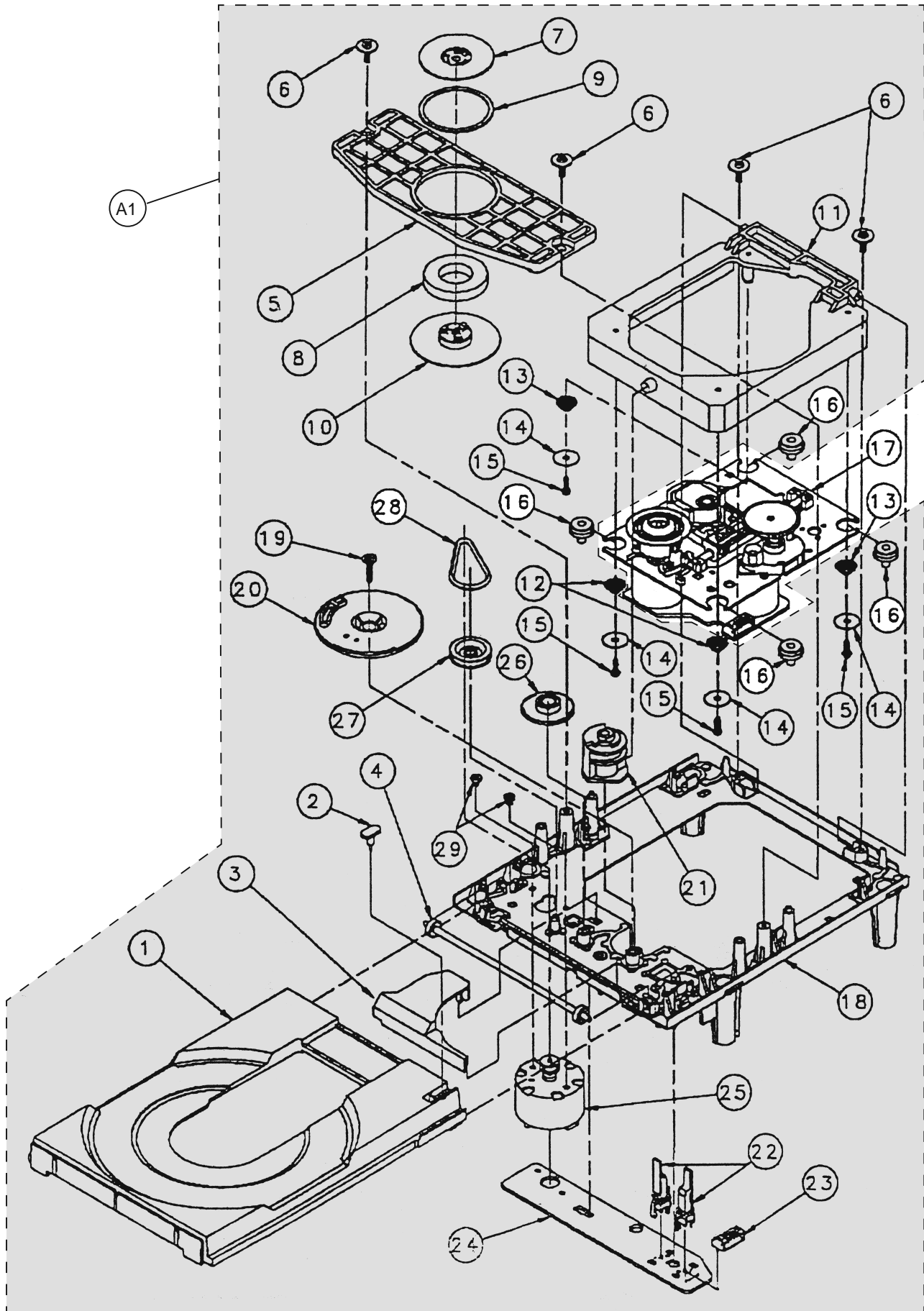
NOTE : "nsp" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

CD MECHANISM (LOADER ASS'Y)

P.C.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION	
	A1		90M24AW304600	90M24AW304600	MECHANISM	CD MECHA.S.K.D	WSL-2130CCM
	1		nsp	nsp	TRAY	TRAY (C)	9A07979600
	2		nsp	nsp	-	-	-
	3		nsp	nsp	COVER	GEAR COVER (S)	9A07979700
	4		nsp	nsp	GEAR	TRAY GEAR (S)	9A07268500
	5		nsp	nsp	RETAINER	CHUCKING PLATE	9A07268900
	6		nsp	nsp	SCREW	SCREW+PTPWH 2.6X7	9A07269900
	7		nsp	nsp	CLAMPER	YOKE (S) , CHUCKING	9A06965300
	8		nsp	nsp	MAGNET	MAGNET	9A06965400
	9		nsp	nsp	DAMPER	DAMPER	9A07268700
	10		nsp	nsp	PULLY	CHUCKING PULLY	9A07979800
	11		nsp	nsp	CHASSIS	SUB CHASSIS 2130	9A07979900
	12		nsp	nsp	SPRING	COIL SPRING (FRONT)	9A07980000
	13		nsp	nsp	SPRING	COIL SPRING (BACK)	9A07980100
	14		nsp	nsp	WASHER	WASHER 2130	9A07980200
	15		nsp	nsp	SCREW	SCREW+P2.6X10	9A07980300
	16		90M24AW259010	90M24AW259010	INSULATOR	INSULATOR	9A07980400
	17		90M24AW304010	90M24AW304010	MECHANISM	MD ASS'Y(KSS-213CCM)	9A07980500
	18		nsp	nsp	CHASSIS	OUTSERT MAIN CHASSIS(S)	9A07980600
	19		nsp	nsp	SCREW	SCREW+PTPWH2.6X16	9A06966200
	20		nsp	nsp	GEAR	DRIVE GEAR (S)	9A07980700
	21		nsp	nsp	CAM	CONTROL CAM (S)	9A07269000
	22		nsp	nsp	SW	LEAF SW	9A07268000
	23		nsp	nsp	CONN.	PIN,CONNECTOR 5P	9A06966600
	24		nsp	nsp	PWB	PC BOARD,LOADING	9A06966700
	25		nsp	nsp	MOTOR	MOTOR ASSY LOADING	9A06966800
	26		nsp	nsp	GEAR	MIDWAY GEAR (S)	9A07980800
	27		nsp	nsp	PULLY	LOADING PULLY	9A07268600
	28		90M24AW264010	90M24AW264010	BELT	LM BELT	9A07980900
	29		nsp	nsp	SCREW	SCREW+B2.6X2.5	9A06967200

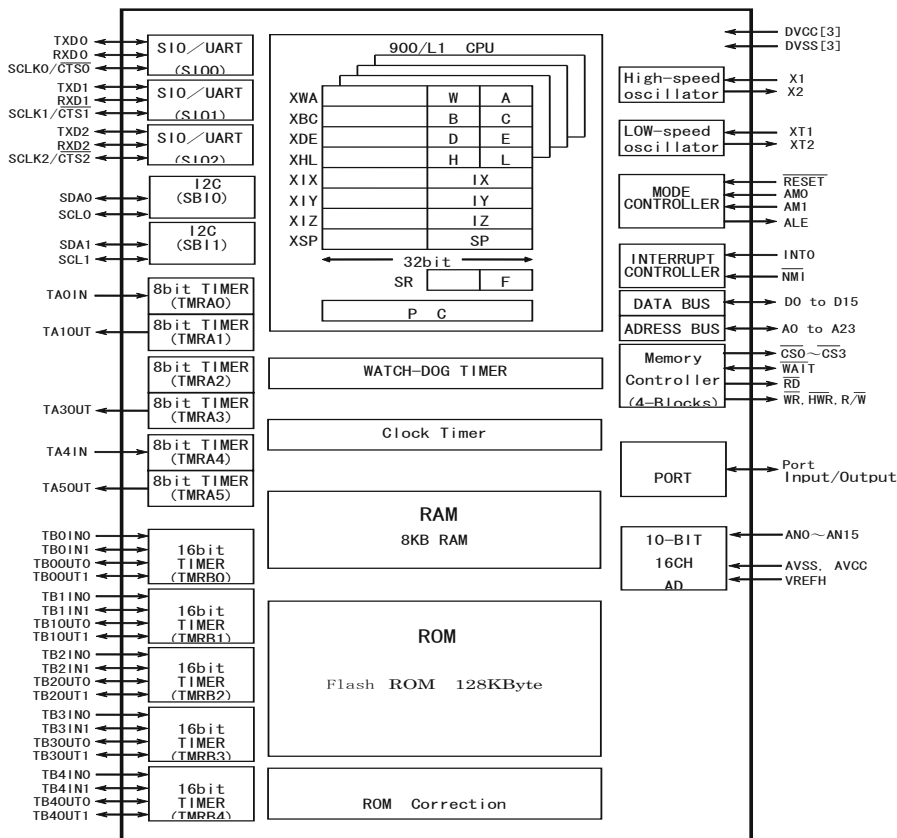
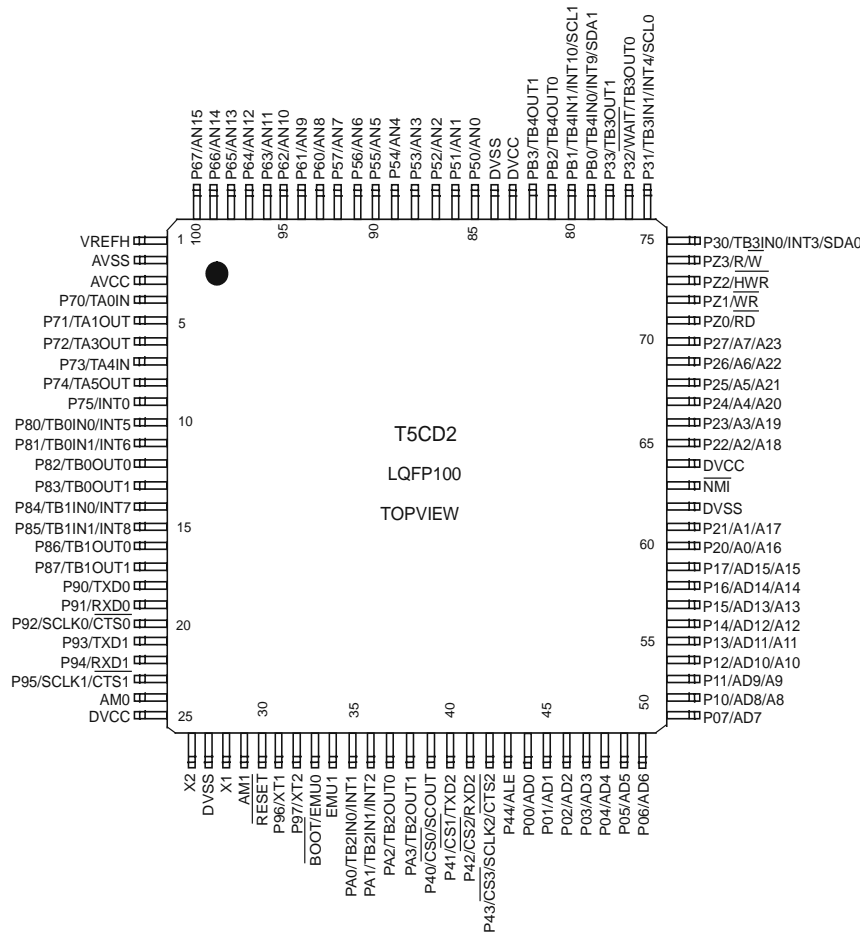
NOTE : *nsp* PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

CD MECHANISM (LOADER ASS'Y)



11. MICROPROCESSOR AND IC DATA

IC51 : T5CD2



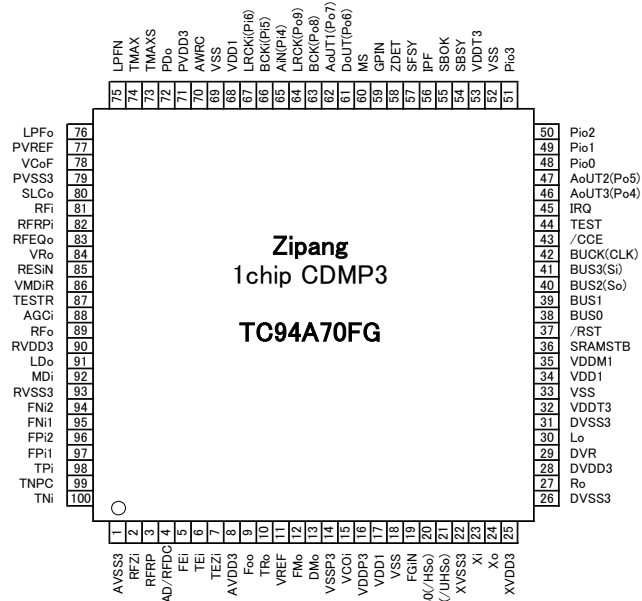
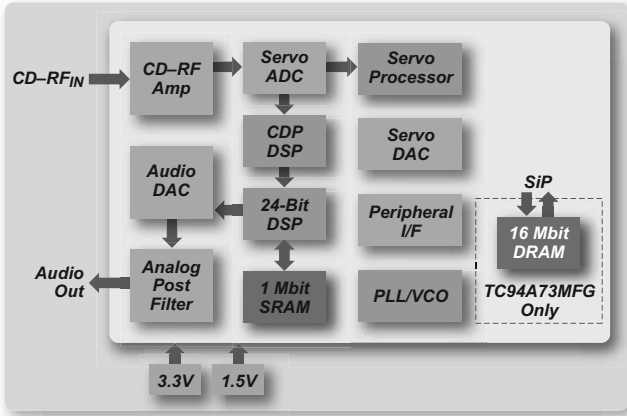
IC51 : T5CD2

Pin No.	Port Name	I/O	Use	Power off	Name	Port Setting		Note
						Act.	init	
1	VREFH				VREFH			ADC power, connect with +5V
2	AVSS				GND			GND
3	AVCC				AVCC			MCU power, connect with +5V
4	P70/TA0IN	I/O	O	L	/SRAM_WE	L	I	sram write enable
5	P71/TA1OUT	I/O	O	L	/SRAM_OE	L	I	sram output enable
6	P72/TA3OUT	I/O	O	L	/SRAM_CE	L	I	sram chip enable
7	P73/TA4IN	I/O			NC			open
8	P74/TA5OUT	I/O			NC			open
9	P75/INT0	I/O	I	-	RS/REMOTE	-	I	remote in
10	P80/TB0IN0/INT5	I/O	I/O	L	SRAM_DATA00	-	I	sram_data_00
11	P81/TB0IN1/INT6	I/O	I/O	L	SRAM_DATA01	-	I	sram_data_01
12	P82/TB0OUT0	I/O	I/O	L	SRAM_DATA02	-	I	sram_data_02
13	P83/TB0OUT1	I/O	I/O	L	SRAM_DATA03	-	I	sram_data_03
14	P84/TB1IN0/INT7	I/O	I/O	L	SRAM_DATA04	-	I	sram_data_04
15	P85/TB1IN1/INT8	I/O	I/O	L	SRAM_DATA05	-	I	sram_data_05
16	P86/TB1OUT0	I/O	I/O	L	SRAM_DATA06	-	I	sram_data_06
17	P87/TB1OUT1	I/O	I/O	L	SRAM_DATA07	-	I	sram_data_07
18	P90/TXD0	I/O	O	L	VFD_DATA	-		vfd data
19	P91/RXD0	I/O	O	L	VFD_CS	L		vfd chip select
20	P92/SCLK0/CTS0	I/O	O	L	VFD_CLK	L	I	vfd clock
21	P93/TXD1	I/O	O	L	UPDATE_TXD	-	I	used when connect with update tool
22	P94/RXD1	I/O	I	I	UPDATE_RXD	-	I	used when connect with update tool
23	P95/SCLK1/CTS1	I/O			NC	-	I	open
24	AM0				AM0			chip operate select, connect with +5V
25	DVCC				DVCC			MCU power, connect with +5V
26	X2				X2			oscillator(20MHz)
27	DVSS				DVSS			GND
28	X1				X1			oscillator(20MHz)
29	AM1				AM1			chip operate select, connect with +5V
30	/RESET				/RESET			MCU reset
31	P96/XT1	I/O			NC			open
32	P97/XT2	I/O			NC			open
33	/BOOT/EMU0				BOOT			update mode select
34	EMU1	I/O			NC			open
35	PA0/TB2IN0/INT1	I/O	I	-	RS/REMOTE	-	I	remote in
36	PA1/TB2IN1/INT2	I/O			NC			open
37	PA2/TB2OUT0	I/O	O	H	BUSOUT	-	I	bus out
38	PA3/TB2OUT1	I/O	I	-	SYSTEM_DETECT	-	I	system detect
39	P40/CS0/SCOUT	I/O	O	-	RS_ON/OFF	-	I	remote signal kill control
40	P41/CS1/TXD2	I/O	O	L	CTRL	H	I	Unit power control
41	P42/CS2/RXD2	I/O	O	H	LED	L		stanby LED control
42	P43/CS3/SCLK2/CTS2	I/O			NC			open
43	P44/ALE	I/O			NC			open
44	P00/AD0	I/O	O	L	SRAM_ADD00	-	I	sram_address_00
45	P01/AD1	I/O	O	L	SRAM_ADD01	-	I	sram_address_01
46	P02/AD2	I/O	O	L	SRAM_ADD02	-	I	sram_address_02
47	P03/AD3	I/O	O	L	SRAM_ADD03	-	I	sram_address_03
48	P04/AD4	I/O	O	L	SRAM_ADD04	-	I	sram_address_04
49	P05/AD5	I/O	O	L	SRAM_ADD05	-	I	sram_address_05
50	P06/AD6	I/O	O	L	SRAM_ADD06	-	I	sram_address_06

IC51 : T5CD2

Pin No.	Port Name	I/O	Use	Power off	Name	Port Setting		Note
						Act.	init	
51	P07/AD7	I/O	O	L	SRAM_ADD07	-	I	sram_address_07
52	P10/AD8/A8	I/O	I	I	CD_BUS2	-	I	receive data from CD DSP
53	P11/AD9/A9	I/O	O	L	CD_BUS3	-	I	send command to CD DSP
54	P12/AD10/A10	I/O	O	L	CD_BUCK	-	I	communication clock with CD DSP
55	P13/AD11/A11	I/O	O	L	CD_CCE	L	I	communication chip enable with CD DSP
56	P14/AD12/A12	I/O	O	L	DSP_RESET	L	I	CD DSP reset
57	P15/AD13/A13	I/O	O	L	MT_STBY	H	I	motor stanby
58	P16/AD14/A14	I/O	O	L	CD_CLOSE_M	H	I	cd close motor
59	P17/AD15/A15	I/O	O	L	CD_OPEN_M	H	I	cd open motor
60	P20/A0/A16	I/O			NC			open
61	P21/A1/A17	I/O	I	I	CD_OPEN_SW	-	I	cd open switch
62	DVSS				DVSS			GND
63	/NMI				/NMI			external interrupt, connect with +5V
64	DVCC				DVCC			MCU power, connect with +5V
65	P22/A2/A18	I/O	I	I	CD_CLOSE_SW	-	I	cd close switch
66	P23/A3/A19	I/O			NC			open
67	P24/A4/A20	I/O	I	I	CD_LIMIT_SW	-	I	cd inner switch
68	P25/A5/A21	I/O	O	L	VFD_POWER	H	I	vfd blink control
69	P26/A6/A22	I/O	O	H	F_MUTE	H	I	preout mute control
70	P27/A7/A23	I/O	O	L	DISPLAY_P	L	I	FIP display on/off control
71	PZ0/RD	I/O	O	L	DAC_RESET	L	H	DAC reset
72	PZ1/WR	I/O	O	L	NC			open
73	PZ2/HWR	I/O	O	L	DAC_CLK	-	I	DAC clock
74	PZ3/R/W	I/O	O	L	DAC_DATA	-	I	DAC data
75	P30/TB3IN0/INT3/SDA0	I/O	O	L	TRANS_ON/OFF	H	I	trans change control
76	P31/TB3IN1/INT4/SCL0	I/O	O	L	MP3_LED_P	H	I	MP3 LED control
77	P32/WAIT/TB3OUT0	I/O	O	L	WMA_LED_P	H	I	WMA LED control
78	P33/TB3OUT1	I/O			NC			open
79	PB0/TB4IN0/INT9/SDA1	I/O	O	L	PLL_SDA_	-	I	Pitch data Control
80	PB1/TB4IN1/INT10/SCL1	I/O	O	L	PLL_SCL	-	I	Pitch clock Control
81	PB2/TB4OUT0	I/O	O	L	PLL_PLL	L	I	Pitch chip enable Control
82	PB3/TB4OUT1	I/O	O	L	PLL_EX_SEL	-	I	PLL Ex Select Pin
83	DVCC				DVCC			MCU power, connect with +5V
84	DVSS				DVSS			GND
85	P50/AN0	I/O	I	I	KEY0	-	I	key1 input
86	P51/AN1	I/O	I	I	KEY1	-	I	key2 input
87	P52/AN2	I/O	I	I	KEY2	-	I	key3 input
88	P53/AN3	I/O			NC			open
89	P54/AN4	I/O			NC			open
90	P55/AN5	I/O			NC			open
91	P56/AN6	I/O			NC			open
92	P57/AN7	I/O			NC			open
93	P60/AN8	I/O	O	L	SRAM_ADD08	-	I	sram_address_08
94	P61/AN9	I/O	O	L	SRAM_ADD09	-	I	sram_address_09
95	P62/AN10	I/O	O	L	SRAM_ADD10	-	I	sram_address_10
96	P63/AN11	I/O	O	L	SRAM_ADD11	-	I	sram_address_11
97	P64/AN12	I/O	O	L	SRAM_ADD12	-	I	sram_address_12
98	P65/AN13	I/O	O	L	SRAM_ADD13	-	I	sram_address_13
99	P66/AN14	I/O	O	L	SRAM_ADD14	-	I	sram_address_14
100	P67/AN15	I/O			NC			open

IC31 : TC94A70FG



Pin No.	Symbol	I/O	Description	Default	Remarks
1	AVSS3	—	Grounding pin for 3.3V CD analog circuits.	—	
2	RFZi	I 3A/I/F	Input pin for RF ripple zero-cross signal.	I	Connect to RFRP by 0.033uF
3	RFRP	O 3A/I/F	RF ripple signal output pin.	O	
4	SBAD/RFDC	O 3A/I/F	Sub beam addition signal or RFDC (Hologram PUH RF peak detection signal) signal output pin	O	Monitor pin for the signal.
5	FEi	O 3A/I/F	Focus error signal input pin.	O	
6	TEi	O 3A/I/F	Tracking error signal input pin.	O	
7	TEZi	I 3A/I/F	Tracking error signal zero-cross input pin.	I	Connect to TEi by 0.033uF
8	AVDD3	—	Power supply pin for 3.3 V CD analog circuits.	—	
9	Fo0	O 3A/I/F	Focus servo equalizer output pin.	O	Built-in series resistor 3.3k Ω
10	TRo	O 3A/I/F	Tracking servo equalizer output pin.	O	
11	VREF	—	Reference voltage pin for analog circuits(1.65V)	—	Connect to VRO and PVREF. Connect 0.1uF
12	FMo	O 3A/I/F	Feed servo equalizer output pin.	O	Built-in series resistor 3.3k Ω 3-state output (AVDD3,AVSS3,VREF)
13	DMo	O 3A/I/F	Disc servo equalizer output pin	O	
14	VSSP3	—	Grounding pin for 3.3V DSP VCO circuits.	—	
15	VCOi	I 3A/I/F	DSP VCO control voltage input pin.	I	
16	VDDP3	—	Power supply pin for 3.3V DSP VCO circuit.	—	
17	VDD1	—	Power supply pin for 1.5V digital circuit	—	
18	VSS	—	Grounding pin for 1.5V digital circuit.	—	
19	FGiN	I 3I/F	FG signal input pin for CAV. CLV: "L", CAV: FG input	I	Analog input
20	io0/(HS0)	I/O 3I/F	General Input/output port -0 (CD) (Playback speed mode flag output pin.)	I	Schmitt input CMOS PORT
21	io1/(UHSo)	I/O 3I/F	General Input/output port -1 (CD) (Playback speed mode flag output pin.)	I	Schmitt input CMOS PORT
22	XVSS3	—	Grounding pin for 3.3V system clock oscillator circuit.	—	
23	Xi	I 3A/I/F	Input pin for system clock oscillator Circuit (External Rfb=1MΩ)	I	X'tal
24	Xo	O 3A/I/F	Output pin for system clock oscillator circuit	O	X'tal
25	XVDD3	—	Power supply pin for 3.3 V system clock oscillator circuit	—	

Pin No.	Symbol	I/O	Description	Default	Remarks
26	DVSS3	—	Grounding pin for 3.3V DAC circuit	—	
27	Ro	O 3A/I/F	R channel audio output pin of Audio DAC.	O	No capacitor required to DVR pin when built-in audio DAC is not in use, however, connect 3.3V to DVDD3 and GND to DVSS3.
28	DVDD3	—	Power supply pin for 3.3V Audio DAC circuit.	—	
29	DVR	—	Reference voltage pin for Audio DAC.	—	
30	Lo	O 3A/I/F	L channel audio output pin of Audio DAC	O	
31	DVSS3	—	Grounding pin for 3.3V Audio DAC circuit	—	
32	VDDT3	—	Power supply pin for 3.3 V digital I/O circuit.	—	For CD and DSP I/O
33	VSS	—	Grounding pin for 3.3V digital circuit	—	-
34	VDD1	—	Power supply pin for 1.5V digital circuit.	—	-
35	VDDM1	—	Power supply pin for 1.5V 1Mbit SRAM.	—	
36	SRAMSTB	I 3I/F	1Mbit SRAM stand-by pin	I	Schmitt input
37	/RST	I 3I/F	Reset signal input pin.	I	Schmitt input
38	BUS0	IO 3I/F	Data input/output pin -0 for microcontroller interface	I	Schmitt input CMOS PORT
39	BUS1	IO 3I/F	Data input/output pin -1 for microcontroller interface	I	Schmitt input CMOS PORT
40	BUS2(So)	IO 3I/F	Data input/output pin -2 for microcontroller interface (Serial output)	I	Schmitt input CMOS PORT
41	BUS3(Si)	IO 3I/F	Data input/output pin -3 for microcontroller interface (Serial input)	I	Schmitt input CMOS PORT
42	BUCK(CLK)	I 3I/F	Clock input pin for the microcontroller interface. (Clock input for Serial communication interface)	I	Schmitt input
43	/CCE	I 3I/F	Chip enable signal input pin for microcontroller interface.	I	Schmitt input
44	TEST	I 3I/F	Setting pin for LSI test mode. (Connect to GND in normal operation)	I	Schmitt input
45	IRQ	I	DSP interruption pin.(Pull down by 100kΩ when not in use)	I	Schmitt input
46	AoUT3(Po4)	O 3I/F	Audio data output pin -3 (DSP general output port -4)	O	CMOS PORT
47	AoUT2(Po5)	O 3I/F	Audio data output pin -2 (DSP general output port -5)	O	CMOS PORT
48	Pio0	I/O 3I/F	DSP general input/output port -0	I	Schmitt input CMOS PORT
49	Pio1	I/O 3I/F	DSP general input/output port -1	I	Schmitt input CMOS PORT
50	Pio2	I/O 3I/F	DSP general input/output port -2	I	Schmitt input CMOS PORT
51	Pio3	I/O 3I/F	DSP general input/output port -3	I	Schmitt input CMOS PORT
52	VSS	—	Grounding pin for 3.3V digital circuit	—	-
53	VDDT3	—	Power supply pin for 3.3 V digital I/O circuit.	—	For CD and DSP I/O
54	SBSY	O 3I/F	Sub code block sync output pin	O	CMOS PORT
55	SBOK	O 3I/F	CRCC check result output pin for sub code O data.	O	CMOS PORT

IC31 : TC94A70FG

Pin No.	Symbol	I/O	Description	Default	Remarks
56	IPF	O 3I/F	Correction flag output	O	CMOS PORT
57	SFSY	O 3I/F	Servo internal register read clock output pin	O	CMOS PORT
58	ZDET	O 3I/F	Internal Audio DAC Zero data detection flag output	O	CMOS PORT
59	GPIN	I 3I/F	CD General Input port(Pull down by 100KΩ when not in use)	I	Schmitt input
60	MS	I 3I/F	Microprocessor I/F mode selection pin. "L": Parallel I/F, "H": Serial I/F	I	
61	DoUT(Po6)	O 3I/F	Digital Audio output (SPDIF) pin (DSP general output port -6)	O	CMOS PORT
62	AoUT1(Po7)	O 3I/F	Audio data output pin -1(DSP general output port -7)	O	CMOS PORT
63	BCKo(Po8)	O 3I/F	Bit clock output pin for AoUT (DSP general output port -8)	O	CMOS PORT
64	LRCKo(Po9)	O 3I/F	L/R channel clock output pin (DSP general output port -9)	O	CMOS PORT
65	AIiN(Pi4)	I 3I/F	Audio data input for Audio DAC (DSP general input port -4)	I	Schmitt input
66	BCKi(Pi5)	I 3I/F	Bit clock input pin for AIiN (DSP general input port -5)	I	Schmitt input
67	LRCKi(Pi6)	I 3I/F	L/R channel clock for AIiN (DSP general input port -6)	I	Schmitt input
68	VDD1	—	Power supply pin for 1.5V digital circuit.	—	
69	VSS	—	Grounding pin for 1.5V digital circuit.	—	
70	AWRC	O 3A/I/F	VCO control pin for active wide-range PLL	O	Applicable in CLV/CAV mode. Connect 0.033 uF.
71	PVDD3	—	Power supply pin for 3.3V CD PLL circuit.	—	
72	PDo	O 3A/I/F	EFM and PLCK Phase difference signal output pin.	O	4-state output (PVDD3, Hiz,PVSS3,PVREF)
73	TMAXS	O 3A/I/F	TMAX detection result output pin	O	3-state output (PVDD3,PVSS3,Hiz)
74	TMAX	O 3A/I/F	TMAX detection result output pin	O	3-state output(PVDD3,PVSS3,Hiz)
75	LPFN	I 3A/I/F	PLL circuit LPF amplifier inversion input pin	I	Connect resistor of LPF, refer to application circuit diagram.
76	LPFo	O 3A/I/F	PLL circuit LPF amplifier Output pin	O	Connect capacitor of LPF, refer to application circuit diagram.
77	PVREF	—	PLL circuit 1.65 V reference voltage pin.	—	Connected to VREF and VRO inside of IC. Connect 0.1uF.
78	VCoF	O 3A/I/F	VCO filter pin	O	Connect 0.01uF.
79	PVSS3	—	Grounding pin for 3.3V CD PLL circuit.	—	
80	SLCo	O 3A/I/F	EFM slice level output pin. Output impedance =2.5kΩ both of analog/digital slice mode.	O	Connect capacitor according with servo frequency band.
81	RFi	I 3A/I/F	RF signal input pin Zin is selectable by command.	I	Zin : 20kΩ, 10kΩ, 5kΩ
82	RFRPi	I 3A/I/F	RF ripple signal input pin	I	

Pin No.	Symbol	I/O	Description	Default	Remarks
83	RFEQo	O 3A/I/F	RF equalizer circuit output pin.	O	Connect to RFRPi by 0.1uF, to RFi by 4700pF.
84	VRo	O 3A/I/F	1.65 V reference voltage output pin.	O	Connected to VREF and PVREF inside of IC. Connect 0.1uF+100uF.
85	RESIN	O 3A/I/F	Pin for connecting a resistor for reference current generation.	O	Connect 22kΩ/0.01uF.
86	VMDIR	—	Reference voltage output pin for LD APC.	—	Connect 0.1uF
87	TESTR	O 3A/I/F	LPF connection pin for RFEQo offset correction circuit.	O	Connect more than 0.015uF.
88	AGCi	I 3A/I/F	RF signal AGC amplifier input pin	I	
89	RFo	O 3A/I/F	RF signal generation amplifier output pin	O	
90	RVDD3	—	Power supply for 3.3V RF amplifier core circuit.	—	
91	LDo	O 3A/I/F	Laser diode amplifier output pin.		
92	MDi	I 3A/I/F	Monitor photodiode amplifier input pin.	I	Reference Voltage=178mVtyp.
93	RVSS3	—	Grounding pin for RF amplifier core circuit	—	
94	FNi2	I 3A/I/F	Main beam signal input pin. To be connected to PIN diode C.	I	
95	FNi1	I 3A/I/F	Main beam signal input pin. To be connected to PIN diode A.	I	
96	FPi2	I 3A/I/F	Main beam signal input pin. To be connected to PIN diode D.	I	
97	FPi1	I 3A/I/F	Main beam signal input pin. To be connected to PIN diode B.	I	
98	TPi	I 3A/I/F	Sub beam signal input pin. To be connected to PIN diode F.	I	
99	TNPC	O 3A/I/F	TNI/TPi input common capacitor connection pin.	O	Connect to VRO by capacitor.
100	TNi	I 3A/I/F	Sub beam signal input pin. To be connected to PIN diode E.	I	

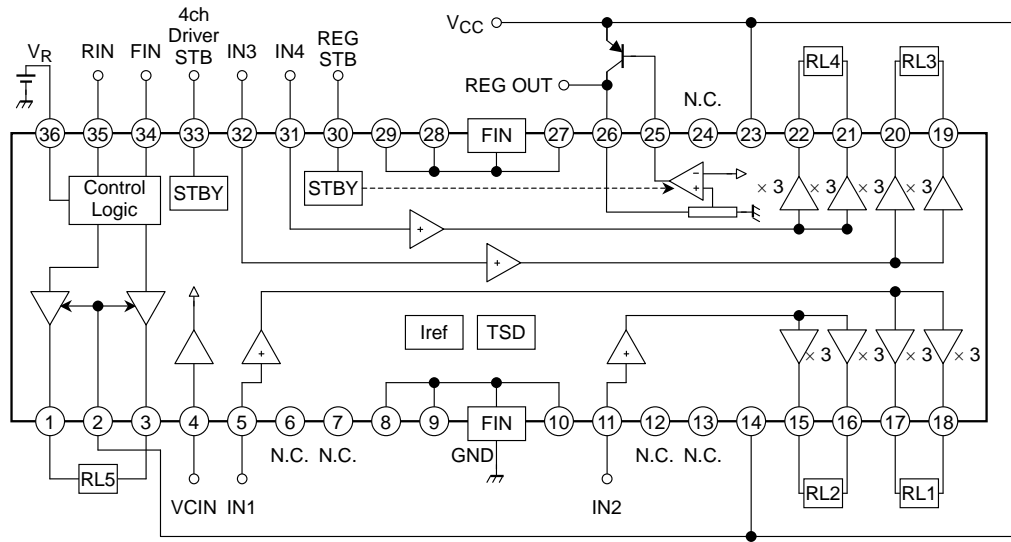
* 3A I/F : 3 V analog circuit input/output pin.
1.5 I/F : 1.5V/digital input/output pin.
3 I/F : 3 V digital input/output pin.

Note: The servo output pins (FOO, TRO, FMO, and DMO) become undefined or GND level under the following conditions:

- /RST pin = Low
- Crystal oscillation stopped according to the instructions by the Stop crystal oscillation command
- Power supply for CD is OFF.
- SRAMSTB pin = High

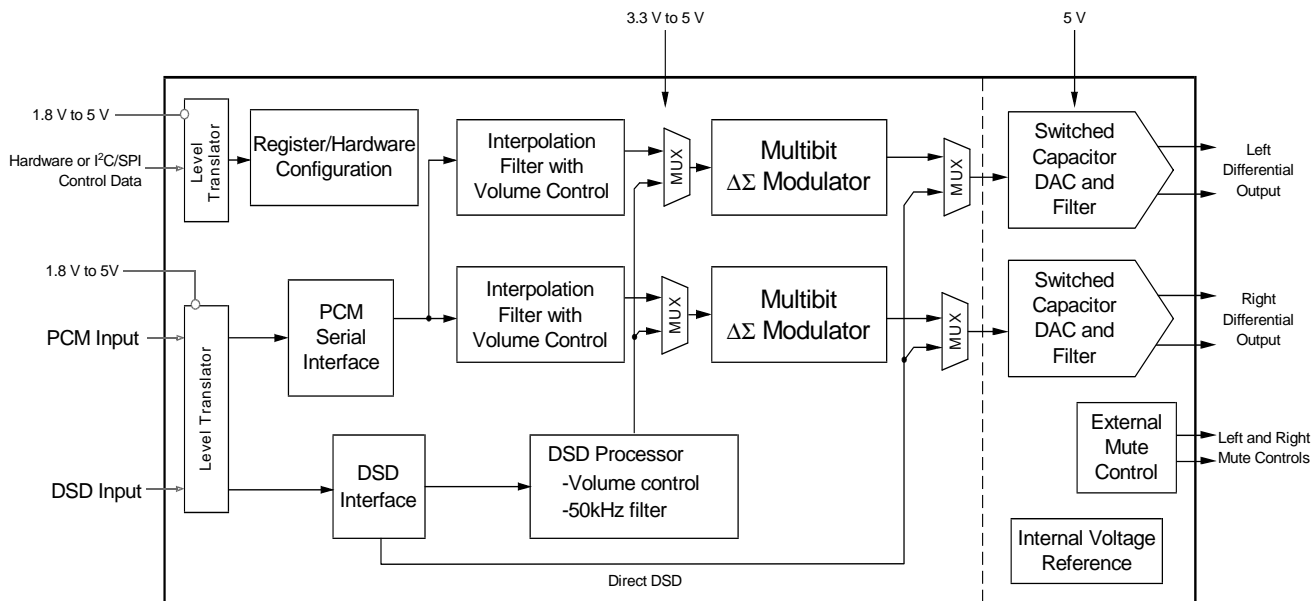
To prevent the undefined pin states from affecting the servo circuitry or any other mechanical blocks in the system, appropriate measures should be taken, such as using a driver IC supporting a standby feature to place the system in standby mode while either of the above conditions is satisfied.

IC32 : TA2125AF



No.	Symbol	Function	
1	OUT5A	Output terminal	H-bridge
2	V _M	Supply voltage terminal for Logic	H-bridge
3	OUT5B	Output terminal	H-bridge
4	V _{CIN}	Input reference voltage	4ch BTL
5	IN1	Input for ch1	4ch BTL
6	N.C.	Open	—
7	N.C.	Open	—
8	N.C.	8, 9, 10, 27, 28, 29 are connected to PW GND (FIN)	—
9	N.C.	8, 9, 10, 27, 28, 29 are connected to PW GND (FIN)	—
10	N.C.	8, 9, 10, 27, 28, 29 are connected to PW GND (FIN)	—
11	IN2	Input for ch2	4ch BTL
12	N.C.	Open	—
13	N.C.	Open	—
14	V _{CC1}	Supply voltage terminal for ch1/ch2	4ch BTL
15	OUT2M	Inverted output for ch2	4ch BTL
16	OUT2P	Non-inverted output for ch2	4ch BTL
17	OUT1M	Inverted output for ch1	4ch BTL
18	OUT1P	Non-inverted output for ch1	4ch BTL
19	OUT3P	Non-inverted output for ch3	4ch BTL
20	OUT3M	Inverted output for ch3	4ch BTL
21	OUT4P	Non-inverted output for ch4	4ch BTL
22	OUT4M	Inverted output for ch4	4ch BTL
23	V _{CC2}	Supply voltage terminal for ch3/ch4	4ch BTL
24	N.C.	Open	—
25	REG	Connection with BASE of PNP Tr	Regulator
26	REG OUT	Output for regulator (5 V)	Regulator
27	N.C.	8, 9, 10, 27, 28, 29 are connected to PW GND (FIN)	—
28	N.C.	8, 9, 10, 27, 28, 29 are connected to PW GND (FIN)	—
29	N.C.	8, 9, 10, 27, 28, 29 are connected to PW GND (FIN)	—
30	REG STBY	Standby control for regulator	Regulator
31	IN4	Input for ch4	4ch BTL
32	IN3	Input for ch3	4ch BTL
33	STBY	Standby control for 4ch BTL	4ch BTL
34	FIN	Logic control input	H-bridge
35	RIN	Logic control input	H-bridge
36	VR	Supply voltage terminal for motor driver	H-bridge

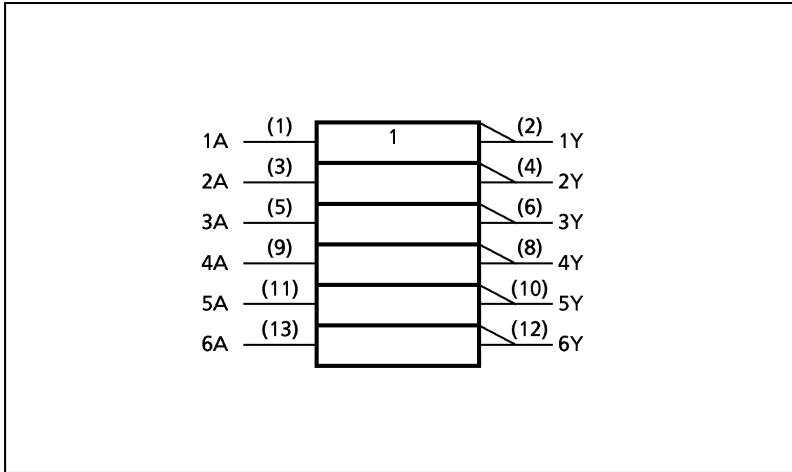
IC41 : CS4398CZ



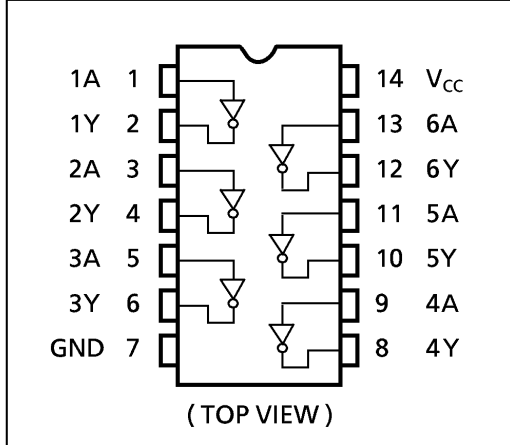
Pin Name	Pin #	Pin Description
DSD_A	28	Direct Stream Digital Input (Input) - Input for Direct Stream Digital serial audio data.
DSD_B	1	
DSD_SCLK	2	DSD Serial Clock (Input) - Serial clock for the Direct Stream Digital audio interface.
SDIN	3	Serial Audio Data Input (Input) - Input for two's complement serial audio data.
SCLK	4	Serial Clock (Input) - Serial clock for the serial audio interface.
LRCK	5	Left Right Clock (Input) - Determines which channel, Left or Right, is currently active on the serial audio data line.
MCLK	6	Master Clock (Input) - Clock source for the delta-sigma modulator and digital filters.
VD	7	Digital Power (Input) - Positive power for the digital section.
DGND	8	Digital Ground (Input) - Ground reference for the digital section.
RST	13	Reset (Input) - The device enters system reset when enabled.
VLC	14	Control Port Power (Input) - Positive power for Control Port I/O.
FILT+	15	Positive Voltage Reference (Output) - Positive reference voltage for the internal sampling circuits.
REF_GND	16	Reference Ground (Input) - Ground reference for the internal sampling circuits.
VREF	17	Voltage Reference (Input) - Positive voltage reference for the internal sampling circuits.
BMUTE	18	Mute Control (Output) - The Mute Control pin is active during power-up initialization, muting, power-down or if the master clock to left/right clock frequency ratio is incorrect. During reset, these outputs are set to a high impedance.
AMUTE	25	
AOUTB+	20	Differential Right Channel Analog Output (Output) - The full-scale differential analog output level is specified in the Analog Characteristics specification table.
AOUTB-	19	
AGND	21	Analog Ground (Input) - Ground reference for the analog section.
VA	22	Analog Power (Input) - Positive power for the analog section.
AOUTA+	23	Differential Left Channel Analog Output (Output) - The full-scale differential analog output level is specified in the Analog Characteristics specification table.
AOUTA-	24	
VQ	26	Quiescent Voltage (Output) - Filter connection for internal quiescent voltage.
VLS	27	Serial Audio Interface Power (Input) - Positive power for serial audio interface I/O.
Stand-Alone Mode Definitions		
M3	9	Mode Selection (Input) - Determines the operational mode of the device.
M2	10	
M1	11	
M0	12	
Control Port Mode Definitions		
AD1/CDIN	9	Address Bit 1 (I²C) / Control Data Input (SPI) (Input) - AD1 is a chip address pin in I ² C mode; CDIN is the input data line for the Control Port interface in SPI mode.
SCL/CCLK	10	Serial Control Port Clock (Input) - Serial clock for the serial Control Port.
SDA/CDOOUT	11	Serial Control Data (I²C) / Control Data Output (SPI) (Input/Output) - SDA is a data I/O line in I ² C mode. CDOOUT is the output data line for the Control Port interface in SPI mode.
AD0/ $\overline{\text{CS}}$	12	Address Bit 0 (I²C) / Control Port Chip Select (SPI) (Input) - AD0 is a chip address pin in I ² C mode; $\overline{\text{CS}}$ is the chip select signal for SPI format.

IC33 : TC74HCU04AFNG

IEC LOGIC SYMBOL



PIN ASSIGNMENT

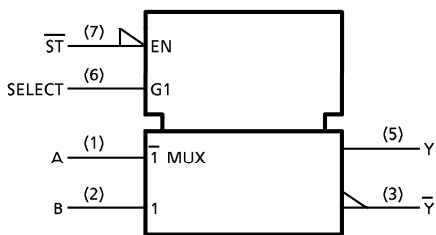


TRUTH TABLE

A	Y
L	H
H	L

IC44 : TC7WH157FU

LOGIC DIAGRAM



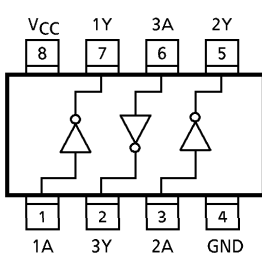
TRUTH TABLE

INPUTS				OUTPUTS	
\overline{ST}	SELECT	A	B	Y	\overline{Y}
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

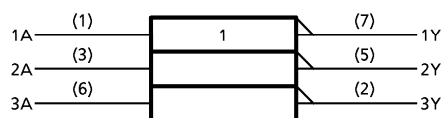
x : Don't care

IC45 : TC7WHU04FU

PIN ASSIGNMENT (TOP VIEW)



LOGIC DIAGRAM

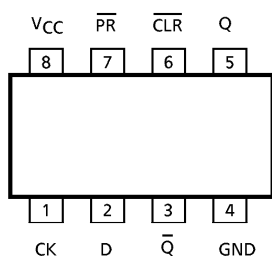


TRUTH TABLE

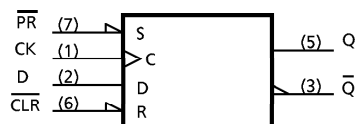
A	Y
L	H
H	L

IC46 : TC7WH74FU

PIN ASSIGNMENT (TOP VIEW)



LOGIC DIAGRAM

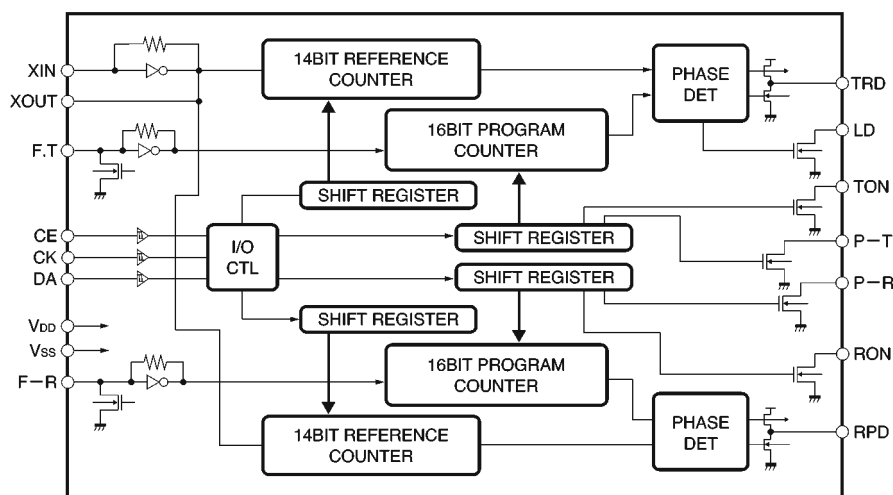


TRUTH TABLE

INPUTS				OUTPUTS		FUNCTION
CLR	PR	D	CK	Q	Q̄	
L	H	x	x	L	H	CLEAR
H	L	x	x	H	L	PRESET
L	L	x	x	H	H	—
H	H	L	↑	L	H	—
H	H	H	↑	H	L	—
H	H	x	↓	Q _n	Q̄ _n	NO CHANGE

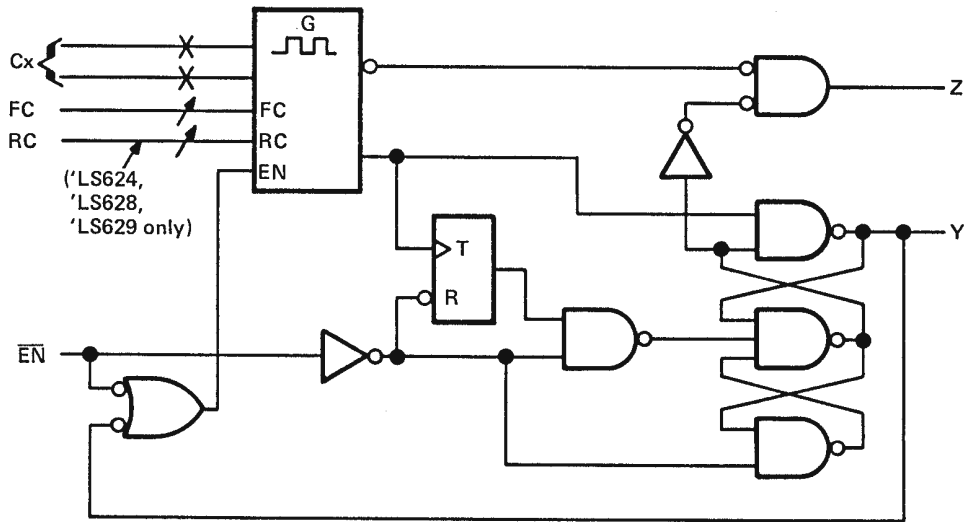
x : Don't care

IC47 : BU2630FV

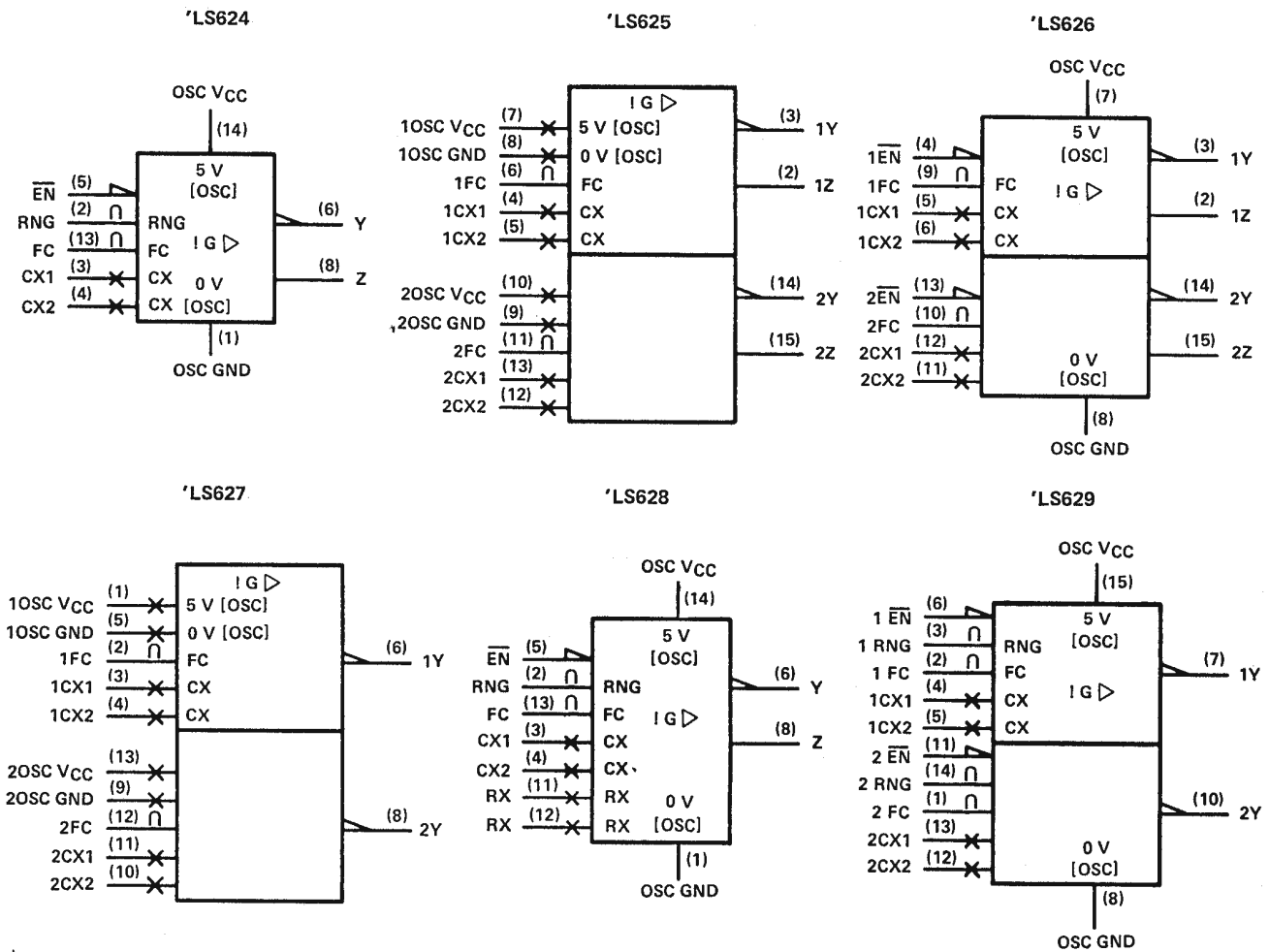


Pin No.	Pin name	Name	Function	I/O circuit
16	XOUT	Crystal resonator	For reference frequency	TYPE A
1	XIN			
2	V _{SS}			
3	RPD	Phase comparator output	This is LO if the locally divided value is higher than the reference frequency, HI if it is lower, and Z if it matches.	TYPE E
4	P-R	Output port	This is controlled by the input data.	TYPE D
5	RON			
6	F-R	VCO input	Local input for reception	TYPE F
7	CE	Chip enable clock signal serial data	When CE is HIGH, the DA synchronized to the rise of CK is read into the internal shift register, and is latched at the timing of the CE fall.	TYPE B
8	CK			
9	DA			
10	LD	Unlock output	This goes ON when the PLL is unlocked on the transmission side	TYPE D
11	F-T	VCO input	Local input for transmission	TYPE F
12	TON	Output port	This is controlled by the input data	TYPE D
13	P-T			
14	TPD	Phase comparator output	This is LO if the locally divided value is higher than the reference frequency, HI if it is lower, and Z if it matches.	TYPE E
15	V _{DD}	Power supply	2.5~5.5V	

logic diagram (positive logic)



logic symbols†



†These symbols are in accordance with ANSI/IEEE Std. 91-1984 and IEC Publication 617-12. Pin numbers shown are for D, J, N, and W packages.

12. ELECTRICAL PARTS LIST

PARTS INFORMATION

RESISTORS

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

① — Resistance value

Examples ;

① Resistance value

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

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

CAPACITORS

CERAMIC CAP.

- 3) 00MDD1 x x x x 370,

Ceramic capacitor

Disc type

Temp.coeff.P350 ~ N1000, 50V

② — Capacity value
 ③ — Tolerance

Examples ;

② Tolerance (Capacity deviation)

±0.25pF.....0
±0.5pF.....1
±5%.....5

* Tolerance of COMMON PARTS handled here are as follows :

0.5pF ~ 5pF ±0.25pF
6pF ~ 10pF ±0.5pF
12pF ~ 560pF ±5%

③ Capacity value

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

CERAMIC CAP.

- 4) 00MDK16 x x x 300,

High dielectric constant ceramic capacitor

Disc type

Temp.chara. 2B4, 50V

④ — Capacity value

Examples ;

④ Capacity value

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

ELECTROLY CAP. (⏏)

- 5) 00MEA x x x x x 10,

Electrolytic capacitor

One-way lead type, Tolerance ±20%

⑤ — Working voltage
 ⑥ — Capacity value

Examples ;

⑤ Capacity value

0.1μF.....104	4.7μF475	100μF ... 107
0.33μF.....334	10μF ... 106	330μF ... 337
1μF.....105	22μF226	1100μF ... 118
		2200μF ... 228

⑥ Working voltage

6.3V.....006	25V025
10V.....010	35V035
16V.....016	50V050

FILM CAP. (⏏)

- 6) 00MDF15 x x x 350

Plastic film capacitor

00MDF15 x x x 310 — One-way type, Mylar ±5% 50V

00MDF16 x x x 310 — Plastic film capacitor

One-way type, Mylar ±10% 50V

⑦ — Capacity value

Examples ;

⑦ Capacity value

0.001μF (1000pF) 102	0.1μF 104
0.0018μF.....182	0.56μF 564
0.01μF.....103	1μF 105
0.015μF.....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 x x x 140	→ RF25S x x x x ΩJ	(±5% 1/4W)
00MNH05 x x x 120	→ RF50S x x x x ΩJ	(±5% 1/2W)
00MNH85 x x x 110	→ RF73B2A x x x x ΩJ	(±5% 1/10W)
00MNH95 x x x 140	→ RF73B2E x x x x ΩJ	(±5% 1/4W)

* Resistance value — Resistance value (0.1 – 10kΩ)

2. Matsushita Electronic Components Co., Ltd

Part No. (MJI)	Type No. (MEC)	Description
00MNF05 x x x 140	→ ERD-2FCJ x x x	(±5% 1/4W)
00MRF05 x x x 140		
00MNF02 x x x 140	→ ERD-2FCG x x x	(±2% 1/4W)
00MRF02 x x x 140		

* Resistance value — * Resistance value

Examples ;

* Resistance value

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

ABBREVIATION AND MARKS

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

NOTE ON 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.C.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
FRONT PWB (CUP11984-1)						
FRONT	BK21		nsp	nsp	BRACKET	FOR DISPLAY UNIT CMD1A374
FRONT	BK22		nsp	nsp	BRACKET	FOR DISPLAY UNIT CMD1A374
FRONT	BN22		nsp	nsp	CORD	WIRE ASSY CWB1C905100EN
FRONT	C202		nsp	nsp	CER. CAP.	0.1UF 50V Z HCBS1H104ZF
FRONT	C203		00MEJ47601640	00MEJ47601640	ELECT CAP.	47 UF 16V KS CCEA1CKS470T
FRONT	C204		00MEJ47601640	00MEJ47601640	ELECT CAP.	47 UF 16V KS CCEA1CKS470T
FRONT	C208		nsp	nsp	CER. CAP.	0.1UF 50V Z HCBS1H104ZF
FRONT	C209		nsp	nsp	CER. CAP.	0.1UF 50V Z HCBS1H104ZF
FRONT	CN21		nsp	nsp	CONN.	15P FFC WAFER CJP15GA117ZY
FRONT	CN94		nsp	nsp	CONN.	7P FFC WAFER CJP07GA117ZY
FRONT	D202		90M-HI101120R	90M-HI101120R	LED	SLR325VRA47 KVDSLR325VRA47
FRONT	D203		90M-HI101120R	90M-HI101120R	LED	SLR325VRA47 KVDSLR325VRA47
FRONT	D204		90M-HI101120R	90M-HI101120R	LED	SLR325VRA47 KVDSLR325VRA47
FRONT	F201		90M-HQ300610R	90M-HQ300610R	DISPLAY	FL DISPLAY FOR CD5400 CFLHCA12SS18T
FRONT	IC21		90M-HC700550R	90M-HC700550R	IC	TC74HCU04AFNG HVI74HCU04AFNG
FRONT	J201		nsp	nsp	CORD	SN95/PB5 0.6 C3A206
FRONT	J203		nsp	nsp	CORD	SN95/PB5 0.6 C3A206
FRONT	J204		nsp	nsp	CORD	SN95/PB5 0.6 C3A206
FRONT	J205		nsp	nsp	CORD	SN95/PB5 0.6 C3A206
FRONT	J206		nsp	nsp	CORD	SN95/PB5 0.6 C3A206
FRONT	J207		nsp	nsp	CORD	SN95/PB5 0.6 C3A206
FRONT	J208		nsp	nsp	CORD	SN95/PB5 0.6 C3A206
FRONT	J209		nsp	nsp	CORD	SN95/PB5 0.6 C3A206
FRONT	J210		nsp	nsp	CORD	SN95/PB5 0.6 C3A206
FRONT	J211		nsp	nsp	CORD	SN95/PB5 0.6 C3A206
FRONT	J212		nsp	nsp	CORD	SN95/PB5 0.6 C3A206
FRONT	J213		nsp	nsp	CORD	SN95/PB5 0.6 C3A206
FRONT	J214		nsp	nsp	CORD	SN95/PB5 0.6 C3A206
FRONT	J215		nsp	nsp	CORD	SN95/PB5 0.6 C3A206
FRONT	J216		nsp	nsp	CORD	SN95/PB5 0.6 C3A206
FRONT	J217		nsp	nsp	CORD	SN95/PB5 0.6 C3A206
FRONT	J218		nsp	nsp	CORD	SN95/PB5 0.6 C3A206
FRONT	L201		90M-FN000090R	90M-FN000090R	EMI FILTER	BEAD KLZ9H001Z
FRONT	L202		90M-FN000090R	90M-FN000090R	EMI FILTER	BEAD KLZ9H001Z
FRONT	L203		90M-FN000090R	90M-FN000090R	EMI FILTER	BEAD KLZ9H001Z
FRONT	Q202		90M-BA001460R	90M-BA001460R	TRS.	KRC107M HVTKRC107MT
FRONT	Q203		90M-BA001460R	90M-BA001460R	TRS.	KRC107M HVTKRC107MT
FRONT	Q204		90M-BA001460R	90M-BA001460R	TRS.	KRC107M HVTKRC107MT
FRONT	R204		nsp	nsp	RES.	330 OHM 1/5W J CRD20TJ331T
FRONT	R205		nsp	nsp	RES.	10K OHM 1/5W J CRD20TJ103T
FRONT	R206		nsp	nsp	RES.	1.8K OHM 1/5W J CRD20TJ182T
FRONT	R207		nsp	nsp	RES.	1.5K OHM 1/5W J CRD20TJ152T
FRONT	R208		nsp	nsp	RES.	1K OHM 1/5W J CRD20TJ102T
FRONT	R209		nsp	nsp	RES.	10K OHM 1/5W J CRD20TJ103T
FRONT	R210		nsp	nsp	RES.	1K OHM 1/5W J CRD20TJ102T
FRONT	R216		nsp	nsp	RES.	330 OHM 1/5W J CRD20TJ331T
FRONT	R217		nsp	nsp	RES.	330 OHM 1/5W J CRD20TJ331T
FRONT	R218		nsp	nsp	RES.	100 OHM 1/5W J CRD20TJ101T
FRONT	RS21		00MHW10004210	00MHW10004210	PHOTO UNIT	RPM6936-V4 BRVRPM6936V4
FRONT	S202		90M-SP001400R	90M-SP001400R	PUSH SW	TACT SW EVQ22505R CST1A023ZT
FRONT	S203		90M-SP001400R	90M-SP001400R	PUSH SW	TACT SW EVQ22505R CST1A023ZT
FRONT	S204		90M-SP001400R	90M-SP001400R	PUSH SW	TACT SW EVQ22505R CST1A023ZT
FRONT	S205		90M-SP001400R	90M-SP001400R	PUSH SW	TACT SW EVQ22505R CST1A023ZT
FRONT	S206		90M-SP001400R	90M-SP001400R	PUSH SW	TACT SW EVQ22505R CST1A023ZT
FRONT	S207		90M-SP001400R	90M-SP001400R	PUSH SW	TACT SW EVQ22505R CST1A023ZT
HEADPHONE PWB (CUP11983Z-2)						
H/P	BK81		nsp	nsp	TERMINAL	EARTH PLATE CMC1A278
H/P	BN81(1)		90M-FC500020R	90M-FC500020R	FERRITE CORE	D 30 M/M CLZ9W001Z
H/P	BN81(2)		nsp	nsp	CORD	WIRE ASSY CWZCD6002BN81
H/P	C801		nsp	00MOA10701620	ELECT CAP.	100UF 16V CCEA1CH101T
H/P	C802		nsp	00MOA10701620	ELECT CAP.	100UF 16V CCEA1CH101T
H/P	C803		nsp	00MOA47602520	ELECT CAP.	47UF 25V CCEA1EH470T
H/P	C804		nsp	00MOA47602520	ELECT CAP.	47UF 25V CCEA1EH470T
H/P	C805		nsp	nsp	CER. CAP.	1000PF 50V B HCBS1H102KBT
H/P	C806		nsp	nsp	CER. CAP.	1000PF 50V B HCBS1H102KBT
H/P	C807		nsp	00MOA47602520	ELECT CAP.	47UF 25V CCEA1EH470T

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

P.C.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION	
H/P	C808		nsp	00MOA47602520	ELECT CAP.	47UF 25V	CCEA1EH470T
H/P	D801		90M-HZ200190R	90M-HZ200190R	DIODE	RLS4148SR	HVDRLS4148SR
H/P	D802		90M-HZ200190R	90M-HZ200190R	DIODE	RLS4148SR	HVDRLS4148SR
H/P	D803		90M-HZ200190R	90M-HZ200190R	DIODE	RLS4148SR	HVDRLS4148SR
H/P	D804		90M-HZ200190R	90M-HZ200190R	DIODE	RLS4148SR	HVDRLS4148SR
H/P	IC81		00MHC10102090	00MHC10102090	IC	NJM2068MD-TE1	HVINJM2068MDTE1
H/P	PH81	F B	nsp	90M-YT003160R	TERMINAL	HTJ-064-05NG HEADPHONE JACK	CJJ2E020Z
H/P	PH81	F N	nsp	90M-YT003160R	TERMINAL	HTJ-064-05NG HEADPHONE JACK	CJJ2E020Z
H/P	PH81	/K1G	nsp	90M-YT003160R	TERMINAL	HTJ-064-05NG HEADPHONE JACK	CJJ2E020Z
H/P	PH81	/N1B	90M-YT003160R	90M-YT003160R	TERMINAL	HTJ-064-05NG HEADPHONE JACK	CJJ2E020Z
H/P	PH81	/N1S	90M-YT004500R	90M-YT004500R	TERMINAL	JACK HEADPHONE(SILVER)	CJJ2E026Z
H/P	Q801		00MHT800951B0	00MHT800951B0	TRS.	KTC3203Y	HVTKTC3203YT
H/P	Q802		00MHT800951B0	00MHT800951B0	TRS.	KTC3203Y	HVTKTC3203YT
H/P	Q803		00MHT600141B0	00MHT600141B0	TRS.	KTA1271Y	HVTKTA1271YT
H/P	Q804		00MHT600141B0	00MHT600141B0	TRS.	KTA1271Y	HVTKTA1271YT
H/P	Q805		90M-HX800070R	90M-HX800070R	CHIP TRS.	KTC812TB	HVTKTC812TB
H/P	Q806		90M-HX800070R	90M-HX800070R	CHIP TRS.	KTC812TB	HVTKTC812TB
H/P	R801		nsp	00MNN05472610	CHIP RES.	4.7K OHM 1/10W J	CRJ10DJ472T
H/P	R802		nsp	00MNN05472610	CHIP RES.	4.7K OHM 1/10W J	CRJ10DJ472T
H/P	R803		nsp	00MNN05472610	CHIP RES.	4.7K OHM 1/10W J	CRJ10DJ472T
H/P	R804		nsp	00MNN05472610	CHIP RES.	4.7K OHM 1/10W J	CRJ10DJ472T
H/P	R805		nsp	00MNN05152610	CHIP RES.	1.5K OHM 1/10W J	CRJ10DJ152T
H/P	R806		nsp	00MNN05120610	CHIP RES.	12 OHM 1/10W J	CRJ10DJ120T
H/P	R807		90M-RI000330R	90M-RI000330R	CHIP RES.	33 OHM 1/2W	CRJ12EJ330T
H/P	R808		nsp	00MNN05120610	CHIP RES.	12 OHM 1/10W J	CRJ10DJ120T
H/P	R809		nsp	00MNN05152610	CHIP RES.	1.5K OHM 1/10W J	CRJ10DJ152T
H/P	R810		90M-RI000330R	90M-RI000330R	CHIP RES.	33 OHM 1/2W	CRJ12EJ330T
H/P	R811		nsp	00MNN05152610	CHIP RES.	1.5K OHM 1/10W J	CRJ10DJ152T
H/P	R812		nsp	00MNN05120610	CHIP RES.	12 OHM 1/10W J	CRJ10DJ120T
H/P	R813		90M-RI000330R	90M-RI000330R	CHIP RES.	33 OHM 1/2W	CRJ12EJ330T
H/P	R814		nsp	00MNN05120610	CHIP RES.	12 OHM 1/10W J	CRJ10DJ120T
H/P	R815		nsp	00MNN05152610	CHIP RES.	1.5K OHM 1/10W J	CRJ10DJ152T
H/P	R816		90M-RI000330R	90M-RI000330R	CHIP RES.	33 OHM 1/2W	CRJ12EJ330T
H/P	R817		nsp	00MNN05750610	CHIP RES.	75 OHM 1/10W J	CRJ10DJ750T
H/P	R818		nsp	00MNN05103610	CHIP RES.	10K OHM 1/10W J	CRJ10DJ103T
H/P	R819		nsp	00MNN05103610	CHIP RES.	10K OHM 1/10W J	CRJ10DJ103T
H/P	R820		nsp	00MNN05750610	CHIP RES.	75 OHM 1/10W J	CRJ10DJ750T
H/P	R821		nsp	00MNN05472610	CHIP RES.	4.7K OHM 1/10W J	CRJ10DJ472T
H/P	R822		nsp	00MNN05472610	CHIP RES.	4.7K OHM 1/10W J	CRJ10DJ472T
H/P	R823		nsp	00MNN05750610	CHIP RES.	75 OHM 1/10W J	CRJ10DJ750T
H/P	R824		nsp	00MNN05750610	CHIP RES.	75 OHM 1/10W J	CRJ10DJ750T
H/P	R825		nsp	00MNN05472610	CHIP RES.	4.7K OHM 1/10W J	CRJ10DJ472T
H/P	R826		nsp	00MNN05472610	CHIP RES.	4.7K OHM 1/10W J	CRJ10DJ472T
H/P	R827		nsp	90M-NI001040R	CHIP RES.	0 OHM 1/10W J	CRJ10CJ0R0T
H/P	R828		nsp	90M-NI001040R	CHIP RES.	0 OHM 1/10W J	CRJ10CJ0R0T
H/P	VR81		90M-RB000040R	90M-RB000040R	VAR. RES.	VOLUME (B CURVE)	CVV2J02B103Z
					MAIN PWB (CUP11983Z-1)		
MAIN	BK31		nsp	nsp	HEATSINK	HEAT SINK	CMY1A267
MAIN	BK71		nsp	nsp	BRACKET	BRACKET FOR PWB	CMD1A569
MAIN	BK72		nsp	nsp	BRACKET	BRACKET FOR PWB	CMD1A569
MAIN	BK73		nsp	nsp	BRACKET	BRACKET FOR PWB	CMD1A569
MAIN	C301		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C306		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C313		nsp	00MDD95470300	CER. CAP.	47PF 50V JA	CCUS1H470JA
MAIN	C314		nsp	00MDK96333300	CER. CAP.	0.033UF 50V K	CCUS1H333KC
MAIN	C315		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C316		nsp	00MDK96153300	CER. CAP.	0.015UF 50V	CCUS1H153KC
MAIN	C317		nsp	00MDK96103300	CER. CAP.	0.01UF 50V KC	CCUS1H103KC
MAIN	C318		nsp	00MDK96103300	CER. CAP.	0.01UF 50V KC	CCUS1H103KC
MAIN	C319		nsp	00MDK96472300	CER. CAP.	4700PF 50V KC	CCUS1H472KC
MAIN	C320		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C321		nsp	00MDK96103300	CER. CAP.	0.01UF 50V KC	CCUS1H103KC
MAIN	C322		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C323		nsp	00MDK96153300	CER. CAP.	0.015UF 50V	CCUS1H153KC
MAIN	C324		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C325		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C326		nsp	00MDD95680300	CER. CAP.	68PF 50V JA	CCUS1H680JA

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

P.C.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION	
MAIN	C327		nsp	00MDK96102300	CER. CAP.	1000PF 50V KC	CCUS1H102KC
MAIN	C328		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C329		nsp	00MDK96333300	CER. CAP.	0.033UF 50V K	CCUS1H333KC
MAIN	C330		nsp	00MDK96333300	CER. CAP.	0.033UF 50V K	CCUS1H333KC
MAIN	C331		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C332		nsp	00MDD95471300	CER. CAP.	470PF 50V JA	CCUS1H471JA
MAIN	C333		nsp	00MDD95471300	CER. CAP.	470PF 50V JA	CCUS1H471JA
MAIN	C334		nsp	00MDK96103300	CER. CAP.	0.01UF 50V KC	CCUS1H103KC
MAIN	C335		nsp	00MDK96473300	CER. CAP.	0.043UF 50V KC	CCUS1H473KC
MAIN	C336		nsp	00MDK96473300	CER. CAP.	0.043UF 50V KC	CCUS1H473KC
MAIN	C337		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C338		nsp	00MDK96222300	CER. CAP.	2200PF 50V KC	CCUS1H222KC
MAIN	C339		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C340		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C341		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C342		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C343		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C344		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C345		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C351		nsp	00MOA47602520	ELECT CAP.	47UF 25V	CCEA1EH470T
MAIN	C352		nsp	00MOA10701620	ELECT CAP.	100UF 16V	CCEA1CH101T
MAIN	C353		nsp	00MOA10701620	ELECT CAP.	100UF 16V	CCEA1CH101T
MAIN	C354		nsp	00MOA47701620	ELECT CAP.	470UF 16V ZF	CCEA1CH471T
MAIN	C355		nsp	00MOA10701620	ELECT CAP.	100UF 16V	CCEA1CH101T
MAIN	C356		nsp	00MOA22701620	ELECT CAP.	220UF 16V	CCEA1CH221T
MAIN	C357		nsp	00MOA47602520	ELECT CAP.	47UF 25V	CCEA1EH470T
MAIN	C358		nsp	00MOA10701620	ELECT CAP.	100UF 16V	CCEA1CH101T
MAIN	C371		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C372		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C373		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C374		nsp	00MDD95120300	CER. CAP.	12PF 50V JA	CCUS1H120JA
MAIN	C376		nsp	00MDD95101300	CER. CAP.	100PF 50V JA	CCUS1H101JA
MAIN	C377		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C378		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C379		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C380		nsp	00MOA47602520	ELECT CAP.	47UF 25V	CCEA1EH470T
MAIN	C381		nsp	00MOA47602520	ELECT CAP.	47UF 25V	CCEA1EH470T
MAIN	C382		nsp	00MOA47602520	ELECT CAP.	47UF 25V	CCEA1EH470T
MAIN	C383		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C389		nsp	90M-OA000630R	ELECT CAP.	KZH 6.3V/1000UF	CCEA0JKZH102KS
MAIN	C401		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C403		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C404		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C405		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C420		nsp	00MOA227025R0	ELECT CAP.	220UF/25V 10X20	CCEA1EROA221T
MAIN	C421		nsp	00MOA33505020	ELECT CAP.	3.3UF 50V	CCEA1HH3R3T
MAIN	C422		nsp	00MOA10701620	ELECT CAP.	100UF 16V	CCEA1CH101T
MAIN	C423		nsp	90M-OA000330R	ELECT CAP.	33UF 50V	CCEA1HH330T
MAIN	C424		nsp	90M-OA000330R	ELECT CAP.	33UF 50V	CCEA1HH330T
MAIN	C434		00MOF15121540	00MOF15121540	FILM CAP.	120PF J 100V APSV	CCMP2A121JN09T
MAIN	C451		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C452		nsp	00MDD95120300	CER. CAP.	12PF 50V JA	CCUS1H120JA
MAIN	C453		nsp	00MDD95120300	CER. CAP.	12PF 50V JA	CCUS1H120JA
MAIN	C454		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C455		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C456		nsp	00MDK96103300	CER. CAP.	0.01UF 50V KC	CCUS1H103KC
MAIN	C457		nsp	00MDK96222300	CER. CAP.	2200PF 50V KC	CCUS1H222KC
MAIN	C458		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C459		nsp	00MDD95220300	CER. CAP.	22PF 50V JA	CCUS1H220JA
MAIN	C460		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C461		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C462		nsp	00MOA47602520	ELECT CAP.	47UF 25V	CCEA1EH470T
MAIN	C463		nsp	00MOA47602520	ELECT CAP.	47UF 25V	CCEA1EH470T
MAIN	C464		nsp	00MOA10701620	ELECT CAP.	100UF 16V	CCEA1CH101T
MAIN	C465		nsp	00MOA10505020	ELECT CAP.	1UF 50V	CCEA1HH1R0T
MAIN	C466		nsp	00MOA47602520	ELECT CAP.	47UF 25V	CCEA1EH470T
MAIN	C467		nsp	00MOA47602520	ELECT CAP.	47UF 25V	CCEA1EH470T

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

P.C.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION	
MAIN	C501		nsp	00MDD95270300	CER. CAP.	27PF 50V JA	CCUS1H270JA
MAIN	C502		nsp	00MDD95270300	CER. CAP.	27PF 50V JA	CCUS1H270JA
MAIN	C503		nsp	90M-DK900090R	CER. CAP.	1UF 10V KC	CCUS1A105KC
MAIN	C504		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C506		nsp	00MOA47602520	ELECT CAP.	47UF 25V	CCEA1EH470T
MAIN	C507		nsp	00MOA10701620	ELECT CAP.	100UF 16V	CCEA1CH101T
MAIN	C508		nsp	00MDK96103300	CER. CAP.	0.01UF 50V KC	CCUS1H103KC
MAIN	C509		nsp	00MDK96103300	CER. CAP.	0.01UF 50V KC	CCUS1H103KC
MAIN	C510		nsp	00MDK96103300	CER. CAP.	0.01UF 50V KC	CCUS1H103KC
MAIN	C511		nsp	00MDK96103300	CER. CAP.	0.01UF 50V KC	CCUS1H103KC
MAIN	C512		nsp	00MDK96103300	CER. CAP.	0.01UF 50V KC	CCUS1H103KC
MAIN	C513		nsp	00MOA10701620	ELECT CAP.	100UF 16V	CCEA1CH101T
MAIN	C514		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C515		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C516		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C517		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C601		00MOF15182540	00MOF15182540	FILM CAP.	APSV 182J 1800PF(TP) 100V PP	CCMP2A182JN09T
MAIN	C602		00MOF15331540	00MOF15331540	FILM CAP.	APSV 331J 330PF(TP) 100V PP	CCMP2A331JN09T
MAIN	C603		00MOF15121540	00MOF15121540	FILM CAP.	120PF J 100V APSV	CCMP2A121JN09T
MAIN	C604		nsp	nsp	CER. CAP.	47PF 50V J	HCBS1H470JT
MAIN	C605		00MOF15681540	00MOF15681540	FILM CAP.	APSV 680PF J	CCMP2A681JN09T
MAIN	C607		nsp	00MOA227025R0	ELECT CAP.	220UF/25V 10X20	CCEA1EROA221T
MAIN	C608		nsp	00MOA227016Z0	ELECT CAP.	ROS-16V 221M-H5#PE-T2 (220UF 16V)	CCEA1CR221T
MAIN	C609		nsp	00MOA227016Z0	ELECT CAP.	ROS-16V 221M-H5#PE-T2 (220UF 16V)	CCEA1CR221T
MAIN	C701		00MOF15182540	00MOF15182540	FILM CAP.	APSV 182J 1800PF(TP) 100V PP	CCMP2A182JN09T
MAIN	C702		00MOF15331540	00MOF15331540	FILM CAP.	APSV 331J 330PF(TP) 100V PP	CCMP2A331JN09T
MAIN	C703		00MOF15121540	00MOF15121540	FILM CAP.	120PF J 100V APSV	CCMP2A121JN09T
MAIN	C704		nsp	nsp	CER. CAP.	47PF 50V J	HCBS1H470JT
MAIN	C705		00MOF15681540	00MOF15681540	FILM CAP.	APSV 680PF J	CCMP2A681JN09T
MAIN	C707		nsp	00MOA227025R0	ELECT CAP.	220UF/25V 10X20	CCEA1EROA221T
MAIN	C708		nsp	00MOA227016Z0	ELECT CAP.	ROS-16V 221M-H5#PE-T2 (220UF 16V)	CCEA1CR221T
MAIN	C709		nsp	00MOA227016Z0	ELECT CAP.	ROS-16V 221M-H5#PE-T2 (220UF 16V)	CCEA1CR221T
MAIN	C901		nsp	nsp	FILM CAP.	0.1UF 100V	CCUMT2A104KB
MAIN	C902		nsp	nsp	CER. CAP.	0.1UF 50V Z	HCBS1H104ZFT
MAIN	C903		nsp	nsp	CER. CAP.	0.1UF 50V Z	HCBS1H104ZFT
MAIN	C906		nsp	nsp	CER. CAP.	0.1UF 50V Z	HCBS1H104ZFT
MAIN	C909		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C911		nsp	nsp	CER. CAP.	0.022UF 50V Z	HCBS1H223ZFT
MAIN	C913		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C914		nsp	00MDK96104300	CER. CAP.	0.1UF 50V K	CCUS1H104KC
MAIN	C920		nsp	00MOA22706320	ELECT CAP.	220UF 63V	CCEA1JH221E
MAIN	C921		nsp	00MOA22505020	ELECT CAP.	2.2UF 50V	CCEA1HH2R2T
MAIN	C922		nsp	00MOA10605020	ELECT CAP.	10UF 50V	CCEA1HH100T
MAIN	C923		nsp	90M-OA000620R	ELECT CAP.	KR3 25V/6800UF 18X35	CCEA1EH682E
MAIN	C924		nsp	00MOA22801620	ELECT CAP.	2200UF 16V	CCEA1CH222E
MAIN	C925		nsp	00MOA10801620	ELECT CAP.	1000UF 16V	CCEA1CH102E
MAIN	C926		nsp	00MOA33802520	ELECT CAP.	3300UF 25V	CCEA1EH332E
MAIN	C928		nsp	00MOA10701620	ELECT CAP.	100UF 16V	CCEA1CH101T
MAIN	C929		nsp	00MOA10803520	ELECT CAP.	1000UF 35V	CCEA1VH102E
MAIN	C930		nsp	00MOA10505020	ELECT CAP.	1UF 50V	CCEA1HH1R0T
MAIN	C931		nsp	00MOA47505020	ELECT CAP.	4.7UF 50V	CCEA1HH4R7T
MAIN	C932		00MOB10803570	00MOB10803570	ELECT CAP.	1000U 35V(ALP) (LF)-BLOCK CAP	CCEA1VLAO102E
MAIN	C933		nsp	00MOA47602520	ELECT CAP.	47UF 25V	CCEA1EH470T
MAIN	C934		nsp	00MOA47701620	ELECT CAP.	470UF 16V ZF	CCEA1CH471T
MAIN	C935		00MOB10803570	00MOB10803570	ELECT CAP.	1000U 35V(ALP) (LF)-BLOCK CAP	CCEA1VLAO102E
MAIN	C936		nsp	00MOA47602520	ELECT CAP.	47UF 25V	CCEA1EH470T
MAIN	C937		nsp	00MOA47701620	ELECT CAP.	470UF 16V ZF	CCEA1CH471T
MAIN	C938		nsp	00MOA10801620	ELECT CAP.	1000UF 16V	CCEA1CH102E
MAIN	C939		nsp	00MOA10701620	ELECT CAP.	100UF 16V	CCEA1CH101T
MAIN	C940		nsp	00MOA47701620	ELECT CAP.	470UF 16V ZF	CCEA1CH471T
MAIN	C941		nsp	00MOA10701620	ELECT CAP.	100UF 16V	CCEA1CH101T
MAIN	C942		nsp	00MOA47602520	ELECT CAP.	47UF 25V	CCEA1EH470T
MAIN	C943		nsp	00MOA47602520	ELECT CAP.	47UF 25V	CCEA1EH470T
MAIN	CN31		nsp	nsp	CONN.	5P STRAIGHT	CJP05GA19ZY
MAIN	CN32		nsp	nsp	CONN.	6P STRAIGHT	CJP06GA19ZY
MAIN	CN33		nsp	nsp	CONN.	16P WAFER CARD CABLE	CJP16GA117ZY
MAIN	CN51		nsp	nsp	CONN.	15P FFC WAFER	CJP15GA117ZY

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

P.C.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
MAIN	CN52		nsp	nsp	CONN.	7P STRAIGHT CJP07GA19ZY
MAIN	CN53		nsp	nsp	CONN.	7P WAFER CARD CABLE CJP07GB113ZY
MAIN	CN81		nsp	nsp	CONN.	9P STRAIGHT CJP09GA19ZY
MAIN	CN91		nsp	nsp	CONN.	13P WAFER STRAIGHT CJP13GA19ZY
MAIN	CN93		nsp	nsp	CONN.	7P FFC WAFER CJP07GA117ZY
MAIN	CN94		nsp	nsp	CONN.	3P STRAIGHT CJP03GA01ZY
MAIN	D301		90M-HZ200190R	90M-HZ200190R	DIODE	RLS4148SR HVDRLS4148SR
MAIN	D302		90M-HZ200190R	90M-HZ200190R	DIODE	RLS4148SR HVDRLS4148SR
MAIN	D601		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
MAIN	D602		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
MAIN	D603		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
MAIN	D604		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
MAIN	D605		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
MAIN	D606		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
MAIN	D607		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
MAIN	D608		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
MAIN	D609		90M-HZ200190R	90M-HZ200190R	DIODE	RLS4148SR HVDRLS4148SR
MAIN	D610		90M-HZ200190R	90M-HZ200190R	DIODE	RLS4148SR HVDRLS4148SR
MAIN	D701		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
MAIN	D702		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
MAIN	D703		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
MAIN	D704		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
MAIN	D705		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
MAIN	D706		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
MAIN	D707		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
MAIN	D708		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
MAIN	D709		90M-HZ200190R	90M-HZ200190R	DIODE	RLS4148SR HVDRLS4148SR
MAIN	D710		90M-HZ200190R	90M-HZ200190R	DIODE	RLS4148SR HVDRLS4148SR
MAIN	D902		90M-HD302430R	90M-HD302430R	ZENER DIODE	ZJ36B CVDZJ36BT
MAIN	D903		nsp	90M-HD201730R	DIODE	1N4003 CVD1N4003ST
MAIN	D904		nsp	90M-HD201730R	DIODE	1N4003 CVD1N4003ST
MAIN	D905		nsp	90M-HD201730R	DIODE	1N4003 CVD1N4003ST
MAIN	D906		nsp	90M-HD201730R	DIODE	1N4003 CVD1N4003ST
MAIN	D907		nsp	90M-HD201730R	DIODE	1N4003 CVD1N4003ST
MAIN	D908		nsp	90M-HD201730R	DIODE	1N4003 CVD1N4003ST
MAIN	D909		90M-HD302440R	90M-HD302440R	ZENER DIODE	ZJ4.7B 1/2W CVDZJ4.7BT
MAIN	D910		90M-HZ200190R	90M-HZ200190R	DIODE	RLS4148SR HVDRLS4148SR
MAIN	D911		90M-HZ200190R	90M-HZ200190R	DIODE	RLS4148SR HVDRLS4148SR
MAIN	D912		90M-HZ200190R	90M-HZ200190R	DIODE	RLS4148SR HVDRLS4148SR
MAIN	D913		nsp	00MHD20055100	DIODE	11EQS10 CVD11EQS10GT
MAIN	D914		nsp	00MHD20055100	DIODE	11EQS10 CVD11EQS10GT
MAIN	D915		nsp	00MHD20055100	DIODE	11EQS10 CVD11EQS10GT
MAIN	D916		nsp	00MHD20055100	DIODE	11EQS10 CVD11EQS10GT
MAIN	D917		90M-HZ200190R	90M-HZ200190R	DIODE	RLS4148SR HVDRLS4148SR
MAIN	D918		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
MAIN	D919		90M-HD302450R	90M-HD302450R	ZENER DIODE	ZJ13B 1/2W CVDZJ13BT
MAIN	D920		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
MAIN	D921		90M-HD302450R	90M-HD302450R	ZENER DIODE	ZJ13B 1/2W CVDZJ13BT
MAIN	D922		nsp	90M-HD201730R	DIODE	1N4003 CVD1N4003ST
MAIN	D923		nsp	90M-HD201730R	DIODE	1N4003 CVD1N4003ST
MAIN	D924		nsp	90M-HD201730R	DIODE	1N4003 CVD1N4003ST
MAIN	D925		nsp	90M-HD201730R	DIODE	1N4003 CVD1N4003ST
MAIN	D926		90M-HD302460R	90M-HD302460R	ZENER DIODE	ZJ5.6B 1/2W CVDZJ5.6BT
MAIN	D927		nsp	90M-HD201730R	DIODE	1N4003 CVD1N4003ST
MAIN	D928		nsp	90M-HD201730R	DIODE	1N4003 CVD1N4003ST
MAIN	D929		nsp	90M-HD201730R	DIODE	1N4003 CVD1N4003ST
MAIN	D930		nsp	90M-HD201730R	DIODE	1N4003 CVD1N4003ST
MAIN	D931		nsp	90M-HD201730R	DIODE	1N4003 CVD1N4003ST
MAIN	D932		nsp	90M-HD201730R	DIODE	1N4003 CVD1N4003ST
MAIN	D953		90M-HD302470R	90M-HD302470R	ZENER DIODE	ZJ6.2B 1/2W CVDZJ6.2BT
MAIN	F901		90M-FS001520R	90M-FS001520R	FUSE	FUSE 1A 372 SERIES/TR5 KBA2D1000A3EYT
MAIN	F903		90M-FS001530R	90M-FS001530R	FUSE	FUSE 0.8A 372 SERIES/TR5 KBA2D0800A3EYT
MAIN	F904		90M-FS001530R	90M-FS001530R	FUSE	FUSE 0.8A 372 SERIES/TR5 KBA2D0800A3EYT
MAIN	HF91		nsp	nsp	CONN.	HOLDER FUSE KJCFCS5
MAIN	HF92		nsp	nsp	CONN.	HOLDER FUSE KJCFCS5
MAIN	IC31		90M-HC110060R	90M-HC110060R	IC	TC94A70FG CD DSP CVITC94A70FG
MAIN	IC32		90M-HC109470R	90M-HC109470R	IC	TA2125AFG HVITA2125AFG

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

P.C.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION	
MAIN	IC33		90M-HC700550R	90M-HC700550R	IC	TC74HCU04AFNG	HV174HCU04AFNG
MAIN	IC41		90M-HC109330R	90M-HC109330R	IC	CS4398CZ	HVICS4398CZ
MAIN	IC45		00MHC008005K0	00MHC008005K0	IC	TC7WHU04FU(TE12	CVITC7WHU04FU
MAIN	IC46		00MHC007905K0	00MHC007905K0	IC	TC7WH74FU(TE12L	CVITC7WH74FU
MAIN	IC47		90M-HC109440R	90M-HC109440R	IC	BU2630FV	BVIBU2630FV-E2
MAIN	IC48		90M-HC700560R	90M-HC700560R	IC	TC74LS628	HVITC74LS628
MAIN	IC49		00MHC009105K0	00MHC009105K0	IC	TC7WH157FU	HVITC7WH157FU
MAIN	IC50		00MHC008005K0	00MHC008005K0	IC	TC7WHU04FU(TE12	CVITC7WHU04FU
MAIN	IC51		90M-HS30CW0R	90M-HS30CW0R	U-PRO	T5CD2(F AAD JZ) CD6002	CVIT5CD2
MAIN	IC52		90M-HC110070R	90M-HC110070R	IC	S61C256AH12J 256K SRAM	BVIS61C256AH12J
MAIN	IC53		00MHC10099540	00MHC10099540	IC	S-80145ALMC	HVIS-80145ALMC
MAIN	IC91		90M-HC300950R	90M-HC300950R	IC	KIA78R08 REGULATOR(TO220IS-4)	CVIKIA78R08PI
MAIN	IC92		00MHC3890599F	00MHC3890599F	IC	KIA7805API	HVIA7805API
MAIN	IC93		90M-HC300960R	90M-HC300960R	IC	KIA78D33 REGULATOR(TO220IS-4)	CVIKIA78D33PI
MAIN	IC94		00MHC3890599F	00MHC3890599F	IC	KIA7805API	HVIA7805API
MAIN	IC95		90M-HC900150R	90M-HC900150R	IC	KIA1117S/F33 REGULATOR(SOT-223)	CVIKIA1117S33
MAIN	IC96		90M-HC900160R	90M-HC900160R	IC	LM1117S15 REGULATOR(SOT-223)	CVIKIA1117S15
MAIN	JK31		90M-YT005310R	90M-YT005310R	OPT. CONN.	TOTX177L	HJSTOTX177L
MAIN	JK32		90M-YT003100R	90M-YT003100R	TERMINAL	CINCH 1P (GOLD) COAXIAL	CJJ4M045Z
MAIN	JK33		90M-YT003120R	90M-YT003120R	TERMINAL	CINCH 2P (GOLD) REMOTE	CJJ4N036Z
MAIN	JK61		90M-YT005350R	90M-YT005350R	TERMINAL	1P CINCH RED GOLD PLATE	CJJ4M060Z
MAIN	JK71		90M-YT005360R	90M-YT005360R	TERMINAL	1P CINCH WHITE GOLD PLATE	CJJ4M059Z
MAIN	L301		nsp	nsp	CHIP INDUCT	FI-C3216-103KJT	HLQ09E100KRZ
MAIN	L303		90M-FN000260R	90M-FN000260R	EMI FILTER	HU-1H3216-121	HLZ91002Z
MAIN	L304		90M-FN000260R	90M-FN000260R	EMI FILTER	HU-1H3216-121	HLZ91002Z
MAIN	L305		90M-FN000260R	90M-FN000260R	EMI FILTER	HU-1H3216-121	HLZ91002Z
MAIN	L371		90M-FN000260R	90M-FN000260R	EMI FILTER	HU-1H3216-121	HLZ91002Z
MAIN	L401		nsp	nsp	CHIP INDUCT	FI-C3216-103KJT	HLQ09E100KRZ
MAIN	L451		90M-FN000260R	90M-FN000260R	EMI FILTER	HU-1H3216-121	HLZ91002Z
MAIN	L452		90M-FN000260R	90M-FN000260R	EMI FILTER	HU-1H3216-121	HLZ91002Z
MAIN	L901		90M-FN000260R	90M-FN000260R	EMI FILTER	HU-1H3216-121	HLZ91002Z
MAIN	L902		90M-FN000260R	90M-FN000260R	EMI FILTER	HU-1H3216-121	HLZ91002Z
MAIN	Q301		90M-HX600020R	90M-HX600020R	CHIP TRS.	KTA1504S Y RTK	HVTKTA1504SYRTK
MAIN	Q374		90M-HX800100R	90M-HX800100R	CHIP TRS.	KTC3875S Y RTK	HVTKTC3875SYRTK
MAIN	Q502		90M-HX600010R	90M-HX600010R	CHIP TRS.	KRA102S	HVTKRA102S
MAIN	Q503		90M-HX600010R	90M-HX600010R	CHIP TRS.	KRA102S	HVTKRA102S
MAIN	Q601		00MHF203691B0	00MHF203691B0	F.E.T.	2SK369 BL VGDS-40V PD0.4W	HVT2SK369BLT
MAIN	Q602		00MHT800931A0	00MHT800931A0	TRS.	KTC3200GR	HVTKTC3200GRT
MAIN	Q603		00MHF203691B0	00MHF203691B0	F.E.T.	2SK369 BL VGDS-40V PD0.4W	HVT2SK369BLT
MAIN	Q604		00MHT600121A0	00MHT600121A0	TRS.	KTA1268GR	HVTKTA1268GRT
MAIN	Q605		00MHT600121A0	00MHT600121A0	TRS.	KTA1268GR	HVTKTA1268GRT
MAIN	Q606		00MHT800931A0	00MHT800931A0	TRS.	KTC3200GR	HVTKTC3200GRT
MAIN	Q607		00MHF201701G0	00MHF201701G0	F.E.T.	2SK170 BL VGDS=-40V PD=0.4V	HVT2SK170BLT
MAIN	Q608		00MHF100741G0	00MHF100741G0	F.E.T.	2SJ74BLT	HVT2SJ74BLT
MAIN	Q609		00MHT600121A0	00MHT600121A0	TRS.	KTA1268GR	HVTKTA1268GRT
MAIN	Q610		00MHT600121A0	00MHT600121A0	TRS.	KTA1268GR	HVTKTA1268GRT
MAIN	Q611		00MHT600121A0	00MHT600121A0	TRS.	KTA1268GR	HVTKTA1268GRT
MAIN	Q612		00MHT800931A0	00MHT800931A0	TRS.	KTC3200GR	HVTKTC3200GRT
MAIN	Q613		00MHT800931A0	00MHT800931A0	TRS.	KTC3200GR	HVTKTC3200GRT
MAIN	Q614		00MHT800931A0	00MHT800931A0	TRS.	KTC3200GR	HVTKTC3200GRT
MAIN	Q615		00MHT800931A0	00MHT800931A0	TRS.	KTC3200GR	HVTKTC3200GRT
MAIN	Q616		00MHT600121A0	00MHT600121A0	TRS.	KTA1268GR	HVTKTA1268GRT
MAIN	Q617		90M-HX800080R	90M-HX800080R	CHIP TRS.	KRC107S	HVTKRC107S
MAIN	Q618		00D2690191903	00D2690191903	CHIP TRS.	KRA104S	HVTKRA104S
MAIN	Q619		90M-HT300970R	90M-HT300970R	TRS.	KTC2875B	HVTKTC2875B
MAIN	Q620		90M-HT300970R	90M-HT300970R	TRS.	KTC2875B	HVTKTC2875B
MAIN	Q701		00MHF203691B0	00MHF203691B0	F.E.T.	2SK369 BL VGDS-40V PD0.4W	HVT2SK369BLT
MAIN	Q702		00MHT800931A0	00MHT800931A0	TRS.	KTC3200GR	HVTKTC3200GRT
MAIN	Q703		00MHF203691B0	00MHF203691B0	F.E.T.	2SK369 BL VGDS-40V PD0.4W	HVT2SK369BLT
MAIN	Q704		00MHT600121A0	00MHT600121A0	TRS.	KTA1268GR	HVTKTA1268GRT
MAIN	Q705		00MHT600121A0	00MHT600121A0	TRS.	KTA1268GR	HVTKTA1268GRT
MAIN	Q706		00MHT800931A0	00MHT800931A0	TRS.	KTC3200GR	HVTKTC3200GRT
MAIN	Q707		00MHF201701G0	00MHF201701G0	F.E.T.	2SK170 BL VGDS=-40V PD=0.4V	HVT2SK170BLT
MAIN	Q708		00MHF100741G0	00MHF100741G0	F.E.T.	2SJ74BLT	HVT2SJ74BLT
MAIN	Q709		00MHT600121A0	00MHT600121A0	TRS.	KTA1268GR	HVTKTA1268GRT
MAIN	Q710		00MHT600121A0	00MHT600121A0	TRS.	KTA1268GR	HVTKTA1268GRT
MAIN	Q711		00MHT600121A0	00MHT600121A0	TRS.	KTA1268GR	HVTKTA1268GRT

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

P.C.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION	
MAIN	Q712		00MHT800931A0	00MHT800931A0	TRS.	KTC3200GR	HVTKTC3200GRT
MAIN	Q713		00MHT800931A0	00MHT800931A0	TRS.	KTC3200GR	HVTKTC3200GRT
MAIN	Q714		00MHT800931A0	00MHT800931A0	TRS.	KTC3200GR	HVTKTC3200GRT
MAIN	Q715		00MHT800931A0	00MHT800931A0	TRS.	KTC3200GR	HVTKTC3200GRT
MAIN	Q716		00MHT600121A0	00MHT600121A0	TRS.	KTA1268GR	HVTKTA1268GRT
MAIN	Q717		90M-HX800080R	90M-HX800080R	CHIP TRS.	KRC107S	HVTKRC107S
MAIN	Q718		00D2690191903	00D2690191903	CHIP TRS.	KRA104S	HVTKRA104S
MAIN	Q719		90M-HT300970R	90M-HT300970R	TRS.	KTC2875B	HVTKTC2875B
MAIN	Q720		90M-HT300970R	90M-HT300970R	TRS.	KTC2875B	HVTKTC2875B
MAIN	▲ Q903		90M-HT800040R	90M-HT800040R	TRS.	! KSC2316Y	HVTKSC2316YT
MAIN	Q904		00MHT30001000	00MHT30001000	TRS.	KTC3199Y	HVTKTC3199YT
MAIN	Q905		00MHT30001000	00MHT30001000	TRS.	KTC3199Y	HVTKTC3199YT
MAIN	Q906		90M-BA001530R	90M-BA001530R	TRS.	KTC114M	HVTKRC114MT
MAIN	Q908		00MHT600111B0	00MHT600111B0	TRS.	KTA1267Y	HVTKTA1267YT
MAIN	Q909		00MHT41415100	00MHT41415100	TRS.	2SD1415A	CVT2SD1415A
MAIN	Q910		00MHT21020100	00MHT21020100	TRS.	2SB1020A	CVT2SB1020A
MAIN	▲ Q911		90M-HT800040R	90M-HT800040R	TRS.	! KSC2316Y	HVTKSC2316YT
MAIN	R301		nsp	00MNN05222610	CHIP RES.	2.2K OHM 1/10W J	CRJ10DJ222T
MAIN	R302		nsp	00MNN05222610	CHIP RES.	2.2K OHM 1/10W J	CRJ10DJ222T
MAIN	R303		nsp	00MNN05222610	CHIP RES.	2.2K OHM 1/10W J	CRJ10DJ222T
MAIN	R304		nsp	00MNN05222610	CHIP RES.	2.2K OHM 1/10W J	CRJ10DJ222T
MAIN	R306		nsp	00MNN05104610	CHIP RES.	100K OHM 1/10W J	CRJ10DJ104T
MAIN	R307		nsp	00MNN05153610	CHIP RES.	15K OHM 1/10W J	CRJ10DJ153T
MAIN	R308		nsp	00MNN05000610	CHIP RES.	0 OHM 1/10W J	CRJ10DJ0R0T
MAIN	R309		nsp	00MNN05000610	CHIP RES.	0 OHM 1/10W J	CRJ10DJ0R0T
MAIN	R310		nsp	00MNN05000610	CHIP RES.	0 OHM 1/10W J	CRJ10DJ0R0T
MAIN	R311		nsp	00MNN05562610	CHIP RES.	5.6K OHM 1/10W J	CRJ10DJ562T
MAIN	R312		nsp	00MNN05473610	CHIP RES.	47K OHM 1/10W J	CRJ10DJ473T
MAIN	R313		nsp	00MNN05334610	CHIP RES.	330K OHM 1/10W J	CRJ10DJ334T
MAIN	R314		nsp	00MNN05154610	CHIP RES.	150K OHM 1/10W J	CRJ10DJ154T
MAIN	R315		nsp	00MNN05153610	CHIP RES.	15K OHM 1/10W J	CRJ10DJ153T
MAIN	R316		nsp	00MNN05223610	CHIP RES.	22K OHM 1/10W J	CRJ10DJ223T
MAIN	R317		nsp	00MNN05000610	CHIP RES.	0 OHM 1/10W J	CRJ10DJ0R0T
MAIN	R318		nsp	00MNN05100610	CHIP RES.	10 OHM 1/10W J	CRJ10DJ100T
MAIN	R319		nsp	00MNN05183610	CHIP RES.	18K OHM 1/10W J	CRJ10DJ183T
MAIN	R320		nsp	00MNN05183610	CHIP RES.	18K OHM 1/10W J	CRJ10DJ183T
MAIN	R321		nsp	00MNN05183610	CHIP RES.	18K OHM 1/10W J	CRJ10DJ183T
MAIN	R322		nsp	00MNN05471610	CHIP RES.	470 OHM 1/10W J	CRJ10DJ471T
MAIN	R323		nsp	00MNN05332610	CHIP RES.	3.3K OHM 1/10W J	CRJ10DJ332T
MAIN	R324		nsp	00MNN05682610	CHIP RES.	6.8K OHM 1/10W J	CRJ10DJ682T
MAIN	R325		nsp	00MNN05221610	CHIP RES.	220 OHM 1/10W J	CRJ10DJ221T
MAIN	R326		nsp	00MNN05104610	CHIP RES.	100K OHM 1/10W J	CRJ10DJ104T
MAIN	R327		nsp	00MNN05104610	CHIP RES.	100K OHM 1/10W J	CRJ10DJ104T
MAIN	R328		nsp	00MNN05104610	CHIP RES.	100K OHM 1/10W J	CRJ10DJ104T
MAIN	R371		nsp	00MNN05122610	CHIP RES.	1.2K OHM 1/10W J	CRJ10DJ122T
MAIN	R372		nsp	00MNN05104610	CHIP RES.	100K OHM 1/10W J	CRJ10DJ104T
MAIN	R373		nsp	00MNN05100610	CHIP RES.	10 OHM 1/10W J	CRJ10DJ100T
MAIN	R374		nsp	00MNN05181610	CHIP RES.	180 OHM 1/10W J	CRJ10DJ181T
MAIN	R375		nsp	00MNN05181610	CHIP RES.	180 OHM 1/10W J	CRJ10DJ181T
MAIN	R376		nsp	00MNN05101610	CHIP RES.	100 OHM 1/10W J	CRJ10DJ101T
MAIN	R378		nsp	00MNN05473610	CHIP RES.	47K OHM 1/10W J	CRJ10DJ473T
MAIN	R381		nsp	00MNN05473610	CHIP RES.	47K OHM 1/10W J	CRJ10DJ473T
MAIN	R382		nsp	00MNN05473610	CHIP RES.	47K OHM 1/10W J	CRJ10DJ473T
MAIN	R383		nsp	00MNN05183610	CHIP RES.	18K OHM 1/10W J	CRJ10DJ183T
MAIN	R384		nsp	00MNN05470610	CHIP RES.	47 OHM 1/10W J	CRJ10DJ470T
MAIN	R401		nsp	00MNN05000610	CHIP RES.	0 OHM 1/10W J	CRJ10DJ0R0T
MAIN	R402		nsp	00MNN05101610	CHIP RES.	100 OHM 1/10W J	CRJ10DJ101T
MAIN	R403		nsp	00MNN05101610	CHIP RES.	100 OHM 1/10W J	CRJ10DJ101T
MAIN	R404		nsp	00MNN05000610	CHIP RES.	0 OHM 1/10W J	CRJ10DJ0R0T
MAIN	R432		nsp	00MNN05272610	CHIP RES.	2.7K OHM 1/10W J	CRJ10DJ272T
MAIN	R433		nsp	00MNN05472610	CHIP RES.	4.7K OHM 1/10W J	CRJ10DJ472T
MAIN	R436		nsp	00MNN05103610	CHIP RES.	10K OHM 1/10W J	CRJ10DJ103T
MAIN	R437		nsp	00MNN05000610	CHIP RES.	0 OHM 1/10W J	CRJ10DJ0R0T
MAIN	R451		nsp	00MNN05271610	CHIP RES.	270 OHM 1/10W J	CRJ10DJ271T
MAIN	R452		nsp	00MNN05105610	CHIP RES.	1M OHM 1/10W J	CRJ10DJ105T
MAIN	R453		nsp	00MNN05470610	CHIP RES.	47 OHM 1/10W J	CRJ10DJ470T
MAIN	R454		nsp	00MNN05470610	CHIP RES.	47 OHM 1/10W J	CRJ10DJ470T

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

P.C.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION	
MAIN	R455		nsp	00MNN05470610	CHIP RES.	47 OHM 1/10W J	CRJ10DJ470T
MAIN	R456		nsp	00MNN05000610	CHIP RES.	0 OHM 1/10W J	CRJ10DJ0R0T
MAIN	R457		nsp	00MNN05101610	CHIP RES.	100 OHM 1/10W J	CRJ10DJ101T
MAIN	R458		nsp	00MNN05103610	CHIP RES.	10K OHM 1/10W J	CRJ10DJ103T
MAIN	R459		nsp	00MNN05221610	CHIP RES.	220 OHM 1/10W J	CRJ10DJ221T
MAIN	R460		nsp	00MNN05100610	CHIP RES.	10 OHM 1/10W J	CRJ10DJ100T
MAIN	R461		nsp	00MNN05681610	CHIP RES.	680 OHM 1/10W J	CRJ10DJ681T
MAIN	R462		nsp	00MNN05221610	CHIP RES.	220 OHM 1/10W J	CRJ10DJ221T
MAIN	R463		nsp	00MNN05220610	CHIP RES.	22 OHM 1/10W J	CRJ10DJ220T
MAIN	R464		nsp	00MNN05000610	CHIP RES.	0 OHM 1/10W J	CRJ10DJ0R0T
MAIN	R465		nsp	00MNN05000610	CHIP RES.	0 OHM 1/10W J	CRJ10DJ0R0T
MAIN	R501		nsp	00MNN05104610	CHIP RES.	100K OHM 1/10W J	CRJ10DJ104T
MAIN	R502		nsp	00MNN05104610	CHIP RES.	100K OHM 1/10W J	CRJ10DJ104T
MAIN	R503		nsp	00MNN05000610	CHIP RES.	0 OHM 1/10W J	CRJ10DJ0R0T
MAIN	R504		nsp	00MNN05102610	CHIP RES.	1K OHM 1/10W J	CRJ10DJ102T
MAIN	R505		nsp	00MNN05102610	CHIP RES.	1K OHM 1/10W J	CRJ10DJ102T
MAIN	R506		nsp	00MNN05102610	CHIP RES.	1K OHM 1/10W J	CRJ10DJ102T
MAIN	R507		nsp	00MNN05102610	CHIP RES.	1K OHM 1/10W J	CRJ10DJ102T
MAIN	R511		nsp	00MNN05000610	CHIP RES.	0 OHM 1/10W J	CRJ10DJ0R0T
MAIN	R512		nsp	00MNN05101610	CHIP RES.	100 OHM 1/10W J	CRJ10DJ101T
MAIN	R601		nsp	nsp	RES.	1K OHM 1/5W J	CRD20TJ102T
MAIN	R602		nsp	nsp	RES.	560 OHM 1/5W J	CRD20TJ561T
MAIN	R603		nsp	nsp	RES.	1K OHM 1/5W J	CRD20TJ102T
MAIN	R604		nsp	nsp	RES.	3.9K OHM 1/5W	CRD20TJ392T
MAIN	R605		nsp	nsp	RES.	3.9K OHM 1/5W	CRD20TJ392T
MAIN	R606		nsp	nsp	RES.	120 OHM 1/5W J	CRD20TJ121T
MAIN	R607		nsp	nsp	RES.	120 OHM 1/5W J	CRD20TJ121T
MAIN	R608		nsp	nsp	RES.	68 OHM 1/5W J	CRD20TJ680T
MAIN	R609		nsp	nsp	RES.	560 OHM 1/5W J	CRD20TJ561T
MAIN	R610		nsp	nsp	RES.	10K OHM 1/5W J	CRD20TJ103T
MAIN	R611		nsp	nsp	RES.	33K OHM 1/5W J	CRD20TJ333T
MAIN	R612		nsp	nsp	RES.	100 OHM 1/5W J	CRD20TJ101T
MAIN	R613		nsp	nsp	RES.	560 OHM 1/5W J	CRD20TJ561T
MAIN	R614		nsp	nsp	RES.	270 OHM 1/5W J	CRD20TJ271T
MAIN	R615		nsp	nsp	RES.	270 OHM 1/5W J	CRD20TJ271T
MAIN	R616		nsp	nsp	RES.	33 OHM 1/6W J	CRD20TJ330T
MAIN	R617		nsp	nsp	RES.	33 OHM 1/6W J	CRD20TJ330T
MAIN	R618		nsp	nsp	RES.	120 OHM 1/5W J	CRD20TJ121T
MAIN	R619		nsp	nsp	RES.	270 OHM 1/5W J	CRD20TJ271T
MAIN	R620		nsp	nsp	RES.	270 OHM 1/5W J	CRD20TJ271T
MAIN	R621		nsp	nsp	RES.	47 OHM 1/5W J	CRD20TJ470T
MAIN	R622		nsp	nsp	RES.	33 OHM 1/6W J	CRD20TJ330T
MAIN	R623		nsp	nsp	RES.	33 OHM 1/6W J	CRD20TJ330T
MAIN	R624		nsp	nsp	RES.	47K OHM 1/5W J	CRD20TJ473T
MAIN	R625		nsp	nsp	RES.	68 OHM 1/5W J	CRD20TJ680T
MAIN	R626		nsp	00MNN05221610	CHIP RES.	220 OHM 1/10W J	CRJ10DJ221T
MAIN	R627		nsp	00MNN05472610	CHIP RES.	4.7K OHM 1/10W J	CRJ10DJ472T
MAIN	R628		nsp	nsp	RES.	68 OHM 1/5W J	CRD20TJ680T
MAIN	R629		nsp	00MNN05474610	CHIP RES.	470K OHM 1/10W J	CRJ10DJ474T
MAIN	R630		nsp	00MNN05472610	CHIP RES.	4.7K OHM 1/10W J	CRJ10DJ472T
MAIN	R631		nsp	nsp	RES.	68 OHM 1/5W J	CRD20TJ680T
MAIN	R632		nsp	nsp	RES.	1.2K OHM 1/5W J	CRD20TJ122T
MAIN	R633		nsp	nsp	RES.	2.7K OHM 1/5W J	CRD20TJ272T
MAIN	R635		nsp	00MNN05472610	CHIP RES.	4.7K OHM 1/10W J	CRJ10DJ472T
MAIN	R647		nsp	nsp	RES.	10K OHM 1/5W J	CRD20TJ103T
MAIN	R701		nsp	nsp	RES.	1K OHM 1/5W J	CRD20TJ102T
MAIN	R702		nsp	nsp	RES.	560 OHM 1/5W J	CRD20TJ561T
MAIN	R703		nsp	nsp	RES.	1K OHM 1/5W J	CRD20TJ102T
MAIN	R704		nsp	nsp	RES.	3.9K OHM 1/5W	CRD20TJ392T
MAIN	R705		nsp	nsp	RES.	3.9K OHM 1/5W	CRD20TJ392T
MAIN	R706		nsp	nsp	RES.	120 OHM 1/5W J	CRD20TJ121T
MAIN	R707		nsp	nsp	RES.	120 OHM 1/5W J	CRD20TJ121T
MAIN	R708		nsp	nsp	RES.	68 OHM 1/5W J	CRD20TJ680T
MAIN	R709		nsp	nsp	RES.	560 OHM 1/5W J	CRD20TJ561T
MAIN	R710		nsp	nsp	RES.	10K OHM 1/5W J	CRD20TJ103T
MAIN	R711		nsp	nsp	RES.	33K OHM 1/5W J	CRD20TJ333T
MAIN	R712		nsp	nsp	RES.	100 OHM 1/5W J	CRD20TJ101T

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

P.C.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
MAIN	R713		nsp	nsp	RES.	560 OHM 1/5W J CRD20TJ561T
MAIN	R714		nsp	nsp	RES.	270 OHM 1/5W J CRD20TJ271T
MAIN	R715		nsp	nsp	RES.	270 OHM 1/5W J CRD20TJ271T
MAIN	R716		nsp	nsp	RES.	33 OHM 1/6W J CRD20TJ330T
MAIN	R717		nsp	nsp	RES.	33 OHM 1/6W J CRD20TJ330T
MAIN	R718		nsp	nsp	RES.	120 OHM 1/5W J CRD20TJ121T
MAIN	R719		nsp	nsp	RES.	270 OHM 1/5W J CRD20TJ271T
MAIN	R720		nsp	nsp	RES.	270 OHM 1/5W J CRD20TJ271T
MAIN	R721		nsp	nsp	RES.	47 OHM 1/5W J CRD20TJ470T
MAIN	R722		nsp	nsp	RES.	33 OHM 1/6W J CRD20TJ330T
MAIN	R723		nsp	nsp	RES.	33 OHM 1/6W J CRD20TJ330T
MAIN	R724		nsp	nsp	RES.	47K OHM 1/5W J CRD20TJ473T
MAIN	R725		nsp	nsp	RES.	68 OHM 1/5W J CRD20TJ680T
MAIN	R726		nsp	00MNN05221610	CHIP RES.	220 OHM 1/10W J CRJ10DJ221T
MAIN	R727		nsp	00MNN05472610	CHIP RES.	4.7K OHM 1/10W J CRJ10DJ472T
MAIN	R728		nsp	nsp	RES.	68 OHM 1/5W J CRD20TJ680T
MAIN	R729		nsp	00MNN05474610	CHIP RES.	470K OHM 1/10W J CRJ10DJ474T
MAIN	R730		nsp	00MNN05472610	CHIP RES.	4.7K OHM 1/10W J CRJ10DJ472T
MAIN	R731		nsp	nsp	RES.	68 OHM 1/5W J CRD20TJ680T
MAIN	R732		nsp	nsp	RES.	1.2K OHM 1/5W J CRD20TJ122T
MAIN	R733		nsp	nsp	RES.	2.7K OHM 1/5W J CRD20TJ272T
MAIN	R735		nsp	00MNN05472610	CHIP RES.	4.7K OHM 1/10W J CRJ10DJ472T
MAIN	R747		nsp	nsp	RES.	10K OHM 1/5W J CRD20TJ103T
MAIN	R901		nsp	nsp	RES.	100 OHM 1/5W J CRD20TJ101T
MAIN	R902		nsp	nsp	RES.	100 OHM 1/5W J CRD20TJ101T
MAIN	R904		nsp	nsp	RES.	12K OHM 1/5W J CRD20TJ123T
MAIN	R905		nsp	nsp	RES.	3.3K OHM 1/5W J CRD20TJ332T
MAIN	R906		nsp	nsp	RES.	1K OHM 1/5W J CRD20TJ102T
MAIN	R907		nsp	nsp	RES.	22K OHM 1/5W J CRD20TJ223T
MAIN	R910		nsp	00MNN05122610	CHIP RES.	1.2K OHM 1/10W J CRJ10DJ122T
MAIN	R911		nsp	00MNN05153610	CHIP RES.	15K OHM 1/10W J CRJ10DJ153T
MAIN	R912		nsp	00MNN05105610	CHIP RES.	1M OHM 1/10W J CRJ10DJ105T
MAIN	R913		nsp	00MNN05473610	CHIP RES.	47K OHM 1/10W J CRJ10DJ473T
MAIN	R914		nsp	00MNN05103610	CHIP RES.	10K OHM 1/10W J CRJ10DJ103T
MAIN	R915		nsp	00MNN05473610	CHIP RES.	47K OHM 1/10W J CRJ10DJ473T
MAIN	R916		nsp	00MNN05473610	CHIP RES.	47K OHM 1/10W J CRJ10DJ473T
MAIN	R918		nsp	00MNN05101610	CHIP RES.	100 OHM 1/10W J CRJ10DJ101T
MAIN	R920		nsp	nsp	RES.	2.2K OHM 1/5W J CRD20TJ222T
MAIN	R922		nsp	nsp	RES.	2.2K OHM 1/5W J CRD20TJ222T
MAIN	R923		nsp	nsp	RES.	47K OHM 1/5W J CRD20TJ473T
MAIN	R924		nsp	nsp	RES.	1K OHM 1/5W J CRD20TJ102T
MAIN	R925		nsp	nsp	RES.	47K OHM 1/5W J CRD20TJ473T
MAIN	R926		90M-NI001040R	90M-NI001040R	CHIP RES.	0 OHM 1/10W J CRJ10CJ0R0T
MAIN	SW31		90M-SS000710R	90M-SS000710R	SW	SLIDE SWITCH KSS2B016Z
MAIN	X401		90M-JX001390R	90M-JX001390R	X'TAL	16.934MHZ HOX16934A120C
MAIN	X501		90M-JX001100R	90M-JX001100R	X'TAL	20MHZ HOX20000E220C
POWER PWB (CUP11983Z-3)						
POWER	BN91		nsp	nsp	CORD	WIRE ASSY CWB1C913120EN
POWER	BN94		nsp	nsp	CORD	WIRE ASSY CWB1D903150BM
POWER	▲ C954		90M-DK100770R	90M-DK100770R	CER. CAP.	! 0.0047UF 2.5KV KCKDKS472ME
POWER	C955		nsp	00MOA10702520	ELECT CAP.	100UF 25V CCEA1EH101T
POWER	C956		nsp	00MOA10702520	ELECT CAP.	100UF 25V CCEA1EH101T
POWER	CN95		nsp	nsp	CONN.	7.92MM(YUNHO) CJP02KA060ZY
POWER	D951		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
POWER	D952		nsp	00MHD20015210	DIODE	1SS133T-77 CVD1SS133MT
POWER	▲ F951	F B	nsp	90M-FS001370R	FUSE	! 250V T 0.63A KBA2C0630TLEY
POWER	▲ F951	F N	nsp	90M-FS001370R	FUSE	! 250V T 0.63A KBA2C0630TLEY
POWER	▲ F951	/K1G	nsp	90M-FS001260R	FUSE	! T 315MA L 250V KBA2C0315TLEY
POWER	▲ F951	/N1B	90M-FS001260R	90M-FS001260R	FUSE	! T 315MA L 250V KBA2C0315TLEY
POWER	▲ F951	/N1S	90M-FS001260R	90M-FS001260R	FUSE	! T 315MA L 250V KBA2C0315TLEY
POWER	Q951		00MHT327851H0	00MHT327851H0	TRS.	KSC2785Y HVTKSC2785YT
POWER	R951		nsp	nsp	RES.	3.3K OHM 1/5W J CRD20TJ332T
POWER	R952		nsp	nsp	RES.	1 OHM 1/5W J CRD20TJ1R0T
POWER	R953		nsp	nsp	RES.	1 OHM 1/5W J CRD20TJ1R0T
POWER	R954		nsp	nsp	RES.	10K OHM 1/5W J CRD20TJ103T
POWER	▲ RY95		00MLY10120400	00MLY10120400	RELAY	! POWER RELAY G5PA-1 5A OMRON CSL1E002ZE
POWER	▲ T951	F B	nsp	90M-TS003150R	TRANSF.	# TRANSF. POWER CD6002 100V/50HZ CLT5N035ZJ

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

P.C.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
POWER	▲ T951	F N	nsp	90M-TS003150R	TRANSF.	# TRANSF. POWER CD6002 100V/50HZ CLT5N035ZJ
POWER	▲ T951	/K1G	nsp	90M-TS003160R	TRANSF.	# TRANSF. POWER CD6002 230V/50HZ CLT5N035ZE
POWER	▲ T951	/N1B	90M-TS003160R	90M-TS003160R	TRANSF.	# TRANSF. POWER CD6002 230V/50HZ CLT5N035ZE
POWER	▲ T951	/N1S	90M-TS003160R	90M-TS003160R	TRANSF.	# TRANSF. POWER CD6002 230V/50HZ CLT5N035ZE
POWER	▲ T952	F B	nsp	90M-TS003170R	TRANSF.	# TRANSF. SUB CD6002/F CLT5I009ZJ
POWER	▲ T952	F N	nsp	90M-TS003170R	TRANSF.	# TRANSF. SUB CD6002/F CLT5I009ZJ
POWER	▲ T952	/K1G	nsp	90M-TS003180R	TRANSF.	# TRANSF. SUB CD6002/N CLT5I009ZE
POWER	▲ T952	/N1B	90M-TS003180R	90M-TS003180R	TRANSF.	# TRANSF. SUB CD6002/N CLT5I009ZE
POWER	▲ T952	/N1S	90M-TS003180R	90M-TS003180R	TRANSF.	# TRANSF. SUB CD6002/N CLT5I009ZE
TACT SW PWB (CUP11984-2)						
TACT	CN22		nsp	nsp	CONN.	5P WAFER CJP05GB46ZY
TACT	D201		90M-HI101120R	90M-HI101120R	LED	SLR325VRA47 KVDCLR325VRA47
TACT	Q201		90M-BA001460R	90M-BA001460R	TRS.	KRC107M HVTKRC107MT
TACT	R201		nsp	nsp	RES.	1.5K OHM 1/5W J CRD20TJ152T
TACT	R202		nsp	nsp	RES.	10K OHM 1/5W J CRD20TJ103T
TACT	S201		90M-SP001400R	90M-SP001400R	PUSH SW	TACT SW EVQ22505R CST1A023ZT

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

13. 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
MAIN	IC51	T5CD2(F AAD JZ) CD6002	B	

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
MAIN	IC51	T5CD2(F AAD JZ) CD6002	B	

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。