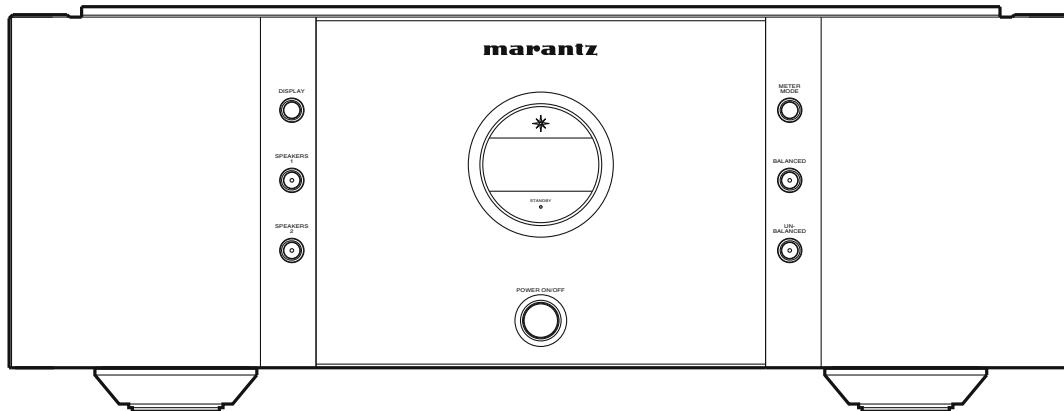


Service Manual

SM-11S1 /F N/K1G/N1G/U1G/N1S

Stereo Power Amplifier



SM-11S1

TABLE OF CONTENTS

SECTION	PAGE
1. TECHNICAL SPECIFICATIONS	1
2. CAUTION	1
3. ALIGNMENTS.....	2
4. SERVICE MODE.....	7
5. UPDATE FIRMWARE	8
[A] SOFTWARE (fdtv307r01.exe) DOWNLOADS AND INSTALLS PROCEDURE	8
[B] WRITING AND UPDATE SOFTWARE.....	24
6. WIRING DIAGRAM.....	35
7. BLOCK DIAGRAM	37
8. SCHEMATIC DIAGRAM	39
9. PARTS LOCATION	47
10. EXPLODED VIEW AND PARTS LIST	61
11. MICROPROCESSOR AND IC DATA.....	65
12. ELECTRICAL PARTS LIST.....	71
13. ABOUT REPLACE THE MICROPROCESSOR WITH A NEW ONE.....	86

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®

SM-11S1

MARANTZ DESIGN AND SERVICE

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

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

ORDERING PARTS :

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

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

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

USA

MARANTZ AMERICA, INC
100 CORPORATE DRIVE
MAHWAH, NEW JERSEY 07430
USA

EUROPE / TRADING

MARANTZ EUROPE B.V.
P. O. BOX 8744, BUILDING SILVERPOINT
BEEMDSTRAAT 11, 5653 MA EINDHOVEN
THE NETHERLANDS
PHONE : +31 - 40 - 2507844
FAX : +31 - 40 - 2507860

CANADA

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

JAPAN

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

株式会社 ディーアンドエムホールディングス

本 社 ☎210-8569
神奈川県川崎市川崎区日進町2-1 D&Mビル

KOREA

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

CHINA

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

NOTE ON SAFETY :

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

安全上の注意 :

がついている部品は、安全上重要な部品です。必ず指定されている部品番号のものをして下さい。

SHOCK, FIRE HAZARD SERVICE TEST :

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

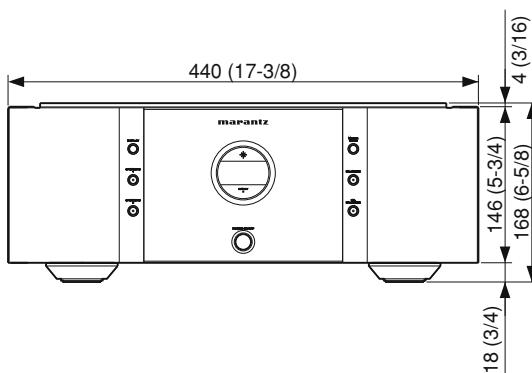
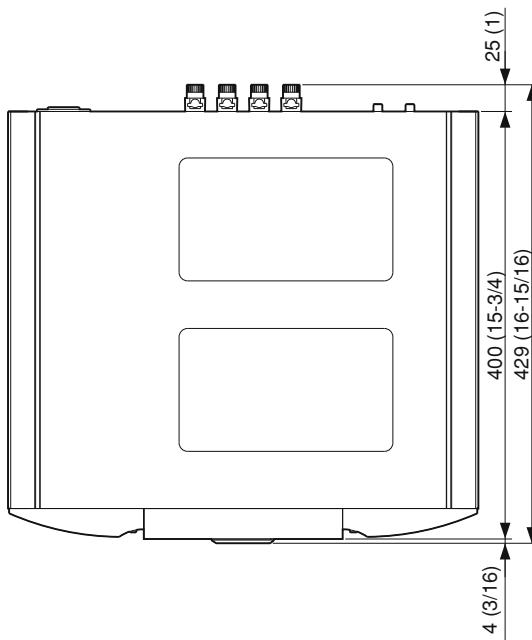
Any resistance measurement less than 1 Megohms should cause unit to be repaired or corrected before AC power is applied, and verified before it is return to the user/customer.

Ref. UL Standard No. 60065.

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

1. TECHNICAL SPECIFICATIONS

Power output (20 Hz ~ 20 kHz simultaneous drive of both channels)	
.....	110W + 110W (8Ω load)
.....	220W + 220W (4Ω load)
Power output during BTL	420 W (8Ω load)
Total harmonic distortion	
(20Hz ~ 20kHz simultaneous drive of both channels)	
.....	0.02% (8Ω load)
Output band width (8Ω load, 0.05%)	5Hz ~ 40kHz
Frequency response (1W, 8Ω load)	5Hz ~ 120kHz
Dumping factor (8Ω load, 20Hz ~ 20kHz)	110
Input sensitivity/Input impedance	
.....	2V / 22kΩ (BALANCED)
.....	2V / 22kΩ (UNBALANCED)
S/N (IHF-A, 1W, 8Ω load)	
.....	101dB (BALANCED)
.....	101dB (UNBALANCED)
Voltage amplification	
.....	17dB (GAIN SETTING: -6dB)
.....	23dB (GAIN SETTING: ±0dB)
.....	29dB (GAIN SETTING: +6dB)
Power requirement	
[/F]	AC 100V 50/60Hz
[/N]	AC 230V 50/60Hz
[/U]	AC 120V 60Hz
Power consumption	
EN60065, UL60065	380W
J60065 [/F]	300W
Maximum outer dimensions	
Width	440mm (17-3/8 in)
Height	168mm (6-5/8 in)
Depth	429mm (16-15/16) in
Weight	26.6kg (56.6 lbs)
Accessories	
Detachable AC power cable	1



2. CAUTION

- The layout of this amplifier is well concerned for sound quality.
- When screws and washers are removed, those parts must be set to the same places.
 - When wires are removed, the wires must be installed in the same roots, same places.
 - Do not hold the side panel (001D) to move the unit when the unit is disassembled.

2. 注意

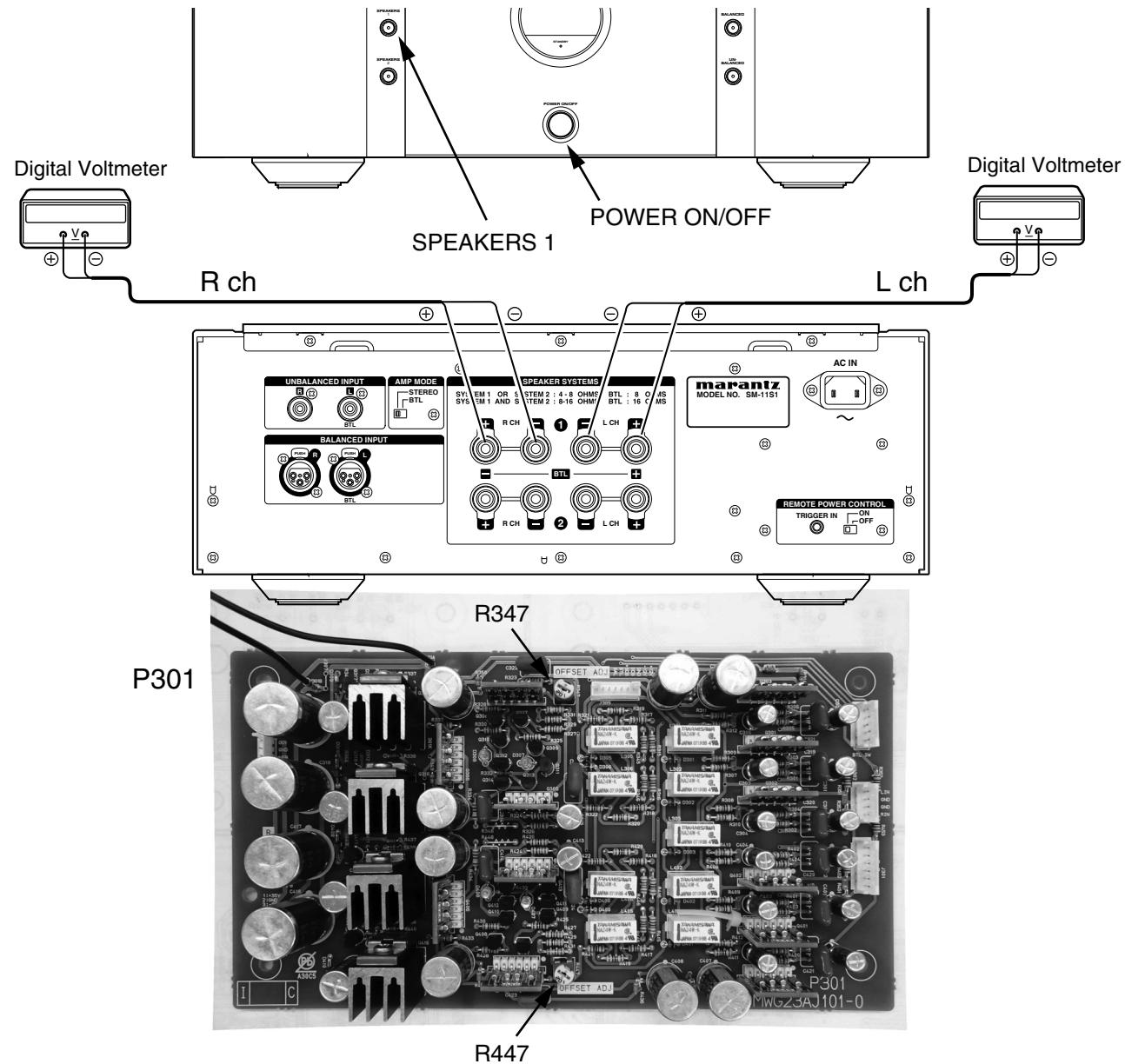
- 当機は音質を考慮したレイアウトになっています。
- ネジやワッシャ類を取り外した場合、元の位置に取り付けてください。
 - ワイヤ類を取り外した場合の配線ルートは、元のルート通りに戻してください。
 - 当機を分解した状態で移動するときは、サイドパネル(001D)を持たないでください。

3. ALIGNMENTS

Set the power voltage to rated voltage for this adjustment.

調整時は必ず電源電圧を定格電圧に合わせてください。

1. DC Offset Voltage Adjustment



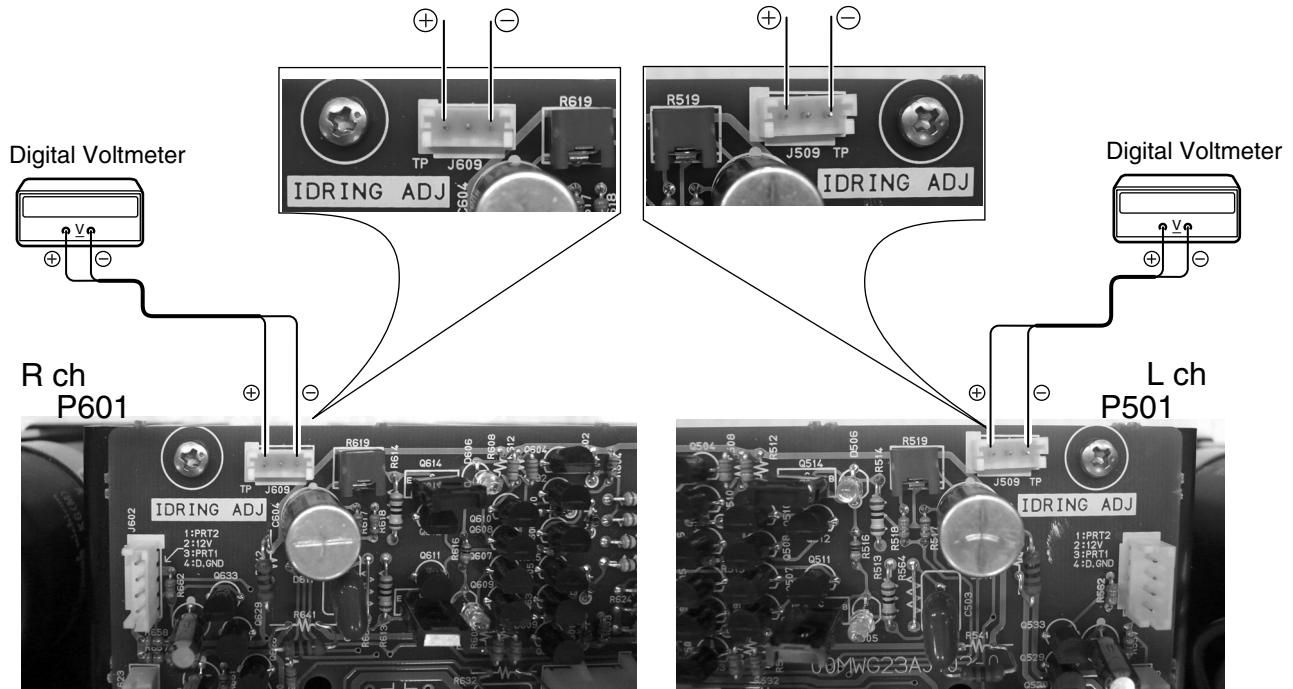
- Before turning on the power, Insert Digital Voltage Meter between the SPEAKER SYSTEMS 1 (L CH) "+" and "-". Insert Digital Voltage Meter between the SPEAKER SYSTEMS 1 (R CH) "+" and "-".
- Turn on the power. Then press the **SPEAKERS 1** Button. Adjustment is started immediately after a speaker relay turns on
- First L CH is adjusted.
The variable resistor **R347** on P301 is turned with adjustment driver, and the Digital Voltage Meter is adjusted to "0mV ±3mV".
- Then, R CH is adjusted.
The variable resistor **R447** on P301 is turned with adjustment driver, and the Digital Voltage Meter is adjusted to "0mV ±3mV".

- 電源をONする前にリアパネルのSPEAKER SYSTEMS 1のL CH およびR CH それぞれの "+" 端子と "-" 端子間にデジタルボルトメーターを接続します。
- 電源を投入し本体前面の**SPEAKERS 1** のボタンをONにします。
スピーカーリレーがONした直後から調整を開始します。
- 最初にL CHを調整します。
P301基板の半固定抵抗**R347**を調整ドライバーで回し、L CHスピーカー出力端子に接続したデジタルボルトメーターの電圧が "0mV ±3mV" 以内になるように調整します。
- 続けて、R CHを調整します。P301 基板の半固定抵抗 **R447**を調整ドライバーで回し、R CHスピーカー出力端子に接続したデジタルボルトメーターの電圧が "0mV ±3mV" 以内になるように調整します。
- 調整後DCオフセット電圧は多少の変動はありますが、

5. Although after-adjustment DC offset voltage has some change, Please check that the range of DC offset voltage between L ch (R ch) "+" and L ch (R ch) "-" terminal of SPEAKER SYSTEMS 1 is "0mV ±20mV".

2. Idling Current Adjustment

After DC Offset Voltage Adjustment is completed, adjust the Idling Current with the variable resistor **R519** and **R619** on the PWB (P501/P601).



1. Turn off the power.
2. "+" of Connect Digital Voltage is connected to the **No. 1** pin and connected "-" to **No. 3** pin of **J509**.
3. "+" of Connect Digital Voltage is connected to the **No. 1** pin and connected "-" to **No. 3** pin of **J609**.
4. Before turning on the power, **R519** and **R619** have been counter clockwise turned with the adjustment driver.
5. Turn on the power.
6. With seeing the digital voltage meter turn the variable resistor clockwise slowly to adjust the idling current.
Idling adjustment with **R519** (**R619**).
 - Turn **R519** (**R619**) clockwise to increase the idling current.
 - The adjustment value of idling current is **7mV(35mA)** each after turn on the power 3 minutes.
7. Confirm the current value becomes about **10mV(50mA)** after turn on the power 10 minutes later.
Adjustment is completed.
8. The current value is stable with about 10mV (50mA) after turn on the power in about 30 minutes.
9. Remove connection cable, attach the top cover.

SPEAKER SYSTEMS 1 の L CH および R CH それぞれの "+" 端子と "-" 端子間の DC オフセット電圧は "0mV ±20mV" の範囲であることを確認してください。

2. アイドリング電流調整

DC オフセット電圧調終了後、P501/P601 基板上の半固定抵抗 **R519** と **R619** でアイドリング電流を調整します。

1. 電源を OFF します。
2. P501 基板の **J509** にデジタルボルトメーターを接続します。デジタルボルトメーターは **J509** の **1** 番ピン（丸印側）を "+"、**3** 番ピンを "-" に接続します。
3. P601 基板の **J609** にデジタルボルトメーターを接続します。デジタルボルトメーターは **J609** の **1** 番ピン（丸印側）を "+"、**3** 番ピンを "-" に接続します。
4. 電源を投入する前に半固定抵抗 **R519** と **R619** を、調整ドライバーで反時計方向に回しきってください。
5. 電源を ON します。
6. P501 基板の **J509** (**J609**) に接続したデジタルボルトメーターの電圧値を監視しながら、半固定抵抗 **R519** (**R619**) をゆっくりと時計方向に回してください。
 - **R519** と **R619** を時計方向に回すとアイドリング電流が増加します。
 - アイドリング電流の調整値は、電源投入から 3 分後にそれぞれ "7mV(35mA)" にします。
7. 電源投入 10 分後に約 "10mV(50mA)" の値になることを確認します。
以上で調整は完了です。
8. 電源投入後約 30 分で約 10mV(50mA) で安定します。
9. デジタルボルトメーターの接続を外し、トップカバーを取付けます。

3. PROCEDURE FOR POWER METER ADJUSTMENT

At the time of the adjustment, please make sure to adjust the power supply voltage to the rated voltage and frequency.

[A] STEREO MODE adjustment

1. Connect an 8-ohm ($\geq 100W$) dummy load to each of the L-ch and R-ch speaker terminals.
Set the AMP MODE SW on the rear panel to **STEREO**.
2. Connect an oscillator to the UN-BALANCED input terminal each of the L-ch and R-ch. Make sure that the frequency is 1kHz, keep the output down and then turn on the oscillator.
3. Hold down the **SPEAKERS 2** button and **UN-BALANCED** button at the same time when turning on the unit. (It switches to the Meter Adjustment Mode.)

L POWER R
0.00 0.00

4. Adjust the oscillator output to 1.89 V (rms).
5. Adjust the L-ch. The display will indicate the status as shown on the following figure (for one):

L POWER R
123 75.3

Press the **DISPLAY** button once, and the display indicates "L" on the left once the unit is switched to the adjustment mode.

L POWER R
123 75.3

Check the display and adjust the L-ch output level until it indicates "100". The unit has two keys with a variability of plus and minus 50% at a maximum: one varies 5%, the other 1%, at every one push. At first, press the 5% key, adjust the level until the display indicates nearly 100, and then press the 1% key and set the level to 100.

3. Power Meter 調整手順

調整時は必ず電源電圧を定格電圧・周波数に合わせてください。

[A] STEREO MODEの調整

1. Lch, Rchスピーカ端子にそれぞれ8Ω(100W以上)のダミーロードを接続してください。
Rear Panel のAMP MODE SWは**STEREO**にしてください。
2. Lch, RchのUN-BALANCED入力端子に発振器を接続します。発振器は1kHzで出力は絞っていることを確認して発振器の電源を入れます。
3. **SPEAKERS 2**ボタンと**UN-BALANCED**ボタンを押しながら電源を入れます。(メーター調整モードになります。)

4. 発振器の出力が1.89V (rms) になる様に発振器の出力を調整します。
5. Lchの調整を行います。この時表示は下図の様になります。
(数値は一例です。)

DISPLAYボタンを1回押します。調整モードに入ると上段左にLが表示されます。

ディスプレーのLch側の出力電力表示を見ながら表示が"100"になるように調整します。最大±50%の調整量を持ち、1回押す毎に1%表示を可変するキーと5%可変するキーがあります。始めは5%表示を可変するキーで100近傍まで調整をして、次に1%表示を可変するキーを用い100に合わせてください。

	Down ▼	Up ▲
1%	SPEAKERS 1	BALANCED
5%	SPEAKERS 2	UN-BALANCED

When the value is below 100, turn UP (▲).

When the value is above 100, turn DOWN (▼).

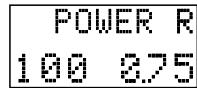
表示された数値が100より小さい時： Up (▲)

表示された数値が100より大きい時： Down (▼)

L POWER R
100 87.5

When the adjustment is completed, press the **DISPLAY** button once again.

6. Next, adjust the R-ch. The display will indicate the status as shown on the following figure (for one):



It can be adjusted in the same way as the L-ch except that the display indicates "R".

調整終了後もう一度**DISPLAY**ボタンを1回押します。

6. 次にRchの調整を行います。この時表示は下図の様になります。



When the adjustment is completed, press the **DISPLAY** button once again as with the L-ch.

This is the end of the STEREO MODE adjustment. After confirming the message shown on the following figure, turn off the power.

調整終了後Lch同様にもう一度**DISPLAY**ボタンを1回押します。

これでSTEREO MODEの調整は終わりです。
下図のメッセージ確認後、電源を切ってください。



[B] BTL MODE adjustment

1. Connect an 8-ohm ($\geq 100W$) dummy load to each of the L-ch and R-ch speaker terminals.
Set the AMP MODE SW to **BTL**.
2. Connect an oscillator to the UN-BALANCED input terminal of the L-ch. Make sure that the frequency is 1kHz, keep the output down and then turn on the oscillator.
3. Hold down the **SPEAKERS 2** button and **UN-BALANCED** button at the same time when turning on the unit. (It switches to the Meter Adjustment Mode.)
4. Adjust the oscillator output to 0.945 V (rms).
5. Adjust the BTL Mode. The display will indicate the status as shown on the following figure (for one):

[B] BTL MODEの調整

1. SPEAKERS 1のLch, Rchの+スピーカ端子に8Ω(100W以上)のダミーロードを接続してください。
AMP MODE SWは**BTL**にしてください。
2. L-chのUN-BALANCED入力端子に発振器を接続します。
発振器は1kHzで出力は絞っていることを確認して発振器の電源を入れます。
3. **SPEAKERS 2**ボタンと**UN-BALANCED**ボタンを押しながら電源を入れます。（メーター調整モードになります）
4. 発振器の出力が0.945V (rms) になる様に発振器の出力を調整します。
5. BTLモードの調整を行います。この時表示は下図の様になります。
(数値は一例です。)



Press the **DISPLAY** button once, and the display indicates "-" on both the right and left once the unit is switched to the adjustment mode.

DISPLAYボタンを1回押します。調整モードに入ると上段左右にマイナスが表示されます。



Check the display and adjust the L-ch output level until it indicates "100". The unit has two keys with a variability of plus and minus 50% at a maximum: one varies 5%, the other 1%, at every one push. At first, press the 5% key,

ディスプレーのLch側の出力電力表示を見ながら表示が "100"になるように調整します。最大±50%の調整量を持ち、1回押す毎に1%表示を可変するキーと5%可変するキーがあります。始めは5%表示を可変するキーで100近傍まで

adjust the level until the display indicates nearly 100, and then press the 1% key and set the level to 100.

調整をして、次に1%表示を可変するキーを用い100に合わせてください。

	Down ▼	Up ▲
1%	SPEAKERS 1	BALANCED
5%	SPEAKERS 2	UN-BALANCED

When the value is below 1.00, BALANCED (▲).

表示された数値が1.00より小さい時： BALANCED (▲)

When the value is above 1.00, SPEAKERS 1 (▼).

表示された数値が1.00より大きい時： SPEAKERS 1 (▼)

- POWER -
100

When the adjustment is completed, press the **DISPLAY** button once again.

調整終了後もう一度**DISPLAY**ボタンを1回押します。

Confirm that the message as on the following figure is shown on the display and then turn off the power.

INITIAL
OK

This is the end of the BTL MODE adjustment.

これで BTL MODE の調整は終わりです。

4. SERVICE MODE

- To enter the Service Mode, press the **POWER ON/OFF** button with pressing the **DISPLAY** and **METER MODE** buttons to turn on the unit.

When into the Service Mode, the memory is cleared and the unit is initialized.

- The Model name and Version number are displayed on the Front LCD.

Whenever press the **DISPLAY** button, the display changes as follows.

Turn off power to quit service mode.

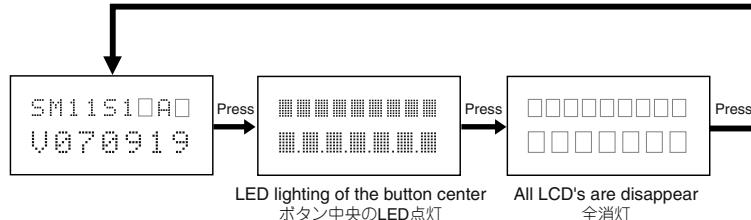
- 本体の**DISPLAY**ボタンと**METER MODE**ボタンを押しながら**POWER ON/OFF**ボタンを押します。

注意：サービスモードに入ると、全ての設定がクリアされ出荷状態になります。

- バージョンとモデル名が表示されます。

DISPLAYボタンを押すたびに下記の表示となります。

POWER ON/OFFボタンを押し、電源を切るとサービスモードが解除されます。



SERIAL NUMBER CHECK MODE

- To enter the serial number check mode, press the **POWER ON/OFF** button with pressing the **SPEAKERS 1** and **BALANCED** buttons to turn on the unit.
- The Serial number is displayed on the Front LCD.
Turn off power to quit serial number check mode.

シリアル番号の確認

- 本体の**SPEAKERS 1**ボタンと**BALANCED**ボタンを押しながら**POWER ON/OFF**ボタンを押します。これでシリアル番号の確認モードに入れます。
- シリアル番号が表示されます。
POWER ON/OFFボタンを押し、電源を切るとシリアル番号の確認モードが解除されます。

Initial settings 出荷状態内容

INPUT :	BALANCED
DISPLAY :	ON
SPEAKERS (1, 2) :	OFF
SIDE ILLUMINATION :	ON
GAIN :	0dB
METER MODE :	MODE 1

5. UPDATE FIRMWARE

[A] SOFTWARE (fdtv307r01.exe) DOWNLOADS AND INSTALLS PROCEDURE

[A-1] DOWNLOADS OF THE SOFTWARE

(Flash Development Toolkit: the rest is FDT)

Download the software for update/write-in of the microprocessor.

1. Launch the browser.
2. Type the "http://www.renesas.com/" into an address. And click the **Go** or press the **Enter** on keyboard of PC.
NOTE : This site is managed by RENESAS. The following explanation may differ from the actual composition. When different, please proceed along with the site composition of RENESAS.
3. Click the **GLOBAL SITE**.

5. UPDATE FIRMWARE

[A] SOFTWARE (fdtv307r01.exe) DOWNLOADS AND INSTALLS PROCEDURE

[A-1] DOWNLOADS OF THE SOFTWARE

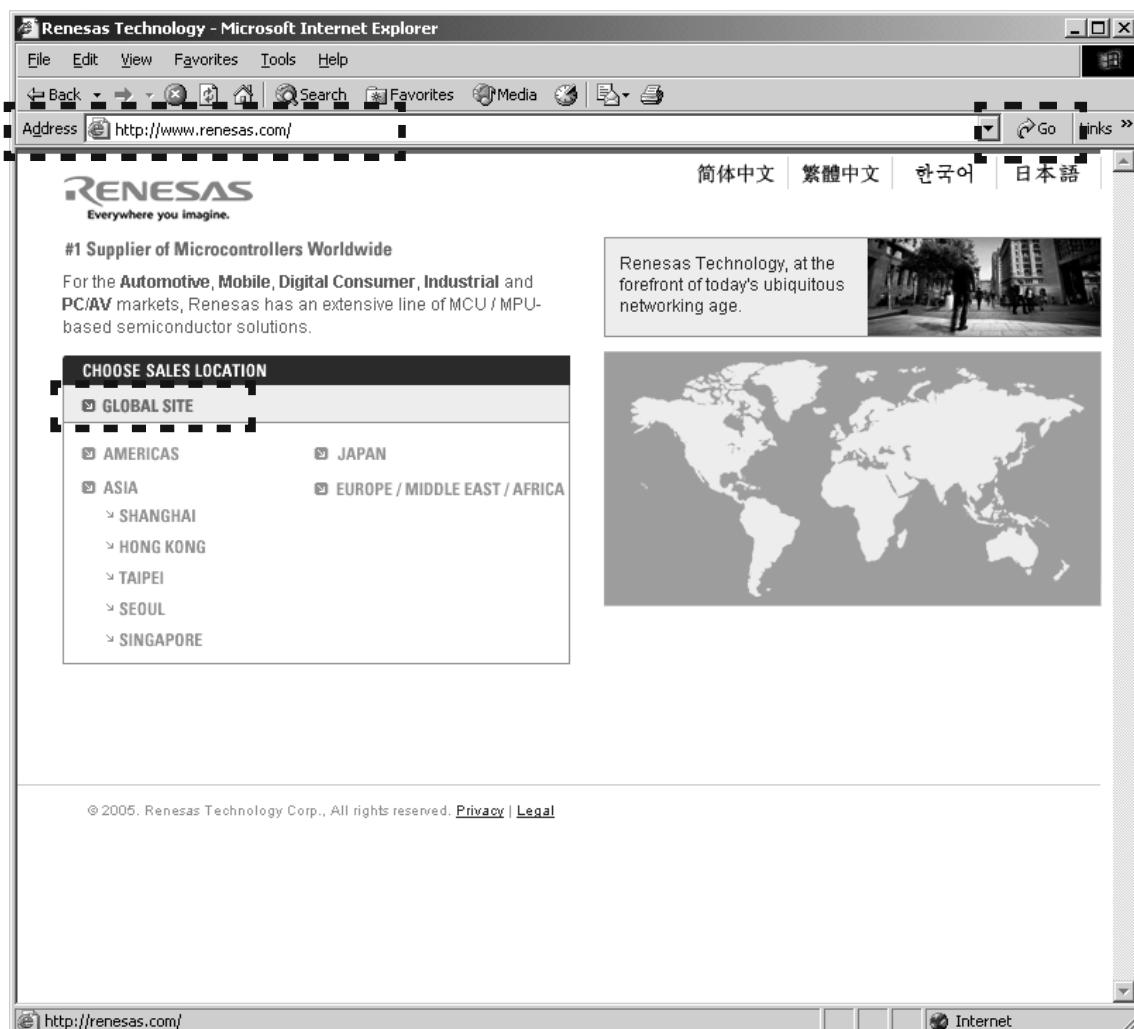
(Flash Development Toolkit: 以下 FDT)

マイコンの書き込み用ソフトウェア(FDT)をダウンロードします。

1. ブラウザ(インターネットエクスプローラーなど)を立ち上げます。
2. ブラウザのアドレスに"http://www.renesas.com/"を入力し、**移動**、またはキーボードの**Enter**を押します。

注意 : このサイトはRENESASが管理しているため、以下の説明が実際のサイト構成と異なっている場合があります。その場合は実際のRENESASのサイト構成に沿って進めてください。

3. **GLOBAL SITE**をクリックします。



4. A login ID is necessary to download the FDT.
 If you have Login ID, please advance to step 15.
 If you do not have Login ID, Click the **MY RENESAS**.
4. FDTのダウンロードにはLogin IDが必要になります。
 既にLogin IDを持っている方は手順の15へ進んでください。
 Login IDを持っていない方は**MY RENESAS**をクリックします。

5. Click the **If you are a new user click here to register now.**
5. **If you are a new user click here to register now**をクリックします。

6. Choose **Non Secure** or **Secure** in Security Level at your network environment.
 Choose **English** or **another one** in Region and Language.
6. PCのネットワーク環境によりChoose Security Levelから**Non Secure**, または**Secure**を選んでください。
 Choose Region and Languageから**日本語**をクリックします。

The screenshot shows a Microsoft Internet Explorer window with the address bar set to http://update.renesas.com/registration/forms/country_select.jsp. The page title is "Renesas.com | Update - Microsoft Internet Explorer". The content area displays the "Select Region" section with two radio buttons: "Non Secure" (selected) and "Secure". Below this is the "Choose Region and Language" section, which lists various regions with their corresponding language options. The regions listed are: Shanghai (English, 简体中文, 繁體中文), Hong Kong (English, 简体中文, 繁體中文), Seoul (English, 한국어), Singapore, Australia, India, Indonesia, Malaysia, Thailand, Vietnam, New Zealand & Philippines (English), Taipei (English, 繁體中文), Japan (日本語), Europe, Middle East, Africa (English), and North America (English). The "Done" button is visible at the bottom left of the browser window.

7. Input the each item.
NOTE : The items displayed by a language and region are different.
7. 各項目を記入します。
注意 : 下記説明は英語ですが、日本語を選んだ場合日本語で表示されます。

The screenshot shows a Microsoft Internet Explorer window with the address bar set to <http://update.renesas.com/registration/forms/register0.do?action=register0&language=en®ion=na>. The page title is "Renesas.com | Update - Microsoft Internet Explorer". The content area displays the "Account Registration" section. It includes a note: "To register for Renesas.com, please provide the following information." Below this is a list of required fields, each preceded by an asterisk (*). The fields are: Title (dropdown menu showing "Mr."), Given Name / First Name (text input field), Family Name / Last Name (text input field), Email Address (text input field), Company Name (text input field), Job Title (text input field), Address 1 (text input field), Address 2 (text input field), City (text input field), State (text input field), Country / Region (dropdown menu showing "Select Country/Region"), Postal Code (text input field), Phone Number (text input field), and Select Login ID (text input field). The "Done" button is visible at the bottom left of the browser window.

8. If you have inputted the necessary items, check the **I Agree**, and click the **Submit**.
 8. 必須項目を入力したならば、**同意します**にチェックを入れ、**送信**をクリックします。

9. The input is needless in this page.
 Scroll down the page.

9. このページは入力しなくても結構です。
 ページをスクロールダウンします。

Category	Family	Series	Group
Empty			

10. Click the **Submit**.

10. 送信をクリックします。

Category: Select product_category

Family:

Series:

Group: Add

Subscribed Products

Category	Family	Series	Group
Empty			

Applications / System Solutions

- Digital Home Electronics
- Automotive
- Network
- Wireless

Other

- News and Events
- Press Releases

Submit

Legal ► Privacy ► © 2006 RENESAS TECHNOLOGY CORPORATION, ALL RIGHTS RESERVED.

11. Immediately, an E-mail arrives from the RENESAS.
Click the link in the E-mail to go to the registration site,
and input the Login ID and Password.
And Click the **Submit**.

11. 直ちに、RENESASからE-mailが届きます。
E-mail内に有る登録サイトへのリンクをクリックします。
Login IDとPasswordを入力し**Submit**をクリックします。

GLOBAL SITE

RENESAS
Everywhere you imagine

Login

Please login to proceed Download Process.

* Indicates Required Fields

* Login ID: _____

Password: _____

Submit

Forgot your Login Details?

[Forgot your Password? Click Here](#)

[New User? Click Here](#)

[If you are a new user click here to register now.](#)

Legal ► Privacy ► © 2006 RENESAS TECHNOLOGY CORPORATION, ALL RIGHTS RESERVED.

12. Registration is finished.
 13. Open the RENESAS top page from registration page.
 14. Click the **GLOBAL SITE**.
12. 登録が完了します。
 13. 登録ページに有るリンクからRENESASのトップページに移動します。
 14. **GLOBAL SITE**をクリックします。



15. Click the **Downloads** in the DESIGN SUPPORT.
15. DESIGN SUPPORT内の**Downloads**をクリックします。



16. Scroll down the page, and type the "Flash Development toolkit" into the Keyword.
And click the **Start Search**.
16. ページをスクロールダウンし、Keywordに"Flash Development toolkit"を入力します。
Start Searchをクリックします。

Category: select

When multiple parameters are selected, "OR" search is carried out.

It is possible to select from Evaluation Software, Upgrades, Utilities, Sample Codes, and IBIS.

Keyword:

Date From:

Date To:

In order to search for downloadable content on a particular regional site, please go to the download search screen on the regional site in question. Select from one of the following:

[AMERICA] [EUROPE] [JAPAN] [SINGAPORE]
[HONG KONG] [SHANGHAI] [TAIPEI] [SEOUL]
[OTHER ASIAN] [GLOBAL]

© 2003-2007 Renesas Technology Corp. All rights reserved. [Using Our Website](#) | [Privacy](#) | [Sitemap](#)

17. Click the latest Flash Development Toolkit in the table. **But DO NOT click the upgrade version because installation fails.**

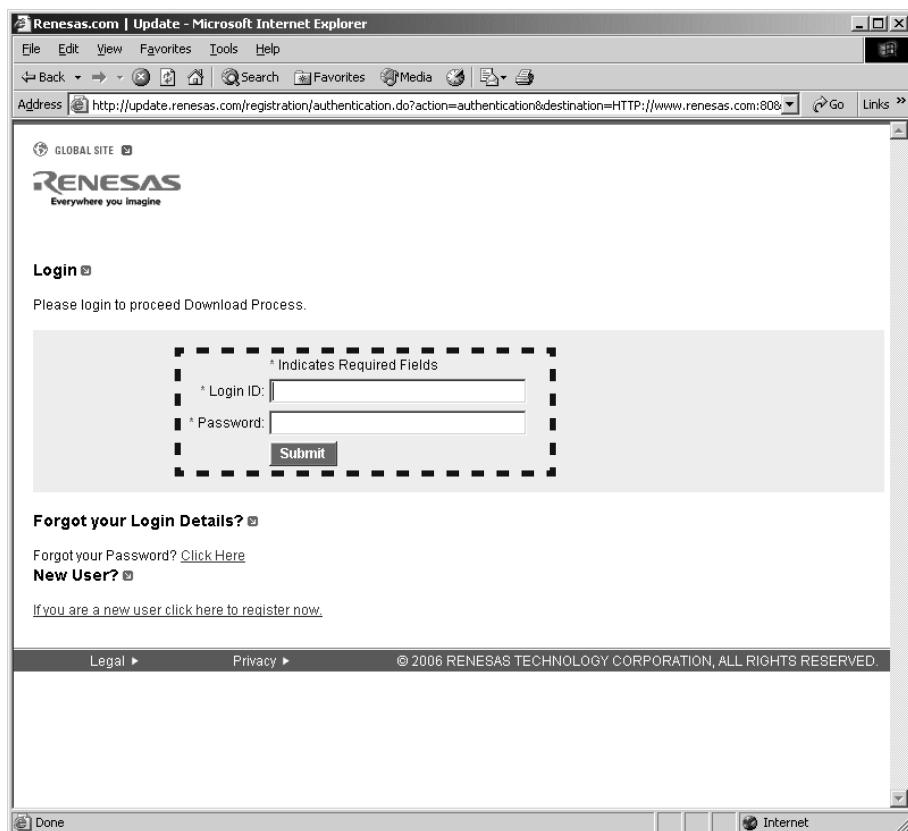
NOTE : The latest edition is FDT V3.07 Release 01 at present. (February, 2007) It is in FDT V3.07 Release 01 as follows and explains it.

17. 検索結果の中から最新のFlash Development Toolkitをクリックします。アップグレード版はインストールに失敗するのでクリックしないでください。
- 注意 :** 現時点(2007年2月)での最新バージョンはV3.07 Release 01になります。以下FDT V3.07 Release 01で説明します。

Product Category	Product Name	Group Name/Part No.	Issue Date	Comments
Flash Development Toolkit V.3.07 Release 01 Upgrade	Flash Development Toolkit V.3.07 Release 01 Upgrade		2006-12-21	Supported Version: For supported customer in ASIA only. This is the latest version for the Flash Development Toolkit Ver 3.xx and V.3.xx Release xx. Upgrading to this latest version from any version of the Flash Development Toolkit Ver3 is available.
Flash Development Toolkit	Evaluation Software Flash Development Toolkit V.3.07 Release 01		2006-12-21	Evaluation Version: no guarantee of support. Login ID and password are required to access this SW.
Flash Development Toolkit	Flash Development Toolkit V.3.07 Release 00 Upgrade		2006-11-06	
Flash Development Toolkit	Flash Development Toolkit V.3.06 Release 00 Upgrade		2006-05-22	

18. Input the Login ID and Password.
And click the **Submit**.

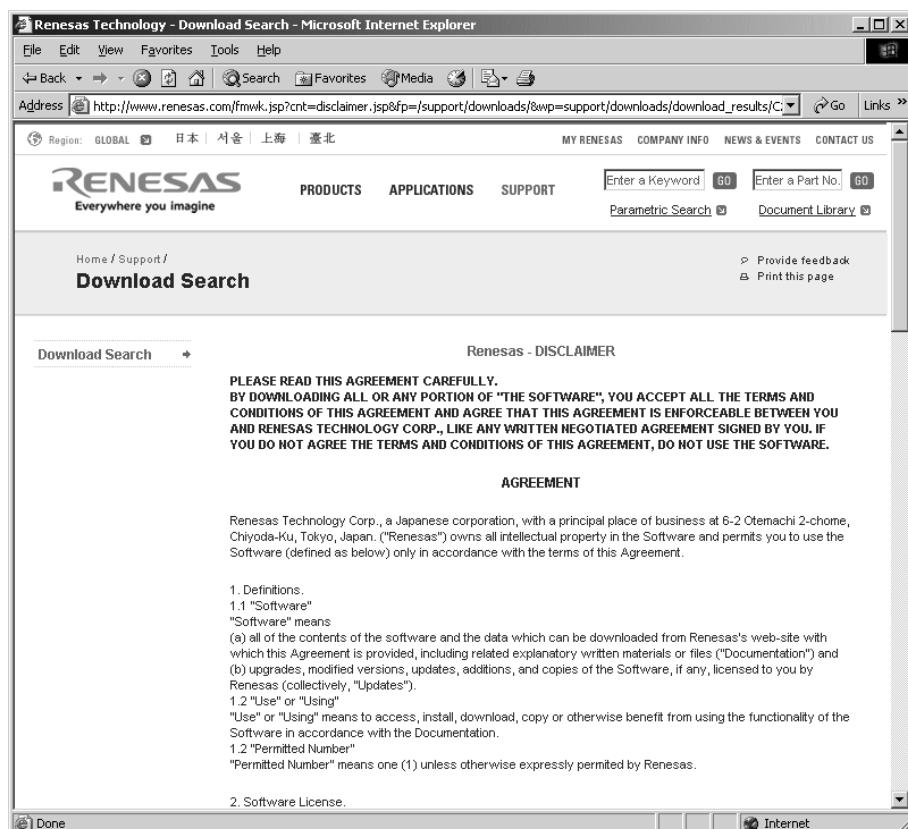
18. ダウンロードするためにLogin IDとPasswordを入力します。
Submitをクリックします。



The screenshot shows a Microsoft Internet Explorer window with the address bar set to <http://update.renesas.com/registration/authentication.do?action=authentication&destination=HTTP://www.renesas.com:80/>. The main content is a 'Login' form with fields for 'Login ID' and 'Password', and a 'Submit' button. Below the form are links for 'Forgot your Login Details?' and 'New User?'. The footer contains links for 'Legal', 'Privacy', and copyright information.

19. Scroll down the page.

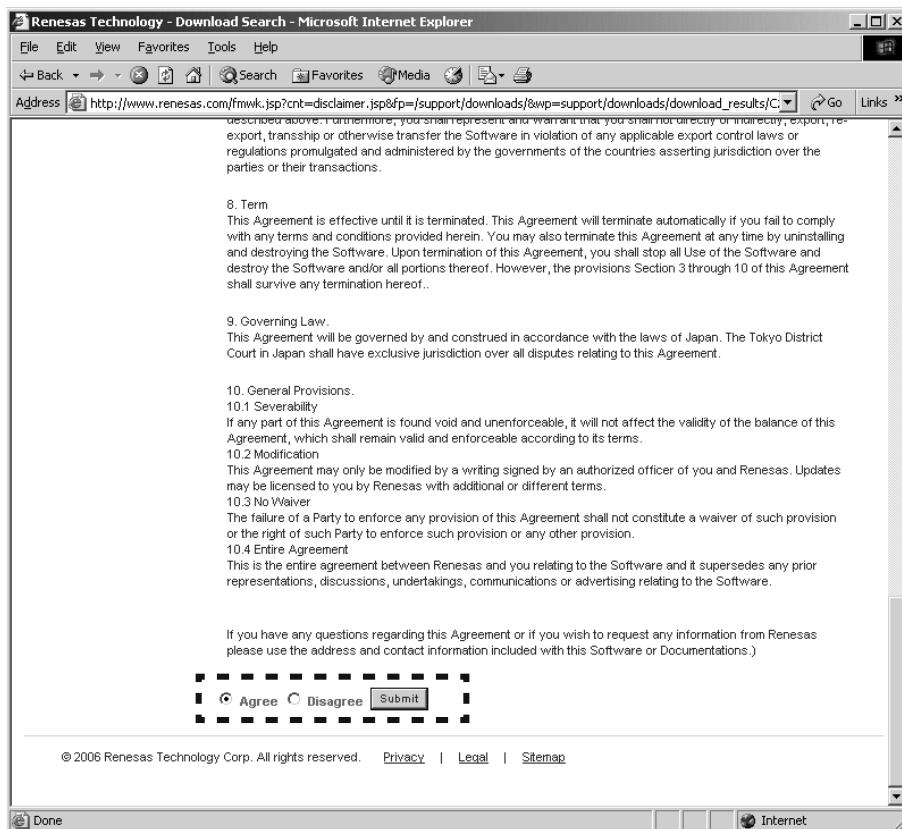
19. ページをスクロールダウンします。



The screenshot shows a Microsoft Internet Explorer window with the address bar set to http://www.renesas.com/fmwk.jsp?cnt=disclaimer.jsp&p=/support/downloads&wp=/support/downloads/download_results/C:/. The main content is a 'Download Search' page with a 'Disclaimer' section containing legal text about software terms and conditions. There is also an 'Agreement' section with detailed software license terms.

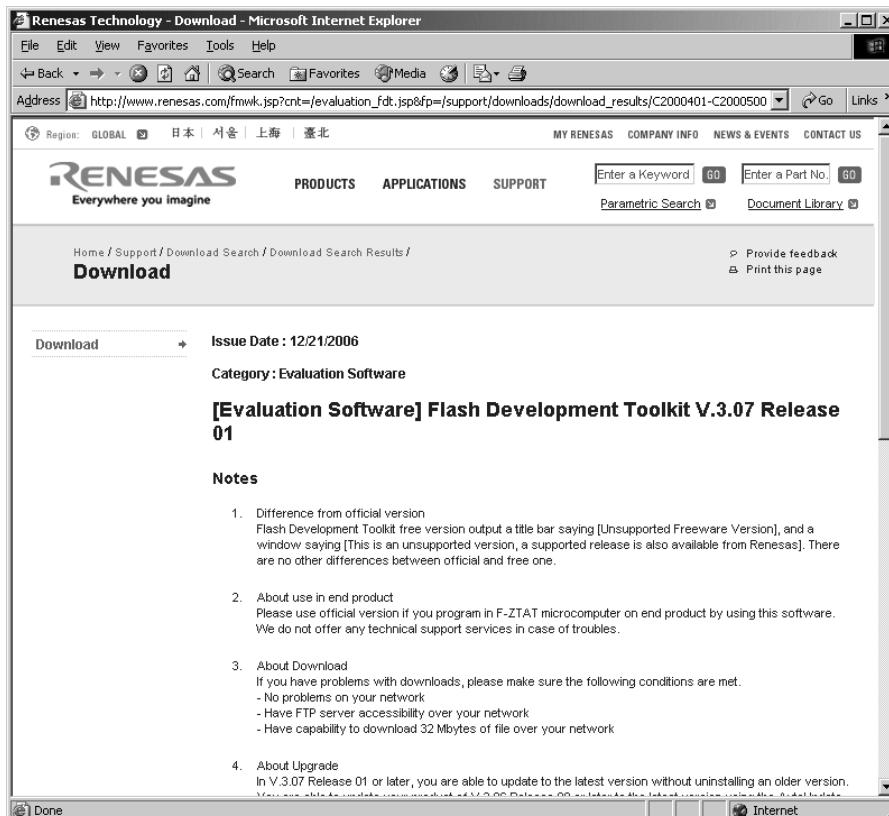
20. Check the **Agree**, and click the **Submit**.

20. **Agree**にチェックを入れ、**Submit**をクリックします。



21. Scroll down the page.

21. ページをスクロールダウンします。



22. Click the **Download**.

22. **Download**をクリックします。

If you uninstall the Flash Development Toolkit v.3.07 through the Add/Remove Programs dialog box in Windows' Control Panel, the AutoUpdate Utility may not operate properly.
For details, see [RENESAS TOOL NEWS](#).

[Available MCUs for Flash Development Toolkit Ver3.x and V3.xx Releasexx](#)

Installation Methods after Downloading

- When executing the downloaded file in a directory, the installer is automatically executed.(Make sure the drive of the directory used for executing has enough capacity.)
- Follow the instructions indicated by the installer.
- In case of MS-Windows XP, 2000 and NT4.0, make sure that installer is executed by one who is authorized as an Administrator. No one but the user who has the authority of an Administrator can install this tool.

Comments

Be note that this software is evaluation version with no technical support service.

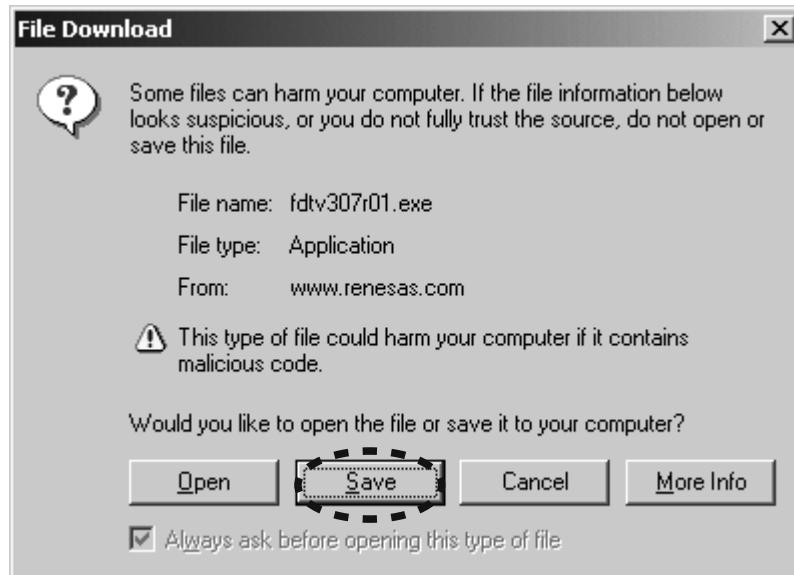
Download

Product Name	File Name	File Size	Download Link
[Evaluation Software] Flash Development Toolkit V.3.07 Release 01	fdtv307r01.exe	30,902,160 bytes (29.47 Mbytes)	 Download 

© 2003-2007 Renesas Technology Corp. All rights reserved. [Using Our Website](#) | [Privacy](#) | [Sitemap](#)

23. Click the **Save**.

23. **Save**をクリックします。

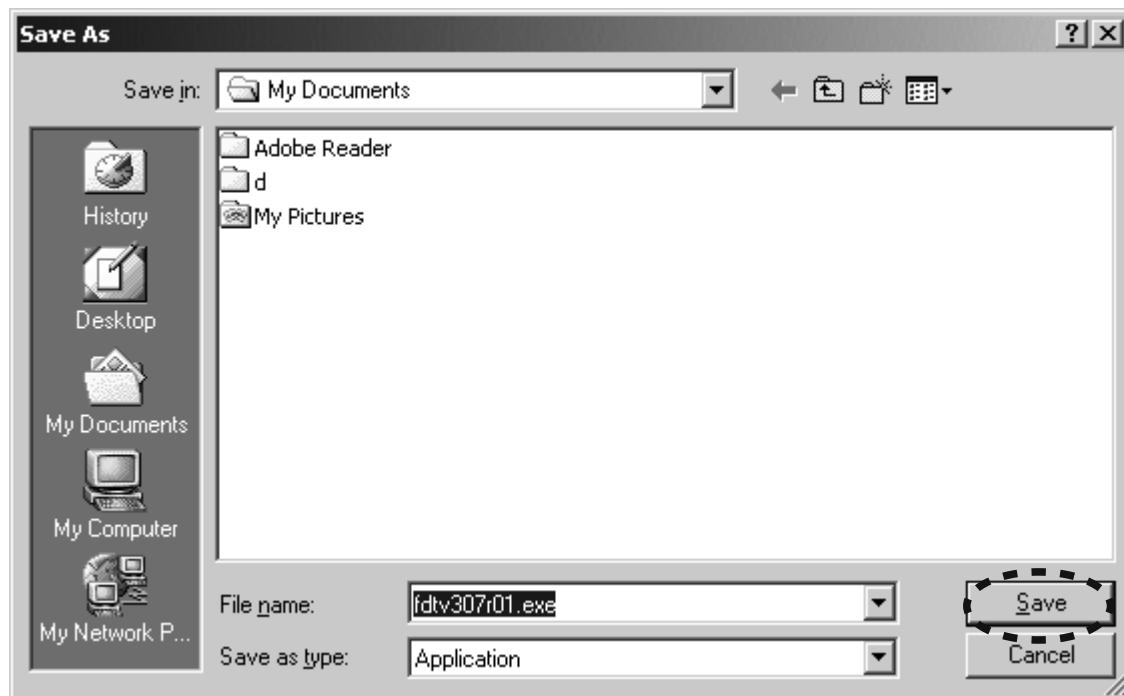


24. Save the fdtv307r01.exe on your PC's hard disc.

NOTE : A file name is change by improvement.

24. fdtv307r01.exeを任意のフォルダに保存します。

注意：ファイル名はバージョンにより変わります。

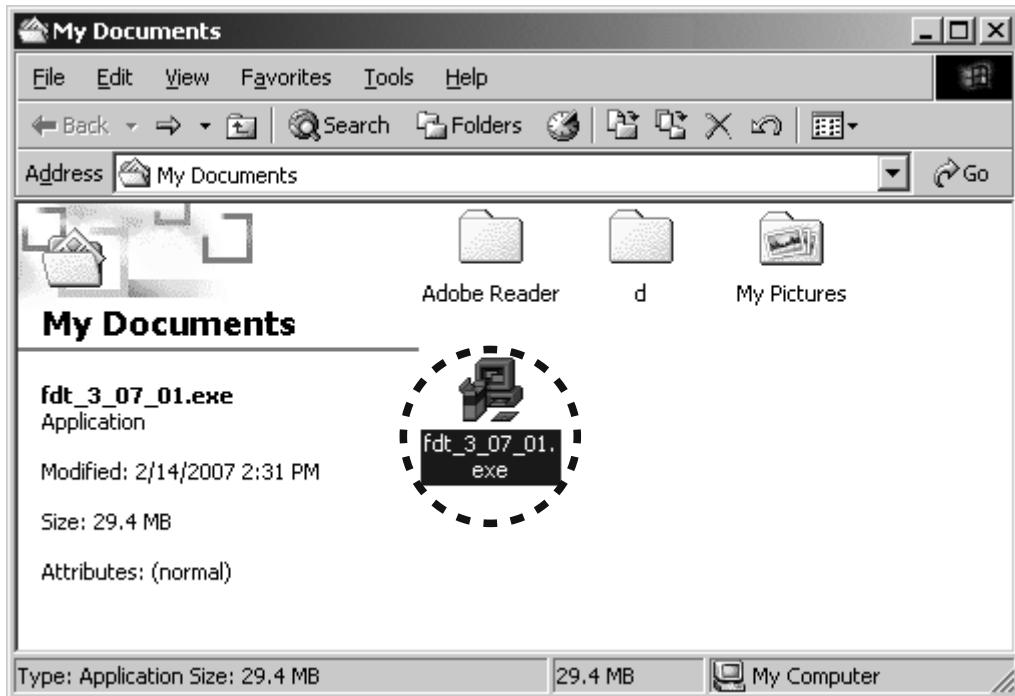


**[A-2] INSTALLS OF THE SOFTWARE
(Flash Development Toolkit Ver.3.07)**

1. Open the folder with the downloaded file.
2. And double click the **fdtv307r01.exe**.

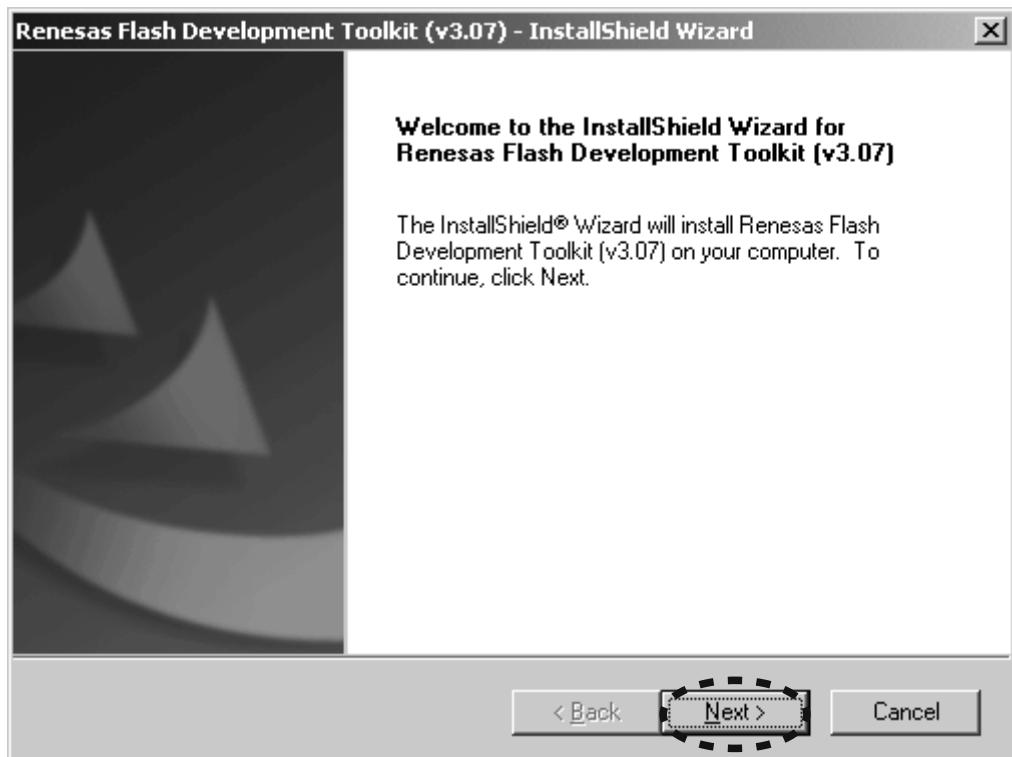
**[A-2] INSTALLS OF THE SOFTWARE
(Flash Development Toolkit Ver.3.07)**

1. ダウンロードしたファイルのあるフォルダを開きます。
2. **fdtv307r01.exe**をダブルクリックします。

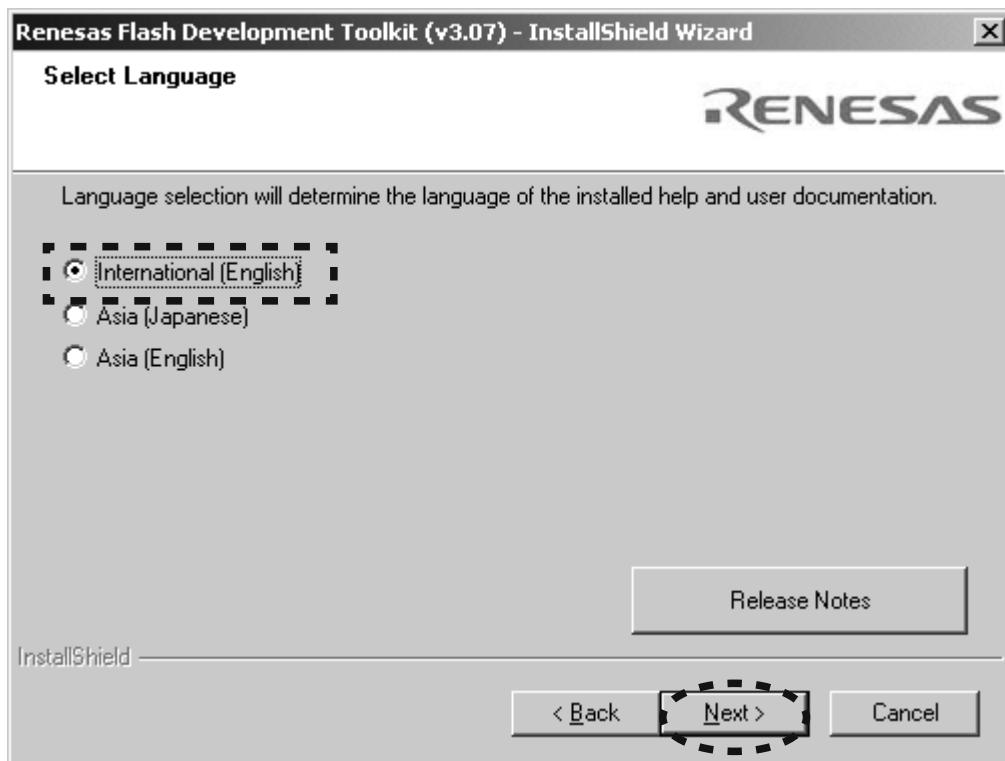


3. Click the **Next**.

3. **Next**をクリックします。

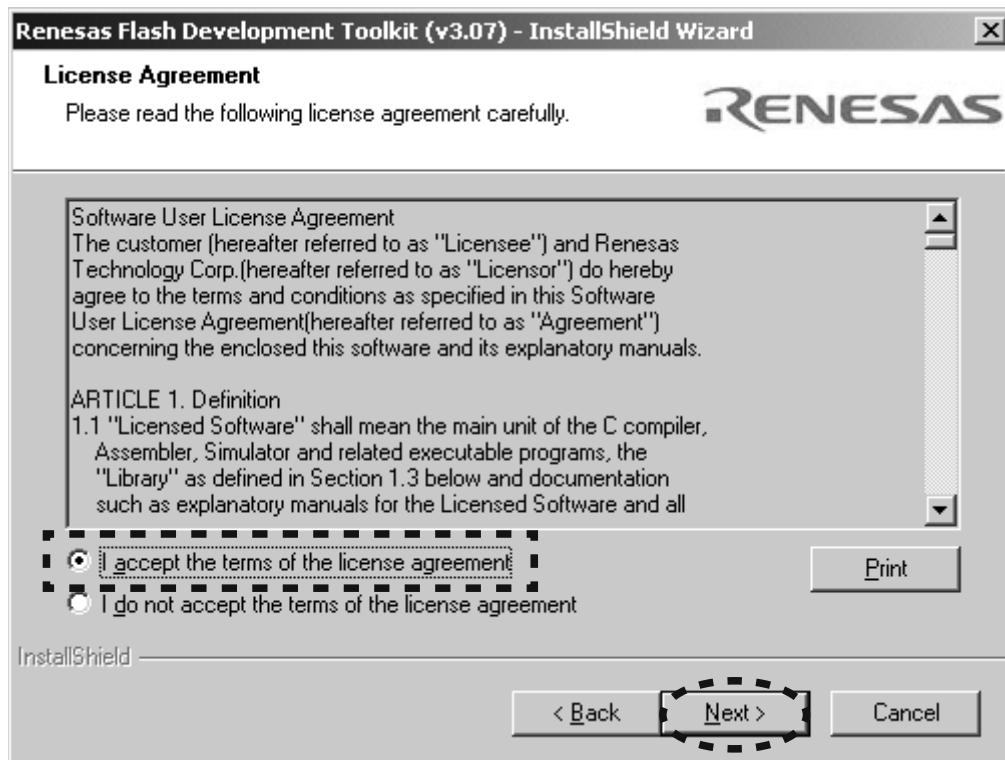


4. Check the **International [English]**, and click the **Next**. 4. **International [English]**にチェックを入れ**Next**をクリックします。



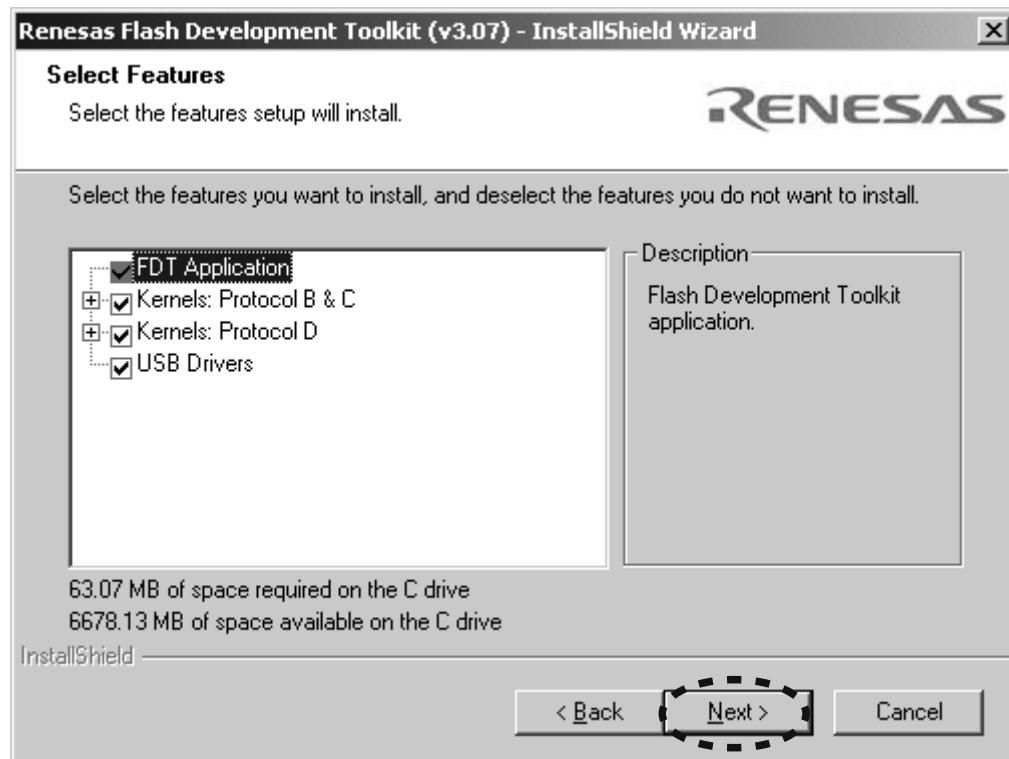
5. Check the **I accept the terms of the license agreement**, and Click the **Next**.

5. **I accept the terms of the license agreement**にチェックを入れ、**Next**をクリックします。



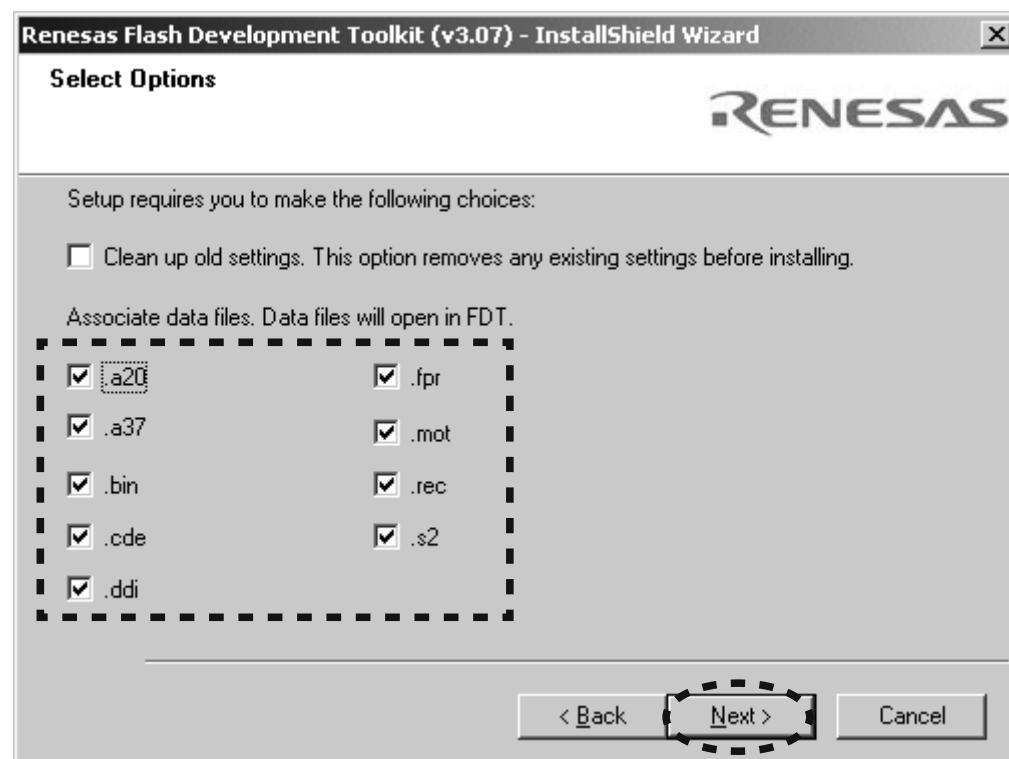
6 Click the **Next**.

6. **Next**をクリックします。



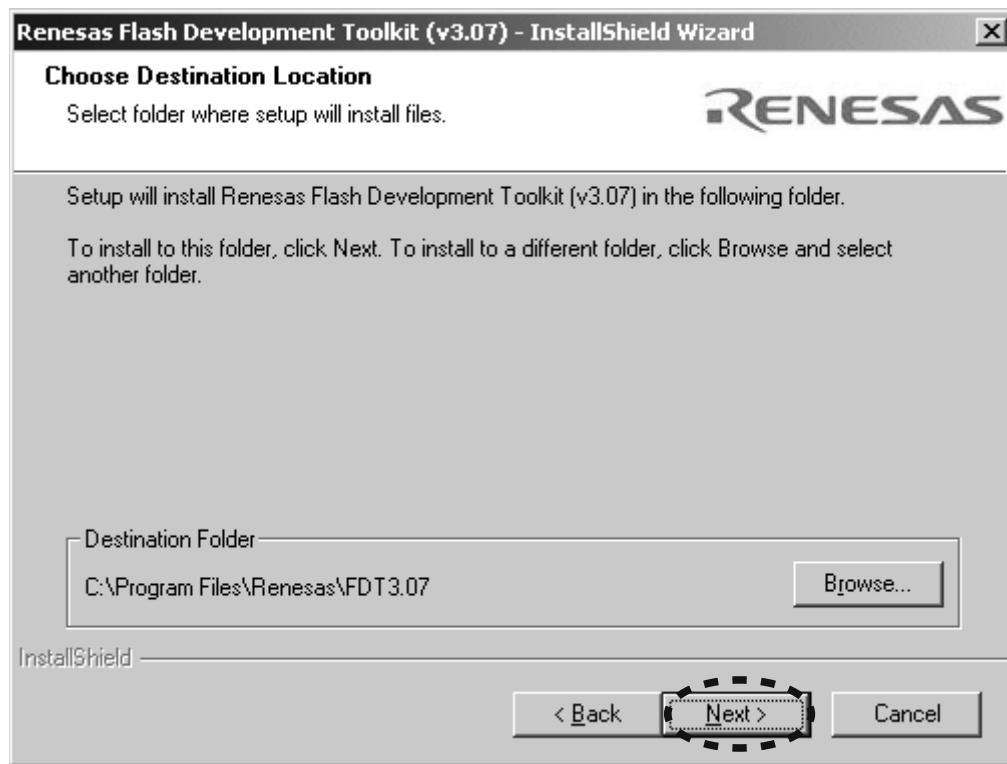
7. Check the all file type, and Click the **Next**.

7. 全てのファイルタイプにチェックを入れ、**Next**をクリックします。



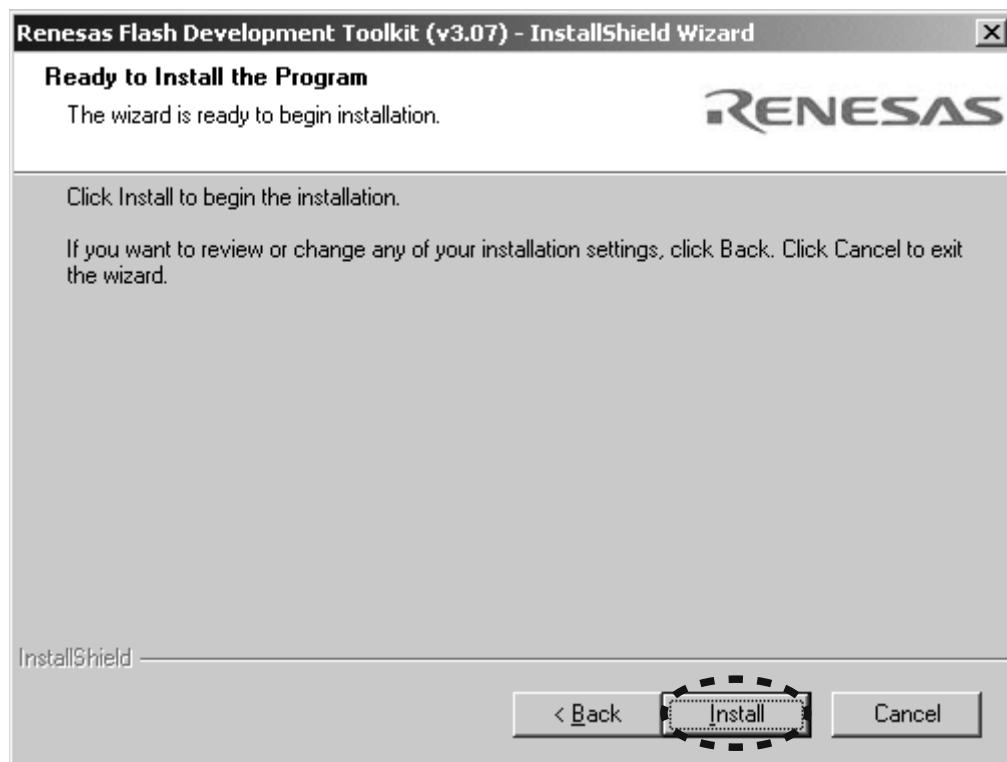
8. Click the **Next**.

8. **Next**をクリックします。



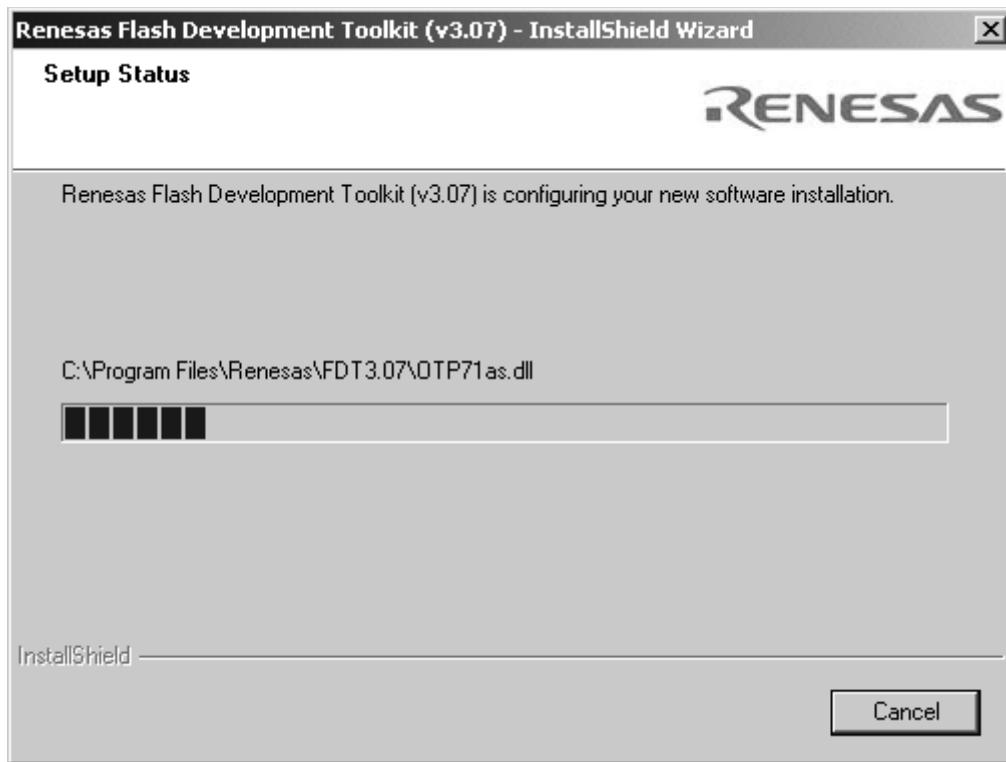
9. Click the **Install**.

9. **Install**をクリックします。



10. The Setup Status bar appears.

10. インストールの状態が表示されます。



11. Un-Check the Launch AutoUpdate, and click the **Finish**.

11. Launch AutoUpdateのチェックを外し、**Finish**をクリックします。



[B] WRITING AND UPDATE SOFTWARE

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

Software for microprocessor (QU01) can be updated/downloaded.

Have update/download application software. ("fdtv307r01.exe (FDT3.07 Release 01) or latest version")

Update/Download microprocessor's software to internal Flash-ROM.

- This mode is to update/download the software for microprocessor.
- The target device is internal flash ROM of microprocessor (QU01) on FRONT PWB (P307).
- The updating/downloading of software takes about 30 seconds.

NECESSARY EQUIPMENT

The following items are required for updating/downloading.

- Windows PC (OS: Windows2000 or WindowsXP) with Serial port.
- RS-232C Dsub-9 pin cable (female to female/straight type).
- Writing data. P/N : 00M23AJ499A00 (SM11S1_vyymdd mot)

NOTE : A00 is a revision number. The latest revision is A00 at present. (October, 2007)
The yy is two digits of year. The mm is month.
The dd is date.

- Flash Development Toolkit 3.07 or latest version.
(fdtv307r01.exe or latest version)
- Connection JIG (90M-PM11S1JIG).

[B] WRITING AND UPDATE SOFTWARE

メインマイコンQU01を交換したときは、 QU01へプログラムを書き込む必要があります。

メインマイコンのソフトウェアは更新、 および書き込みが出来ます。

更新および書き込みには書き込み用アプリケーションが必要です。 ("fdtv307r01.exe (FDT3.07 Release 01)または最新版")

Update/Download microprocessor's software to internal Flash-ROM.

- このモードはMAINマイコンの更新および書き込み用です。
- FRONT PWB基板(P307)のQU01のマイコン内部のフラッシュROMに書き込みます。
- 書き込みにかかる時間は約30秒です。

必要機器

下記は更新および書き込みに必要な機器です。

- 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)
- 書き込み用データ。 P/N : 00M23AJ499A00 (SM11S1_vyymdd.mot)

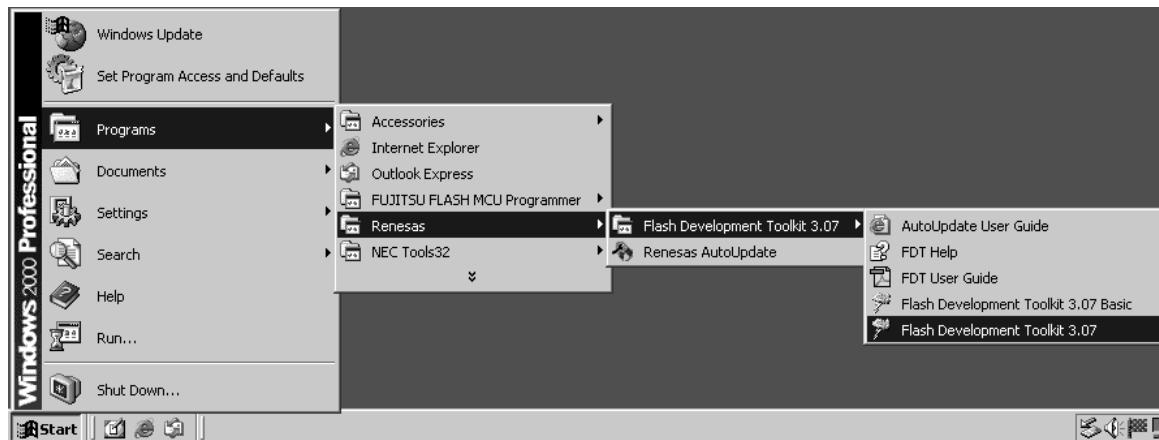
注意 : A00はリリース番号。最新リリース番号はA00です。 (2007年10月現在)
yyは年の下二桁、 mmは月、 ddは日

- Flash Development Toolkit 3.07または最新版。
(fdtv307r01.exeまたは最新版)
- 接続治具(90M-PM11S1JIG)。

[B-1] Update/Download microprocessor's software to internal Flash-ROM.

[B-1-1] The writing software setup procedure

1. Launch the Flash Development Toolkit v3.07 (FDT).
NOTE : Please refer to "**[A] SOFTWARE (fdtv307r01.exe) DOWNLOAD AND INSTALL PROCEDURE**", when you do not have FDT.
2. Click **Start, Programs, Renesas, Flash Development Toolkit 3.07** and **Flash Development Toolkit 3.07**.



3. Check the **Create a new project workspace**, and click the **OK**.

NOTE : It is needs setup for SM-11S1. When you have already setup, please advance to "**[B-1-2] Writing Procedure for microprocessor**".

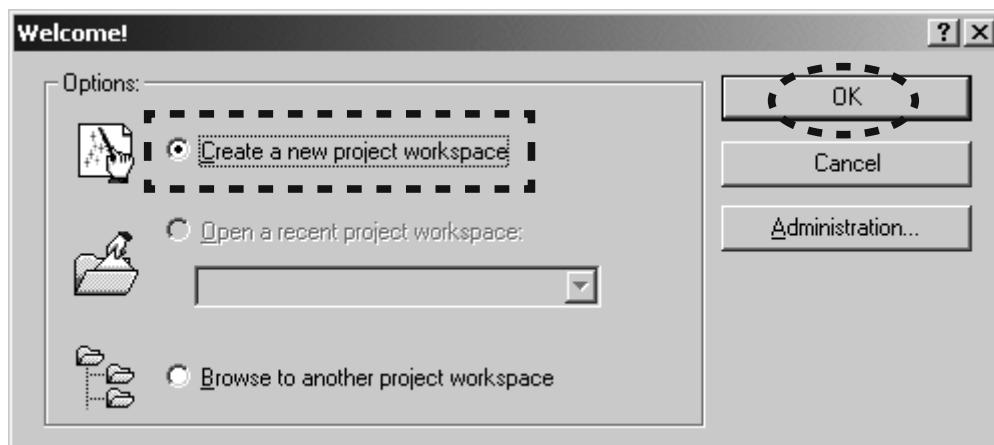
[B-1] Update/Download microprocessor's software to internal Flash-ROM.

[B-1-1] The writing software setup procedure

1. Flash Development Toolkit v3.07 (FDT)を起動します。
注意：FDTを持っていない方は"**[A] SOFTWARE (fdtv307r01.exe) DOWNLOAD AND INSTALL PROCEDURE**"を参照してダウンロードしてください。
2. **Start, Programs, Renesas, Flash Development Toolkit 3.07, Flash Development Toolkit 3.07**をクリックします。

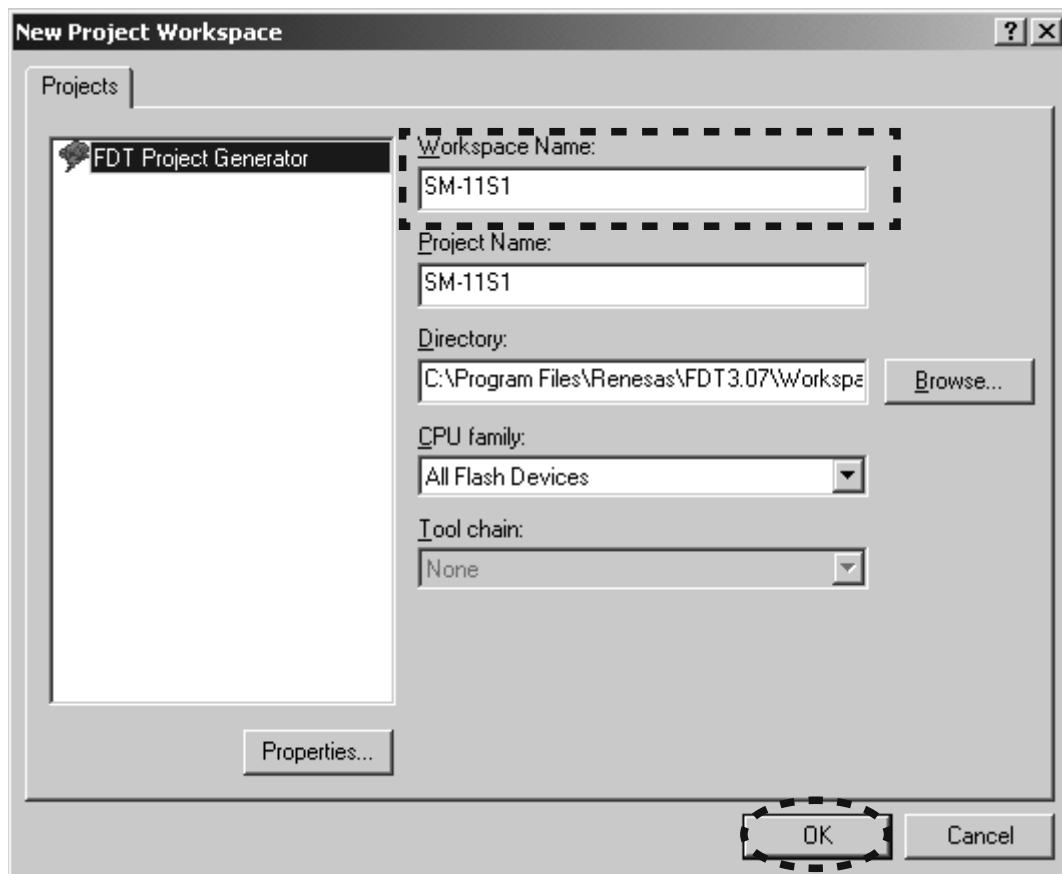
3. **Create a new project workspace**をチェックし、**OK**をクリックします。

注意：SM-11S1用の設定が必要です。既に設定が終わっている方は"**[B-1-2] Writing Procedure for microprocessor**"へ進んでください。



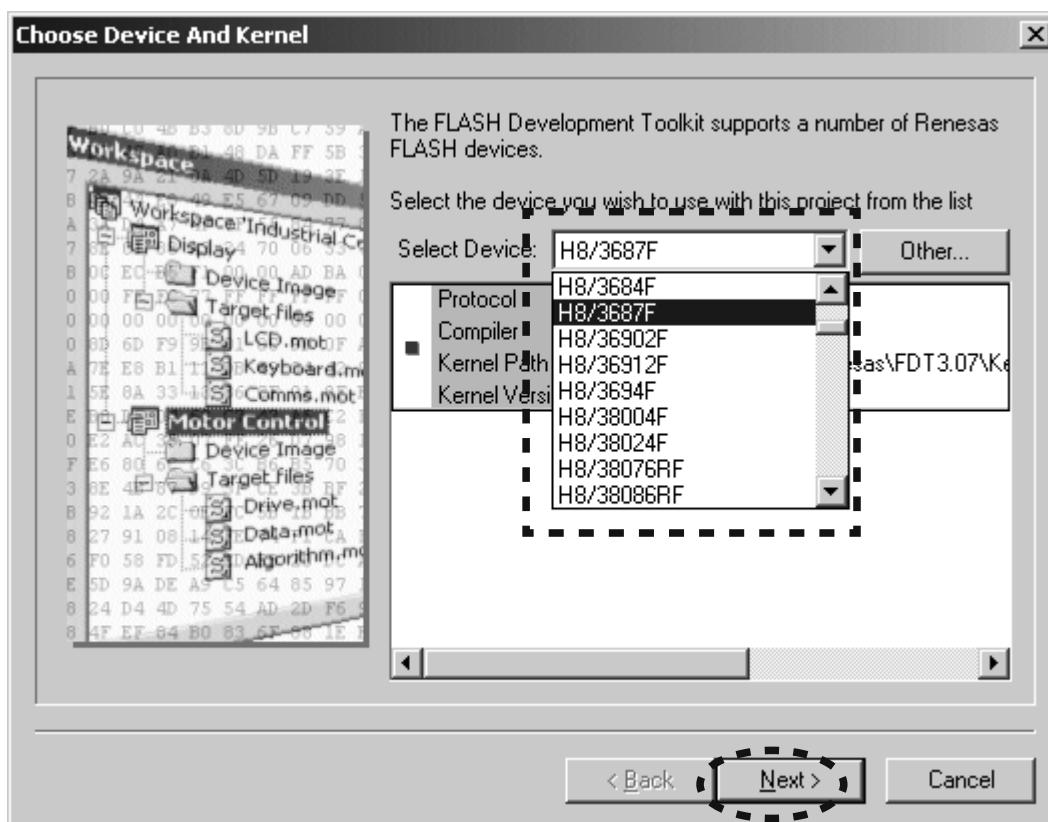
4. **SM-11S1** is inputted into the Workspace Name.
 (It is simultaneously inputted into Project Name.)
 Click the **OK**.

4. Workspace Nameに**SM-11S1**を入力します。
 (同時にProject Nameにも入力されます)
OKをクリックします。

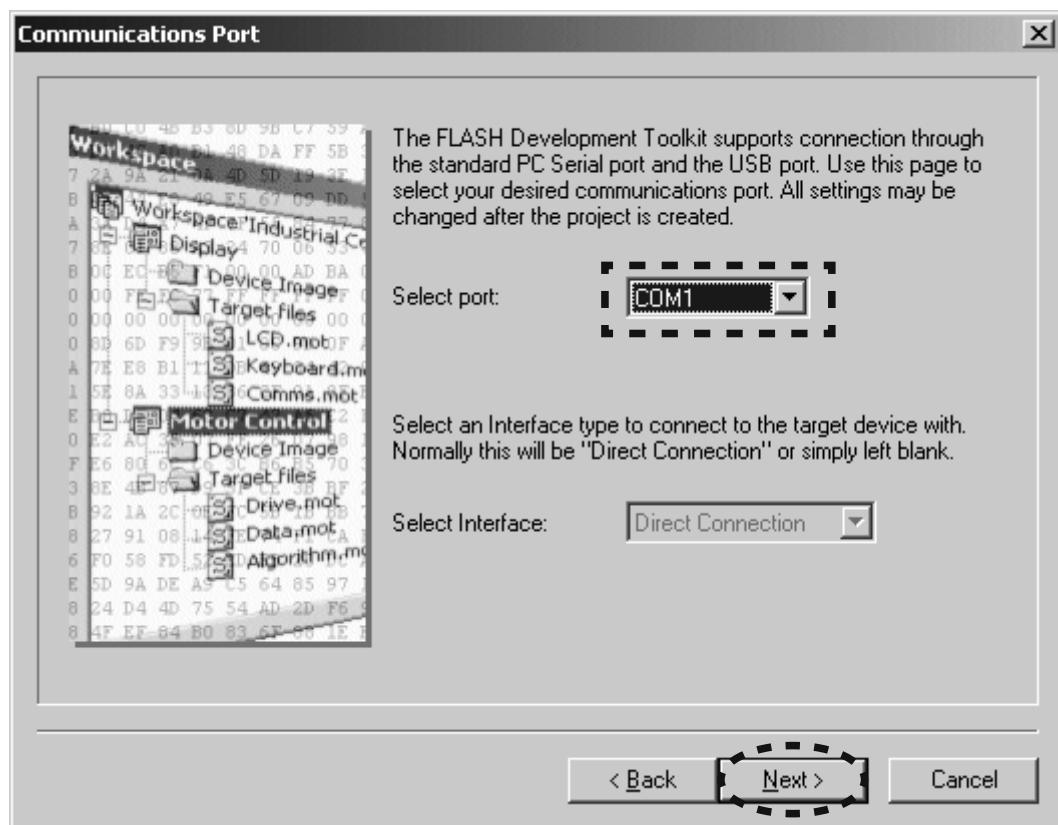


5. Choose the **H8/3687F** in Select Device. And click the **Next**.

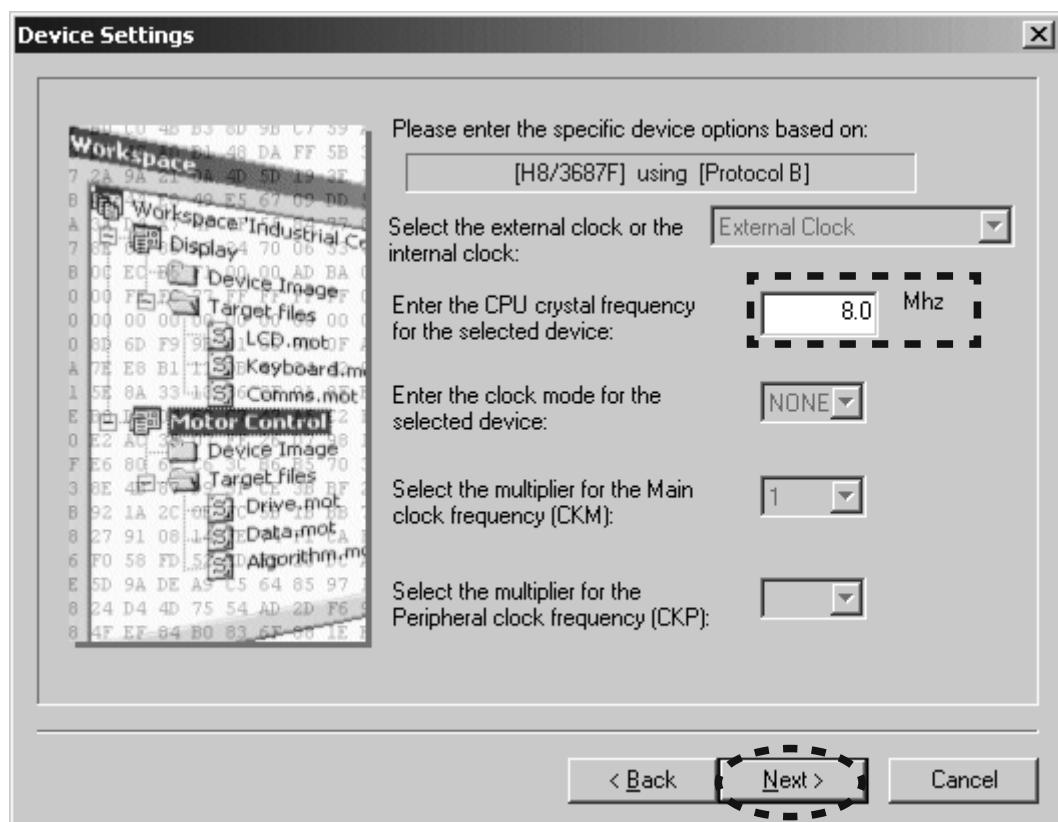
5. Select Deviceから**H8/3687F**を選択し、**Next**をクリックします。



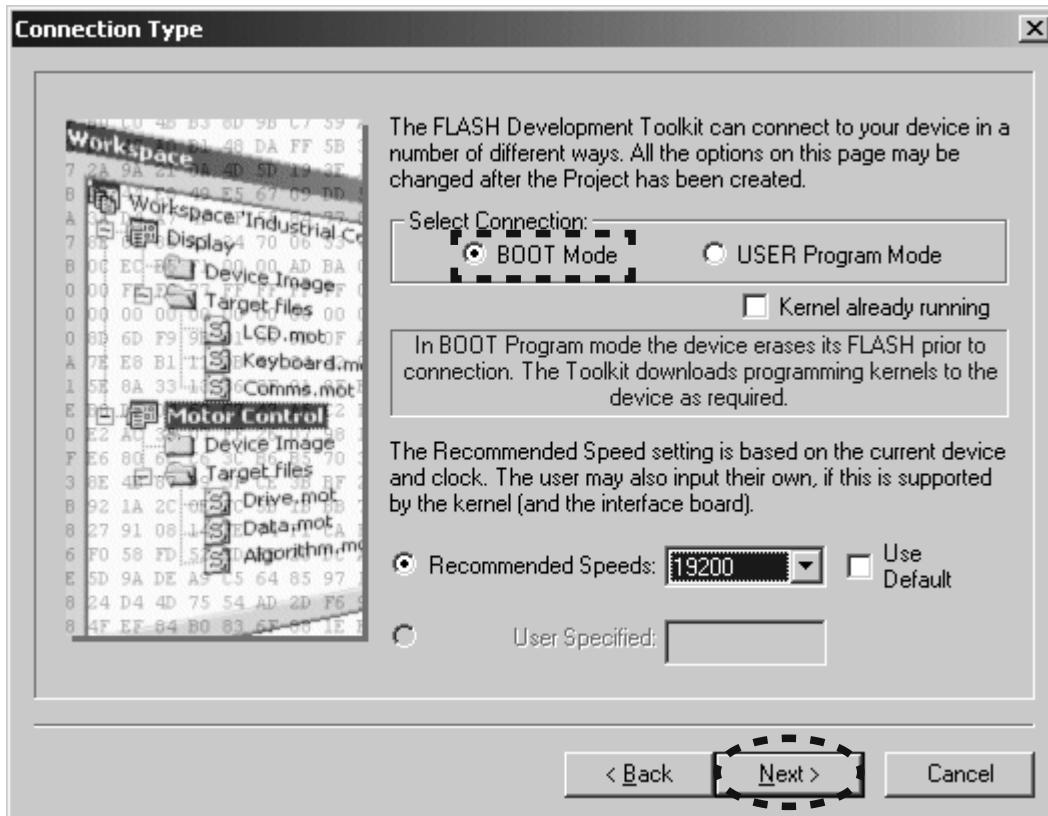
6. Choose the **Serial port number** in the Select Port. And click the **Next**.
 6. Select Portから**Serialポート番号**を選び、**Next**をクリックします。



7. 8.0 is inputted into the Enter the CPU crystal frequency for the selected device. And click the **Next**.
 7. Enter the CPU crystal frequency for the selected device に**8.0**を入力し、**Next**をクリックします。

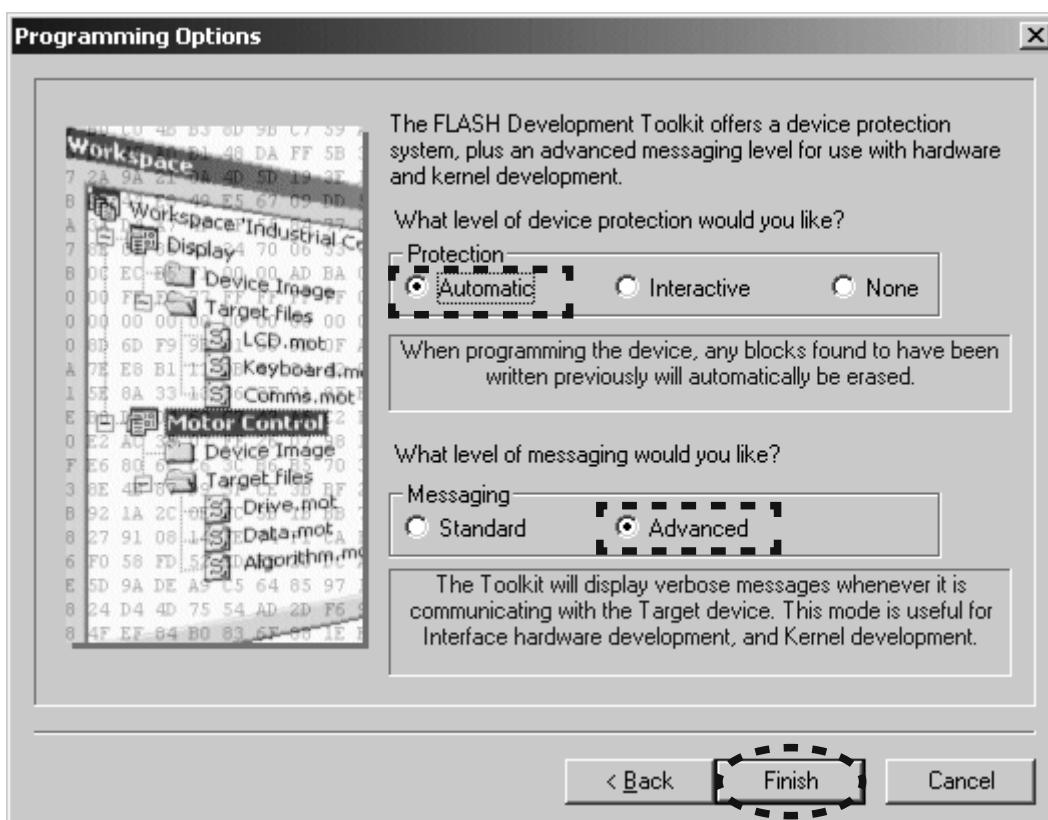


8. Check The **BOOT Mode** in Select Connection.
 Un-check the **Use Default**, and choose the **19200** in Recommended Speeds.
 Click the **Next**.
8. Select Connectionの**BOOT Mode**をチェックします。
 Recommended Speedsの**Use Default**のチェックを外し、**19200**を選択します。
Nextをクリックします。



9. Check the **Automatic** in Protection.
 Check the **Advanced** in Messaging.
 Click the **Finish**.

9. Protectionの**Automatic**をチェックします。
 Messagingの**Advanced**をチェックします。
Finishをクリックします。

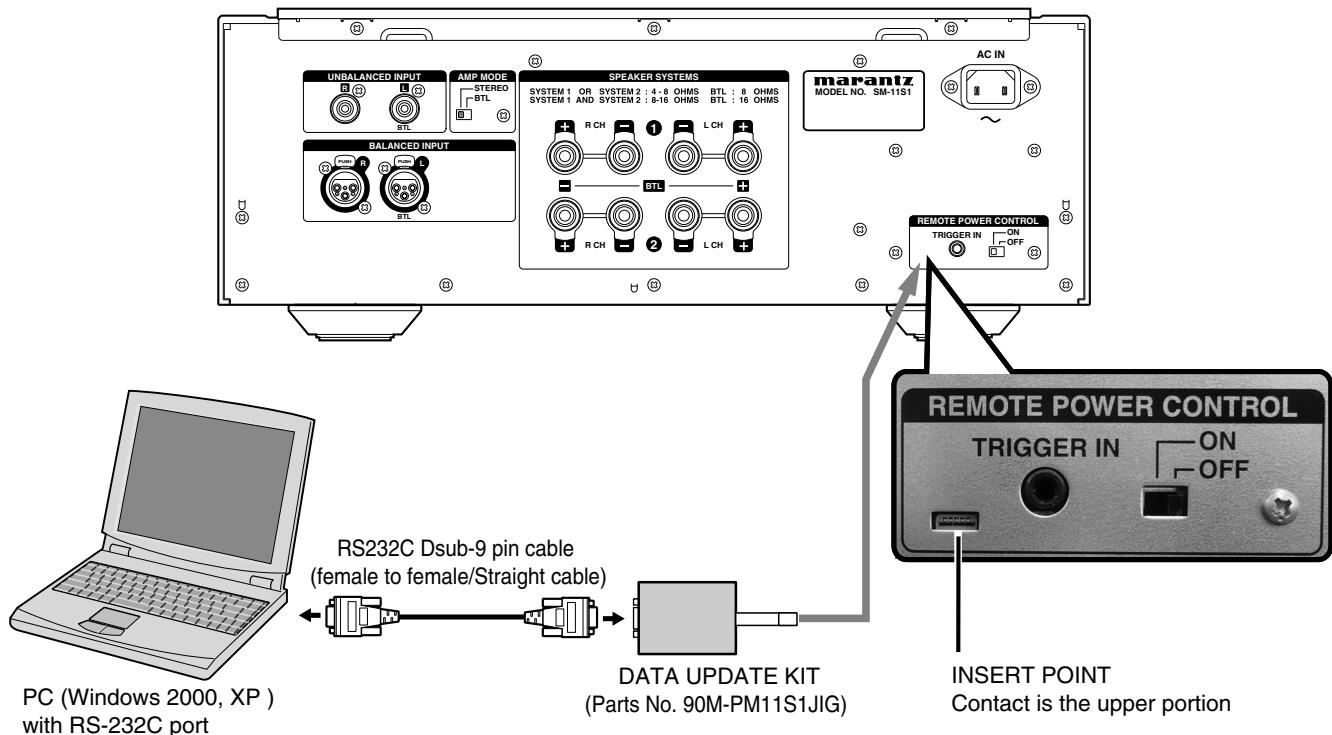


[B-1-2] Writing Procedure for microprocessor

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

[B-1-2] Writing Procedure for microprocessor

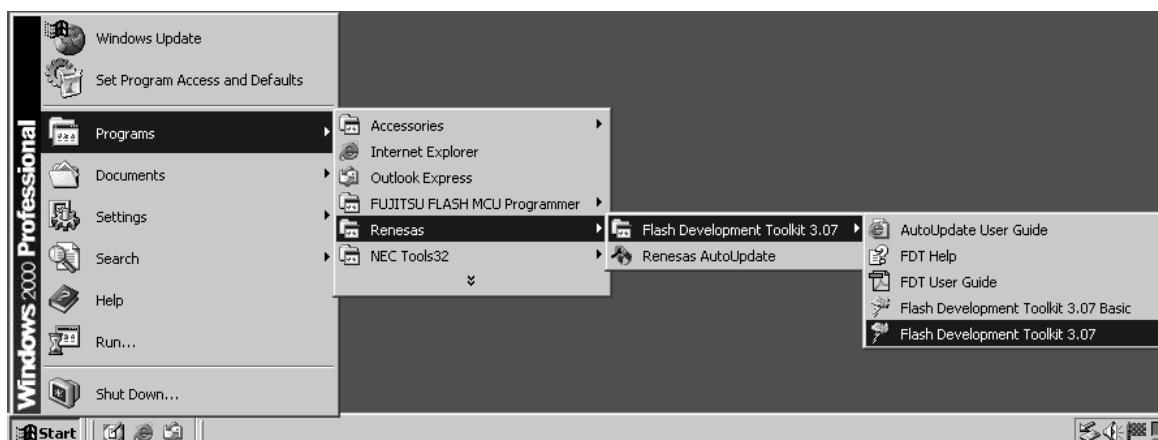
1. 本機の電源ケーブルを抜きます。
2. 接続治具のRS-232CコネクタとWindows PCのSerialポートをRS-232Cケーブルで接続します。
3. 本機のリアパネルに接続治具のFFCをコンタクト面を上にして差し込みます。



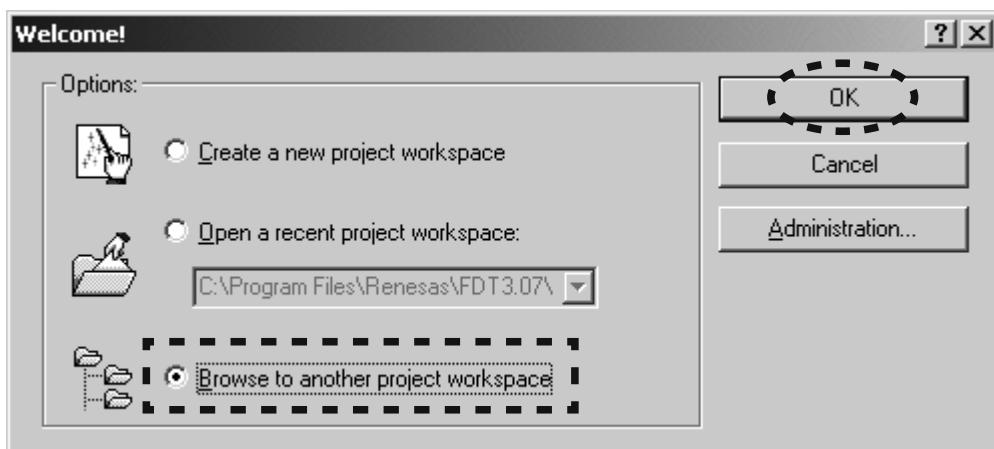
PC (Windows 2000, XP)
with RS-232C port

4. Connect the mains cord into the unit.
5. Launch the Flash Development Toolkit (FDT), When FDT is not launch.
When FDT is already launch, please advance to step No.9.
6. Click **Start, Programs, Renesas, Flash Development Toolkit 3.07 and Flash Development Toolkit 3.07**.

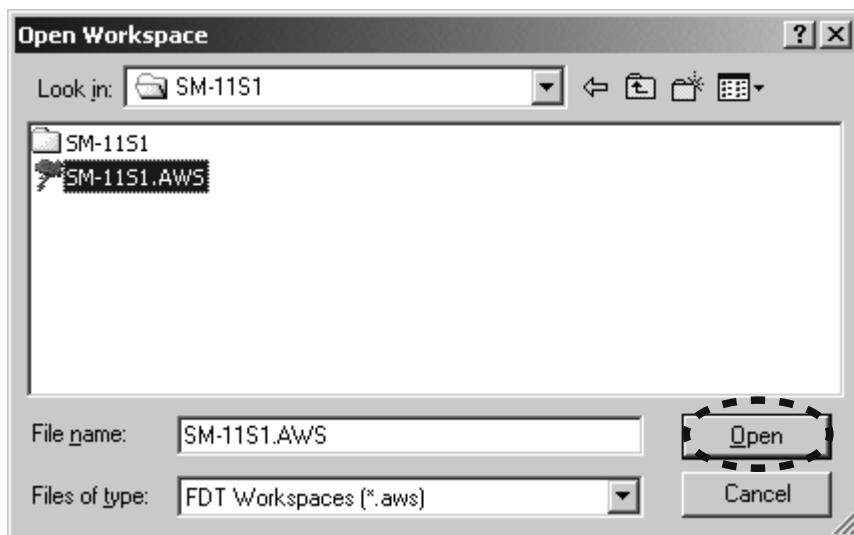
4. 本機に電源コードを接続します。
5. Flash Development Toolkit v3.07(FDT)を起動していない場合は起動します。
既にFDTを起動している方はステップ9に進んでください。
6. **Start, Programs, Renesas, Flash Development Toolkit 3.07, Flash Development Toolkit 3.07**をクリックします。



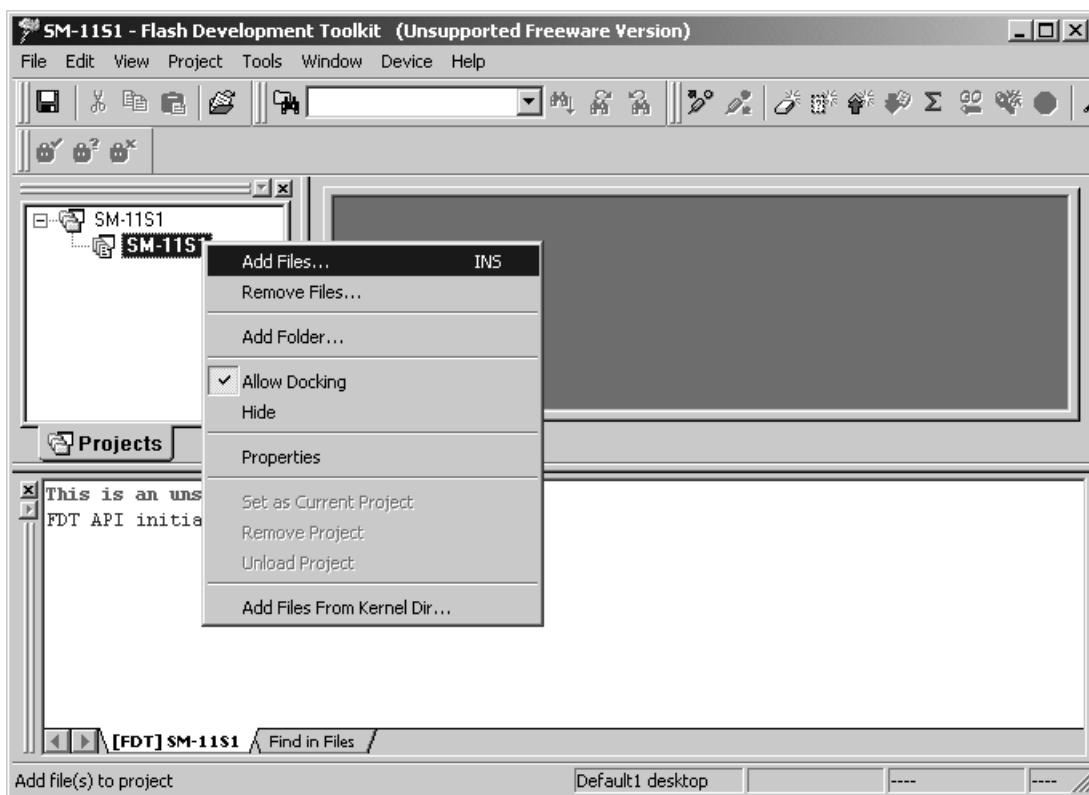
7. Check the **Browse to another project workspace**, and click **OK**.
7. **Browse to another project workspace**をチェックし、**OK**をクリックします。



8. Choose **SM-11S1.AWS** in SM-11S1 folder under workspace folder. And Click the **Open**.
8. workspaceフォルダの下のSM-11S1フォルダ内の **SM-11S1.AWS**を選択し、**Open**をクリックします。



9. Right button of mouse click on the **SM-11S1**, and select the **Add Files...** in a menu.
9. **SM-11S1**を右クリックし、メニューから**Add Files...**をクリックします。

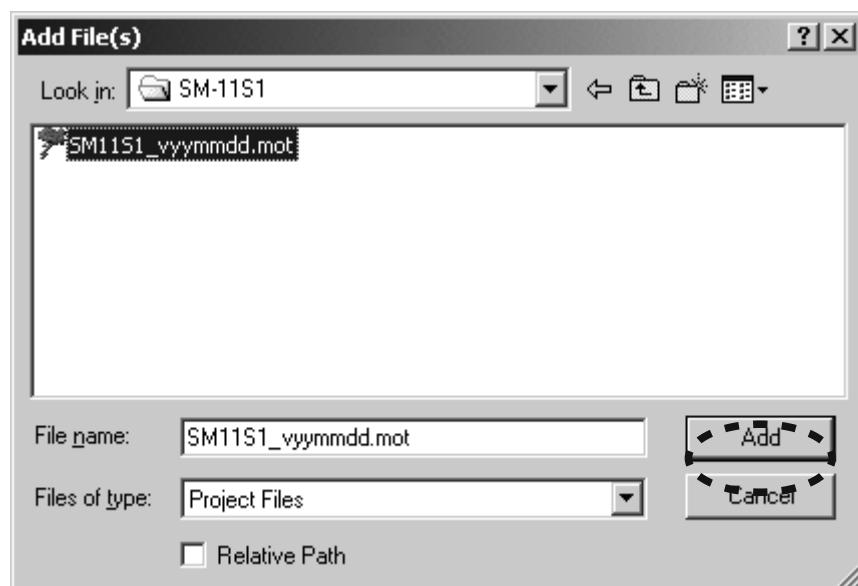


10. Choose the **SM11S1_vyymmdd.mot**, and click the **Add**.

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

10. **SM11S1_vyymmdd.mot**を選択し、**Add**をクリックします。

注意：yyは年の下二桁、mmは月、ddは日

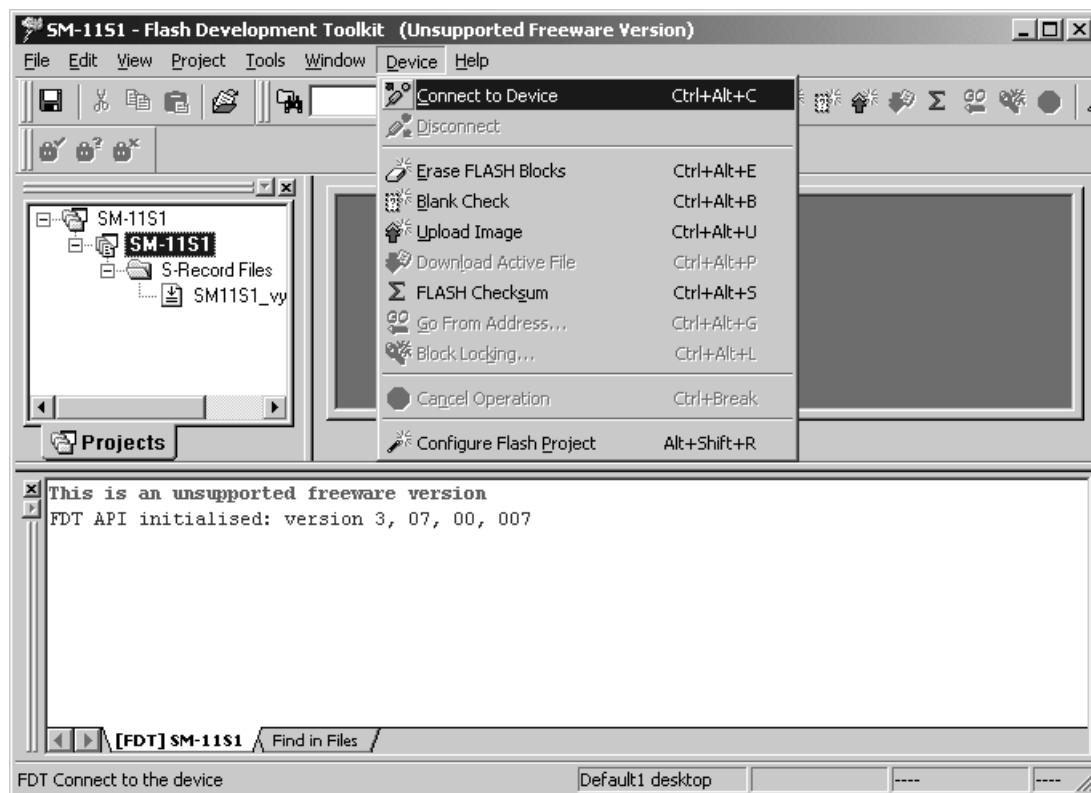


11. Press the **POWER ON/OFF** button for turn on the unit.
At the time, the LCD display and LED does not light.

11. **POWER ON/OFF**ボタンを押し、本機の電源を入れます。
この時、LCDディスプレイとLEDは点灯しません。

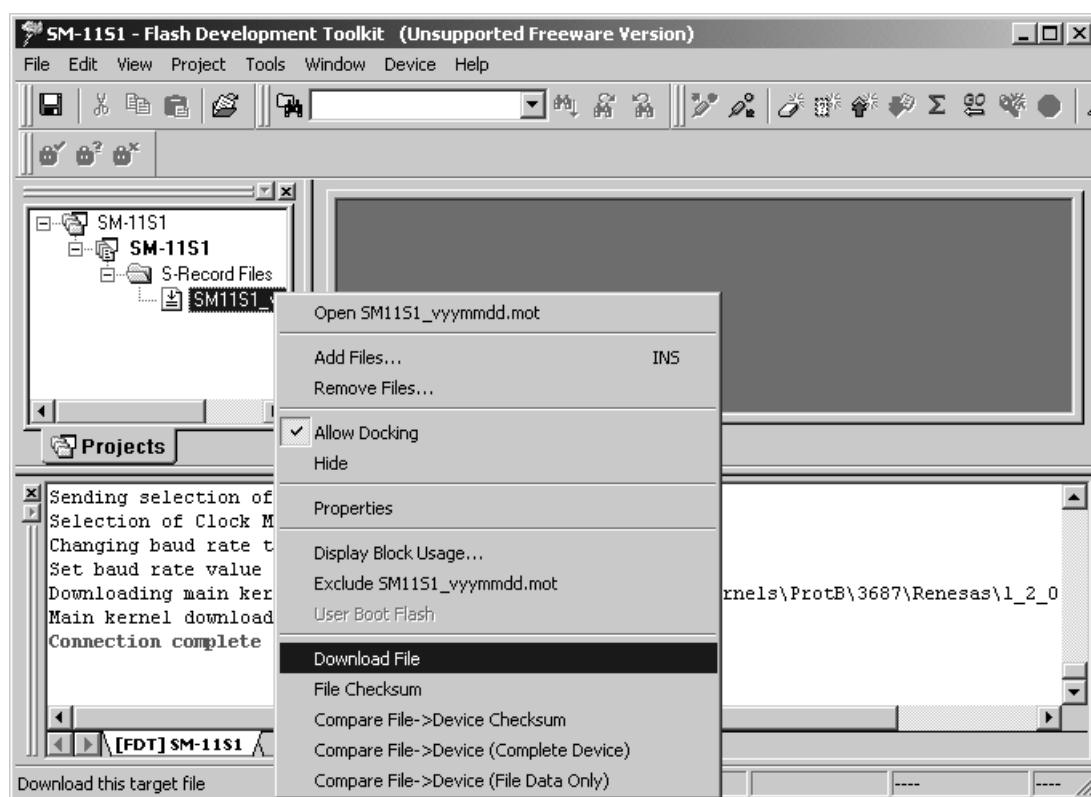
12. Click the **Device** in the menu bar and select the **Connect to Device**.

12. **Device**をクリックし、メニューから**Connect to Device**をクリックします。



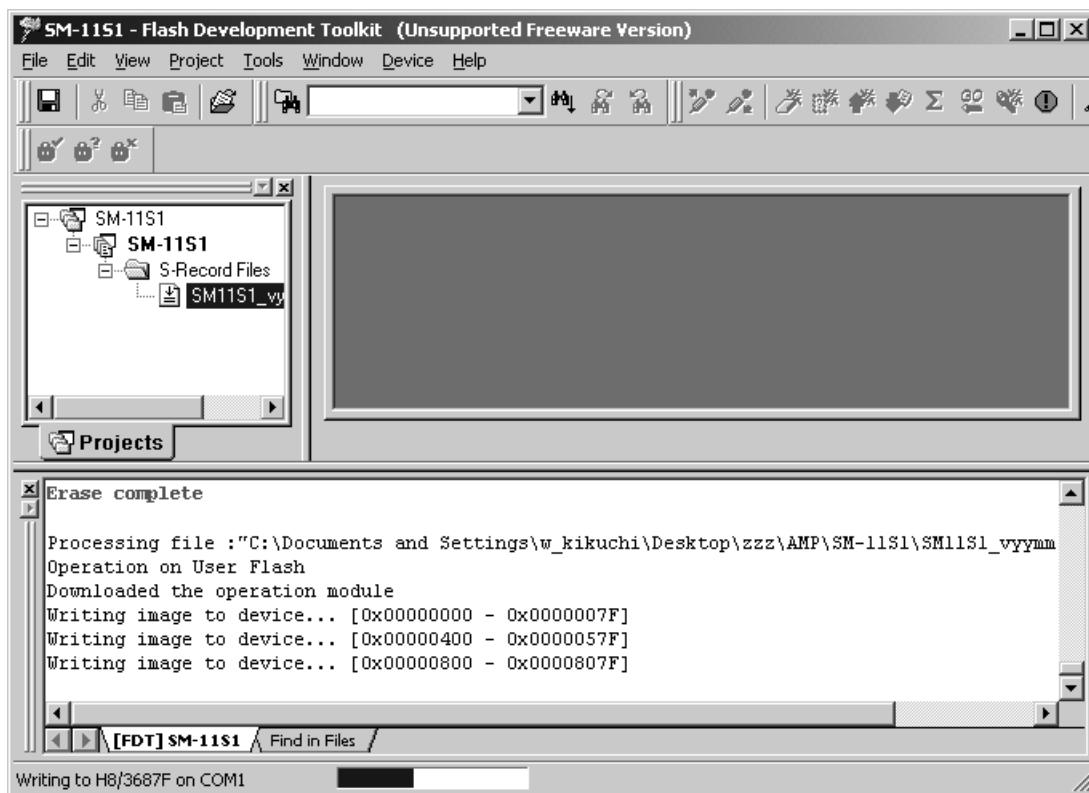
13. Press right button of mouse on the **SM11S1_vyymmdd**. and select the **Download File** in a menu.

13. **SM11S1_vyymmdd.mot**を右クリックし、メニューから**Download File**をクリックします。



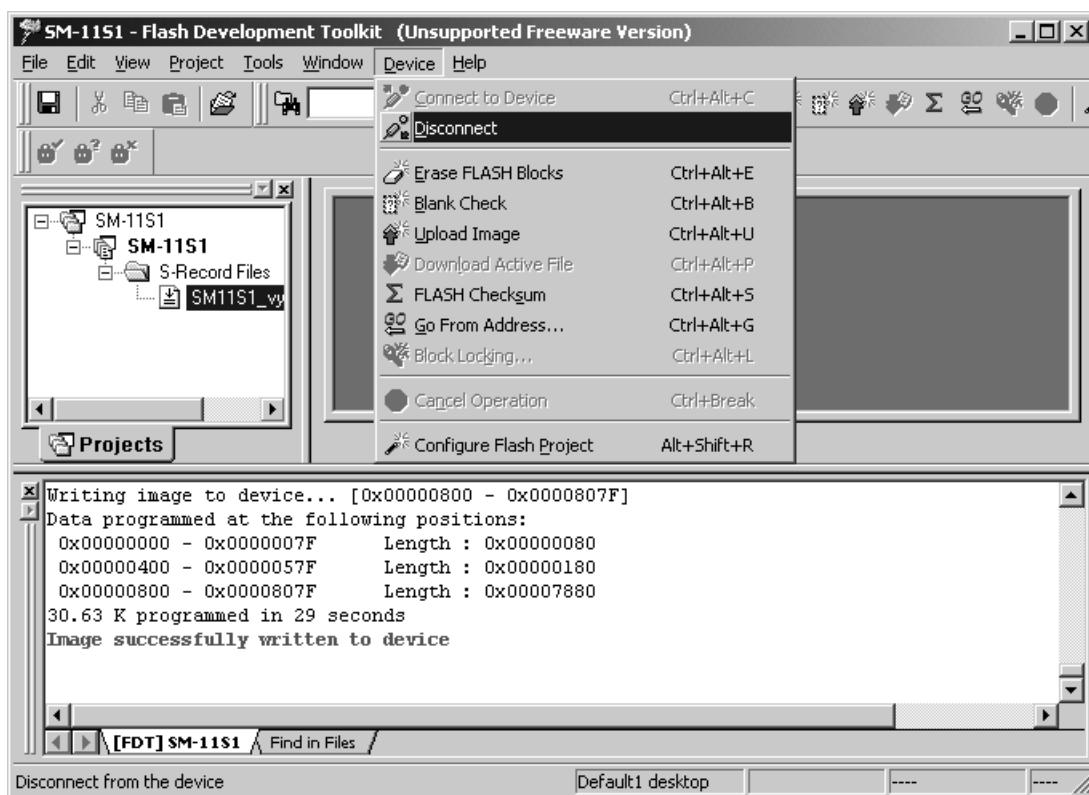
14. Software is written into the microprocessor.
The writing of software takes about 30 seconds.

14. ソフトウェアがマイコンに書き込まれます。
書き込みにかかる時間は約30秒です。



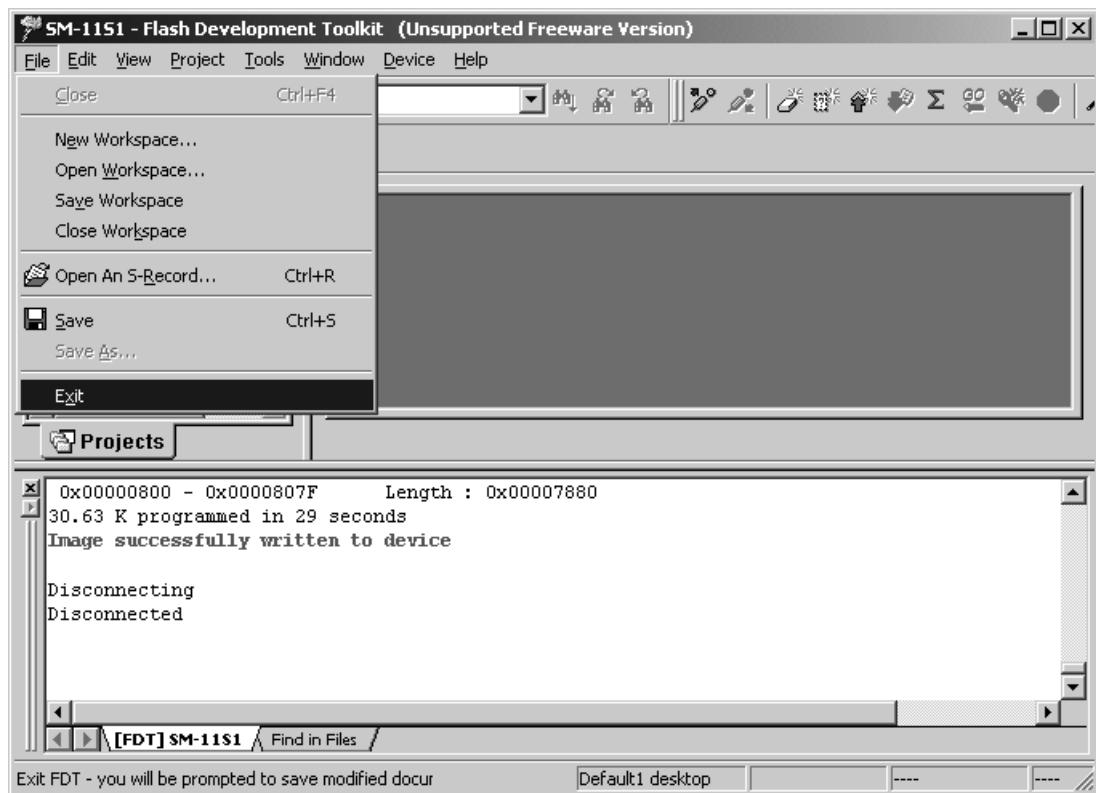
15. Click the **Device** in the menu bar and select the **Disconnect**.

15. **Device**をクリックし、メニューから**Disconnect**をクリックします。



16. Click the **File** and select the **Exit** in menu.

16. **File**をクリックし、メニューから**Exit**をクリックします。



17. Press the **POWER ON/OFF** button for turn off the unit.

18. Disconnect the mains cord and FFC from the unit.

19. Check the version number of the firmware Refer to

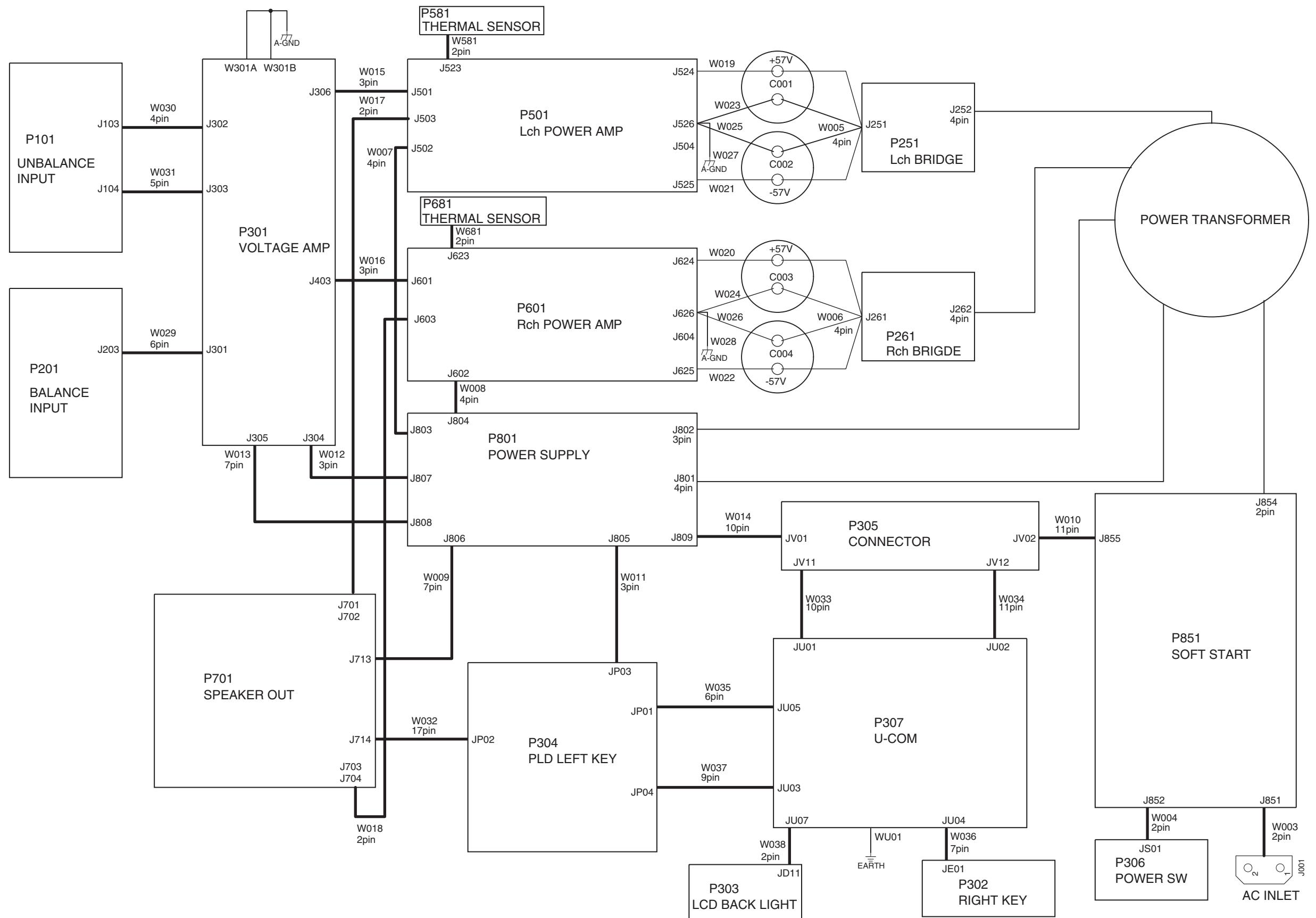
"**4. SERVICE MODE**".

17. **POWER ON/OFF**ボタンを押し、本機の電源を切ります。

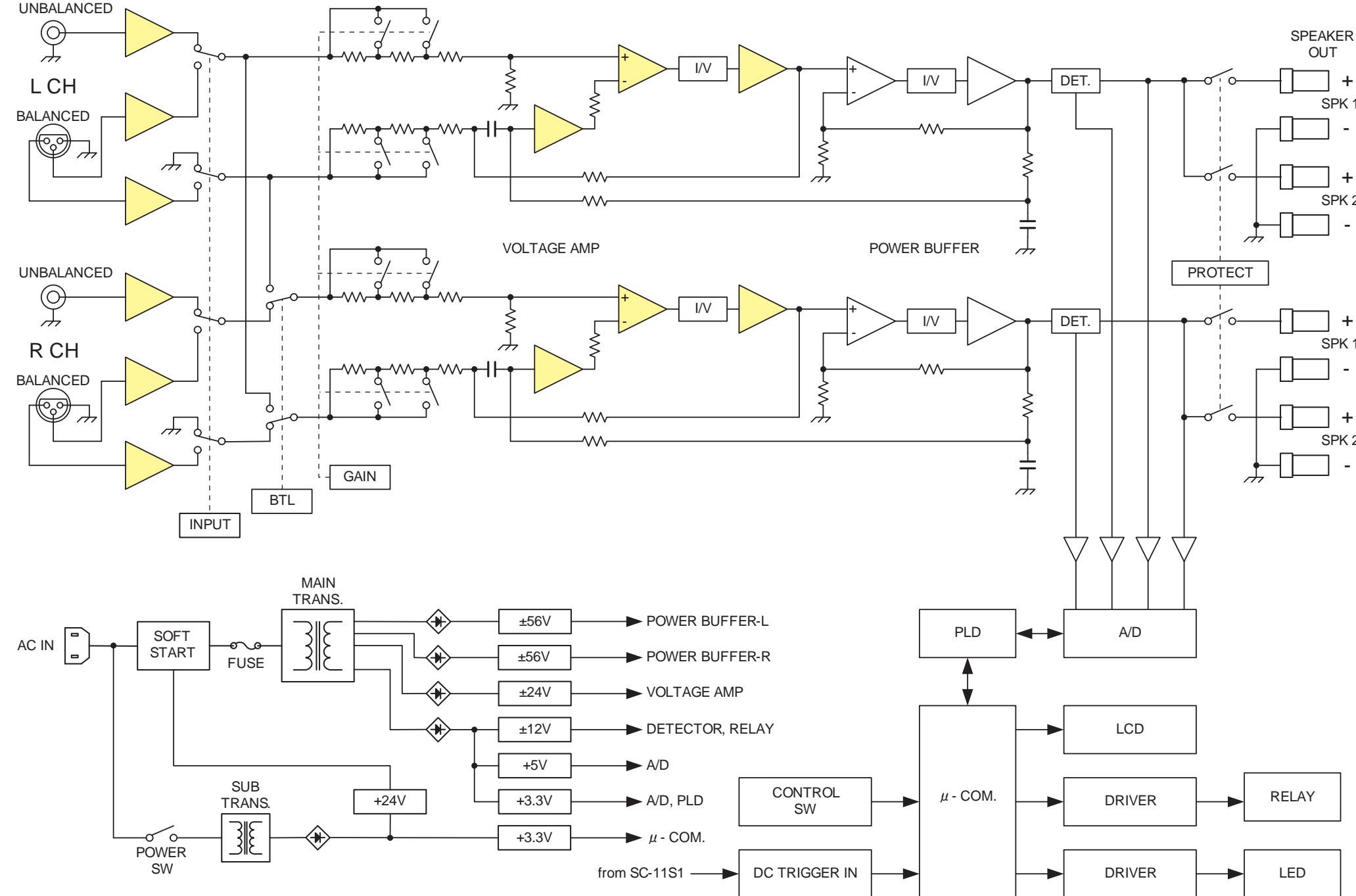
18.. 本機から電源コードとFFCを外します。

19. Versionの確認をします。"**4. SERVICE MODE**"で確認します。書き込んだバージョンが正しければ書き換え完了です。

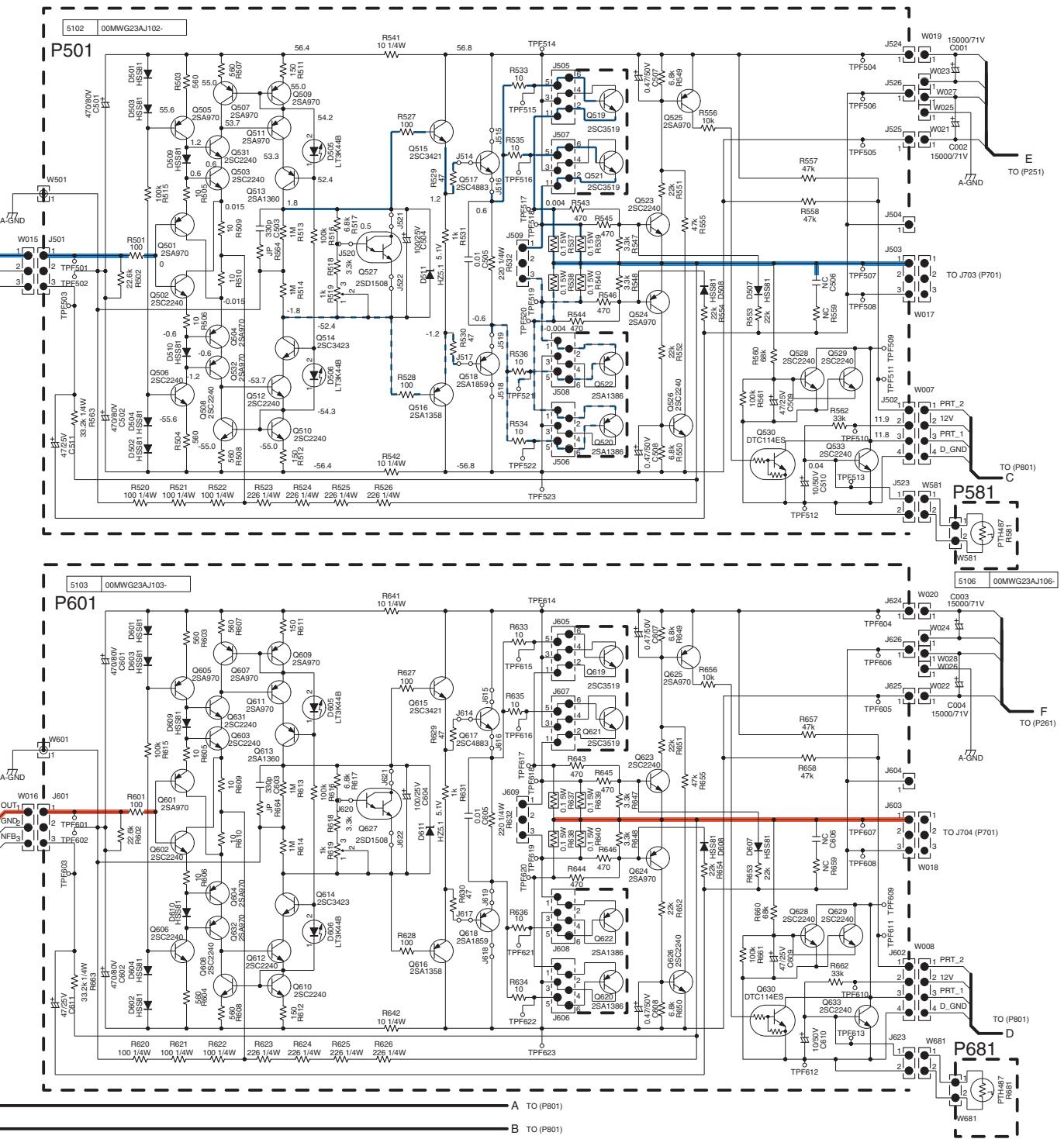
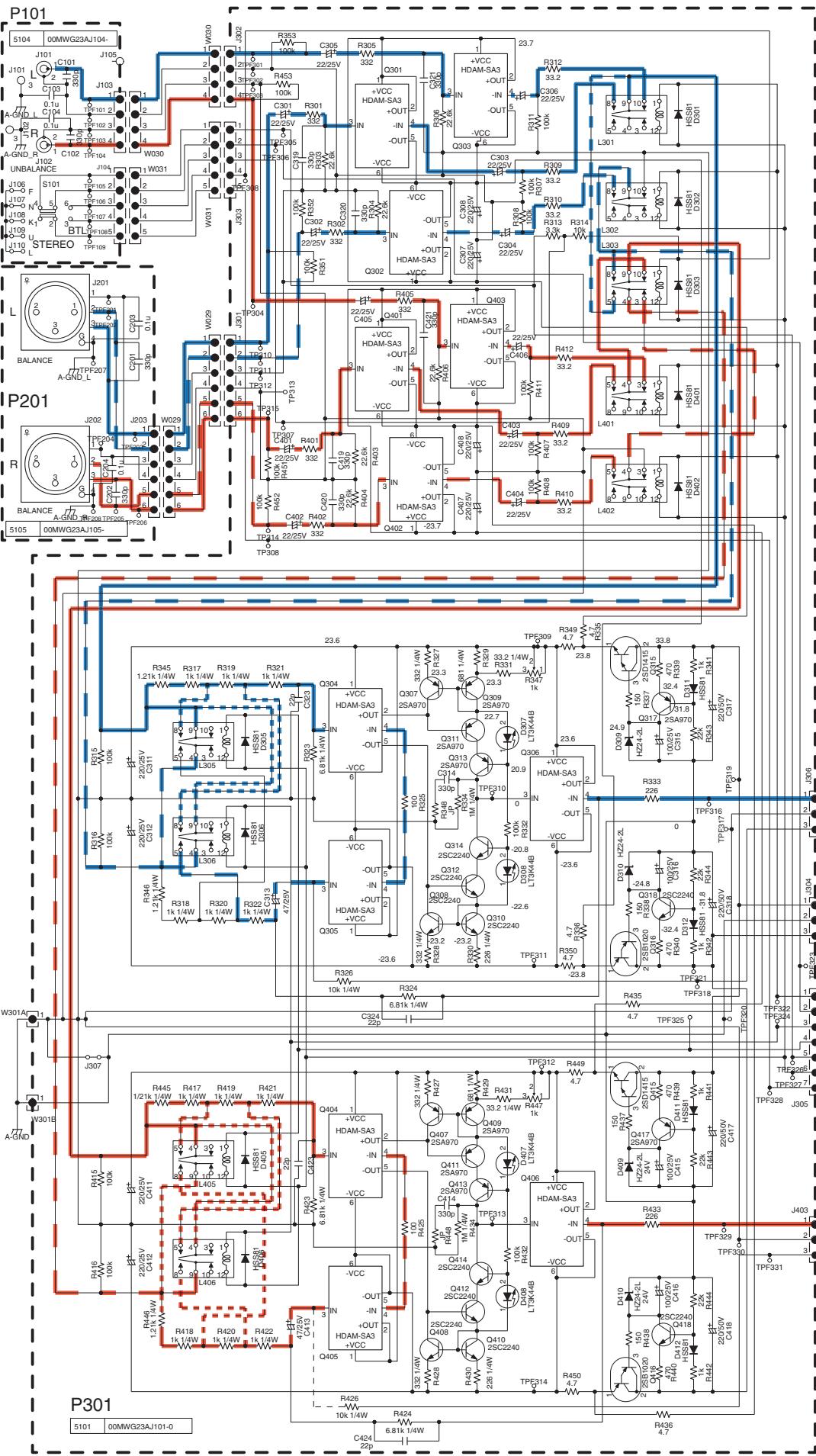
6. WIRING DIAGRAM

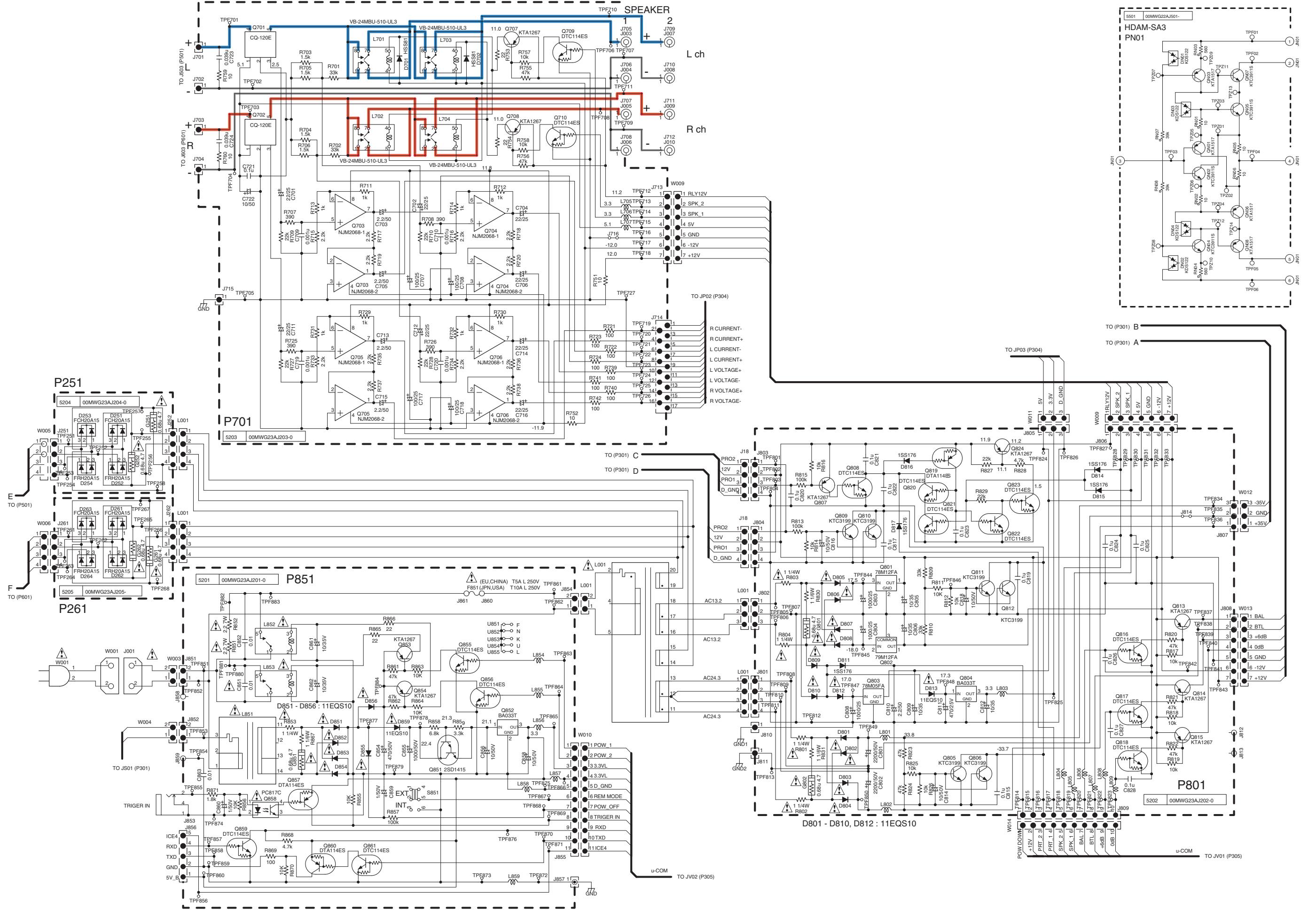


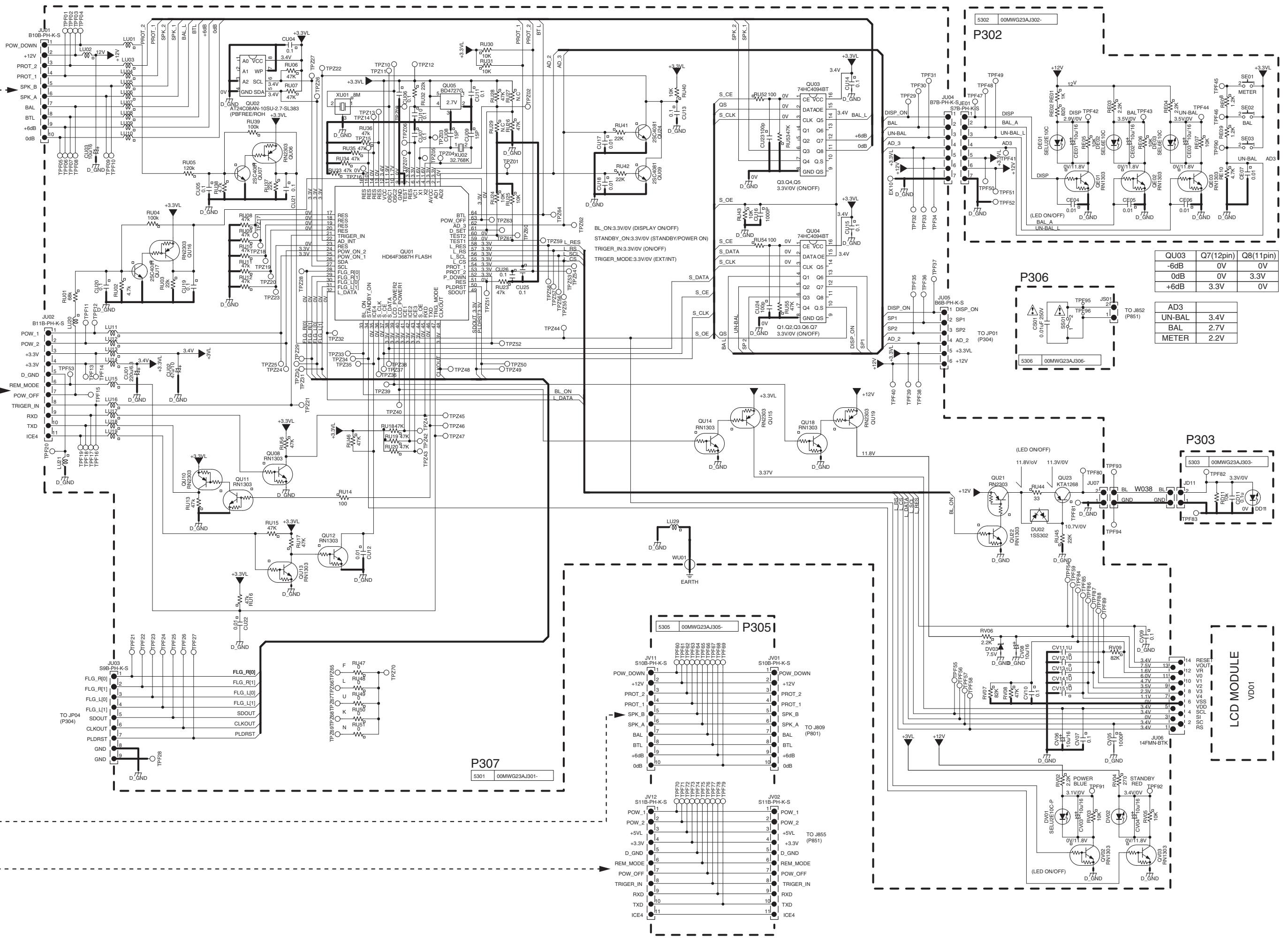
7. BLOCK DIAGRAM

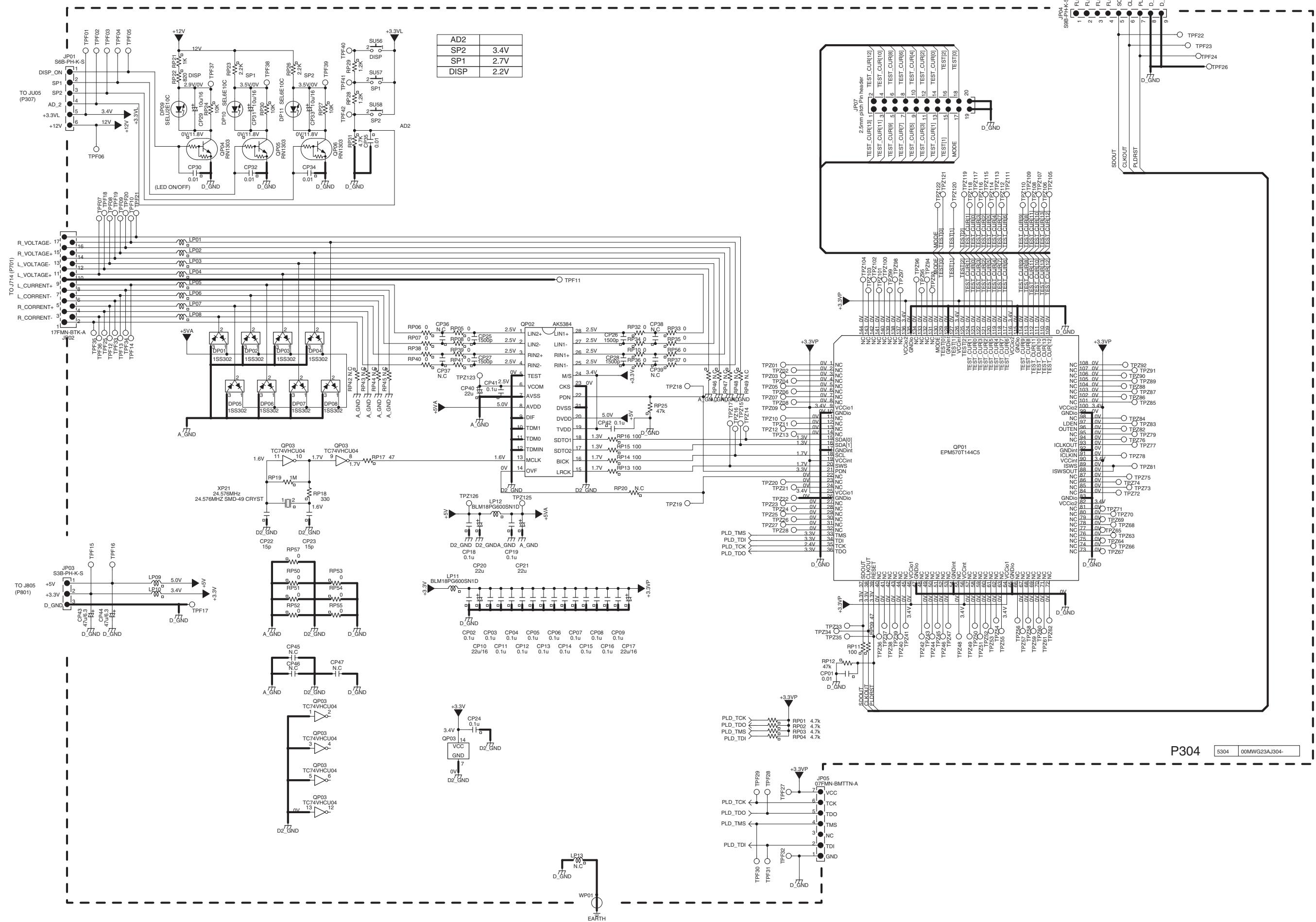


8. SCHEMATIC DIAGRAM

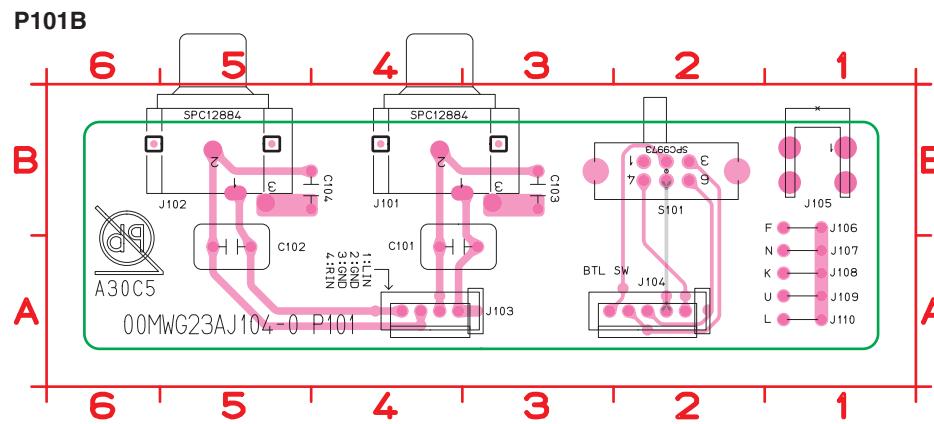




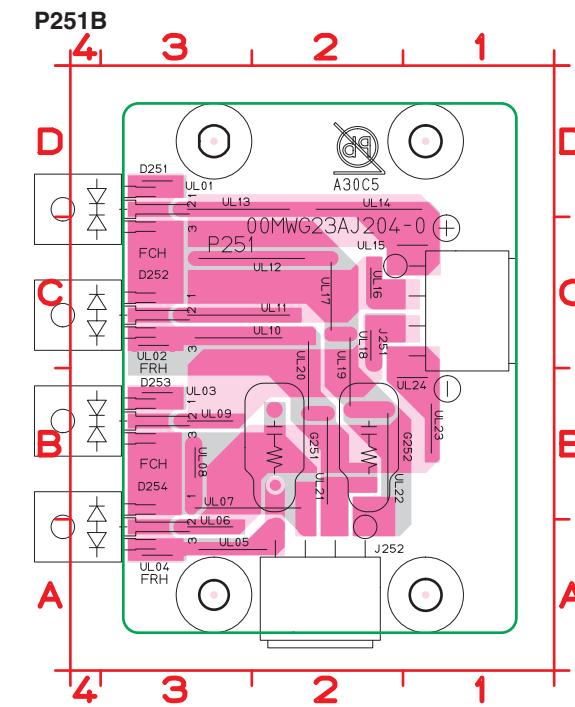




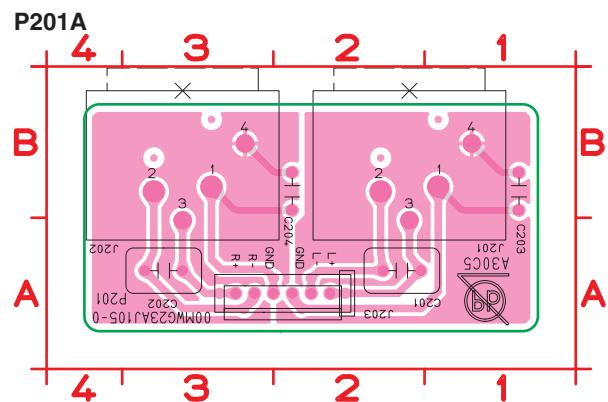
9. PARTS LOCATION



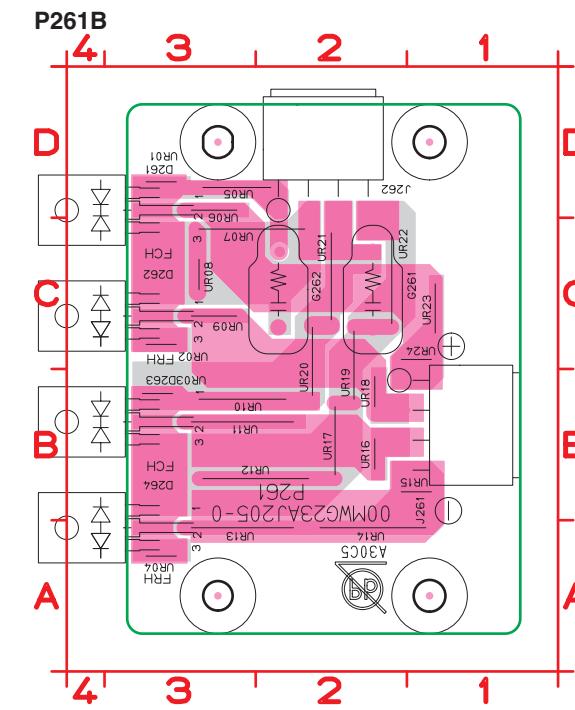
C101 A3
C102 A5
C103 B3
C104 B5
J101 B4
J102 B5
J103 A4
J104 A2
J105 B1
J106 B1
J107 A1
J108 A1
J109 A1
J110 A1
S101 B2



D251 D3
D252 C3
D253 B3
D254 A3
G251 B2
G252 B2
J251 C2
J252 A2
UL01 D3
UL02 C3
UL03 B3
UL04 A3
UL05 A2
UL06 A3
UL07 B2
UL08 B3
UL09 B3
UL10 C2
UL11 C2
UL12 C2
UL13 D2
UL14 D1
UL15 C1
UL16 C2
UL17 C2
UL18 C2



C201 A2
C202 A3
C203 B1
C204 B2
J201 B2
J202 B3
J203 A2



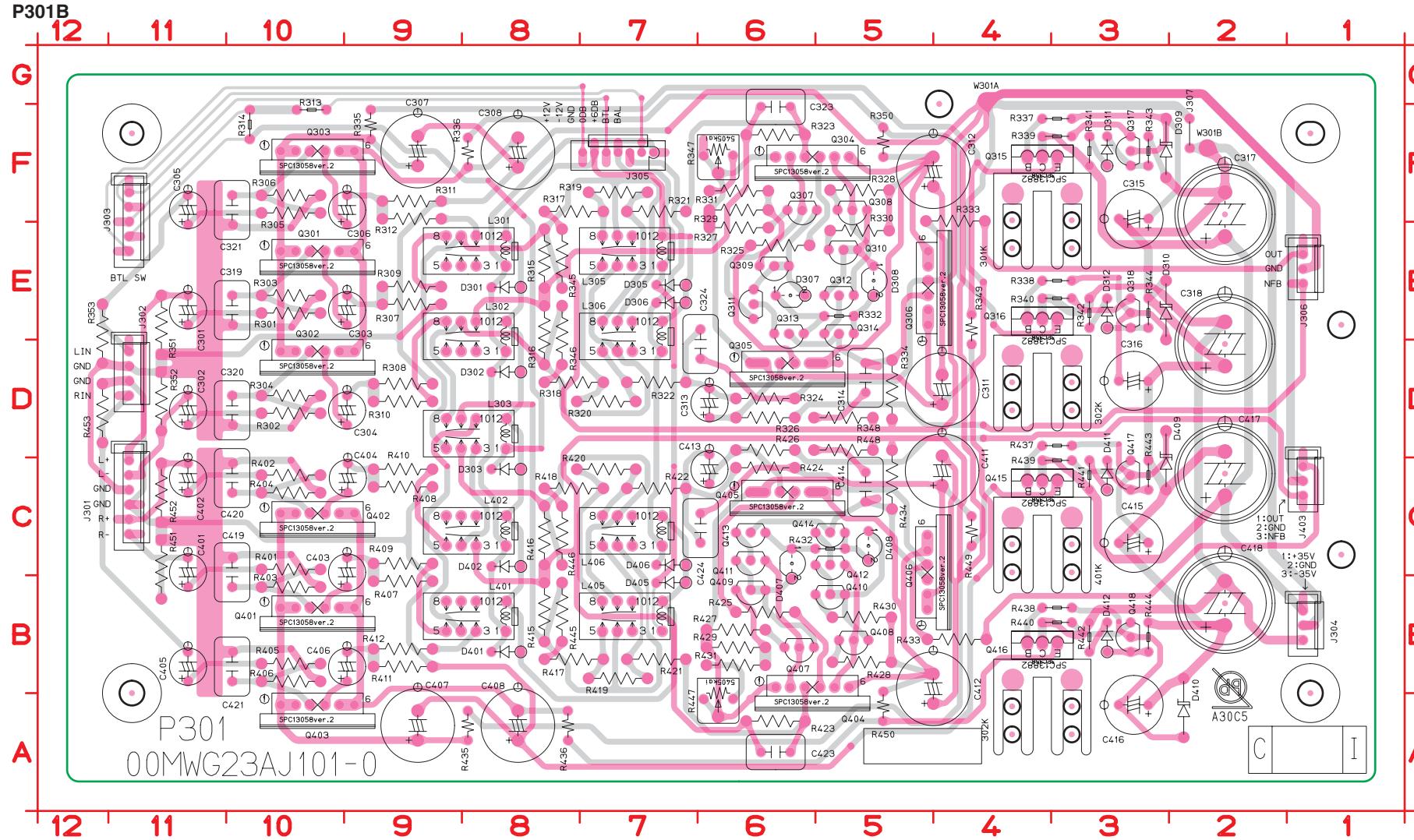
D261 D3
D262 C3
D263 B3
D264 A3
G261 C2
G262 C2
J261 B2
J262 D2
UR01 D3
UR02 C3
UR03 B3
UR04 A3
UR05 D2
UR06 D3
UR07 C2
UR08 C3
UR09 C3
UR10 B2
UR11 B2
UR12 B2
UR13 A2
UR14 A1
UR15 B1
UR16 B2
UR17 B2
UR18 B2
UR19 B2
UR20 B2
UR21 C2
UR22 C2

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。

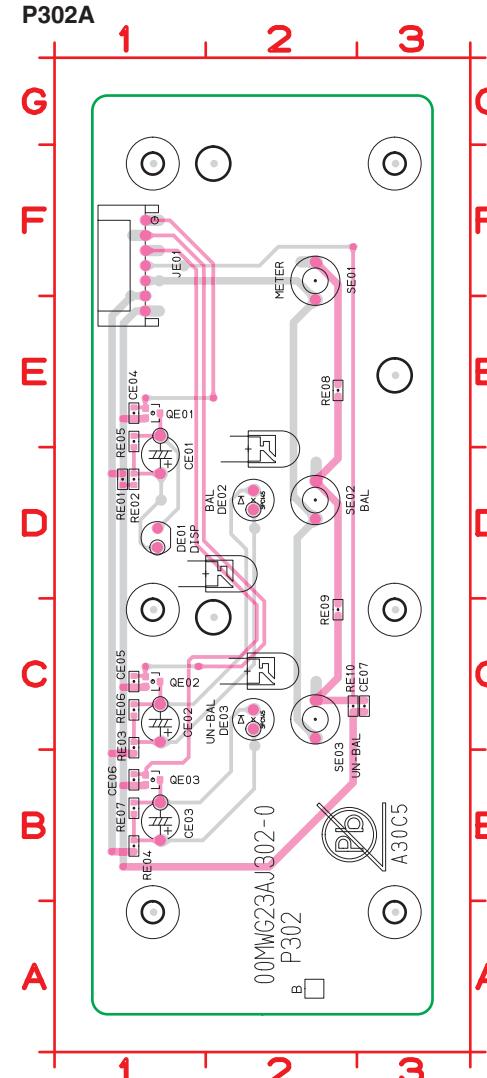
Lead-free Solder

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

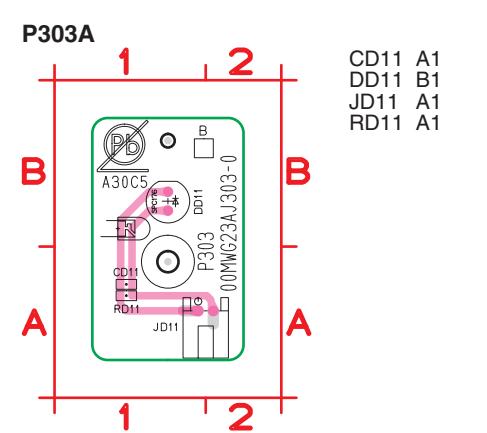


C301	E11	C323	F6	C420	C10	D407	C6	L401	B8	Q316	E4	Q417	C3	R318	D8	R337	F4	R403	B10	R424	C6	R443	C3		
C302	D11	C324	E6	C421	B10	D408	C5	L402	C8	Q317	F3	Q418	B3	R319	F7	R338	E3	R404	C10	R425	B6	R444	B3		
C303	E9	C401	B11	C423	A6	D409	C3	L405	B7	Q318	E3	Q401	B10	R320	D8	R339	F4	R405	B10	R426	D6	R445	B8		
C304	D9	C402	C11	C424	C6	D410	A2	L406	C7	Q301	E10	Q402	C10	R301	E10	R321	F7	R340	E3	R406	B10	R427	B6	R446	C8
C305	E11	C403	B9	D301	E8	D411	C3	Q302	D10	Q301	E10	Q403	A10	R302	D10	R322	D7	R341	F3	R407	B9	R428	B5	R447	A6
C306	E9	C404	C9	D302	D8	D412	B3	Q302	D10	Q303	F10	Q404	B6	R303	E10	R323	F6	R342	E3	R408	C9	R429	B6	R448	D6
C307	F9	C405	B11	D303	C8	J301	C11	Q303	F10	Q404	B6	R304	A10	R305	F10	R324	D6	R343	F3	R409	C9	R430	B5	R449	C4
C308	F8	C406	B9	D305	E7	J302	D11	Q304	F6	Q405	C6	R305	F6	R306	F10	R325	E6	R344	E3	R410	C9	R431	B6	R450	B5
C311	D4	C407	A9	D306	E7	J303	F11	Q305	D6	Q406	E5	R306	C5	R307	E9	R326	D6	R345	E8	R411	B9	R432	C6	R451	B11
C312	F5	C408	A8	D307	E6	J304	B1	Q306	E5	Q407	B6	R307	E5	R308	D9	R327	E6	R346	D8	R412	B9	R433	B5	R452	C11
C313	D6	C411	C4	D308	E5	J305	F7	Q307	F6	Q408	B5	R308	E9	R309	E9	R328	F5	R347	F6	R415	B8	R434	C5	R453	D12
C314	D5	C412	A5	D309	F3	J306	E1	Q308	F5	Q409	B6	R309	D9	R310	D9	R329	F6	R348	D6	R416	C8	R435	A8	W301	G4
C315	F3	C413	C6	D310	E3	J307	F2	Q309	E6	Q410	B5	R310	B5	R311	F9	R330	E5	R349	D4	R417	B8	R436	A8		
C316	D3	C414	C5	D311	F3	J403	C1	Q310	E5	Q411	C6	R311	F9	R312	F9	R331	F6	R350	F5	R418	C8	R437	D4		
C317	E2	C415	C3	D312	E3	L301	E8	Q311	E6	Q412	C5	R313	F10	R313	E5	R332	E5	R351	E11	R419	B7	R438	B3		
C318	D2	C416	A3	D401	B8	L302	D8	Q312	E5	Q413	C6	R314	F10	R314	F10	R333	F5	R352	D11	R420	C8	R439	C4		
C319	E10	C417	C2	D402	C8	L303	D8	Q313	E6	Q414	C5	R315	E8	R315	E8	R334	D5	R353	D12	R421	B7	R440	B3		
C320	D10	C418	B2	D405	B7	L305	E7	Q314	E5	Q415	C4	R316	E8	R316	F8	R335	F9	R401	C10	R422	C7	R441	C3		
C321	F10	C419	B10	D406	C7	L306	D7	Q315	F4	Q416	B4	R317	F8	R317	F8	R402	C10	R423	A6	R442	B3				

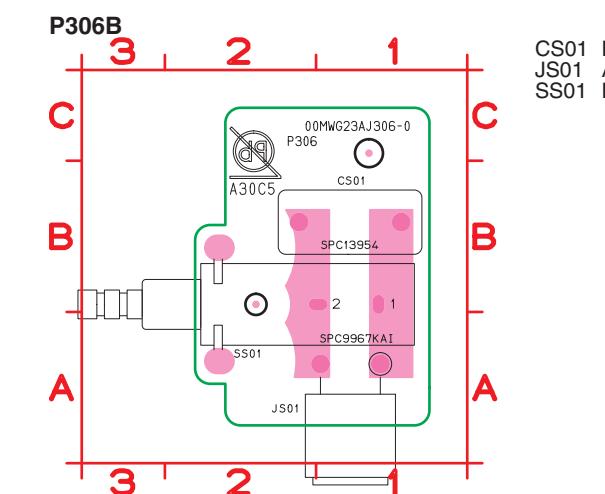
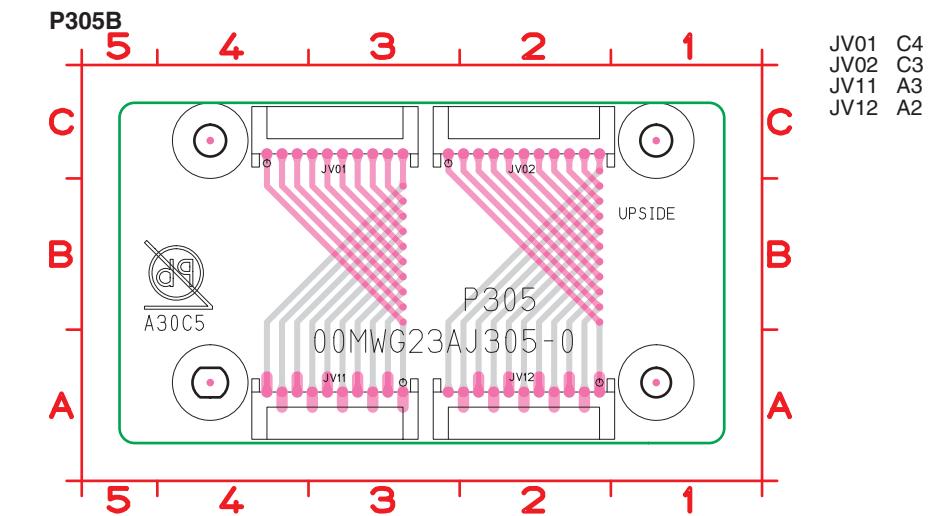
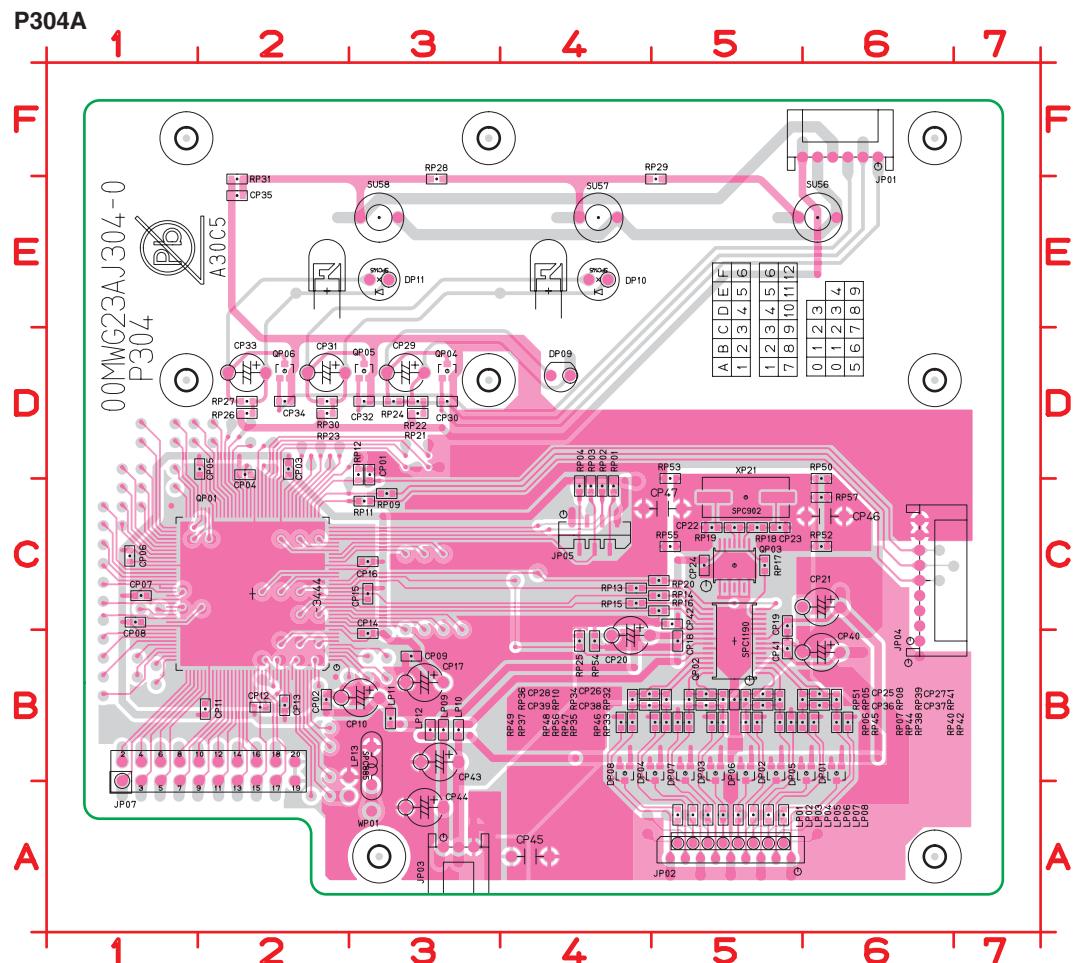
鉛フリー半田
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。
Lead-free Solder
When soldering, use the Lead-free Solder (Sn-Ag-Cu).



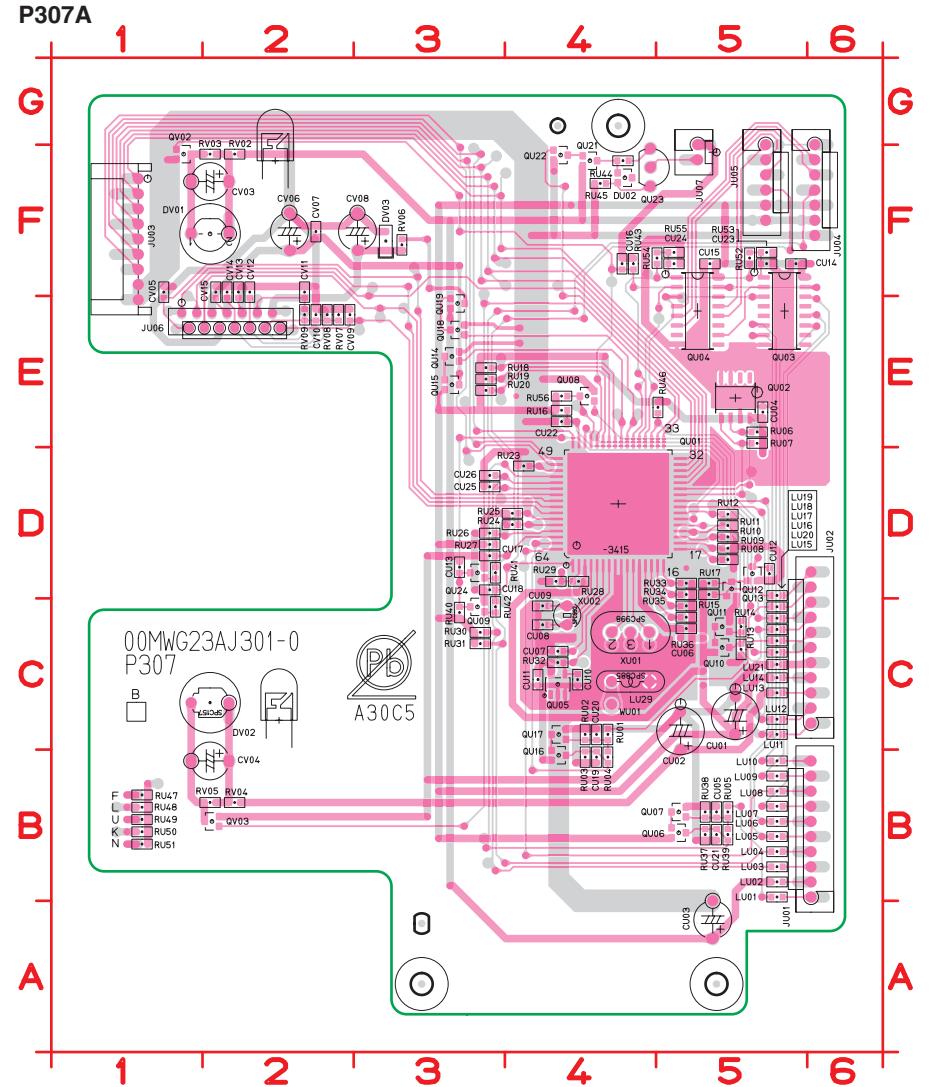
CE01	D1
CE02	C1
CE03	B1
CE04	E1
CE05	C1
CE06	B1
CE07	C3
DE01	D1
DE02	D2
DE03	C2
JE01	F1
QE01	E1
QE02	C1
QE03	B1
RE01	D1
RE02	D1
RE03	C1
RE04	B1
RE05	E1
RE06	C1
RE07	B1
RE08	E2
RE09	C2
RE10	C2
SE01	F2
SE02	D2
SE03	C2



CD11	A1
DD11	B1
JD11	A1
RD11	A1



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).

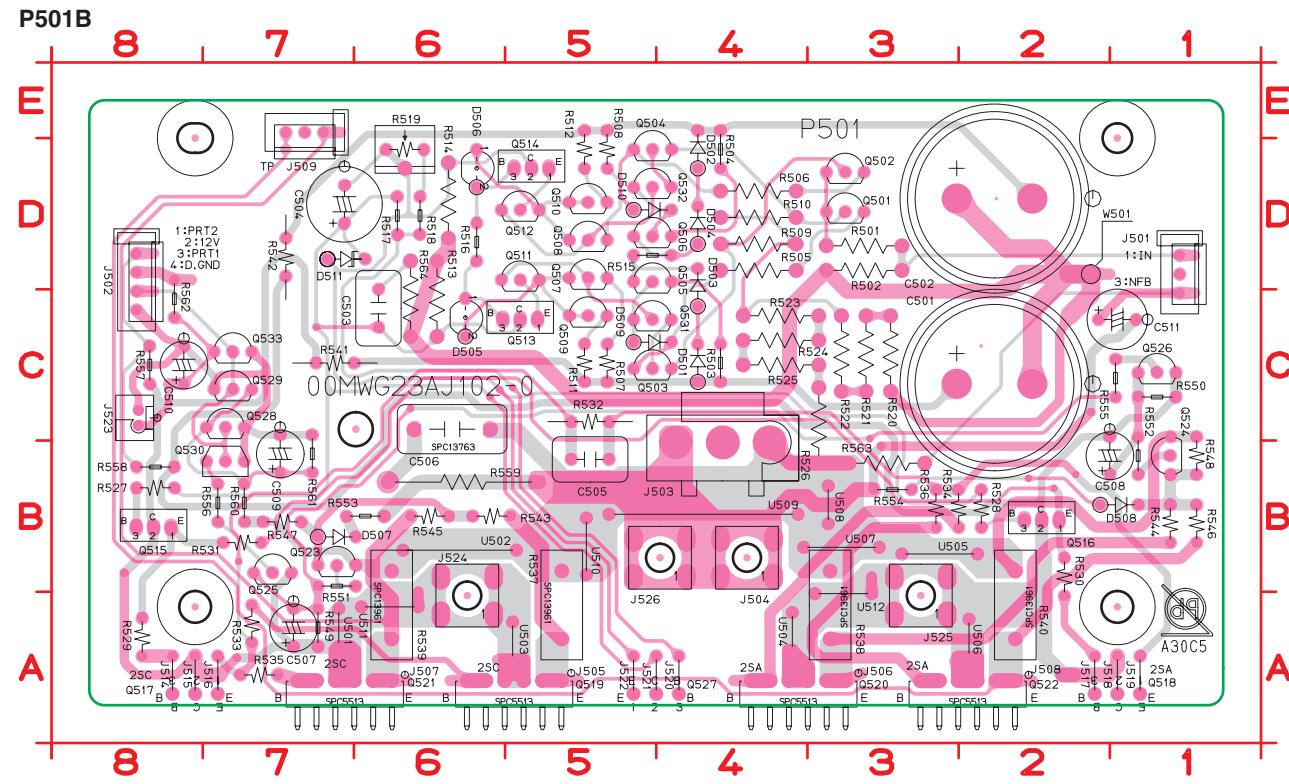


鉛フリー半田

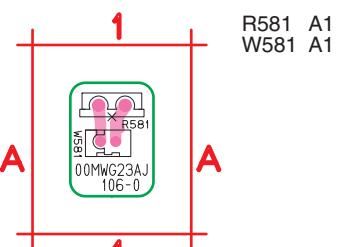
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

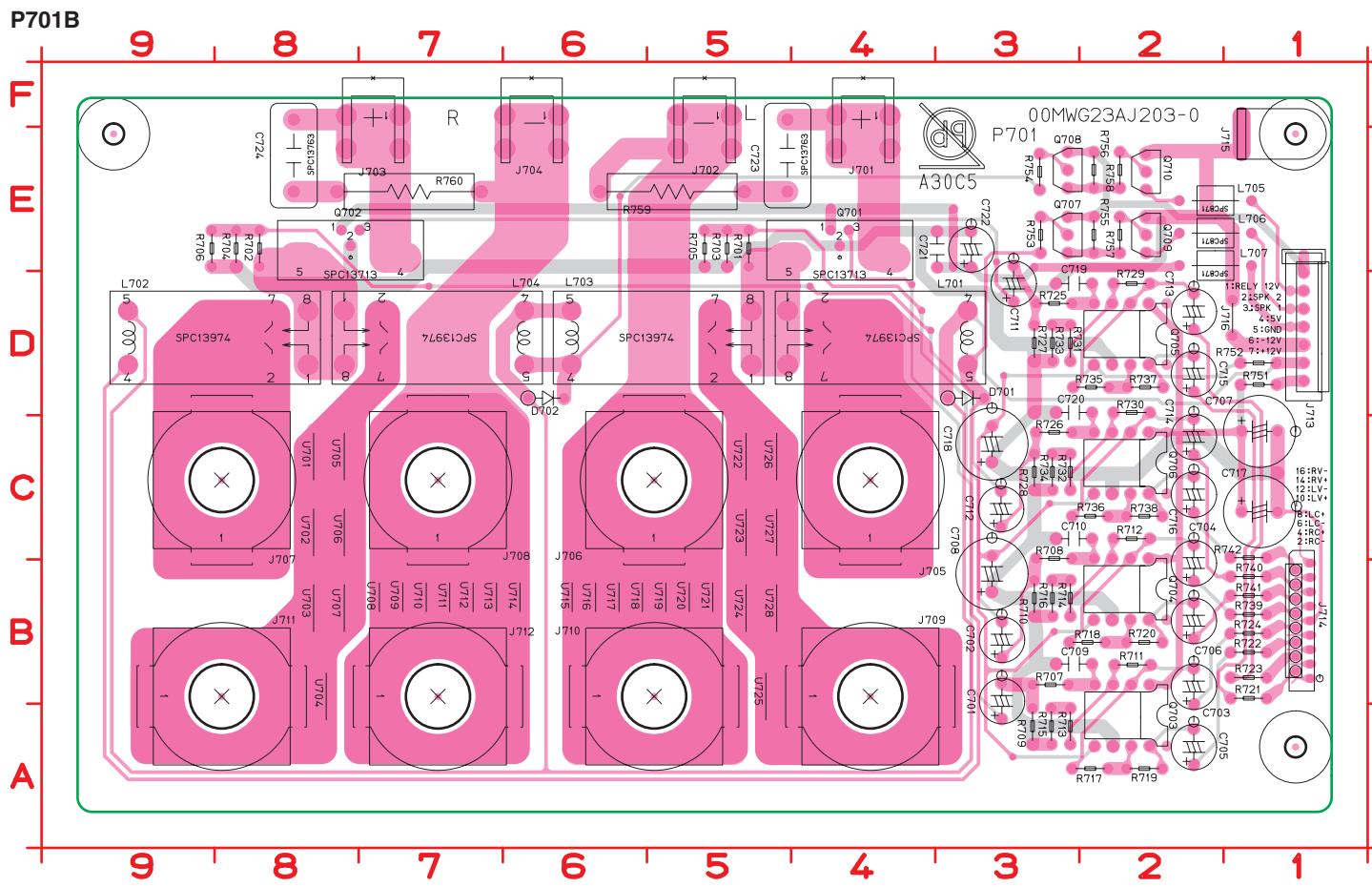
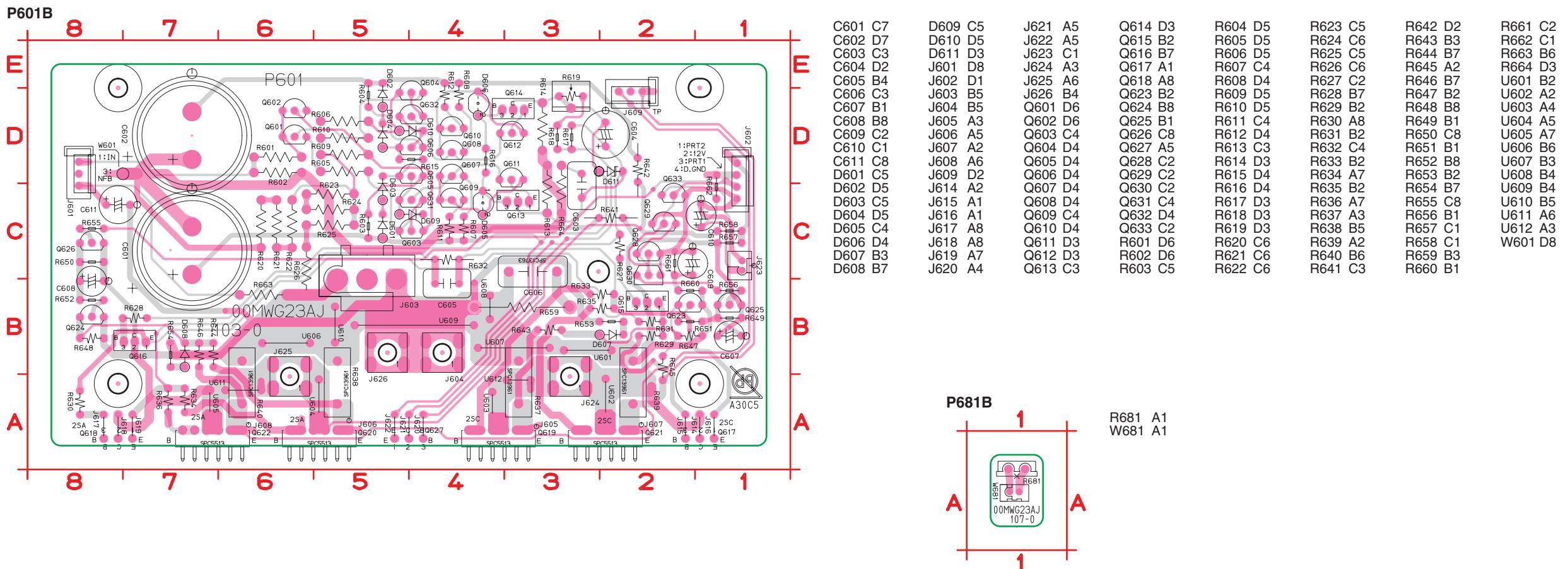
Lead-free Solder

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



P581B





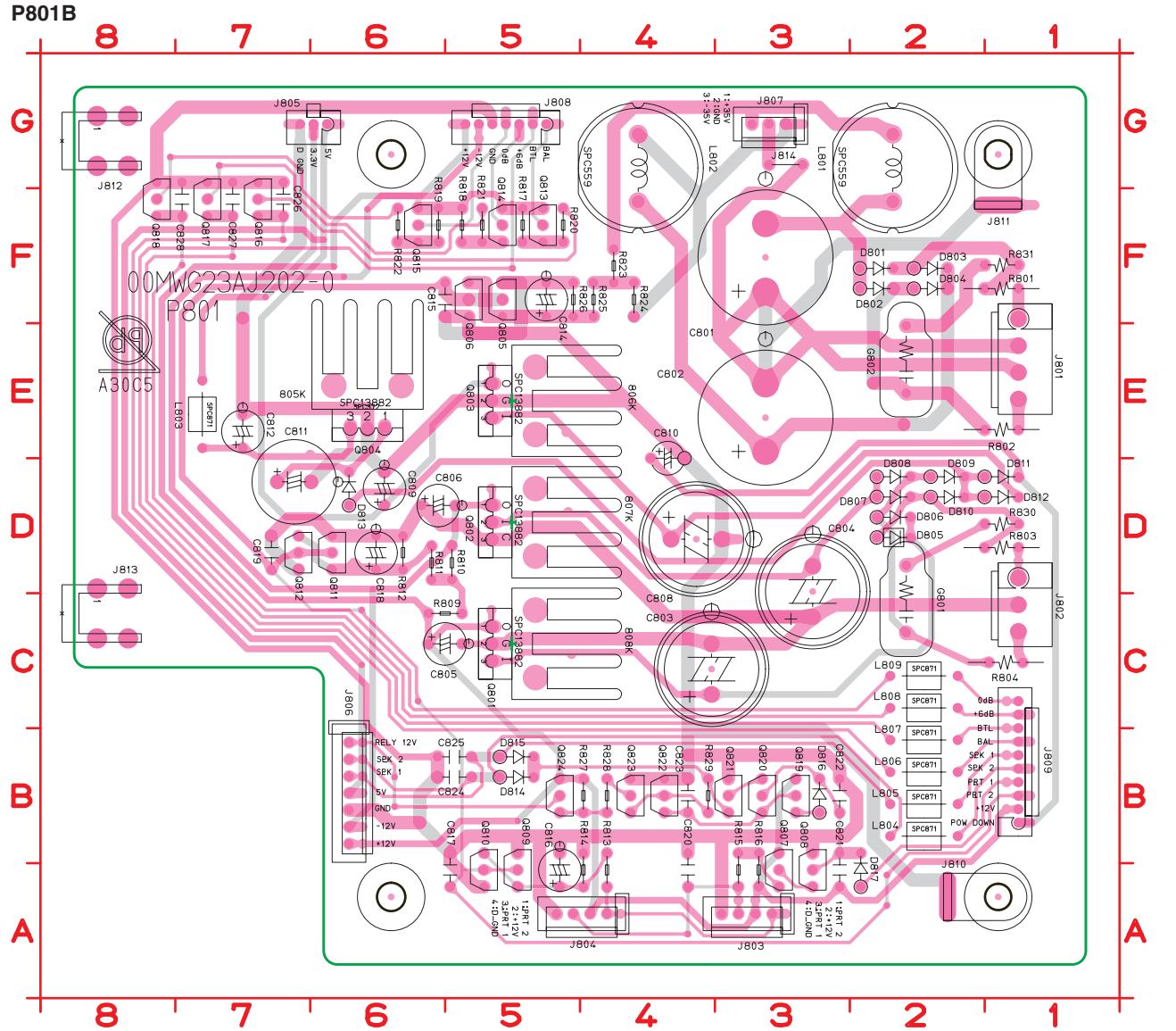
C873	B3	D891	B6	R882	B5
C874	B4	G871	A2	R883	C6
C875	B3	J871	B1	R884	C6
C876	B4	J872	D1	R885	B8
C877	C3	J873	D10	R886	B7
C878	C4	J874	B10	R887	C7
C879	C3	J875	D6	R888	C7
C880	C5	J876	D9	R889	C8
C881	B7	L871	B2	R890	C8
C882	C7	L872	B5	R891	A3
C883	B6	L873	C1	RH97	C8
C884	C6	L874	D1	RH98	C9
C885	C7	L875	C10		
C886	C6	L876	C10		
C887	B8	L877	B8		
C888	B7	L878	B8		
C889	C7	L879	B8		
CH97	B9	CH98	C9		
L880	A8	L881	A8		
CH98	C9	D871	A3		
L881	A8	D872	A3		
D872	A3	Q872	D4		
D873	A3	Q873	D3		
D874	A3	Q874	D4		
D875	A4	Q876	D8		
D876	A4	Q877	D7		
D877	A4	Q878	C6		
D878	A4	Q879	B8		
D879	D3	Q880	C8		
D880	D4	Q881	D2		
D881	D3	Q882	D5		
D882	D4	R871	B2		
D883	D3	R872	B2		
D884	D4	R874	E3		
D885	A5	R875	D3		
D886	A5	R876	D4		
D887	A5	R877	D3		
D888	A5	R878	D5		
D889	B6	R879	C2		
D890	B5	R880	C5		

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

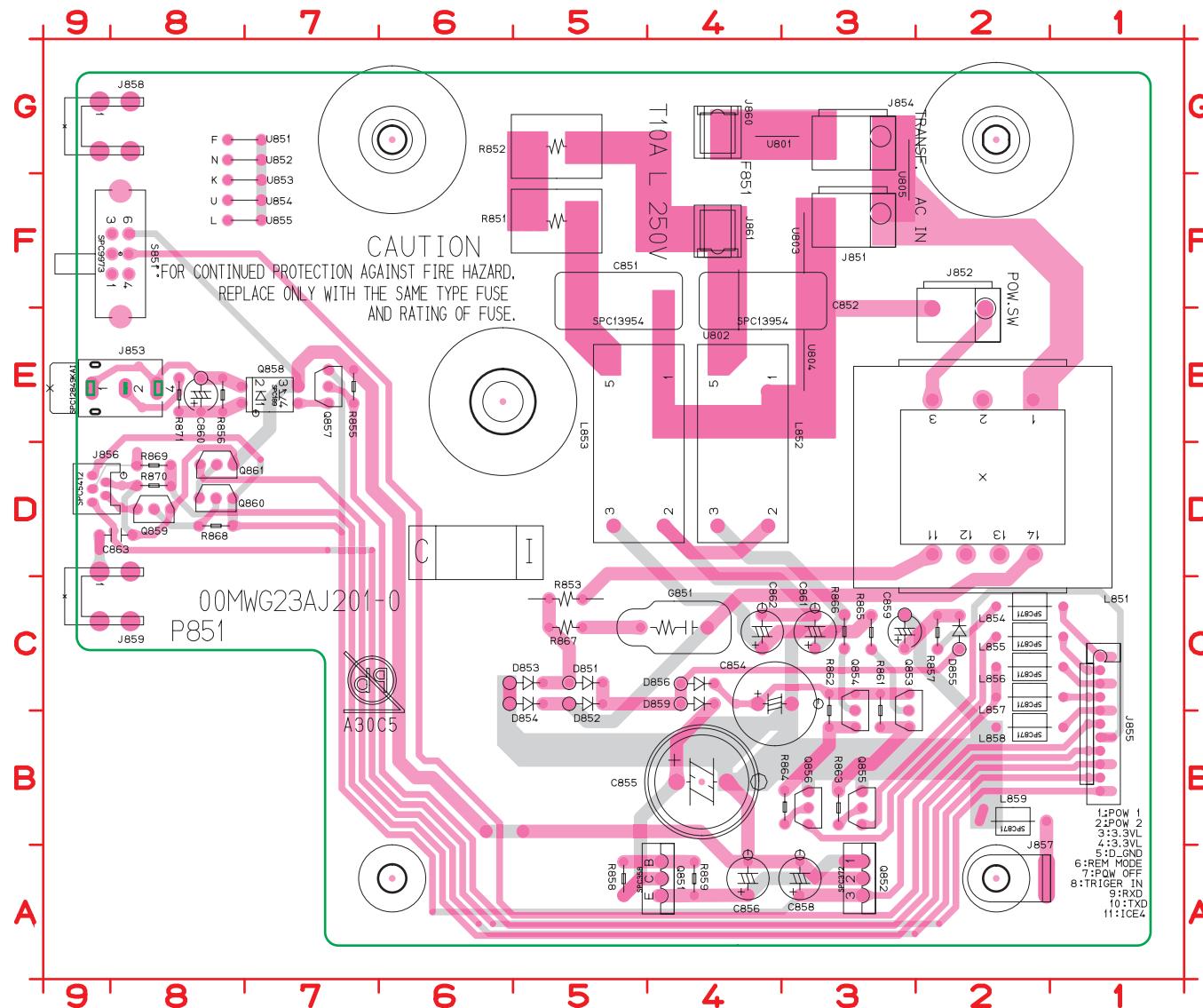
When soldering, use the Lead-free Solder (Sn-Ag-Cu).



C801	F3	C820	A4	D809	D2	J807	G3	Q801	C5	Q818	F8	R815	A3
C802	E3	C821	A3	D810	D2	J808	G5	Q802	D5	Q819	B3	R816	A3
C803	C4	C822	B3	D811	D2	J809	B1	Q803	E5	Q820	B3	R817	F5
C804	C3	C823	B4	D812	D2	J810	A1	Q804	E6	Q821	B3	R818	F5
C805	C6	C824	B5	D813	D6	J811	G1	Q805	F5	Q822	B4	R819	F6
C806	D6	C825	B5	D814	B5	J812	G8	Q806	F5	Q823	B4	R820	F5
C808	D4	C826	F7	D815	B5	J813	C8	Q807	A3	Q824	B5	R821	F5
C809	D6	C827	F7	D816	B3	J814	G3	Q808	A3	R801	F1	R822	F6
C810	E4	C828	G7	D817	A2	L801	F2	Q809	A5	R802	E1	R823	F4
C811	D7	D801	F2	G801	D2	L802	F4	Q810	A5	R803	D1	R824	F4
C812	E7	D802	F2	G802	E2	L803	E7	Q811	D6	R804	C1	R825	F4
C814	F5	D803	F2	J801	F1	L804	B2	Q812	D7	R809	C6	R826	F5
C815	F6	D804	F2	J802	D1	L805	B2	Q813	F5	R810	D5	R827	B4
C816	A5	D805	D2	J803	A3	L806	B2	Q814	F5	R811	D6	R828	B4
C817	A5	D806	D2	J804	A4	L807	B2	Q815	F6	R812	D6	R829	B4
C818	D6	D807	D2	J805	G6	L808	C2	Q816	F7	R813	A4	R830	D1
C819	D7	D808	D2	J806	B6	L809	C2	Q817	F7	R814	A4	R831	F1

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).

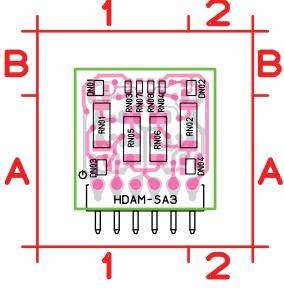
P851B



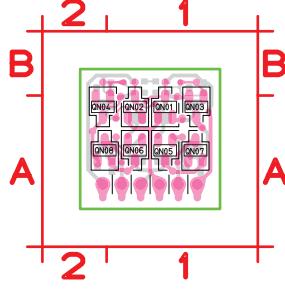
C851	F4	R852	G5
C852	F3	R853	C5
C854	C4	R855	E7
C855	B4	R856	E8
C856	A4	R857	C2
C858	A3	R858	A5
C859	C3	R859	A4
C860	E8	R861	C3
C861	C3	R862	C3
C862	C4	R863	B3
C863	D8	R864	B3
D851	C5	R865	C3
D852	C5	R866	C3
D853	C6	R867	C5
D854	C6	R868	D8
D855	C2	R869	D8
D856	C4	R870	D8
D859	C4	R871	E8
G851	C5	S851	F8
J851	F3	U801	G3
J852	E2	U802	E4
J853	E9	U803	F3
J854	G3	U804	E3
J855	C1	U805	F3
J856	D9	U851	G7
J857	A2	U852	G7
J858	G9	U853	F7
J859	C9	U854	F7
J860	G4	U855	F7
J861	F4		
L851	D2		
L852	E4		
L853	E4		
L854	C2		
L855	C2		
L856	C2		
L857	C2		
L858	B2		
L859	B2		
Q851	A4		
Q852	A3		
Q853	C3		
Q854	C3		
Q855	B3		
Q856	B3		
Q857	E7		
Q858	E8		
Q859	D8		
Q860	D8		
Q861	D8		
R851	F5		

DN01	B1
DN02	B2
DN03	A1
DN04	A2
JN01	A1
RN01	A1
RN02	A2
RN03	B1
RN04	B1
RN05	A1
RN06	A1
RN07	B1
RN08	B1

HDAM (PN01) A



HDMI (PN01) B



QN01	A1
QN02	A1
QN03	A1
QN04	A2
QN05	A1
QN06	A1
QN07	A1
QN08	A2

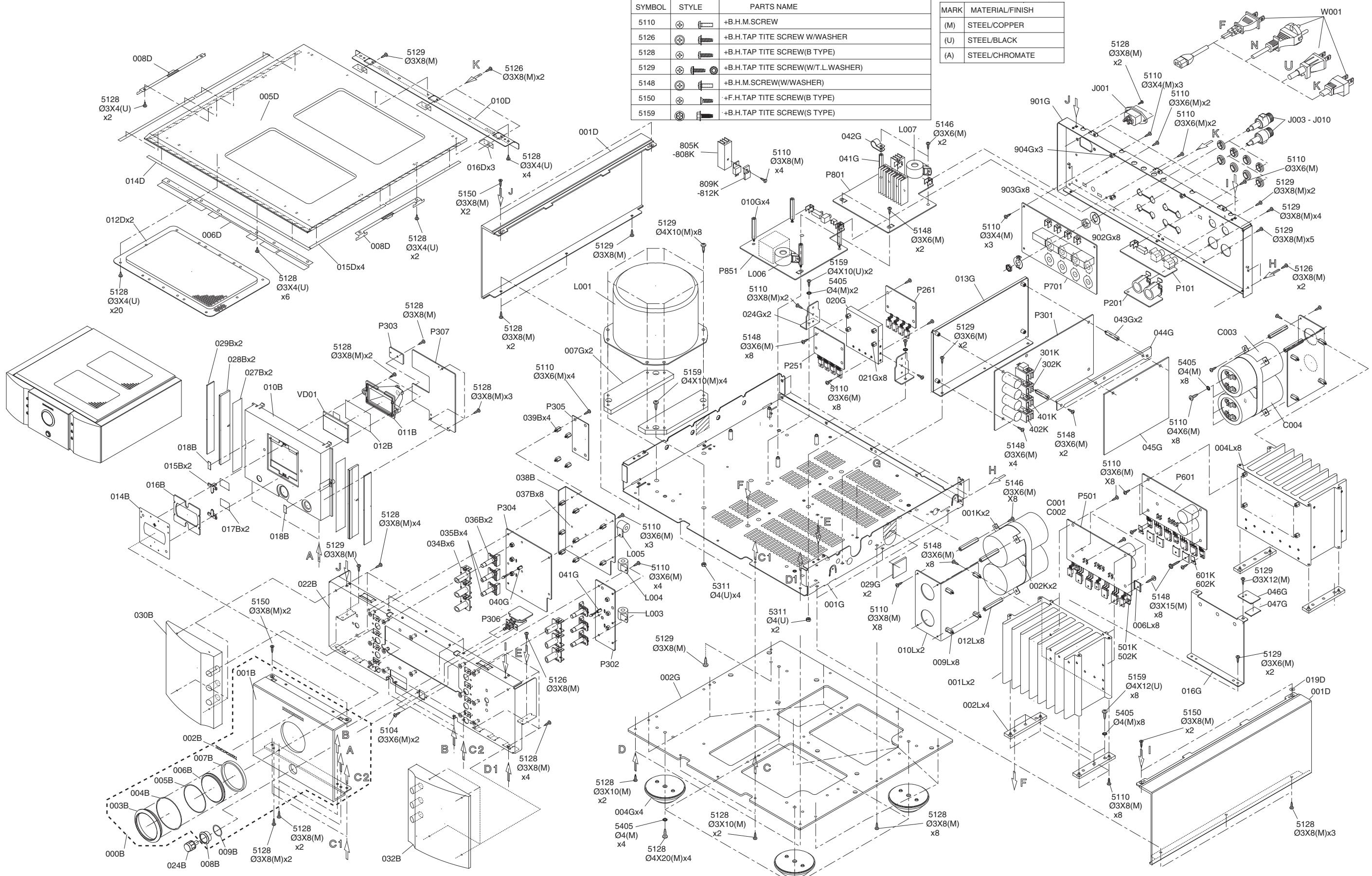
鉛フリー半田

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



P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
	000B	F N	nsp	99M23AJ248410	PANEL ASSY	FRONT AL PANEL ASSY SM-11S1 GOLD
	000B	/K1G	nsp	99M23AJ248410	PANEL ASSY	FRONT AL PANEL ASSY SM-11S1 GOLD
	000B	/N1G	99M23AJ248410	99M23AJ248410	PANEL ASSY	FRONT AL PANEL ASSY SM-11S1 GOLD
	000B	/N1S	99M23AJ248420	99M23AJ248420	PANEL ASSY	FRONT AL PANEL ASSY SM-11S1 SILVER
	000B	/U1G	nsp	99M23AJ248410	PANEL ASSY	FRONT AL PANEL ASSY SM-11S1 GOLD
	010B		00M04AJ105050	00M04AJ105050	CHASSIS	FRONT MOLD CHASSIS PM-11S1
	014B	F N	nsp	00M04AJ265120	INDICATOR	INDICATOR GOLD
	014B	/K1G	nsp	00M04AJ265120	INDICATOR	INDICATOR GOLD
	014B	/N1G	00M04AJ265120	00M04AJ265120	INDICATOR	INDICATOR GOLD
	014B	/N1S	00M04AJ265220	00M04AJ265220	INDICATOR	INDICATOR SILVER
	014B	/U1G	nsp	00M04AJ265120	-	INDICATOR GOLD
	015B		00M04AJ355010	00M04AJ355010	LENS	LENS-LCD ESCUTCHEON
	024B	F N	nsp	00M04AJ270110	BUTTON	POWER BUTTON GOLD
	024B	/K1G	nsp	00M04AJ270110	BUTTON	POWER BUTTON GOLD
	024B	/N1G	00M04AJ270110	00M04AJ270110	BUTTON	POWER BUTTON GOLD
	024B	/N1S	00M04AJ270210	00M04AJ270210	BUTTON	POWER BUTTON SILVER
	024B	/U1G	nsp	00M04AJ270110	BUTTON	POWER BUTTON GOLD
	028B		00M04AJ355030	00M04AJ355030	LENS	LENS SIDE
	030B	F N	nsp	00M23AJ063110	ESCUTCHEON	SIDE ESCUTCHEON L GOLD
	030B	/K1G	nsp	00M23AJ063110	ESCUTCHEON	SIDE ESCUTCHEON L GOLD
	030B	/N1G	00M23AJ063110	00M23AJ063110	ESCUTCHEON	SIDE ESCUTCHEON L GOLD
	030B	/N1S	00M23AJ063210	00M23AJ063210	ESCUTCHEON	SIDE ESCUTCHEON L SILVER
	030B	/U1G	nsp	00M23AJ063110	ESCUTCHEON	SIDE ESCUTCHEON L GOLD
	032B	F N	nsp	00M23AJ063120	ESCUTCHEON	SIDE ESCUTCHEON R GOLD
	032B	/K1G	nsp	00M23AJ063120	ESCUTCHEON	SIDE ESCUTCHEON R GOLD
	032B	/N1G	00M23AJ063120	00M23AJ063120	ESCUTCHEON	SIDE ESCUTCHEON R GOLD
	032B	/N1S	00M23AJ063220	00M23AJ063220	ESCUTCHEON	SIDE ESCUTCHEON R SILVER
	032B	/U1G	nsp	00M23AJ063120	ESCUTCHEON	SIDE ESCUTCHEON R GOLD
	034B	F N	nsp	00M04AJ259210	BUSHING	FUNCTION BUTTON BUSH GOLD
	034B	/K1G	nsp	00M04AJ259210	BUSHING	FUNCTION BUTTON BUSH GOLD
	034B	/N1G	00M04AJ259210	00M04AJ259210	BUSHING	FUNCTION BUTTON BUSH GOLD
	034B	/N1S	00M04AJ259110	00M04AJ259110	BUSHING	FUNCTION BUTTON BUSH SILVER
	034B	/U1G	nsp	00M04AJ259210	BUSHING	FUNCTION BUTTON BUSH GOLD
	035B	F N	nsp	00M04AJ270120	BUTTON	FUNCTION BUTTON LIGHTING GOLD
	035B	/K1G	nsp	00M04AJ270120	BUTTON	FUNCTION BUTTON LIGHTING GOLD
	035B	/N1G	00M04AJ270120	00M04AJ270120	BUTTON	FUNCTION BUTTON LIGHTING GOLD
	035B	/N1S	00M04AJ270220	00M04AJ270220	BUTTON	FUNCTION BUTTON LIGHTING SILVER
	035B	/U1G	nsp	00M04AJ270120	BUTTON	FUNCTION BUTTON LIGHTING GOLD
	036B	F N	nsp	00M04AJ270130	BUTTON	FUNCTION BUTTON GOLD
	036B	/K1G	nsp	00M04AJ270130	BUTTON	FUNCTION BUTTON GOLD
	036B	/N1G	00M04AJ270130	00M04AJ270130	BUTTON	FUNCTION BUTTON GOLD
	036B	/N1S	00M04AJ270230	00M04AJ270230	BUTTON	FUNCTION BUTTON SILVER
	036B	/U1G	nsp	00M04AJ270130	BUTTON	FUNCTION BUTTON GOLD
	001D	F N	nsp	00M04AJ249110	SIDE PANEL	SIDE PANEL GOLD
	001D	/K1G	nsp	00M04AJ249110	SIDE PANEL	SIDE PANEL GOLD
	001D	/N1G	00M04AJ249110	00M04AJ249110	SIDE PANEL	SIDE PANEL GOLD
	001D	/N1S	00M04AJ249210	00M04AJ249210	SIDE PANEL	SIDE PANEL SILVER
	001D	/U1G	nsp	00M04AJ249110	SIDE PANEL	SIDE PANEL GOLD
	005D	F N	nsp	00M21AJ257110	LID	TOP LID AL GOLD (HOLE TYPE)
	005D	/K1G	nsp	00M21AJ257110	LID	TOP LID AL GOLD (HOLE TYPE)
	005D	/N1G	00M21AJ257110	00M21AJ257110	LID	TOP LID AL GOLD (HOLE TYPE)
	005D	/N1S	00M21AJ257210	00M21AJ257210	LID	TOP LID AL SILVER (HOLE TYPE)
	005D	/U1G	nsp	00M21AJ257110	LID	TOP LID AL GOLD (HOLE TYPE)
	012D	F N	nsp	00M21AJ003110	PERFORATED	PERFORATED-TOP LID GOLD
	012D	/K1G	nsp	00M21AJ003110	PERFORATED	PERFORATED-TOP LID GOLD
	012D	/N1G	00M21AJ003110	00M21AJ003110	PERFORATED	PERFORATED-TOP LID GOLD
	012D	/N1S	00M21AJ003210	00M21AJ003210	PERFORATED	PERFORATED-TOP LID SILVER
	012D	/U1G	nsp	00M21AJ003110	PERFORATED	PERFORATED-TOP LID GOLD
	004G	F N	nsp	00M04AJ057510	LUG EYELET	LEGS GOLD
	004G	/K1G	nsp	00M04AJ057510	LUG EYELET	LEGS GOLD
	004G	/N1G	00M04AJ057510	00M04AJ057510	LUG EYELET	LEGS GOLD
	004G	/N1S	00M04AJ057520	00M04AJ057520	LUG EYELET	LEGS SILVER
	004G	/U1G	nsp	00M04AJ057510	LUG EYELET	LEGS GOLD
	C001		00MOB15907130	00MOB15907130	ELECT. CAP.	15000UF 71V LKGH2153MSGRZT
	C002		00MOB15907130	00MOB15907130	ELECT. CAP.	15000UF 71V LKGH2153MSGRZT
	C003		00MOB15907130	00MOB15907130	ELECT. CAP.	15000UF 71V LKGH2153MSGRZT
	C004		00MOB15907130	00MOB15907130	ELECT. CAP.	15000UF 71V LKGH2153MSGRZT

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
	▲ J001		00MYJ04002640	00MYT01010360	JACK	! R-301(21) AC INLET
	J003		00MYT01010360	00MYT01010360	TERMINAL	WBT-0765 POLE TERMINAL RED
	J004		00MYT01010370	00MYT01010370	TERMINAL	WBT-0765 POLE TERMINAL WHT
	J005		00MYT01010360	00MYT01010360	TERMINAL	WBT-0765 POLE TERMINAL RED
	J006		00MYT01010370	00MYT01010370	TERMINAL	WBT-0765 POLE TERMINAL WHT
	J007		00MYT01010360	00MYT01010360	TERMINAL	WBT-0765 POLE TERMINAL RED
	J008		00MYT01010370	00MYT01010370	TERMINAL	WBT-0765 POLE TERMINAL WHT
	J009		00MYT01010360	00MYT01010360	TERMINAL	WBT-0765 POLE TERMINAL RED
	J010		00MYT01010370	00MYT01010370	TERMINAL	WBT-0765 POLE TERMINAL WHT
	▲ L001	F N	nsp	00MTS45001160	TRANSF.	# POWER TRANSF. FOR 100V
	▲ L001	/K1G	nsp	00MTS45001170	TRANSF.	# POWER TRANSF. FOR 230V
	▲ L001	/N1G	00MTS45001170	00MTS45001170	TRANSF.	# POWER TRANSF. FOR 230V
	▲ L001	/N1S	00MTS45001170	00MTS45001170	TRANSF.	# POWER TRANSF. FOR 230V
	▲ L001	/U1G	nsp	00MTS45001180	TRANSF.	# POWER TRANSF. FOR 120V
	L003		00MFC50160030	00MFC50160030	FERRITE CORE	FERRITE CORE TFCK-16813
	L004		00MFC50160030	00MFC50160030	FERRITE CORE	FERRITE CORE TFCK-16813
	L005		00MFC50160030	00MFC50160030	FERRITE CORE	FERRITE CORE TFCK-16813
	L006		00MFC50160030	00MFC50160030	FERRITE CORE	FERRITE CORE TFCK-16813
	L007		00MFC50160030	00MFC50160030	FERRITE CORE	FERRITE CORE TFCK-16813
	P101		nsp	nsp	PWB ASSY	CINCH PIN JACK PWB ASSY
	P201		nsp	nsp	PWB ASSY	BALANCE INPUT PWB ASSY
	P251		nsp	nsp	PWB ASSY	BRIDGE L PWB ASSY
	P261		nsp	nsp	PWB ASSY	BRIDGE R PWB ASSY
	P301		nsp	nsp	PWB ASSY	PRE AMP PWB
	P302		nsp	nsp	PWB ASSY	RIGHT PWB ASSY
	P303		nsp	nsp	PWB ASSY	BACK LIGHT PWB ASSY
	P304		nsp	nsp	PWB ASSY	LEFT PWB ASSY
	P305		nsp	nsp	PWB ASSY	CONNECTOR PWB ASSY
	P306		nsp	nsp	PWB ASSY	POWER SW ASSY
	P307		nsp	nsp	PWB ASSY	FRONT PWB ASSY
	P501		nsp	nsp	PWB ASSY	POWER AMP L PWB ASSY
	P581		nsp	nsp	PWB ASSY	POSISTOR L PWB ASSY
	P601		nsp	nsp	PWB ASSY	POWER AMP R PWB
	P681		nsp	nsp	PWB ASSY	POSISTOR R PWB ASSY
	P701		nsp	nsp	PWB ASSY	SPK.TERMINAL PWB ASSY
	P801		nsp	nsp	PWB ASSY	POWER SUPPLY PWB ASSY
	P851		nsp	nsp	PWB ASSY	AC INPUT PWB ASSY
	VD01		00MHQ22901990	00MHQ22901990	DISPLAY	LCD MODULE FOR PM-11S1
	W032		nsp	00MYU17550520	FPC	SML2SC17(1)X542BDX6(BL)-P1.0-S4-M-N(35)
PACKING						
	001T	F N	nsp	00M23AJ851110	USER GUIDE	USER GUIDE F
	001T	/K1G	nsp	00M23AJ851350	USER GUIDE	USER GUIDE K
	001T	/N1G	00M23AJ851310	00M23AJ851310	USER GUIDE	USER GUIDE N
	001T	/N1S	00M23AJ851310	00M23AJ851310	USER GUIDE	USER GUIDE N
	001T	/U1G	nsp	00M23AJ851310	USER GUIDE	USER GUIDE N
	▲ W001	F N	nsp	00D2062141002	MAINS CORD	# MAINS CORD W/CON&PLUG
	▲ W001	/K1G	nsp	00MZC01808030	MAINS CORD	# MAINS CORD CHINA 250V 10A
	▲ W001	/N1G	00MZC01803080	00MZC01803080	MAINS CORD	# 2P MAINS CORD 10A 250V CLASS2
	▲ W001	/N1S	00MZC01803080	00MZC01803080	MAINS CORD	# 2P MAINS CORD 10A 250V CLASS2
	▲ W001	/U1G	nsp	00MZC01802100	MAINS CORD	# MAINS CORDSET 125V13A UL/CSA
NOT STANDARD SPARE PART						
	001S		nsp	00M23AJ801010	PACKING CASE	PACKING CASE
	002S	/N1G	nsp	00M23AJ805010	MASS CARTON	MASTER CARTON
	002S	/N1S	nsp	00M23AJ805010	MASS CARTON	MASTER CARTON
	003S		nsp	00M23AJ809010	CUSHION	CUSHION L
	004S		nsp	00M23AJ809020	CUSHION	CUSHION R

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

11. MICROPROCESSOR AND IC DATA

P307 / QU01 : HD64F3687H

Pin	PORT	SIGNAL NAME	I/O	Function	Description
1	PB6_AN6	AD2	I	Analog KEY information	
2	PB7_AN7	AD1	I	Model select	
3	AVcc	AVCC	I	Analog power supply	
4	X2	X2	O	Sub clock output	
5	X1	X1	I	Sub clock input	32.758kHz
6	VCL	VC1	I	Internal step-down power supply	
7	/RES	RES	I	Reset pin	
8	TEST	TEST	I	Test Pin	Connect to GND
9	Vss	GND	I	GND	
10	OSC2	OSC2	O	Main clock output	
11	OSC1	OSC1	I	Main clock input	8MHz
12	Vcc	VCC	I	+3.3V Power supply	
13	P50_WKP0	Reserved	-		External trigger
14	P51_WKP1	Reserved	-		External trigger
15	P34	Reserved	-		
16	P35	Reserved	-		
17	P36	Reserved	-		
18	P37	Reserved	-		
19	P52_WKP2	Reserved	-		External trigger
20	P53_WKP3	Reserved	-		External trigger
21	P54_WKP4	TRIGER_IN	I	DC Triger Input	External trigger(Active H)
22	P55_WKP5_AdTRG	AD_INT	I	Analog KEY information, Change detection	External trigger(Active L)
23	P10_TMOW	Reserved	-		
24	P11_PWM	POW_ON_2	O	Power ON Control	H/L = POW_ON/POW_OFF
25	P12	POW_ON_1	O	Power ON Control	H/L = POW_ON/POW_OFF
26	P56_SDA	SDA	I/O	EEPROM (AT24C04) Serial-Data	I2C_DATA
27	P57_SCL	SCL	O	EEPROM (AT24C04) Serial-Clock	I2C_CLOCK
28	P74_TMRIV	FLG_R[0]	I		
29	P75_TMCIV	FLG_R[1]	I		
30	P76_TMOV	FLG_L[0]	I		
31	P24	FLG_L[1]	I		
32	P63_FTIOD0	L_DATA	O	LCD-Controler(SPLC093C)Serial DATA OUT	
33	P62_FTIOC0	BL_ON	O	LCD back light ON/OFF	H/L = ON/OFF
34	P61_FTIOB0	STANDBY_ON	O	STANDBY LED ON	H/L = ID0, ID1/ID2, ID3
35	/NMI	ICE4	I	ICE connect pin	ICE brake control
36	P60_FTIOA0	S_CLK	O	LED+INPUT SELECTOER control, Serial-Interface Clock	
37	P64_FTIOA1	S_CE	O	LED+INPUT SELECTOER control, Serial-Interface CS	Active L
38	P65_FTIOB1	S_DATA	O	LED+INPUT SELECTOER control, Serial-Interface Data	
39	P66_FTIOC1	LCD_POWER1	O	LCD module power supply ON/OFF control (+3.3VL)	H/L = ON/OFF
40	P67_FTIOD1	LCD_POWER2	O	LCD module power supply ON/OFF control (+12V)	H/L = ON/OFF
41	P85	ICE1	-	ICE connect pin	
42	P86	ICE2	-	ICE connect pin	
43	P87	ICE3	-	ICE connect pin	
44	P20_SCK3	S_OE	O	LED+INPUT SELECTOER control, Serial-Interface OE	Active H
45	P21_RXD	RXD	I	SYSTEM Control bus input	
46	P22_TXD	TXD	O	SYSTEM Control bus output	
47	P23	TRIG_MODE	I	DC Triger INT/EXT	H/L = EXT/INT
48	P70_SCK3-2	CLKOUT	I		
49	P71_RXD-2	SDOUT	I		
50	P72_TXD-2	PLDRST	O	CPLD reset	
51	P14_IRQ0	Reserved	-		
52	P15_IRQ1_TMIB1	P_DOWN	I	Power down detect	External trigger(Active H)

P307 / QU01 : HD64F3687H

Pin	PORT	SIGNAL NAME	I/O	Function	Description
53	P16_/_IRQ2	PROT_2	I	Power supply error detect	Active L(POW_OFF)
54	P17_/_IRQ3_TRGV	PROT_1	I	DC/over current/Temp detect	Active L(Mute)
55	P33	L_CS	O	LCD-Controller(SPLC093C) CE	Active L
56	P32	L_SCL	O	LCD-Controller(SPLC093C) Serial CLOCK OUT	
57	P31	L_RS	O	LCD-Controller(SPLC093C) REGISTER SELECT	H/L = Data/Instruction
58	P30	L_RES	O	LCD-Controller(SPLC093C) RESET	Active L(Reset)
59	PB3_AN3	TEST_1	I	PWB mode setting 1	Port check
60	PB2_AN2	TEST_2	I	PWB mode setting 2	Port check
61	PB1_AN1	D-SET	I	LCD-Controller mode setting	H/L 100msec, each time
62	PB0_AN0	AD3	I	Analog KEY information	
63	PB4_AN4	POW_OFF	I	The Sub Trans ON/OFF detect	H/L = ON/OFF
64	PB5_AN5	BTL	I	BTL/Stereo select	H/L = BTL/Stereo

P304 / QP01 : EPM570T144C5

Pin	Port	Port name	IO	Note
1	IO	nc	nc	
2	IO	nc	nc	
3	IO	nc	nc	
4	IO	nc	nc	
5	IO	nc	nc	
6	IO	nc	nc	
7	IO	nc	nc	
8	IO	nc	nc	
9	VCCio1	+3.3V	Vcc	
10	GNDio	GND	Gnd	
11	IO	nc	nc	
12	IO	nc	nc	
13	IO	nc	nc	
14	IO	nc	nc	
15	IO	SDA1	in	
16	IO	SDA2	in	
17	GNDint	GND	Gnd	
18	IO GCLK0	SCL	in	
19	VCCint	+3.3V	Vcc	
20	IO GCLK1	SWS	in	
21	IO	AD_PD	out	
22	IO	nc	nc	
23	IO	nc	nc	
24	IO	nc	nc	
25	VCCio1	+3.3V	Vcc	
26	GNDio	GND	Gnd	
27	IO	nc	nc	
28	IO	nc	nc	
29	IO	nc	nc	
30	IO	nc	nc	
31	IO	nc	nc	
32	IO	nc	nc	
33	TMS	TMS	in	
34	TDI	TDI	in	
35	TCK	TCK	in	
36	TDO	TDO	out	
37	IO	SDOUT	out	
38	IO	CLKOUT	out	
39	IO	PLDRST	in	
40	IO	nc	nc	

Pin	Port	Port name	IO	Note
41	IO	nc	nc	
42	IO	nc	nc	
43	IO	nc	nc	
44	IO	nc	nc	
45	IO	nc	nc	
46	VCCio1	+3.3V	Vcc	
47	GNDio	GND	Gnd	
48	IO	nc	nc	
49	IO	nc	nc	
50	IO	nc	nc	
51	IO	nc	nc	
52	IO	nc	nc	
53	IO	nc	nc	
54	GNDint	GND	Gnd	
55	IO	nc	nc	
56	VCCint	+3.3V	Vcc	
57	IO	nc	nc	
58	IO	nc	nc	
59	IO	nc	nc	
60	IO DEV_OE	nc	nc	
61	IO DEV_CLRn	nc	nc	
62	IO	nc	nc	
63	IO	nc	nc	
64	VCCio1	+3.3V	Vcc	
65	GNDio	GND	Gnd	
66	IO	nc	nc	
67	IO	nc	nc	
68	IO	nc	nc	
69	IO	nc	nc	
70	IO	nc	nc	
71	IO	nc	nc	
72	IO	nc	nc	
73	IO	nc	nc	
74	IO	nc	nc	
75	IO	nc	nc	
76	IO	nc	nc	
77	IO	nc	nc	
78	IO	nc	nc	
79	IO	nc	nc	
80	IO	nc	nc	

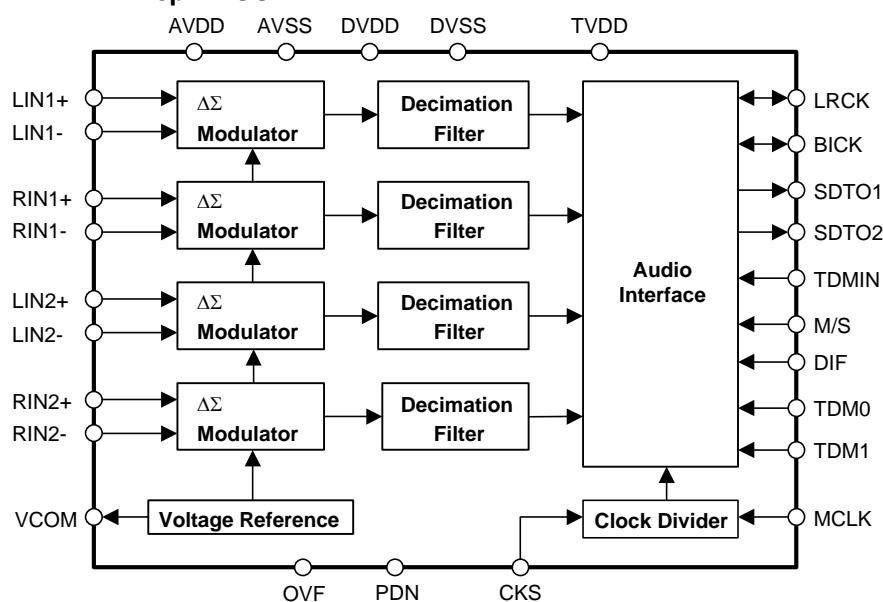
P304 / QP01 : EPM570T144C5

Pin	Port	Port name	IO	Note
81	IO	nc	nc	
82	VCCio2	+3.3V	Vcc	
83	GNDio	GND	Gnd	
84	IO	nc	nc	
85	IO	nc	nc	
86	IO	nc	nc	
87	IO	nc	nc	
88	IO	ISWSOUT	out	
89	IO	ISWS	in	
90	VCCint	+3.3V	Vcc	
91	IO	nc	nc	
92	GNDint	GND	Gnd	
93	IO	nc	nc	
94	IO	nc	nc	
95	IO	nc	nc	
96	IO	nc	nc	
97	IO	nc	nc	
98	IO	nc	nc	
99	GNDio	GND	Gnd	
100	VCCio2	+3.3V	Vcc	
101	IO	nc	nc	
102	IO	nc	nc	
103	IO	nc	nc	
104	IO	nc	nc	
105	IO	nc	nc	
106	IO	nc	nc	
107	IO	nc	nc	
108	IO	nc	nc	
109	IO	nc	nc	
110	IO	nc	nc	
111	IO	nc	nc	
112	IO	nc	nc	

Pin	Port	Port name	IO	Note
113	IO	nc	nc	
114	IO	nc	nc	
115	GNDio	GND	Gnd	
116	VCCio2	+3.3V	Vcc	
117	IO	nc	nc	
118	IO	nc	nc	
119	IO	nc	nc	
120	IO	nc	nc	
121	IO	nc	nc	
122	IO	nc	nc	
123	IO	nc	nc	
124	IO	nc	nc	
125	IO	nc	nc	
126	VCCint	+3.3V	Vcc	
127	IO	nc	nc	
128	GNDint	GND	Gnd	
129	IO	nc	nc	
130	IO	nc	nc	
131	IO	nc	nc	
132	IO	nc	nc	
133	IO	nc	nc	
134	IO	nc	nc	
135	GNDio	GND	Gnd	
136	VCCio2	+3.3V	Vcc	
137	IO	nc	nc	
138	IO	nc	nc	
139	IO	nc	nc	
140	IO	nc	nc	
141	IO	nc	nc	
142	IO	nc	nc	
143	IO	nc	nc	
144	IO	nc	nc	

FEATURES

- 4-Channel $\Delta\Sigma$ ADC
- Differential Inputs
- Digital HPF for DC-Offset Cancel
- S/(N+D): 100dB@5V for 48kHz
- DR: 107dB@5V for 48kHz
- S/N: 107dB@5V for 48kHz
- Sampling Rate Ranging from 8kHz to 96kHz
- Master Clock:
256fs/384fs/512fs/768fs (~ 48kHz)
256fs/384fs (~ 96kHz)
- TTL Digital Input Level
- Output format: 24bit MSB justified, I²S or TDM
- Cascade TDM Interface
- Master & Slave Mode
- Overflow Flag
- Power Supply: 4.75 to 5.25V
- Power Supply for output buffer: 3.0 to 5.25V
- Ta = -40 ~ 85°C
- 28pin VSOP



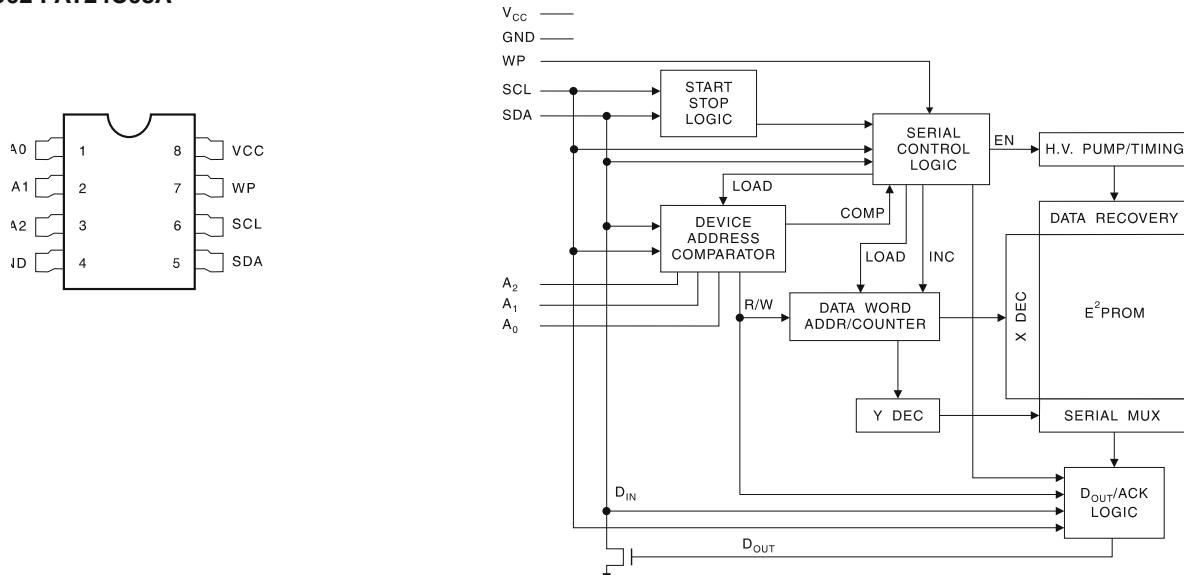
Top View

LIN2+	1	28	LIN1+
LIN2-	2	27	LIN1-
RIN2+	3	26	RIN1+
RIN2-	4	25	RIN1-
TEST	5	24	M/S
VCOM	6	23	CKS
AVSS	7	22	PDN
AVDD	8	21	DVSS
DIF	9	20	DVDD
TDM1	10	19	TVDD
TDM0	11	18	SDTO1
TDMIN	12	17	SDTO2
MCLK	13	16	BICK
OVF	14	15	LRCK

No.	Pin Name	I/O	Function
1	LIN2+	I	ADC2 Lch Positive Analog Input Pin
2	LIN2-	I	ADC2 Lch Negative Analog Input Pin
3	RIN2+	I	ADC2 Rch Positive Analog Input Pin
4	RIN2-	I	ADC2 Rch Negative Analog Input Pin
5	TEST	I	Test Pin (Connected to AVSS)
6	VCOM	O	Common Voltage Output Pin, AVDD/2 Normally connected to AVSS with a 0.1μF ceramic capacitor in parallel with an electrolytic capacitor less than 2.2μF.
7	AVSS	-	Analog Ground Pin
8	AVDD	-	Analog Power Supply Pin, 4.75 ~ 5.25V
9	DIF	I	Audio Interface Format Pin “L” : 24bit MSB justified, “H” : 24bit I ² S Compatible
10	TDM1	I	TDM I/F BICK Frequency Select Pin “L” : 256fs, “H” : 128fs
11	TDM0	I	TDM I/F Format Enable Pin “L” : Normal Mode, “H” : TDM Mode
12	TDMIN	I	TDM Data Input Pin
13	MCLK	I	Master Clock Input Pin
14	OVF	O	Analog Input Overflow Detect Pin This pin goes to “H” if one of four analog inputs overflows.
15	LRCK	I/O	Output Channel Clock Pin “L” Output in Master Mode at Power-down mode.
16	BICK	I/O	Audio Serial Data Clock Pin “L” Output in Master Mode at Power-down mode.
17	SDTO2	O	ADC2 Audio Serial Data Output Pin “L” Output at Power-down mode.
18	SDTO1	O	ADC1 Audio Serial Data Output Pin “L” Output at Power-down mode.
19	TVDD	-	Output Buffer Power Supply Pin, 3.0 ~ 5.25V
20	DVDD	-	Digital Power Supply Pin, 4.75 ~ 5.25V
21	DVSS	-	Digital Ground Pin
22	PDN	I	Power-Down Mode Pin When “L”, the circuit is in power-down mode. The AK5384 should always be reset upon power-up.
23	CKS	I	Master Clock Select Pin “L” : 256fs, “H” : 512fs This pin is enabled in Master Mode.
24	M/S	I	Master / Slave Mode Pin “L” : Slave Mode, “H” : Master Mode
25	RIN1-	I	ADC1 Rch Negative Analog Input Pin
26	RIN1+	I	ADC1 Rch Positive Analog Input Pin
27	LIN1-	I	ADC1 Lch Negative Analog Input Pin
28	LIN1+	I	ADC1 Lch Positive Analog Input Pin

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

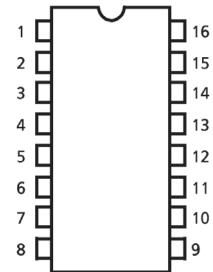
P307 / QU02 : AT24C08A



P307 / QU03, QU04 : 74HC4094

QU03 : 74HC4094

Pin	Port	I/O	Name	Function	Description
1	CE	IN	STROBE		
2	DATA	IN	DATA		
3	CLK	IN			
4	Q1	OUT			
5	Q2	OUT			
6	Q3	OUT	SPK_1	Speaker output relay ON	Active H
7	Q4	OUT	SPK_2	Speaker output relay ON	Active H
8	GND		GND		
9	QS	OUT			
10	Q'S	OUT			
11	Q8	OUT	0dB	*1	*1
12	Q7	OUT	+6dB	*1	*1
13	Q6	OUT			
14	Q5	OUT	BAL_L	Balanced input relay ON	Active H
15	OE	IN	OUTPUT ENABLE		
16	VCC		VCC		



*1 Gain adjustment relay function

	0dB(11pin)	6dB(12pin)
-6dB	L	L
0dB	H	L
+6dB	L	H

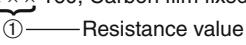
QU04 : 74HC4094

Pin	Port	I/O	Name	Function	Description
1	CE	IN	STROBE		
2	DATA	IN	DATA		
3	CLK	IN			
4	Q1	OUT	BAL	Balanced Input LED ON	Active H
5	Q2	OUT	UN-BAL	Unbalanced Input LED ON	Active H
6	Q3	OUT	SP2	Speaker output LED ON	Active H
7	Q4	OUT			
8	GND		GND		
9	QS	OUT			
10	Q'S	OUT			
11	Q8	OUT			
12	Q7	OUT	DISP_ON	Side illuminations LED ON	Active H
13	Q6	OUT	SP1	Speaker output LED ON	Active H
14	Q5	OUT			
15	OE	IN	OUTPUT ENABLE		
16	VCC		VCC		

12. ELECTRICAL PARTS LIST

PARTS INFORMATION

RESISTORS

- 1) 00MGD05 $\times \times \times$ 140, Carbon film fixed resistor, $\pm 5\%$ 1/4W
 2) 00MGD05 $\times \times \times$ 160, Carbon film fixed resistor, $\pm 5\%$ 1/6W
- 

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 $\times \times \times$ 370, Ceramic capacitor
 Disc type
 Temp.coeff.P350 ~ N1000, 50V
- 

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 $\times \times \times$ 300, High dielectric constant ceramic capacitor
 Disc type
 Temp.chara. 2B4, 50V
- 

Examples :

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

ELECTROLY CAP. ($\frac{1}{4}$)

- 5) 00MEA $\times \times \times \times \times \times$ 10, Electrolytic capacitor
 One-way lead type, Tolerance ±20%
- 

Examples :

- ⑤ Capacity value
 0.1μF....104 4.7μF....475 100μF....107
 0.33μF....334 10μF....106 330μF....337
 1μF....105 22μF....226 1100μF....118
 2200μF....228
- ⑥ Working voltage
 6.3V....006 25V....025
 10V....010 35V....035
 16V....016 50V....050

FILM CAP. ($\frac{1}{4}$)

- 6) 00MDF15 $\times \times \times$ 350 → Plastic film capacitor
 00MDF15 $\times \times \times$ 310 → One-way type, Mylar ±5% 50V
 00MDF16 $\times \times \times$ 310 → Plastic film capacitor
 One-way type, Mylar ±10% 50V
- 

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 $\times \times \times$ 140	RF25S $\times \times \times \times \Omega J$	(±5% 1/4W)
00MNH05 $\times \times \times$ 120	RF50S $\times \times \times \times \Omega J$	(±5% 1/2W)
00MNH85 $\times \times \times$ 110	RF73B2A $\times \times \times \times \Omega J$	(±5% 1/10W)
00MNH95 $\times \times \times$ 140	RF73B2E $\times \times \times \times \Omega J$	(±5% 1/4W)

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

2. Matsushita Electronic Components Co., Ltd

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

└* 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.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
					CINCH PIN JACK PWB P101 (00MWG23AJ104-)	
P101	C101	/K1G	nsp	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10
P101	C101	/N1G	00MOF56331540	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10
P101	C101	/N1S	00MOF56331540	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10
P101	C102	/K1G	nsp	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10
P101	C102	/N1G	00MOF56331540	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10
P101	C102	/N1S	00MOF56331540	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10
P101	J101		00MYT02011000	00MYT02011000	TERMINAL	1P CINCH PIN JACK T6782-AAAB
P101	J102		00MYT02011000	00MYT02011000	TERMINAL	1P CINCH PIN JACK T6782-AAAB
P101	S101		00MSS02021620	00MSS02021620	SLIDE SW	SSSU121700
					BALANCE INPUT PWB P201 (00MWG23AJ105-)	
P201	C201	/K1G	nsp	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10
P201	C201	/N1G	00MOF56331540	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10
P201	C201	/N1S	00MOF56331540	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10
P201	C202	/K1G	nsp	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10
P201	C202	/N1G	00MOF56331540	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10
P201	C202	/N1S	00MOF56331540	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10
P201	J201		00MYJ01004340	00MYJ01004340	JACK	NC3FAH2 4P CANON TYPE
P201	J202		00MYJ01004340	00MYJ01004340	JACK	NC3FAH2 4P CANON TYPE
					BRIDGE L PWB P251 (00MWG23AJ204-)	
P251	D251		00MHE10005100	00MHE10005100	DIODE	SBD UNIT FCH20A15 TO-220
P251	D252		00MHE10006100	00MHE10006100	DIODE	SBD UNIT FRH20A15 TO-220
P251	D253		00MHE10005100	00MHE10005100	DIODE	SBD UNIT FCH20A15 TO-220
P251	D254		00MHE10006100	00MHE10006100	DIODE	SBD UNIT FRH20A15 TO-220
P251	▲ G251		00MBF68400010	00MBF68400010	CAP.COMP.	! 0.68UF/4.7OHM
P251	▲ G252		00MBF68400010	00MBF68400010	CAP.COMP.	! 0.68UF/4.7OHM
					BRIDGE R PWB P261 (00MWG23AJ205-)	
P261	D261		00MHE10005100	00MHE10005100	DIODE	SBD UNIT FCH20A15 TO-220
P261	D262		00MHE10006100	00MHE10006100	DIODE	SBD UNIT FRH20A15 TO-220
P261	D263		00MHE10005100	00MHE10005100	DIODE	SBD UNIT FCH20A15 TO-220
P261	D264		00MHE10006100	00MHE10006100	DIODE	SBD UNIT FRH20A15 TO-220
P261	▲ G261		00MBF68400010	00MBF68400010	CAP.COMP.	! 0.68UF/4.7OHM
P261	▲ G262		00MBF68400010	00MBF68400010	CAP.COMP.	! 0.68UF/4.7OHM
					PRE AMP PWB P301 (00MWG23AJ101-)	
P301	C301		nsp	00MOA226025Z0	ELECT. CAP.	ROS-25V 220M - F3#PE - T2 (22UF 25V)
P301	C302		nsp	00MOA226025Z0	ELECT. CAP.	ROS-25V 220M - F3#PE - T2 (22UF 25V)
P301	C303		nsp	00MOA226025Z0	ELECT. CAP.	ROS-25V 220M - F3#PE - T2 (22UF 25V)
P301	C304		nsp	00MOA226025Z0	ELECT. CAP.	ROS-25V 220M - F3#PE - T2 (22UF 25V)
P301	C305		nsp	00MOA226025Z0	ELECT. CAP.	ROS-25V 220M - F3#PE - T2 (22UF 25V)
P301	C306		nsp	00MOA226025Z0	ELECT. CAP.	ROS-25V 220M - F3#PE - T2 (22UF 25V)
P301	C307		nsp	00MOA227025Z0	ELECT. CAP.	ROS-25V 221M - I5#PE - S13 (220UF 25V)
P301	C308		nsp	00MOA227025Z0	ELECT. CAP.	ROS-25V 221M - I5#PE - S13 (220UF 25V)
P301	C311		nsp	00MOA227025Z0	ELECT. CAP.	ROS-25V 221M - I5#PE - S13 (220UF 25V)
P301	C312		nsp	00MOA227025Z0	ELECT. CAP.	ROS-25V 221M - I5#PE - S13 (220UF 25V)
P301	C313		nsp	00MOA476025Z0	ELECT. CAP.	ROS-25V 470M - G3#PE - T2 (47UF 25V)
P301	C314		00MOF56331540	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10
P301	C315		nsp	00MOA107025Z0	ELECT. CAP.	ROS-25V 101M - H4#PE - T2 (100UF 25V)
P301	C316		nsp	00MOA107025Z0	ELECT. CAP.	ROS-25V 101M - H4#PE - T2 (100UF 25V)
P301	C317		nsp	00MOA227050Z0	ELECT. CAP.	ROS-50V 221M - J6#PE - S1 (220UF 50V)
P301	C318		nsp	00MOA227050Z0	ELECT. CAP.	ROS-50V 221M - J6#PE - S1 (220UF 50V)
P301	C319		00MOF56331540	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10
P301	C320		00MOF56331540	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10
P301	C321		00MOF56331540	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10
P301	C323		00MOF55220560	00MOF55220560	FILM CAP.	DAMG 22PF 630V
P301	C324		00MOF55220560	00MOF55220560	FILM CAP.	DAMG 22PF 630V
P301	C401		nsp	00MOA226025Z0	ELECT. CAP.	ROS-25V 220M - F3#PE - T2 (22UF 25V)
P301	C402		nsp	00MOA226025Z0	ELECT. CAP.	ROS-25V 220M - F3#PE - T2 (22UF 25V)
P301	C403		nsp	00MOA226025Z0	ELECT. CAP.	ROS-25V 220M - F3#PE - T2 (22UF 25V)
P301	C404		nsp	00MOA226025Z0	ELECT. CAP.	ROS-25V 220M - F3#PE - T2 (22UF 25V)
P301	C405		nsp	00MOA226025Z0	ELECT. CAP.	ROS-25V 220M - F3#PE - T2 (22UF 25V)
P301	C406		nsp	00MOA226025Z0	ELECT. CAP.	ROS-25V 220M - F3#PE - T2 (22UF 25V)
P301	C407		nsp	00MOA227025Z0	ELECT. CAP.	ROS-25V 221M - I5#PE - S13 (220UF 25V)
P301	C408		nsp	00MOA227025Z0	ELECT. CAP.	ROS-25V 221M - I5#PE - S13 (220UF 25V)
P301	C411		nsp	00MOA227025Z0	ELECT. CAP.	ROS-25V 221M - I5#PE - S13 (220UF 25V)
P301	C412		nsp	00MOA227025Z0	ELECT. CAP.	ROS-25V 221M - I5#PE - S13 (220UF 25V)
P301	C413		nsp	00MOA476025Z0	ELECT. CAP.	ROS-25V 470M - G3#PE - T2 (47UF 25V)
P301	C414		00MOF56331540	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P301	C415	nsp	00MOA107025Z0	ELECT. CAP.	ROS-25V 101M - H4#PE - T2 (100UF 25V)	
P301	C416	nsp	00MOA107025Z0	ELECT. CAP.	ROS-25V 101M - H4#PE - T2 (100UF 25V)	
P301	C417	nsp	00MOA227050Z0	ELECT. CAP.	ROS-50V 221M - J6#PE - S1 (220UF 50V)	
P301	C418	nsp	00MOA227050Z0	ELECT. CAP.	ROS-50V 221M - J6#PE - S1 (220UF 50V)	
P301	C419	00MOF56331540	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10	
P301	C420	00MOF56331540	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10	
P301	C421	00MOF56331540	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10	
P301	C423	00MOF55220560	00MOF55220560	FILM CAP.	DAMG 22PF 630V	
P301	C424	00MOF55220560	00MOF55220560	FILM CAP.	DAMG 22PF 630V	
P301	D301	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P301	D302	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P301	D303	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P301	D305	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P301	D306	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P301	D307	00MHI10095320	00MHI10095320	L.E.D.	LT3K44B GREEN 30MA	
P301	D308	00MHI10095320	00MHI10095320	L.E.D.	LT3K44B GREEN 30MA	
P301	D309	00MHD30012010	00MHD30012010	ZENER DIODE	HZ24-2L	
P301	D310	00MHD30012010	00MHD30012010	ZENER DIODE	HZ24-2L	
P301	D311	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P301	D312	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P301	D401	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P301	D402	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P301	D405	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P301	D406	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P301	D407	00MHI10095320	00MHI10095320	L.E.D.	LT3K44B GREEN 30MA	
P301	D408	00MHI10095320	00MHI10095320	L.E.D.	LT3K44B GREEN 30MA	
P301	D409	00MHD30012010	00MHD30012010	ZENER DIODE	HZ24-2L	
P301	D410	00MHD30012010	00MHD30012010	ZENER DIODE	HZ24-2L	
P301	D411	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P301	D412	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P301	L301	00D2140208003	00D2140208003	RELAY	RELAY(NA24W-K)	
P301	L302	00D2140208003	00D2140208003	RELAY	RELAY(NA24W-K)	
P301	L303	00D2140208003	00D2140208003	RELAY	RELAY(NA24W-K)	
P301	L305	00D2140208003	00D2140208003	RELAY	RELAY(NA24W-K)	
P301	L306	00D2140208003	00D2140208003	RELAY	RELAY(NA24W-K)	
P301	L401	00D2140208003	00D2140208003	RELAY	RELAY(NA24W-K)	
P301	L402	00D2140208003	00D2140208003	RELAY	RELAY(NA24W-K)	
P301	L405	00D2140208003	00D2140208003	RELAY	RELAY(NA24W-K)	
P301	L406	00D2140208003	00D2140208003	RELAY	RELAY(NA24W-K)	
P301	Q301	00MKH22AJ1010	00MKH22AJ1010	UNIT & H-IC	HDAM-SA3	
P301	Q302	00MKH22AJ1010	00MKH22AJ1010	UNIT & H-IC	HDAM-SA3	
P301	Q303	00MKH22AJ1010	00MKH22AJ1010	UNIT & H-IC	HDAM-SA3	
P301	Q304	00MKH22AJ1010	00MKH22AJ1010	UNIT & H-IC	HDAM-SA3	
P301	Q305	00MKH22AJ1010	00MKH22AJ1010	UNIT & H-IC	HDAM-SA3	
P301	Q306	00MKH22AJ1010	00MKH22AJ1010	UNIT & H-IC	HDAM-SA3	
P301	Q307	00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL	
P301	Q308	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	
P301	Q309	00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL	
P301	Q310	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	
P301	Q311	00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL	
P301	Q312	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	
P301	Q313	00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL	
P301	Q314	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	
P301	Q315	00MHT41415100	00MHT41415100	TRS.	2SD1415	
P301	Q316	00MHT21020100	00MHT21020100	TRS.	2SB1020	
P301	Q317	00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL	
P301	Q318	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	
P301	Q401	00MKH22AJ1010	00MKH22AJ1010	UNIT & H-IC	HDAM-SA3	
P301	Q402	00MKH22AJ1010	00MKH22AJ1010	UNIT & H-IC	HDAM-SA3	
P301	Q403	00MKH22AJ1010	00MKH22AJ1010	UNIT & H-IC	HDAM-SA3	
P301	Q404	00MKH22AJ1010	00MKH22AJ1010	UNIT & H-IC	HDAM-SA3	
P301	Q405	00MKH22AJ1010	00MKH22AJ1010	UNIT & H-IC	HDAM-SA3	
P301	Q406	00MKH22AJ1010	00MKH22AJ1010	UNIT & H-IC	HDAM-SA3	
P301	Q407	00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL	
P301	Q408	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	
P301	Q409	00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL	
P301	Q410	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P301	Q411		00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL
P301	Q412		00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL
P301	Q413		00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL
P301	Q414		00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL
P301	Q415		00MHT41415100	00MHT41415100	TRS.	2SD1415
P301	Q416		00MHT21020100	00MHT21020100	TRS.	2SB1020
P301	Q417		00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL
P301	Q418		00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL
P301	R313	nsp	00MGD05332160	RES.	3.3K OHM +-5% 1/6W	
P301	R314	nsp	00MGD05103160	RES.	10K OHM +-5% 1/6W	
P301	R332	nsp	00MGD05104160	RES.	100K OHM +-5% 1/6W	
P301	R337	nsp	00MGD05151160	RES.	150 OHM +-5% 1/6W	
P301	R338	nsp	00MGD05151160	RES.	150 OHM +-5% 1/6W	
P301	R339	nsp	00MGD05471160	RES.	470 OHM +-5% 1/6W	
P301	R340	nsp	00MGD05471160	RES.	470 OHM +-5% 1/6W	
P301	R341	nsp	00MGD05102160	RES.	1K OHM +-5% 1/6W	
P301	R342	nsp	00MGD05102160	RES.	1K OHM +-5% 1/6W	
P301	R343	nsp	00MGD05223160	RES.	22K OHM +-5% 1/6W	
P301	R344	nsp	00MGD05223160	RES.	22K OHM +-5% 1/6W	
P301	R347		00MRA01020780	00MRA01020780	TRIM. RES.	1K OHM RH0683C13R
P301	R432	nsp	00MGD05104160	RES.	100K OHM +-5% 1/6W	
P301	R437	nsp	00MGD05151160	RES.	150 OHM +-5% 1/6W	
P301	R438	nsp	00MGD05151160	RES.	150 OHM +-5% 1/6W	
P301	R439	nsp	00MGD05471160	RES.	470 OHM +-5% 1/6W	
P301	R440	nsp	00MGD05471160	RES.	470 OHM +-5% 1/6W	
P301	R441	nsp	00MGD05102160	RES.	1K OHM +-5% 1/6W	
P301	R442	nsp	00MGD05102160	RES.	1K OHM +-5% 1/6W	
P301	R443	nsp	00MGD05223160	RES.	22K OHM +-5% 1/6W	
P301	R444	nsp	00MGD05223160	RES.	22K OHM +-5% 1/6W	
P301	R447		00MRA01020780	00MRA01020780	TRIM. RES.	1K OHM RH0683C13R
						RIGHT PWB P302 (00MWG23AJ302-)
P302	CE04	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
P302	CE05	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
P302	CE06	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
P302	CE07	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
P302	DE01		00MHI10046080	00MHI10046080	L.E.D.	BLUE LED SELU2E10C-P-E/F 3
P302	DE02		00MHI10047080	00MHI10047080	L.E.D.	SEL6E10C BLUE LED
P302	DE03		00MHI10047080	00MHI10047080	L.E.D.	SEL6E10C BLUE LED
P302	QE01		00MBA21303000	00MBA21303000	TRS.	DTC124EU RN1303 UMT
P302	QE02		00MBA21303000	00MBA21303000	TRS.	DTC124EU RN1303 UMT
P302	QE03		00MBA21303000	00MBA21303000	TRS.	DTC124EU RN1303 UMT
P302	RE01	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W	
P302	RE02	nsp	00MNN05821610	CHIP RES.	820 OHM +-5% 1/16W	
P302	RE03	nsp	00MNN05222610	CHIP RES.	2.2K OHM +-5% 1/16W	
P302	RE04	nsp	00MNN05222610	CHIP RES.	2.2K OHM +-5% 1/16W	
P302	RE05	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
P302	RE06	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
P302	RE07	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
P302	RE08	nsp	00MNN05122610	CHIP RES.	1.2K OHM +-5% 1/16W	
P302	RE09	nsp	00MNN05122610	CHIP RES.	1.2K OHM +-5% 1/16W	
P302	RE10	nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W	
P302	SE01		00MSP01013370	00MSP01013370	PUSH SW	EVQ11L05R H/5MM 160GF
P302	SE02		00MSP01013370	00MSP01013370	PUSH SW	EVQ11L05R H/5MM 160GF
P302	SE03		00MSP01013370	00MSP01013370	PUSH SW	EVQ11L05R H/5MM 160GF
						BACK LIGHT PWB P303 (00MWG23AJ303-)
P303	CD11	nsp	00MDK98104200	CER. CAP.	GRM39F104Z16 0.1UF	
P303	DD11		00MHI10005980	00MHI10005980	L.E.D.	NSPW515BS-S-CO
P303	RD11	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
						LEFT PWB P304 (00MWG23AJ304-)
P304	CP01	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
P304	CP02	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P304	CP03	nsp	00MDK96104200	CER. CAP.	0.1 UF +-10 % B 10V	
P304	CP04	nsp	00MDK96104200	CER. CAP.	0.1 UF +-10 % B 10V	
P304	CP05	nsp	00MDK96104200	CER. CAP.	0.1 UF +-10 % B 10V	
P304	CP06	nsp	00MDK96104200	CER. CAP.	0.1 UF +-10 % B 10V	
P304	CP07	nsp	00MDK96104200	CER. CAP.	0.1 UF +-10 % B 10V	
P304	CP08	nsp	00MDK96104200	CER. CAP.	0.1 UF +-10 % B 10V	

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P304	CP09	nsp	00MDK96104200	CER. CAP.	0.1 UF +-10 % B 10V	
P304	CP11	nsp	00MDK96104200	CER. CAP.	0.1 UF +-10 % B 10V	
P304	CP12	nsp	00MDK96104200	CER. CAP.	0.1 UF +-10 % B 10V	
P304	CP13	nsp	00MDK96104200	CER. CAP.	0.1 UF +-10 % B 10V	
P304	CP14	nsp	00MDK96104200	CER. CAP.	0.1 UF +-10 % B 10V	
P304	CP15	nsp	00MDK96104200	CER. CAP.	0.1 UF +-10 % B 10V	
P304	CP16	nsp	00MDK96104200	CER. CAP.	0.1 UF +-10 % B 10V	
P304	CP18	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P304	CP19	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P304	CP22	nsp	00MDD95150300	CER. CAP.	15 PF +-5 % CG 50V GR39	
P304	CP23	nsp	00MDD95150300	CER. CAP.	15 PF +-5 % CG 50V GR39	
P304	CP24	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P304	CP25	nsp	00MDK96152300	CER. CAP.	1500PF (GR39)	
P304	CP26	nsp	00MDK96152300	CER. CAP.	1500PF (GR39)	
P304	CP27	nsp	00MDK96152300	CER. CAP.	1500PF (GR39)	
P304	CP28	nsp	00MDK96152300	CER. CAP.	1500PF (GR39)	
P304	CP30	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
P304	CP32	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
P304	CP34	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
P304	CP35	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
P304	CP41	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P304	CP42	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P304	DP01	00MHZ20018050	00MHZ20018050	CHIP DIODE	1SS302	
P304	DP02	00MHZ20018050	00MHZ20018050	CHIP DIODE	1SS302	
P304	DP03	00MHZ20018050	00MHZ20018050	CHIP DIODE	1SS302	
P304	DP04	00MHZ20018050	00MHZ20018050	CHIP DIODE	1SS302	
P304	DP05	00MHZ20018050	00MHZ20018050	CHIP DIODE	1SS302	
P304	DP06	00MHZ20018050	00MHZ20018050	CHIP DIODE	1SS302	
P304	DP07	00MHZ20018050	00MHZ20018050	CHIP DIODE	1SS302	
P304	DP08	00MHZ20018050	00MHZ20018050	CHIP DIODE	1SS302	
P304	DP09	00MHI10046080	00MHI10046080	L.E.D.	BLUE LED SELU2E10C-P-E/F 3	
P304	DP10	00MHI10047080	00MHI10047080	L.E.D.	SEL6E10C BLUE LED	
P304	DP11	00MHI10047080	00MHI10047080	L.E.D.	SEL6E10C BLUE LED	
P304	LP01	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P304	LP02	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P304	LP03	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P304	LP04	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P304	LP05	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P304	LP06	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P304	LP07	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P304	LP08	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P304	LP09	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P304	LP10	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P304	LP11	00MFN31010060	00MFN31010060	EMI FILTER	EMI FILTER BLM11P600S	
P304	LP12	00MFN31010060	00MFN31010060	EMI FILTER	EMI FILTER BLM11P600S	
P304	QP01	00MHJ23AJX00F	00MHJ23AJX00F	EPROM/EEPROM	EPM570T144C5N (SOFT_SM-11S1)	
P304	QP02	00MHC10047480	00MHC10047480	IC	AK5384	
P304	QP03	00D2623077900	00D2623077900	IC	TC74VHCU04FT +REF	
P304	QP04	00MBA21303000	00MBA21303000	TRS.	DTC124EU RN1303 UMT	
P304	QP05	00MBA21303000	00MBA21303000	TRS.	DTC124EU RN1303 UMT	
P304	QP06	00MBA21303000	00MBA21303000	TRS.	DTC124EU RN1303 UMT	
P304	RP01	nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W	
P304	RP02	nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W	
P304	RP03	nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W	
P304	RP04	nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W	
P304	RP05	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP06	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP07	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP08	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP09	nsp	00MNN05470610	CHIP RES.	47 OHM +-5% 1/16W	
P304	RP10	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP11	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	
P304	RP12	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P304	RP13	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	
P304	RP14	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	
P304	RP15	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	
P304	RP16	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P304	RP17	nsp	00MNN05470610	CHIP RES.	47 OHM +-5% 1/16W	
P304	RP18	nsp	00MNN05331610	CHIP RES.	330 OHM +-5% 1/16W	
P304	RP19	nsp	00MNN05105610	CHIP RES.	1M OHM +-5% 1/16W	
P304	RP21	nsp	00MNN05102610	CHIP RES.	1K OHM +-5% 1/16W	
P304	RP22	nsp	00MNN05821610	CHIP RES.	820 OHM +-5% 1/16W	
P304	RP23	nsp	00MNN05222610	CHIP RES.	2.2K OHM +-5% 1/16W	
P304	RP24	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
P304	RP25	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P304	RP26	nsp	00MNN05222610	CHIP RES.	2.2K OHM +-5% 1/16W	
P304	RP27	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
P304	RP28	nsp	00MNN05122610	CHIP RES.	1.2K OHM +-5% 1/16W	
P304	RP29	nsp	00MNN05122610	CHIP RES.	1.2K OHM +-5% 1/16W	
P304	RP30	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
P304	RP31	nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W	
P304	RP32	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP33	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP34	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP35	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP36	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP37	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP38	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP39	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP40	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP41	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP50	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP51	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP52	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP53	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP54	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP55	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP56	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	RP57	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P304	SU56	00MSP01013370	00MSP01013370	PUSH SW	EVQ11L05R H/5MM 160GF	
P304	SU57	00MSP01013370	00MSP01013370	PUSH SW	EVQ11L05R H/5MM 160GF	
P304	SU58	00MSP01013370	00MSP01013370	PUSH SW	EVQ11L05R H/5MM 160GF	
P304	XP21	00MJX24005350	00MJX24005350	X'TAL	24.576MHZ SMD-49	
					POWER SW P306 (00MWG23AJ306-)	
P306	▲ CS01	00MDF77103500	00MDF77103500	FILM CAP.	! 0.01UF M 250V AC	
P306	▲ SS01	00MSP01012500	00MSP01012500	PUSH SW	! ESB92S13B TV-5 STROKE=1.5MM	
					FRONT PWB P307 (00MWG23AJ301-)	
P307	CU04	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P307	CU05	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P307	CU06	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P307	CU07	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P307	CU08	nsp	00MDD95150300	CER. CAP.	15 PF +-5% CG 50V GR39	
P307	CU09	nsp	00MDD95150300	CER. CAP.	15 PF +-5% CG 50V GR39	
P307	CU10	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P307	CU11	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P307	CU12	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
P307	CU13	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P307	CU14	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P307	CU15	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P307	CU16	nsp	00MDK96102300	CER. CAP.	1000 PF +-10% B 50V GR36	
P307	CU17	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
P307	CU18	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
P307	CU19	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P307	CU20	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P307	CU21	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P307	CU22	nsp	00MDK96103300	CER. CAP.	0.01UF +-10% 50V C1608JB1H103K	
P307	CU23	nsp	00MDD95101300	CER. CAP.	100 PF +-5% CG 50V GR39	
P307	CU24	nsp	00MDD95101300	CER. CAP.	100 PF +-5% CG 50V GR39	
P307	CU25	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P307	CU26	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P307	CV05	nsp	00MDK96102300	CER. CAP.	1000 PF +-10% B 50V GR36	
P307	CV07	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P307	CV09	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	
P307	CV10	nsp	00MDK96104300	CER. CAP.	C1608X7R1H104K	

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P307	CV11	nsp	00MDK98105200	CER. CAP.	1UF 10V F	
P307	CV12	nsp	00MDK98105200	CER. CAP.	1UF 10V F	
P307	CV13	nsp	00MDK98105200	CER. CAP.	1UF 10V F	
P307	CV14	nsp	00MDK98105200	CER. CAP.	1UF 10V F	
P307	CV15	nsp	00MDK98105200	CER. CAP.	1UF 10V F	
P307	DU02	00MHZ20018050	00MHZ20018050	CHIP DIODE	1SS302	
P307	DV01	00MHI10046080	00MHI10046080	L.E.D.	BLUE LED SELU2E10C-P-E/F 3	
P307	DV02	00MHI10005340	00MHI10005340	L.E.D.	HLMF-K200 #2UL RED H=9 3MM	
P307	DV03	00MHZ30751000	00MHZ30751000	CHIP DIODE	7.5V ZENER MA8075-M,UDPS7.5B	
P307	LU01	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU02	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU03	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU04	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU05	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU06	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU07	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU08	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU09	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU10	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU11	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU12	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU13	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU14	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU15	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU16	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU17	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU18	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU19	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU20	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU21	00MFC90020210	00MFC90020210	FERRITE CORE	MLB-1608-1000A-N2	
P307	LU29	00MFC90090010	00MFC90090010	FERRITE CORE	ZBF503D-00(TA)-01	
P307	QU01	00MHC60037010	00MHC60037010	U-PRO	HD64F3687H FLASH	
P307		00M23AJ499A00	00M23AJ499A00	SOFTWARE	SOFTWARE FOR SM-11S1 VER. 001	
P307	QU02	00MHC10433990	00MHC10433990	IC	AT24C08AN-10SI-2.7	
P307	QU03	00MHC809449R0	00MHC809449R0	IC	74HC4094BT	
P307	QU04	00MHC809449R0	00MHC809449R0	IC	74HC4094BT	
P307	QU05	00MHC10229210	00MHC10229210	IC	BD4727G 2.7V RESET IC	
P307	QU06	00MBA10013050	00MBA10013050	TRS.	RN2303 PNFX1(22K+22K)	
P307	QU07	00MHX300012A0	00MHX300012A0	CHIP TRS.	2SC4081 (Q/R) 2SC4116 (Y/GR)	
P307	QU08	00MBA21303000	00MBA21303000	TRS.	DTC124EU RN1303 UMT	
P307	QU09	00MHX300012A0	00MHX300012A0	CHIP TRS.	2SC4081 (Q/R) 2SC4116 (Y/GR)	
P307	QU10	00MBA10013050	00MBA10013050	TRS.	RN2303 PNFX1(22K+22K)	
P307	QU11	00MBA21303000	00MBA21303000	TRS.	DTC124EU RN1303 UMT	
P307	QU12	00MBA21303000	00MBA21303000	TRS.	DTC124EU RN1303 UMT	
P307	QU13	00MBA21303000	00MBA21303000	TRS.	DTC124EU RN1303 UMT	
P307	QU14	00MBA21303000	00MBA21303000	TRS.	DTC124EU RN1303 UMT	
P307	QU15	00MBA10013050	00MBA10013050	TRS.	RN2303 PNFX1(22K+22K)	
P307	QU16	00MBA10013050	00MBA10013050	TRS.	RN2303 PNFX1(22K+22K)	
P307	QU17	00MHX300012A0	00MHX300012A0	CHIP TRS.	2SC4081 (Q/R) 2SC4116 (Y/GR)	
P307	QU18	00MBA21303000	00MBA21303000	TRS.	DTC124EU RN1303 UMT	
P307	QU19	00MBA10013050	00MBA10013050	TRS.	RN2303 PNFX1(22K+22K)	
P307	QU21	00MBA10013050	00MBA10013050	TRS.	RN2303 PNFX1(22K+22K)	
P307	QU22	00MBA21303000	00MBA21303000	TRS.	DTC124EU RN1303 UMT	
P307	QU23	00MHT600121A0	00MHT600121A0	TRS.	KTA1268 GR	
P307	QU24	00MHX300012A0	00MHX300012A0	CHIP TRS.	2SC4081 (Q/R) 2SC4116 (Y/GR)	
P307	QV02	00MBA21303000	00MBA21303000	TRS.	DTC124EU RN1303 UMT	
P307	QV03	00MBA21303000	00MBA21303000	TRS.	DTC124EU RN1303 UMT	
P307	RU01	nsp	00MNN05683610	CHIP RES.	68K OHM +-5% 1/16W	
P307	RU02	nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W	
P307	RU03	nsp	00MNN05223610	CHIP RES.	22K OHM +-5% 1/16W	
P307	RU04	nsp	00MNN05104610	CHIP RES.	100K OHM +-5% 1/16W	
P307	RU05	nsp	00MNN05124610	CHIP RES.	120K OHM +-5% 1/16W	
P307	RU06	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU07	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU08	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU09	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU10	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P307	RU11	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU12	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU13	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU14	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	
P307	RU15	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU16	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU17	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU18	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU19	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU20	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU23	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU24	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
P307	RU25	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
P307	RU26	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU28	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU30	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
P307	RU31	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
P307	RU32	nsp	00MNN05223610	CHIP RES.	22K OHM +-5% 1/16W	
P307	RU33	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU34	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU35	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU36	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU37	nsp	00MNN05223610	CHIP RES.	22K OHM +-5% 1/16W	
P307	RU38	nsp	00MNN05472610	CHIP RES.	4.7K OHM +-5% 1/16W	
P307	RU39	nsp	00MNN05104610	CHIP RES.	100K OHM +-5% 1/16W	
P307	RU40	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
P307	RU41	nsp	00MNN05223610	CHIP RES.	22K OHM +-5% 1/16W	
P307	RU42	nsp	00MNN05223610	CHIP RES.	22K OHM +-5% 1/16W	
P307	RU43	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
P307	RU44	nsp	00MNN05330610	CHIP RES.	33 OHM +-5% 1/16W	
P307	RU45	nsp	00MNN05223610	CHIP RES.	22K OHM +-5% 1/16W	
P307	RU46	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU47	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P307	RU48	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P307	RU49	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P307	RU50	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P307	RU51	nsp	00MNN05000610	CHIP RES.	0 OHM +-5% 1/16W	
P307	RU52	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	
P307	RU53	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU54	nsp	00MNN05101610	CHIP RES.	100 OHM +-5% 1/16W	
P307	RU55	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RU56	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RV02	nsp	00MNN05222610	CHIP RES.	2.2K OHM +-5% 1/16W	
P307	RV03	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
P307	RV04	nsp	00MNN05221610	CHIP RES.	220 OHM +-5% 1/16W	
P307	RV05	nsp	00MNN05103610	CHIP RES.	10K OHM +-5% 1/16W	
P307	RV06	nsp	00MNN05222610	CHIP RES.	2.2K OHM +-5% 1/16W	
P307	RV07	nsp	00MNN05823610	CHIP RES.	82K OHM +-5% 1/16W	
P307	RV08	nsp	00MNN05473610	CHIP RES.	47K OHM +-5% 1/16W	
P307	RV09	nsp	00MNN05823610	CHIP RES.	82K OHM +-5% 1/16W	
P307	XU01	00MFQ08004060	00MFQ08004060	CER. VIB.	CSTS MG 8MHZ (15PF)	
P307	XU02	00MXO001001T0	00MXO001001T0	X'TAL	DT-38 32.768KHZ	
POWER AMP L PWB P501 (00MWG23AJ102-)						
P501	C501	00MOB47708050	00MOB47708050	ELECT. CAP.	470UF/80V PB-FREE	
P501	C502	00MOB47708050	00MOB47708050	ELECT. CAP.	470UF/80V PB-FREE	
P501	C503	00MOF56331540	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10	
P501	C504	nsp	00MOA107025Z0	ELECT. CAP.	ROS-25V 101M - H4#PE - T2 (100UF 25V)	
P501	C505	00MOF55103580	00MOF55103580	FILM CAP.	0.01UF 100V +-5% FNS	
P501	C507	nsp	00MOA47405020	ELECT. CAP.	0.47UF M 50V RA-2	
P501	C508	nsp	00MOA47405020	ELECT. CAP.	0.47UF M 50V RA-2	
P501	C509	nsp	00MOA476025Z0	ELECT. CAP.	47 UF M 25V RA-2	
P501	C510	nsp	00MOA10605020	ELECT. CAP.	10 UF M 50V RA-2	
P501	C511	nsp	00MOA476025Z0	ELECT. CAP.	ROS-25V 470M - G3#PE - T2 (47UF 25V)	
P501	D501	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P501	D502	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P501	D503	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P501	D504	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P501	D505		00MHI10095320	00MHI10095320	L.E.D.	LT3K44B GREEN 30MA
P501	D506		00MHI10095320	00MHI10095320	L.E.D.	LT3K44B GREEN 30MA
P501	D507	nsp		00MHD20027010	DIODE	HSS81TD-E 150V 150MA
P501	D508	nsp		00MHD20027010	DIODE	HSS81TD-E 150V 150MA
P501	D509	nsp		00MHD20027010	DIODE	HSS81TD-E 150V 150MA
P501	D510	nsp		00MHD20027010	DIODE	HSS81TD-E 150V 150MA
P501	D511		00MHD30511000	00MHD30511000	ZENER DIODE	5.1V ZENER EQUIVALENT
P501	J505		00MYP07005670	00MYP07005670	PLUG	IMSA-6065B-06Z065-PT1
P501	J506		00MYP07005670	00MYP07005670	PLUG	IMSA-6065B-06Z065-PT1
P501	J507		00MYP07005670	00MYP07005670	PLUG	IMSA-6065B-06Z065-PT1
P501	J508		00MYP07005670	00MYP07005670	PLUG	IMSA-6065B-06Z065-PT1
P501	K501		00MHK185919C0	00MHK185919C0	TRS. KIT	A1859/C4883 O OR Y PAIR FOR Q517/Q518
P501	K502		00MHK138619F0	00MHK138619F0	TRS. KIT	A1386/C3519 PAIR FOR Q519/Q520 Q521/Q522
P501	Q501		00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL
P501	Q502		00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL
P501	Q503		00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL
P501	Q504		00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL
P501	Q505		00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL
P501	Q506		00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL
P501	Q507		00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL
P501	Q508		00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL
P501	Q509		00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL
P501	Q510		00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL
P501	Q511		00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL
P501	Q512		00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL
P501	Q513		00MHT113602A0	00MHT113602A0	TRS.	2SA1360 O OR Y
P501	Q514		00MHT334232A0	00MHT334232A0	TRS.	2SC3423 O OR Y
P501	Q515		00MHT334212A0	00MHT334212A0	TRS.	2SC3421 O/Y 120V 1A PC=1.5W (10W)
P501	Q516		00MHT113582A0	00MHT113582A0	TRS.	2SA1358 O/Y 120V 1A PC=1.5W (10W)
P501	Q517	nsp		nsp	TRS.	2SC4883 O OR Y PAIR OF K501
P501	Q518	nsp		nsp	TRS.	2SA1859 O OR Y PAIR OF K501
P501	Q519	nsp		nsp	TRS.	2SC3519 O/P/Y PAIR OF K502 WITH Q520
P501	Q520	nsp		nsp	TRS.	2SA1386 O/P/Y PAIR OF K502 WITH Q519
P501	Q521	nsp		nsp	TRS.	2SC3519 O/P/Y PAIR OF K502 WITH Q522
P501	Q522	nsp		nsp	TRS.	2SA1386 O/P/Y PAIR OF K502 WITH Q521
P501	Q523		00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL
P501	Q524		00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL
P501	Q525		00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL
P501	Q526		00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL
P501	Q527		00MHT415080A0	00MHT415080A0	TRS.	2SD1508 HFE>4000
P501	Q528		00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL
P501	Q529		00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL
P501	Q530		00MBA20001000	00MBA20001000	TRS.	DTC114ES/UN4211 10K 10K
P501	Q531		00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL
P501	Q532		00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL
P501	Q533		00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL
P501	R503	nsp		00MGD05561160	RES.	560 OHM +-5% 1/6W
P501	R504	nsp		00MGD05561160	RES.	560 OHM +-5% 1/6W
P501	R515	nsp		00MGD05104160	RES.	100K OHM +-5% 1/6W
P501	R516	nsp		00MGD05104160	RES.	100K OHM +-5% 1/6W
P501	R517	nsp		00MGD05682160	RES.	6.8K OHM +-5% 1/6W
P501	R518	nsp		00MGD05332160	RES.	3.3K OHM +-5% 1/6W
P501	R519		00MRA01020760	00MRA01020760	TRIM. RES.	1K OHM VERTICAL
P501	R537		00MGO05001050	00MGO05001050	RES.	0.1 OHMS +-5% 5W PBR58
P501	R538		00MGO05001050	00MGO05001050	RES.	0.1 OHMS +-5% 5W PBR58
P501	R539		00MGO05001050	00MGO05001050	RES.	0.1 OHMS +-5% 5W PBR58
P501	R540		00MGO05001050	00MGO05001050	RES.	0.1 OHMS +-5% 5W PBR58
P501	R549	nsp		00MGD05682160	RES.	6.8K OHM +-5% 1/6W
P501	R550	nsp		00MGD05682160	RES.	6.8K OHM +-5% 1/6W
P501	R551	nsp		00MGD05223160	RES.	22K OHM +-5% 1/6W
P501	R552	nsp		00MGD05223160	RES.	22K OHM +-5% 1/6W
P501	R553	nsp		00MGD05223160	RES.	22K OHM +-5% 1/6W
P501	R554	nsp		00MGD05223160	RES.	22K OHM +-5% 1/6W
P501	R555	nsp		00MGD05473160	RES.	47K OHM +-5% 1/6W
P501	R556	nsp		00MGD05103160	RES.	10K OHM +-5% 1/6W
P501	R557	nsp		00MGD05473160	RES.	47K OHM +-5% 1/6W
P501	R558	nsp		00MGD05473160	RES.	47K OHM +-5% 1/6W

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P501	R560	nsp	00MGD05683160	RES.	68K OHM +5% 1/6W	
P501	R561	nsp	00MGD05104160	RES.	100K OHM +5% 1/6W	
P501	R562	nsp	00MGD05333160	RES.	33K OHM +5% 1/6W	
					POSISTOR L PWB P581 (00MWG23AJ106-)	
P581	R581	00MHP00009230	00MHP00009230	VARISTOR	POSISTOR PTH487 (01BB-120)	
					POWER AMP R PWB P601 (00MWG23AJ103-)	
P601	C601	00MOB47708050	00MOB47708050	ELECT. CAP.	470UF/80V PB-FREE	
P601	C602	00MOB47708050	00MOB47708050	ELECT. CAP.	470UF/80V PB-FREE	
P601	C603	00MOF56331540	00MOF56331540	FILM CAP.	STAR(126)100VDC331J7-10	
P601	C604	nsp	00MOA107025Z0	ELECT. CAP.	ROS-25V 101M - H4#PE - T2 (100UF 25V)	
P601	C605	00MOF55103580	00MOF55103580	FILM CAP.	0.01UF 100V +5% FNS	
P601	C607	nsp	00MOA47405020	ELECT. CAP.	0.47UF M 50V RA-2	
P601	C608	nsp	00MOA47405020	ELECT. CAP.	0.47UF M 50V RA-2	
P601	C609	nsp	00MOA47602520	ELECT. CAP.	47 UF M 25V RA-2	
P601	C610	nsp	00MOA10605020	ELECT. CAP.	10 UF M 50V RA-2	
P601	C611	nsp	00MOA476025Z0	ELECT. CAP.	ROS-25V 470M - G3#PE - T2 (47UF 25V)	
P601	D601	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P601	D602	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P601	D603	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P601	D604	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P601	D605	00MHI10095320	00MHI10095320	L.E.D.	LT3K44B GREEN 30MA	
P601	D606	00MHI10095320	00MHI10095320	L.E.D.	LT3K44B GREEN 30MA	
P601	D607	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P601	D608	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P601	D609	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P601	D610	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P601	D611	00MHD30511000	00MHD30511000	ZENER DIODE	5.1V ZENER EQUIVALENT	
P601	J605	00MYP07005670	00MYP07005670	PLUG	IMSA-6065B-06Z065-PT1	
P601	J606	00MYP07005670	00MYP07005670	PLUG	IMSA-6065B-06Z065-PT1	
P601	J607	00MYP07005670	00MYP07005670	PLUG	IMSA-6065B-06Z065-PT1	
P601	J608	00MYP07005670	00MYP07005670	PLUG	IMSA-6065B-06Z065-PT1	
P601	K601	00MHK185919C0	00MHK185919C0	TRS. KIT	A1859/C4883 O OR Y PAIR FOR Q617/Q618	
P601	K602	00MHK138619F0	00MHK138619F0	TRS. KIT	A1386/C3519 PAIR FOR Q619/Q620 Q621/Q622	
P601	Q601	00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL	
P601	Q602	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	
P601	Q603	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	
P601	Q604	00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL	
P601	Q605	00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL	
P601	Q606	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	
P601	Q607	00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL	
P601	Q608	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	
P601	Q609	00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL	
P601	Q610	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	
P601	Q611	00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL	
P601	Q612	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	
P601	Q613	00MHT113602A0	00MHT113602A0	TRS.	2SA1360 O OR Y	
P601	Q614	00MHT334232A0	00MHT334232A0	TRS.	2SC3423 O OR Y	
P601	Q615	00MHT334212A0	00MHT334212A0	TRS.	2SC3421 O/Y 120V 1A PC=1.5W (10W)	
P601	Q616	00MHT113582A0	00MHT113582A0	TRS.	2SA1358 O/Y 120V 1A PC=1.5W (10W)	
P601	Q617	00MHT348832A0	00MHT348832A0	TRS.	2SC4883 O OR Y PAIR OF K601	
P601	Q618	00MHT118592A0	00MHT118592A0	TRS.	2SA1859 O OR Y PAIR OF K601	
P601	Q619	00MHT335192A0	00MHT335192A0	TRS.	2SC3519 O/P/Y PAIR OF K602 WITH Q620	
P601	Q620	00MHT113862A0	00MHT113862A0	TRS.	2SA1386 O/P/Y PAIR OF K602 WITH Q619	
P601	Q621	00MHT335192A0	00MHT335192A0	TRS.	2SC3519 O/P/Y PAIR OF K602 WITH Q622	
P601	Q622	00MHT113862A0	00MHT113862A0	TRS.	2SA1386 O/P/Y PAIR OF K602 WITH Q621	
P601	Q623	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	
P601	Q624	00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL	
P601	Q625	00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL	
P601	Q626	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	
P601	Q627	00MHT415080A0	00MHT415080A0	TRS.	2SD1508 HFE>4000	
P601	Q628	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	
P601	Q629	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	
P601	Q630	00MBA20001000	00MBA20001000	TRS.	DTC114ES/UN4211 10K 10K	
P601	Q631	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	
P601	Q632	00MHT109702A0	00MHT109702A0	TRS.	2SA970 GR OR BL	
P601	Q633	00MHT322402A0	00MHT322402A0	TRS.	2SC2240 GR OR BL	
P601	R603	nsp	00MGD05561160	RES.	560 OHM +5% 1/6W	

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P601	R604	nsp	00MGD05561160	RES.	560 OHM +-5% 1/6W	
P601	R615	nsp	00MGD05104160	RES.	100K OHM +-5% 1/6W	
P601	R616	nsp	00MGD05104160	RES.	100K OHM +-5% 1/6W	
P601	R617	nsp	00MGD05682160	RES.	6.8K OHM +-5% 1/6W	
P601	R618	nsp	00MGD05332160	RES.	3.3K OHM +-5% 1/6W	
P601	R619	00MRA01020760	00MRA01020760	TRIM. RES.	1K OHM VERTICAL	
P601	R637	00MGO05001050	00MGO05001050	RES.	0.1 OHMS +-5% 5W PBR58	
P601	R638	00MGO05001050	00MGO05001050	RES.	0.1 OHMS +-5% 5W PBR58	
P601	R639	00MGO05001050	00MGO05001050	RES.	0.1 OHMS +-5% 5W PBR58	
P601	R640	00MGO05001050	00MGO05001050	RES.	0.1 OHMS +-5% 5W PBR58	
P601	R649	nsp	00MGD05682160	RES.	6.8K OHM +-5% 1/6W	
P601	R650	nsp	00MGD05682160	RES.	6.8K OHM +-5% 1/6W	
P601	R651	nsp	00MGD05223160	RES.	22K OHM +-5% 1/6W	
P601	R652	nsp	00MGD05223160	RES.	22K OHM +-5% 1/6W	
P601	R653	nsp	00MGD05223160	RES.	22K OHM +-5% 1/6W	
P601	R654	nsp	00MGD05223160	RES.	22K OHM +-5% 1/6W	
P601	R655	nsp	00MGD05473160	RES.	47K OHM +-5% 1/6W	
P601	R656	nsp	00MGD05103160	RES.	10K OHM +-5% 1/6W	
P601	R657	nsp	00MGD05473160	RES.	47K OHM +-5% 1/6W	
P601	R658	nsp	00MGD05473160	RES.	47K OHM +-5% 1/6W	
P601	R660	nsp	00MGD05683160	RES.	68K OHM +-5% 1/6W	
P601	R661	nsp	00MGD05104160	RES.	100K OHM +-5% 1/6W	
P601	R662	nsp	00MGD05333160	RES.	33K OHM +-5% 1/6W	
					POSISTOR R PWB P681 (00MWG23AJ107-)	
P681	R681	00MHP00009230	00MHP00009230	VARISTOR	POSISTOR PTH487 (01BB-120)	
					SPK.TERMINAL PWB P701 (00MWG23AJ203-)	
P701	C701	nsp	00MOA22602520	ELECT. CAP.	22 UF M 25V RA-2	
P701	C702	nsp	00MOA22602520	ELECT. CAP.	22 UF M 25V RA-2	
P701	C703	nsp	00MOA22505020	ELECT. CAP.	2.2 UF M 50V RA-2	
P701	C704	nsp	00MOA22602520	ELECT. CAP.	22 UF M 25V RA-2	
P701	C705	nsp	00MOA22505020	ELECT. CAP.	2.2 UF M 50V RA-2	
P701	C706	nsp	00MOA22602520	ELECT. CAP.	22 UF M 25V RA-2	
P701	C707	nsp	00MOA107025R0	ELECT. CAP.	ROA-25V 101M -H4#PE - T2 (100UF 25V)	
P701	C708	nsp	00MOA107025R0	ELECT. CAP.	ROA-25V 101M -H4#PE - T2 (100UF 25V)	
P701	C709	00MOF15102540	00MOF15102540	FILM CAP.	1000PF J 100V APSV	
P701	C710	00MOF15102540	00MOF15102540	FILM CAP.	1000PF J 100V APSV	
P701	C711	nsp	00MOA22602520	ELECT. CAP.	22 UF M 25V RA-2	
P701	C712	nsp	00MOA22602520	ELECT. CAP.	22 UF M 25V RA-2	
P701	C713	nsp	00MOA22505020	ELECT. CAP.	2.2 UF M 50V RA-2	
P701	C714	nsp	00MOA22602520	ELECT. CAP.	22 UF M 25V RA-2	
P701	C715	nsp	00MOA22505020	ELECT. CAP.	2.2 UF M 50V RA-2	
P701	C716	nsp	00MOA22602520	ELECT. CAP.	22 UF M 25V RA-2	
P701	C717	nsp	00MOA107025R0	ELECT. CAP.	ROA-25V 101M -H4#PE - T2 (100UF 25V)	
P701	C718	nsp	00MOA107025R0	ELECT. CAP.	ROA-25V 101M -H4#PE - T2 (100UF 25V)	
P701	C719	00MOF15102540	00MOF15102540	FILM CAP.	1000PF J 100V APSV	
P701	C720	00MOF15102540	00MOF15102540	FILM CAP.	1000PF J 100V APSV	
P701	C722	nsp	00MOA10602520	ELECT. CAP.	10 UF M 25V RA-2	
P701	C723	00MOF55393580	00MOF55393580	FILM CAP.	0.039UF 100V +-5% FAS	
P701	C724	00MOF55393580	00MOF55393580	FILM CAP.	0.039UF 100V +-5% FAS	
P701	D701	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P701	D702	nsp	00MHD20027010	DIODE	HSS81TD-E 150V 150MA	
P701	L701	00MLY20240310	00MLY20240310	RELAY	VB-24MBU-510-UC	
P701	L702	00MLY20240310	00MLY20240310	RELAY	VB-24MBU-510-UC	
P701	L703	00MLY20240310	00MLY20240310	RELAY	VB-24MBU-510-UC	
P701	L704	00MLY20240310	00MLY20240310	RELAY	VB-24MBU-510-UC	
P701	L705	00MFC90050060	00MFC90050060	FERRITE CORE	FERRIT BEADS (B-01-AT1F)	
P701	L706	00MFC90050060	00MFC90050060	FERRITE CORE	FERRIT BEADS (B-01-AT1F)	
P701	L707	00MFC90050060	00MFC90050060	FERRITE CORE	FERRIT BEADS (B-01-AT1F)	
P701	Q701	00MHG00002480	00MHG00002480	HALL DEVICE	CQ-120E	
P701	Q702	00MHG00002480	00MHG00002480	HALL DEVICE	CQ-120E	
P701	Q703	00MHC10053090	00MHC10053090	IC	NJM2068DD	
P701	Q704	00MHC10053090	00MHC10053090	IC	NJM2068DD	
P701	Q705	00MHC10053090	00MHC10053090	IC	NJM2068DD	
P701	Q706	00MHC10053090	00MHC10053090	IC	NJM2068DD	
P701	Q707	00MHT600111B0	00MHT600111B0	TRS.	KTA1267 Y	
P701	Q708	00MHT600111B0	00MHT600111B0	TRS.	KTA1267 Y	
P701	Q709	00MBA20001000	00MBA20001000	TRS.	DTC114ES/UN4211 10K 10K	

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P701	Q710		00MBA20001000	00MBA20001000	TRS.	DTC114ES/UN4211 10K 10K
P701	R701		nsp	00MGD05333160	RES.	33K OHM +-5% 1/6W
P701	R702		nsp	00MGD05333160	RES.	33K OHM +-5% 1/6W
P701	R703		nsp	00MGD05152160	RES.	1.5K OHM +-5% 1/6W
P701	R704		nsp	00MGD05152160	RES.	1.5K OHM +-5% 1/6W
P701	R705		nsp	00MGD05152160	RES.	1.5K OHM +-5% 1/6W
P701	R706		nsp	00MGD05152160	RES.	1.5K OHM +-5% 1/6W
P701	R707		nsp	00MGD05391160	RES.	390 OHM +-5% 1/6W
P701	R708		nsp	00MGD05391160	RES.	390 OHM +-5% 1/6W
P701	R709		nsp	00MGD05223160	RES.	22K OHM +-5% 1/6W
P701	R710		nsp	00MGD05223160	RES.	22K OHM +-5% 1/6W
P701	R711		nsp	00MGD05102160	RES.	1K OHM +-5% 1/6W
P701	R712		nsp	00MGD05102160	RES.	1K OHM +-5% 1/6W
P701	R713		nsp	00MGD05102160	RES.	1K OHM +-5% 1/6W
P701	R714		nsp	00MGD05102160	RES.	1K OHM +-5% 1/6W
P701	R715		nsp	00MGD05222160	RES.	2.2K OHM +-5% 1/6W
P701	R716		nsp	00MGD05222160	RES.	2.2K OHM +-5% 1/6W
P701	R717		nsp	00MGD05222160	RES.	2.2K OHM +-5% 1/6W
P701	R718		nsp	00MGD05222160	RES.	2.2K OHM +-5% 1/6W
P701	R719		nsp	00MGD05222160	RES.	2.2K OHM +-5% 1/6W
P701	R720		nsp	00MGD05222160	RES.	2.2K OHM +-5% 1/6W
P701	R721		nsp	00MGD05101160	RES.	100 OHM +-5% 1/6W
P701	R722		nsp	00MGD05101160	RES.	100 OHM +-5% 1/6W
P701	R723		nsp	00MGD05101160	RES.	100 OHM +-5% 1/6W
P701	R724		nsp	00MGD05101160	RES.	100 OHM +-5% 1/6W
P701	R725		nsp	00MGD05391160	RES.	390 OHM +-5% 1/6W
P701	R726		nsp	00MGD05391160	RES.	390 OHM +-5% 1/6W
P701	R727		nsp	00MGD05223160	RES.	22K OHM +-5% 1/6W
P701	R728		nsp	00MGD05223160	RES.	22K OHM +-5% 1/6W
P701	R729		nsp	00MGD05102160	RES.	1K OHM +-5% 1/6W
P701	R730		nsp	00MGD05102160	RES.	1K OHM +-5% 1/6W
P701	R731		nsp	00MGD05102160	RES.	1K OHM +-5% 1/6W
P701	R732		nsp	00MGD05102160	RES.	1K OHM +-5% 1/6W
P701	R733		nsp	00MGD05222160	RES.	2.2K OHM +-5% 1/6W
P701	R734		nsp	00MGD05222160	RES.	2.2K OHM +-5% 1/6W
P701	R735		nsp	00MGD05222160	RES.	2.2K OHM +-5% 1/6W
P701	R736		nsp	00MGD05222160	RES.	2.2K OHM +-5% 1/6W
P701	R737		nsp	00MGD05222160	RES.	2.2K OHM +-5% 1/6W
P701	R738		nsp	00MGD05222160	RES.	2.2K OHM +-5% 1/6W
P701	R739		nsp	00MGD05101160	RES.	100 OHM +-5% 1/6W
P701	R740		nsp	00MGD05101160	RES.	100 OHM +-5% 1/6W
P701	R741		nsp	00MGD05101160	RES.	100 OHM +-5% 1/6W
P701	R742		nsp	00MGD05101160	RES.	100 OHM +-5% 1/6W
P701	R755		nsp	00MGD05473160	RES.	47K OHM +-5% 1/6W
P701	R756		nsp	00MGD05473160	RES.	47K OHM +-5% 1/6W
P701	R757		nsp	00MGD05103160	RES.	10K OHM +-5% 1/6W
P701	R758		nsp	00MGD05103160	RES.	10K OHM +-5% 1/6W
P701	R759	00MNK05100030	00MNK05100030	METAL RES.		10 OHM +-5% 3W
P701	R760	00MNK05100030	00MNK05100030	METAL RES.		10 OHM +-5% 3W
POWER SUPPLY PWB P801 (00MWG23AJ202-)						
P801	C801		nsp	00MOA22805030	ELECT. CAP.	2200UF 50V LKG1H222MESYZT
P801	C802		nsp	00MOA22805030	ELECT. CAP.	2200UF 50V LKG1H222MESYZT
P801	C803		nsp	00MOA108025R0	ELECT. CAP.	ROA-25V 102M - J7#PE - S1 (1000UF 25V)
P801	C804		nsp	00MOA108025R0	ELECT. CAP.	ROA-25V 102M - J7#PE - S1 (1000UF 25V)
P801	C805		nsp	00MOA106035Z0	ELECT. CAP.	ROS-35V 100M - F3#PE - T2 (10UF 35V)
P801	C806		nsp	00MOA106035Z0	ELECT. CAP.	ROS-35V 100M - F3#PE - T2 (10UF 35V)
P801	C808		nsp	00MOA108025R0	ELECT. CAP.	ROA-25V 102M - J7#PE - S1 (1000UF 25V)
P801	C809		nsp	00MOA106035Z0	ELECT. CAP.	ROS-35V 100M - F3#PE - T2 (10UF 35V)
P801	C810		nsp	00MOA22505020	ELECT. CAP.	2.2 UF M 50V RA-2
P801	C811		nsp	00MOA477025R0	ELECT. CAP.	ROA-25V 471M - I6#PE - S13 (470UF 25V)
P801	C812		nsp	00MOA106035Z0	ELECT. CAP.	ROS-35V 100M - F3#PE - T2 (10UF 35V)
P801	C814		nsp	00MOA10605020	ELECT. CAP.	10 UF M 50V RA-2
P801	C816		nsp	00MOA10605020	ELECT. CAP.	10 UF M 50V RA-2
P801	C818		nsp	00MOA10605020	ELECT. CAP.	10 UF M 50V RA-2
P801	▲ D801	00MHD20055100	00MHD20055100	DIODE		! SHOTKY 11EQS10 1A 100V
P801	▲ D802	00MHD20055100	00MHD20055100	DIODE		! SHOTKY 11EQS10 1A 100V
P801	▲ D803	00MHD20055100	00MHD20055100	DIODE		! SHOTKY 11EQS10 1A 100V

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P801	▲ D804		00MHD20055100	00MHD20055100	DIODE	.! SHOTTKY 11EQS10 1A 100V
P801	▲ D805		00MHD20055100	00MHD20055100	DIODE	.! SHOTTKY 11EQS10 1A 100V
P801	▲ D806		00MHD20055100	00MHD20055100	DIODE	.! SHOTTKY 11EQS10 1A 100V
P801	▲ D807		00MHD20055100	00MHD20055100	DIODE	.! SHOTTKY 11EQS10 1A 100V
P801	▲ D808		00MHD20055100	00MHD20055100	DIODE	.! SHOTTKY 11EQS10 1A 100V
P801	▲ D809		00MHD20055100	00MHD20055100	DIODE	.! SHOTTKY 11EQS10 1A 100V
P801	▲ D810		00MHD20055100	00MHD20055100	DIODE	.! SHOTTKY 11EQS10 1A 100V
P801	D811	nsp	00MHD20002000	00MHD20002000	DIODE	1SS133 T-77
P801	▲ D812		00MHD20055100	00MHD20055100	DIODE	.! SHOTTKY 11EQS10 1A 100V
P801	▲ D813		00MHD20055100	00MHD20055100	DIODE	.! SHOTTKY 11EQS10 1A 100V
P801	D814	nsp	00MHD20002000	00MHD20002000	DIODE	1SS133 T-77
P801	D815	nsp	00MHD20002000	00MHD20002000	DIODE	1SS133 T-77
P801	D816	nsp	00MHD20002000	00MHD20002000	DIODE	1SS133 T-77
P801	D817	nsp	00MHD20002000	00MHD20002000	DIODE	1SS133 T-77
P801	▲ G801		00MBF68400010	00MBF68400010	CAP.COMP.	.! 0.68UF/4.7OHM
P801	▲ G802		00MBF68400010	00MBF68400010	CAP.COMP.	.! 0.68UF/4.7OHM
P801	L801		00MLC21060720	00MLC21060720	COIL	10MH SL1923-103KR33
P801	L802		00MLC21060720	00MLC21060720	COIL	10MH SL1923-103KR33
P801	L803		00MFC90050060	00MFC90050060	FERRITE CORE	FERRIT BEADS (B-01-AT1F)
P801	L804		00MFC90050060	00MFC90050060	FERRITE CORE	FERRIT BEADS (B-01-AT1F)
P801	L805		00MFC90050060	00MFC90050060	FERRITE CORE	FERRIT BEADS (B-01-AT1F)
P801	L806		00MFC90050060	00MFC90050060	FERRITE CORE	FERRIT BEADS (B-01-AT1F)
P801	L807		00MFC90050060	00MFC90050060	FERRITE CORE	FERRIT BEADS (B-01-AT1F)
P801	L808		00MFC90050060	00MFC90050060	FERRITE CORE	FERRIT BEADS (B-01-AT1F)
P801	L809		00MFC90050060	00MFC90050060	FERRITE CORE	FERRIT BEADS (B-01-AT1F)
P801	Q801		00MHC3851209F	00MHC3851209F	IC	NJM78M12FA
P801	Q802		00MHC3951209F	00MHC3951209F	IC	NJM79M12AF -12V 0.5A
P801	Q803		00MHC3850509F	00MHC3850509F	IC	NJM78M05FA
P801	Q804		00MHC36J3321F	00MHC36J3321F	IC	BA033T +3.3V 1A TYPE
P801	Q805		00MHT800921B0	00MHT800921B0	TRS.	KTC3199 Y
P801	Q806		00MHT800921B0	00MHT800921B0	TRS.	KTC3199 Y
P801	Q807		00MHT600111B0	00MHT600111B0	TRS.	KTA1267 Y
P801	Q808		00MBA20001000	00MBA20001000	TRS.	DTC114ES/UN4211 10K 10K
P801	Q809		00MHT800921B0	00MHT800921B0	TRS.	KTC3199 Y
P801	Q810		00MHT800921B0	00MHT800921B0	TRS.	KTC3199 Y
P801	Q811		00MHT800921B0	00MHT800921B0	TRS.	KTC3199 Y
P801	Q812		00MHT800921B0	00MHT800921B0	TRS.	KTC3199 Y
P801	Q813		00MHT600111B0	00MHT600111B0	TRS.	KTA1267 Y
P801	Q814		00MHT600111B0	00MHT600111B0	TRS.	KTA1267 Y
P801	Q815		00MHT600111B0	00MHT600111B0	TRS.	KTA1267 Y
P801	Q816		00MBA20001000	00MBA20001000	TRS.	DTC114ES/UN4211 10K 10K
P801	Q817		00MBA20001000	00MBA20001000	TRS.	DTC114ES/UN4211 10K 10K
P801	Q818		00MBA20001000	00MBA20001000	TRS.	DTC114ES/UN4211 10K 10K
P801	Q819		00MBA10001000	00MBA10001000	TRS.	DTA114ES/UN4111 10K 10K
P801	Q820		00MBA20001000	00MBA20001000	TRS.	DTC114ES/UN4211 10K 10K
P801	Q821		00MBA20001000	00MBA20001000	TRS.	DTC114ES/UN4211 10K 10K
P801	Q822		00MBA20001000	00MBA20001000	TRS.	DTC114ES/UN4211 10K 10K
P801	Q823		00MBA20001000	00MBA20001000	TRS.	DTC114ES/UN4211 10K 10K
P801	Q824		00MHT600111B0	00MHT600111B0	TRS.	KTA1267 Y
P801	▲ R801		00MGG05010140	00MGG05010140	RES.	.! 1 OHM +-5% 1/4W ERD25FYJ1R0T
P801	▲ R802		00MGG05010140	00MGG05010140	RES.	.! 1 OHM +-5% 1/4W ERD25FYJ1R0T
P801	▲ R803		00MGG05010140	00MGG05010140	RES.	.! 1 OHM +-5% 1/4W ERD25FYJ1R0T
P801	▲ R804		00MGG05010140	00MGG05010140	RES.	.! 1 OHM +-5% 1/4W ERD25FYJ1R0T
P801	R809	nsp	00MGD05333160	00MGD05333160	RES.	33K OHM +-5% 1/6W
P801	R810	nsp	00MGD05333160	00MGD05333160	RES.	33K OHM +-5% 1/6W
P801	R811	nsp	00MGD05103160	00MGD05103160	RES.	10K OHM +-5% 1/6W
P801	R812	nsp	00MGD05103160	00MGD05103160	RES.	10K OHM +-5% 1/6W
P801	R813	nsp	00MGD05104160	00MGD05104160	RES.	100K OHM +-5% 1/6W
P801	R814	nsp	00MGD05103160	00MGD05103160	RES.	10K OHM +-5% 1/6W
P801	R815	nsp	00MGD05104160	00MGD05104160	RES.	100K OHM +-5% 1/6W
P801	R816	nsp	00MGD05103160	00MGD05103160	RES.	10K OHM +-5% 1/6W
P801	R817	nsp	00MGD05103160	00MGD05103160	RES.	10K OHM +-5% 1/6W
P801	R818	nsp	00MGD05103160	00MGD05103160	RES.	10K OHM +-5% 1/6W
P801	R819	nsp	00MGD05103160	00MGD05103160	RES.	10K OHM +-5% 1/6W
P801	R820	nsp	00MGD05473160	00MGD05473160	RES.	47K OHM +-5% 1/6W
P801	R821	nsp	00MGD05473160	00MGD05473160	RES.	47K OHM +-5% 1/6W
P801	R822	nsp	00MGD05473160	00MGD05473160	RES.	47K OHM +-5% 1/6W

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P801	R823	nsp	00MGD05473160	RES.	47K OHM +5% 1/6W	
P801	R824	nsp	00MGD05473160	RES.	47K OHM +5% 1/6W	
P801	R825	nsp	00MGD05103160	RES.	10K OHM +5% 1/6W	
P801	R826	nsp	00MGD05103160	RES.	10K OHM +5% 1/6W	
P801	R827	nsp	00MGD05223160	RES.	22K OHM +5% 1/6W	
P801	R828	nsp	00MGD05472160	RES.	4.7K OHM +5% 1/6W	
P801	R829	nsp	00MGD05223160	RES.	22K OHM +5% 1/6W	
						AC INPUT PWB P851 (00MWG23AJ201-)
P851	▲ C851		00MDF77103500	00MDF77103500	FILM CAP.	! 0.01UF M 250V AC
P851	▲ C852		00MDF77103500	00MDF77103500	FILM CAP.	! 0.01UF M 250V AC
P851	C854	nsp	00MOA47705020	ELECT. CAP.	470 UF M 50V RA-2	
P851	C855	nsp	00MOA10805020	ELECT. CAP.	ELNA RA2 16X25	
P851	C856	nsp	00MOA10605020	ELECT. CAP.	10 UF M 50V RA-2	
P851	C858	nsp	00MOA10605020	ELECT. CAP.	10 UF M 50V RA-2	
P851	C859	nsp	00MOA10505020	ELECT. CAP.	1 UF M 50V RA-2	
P851	C861	nsp	00MOA106035Z0	ELECT. CAP.	ROS-35V 100M - F3#PE - T2 (10UF 35V)	
P851	C862	nsp	00MOA106035Z0	ELECT. CAP.	ROS-35V 100M - F3#PE - T2 (10UF 35V)	
P851	▲ D851		00MHD20055100	00MHD20055100	DIODE	! SHOTTKY 11EQS10 1A 100V
P851	▲ D852		00MHD20055100	00MHD20055100	DIODE	! SHOTTKY 11EQS10 1A 100V
P851	▲ D853		00MHD20055100	00MHD20055100	DIODE	! SHOTTKY 11EQS10 1A 100V
P851	▲ D854		00MHD20055100	00MHD20055100	DIODE	! SHOTTKY 11EQS10 1A 100V
P851	▲ D855		00MHD20055100	00MHD20055100	DIODE	! SHOTTKY 11EQS10 1A 100V
P851	▲ D856		00MHD20055100	00MHD20055100	DIODE	! SHOTTKY 11EQS10 1A 100V
P851	▲ D859		00MHD20055100	00MHD20055100	DIODE	! SHOTTKY 11EQS10 1A 100V
P851	▲ F851	F N	nsp	0520100200020	FUSE	! 0218010.MXP
P851	▲ F851	/K1G	nsp	0520100170060	FUSE	# T5A L 250V 02180005MXP
P851	▲ F851	/N1G	0520100170060	0520100170060	FUSE	# T5A L 250V 02180005MXP
P851	▲ F851	/N1S	0520100170060	0520100170060	FUSE	# T5A L 250V 02180005MXP
P851	▲ F851	/U1G	nsp	0520100200020	FUSE	! 0218010.MXP
P851	▲ G851		00MBF68400010	00MBF68400010	CAP.COMP.	! 0.68UF/4.7OHM
P851	J853		00MYJ01004670	00MYJ01004670	JACK	LGY6501-0600 3.5 MINI JACK
P851	▲ L851	F N	nsp	00MTS13521210	TRANSF.	# POWER TRANSF. FOR BACKUP 100V
P851	▲ L851	/K1G	nsp	00MTS13521230	TRANSF.	# POWER TRANSF. FOR BACKUP 230V
P851	▲ L851	/N1G	00MTS13521230	00MTS13521230	TRANSF.	# POWER TRANSF. FOR BACKUP 230V
P851	▲ L851	/N1S	00MTS13521230	00MTS13521230	TRANSF.	# POWER TRANSF. FOR BACKUP 230V
P851	▲ L851	/U1G	nsp	00MTS13521220	TRANSF.	# POWER TRANSF. FOR BACKUP 120V
P851	▲ L852		00MLY10240240	00MLY10240240	RELAY	! VS24MB-NR TV-8 SEMKO LISTED
P851	▲ L853		00MLY10240240	00MLY10240240	RELAY	! VS24MB-NR TV-8 SEMKO LISTED
P851	L854		00MFC90050060	00MFC90050060	FERRITE CORE	FERRIT BEADS (B-01-AT1F)
P851	L855		00MFC90050060	00MFC90050060	FERRITE CORE	FERRIT BEADS (B-01-AT1F)
P851	L856		00MFC90050060	00MFC90050060	FERRITE CORE	FERRIT BEADS (B-01-AT1F)
P851	L857		00MFC90050060	00MFC90050060	FERRITE CORE	FERRIT BEADS (B-01-AT1F)
P851	L858		00MFC90050060	00MFC90050060	FERRITE CORE	FERRIT BEADS (B-01-AT1F)
P851	L859		00MFC90050060	00MFC90050060	FERRITE CORE	FERRIT BEADS (B-01-AT1F)
P851	Q851		00MHT41415100	00MHT41415100	TRS.	2SD1415
P851	Q852		00MHC36J3321F	00MHC36J3321F	IC	BA033T +3.3V 1A TYPE
P851	Q853		00MHT600111B0	00MHT600111B0	TRS.	KTA1267 Y
P851	Q854		00MHT600111B0	00MHT600111B0	TRS.	KTA1267 Y
P851	Q855		00MBA20001000	00MBA20001000	TRS.	DTC114ES/UN4211 10K 10K
P851	Q856		00MBA20001000	00MBA20001000	TRS.	DTC114ES/UN4211 10K 10K
P851	Q857		00MBA10001000	00MBA10001000	TRS.	DTA114ES/UN4111 10K 10K
P851	▲ Q858		00MHW10006320	00MHW10006320	PHOTO UNIT	! PC-817 PHOTO CUPLER 1PAIR
P851	Q859		00MBA20001000	00MBA20001000	TRS.	DTC114ES/UN4211 10K 10K
P851	Q860		00MBA10001000	00MBA10001000	TRS.	DTA114ES/UN4111 10K 10K
P851	Q861		00MBA20001000	00MBA20001000	TRS.	DTC114ES/UN4211 10K 10K
P851	▲ R851		00MNQ15022070	00MNQ15022070	ROTOR RES.	! 2.2 OHM 7W W/TEMP. FUSE
P851	▲ R852		00MNQ15022070	00MNQ15022070	ROTOR RES.	! 2.2 OHM 7W W/TEMP. FUSE
P851	▲ R853		00MGG05010140	00MGG05010140	RES.	! 1 OHM +-5% 1/4W ERD25FYJ1R0T
P851	R855		nsp	00MGD05103160	RES.	10K OHM +-5% 1/6W
P851	R856		nsp	00MGD05103160	RES.	10K OHM +-5% 1/6W
P851	R857		nsp	00MGD05104160	RES.	100K OHM +-5% 1/6W
P851	R858		nsp	00MGD05682160	RES.	6.8K OHM +-5% 1/6W
P851	R859		nsp	00MGD05332160	RES.	3.3K OHM +-5% 1/6W
P851	R861		nsp	00MGD05473160	RES.	47K OHM +-5% 1/6W
P851	R862		nsp	00MGD05473160	RES.	47K OHM +-5% 1/6W
P851	R863		nsp	00MGD05103160	RES.	10K OHM +-5% 1/6W
P851	R864		nsp	00MGD05103160	RES.	10K OHM +-5% 1/6W

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
P851	R868	nsp	00MGD05472160	RES.	4.7K OHM +-5% 1/6W	
P851	R869	nsp	00MGD05101160	RES.	100 OHM +-5% 1/6W	
P851	R870	nsp	00MGD05103160	RES.	10K OHM +-5% 1/6W	
P851	R871	nsp	00MGD05182160	RES.	1.8K OHM +-5% 1/6W	
P851	S851	00MSS02021620	00MSS02021620	SLIDE SW	SSSU121700	
					HDAM-S3 PWB (00MWG22AJ501-)	
PN01	DN01	00MHZ20014990	00MHZ20014990	CHIP DIODE	KDS122	
PN01	DN02	00MHZ20014990	00MHZ20014990	CHIP DIODE	KDS122	
PN01	DN03	00MHZ20014990	00MHZ20014990	CHIP DIODE	KDS122	
PN01	DN04	00MHZ20014990	00MHZ20014990	CHIP DIODE	KDS122	
PN01	JN01	00MYP07005670	00MYP07005670	PLUG	IMSA-6065B-06Z065-PT1	
PN01	QN01	00D2710320900	00D2710320900	TRS.	KTA1517-GR-RTK/P	
PN01	QN02	00D2730481900	00D2730481900	TRS.	KTC3911S-GR-RTK/P	
PN01	QN03	00D2710320900	00D2710320900	TRS.	KTA1517-GR-RTK/P	
PN01	QN04	00D2730481900	00D2730481900	TRS.	KTC3911S-GR-RTK/P	
PN01	QN05	00D2730481900	00D2730481900	TRS.	KTC3911S-GR-RTK/P	
PN01	QN06	00D2710320900	00D2710320900	TRS.	KTA1517-GR-RTK/P	
PN01	QN07	00D2730481900	00D2730481900	TRS.	KTC3911S-GR-RTK/P	
PN01	QN08	00D2710320900	00D2710320900	TRS.	KTA1517-GR-RTK/P	
PN01	RN03	nsp	00MNN05561610	CHIP RES.	560 OHM +-5% 1/16W	
PN01	RN04	nsp	00MNN05561610	CHIP RES.	560 OHM +-5% 1/16W	
PN01	RN07	nsp	00MNN05393610	CHIP RES.	39K OHM +-5% 1/16W	
PN01	RN08	nsp	00MNN05393610	CHIP RES.	39K OHM +-5% 1/16W	

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
P307	QU01	HD64F3687H FLASH	C	Software: 00M23AJ499A00

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
P307	QU01	HD64F3687H FLASH	C	Software: 00M23AJ499A00

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。