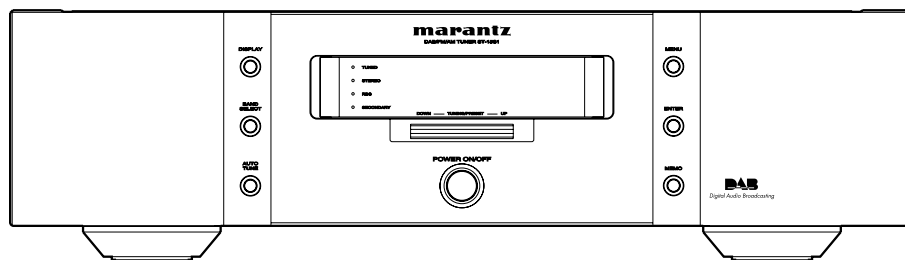


# Service Manual

ST-15S1 /N1G/N1S

DAB / FM / AM Tuner



**DAB**  
Digital Audio Broadcasting

## TABLE OF CONTENTS

SECTION	PAGE
1. TECHNICAL SPECIFICATIONS .....	1
2. FACTORY / SERVICE MODE .....	2
3. WRITING MAIN MICROPROCESSOR PROCEDURE .....	3
4. UPDATE DAB MICROPROCESSOR PROCEDURE .....	12
5. WIRING DIAGRAM .....	21
6. BLOCK DIAGRAM .....	23
7. SCHEMATIC DIAGRAM .....	25
8. PARTS LOCATION .....	29
9. MICROPROCESSOR AND IC DATA .....	35
10. EXPLODED VIEW AND PARTS LIST .....	43
11. ELECTRICAL PARTS LIST .....	47
12. ABOUT REPLACE THE MICROPROCESSOR WITH A NEW ONE .....	59

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®

## ST-15S1

## MARANTZ DESIGN AND SERVICE

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

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

### ORDERING PARTS :

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

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

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

#### USA

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

#### EUROPE / TRADING

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

#### CANADA

**MARANTZ CANADA INC.**  
5-505 APPLE CREEK BLVD.  
MARKHAM, ONTARIO L3R 5B1  
CANADA  
PHONE : 905 - 415 - 9292  
FAX : 905 - 475 - 4159

#### AUSTRALIA

**QualiFi Pty Ltd,**  
24 LIONEL ROAD,  
MT. WAVERLEY VIC 3149  
AUSTRALIA  
PHONE : +61 - (0)3 - 9543 - 1522  
FAX : +61 - (0)3 - 9543 - 3677

#### THAILAND

**MRZ STANDARD CO., LTD**  
746 - 754 MAHACHAI ROAD.,  
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BANGKOK, 10200 THAILAND  
PHONE : +66 - 2 - 222 9181  
FAX : +66 - 2 - 224 6795

#### SINGAPORE

**WO KEE HONG DISTRIBUTION PTE LTD**  
No.1 JALAN KILANG TIMOR  
#08-03 PACIFIC TECH CENTRE  
SINGAPORE 159303  
PHONE : +65 6376 0338  
FAX : +65 6376 0166

#### NEW ZEALAND

**WILDASH AUDIO SYSTEMS NZ**  
14 MALVERN ROAD MT ALBERT  
AUCKLAND NEW ZEALAND  
PHONE : +64 - 9 - 8451958  
FAX : +64 - 9 - 8463554

#### TAIWAN

**PAI- YUING CO., LTD.**  
6 TH FL NO, 148 SUNG KIANG ROAD,  
TAIPEI, 10429, TAIWAN R.O.C.  
PHONE : +886 - 2 - 25221304  
FAX : +886 - 2 - 25630415

#### MALAYSIA

**WO KEE HONG ELECTRONICS SDN. BHD.**  
2ND FLOOR BANGUNAN INFINITE CENTRE  
LOT 1, JALAN 13/6, 46200 PETALING JAYA  
SELANGOR DARUL EHSAN, MALAYSIA  
PHONE : +60 - 3 - 7954 8088  
FAX : +60 - 3 - 7954 7088

#### JAPAN

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

株式会社 ディーアンドエムホールディングス

本 社 〒210-8569  
神奈川県川崎市川崎区日進町2-1 D&Mビル

#### KOREA

**MARANTZ KOREA CO., LTD.**  
ROOM 604, ELECTRO OFFICE, 16-58,  
HANGGANG-RO 3GA, YONGSAN-KU,  
SEOUL, 140-013, 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

### SHOCK, FIRE HAZARD SERVICE TEST :

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

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

Ref. UL Standard No. 1492.

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

# 1. TECHNICAL SPECIFICATIONS

## FM tuner section

Frequency range .....	87.5 MHz ~ 108.0 MHz[/N]
Antenna terminals .....	75 Ω, Unbalanced
Usable sensitivity .....	1.1 μV (12.2 dBf)
.....	1.1 μV (IHF)
Image interference ratio .....	80 dB
IF interference ratio .....	100 dB
AM suppression ratio .....	50 dB
Effective selectivity .....	50 dB (±400 kHz)
Capture ratio .....	2.0 dB
Frequency characteristics ....	20 Hz ~ 15 kHz +0.5/1.0 dB
Signal-to-noise ratio	
Monaural .....	74 dB (IHF), 70 dB (DIN)
Stereo .....	68 dB (IHF), 64 dB (DIN)
Total harmonic distortion	
Mono 1 kHz (at 75 kHz dev.) .....	0.2 %
Stereo 1 kHz (at 67.5 kHz dev.) .....	0.3 %
Stereo separation 1 kHz (WIDE) .....	43 dB

## DAB tuner section [/N version only]

Frequency range	
.....	174.928 (5A) ~ 239.200 (13F) MHz (BAND III)
.....	1452.960 (LA) ~ 1490.624 (LW) MHz (L.BAND)
Sensitivity .....	-99 dBm
Signal-to-noise ratio .....	103 dB
THD+N .....	0.007 % (1 kHz)
Channel separation .....	100 dB (1 kHz)
Selectivity .....	40 dB (at adjacent channel)
Frequency response .....	+0.5/0.5 dB (5 Hz ~ 20 kHz)
Digital output .....	Optical, Coaxial
Sampling frequency .....	48 kHz
Aerial terminal .....	75 Ω, F female
Analog output level .....	2 Vrms

## AM tuner section

Frequency range .....	522 kHz ~ 1611kHz[/N]
Antenna terminals .....	Terminal type with loop antenna
Usable sensitivity .....	18 μV
Signal-to-noise ratio .....	53 dB

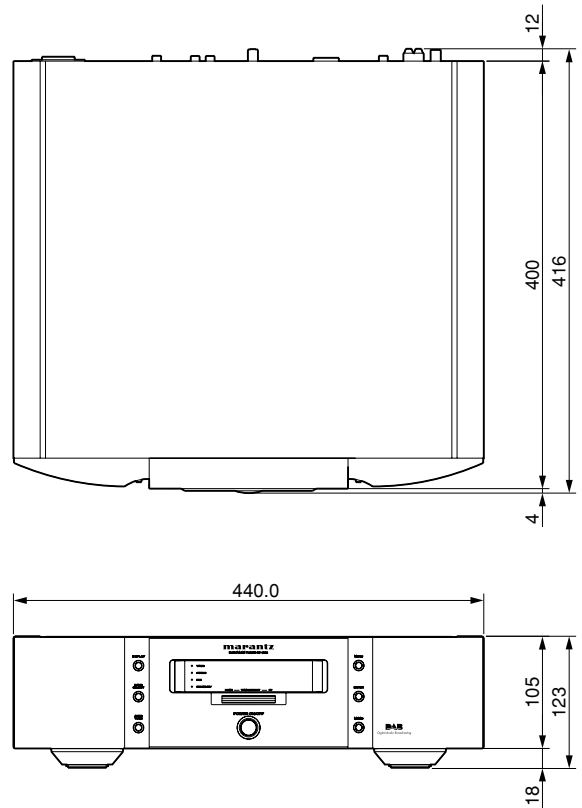
## General

Power supply .....	AC 230 V, 50 Hz[/N]
Power consumption .....	12 W
Weight .....	12.3 kg

## Accessories

Audio connecting cord .....	1
Power supply cord .....	1
AM loop antenna .....	1
FM indoor antenna .....	1
DAB indoor antenna .....	1[/N]
Remote Control Connecting Cord .....	1
User Guide .....	1

## DIMENSIONS (Unit : mm)



## 2. FACTORY / SERVICE MODE

### A. FACTORY MODE

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

1. Press the **POWER ON/OFF** button to turn on the power.
2. Press at the same time for **MENU** button + **BANDSELECT** button and mains cord pull out.
3. Mains cord pull in.
4. During the initialization, it is converted to DAB Auto Tuning state.

#### Note

- If step 3 does not work, start over from step 1.
- If the microprocessor has been initialized all the button settings are reset to the default values (the values set upon shipment from the factory).

### B. SERVICE MODE

#### 1. Microprocessor Version check

- 1) Connect mains cord to the unit.
- 2) Press the **POWER ON/OFF** button while pressing **MENU** and **DISPLAY** button.
- 3) All Segments of FLD will be light ON.

### A. FACTORY モード

1. **POWER ON/OFF**ボタンを押し本体の電源を入れます。
2. **MENU**ボタンと**BANDSELECT**ボタンを押しながら電源ケーブルを本体から抜きます。
3. 電源ケーブルを本体に差し込みます。
4. 初期化の間、DAB自動選局状態に変わります。

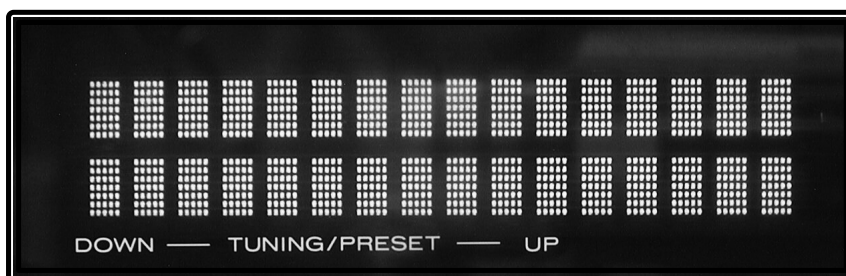
#### 注意

- もし、手順3で動作しない場合は手順1からやり直してください。
- マイコンが初期化された場合、ボタンの設定はすべて、工場からの出荷状態になります。

### B. SERVICE モード

#### 1. Microprocessor (CPU) VERSION確認

- 1) 本体に電源コードを接続します。
- 2) **MENU**ボタンと**DISPLAY**ボタンを押しながら**POWER ON/OFF**ボタンを押します。
- 3) FLDが全点灯します。

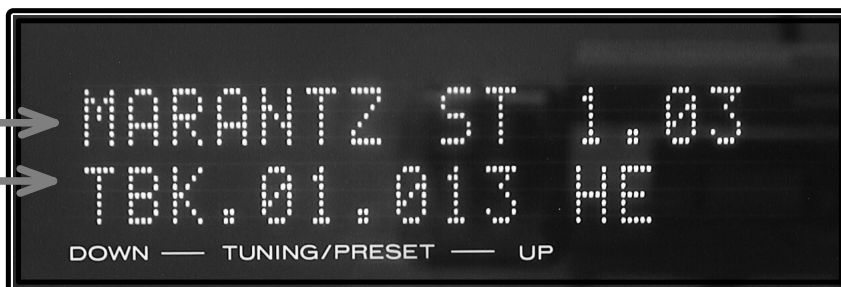


- 4) Turn **GYRO TUNING** dial. VIRSION is displayed on FLD.  
Ex. :

- 4) **GYRO TUNING**ツマミを回転されるとマイコンのバージョンが表示されます。  
表示例 :

Main Microprocessor VERSION →

DAB Software VERSION →



- 5) Turn off power to quit Service mode.

- 5) 電源を切るとサービスモードが解除されます。

### 3. WRITING MAIN MICROPROCESSOR PROCEDURE

#### NECESSARY EQUIPMENT

- Windows PC (OS : Windows2000 or WindowsXP) with Serial Port
  - RS-232C Cable straight type (9 Pin male - 9 Pin female)
  - Connection JIG : ST-7001 DAB/MICOM UPGRADE BOARD (90M-ST7001JIG)
  - Writing software (flashprog16lx-v01111.exe)
  - Writing data (Marantz\_DABxxxx.mhx)
- NOTE: xx is a revision number.

#### 必要機器

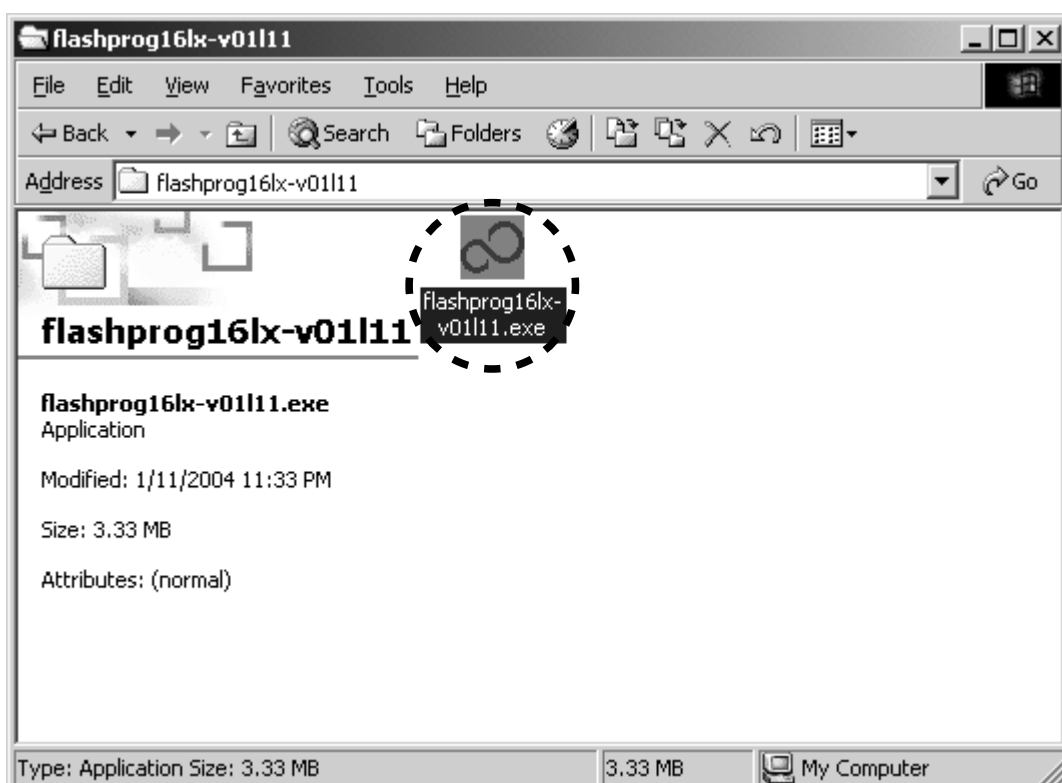
- Windows PC (OS : Windows2000 または WindowsXP) で Serial ポートのあるもの
- RS-232C ストレートケーブル (9Pin オス -9Pin メス)
- 接続治具 : ST-7001 DAB/MICOM UPGRADE BOARD (90M-ST7001JIG)
- 書き込み用ソフトウェア (flashprog16lx-v01111.exe)
- 書き込み用データ (Marantz\_DABxxxx.mhx)

#### INSTALL PROCEDURE

Double click **flashprog16lx-v01111.exe**.

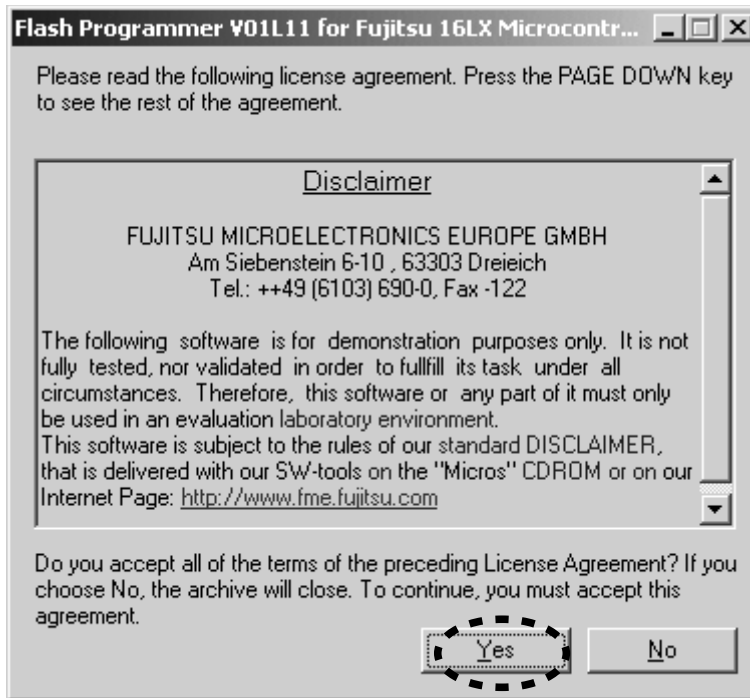
#### インストール手順

**flashprog16lx-v01111.exe** をダブルクリックします。



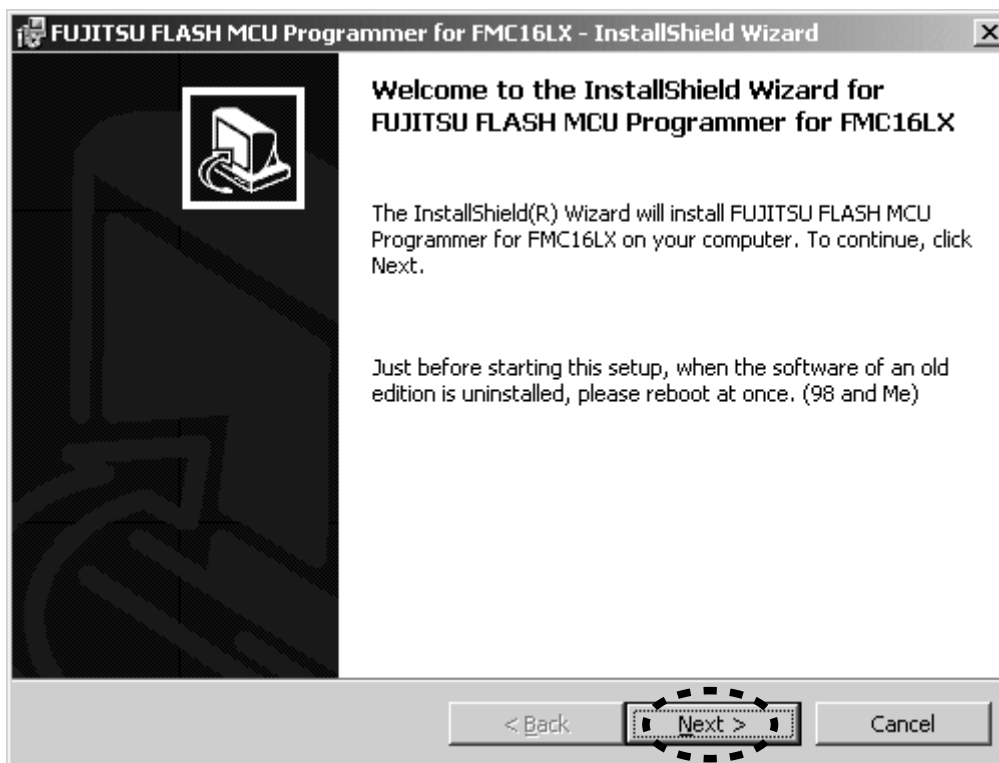
Click **Yes**.

**Yes** をクリックします。



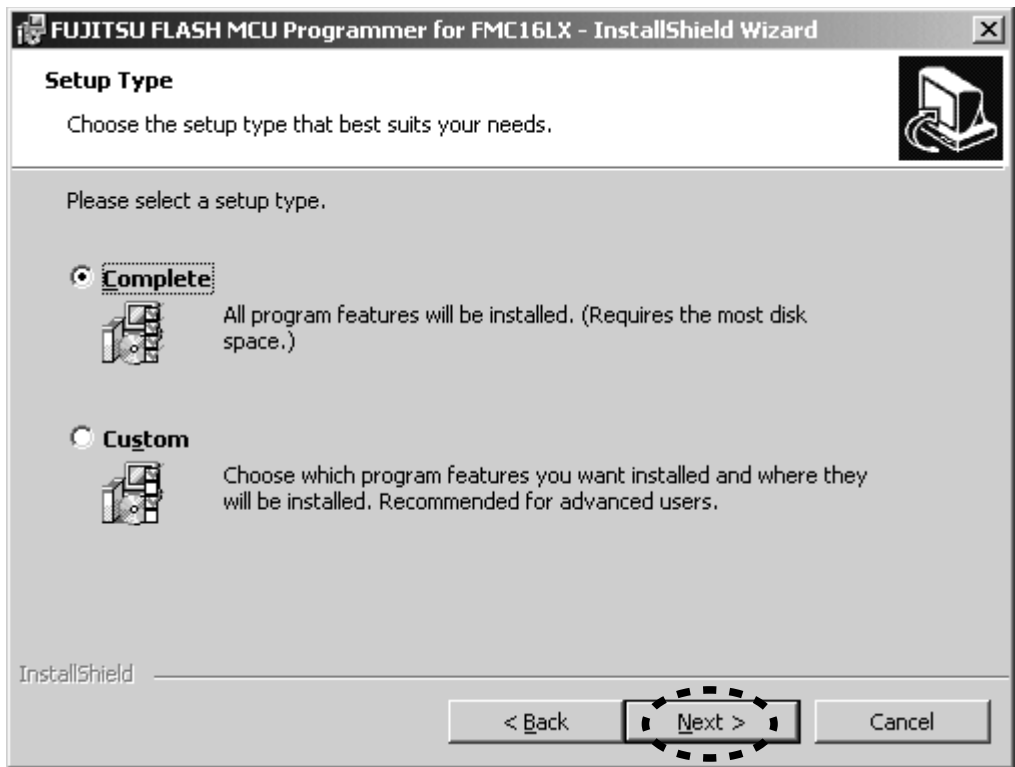
Click **Next**.

**Next** をクリックします。



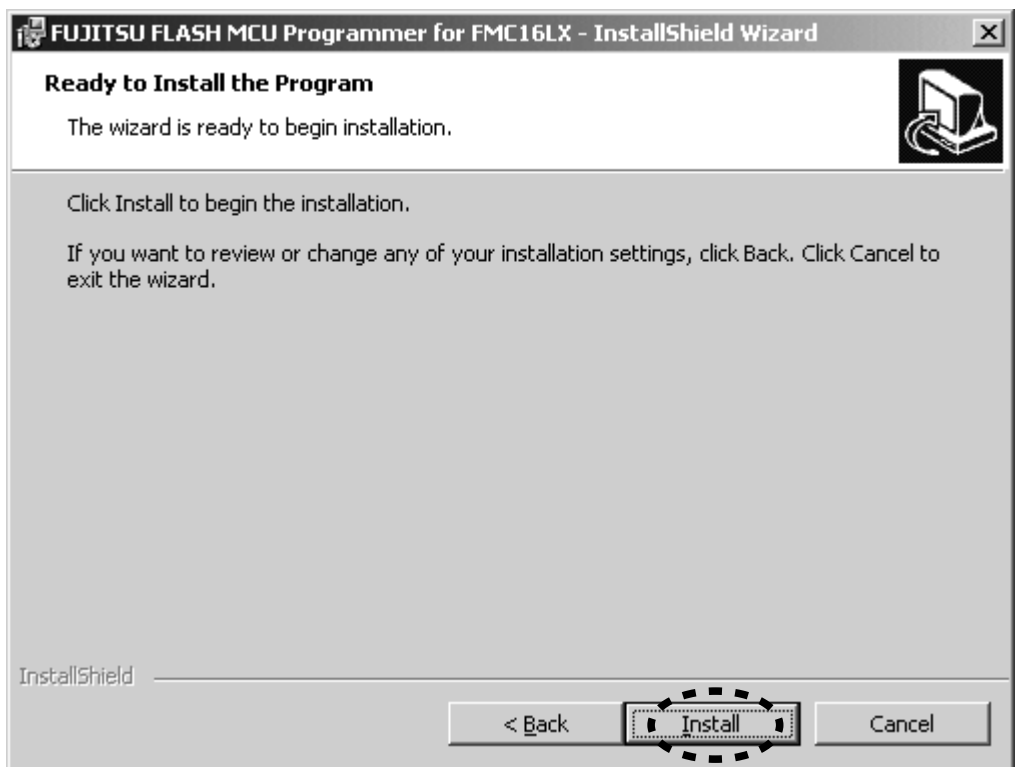
Check **Complete**, and click **Next**.

**Complete** にチェックを入れて **Next** をクリックします。



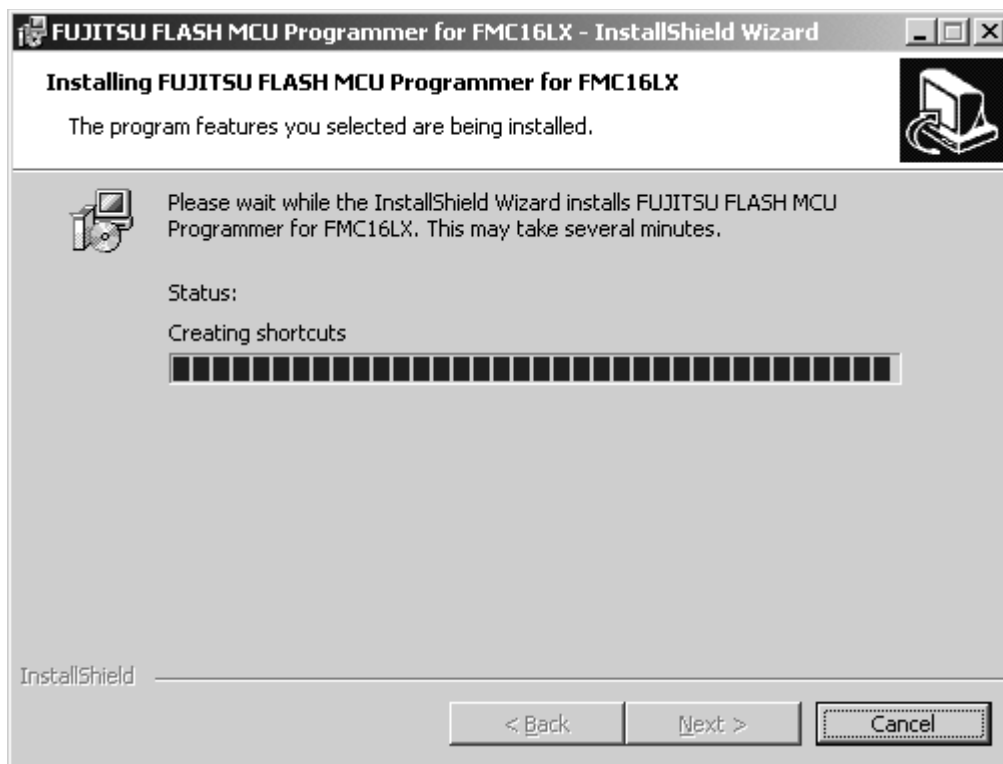
Click **Install**.

**Install** をクリックします。



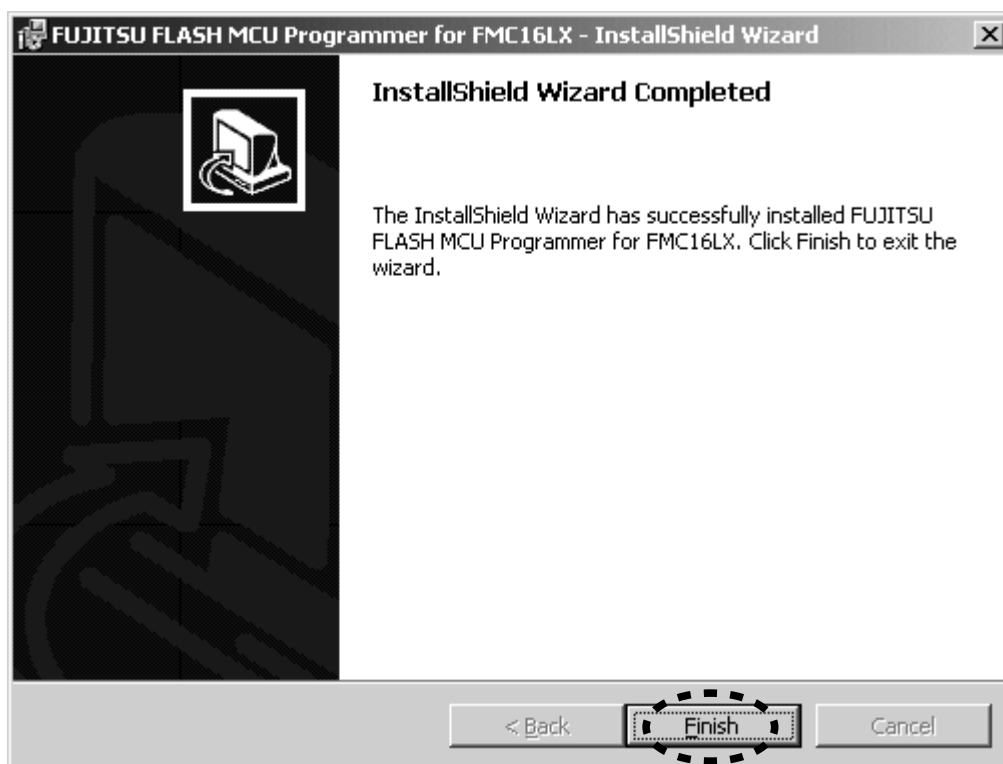
The status bar appears.

インストールが開始します。



Click **Finish**.

**Finish** をクリックします。



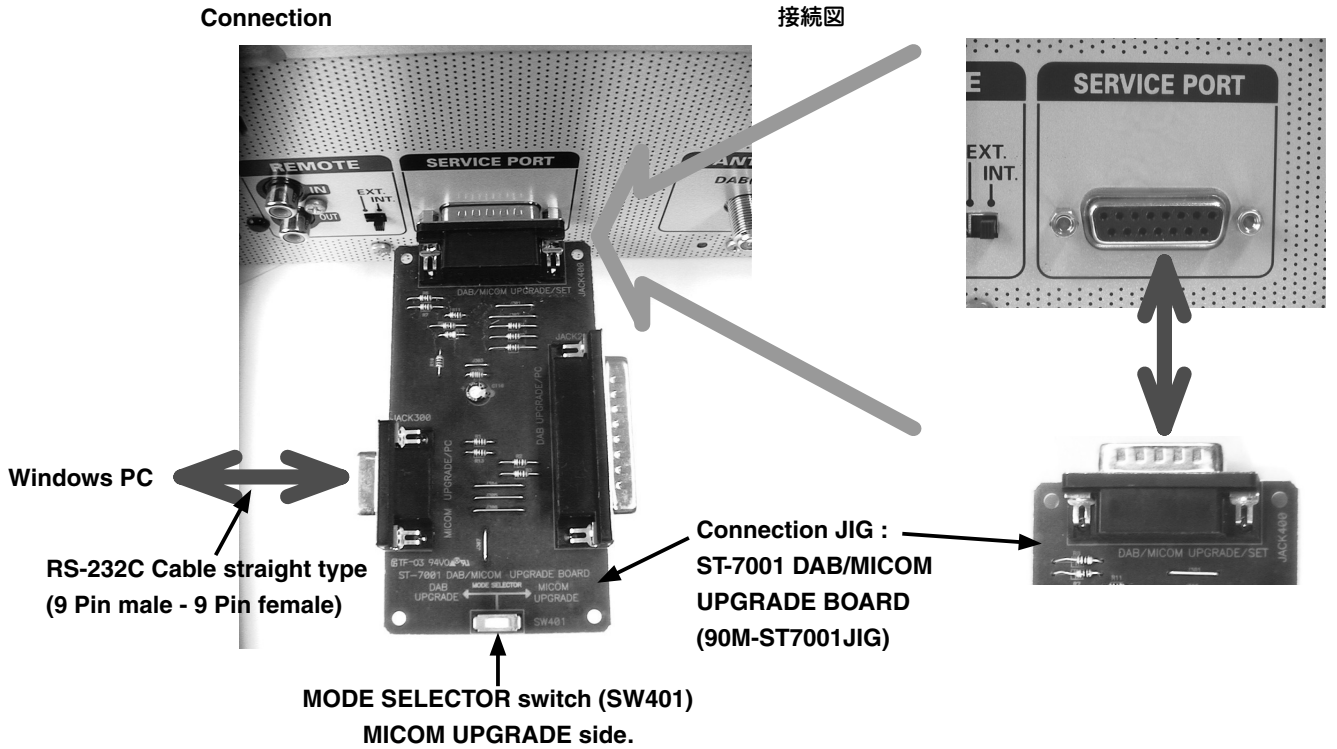


**WRITING PROCEDURE**

Disconnect the mains cord from the unit.  
 Connect RS-232C on the connection JIG and Serial Port of windows PC with RS-232C cable.  
 Turn the MODE SELECTOR switch (SW401) of Connection JIG to the MICOM UPGRADE side.  
 Connect the connection JIG to SERVICE PORT in the rear panel of the unit.  
 Connect mains cord to the unit.  
 Press the **POWER ON/OFF** button, and turn on the unit.  
 Launch up the FUJITSU Flash MCU Programmer (FMC16LX).

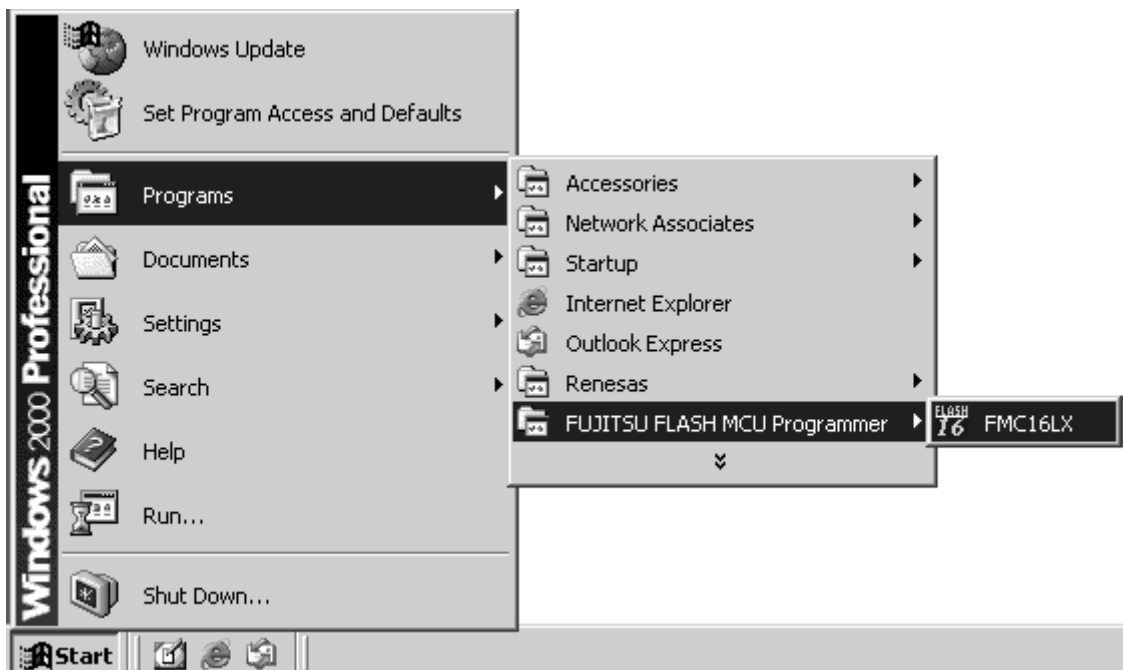
**書き込み手順**

本機の電源ケーブルを抜きます。  
 Windows PC の Serial Port と接続治具を RS-232C ケーブルで接続します。  
 接続治具の MODE SELECTOR スイッチ (SW401) を MICOM UPGRADE 側に切替えます。  
 接続治具を本体のリアパネルにある SERVICE PORT に接続します。  
 本体の電源ケーブルを差し込みます。  
**POWER ON/OFF** ボタンを押し、本体の電源を入れます。



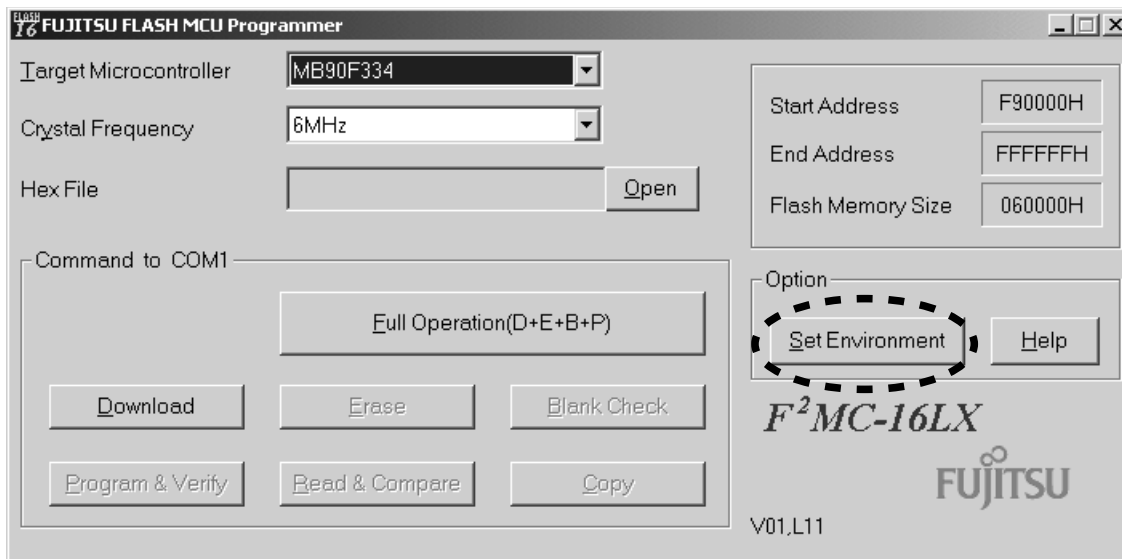
Click **Start**, **programs**, **FUJITSU FLASH MCU Programmer** and **FMC16LX**.

**Start** → **programs** → **FUJITSU FLASH MCU Programmer** → **FMC16LX** をクリックして起動します。



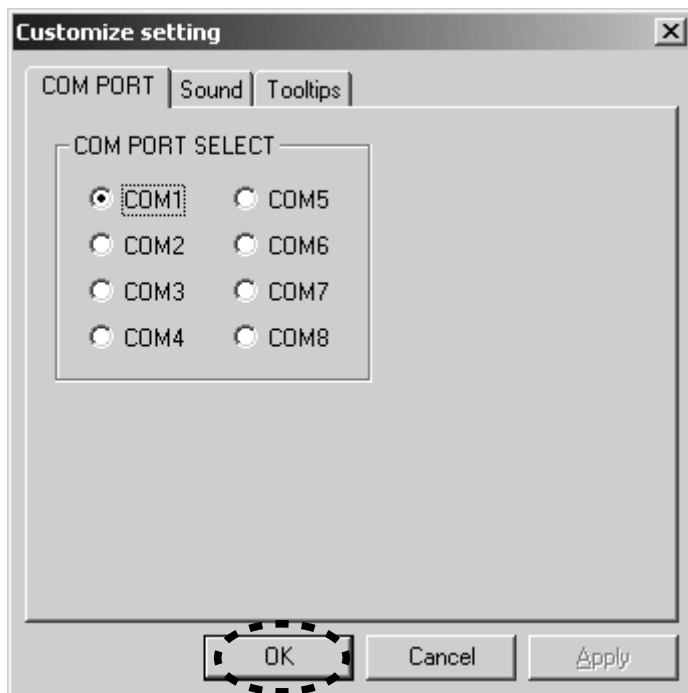
Click **Set Environment**.

**Set Environment** をクリックします。



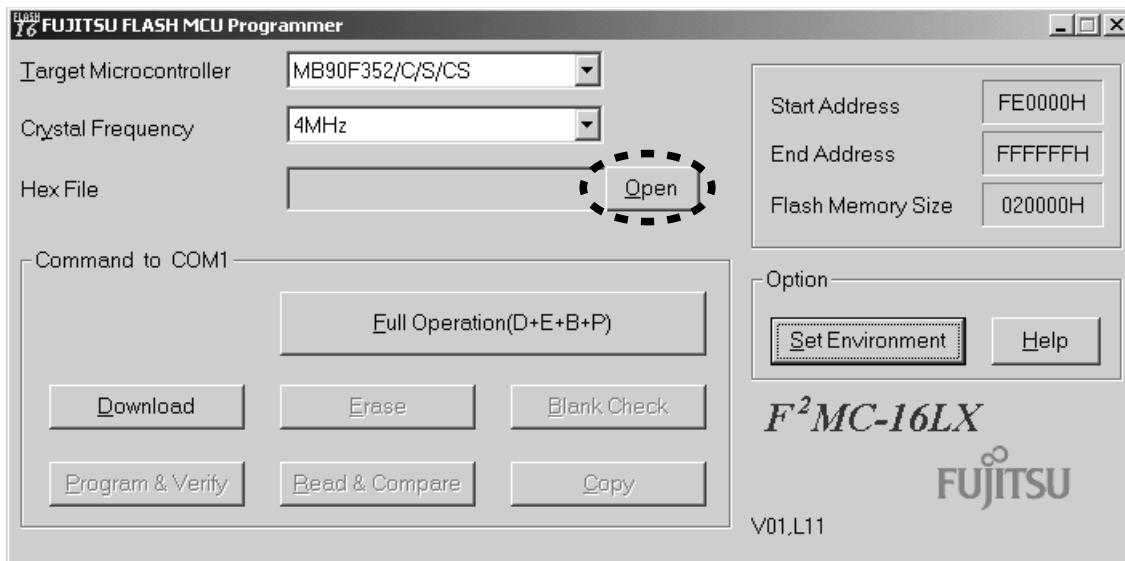
Choose the using serial port, and click **OK**.

接続している Serial Port 番号を選び、**OK** をクリックします。



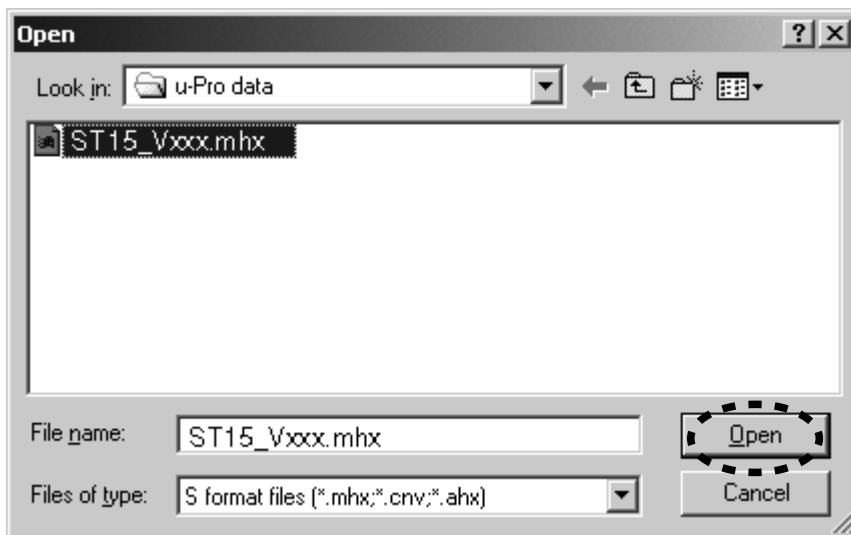
Choose **MB90F352/C/S/CS** in Target Microcontroller.  
Choose **4MHz** in Crystal Frequency.  
Click **Open**.

Target Microcontroller から **MB90F352/C/S/CS** を選びます。  
Crystal Frequency から **4MHz** を選びます。  
**Open** をクリックします。



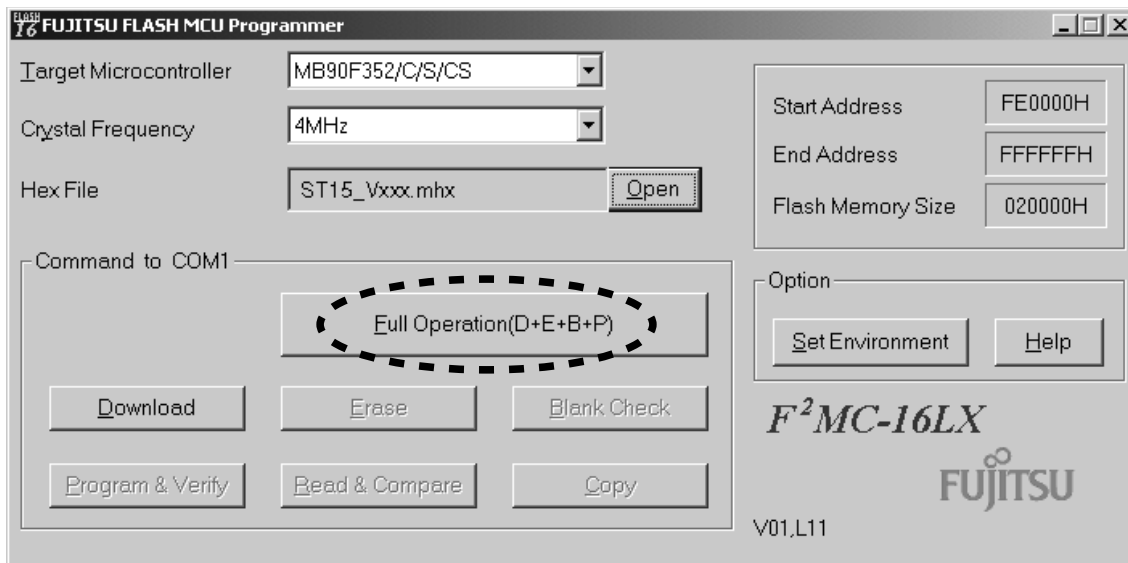
Select writing data, and click **Open**.

書き込みデータを選び、**Open** をクリックします。



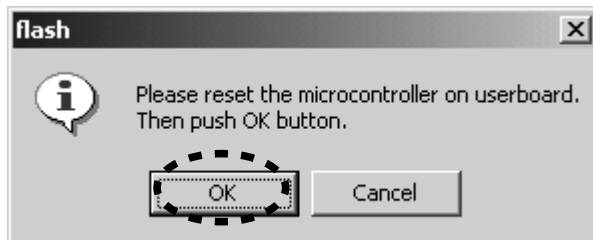
Click **Full Operation(D+E+B+P)**.

**Full Operation(D+E+B+P)** をクリックします。



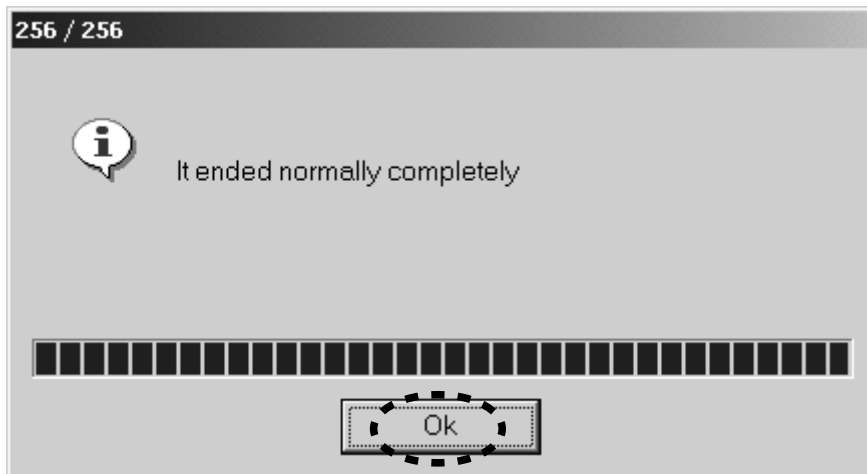
Click **OK**.

**OK** をクリックします。



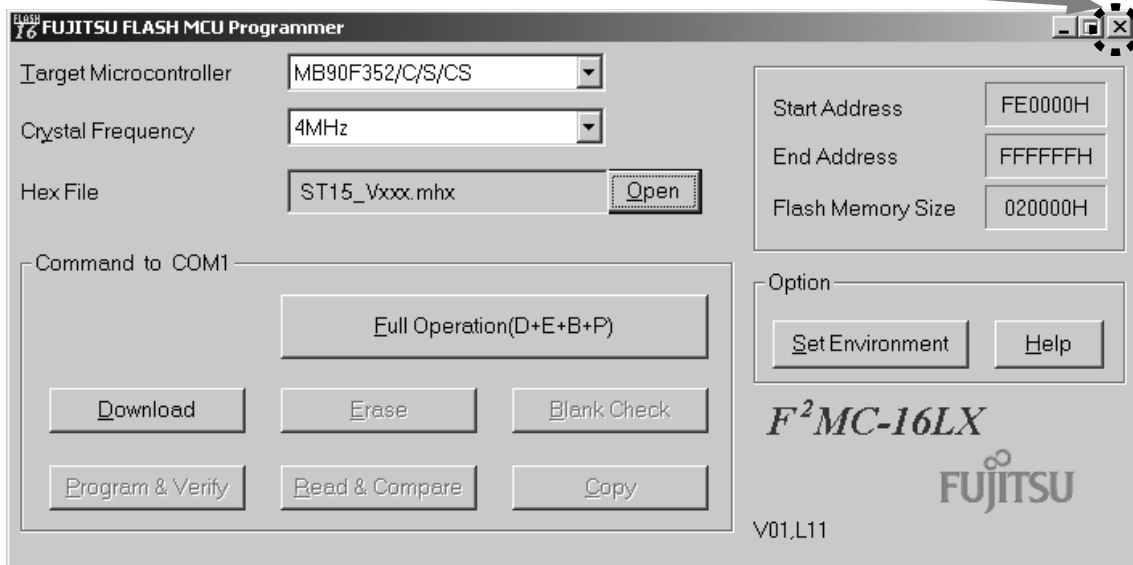
Click **OK**.

**OK** をクリックします。



Click X icon, and close FUJITSU Flash MCU Programmer (FMC16LX).

X(閉じる)アイコンをクリックし終了します。



Disconnect mains cord from the unit.

Disconnect connection JIG from the unit.

Check the version.

Refer to "2. SERVICE MODE" on page 2.

本体から電源ケーブルを抜きます。

接続治具を外します。

バージョンを確認してください。

2ページの"2. SERVICE MODE"で確認します。

## 4. UPDATE DAB MICROPROCESSOR PROCEDURE

### NECESSARY EQUIPMENT

- Windows PC (OS : Windows2000 or WindowsXP) with Parallel Port
  - Parallel Cable straight type (25 Pin male - 25 Pin female)
  - Connection JIG : ST-7001 DAB/MICOM UPGRADE BOARD (90M-ST7001JIG)
  - Writing software and several files (DAB folder: include fast DRE310 Programmer.exe, install.bat, etc...)
  - Writing data (Flash\_DRE310\_EVMSPISLAVE\_ 20050701\_TBK\_01\_002\_HE.bin)
- NOTE: File name will change according to release date.

### 必要機器

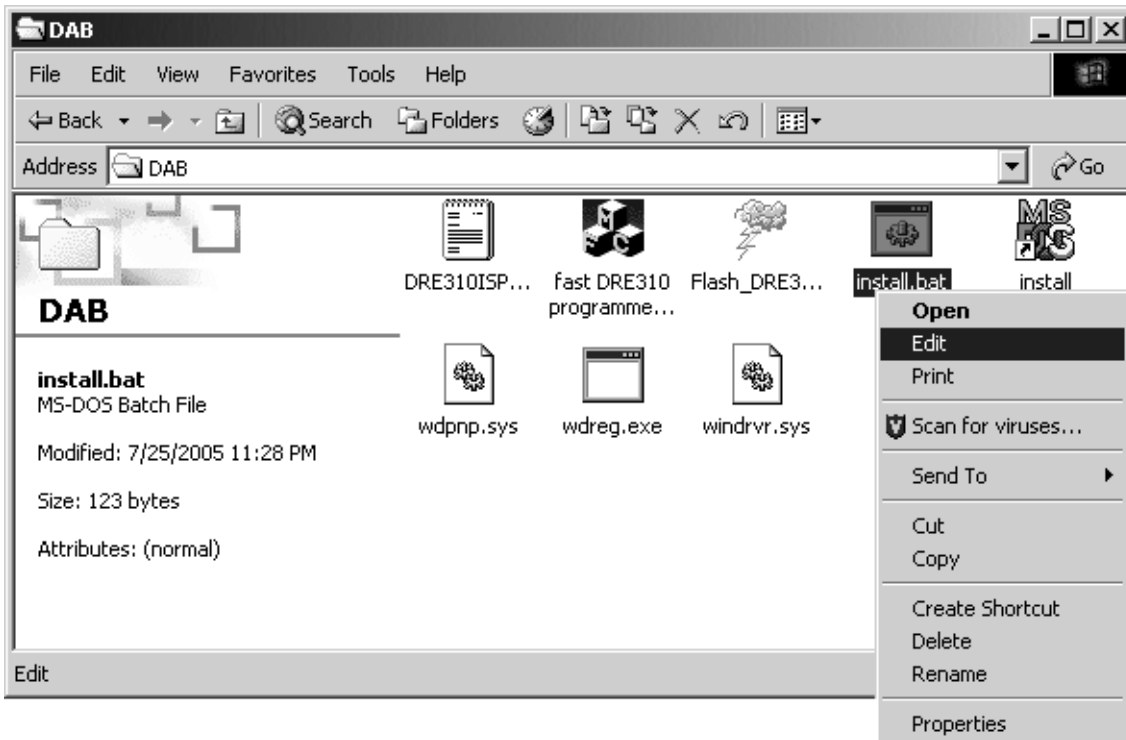
- Windows PC (OS : Windows2000 または WindowsXP) で Parallel ポートのあるもの
- Parallel ストレートケーブル (25Pin オス -25Pin メス)
- 接続治具 : ST-7001 DAB/MICOM UPGRADE BOARD (90M-ST7001JIG)
- 書き込み用ソフトウェア一式 (DAB フォルダ内 fast DRE310 Programmer.exe、install.bat など)
- 書き込み用データ (Flash\_DRE310\_EVMSPISLAVE\_ 2005 0701\_TBK\_01\_002\_HE.bin) ファイル名は変更になる場合があります。

### INSTALL PROCEDURE

Press right button of mouse on the **install.bat**, and choose the **Edit** in a menu.

### インストール手順

**install.bat** を右クリックしメニューを出し、編集 (**Edit**) を選びます。

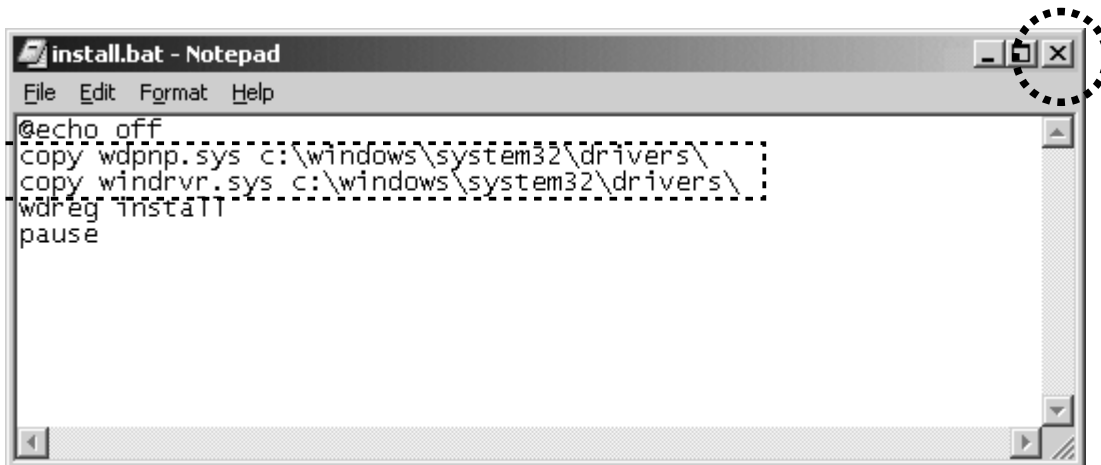


The text which copies "wdpnp.sys" and a "windrvr.sys" file to the system folder of Windows is described. Check the following texts. When text is different, correct it, then save as same filename.

Case of Windows XP

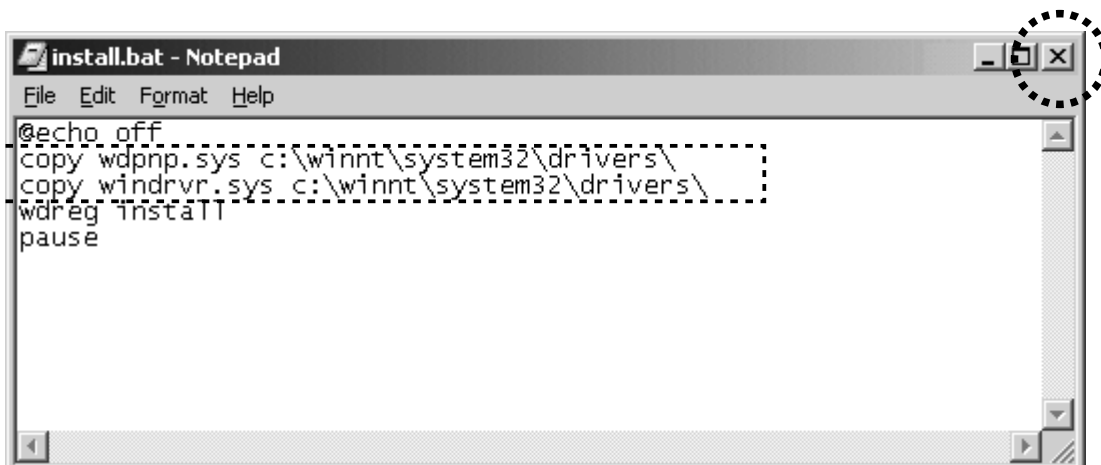
wdpnp.sys と windrvr.sys ファイルを Windows のシステムフォルダにコピーする文章が書かれています。下記の通りにかかれているか確認してください。もし、下記と違う場合は違う箇所を書き直し、上書き保存をしてください。

Windows XP の場合



Case of Windows 2000

Windows 2000 の場合

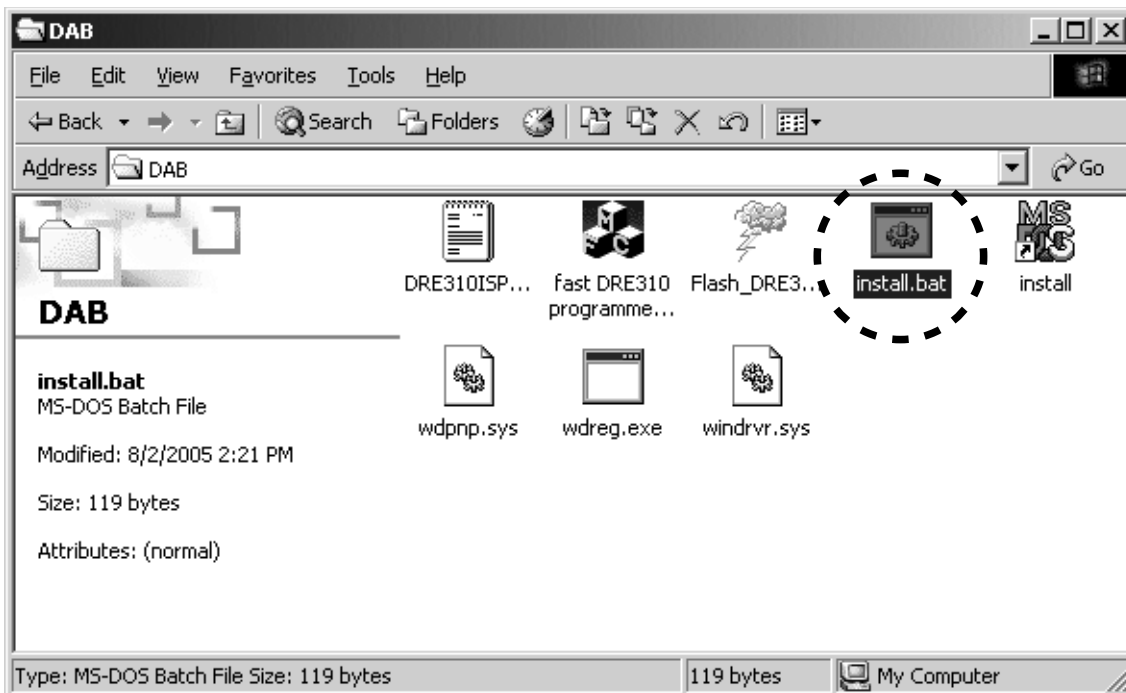


Click X icon, and close.

X アイコンをクリックして閉じます。

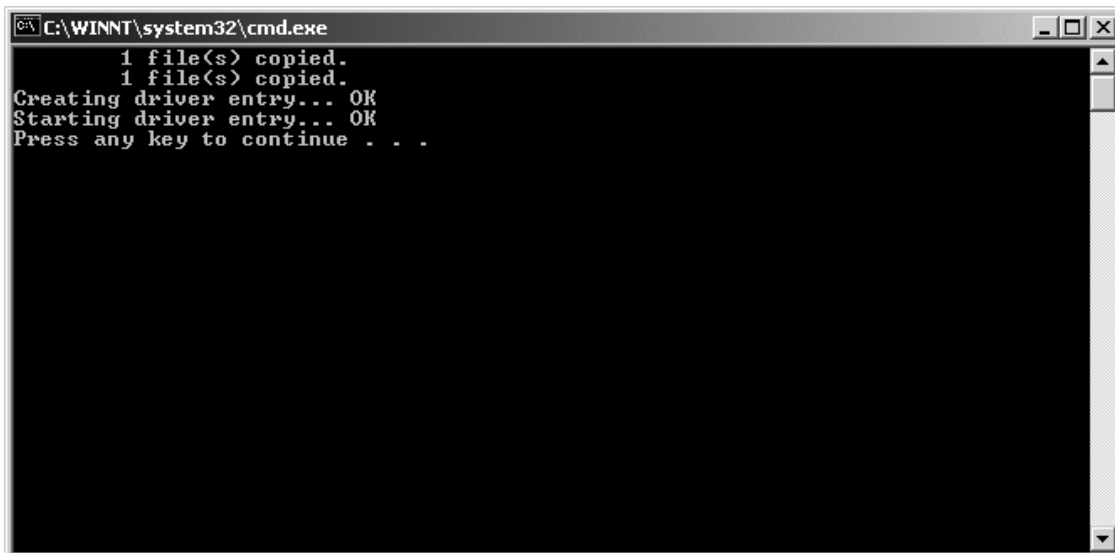
Double click **Install.bat**.

**Install.bat** をダブルクリックします。



Command prompt is launched, and files are copied.  
Check that the files have been copied.  
Press the **Enter** or **Space** button, and command prompt is closed automatically.

コマンドプロンプトが立ち上がりファイルをコピーします。  
ファイルがコピーされたことを確認してください。  
**Enter** または **Space** を押すと、自動的にコマンドプロンプトが閉じます。





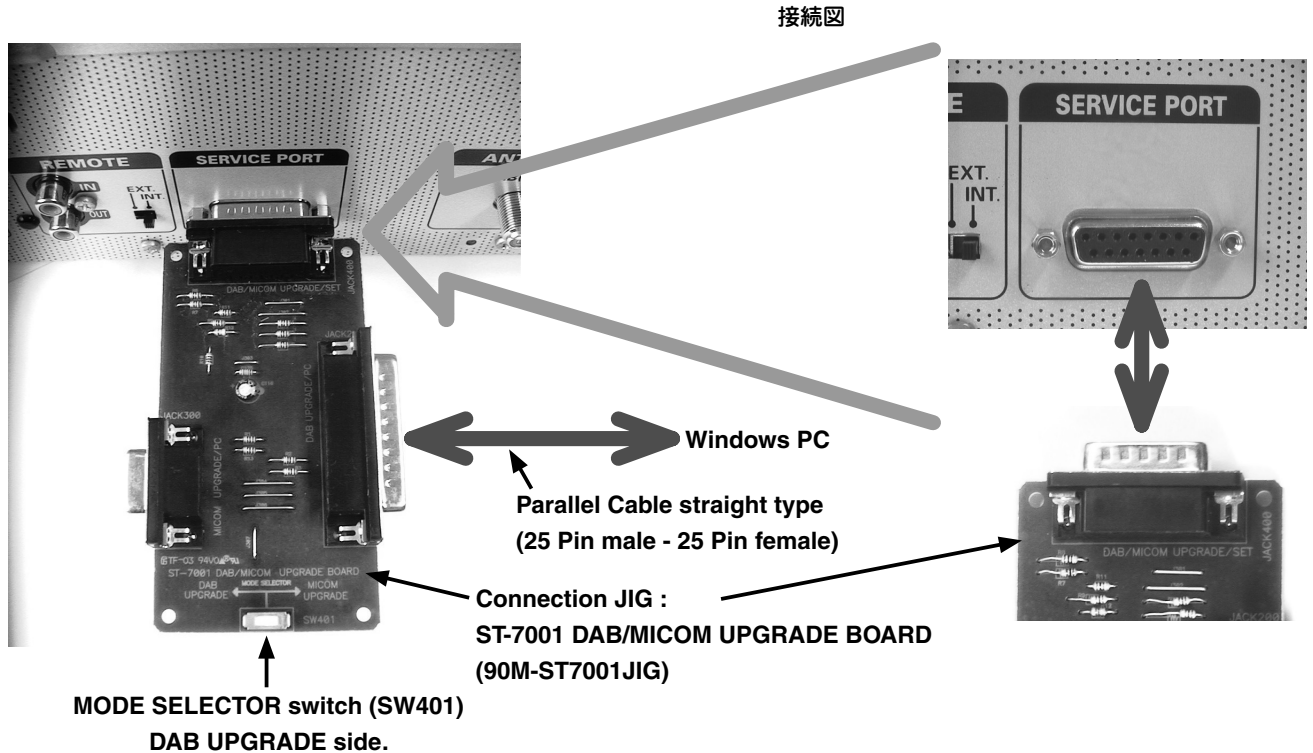
**WRITING PROCEDURE**

- Disconnect the mains cord from the unit.
- Connect Parallel connector on the connection JIG and Parallel Port of windows PC with parallel cable.
- Turn the MODE SELECTOR switch (SW401) of Connection JIG to the DAB UPGRADE side.
- Connect the connection JIG to SERVICE PORT in the rear panel of the unit.
- Connect mains cord to the unit.
- Press the **POWER ON/OFF** button, and turn on the unit.

**Connection**

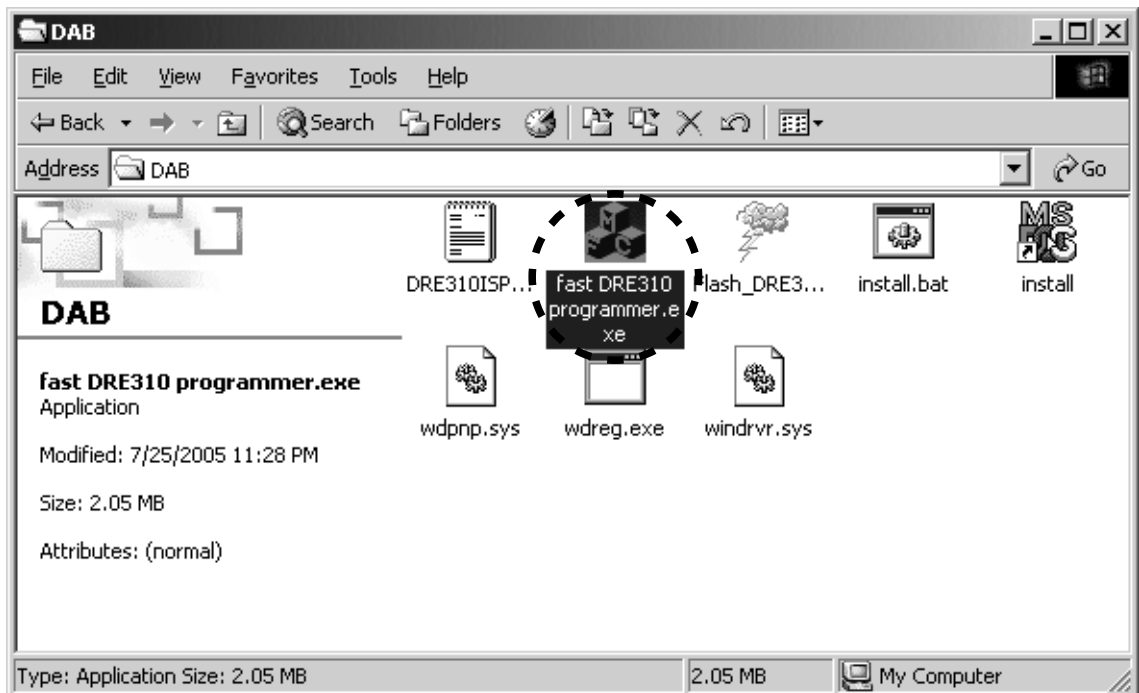
**書き込み手順**

- 本体の電源ケーブルを抜きます。
- Windows PC の parallel Port と接続治具を parallel ケーブルで接続します。
- 接続治具のスイッチ (SW401) を DAB UPGRADE 側に切替えます。
- 接続治具を本体のリアパネルにある SERVICE PORT に接続します。
- 本体の電源ケーブルを差込みます。
- POWER ON/OFF** ボタンを押し、本体の電源を入れます。



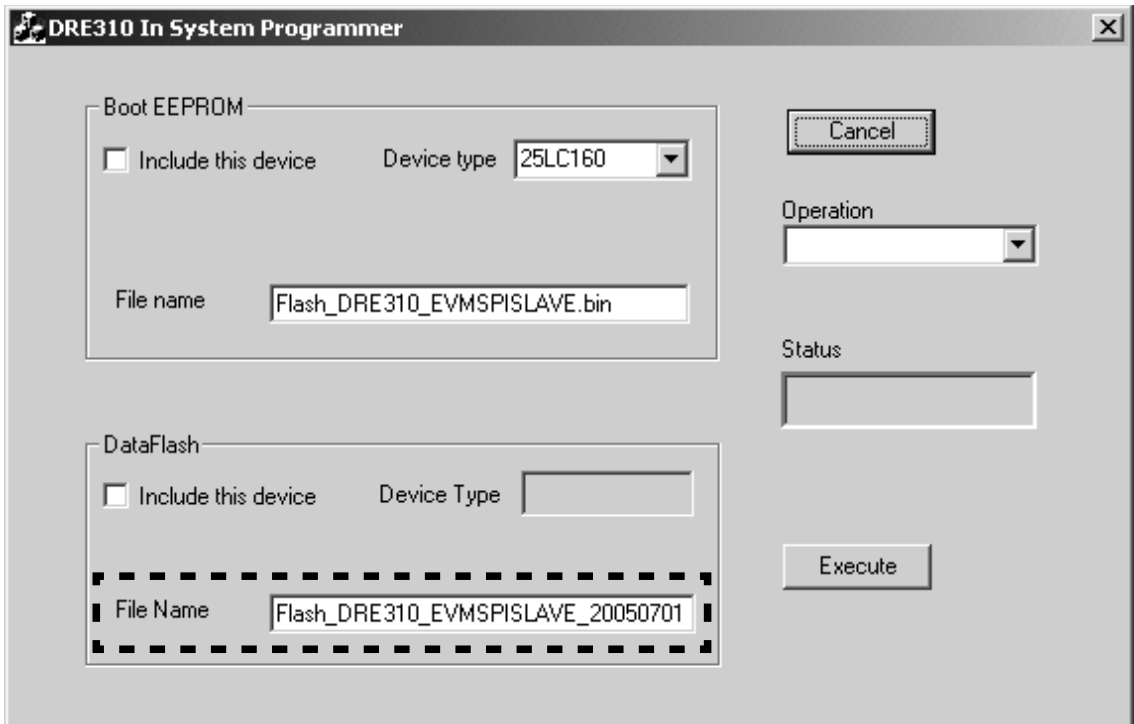
Double click **fast DRE310 Programmer.exe**.

**fast DRE310 Programmer.exe** をダブルクリックします。



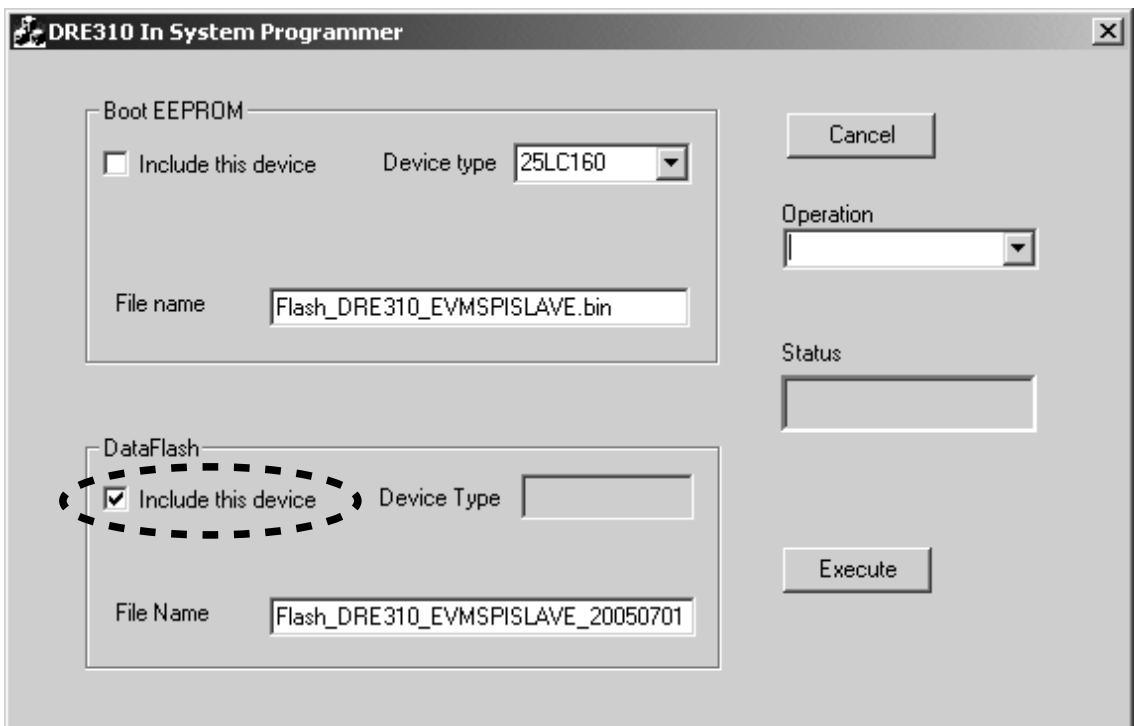
DRE310 In System Programmer is launched.  
The same name as File Name of DataFlash is displayed.  
When a file name is different, change is required for the right file name.

DRE310 In System Programmer が立ち上がります。  
DataFlash の File Name に書かれているファイル名と同一名が表示されます。もし、ファイル名と違う場合は正しいファイル名に変更が必要です。



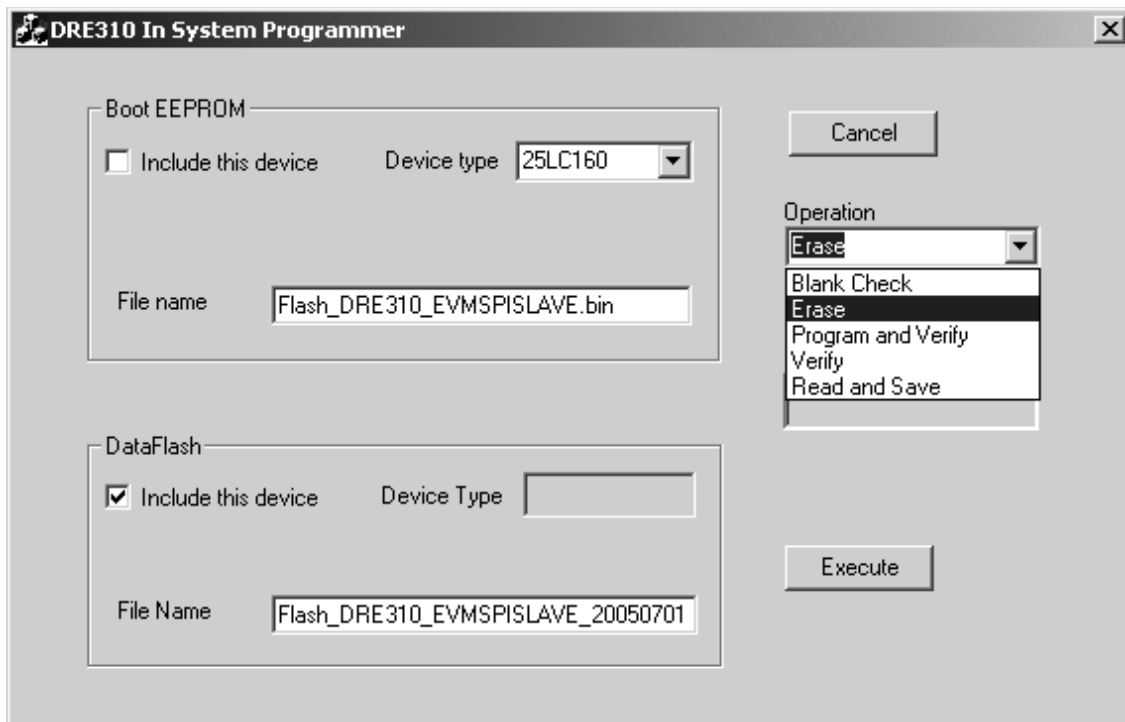
Check Include this device in DataFlash.

Include this device にチェックを入れます。



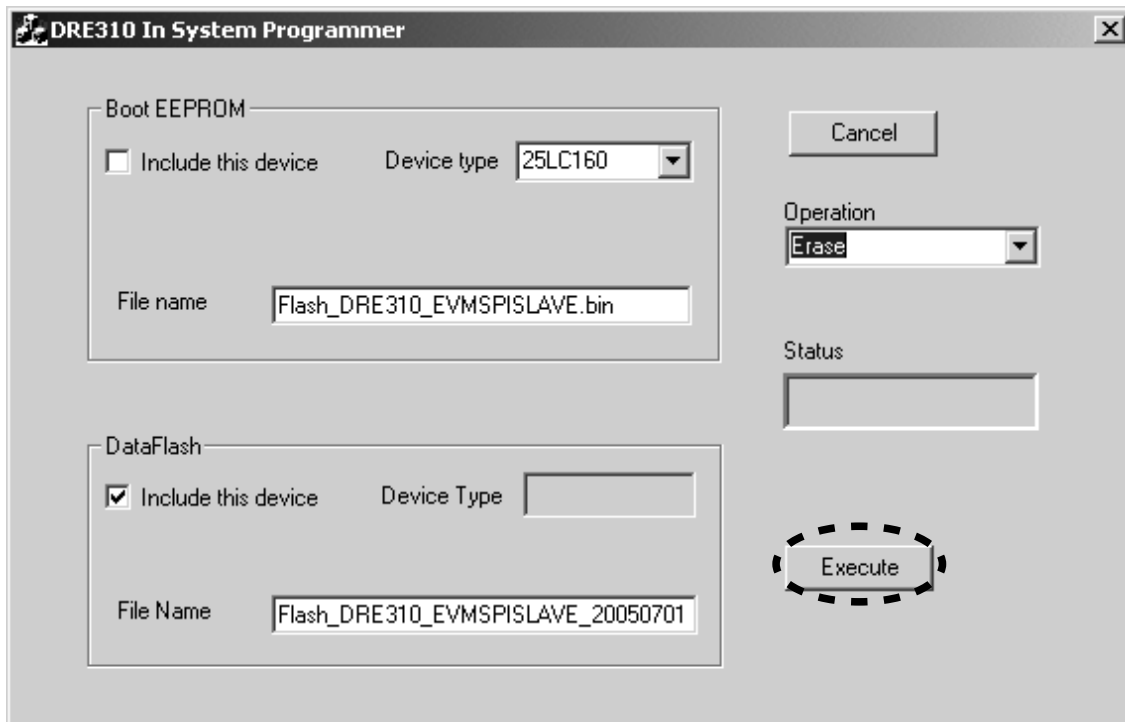
Choose **Erase** in Operation.

Operation から **Erase** を選びます。



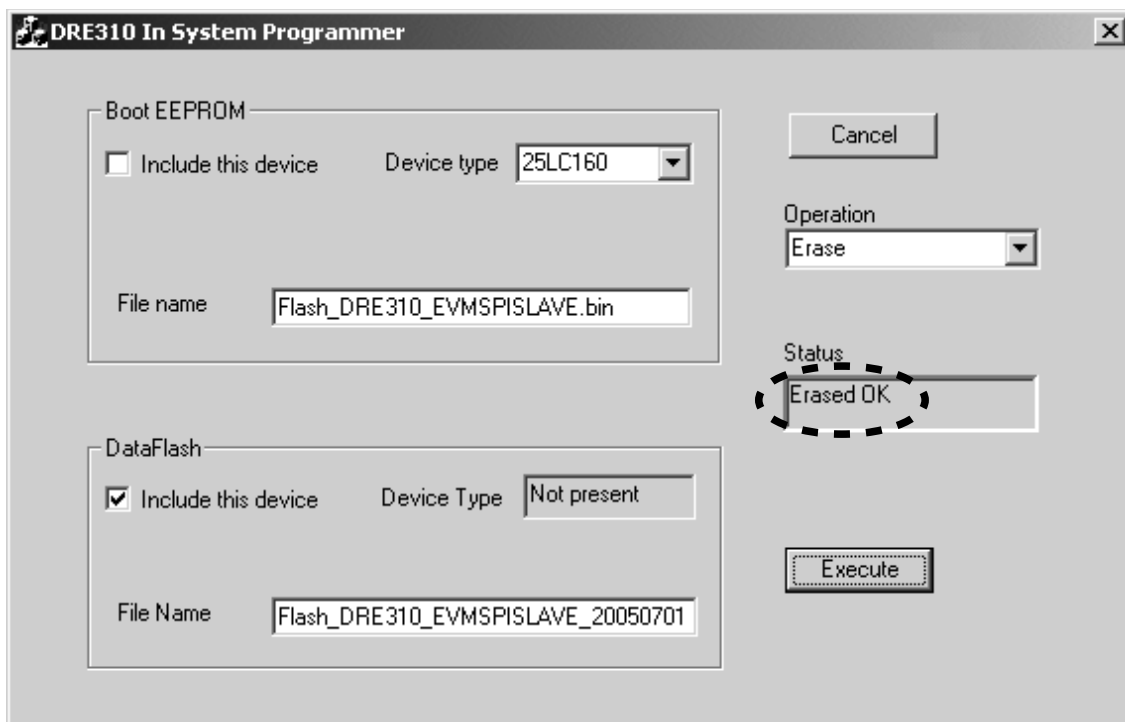
Click **Execute**.

**Execute** をクリックします。



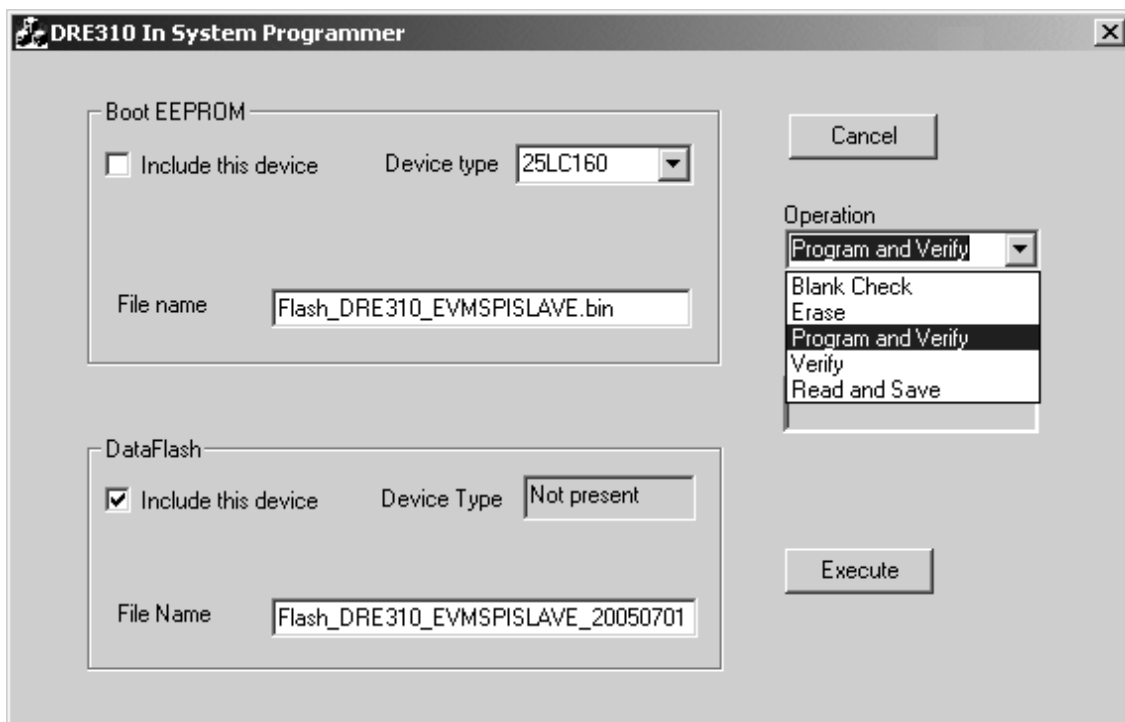
The data of DAB microprocessor is erased.  
Erased OK appears in status.

DAB マイコンのデータが消去されます。  
Status に Erased OK と表示されます。



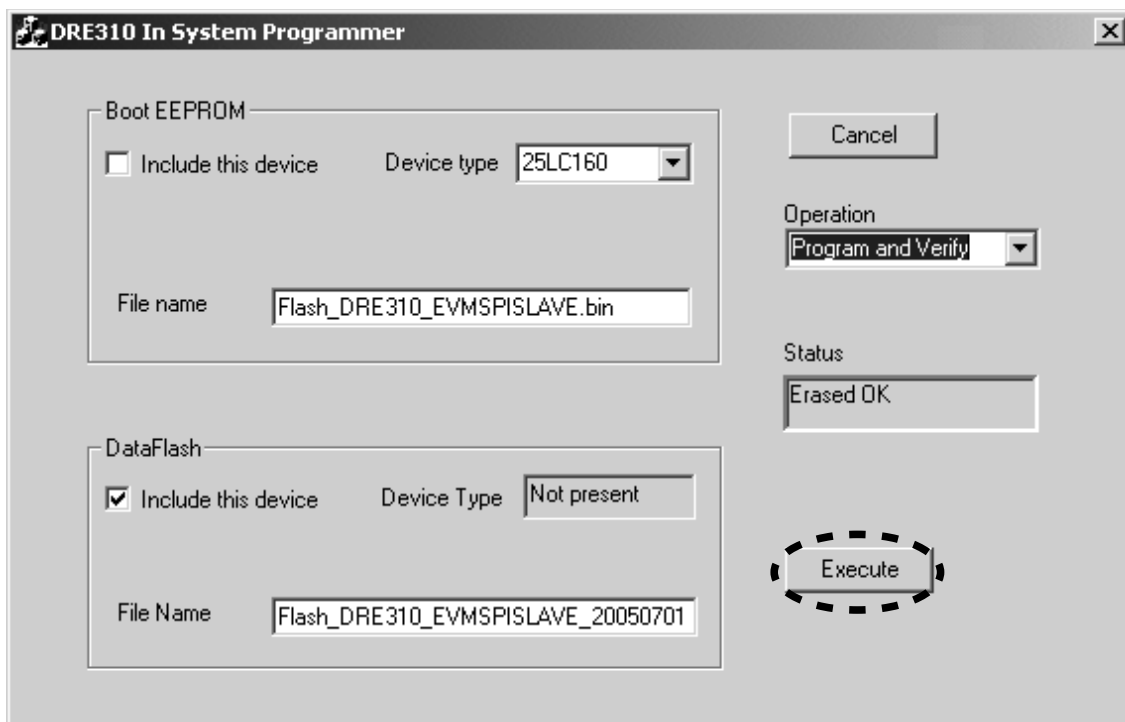
Choose **Program and Verify** in Operation.

Operation から **Program and Verify** を選びます。



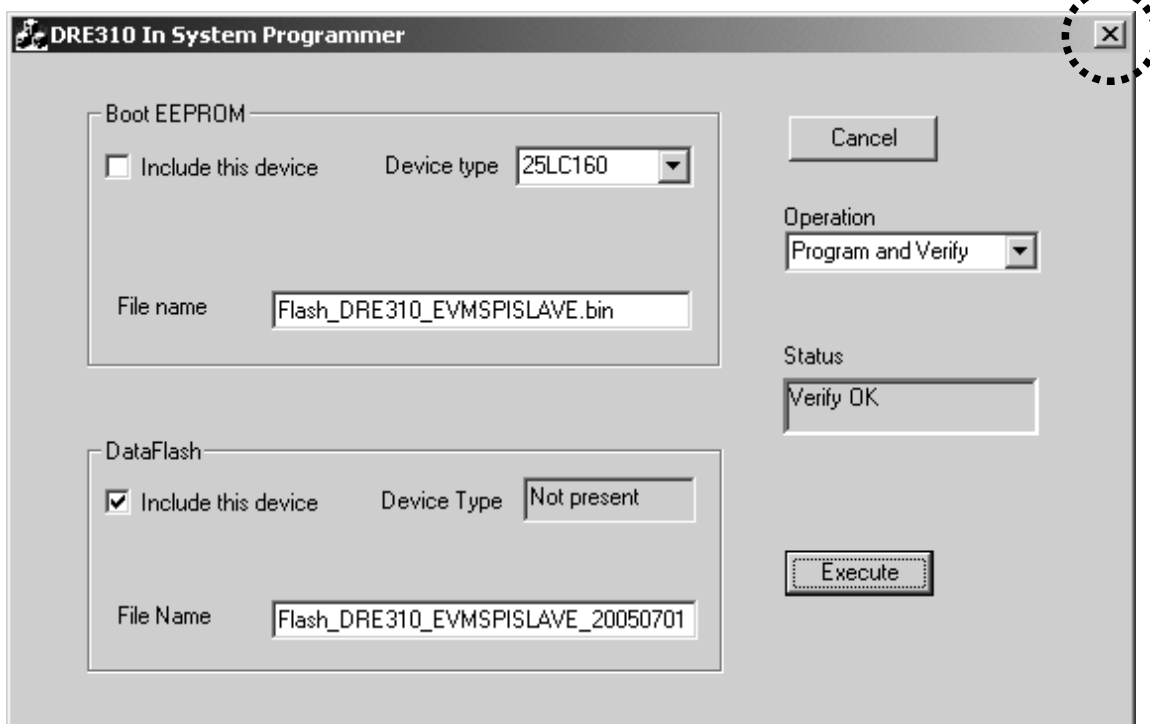
Click **Execute**.

**Execute** をクリックします。



Writing data is written and verify.  
Click **X** icon, and close.

DAB マイコンにデータが書き込まれ、照合がされます。  
**X** アイコンをクリックして閉じます。

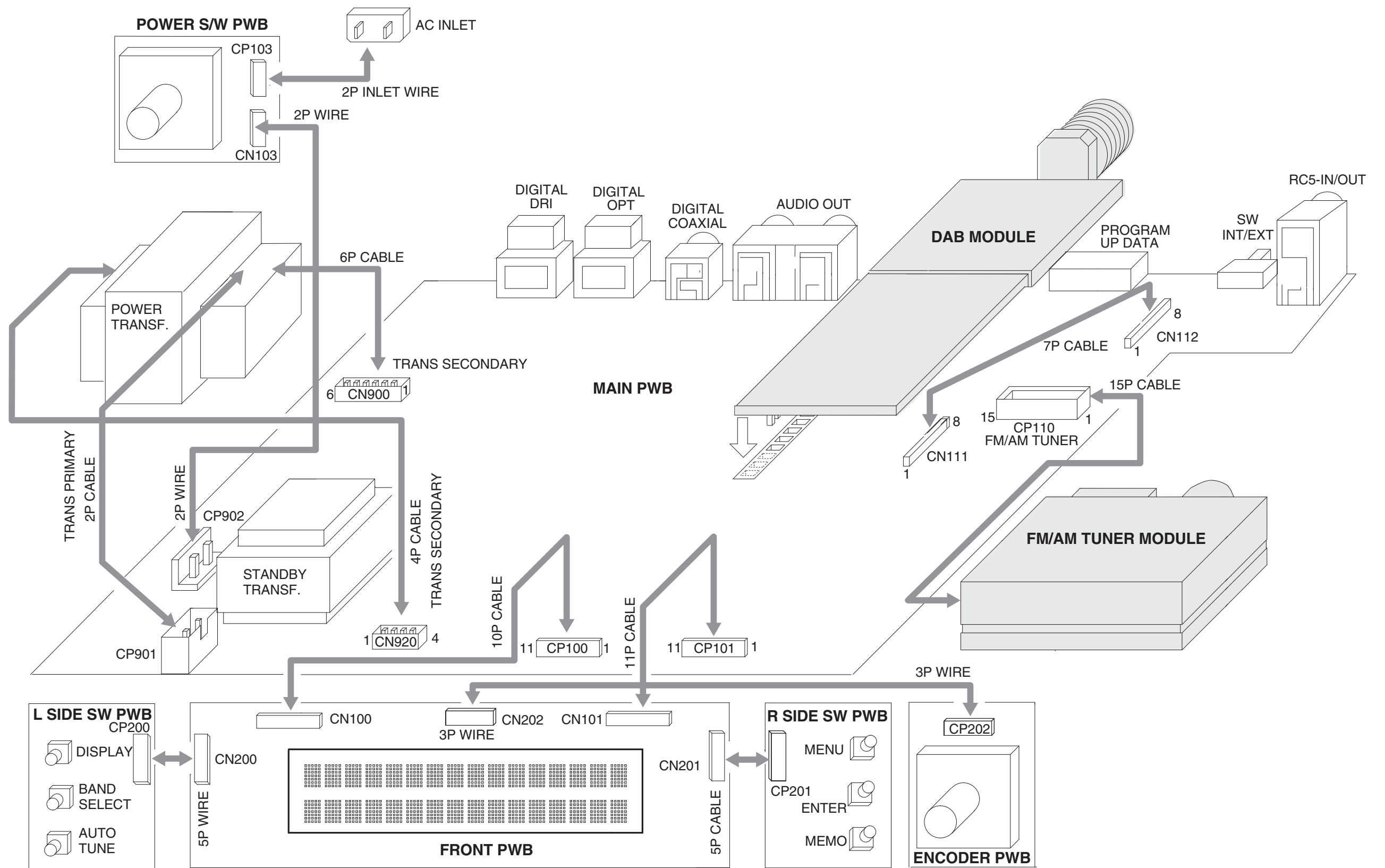


Press the **POWER ON/STANDBY** button, and turn off the unit.  
Disconnect mains cord from the unit.  
Disconnect connection JIG from the unit.  
Check the version.  
Refer to "**2. SERVICE MODE**" on page 2.

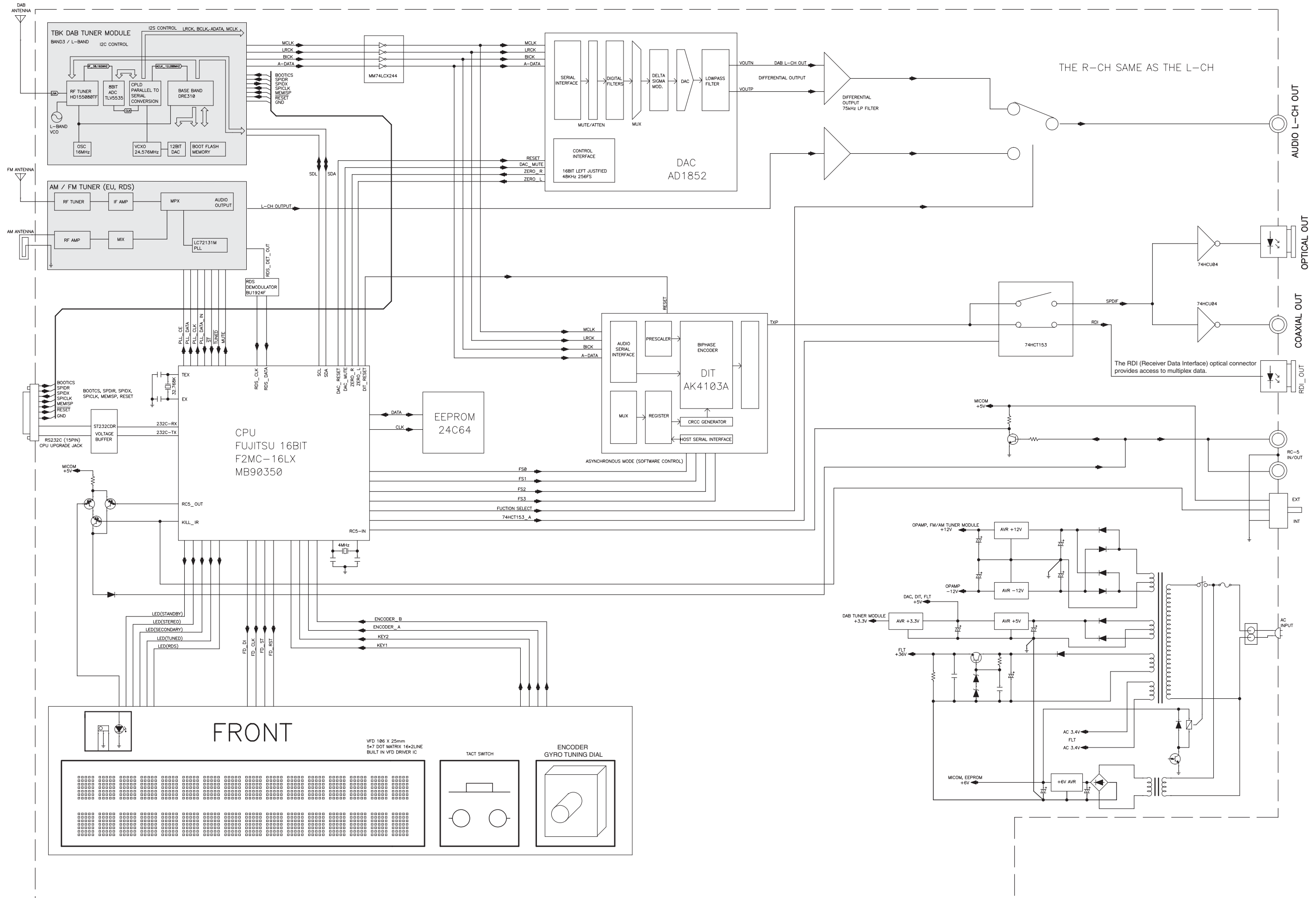
**POWER ON/STANDBY** ボタンを押して電源を切ります。  
本体から電源ケーブルを抜きます。  
接続治具を外します。  
バージョンを確認します。  
2 ページの "**2. SERVICE MODE**" で確認します。



5. WIRING DIAGRAM

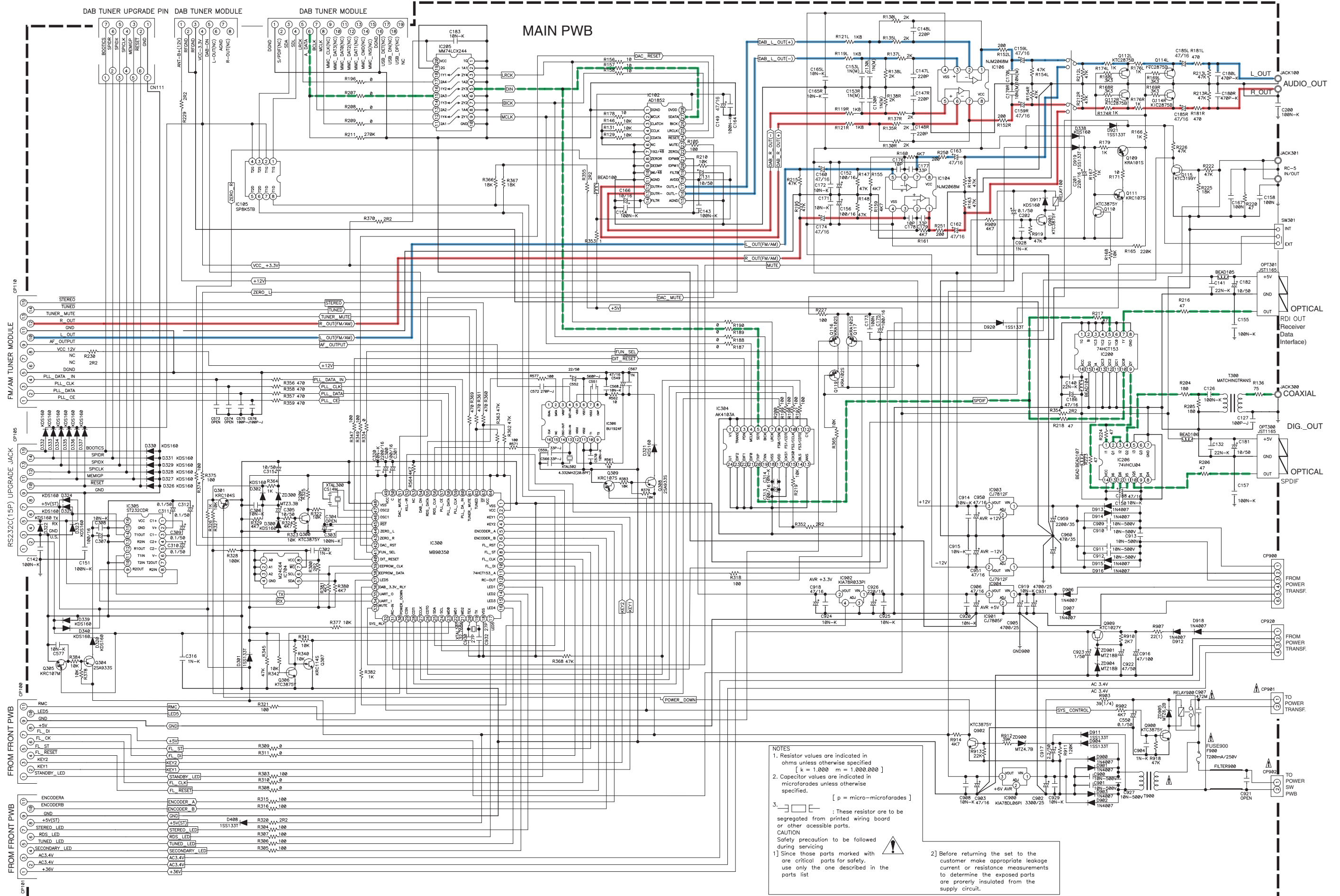


## 6. BLOCK DIAGRAM





# 7. SCHEMATIC DIAGRAM

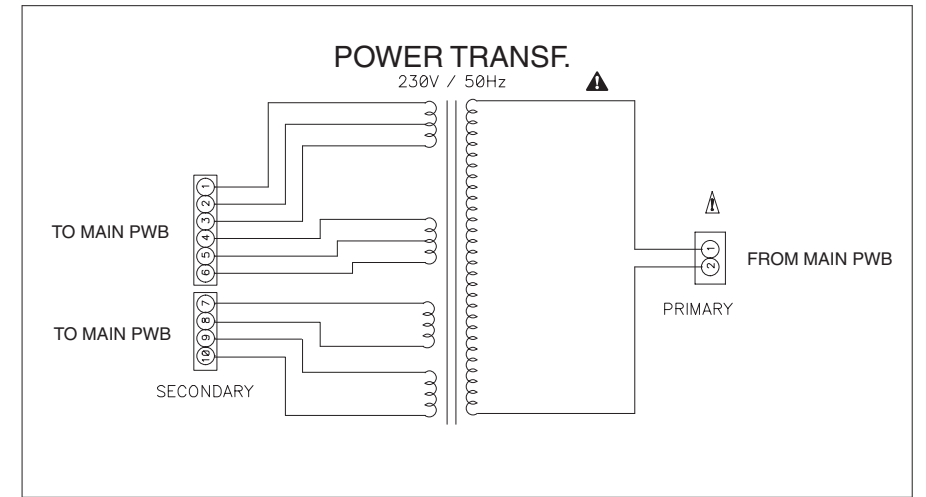
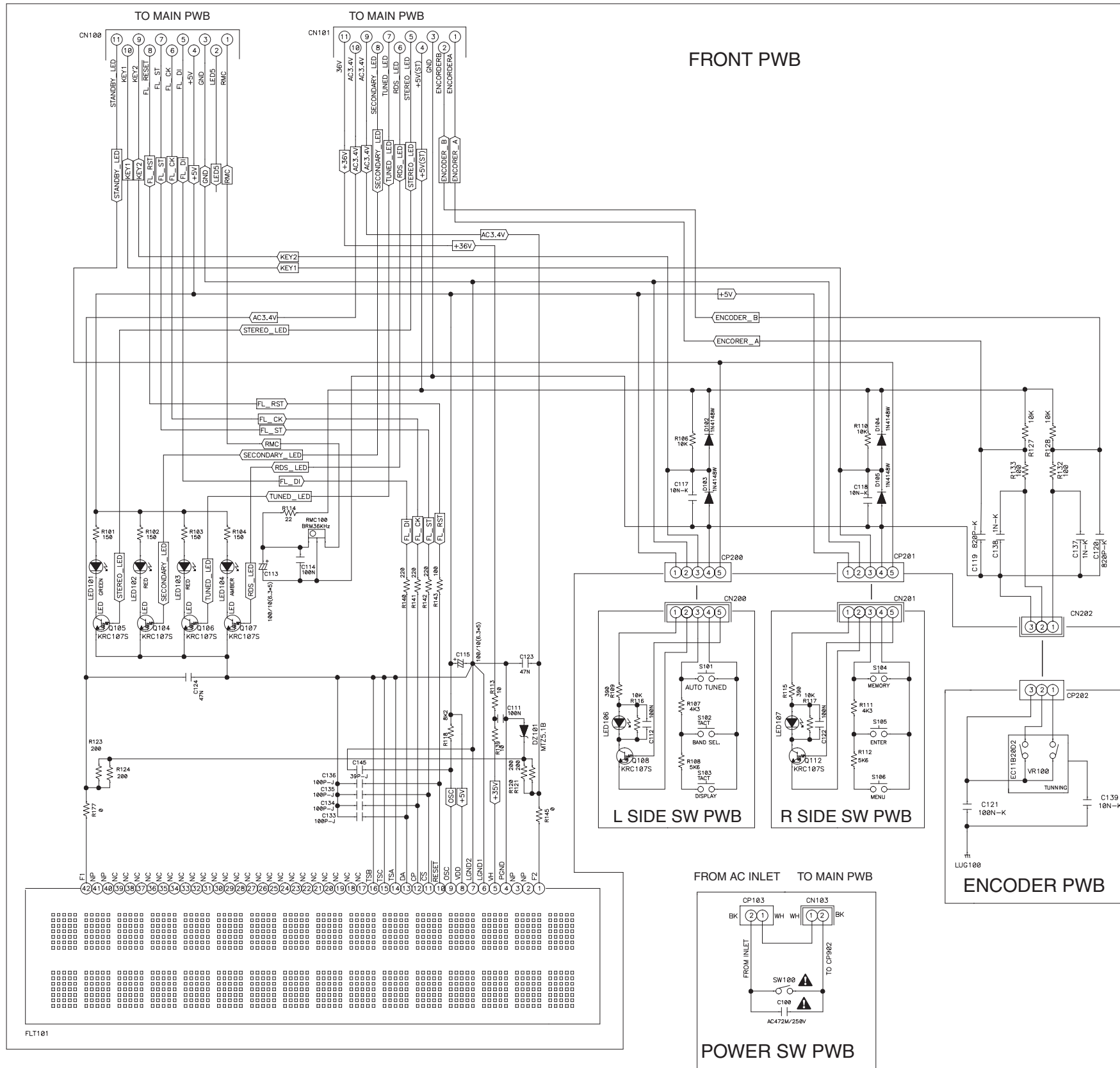


NOTES

1. Resistor values are indicated in ohms unless otherwise specified [k = 1,000 m = 1,000,000]
2. Capacitor values are indicated in microfarads unless otherwise specified. [p = micro-microfarads]
3. ⏏ : These resistor are to be segregated from printed wiring board or other accessible parts.

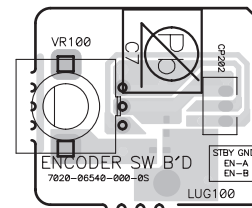
CAUTION  
Safety precaution to be followed during servicing

- 1) Since those parts marked with critical parts for safety, use only the one described in the parts list
- 2) Before returning the set to the customer make appropriate leakage current or resistance measurements to determine the exposed parts are properly insulated from the supply circuit.

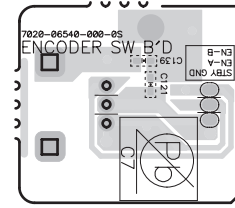


## 8. PARTS LOCATION

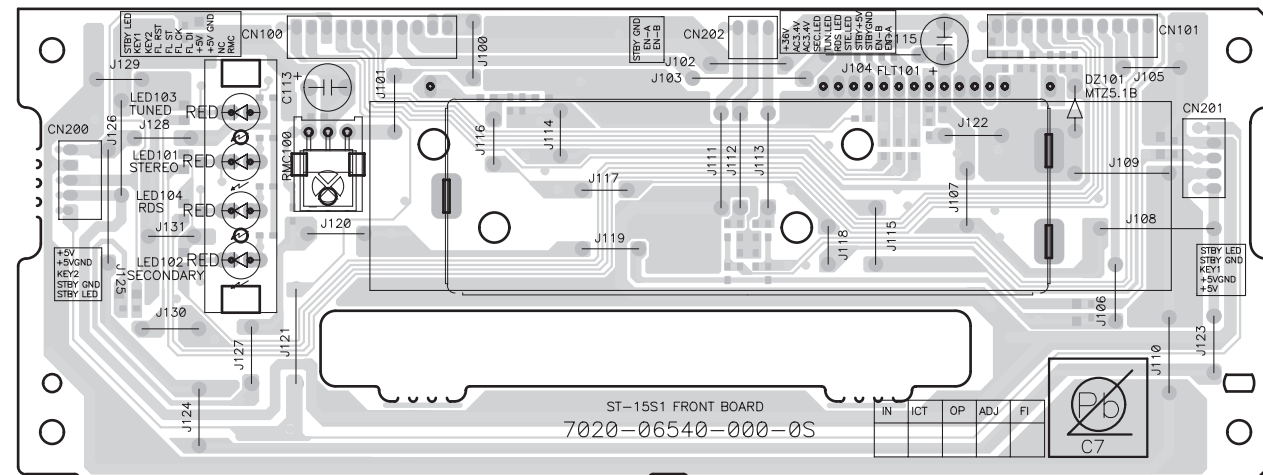
ENCODER PWB A



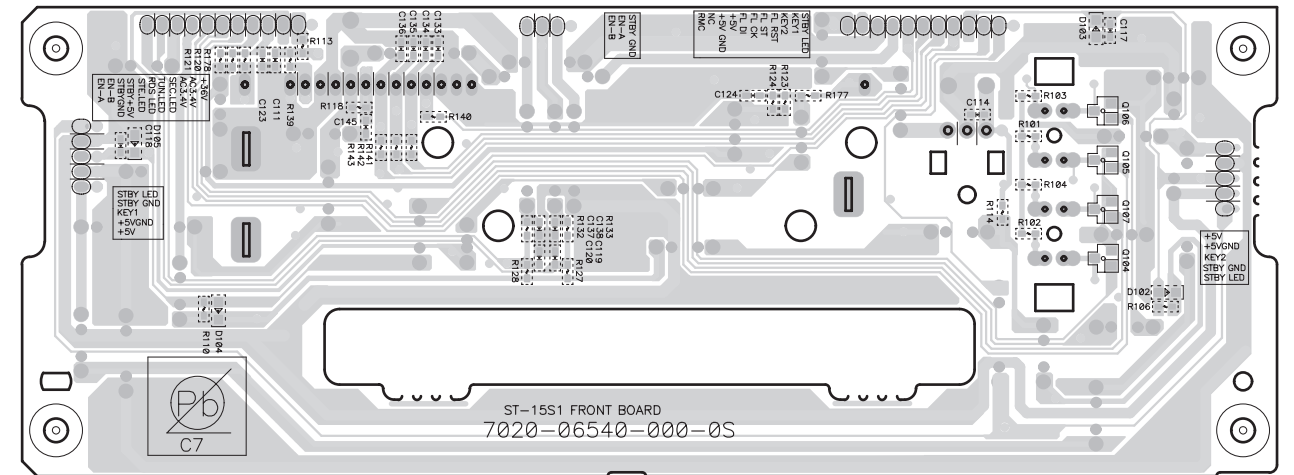
ENCODER PWB B



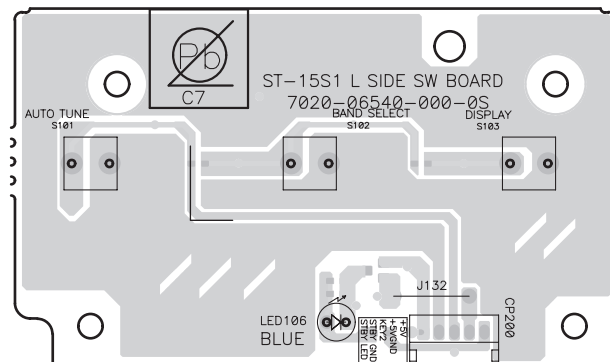
FRONT PWB A



FRONT PWB B

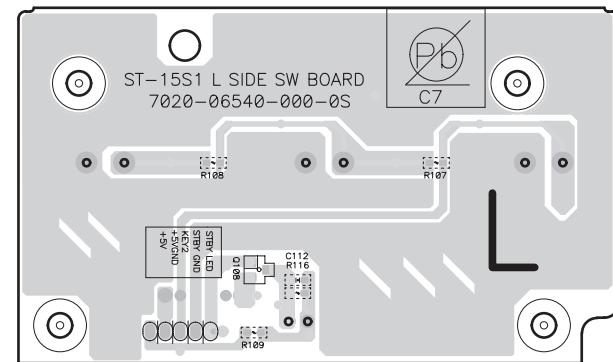


L SIDE SW PWB A

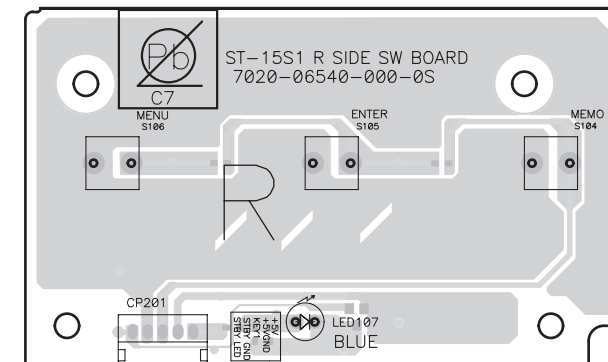


L SIDE SW PWB B

Q108

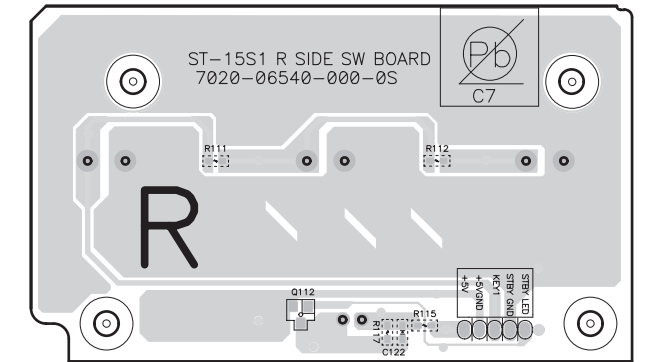


R SIDE SW PWB A

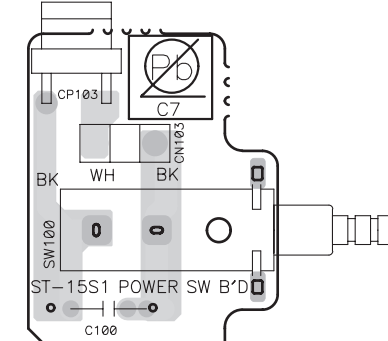


R SIDE SW PWB B

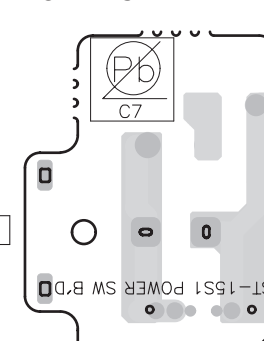
Q112



POWER SW PWB A

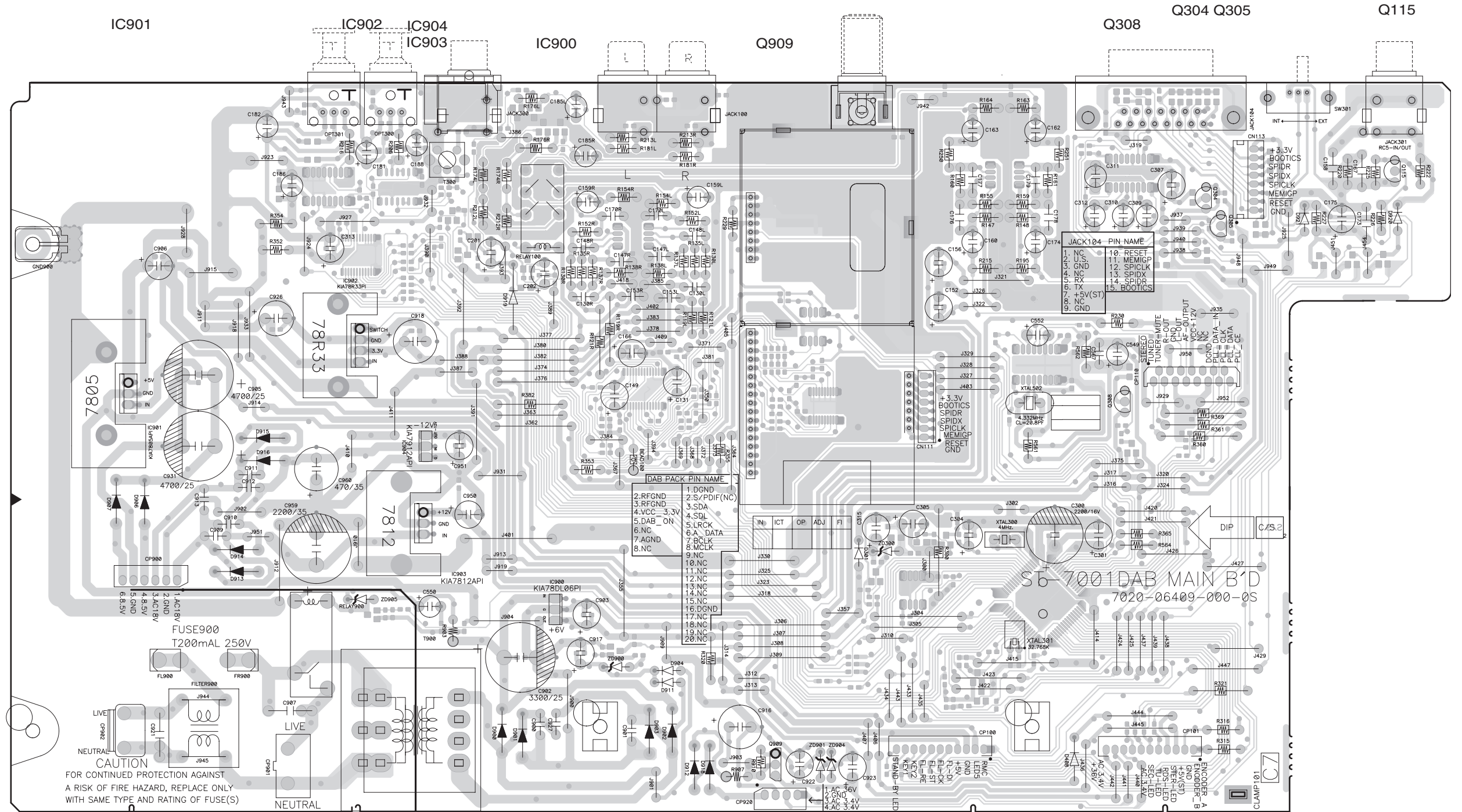


POWER SW PWB B



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

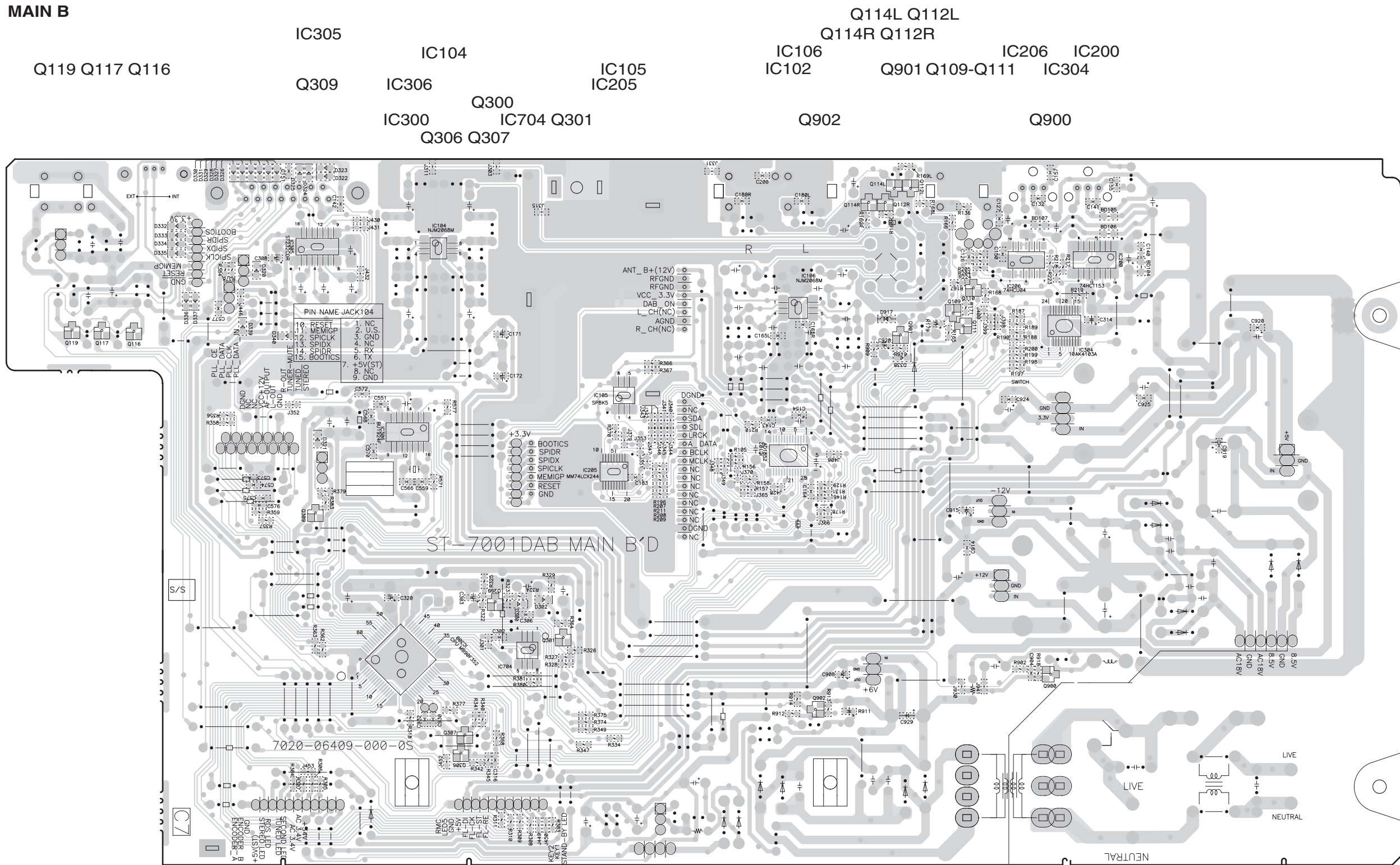
MAIN A



鉛フリー半田  
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

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

MAIN B



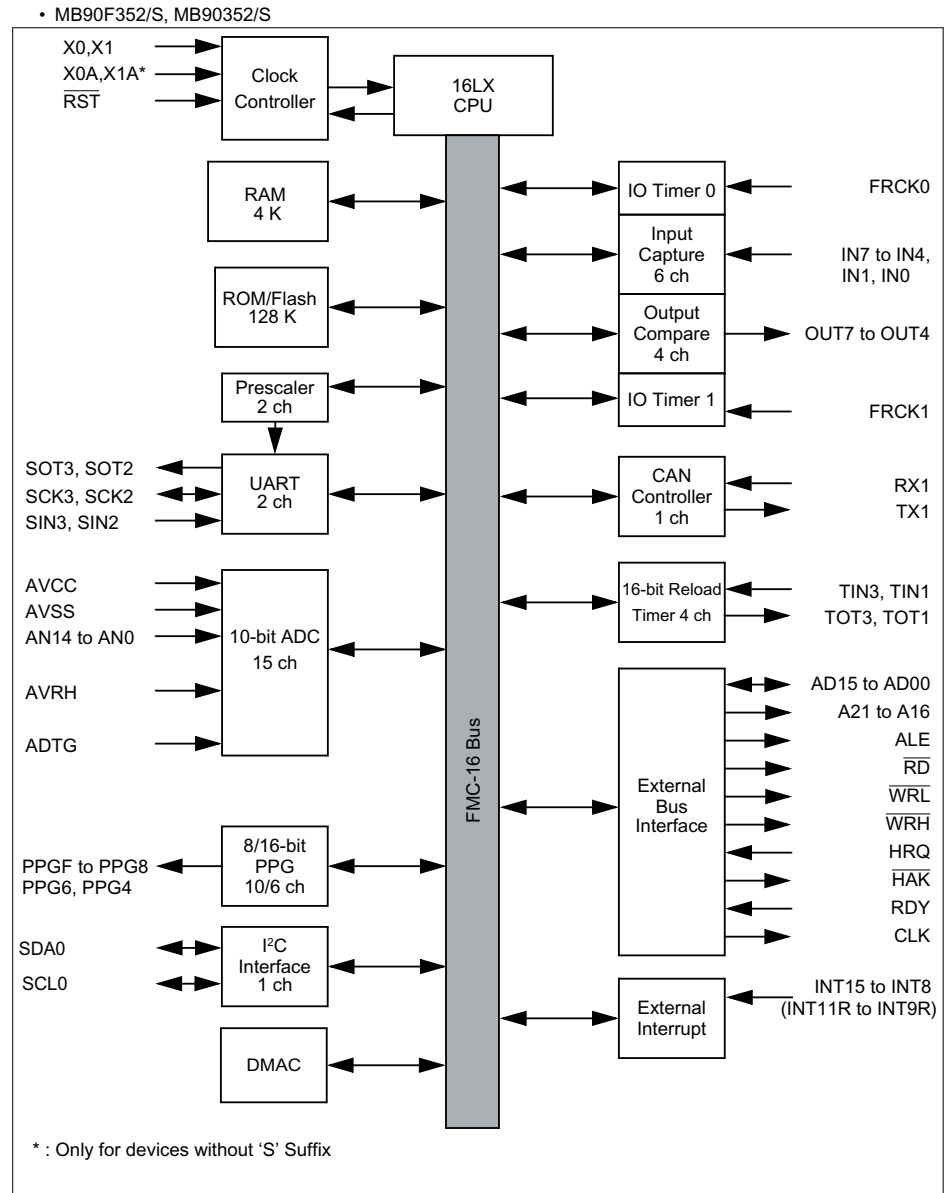
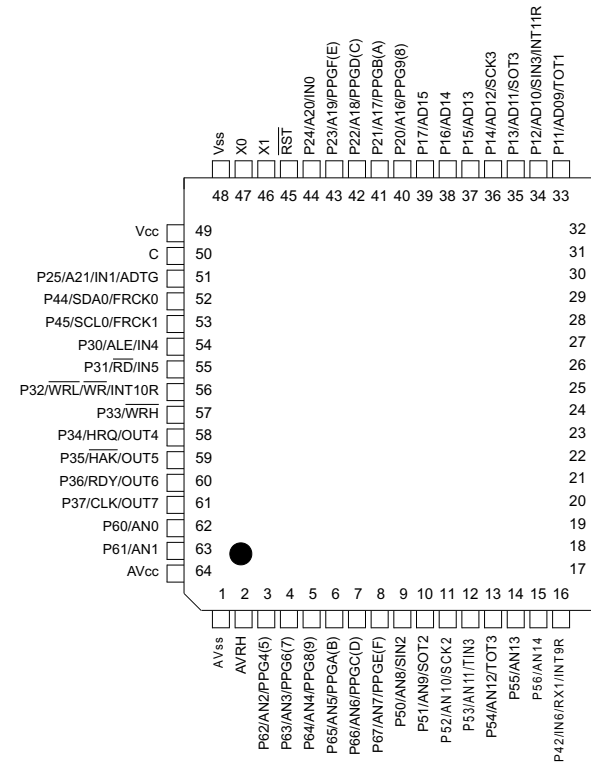
**鉛フリー半田**  
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。  
**Lead-free Solder**  
When soldering, use the Lead-free Solder (Sn-Ag-Cu).

## 9. MICROPROCESSOR AND IC DATA

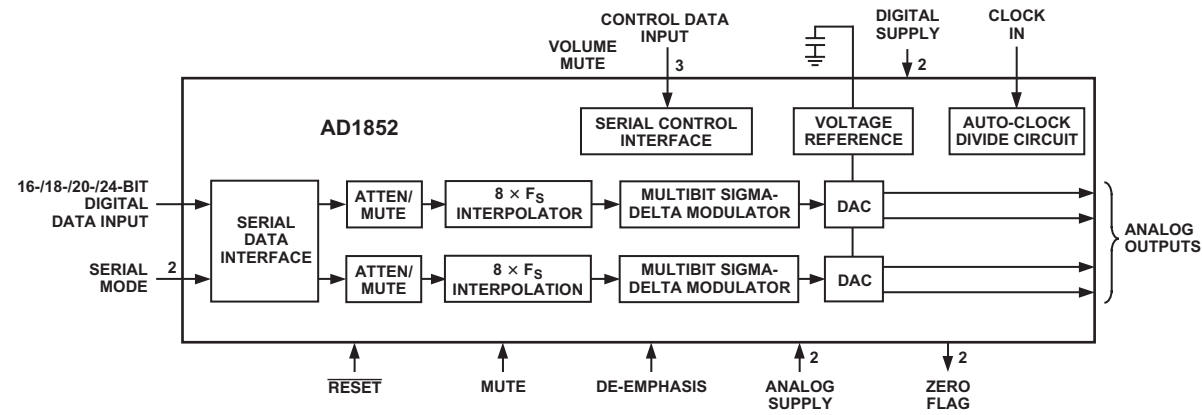
### IC300 : MB90F352PFM-G

Pin No.	Pin Name	I/O	Function
1	Avss		Vss
2	AVRH		Vcc
3	P62/AN2/PPG4(5)	A/D	key1
4	P63/AN3/PPG6(7)	A/D	key2
5	P64/AN4/PPG8(9)	INPUT	encoder_a
6	P65/AN5/PPGA(B)	INPUT	encoder_b
7	P66/AN6/PPGC(D)	OUTPUT	FLT_RESET
8	P67/AN7/PPGE(F)	OUTPUT	FLT_SELECT
9	P50/AN8/SIN2	OUTPUT	FLT_CLOCK
10	P51/AN9/SOT2	OUTPUT	FLT_DATA
11	P52/AN10/SCK2	OUTPUT	RDI_SELECT
12	P53/AN11/TIN3	OUTPUT	(RC5-OUT)
13	P54/AN12/TOT3	OUTPUT	LED_STANDBY
14	P55/AN13	OUTPUT	LED_STEREO
15	P56/AN14	OUTPUT	LED_SECONDARY
16	P42/IN6/RX1/INT9R	OUTPUT	LED_TUNED
17	P43/INT7/TX1	OUTPUT	LED_RDS
18	Vss		GND
19	P40/X0A		
20	P41/X1A		
21	MD2		MICOM UPGRADE
22	MD1		MICOM UPGRADE
23	MD0		MICOM UPGRADE
24	P00/AD00/INT8	OUTPUT	DAB_I2C_CLOCK
25	P01/AD01/INT9	OUTPUT	DAB_I2C_DATA
26	P02/AD02/INT10	INPUT	AK4103_DATA_IN
27	P03/AD03/INT11	OUTPUT	AK4103_CLOCK
28	P04/AD04/INT12	OUTPUT	AK4103_DATA_OUT
29	P05/AD05/INT13	OUTPUT	AK4103_SELECT
30	P06/AD06/INT14	INPUT	POWER_DOWN
31	P07/AD07/INT15	INPUT	REMOCON
32	P10/AD08/TIN1	OUTPUT	POWER_RELAY
33	P11/AD09/TOT1	OUTPUT	MAIN_MUTE
34	P12/AD10/SIN3/INT11R	OUTPUT	UPGRADE_RX
35	P13/AD1A/SOT3	OUTPUT	UPGRADE_TX
36	P14/AD12/SCK3	OUTPUT	POWER_DAB
37	P15/AD13	OUTPUT	LED_TIMER
38	P16/AD14	OUTPUT	EEPROM_DATA
39	P17/AD15	OUTPUT	EEPROM_CLOCK
40	P20/A16/PPG9(8)	OUTPUT	DIT_RESET
41	P21/A17/PPGB(A)	OUTPUT	FUNCTION_RELAY
42	P22/A18/PPGD(C)	OUTPUT	DAC_RESET
43	P23/A19/PPGF(E)	INPUT	DAC_MUTE_DETECT_R
44	P24/A20/IN0	INPUT	DAC_MUTE_DETECT_L
45	RST		
46	X1		4MHz
47	X0		4MHz
48	Vss		
49	Vcc		
50	C		0.1UF/CERAMIC
51	P25/A21/IN1/ADTG	OUTPUT	DAC_MUTE
52	P44/FRCK0	OUTPUT	
53	P45/FRCK1	INPUT	(RC5_IN/EXT)
54	P30/ALE/IN4	OUTPUT	DAB_ON
55	P31/RD/IN5	INPUT	RDS_DATA
56	P32/WRL/WR/INT10R	INPUT	RDS_CLOCK
57	P33/WRH	OUTPUT	PLL_CE
58	P34/HRQ/OUT4	OUTPUT	PLL_DATA_OUT(PLL DATA TRANS)
59	P35/HAK/OUT5	OUTPUT	PLL_CLOCK
60	P36/RDY/OUT6	INPUT	PLL_DATA_IN(IF READ)

Pin No.	Pin Name	I/O	Function
61	P37/CLK/OUT7	OUTPUT	TUNER_MUTE
62	P60/AN0	INPUT	TUNER_STEREO
63	P61/AN1	INPUT	TUNER_TUNED
64	Avcc		VCC



IC102 : AD1852JSR



Pin	Input/Output	Pin Name	Description
1	I	DGND	Digital Ground.
2	I	MCLK	Master Clock Input. Connect to an external clock source at either 256 F <sub>S</sub> , 384 F <sub>S</sub> , 512 F <sub>S</sub> , 768 F <sub>S</sub> , or 1024 F <sub>S</sub> .
3	I	CLATCH	Latch Input for Control Data. This input is rising-edge sensitive.
4	I	CCLK	Control Clock Input for Control Data. Control input data must be valid on the rising edge of CCLK. CCLK may be continuous or gated.
5	I	CDATA	Serial Control Input, MSB first, containing 16 bits of unsigned data per channel. Used for specifying channel-specific attenuation and mute.
6		NC	No Connect.
7	I	192/48	Selects 48 kHz (LO) or 192 kHz Sample Frequency.
8	O	ZEROR	Right Channel Zero Flag Output. This pin goes HI when Right Channel has no signal input for more than 1024 LR Clock Cycles.
9	I	DEEMP	De-Emphasis. Digital de-emphasis is enabled when this input signal is HI. This is used to impose a 50 μs/15 μs response characteristic on the output audio spectrum at an assumed 44.1 kHz sample rate. Curves for 32 kHz and 48 kHz sample rates may be selected via SPI control register.
10	I	96/48	Selects 48 kHz (LO) or 96 kHz Sample Frequency.
11, 15	I	AGND	Analog Ground.
12	O	OUTR+	Right Channel Positive Line Level Analog Output.
13	O	OUTR-	Right Channel Negative Line Level Analog Output.
14	O	FILTR	Voltage Reference Filter Capacitor Connection. Bypass and decouple the voltage reference with parallel 10 μF and 0.1 μF capacitors to the AGND.
16	O	OUTL-	Left Channel Negative Line Level Analog Output.
17	O	OUTL+	Left Channel Positive Line Level Analog Output.
18	I	AVDD	Analog Power Supply. Connect to Analog 5 V Supply.
19		FILTB	Filter Capacitor Connection. Connect 10 μF capacitor to AGND (Pin 15).
20	I	IDPM1	Input Serial Data Port Mode Control One. With IDPM0, defines 1 of 4 serial modes.
21	I	IDPM0	Input Serial Data Port Mode Control Zero. With IDPM1, defines 1 of 4 serial modes.
22	O	ZEROL	Left Channel Zero Flag Output. This pin goes HI when Left Channel has no signal input for more than 1024 LR Clock Cycles.
23	I	MUTE	Mute. Assert HI to mute both stereo analog outputs. Deassert LO for normal operation.
24	I	RESET	Reset. The AD1852 is reset on the rising edge of this signal. The serial control port registers are reset to the default values. Connect HI for normal operation.
25	I	L/RCLK	Left/Right Clock Input for Input Data. Must run continuously.
26	I	BCLK	Bit Clock Input for Input Data. Need not run continuously; may be gated or used in a burst fashion.
27	I	SDATA	Serial Input, MSB first, containing two channels of 16, 18, 20, and 24 bits of twos complement data per channel.
28	I	DVDD	Digital Power Supply Connect to digital 5 V supply.

Table I. Serial Data Input Mode

IDPM1 (Pin 20)	IDPM0 (Pin 21)	Serial Data Input Format
0	0	Right-Justified
0	1	I <sup>2</sup> S-Compatible
1	0	Left-Justified
1	1	DSP

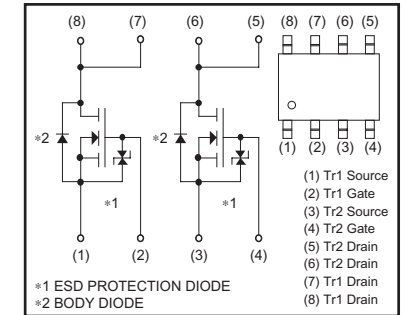
IC105 : SP8K5TB

●Absolute maximum ratings (Ta=25°C)  
It is the same ratings for the Tr. 1 and Tr. 2.

Parameter	Symbol	Limits	Unit	
Drain-source voltage	V <sub>DSS</sub>	30	V	
Gate-source voltage	V <sub>GSS</sub>	20	V	
Drain current	Continuous	I <sub>D</sub>	±3.5	A
	Pulsed	I <sub>DP</sub>	±14	A *1
Source current (Body diode)	Continuous	I <sub>S</sub>	1.6	A
	Pulsed	I <sub>SP</sub>	6.4	A *1
Total power dissipation	P <sub>D</sub>	2	W *2	
Channel temperature	T <sub>ch</sub>	150	°C	
Storage temperature	T <sub>stg</sub>	-55 to +150	°C	

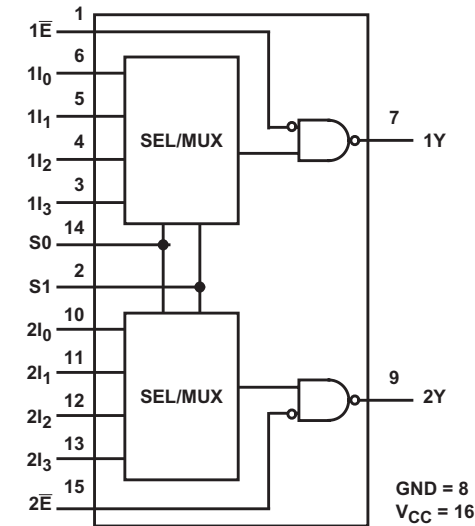
\*1 P<sub>w</sub> ≤ 10μs, Duty cycle ≤ 1%  
\*2 MOUNTED ON A CERAMIC BOARD.

●Equivalent circuit



(1) Tr1 Source  
(2) Tr1 Gate  
(3) Tr2 Source  
(4) Tr2 Gate  
(5) Tr2 Drain  
(6) Tr2 Drain  
(7) Tr1 Drain  
(8) Tr1 Drain  
\*1 ESD PROTECTION DIODE  
\*2 BODY DIODE  
\*A protection diode is included between the gate and the source terminals to protect the diode against static electricity when the product is in use. Use the protection circuit when the fixed voltages are exceeded.

IC200 : 74HCT153



TRUTH TABLE

SELECT INPUTS		DATA INPUTS				ENABLE	OUTPUT
S1	S0	I0	I1	I2	I3	E	Y
X	X	X	X	X	X	H	L
L	L	L	X	X	X	L	L
L	L	H	X	X	X	L	H
L	H	X	L	X	X	L	L
L	H	X	H	X	X	L	H
H	L	X	X	L	X	L	L
H	L	X	X	H	X	L	H
H	H	X	X	X	L	L	L
H	H	X	X	X	H	L	H

NOTE:

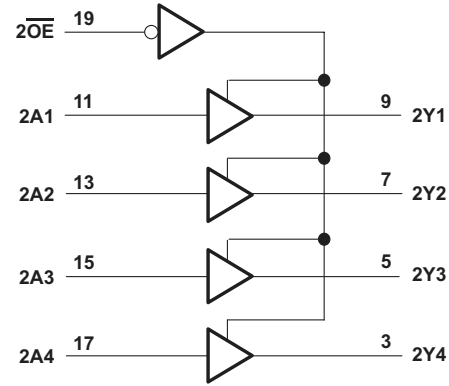
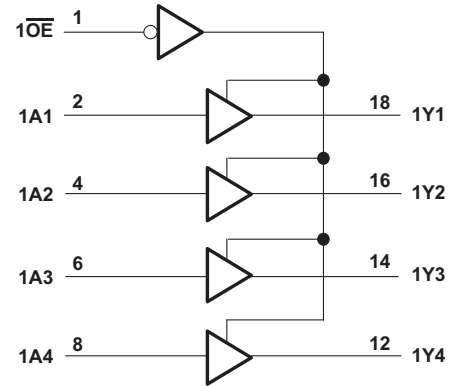
Select inputs S1 and S0 are common to both sections.  
H = High Voltage Level, L = Low Voltage Level, X = Don't Care

IC205 : MM74LCX244

IC207 : MM74HCT244

FUNCTION TABLE  
(each buffer/driver)

INPUTS		OUTPUT
OE	A	Y
L	H	H
L	L	L
H	X	Z



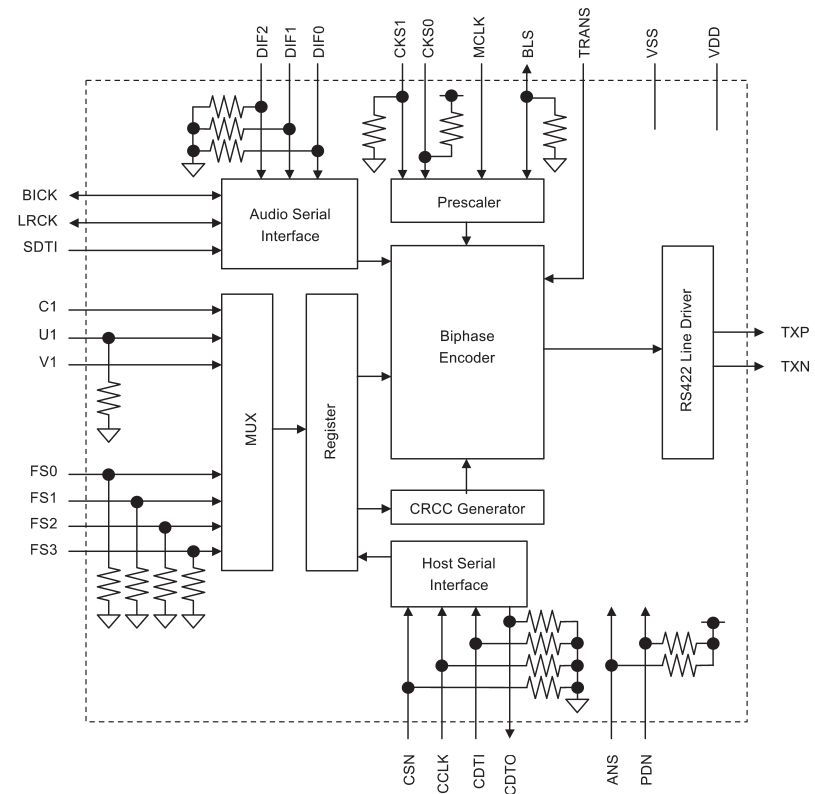
IC206 : 74VHCU04

FUNCTION TABLE  
(each inverter)

INPUT	OUTPUT
A	Y
H	L
L	H



IC304 : AK4103A



No.	Pin Name	I/O	Description
1	VI	I	Validity Bit Input Pin
2	TRANS	I	Audio Routing Mode (Transparent Mode) Pin at Synchronous mode 0: Normal mode, 1: Audio routing mode (transparent mode)
3	PDN	I	Power Down & Reset Pin (Pull-up Pin) When "L", the AK4103A is powered-down, TXP/N pins are "L" and the control registers are reset to default values.
4	MCLK	I	Master Clock Input Pin
5	SDTI	I	Audio Serial Data Input Pin
6	BICK	I/O	Audio Serial Data Clock Input/Output Pin Serial Clock for SDTI pin which can be configured as an output based on the DIF2-0 inputs.
7	LRCK	I/O	Input/Output Channel Clock Pin Indicates left or right channel, and can be configured as an output based on the DIF2-0 inputs.
8	FS0	I	Sampling Frequency Select 0 Pin at Synchronous mode (Pull-down Pin)
	CSN	I	Host Interface Chip Select Pin at Asynchronous mode (Pull-down Pin)
	AKMODE	I	AK4112B Mode Pin at Audio routing mode (Pull-down Pin) 0: Non-AKM receivers mode, 1: AK4112B mode
9	FS1	I	Sampling Frequency Select 1 Pin at Synchronous mode (Pull-down Pin)
	CDTI	I	Host Interface Data Input Pin at Asynchronous mode (Pull-down Pin)
10	FS2	I	Sampling Frequency Select 2 Pin at Synchronous mode (Pull-down Pin)
	CCLK	I	Host Interface Bit Clock Input Pin at Asynchronous mode (Pull-down Pin)
11	FS3	I	Sampling Frequency Select 3 Pin at Synchronous mode (Pull-down Pin)
	CDTO	O	Host Interface Data Output Pin at Asynchronous mode (Pull-down Pin)
12	C1	I	Channel Status Bit Input Pin
13	ANS	I	Asynchronous/Synchronous Mode Select Pin (Pull-up Pin) 0: Asynchronous mode, 1: Synchronous mode
14	BLS	I/O	Block Start Input/Output Pin (Pull-down Pin) In normal mode, the channel status block output is "H" for the first four bytes. In audio routing mode, the pin is configured as an input. When PDN pin = "L", BLS pin goes "H" at Normal mode.
15	CKS0	I	Clock Mode Select 0 Pin (Pull-up Pin)
16	CKS1	I	Clock Mode Select 1 Pin (Pull-down Pin)
17	VDD	-	Power Supply Pin, 4.75V~5.25V
18	VSS	-	Ground Pin, 0V
19	TXN	O	Negative Differential Output Pin
20	TXP	O	Positive Differential Output Pin
21	DIF0	I	Audio Serial Interface Select 0 Pin (Pull-down Pin)
22	DIF1	I	Audio Serial Interface Select 1 Pin (Pull-down Pin)
23	DIF2	I	Audio Serial Interface Select 2 Pin (Pull-down Pin)
24	U1	I	User Data Bit Input Pin for Channel 1 (Pull-down Pin)

Notes:

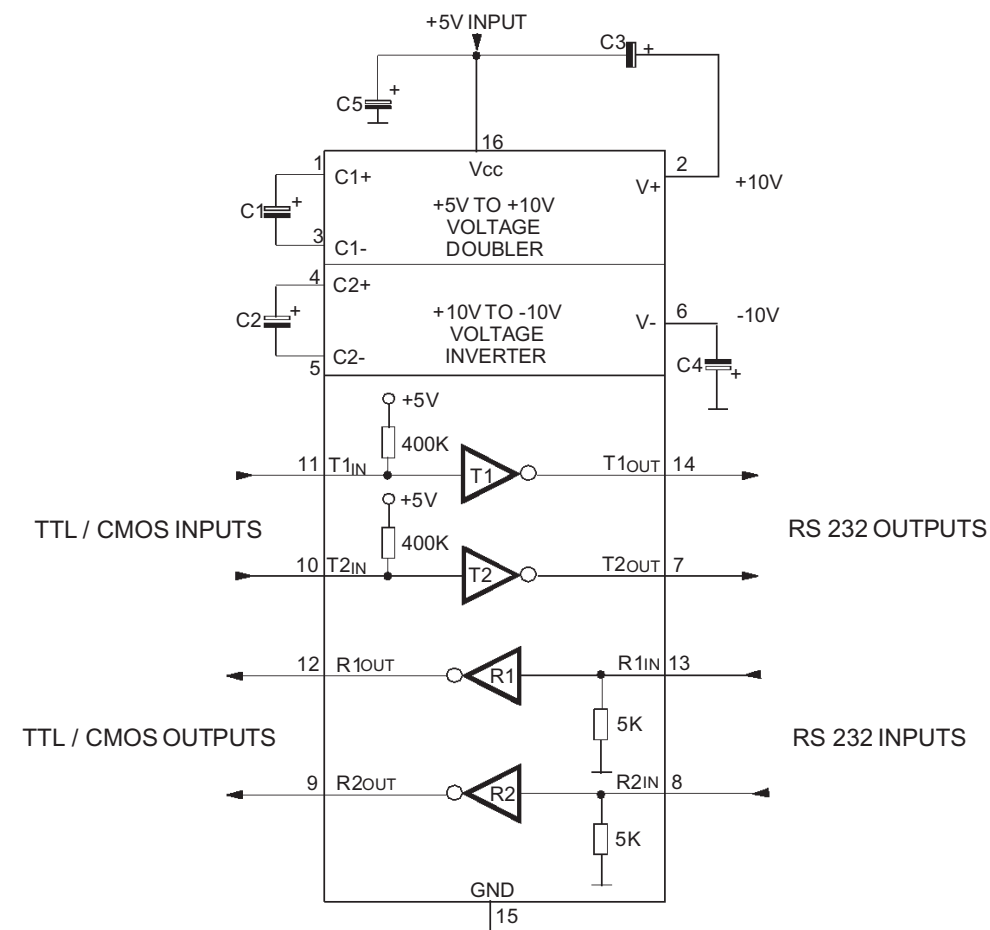
1. Internal pull-up and pull-down resistors are connected on-chip. The value of the resistors is 43kΩ (typ).
2. All input pins except internal pull-down/pull-up pins should not be left floating.



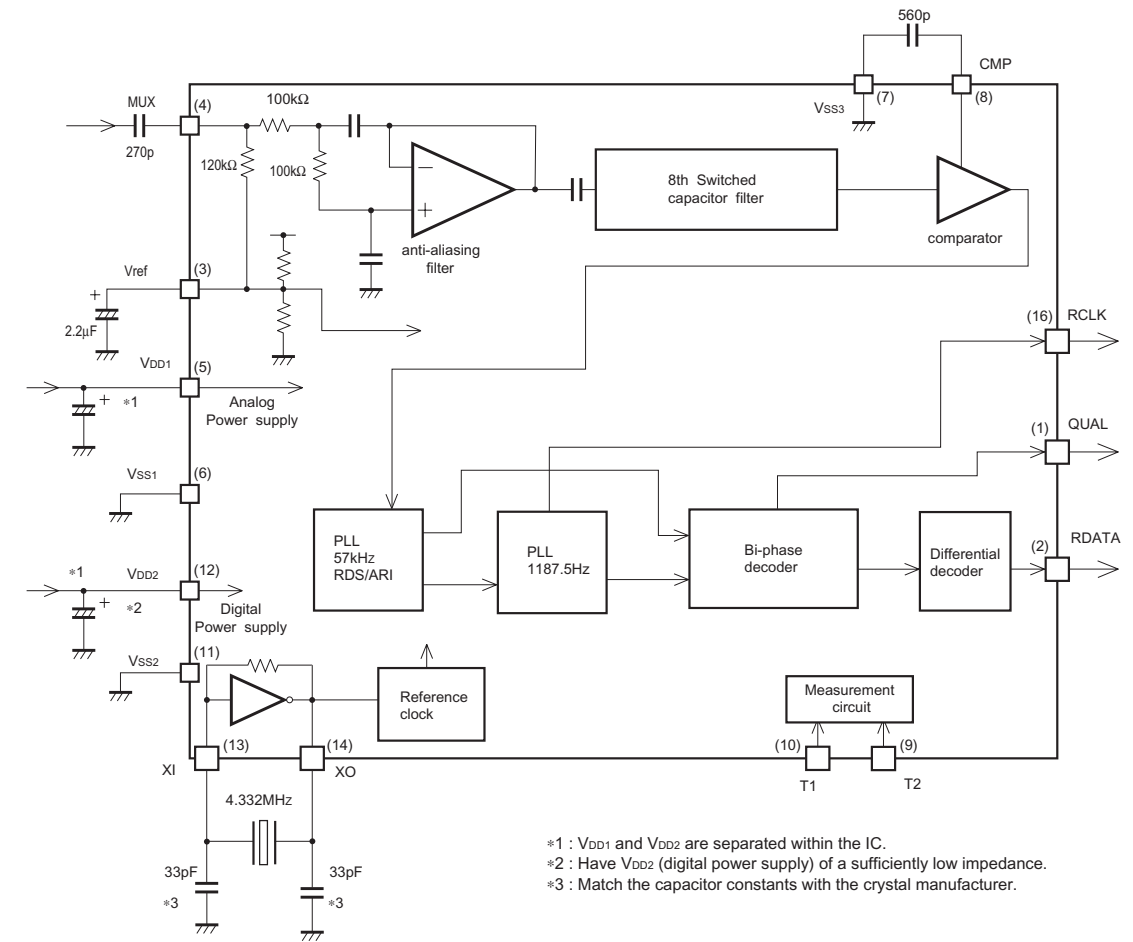
IC305 : ST232CDR

PIN DESCRIPTION

PIN No	SYMBOL	NAME AND FUNCTION
1	C <sub>1+</sub>	Positive Terminal for the first Charge Pump Capacitor
2	V+	Doubled Voltage Terminal
3	C <sub>1-</sub>	Negative Terminal for the first Charge Pump Capacitor
4	C <sub>2+</sub>	Positive Terminal for the second Charge Pump Capacitor
5	C <sub>2-</sub>	Negative Terminal for the second Charge Pump Capacitor
6	V-	Inverted Voltage Terminal
7	T <sub>2OUT</sub>	Second Transmitter Output Voltage
8	R <sub>2IN</sub>	Second Receiver Input Voltage
9	R <sub>2OUT</sub>	Second Receiver Output Voltage
10	T <sub>2IN</sub>	Second Transmitter Input Voltage
11	T <sub>1IN</sub>	First Transmitter Input Voltage
12	R <sub>1OUT</sub>	First Receiver Output Voltage
13	R <sub>1IN</sub>	First Receiver Input Voltage
14	T <sub>1OUT</sub>	First Transmitter Output Voltage
15	GND	Ground
16	V <sub>CC</sub>	Supply Voltage



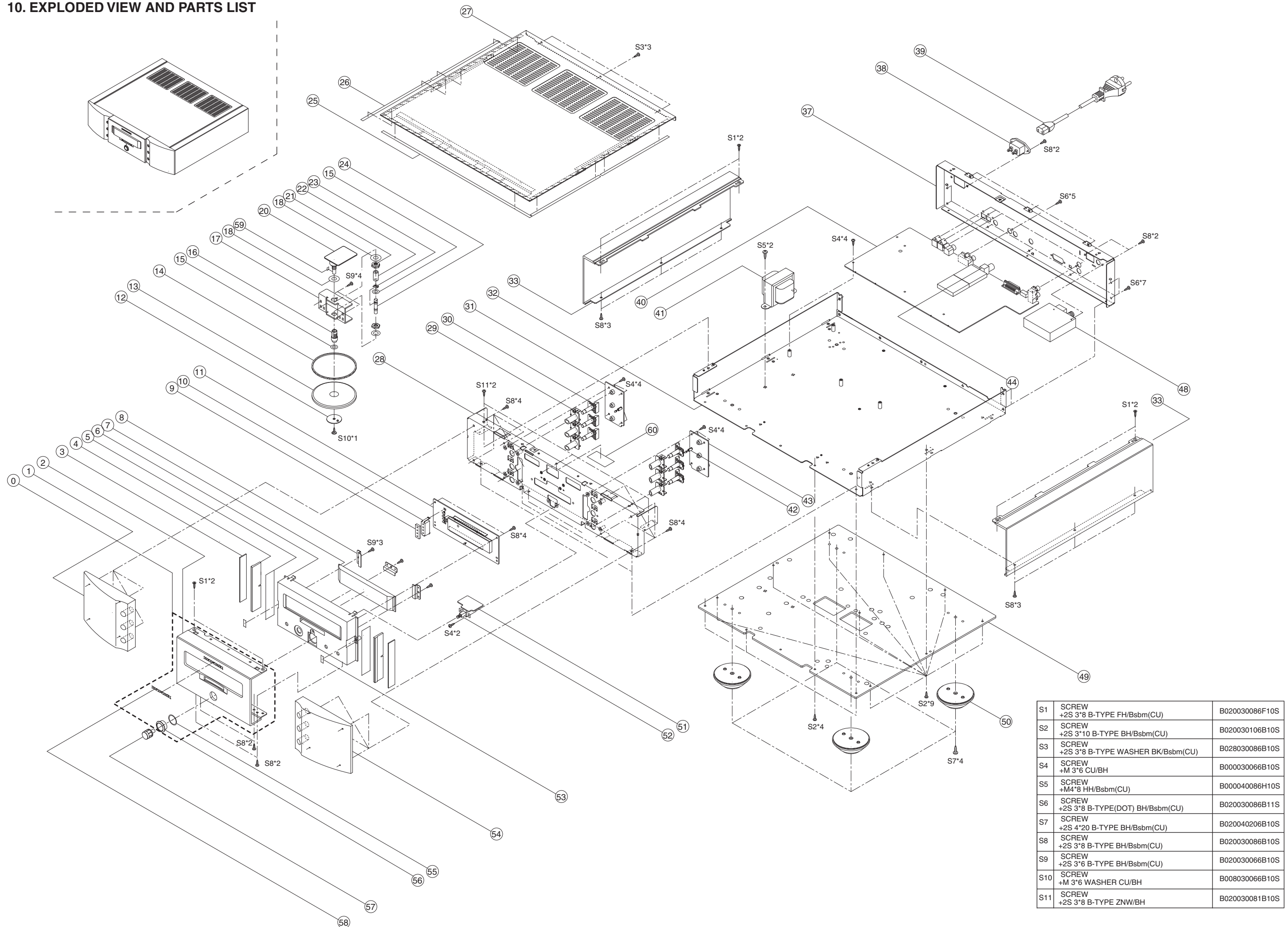
IC306 : BU1924F / RDS



●Pin descriptions

Pin No.	Symbol	Pin name	Functions	Input/Output type
1	QUAL	Demodulator quality	Good data : High, bad data : Low	Type C
2	RDATA	Demodulator data	Refer to output data timing	-
3	Vref	Reference voltage	1/2 V <sub>DD1</sub> (refer to input/output circuits)	Type E
4	MUX	Input	Composite signal input (refer to input/output circuits)	Type D
5	V <sub>DD1</sub>	Analog power supply	4.5V to 5.5V	-
6	V <sub>SS1</sub>			
7	V <sub>SS3</sub>	GND	-	-
8	CMP	Comparator input	C-junction (refer to input/output circuits)	Type D
9	T2	Test input	Open or connected to ground	Type B
10	T1			
11	V <sub>DD2</sub>	Digital power supply	4.5V to 5.5V	-
12	V <sub>SS2</sub>			
13	XI	Crystal oscillator	Connects to 4.332MHz oscillator (refer to input/output circuits)	Type A
14	XO			
15	(N.C.)	-	-	-
16	RCLK	Demodulator clock	1187.5Hz clock (refer to the timing diagram)	Type C

# 10. EXPLODED VIEW AND PARTS LIST



P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
	0	/N1G	90M22CW248410	90M22CW248410	PANEL ASSY	FRONT PANEL ASSY GOLD
	0	/N1S	90M22CW248420	90M22CW248420	PANEL ASSY	FRONT PANEL ASSY SILVER
	1	/N1G	00M22CW063110	00M22CW063110	ESCUTCHEON	FRONT LEFT SIDE (GL) ---
	1	/N1S	00M22CW063210	00M22CW063210	ESCUTCHEON	FRONT LEFT SIDE (SL) ---
	2	/N1G	nsp	nsp	PANEL	FRONT PANEL (GL) ---
	2	/N1S	nsp	nsp	PANEL	FRONT PANEL (SL) ---
	3		nsp	nsp	MASK	SIDE LENS BUFFER 4050211615000S
	4		00M18AK355010	00M18AK355010	LENS	SIDE LENS ---
	5		nsp	nsp	SHEET	SHEET FOR SIDE LENS INSIDE 1210210392000S
	6	/N1G	00M22CW105150	00M22CW105150	CHASSIS	FRONT MOLD CHASSIS(GL) 3217211321010S
	6	/N1S	00M22CW105250	00M22CW105250	CHASSIS	FRONT MOLD CHASSIS(SL) 3217211321000S
	7		00M22CW158010	00M22CW158010	WINDOW	WINDOW ST-15S1 (GOLD/SILVER) ---
	8		nsp	nsp	BRACKET	WINDOW BRACKET 4010212756000S
	9		nsp	nsp	BUFFER	SIDE LENS LED MASK 4050211625000S
	10		nsp	nsp	HOLDER	LED HOLDER 4320210561000S
	11		nsp	nsp	PWB ASSY	FRONT PWB ASSY 7028065401010
	12		nsp	nsp	RETAINER	ST15S1/N1S(MARANTZ) SUS 4340000016000S
	13	/N1G	00M11AJ063130	00M11AJ063130	ESCUTCHEON	GYRO ESCUTCHEON GL ---
	13	/N1S	00M11AJ063230	00M11AJ063230	ESCUTCHEON	GYRO ESCUTCHEON SL ---
	14		00M11AJ353010	00M11AJ353010	RING	RING GYRO RUBBER ---
	15		nsp	nsp	WASHER	POLY WASHER D6 T0.5 1210210442000S
	16		00M22CW055010	00M22CW055010	COLLAR	GYRO COLLOR ---
	17		nsp	nsp	BRACKET	GYRO BRACKET 4010212746000S
	18		nsp	nsp	WASHER	WASHER T0.9 4300210099000S
	20		nsp	nsp	PWB ASSY	ENCODER SW PWB ASSY 7028065403010
	21		nsp	nsp	NUT	SIX ANGLES M9*P.75 SUS/CAP 1520210296000S
	22		00M12AJ121010	00M12AJ121010	LINK	LINK GYRO ---
	23		nsp	nsp	RING	E-RING B700040005E10S
	24		00M22CW112010	00M22CW112010	SHAFT	GYRO SHAFT ---
	25		nsp	nsp	SHEET	TOP COVER SHEET (FRONT) 1210210402000S
	26		nsp	nsp	SHEET	TOP COVER SHEET (SIDE) 1210210412000S
	27	/N1G	00M18AK257520	00M18AK257520	LID	TOP COVER ASSY (GL) ---
	27	/N1S	00M18AK257530	00M18AK257530	LID	TOP COVER ASSY (SL) ---
	28		nsp	nsp	CHASSIS	FRONT METAL CHASSIS 3200212036000S
	29	/N1G	00M04AJ259210	00M04AJ259210	BUSHING	FUNCTION BUTTON BUSH GOLD ---
	29	/N1S	00M04AJ259110	00M04AJ259110	BUSHING	FUNCTION BUTTON BUSH SILVER ---
	30	/N1G	00M04AJ270130	00M04AJ270130	BUTTON	FUNCTION BUTTON (GL) ---
	30	/N1S	00M04AJ270230	00M04AJ270230	BUTTON	FUNCTION BUTTON (SL) ---
	31		nsp	nsp	PWB ASSY	L SIDE SW PWB ASSY 7028065405010
	32		nsp	nsp	CHASSIS	MAIN CHASSIS 3200212026000S
	33	/N1G	00M18AK249110	00M18AK249110	PANEL	SIDE PANEL AL GL ---
	33	/N1S	00M18AK249210	00M18AK249210	PANEL	SIDE PANEL AL SL ---
	37		nsp	nsp	CHASSIS	REAR PANEL ST-15S1 N 3207212046000S
▲	38		90M-YT004530R	90M-YT004530R	TERMINAL	! INLET 2P AC05-4S008A G430040560020S
	40		nsp	nsp	PWB ASSY	MAIN PWB ASSY 7028064094010
▲	41		90M-TS002560R	90M-TS002560R	TRANSF.	! POWER TRANSF. 230V/50HZ 8200570300020S
	42		nsp	nsp	SUPPORT	RUBBER 8T A4/LED (R SIDE) 4380210095000S
	42		nsp	nsp	SUPPORT	RUBBER 8T A4/LED (L SIDE) 4380210095000S
	43		nsp	nsp	PWB ASSY	R SIDE SW PWB ASSY 7028065404010
	44		00D9630225308	00D9630225308	TUNER	TDE-2002-A2 EUREKA-147 DAB E907200200012S
	48		90M-AV000460R	90M-AV000460R	TUNER	FM/AM TUNER FOR N E903141130010S
	49		nsp	nsp	LID	SPCC 3.2T/BOTTOM ---
	50	/N1G	00M04AJ057510	00M04AJ057510	LEG	LEGS (GOLD) ---
	50	/N1S	00M04AJ057520	00M04AJ057520	LEG	LEGS (SILVER) ---
	51		nsp	nsp	PWB ASSY	POWER SW PWB ASSY 7028065402010
	53		nsp	nsp	MASK	MASK SIDE LENS 5200210242000S
	54	/N1G	00M22CW063120	00M22CW063120	ESCUTCHEON	FRONT RIGHT SIDE (GL) ---
	54	/N1S	00M22CW063220	00M22CW063220	ESCUTCHEON	FRONT RIGHT SIDE (SL) ---
	55		nsp	nsp	ADHESIVE	POWER BUTTON RING ADHESIVE 1220210279000S
	56	/N1G	nsp	nsp	RING	POWER BOTTON RING (GL) ---
	56	/N1S	nsp	nsp	RING	POWER BOTTON RING (SL) ---
	57	/N1G	00M04AJ270110	00M04AJ270110	BUTTON	POWER BUTTON (GL) ---
	57	/N1S	00M04AJ270210	00M04AJ270210	BUTTON	POWER BUTTON (SL) ---
	58		nsp	nsp	BADGE	MZ BADGE ---
	59		nsp	nsp	SPACER	AL 0.05T/ENCODER SHAFT 4300210108000S
	60		nsp	nsp	SHEET	FRONT 1210210452000S
			nsp	90M-YU002070R	FPC	1.25*15*120*(5/5/10/10)*(0.05*0.8) N712151233810S

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	
			nsp	nsp	CORD	550MM/2P CKM3962-03	L000551020020S
<b>PACKING</b>							
			00M22CW851310	00M22CW851310	USER GUIDE	USER GUIDE ST-15S1 N	5707000000110S
	▲ 39		90M-ZC000600R	90M-ZC000600R	MAINS CORD	# 16A/250V M3204/VAC17S	L068250160020S
<b>NOT STANDARD SPARE PART</b>							
			nsp	00M22CW801010	PACKING CASE	PKG ST-15S1	6007210920000S
			nsp	00M22CW809010	CUSHION	CUSHION ST-15S1 (L/R)	6230211504000S
			nsp	00M22CW805010	MASS CARTON	MASTER CARTON ST-15S1(N)	6007210910000S
			nsp	90M-ZA000150R	ANTENNA	DAB TUNER ANTENNA ROD	E600355000010S
			nsp	90M-ZA000140R	ANTENNA	AM ANTENNA LOOP	E605010090010S
			nsp	90M-ZA000250R	ANTENNA	ANT WIRE (FM)	E605010070001S
			nsp	90M-ZD000520R	CONN. CORD	CINCH 2P AUDIO CABLE	L063122020010S
			nsp	90M-ZD000530R	CONN. CORD	CINCH 1P REMOTE CABLE	L063841010010S

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

# 11. ELECTRICAL PARTS LIST

## PARTS INFORMATION

### RESISTORS

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

① — Resistance value

Examples ;

① Resistance value

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

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

### CAPACITORS

#### CERAMIC CAP.

- 3) 00MDD1 × × × × 370, Ceramic capacitor  
Disc type  
Temp.coeff.P350 ~ N1000, 50V
- ② — Capacity value  
③ — Tolerance

Examples ;

② Tolerance (Capacity deviation)

±0.25pF.....0
±0.5pF.....1
±5%.....5

\* Tolerance of COMMON PARTS handled here are as follows :

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

③ Capacity value

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

#### CERAMIC CAP.

- 4) 00MDK16 × × × 300, High dielectric constant ceramic capacitor  
Disc type  
Temp.chara. 2B4, 50V
- ④ — Capacity value

Examples ;

④ Capacity value

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

#### ELECTROLY CAP. ( $\text{Z}$ )

- 5) 00MEA × × × × × 10, Electrolytic capacitor  
One-way lead type, Tolerance ±20%
- ⑤ — Working voltage  
⑥ — Capacity value

Examples ;

⑤ Capacity value

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

⑥ Working voltage

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

#### FILM CAP. ( $\text{+}$ )

- 6) 00MDF15 × × × 350 Plastic film capacitor  
One-way type, Mylar ±5% 50V
  - 00MDF15 × × × 310 Plastic film capacitor  
One-way type, Mylar ±10% 50V
- ⑦ — Capacity value

Examples ;

⑦ Capacity value

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

## NOTE ON SAFETY FOR FUSIBLE RESISTOR :

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

### 1. KOA Corporation

Part No. (MJI)	Type No. (KOA)	Description
00MNH05 × × × 140	→ RF25S × × × × ΩJ	(±5% 1/4W)
00MNH05 × × × 120	→ RF50S × × × × ΩJ	(±5% 1/2W)
00MNH85 × × × 110	→ RF73B2A × × × × ΩJ	(±5% 1/10W)
00MNH95 × × × 140	→ RF73B2E × × × × ΩJ	(±5% 1/4W)

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

### 2. Matsushita Electronic Components Co., Ltd

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

\* Resistance value \* Resistance value

Examples ;

\* Resistance value

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

## ABBREVIATION AND MARKS

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

## NOTE ON FUSE :

Regarding to all parts of parts code **00MFS20xxx2xx**, replace only with Wickmann-Werke GmbH, Type 372 non glass type fuse.

## NOTE ON SAFETY :

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

## 安全上の注意 :

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

P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
<b>ENCODER SW PWB</b>						
ENCODE	C121		nsp	00MDK96104300	CER. CAP.	X7R0.1UF-K/50V-1608 D011104577162S
ENCODE	C139		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL D011103777160S
ENCODE	CP202		nsp	nsp	CONN.	G1L-S-3P-S2T2-EF L101220030000S
ENCODE	VR100		00MSR02010130	00MSR02010130	ROTARY SW	EC12E2420802 ---
<b>FRONT PWB</b>						
FRONT	C111		nsp	00MDK96104300	CER. CAP.	X7R0.1UF-K/50V-1608 D011104577162S
FRONT	C113		00MEA10701010	00MEA10701010	ELECT CAP.	100UF-M/10V 6.3*5-5RE SY D040101082050S
FRONT	C114		nsp	00MDK96104300	CER. CAP.	X7R0.1UF-K/50V-1608 D011104577162S
FRONT	C115		00MEA10701010	00MEA10701010	ELECT CAP.	100UF-M/10V 6.3*5-5RE SY D040101082050S
FRONT	C117		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL D011103777160S
FRONT	C118		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL D011103777160S
FRONT	C119		nsp	00D9630224309	CER. CAP.	X7R820PF-K/50V-1608REEL D011821777160S
FRONT	C120		nsp	00D9630224309	CER. CAP.	X7R820PF-K/50V-1608REEL D011821777160S
FRONT	C123		nsp	00MDK96473200	CER. CAP.	X7R0.047UF-K/16V-1608 D011473773160S
FRONT	C124		nsp	00MDK96473200	CER. CAP.	X7R0.047UF-K/16V-1608 D011473773160S
FRONT	C133		nsp	00D9630223601	CER. CAP.	COG100PF-J/50V-1608REEL D010101167160S
FRONT	C134		nsp	00D9630223601	CER. CAP.	COG100PF-J/50V-1608REEL D010101167160S
FRONT	C135		nsp	00D9630223601	CER. CAP.	COG100PF-J/50V-1608REEL D010101167160S
FRONT	C136		nsp	00D9630223601	CER. CAP.	COG100PF-J/50V-1608REEL D010101167160S
FRONT	C137		nsp	00D9630224105	CER. CAP.	X7R1000PF-K/50V-1608REEL D011102777160S
FRONT	C138		nsp	00D9630224105	CER. CAP.	X7R1000PF-K/50V-1608REEL D011102777160S
FRONT	C145		nsp	00D9630223902	CER. CAP.	COG39PF-J/50V-1608REEL D010390167160S
FRONT	CN100		nsp	nsp	CORD	280MM/11P GIL-S-11=CKM2002HR-11 L000281110040S
FRONT	CN101		nsp	nsp	CORD	280MM/11P GIL-S-11=CKM2002HR-11 L000281110040S
FRONT	CN200		nsp	nsp	CORD	80MM/5P GIL-S-05=CKM2002HR-05 L000800050130S
FRONT	CN201		nsp	nsp	CORD	80MM/5P GIL-S-05=CKM2002HR-05 L000800050130S
FRONT	CN202		nsp	nsp	CORD	100MM/3P GIL-S-03=CKM2002HR-03 L000101030220S
FRONT	D102		nsp	00D9630219709	DIODE	1N4148W SOD-323 K005041480020S
FRONT	D103		nsp	00D9630219709	DIODE	1N4148W SOD-323 K005041480020S
FRONT	D104		nsp	00D9630219709	DIODE	1N4148W SOD-323 K005041480020S
FRONT	D105		nsp	00D9630219709	DIODE	1N4148W SOD-323 K005041480020S
FRONT	DZ101		00D9600095500	00D9600095500	ZENER DIODE	MTZJ5.1B-0.5W/5MA-52MM K06005R144520S
FRONT	FLT101		00D9630227403	00D9630227403	DISPLAY	162-SD-10GINK 106*25*6.6(T) K530162100010S
FRONT	J100		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J101		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J102		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J103		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J104		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J105		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J106		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J107		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J108		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J109		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J110		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J111		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J112		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J113		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J114		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J115		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J116		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J117		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J118		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J119		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J120		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J121		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J122		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J123		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J124		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J125		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J126		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J127		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J128		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J129		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J130		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	J131		nsp	nsp	CORD	JUMPER (0.6/52MM) L045084006040S
FRONT	LED101		00D9630267405	00D9630267405	LED	PI3-RD/SLR342VC3 K500032101061S

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	
FRONT	LED102		00D9630267405	00D9630267405	LED	PI3-RD/SLR342VC3	K500032101061S
FRONT	LED103		00D9630267405	00D9630267405	LED	PI3-RD/SLR342VC3	K500032101061S
FRONT	LED104		00D9630267405	00D9630267405	LED	PI3-RD/SLR342VC3	K500032101061S
FRONT	Q104		00D9600111808	00D9600111808	TRS.	TR CHIP KRC107S SOT23	J5020107S0050S
FRONT	Q105		00D9600111808	00D9600111808	TRS.	TR CHIP KRC107S SOT23	J5020107S0050S
FRONT	Q106		00D9600111808	00D9600111808	TRS.	TR CHIP KRC107S SOT23	J5020107S0050S
FRONT	Q107		00D9600111808	00D9600111808	TRS.	TR CHIP KRC107S SOT23	J5020107S0050S
FRONT	R101		nsp	00MNN05221610	CHIP RES.	220-J 1/16W-1608	C20002216M160S
FRONT	R102		nsp	00MNN05221610	CHIP RES.	220-J 1/16W-1608	C20002216M160S
FRONT	R103		nsp	00MNN05221610	CHIP RES.	220-J 1/16W-1608	C20002216M160S
FRONT	R104		nsp	00MNN05221610	CHIP RES.	220-J 1/16W-1608	C20002216M160S
FRONT	R106		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
FRONT	R110		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
FRONT	R113		nsp	00MNN05100610	CHIP RES.	10-J 1/16W-1608	C20001006M160S
FRONT	R114		nsp	00MNN05220610	CHIP RES.	22-J 1/16W-1608	C20002206M160S
FRONT	R118		nsp	00MNN05822610	CHIP RES.	8.2K-J 1/16W-1608	C20008226M160S
FRONT	R120		nsp	00MNN05201610	CHIP RES.	200-J 1/16W-1608	C20002016M160S
FRONT	R121		nsp	00MNN05201610	CHIP RES.	200-J 1/16W-1608	C20002016M160S
FRONT	R123		nsp	00MNN05201610	CHIP RES.	200-J 1/16W-1608	C20002016M160S
FRONT	R124		nsp	00MNN05201610	CHIP RES.	200-J 1/16W-1608	C20002016M160S
FRONT	R127		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
FRONT	R128		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
FRONT	R132		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
FRONT	R133		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
FRONT	R139		nsp	00MNN05100610	CHIP RES.	10-J 1/16W-1608	C20001006M160S
FRONT	R140		nsp	00MNN05221610	CHIP RES.	220-J 1/16W-1608	C20002216M160S
FRONT	R141		nsp	00MNN05221610	CHIP RES.	220-J 1/16W-1608	C20002216M160S
FRONT	R142		nsp	00MNN05221610	CHIP RES.	220-J 1/16W-1608	C20002216M160S
FRONT	R143		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
FRONT	R177		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C20000006M160S
FRONT	R178		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C20000006M160S
FRONT	RMC100		90M-HW100760R	90M-HW100760R	PHOTO UNIT	BRM-1470B-NS-FB2.2 36KHZ 7.5*6.5	E940147000010S
FRONT	RMC100-1		nsp	nsp	HOLDER	BLOCK A3/SENSOR	4350210001000S
					<b>L SIDE SW PWB</b>		
L SIDE	C112		nsp	00MDK96104300	CER. CAP.	X7R0.1UF-K/50V-1608	D011104577162S
L SIDE	CP200		nsp	nsp	CONN.	GIL-S-5P-S2L2-EF	L101220050010S
L SIDE	J132		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
L SIDE	LED106		00MHI10046080	00MHI10046080	LED	SELU2E10C-P TP6 3PI BLUE	---
L SIDE	Q108		00D9600111808	00D9600111808	TRS.	TR CHIP KRC107S SOT23	J5020107S0050S
L SIDE	R107		nsp	00MNN05432610	CHIP RES.	4.3K-J 1/16W-1608	C20004326M160S
L SIDE	R108		nsp	00MNN05562610	CHIP RES.	5.6K-J 1/16W-1608	C20005626M160S
L SIDE	R109		nsp	00MNN05391610	CHIP RES.	390-J 1/16W-1608	C20003916M160S
L SIDE	R116		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
L SIDE	S101		00D9630045708	00D9630045708	PUSH SW	SKHV10920A 5MM/260G-REEL	G180000270010S
L SIDE	S102		00D9630045708	00D9630045708	PUSH SW	SKHV10920A 5MM/260G-REEL	G180000270010S
L SIDE	S103		00D9630045708	00D9630045708	PUSH SW	SKHV10920A 5MM/260G-REEL	G180000270010S
					<b>MAIN PWB</b>		
MAIN	BD104		00D9630220002	00D9630220002	EMI FILTER	HB-IT2012-121JT 2012REEL	7611010000020S
MAIN	BD105		00D9630220002	00D9630220002	EMI FILTER	HB-IT2012-121JT 2012REEL	7611010000020S
MAIN	BD106		00D9630220002	00D9630220002	EMI FILTER	HB-IT2012-121JT 2012REEL	7611010000020S
MAIN	BD107		00D9630220002	00D9630220002	EMI FILTER	HB-IT2012-121JT 2012REEL	7611010000020S
MAIN	BEAD100		00D9630126504	00D9630126504	EMI FILTER	BFS 3550R2F 3.5*5.0 R.REEL	7610035500030S
MAIN	C126		nsp	00MDK96104300	CER. CAP.	X7R0.1UF-K/50V-1608	D011104577162S
MAIN	C127		nsp	00D9630223601	CER. CAP.	COG100PF-J/50V-1608REEL	D010101167160S
MAIN	C128		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C130L		nsp	nsp	FILM CAP.	CAP PP 1NF-J APS TYPE (SAGUB)	D02110206C010S
MAIN	C130R		nsp	nsp	FILM CAP.	CAP PP 1NF-J APS TYPE (SAGUB)	D02110206C010S
MAIN	C131		nsp	00MOA10605020	ELECT CAP.	10UF-M/50V 5*11-5RE.SY	D040100087070S
MAIN	C132		nsp	00D9630224202	CER. CAP.	X7R0.022UF-K/25V-1608REEL	D011223777160S
MAIN	C140		nsp	00D9630224202	CER. CAP.	X7R0.022UF-K/25V-1608REEL	D011223777160S
MAIN	C141		nsp	00D9630224202	CER. CAP.	X7R0.022UF-K/25V-1608REEL	D011223777160S
MAIN	C142		nsp	00MDK96104300	CER. CAP.	X7R0.1UF-K/50V-1608	D011104577162S
MAIN	C143		nsp	00MDK96104300	CER. CAP.	X7R0.1UF-K/50V-1608	D011104577162S
MAIN	C147L		nsp	nsp	FILM CAP.	CAP PP 220PF-J APS TYPE (SAGUB)	D02122106C010S
MAIN	C147R		nsp	nsp	FILM CAP.	CAP PP 220PF-J APS TYPE (SAGUB)	D02122106C010S
MAIN	C148L		nsp	nsp	FILM CAP.	CAP PP 220PF-J APS TYPE (SAGUB)	D02122106C010S
MAIN	C148R		nsp	nsp	FILM CAP.	CAP PP 220PF-J APS TYPE (SAGUB)	D02122106C010S

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	
MAIN	C149		nsp	00MOA47601640	ELECT CAP.	47UF-M/16V 5*11-5RE.SY	D040470083080S
MAIN	C150		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C151		nsp	00MDK96104300	CER. CAP.	X7R0.1UF-K/50V-1608	D011104577162S
MAIN	C152		nsp	00MOA10701620	ELECT CAP.	100UF-M/16V 6.3*11-5RE SMS SY	D040101083070S
MAIN	C153L		nsp	nsp	FILM CAP.	CAP PP 1NF-J APS TYPE (SAGUB)	D02110206C010S
MAIN	C153R		nsp	nsp	FILM CAP.	CAP PP 1NF-J APS TYPE (SAGUB)	D02110206C010S
MAIN	C154		nsp	00MDK96104300	CER. CAP.	X7R0.1UF-K/50V-1608	D011104577162S
MAIN	C155		nsp	00MDK96104300	CER. CAP.	X7R0.1UF-K/50V-1608	D011104577162S
MAIN	C156		nsp	00MOA10701620	ELECT CAP.	100UF-M/16V 6.3*11-5RE SMS SY	D040101083070S
MAIN	C157		nsp	00MDK96104300	CER. CAP.	X7R0.1UF-K/50V-1608	D011104577162S
MAIN	C158		nsp	nsp	CER. CAP.	F0.1UF-Z/50V-52RE	D005104597530S
MAIN	C159L		nsp	90M-OA000550R	ELECT CAP.	47UF-M/16V 5*11-5RE(AHS) SY	D046470083060S
MAIN	C159R		nsp	90M-OA000550R	ELECT CAP.	47UF-M/16V 5*11-5RE(AHS) SY	D046470083060S
MAIN	C160		nsp	90M-OA000550R	ELECT CAP.	47UF-M/16V 5*11-5RE(AHS) SY	D046470083060S
MAIN	C162		nsp	90M-OA000550R	ELECT CAP.	47UF-M/16V 5*11-5RE(AHS) SY	D046470083060S
MAIN	C163		nsp	90M-OA000550R	ELECT CAP.	47UF-M/16V 5*11-5RE(AHS) SY	D046470083060S
MAIN	C164		nsp	00MDK96104300	CER. CAP.	X7R0.1UF-K/50V-1608	D011104577162S
MAIN	C165L		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C165R		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C166		nsp	00MOA10605020	ELECT CAP.	10UF-M/50V 5*11-5RE.SY	D040100087070S
MAIN	C167		nsp	nsp	CER. CAP.	F0.1UF-Z/50V-52RE	D005104597530S
MAIN	C170L		nsp	nsp	FILM CAP.	CAP PP 10NF-J APS TYPE (SAGUB)	D02110306C020S
MAIN	C170R		nsp	nsp	FILM CAP.	CAP PP 10NF-J APS TYPE (SAGUB)	D02110306C020S
MAIN	C171		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C172		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C173		nsp	nsp	CER. CAP.	F0.1UF-Z/50V-52RE	D005104597530S
MAIN	C174		nsp	90M-OA000550R	ELECT CAP.	47UF-M/16V 5*11-5RE(AHS) SY	D046470083060S
MAIN	C175		nsp	00MOA10701620	ELECT CAP.	100UF-M/16V 6.3*11-5RE SMS SY	D040101083070S
MAIN	C176		nsp	nsp	CER. CAP.	SL10PF-J/50V-52RE	D001100067520S
MAIN	C177		nsp	nsp	CER. CAP.	SL33PF-J/50V-52RE	D001330067520S
MAIN	C178		nsp	nsp	CER. CAP.	SL10PF-J/50V-52RE	D001100067520S
MAIN	C179		nsp	nsp	CER. CAP.	SL33PF-J/50V-52RE	D001330067520S
MAIN	C180L		nsp	00D9630224008	CER. CAP.	COG470PF-J/50V-1608REEL	D010471167160S
MAIN	C180R		nsp	00D9630224008	CER. CAP.	COG470PF-J/50V-1608REEL	D010471167160S
MAIN	C181		nsp	00MOA10605020	ELECT CAP.	10UF-M/50V 5*11-5RE.SY	D040100087070S
MAIN	C182		nsp	00MOA10605020	ELECT CAP.	10UF-M/50V 5*11-5RE.SY	D040100087070S
MAIN	C183		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C185L		nsp	90M-OA000550R	ELECT CAP.	47UF-M/16V 5*11-5RE(AHS) SY	D046470083060S
MAIN	C185R		nsp	90M-OA000550R	ELECT CAP.	47UF-M/16V 5*11-5RE(AHS) SY	D046470083060S
MAIN	C186		nsp	00MOA47601640	ELECT CAP.	47UF-M/16V 5*11-5RE.SY	D040470083080S
MAIN	C188		nsp	00MOA47601640	ELECT CAP.	47UF-M/16V 5*11-5RE.SY	D040470083080S
MAIN	C200		nsp	00MDK96104300	CER. CAP.	X7R0.1UF-K/50V-1608	D011104577162S
MAIN	C201		00D9630224600	00D9630224600	ELECT CAP.	220UF-M/16V 8*11.5-5RE SMS-SY	D040221083090S
MAIN	C202		nsp	00MOA10505020	ELECT CAP.	0.1UF-M/50V 5*11-5RE.SY (PB FREE)	D040R10087080S
MAIN	C300		00MEA22801610	00MEA22801610	ELECT CAP.	2200UF-M/16V 10*20-L.BLK SY	D040222083080S
MAIN	C301		nsp	00MOA10701620	ELECT CAP.	100UF-M/16V 6.3*11-5RE SMS SY	D040101083070S
MAIN	C302		nsp	00D9630224105	CER. CAP.	X7R1000PF-K/50V-1608REEL	D011102777160S
MAIN	C303		nsp	00MDK96104300	CER. CAP.	X7R0.1UF-K/50V-1608	D011104577162S
MAIN	C305		nsp	00MOA10605020	ELECT CAP.	10UF-M/50V 5*11-5RE.SY	D040100087070S
MAIN	C306		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C307		nsp	00MOA10701620	ELECT CAP.	100UF-M/16V 6.3*11-5RE SMS SY	D040101083070S
MAIN	C308		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C309		nsp	00MOA10505020	ELECT CAP.	0.1UF-M/50V 5*11-5RE.SY (PB FREE)	D040R10087080S
MAIN	C310		nsp	00MOA10505020	ELECT CAP.	0.1UF-M/50V 5*11-5RE.SY (PB FREE)	D040R10087080S
MAIN	C311		nsp	00MOA10505020	ELECT CAP.	0.1UF-M/50V 5*11-5RE.SY (PB FREE)	D040R10087080S
MAIN	C312		nsp	00MOA10505020	ELECT CAP.	0.1UF-M/50V 5*11-5RE.SY (PB FREE)	D040R10087080S
MAIN	C313		nsp	00MOA10701620	ELECT CAP.	100UF-M/16V 6.3*11-5RE SMS SY	D040101083070S
MAIN	C314		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C315		nsp	00MOA10605020	ELECT CAP.	10UF-M/50V 5*11-5RE.SY	D040100087070S
MAIN	C316		nsp	00D9630224105	CER. CAP.	X7R1000PF-K/50V-1608REEL	D011102777160S
MAIN	C320		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C549		nsp	00MOA47601640	ELECT CAP.	47UF-M/16V 5*11-5RE.SY	D040470083080S
MAIN	C550		nsp	00MOA10505020	ELECT CAP.	0.1UF-M/50V 5*11-5RE.SY (PB FREE)	D040R10087080S
MAIN	C551		nsp	00D9639006146	CER. CAP.	COG 560PF-J/50V-1608REEL	D010561167160S
MAIN	C552		nsp	00MOA22605020	ELECT CAP.	22UF-M/50V 5*11-5RE.SY	D040220087060S
MAIN	C559		nsp	00D9630223805	CER. CAP.	COG33PF-J/50V-1608REEL	D010330167160S
MAIN	C566		nsp	00D9630223805	CER. CAP.	COG33PF-J/50V-1608REEL	D010330167160S

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	
MAIN	C567		nsp	nsp	CER. CAP.	BO.001UF-K/50V-5RE	D004102277050S
MAIN	C568		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C570		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C572		nsp	00D9630223708	CER. CAP.	COG270PF-J/50V-1608REEL	D010271167160S
MAIN	C575		nsp	00D9630223601	CER. CAP.	COG100PF-J/50V-1608REEL	D010101167160S
MAIN	C576		nsp	00D9630223601	CER. CAP.	COG100PF-J/50V-1608REEL	D010101167160S
MAIN	C577		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C900		nsp	nsp	CER. CAP.	F0.01UF-Z/500V-5RE	D00410359D050S
MAIN	C901		nsp	nsp	CER. CAP.	F0.01UF-Z/500V-5RE	D00410359D050S
MAIN	C902		nsp	00MOA33801620	ELECT CAP.	3300UF-M/25V 16*25L.BLK SY	D040332084010S
MAIN	C903		nsp	00MOA47601640	ELECT CAP.	47UF-M/16V 5*11-5RE.SY	D040470083080S
MAIN	C904		nsp	00D9630224105	CER. CAP.	X7R1000PF-K/50V-1608REEL	D011102777160S
MAIN	C905		00D9630183301	00D9630183301	ELECT CAP.	4700UF-M/25V 16*31.5L.BLK SY	D040472084020S
MAIN	C906		nsp	00MOA10701620	ELECT CAP.	100UF-M/16V 6.3*11-5RE SMS SY	D040101083070S
MAIN	▲ C907		00D9639006191	00D9639006191	CER. CAP.	! AC13F472MDOA 10 4.0*10.0 F.BLK	D00847208K070S
MAIN	C908		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C909		nsp	nsp	CER. CAP.	F0.01UF-Z/500V-5RE	D00410359D050S
MAIN	C910		nsp	nsp	CER. CAP.	F0.01UF-Z/500V-5RE	D00410359D050S
MAIN	C911		nsp	nsp	CER. CAP.	F0.01UF-Z/500V-5RE	D00410359D050S
MAIN	C912		nsp	nsp	CER. CAP.	F0.01UF-Z/500V-5RE	D00410359D050S
MAIN	C913		nsp	nsp	CER. CAP.	F0.01UF-Z/500V-5RE	D00410359D050S
MAIN	C914		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C915		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C916		nsp	00MOA47610020	ELECT CAP.	47UF-M/100V 10*12.5	D04047008C130S
MAIN	C917		nsp	00MOA22505020	ELECT CAP.	2.2UF-M/50V 5*11-5RE SY	D0402R2087160S
MAIN	C918		nsp	00MOA47601640	ELECT CAP.	47UF-M/16V 5*11-5RE.SY	D040470083080S
MAIN	C919		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C920		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C922		nsp	00MOA47605020	ELECT CAP.	47UF-M/50V 6.3*11-5RE.SY (PB FREE)	D040470087070S
MAIN	C923		nsp	00MOA10505020	ELECT CAP.	1UF-M/50V 5*11-5RE.SY	D040010087150S
MAIN	C924		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C925		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C926		00D9630224600	00D9630224600	ELECT CAP.	220UF-M/16V 8*11.5-5RE SMS-SY	D040221083090S
MAIN	C927		nsp	nsp	CER. CAP.	F0.01UF-Z/500V-5RE	D00410359D050S
MAIN	C928		nsp	00D9630224105	CER. CAP.	X7R1000PF-K/50V-1608REEL	D011102777160S
MAIN	C929		nsp	00D9639004698	CER. CAP.	X7R0.01UF-K/50V-1608REEL	D011103777160S
MAIN	C930		nsp	00MDD95240300	CER. CAP.	COG24PF-J/50V-1608REEL	D010240167160S
MAIN	C931		00D9630183301	00D9630183301	ELECT CAP.	4700UF-M/25V 16*31.5L.BLK SY	D040472084020S
MAIN	C932		nsp	00MDD95240300	CER. CAP.	COG24PF-J/50V-1608REEL	D010240167160S
MAIN	C950		nsp	00MOA10701620	ELECT CAP.	100UF-M/16V 6.3*11-5RE SMS SY	D040101083070S
MAIN	C951		nsp	00MOA10701620	ELECT CAP.	100UF-M/16V 6.3*11-5RE SMS SY	D040101083070S
MAIN	C959		00D9630224707	00D9630224707	ELECT CAP.	2200UF-M/35V 16*25-L.BLK SY	D040222085020S
MAIN	C960		nsp	00MOA47703520	ELECT CAP.	470UF-M/35V 10*20-L.BLK SY	D040471085020S
MAIN	CLAMP101		nsp	nsp	CLAMPER	W=2.6 L=50/WIRE	4330000120000S
MAIN	CN111		nsp	nsp	CORD	130MM/8P CKM2002H-8=CKM2002H-8	L000131080040S
MAIN	CP100		nsp	nsp	CONN.	GIL-S-11P-S2T2-EF	L101220110000S
MAIN	CP101		nsp	nsp	CONN.	GIL-S-11P-S2T2-EF	L101220110000S
MAIN	CP110		nsp	nsp	CONN.	SCB 1115-00 15P ST	L131111500010S
MAIN	CP900		nsp	nsp	CONN.	5267-06A 6P	L102526700600S
MAIN	CP901		nsp	nsp	CONN.	35328-0260 7.92MM HEADER	L108353280260S
MAIN	CP902		nsp	nsp	CONN.	PLUG JE202B1T2 ST2P 3-B2	L108202000220S
MAIN	CP920		nsp	nsp	CONN.	5267-04A 4P	L102526700400S
MAIN	D300		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D301		nsp	00D2760401905	DIODE	1S133T-72-52MM	K000013300520S
MAIN	D302		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D320		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D321		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D322		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D323		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D324		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D325		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D326		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D327		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D328		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D329		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D330		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D331		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S

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	
MAIN	D332		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D333		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D334		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D335		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D336		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D337		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D338		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D339		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D340		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D402		nsp	00D2760401905	DIODE	1SS133T-72-52MM	K000013300520S
MAIN	D408		nsp	00D2760401905	DIODE	1SS133T-72-52MM	K000013300520S
MAIN	D900		nsp	00D9630058407	DIODE	IN4007 52REEL 1000V 1A	K000400700520S
MAIN	D901		nsp	00D9630058407	DIODE	IN4007 52REEL 1000V 1A	K000400700520S
MAIN	D902		nsp	00D9630058407	DIODE	IN4007 52REEL 1000V 1A	K000400700520S
MAIN	D903		nsp	00D9630058407	DIODE	IN4007 52REEL 1000V 1A	K000400700520S
MAIN	D904		nsp	00D2760401905	DIODE	1SS133T-72-52MM	K000013300520S
MAIN	D906		nsp	00D9630058407	DIODE	IN4007 52REEL 1000V 1A	K000400700520S
MAIN	D907		nsp	00D9630058407	DIODE	IN4007 52REEL 1000V 1A	K000400700520S
MAIN	D908		nsp	00D2760401905	DIODE	1SS133T-72-52MM	K000013300520S
MAIN	D911		nsp	00D2760401905	DIODE	1SS133T-72-52MM	K000013300520S
MAIN	D912		nsp	00D9630058407	DIODE	IN4007 52REEL 1000V 1A	K000400700520S
MAIN	D913		nsp	00D9630058407	DIODE	IN4007 52REEL 1000V 1A	K000400700520S
MAIN	D914		nsp	00D9630058407	DIODE	IN4007 52REEL 1000V 1A	K000400700520S
MAIN	D915		nsp	00D9630058407	DIODE	IN4007 52REEL 1000V 1A	K000400700520S
MAIN	D916		nsp	00D9630058407	DIODE	IN4007 52REEL 1000V 1A	K000400700520S
MAIN	D917		nsp	00D9630219709	DIODE	1N4148W SOD-323	K005041480020S
MAIN	D918		nsp	00D9630058407	DIODE	IN4007 52REEL 1000V 1A	K000400700520S
MAIN	D919		nsp	00D2760401905	DIODE	1SS133T-72-52MM	K000013300520S
MAIN	D920		nsp	00D2760401905	DIODE	1SS133T-72-52MM	K000013300520S
MAIN	D921		nsp	00D2760401905	DIODE	1SS133T-72-52MM	K000013300520S
MAIN	FL900		nsp	nsp	HOLDER	PI5.2-REEL	G645000050010S
MAIN	FR900		nsp	nsp	HOLDER	PI5.2-REEL	G645000050010S
MAIN	▲ FUSE900		00D9630228402	00D9630228402	FUSE	! T200MA /250V-SVBRC(K) 218	N751222000110S
MAIN	GND900		nsp	nsp	TERMINAL	MET37-0002/EARTH FITTING	3790040886000S
MAIN	IC102		00D9630226200	00D9630226200	IC	AD1852JRS SSOP28 /192KHZ 24BIT	J042185200010S
MAIN	IC104		00MHC10175090	00MHC10175090	IC	NJM2114M-DMP8P	J121211400020S
MAIN	IC105		00D9630227005	00D9630227005	CHIP FET	SP8K5TB N-CHANNEL SOP8	J544850000010S
MAIN	IC106		00MHC10175090	00MHC10175090	IC	NJM2114M-DMP8P	J121211400020S
MAIN	IC200		00D9600275304	00D9600275304	IC	74HCT153D SOP16P	J040741530040S
MAIN	IC205		90M-HC700570R	90M-HC700570R	IC	MM74LCX244 TSSOP 20P	J040742440180S
MAIN	IC206		90M-HC700300R	90M-HC700300R	IC	74VHCU04 SOP14	J040740400260S
MAIN	IC300		90M-HS22CWX0R	90M-HS22CWX0R	U-PRO	MB90F352PFM-G ST-15S1 FOR N	J020903520010S
MAIN	IC304		00D9630226307	00D9630226307	IC	AK4103A 192KHZ 24-BIT VSOP24P	J042410300010S
MAIN	IC305		00D9630226404	00D9630226404	IC	ST232CDR 5V SOP16	J046232000030S
MAIN	IC306		00D9630226501	00D9630226501	IC	BU1924F SOP16	J124192400010S
MAIN	IC704		90M-HC109500R	90M-HC109500R	IC	M24C64-WMN6TP SOP8P	J000240640010S
MAIN	IC900		00D9600188909	00D9600188909	IC	KIA78DL06PI 20W LOW DROP	J126780600140S
MAIN	IC901		00D9600296008	00D9600296008	IC	CJ7805F TO-220F 15W 1.5A MOLD	J126780500400S
MAIN	IC902		00D9630226608	00D9630226608	IC	KIA78R33API 3.3V LOW DROP 1A	J12678R330010S
MAIN	IC903		00D9600296105	00D9600296105	IC	CJ7812F TO-220F 15W 1.5A MOLD	J126781200220S
MAIN	IC904		00D9600296202	00D9600296202	IC	CJ7912F TO-220F 15W 1.5A MOLD	J126791200130S
MAIN	J300		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J301		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C20000006160S
MAIN	J302		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J303		nsp	nsp	CHIP RES.	0-J 1/8W-3216	C200000061300S
MAIN	J304		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J305		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J306		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J307		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J308		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J309		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J311		nsp	nsp	CHIP RES.	0-J 1/8W-3216	C200000061300S
MAIN	J312		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J313		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J314		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J315		nsp	nsp	CHIP RES.	0-J 1/8W-3216	C200000061300S
MAIN	J316		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S

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	
MAIN	J317		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J318		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J319		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J320		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J321		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J322		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J323		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J324		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J325		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J326		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J327		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J328		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J329		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J330		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J331		nsp	nsp	CHIP RES.	0-J 1/8W-3216	C20000061300S
MAIN	J340		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J341		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J342		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J343		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J344		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J345		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J346		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J347		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J348		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J349		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J350		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J351		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J352		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J353		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J355		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J357		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J362		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J363		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J364		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J365		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J366		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J367		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J368		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J369		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J370		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J371		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J372		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J373		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J374		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J375		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J376		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J377		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J378		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J379		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J380		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J381		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J382		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J383		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J384		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J385		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J386		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J387		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J388		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J389		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J390		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J391		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J392		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J393		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J394		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J398		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J399		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J400		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S

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	
MAIN	J401		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J403		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J405		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J406		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J407		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J408		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J409		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J410		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J411		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J414		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J415		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J418		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J420		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J421		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J422		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J423		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J424		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J425		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J426		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J427		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J428		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J429		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J430		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J431		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J432		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J433		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J434		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J435		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J436		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J437		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J438		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J439		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J440		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J441		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J442		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J443		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J444		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J445		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J446		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J447		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J449		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J450		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J451		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J452		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J453		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J454		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J900		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J901		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J902		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J903		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J904		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J909		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J910		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J911		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J912		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J913		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J914		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J915		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J918		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J919		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J923		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J924		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J925		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J927		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J928		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J930		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C2000006M160S
MAIN	J931		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S

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	
MAIN	J932		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J933		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J935		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J937		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J938		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J939		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J940		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J942		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J943		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J944		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J945		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J948		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J949		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J950		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J951		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	J952		nsp	nsp	CORD	JUMPER (0.6/52MM)	L045084006040S
MAIN	JACK100		90M-YT005150R	90M-YT005150R	TERMINAL	RCA-206BFG1-05G(RD/WH) 2P CINCH	G601206BFG10YS
MAIN	JACK104		90M-YT004550R	90M-YT004550R	TERMINAL	15P FEMALE CONN. ANGLE	L103150080030S
MAIN	JACK300		90M-YT005140R	90M-YT005140R	TERMINAL	RCA-107AGF(BK) 1P CINCH	G600107AGF00YS
MAIN	JACK301		90M-YT004540R	90M-YT004540R	TERMINAL	RCA-207AE-07 CINCH 2P	G601207AE070YS
MAIN	OPT300		00D9630225104	00D9630225104	OPT. CONN.	JST1165-B 96K SHUTTER	E100116500030S
MAIN	OPT301		00D9630225104	00D9630225104	OPT. CONN.	JST1165-B 96K SHUTTER	E100116500030S
MAIN	Q109		90M-BA001540R	90M-BA001540R	CHIP TRS.	KRA101S R1 R2=4.7K 0.2W	J520010100010S
MAIN	Q110		00D9630066606	00D9630066606	CHIP TRS.	KTC3875Y(ALY) 0.15W	J5223875Y0210S
MAIN	Q111		00D9600111808	00D9600111808	TRS.	TR CHIP KRC107S SOT23	J5020107S0050S
MAIN	Q112L		00D9630044301	00D9630044301	CHIP TRS.	KTC2875B(MB) 0.15W SOT23(RTK)	J5222875B0010S
MAIN	Q112R		00D9630044301	00D9630044301	CHIP TRS.	KTC2875B(MB) 0.15W SOT23(RTK)	J5222875B0010S
MAIN	Q114L		00D9630044301	00D9630044301	CHIP TRS.	KTC2875B(MB) 0.15W SOT23(RTK)	J5222875B0010S
MAIN	Q114R		00D9630044301	00D9630044301	CHIP TRS.	KTC2875B(MB) 0.15W SOT23(RTK)	J5222875B0010S
MAIN	Q115		00MHT800921B0	00MHT800921B0	TRS.	KTC3199Y 0.4W/TO90M-REEL	J5023199Y0010S
MAIN	Q116		90M-BA001230R	90M-BA001230R	CHIP TRS.	KRA102S(PB) 0.2W/SOT-23	J520010200210S
MAIN	Q117		90M-BA001230R	90M-BA001230R	CHIP TRS.	KRA102S(PB) 0.2W/SOT-23	J520010200210S
MAIN	Q119		90M-BA001230R	90M-BA001230R	CHIP TRS.	KRA102S(PB) 0.2W/SOT-23	J520010200210S
MAIN	Q300		00D9630066606	00D9630066606	CHIP TRS.	KTC3875Y(ALY) 0.15W	J5223875Y0210S
MAIN	Q301		00D9600285006	00D9600285006	CHIP TRS.	KRC104S (ND)/SOT-23	J522104S00210S
MAIN	Q304		00D9630102803	00D9630102803	TRS.	2SA933S 0.3W/TO92M-REEL	J5000933S0050S
MAIN	Q305		90M-BA001190R	90M-BA001190R	TRS.	KRC107M 0.4W/TO92M-REEL	J6020107M0010S
MAIN	Q306		00D9630066606	00D9630066606	CHIP TRS.	KTC3875Y(ALY) 0.15W	J5223875Y0210S
MAIN	Q307		00D9630226909	00D9630226909	CHIP TRS.	KRC114S (NP) 0.2W/SOT-23	J522011400210S
MAIN	Q308		00D9630102803	00D9630102803	TRS.	2SA933S 0.3W/TO92M-REEL	J5000933S0050S
MAIN	Q309		00D9600111808	00D9600111808	TRS.	TR CHIP KRC107S SOT23	J5020107S0050S
MAIN	Q900		00D9630066606	00D9630066606	CHIP TRS.	KTC3875Y(ALY) 0.15W	J5223875Y0210S
MAIN	Q901		00D9630066606	00D9630066606	CHIP TRS.	KTC3875Y(ALY) 0.15W	J5223875Y0210S
MAIN	Q902		00D9630066606	00D9630066606	CHIP TRS.	KTC3875Y(ALY) 0.15W	J5223875Y0210S
MAIN	Q909		00D9630226705	00D9630226705	TRS.	KTC1027Y 1W/TO92L-REEL	J5021027Y0020S
MAIN	R105		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
MAIN	R119L		nsp	nsp	RES.	1.8K-J 1/5W-52RE-AX	C00001826P520S
MAIN	R119R		nsp	nsp	RES.	1.8K-J 1/5W-52RE-AX	C00001826P520S
MAIN	R121L		nsp	nsp	RES.	1.8K-J 1/5W-52RE-AX	C00001826P520S
MAIN	R121R		nsp	nsp	RES.	1.8K-J 1/5W-52RE-AX	C00001826P520S
MAIN	R129		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
MAIN	R130L		nsp	nsp	RES.	2K-J 1/5W-52RE-AX	C00002026P520S
MAIN	R130R		nsp	nsp	RES.	2K-J 1/5W-52RE-AX	C00002026P520S
MAIN	R131		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
MAIN	R135L		nsp	nsp	RES.	2K-J 1/5W-52RE-AX	C00002026P520S
MAIN	R135R		nsp	nsp	RES.	2K-J 1/5W-52RE-AX	C00002026P520S
MAIN	R136		nsp	00MNN05750610	CHIP RES.	75-J 1/16W-1608	C20007506M160S
MAIN	R137L		nsp	nsp	RES.	2K-J 1/5W-52RE-AX	C00002026P520S
MAIN	R137R		nsp	nsp	RES.	2K-J 1/5W-52RE-AX	C00002026P520S
MAIN	R138L		nsp	nsp	RES.	2K-J 1/5W-52RE-AX	C00002026P520S
MAIN	R138R		nsp	nsp	RES.	2K-J 1/5W-52RE-AX	C00002026P520S
MAIN	R146		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
MAIN	R147		nsp	nsp	RES.	47K-J 1/5W-52RE-AX	C00004736P520S
MAIN	R148		nsp	nsp	RES.	47K-J 1/5W-52RE-AX	C00004736P520S
MAIN	R152L		nsp	nsp	RES.	200-J 1/5W-52RE-AX	C00002016P520S
MAIN	R152R		nsp	nsp	RES.	200-J 1/5W-52RE-AX	C00002016P520S
MAIN	R154L		nsp	nsp	RES.	47K-J 1/5W-52RE-AX	C00004736P520S

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	
MAIN	R154R		nsp		RES.	47K-J 1/5W-52RE-AX	C00004736P520S
MAIN	R155		nsp	nsp	RES.	4.7K-J 1/5W-52RE-AX	C00004726P520S
MAIN	R156		nsp	00MNN05100610	CHIP RES.	10-J 1/16W-1608	C20001006M160S
MAIN	R157		nsp	00MNN05100610	CHIP RES.	10-J 1/16W-1608	C20001006M160S
MAIN	R158		nsp	00MNN05100610	CHIP RES.	10-J 1/16W-1608	C20001006M160S
MAIN	R159		nsp	nsp	RES.	4.7K-J 1/5W-52RE-AX	C00004726P520S
MAIN	R160		nsp	nsp	RES.	4.7K-J 1/5W-52RE-AX	C00004726P520S
MAIN	R161		nsp	nsp	RES.	4.7K-J 1/5W-52RE-AX	C00004726P520S
MAIN	R163		nsp	nsp	RES.	47K-J 1/5W-52RE-AX	C00004736P520S
MAIN	R164		nsp	nsp	RES.	47K-J 1/5W-52RE-AX	C00004736P520S
MAIN	R165		nsp	00MNN05224610	CHIP RES.	220K-J 1/16W-1608	C20002246M160S
MAIN	R166		nsp	00MNN05102610	CHIP RES.	1K-J 1/16W-1608	C20001026M160S
MAIN	R167		nsp	00MNN05102610	CHIP RES.	1K-J 1/16W-1608	C20001026M160S
MAIN	R168		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
MAIN	R168L		nsp	00MNN05332610	CHIP RES.	3.3K-J 1/16W-1608	C20003326M160S
MAIN	R168R		nsp	00MNN05332610	CHIP RES.	3.3K-J 1/16W-1608	C20003326M160S
MAIN	R169L		nsp	00MNN05332610	CHIP RES.	3.3K-J 1/16W-1608	C20003326M160S
MAIN	R169R		nsp	00MNN05332610	CHIP RES.	3.3K-J 1/16W-1608	C20003326M160S
MAIN	R171		nsp	00MNN05100610	CHIP RES.	10-J 1/16W-1608	C20001006M160S
MAIN	R174L		nsp	nsp	RES.	220-J 1/5W-52RE-AX	C00002216P520S
MAIN	R174R		nsp	nsp	RES.	220-J 1/5W-52RE-AX	C00002216P520S
MAIN	R176L		nsp	nsp	RES.	220-J 1/5W-52RE-AX	C00002216P520S
MAIN	R176R		nsp	nsp	RES.	220-J 1/5W-52RE-AX	C00002216P520S
MAIN	R178		nsp	00MNN05100610	CHIP RES.	10-J 1/16W-1608	C20001006M160S
MAIN	R179		nsp	00MNN05102610	CHIP RES.	1K-J 1/16W-1608	C20001026M160S
MAIN	R181L		nsp	nsp	RES.	220-J 1/5W-52RE-AX	C00002216P520S
MAIN	R181R		nsp	nsp	RES.	220-J 1/5W-52RE-AX	C00002216P520S
MAIN	R187		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C20000006M160S
MAIN	R188		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C20000006M160S
MAIN	R189		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C20000006M160S
MAIN	R190		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C20000006M160S
MAIN	R195		nsp	nsp	RES.	47K-J 1/5W-52RE-AX	C00004736P520S
MAIN	R196		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C20000006M160S
MAIN	R197		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
MAIN	R198		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
MAIN	R199		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
MAIN	R200		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
MAIN	R204		nsp	00MNN05181610	CHIP RES.	180-J 1/16W-1608	C20001816M160S
MAIN	R205		nsp	00MNN05181610	CHIP RES.	180-J 1/16W-1608	C20001816M160S
MAIN	R206		nsp	nsp	RES.	47-J 1/5W-52RE-AX	C00004706P520S
MAIN	R207		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C20000006M160S
MAIN	R208		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C20000006M160S
MAIN	R209		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C20000006M160S
MAIN	R210		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
MAIN	R211		nsp	00MNN05274610	CHIP RES.	270K-J 1/16W-1608	C20002746M160S
MAIN	R212L		nsp	nsp	RES.	47K-J 1/5W-52RE-AX	C00004736P520S
MAIN	R212R		nsp	nsp	RES.	47K-J 1/5W-52RE-AX	C00004736P520S
MAIN	R213L		nsp	nsp	RES.	47K-J 1/5W-52RE-AX	C00004736P520S
MAIN	R213R		nsp	nsp	RES.	47K-J 1/5W-52RE-AX	C00004736P520S
MAIN	R215		nsp	nsp	RES.	47K-J 1/5W-52RE-AX	C00004736P520S
MAIN	R216		nsp	nsp	RES.	47-J 1/5W-52RE-AX	C00004706P520S
MAIN	R217		nsp	00MNN05470610	CHIP RES.	47-J 1/16W-1608	C20004706M160S
MAIN	R218		nsp	00MNN05470610	CHIP RES.	47-J 1/16W-1608	C20004706M160S
MAIN	R219		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
MAIN	R220		nsp	nsp	RES.	47-J 1/5W-52RE-AX	C00004706P520S
MAIN	R222		nsp	nsp	RES.	47K-J 1/5W-52RE-AX	C00004736P520S
MAIN	R223		nsp	00MNN05470610	CHIP RES.	47-J 1/16W-1608	C20004706M160S
MAIN	R224		nsp	00MNN05470610	CHIP RES.	47-J 1/16W-1608	C20004706M160S
MAIN	R225		nsp	nsp	RES.	18K-J 1/5W-52RE-AX	C00001836P520S
MAIN	R226		nsp	nsp	RES.	47K-J 1/5W-52RE-AX	C00004736P520S
MAIN	R227		nsp	nsp	RES.	100-J 1/5W-52RE	C00001016P520S
MAIN	R230		nsp	nsp	RES.	2.2-J 1/5W-52RE-AX	C0002R206P520S
MAIN	R250		nsp	nsp	RES.	200-J 1/5W-52RE-AX	C00002016P520S
MAIN	R251		nsp	nsp	RES.	200-J 1/5W-52RE-AX	C00002016P520S
MAIN	R300		nsp	nsp	RES.	2.2-J 1/5W-52RE-AX	C0002R206P520S
MAIN	R303		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
MAIN	R304		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S

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P.W.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION	
MAIN	R305		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
MAIN	R306		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
MAIN	R307		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
MAIN	R308		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C20000006M160S
MAIN	R309		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C20000006M160S
MAIN	R310		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C20000006M160S
MAIN	R311		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C20000006M160S
MAIN	R315		nsp	nsp	RES.	100-J 1/5W-52RE	C00001016P520S
MAIN	R316		nsp	nsp	RES.	100-J 1/5W-52RE	C00001016P520S
MAIN	R318		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
MAIN	R320		nsp	nsp	RES.	2.2-J 1/5W-52RE-AX	C0002R206P520S
MAIN	R321		nsp	nsp	RES.	100-J 1/5W-52RE	C00001016P520S
MAIN	R322		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
MAIN	R323		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
MAIN	R324		nsp	00MNN05472610	CHIP RES.	4.7K-J 1/16W-1608	C20004726M160S
MAIN	R325		nsp	00MNN05224610	CHIP RES.	220K-J 1/16W-1608	C20002246M160S
MAIN	R326		nsp	00MNN05102610	CHIP RES.	1K-J 1/16W-1608	C20001026M160S
MAIN	R327		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
MAIN	R328		nsp	00MNN05104610	CHIP RES.	100K-J 1/16W-1608	C20001046M160S
MAIN	R329		nsp	00MNN05472610	CHIP RES.	4.7K-J 1/16W-1608	C20004726M160S
MAIN	R334		nsp	00MNN05000610	CHIP RES.	0-J 1/16W-1608	C20000006M160S
MAIN	R340		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
MAIN	R341		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
MAIN	R342		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
MAIN	R345		nsp	00MNN05473610	CHIP RES.	47K-J 1/16W-1608	C20004736M160S
MAIN	R347		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
MAIN	R349		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
MAIN	R352		nsp	nsp	RES.	2.2-J 1/5W-52RE-AX	C0002R206P520S
MAIN	R353		nsp	nsp	RES.	1-J 1/5W-52RE-AX	C00000106P520S
MAIN	R354		nsp	nsp	RES.	2.2-J 1/5W-52RE-AX	C0002R206P520S
MAIN	R355		nsp	nsp	RES.	2.2-J 1/5W-52RE-AX	C0002R206P520S
MAIN	R356		nsp	00MNN05471610	CHIP RES.	470-J 1/16W-1608	C20004716M160S
MAIN	R357		nsp	00MNN05471610	CHIP RES.	470-J 1/16W-1608	C20004716M160S
MAIN	R358		nsp	00MNN05471610	CHIP RES.	470-J 1/16W-1608	C20004716M160S
MAIN	R359		nsp	00MNN05471610	CHIP RES.	470-J 1/16W-1608	C20004716M160S
MAIN	R360		nsp	nsp	RES.	470-J 1/5W-52RE-AX	C00004716P520S
MAIN	R361		nsp	nsp	RES.	470-J 1/5W-52RE-AX	C00004716P520S
MAIN	R362		nsp	00MNN05473610	CHIP RES.	47K-J 1/16W-1608	C20004736M160S
MAIN	R363		nsp	00MNN05473610	CHIP RES.	47K-J 1/16W-1608	C20004736M160S
MAIN	R364		nsp	00MNN05102610	CHIP RES.	1K-J 1/16W-1608	C20001026M160S
MAIN	R365		nsp	nsp	RES.	10K-J 1/5W-52RE-AX	C00001036P520S
MAIN	R366		nsp	00MNN05183610	CHIP RES.	18K-J 1/16W-1608	C20001836M160S
MAIN	R367		nsp	00MNN05183610	CHIP RES.	18K-J 1/16W-1608	C20001836M160S
MAIN	R368		nsp	00MNN05473610	CHIP RES.	47K-J 1/16W-1608	C20004736M160S
MAIN	R369		nsp	nsp	RES.	470-J 1/5W-52RE-AX	C00004716P520S
MAIN	R370		nsp	00MNN05022610	CHIP RES.	2.2-J 1/16W-1608	C2002R206M160S
MAIN	R374		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
MAIN	R375		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
MAIN	R377		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
MAIN	R378		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
MAIN	R379		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
MAIN	R380		nsp	00MNN05472610	CHIP RES.	4.7K-J 1/16W-1608	C20004726M160S
MAIN	R381		nsp	00MNN05472610	CHIP RES.	4.7K-J 1/16W-1608	C20004726M160S
MAIN	R382		nsp	nsp	RES.	1K-J 1/5W-52RE-AX	C00001026P520S
MAIN	R383		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
MAIN	R384		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
MAIN	R385		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608	C20001036M160S
MAIN	R561		nsp	nsp	RES.	10-J 1/5W-52RE-AX	C00001006P520S
MAIN	R562		nsp	nsp	RES.	10-J 1/5W-52RE-AX	C00001006P520S
MAIN	R571		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
MAIN	R577		nsp	00MNN05101610	CHIP RES.	100-J 1/16W-1608	C20001016M160S
MAIN	R902		nsp	00MNN05472610	CHIP RES.	4.7K-J 1/16W-1608	C20004726M160S
MAIN	R903		nsp	nsp	RES.	27-J 1W-R.REEL	C060027065050S
MAIN	R907		nsp	nsp	RES.	22-J 1W-5REEL	C060022065050S
MAIN	R909		nsp	00MNN05472610	CHIP RES.	4.7K-J 1/16W-1608	C20004726M160S
MAIN	R910		nsp	nsp	RES.	2.7K-J 1/5W-52RE-AX	C00002726P520S
MAIN	R911		nsp	00MNN05124610	CHIP RES.	120K-J 1/16W-1608	C20001246M160S

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
MAIN	R912		nsp	00MNN05393610	CHIP RES.	39K-J 1/16W-1608 C20003936M160S
MAIN	R913		nsp	00MNN05223610	CHIP RES.	22K-J 1/16W-1608 C20002236M160S
MAIN	R914		nsp	00MNN05472610	CHIP RES.	4.7K-J 1/16W-1608 C20004726M160S
MAIN	R918		nsp	00MNN05473610	CHIP RES.	47K-J 1/16W-1608 C20004736M160S
MAIN	R919		nsp	00MNN05473610	CHIP RES.	47K-J 1/16W-1608 C20004736M160S
MAIN	RELAY100		00D9630218409	00D9630218409	RELAY	BC3-12 24V 2A (SMALL SIGNAL) G680240202030S
MAIN	▲ RELAY900		90M-LY000390R	90M-LY000390R	RELAY	! G5PA-1 DC6V 5A G680060502010S
MAIN	SW301		90M-SS000700R	90M-SS000700R	SW	SSAF112NA011 G060112011010S
MAIN	T300		00D9630025207	00D9630025207	COIL	COIL TRANS MATCHING D300010250000S
MAIN	▲ T900		00D9630222709	00D9630222709	TRANSF.	! STAND BY 230V/50HZ 35*15 8200350150180S
MAIN	XTAL300		00D9630225201	00D9630225201	X'TAL	CSTLS4M00G53-A0 4.000MHZ E83040000020S
MAIN	XTAL301		90M-JX000750R	90M-JX000750R	X'TAL	32.768KHZ CFS308-CL;12.5P E80032R768050S
MAIN	XTAL502		00D9630217604	00D9630217604	X'TAL	4.332MHZ HC-49U CL=20.8PF E800433200100S
MAIN	ZD300		00D9630047502	00D9630047502	ZENER DIODE	MTZJ3.3B-0.5W/5MA-52MM K06003R344520S
MAIN	ZD900		00D9600132803	00D9600132803	ZENER DIODE	MTZJ4.7B-0.5W/5MA-52MM K06004R744520S
MAIN	ZD901		00D9630046202	00D9630046202	ZENER DIODE	MTZJ18B-0.5W/5MA-52MM K06018R044520S
MAIN	ZD904		00D9630046202	00D9630046202	ZENER DIODE	MTZJ18B-0.5W/5MA-52MM K06018R044520S
					<b>POWER SW PWB</b>	
P SW	▲ C100		00D9639006191	00D9639006191	CER. CAP.	! AC13F472MDOA 10 4.0*10.0 F.BLK D00847208K070S
P SW	CN103		nsp	nsp	CORD	450MM/3P CKM3962H-03=B3951H02-03 L000451030070S
P SW	CP103		nsp	nsp	CONN.	PLUG JE202B2T2 ANG2P 3-B2 L108202000230S
P SW	▲ SW100		00MSP01012500	00MSP01012500	PUSH SW	ESB92S13B TV-5 STROKE=1.5MM ---
					<b>R SIDE SW PWB</b>	
R SIDE	C122		nsp	00MDK96104300	CER. CAP.	X7R0.1UF-K/50V-1608 D011104577162S
R SIDE	CP201		nsp	nsp	CONN.	GIL-S-5P-S2L2-EF L101220050010S
R SIDE	LED107		00MHI10046080	00MHI10046080	LED	SELU2E10C-P TP6 3PI BLUE ---
R SIDE	Q112		00D9600111808	00D9600111808	TRS.	TR CHIP KRC107S SOT23 J5020107S0050S
R SIDE	R111		nsp	00MNN05432610	CHIP RES.	4.3K-J 1/16W-1608 C20004326M160S
R SIDE	R112		nsp	00MNN05562610	CHIP RES.	5.6K-J 1/16W-1608 C20005626M160S
R SIDE	R115		nsp	00MNN05391610	CHIP RES.	390-J 1/16W-1608 C20003916M160S
R SIDE	R117		nsp	00MNN05103610	CHIP RES.	10K-J 1/16W-1608 C20001036M160S
R SIDE	S104		00D9630045708	00D9630045708	PUSH SW	SKHV10920A 5MM/260G-REEL G180000270010S
R SIDE	S105		00D9630045708	00D9630045708	PUSH SW	SKHV10920A 5MM/260G-REEL G180000270010S
R SIDE	S106		00D9630045708	00D9630045708	PUSH SW	SKHV10920A 5MM/260G-REEL G180000270010S

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



## 12. ABOUT REPLACE THE MICROPROCESSOR WITH A NEW ONE

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

PWB Name	Pos. No.	Description	After replaced	Remark
MAIN	IC300	MB90F352PFM-G ST-15S1 FOR N	<b>B</b>	

After replaced

- A** : Mask ROM (With software). No need write-in of software to the microprocessor.
- B** : Flash ROM (With software). Usually, no need write-in of software. But, when the software was updated, you should be write-in of the new software to the microprocessor or flash ROM. Please check the software version.
- C** : Empty Flash ROM (Without software). You should be write-in of the software to the microprocessor or flash ROM. Refer to "Update procedure" or "writing procedure", when you should be write-in the software.