

## SERVICE MANUAL

| MODEL    | JP | E3 | E2 | EK | E2A | E1C | E1K | EUT |
|----------|----|----|----|----|-----|-----|-----|-----|
| TU-604CI |    | ✓  | ✓  |    |     |     |     |     |

### AM-FM / XM MULTIPLE TUNER

#### 注 意

サービスをおこなう前に、このサービスマニュアルを必ずお読みください。本機は、火災、感電、けがなどに対する安全性を確保するために、さまざまな配慮をおこなっており、また法的には「電気用品安全法」にもとづき、所定の許可を得て製造されています。従ってサービスをおこなう際は、これらの安全性が維持されるよう、このサービスマニュアルに記載されている注意事項を必ずお守りください。

- For purposes of improvement, specifications and design are subject to change without notice.

- 本機の仕様は性能改良のため、予告なく変更することがあります。
- 補修用性能部品の保有期間は、製造打切後 8 年です。

- Please use this service manual with referring to the operating instructions without fail.

- 修理の際は、必ず取扱説明書を参照の上、作業を行ってください。

- Some illustrations using in this service manual are slightly different from the actual set.

- 本文中に使用しているイラストは、説明の都合上現物と多少異なる場合があります。

DENON

Denon Brand Company, D&M Holdings Inc.

## SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

### LEAKAGE CURRENT CHECK

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 millamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

#### **CAUTION Please heed the points listed below during servicing and inspection.**

##### **○ Heed the cautions!**

Spots requiring particular attention when servicing, such as the cabinet, parts, chassis, etc., have cautions indicated on labels or seals. Be sure to heed these cautions and the cautions indicated in the handling instructions.

##### **○ Caution concerning electric shock!**

- (1) An AC voltage is impressed on this set, so touching internal metal parts when the set is energized could cause electric shock. Take care to avoid electric shock, by for example using an isolating transformer and gloves when servicing while the set is energized, unplugging the power cord when replacing parts, etc.
- (2) There are high voltage parts inside. Handle with extra care when the set is energized.

##### **○ Caution concerning disassembly and assembly!**

Though great care is taken when manufacturing parts from sheet metal, there may in some rare cases be burrs on the edges of parts which could cause injury if fingers are moved across them. Use gloves to protect your hands.

##### **○ Only use designated parts!**

The set's parts have specific safety properties (fire resistance, voltage resistance, etc.). For replacement parts, be sure to use parts which have the same properties. In particular, for the important safety parts that are marked  $\triangle$  on wiring diagrams and parts lists, be sure to use the designated parts.

##### **○ Be sure to mount parts and arrange the wires as they were originally!**

For safety reasons, some parts use tape, tubes or other insulating materials, and some parts are mounted away from the surface of printed circuit boards. Care is also taken with the positions of the wires inside and clamps are used to keep wires away from heating and high voltage parts, so be sure to set everything back as it was originally.

##### **○ Inspect for safety after servicing!**

Check that all screws, parts and wires removed or disconnected for servicing have been put back in their original positions, inspect that no parts around the area that has been serviced have been negatively affected, conduct an insulation check on the external metal connectors and between the blades of the power plug, and otherwise check that safety is ensured.

(Insulation check procedure)

Unplug the power cord from the power outlet, disconnect the antenna, plugs, etc., and turn the power switch on. Using a 500V insulation resistance tester, check that the insulation resistance between the terminals of the power plug and the externally exposed metal parts (antenna terminal, headphones terminal, microphone terminal, input terminal, etc.) is  $1M\Omega$  or greater. If it is less, the set must be inspected and repaired.

#### **CAUTION Concerning important safety parts**

Many of the electric and structural parts used in the set have special safety properties. In most cases these properties are difficult to distinguish by sight, and using replacement parts with higher ratings (rated power and withstand voltage) does not necessarily guarantee that safety performance will be preserved. Parts with safety properties are indicated as shown below on the wiring diagrams and parts lists in this service manual. Be sure to replace them with parts with the designated part number.

(1) Schematic diagrams ... Indicated by the  $\triangle$  mark.

(2) Parts lists ... Indicated by the  $\triangle$  mark.

Using parts other than the designated parts could result in electric shock, fires or other dangerous situations.

## **注 意 サービス、点検時にはつぎのことご注意願います。**

### **◎注意事項をお守りください！**

サービスのとき特に注意を必要とする個所についてはキャビネット、部品、シャーシなどにラベルや捺印で注意事項を表示しています。これらの注意書きおよび取扱説明書などの注意事項を必ずお守りください。

### **◎感電に注意！**

- (1) このセットは、交流電圧が印加されていますので通電時に内部金属部に触れると感電することがあります。従って通電サービス時には、絶縁トランスの使用や手袋の着用、部品交換には、電源プラグを抜くなどして感電にご注意ください。
- (2) 内部には高電圧の部分がありますので、通電時の取扱には十分ご注意ください。

### **◎分解、組み立て作業時のご注意！**

板金部品の端面の『バリ』は、部品製造時に充分管理をしておりますが、板金端面は鋭利となっている箇所が有りますので、部品端面に触れたまま指を動かすとまれに怪我をする場合がありますので十分注意して作業して下さい。手の保護のために手袋を着用してください。

### **◎指定部品の使用！**

セットの部品は難燃性や耐電圧など安全上の特性を持ったものとなっています。従って交換部品は、使用されていたものと同じ特性の部品を使用してください。特に配線図、部品表に△印で指定されている安全上重要な部品は必ず指定のものをご使用ください。

### **◎部品の取付けや配線の引きまわしは、元どおりに！**

安全上、テープやチューブなどの絶縁材料を使用したり、プリント基板から浮かして取付けた部品があります。また内部配線は引きまわしやクランパーによって発熱部品や高圧部品に接近しないように配慮されていますので、これらは必ず元どおりにしてください。

### **◎サービス後は安全点検を！**

サービスのために取り外したねじ、部品、配線などが元どおりになっているか、またサービスした個所の周辺を劣化させてしまったところがないかなどを点検し、外部金属端子部と、電源プラグの刃の間の絶縁チェックをおこなうなど、安全性が確保されていることを確認してください。

#### **(絶縁チェックの方法)**

電源コンセントから電源プラグを抜き、アンテナやプラグなどを外し、電源スイッチを入れます。500V 絶縁抵抗計を用いて、電源プラグのそれぞれの端子と外部露出金属部[アンテナ端子、ヘッドホン端子、マイク端子、入力端子など]との間で、絶縁抵抗値が 1 MΩ 以上であることを確認してください。この値以下のときはセットの点検修理が必要です。

## **注 意 安全上重要な部品について**

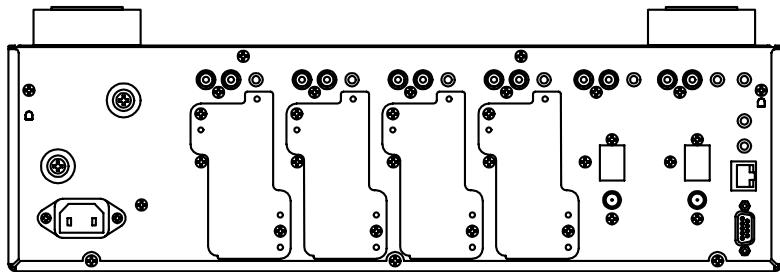
本機に使用している多くの電気部品、および機構部品は安全上、特別な特性を持っています。この特性はほとんどの場合、外観では判別つきにくく、またもとの部品より高い定格(定格電力、耐圧)を持ったものを使用しても安全性が維持されるとは、限りません。安全上の特性を持った部品は、このサービスマニュアルの配線図、部品表につぎのように表示していますので必ず指定されている部品番号のものを使用願います。

- (1) 配線図…△マークで表示しています。
- (2) 部品表…△マークで表示しています。

指定された部品と異なるものを使用した場合には、感電、火災などの危険を生じる恐れがあります。

## DIMENSION

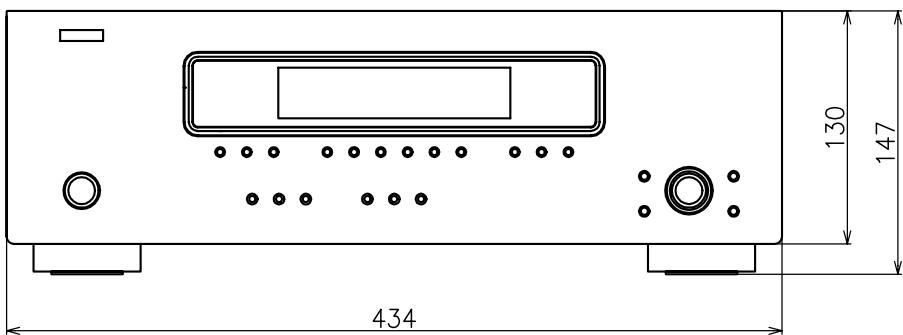
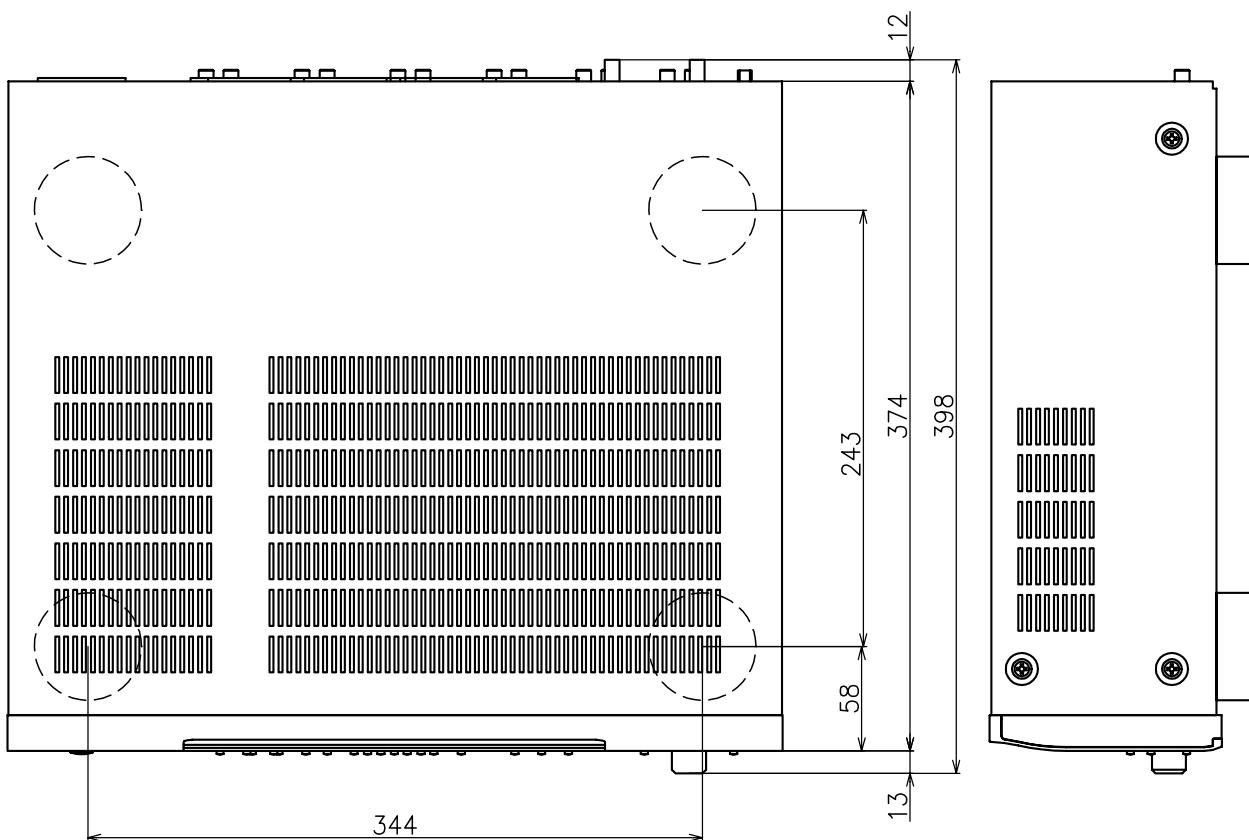
W434 x H147 x D398



Attached ACD-XMSIRE3  
W434 x H147 x D398

Attached ACD-AMFME3/E2  
W434 x H147 x D400

Attached ACD-DABE2  
W434 x H147 x D406



## WIRE ARRANGEMENT

If wire bundles are untied or moved to perform adjustment or parts replacement etc., be sure to rearrange them neatly as they were originally bundled or placed afterward. Otherwise, incorrect arrangement can be a cause of noise generation.

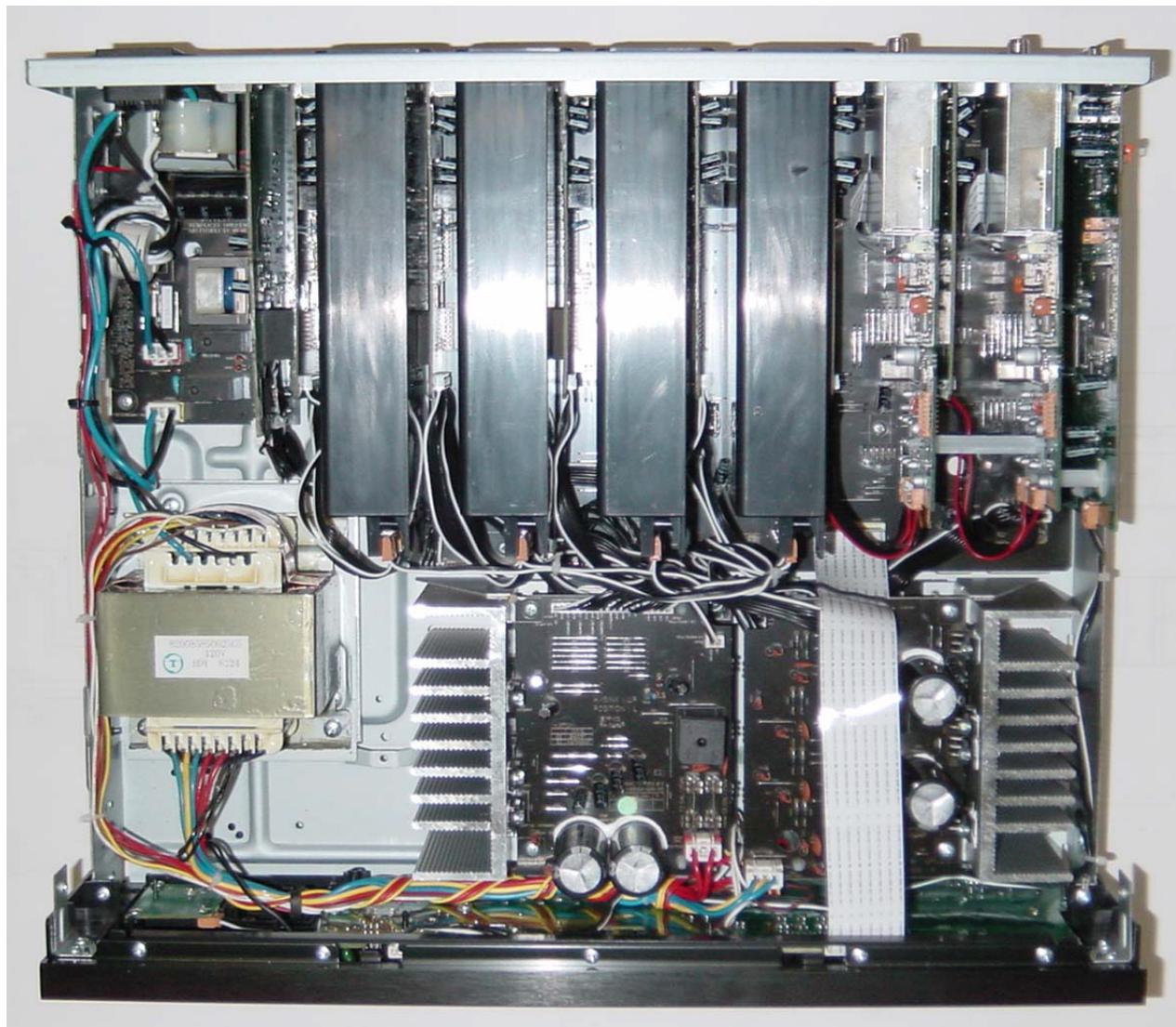
## ワイヤー整形図

調整や部品の交換等により、ワイヤー類の結束をはずしたり移動させた場合には、それらの作業が完了した時点でワイヤーの整形をおこなってください。正しく整形されていないとノイズ発生の原因となることがあります。

Wire arrangement viewed from the top

上面からみたワイヤー整形

Back Panel side



Front Panel side

## CAUTION IN SERVICING

### Initializing MULTI TUNER

MULTI TUNER initialization should be performed when the μcom and peripheral parts of μcom, and Digital P.W.B. are replaced.

1. Press the "ON/STANDBY" button, starting state it does.
2. Press the "SELECT/ENTER" button and hold it in for at least 3 seconds, while simultaneously pressing the "MODE" button and the "TUNER 3" button.
3. Check that the entire display is flashing with an interval of about 1 second, and release your fingers from the 2 buttons.  
\* The microprocessor will be initialized.

**Note:** • If step 3 does not work, start over from step 1.  
• All user settings will be lost and this factory setting will be recovered when this initialization mode. So make sure to memorize your setting for restoring after the initialization.

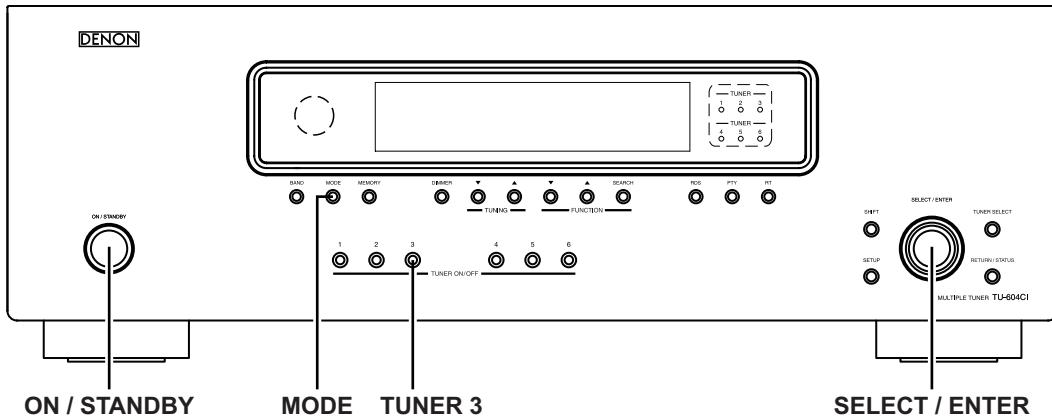
### サービス時の注意事項

#### マルチチューナーの初期化について

マイコンやマイコン周辺部品、Digital 基板等を交換した場合は、マルチチューナーの初期化をおこなってください。

1. "ON/STANDBY" ボタンを押して、起動状態にします。
2. "MODE" ボタンと "TUNER 3" ボタンを同時に押しながら、"SELECT/ENTER" ボタンを 3 秒以上押します。
3. ディスプレイ表示が約 1 秒間隔で点滅するのを確認後、2 つのボタンから指を離します。  
\* マイコンが初期化されます。

**注意:** • 上記 3 の状態にならない場合は、もう一度操作 1 からやり直してください。  
• 初期化を行うとお客様が設定した内容が工場出荷状態に戻りますので、あらかじめ設定内容を控えておき初期化後再設定してください。



• The parts of Option board are not serviceable.  
Please replace the product itself.

#### <Option board>

- ACD-AMFM
- ACD-XMSIR
- ACD-HD
- ACD-DAB

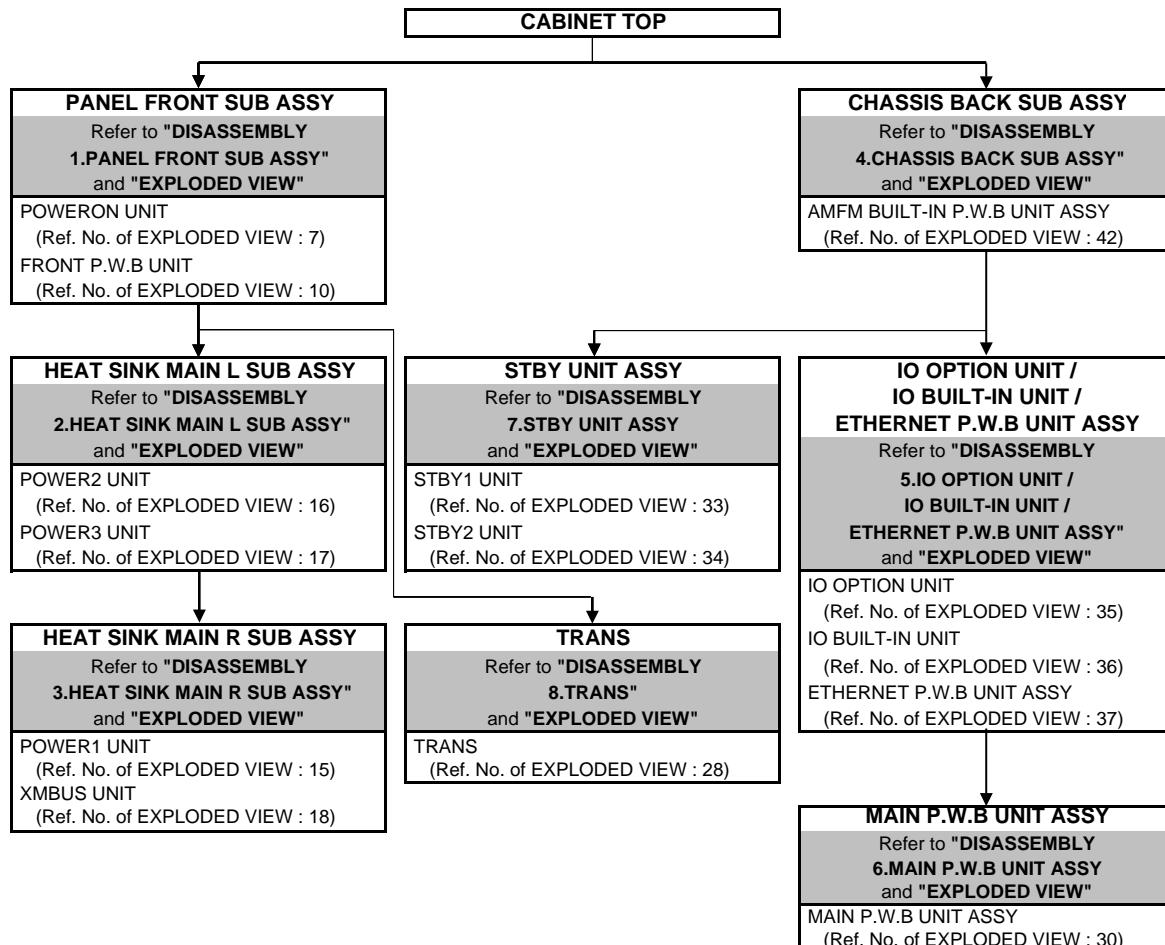
• Option board は修理対象外の製品です。  
サービス対応は「製品交換」のみとなります。

#### <Option board>

- ACD-AMFM
- ACD-XMSIR
- ACD-HD
- ACD-DAB

# DISASSEMBLY

- Disassemble in order of the arrow of the figure of following flow.  
下記フロー図の矢印の順番にはずしてください。
- In the case of the re-assembling, assemble it in order of the reverse of the following flow.  
再組み立ての場合は、下記のフローの逆の順番に組立ててください
- In the case of the re-assembling, observe "attention of assembling" it.  
再組み立ての場合は、「組立のご注意」を遵守してください。



The viewpoint of each photograph  
(photography direction)

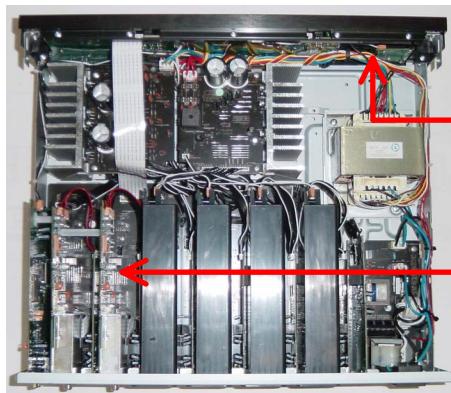
各図の視点(撮影方向)

Picture A



Top view

Picture C →



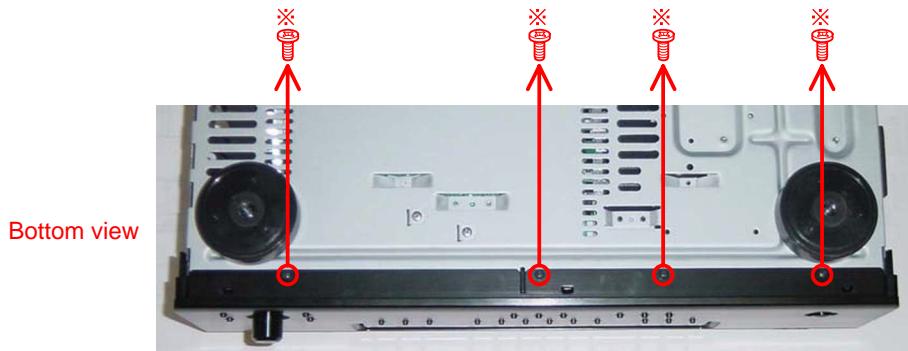
Picture E

Picture B

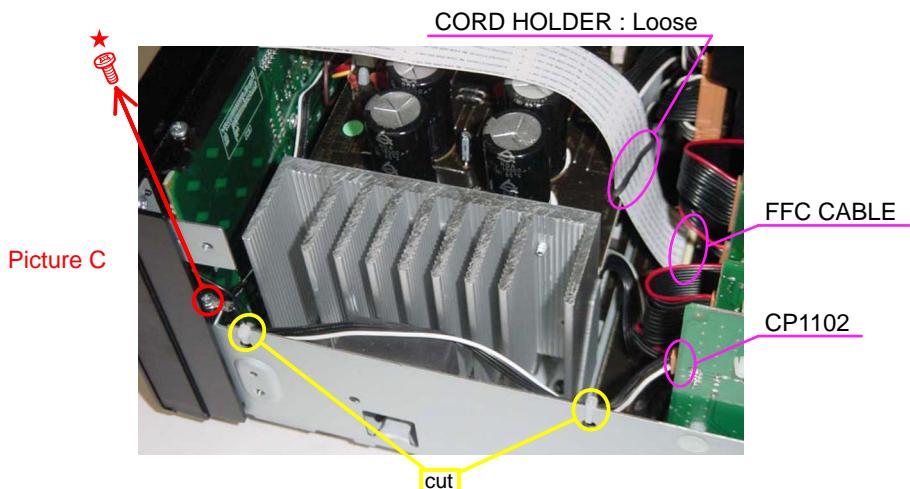
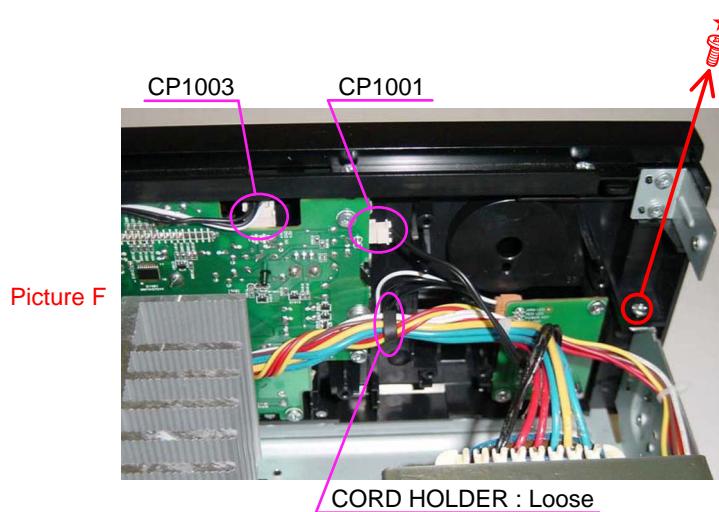
## 1. PANEL FRONT SUB ASSY

proceeding (手順) : **CABINET TOP** → **PANEL FRONT SUB ASSY**

- (1) Remove the screws. (ねじをはずす。)



- (2) Disconnect the connector wires and remove the screw. (コネクタワイヤーとねじをはずす。)

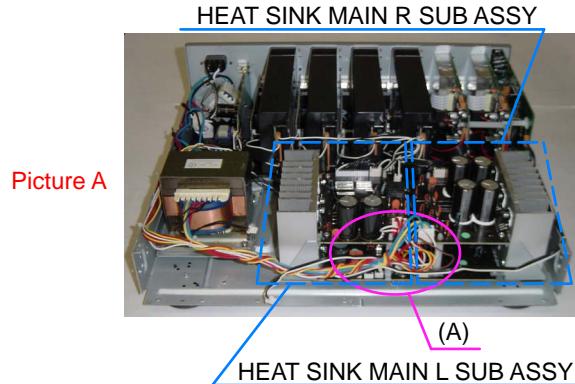


Please refer to "**EXPLODED VIEW**" for the disassembly method of each P.W.B included in PANEL FRONT SUB ASSY .  
PANEL FRONT SUB ASSY の各基板のはずしかたは "**EXPLODED VIEW**" を参照してください。

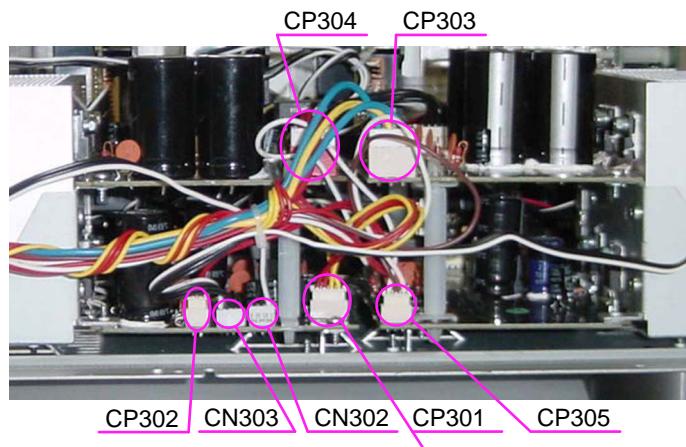
## 2. HEAT SINK MAIN L SUB ASSY

proceeding (手順) : **CABINET TOP** → **PANEL FRONT SUB ASSY**  
 → **HEAT SINK MAIN L SUB ASSY**

- (1) Disconnect the connector wires. (コネクタワイヤーをはずす。)

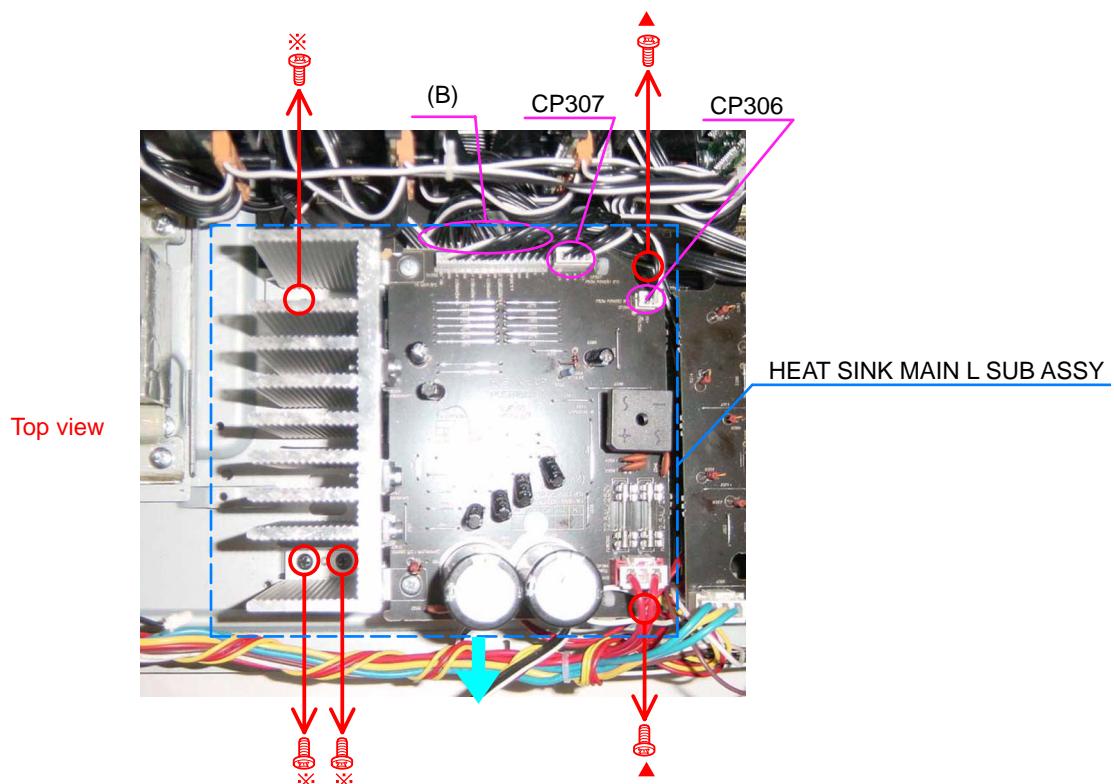


Detail : (A)



Picture A

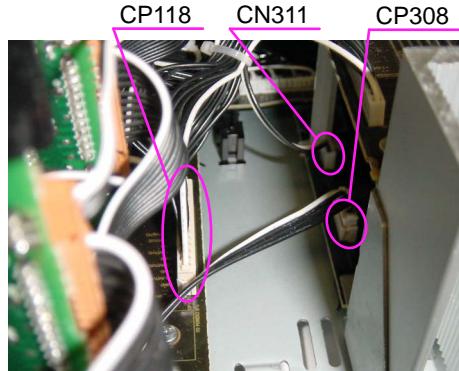
- (2) Disconnect the connector wires and remove the screws. (コネクタワイヤーとねじをはずす。)



(3) Disconnect the connector wires. (コネクタワイヤーをはずす。)

Detail : (B)

Picture D



Please refer to "EXPLODED VIEW" for the disassembly method of each P.W.B included in HEAT SINK MAIN L SUB ASSY.  
HEAT SINK MAIN L SUB ASSY の各基板のはずしかたは "EXPLODED VIEW" を参照してください。

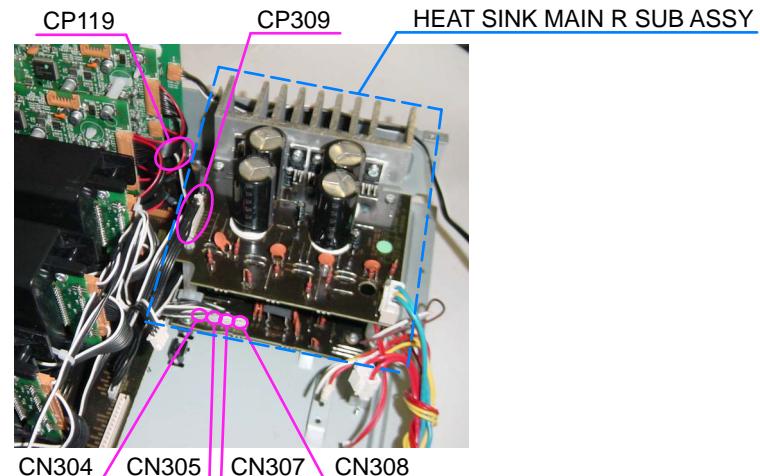
### 3. HEAT SINK MAIN R SUB ASSY

proceeding (手順) : **CABINET TOP** → **PANEL FRONT SUB ASSY**

→ **HEAT SINK MAIN L SUB ASSY** → **HEAT SINK MAIN R SUB ASSY**

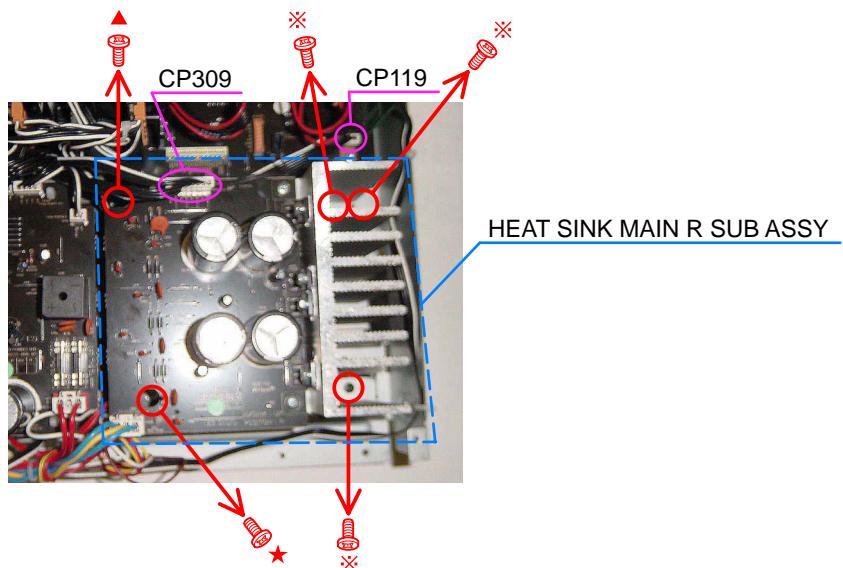
(1) Disconnect the connector wires. (コネクタワイヤーをはずす。)

Picture D



(2) Disconnect the connector wires and remove the screws. (コネクタワイヤーとねじをはずす。)

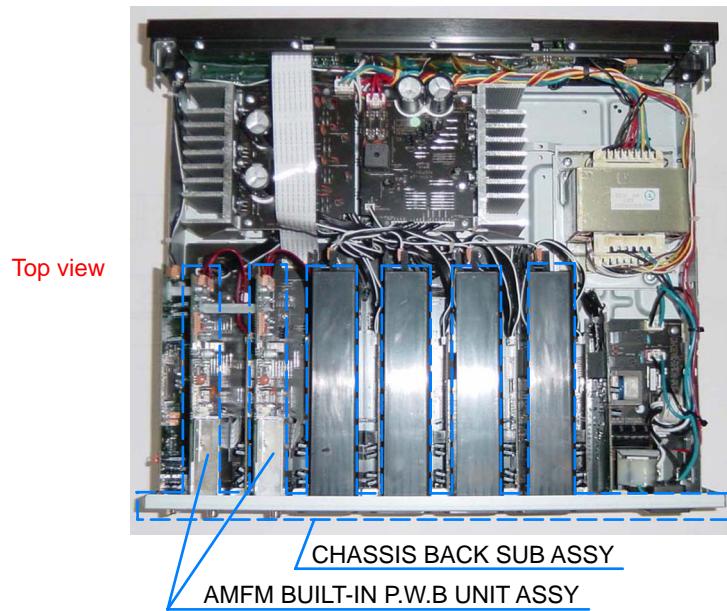
Top view



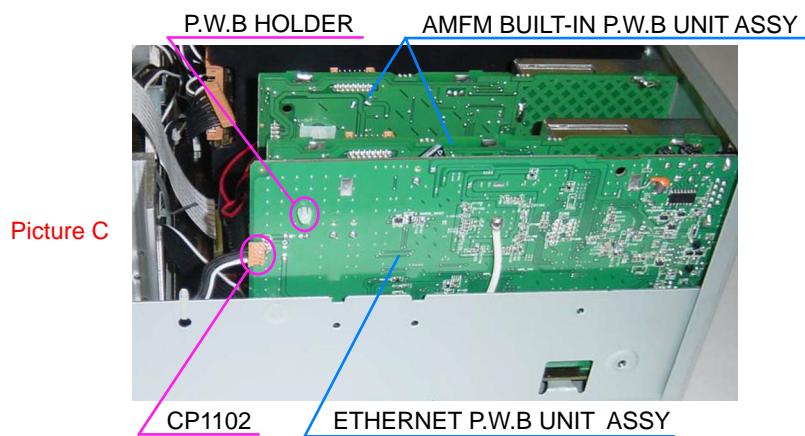
Please refer to "EXPLODED VIEW" for the disassembly method of each P.W.B included in HEAT SINK MAIN R SUB ASSY.  
HEAT SINK MAIN R SUB ASSY の各基板のはずしかたは "EXPLODED VIEW" を参照してください。

#### 4. CHASSIS BACK SUB ASSY

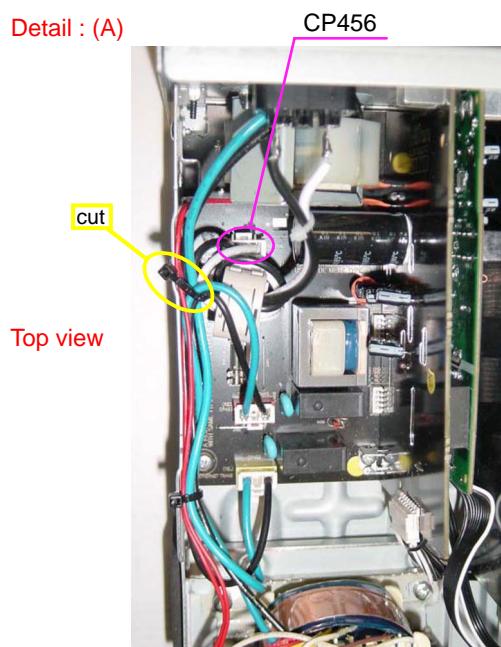
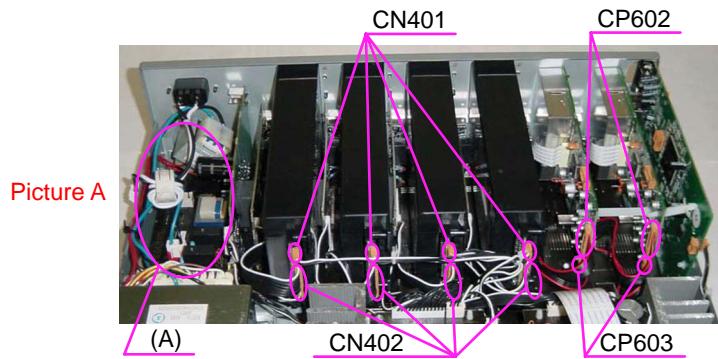
proceeding (手順) : **CABINET TOP** → **CHASSIS BACK SUB ASSY**



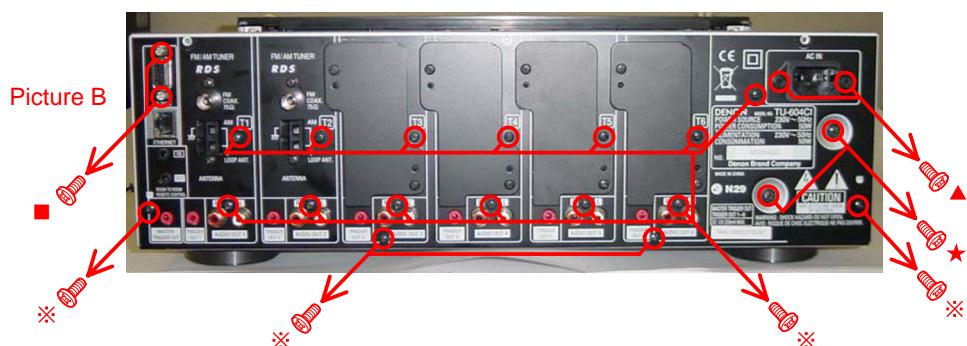
- (1) Remove the P.W.B HOLDER and disconnect the connector wire. (P.W.B ホルダーとコネクタワイヤーをはずす。)



(2) Disconnect the connect wires. (コネクタワイヤーをはずす。)



(3) Remove the screws. (ねじをはずす。)

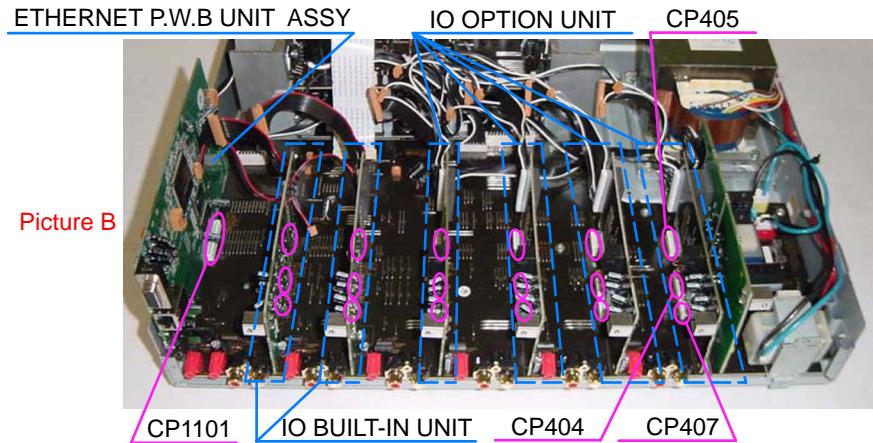


Please refer to "**EXPLODED VIEW**" for the disassembly method of each P.W.B included in CHASSIS BACK SUB ASSY .  
CHASSIS BACK SUB ASSY の各基板のはずしかたは "**EXPLODED VIEW**" を参照してください。

## 5. IO OPTION UNIT / IO BUILT-IN UNIT / ETHERNET P.W.B UNIT ASSY

proceeding (手順) : **CABINET TOP** → **CHASSIS BACK SUB ASSY**  
→ **IO OPTION UNIT / IO BUILT-IN UNIT / ETHERNET P.W.B UNIT ASSY**

- (1) Remove the IO OPTION UNIT , IO BUILT-IN UNIT and ETHERNET UNIT. (IO OPTION UNIT と IO BUILT-IN UNIT と ETHERNET UNIT をはずす。)



## 6. MAIN P.W.B UNIT ASSY

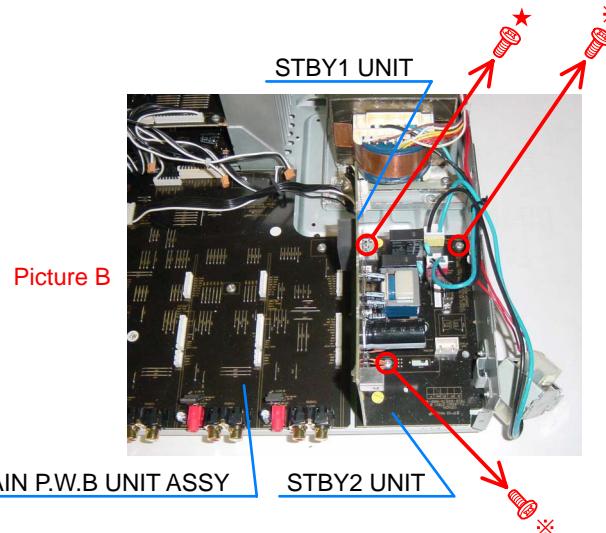
proceeding (手順) : **CABINET TOP** → **CHASSIS BACK SUB ASSY**  
→ **IO OPTION UNIT / IO BUILT-IN UNIT / ETHERNET P.W.B UNIT ASSY**  
→ **MAIN P.W.B UNIT ASSY**

Please refer to "EXPLODED VIEW" for the disassembly method of MAIN P.W.B UNIT ASSY.  
MAIN P.W.B UNIT ASSY のはずしかたは "EXPLODED VIEW" を参照してください。

## 7. STBY UNIT ASSY

proceeding (手順) : **CABINET TOP** → **CHASSIS BACK SUB ASSY**  
→ **STBY UNIT ASSY**

- (1) Disconnect the connector wires and FFC Cables. (コネクタワイヤーと FFC ケーブルをはずす。)



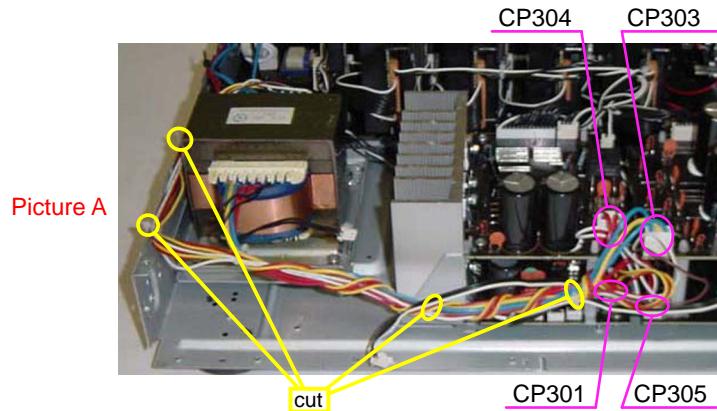
Please refer to "EXPLODED VIEW" for the disassembly method of each P.W.B included in STBY UNIT ASSY.  
STBY UNIT ASSY の各基板のはずしかたは "EXPLODED VIEW" を参照してください。

## 8. TRANS

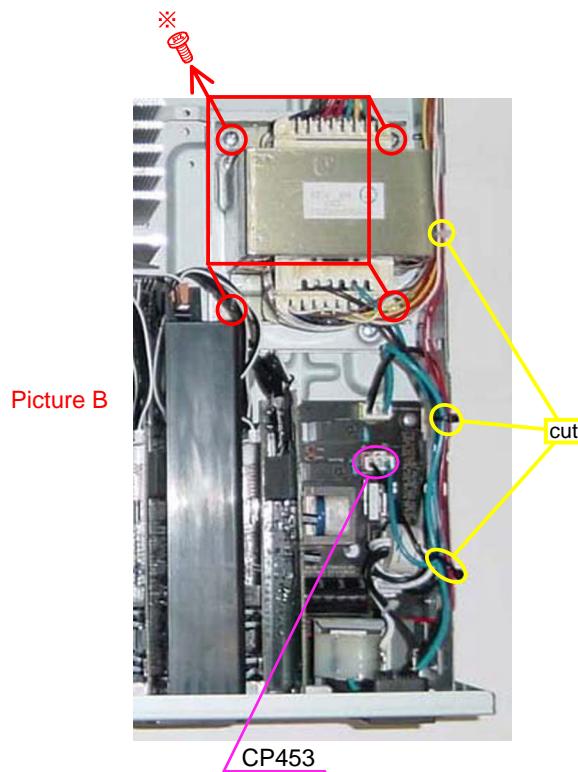
proceeding (手順) : **CABINET TOP** → **PANEL FRONT SUB ASSY** → **TRANS**

(1) Remove the PANEL FRONT ASSY. (PANEL FRONT ASSY をはずす。)

(2) Disconnect the connector wires. (コネクタワイヤーをはずす。)



(3) Disconnect the connector wires and remove the screws. (コネクタコードとねじをはずす。)



## CHECK WITH TEST MODE

### 1. Operation Spec

When the following conditions are satisfied at its starting state, error information is displayed.

#### Starting method (μcom version display mode):

Press the "SELECT/ENTER" button and hold it in for at least 3 seconds, while simultaneously pressing the "MODE" button and the "TUNER 1" button.

Then, "SELECT/ENTER" JOG is turned clockwise and the following information is displayed on FL Display.

### 2. Display Order

Destination information → Main-μcom version information  
→ Sub-μcom version information → Ethernet information

## テストモードによるチェック方法

### 1. 動作仕様

起動状態にて下記の条件に該当した場合は、バージョン情報を表示します。

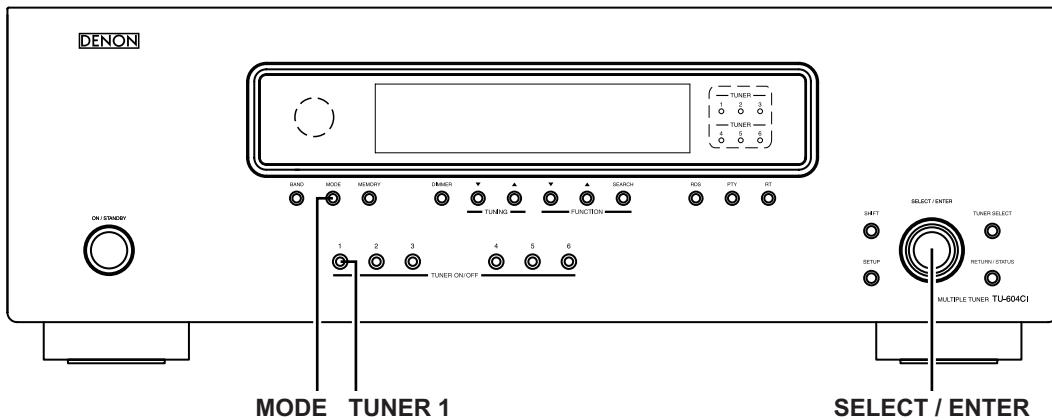
#### 起動方法 (マイコンバージョン表示モード):

"MODE" ボタンと "TUNER 1" ボタンを同時に押しながら、"SELECT/ENTER" ボタンを 3 秒以上押します。

その後、"SELECT/ENTER" JOG を右にまわすと内容を FL Display に表示します。

### 2. 表示順序

仕向地表示 → メインマイコンバージョン情報 → サブマイコンバージョン情報 → イーサネット情報

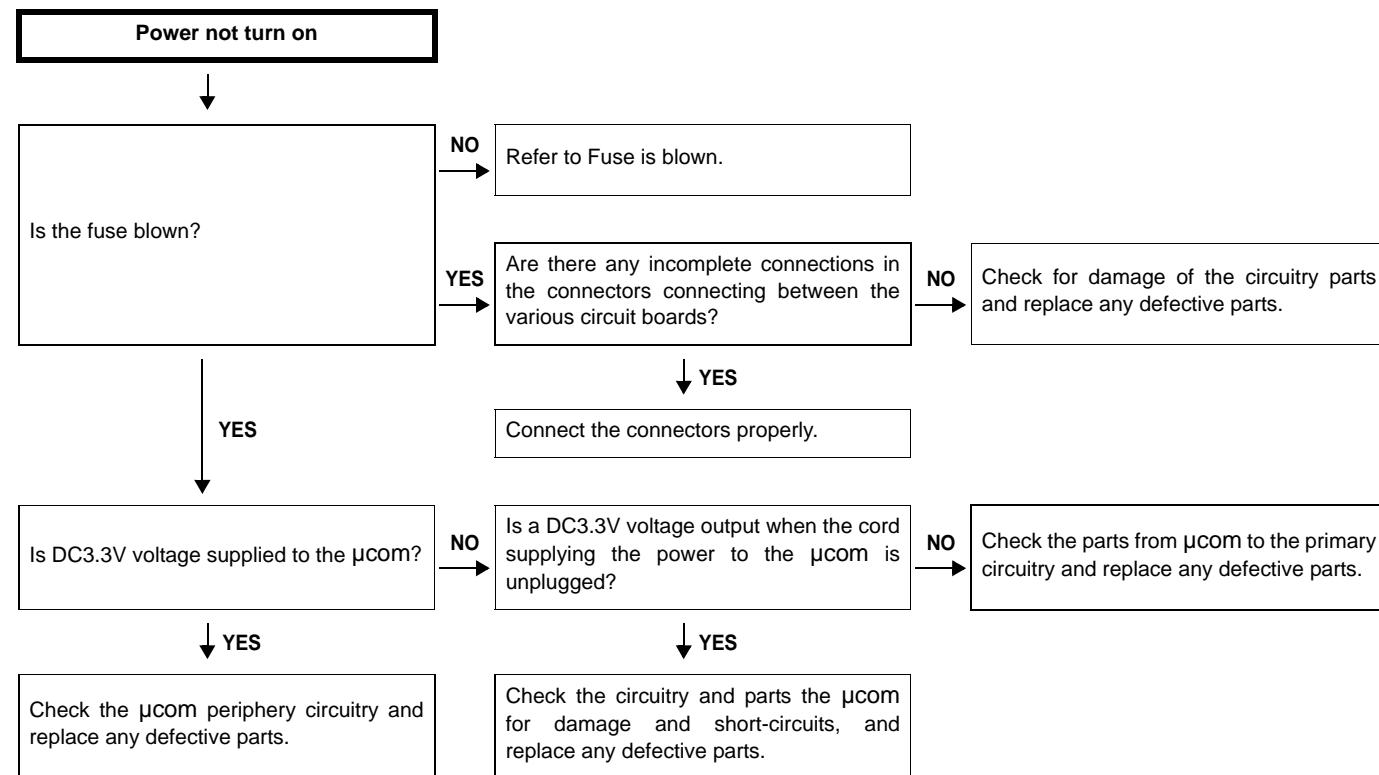


**---MEMO---**

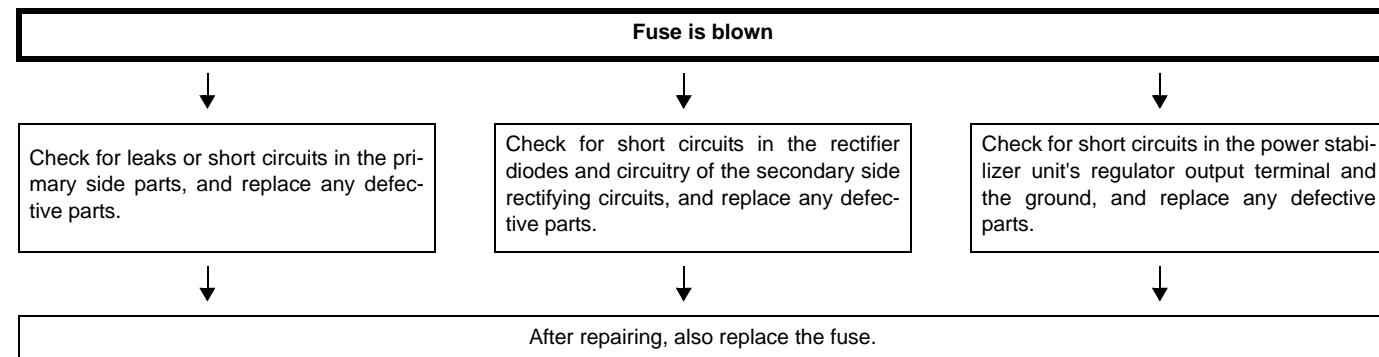
## TROUBLE SHOOTING

### 1. POWER

#### 1.1. Power not turn on



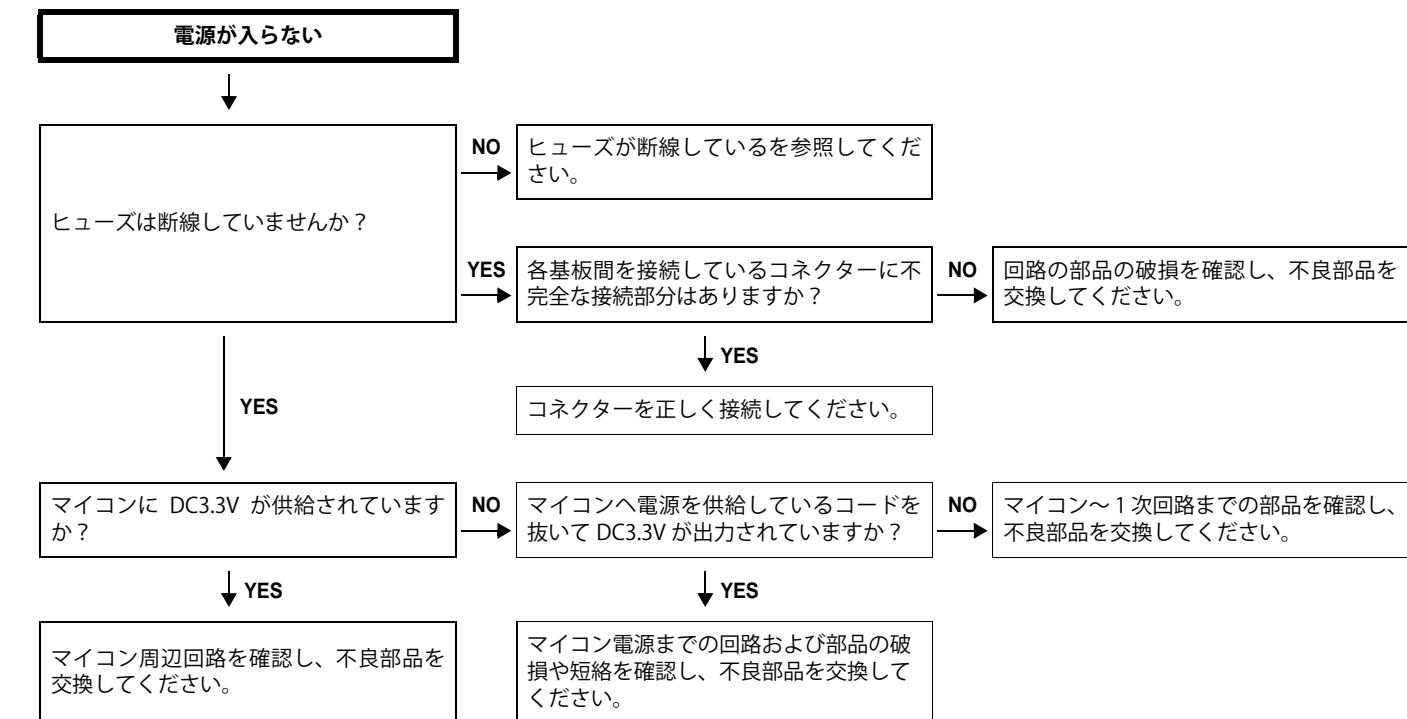
#### 1.2. Fuse is blown



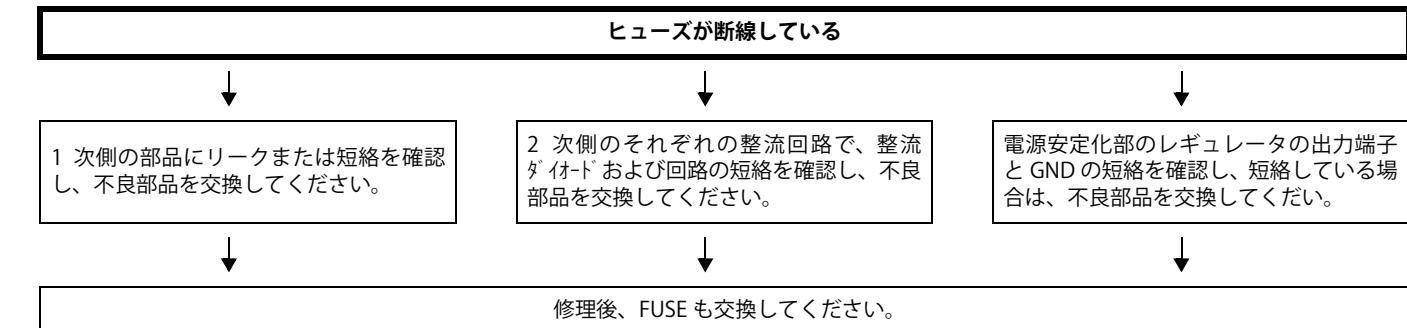
## トラブルシューティング

### 1. 電源

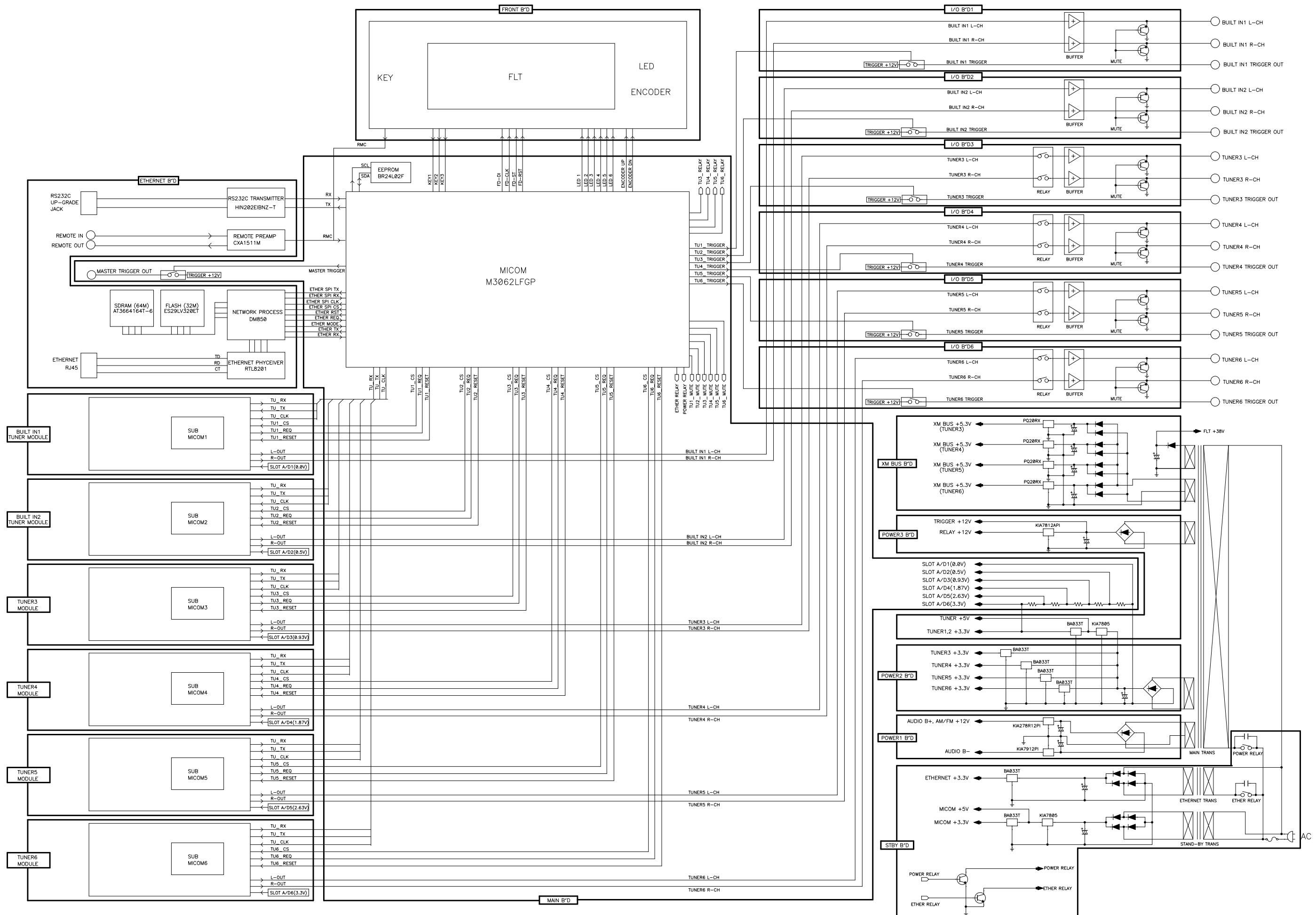
#### 1.1. 電源が入らない



#### 1.2. ヒューズが断線している



## BLOCK DIAGRAM



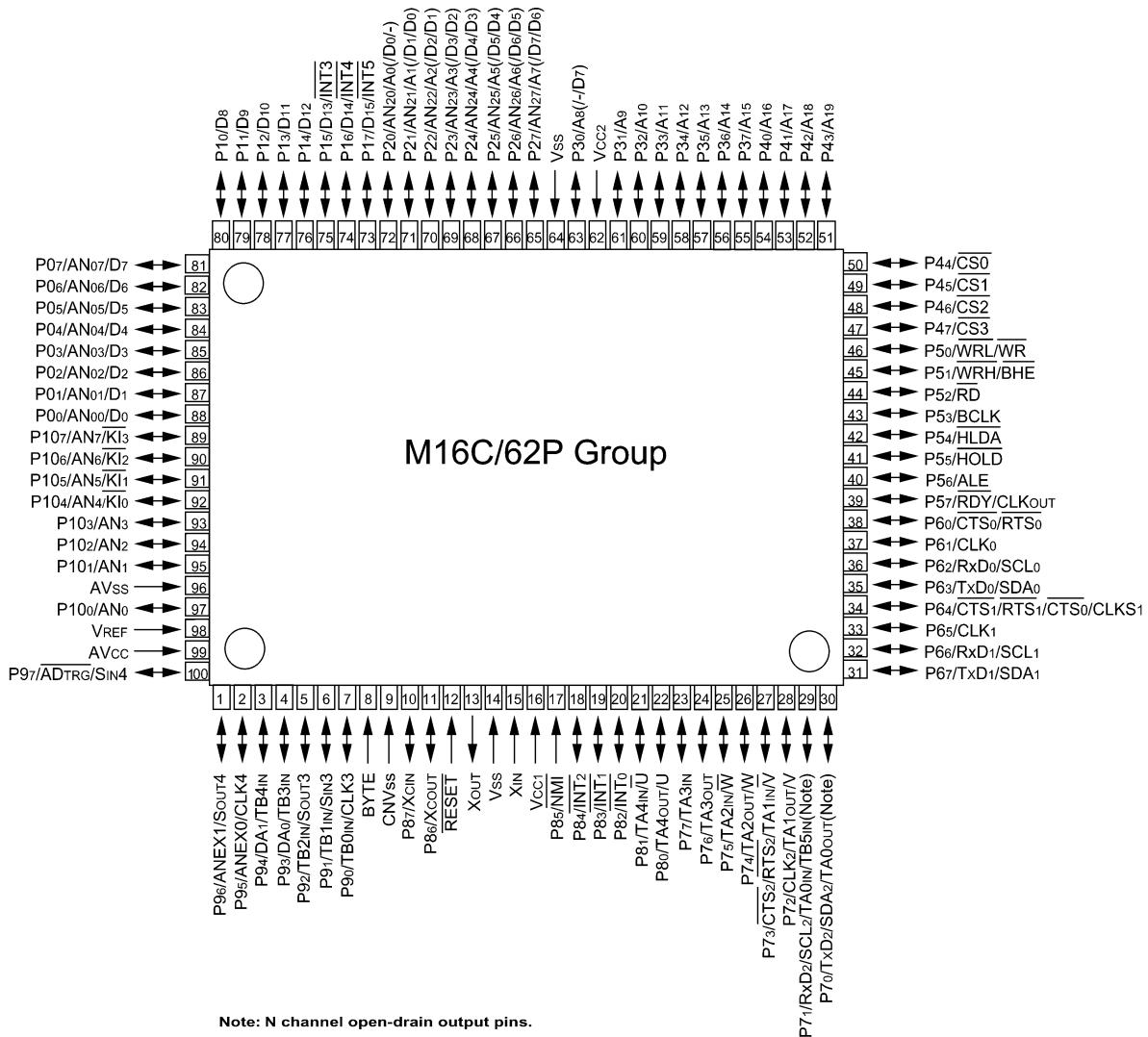
# SEMICONDUCTORS

Only major semiconductors are shown, general semiconductors etc. are omitted to list.

主な半導体を記載しています。汎用の半導体は記載を省略しています。

## 1. IC's

### M30626FJPFP (IC103)



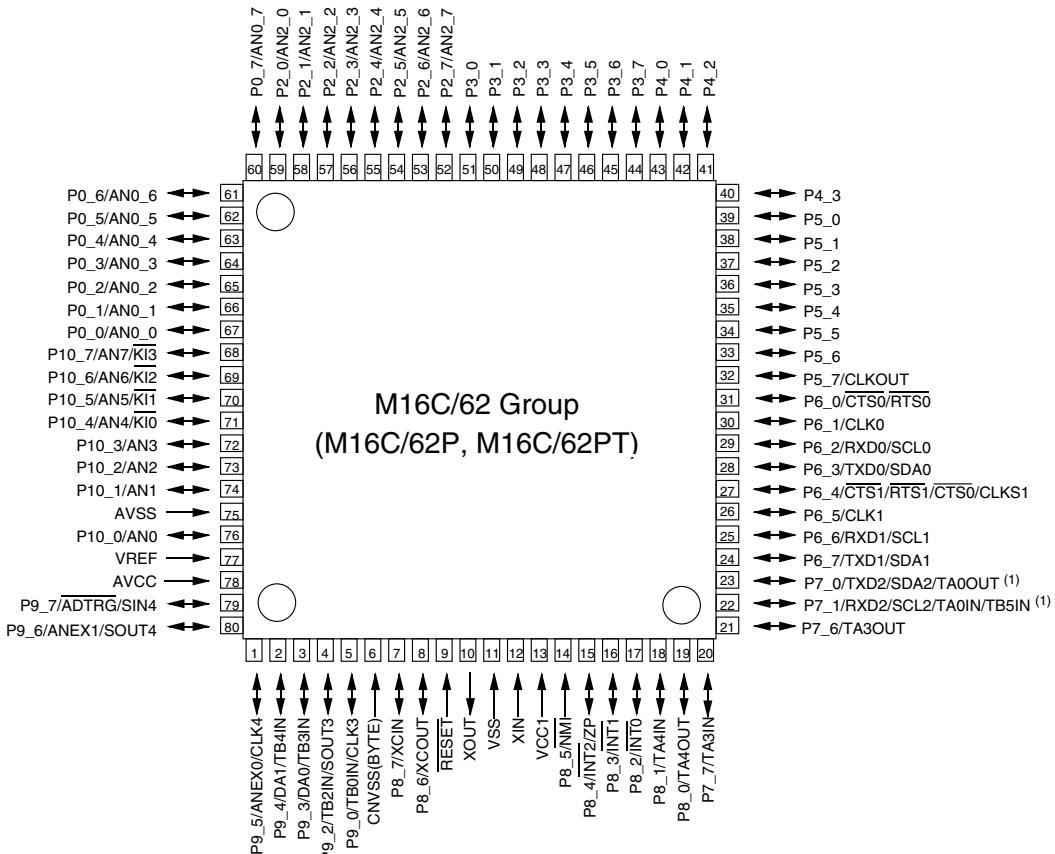
### M30626FJPFP Terminal Function

| Pin | Pin Function | Pin Name           | I/O | STBY | STOP | Active                      | Function   |
|-----|--------------|--------------------|-----|------|------|-----------------------------|--|
| 1   | P96/SOUT4    | VFD_DT             | O   | O/L  | O/L  | SERIAL                      | FLD driver control terminal (16-ST-87GINK) DATA        |
| 2   | P95/CLK4     | VFD_CLK            | O   | O/L  | O/L  | SERIAL                      | FLD driver control terminal (16-ST-87GINK) CLOCK       |
| 3   | P94/TB4      | FLD_RST            | O   | O/L  | O/L  | L:RESET                     | FLD driver reset control terminal (16-ST-87GINK) RESET |
| 4   | P93/TB3      | VFD_CS             | O   | O/L  | O/L  | H:DATA transfer prohibition | FLD driver control terminal (16-ST-87GINK) CIP SELECT  |
| 5   | P92/SOUT3    | ETHER_SPI_TX(MOEI) | O   | O/L  | O/L  | SERIAL                      | ETHER SPI communication control terminal TX            |
| 6   | P91/SIN3     | ETHER_SPI_RX(MIEO) | I   | O/L  | O/L  | SERIAL                      | ETHER SPI communication control terminal RX            |
| 7   | P90/CLK3     | ETHER_SPI_CLK      | O   | O/L  | O/L  | SERIAL                      | ETHER SPI communication control terminal CLOCK         |
| 8   | BYTE         | BYTE               | GND | -    | -    |                             | Single chip mode setting                               |
| 9   | CNVCS        | CNVSS              | -   | -    | -    |                             | UP GRADE PIN   |
| 10  | P87          | MAIN_PWR_STNDBY    | O   | O/L  | O/L  | H:ACTIVE                    | POWER RELAY CONTROL                                    |
| 11  | P86          | NC                 | O   | O/L  | O/L  | -                           | PULL-DOWN  |
| 12  | RESET        | HARD RST           | I   | I    | I    | Lv                          | u-COM RESET SIGNAL INPUT                               |

| Pin | Pin Function | Pin Name        | I/O  | STBY | STOP | Active      | Function  |
|-----|--------------|-----------------|------|------|------|-------------|---|
| 13  | XOUT         | XOUT            | O    | -    | -    |             | OSILATOR CONNECTION                                   |
| 14  | VSS          | Vss             | GND  | -    | -    |             | GND   |
| 15  | XIN          | XIN             | I    | I    | I    |             | OSILATOR CONNECTION                                   |
| 16  | VCC          | Vcc1            | 3.3V | -    | -    |             | POWER 3.3V  |
| 17  | P85/NMI      | NMI             | I    | -    | -    |             | UP GRADE PIN  |
| 18  | P84/INT2     | PWR_DOWN        | I    | I    | I    | Fall Edge&L | Power failure detection                               |
| 19  | P83/INT1     | REMOCON         | I    | I    | I    | Rise Edge&H | Remote control receiver terminal                      |
| 20  | P82/INT0     | ETHER_REQ       | I    | I    | I    | Fall Edge&L | EATHERNET REQUEST                                     |
| 21  | P81          | NC              | O    | O/L  | O/L  | -           | PULL-DOWN   |
| 22  | P80          | NC              | O    | O/L  | O/L  | -           | PULL-DOWN   |
| 23  | P77          | NC              | O    | O/L  | O/L  | -           | PULL-DOWN   |
| 24  | P76          | NC              | O    | O/L  | O/L  | -           | PULL-DOWN   |
| 25  | P75          | NC              | O    | O/L  | O/L  | -           | PULL-DOWN   |
| 26  | P74          | NC              | O    | O/L  | O/L  | -           | PULL-DOWN   |
| 27  | P73/CTS2     | NC              | O    | O/L  | O/L  | -           | PULL-DOWN   |
| 28  | P72/CLK2     | TU CLK          | O    | O/L  | O/L  |             | TUNER SUB CPU communication control terminal CLOCK    |
| 29  | P71/RXD2     | TU RX(MISO)     | I    | I    | O/L  | UART        | TUNER SUB CPU communication control terminal RX       |
| 30  | P70/TXD2     | TU TX(MOSI)     | O    | O/L  | O/L  | UART        | TUNER SUB CPU communication control terminal TX       |
| 31  | P67/TXD1     | RS232C_TX(MORI) | O    | O/L  | O/L  | UART        | RS232C SIGNAL OUTPUT                                  |
| 32  | P66/RXD1     | RS232C_RX(MIRO) | I    | I    | O/L  | UART        | RS232C SIGNAL INPUT                                   |
| 33  | P65/CLK1     | TU6_CS          | O    | O/L  | O/L  |             | TUNER6 communication control CHIP SELECT              |
| 34  | P64/CTS1     | TU6_REQ         | I    | O/L  | O/L  | Lv          | TUNER6 SUB CPU communication control terminal REQUEST |
| 35  | P63/TXD0     | ETHER_TX(MOEI)  | O    | O/L  | O/L  | UART        | EATHERNET communication terminal TX                   |
| 36  | P62/RXD0     | ETHER_RX(MIEO)  | I    | O/L  | O/L  | UART        | EATHERNET communication terminal RX                   |
| 37  | P61/CLK0     | RST_TU6         | O    | O/L  | O/L  | L:ACTIVE    | TUNER6 SUB CPU RESET                                  |
| 38  | P60/CTS0     | MUTE RL6        | O    | O/L  | O/L  | H:ACTIVE    | TUNER6 MUTE RELAY control terminal                    |
| 39  | P57          | MUTE TR6        | O    | O/L  | O/L  | H:ACTIVE    | TUNER6 MUTE TRANSISTOR control terminal               |
| 40  | P56          | TU5_CS          | O    | O/L  | O/L  |             | TUNER5 communication control CHIP SELECT              |
| 41  | P55/EPM      | RS232C_EPM      | I    | I    | I    |             | UP GRADE PIN  |
| 42  | P54          | TU5_REQ         | I    | O/L  | O/L  | Lv          | TUNER5 SUB CPU communication control terminal REQUEST |
| 43  | P53          | RST_TU5         | O    | O/L  | O/L  | L:ACTIVE    | TUNER5 SUB CPU RESET                                  |
| 44  | P52          | MUTE RL5        | O    | O/L  | O/L  | H:ACTIVE    | TUNER5 MUTE RELAY control terminal                    |
| 45  | P51          | MUTE TR5        | O    | O/L  | O/L  | H:ACTIVE    | TUNER5 MUTE TRANSISTOR control terminal               |
| 46  | P50/CE       | RS232C_CE       | O    | I    | I    |             | UP GRADE PIN  |
| 47  | P47          | TU4_CS          | O    | O/L  | O/L  |             | TUNER4 communication control CHIP SELECT              |
| 48  | P46          | TU4_REQ         | I    | O/L  | O/L  | Lv          | TUNER4 SUB CPU communication control terminal REQUEST |
| 49  | P45          | RST_TU4         | O    | O/L  | O/L  | L:ACTIVE    | TUNER4 SUB CPU RESET                                  |
| 50  | P44          | MUTE RL4        | O    | O/L  | O/L  | H:ACTIVE    | TUNER4 MUTE RELAY control terminal                    |
| 51  | P43          | MUTE TR4        | O    | O/L  | O/L  | H:ACTIVE    | TUNER4 MUTE TRANSISTOR control terminal               |
| 52  | P42          | TU3_CS          | O    | O/L  | O/L  |             | TUNER3 communication control CHIP SELECT              |
| 53  | P41          | TU3_REQ         | I    | O/L  | O/L  | Lv          | TUNER3 SUB CPU communication control terminal REQUEST |
| 54  | P40          | RST_TU3         | O    | O/L  | O/L  | L:ACTIVE    | TUNER3 SUB CPU RESET                                  |
| 55  | P37          | MUTE RL3        | O    | O/L  | O/L  | H:ACTIVE    | TUNER3 MUTE RELAY control terminal                    |
| 56  | P36          | MUTE TR3        | O    | O/L  | O/L  | H:ACTIVE    | TUNER3 MUTE TRANSISTOR control terminal               |
| 57  | P35          | TU2_CS          | O    | O/L  | O/L  |             | TUNER2 communication control CHIP SELECT              |
| 58  | P34          | TU2_REQ         | I    | O/L  | O/L  | Lv          | TUNER2 SUB CPU communication control terminal REQUEST |
| 59  | P33          | RST_TU2         | O    | O/L  | O/L  | L:ACTIVE    | TUNER2 SUB CPU RESET                                  |
| 60  | P32          | MUTE RL2        | O    | O/L  | O/L  | H:ACTIVE    | TUNER2 MUTE RELAY control terminal                    |
| 61  | P31          | MUTE TR2        | O    | O/L  | O/L  | H:ACTIVE    | TUNER2 MUTE TRANSISTOR control terminal               |

| Pin | Pin Function | Pin Name       | I/O  | STBY | STOP | Active   | Function  |
|-----|--------------|----------------|------|------|------|----------|---|
| 62  | VCC          | Vcc2           | 3.3V | -    | -    |          | POWER 3.3V  |
| 63  | P30          | TU1_CS         | O    | O/L  | O/L  |          | TUNER1 communication control CHIP SELECT              |
| 64  | VSS          | Vss            | GND  | -    | -    |          | -   |
| 65  | P27/AN2_7    | TU1_REQ        | I    | O/L  | O/L  | Lv       | TUNER1 SUB CPU communication control terminal REQUEST |
| 66  | P26/AN2_6    | RST_TU1        | O    | O/L  | O/L  | L:ACTIVE | TUNER1 SUB CPU RESET                                  |
| 67  | P25/AN2_5    | MUTE RL1       | O    | O/L  | O/L  | H:ACTIVE | TUNER1 MUTE RELAY control terminal                    |
| 68  | P24/AN2_4    | MUTE TR1       | O    | O/L  | O/L  | H:ACTIVE | TUNER1 MUTE TRANSISTOR control terminal               |
| 69  | P23/AN2_3    | TU6_TRG        | O    | O/L  | O/L  | H:ACTIVE | TUNER6 TRIGGER OUT                                    |
| 70  | P22/AN2_2    | TU5_TRG        | O    | O/L  | O/L  | H:ACTIVE | TUNER5 TRIGGER OUT                                    |
| 71  | P21/AN2_1    | TU4_TRG        | O    | O/L  | O/L  | H:ACTIVE | TUNER4 TRIGGER OUT                                    |
| 72  | P20/AN2_0    | TU3_TRG        | O    | O/L  | O/L  | H:ACTIVE | TUNER3 TRIGGER OUT                                    |
| 73  | P17/INT5     | TU2_TRG        | O    | O/L  | O/L  | H:ACTIVE | TUNER2 TRIGGER OUT                                    |
| 74  | P16/INT4     | TU1_TRG        | O    | O/L  | O/L  | H:ACTIVE | TUNER1 TRIGGER OUT                                    |
| 75  | P15/INT3     | A/D_3(PWR_KEY) | I    | O/L  | O/L  | Lv       | POWER ON/STANDBY KEY input                            |
| 76  | P14/D12      | E2PROM_SCL     | O    | O/L  | O/L  |          | E2PROM communication clock: MEMORY BACK UP            |
| 77  | P13/D11      | E2PROM_SDA     | I/O  | I    | O/L  | SERIAL   | E2PROM communication DATA I/O:MEMORY BACK UP          |
| 78  | P12/D10      | RS232C_PWR_SW  | O    | O/H  | O/L  | H:ACTIVE | RS232C power supply control terminal                  |
| 79  | P11/D9       | ETHER_SPI_CS   | O    | O/L  | O/L  |          | ETHER SPI communication control terminal CS           |
| 80  | P10/D8       | ETHER_RST      | O    | O/L  | O/L  | L:RESET  | ETHERNET RST  |
| 81  | P07/AN_07    | ETHER_MODE     | I    | I    | I    | Lv       | EATHERNET MODE  |
| 82  | P06/AN_06    | ETHER_POWER    | O    | O/L  | O/L  | H:ACTIVE | EATHER power supply ON/OFF                            |
| 83  | P05/AN_05    | SELECT UP      | I    | I    | O/L  | Lv       | ROTALY ENCODER UP input                               |
| 84  | P04/AN_04    | SELECT DOWN    | I    | I    | O/L  | Lv       | ROTALY ENCODER DOWN input                             |
| 85  | P03/AN0_3    | A/D_0          | I    | O/L  | O/L  | Lv       | KEY input A/D0  |
| 86  | P02/AN0_2    | A/D_1          | I    | O/L  | O/L  | Lv       | KEY input A/D1  |
| 87  | P01/AN0_1    | A/D_2          | I    | O/L  | O/L  | Lv       | KEY input A/D2  |
| 88  | P00/AN0_0    | M_TRG          | O    | O/L  | O/L  | H:ACTIVE | MASTER TRIGGER OUT                                    |
| 89  | P107/AN7     | STANDBY LED    | O    | O/L  | O/L  | H:ACTIVE | STANDBY LED(RED)                                      |
| 90  | P106/AN6     | POWER ON LED   | O    | O/L  | O/L  | H:ACTIVE | POWER ON LED(GREEN)                                   |
| 91  | P105/AN5     | TU6 LED        | O    | O/L  | O/L  | H:ACTIVE | TUNER6 SELECT LED                                     |
| 92  | P104/AN4     | TU5 LED        | O    | O/L  | O/L  | H:ACTIVE | TUNER5 SELECT LED                                     |
| 93  | P103/AN3     | TU4 LED        | O    | O/L  | O/L  | H:ACTIVE | TUNER4 SELECT LED                                     |
| 94  | P102/AN2     | TU3 LED        | O    | O/L  | O/L  | H:ACTIVE | TUNER3 SELECT LED                                     |
| 95  | P101/AN1     | TU2 LED        | O    | O/L  | O/L  | H:ACTIVE | TUNER2 SELECT LED                                     |
| 96  | AVSS         | AVss           | GND  | -    | -    | -        | GND   |
| 97  | P100/AN0     | TU1 LED        | O    | O/L  | O/L  | H:ACTIVE | TUNER1 SELECT LED                                     |
| 98  | VREF         | VREF           | 3.3V | -    | -    | -        | VREF  |
| 99  | AVCC         | AVcc           | 3.3V | -    | -    | -        | POWER 3.3V  |
| 100 | P97/SIN4     | NA/EU SEL      | I    | O/L  | O/L  | -        | NA/EU switch NA:Hi and EU:Lo                          |

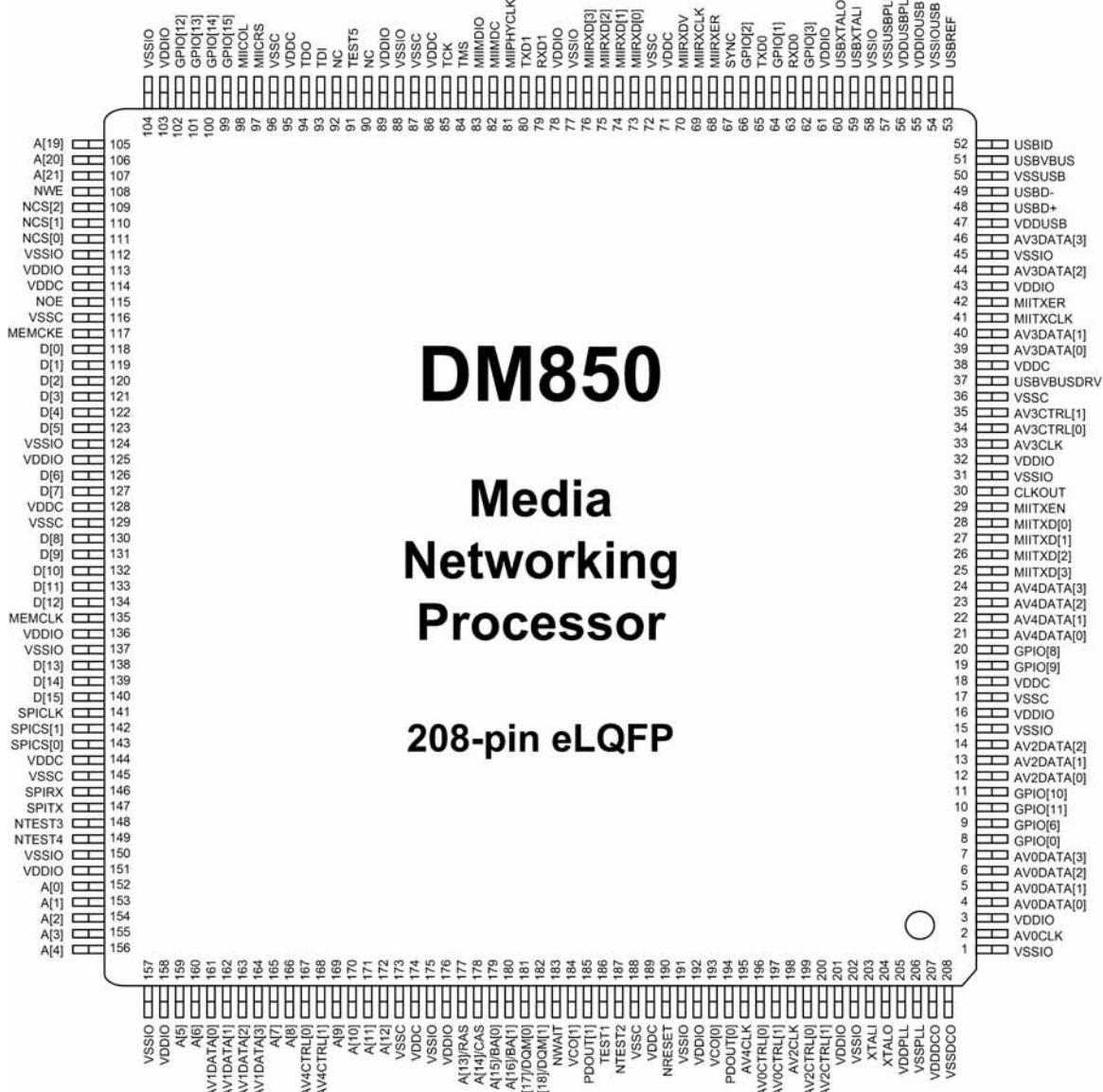
## M30621FCPGP (IC606)



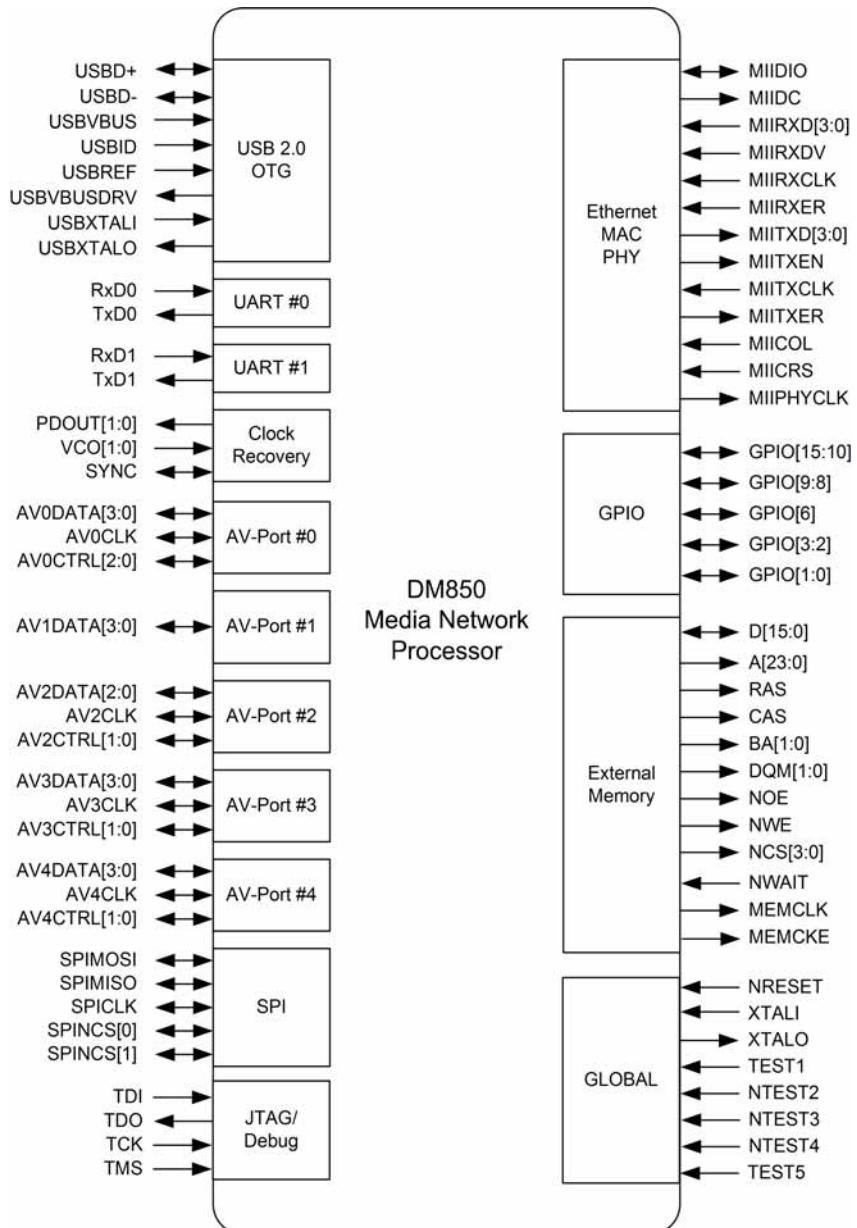
## M30621FJPFP Terminal Function

| Pin | Pin Function | Pin Name  | I/O  | STBY | STOP | Active      | Function   |
|-----|--------------|-----------|------|------|------|-------------|--|
| 1   | P95/CLK4     | ICLK      | O    | O/L  | O/L  |             | E2PROM CLOCK                                     |
| 2   | P94/TB4      | RDS_DO    | I    | I    | O/L  | Lv          | RDS decoder serial data input(LC72722)           |
| 3   | P93/TB3      | RDS_CE    | O    | O/L  | O/L  |             | RDS decoder serial data Chip Enable(LC72722)     |
| 4   | P92/SOUT3    | RDS_DI    | O    | O/L  | O/L  |             | RDS decoder serial data output(LC72722)          |
| 5   | P90/CLK3     | RDS_CL    | O    | O/L  | O/L  |             | RDS decoder serial data CLOCK(LC72722)           |
| 6   | CNVCS(BYTE)  | CNVSS     | -    | -    | -    |             | UP GRADE PIN                                     |
| 7   | P87          | FM_MUTE   | O    | O/L  | O/L  | H:ACTIVE    | FM/AM RADIO ANALOG MUTE                          |
| 8   | P86          | NA/EU_SEL | O    | O/L  | O/L  | H:ACTIVE    | NORTH AMERICA/EUÉDÁ, SELECT Lo:NA                |
| 9   | RESET        | HARD RST  | I    | I    | I    | Lv          | u-COM RESET SIGNAL INPUT                         |
| 10  | XOUT         | XOUT      | O    | -    | -    |             | OSILATOR CONNECTION                              |
| 11  | VSS          | Vss       | GND  | -    | -    |             | GND  |
| 12  | XIN          | XIN       | I    | I    | I    |             | OSILATOR CONNECTION                              |
| 13  | VCC          | Vcc1      | 3.3V | -    | -    |             | POWER 3.3V                                       |
| 14  | P85/NMI      | NMI       | I    | -    | -    |             | PULL-UP  |
| 15  | P84/INT2     | NC        | O    | O/L  | O/L  |             | OPEN   |
| 16  | P83/INT1     | NC        | O    | O/L  | O/L  |             | OPEN   |
| 17  | P82/INT0     | RDS_SYR   | I    | I    | I    | H:ACTIVE    | RDS decoder SYNCH&RAM RESET(LC72722)             |
| 18  | P81          | STERO     | I    | I    | I    |             | STEREO BROADCAST DETECT                          |
| 19  | P80          | TUNED     | O    | O/L  | O/L  |             | TUNED DETECT                                     |
| 20  | P77          | NC        | O    | O/L  | O/L  |             | OPEN   |
| 21  | P76          | NC        | O    | O/L  | O/L  |             | OPEN   |
| 22  | P71/RXD2     | NC        | O    | O/L  | O/L  |             | OPEN   |
| 23  | P70/TXD2     | NC        | O    | O/L  | O/L  |             | OPEN   |
| 24  | P67/TXD1     | PLL_DT    | O    | O/L  | O/L  | UART        | FM/AM MODULECommunication control terminal TX    |
| 25  | P66/RXD1     | PLL_DT_IN | I    | I    | O/L  | UART        | FM/AM MODULECommunication control terminal RX    |
| 26  | P65/CLK1     | PLL_CLK   | O    | O/H  | O/L  |             | FM/AM MODULECommunication control terminal CLOCK |
| 27  | P64/CTS1     | PLL_CS    | O    | O/L  | O/L  | Fall Edge&L | FM/AM MODULECommunication control terminal CS    |

| Pin | Pin Function | Pin Name  | I/O  | STBY | STOP | Active      | Function  |
|-----|--------------|-----------|------|------|------|-------------|---|
| 28  | P63/TXD0     | TU_RX     | O    | O/L  | O/L  | UART        | TUNER SUB CPUCommunication control terminal TX(HOST side RX)    |
| 29  | P62/RXD0     | TU_TX     | I    | O/L  | O/L  | UART        | TUNER SUB CPUCommunication control terminal RX(HOST side TX)    |
| 30  | P61/CLK0     | TU_CLK    | I    | I    | I    |             | TUNER SUB CPUCommunication control terminal CLOCK               |
| 31  | P60/CTS0     | TUX_CS    | I    | I    | I    | Fall Edge&L | TUNER SUB CPUCommunication control terminal CHIP SELECT TU NO.X |
| 32  | P57          | TUX_REQ   | O    | O/L  | O/L  | Fall Edge&L | TUNER SUB CPUCommunication control terminal REQUEST TU NO.X     |
| 33  | P56          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 34  | P55/EPM      | RS232C_UP | I    | I    | I    |             | UP GRADE PIN  |
| 35  | P54          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 36  | P53          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 37  | P52          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 38  | P51          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 39  | P50/CE       | RS232C_UP | O    | I    | I    |             | UP GRADE PIN  |
| 40  | P43          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 41  | P42          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 42  | P41          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 43  | P40          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 44  | P37          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 45  | P36          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 46  | P35          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 47  | P34          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 48  | P33          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 49  | P32          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 50  | P31          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 51  | P30          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 52  | P27          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 53  | P26          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 54  | P25          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 55  | P24          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 56  | P23          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 57  | P22          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 58  | P21          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 59  | P20          | NC        | O    | O/L  | O/L  |             | OPEN  |
| 60  | P07/D7       | NC        | O    | O/L  | O/L  |             | OPEN  |
| 61  | P06/D6       | NC        | O    | O/L  | O/L  |             | OPEN  |
| 62  | P05/D5       | NC        | O    | O/L  | O/L  |             | OPEN  |
| 63  | P04/D4       | NC        | O    | O/L  | O/L  |             | OPEN  |
| 64  | P03/D3       | NC        | O    | O/L  | O/L  |             | OPEN  |
| 65  | P02/D2       | NC        | O    | O/L  | O/L  |             | OPEN  |
| 66  | P01/D1       | NC        | O    | O/L  | O/L  |             | OPEN  |
| 67  | P00/D0       | NC        | O    | O/L  | O/L  |             | OPEN  |
| 68  | P107/AN7     | NC        | O    | O/L  | O/L  |             | OPEN  |
| 69  | P106/AN6     | NC        | O    | O/L  | O/L  |             | OPEN  |
| 70  | P105/AN5     | NC        | O    | O/L  | O/L  |             | OPEN  |
| 71  | P104/AN4     | NC        | O    | O/L  | O/L  |             | OPEN  |
| 72  | P103/AN3     | NC        | O    | O/L  | O/L  |             | OPEN  |
| 73  | P102/AN2     | NC        | O    | O/L  | O/L  |             | OPEN  |
| 74  | P101/AN1     | NC        | O    | O/L  | O/L  |             | OPEN  |
| 75  | AVSS         | AVss      | GND  | -    | -    | -           | GND   |
| 76  | P100/AN0     | SLOT NO.  | I    | I    | I    |             | SLOT NO. A/D input  |
| 77  | VREF         | VREF      | 3.3V | -    | -    | -           | VREF  |
| 78  | AVCC         | AVcc      | 3.3V | -    | -    | -           | POWER 3.3V  |
| 79  | P97/SIN4     | NC        | O    | O/L  | O/L  |             | OPEN  |
| 80  | P96/SOUT4    | IDATA     | I/O  | O/L  | O/L  | -           | E2PROM IDATA  |



## BCOIC-DM850E-CQL Functional Diagram

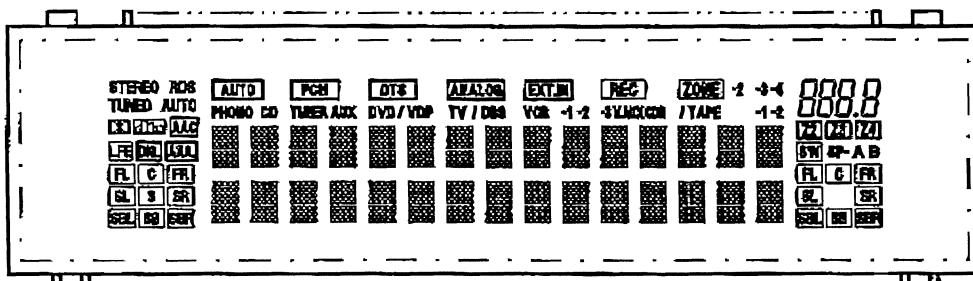


## 2. FL DISPLAY

16-ST-87GINK (FLT1001)

(62)

(1)



### PIN CONNECTION

| PIN NO.    | 6<br>2 | 6<br>1 | 5<br>0 | 5<br>9 | 5<br>8 | 5<br>7 | 5<br>6 | 5<br>5 | 5<br>4 | 5<br>3 | 5<br>2 | 5<br>1 | 4<br>0 | 4<br>9 | 4<br>8 | 4<br>7 | 4<br>6 | 4<br>5 | 4<br>4 | 4<br>3 | 4<br>2 | 4<br>1 | 4<br>0 | ~ | 5<br>4 | 3<br>3 | 2<br>1 |   |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---|--------|--------|--------|---|
| CONNECTION |        |        |        | L      | P      |        | R      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |   |        |        |        |   |
| F          | N      | N      | N      | N      | G      | G      | V      | O      | S      | -      | T      | T      | 1      | 1      |        |        |        |        |        |        |        |        |        | N | N      | N      | F      |   |
| 2          | X      | P      | P      | D      | D      | H      | D      | C      | T      | S      | P      | A      | B      | G      |        |        |        |        |        |        |        |        |        | X | P      | P      | X      | 1 |

NOTE 1) F1, F2 --- Filament 4) NX ----- No extend pin  
 2) NP ----- No pin 5) DL ----- Datum Line  
 3) 16G ----- Grid

### GRID ASSIGNMENT

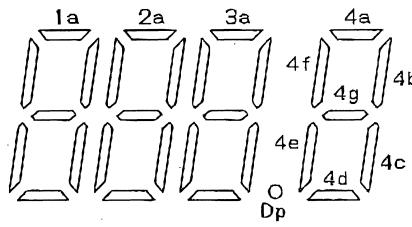
| 16G            | 1G       | 2G        | 3G  | 4G       | 5G    | 6G   | 7G   | 8G | 9G  | 10G | 11G  | 12G  | 13G | 14G | 15G | 16G |  |
|----------------|----------|-----------|-----|----------|-------|------|------|----|-----|-----|------|------|-----|-----|-----|-----|--|
| STEREO RDS     | AUTO     | PCM       | DTS | ANALOG   | EXT.M | REC  | ZONE | -2 | -3  | -4  | -1-2 | -1-2 | Z2  | Z3  | Z4  |     |  |
| TUNED AUTO     | PHONO CD | TUNER AUX | DVD | TV / DBS | VCR   | -1-2 | -3   | V  | AUX | CDR | TAPE |      |     |     |     |     |  |
| DIG. AAC       |          |           | VDP | SECC     | CCD   |      |      |    |     |     |      |      |     |     |     |     |  |
| LFE, DIG. ANA. |          |           | SE  | SP       | PA    |      |      |    |     |     |      |      |     |     |     |     |  |
| FL, C, FR      |          |           | D   | SS       | AB    |      |      |    |     |     |      |      |     |     |     |     |  |
| SL, S, SR      |          |           | H   | TT       | GG    |      |      |    |     |     |      |      |     |     |     |     |  |
| SBL, SB, SBR   |          |           | D   | T        | 1     |      |      |    |     |     |      |      |     |     |     |     |  |

(上段)

|          |          |          |          |          |
|----------|----------|----------|----------|----------|
| 1-1<br>B | 2-1<br>B | 3-1<br>B | 4-1<br>B | 5-1<br>B |
| 1-2<br>B | 2-2<br>B | 3-2<br>B | 4-2<br>B | 5-2<br>B |
| 1-3<br>B | 2-3<br>B | 3-3<br>B | 4-3<br>B | 5-3<br>B |
| 1-4<br>B | 2-4<br>B | 3-4<br>B | 4-4<br>B | 5-4<br>B |
| 1-5<br>B | 2-5<br>B | 3-5<br>B | 4-5<br>B | 5-5<br>B |
| 1-6<br>B | 2-6<br>B | 3-6<br>B | 4-6<br>B | 5-6<br>B |
| 1-7<br>B | 2-7<br>B | 3-7<br>B | 4-7<br>B | 5-7<br>B |

(下段)

|          |          |          |          |          |
|----------|----------|----------|----------|----------|
| 1-1<br>A | 2-1<br>A | 3-1<br>A | 4-1<br>A | 5-1<br>A |
| 1-2<br>A | 2-2<br>A | 3-2<br>A | 4-2<br>A | 5-2<br>A |
| 1-3<br>A | 2-3<br>A | 3-3<br>A | 4-3<br>A | 5-3<br>A |
| 1-4<br>A | 2-4<br>A | 3-4<br>A | 4-4<br>A | 5-4<br>A |
| 1-5<br>A | 2-5<br>A | 3-5<br>A | 4-5<br>A | 5-5<br>A |
| 1-6<br>A | 2-6<br>A | 3-6<br>A | 4-6<br>A | 5-6<br>A |
| 1-7<br>A | 2-7<br>A | 3-7<br>A | 4-7<br>A | 5-7<br>A |



(16G)

(1G~15G)

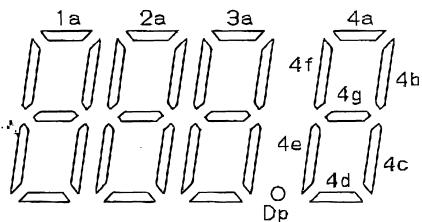
### TIMING ASSIGNMENT

| T16                      | T17              | T18              | T19              | T20                | T21                 | T22                | T23                     | T16  |
|--------------------------|------------------|------------------|------------------|--------------------|---------------------|--------------------|-------------------------|--|
| STEREO RDS<br>TUNED AUTO | AUTO<br>PHONO CD | PCM<br>TUNER AUX | DTS<br>DVD / VDP | ANALOG<br>TV / DBS | EXT.IN<br>VCR -1 -2 | REC<br>-3 VAUX CDR | ZONE -2<br>/ TAPE -1 -2 | 0000.0<br>Z2 Z3 Z4<br>SW SP- A B<br>FL C FR<br>SL S SR<br>SEL SB SBR |
| DOLBY AAC                | LFE DIG ANA      | FL C FR          | SL S SR          | SEL SB SBR         |                     |                    |                         |  |
|                          |                  |                  |                  |                    |                     |                    |                         |  |
|                          |                  |                  |                  |                    |                     |                    |                         |  |

(上段) T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12 T13 T14 T15 (下段)

|          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 1-1<br>B | 2-1<br>B | 3-1<br>B | 4-1<br>B | 5-1<br>B | 1-1<br>A | 2-1<br>A | 3-1<br>A | 4-1<br>A | 5-1<br>A |
| 1-2<br>B | 2-2<br>B | 3-2<br>B | 4-2<br>B | 5-2<br>B | 1-2<br>A | 2-2<br>A | 3-2<br>A | 4-2<br>A | 5-2<br>A |
| 1-3<br>B | 2-3<br>B | 3-3<br>B | 4-3<br>B | 5-3<br>B | 1-3<br>A | 2-3<br>A | 3-3<br>A | 4-3<br>A | 5-3<br>A |
| 1-4<br>B | 2-4<br>B | 3-4<br>B | 4-4<br>B | 5-4<br>B | 1-4<br>A | 2-4<br>A | 3-4<br>A | 4-4<br>A | 5-4<br>A |
| 1-5<br>B | 2-5<br>B | 3-5<br>B | 4-5<br>B | 5-5<br>B | 1-5<br>A | 2-5<br>A | 3-5<br>A | 4-5<br>A | 5-5<br>A |
| 1-6<br>B | 2-6<br>B | 3-6<br>B | 4-6<br>B | 5-6<br>B | 1-6<br>A | 2-6<br>A | 3-6<br>A | 4-6<br>A | 5-6<br>A |
| 1-7<br>B | 2-7<br>B | 3-7<br>B | 4-7<br>B | 5-7<br>B | 1-7<br>A | 2-7<br>A | 3-7<br>A | 4-7<br>A | 5-7<br>A |

(T1~T15)



(T16) (T19) (T20) (T23)

### ANODE TIMING CHART

|      | T1~T14 | T15  | T16 | T17 | T18 | T19 | T20 | T21 | T22 | T23 |
|------|--------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| D0A  | 1-1A   | 1-1A | Dp  |     |     |     |     |     |     |     |
| D1A  | 2-1A   | 2-1A | 1d  |     |     |     |     |     |     |     |
| D2A  | 3-1A   | 3-1A | 2d  |     |     |     |     |     |     |     |
| D3A  | 4-1A   | 4-1A | 3d  |     |     |     |     |     |     |     |
| D4A  | 5-1A   | 5-1A | 4d  |     |     |     |     |     |     |     |
| D5A  | 1-2A   | 1-2A |     |     |     |     |     |     |     |     |
| D6A  | 2-2A   | 2-2A | 1e  |     |     |     |     |     |     |     |
| D7A  | 3-2A   | 3-2A | 2e  |     |     |     |     |     |     |     |
| D8A  | 4-2A   | 4-2A | 3e  |     |     |     |     |     |     |     |
| D9A  | 5-2A   | 5-2A | 4e  |     |     |     |     |     |     |     |
| D10A | 1-3A   | 1-3A |     |     |     |     |     |     |     |     |
| D11A | 2-3A   | 2-3A | 1c  |     |     |     |     |     |     |     |
| D12A | 3-3A   | 3-3A | 2c  |     |     |     |     |     |     |     |
| D13A | 4-3A   | 4-3A | 3c  |     |     |     |     |     |     |     |
| D14A | 5-3A   | 5-3A | 4c  |     |     |     |     |     |     |     |
| D15A | 1-4A   | 1-4A |     |     |     |     |     |     |     |     |
| D16A | 2-4A   | 2-4A | 1g  |     |     |     |     |     |     |     |
| D17A | 3-4A   | 3-4A | 2g  |     |     |     |     |     |     |     |
| D18A | 4-4A   | 4-4A | 3g  |     |     |     |     |     |     |     |
| D19A | 5-4A   | 5-4A | 4g  |     |     |     |     |     |     |     |
| D20A | 1-5A   | 1-5A |     |     |     |     |     |     |     |     |
| D21A | 2-5A   | 2-5A | 1f  |     |     |     |     |     |     |     |
| D22A | 3-5A   | 3-5A | 2f  |     |     |     |     |     |     |     |
| D23A | 4-5A   | 4-5A | 3f  |     |     |     |     |     |     |     |
| D24A | 5-5A   | 5-5A | 4f  |     |     |     |     |     |     |     |
| D25A | 1-6A   | 1-6A |     |     |     |     |     |     |     |     |
| D26A | 2-6A   | 2-6A | 1b  |     |     |     |     |     |     |     |
| D27A | 3-6A   | 3-6A | 2b  |     |     |     |     |     |     |     |
| D28A | 4-6A   | 4-6A | 3b  |     |     |     |     |     |     |     |
| D29A | 5-6A   | 5-6A | 4b  |     |     |     |     |     |     |     |
| D30A | 1-7A   | 1-7A |     |     |     |     |     |     |     |     |
| D31A | 2-7A   | 2-7A | 1a  |     |     |     |     |     |     |     |
| D32A | 3-7A   | 3-7A | 2a  |     |     |     |     |     |     |     |
| D33A | 4-7A   | 4-7A | 3a  |     |     |     |     |     |     |     |
| D34A | 5-7A   | 5-7A | 4a  |     |     |     |     |     |     |     |

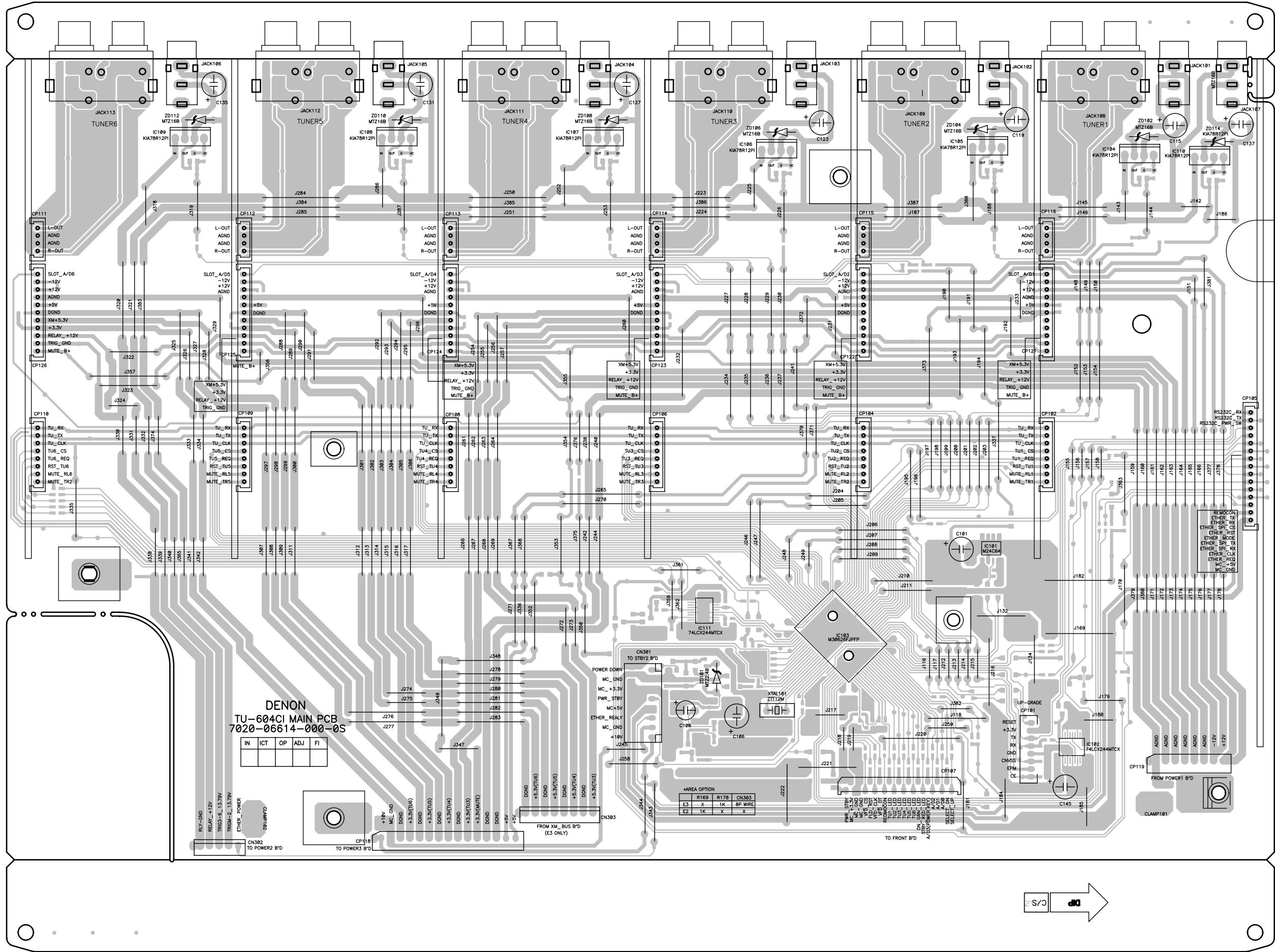
### ANODE TIMING CHART

|      | T1~T14 | T15    | T16    | T17   | T18 | T19    | T20    | T21  | T22  | T23 |
|------|--------|--------|--------|-------|-----|--------|--------|------|------|-----|
| D0B  | 1-1B   | 1-1B   | Z2     |       |     |        |        |      |      |     |
| D1B  | 2-1B   | 2-1B   | Z3     |       |     |        |        |      |      |     |
| D2B  | 3-1B   | 3-1B   | Z4     |       |     |        |        |      |      |     |
| D3B  | 4-1B   | 4-1B   |        |       |     |        |        |      |      |     |
| D4B  | 5-1B   | 5-1B   | DOL    |       |     |        |        |      |      |     |
| D5B  | 1-2B   | 1-2B   | DOL    |       |     |        |        |      |      |     |
| D6B  | 2-2B   | 2-2B   | MIC    |       |     |        |        |      |      |     |
| D7B  | 3-2B   | 3-2B   | LFE    |       |     |        |        |      |      |     |
| D8B  | 4-2B   | 4-2B   | FL     |       |     |        |        |      |      |     |
| D9B  | 5-2B   | 5-2B   | SL     |       |     |        |        |      |      |     |
| D10B | 1-3B   | 1-3B   | SP-    |       |     |        |        |      |      |     |
| D11B | 2-3B   | 2-3B   |        |       |     |        |        |      |      |     |
| D12B | 3-3B   | 3-3B   |        |       |     |        |        |      |      |     |
| D13B | 4-3B   | 4-3B   | SW     |       |     |        |        |      |      |     |
| D14B | 5-3B   | 5-3B   | S2     |       |     |        |        |      |      |     |
| D15B | 1-4B   | 1-4B   | A      |       |     |        |        |      |      |     |
| D16B | 2-4B   | 2-4B   | B      |       |     |        |        |      |      |     |
| D17B | 3-4B   | 3-4B   | FL (R) |       |     |        |        |      |      |     |
| D18B | 4-4B   | 4-4B   | FL (L) |       |     |        |        |      |      |     |
| D19B | 5-4B   | 5-4B   | FR (R) |       |     |        |        |      |      |     |
| D20B | 1-5B   | 1-5B   | SL (R) |       |     |        |        |      |      |     |
| D21B | 2-5B   | 2-5B   | SL (L) |       |     |        |        |      |      |     |
| D22B | 3-5B   | 3-5B   | SB (R) |       |     |        |        |      |      |     |
| D23B | 4-5B   | 4-5B   | SB (L) |       |     |        |        |      |      |     |
| D24B | 5-5B   | 5-5B   | SB (R) |       |     |        |        |      |      |     |
| D25B | 1-6B   | 1-6B   |        |       |     |        |        |      |      |     |
| D26B | 2-6B   | 2-6B   | FL (R) |       |     |        |        |      |      |     |
| D27B | 3-6B   | 3-6B   | FL (L) |       |     |        |        |      |      |     |
| D28B | 4-6B   | 4-6B   | FR (R) |       |     |        |        |      |      |     |
| D29B | 5-6B   | 5-6B   | SL (R) |       |     |        |        |      |      |     |
| D30B | 1-7B   | 1-7B   | S      |       |     |        |        |      |      |     |
| D31B | 2-7B   | 2-7B   | SB (R) |       |     |        |        |      |      |     |
| D32B | 3-7B   | 3-7B   | SB (L) |       |     |        |        |      |      |     |
| D33B | 4-7B   | 4-7B   | SB (R) |       |     |        |        |      |      |     |
| D34B | 5-7B   | 5-7B   | SB (L) |       |     |        |        |      |      |     |
| AD1  | -3     | STEREO | AUTO   | PCM   | DTS | ANALOG | EXT.IN | REC  | ZONE |     |
| AD2  | -4     | RDS    | PHONO  | TUNER | DVD | TV     | VCR    | -3   | -2   |     |
| AD3  | -1     | TUNED  | CD     | AUX   | S1  | S2     | -1     | VAUX | S3   |     |
| AD4  | -2     | AUTO   |        |       | VDP | DBS    | -2     | CDR  | TAPE |     |

**---MEMO---**

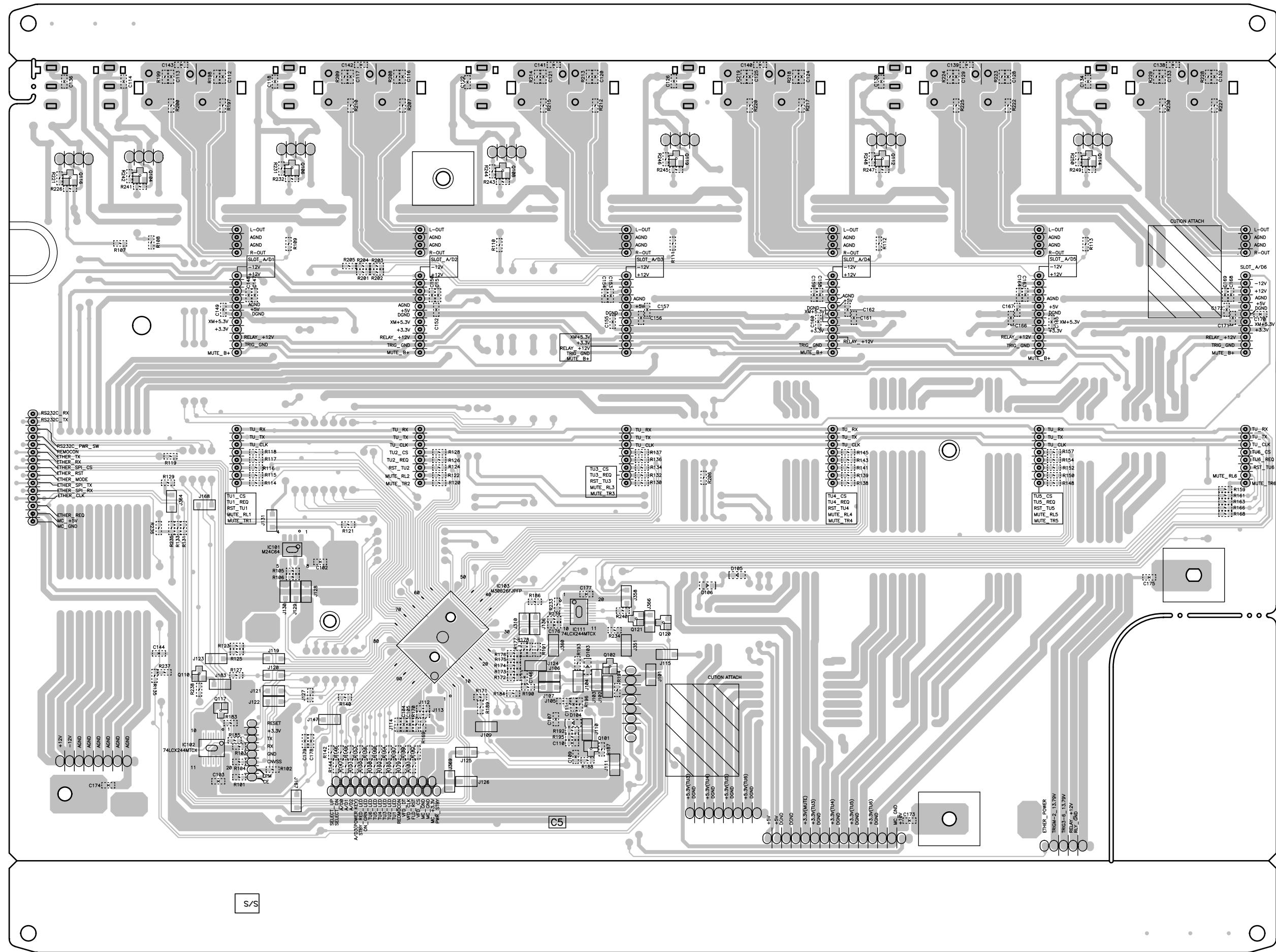
## **PRINTED WIRING BOARDS**

## **MAIN UNIT (1/2)**



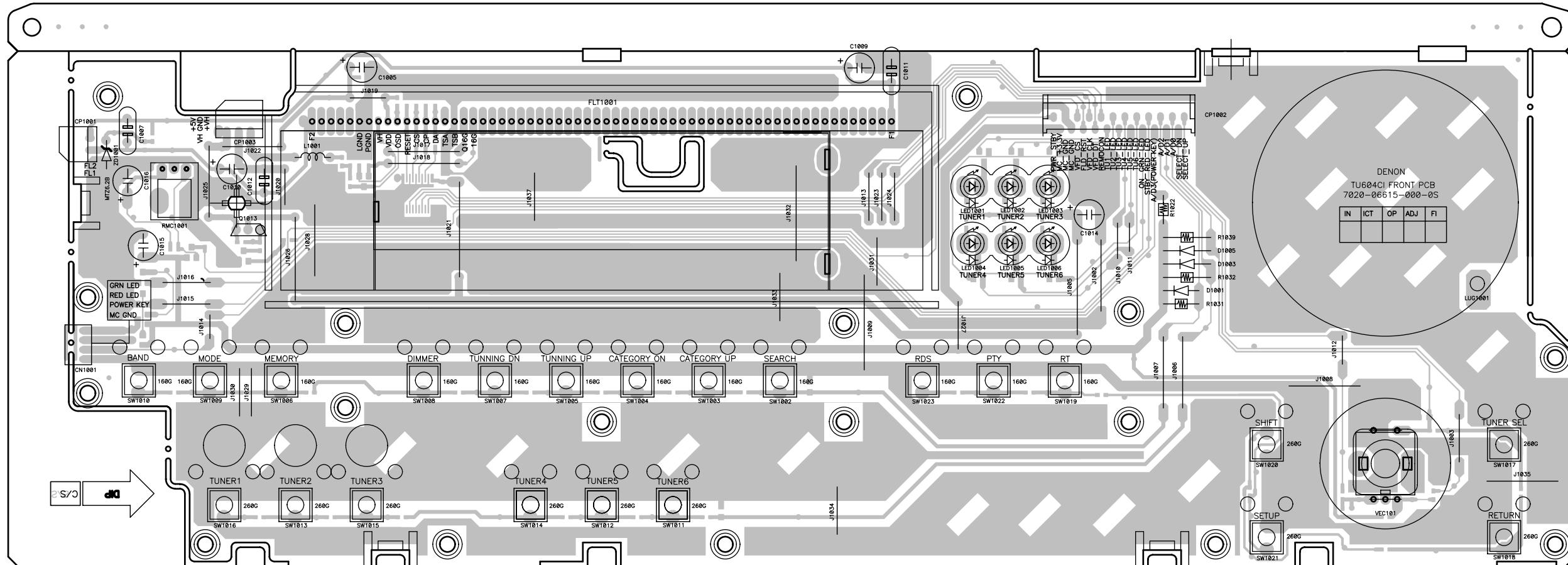
**COMPONENT SIDE**

MAIN UNIT (2/2)



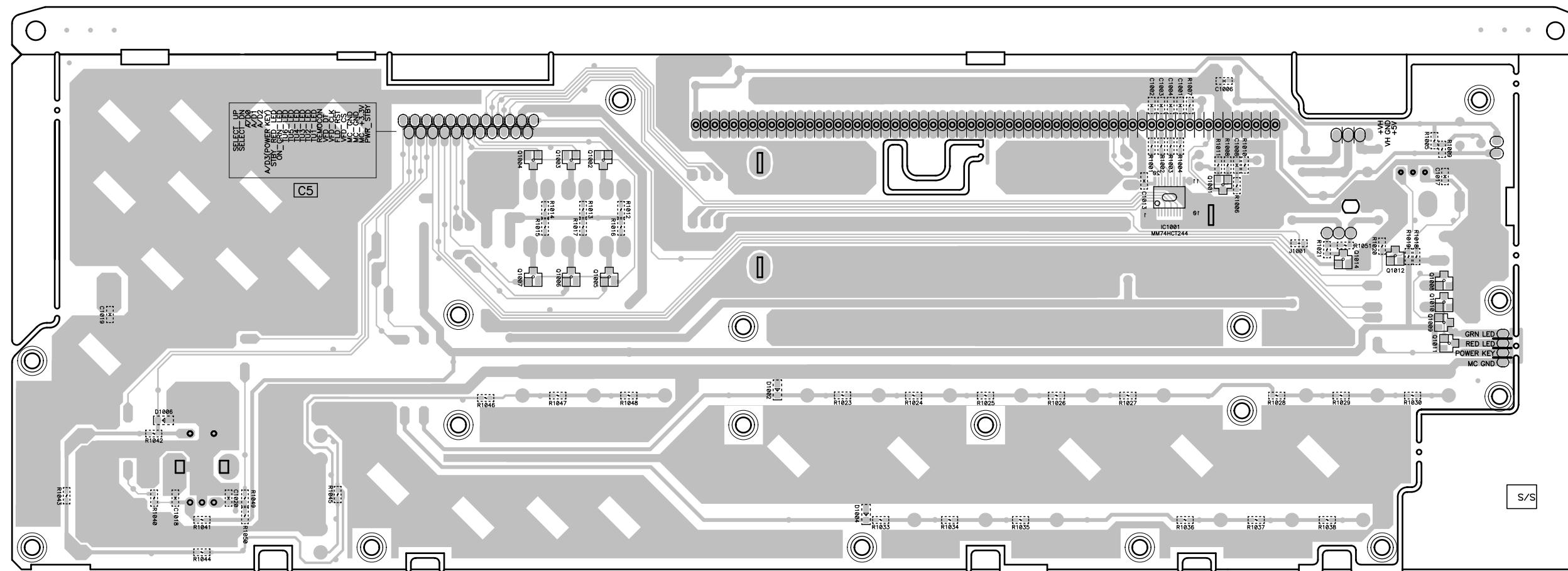
FOIL SIDE

## FRONT UNIT (1/2)

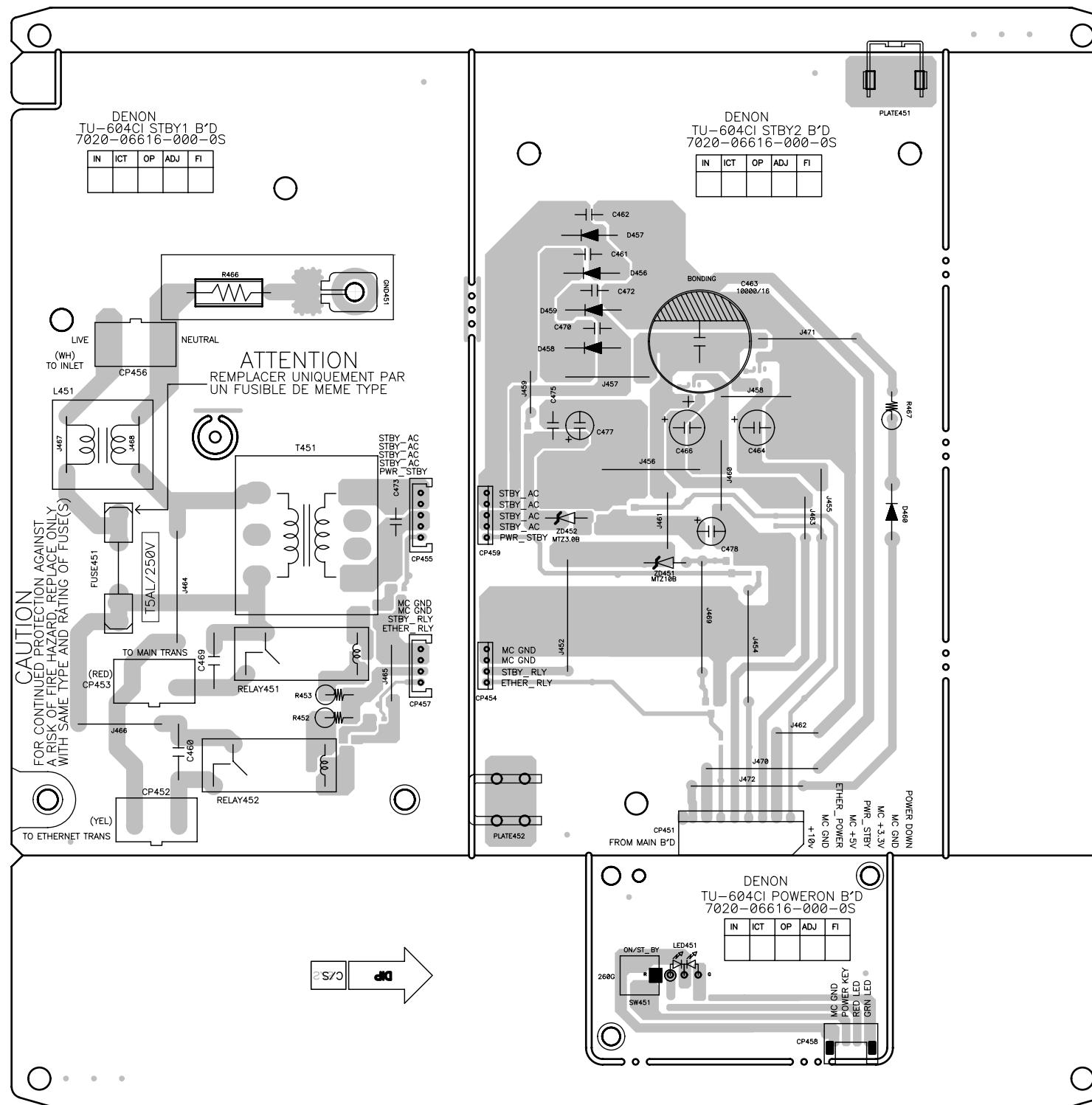


COMPONENT SIDE

## FRONT UNIT (2/2)

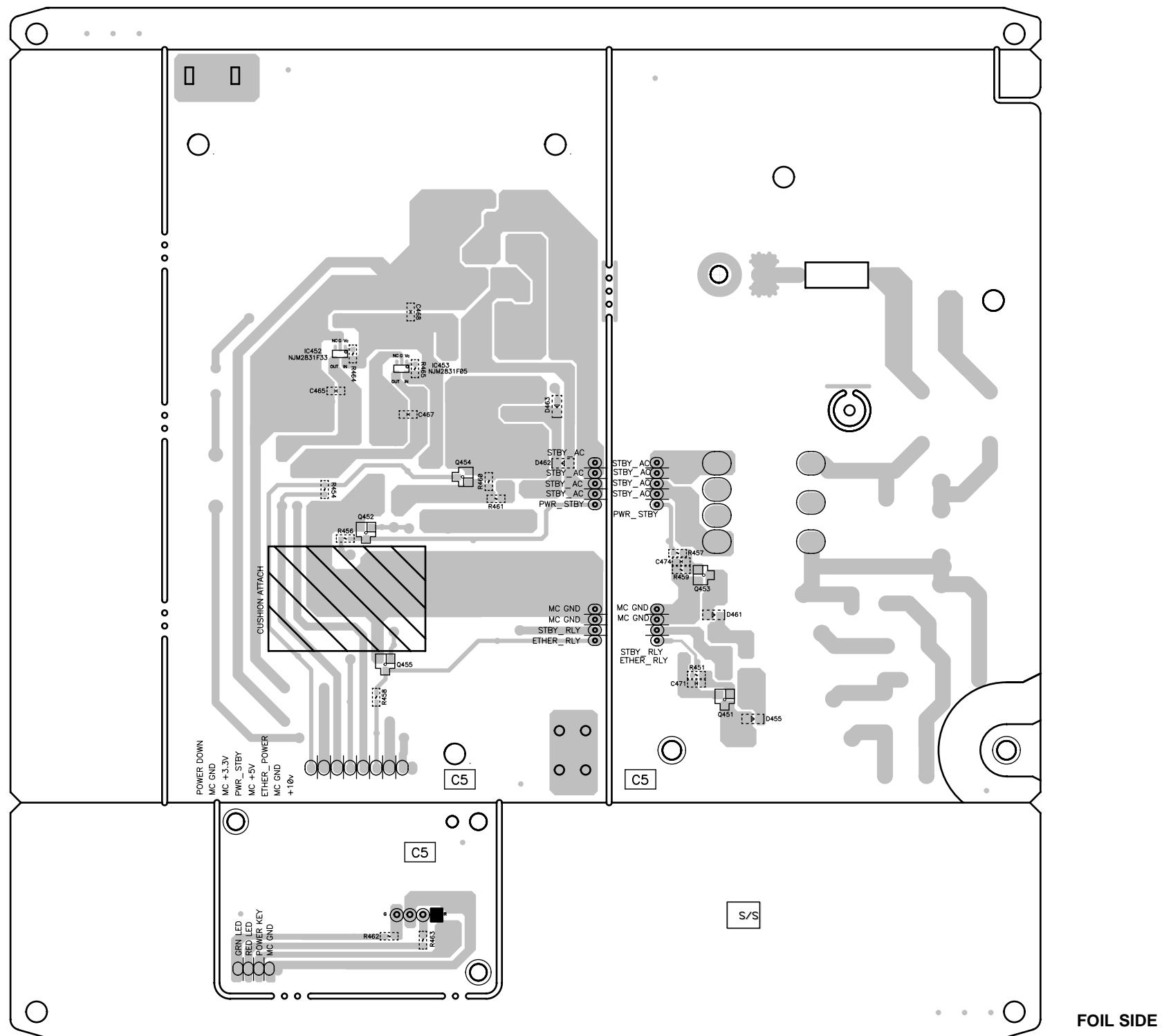


## **STANDBY UNIT (1/2)**

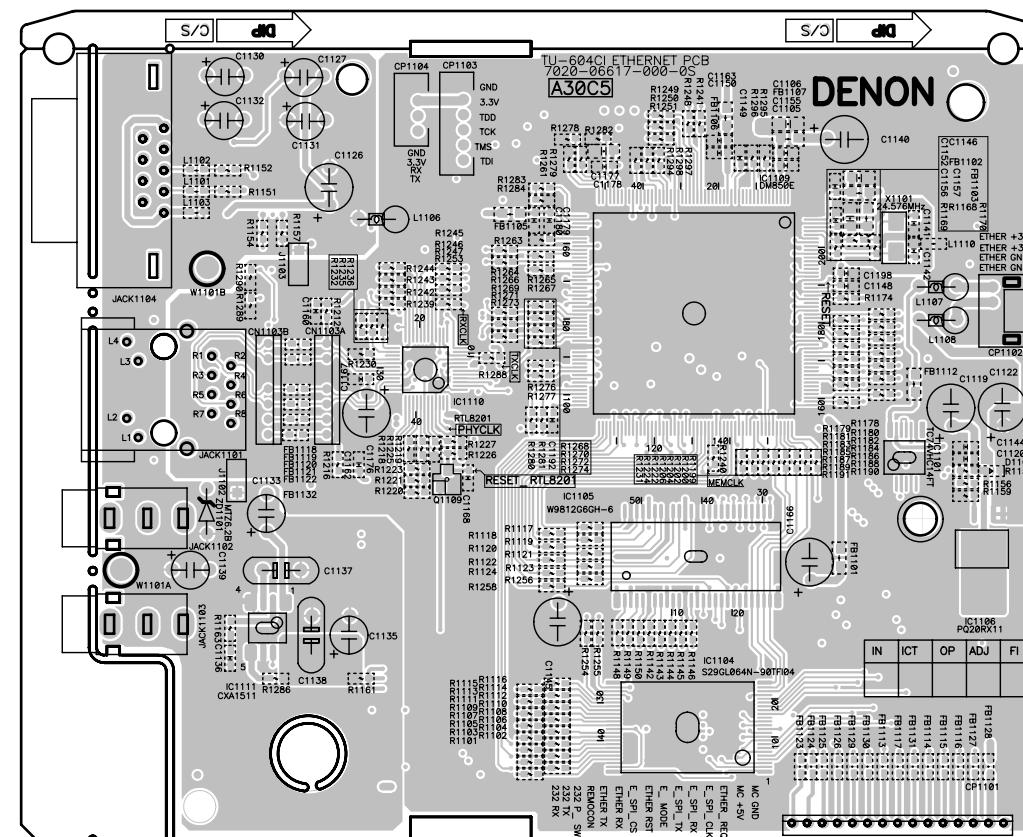


**COMPONENT SIDE**

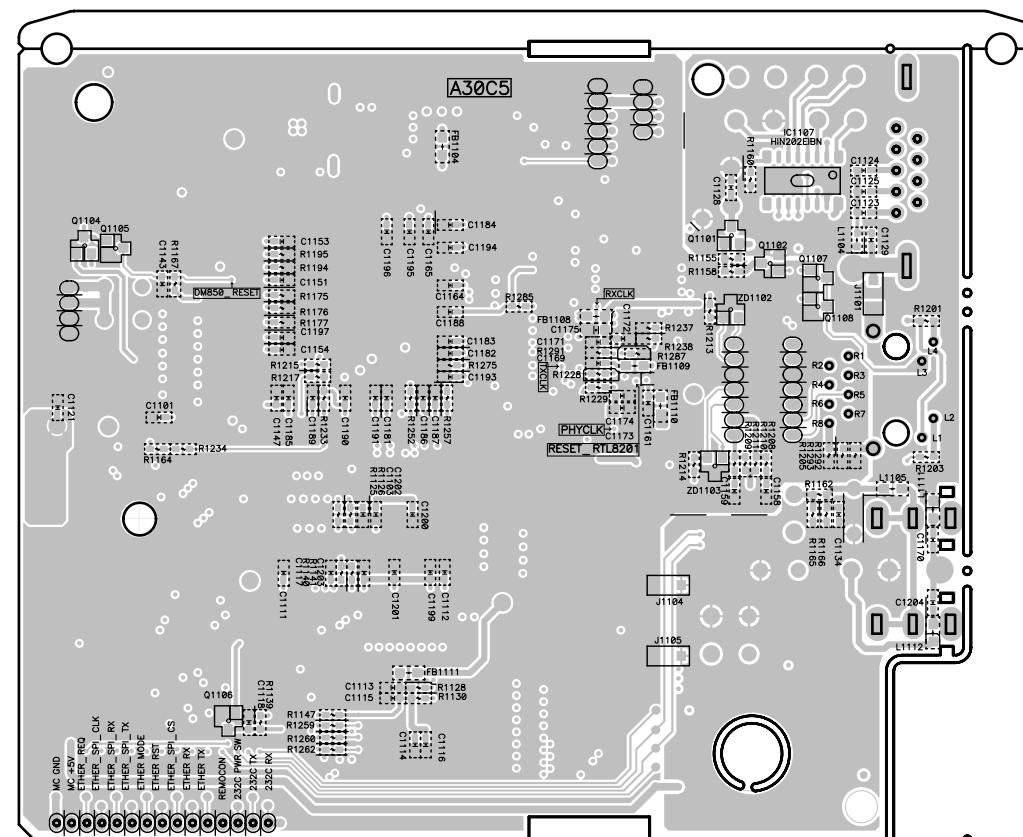
## STANDBY UNIT (2/2)



## ETHERNET UNIT

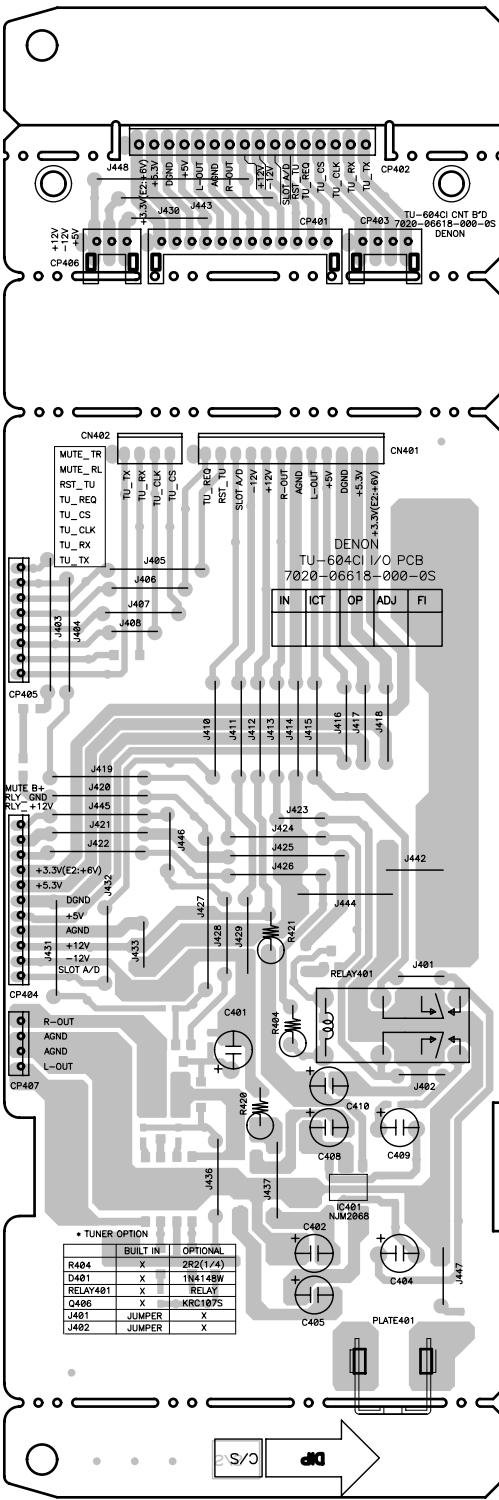


COMPONENT SIDE

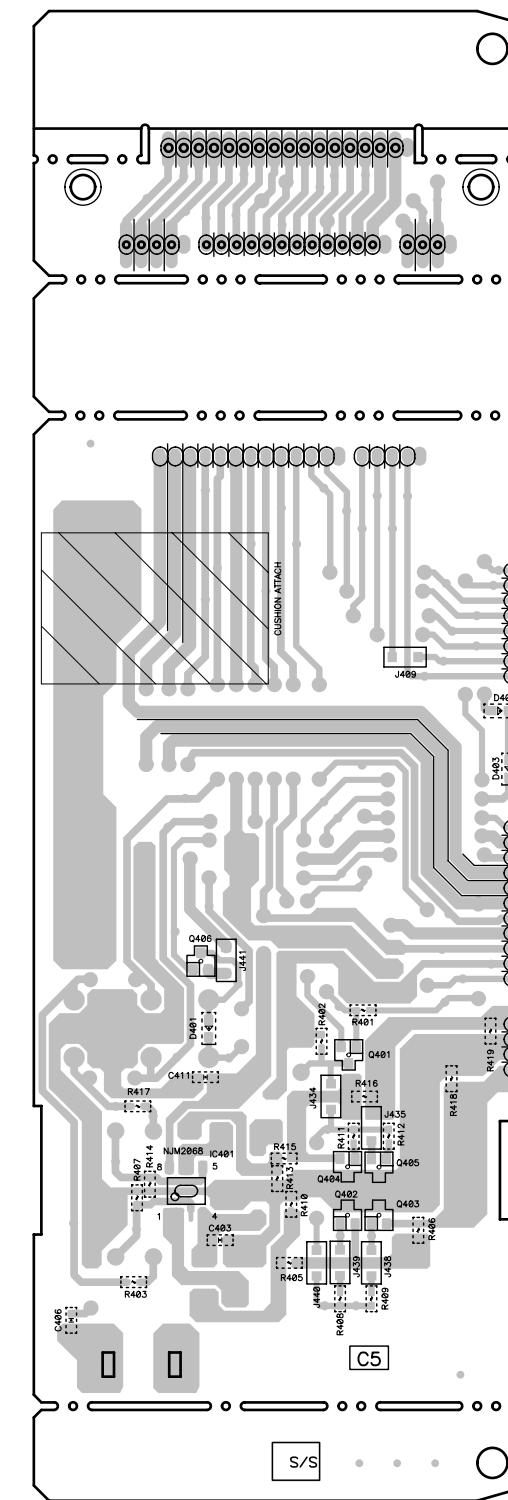


FOIL SIDE

## I/O UNIT

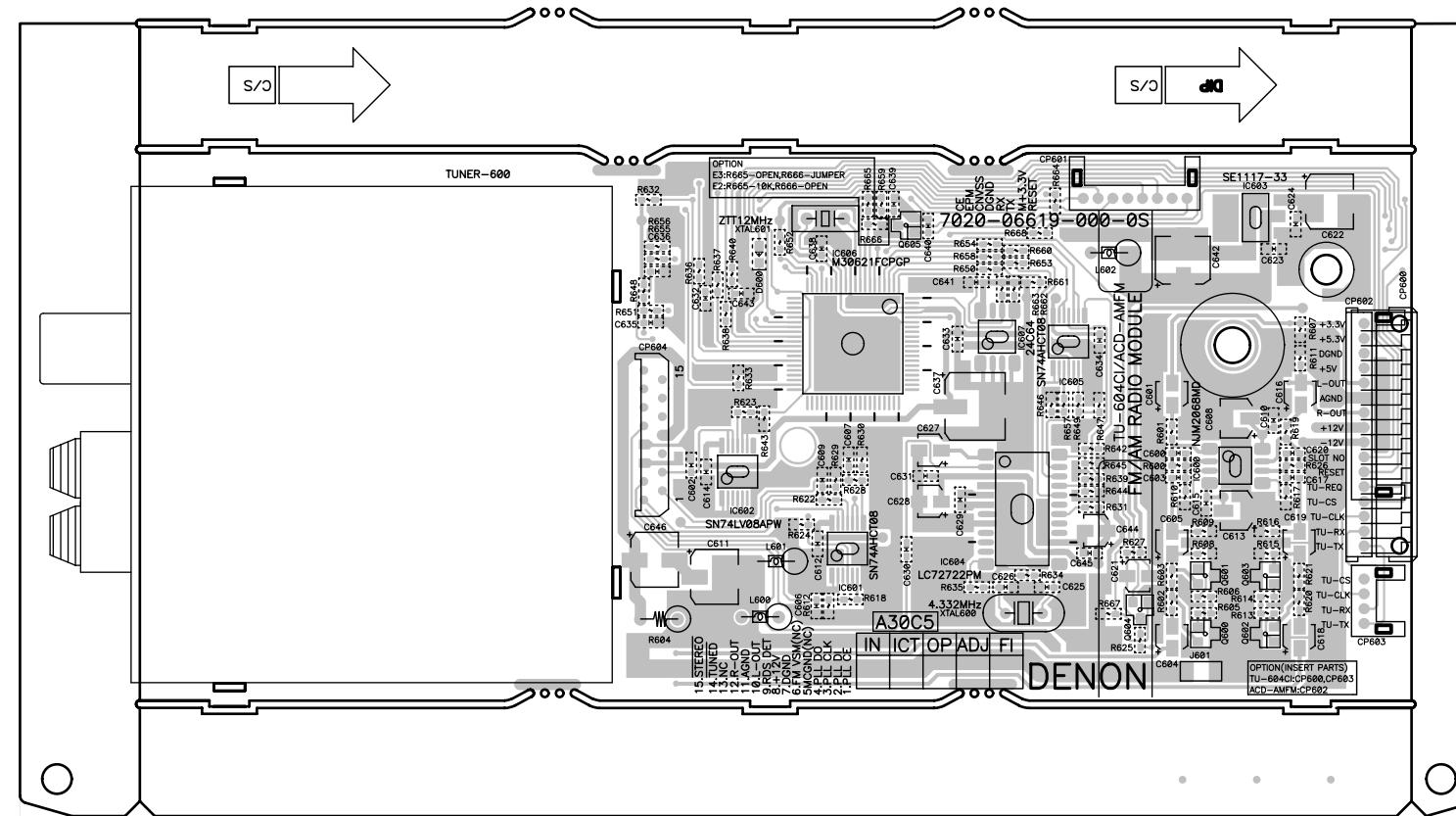


COMPONENT SIDE

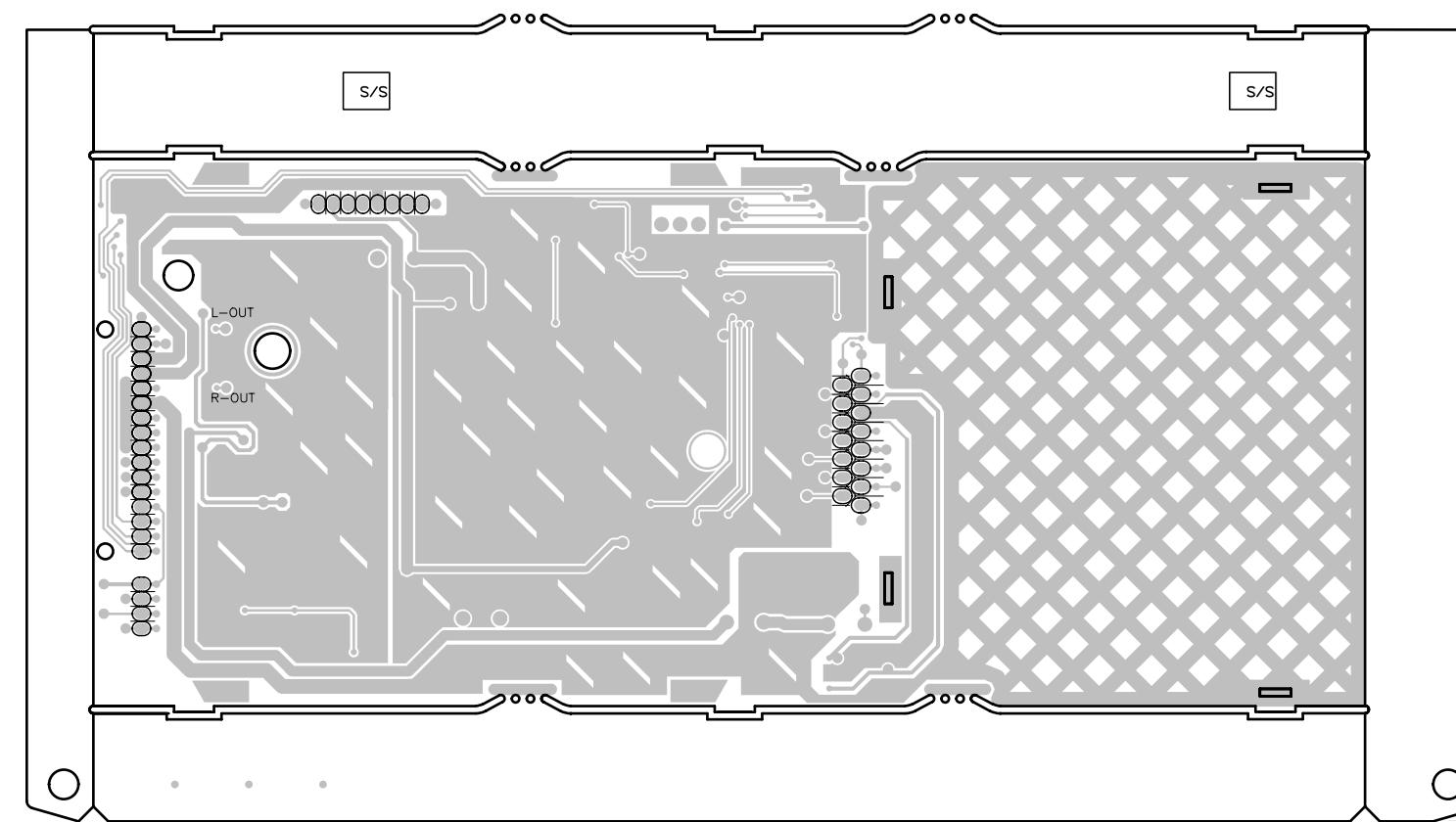


FOIL SIDE

## FM/AM UNIT

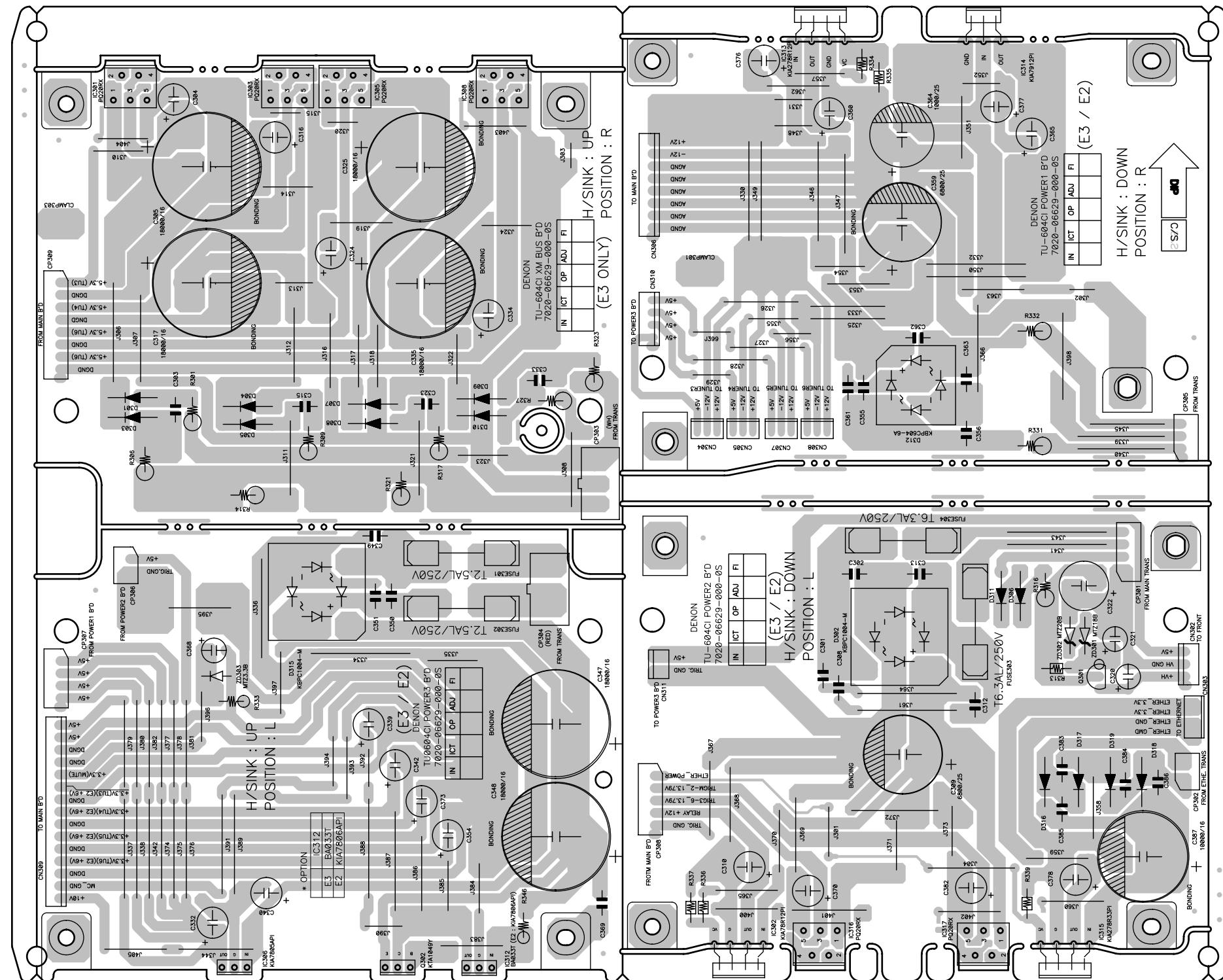


COMPONENT SIDE



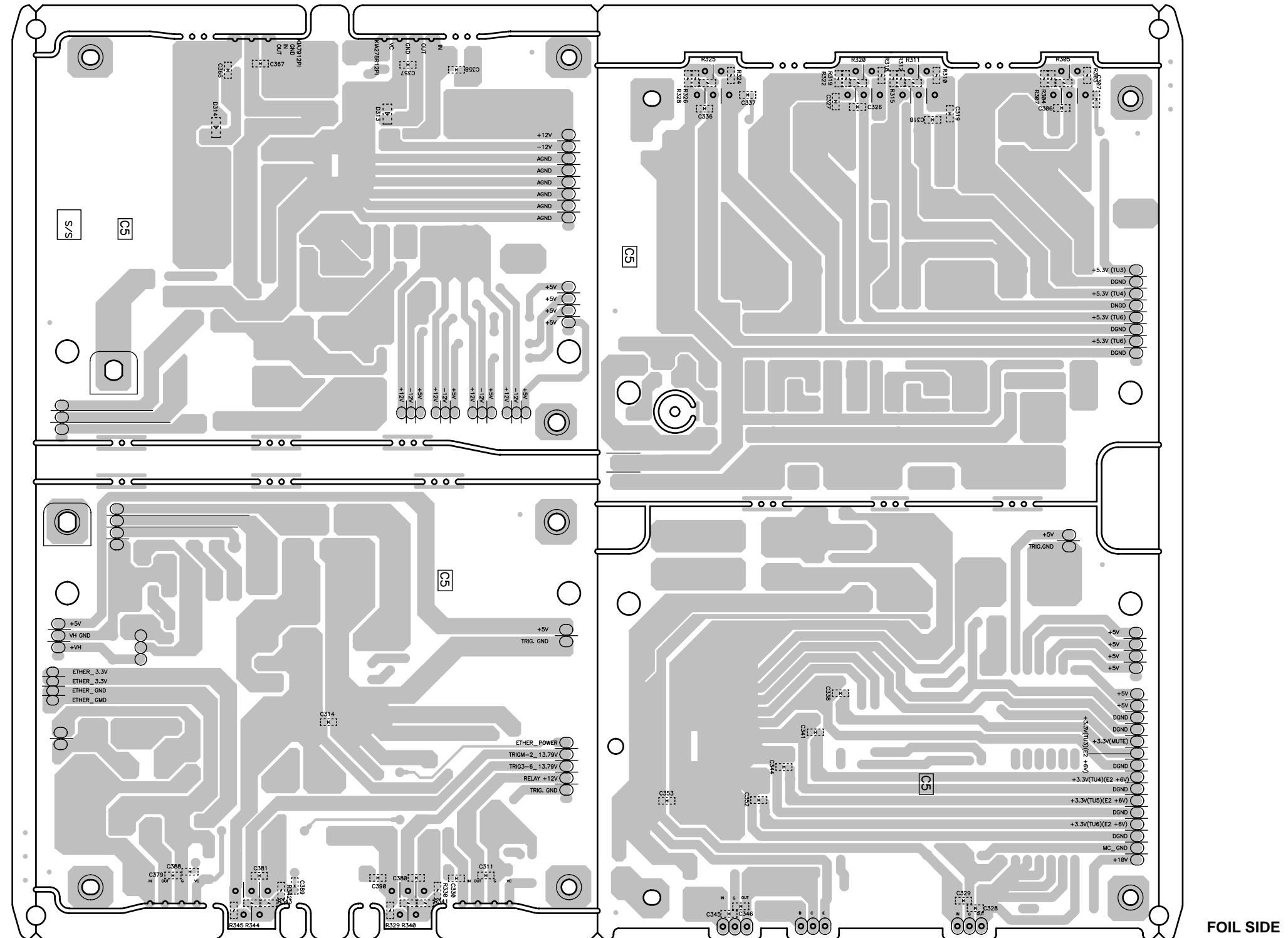
FOIL SIDE

## **POWER UNIT (1/2)**



COMPONENT SIDE

## **POWER UNIT (2/2)**



**---MEMO---**

# NOTE FOR PARTS LIST

- Parts for which "nsp" is indicated on this table cannot be supplied.
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "★" is not illustrated in the exploded view.
- Not including General-purpose Carbon Film Resistor in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)
- Not including General-purpose Carbon Chip Resistor in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

## WARNING:

Parts marked with this symbol  have critical characteristics.  
Use ONLY replacement parts recommended by the manufacturer.

## ● Resistors

| Ex.: RN               | 14K                   | 2E        | 182        | G                        | FR     |
|-----------------------|-----------------------|-----------|------------|--------------------------|--------|
| Type                  | Shape and performance | Power     | Resistance | Allowable error          | Others |
| RD : Carbon           |                       | 2B : 1/8W | F : ±1%    | P : Pulse-resistant type |        |
| RC : Composition      |                       | 2E : 1/4W | G : ±2%    | NL : Low noise type      |        |
| RS : Metal oxide film |                       | 2H : 1/2W | J : ±5%    | NB : Non-burning type    |        |
| RW : Winding          |                       | 3A : 1W   | K : ±10%   | FR : Fuse-resistor       |        |
| RN : Metal film       |                       | 3D : 2W   | M : ±20%   | F : Lead wire forming    |        |
| RK : Metal mixture    |                       | 3F : 3W   |            |                          |        |
|                       |                       | 3H : 5W   |            |                          |        |

### \* Resistance

1 8 2  $\Rightarrow$  1800 ohm = 1.8 kohm  
 Indicates number of zeros after effective number.  
 2-digit effective number.  
 • Units: ohm

1 R 2  $\Rightarrow$  1.2 ohm  
 1-digit effective number.  
 2-digit effective number, decimal point indicated by R.  
 • Units: ohm

## ● Capacitors

| Ex.: CE                          | 04W                   | 1H                  | 2R2                              | M               | BP     |
|----------------------------------|-----------------------|---------------------|----------------------------------|-----------------|--------|
| Type                             | Shape and performance | Dielectric strength | Capacity                         | Allowable error | Others |
| CE : Aluminum foil electrolytic  | 0J : 6.3V             | F : ±1%             | HS : High stability type         |                 |        |
| CA : Aluminum solid electrolytic | 1A : 10V              | G : ±2%             | BP : Non-polar type              |                 |        |
| CS : Tantalum electrolytic       | 1C : 16V              | J : ±5%             | HR : Ripple-resistant type       |                 |        |
| CQ : Film                        | 1E : 25V              | K : ±10%            | DL : For change and discharge    |                 |        |
| CK : Ceramic                     | 1V : 35V              | M : ±20%            | HF : For assuring high frequency |                 |        |
| CC : Ceramic                     | 1H : 50V              | Z : +80%            | U : UL part                      |                 |        |
| CP : Oil                         | 2A : 100V             | -20%                | C : CSA part                     |                 |        |
| CM : Mica                        | 2B : 125V             | P : +100%           | W : UL-CSA type                  |                 |        |
| CF : Metallized                  | 2C : 160V             | -0%                 | F : Lead wire forming            |                 |        |
| CH : Metallized                  | 2D : 200V             | C : ±0.25pF         |                                  |                 |        |
|                                  | 2E : 250V             | D : ±0.5pF          |                                  |                 |        |
|                                  | 2H : 500V             | = : Others          |                                  |                 |        |
|                                  | 2J : 630V             |                     |                                  |                 |        |

### \* Capacity (electrolyte only)

2 2 2  $\Rightarrow$  2200 $\mu$ F  
 Indicates number of zeros after effective number.  
 2-digit effective number.  
 • Units:  $\mu$ F.

2 R 2  $\Rightarrow$  2.2 $\mu$ F  
 1-digit effective number.  
 2-digit effective number, decimal point indicated by R.  
 • Units:  $\mu$ F.

### \* Capacity (except electrolyte)

2 2 2  $\Rightarrow$  2200pF=0.0022 $\mu$ F  
 (More than 2) - Indicates number of zeros after effective number.  
 2-digit effective number.  
 • Units: pF.

2 2 1  $\Rightarrow$  220pF  
 (0 or 1) - Indicates number of zeros after effective number.  
 2-digit effective number.  
 • Units: pF.

• When the dielectric strength is indicated in AC, "AC" is included after the dielectric strength value.

## 部品表について

- 部品表に "nsp" と記載されている部品は供給できません。
- 部品を発注する際は特に数字の "1" と英字の "I"との区別をはっきり記入してください。
- 部品番号を表示していない部品は供給できません。
- △印の部品は安全上重要な部品です。交換するときは、安全および性能維持のため必ず指定の部品をご使用ください。
- ★印のついている部品は分解図中には記載していません。
- 汎用カーボン抵抗器は記載していません。定数は回路図を参照願います。
- 汎用カーボンチップ抵抗器は記載していません。定数は回路図を参照願います。
- 部品表の抵抗器、コンデンサの品名記号の読み方は表を参照してください。

## ● 抵抗器

| 例) | RN         | 14K       | 2E       | 182         | G   | FR  |
|----|------------|-----------|----------|-------------|-----|-----|
|    | 種類         | 形状特性      | 電力       | 抵抗値         | 許容差 | その他 |
|    | RD : カーボン  | 2B : 1/8W | F : ±1%  | P : 耐パルス形   |     |     |
|    | RC : 固定体   | 2E : 1/4W | G : ±2%  | NL : 低雑音形   |     |     |
|    | RS : 金属系皮膜 | 2H : 1/2W | J : ±5%  | NB : 不燃形    |     |     |
|    | RW : 卷線    | 3A : 1W   | K : ±10% | FR : ヒューズ抵抗 |     |     |
|    | RN : 金属皮膜  | 3D : 2W   | M : ±20% | F : リード線成形  |     |     |
|    | RK : 金属混合体 | 3F : 3W   |          |             |     |     |
|    |            | 3H : 5W   |          |             |     |     |

\* 抵抗値  
 18 2  $\Rightarrow$  1800Ω=1.8kΩ  
 有効数字につづく0の数を表す。  
 2桁の有効数字を表す。  
 1R 2  $\Rightarrow$  1.2Ω  
 1桁の有効数字を表す。  
 2桁の有効数字で小数点はRで表す。  
 : 単位はΩ

## ● コンデンサ

| 例) | CE            | 04W       | 1H          | 2R2          | M          | BP  |
|----|---------------|-----------|-------------|--------------|------------|-----|
|    | 種類            | 形状特性      | 耐圧          | 容量           | 許容差        | その他 |
|    | CE : アルミ箔電解   | 0J : 6.3V | F : ±1%     | HS : 高安定形    |            |     |
|    | CA : アルミニ固体電解 | 1A : 10V  | G : ±2%     | BP : 無極性形    |            |     |
|    | CS : タンタル電解   | 1C : 16V  | J : ±5%     | HR : 耐リップル形  |            |     |
|    | CQ : フィルム     | 1E : 25V  | K : ±10%    | DL : 充放電対策用  |            |     |
|    | CK : セラミック    | 1V : 35V  | M : ±20%    | HF : 高周波保護用  |            |     |
|    | CC : オイル      | 2A : 50V  | Z : +80%    | U : UL部品     |            |     |
|    | CP : マイカ      | 2B : 100V | -20%        | W : UL-CSA部品 |            |     |
|    | CM : メタライズド   | 2C : 125V | P : +100%   | C : CSA部品    |            |     |
|    | CF : メタライズド   | 2D : 200V | -0%         | 2B : 100V    | -20%       |     |
|    |               | 2E : 250V | C : ±0.25pF | 2C : 160V    | P : +100%  |     |
|    |               | 2H : 500V | D : ±0.5pF  | 2D : 200V    | -0%        |     |
|    |               | 2J : 630V | = : Others  | 2E : 250V    | C : ±0.5pF |     |
|    |               |           |             | 2H : 500V    | D : ±0.5pF |     |
|    |               |           |             | 2J : 630V    | = : その他    |     |

### \* 容量値

● 電解コンデンサの場合  
 2 2 2  $\Rightarrow$  2200 $\mu$ F  
 有効数字につづく0の数を表す。  
 2桁の有効数字を表す。  
 : 単位は $\mu$ F

2R 2  $\Rightarrow$  2.2 $\mu$ F  
 1桁の有効数字を表す。  
 2桁の有効数字で小数点はRで表す。  
 : 単位は $\mu$ F

### ● 電解コンデンサ以外の場合

22 2  $\Rightarrow$  2200pF=0.0022 $\mu$ F  
 有効数字につづく0の数を表す。  
 (0の数が2以上の場合)  
 2桁の有効数字を表す。  
 : 単位はpF

22 1  $\Rightarrow$  220pF  
 有効数字につづく0の数を表す。  
 (0の数が0または1の場合)  
 2桁の有効数字を表す。  
 : 単位はpF

● 耐圧を交流で表示する場合は、耐圧表示の次に「AC」を表示します。

# PARTS LIST OF P.W.B. UNIT

\* 本表に "nsp" と記載されている部品は供給できません。

\* Parts for which "nsp" is indicated on this table cannot be supplied.\

\* 本表に記載されている部品は、補修用部品のため製品に使用している部品とは一部、形状、寸法などが異なる場合があります。

\* The parts listed below are for maintenance only, might differ from the parts used in the unit in appearances or dimensions.

Note: The symbols in the column "Remarks" indicate the following destinations.

E3: U.S.A. & Canada model

E2: Europe model

## MAIN P.W.B. UNIT ASS'Y

|                             | Ref. No.  | Part No.      | Part Name                     | Remarks     |                | Q'ty | New |
|-----------------------------|-----------|---------------|-------------------------------|-------------|----------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b> |           |               |                               |             |                |      |     |
|                             | IC101     | 00D9630267007 | IC M24C64-WMN6TP              |             | J000240640010S |      |     |
|                             | IC102     | 00D9600266805 | IC 74LCX244MTCX               |             | J040742440180S |      |     |
|                             | IC103     | 8R2411000300D | MAIN CPU SUB ASSY             | M30626FJPFP | J020306200060S | *    |     |
|                             | IC104-110 | 00D2631162001 | IC KIA78R12PI                 |             | J126781200260S | *    |     |
|                             | IC111     | 00D9600266805 | IC 74LCX244MTCX               |             | J040742440180S |      |     |
|                             | Q101      | 00D9630121509 | TR KTC3875S                   |             | J522038750210S |      |     |
|                             | Q102      | 00D9600285006 | TR KRC104S (ND)               |             | J522104S00210S |      |     |
|                             | Q110      | 00D9630121402 | TR KRA104S                    |             | J520010400210S |      |     |
|                             | Q117      | 00D9630120801 | TR 2SC KRC102S (NB)           |             | J522010200210S |      |     |
|                             | Q120      | 00D9630121606 | TR KRC107S (NH)               |             | J522107S00210S |      |     |
|                             | Q121      | 00D9630120704 | TR KRA102S(PB)                |             | J520010200210S |      |     |
|                             | D103-106  | 00D9630355401 | D,SWITCHING KDS4148U          |             | K005041480030S |      |     |
|                             | ZD101     | 90M-HD302420R | D,ZENER MTZJ2.4B              |             | K06002R444520S |      |     |
|                             | ZD102     | 00D9630219903 | D,ZENER MTZJ16B               |             | K06016R044520S |      |     |
|                             | ZD104     | 00D9630219903 | D,ZENER MTZJ16B               |             | K06016R044520S |      |     |
|                             | ZD106     | 00D9630219903 | D,ZENER MTZJ16B               |             | K06016R044520S |      |     |
|                             | ZD108     | 00D9630219903 | D,ZENER MTZJ16B               |             | K06016R044520S |      |     |
|                             | ZD110     | 00D9630219903 | D,ZENER MTZJ16B               |             | K06016R044520S |      |     |
|                             | ZD112     | 00D9630219903 | D,ZENER MTZJ16B               |             | K06016R044520S |      |     |
|                             | ZD114     | 00D9630219903 | D,ZENER MTZJ16B               |             | K06016R044520S |      |     |
| <b>CAPACITORS GROUP</b>     |           |               |                               |             |                |      |     |
|                             | C101      | 00D9630311607 | C,ELECT 100UF-M/10V (Pb Free) |             | D040101082090S |      |     |
|                             | C102      | 00D9630332709 | C,CERAMIC 0.1UF-K/50V         |             | D011104577162S |      |     |
|                             | C103      | nsp           | C,CERAMIC 0.01UF-K/50V        |             | D011103777160S |      |     |
|                             | C104,105  | nsp           | C,CERAMIC 0.047UF-Z/50V       |             | D011473597160S |      |     |
|                             | C106      | 00D9639006557 | C,ELECT 220UF-M/6.3V          |             | D040221081060S |      |     |
|                             | C107      | nsp           | C,CERAMIC 0.01UF-K/50V        |             | D011103777160S |      |     |
|                             | C108      | 00D9630234205 | C,ELECT 10UF-M/50V            |             | D040100087070S |      |     |
|                             | C109-111  | nsp           | C,CERAMIC 0.01UF-K/50V        |             | D011103777160S |      |     |
|                             | C112,113  | 00D9609009869 | C,CERAMIC 470PF-K/50V         |             | D011471767160S |      |     |
|                             | C114      | 00D9630332709 | C,CERAMIC 0.1UF-K/50V         |             | D011104577162S |      |     |
|                             | C115      | 00D9630234506 | C,ELECT 47UF-M/50V (Pb Free)  |             | D040470087070S |      |     |
|                             | C116,117  | 00D9609009869 | C,CERAMIC 470PF-K/50V         |             | D011471767160S |      |     |
|                             | C118      | 00D9630332709 | C,CERAMIC 0.1UF-K/50V         |             | D011104577162S |      |     |
|                             | C119      | 00D9630234506 | C,ELECT 47UF-M/50V (Pb Free)  |             | D040470087070S |      |     |
|                             | C120,121  | 00D9609009869 | C,CERAMIC 470PF-K/50V         |             | D011471767160S |      |     |
|                             | C122      | 00D9630332709 | C,CERAMIC 0.1UF-K/50V         |             | D011104577162S |      |     |
|                             | C123      | 00D9630234506 | C,ELECT 47UF-M/50V (Pb Free)  |             | D040470087070S |      |     |
|                             | C124,125  | 00D9609009869 | C,CERAMIC 470PF-K/50V         |             | D011471767160S |      |     |
|                             | C126      | 00D9630332709 | C,CERAMIC 0.1UF-K/50V         |             | D011104577162S |      |     |
|                             | C127      | 00D9630234506 | C,ELECT 47UF-M/50V (Pb Free)  |             | D040470087070S |      |     |
|                             | C128,129  | 00D9609009869 | C,CERAMIC 470PF-K/50V         |             | D011471767160S |      |     |

|  | Ref. No. | Part No.      | Part Name                     | Remarks |                | Q'ty | New |
|--|----------|---------------|-------------------------------|---------|----------------|------|-----|
|  | C130     | 00D9630332709 | C,CERAMIC 0.1UF-K/50V         |         | D011104577162S |      |     |
|  | C131     | 00D9630234506 | C,ELECT 47UF-M/50V (Pb Free)  |         | D040470087070S |      |     |
|  | C132,133 | 00D9609009869 | C,CERAMIC 470PF-K/50V         |         | D011471767160S |      |     |
|  | C134     | 00D9630332709 | C,CERAMIC 0.1UF-K/50V         |         | D011104577162S |      |     |
|  | C135     | 00D9630234506 | C,ELECT 47UF-M/50V (Pb Free)  |         | D040470087070S |      |     |
|  | C136     | 00D9630332709 | C,CERAMIC 0.1UF-K/50V         |         | D011104577162S |      |     |
|  | C137     | 00D9630234506 | C,ELECT 47UF-M/50V (Pb Free)  |         | D040470087070S |      |     |
|  | C138-143 | 00D9630332709 | C,CERAMIC 0.1UF-K/50V         |         | D011104577162S |      |     |
|  | C144     | nsp           | C,CERAMIC 0.01UF-K/50V        |         | D011103777160S |      |     |
|  | C145     | 00D9630311607 | C,ELECT 100UF-M/10V (Pb Free) |         | D040101082090S |      |     |
|  | C146-175 | 00D9630332709 | C,CERAMIC 0.1UF-K/50V         |         | D011104577162S |      |     |
|  | C176     | nsp           | C,CERAMIC 220PF-J/50V         |         | D010221167160S |      |     |
|  | C177     | nsp           | C,CERAMIC 1000PF-K/50V        |         | D011102777160S |      |     |
|  | C178,179 | nsp           | C,CERAMIC 0.01UF-K/50V        |         | D011103777160S |      |     |

**OTHERS PARTS GROUP**

|  |              |               |                         |        |                |   |  |
|--|--------------|---------------|-------------------------|--------|----------------|---|--|
|  | CLAMP101,102 | nsp           | CLAMP WIRE(SOLDER)      |        | 4330000120000S |   |  |
|  | CN301        | nsp           | CN,WIRE 280MM/8P        |        | L000281080010S | * |  |
|  | CN302        | nsp           | CN,WIRE 120MM/5P        |        | L000121050100S | * |  |
|  | CN303        | nsp           | CN,WIRE 140MM/8P        | for E3 | L000141080030S |   |  |
|  | CP101        | nsp           | CN.WAFER 2.0MM 8P       |        | L101220080000S |   |  |
|  | CP102        | nsp           | CN.WAFER 2.0MM 8P       |        | L101100040810S |   |  |
|  | CP104        | nsp           | CN.WAFER 2.0MM 8P       |        | L101100040810S |   |  |
|  | CP105        | nsp           | CN.WAFER 2.0MM 15P      |        | L101100041510S |   |  |
|  | CP106        | nsp           | CN.WAFER 2.0MM 8P       |        | L101100040810S |   |  |
|  | CP107        | 00D9630161103 | CN.FPC 1.25MM 23P       |        | L131112300010S |   |  |
|  | CP108-110    | nsp           | CN.WAFER 2.0MM 8P       |        | L101100040810S |   |  |
|  | CP111-116    | nsp           | CN.WAFER 2.0MM 4P       |        | L101100040410S |   |  |
|  | CP118        | nsp           | CN.WAFER 2.5MM 15P      |        | L102526701510S |   |  |
|  | CP119        | nsp           | CN.WAFER 2.5MM 8P       |        | L102526700800S |   |  |
|  | CP121-126    | nsp           | CN.WAFER 2.0MM 11P      |        | L101100041110S |   |  |
|  | JACK101-107  | 00D9630325606 | JACK,D3.5 EARPHONE      |        | G40130802001YS |   |  |
|  | JACK108-113  | 90M-YT005150R | TER,RCA 2PIN            |        | G601206BFG10YS |   |  |
|  | XTAL101      | 00D9630217701 | RESONATOR ZTT12.00MT-TF |        | E830120000060S |   |  |

# FRONT P.W.B. UNIT ASS'Y

|                             | Ref. No.     | Part No.      | Part Name                     | Remarks |                | Q'ty | New |
|-----------------------------|--------------|---------------|-------------------------------|---------|----------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b> |              |               |                               |         |                |      |     |
|                             | IC1001       | 00D9600266902 | IC MM74HCT244                 |         | J040742440190S |      |     |
|                             | Q1001        | 00D9630121509 | TR KTC3875S                   |         | J522038750210S |      |     |
|                             | Q1002-1007   | 00D9630120801 | TR 2SC KRC102S (NB)           |         | J522010200210S |      |     |
|                             | Q1008        | 00D9630121606 | TR KRC107S (NH)               |         | J522107S00210S |      |     |
|                             | Q1009        | 00D9630120704 | TR KRA102S(PB)                |         | J520010200210S |      |     |
|                             | Q1010        | 00D9630121606 | TR KRC107S (NH)               |         | J522107S00210S |      |     |
|                             | Q1011        | 00D9630120704 | TR KRA102S(PB)                |         | J520010200210S |      |     |
|                             | Q1012        | 00D9630121402 | TR KRA104S                    |         | J520010400210S |      |     |
|                             | Q1013        | 00D9630102803 | TR 2SA933S                    |         | J5000933S0050S |      |     |
|                             | Q1014        | 00D9630121606 | TR KRC107S (NH)               |         | J522107S00210S |      |     |
|                             | D1001        | 00D2760401905 | D,SWITCHING 1SS133T           |         | K000013300520S |      |     |
|                             | D1002        | 00D9630355401 | D,SWITCHING KDS4148U          |         | K005041480030S |      |     |
|                             | D1003        | 00D2760401905 | D,SWITCHING 1SS133T           |         | K000013300520S |      |     |
|                             | D1004        | 00D9630355401 | D,SWITCHING KDS4148U          |         | K005041480030S |      |     |
|                             | D1005        | 00D2760401905 | D,SWITCHING 1SS133T           |         | K000013300520S |      |     |
|                             | D1006        | 00D9630355401 | D,SWITCHING KDS4148U          |         | K005041480030S |      |     |
|                             | ZD1001       | 00D9600095704 | D,ZENER MTZJ6.2B              |         | K06006R244520S |      |     |
|                             | LED1001-1006 | 963263000200S | LED,ROUND BL-BGE1V1J 3PI      |         | K500035000060S |      | *   |
| <b>CAPACITORS GROUP</b>     |              |               |                               |         |                |      |     |
|                             | C1001        | nsp           | C,CERAMIC 0.01UF-K/50V        |         | D011103777160S |      |     |
|                             | C1002-1004   | nsp           | C,CERAMIC 100PF-J/50V         |         | D010101167160S |      |     |
|                             | C1005        | 00D9630234205 | C,ELECT 10UF-M/50V            |         | D040100087070S |      |     |
|                             | C1006        | 00D9630332709 | C,CERAMIC 0.1UF-K/50V         |         | D011104577162S |      |     |
|                             | C1007        | 00D9630216401 | C,FILM 0.1UF-J/100V           |         | D02010406C060S |      |     |
|                             | C1008        | 00D9630332709 | C,CERAMIC 0.1UF-K/50V         |         | D011104577162S |      |     |
|                             | C1009,1010   | 00D9630293602 | C,ELECT 1UF-M/50V (Pb Free)   |         | D040010087150S |      |     |
|                             | C1011,1012   | 00D9630021900 | C,FILM 0.047UF-J/100V         |         | D02047306C060S |      |     |
|                             | C1013        | nsp           | C,CERAMIC 0.01UF-K/50V        |         | D011103777160S |      |     |
|                             | C1014-1016   | 00D9630311607 | C,ELECT 100UF-M/10V (Pb Free) |         | D040101082090S |      |     |
|                             | C1017        | 00D9609010641 | C,CERAMIC 0.047UF-K/16V       |         | D011473773160S |      |     |
|                             | C1018-1020   | nsp           | C,CERAMIC 0.01UF-K/50V        |         | D011103777160S |      |     |
| <b>OTHERS PARTS GROUP</b>   |              |               |                               |         |                |      |     |
|                             | BKT1101      | nsp           | HOLDER FLT                    |         | 4320210536000S |      |     |
|                             | CN1001       | nsp           | CN,WIRE 70MM/4P               |         | L000700040060S |      | *   |
|                             | CP1001       | nsp           | CN.WAFER 2.5MM 2P             |         | L102526800200S |      |     |
|                             | CP1002       | 00D9630161006 | CN.FPC 1.25MM 23P             |         | L131102300010S |      |     |
|                             | CP1003       | nsp           | CN.WAFER 2.5MM 3P             |         | L102526803010S |      |     |
|                             | L1001        | nsp           | COIL,INDUCTOR 100UH           |         | D330101001020S |      |     |
|                             | RMC1001      | 00D9630225405 | MODULE,REMOCON NJL33H380A     |         | E940333800010S |      |     |
|                             | SW1002-1010  | 00D9630095305 | SW,TACT SKHV10910D01          |         | G180040500010S |      |     |
|                             | SW1011-1018  | 00D9630045708 | SW,TACT SKHV10920A            |         | G180000270010S |      |     |

|  | <b>Ref. No.</b> | <b>Part No.</b> | <b>Part Name</b>         | <b>Remarks</b> |                | <b>Q'ty</b> | <b>New</b> |
|--|-----------------|-----------------|--------------------------|----------------|----------------|-------------|------------|
|  | SW1019          | 00D9630095305   | SW,TACT SKHV10910D01     |                | G180040500010S |             |            |
|  | SW1020,1021     | 00D9630045708   | SW,TACT SKHV10920A       |                | G180000270010S |             |            |
|  | SW1022,1023     | 00D9630095305   | SW,TACT SKHV10910D01     |                | G180040500010S |             |            |
|  | VEC101          | 00D9630300401   | SW,ENCODER EC11B20C2     |                | G121112020000S |             |            |
|  | FLT1001         | 00D9630300906   | DISPLAY,FLT 16-ST-87GINK |                | K530168700010S |             |            |
|  | LUG1001         | nsp             | RING,TER WIRE 70MM/1P    |                | 8410700010070S |             | *          |

# STANDBY P.W.B. UNIT ASS'Y

|                             | Ref. No. | Part No.      | Part Name                   | Remarks |                | Q'ty | New |
|-----------------------------|----------|---------------|-----------------------------|---------|----------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b> |          |               |                             |         |                |      |     |
|                             | IC452    | 00D2631242905 | IC NJM2831F33               |         | J126283133010S | *    |     |
|                             | IC453    | 90M-HC900200R | IC NJM2831F0                |         | J126283105010S | *    |     |
|                             | Q451     | 00D9630121509 | TR KTC3875S                 |         | J522038750210S |      |     |
|                             | Q452     | 00D9630121606 | TR KRC107S (NH)             |         | J522107S00210S |      |     |
|                             | Q453,454 | 00D9630121509 | TR KTC3875S                 |         | J522038750210S |      |     |
|                             | Q455     | 00D9630121606 | TR KRC107S (NH)             |         | J522107S00210S |      |     |
|                             | D455     | 00D9630355401 | D,SWITCHING KDS4148U        |         | K005041480030S |      |     |
|                             | D456-460 | 00D9630328409 | D,SWITCHING 1N4007          |         | K000400700010S |      |     |
|                             | D461-463 | 00D9630355401 | D,SWITCHING KDS4148U        |         | K005041480030S |      |     |
|                             | ZD451    | 00D9600211106 | D,ZENER MTZJ10B             |         | K06010R044520S |      |     |
|                             | ZD452    | 963203000400S | D,ZENER MTZJ3.0B            |         | K06003R044520S |      |     |
|                             | LED451   | 00D9630366108 | LED,ROUND BL-BJEGJ204-L 5PI |         | K500052004010S |      | *   |
| <b>RESISTORS GROUP</b>      |          |               |                             |         |                |      |     |
|                             | R452,453 | 00D9609005300 | R,METAL FILM 10-J,1W        |         | C060010065050S |      |     |
|                             | R467     | 00D9630048103 | R,METAL FILM 150-J,1W       |         | C060015165050S |      |     |
| <b>CAPACITORS GROUP</b>     |          |               |                             |         |                |      |     |
|                             | C460     | 00D9630323802 | C,CERAMIC 0.0047UF 250V     |         | D00847208H010S |      |     |
|                             | C461,462 | 00D9630266707 | C,CERAMIC 0.01UF-Z/500V     |         | D00410359D050S |      |     |
|                             | C463     | 00D9600133404 | C,ELECT SHL 10000UF 16V     |         | D040103083020S |      |     |
|                             | C464     | 00D9630234205 | C,ELECT 10UF-M/50V          |         | D040100087070S |      |     |
|                             | C465     | nsp           | C,CERAMIC 0.01UF-K/50V      |         | D011103777160S |      |     |
|                             | C466     | 00D9639005820 | C,ELECT 22UF-M/16V          |         | D040220083070S |      |     |
|                             | C467,468 | nsp           | C,CERAMIC 0.01UF-K/50V      |         | D011103777160S |      |     |
|                             | C469     | 00D9630323802 | C,CERAMIC 0.0047UF 250V     |         | D00847208H010S |      |     |
|                             | C470     | 00D9630266707 | C,CERAMIC 0.01UF-Z/500V     |         | D00410359D050S |      |     |
|                             | C471     | 00D9630332709 | C,CERAMIC 0.1UF-K/50V       |         | D011104577162S |      |     |
|                             | C472,473 | 00D9630266707 | C,CERAMIC 0.01UF-Z/500V     |         | D00410359D050S |      |     |
|                             | C474     | 00D9630332709 | C,CERAMIC 0.1UF-K/50V       |         | D011104577162S |      |     |
|                             | C475     | 00D9609006202 | C,CERAMIC 0.01UF-K/50V      |         | D004103277050S |      |     |
|                             | C477,478 | 00D9609010625 | C,ELECT 1UF-M/100V          |         | D040010086060S |      |     |
| <b>OTHERS PARTS GROUP</b>   |          |               |                             |         |                |      |     |
|                             | CP451    | nsp           | CN.WAFER 2.5MM 8P           |         | L102526808010S |      |     |
|                             | CP452    | nsp           | CN.WAFER 7.92MM             |         | L108353280290S |      |     |
|                             | CP453    | nsp           | CN.WAFER 7.92MM             |         | L108353280280S |      |     |
|                             | CP454    | nsp           | CN.WAFER 2.0MM 4P           |         | L101100030410S |      |     |
|                             | CP455    | nsp           | CN.WAFER 2.0MM 5P           |         | L101100040510S |      |     |
|                             | CP456    | nsp           | CN.WAFER 7.92MM             |         | L108353280260S |      |     |
|                             | CP457    | nsp           | CN.WAFER 2.0MM 4P           |         | L101100040410S |      |     |
|                             | CP458    | nsp           | CN.WAFER 2.0MM              |         | L101220040010S |      |     |
|                             | CP459    | nsp           | CN.WAFER 2.0MM 5P           |         | L101100030510S |      |     |
|                             | SW451    | 00D9630045708 | SW,TACT SKHV10920A          |         | G180000270010S |      |     |
| ⚠                           | FUSE451  | 00D9630337607 | FUSE GLASS TUBE T5A /250V   | for E3  | N751225001110S |      |     |

|   | Ref. No.      | Part No.      | Part Name                   | Remarks |                | Q'ty | New |
|---|---------------|---------------|-----------------------------|---------|----------------|------|-----|
| ⚠ | FUSE451       | 00D9630104704 | FUSE GLASS TUBE T2.5A /250V | for E2  | N751222501110S |      |     |
|   | PLATE451      | nsp           | BRACKET TUNER               |         | 4010212646000S |      |     |
|   | PLATE452      | nsp           | BRACKET SCREW               |         | 4010210196000S |      |     |
|   | RELAY451,452  | 90M-LY000390R | RELAY G5PA-1 6V 5A          |         | G680060502010S |      |     |
| ⚠ | T451          | 963101000270D | POWER TRANS 120V/60HZ       | for E3  | 8200280150490S | *    |     |
| ⚠ | T451          | 963101000240D | POWER TRANS 230V/50HZ       | for E2  | 8200280150500S | *    |     |
|   | FUSE4511,4512 | nsp           | HOLDER,FUSE CLIP            |         | G645000050010S |      |     |

# POWER P.W.B. UNIT ASS'Y

|                             | Ref. No.  | Part No.      | Part Name                       | Remarks |                | Q'ty | New |
|-----------------------------|-----------|---------------|---------------------------------|---------|----------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b> |           |               |                                 |         |                |      |     |
|                             | IC301     | 963231000440S | IC PQ20RX11                     | for E3  | J126201100020S |      |     |
|                             | IC303     | 963231000440S | IC PQ20RX11                     | for E3  | J126201100020S |      |     |
|                             | IC305     | 963231000440S | IC PQ20RX11                     | for E3  | J126201100020S |      |     |
|                             | IC306     | 00D2631100005 | IC KIA7805API                   |         | J126780500110S |      |     |
|                             | IC308     | 963231000440S | IC PQ20RX11                     | for E3  | J126201100020S |      |     |
|                             | IC312     | 00D9600239104 | IC KIA7806API                   | for E2  | J126780600130S |      |     |
|                             | IC312     | 00D9630313702 | IC BA033T                       | for E3  | J12603R300010S |      |     |
|                             | IC316,317 | 963231000440S | IC PQ20RX11                     |         | J126201100020S |      |     |
|                             | Q301      | 00D9630226705 | TR KTC1027Y                     |         | J5021027Y0020S |      |     |
|                             | Q302      | 00D9600262809 | TR KTA1049Y                     |         | J5011049Y0010S |      |     |
|                             | D301      | 00D9630328409 | D,SWITCHING 1N4007              | for E3  | K000400700010S |      |     |
|                             | D302      | 00D9600239201 | D,RECTIFIER KBPC1004-M 400V/10A |         | K047100400010S |      |     |
|                             | D303-305  | 00D9630328409 | D,SWITCHING 1N4007              | for E3  | K000400700010S |      |     |
|                             | D306      | 00D9630328409 | D,SWITCHING 1N4007              |         | K000400700010S |      |     |
|                             | D307-310  | 00D9630328409 | D,SWITCHING 1N4007              | for E3  | K000400700010S |      |     |
|                             | D311      | 00D9630328409 | D,SWITCHING 1N4007              |         | K000400700010S |      |     |
|                             | D312      | 00D9600197107 | D,RECTIFIER BRIDGE KBPC604 6A   |         | K047604000020S |      |     |
|                             | D313,314  |               | D,SCHOTTKY RB501V-40            |         | K120501000010S |      |     |
|                             | D315      | 00D9600239201 | D,RECTIFIER KBPC1004-M 400V/10A |         | K047100400010S | *    |     |
|                             | D316-319  | 00D9630328409 | D,SWITCHING 1N4007              |         | K000400700010S |      |     |
|                             | ZD301     | 00D9630046202 | D,ZENER MTZJ18B                 |         | K06018R044520S |      |     |
|                             | ZD302     | 00D9630058708 | D,ZENER MTZJ20B                 |         | K06020R044520S |      |     |
|                             | ZD303     | 00D9630047502 | D,ZENER MTZJ3.3B                |         | K06003R344520S |      |     |
| <b>RESISTORS GROUP</b>      |           |               |                                 |         |                |      |     |
|                             | R301      | 00D9630216003 | R,METAL FILM 0.22-J,1W          | for E3  | C060R22065050S |      |     |
|                             | R306      | 00D9630216003 | R,METAL FILM 0.22-J,1W          | for E3  | C060R22065050S |      |     |
|                             | R309      | 00D9630216003 | R,METAL FILM 0.22-J,1W          | for E3  | C060R22065050S |      |     |
|                             | R314      | 00D9630216003 | R,METAL FILM 0.22-J,1W          | for E3  | C060R22065050S |      |     |
|                             | R316      | 00D9630215907 | R,METAL FILM 4.7-J,1W           |         | C0604R7065050S |      |     |
|                             | R317      | 00D9630216003 | R,METAL FILM 0.22-J,1W          | for E3  | C060R22065050S |      |     |
|                             | R321      | 00D9630216003 | R,METAL FILM 0.22-J,1W          | for E3  | C060R22065050S |      |     |
|                             | R323      | 00D9630216003 | R,METAL FILM 0.22-J,1W          | for E3  | C060R22065050S |      |     |
|                             | R327      | 00D9630216003 | R,METAL FILM 0.22-J,1W          | for E3  | C060R22065050S |      |     |
|                             | R331,332  | 00D9630216003 | R,METAL FILM 0.22-J,1W          |         | C060R22065050S |      |     |
|                             | R333      | 00D9630128007 | R,METAL FILM 1K-J,1/4W          |         | C060010263050S |      |     |
|                             | R346      | 00D9609010405 | R,METAL FILM 27-J,1W            |         | C060027065050S |      |     |
| <b>CAPACITORS GROUP</b>     |           |               |                                 |         |                |      |     |
|                             | C301,302  | 00D9630266707 | C,CERAMIC 0.01UF-Z/500V         | for E3  | D00410359D050S |      |     |
|                             | C303      | 00D9630266707 | C,CERAMIC 0.01UF-Z/500V         |         | D00410359D050S |      |     |
|                             | C304      | 00D9630333203 | C,ELECT 100UF-M/16V             | for E3  | D040101083090S |      |     |
|                             | C305      | 963134000410S | C,ELECT 18000UF-M/16V           | for E3  | D040183083001S |      |     |
|                             | C306,307  | 00D9630332709 | C,CERAMIC 0.1UF-K/50V           | for E3  | D011104577162S |      |     |
|                             | C308      | 00D9630266707 | C,CERAMIC 0.01UF-Z/500V         |         | D00410359D050S |      |     |
|                             | C309      | 963134000420S | C,ELECT 6800UF 25V              |         | D049682084000S |      |     |
|                             | C310      | 00D9630333203 | C,ELECT 100UF-M/16V             |         | D040101083090S |      |     |
|                             | C311      | nsp           | C,CERAMIC 0.01UF-K/50V          |         | D011103777160S |      |     |
|                             | C312,313  | 00D9630266707 | C,CERAMIC 0.01UF-Z/500V         |         | D00410359D050S |      |     |

|  | Ref. No. | Part No.      | Part Name                   | Remarks |                | Q'ty | New |
|--|----------|---------------|-----------------------------|---------|----------------|------|-----|
|  | C314     | nsp           | C,CERAMIC 0.01UF-K/50V      |         | D011103777160S |      |     |
|  | C315     | 00D9630266707 | C,CERAMIC 0.01UF-Z/500V     | for E3  | D00410359D050S |      |     |
|  | C316     | 00D9630333203 | C,ELECT 100UF-M/16V         | for E3  | D040101083090S |      |     |
|  | C317     | 963134000410S | C,ELECT 18000UF-M/16V       | for E3  | D040183083001S |      |     |
|  | C318,319 | 00D9630332709 | C,CERAMIC 0.1UF-K/50V       | for E3  | D011104577162S |      |     |
|  | C320     | 00D9630293602 | C,ELECT 1UF-M/50V (Pb Free) |         | D040010087150S |      |     |
|  | C321     | 00D9630234205 | C,ELECT 10UF-M/50V          |         | D040100087070S |      |     |
|  | C322     | 963134000430S | C,ELECT 100UF-M/63V         |         | D040101088010S |      |     |
|  | C323     | 00D9630266707 | C,CERAMIC 0.01UF-Z/500V     | for E3  | D00410359D050S |      |     |
|  | C324     | 00D9630333203 | C,ELECT 100UF-M/16V         | for E3  | D040101083090S |      |     |
|  | C325     | 963134000410S | C,ELECT 18000UF-M/16V       | for E3  | D040183083001S |      |     |
|  | C326,327 | 00D9630332709 | C,CERAMIC 0.1UF-K/50V       | for E3  | D011104577162S |      |     |
|  | C328,329 | nsp           | C,CERAMIC 0.01UF-K/50V      |         | D011103777160S |      |     |
|  | C330     | 00D9630332709 | C,CERAMIC 0.1UF-K/50V       |         | D011104577162S |      |     |
|  | C332     | 00D9630333203 | C,ELECT 100UF-M/16V         |         | D040101083090S |      |     |
|  | C333     | 00D9630266707 | C,CERAMIC 0.01UF-Z/500V     | for E3  | D00410359D050S |      |     |
|  | C334     | 00D9630333203 | C,ELECT 100UF-M/16V         | for E3  | D040101083090S |      |     |
|  | C335     | 963134000410S | C,ELECT 18000UF-M/16V       | for E3  | D040183083001S |      |     |
|  | C336,337 | 00D9630332709 | C,CERAMIC 0.1UF-K/50V       | for E3  | D011104577162S |      |     |
|  | C338     | nsp           | C,CERAMIC 0.01UF-K/50V      |         | D011103777160S |      |     |
|  | C339     | 00D9630293709 | C,ELECT 100UF-M/10V         |         | D040101082070S |      |     |
|  | C340     | 00D9639005862 | C,ELECT 47UF-M/16V          |         | D040470083080S |      |     |
|  | C341     | nsp           | C,CERAMIC 0.01UF-K/50V      |         | D011103777160S |      |     |
|  | C342     | 00D9630293709 | C,ELECT 100UF-M/10V         |         | D040101082070S |      |     |
|  | C344     | nsp           | C,CERAMIC 0.01UF-K/50V      |         | D011103777160S |      |     |
|  | C345,346 | 00D9630332709 | C,CERAMIC 0.1UF-K/50V       |         | D011104577162S |      |     |
|  | C347,348 | 963134000410S | C,ELECT 18000UF-M/16V       |         | D040183083001S |      |     |
|  | C349-351 | 00D9630266707 | C,CERAMIC 0.01UF-Z/500V     |         | D00410359D050S |      |     |
|  | C352,353 | nsp           | C,CERAMIC 0.01UF-K/50V      |         | D011103777160S |      |     |
|  | C354     | 00D9630293709 | C,ELECT 100UF-M/10V         |         | D040101082070S |      |     |
|  | C355,356 | 00D9630266707 | C,CERAMIC 0.01UF-Z/500V     |         | D00410359D050S |      |     |
|  | C357,358 | nsp           | C,CERAMIC 0.01UF-K/50V      |         | D011103777160S |      |     |
|  | C359     | 963134000420S | C,ELECT 6800UF 25V          |         | D049682084000S |      |     |
|  | C360     | 00D9630333203 | C,ELECT 100UF-M/16V         |         | D040101083090S |      |     |
|  | C361-363 | 00D9630266707 | C,CERAMIC 0.01UF-Z/500V     |         | D00410359D050S |      |     |
|  | C364     | 00D9630276506 | C,ELECT 1000UF-M/25V        |         | D040102084000S |      |     |
|  | C365     | 00D9630333203 | C,ELECT 100UF-M/16V         |         | D040101083090S |      |     |
|  | C366,367 | nsp           | C,CERAMIC 0.01UF-K/50V      |         | D011103777160S |      |     |
|  | C368     | 00D9630234205 | C,ELECT 10UF-M/50V          |         | D040100087070S |      |     |
|  | C369     | 00D9630266707 | C,CERAMIC 0.01UF-Z/500V     |         | D00410359D050S |      |     |
|  | C370     | 00D9630333203 | C,ELECT 100UF-M/16V         |         | D040101083090S |      |     |
|  | C373     | 00D9630293709 | C,ELECT 100UF-M/10V         |         | D040101082070S |      |     |
|  | C376,377 | 00D9639005875 | C,ELECT 47UF-M/25V          |         | D040470084070S |      |     |
|  | C378     | 00D9639005820 | C,ELECT 22UF-M/16V          |         | D040220083070S |      |     |
|  | C379     | nsp           | C,CERAMIC 0.01UF-K/50V      |         | D011103777160S |      |     |
|  | C380,381 | 00D9630332709 | C,CERAMIC 0.1UF-K/50V       |         | D011104577162S |      |     |
|  | C382     | 00D9630333203 | C,ELECT 100UF-M/16V         |         | D040101083090S |      |     |
|  | C383-386 | 00D9630266707 | C,CERAMIC 0.01UF-Z/500V     |         | D00410359D050S |      |     |
|  | C387     | 00D9600133404 | C,ELECT SHL 10000UF 16V     |         | D040103083020S |      |     |
|  | C388     | nsp           | C,CERAMIC 0.01UF-K/50V      |         | D011103777160S |      |     |
|  | C389,390 | 00D9630332709 | C,CERAMIC 0.1UF-K/50V       |         | D011104577162S |      |     |

|                           | Ref. No.  | Part No.                        | Part Name   | Remarks          |  | Q'ty | New |
|---------------------------|---|---------------------------------|---|------------------|--|------|-----|
| <b>OTHERS PARTS GROUP</b> |   |                                 |   |                  |  |      |     |
|                           | CLAMP301<br>CLAMP303                            | nsp<br>nsp                      | CLAMP WIRE(SOLDER)<br>CLAMP WIRE(SOLDER)  | for E2<br>for E3 | 4330000120000S<br>4330000120000S   |      |     |
|                           | CN301<br>CN302<br>CN304<br>CN305<br>CN306       | nsp<br>nsp<br>nsp<br>nsp<br>nsp | CN,WIRE 450MM/4P<br>CN,WIRE 200MM/3P<br>CN,WIRE 140MM/3P<br>CN,WIRE 180MM/3P<br>CN,WIRE 100MM/8P      |                  | L000451040020S<br>L000201030100S<br>L000141030110S<br>L000181030060S<br>L000101080100S | *    | *   |
|                           | CN307<br>CN308<br>CN309<br>CN310<br>CN311       | nsp<br>nsp<br>nsp<br>nsp<br>nsp | CN,WIRE 240MM/3P<br>CN,WIRE 300MM/3P<br>CN,WIRE 140MM/15P<br>CN,WIRE 160MM/4P<br>CN,WIRE 120MM/2P     |                  | L000241030010S<br>L000301030060S<br>L000141150050S<br>L000161040110S<br>L000121020020S | *    | *   |
|                           | CP301<br>CP302<br>CP303<br>CP304                | nsp<br>nsp<br>nsp<br>nsp        | CN.WAFER 2.5MM 4P<br>CN.WAFER 2.5MM 2P<br>CN.WAFER 3.96MM<br>CN.WAFER 7.92MM                          | for E3           | L102526700400S<br>L102526700200S<br>L104353130300S<br>L108353280280S                   |      |     |
|                           | CP305<br>CP306<br>CP307<br>CP308<br>CP309       | nsp<br>nsp<br>nsp<br>nsp<br>nsp | CN.WAFER 2.5MM 3P<br>CN.WAFER 2.5MM 2P<br>CN.WAFER 2.5MM 4P<br>CN.WAFER 2.5MM 5P<br>CN.WAFER 2.5MM 8P | for E3           | L102526700300S<br>L102526700200S<br>L102526700400S<br>L102526700500S<br>L102526700800S |      |     |
| ⚠<br>⚠                    | FUSE301,302<br>FUSE303,304                      | 00D9630104704<br>00D9630104908  | FUSE GLASS TUBE T2.5A /250V<br>FUSE GLASS TUBE T6.3A/250V   |                  | N751222501110S<br>N751226301110S   |      |     |
|                           | FUSE3011,3012                                   | nsp                             | HOLDER,FUSE CLIP  |                  | G645000050010S   |      |     |
|                           | FUSE3021,3022<br>FUSE3031,3032<br>FUSE3041,3042 | nsp<br>nsp<br>nsp               | HOLDER,FUSE CLIP<br>HOLDER,FUSE CLIP<br>HOLDER,FUSE CLIP  |                  | G645000050010S<br>G645000050010S<br>G645000050010S                                     |      |     |

**IO TUNER1 P.W.B. UNIT ASS'Y  
IO TUNER2 P.W.B. UNIT ASS'Y**

|                             | Ref. No. | Part No.      | Part Name               | Remarks |                | Q'ty | New |
|-----------------------------|----------|---------------|-------------------------|---------|----------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b> |          |               |                         |         |                |      |     |
|                             | IC401    | 00D9630024004 | IC NJM2068M             |         | J121206800020S |      |     |
|                             | Q401     | 00D9630120704 | TR KRA102S(PB)          |         | J520010200210S |      |     |
|                             | Q402-405 | 00D9630044301 | TR KTC2875B(MB)         |         | J5222875B0010S |      |     |
|                             | D402,403 | 00D9630355401 | D,SWITCHING KDS4148U    |         | K005041480030S |      |     |
| <b>RESISTORS GROUP</b>      |          |               |                         |         |                |      |     |
|                             | R420,421 | 00D9609003807 | R,METAL FILM 100-J,1/4W |         | C060010163050S |      |     |
| <b>CAPACITORS GROUP</b>     |          |               |                         |         |                |      |     |
|                             | C401     | 00D9630130503 | C,ELECT 0.1UF-M/50V     |         | D040R10087060S |      |     |
|                             | C402     | 00D9630234205 | C,ELECT 10UF-M/50V      |         | D040100087060S |      |     |
|                             | C403     | nsp           | C,CERAMIC 0.01UF-K/50V  |         | D011103777160S |      |     |
|                             | C404,405 | 00D9630234205 | C,ELECT 10UF-M/50V      |         | D040100087060S |      |     |
|                             | C406     | 00D9630332709 | C,CERAMIC 0.1UF-K/50V   |         | D011104577162S |      |     |
|                             | C408-410 | 00D9630234205 | C,ELECT 10UF-M/50V      |         | D040100087060S |      |     |
|                             | C411     | nsp           | C,CERAMIC 0.01UF-K/50V  |         | D011103777160S |      |     |
| <b>OTHERS PARTS GROUP</b>   |          |               |                         |         |                |      |     |
|                             | CN401    | nsp           | CN,WIRE 120MM/12P       |         | L000121120020S |      | *   |
|                             | CN402    | nsp           | CN,WIRE 120MM/4P        |         | L000121040150S |      | *   |
|                             | CP404    | nsp           | CN.WAFER 2.0MM 11P      |         | L101100031110S |      |     |
|                             | CP405    | nsp           | CN.WAFER 2.0MM 8P       |         | L101100030810S |      |     |
|                             | CP407    | nsp           | CN.WAFER 2.0MM 4P       |         | L101100030410S |      |     |
|                             | PLATE401 | nsp           | BRACKET TUNER           |         | 4010212646000S |      |     |

**IO TUNER3 P.W.B. UNIT ASS'Y  
IO TUNER4 P.W.B. UNIT ASS'Y  
IO TUNER5 P.W.B. UNIT ASS'Y  
IO TUNER6 P.W.B. UNIT ASS'Y**

|                             | Ref. No. | Part No.      | Part Name               | Remarks |                | Q'ty | New |
|-----------------------------|----------|---------------|-------------------------|---------|----------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b> |          |               |                         |         |                |      |     |
|                             | IC401    | 00D9630024004 | IC NJM2068M             |         | J121206800020S |      |     |
|                             | Q401     | 00D9630120704 | TR KRA102S(PB)          |         | J520010200210S |      |     |
|                             | Q402-405 | 00D9630044301 | TR KTC2875B(MB)         |         | J5222875B0010S |      |     |
|                             | Q406     | 00D9630121606 | TR KRC107S (NH)         |         | J522107S00210S |      |     |
|                             | D401-403 | 00D9630355401 | D,SWITCHING KDS4148U    |         | K005041480030S |      |     |
| <b>RESISTORS GROUP</b>      |          |               |                         |         |                |      |     |
|                             | R404     | 00D9630144405 | R,METAL FILM 2.2-J,1/4W |         | C0602R2063050S |      |     |
|                             | R420,421 | 00D9609003807 | R,METAL FILM 100-J,1/4W |         | C060010163050S |      |     |
| <b>CAPACITORS GROUP</b>     |          |               |                         |         |                |      |     |
|                             | C401     | 00D9630130503 | C,ELECT 0.1UF-M/50V     |         | D040R10087060S |      |     |
|                             | C402     | 00D9630234205 | C,ELECT 10UF-M/50V      |         | D040100087060S |      |     |
|                             | C403     | nsp           | C,CERAMIC 0.01UF-K/50V  |         | D011103777160S |      |     |
|                             | C404,405 | 00D9630234205 | C,ELECT 10UF-M/50V      |         | D040100087060S |      |     |
|                             | C406     | 00D9630332709 | C,CERAMIC 0.1UF-K/50V   |         | D011104577162S |      |     |
|                             | C408-410 | 00D9630234205 | C,ELECT 10UF-M/50V      |         | D040100087060S |      |     |
|                             | C411     | nsp           | C,CERAMIC 0.01UF-K/50V  |         | D011103777160S |      |     |
| <b>OTHERS PARTS GROUP</b>   |          |               |                         |         |                |      |     |
|                             | CN401    | nsp           | CN,WIRE 120MM/12P       |         | L000121120010S |      |     |
|                             | CN402    | nsp           | CN,WIRE 120MM/4P        |         | L000121040160S |      |     |
|                             | CP401    | nsp           | CN.WAFER 2.0MM          |         | L101220120010S |      |     |
|                             | CP402    | nsp           | CN.WAFER 2.0MM 16P      |         | L101201601010S |      |     |
|                             | CP403    | nsp           | CN.WAFER 2.0MM          |         | L101220040010S |      |     |
|                             | CP404    | nsp           | CN.WAFER 2.0MM 11P      |         | L101100031110S |      |     |
|                             | CP405    | nsp           | CN.WAFER 2.0MM 8P       |         | L101100030810S |      |     |
|                             | CP406    | nsp           | CN.WAFER 2.0MM          |         | L101220030010S |      |     |
|                             | CP407    | nsp           | CN.WAFER 2.0MM 4P       |         | L101100030410S |      |     |
|                             | PLATE401 | nsp           | BRACKET TUNER           |         | 4010212646000S |      |     |
|                             | RELAY401 | 00D9630083100 | RELAY RSB12 12V 2A      |         | G680120202020S |      |     |

**AMFME2 BUILT-IN P.W.B. UNIT ASS'Y  
AMFME3 BUILT-IN P.W.B. UNIT ASS'Y**

|                             | Ref. No. | Part No.      | Part Name               | Remarks     |                | Q'ty | New |
|-----------------------------|----------|---------------|-------------------------|-------------|----------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b> |          |               |                         |             |                |      |     |
|                             | IC600    | 00D9630024004 | IC NJM2068M             |             | J121206800020S |      | *   |
|                             | IC601    | 963235000480S | IC SN74AHCT08-EL2       |             | J040740800240S |      | *   |
|                             | IC602    | 963235000490S | IC SN74LVO8APW-EL2      |             | J040740800230S |      | *   |
|                             | IC603    | 00D9630111603 | IC SE1117-33-PF         |             | J126111733020S |      |     |
|                             | IC604    | 00D9630326906 | IC LC72722PM-TLM-E      |             | J124727220010S |      |     |
|                             | IC605    | 963235000480S | IC SN74AHCT08-EL2       |             | J040740800240S |      | *   |
|                             | IC606    | 8R2411000400D | AMFM CPU SUB ASSY       | M30621FCPGP | J020306210010S |      |     |
|                             | IC607    | 00D9630267007 | IC M24C64-WMN6TP        |             | J000240640010S |      |     |
|                             | Q600-603 | 00D9630044301 | TR KTC2875B(MB)         |             | J5222875B0010S |      |     |
|                             | Q604     | 00D9630120704 | TR KRA102S(PB)          |             | J520010200210S |      |     |
|                             | Q605     | 00D9630226909 | TR KRC114S (NH)         |             | J522011400210S |      |     |
|                             | D600     | 00D2760773905 | D,SCHOTTKY RB501V-40    |             | K120501000010S |      |     |
| <b>RESISTORS GROUP</b>      |          |               |                         |             |                |      |     |
|                             | R604     | 00D9630215907 | R,METAL FILM 4.7-J,1W   |             | C0604R7065050S |      |     |
| <b>CAPACITORS GROUP</b>     |          |               |                         |             |                |      |     |
|                             | C600     | nsp           | C,CERAMIC 33PF-J/50V    |             | D010330167160S |      |     |
|                             | C601     | 00D9630338606 | C,ELECT 10UF-MVG/16V    |             | D050100083470S |      |     |
|                             | C602     | nsp           | C,CERAMIC 100PF-J/50V   |             | D010101167160S |      |     |
|                             | C603     | 00D9609009801 | C,CERAMIC 10PF-D/50V    |             | D010100117160S |      |     |
|                             | C604,605 | 00D9630338606 | C,ELECT 10UF-MVG/16V    |             | D050100083470S |      |     |
|                             | C606,607 | nsp           | C,CERAMIC 100PF-J/50V   |             | D010101167160S |      |     |
|                             | C608     | 00D9630324801 | C,ELECT 10UF-MVG/25V    |             | D050100084200S |      |     |
|                             | C609     | nsp           | C,CERAMIC 100PF-J/50V   |             | D010101167160S |      |     |
|                             | C610     | 00D9630332709 | C,CERAMIC 0.1UF-K/50V   |             | D011104577162S |      |     |
|                             | C611     | 963134000450S | C,ELECT 100UF-MVG/16V   |             | D050101083660S |      |     |
|                             | C612     | 00D9630332709 | C,CERAMIC 0.1UF-K/50V   |             | D011104577162S |      |     |
|                             | C613     | 00D9630324801 | C,ELECT 10UF-MVG/25V    |             | D050100084200S |      |     |
|                             | C614,615 | 00D9630332709 | C,CERAMIC 0.1UF-K/50V   |             | D011104577162S |      |     |
|                             | C616     | 00D9630338606 | C,ELECT 10UF-MVG/16V    |             | D050100083470S |      |     |
|                             | C617     | 00D9609009801 | C,CERAMIC 10PF-D/50V    |             | D010100117160S |      |     |
|                             | C618,619 | 00D9630338606 | C,ELECT 10UF-MVG/16V    |             | D050100083470S |      |     |
|                             | C620     | nsp           | C,CERAMIC 33PF-J/50V    |             | D010330167160S |      |     |
|                             | C621     | 00D9630325509 | C,ELECT 0.1UF-MVG/50V   |             | D050R10080010S |      |     |
|                             | C622     | 963134000450S | C,ELECT 100UF-MVG/16V   |             | D050101083660S |      |     |
|                             | C623,624 | 00D9630332709 | C,CERAMIC 0.1UF-K/50V   |             | D011104577162S |      |     |
|                             | C625,626 | 00D9639004614 | C,CERAMIC 27PF-J/50V    |             | D010270167160S |      |     |
|                             | C627,628 | 00D9630338606 | C,ELECT 10UF-MVG/16V    |             | D050100083470S |      |     |
|                             | C629     | nsp           | C,CERAMIC 560PF-K/50V   |             | D011561777180S |      |     |
|                             | C630     | 00D9609009814 | C,CERAMIC 330PF-J/50V   |             | D010331167160S |      |     |
|                             | C631     | nsp           | C,CERAMIC 0.01UF-K/50V  |             | D011103777160S |      |     |
|                             | C633,634 | 00D9630332709 | C,CERAMIC 0.1UF-K/50V   |             | D011104577162S |      |     |
|                             | C635,636 | nsp           | C,CERAMIC 100PF-J/50V   |             | D010101167160S |      |     |
|                             | C637     | 00D9630325402 | C,ELECT 470UF-MVG/6.3V  |             | D050471081200S |      |     |
|                             | C638,639 | 00D9630332709 | C,CERAMIC 0.1UF-K/50V   |             | D011104577162S |      |     |
|                             | C640     | nsp           | C,CERAMIC 0.022UF-K/25V |             | D011223777160S |      |     |
|                             | C641     | 00D9630332709 | C,CERAMIC 0.1UF-K/50V   |             | D011104577162S |      |     |
|                             | C642     | 963134000450S | C,ELECT 100UF-MVG/16V   |             | D050101083660S |      |     |

|  | <b>Ref. No.</b> | <b>Part No.</b> | <b>Part Name</b>       | <b>Remarks</b> |                | <b>Q'ty</b> | <b>New</b> |
|--|-----------------|-----------------|------------------------|----------------|----------------|-------------|------------|
|  | C643            | nsp             | C,CERAMIC 220PF-J/50V  |                | D010221167160S |             |            |
|  | C644            | 00D9630338606   | C,ELECT 10UF-MVG/16V   |                | D050100083470S |             |            |
|  | C645            | nsp             | C,CERAMIC 0.01UF-K/50V |                | D011103777160S |             |            |
|  | C646            | 963134000460S   | C,ELECT 220UF-M/16V    |                | D050221083200S |             |            |

**OTHERS PARTS GROUP**

|  |                                  |   |  |                      |  |  |   |
|--|----------------------------------|---|--|----------------------|--|--|---|
|  | CP600<br>CP601<br>CP603<br>CP604 | nsp<br>nsp<br>nsp<br>00D9630149303        | CN.WAFER 2.0MM<br>CN.WAFER 2.0MM 8P<br>CN.WAFER 2.0MM<br>CN.FPC 1.25MM 15P |                      | L101220120010S<br>L101220080010S<br>L101220040010S<br>L131111500010S |  |   |
|  | L600-602                         | 00D9630126504                             | BEAD,COIL 3550R2F  |                      | 7610035500030S   |  |   |
|  | XTAL600<br>XTAL601               | 00D9630217604<br>00D9630217701            | CRYSTAL 4.332MHZ<br>RESONATOR ZTT12.00MT-TF                                |                      | E800433200100S<br>E830120000060S                                     |  |   |
|  | TUN600                           | 00D9630145705<br><br>963183000220S<br>nsp | TUNER,FM/AM KST-MB014MA<br><br>TUNER,FM/AM KST-MB014MA0<br>BRACKET TUNER   | for E2<br><br>for E3 | E903014100030S<br><br>E903014000070S<br>4010213346000S               |  | * |
|  |                                  | 963606000470S<br>nsp                      | CABLE,FLAT CARD 1.25MM<br>TAPE ACETATE CLOTH                               |                      | N712151033110S<br>1220210059050S                                     |  | * |

# ETHERNET P.W.B. UNIT ASS'Y

**(This P.W.B. UNIT ASSY is replaced by Assy level.)**

|                             | Ref. No.    | Part No. | Part Name                     | Remarks |                | Q'ty | New |
|-----------------------------|-------------|----------|-------------------------------|---------|----------------|------|-----|
| <b>SEMICONDUCTORS GROUP</b> |             |          |                               |         |                |      |     |
|                             | IC1101      | nsp      | IC TC74VHC14FT                |         | J040741400220S |      | *   |
|                             | IC1104      | nsp      | IC S29GL064A-90TFIR4          |         | J005290640010S |      | *   |
|                             | IC1105      | nsp      | IC W9812G6GH-6                |         | J001981260010S |      | *   |
|                             | IC1106      | nsp      | IC PQ070XZ01ZPH               |         | J126070010010S |      |     |
|                             | IC1107      | nsp      | IC HIN202EIBN                 |         | J040202000020S |      |     |
|                             | IC1109      | nsp      | IC BCOIC-DM850E-CQL           |         | J080850000010S |      |     |
|                             | IC1110      | nsp      | IC RTL8201CP-LF               |         | J040820100020S |      | *   |
|                             | IC1111      | nsp      | IC CXA1511M-T4                |         | J030151100010S |      |     |
|                             | Q1101       | nsp      | SEMI KTA1504S                 |         | J520015040150S |      |     |
|                             | Q1102       | nsp      | TR KRC102S (NH)               |         | J522010200210S |      |     |
|                             | Q1104       | nsp      | TR KRA102S(PB)                |         | J520010200210S |      |     |
|                             | Q1105       | nsp      | TR KRC104S (ND)               |         | J522104S00210S |      |     |
|                             | Q1107,1108  | nsp      | TR 2SC KRC102S (NB)           |         | J522010200210S |      |     |
|                             | D1101       | nsp      | D,SCHOTTKY RB521S-30          |         | K125521300010S |      |     |
|                             | ZD1101      | nsp      | D,ZENER MTZJ6.2B              |         | K06006R244520S |      |     |
|                             | ZD1102,1103 | nsp      | D,ESD NSAD500F-T1B-A          |         | K067500000010S |      |     |
| <b>CAPACITORS GROUP</b>     |             |          |                               |         |                |      |     |
|                             | C1101       | nsp      | C,CERAMIC 1000PF-K/50V        |         | D011102777160S |      |     |
|                             | C1103       | nsp      | C,CERAMIC 10PF-D/50V          |         | D010100117160S |      |     |
|                             | C1105       | nsp      | C,CERAMIC 0.1UF-K/50V         |         | D011104577162S |      |     |
|                             | C1106       | nsp      | C,CERAMIC 4.7UF-K/10V         |         | D011475772200S |      |     |
|                             | C1111-1114  | nsp      | C,CERAMIC 0.1UF-K/50V         |         | D011104577162S |      |     |
|                             | C1115,1116  | nsp      | C,CERAMIC 1000PF-K/50V        |         | D011102777160S |      |     |
|                             | C1117       | nsp      | C,CERAMIC 10PF-D/50V          |         | D010100117160S |      |     |
|                             | C1118       | nsp      | C,CERAMIC 0.1UF-K/50V         |         | D011104577162S |      |     |
|                             | C1119       | nsp      | C,ELECT 100UF-M/10V           |         | D040101082050S |      |     |
|                             | C1120,1121  | nsp      | C,CERAMIC 1000PF-K/50V        |         | D011102777160S |      |     |
|                             | C1122       | nsp      | C,ELECT 100UF-M/10V           |         | D040101082050S |      |     |
|                             | C1123-1125  | nsp      | C,CERAMIC 100PF-J/50V         |         | D010101167160S |      |     |
|                             | C1126       | nsp      | C,ELECT 100UF-M/10V           |         | D040101082050S |      |     |
|                             | C1127       | nsp      | C,ELECT 0.1UF-M/50V (Pb Free) |         | D040R10087080S |      |     |
|                             | C1128,1129  | nsp      | C,CERAMIC 0.1UF-K/50V         |         | D011104577162S |      |     |
|                             | C1130-1132  | nsp      | C,ELECT 0.1UF-M/50V (Pb Free) |         | D040R10087080S |      |     |
|                             | C1133       | nsp      | C,ELECT 1UF-M/50V (Pb Free)   |         | D040010087150S |      |     |
|                             | C1134       | nsp      | C,CERAMIC 0.01UF-K/50V        |         | D011103777160S |      |     |
|                             | C1135       | nsp      | C,ELECT 47UF-M/16V            |         | D040470083080S |      |     |
|                             | C1136       | nsp      | C,CERAMIC 100PF-J/50V         |         | D010101167160S |      |     |
|                             | C1137,1138  | nsp      | C,FILM 0.012UF-J/100V         |         | D02012306C060S |      |     |
|                             | C1139       | nsp      | C,ELECT 0.1UF-M/50V (Pb Free) |         | D040R10087080S |      |     |
|                             | C1140       | nsp      | C,ELECT 100UF-M/10V           |         | D040101082050S |      |     |
|                             | C1141,1142  | nsp      | C,CERAMIC 15PF-J/50V          |         | D010150167160S |      |     |
|                             | C1143       | nsp      | C,CERAMIC 1000PF-K/50V        |         | D011102777160S |      |     |
|                             | C1144       | nsp      | C,CERAMIC 100PF-J/50V         |         | D010101167160S |      |     |
|                             | C1145       | nsp      | C,ELECT 100UF-M/10V           |         | D040101082050S |      |     |
|                             | C1146       | nsp      | C,CERAMIC 4.7UF-K/10V         |         | D011475772200S |      |     |
|                             | C1147-1149  | nsp      | C,CERAMIC 0.1UF-K/50V         |         | D011104577162S |      |     |
|                             | C1150,1151  | nsp      | C,CERAMIC 1000PF-K/50V        |         | D011102777160S |      |     |
|                             | C1152       | nsp      | C,CERAMIC 0.01UF-K/50V        |         | D011103777160S |      |     |

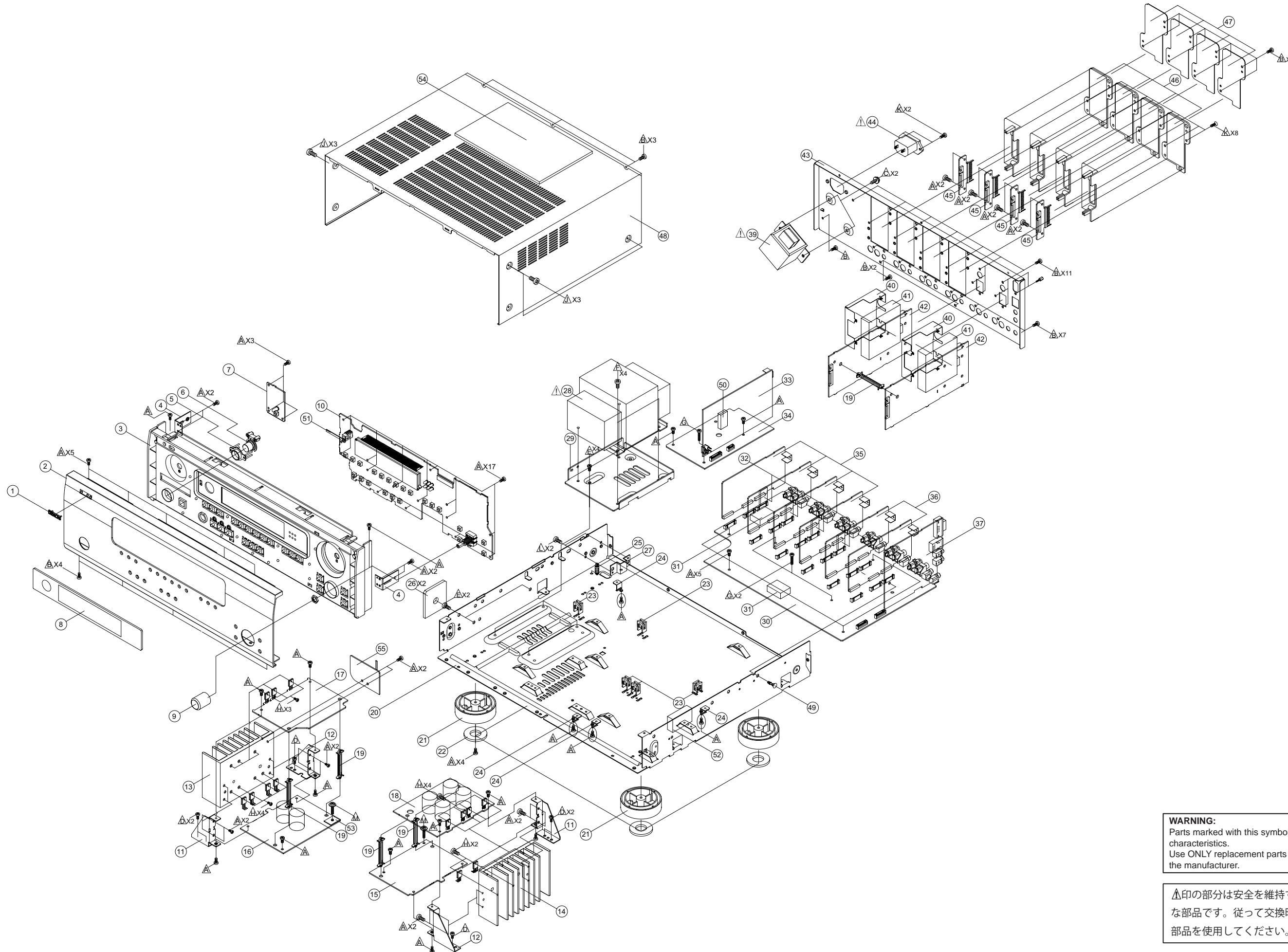
|  | <b>Ref. No.</b> | <b>Part No.</b> | <b>Part Name</b>       | <b>Remarks</b> |                | <b>Q'ty</b> | <b>New</b> |
|--|-----------------|-----------------|------------------------|----------------|----------------|-------------|------------|
|  | C1153           | nsp             | C,CERAMIC 0.1UF-K/50V  |                | D011104577162S |             |            |
|  | C1154,1155      | nsp             | C,CERAMIC 1000PF-K/50V |                | D011102777160S |             |            |
|  | C1156           | nsp             | C,CERAMIC 0.01UF-K/50V |                | D011103777160S |             |            |
|  | C1157           | nsp             | C,CERAMIC 4.7UF-K/10V  |                | D011475772200S |             |            |
|  | C1158-1163      | nsp             | C,CERAMIC 0.1UF-K/50V  |                | D011104577162S |             |            |
|  | C1164,1165      | nsp             | C,CERAMIC 1000PF-K/50V |                | D011102777160S |             |            |
|  | C1166           | nsp             | C,ELECT 100UF-M/10V    |                | D040101082050S |             |            |
|  | C1167           | nsp             | C,CERAMIC 0.1UF-K/50V  |                | D011104577162S |             |            |
|  | C1168           | nsp             | C,CERAMIC 1000PF-K/50V |                | D011102777160S |             |            |
|  | C1169           | nsp             | C,CERAMIC 0.1UF-K/50V  |                | D011104577162S |             |            |
|  | C1171           | nsp             | C,CERAMIC 0.1UF-K/50V  |                | D011104577162S |             |            |
|  | C1172           | nsp             | C,CERAMIC 1000PF-K/50V |                | D011102777160S |             |            |
|  | C1173           | nsp             | C,CERAMIC 0.1UF-K/50V  |                | D011104577162S |             |            |
|  | C1174           | nsp             | C,CERAMIC 1000PF-K/50V |                | D011102777160S |             |            |
|  | C1175           | nsp             | C,CERAMIC 4.7UF-K/10V  |                | D011475772200S |             |            |
|  | C1176           | nsp             | C,ELECT 100UF-M/10V    |                | D040101082050S |             |            |
|  | C1177           | nsp             | C,CERAMIC 4.7UF-K/10V  |                | D011475772200S |             |            |
|  | C1178,1179      | nsp             | C,CERAMIC 0.1UF-K/50V  |                | D011104577162S |             |            |
|  | C1180           | nsp             | C,CERAMIC 1000PF-K/50V |                | D011102777160S |             |            |
|  | C1181-1184      | nsp             | C,CERAMIC 0.1UF-K/50V  |                | D011104577162S |             |            |
|  | C1185-1188      | nsp             | C,CERAMIC 1000PF-K/50V |                | D011102777160S |             |            |
|  | C1189-1198      | nsp             | C,CERAMIC 10PF-D/50V   |                | D010100117160S |             |            |
|  | C1199-1203      | nsp             | C,CERAMIC 0.1UF-K/50V  |                | D011104577162S |             |            |

#### OTHERS PARTS GROUP

|  |               |     |                           |  |                |  |   |
|--|---------------|-----|---------------------------|--|----------------|--|---|
|  | CP1101        | nsp | CN.WAFER 2.0MM 15P        |  | L101100031510S |  |   |
|  | CP1102        | nsp | CN.WAFER 2.0MM            |  | L101220040010S |  |   |
|  | CP1103        | nsp | CN.WAFER 2.0MM            |  | L101220060000S |  |   |
|  | CP1104        | nsp | CN.WAFER 2.0MM            |  | L101220040000S |  |   |
|  | JACK1101      | nsp | JACK,MODULAR RDA-1D5B8K1A |  | G4060RJ450040S |  | * |
|  | JACK1102,1103 | nsp | JACK,D3.5 EARPHONE        |  | G40130802000YS |  |   |
|  | JACK1104      | nsp | CN.WAFER 9P               |  | L103090090030S |  |   |
|  | L1101-1104    | nsp | BEAD,COIL SMD1608         |  | D340160800060S |  |   |
|  | L1105         | nsp | BEAD,COIL HH-1M2012-221JT |  | D340201200050S |  |   |
|  | L1106         | nsp | BEAD,COIL 3550R2F         |  | 7610035500030S |  |   |
|  | L1111,1112    | nsp | BEAD,COIL HH-1M2012-221JT |  | D340201200050S |  |   |
|  | X1101         | nsp | CRYSTAL 24.5760MHz        |  | E80524R576010S |  |   |
|  | FB1101        | nsp | R,CHIP THICK 0-J,1/10W    |  | C200000060200S |  |   |
|  | FB1102-1105   | nsp | BEAD,COIL HH-1M2012-221JT |  | D340201200050S |  |   |
|  | FB1106-1108   | nsp | R,CHIP THICK 0-J,1/10W    |  | C200000060200S |  |   |
|  | FB1109,1110   | nsp | BEAD,COIL HH-1M2012-221JT |  | D340201200050S |  |   |
|  | FB1111,1112   | nsp | R,CHIP THICK 0-J,1/10W    |  | C200000060200S |  |   |
|  | FB1113-1117   | nsp | R,CHIP THICK 0-J,1/16W    |  | C20000006M160S |  |   |
|  | FB1118-1122   | nsp | BEAD,COIL HB-1S1608-200JT |  | D340160802000S |  |   |
|  | FB1123-1131   | nsp | R,CHIP THICK 0-J,1/16W    |  | C20000006M160S |  |   |
|  | FB1132        | nsp | BEAD,COIL HB-1S1608-200JT |  | D340160802000S |  |   |

---MEMO---

## EXPLODED VIEW



**WARNING:**  
Parts marked with this symbol ▲ have critical characteristics.  
Use ONLY replacement parts recommended by the manufacturer.

▲印の部分は安全を維持するために重要な部品です。従って交換時は必ず指定の部品を使用してください。

# PARTS LIST OF EXPLODED VIEW

\* 本表に "nsp" と記載されている部品は供給できません。

\* Parts for which "nsp" is indicated on this table cannot be supplied.

\* 本表に "nsp" と記載されている基板 ASS'Y は供給できません。基板 ASS'Y の修理の際には基板部品表を確認のうえ、交換部品を発注してください。

\* P.W.B. ASS'Y for which "nsp" is indicated on this table cannot be supplied. When repairing the P.W.B. ASS'Y, check the board parts table and order replacement parts.

\* 本表に記載されている部品は、補修用部品のため製品に使用している部品とは一部、形状、寸法などが異なる場合があります。

\* The parts listed below are for maintenance only, might differ from the parts used in the unit in appearances or dimensions.

**Note:** The symbols in the column "Remarks" indicate the following destinations.

E3 : U.S.A. & Canada model

E2 : Europe model

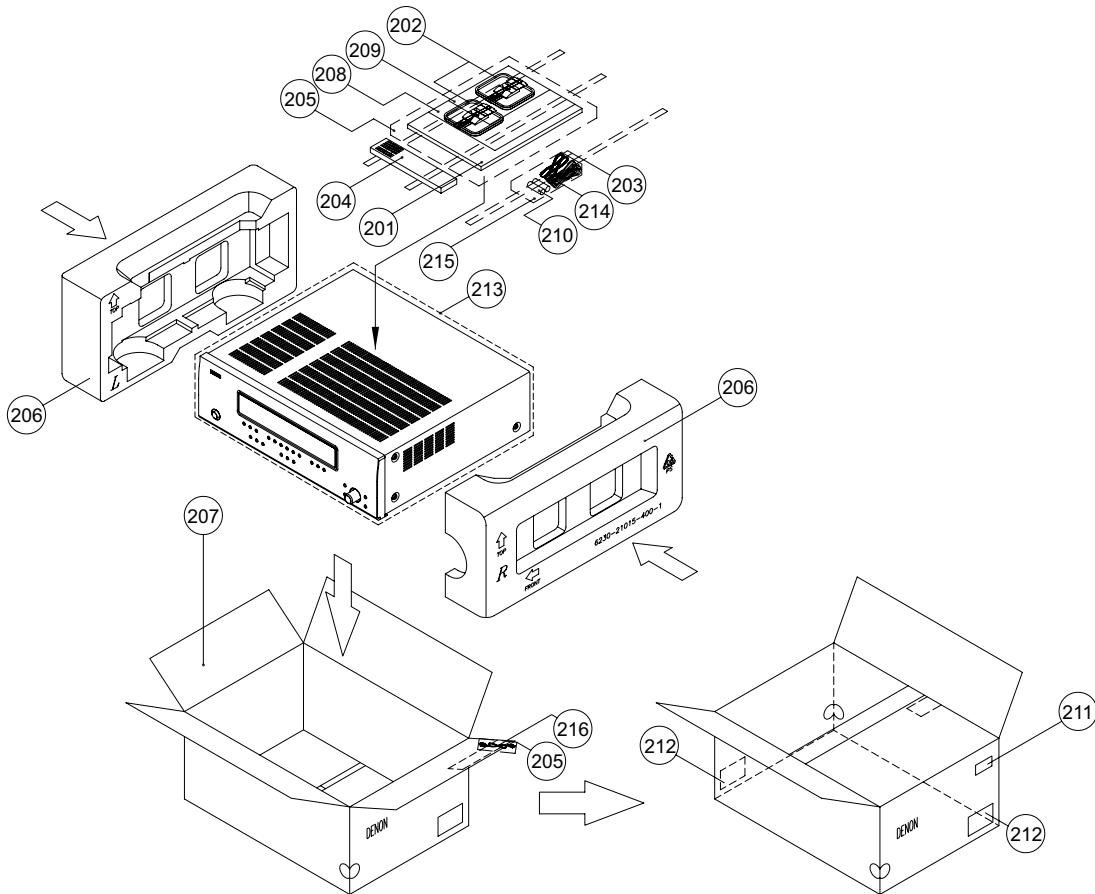
| Ref. No. | Part No.                      | Part Name   | Remarks   |                                      | Q'ty   | New                   |   |
|----------|-------------------------------|---|---|--------------------------------------|--|-----------------------|---|
|          | 7A<br>7A<br>7<br>33<br>34     | nsp<br>nsp<br>-<br>-<br>-   | STANDBY P.W.B UNIT ASSY<br>STANDBY P.W.B UNIT ASSY<br>POWERON UNIT<br>STBY1 UNIT<br>STBY2 UNIT  | for E3<br>for E2                     | 7025HU0702014<br>7025HU0702024   | 1<br>1                | * |
|          | 10<br>15A<br>15A<br>15<br>16  | nsp<br>nsp<br>nsp<br>-<br>-   | FRONT P.W.B UNIT ASSY<br>POWER P.W.B UNIT ASSY<br>POWER P.W.B UNIT ASSY<br>POWER1 UNIT<br>POWER2 UNIT                                     | for E3<br>for E2                     | 7025HU0702013<br>7025HU0702017<br>7025HU0702027  | 1<br>1<br>1           | * |
|          | 17<br>18<br>30<br>30<br>35A   | -<br>-<br>nsp<br>nsp<br>nsp   | POWER3 UNIT<br>XMBUS UNIT<br>MAIN P.W.B UNIT ASSY<br>MAIN P.W.B UNIT ASSY<br>IO TUNER3 P.W.B UNIT ASSY                                    | for E3 only<br>for E3<br>for E2      | 7025HU0702010<br>7025HU0702020<br>7025HU0702019  | 1<br>1<br>1           | * |
|          | 35B<br>35C<br>35D<br>35<br>45 | nsp<br>nsp<br>nsp<br>-<br>-   | IO TUNER4 P.W.B UNIT ASSY<br>IO TUNER5 P.W.B UNIT ASSY<br>IO TUNER6 P.W.B UNIT ASSY<br>IO OPTION UNIT<br>CNT UNIT                         |                                      | 7025HU070201A<br>7025HU070201B<br>7025HU070201C  | 1<br>1<br>1           | * |
|          | 36A<br>36B<br>36<br>37<br>42  | nsp<br>nsp<br>-<br>963189000210D<br>nsp                                 | IO TUNER1 P.W.B UNIT ASSY<br>IO TUNER2 P.W.B UNIT ASSY<br>IO BUILT-IN UNIT<br>ETHERNET P.W.B UNIT ASSY<br>AMFME3 BUILT-IN P.W.B UNIT ASSY |                                      | 7025HU0702016<br>7025HU0702018<br>7025HU0702015<br>7025HU0702012                         | 1<br>1<br>1<br>1      | * |
|          | 42                            | nsp   | AMFME2 BUILT-IN P.W.B UNIT ASSY   | for E2                               | 7025HU0702023  | 1                     | * |
|          | 1<br>2<br>3                   | 00D9630362109<br>963402000170D<br>963443000180D                         | BADGE<br>PANEL FRONT<br>FRAME FRONT   |                                      | 5630210028300S<br>3067212728200S<br>3217211271400S                                       | 1<br>1<br>1           | * |
|          | 4<br>5<br>6<br>8<br>9         | nsp<br>00D9630137807<br>00D9630184106<br>963416000190D<br>00D9630297705 | BRACKET SIDE L/R<br>LENS STANDBY<br>BUTTON STANDBY<br>WINDOW DISPLAY<br>KNOB SELECT(KD)   |                                      | 4010211986000S<br>3710210503000S<br>5097212368000SZ<br>5077212422000S<br>5087211298000SZ | 2<br>1<br>1<br>1<br>1 |   |
|          | 11<br>12<br>13<br>13<br>14    | nsp<br>nsp<br>nsp<br>nsp<br>nsp   | BRACKET HEATSINK L<br>BRACKET HEATSINK R<br>HEAT SINK MAIN L<br>HEAT SINK MAIN L<br>HEAT SINK MAIN R                                      | for E3<br>for E2<br>for E3           | 4010213316000S<br>4010213336000S<br>2120211168200S<br>2120211168300S<br>2120211168000S   | 2<br>2<br>1<br>1<br>1 | * |
|          | 14<br>19<br>19<br>20<br>21    | nsp<br>nsp<br>nsp<br>nsp<br>00D9630137904                               | HEAT SINK MAIN R<br>SPACER SUPPORTER<br>SPACER SUPPORTER<br>CHASSIS MAIN<br>FOOT  | for E2<br>for E3<br>for E2<br>for E2 | 2120211168100S<br>4300210023000S<br>4300210023000S<br>3200210146402S<br>4007210261000S   | 1<br>5<br>3<br>1<br>4 | * |
|          | 22<br>23<br>24                | nsp<br>nsp<br>nsp   | CUSHION PCB<br>SUPPORTER<br>BRACKET SUPPORTER   |                                      | 4050211295000S<br>4070001601010S<br>4010210206000S                                       | 4<br>5<br>4           |   |

| Ref. No. | Part No. | Part Name     | Remarks                |        | Q'ty           | New |
|----------|----------|---------------|------------------------|--------|----------------|-----|
|          | 25       | nsp           | SUPPORTER P.C.         |        | 4070210192000S | 1   |
|          | 26       | nsp           | CUSHION SIDE           |        | 4050211095000S | 2   |
| ⚠        | 27       | nsp           | BRACKET SIDE           |        | 4010210686000S | 1   |
| ⚠        | 28       | 963101000260D | POWER TRANS MAIN       | for E3 | 8200858500280S | 1   |
| ⚠        | 28       | 963101000150D | POWER TRANS MAIN       | for E2 | 8200858500290S | 1   |
|          | 29       | nsp           | BRACKET TRANS          |        | 4010210466002S | 1   |
|          | 31       | nsp           | CUSHION BD             |        | 4050211845000S | 2   |
| ⚠        | 32       | nsp           | CUSHION IO             |        | 4050211905000S | 4   |
| ⚠        | 38       | nsp           | SUPPORTER              |        | 4070211583000S | 1   |
| ⚠        | 39       | nsp           | POWER TRANS ETHERNET   | for E3 | 8200412150010S | 1   |
| ⚠        | 39       | nsp           | POWER TRANS ETHERNET   | for E2 | 8200412150020S | 1   |
|          | 40       | nsp           | BRACKET TUNER          |        | 4010213346000S | 1   |
| ⚠        | 41       | 963183000220S | TUNER FM/AM            | for E3 | E903014000070S | 1   |
|          | 41       | 00D9630145705 | TUNER FM/AM            | for E2 | E903014100030S | 1   |
|          | 43       | 963406000900D | CHASSIS BACK           | for E3 | 3207212196000S | 1   |
|          | 43       | 963406000910D | CHASSIS BACK           | for E2 | 3207212196010S | 1   |
| ⚠        | 44       | 90M-YT005490R | AC INLET               |        | G430019090011S | 1   |
|          | 46       | nsp           | HOUSING TUNER          |        | 3050210091000S | 4   |
|          | 47       | nsp           | PLATE COVER            |        | 4477211286000S | 4   |
|          | 48       | 963403000110D | CABINET TOP            |        | 3000210466600S | 1   |
|          | 49       | nsp           | SUPPORTER PCB          |        | 4070210343000S | 1   |
|          | 50       | nsp           | CUSHION STANDBY2       |        | 4050212035000S | 1   |
|          | 51       | nsp           | CLAMP WIRE(MTG)        |        | 4330000310000S | 1   |
|          | 52       | nsp           | CUSHION HEATSINK       |        | 4050212065000S | 1   |
|          | 53       | nsp           | SHEET PCB              |        | 1210210702000S | 1   |
|          | 54       | nsp           | CUSHION TOP            | for E3 | 4050212079000S | 1   |
|          | 55       | nsp           | PCB GUIDE              |        | 1              | *   |
| ★        | 60       | nsp           | SPACER SUPPORTER       |        | 4300210023000S | 1   |
| ★        | 61       | nsp           | CLAMP CABLE            |        | 4330040343010S | 7   |
| ★        | 62       | nsp           | TUBE VW-1-T1-LR(BLK)   |        | A700201019010S | 1   |
| ★        | 63       | nsp           | COIL,TFT-102010N       |        | D320102010010S | 1   |
| ★        | 64       | nsp           | CN,WIRE 370MM/2P       |        | L000371020010S | 1   |
| ★        | 65       | 963231000160S | IC KIA278R12PI         | IC313  | J126781200250S | 1   |
| ★        | 66       | 00D9600216800 | IC KIA7912PI           | IC314  | J126791200060S | 1   |
| ★        | 67       | 00D2631162001 | IC KIA78R12PI          | IC302  | J126781200260S | 1   |
| ★        | 68       | 90M-HC300740R | IC KIA278R33PI         | IC315  | J126783300010S | 1   |
| ★        | 69       | 963606000510S | CABLE,FLAT CARD 1.25MM |        | N712232333810S | 1   |
| ★        | 70       | nsp           | LABEL SERIAL NO.       |        | 5507002000070S | 1   |

#### SCREWS

|  |   |     |                                    |        |                |    |  |
|--|---|-----|------------------------------------|--------|----------------|----|--|
|  | A | nsp | SCREW (+2S 3*8 ZNW/BH)             | for E3 | B020030081B10S | 74 |  |
|  | A | nsp | SCREW (+2S 3*8 ZNW/BH)             | for E3 | B020030081B10S | 72 |  |
|  | B | nsp | SCREW (+2S 3*10 (DOT) BK/BH)       |        | B020030103B11S | 36 |  |
|  | C | nsp | SCREW (+WSAM 4X8B)                 |        | B020940083W10S | 2  |  |
|  | D | nsp | SCREW (+2S 3*6 BK/BH)              |        | B020030063B10S | 6  |  |
|  | E | nsp | SCREW (+3S 4*6 ZNW/BH)             |        | B020740061B10S | 6  |  |
|  | F | nsp | SCREW (+3S 4*8 WASHER ZNW/BH)      |        | B028940081B10S | 4  |  |
|  | G | nsp | SCREW (+2S 3*17 ZNW/BH)            |        | B020030171B10S | 3  |  |
|  | H | nsp | SCREW (+2S 3*14 P+S WASHER ZNY/HH) | for E3 | B018230141H11S | 13 |  |
|  | H | nsp | SCREW (+2S 3*14 P+S WASHER ZNY/HH) | for E2 | B018230141H11S | 9  |  |
|  | J | nsp | SCREW (+2S 4*8 (DOT) BK/BH)        |        | 1500040083B10S | 6  |  |
|  | K | nsp | SCREW (+3S 3*10 BK/FH)             |        | B010330103F10S | 10 |  |
|  | L | nsp | SCREW (+2S 3*5 ZNW/BH)             |        | B020030051B10S | 2  |  |
|  | M | nsp | SCREW (+2S 3*17 ZNW)               |        | 1500001206020S | 2  |  |

## PACKING VIEW



## PARTS LIST OF PACKING & ACCESSORIES

\* 本表に "nsp" と記載されている部品は供給できません。

\* Parts for which "nsp" is indicated on this table cannot be supplied.

\* 本表に記載されている部品は、補修用部品のため製品に使用している部品とは一部、形状、寸法などが異なる場合があります。

\* The parts listed below are for maintenance only, might differ from the parts used in the unit in appearances or dimensions.

Note: The symbols in the column "Remarks" indicate the following destinations.

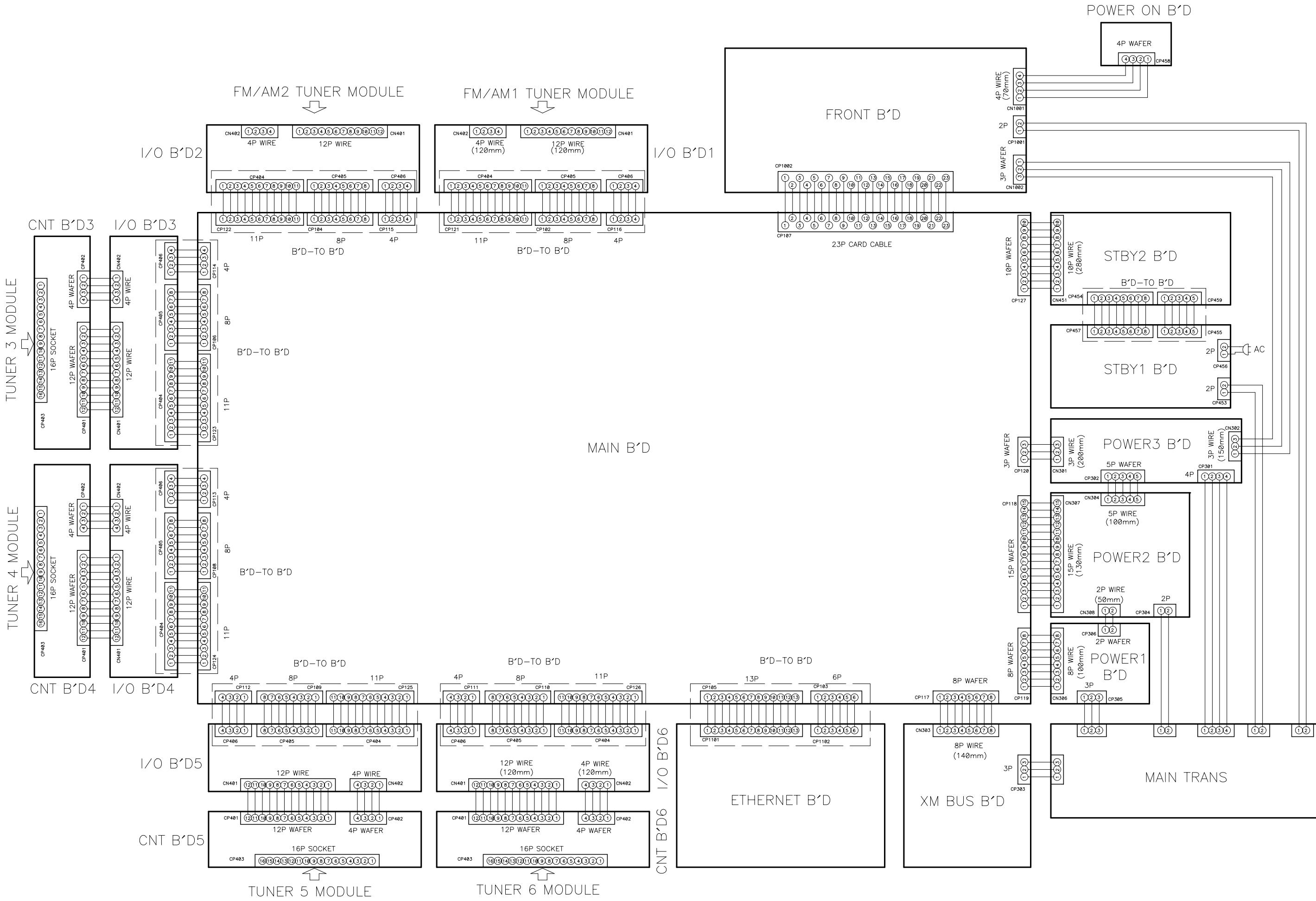
E3 : U.S.A. & Canada model

E2 : Europe model

| Ref. No. | Part No.      | Part Name               | Remarks |                | Q'ty | New |
|----------|---------------|-------------------------|---------|----------------|------|-----|
| 201      | 963541000280D | INSTRUCTION MANUAL      | for E3  | 5707210120160S | 1    | *   |
| 201      | 963541000290D | INSTRUCTION MANUAL      | for E2  | 5707210120170S | 1    | *   |
| 202      | 00D9630145307 | AM ANTENNA WIRE         |         | E605010110010S | 2    |     |
| 203      | 00D9630158006 | FM ANTENNA WIRE         |         | E605010070001S | 2    |     |
| 204      | 00D3991128001 | REMOTE CONTLOR(RC-1093) |         | 8300010930010S | 1    | *   |
| 205      | nsp           | POLY BAG                |         | 6330000240000S | 2    |     |
| 206      | 00D9600193101 | CUSHION SNOW            |         | 6230210154001S | 1    |     |
| 207      | 963531000100D | BOX GIFT                |         | 6007211090000S | 1    | *   |
| 208      | nsp           | CARD WARRANTY           | for E3  | 5777001610038S | 1    |     |
| 209      | nsp           | CARD S.S LIST           |         | 577700162001CS | 1    |     |
| 210      | nsp           | BATTERY DRY             |         | G670001R50210S | 4    |     |
| 211      | nsp           | LABEL UPC               | for E3  | 5507002370150S | 1    | *   |
| 211      | nsp           | LABEL UPC               | for E2  | 5507002370160S | 1    | *   |
| 212      | nsp           | LABEL CONTROL           |         | 5500014920010S | 2    |     |
| 213      | nsp           | PE,SHEET SET            |         | 6327040059000S | 1    |     |
| 214      | nsp           | CORD RCA                |         | L063152020020S | 2    | *   |
| 215      | nsp           | POLY BAG ACCESSORY      |         | 6330210222000S | 1    |     |
| 216      | 90M-ZC000470R | CORD ASSY               | for E3  | L068125130010S | 1    |     |
| 216      | 90M-ZC000600R | CORD ASSY               | for E2  | L068250160020S | 1    |     |
| ★ 217    | nsp           | LABEL MAC ADDRESS       |         | 5507000001220S | 1    | *   |
| ★ 218    | nsp           | FUSE LABEL              | for E2  | 5507000001450S | 1    | *   |

**---MEMO---**

# WIRING DIAGRAM



## NOTE FOR SCHEMATIC DIAGRAM

## 配線図について

### WARNING:

Parts marked with this symbol  have critical characteristics.  
Use ONLY replacement parts recommended by the manufacturer.

### CAUTION:

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 millamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

### WARNING:

DO NOT return the unit to the customer until the problem is located and corrected.

### NOTICE:

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM

M=1,000,000 OHM

ALL CAPACITANCE VALUES IN MICRO FARAD.

P=MICRO-MICRO FARAD

EACH VOLTAGE AND CURRENT ARE MEASURED AT

NO SIGNAL INPUT CONDITION.

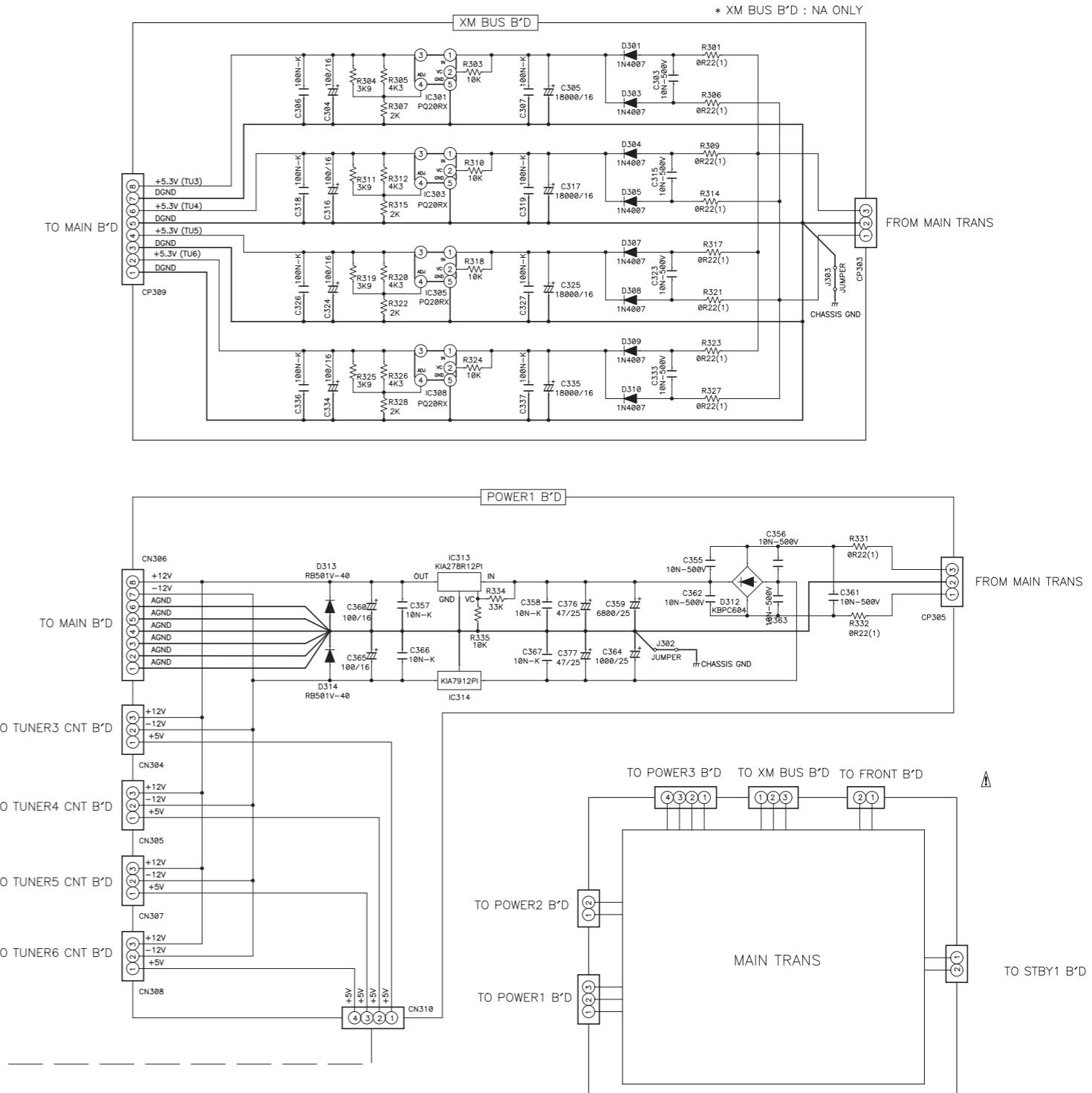
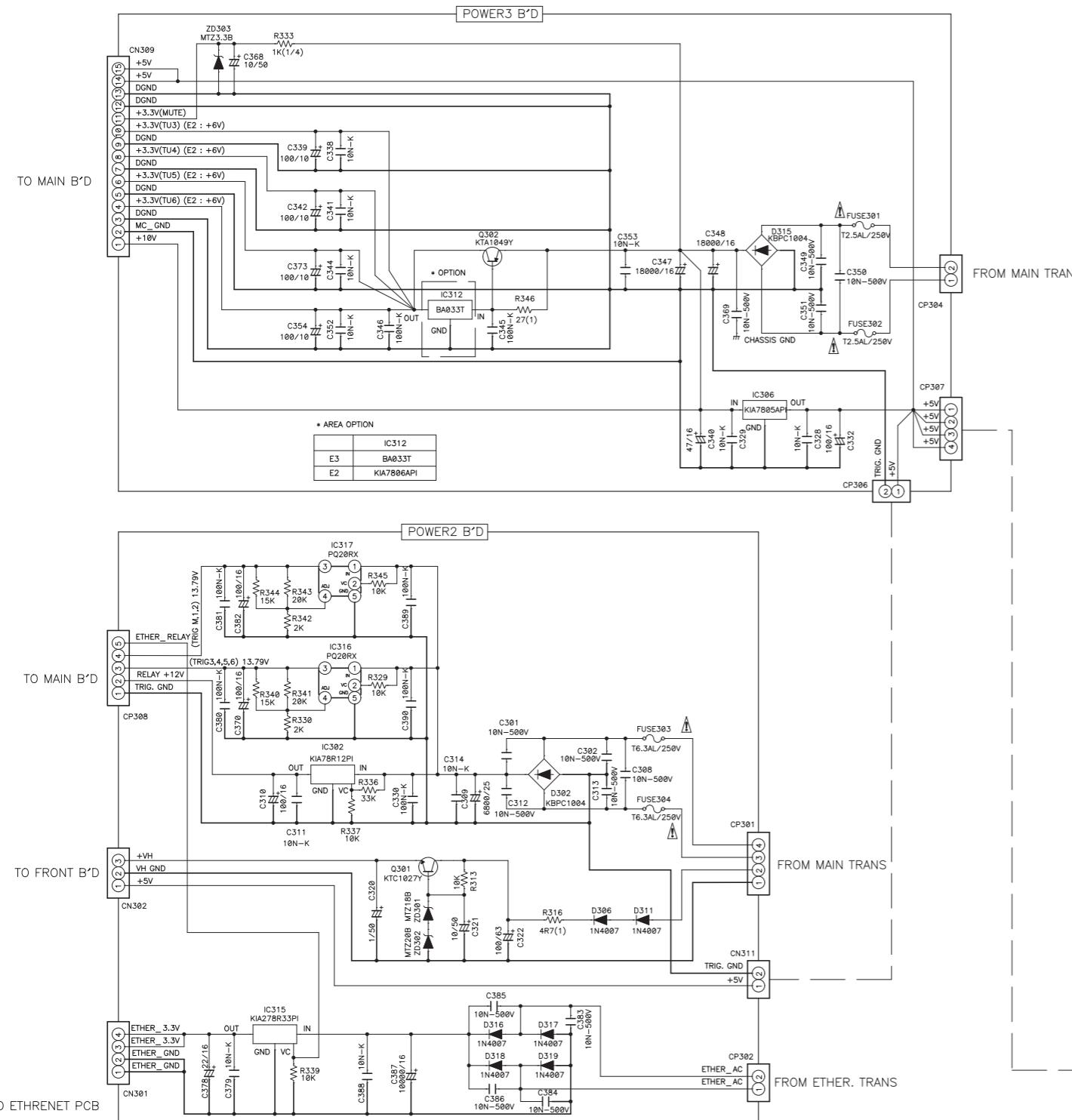
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE  
WITHOUT PRIOR NOTICE.

 印の部品は安全を維持するために重要な部品です。  
従って交換時は必ず指定の部品を使用してください。

### 注)

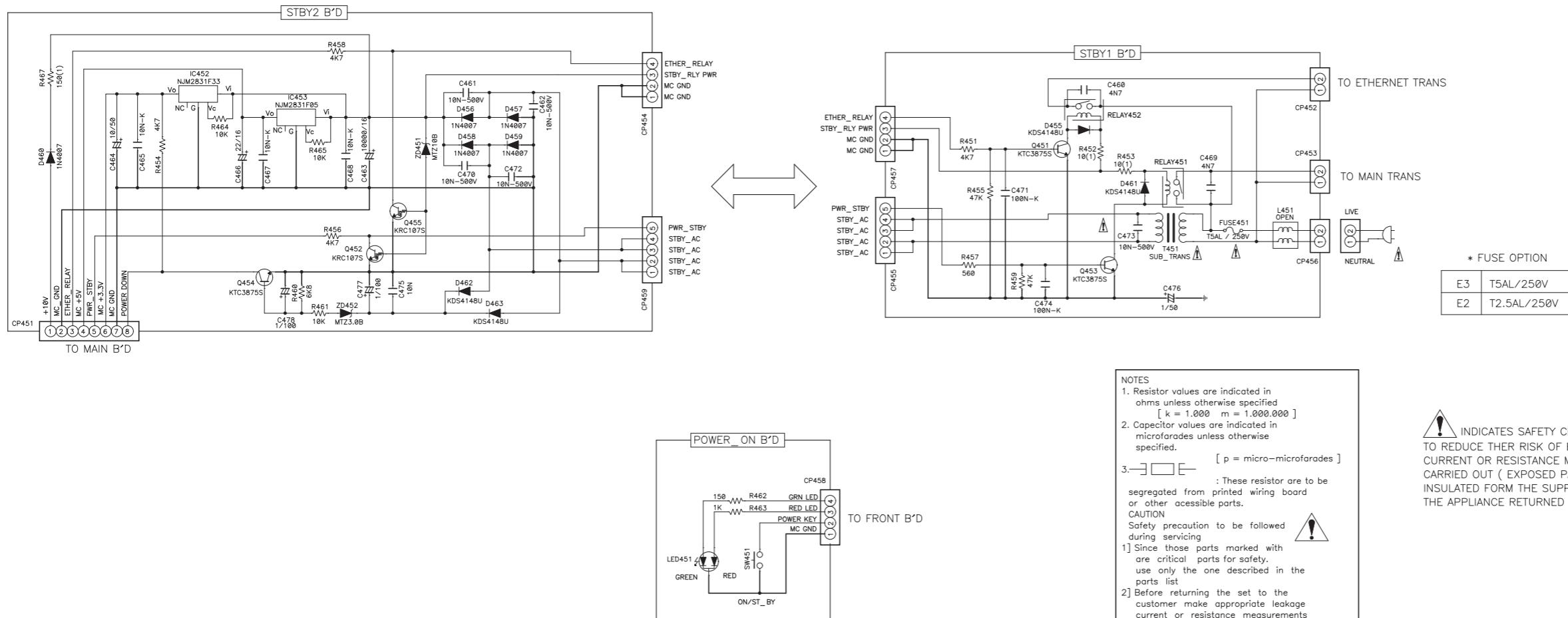
- (1) 指定なき抵抗値は  $\Omega$ 、k は  $k\Omega$ 、M は  $M\Omega$  を示す。
- (2) 指定なきコンデンサーの値は  $\mu F$ 、p は  $pF$  を示す。
- (3) 各部の電圧は無信号の値を示す。
- (4) この配線図は基本配線図です。改良等のため変更することがありますのでご了承ください。

## TU-604CI POWER PART



## SCHEMATIC DIAGRAMS (1/9) POWERT UNIT

## TU-604CI ST-BY PART

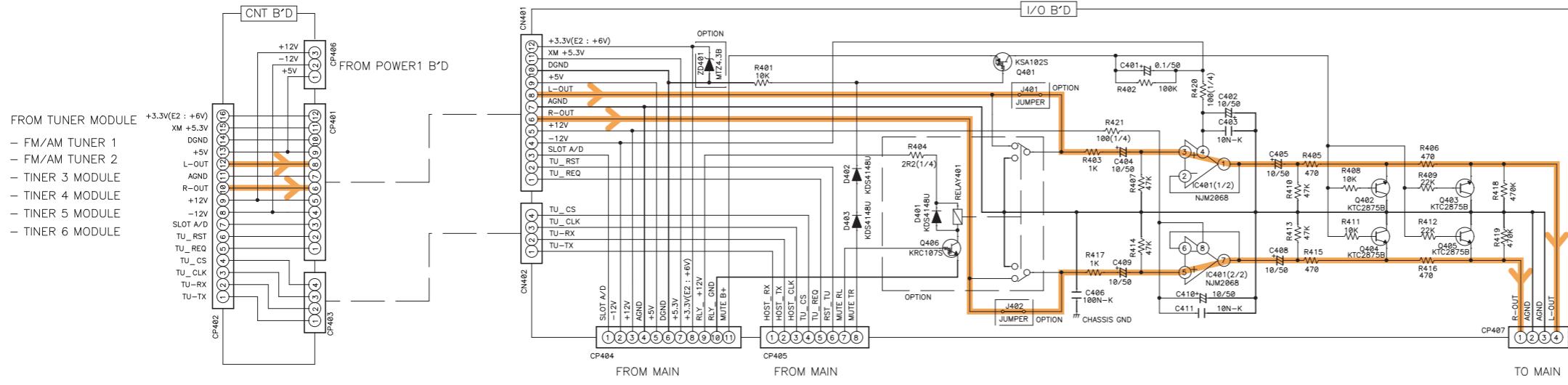


## NOTES

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 are 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.

INDICATES SAFETY CRITICAL COMPONENTS, TO REDUCE THE RISK OF ELECTRIC SHOCK, LEAKAGE CURRENT OR RESISTANCE MEASUREMENTS SHALL BE CARRIED OUT ( EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT ) BEFORE THE APPLIANCE RETURNED TO THE CUSTOMER.

## TU-604CI I/O PART



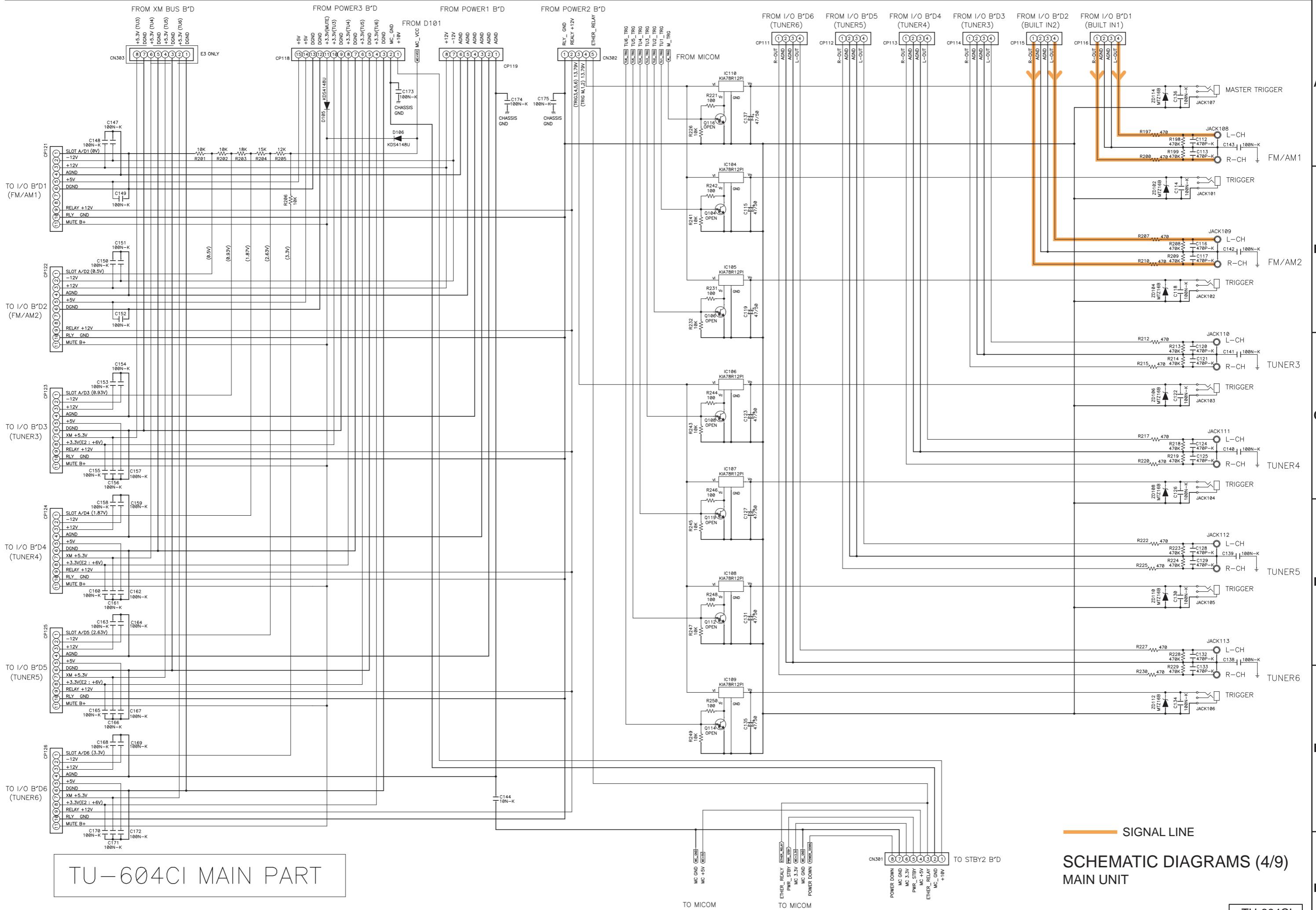
\* OPTION

| MODULE<br>R_NO | FM/AM1 | FM/AM2 | TUNER3, 4, 5, 6 (E3) | TUNER3, 4, 5, 6 (E2) |
|----------------|--------|--------|----------------------|----------------------|
| R404           | X      | X      | 2R2(1/4)             | 2R2(1/4)             |
| D401           | X      | X      | KDS4148U             | KDS4148U             |
| RELAY401       | X      | X      | RELAY                | RELAY                |
| Q406           | X      | X      | KRC107S              | KRC107S              |
| J401           | JUMPER | JUMPER | X                    | X                    |
| J402           | JUMPER | JUMPER | X                    | X                    |
| ZD401          | X      | X      | MTZ4.3B              | X                    |

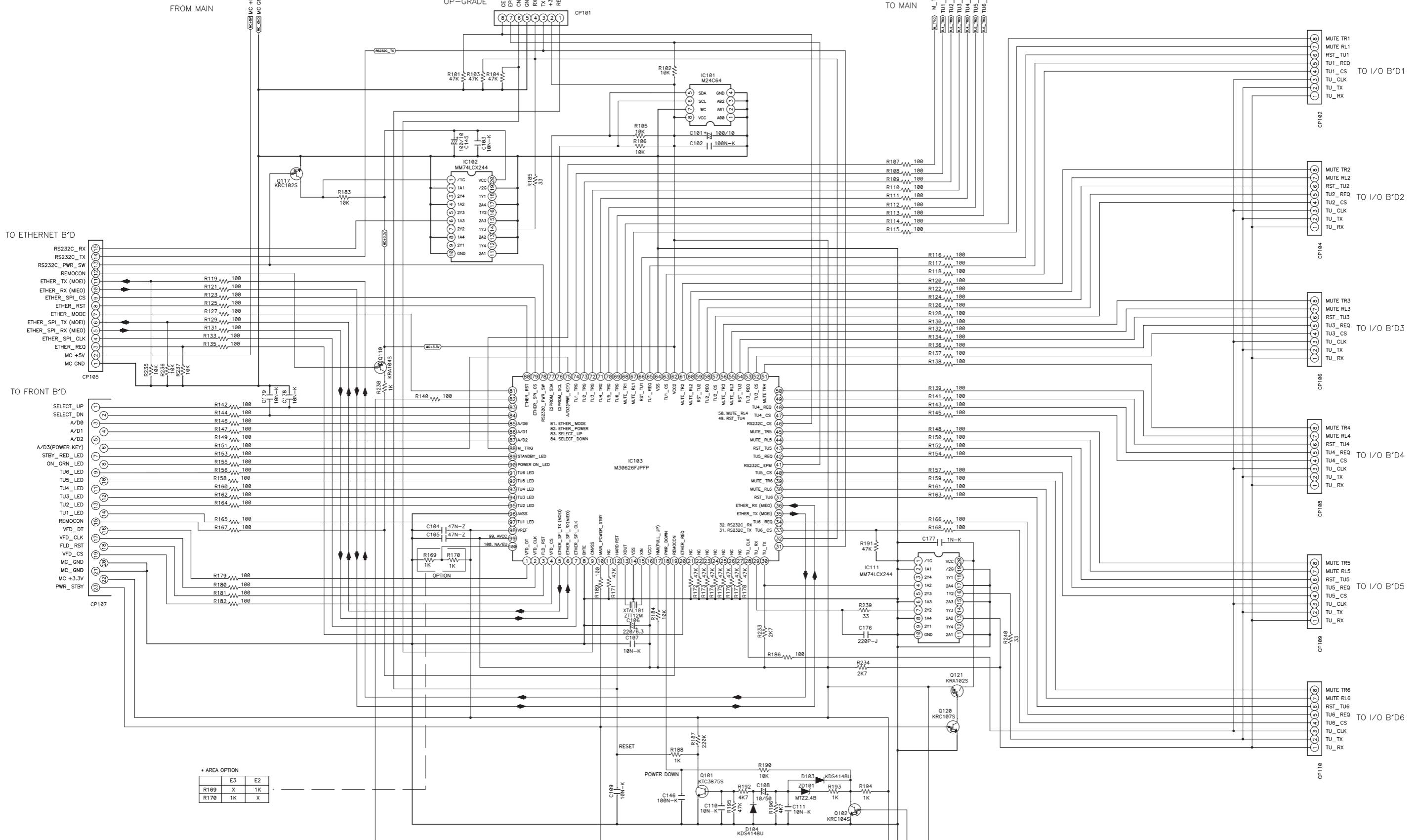
SIGNAL LINE

SCHEMATIC DIAGRAMS (3/9)  
I/O UNIT

1 2 3 4 5 6 7 8



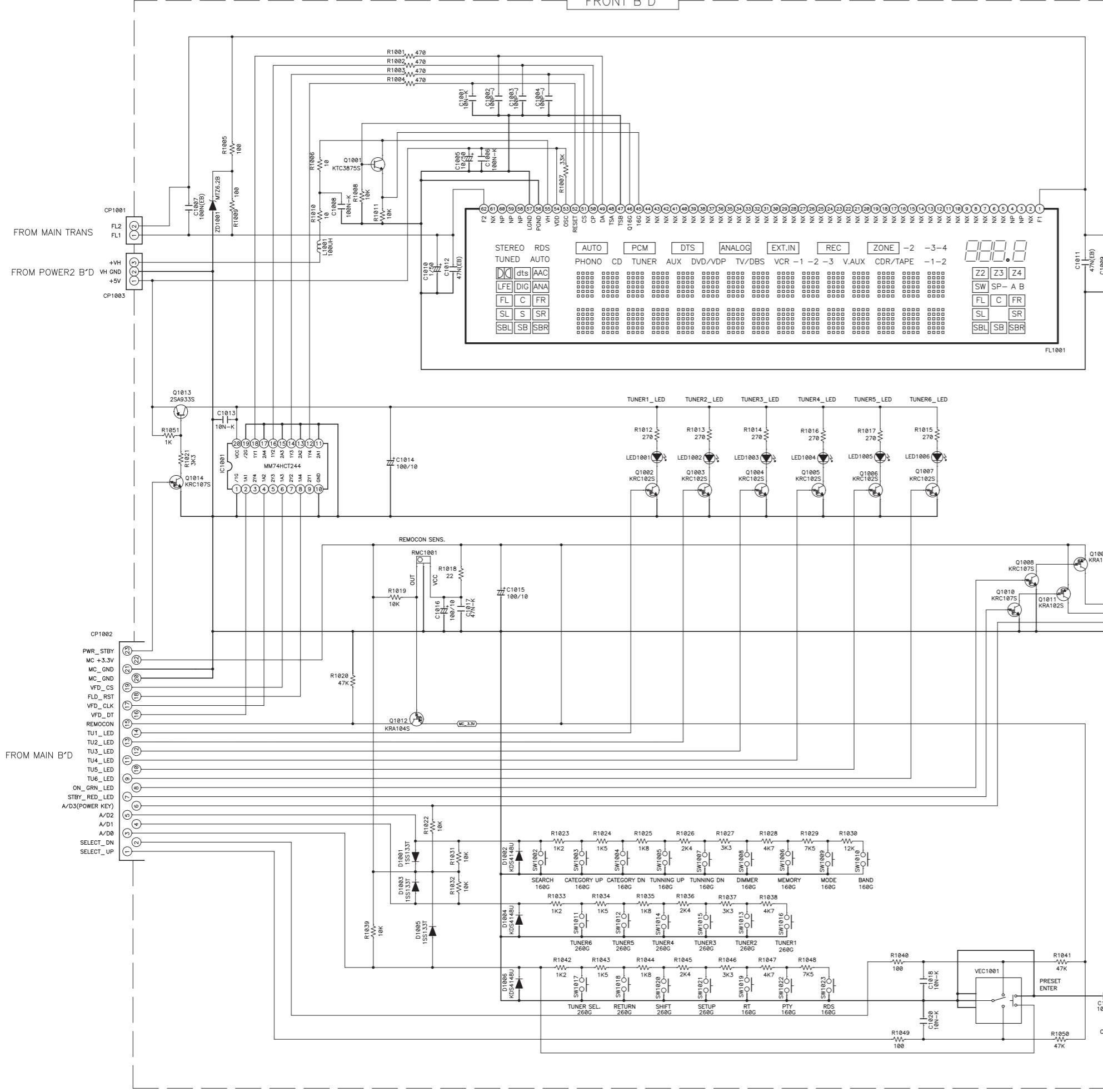
1 2 3 4 5 6 7 8



TU-604CI MICOM PART

SCHEMATIC DIAGRAMS (5/9)  
MICOM UNIT

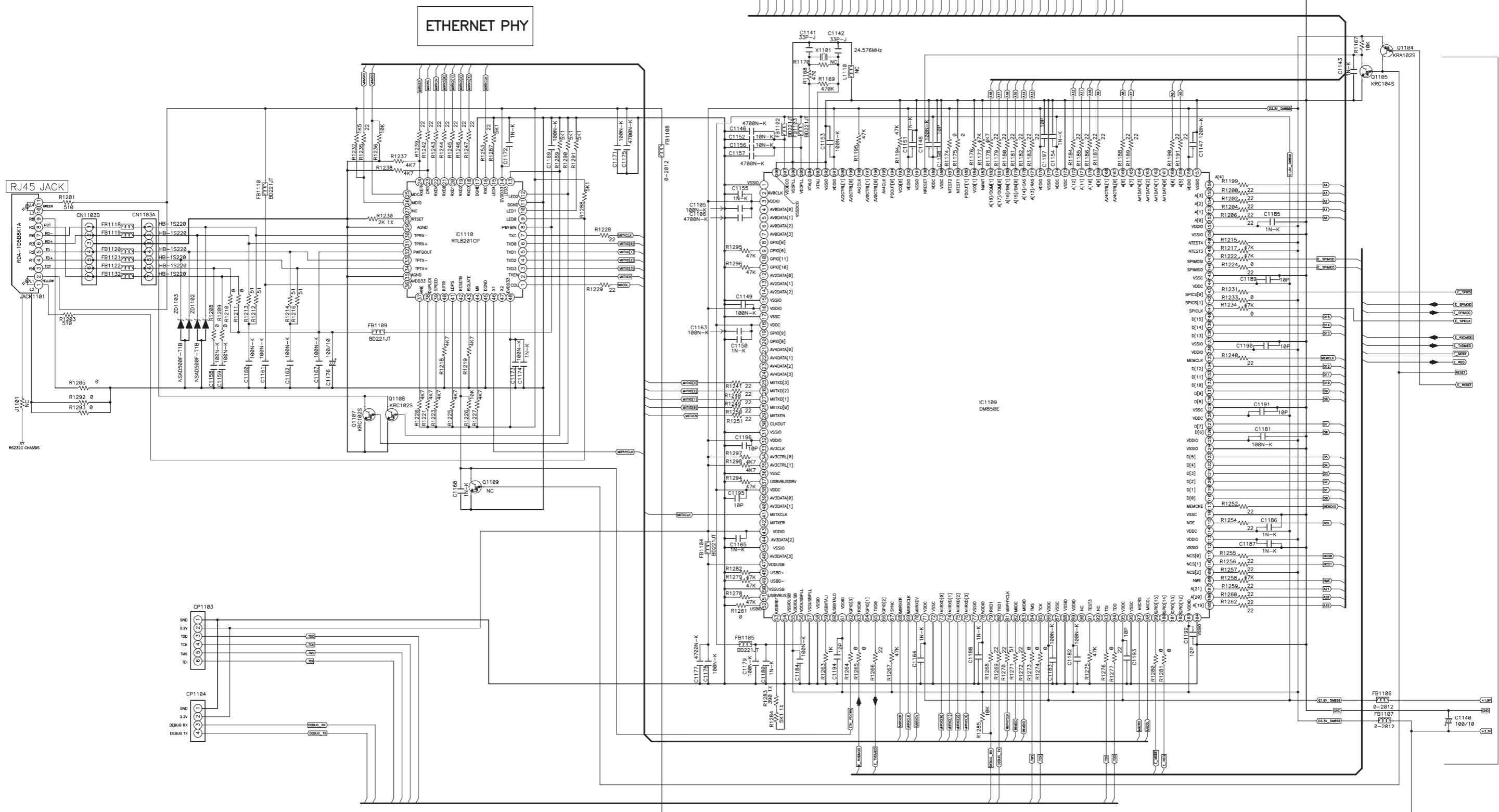
FRONT B'D



TU-604CI FRONT PART

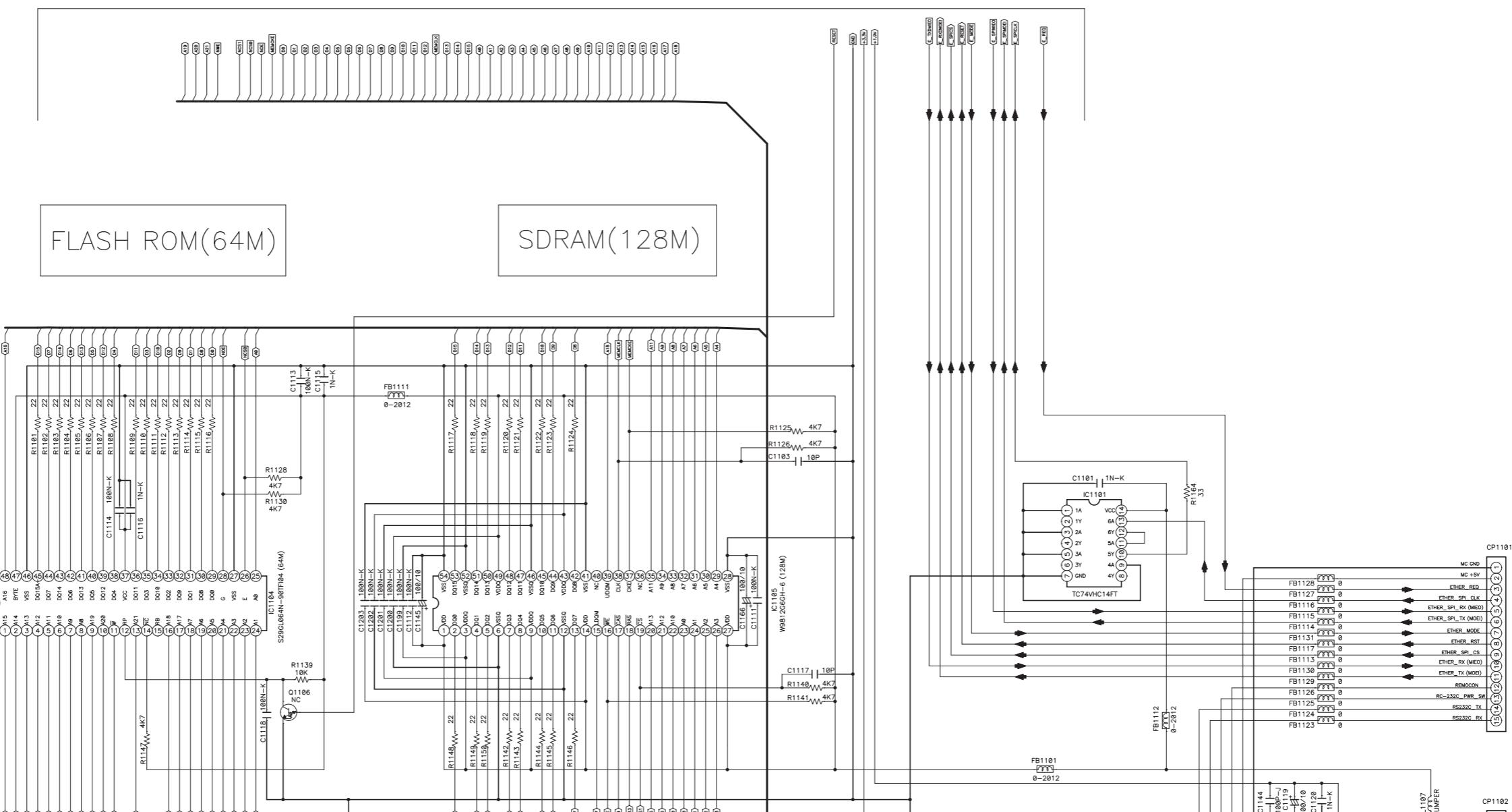
SCHEMATIC DIAGRAMS (6/9)  
FRONT UNIT

# TU-604CI ETHERNET PART1



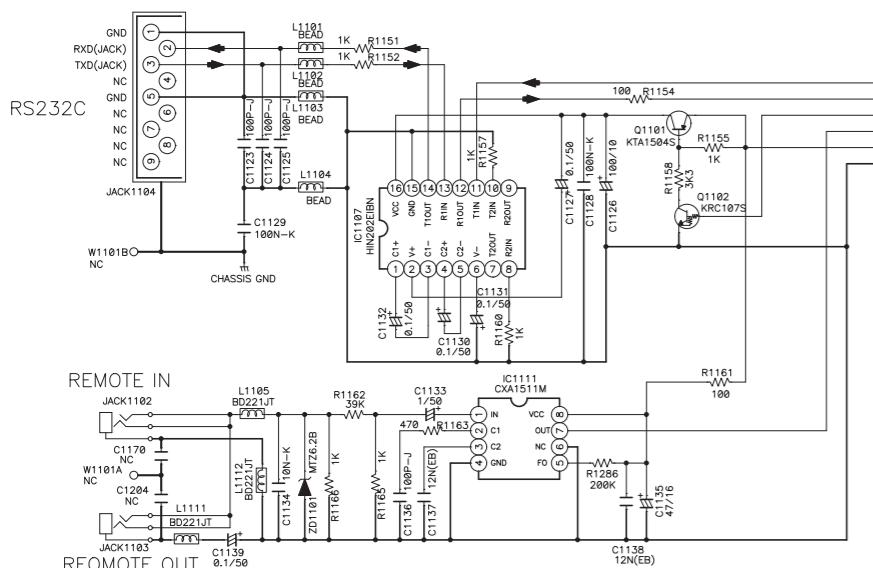
## SCHEMATIC DIAGRAMS (7/9) ETHERNET UNIT(1/2)

## TO ETHERNET PART1

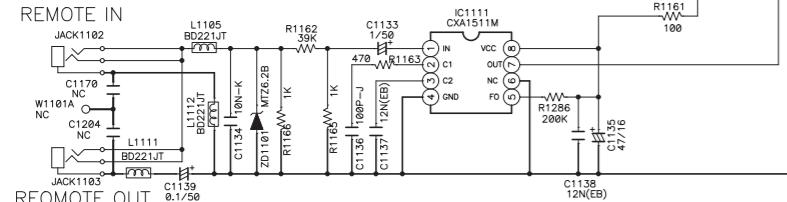


TO MAIN B'D

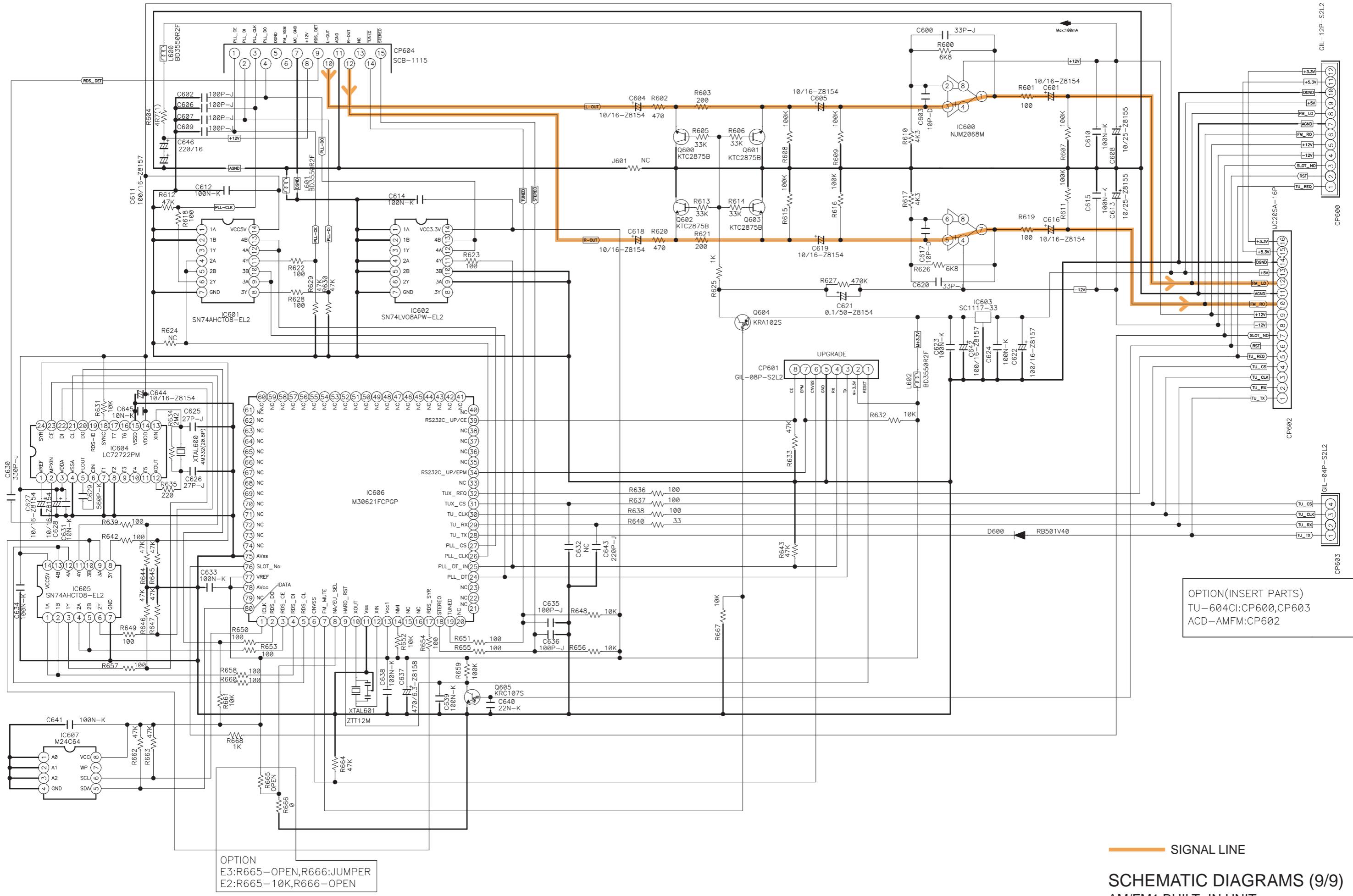
FROM POWER2 B'D



## TU-604CI ETHERNET PART2

SCHEMATIC DIAGRAMS (8/9)  
ETHERNET UNIT(2/2)

## FM/AM MODULE SCHEMATIC



SCHEMATIC DIAGRAMS (9/9)  
AM/FM1 BUILT -IN UNIT  
AM/FM2 BUILT -IN UNIT