

## SERVICE MANUAL

MODEL	JP	E3	E2	EK	E2A	E1C	E1K	EUT
S-102	✓	✓	✓					

### DVD HOME ENTERTAINMENT SYSTEM

HOME ENTERTAINMENT SYSTEM (S-102) consists of DVD SURROUND RECEIVER (ADV-S102), SUB WOOFER (DSW-S102) and SPEAKER SYSTEM (SC-S102)

#### 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

TOKYO, JAPAN  
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.

### LASER RADIATION

Do not stare into beam or view directly with optical instruments, class 3A laser product.

### **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、絶縁トランク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  $\triangle$  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  $1 M\Omega$  以上であること、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**

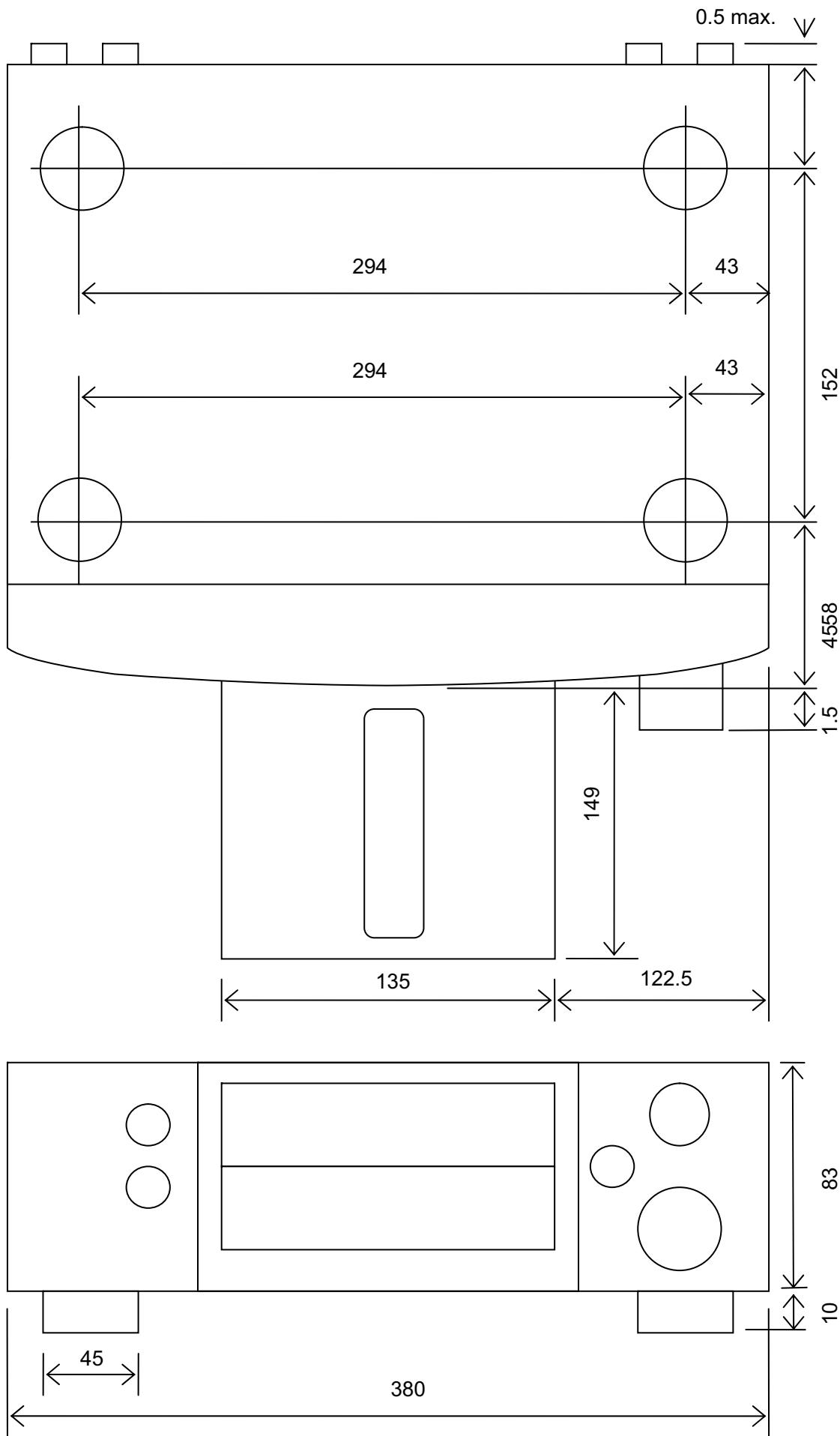
本機に使用している多くの電気部品、および機構部品は安全上、特別な特性を持っています。この特性はほとんどの場合、外観では判別つきにくく、またもとの部品より高い定格（定格電力、耐圧）を持ったものを使用しても安全性が維持されるとは、限りません。安全上の特性を持った部品は、このサービスマニュアルの配線図、部品表につぎのように表示していますので必ず指定されている部品番号のものを使用願います。

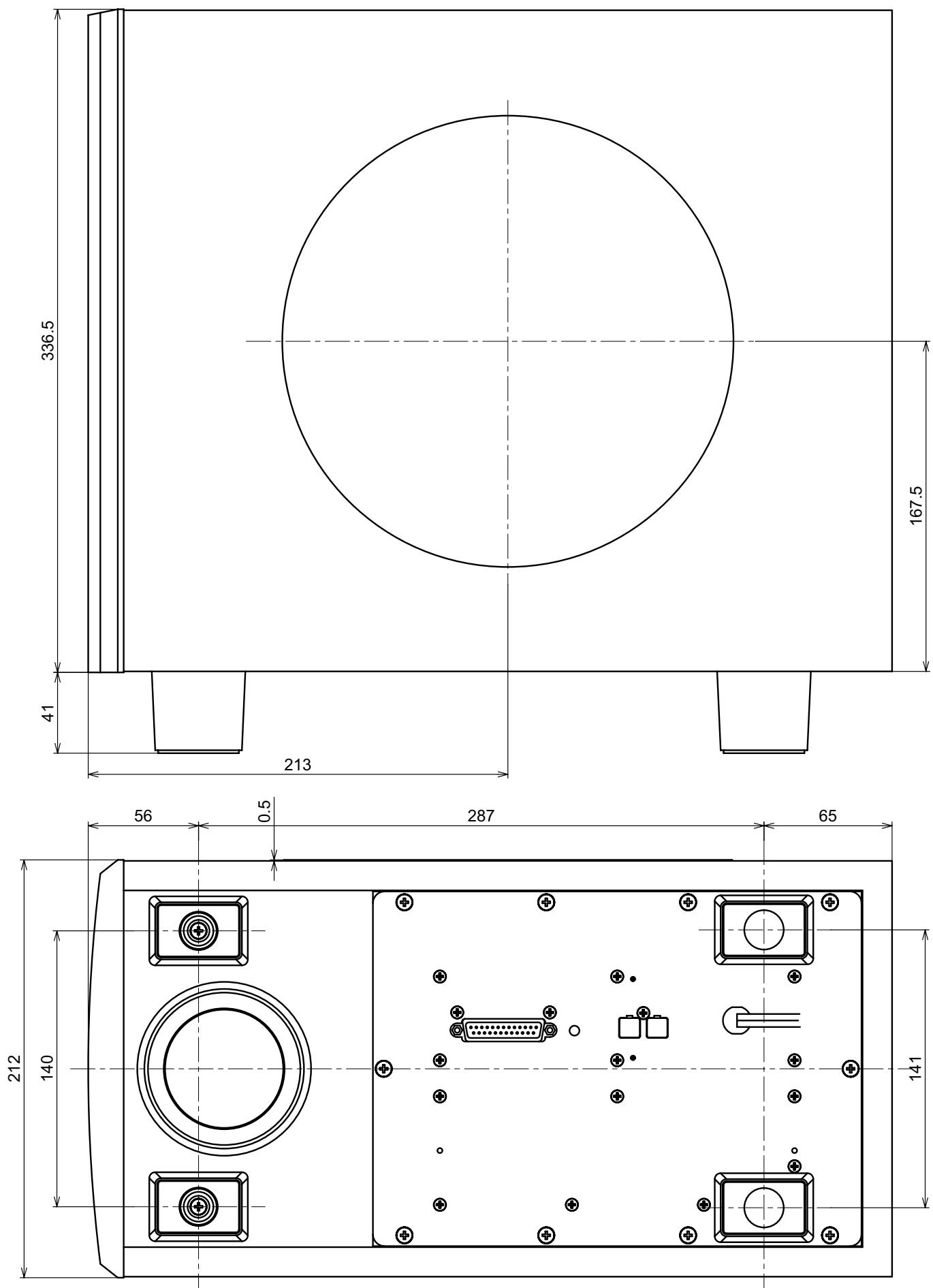
(1) 配線図… $\triangle$ マークで表示しています。

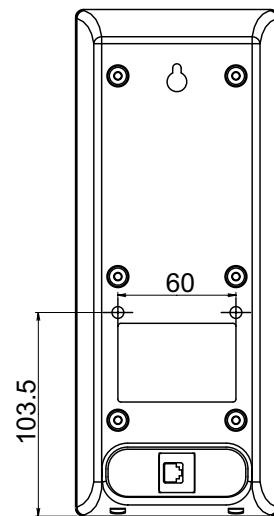
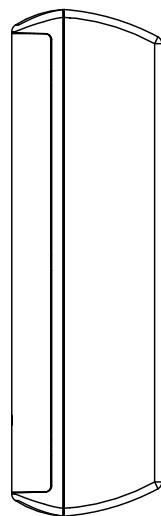
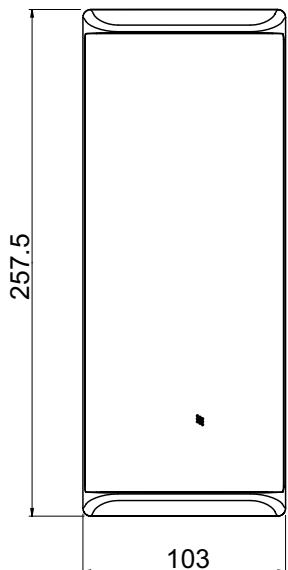
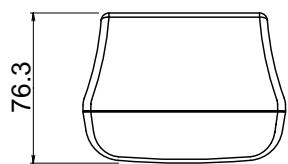
(2) 部品表… $\triangle$ マークで表示しています。

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

**DIMENSION**  
**ADV-S102**



**DSW-S102**

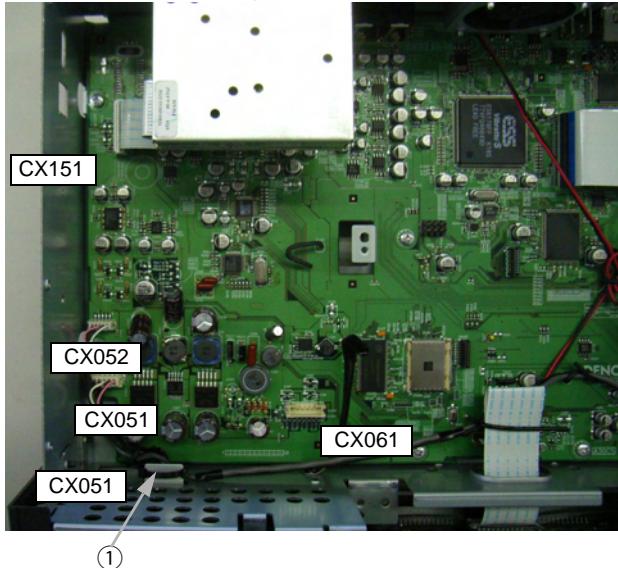
**SC-S102**

## WIRE ARRANGEMENT

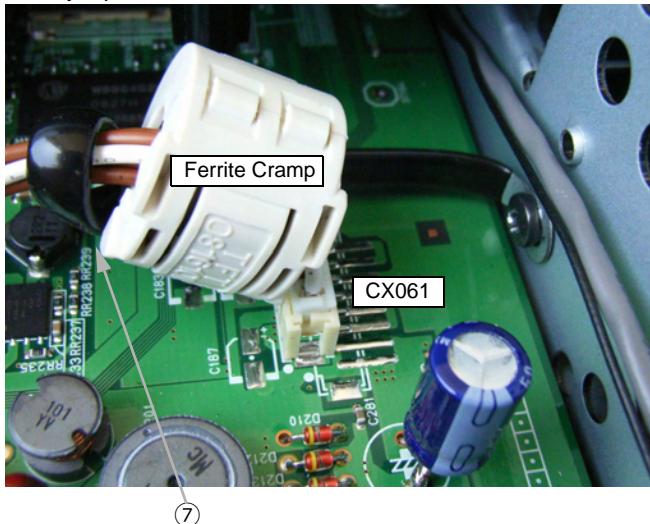
If wire bundles are untied or moved to perform adjustment or parts replacement etc., be sure to rearrange them neatly as they were originally bundled or placed afterward. Otherwise, incorrect arrangement can be a cause of noise generation.

### 1. ADV-S102

- ① Fasten the CW051 5P connector cord to the front chassis with a clamp band.
- ② Fasten the CW052 5P connector cord to the front chassis with a clamp band.
- ③ Fasten the CX31 3P connector cord to the circuit board with a style pin.
- ④ Fasten the CW52 5P connector cord to the circuit board with a style pin.
- ⑤ Press the CX211 FFC in with a style pin.
- ⑥ Twist the CX021 2P connector cord several times and fasten it twice with a style pin.



- ⑥ Fasten the CX061 6P connector with a cord holder.
- ⑦ Float the CX061 6P connector code to the circuit board with a style pin and fasten.

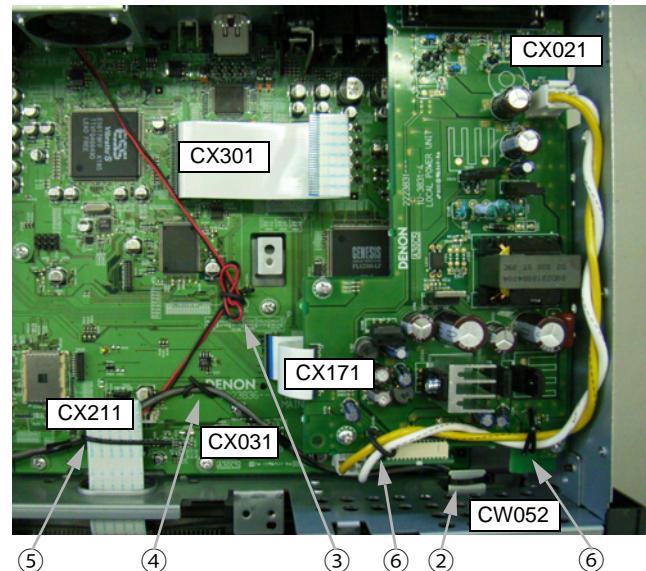


## ワイヤー整形図

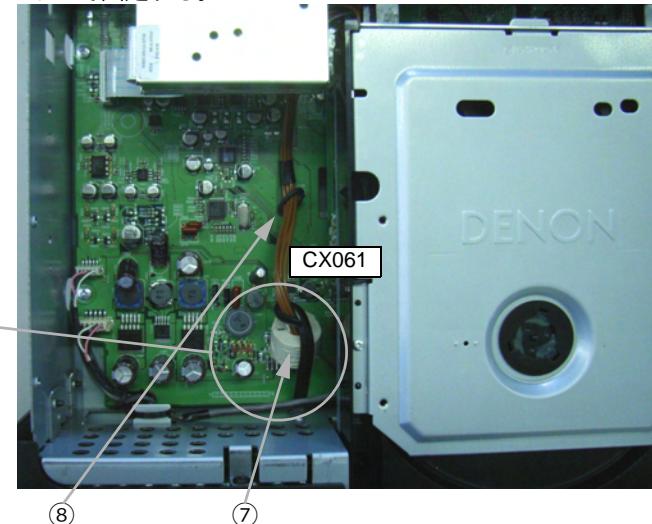
調整や部品の交換等により、ワイヤー類の結束をはずしたり移動させた場合には、それらの作業が完了した時点でワイヤーの整形をおこなってください。正しく整形されてないとノイズ発生の原因となることがあります。

### 1. ADV-S102

- ① CW051 5P コネクターコードをフロントシャーシにクランプバンドで結束する。
- ② CW052 5P コネクターコードをフロントシャーシにクランプバンドで結束する。
- ③ CX31 3P コネクターコードをスタイルピンで基板に固定する。
- ④ CW52 5P コネクターコードをスタイルピンで基板に固定する。
- ⑤ CX211 の FFC をスタイルピンで押さえこむ。
- ⑥ CX021 2P コネクターコードを数回捩ってスタイルピンで2箇所を固定する。



- ⑥ CX061 6P コネクターコードをコードホルダーで固定する。
- ⑦ CX061 6P コネクターコードをスタイルピンで基板より浮かせて固定する。

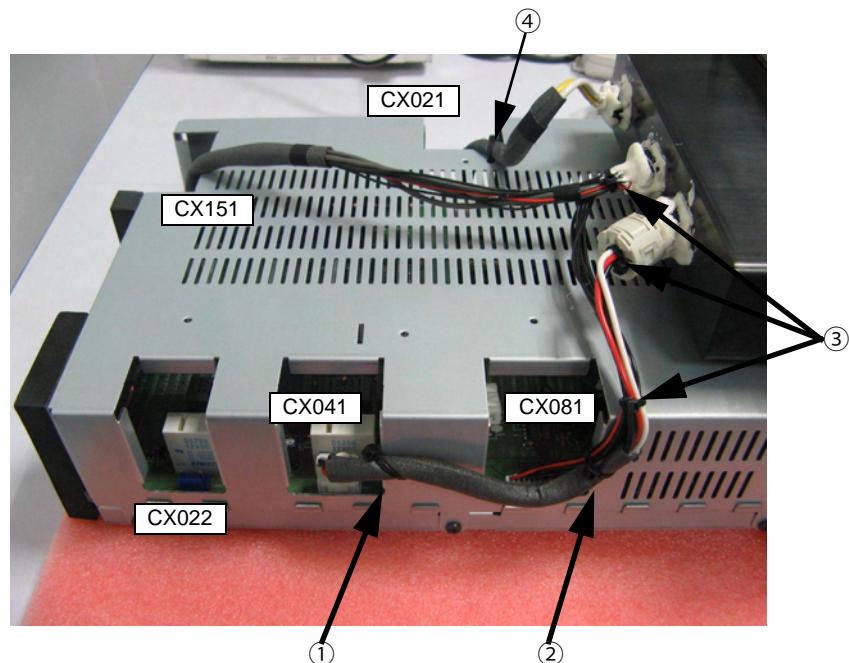


## 2. DSW-S102

- ① Fasten the CX041 4P connector cord to the chassis with a clamp band.
- ② Fasten the CX041 4P connector cord and CX081 8P connector cord to the chassis with a clamp band.
- ③ Fasten with a clamp band.
- ④ Fasten the CX021 2P connector cord to the chassis with a clamp band.

## 2. DSW-S102

- ① CX041 4P コネクターコードをクランプバンドでシャーシに固定。
- ② CX041 4P コネクターコードと CX081 8P コネクターコードをクランプバンドでシャーシに固定。
- ③ クランプバンドで結束。
- ④ CX021 2P コネクターコードをクランプバンドでシャーシに固定。



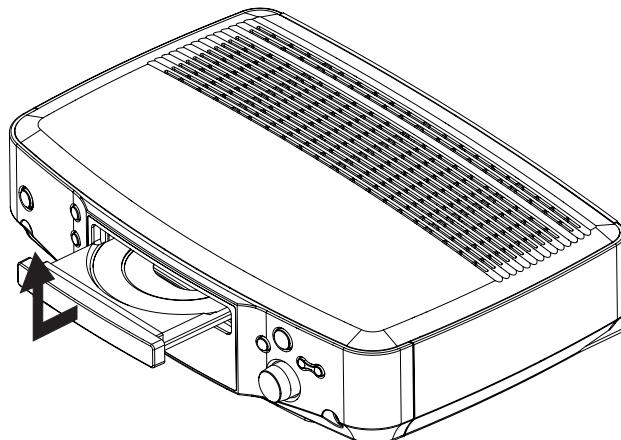
## DISASSEMBLY

(Follow the procedure below in reverse order when reassembling.)

### ● ADV-S102

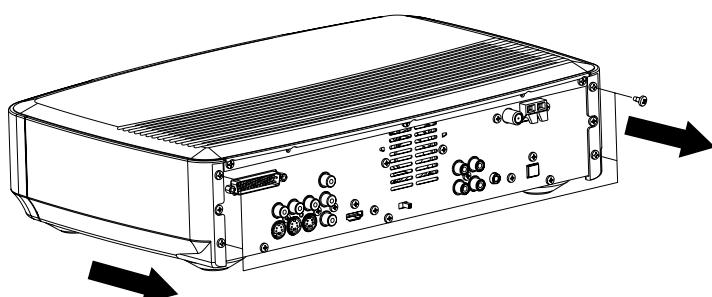
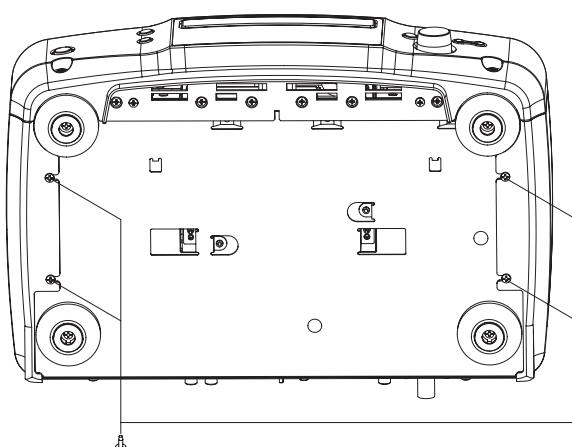
#### 1. Loader Panel

- (1) Switch on, and press [▲ (OPEN/CLOSE)] button to open the Disc tray.
- (2) Detach the Loader Panel by lifting.



#### 2. Side Panel

- (1) Remove 4 bottom screws.
- (2) Remove 4 rear screws, then detach Side Panel.



## 各部のはずしかた

(組み立てるときは、逆の順序でおこなってください。)

### ● ADV-S102

#### 1. ローダーパネルのはずしかた

- (1) 電源を入れ 「▲ (OPEN/CLOSE)」 ボタンを押して、ディスクトレイを開きます。
- (2) ローダーパネルを持ち上げてはずします。

#### 2. サイドパネルのはずしかた

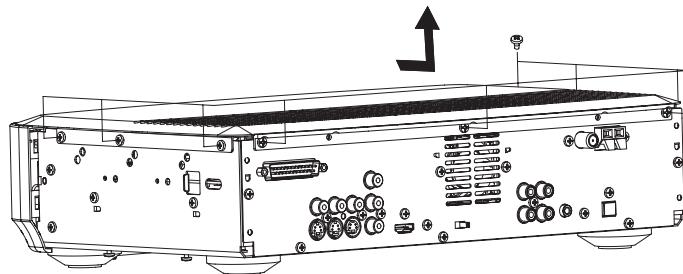
- (1) 底面よりネジを 4 本はずします。
- (2) 裏面よりネジを 4 本はずし、サイドパネルを矢印の方向へはずします。

### 3. Top Cover

- (1) Remove 9 screws, then detach Top Cover.

### 3. トップカバーのはずしかた

- (1) トップカバーを止めているネジ9本をはずし、  
トップカバーを矢印の方向へはずします。

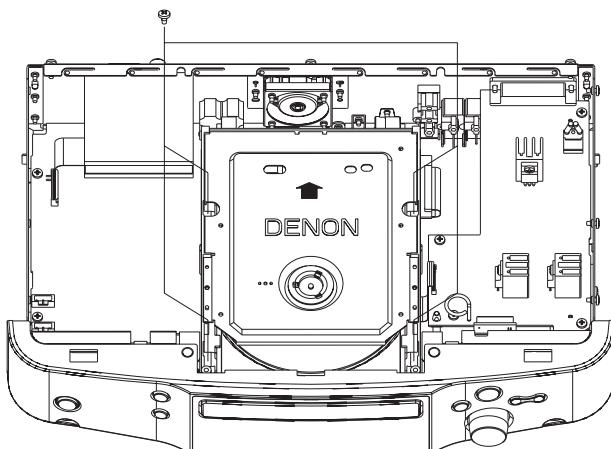


### 4. DVD Mecha. Unit

- (1) Remove 4 screws fixing the DVD Mecha.  
(2) Detach the DVD Mecha. to the arrow direction.  
(3) Lift the DVD Mecha. and disconnect FFC and connectors.

### 4. DVD メカユニットのはずしかた

- (1) メカユニットを止めているネジ4本をはずします。  
(2) メカユニットを矢印の方向にはずします。  
(3) DVD メカユニットを持ち上げ、コネクタと FFC をはずします。

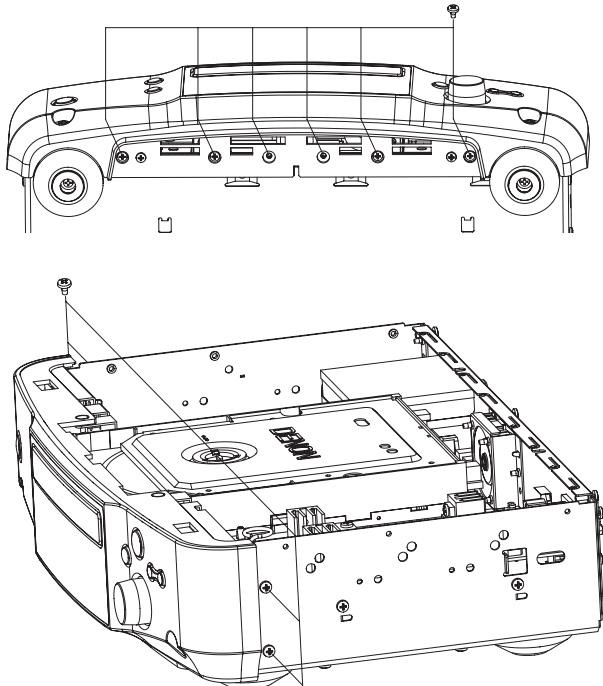


## 5. Front Panel Ass'y

- (1) Remove 6 Front panel screws, then detach P.W.B. and chassis.
- (2) Remove 4 Front panel side screws, then detach the Front Panel Ass'y.

## 5. フロントパネルのはずしかた

- (1) フロントパネルからの基板とシャーシを止めているネジを6本はずします。
- (2) フロントパネル側面を止めているネジ4本(左右各2本)をはずし、フロントパネルをはずします。

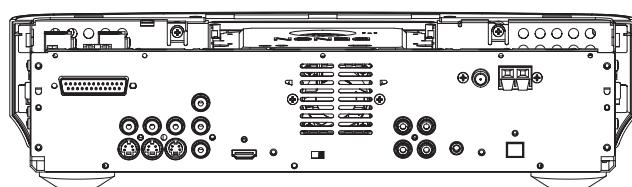


## 6. Back Panel Ass'y

- (1) Remove each terminal screws, Back Panel screws and Chassis screws, then detach the Back Panel.

## 6. バックパネルのはずしかた

- (1) 各端子を止めているネジおよびバックパネルとシャーシを止めているネジをはずし、バックパネルをはずします。



## ● DSW-S102

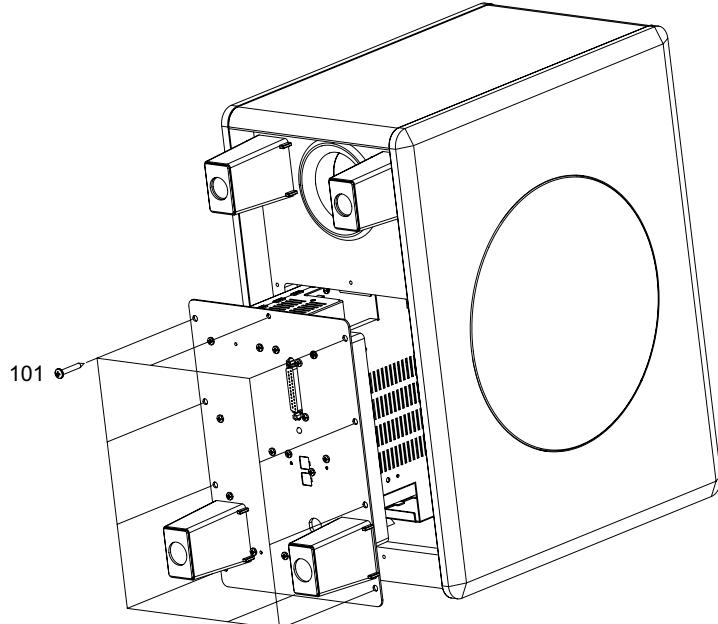
### 1. Rear panel

- (1) Remove 10 screws 101 on the bottom side.
- (2) Detach the Rear panel.

## ● DSW-S102

### 1. Rear panel

- (1) 底面側から 101 のねじ 10 本をはずします。
- (2) Rear panel をはずします。

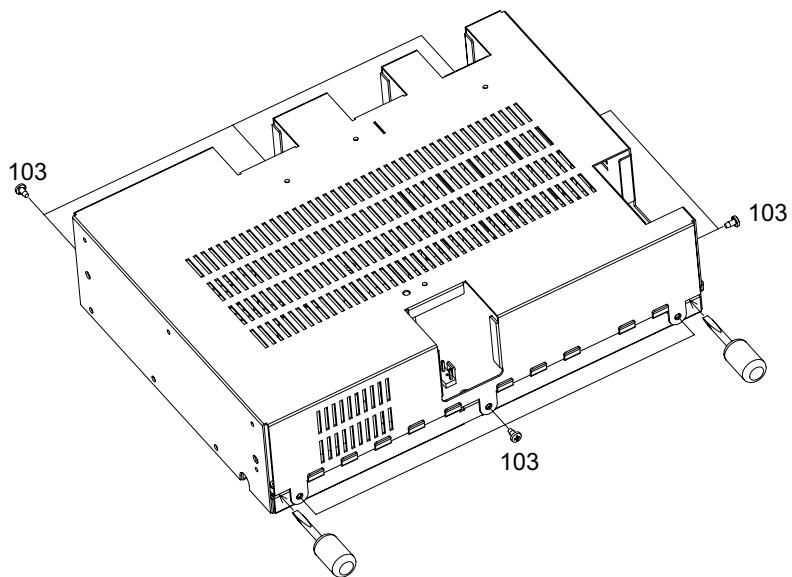


### 2. SHIELD COVER

- (1) Remove 8 screws 103 on the Side.
- (2) Lift the shield cover using a flat-headed screwdriver and remove it. When doing this, be careful not to deform the main bracket's hook.

### 2. SHIELD COVER

- (1) 側面側から 103 のねじ 8 本をはずします。
- (2) マイナスドライバーでシールドカバーを持ち上げては  
ずします。このとき、メインブラケットのつめを変形  
させないように注意してください。



## DIAGNOSTICS OF OPTICAL PICKUP AND REPLACING TRAVERSE UNIT

Make failure diagnostics of the Optical Pickup as follows.

If the laser drive current (lop) becomes more than 1.5 times of the initial value, the Optical Pickup should be replaced.

The laser drive current initial value is checked by "lop checked Method" of next page.

In case of replacing the Pickup, change the whole part of the Traverse Unit.

No mechanical adjustment is necessary after the replacement.

## 光ピックアップの故障診断とトラバースユニットの交換

次の順序で故障診断を行ってください。

レーザー駆動電流 lop 値が初期値の 1.5 倍以上になっている場合は光ピックアップ交換の目安となります。

レーザー駆動電流初期値は、次ページ "lop 値の確認方法" で確認できます。

ピックアップ交換の場合は、トラバースユニット単位での交換となります。メカの調整は不要です。

### レーザー駆動電流初期値:

#### Laser drive current initial value:

DVD:

FL Display (The display part of 13 digits)

1	2	3	4	5	6	7	8	9	10	11	12	13
T	2	2	—	m	m	m	m	—	n	n	n	n

CD:

FL Display (The display part of 13 digits)

1	2	3	4	5	6	7	8	9	10	11	12	13
T	2	1	—	m	m	m	m	—	n	n	n	n

Disc no read, unsteady playback, etc.

ディスクを読み込まない  
スムーズに再生しない等

Laser drive current (lop) check  
HF wave form check  
(Refer to WAVE FORMS)

レーザー駆動電流 lop 値の確認  
H F 波形の確認  
(WAVE FORMS 参照)

Present value exceeds the initial value by 1.5 times

現在値が初期値の  
1.5 倍になっている

Traverse Unit replacing

トラバースユニット交換

Laser current (lop) memorizing after replacement

交換後にレーザー電流値の記憶

## 1. Iop checked Method

Select the laser ON/OFF (CD/DVD) mode of the test mode, and check the Iop value of DVD laser or CD laser.  
(See page 13 for test mode.)

FL Display (The display part of 13 digits)

1	2	3	4	5	6	7	8	9	10	11	12	13
T	2		L	a	s	e	r	O	n	O	f	f

### 1.1. DVD laser current check

- (1) Press the SKIP |◀◀| or |▶▶| button to display the laser current value, and then select T22.
- (2) Check the current value of Iop (nnnn).

FL Display (The display part of 13 digits)

1	2	3	4	5	6	7	8	9	10	11	12	13
T	2	2	—	m	m	m	m	—	n	n	n	n

(— : Off, DVD laser, Initial value: mm.mm [mA],  
Current value: nn.nn [mA])

### 1.2. CD Laser current check

- (1) Press the |◀◀| or |▶▶| button to display the laser current value, and then select T21.
- (2) Check the current value of Iop (nnnn).

FL Display (The display part of 13 digits)

1	2	3	4	5	6	7	8	9	10	11	12	13
T	2	1	—	m	m	m	m	—	n	n	n	n

(— : Off, CD laser, Initial value: mm.mm [mA],  
Current value: nn.nn [mA])

## 2. Note for Handling the Laser Pick-Up

- The protection for the damage of laser diode.  
If you want to change the optical device unit from any other units, you must keep the following.
- (1) It should be done at the desk already took measures the static electricity in care of removing the OPU's (Optical device unit) connector cable.
  - (2) Workers should be put on the "Earth Band".
  - (3) It should be done to add the solder to the short land to prevent the broken Laser diode before removing the 24P FFC cable.
  - (4) Don't touch OPU's connector parts carelessly.

## 3. Replacement of the Laser Pick-up (Traverse Unit)

Check the Iop (Laser drive current)  
If the present Iop (current) value exceeds.+150% of the initial value, replace the Traverse unit (Laser Pick-up) with a new one.

## 1. Iop 値の確認方法

レーザー駆動電流を確認する場合は、テストモードのレーザー ON/OFF (CD/DVD) モードを選択して、DVD レーザーまたは CD レーザーの Iop 値を確認します。  
(詳細は 13 ページ、テストモード参照)

FL 管の表示 (13 行の表示部)

1	2	3	4	5	6	7	8	9	10	11	12	13
T	2		L	a	s	e	r	O	n	O	f	f

### 1.1. DVD レーザー電流確認

- (1) レーザー電流値を表示する場合は、|◀◀|ボタンまたは|▶▶|ボタンを押し、T22 を選択します。
- (2) 現在の Iop 値 (nnnn) を確認します。

FL 管の表示 (13 行の表示部)

1	2	3	4	5	6	7	8	9	10	11	12	13
T	2	2	—	m	m	m	m	—	n	n	n	n

(— : 消灯、DVD レーザー、初期値 : mm.mm[mA],  
現在値 : nn.nn [mA])

### 1.2. CD レーザー電流確認

- (1) レーザー電流値を表示する場合は、|◀◀|ボタンまたは|▶▶|ボタンを押し、T21 を選択します。
- (2) 現在の Iop 値 (nnnn) を確認します。

FL 管の表示 (13 行の表示部)

1	2	3	4	5	6	7	8	9	10	11	12	13
T	2	1	—	m	m	m	m	—	n	n	n	n

(— : 消灯、CD レーザー、初期値 : mm.mm[mA],  
現在値 : nn.nn [mA])

## 2. レーザーピックアップの取扱注意

レーザーダイオードの破壊防止。

光素子ユニットを交換するときは、以下を遵守してください。

- (1) 光素子ユニットの接続ケーブルをはずすときは、静電対策を行ったデスク上で作業してください。
- (2) 作業者は、リストストラップを使用してください。
- (3) レーザーダイオードの破壊防止のため、24P FFC ケーブルをはずす前にランドを半田付けショートしてください。
- (4) 光素子ユニットのコネクタ部に触れないでください。

## 3. レーザーピックアップ ( ト ラ バ ー ス ユ ニ ッ ト ) の交換

Iop ( レーザー駆動電流 ) をチェックします。

現在の Iop 値が初期値の 150% を越えている場合、トラバースユニット ( レーザーピックアップ ) を交換してください。

#### 4. Rewriting the default value of the laser current

To rewrite the default value of the laser current, press the ▶ button for at least 5 seconds while the CD or DVD laser current is displayed, then press the |◀◀| or |▶▶| button to select T23. (For details, see "lop checked Method" on page 22.)

If the ▶ button is pressed while T23 is displayed, the current value is displayed at "mmmm" and stored in the EEPROM.

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	2	3	—	m	m	m	m	—	—	—	—	—

#### 5. Resetting the accumulated laser on time

To clear the accumulated laser on time, press the ▶ button while the accumulated laser on time is displayed (TB1, TB2 : For details, see "Test Mode" on page 22.) until "\*" appears at the fourth position, then press the |◀◀| or |▶▶| button to select TB3.

If the ▶ button is pressed while TB3 is displayed, the accumulated laser on time of CD and DVD is cleared.

When TB1 or TB2 is selected with the |◀◀| or |▶▶| button, "nnnnnnn" is displayed as 0 so you can check.

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	B	Y	—	—	—	n	n	n	n	n	n	n

(— : Off, Y : 1: CD, 2: DVD, nnnnnnnn: Hour [h])

#### 4. レーザー電流初期値の書き換え方法

レーザー電流の初期値を書き換えるには、CD または DVD レーザー電流が表示されている時に▶ボタンを5秒以上押し、次に|◀◀|ボタンまたは|▶▶|ボタンを押してT23を選択します。(詳細は22ページ、lop値の確認方法参照)

T23表示時に▶ボタンを押すと、mmmm部に現在値を表示し、EEPROMに保存します。

FL管の表示(13桁の表示部)

1	2	3	4	5	6	7	8	9	10	11	12	13
T	2	3	—	m	m	m	m	—	—	—	—	—

#### 5. レーザーON累積時間のリセット方法

レーザーON累積時間をクリアするには、レーザーON累積時間表示(TB1,TB2)の時(詳細は22ページ、テストモード参照)に▶ボタンを4桁目に'\*'が表示されるまで押し、|◀◀|ボタンまたは|▶▶|ボタンを押しTB3を表示させます。

TB3表示時に▶ボタンを押すと、CD及びDVDレーザーON累積時間をクリアします。

|◀◀|ボタンまたは|▶▶|ボタンでTB1またはTB2を選択すると、nnnnnnn部が0表示となり確認できます。

FL管の表示(13桁の表示部)

1	2	3	4	5	6	7	8	9	10	11	12	13
T	B	Y	—	—	—	n	n	n	n	n	n	n

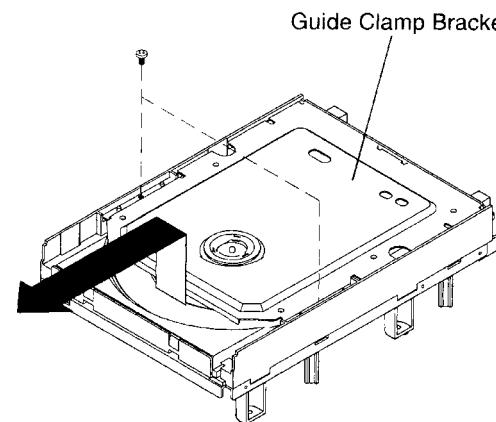
(— : 消灯、Y : 1: CD, 2: DVD、nnnnnnn : 時間 [h])

## HOW TO REPLACE TRAVERSE UNIT

**Caution:** The optical pickup can be damaged easily by static electricity charged on human body.  
Take necessary anti-static measures when repairing around the optical pickup.

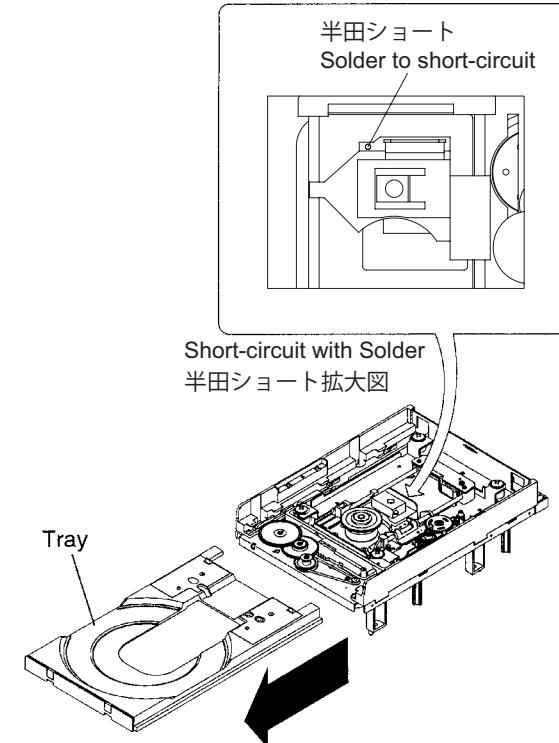
### 1. Guide Clamp Bracket disassembly

- (1) Remove 2 screws.
- (2) Remove Guide Clamp Bracket to arrow direction.



### 2. Tray disassembly

- (1) Remove to arrow direction.
- (2) Solder the short-circuit (see in the frame).



## トラバースユニットの交換方法

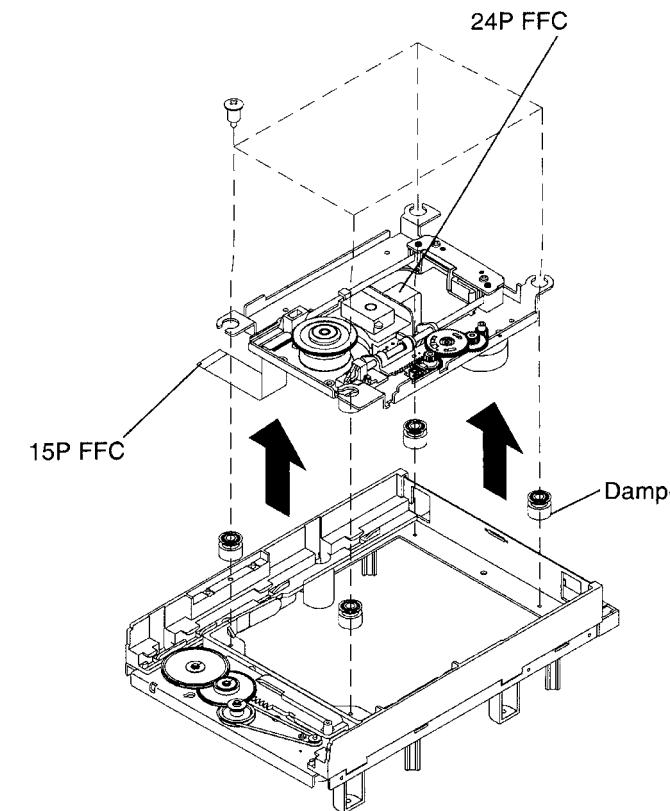
注意：光ピックアップは、人体に帯電した静電気等で静電破壊することがあります。光ピックアップ周辺を修理する際は、必要な静電対策を行ってください。

### 1. ガイドクランプブラケットのはずしかた

- (1) ねじ2本をはずします。
- (2) ガイドクランプブラケットを矢印方向にとりはずします。

### 3. Traverse Unit disassembly

- (1) Remove 24P FFC, 15P FFC and 5P PH WIRE connecting with from the Main P.W.B.
- (2) Remove 4 screws fixing Damper.
- (3) Remove Traverse Unit to arrow direction.



### 2. トレイのはずしかた

- (1) 矢印方向にとりはずします。
- (2) 半田付けショートを行います。(枠内図参照)

### Note for disassembly Traverse Unit

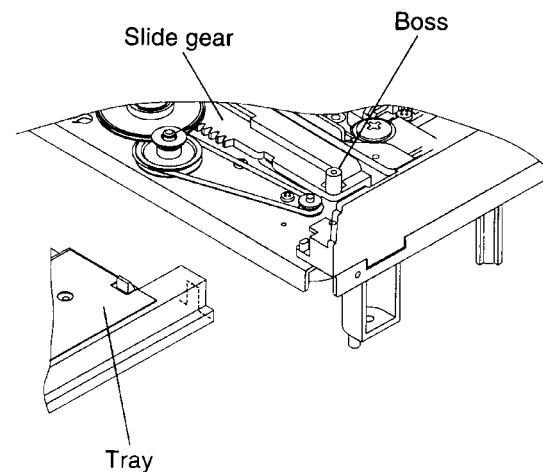
- (1) When assembling, reverse the order of the above.
- (2) When inserting Tray, confirm boss on Slide Cam set to ditch of the Tray (Compare with below drawing).

### 3. トラバースユニットのはずしかた

- (1) メイン基板に接続している24P FFC、15P FFC、5P PH ワイヤをはずします。
- (2) ダンパーを固定しているねじ4本をはずします。
- (3) トラバースユニットを矢印方向にとりはずします。

### トラバースユニット分解の注意

- (1) 組み立てるときは、上記の逆の順序で行ってください。
- (2) トレイ組込み時、スライドカムのボスがトレイの溝に合っているか確認してください。(下図参照)



## SERVICE MODE

### 1. Aging Mode

#### 1.1. preparation

(1) Equipment used: Any one of DVD Karaoke Disc (containing more than 10 titles).

(ex : Heat run disc TDV-HR01)

(2) Unit setting : No spec other than the following procedure.

#### 1.2. procedure

※ Perform aging of the DVD.

(1) Pressing the ■ and ▶ buttons simultaneously, plug the AC cord into a power outlet, then press the ON/STANDBY button to turn the power on. This sets the aging mode.

- Once the aging mode is set, press the FUNCTION button to switch the mode.

(After the display is put out at the switch, it selects.)

(a) To select the normal aging mode ... Start from (2)

(b) To select the error rate display mode ... Start from (8)

(2) Press the ▶ button and play all the tracks recorded on the disc.

(3) Both the "▶" and "■" indicators light on the fluorescent display tube.

(4) When the ▶ button is pressed once with the tray open, titles 1 and 10 recorded on the disc are played.

(5) The "▶" indicator flashes and the "■" indicator lights on the fluorescent display tube.

(6) Once playback is completed, open and close the tray and repeat the operation in step (3) or (4).

(7) If there is an error while in the aging mode, the error is displayed and the stop mode is set with the status at that time.

NOTE) • The FUNCTION button on the main unit and the FUNCTION selector button on the remote control unit will not work during the aging mode.  
(If the function is switched, the DVD stops and the aging mode is canceled.)

• The ON/STANDBY buttons on the main unit and the remote control unit will not work during the aging mode.

(If the set's power is turned off, the DVD stops and the aging mode is canceled.)

(8) When the error rate display mode is set, the final error rate information is displayed on the fluorescent display tube.

No.	Error contents	FL display
1	Bad Disc	
2	Focus Error	
3	Read Error	
4	Tracking Error	
5	Tray Error	
6	Navigation Pack Read Error	
7	Communication Error	

FL Display (The display part of 13 digits)

1	2	3	4	5	6	7	8	9	10	11	12	13
E	7			X	X		X	X		X	X	

## サービスモードについて

### 1. エージングモード

#### 1.1. 準備

(1) 使用機器 : DVD カラオケディスク (10 タイトル以上のもの)  
(例 : ヒートランディスク TDV-HR01)

(2) 本体設定 : 下記設定以外規定無。

#### 1.2. 手順

※ DVD のエージングをおこなう。

(1) 本体の ■ ボタンと ▶ ボタンを同時に押しながら、AC コードをコンセントへ接続し、ON/STANDBY ボタンを押してセットの電源を入れると、エージングモードが設定される。

・ エージングモード設定後、FUNCTION ボタンを押して、モードを切り替える。  
(切り替え時に表示を出してから選択する。)

(a) 通常のエージングモードを選択 ... (2) から開始

(b) エラーレート表示モードを選択 ... (8) から開始

(2) ▶ ボタンを押し、ディスクに収録されている全ての曲を再生する。

(3) FL 管の "▶" インジケーターと "■" インジケーターが両方とも点灯する。

(4) トレイを開いた状態で ▶ ボタンを 1 回押して、ディスクに収録されているタイトル 1 とタイトル 10 を再生する。

(5) FL 管の "▶" インジケーターが点滅し、"■" インジケーターが点灯する。

(6) 再生終了後、トレイを開閉させ (3) または (4) の動作をする。

(7) エージングモード中にエラーが発生すると、エラーを表示し、その時の状態で停止する。

注) • エージングモード中は、本体の FUNCTION ボタンおよび、リモコンの FUNCTION 切替ボタンは動作しない。  
(ファンクションを変えると DVD が停止し、エージングモードが解除される。)

• エージングモード中は本体およびリモコンの ON/STANDBY ボタンを動作しない。  
(セットの電源を OFF にすると DVD が停止し、エージングモードが解除される。)

(8) エラーレート表示モードに入ると、最終エラーレート情報を FL 管に表示する。

No.	エラー内容	FL 管表示
1	不良ディスク	
2	フォーカスエラー	
3	リードエラー	
4	トラッキングエラー	
5	トレイエラー	
6	ナビゲーションパックエラー	
7	コマンド通信エラー	

FL 管の表示 (13 枠の表示部)

1	2	3	4	5	6	7	8	9	10	11	12	13
E	7			X	X		X	X		X	X	

## 2. Initial Setting Mode

### 2.1. Preparation

- (1) Equipment used: None
- (2) Unit setting: No spec other than the following procedure.

### 2.2. Procedure

#### ● SYSTEM

※ This initializes the data for the function, volume, DVD mechanism, etc.

- (1) When the ON/STANDBY button is pressed to turn the set on while pressing the main unit's FUNCTION and **◀◀** buttons simultaneously, the initialization mode is set.
- (2) The standby indicator lights yellow and "INITIALIZE" is displayed on the fluorescent display tube.
- (3) Once the entire initialization procedure has been completed, the set is in the normal mode with the power turned on.

#### ● DVD

※ This initializes the data for the DVD mechanism.

- (1) With the power on, set the function to DVD, and in the playback stopped mode, press the **■** and **◀◀** buttons simultaneously for at least 2 seconds to set the DVD initialization mode.
- (2) "INITIALIZE" is displayed on the fluorescent display tube.

## 3. μcom Firm Check Mode

### 3.1. Preparation

- (1) Equipment used: None
- (2) Unit setting: No spec other than the following procedure.

### 3.2. Procedure

※ Use this to display the version information, etc.

- (1) When, in the standby mode, the ON/STANDBY button is pressed to turn the set on while pressing the main unit's FUNCTION and **▶▶■** buttons simultaneously, the system check mode is set.
- (2) Press the STATUS button on the remote control unit to display the following information, in this order: System microprocessor version → Date of system microprocessor version updating → DSP version → Date of DSP version updating → Drive microprocessor version of DVD mechanism → ESS version → Date of ESS version updating.
- (3) Unplug AC cord to clear this mode.

NOTE) The DVD mechanism driver version and ESS version are not displayed unless the function is once set to DVD.

## 2. イニシャルモード

### 2.1. 準備

- (1) 使用機器：無
- (2) 本体設定：下記手順以外規定無。

### 2.2. 手順

#### ● システム

※ ファンクション、VOL 等およびDVD メカのバックアップデータの初期化をおこなう。

- (1) 本体 FUNCTION ボタンと**◀◀**ボタンを同時に押しながら、ON/STANDBY ボタンを押してセットの電源を入れるとイニシャルモードが設定される。
- (2) スタンバイ LED が黄色に点灯し、FL 管に "INITIALIZE" が表示される。
- (3) 全ての初期化完了後、通常モードの電源 ON の状態になる。

#### ● DVD

※ DVD のみのバックアップデータの初期化をおこなう。

- (1) 電源 ON 時にファンクションを DVD にし再生停止状態で、**■** ボタンと**◀◀**ボタンを 2 秒以上同時に押し続けると、DVD 初期化モードが設定される。
- (2) FL 管に "INITIALIZE" が表示される。

## 3. マイコンファームチェックモード

### 3.1. 準備

- (1) 使用機器：無
- (2) 本体設定：下記手順以外規定無。

### 3.2. 手順

※ バージョン表示等をおこなう。

- (1) STANDBY 時に本体 FUNCTION ボタンと**▶▶■**ボタンを同時に押しながら、ON/STANDBY ボタンを押してセットの電源を入れると、システムチェックモードが設定される。
- (2) リモコンの STATUS ボタンを押すと、システムマイコンのバージョン→システムマイコンのバージョンアップ日→DSP のバージョン→DSP のバージョンアップ日→DVD メカのドライブマイコンのバージョン→ESS のバージョン→ESS のバージョンアップ日の順に表示される。
- (3) AC コードを抜くことにより、システムチェックモードを解除する。  
注) DVD メカのドライブバージョン、ESS のバージョンの表示については、一度ファンクションを DVD にしないと表示されない。







#### 4.5. Execution of trace mode (error rate display) (See "Table 2 - Trace mode details")

Trace will be performed if the ► button is pushed after choosing operation.

FL Display (The display part of 13 digits)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	Y	Y	m	m	m	m	m	m	I	I	I	I

(YY : selection mode [71 to 94], m : address [PBA][HEX], I : error rate [COUNT/SEC] [HEX])

Note) CD : Error rate of 75 frames is displayed (1 second).

DVD : Error rate of 8ECC block is displayed.

The mode chosen when selection mode was changed into the trace execution and the ► button was pushed is performed from the beginning.

When the ► button is pushed without changing selection mode, the mode under selection is performed from the beginning.  
(If the ► button is pushed, the address corresponding to the chosen mode will be searched again.)

The pause mode is set after tracing is completed.

#### 4.5. トレースモード(エラーレート表示)の実行(表2 トレースモード詳細参照)

動作を選択した後、►ボタンを押すとトレースを実行する。

FL 管の表示(13桁の表示部)												
1	2	3	4	5	6	7	8	9	10	11	12	13
T	Y	Y	m	m	m	m	m	m	I	I	I	I

(YY : 選択モード [71 ~ 94]、m: アドレス [PBA][HEX]、I : エラーレート [COUNT][DEC])

注) CD : 表示するエラーレートは、75 フレーム分の値(1秒)。

DVD : 表示するエラーレートは、8ECC ブロック分の値。

トレース実行中に選択モードを変更し、►ボタンを押すと選択したモードを最初から実行する。  
選択モードを変更せずに►ボタンを押した場合も、選択中のモードを最初から実行する。

(►ボタンを押すと、選択しているモードに対応したアドレスを再度サーチする。)

トレース終了時は、PAUSE 状態になります。

#### 4.6. Other operations

- ① When the ■ button is pressed, the mode returns to the previously selected mode.

#### 4.6. その他の動作

- ① ■ボタンを押すと、前の選択モードに戻る。

#### (1) Test mode detailed table

Table 1: Servo adjustment value display mode details

XXX	Name	Size	Meaning	Remarks
T31	fbal0	16bits	CD/DVD L0 layer focus balance adjustment value	FBAL range: 0x8000 < FBAL < 0x7FC0(Center:0x0000)
T32	tbal0	16bits	CD/DVD L0 layer tracking balance adjustment value	TBAL range: 0x0000 < TBAL < 0x003F
T33	fcga0	16bits	CD/DVD L0 layer focus Loop Gain adjustment value	1x for 0x100 [0x200 (2x) set to Typ. (1x for 0x100, 2x for 0x200. Y/0x100 ratio calculation.) Adjustment value 0x200 sets so that gain crossover reaches target.]
T34	tkga0	16bits	CD/DVD L0 layer tracking Loop Gain adjustment value	1x for 0x100 [0x200 (2x) set to Typ. (1x for 0x100, 2x for 0x200. Y/0x100 ratio calculation.) Adjustment value 0x202 sets so that gain crossover reaches target.]
T35	Fbal1	16bits	DVD L1 layer focus balance adjustment value	FBAL range: 0x8000 < FBAL < 0x7FC0(Center:0x0000)
T36	Tbal1	16bits	DVD L1 layer tracking balance adjustment value	TBAL range: 0x0000 < TBAL < 0x003F
T37	Fcga1	16bits	DVD L1 layer focus Loop Gain adjustment value	1x for 0x100 [0x200 (2x) set to Typ. (1x for 0x100, 2x for 0x200. Y/0x100 ratio calculation.) Adjustment value 0x200 sets so that gain crossover reaches target.]
T38	Tkga1	16bits	DVD L1 layer tracking Loop Gain adjustment value	1x for 0x100 [0x200 (2x) set to Typ. (1x for 0x100, 2x for 0x200. Y/0x100 ratio calculation.) Adjustment value 0x202 sets so that gain crossover reaches target.]
T39	Asoffs	16bits	AS signal Offset value	Upper 10 bit is valid
T40	Envoffse	16bits	ENV signal Offset adjustment value	Upper 10 bit is valid
T41	Foffse	16bits	FE signal Offset adjustment value	Upper 10 bit is valid
T42	Teoffse	16bits	TE signal Offset adjustment value	Upper 10 bit is valid
T43	RFfc	8bits	RF signal frequency adjustment value	
T44	RFbst	8bits	RF signal Boost adjustment value	Adjustment range : 0x0000 ~ 0x001F 0x0000 : 0dB 0x001F : 14dB
T45	RFgdl	8bits	RF signal low range group delay adjustment value	
T46	RFgdh	8bits	RF signal high range group delay adjustment value	

#### (1) テストモード詳細一覧表

表1 サーボ調整値表示モード詳細

XXX	名称	サイズ	意味	備考
T31	fbal0	16ビット	CD/DVD L0 層フォーカスバランス調整値	FBAL の範囲は 0x8000 < FBAL < 0x7FC0。(センター : 0x0000)
T32	tbal0	16ビット	CD/DVD L0 層トラッキングバランス調整値	TBAL の範囲は 0x0000 < TBAL < 0x003F。
T33	fcga0	16ビット	CD/DVD L0 層フォーカス Loop Gain 調整値	0x100 で 1 倍 [0x200(2 倍) を Typ に設定する] (0x100 で 1 倍、0x200 で 2 倍。Y/0x100 の比率計算) 調整値 0x200 で Gain 交点が目標ターゲットになる様設定している。
T34	tkga0	16ビット	CD/DVD L0 層トラッキング Loop Gain 調整値	0x100 で 1 倍 [0x200(2 倍) を Typ に設定する。 (0x100 で 1 倍、0x200 で 2 倍。Y/0x100 の比率計算) 調整値 0x202 で Gain 交点が目標ターゲットになる様設定している。
T35	Fbal1	16ビット	DVD L1 層フォーカスバランス調整値	FBAL の範囲は 0x8000 < FBAL < 0x7FC0。(センター : 0x0000)
T36	Tbal1	16ビット	DVD L1 層トラッキングバランス調整値	TBAL の範囲は 0x0000 < TBAL < 0x003F。
T37	Fcga1	16ビット	DVD L1 層フォーカス Loop Gain 調整値	0x100 で 1 倍 [0x200(2 倍) を Typ に設定する] (0x100 で 1 倍、0x200 で 2 倍。Y/0x100 の比率計算) 調整値 0x200 で Gain 交点が目標ターゲットになる様設定している。
T38	Tkga1	16ビット	DVD L1 層トラッキング Loop Gain 調整値	0x100 で 1 倍 [0x200(2 倍) を Typ に設定する] (0x100 で 1 倍、0x200 で 2 倍。Y/0x100 の比率計算) 調整値 0x202 で Gain 交点が目標ターゲットになる様設定している。
T39	Asoffs	16ビット	AS 信号の Offset 値	上位 10bit が有効
T40	Envoffse	16ビット	ENV 信号の Offset 調整値	上位 10bit が有効
T41	Foffse	16ビット	FE 信号の Offset 調整値	上位 10bit が有効
T42	Teoffse	16ビット	TE 信号の Offset 調整値	上位 10bit が有効
T43	RFfc	8ビット	RF 信号の周波数調整値	
T44	RFbst	8ビット	RF 信号の Boost 調整値	調整範囲 : 0x0000 ~ 0x001F 0x0000 : 0dB 0x001F : 14dB
T45	RFgdl	8ビット	RF 信号の低域群遅延調整値	
T46	RFgdh	8ビット	RF 信号の高域群遅延調整値	

Table 2: Trace mode details

YY	Contents	Contents supplement
71	A display of PO error detection number of the inner circumference of 1-layer and an address.	It is invalid at the time of CD operation.
72	A display of PO uncorrectable number of the inner circumference of 1-layer and an address.	It is invalid at the time of CD operation.
73	A display of PI error detection number of the inner circumference of 1-layer and an address.	CD : C1 error detection number (x3)
74	A display of PI uncorrectable number of the inner circumference of 1-layer and an address.	It is invalid at the time of CD operation.
75	A display of PO error detection number of the central circumference of 1-layer and an address.	It is invalid at the time of CD operation.
76	A display of PO uncorrectable number of the central circumference of 1-layer and an address.	It is invalid at the time of CD operation.
77	A display of PI error detection number of the central circumference of 1-layer and an address.	CD : C1 error detection number (x3)
78	A display of PI uncorrectable number of the central circumference of 1-layer and an address.	It is invalid at the time of CD operation.
79	A display of PO error detection number of the outer circumference of 1-layer and an address.	It is invalid at the time of CD operation.
80	A display of PO uncorrectable number of the outer circumference of 1-layer and an address.	It is invalid at the time of CD operation.
81	A display of PI error detection number of the outer circumference of 1-layer and an address.	CD : C1 error detection number (x3)
82	A display of PI uncorrectable number of the outer circumference of 1-layer and an address.	It is invalid at the time of CD operation.
83	A display of PO error detection number of the inner circumference of 2-layer and an address.	In the case of 1-layer DVD and CD disc, it is invalid.
84	A display of PO uncorrectable number of the inner circumference of 2-layer and an address.	In the case of 1-layer DVD and CD disc, it is invalid.
85	A display of PI error detection number of the inner circumference of 2-layer and an address.	In the case of 1-layer DVD disc, it is invalid. CD : C1 error detection number (x6)
86	A display of PI uncorrectable number of the inner circumference of 2-layer and an address.	In the case of 1-layer DVD and CD disc, it is invalid.
87	A display of PO error detection number of the central circumference of 2-layer and an address.	In the case of 1-layer DVD and CD disc, it is invalid.
88	A display of PO uncorrectable number of the central circumference of 2-layer and an address.	In the case of 1-layer DVD and CD disc, it is invalid.
89	A display of PI error detection number of the central circumference of 2-layer and an address.	In the case of 1-layer DVD disc, it is invalid. CD : C1 error detection number (x6)
90	A display of PI uncorrectable number of the central circumference of 2-layer and an address.	In the case of 1-layer DVD and CD disc, it is invalid.
91	A display of PO error detection number of the outer circumference of 2-layer and an address.	In the case of 1-layer DVD and CD disc, it is invalid.
92	A display of PO uncorrectable number of the outer circumference of 2-layer and an address.	In the case of 1-layer DVD and CD disc, it is invalid.
93	A display of PI error detection number of the outer circumference of 2-layer and an address.	In the case of 1-layer DVD disc, it is invalid. CD : C1 error detection number (x6)
94	A display of PI uncorrectable number of the outer circumference of 2-layer and an address.	In the case of 1-layer DVD and CD disc, it is invalid.

表2 トレースモード詳細

YY	内容	補足説明
71	1層内周の PO 誤り検出数とアドレスの表示	CD 時は無効。
72	1層内周の PO 訂正不可数とアドレスの表示	CD 時は無効。
73	1層内周の PI 誤り検出数とアドレスの表示	CD 時は C1 誤り検出数。(x3)
74	1層内周の PI 訂正不可数とアドレスの表示	CD 時は無効。
75	1層中周の PO 誤り検出数とアドレスの表示	CD 時は無効。
76	1層中周の PO 訂正不可数とアドレスの表示	CD 時は無効。
77	1層中周の PI 誤り検出数とアドレスの表示	CD 時は C1 誤り検出数。(x3)
78	1層中周の PI 訂正不可数とアドレスの表示	CD 時は無効。
79	1層外周の PO 誤り検出数とアドレスの表示	CD 時は無効。
80	1層外周の PO 訂正不可数とアドレスの表示	CD 時は無効。
81	1層外周の PI 誤り検出数とアドレスの表示	CD 時は C1 誤り検出数。(x3)
82	1層外周の PI 訂正不可数とアドレスの表示	CD 時は無効。
83	2層内周の PO 誤り検出数とアドレスの表示	DVD 1層ディスクの場合、無効。 CD 時は無効。
84	2層内周の PO 訂正不可数とアドレスの表示	DVD 1層ディスクの場合、無効。 CD 時は無効。
85	2層内周の PI 誤り検出数とアドレスの表示	DVD 1層ディスクの場合、無効。 CD 時は C1 誤り検出数。(x6)
86	2層内周の PI 訂正不可数とアドレスの表示	DVD 1層ディスクの場合、無効。 CD 時は無効。
87	2層中周の PO 誤り検出数とアドレスの表示	DVD 1層ディスクの場合、無効。 CD 時は無効。
88	2層中周の PO 訂正不可数とアドレスの表示	DVD 1層ディスクの場合、無効。 CD 時は無効。
89	2層中周の PI 誤り検出数とアドレスの表示	DVD 1層ディスクの場合、無効。 CD 時は C1 誤り検出数。(x6)
90	2層中周の PI 訂正不可数とアドレスの表示	DVD 1層ディスクの場合、無効。 CD 時は無効。
91	2層外周の PO 誤り検出数とアドレスの表示	DVD 1層ディスクの場合、無効。 CD 時は無効。
92	2層外周の PO 訂正不可数とアドレスの表示	DVD 1層ディスクの場合、無効。 CD 時は無効。
93	2層外周の PI 誤り検出数とアドレスの表示	DVD 1層ディスクの場合、無効。 CD 時は C1 誤り検出数。(x6)
94	2層外周の PI 訂正不可数とアドレスの表示	DVD 1層ディスクの場合、無効。 CD 時は無効。

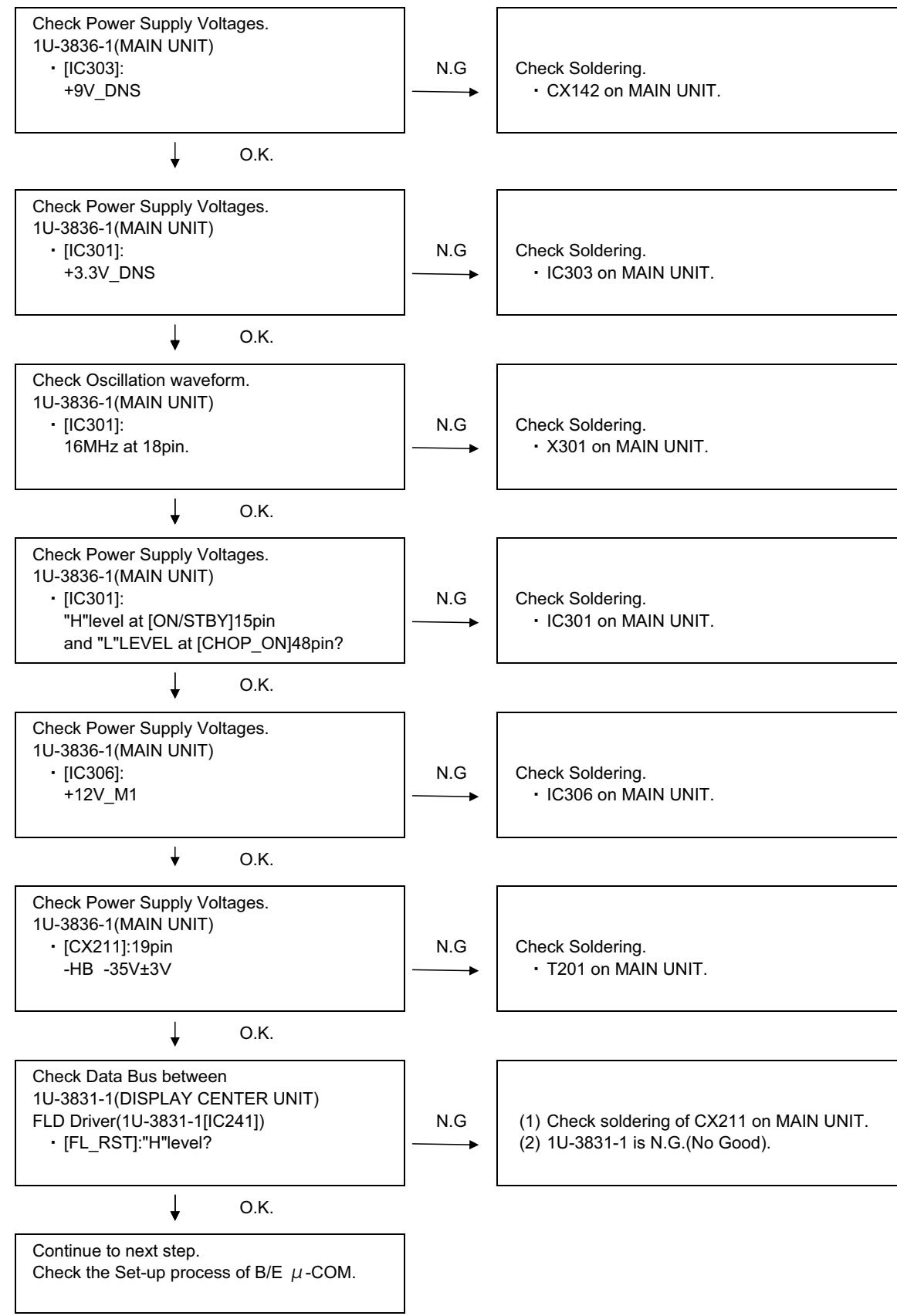
## TROUBLE SHOOTING

### ● ADV-S102

#### 1. 1U-3836 (MAIN UNIT)

##### 1.1. FL TUBE doesn't light

(1) Check the Set-up process of System  $\mu$ -COM



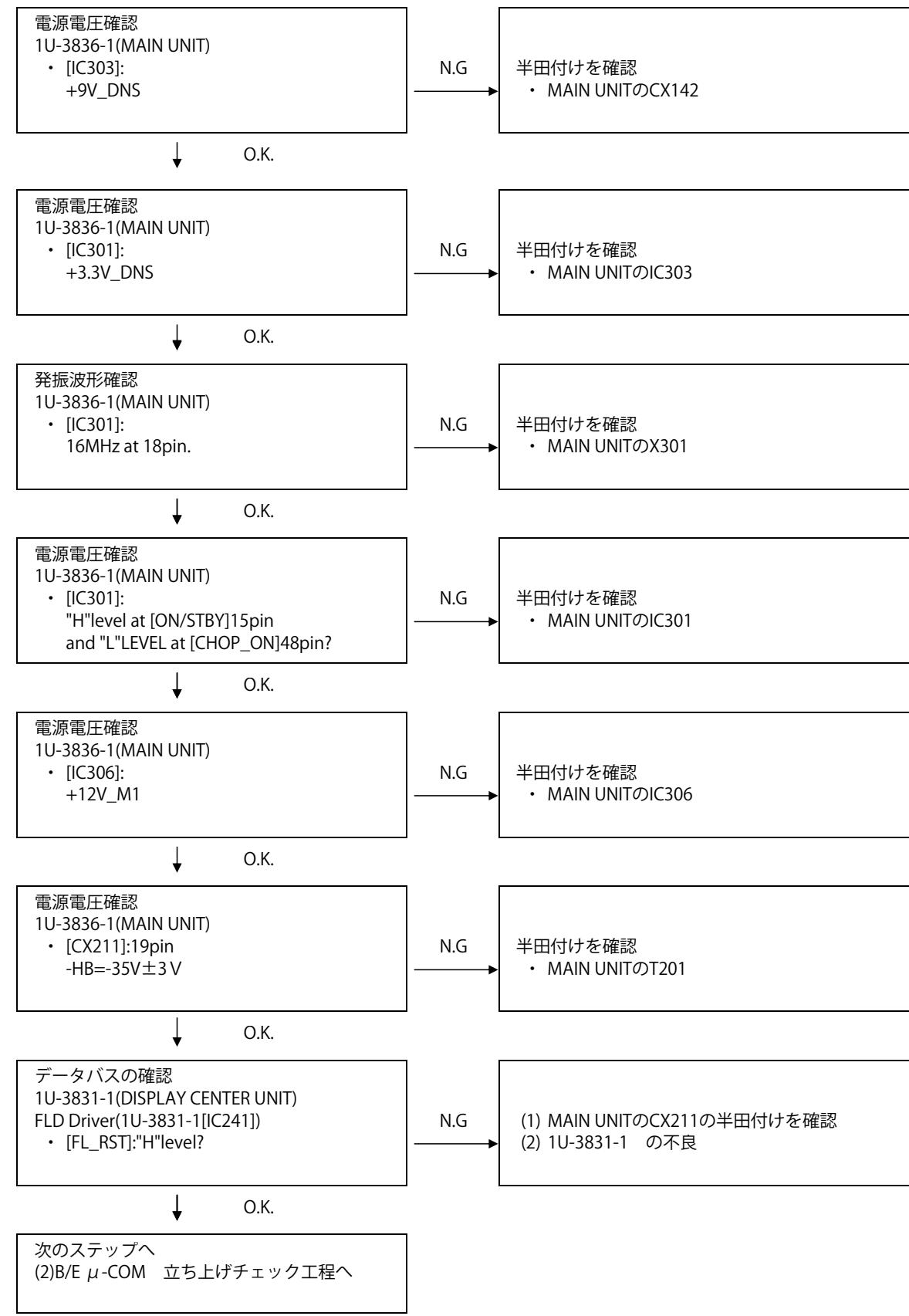
## トラブルシューティング

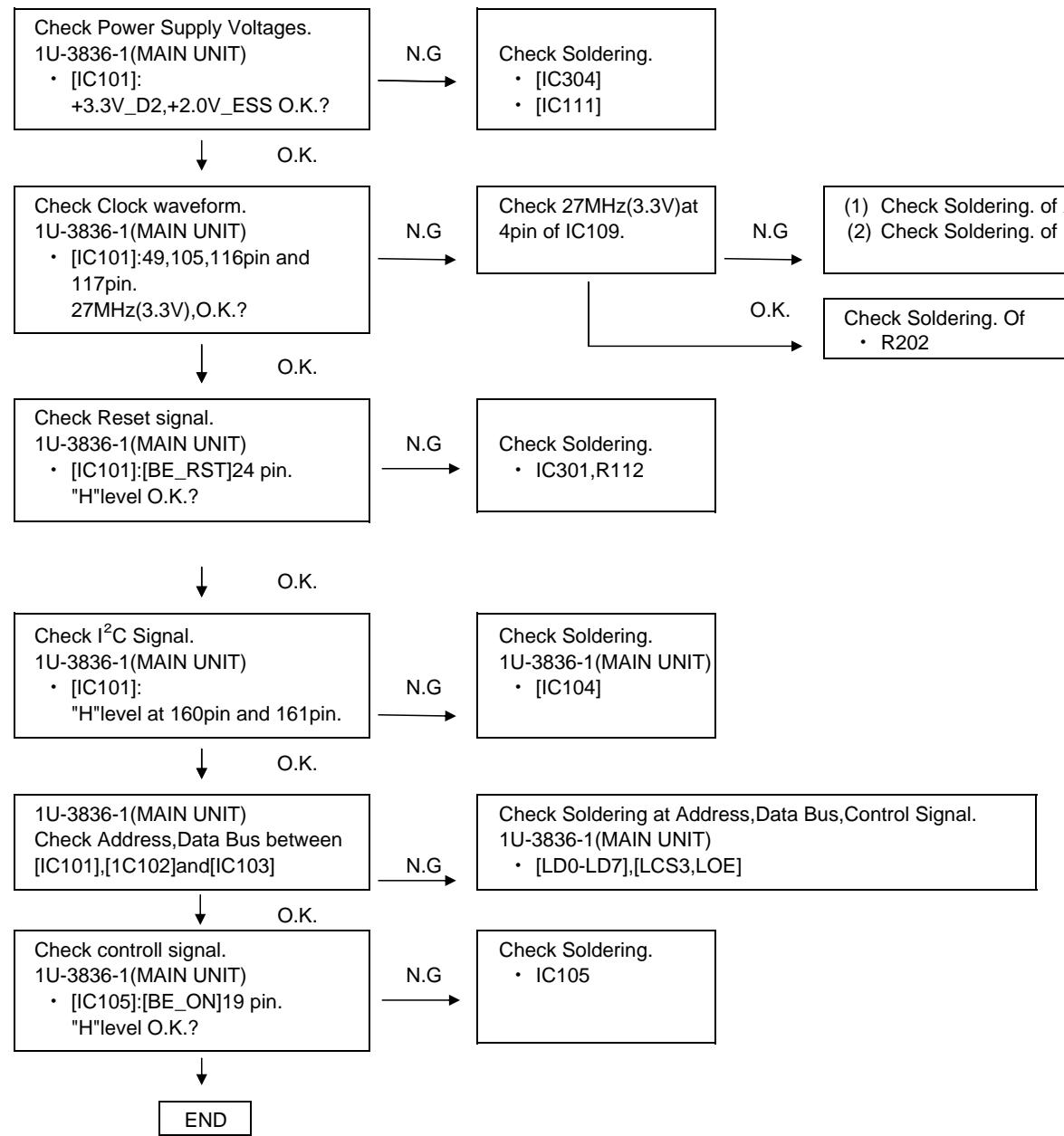
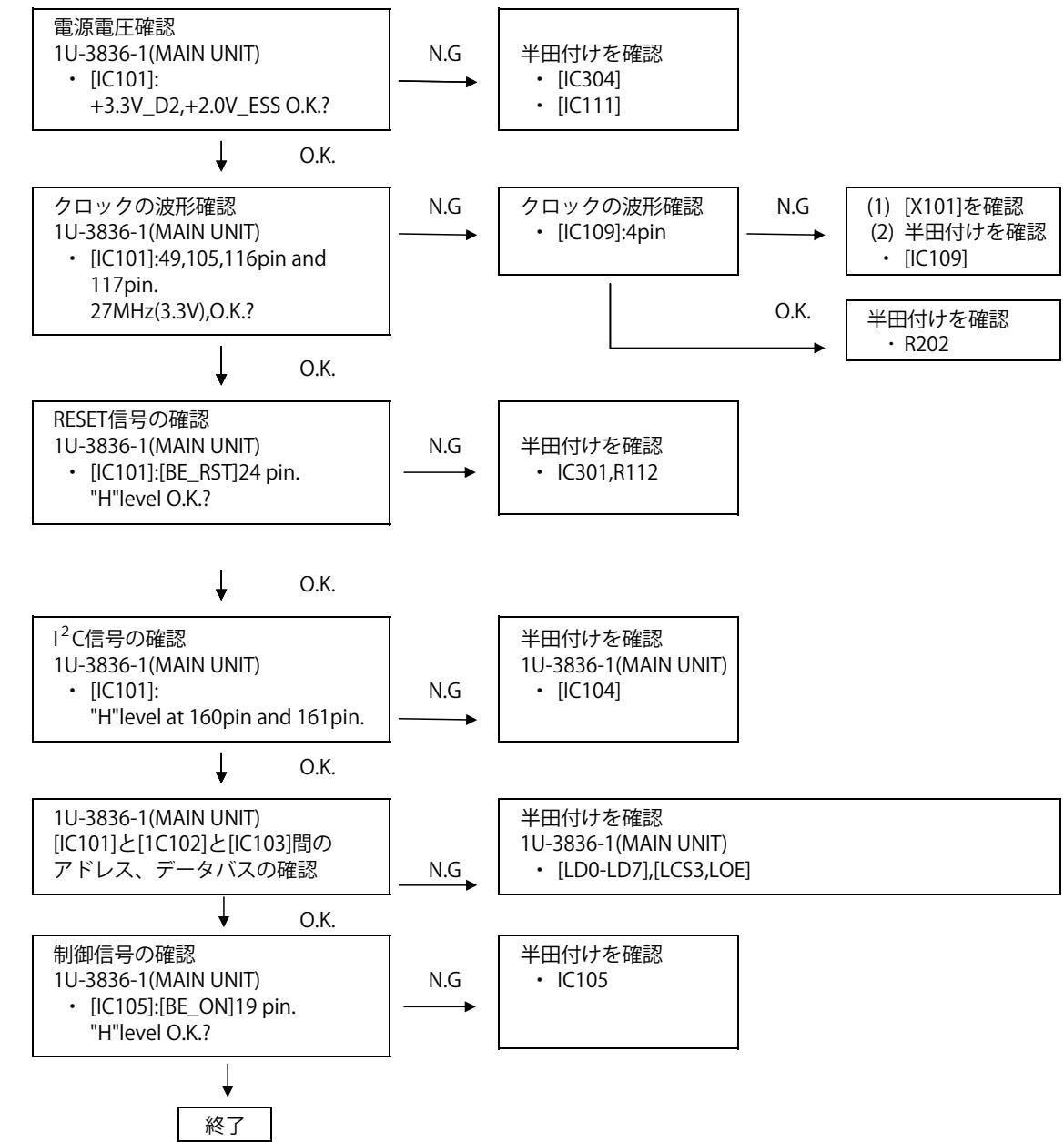
### ● ADV-S102

#### 1. 1U-3836 (MAIN UNIT)

##### 1.1. FL管点灯せず

(1) システム  $\mu$ -COM 立ち上がりチェック工程

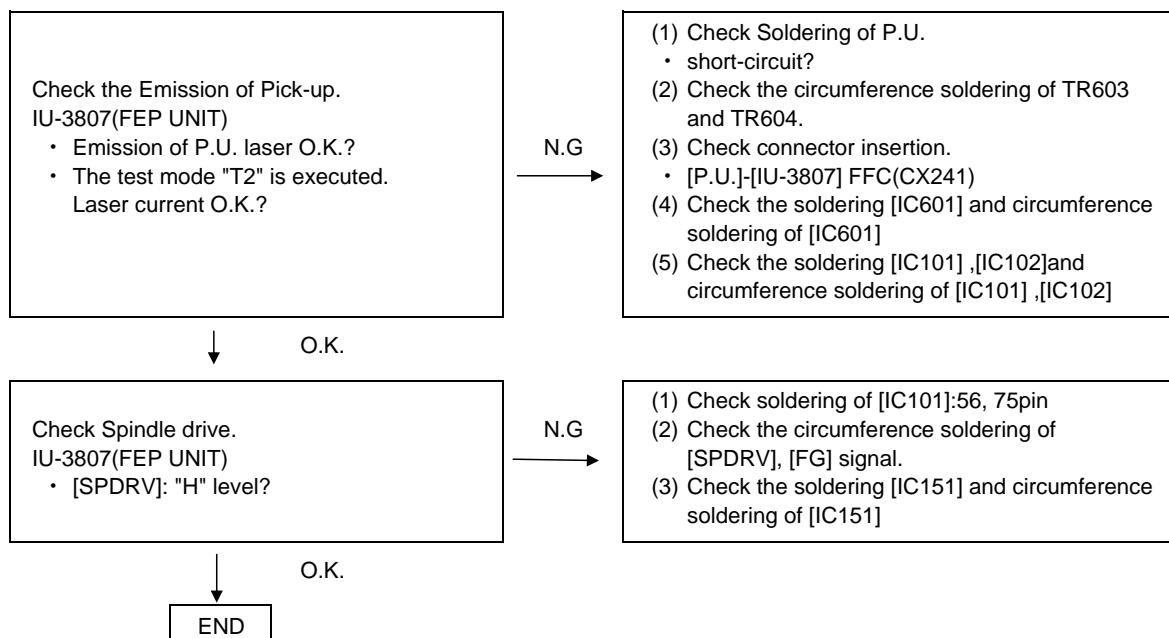


(2) Check the Set-up process of B/E  $\mu$ -COM(2) B/E  $\mu$ -COM 立ち上がりチェック工程

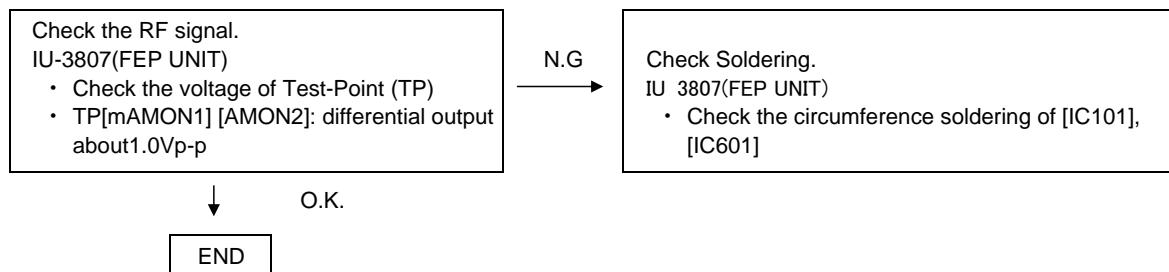
## 1.2. No Sound, Noise generated

[No Play], [00 00] displayed etc.

(1) CD,DVD PLAY



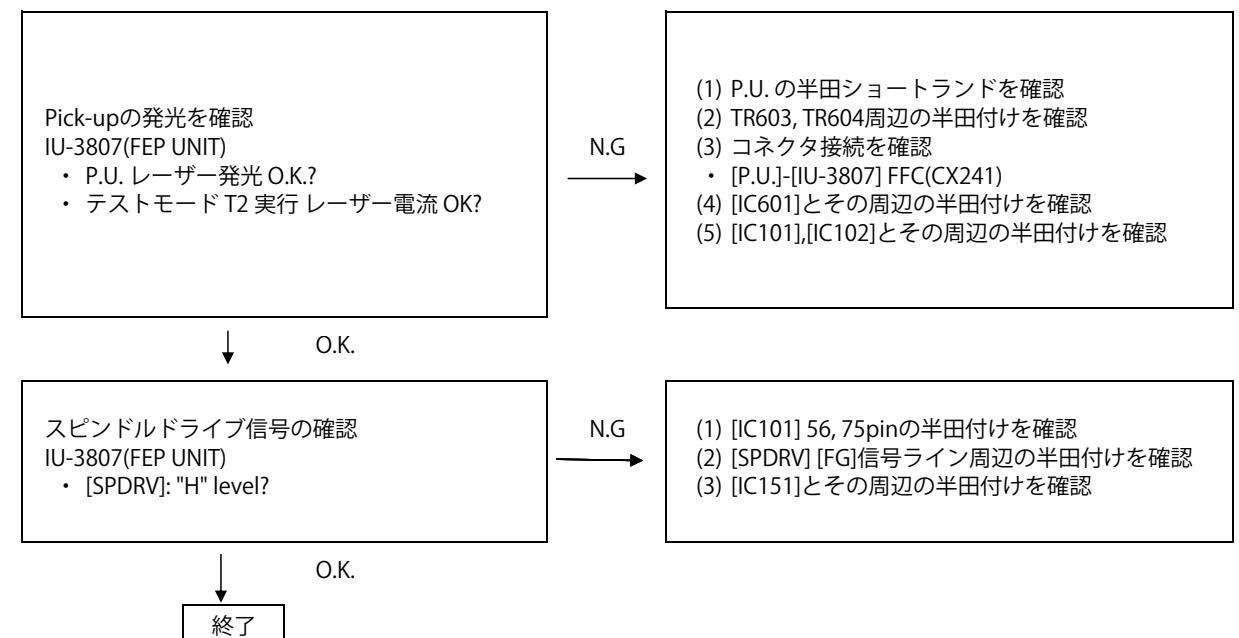
(2) CD or DVD check process



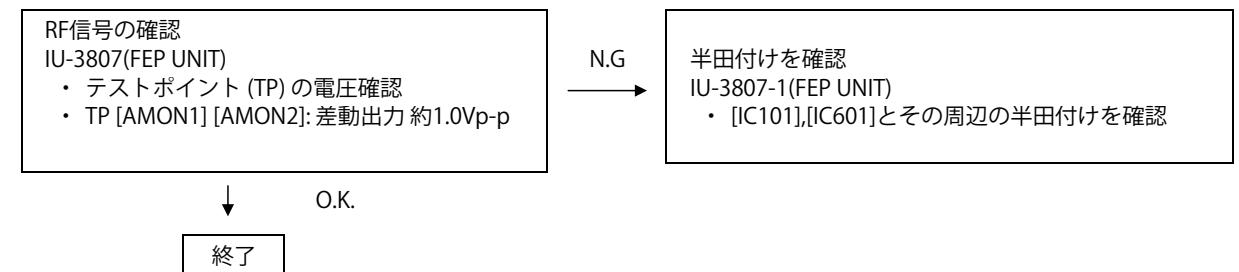
## 1.2. ディスク読めず

[No Play], [00 00] 等の表示

(1) ディスク回転せず

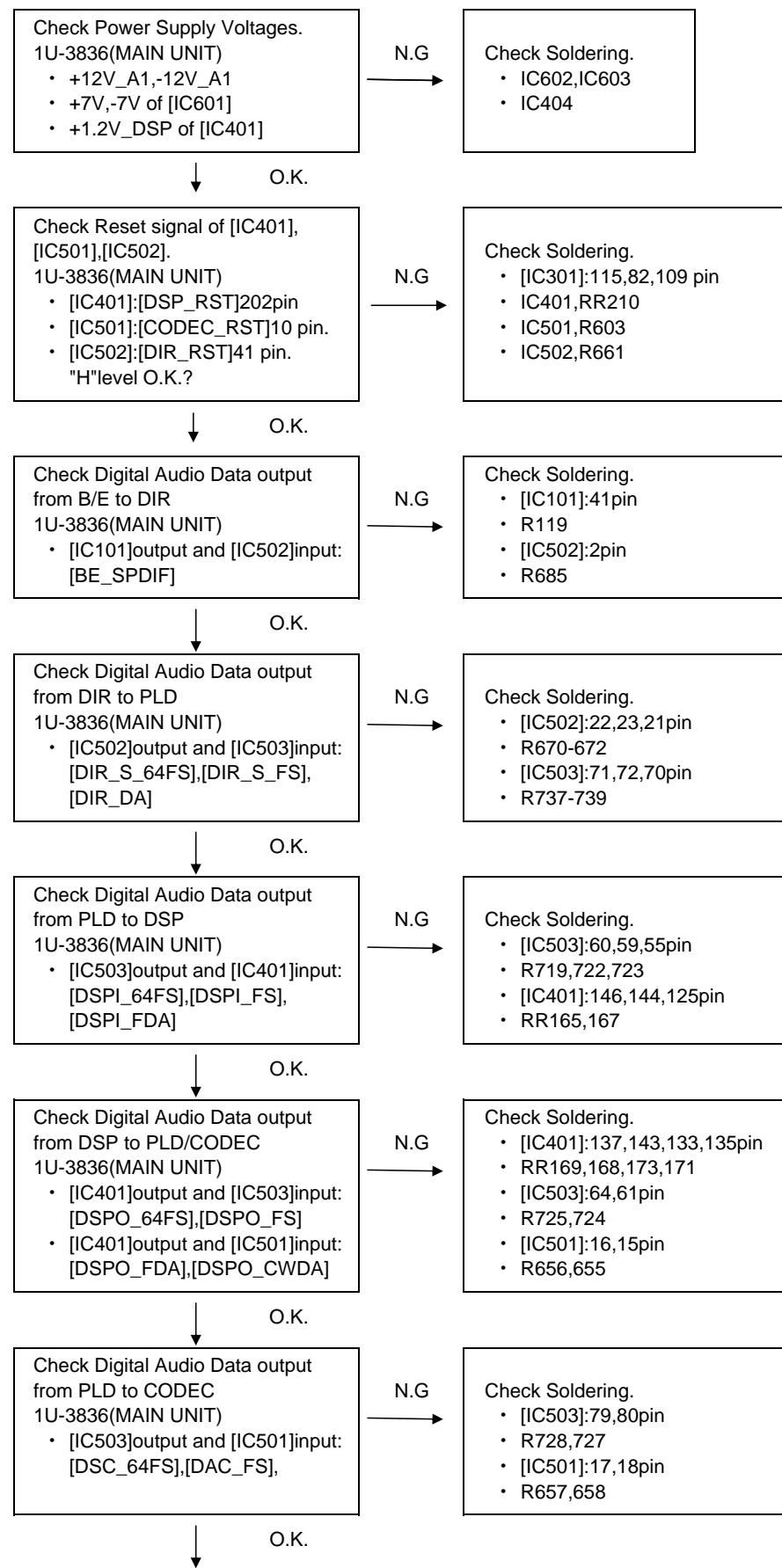


(2) CD or DVD チェック工程



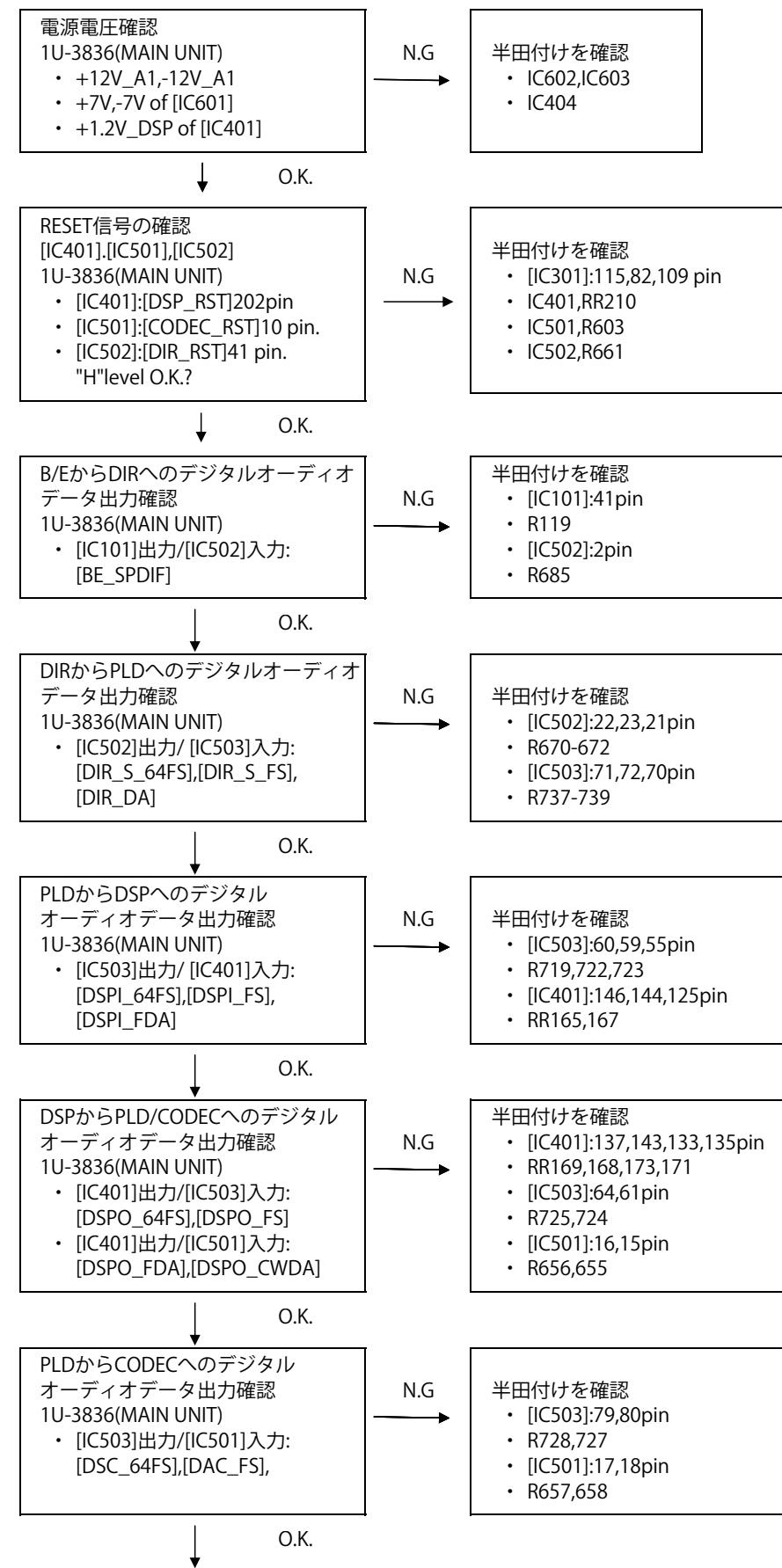
### 1.3. No Sound,Noise generated

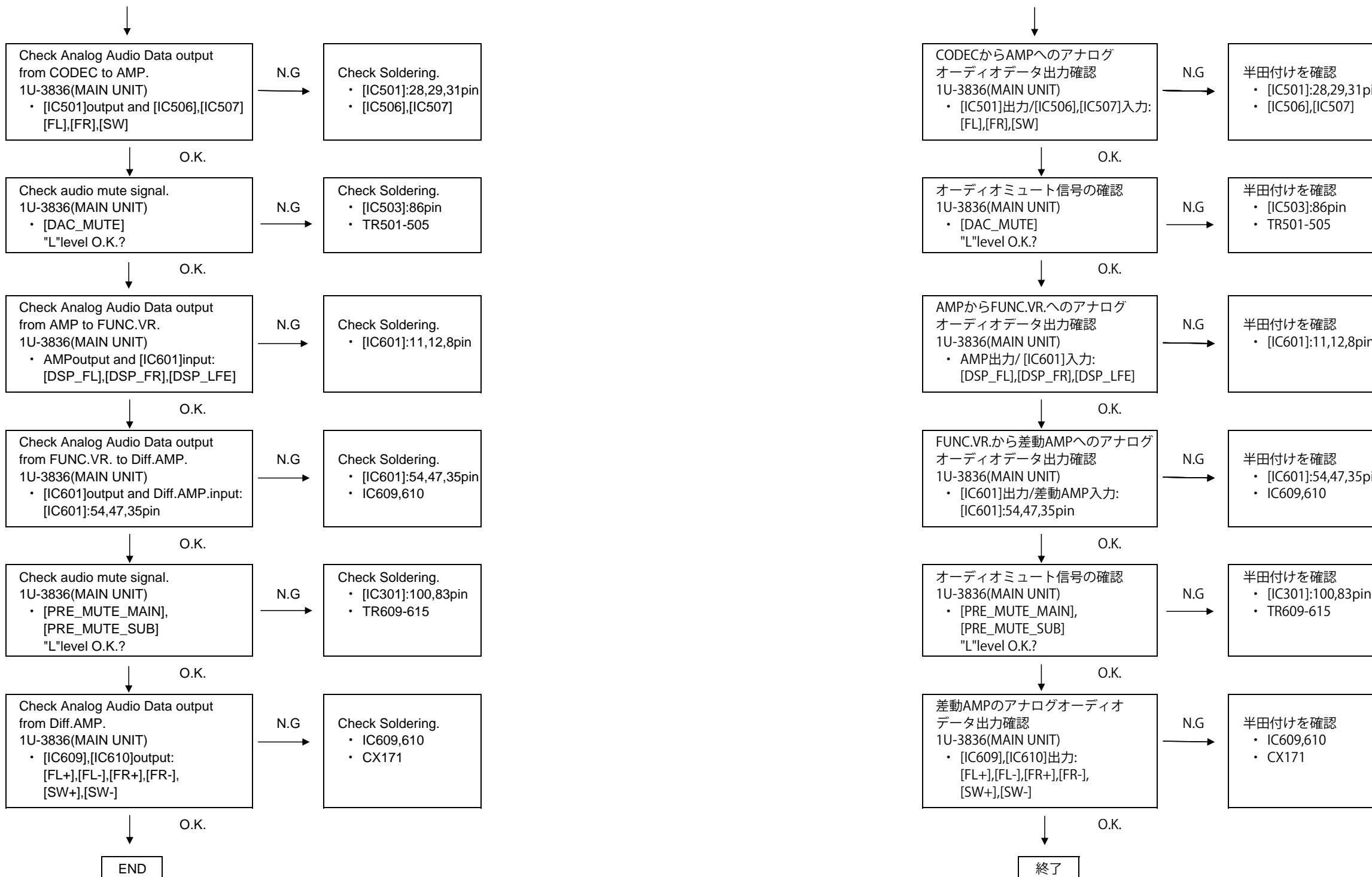
(1) CD,DVD PLAY



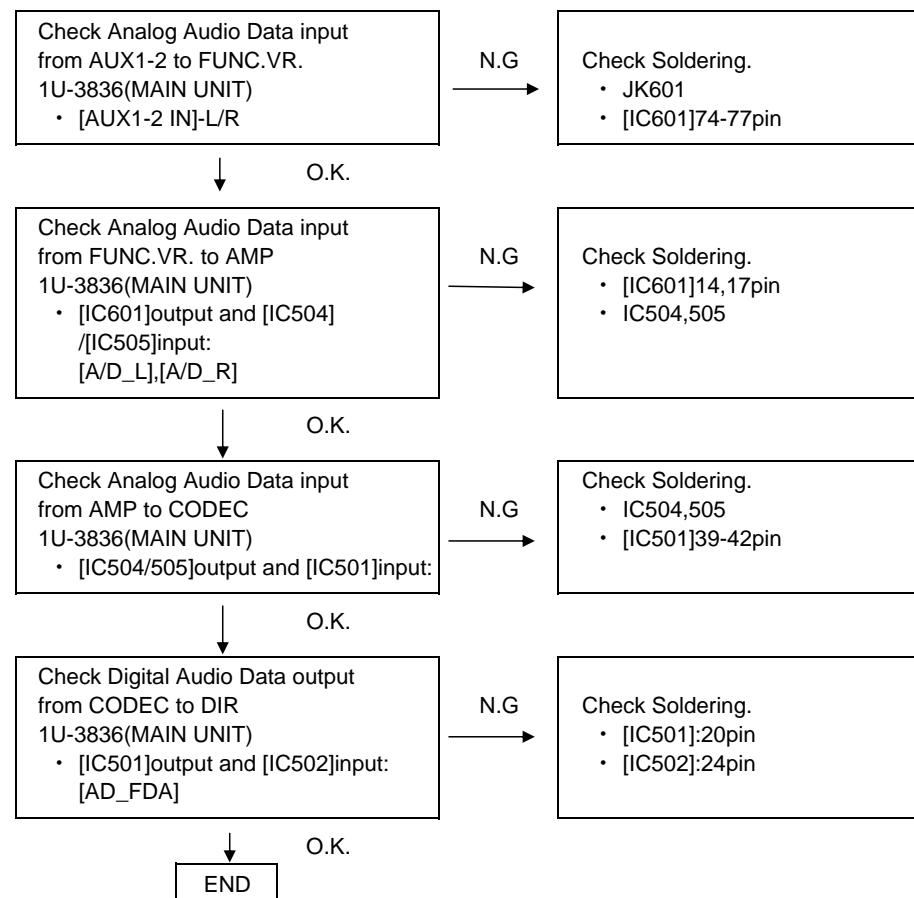
### 1.3. 音声出力せず、ノイズ発生

(1) CD,DVD 再生時

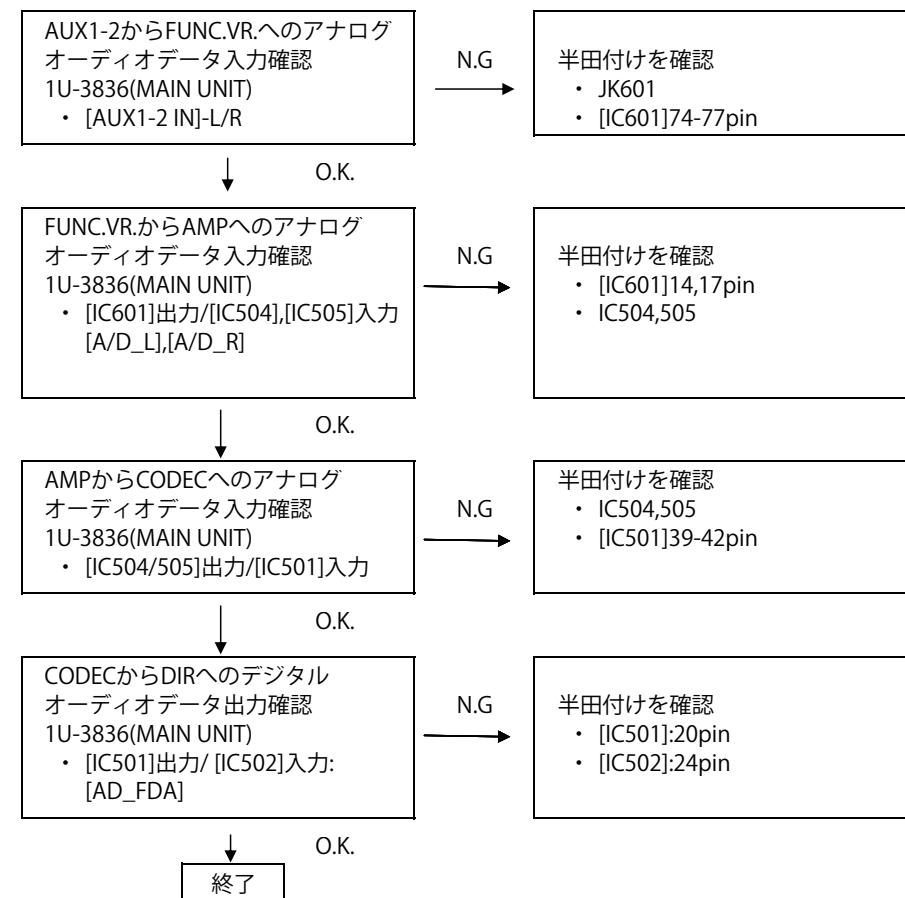




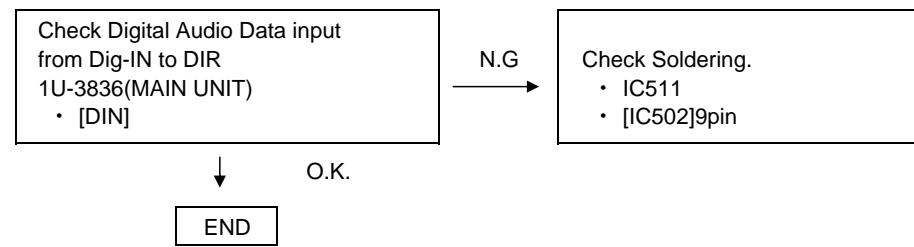
## (2) Analog audio in(AUX1,AUX2)



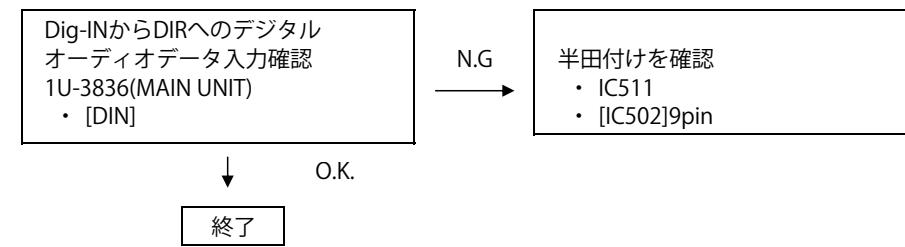
## (2) アナログオーディオ入力時(AUX1,AUX2)



## (3) Digital audio in



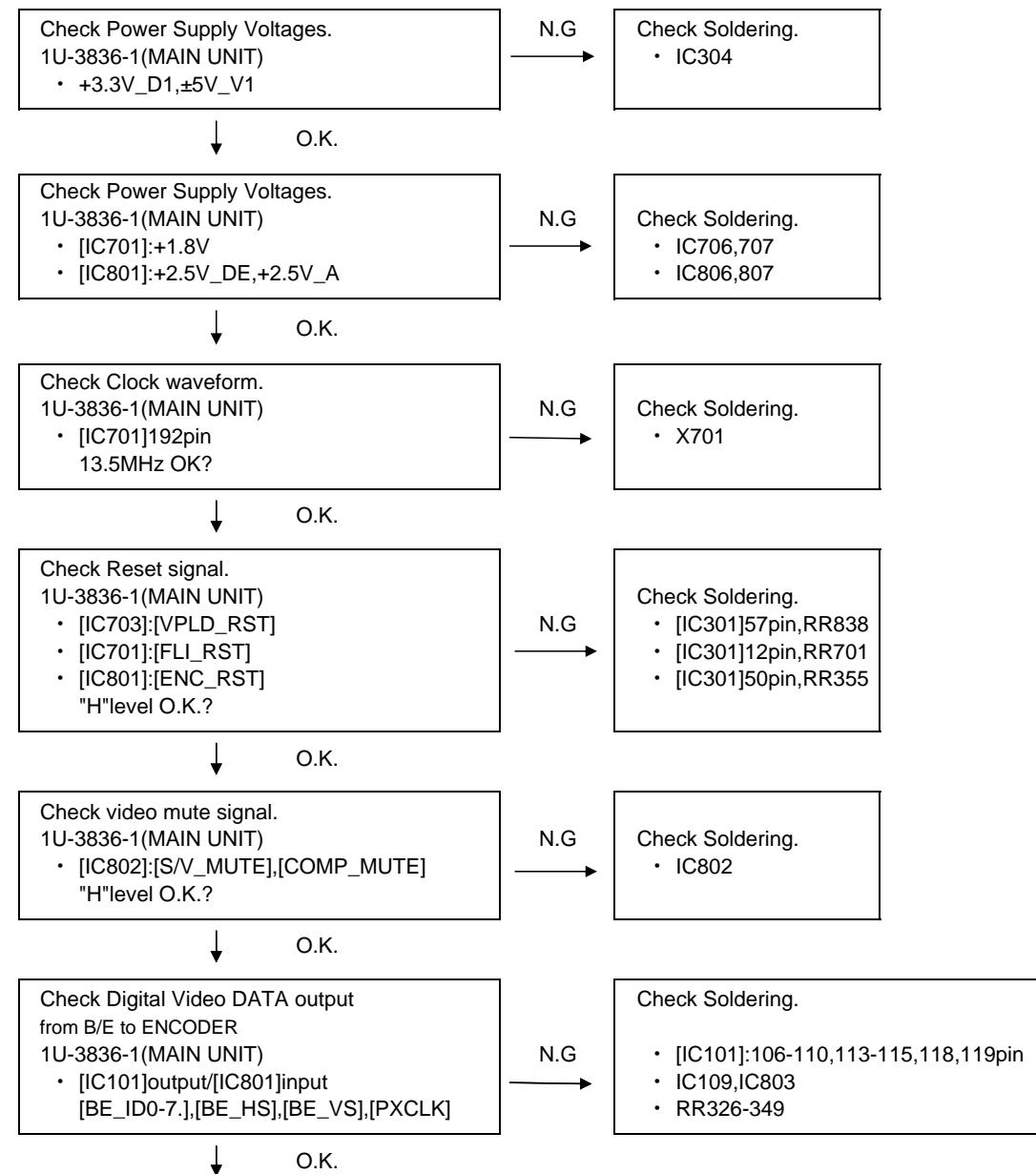
## (3) デジタルオーディオ入力時



### 3. 1U-3836-1 (MAIN UNIT)

#### 3-1.DVD PLAY

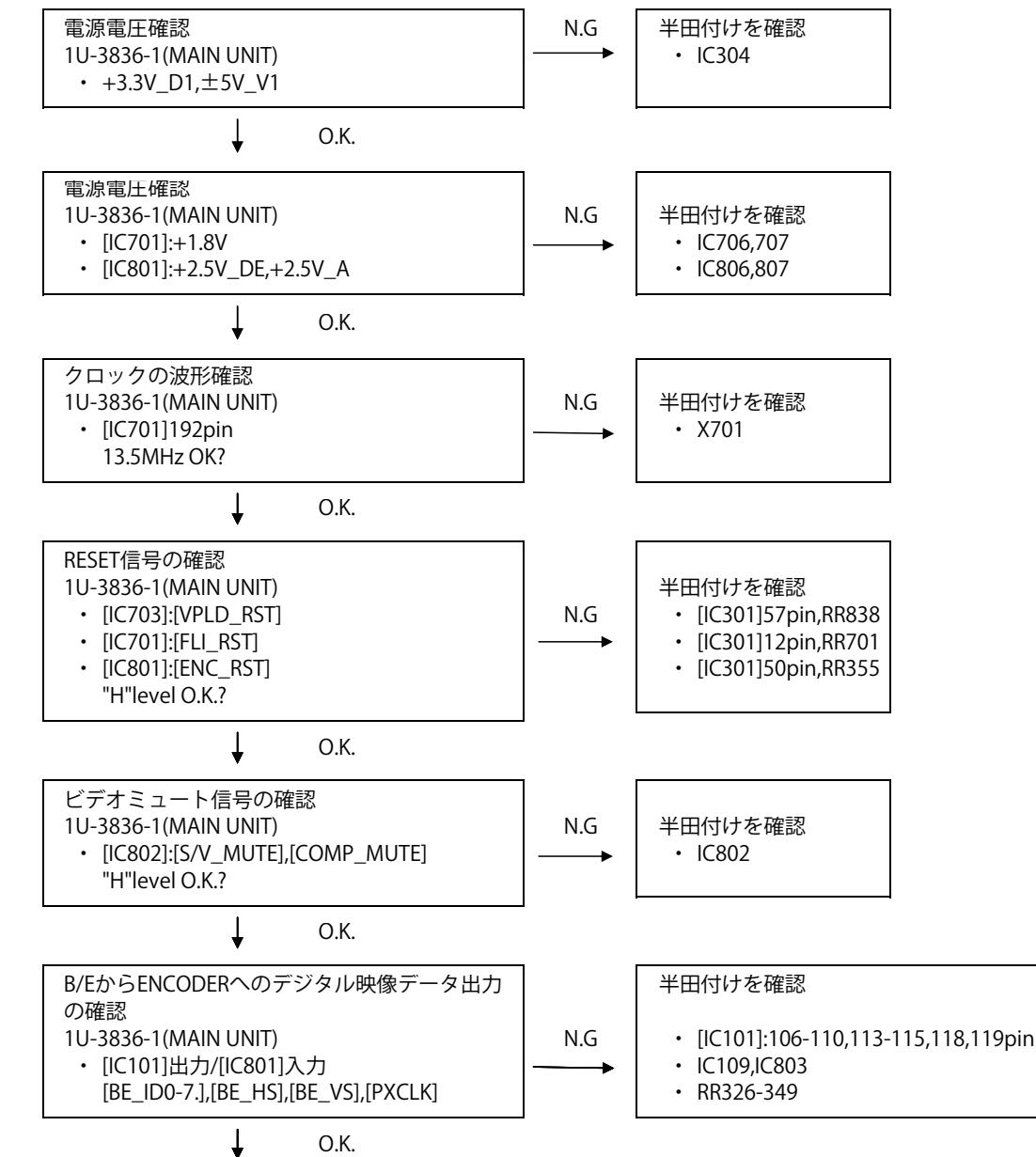
(1) INTERLACE output does not outputed.

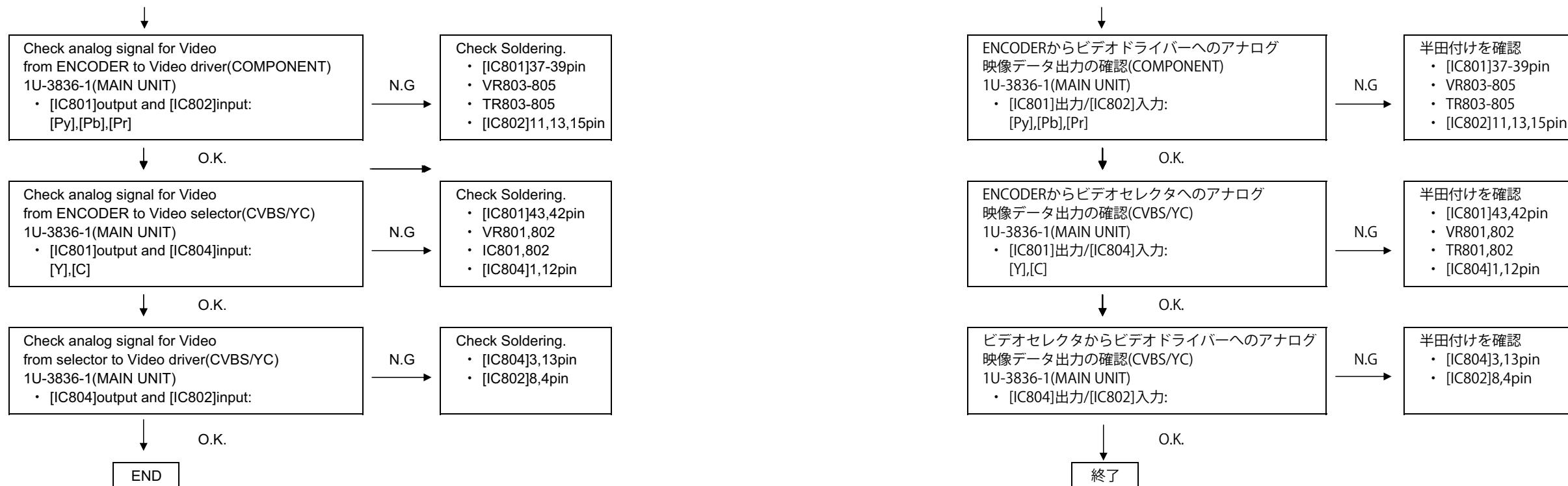


### 3. 1U-3836-1 (MAIN UNIT)

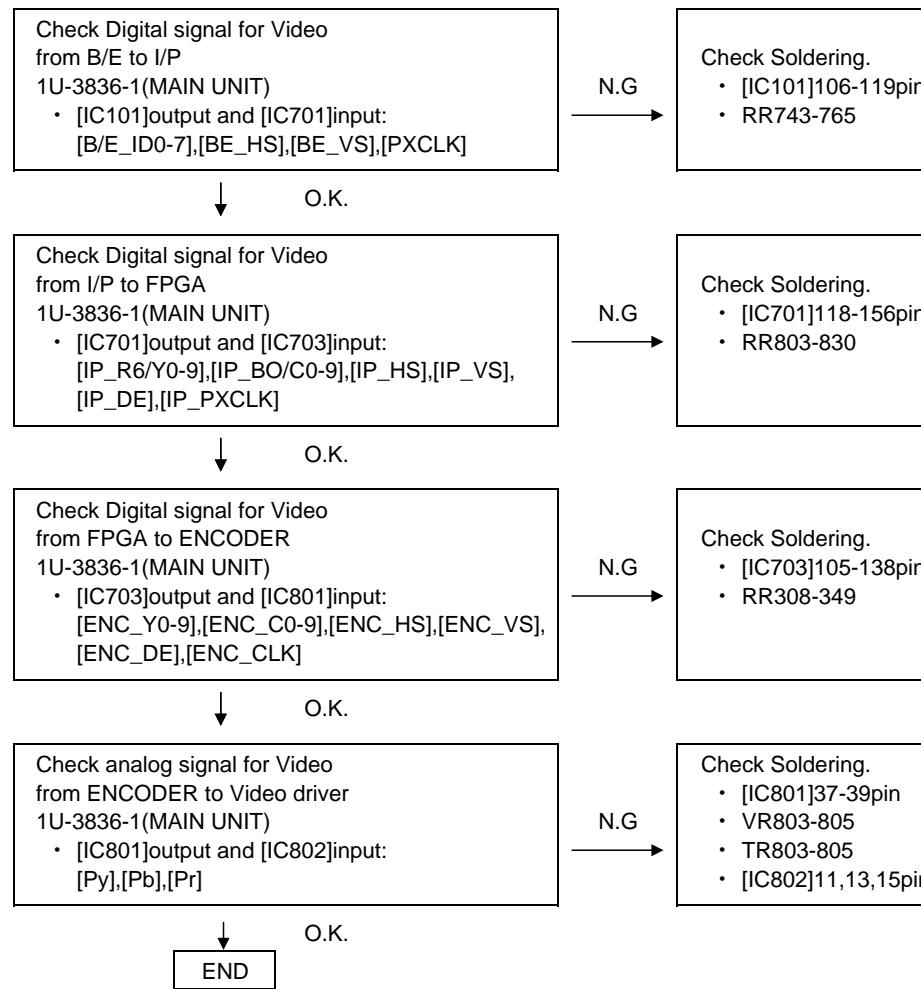
#### 3-1.DVD 再生時

(1) インターレース映像出力せず

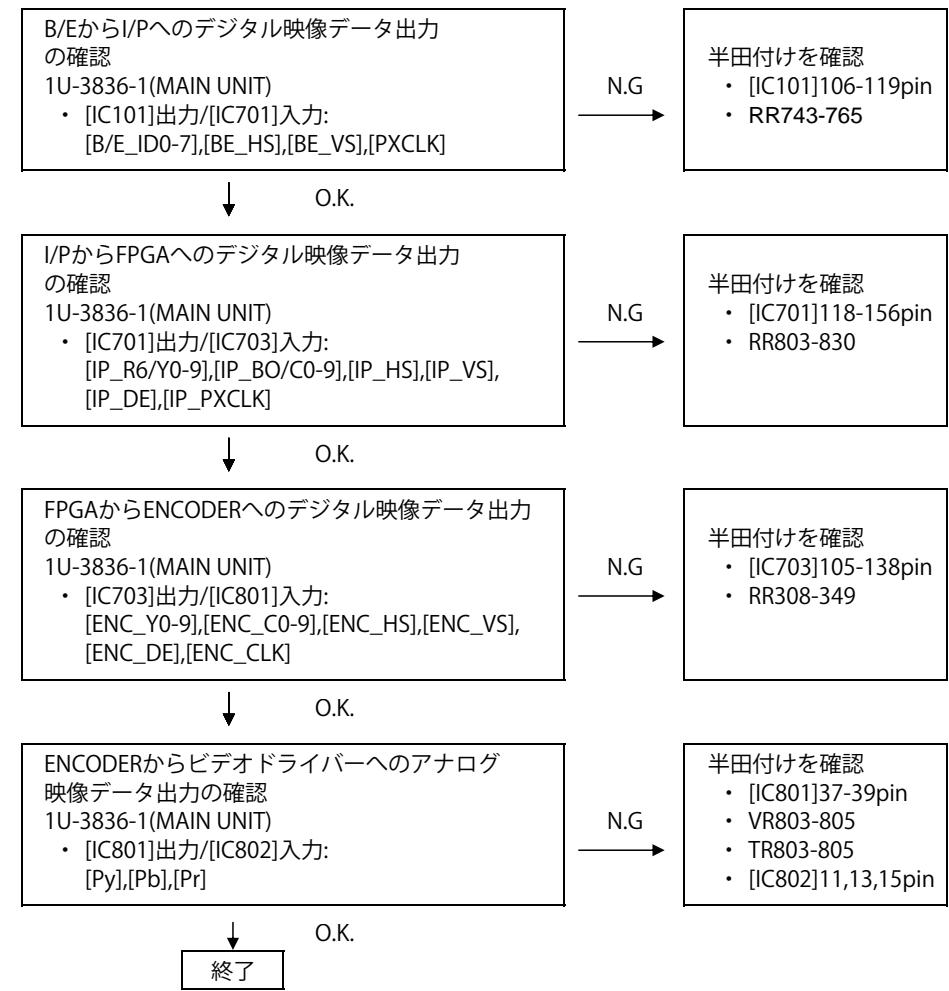




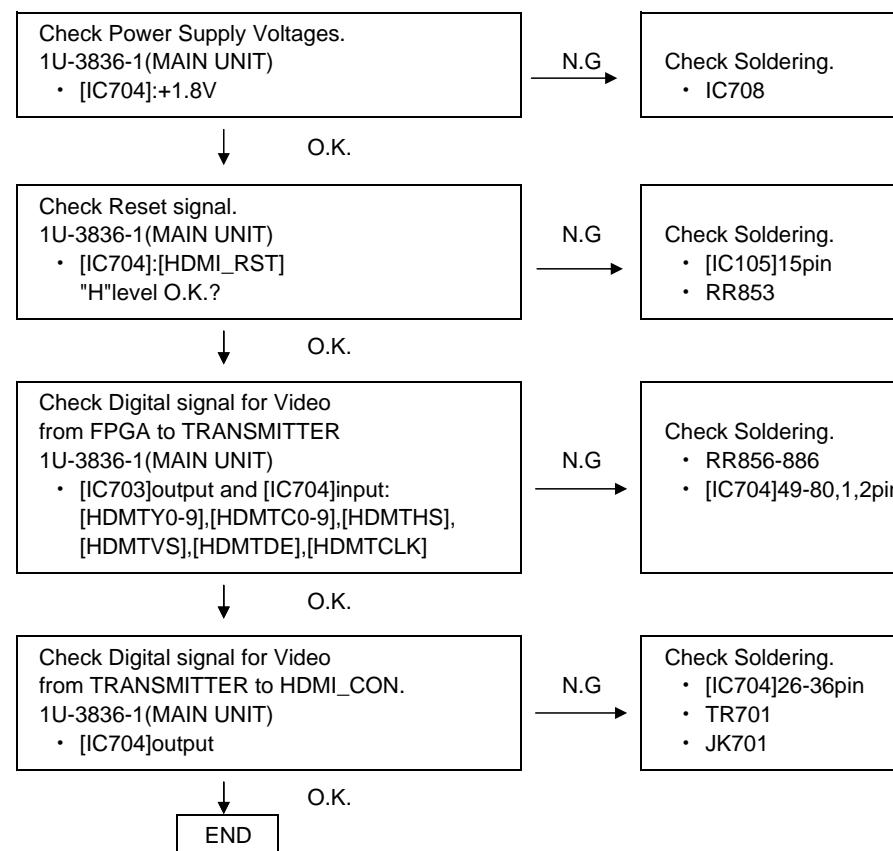
(2) PROGRESSIVE output does not outputed.



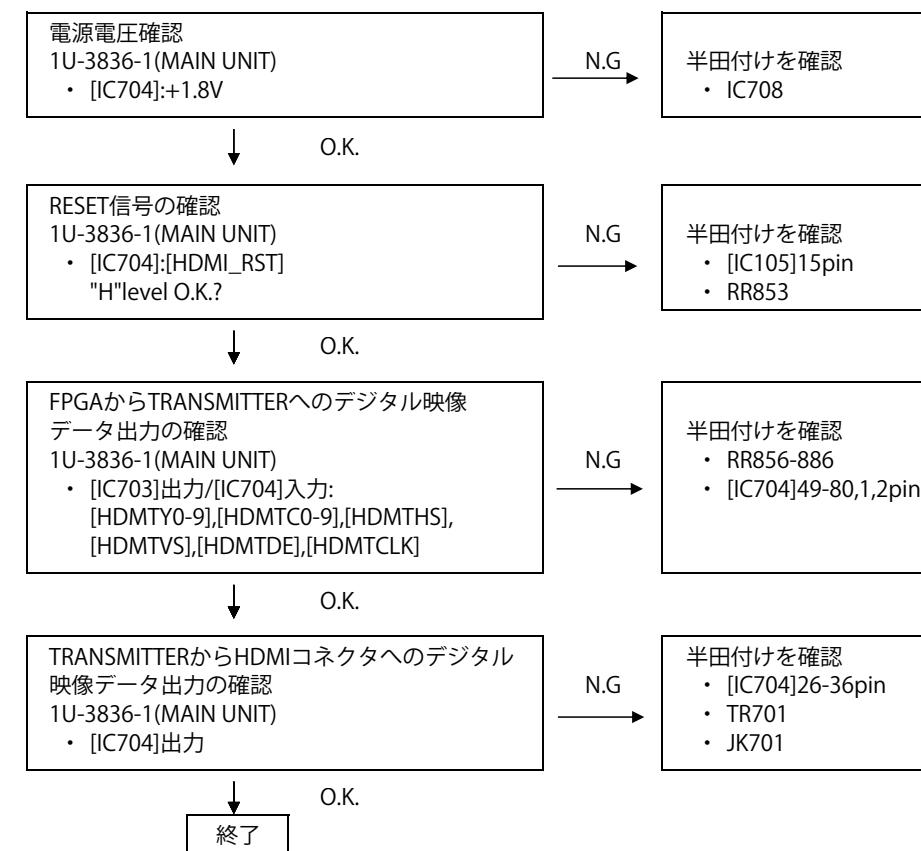
(2) プログレッシブ映像出力せず



(3) HDMI output does not outputed.

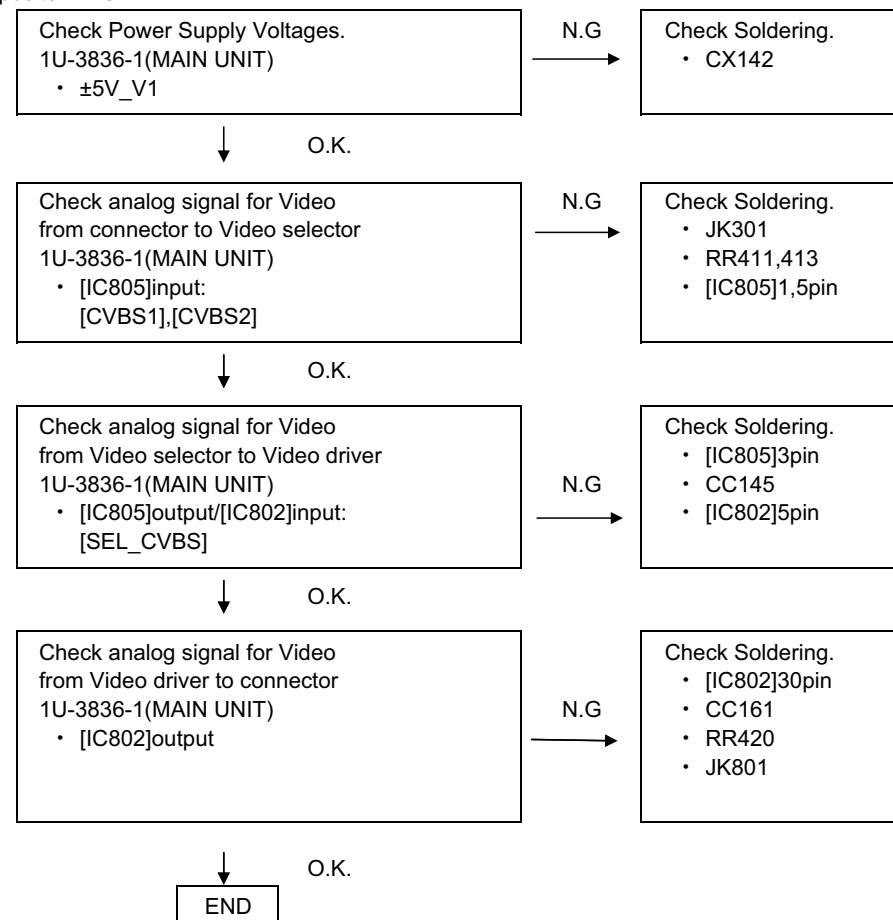


(3) HDMI映像出力せず

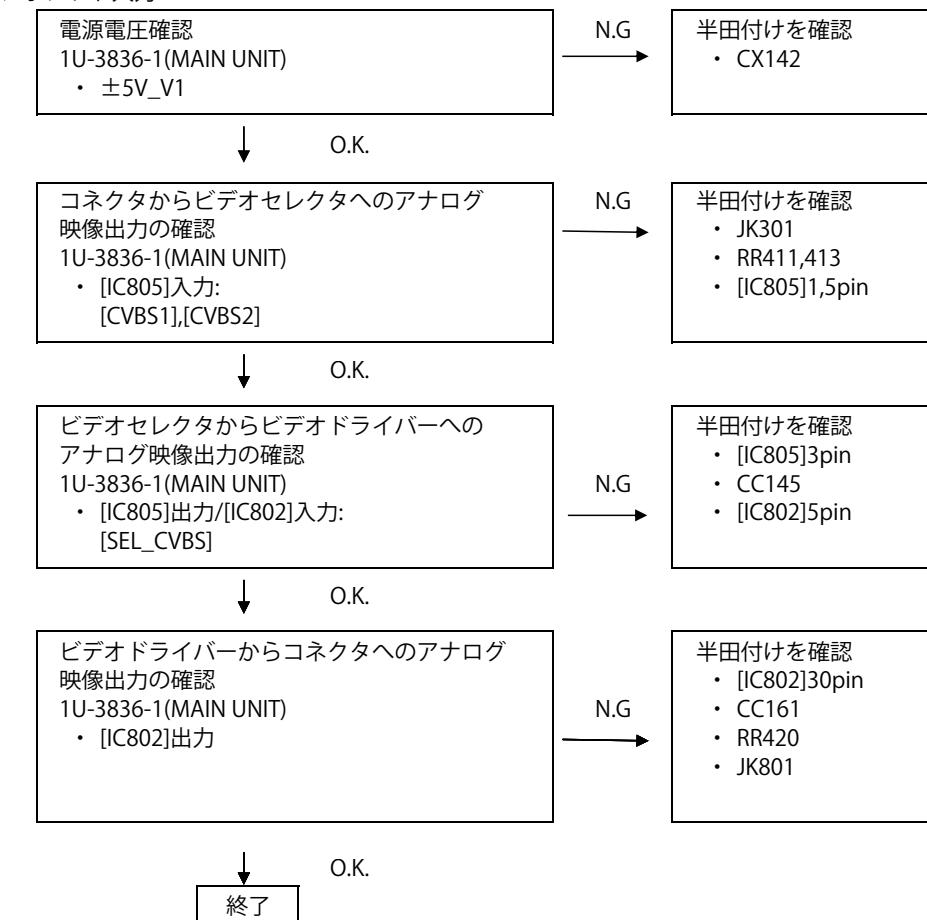


**3-2.AUX IN**

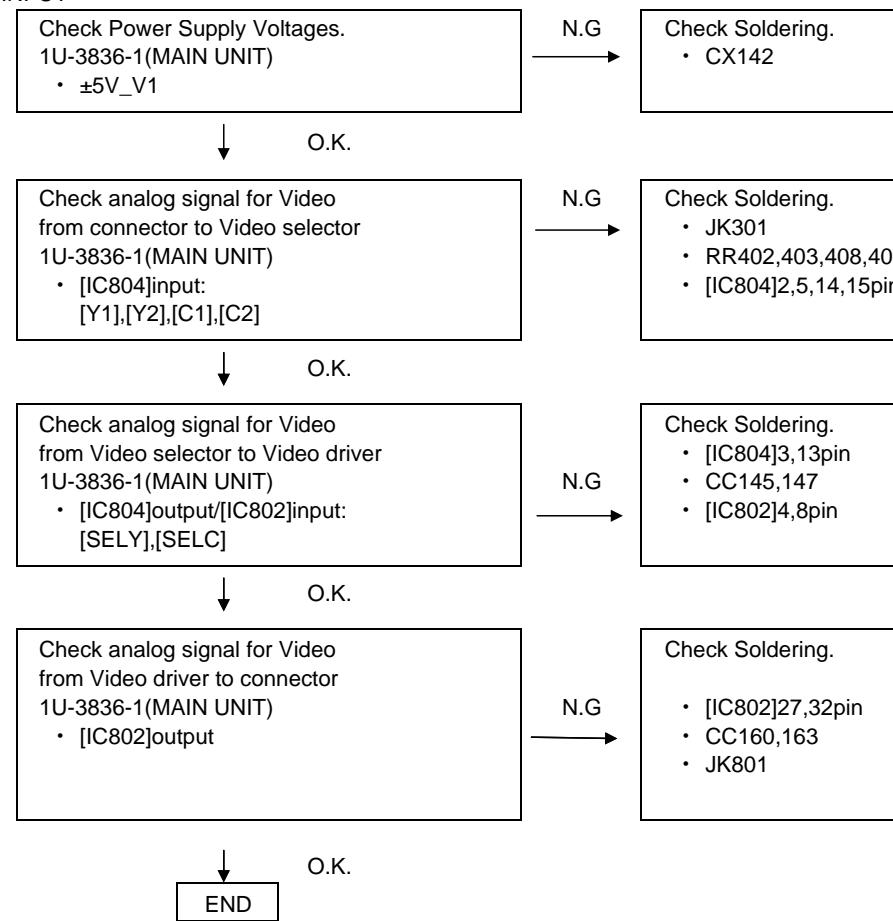
## (1) Composite INPUT

**3-2.外部入力時**

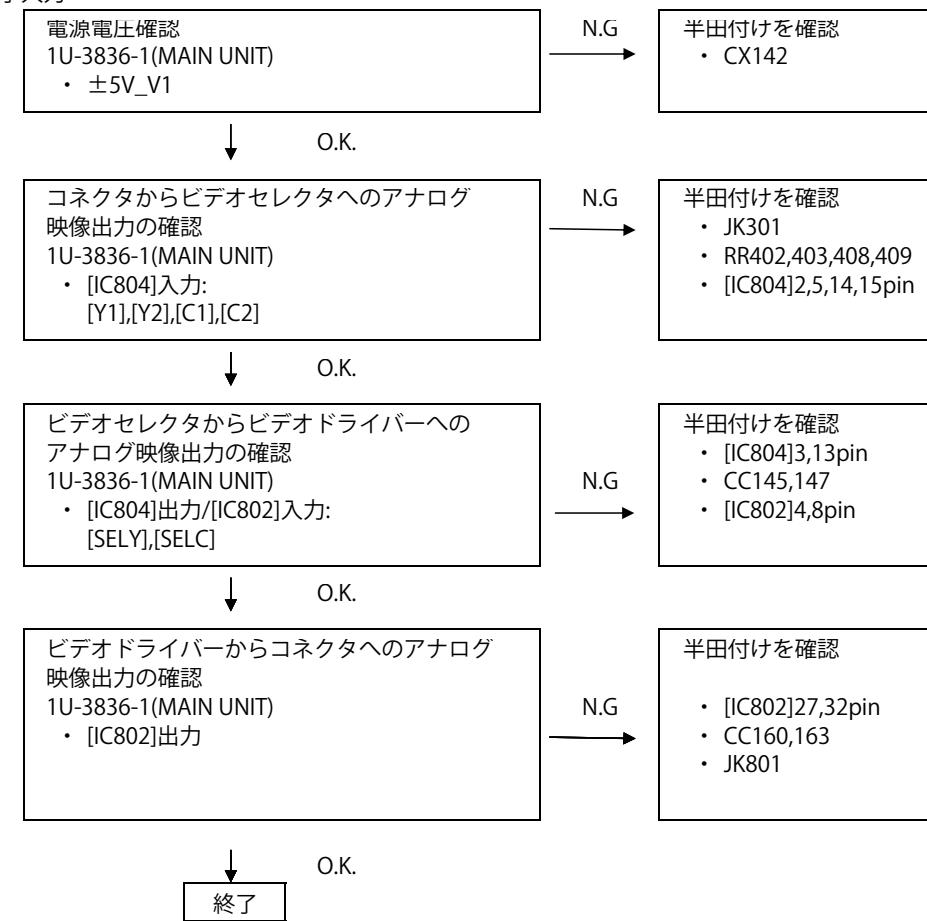
## (1) コンポジット入力



## (2) Y/C INPUT



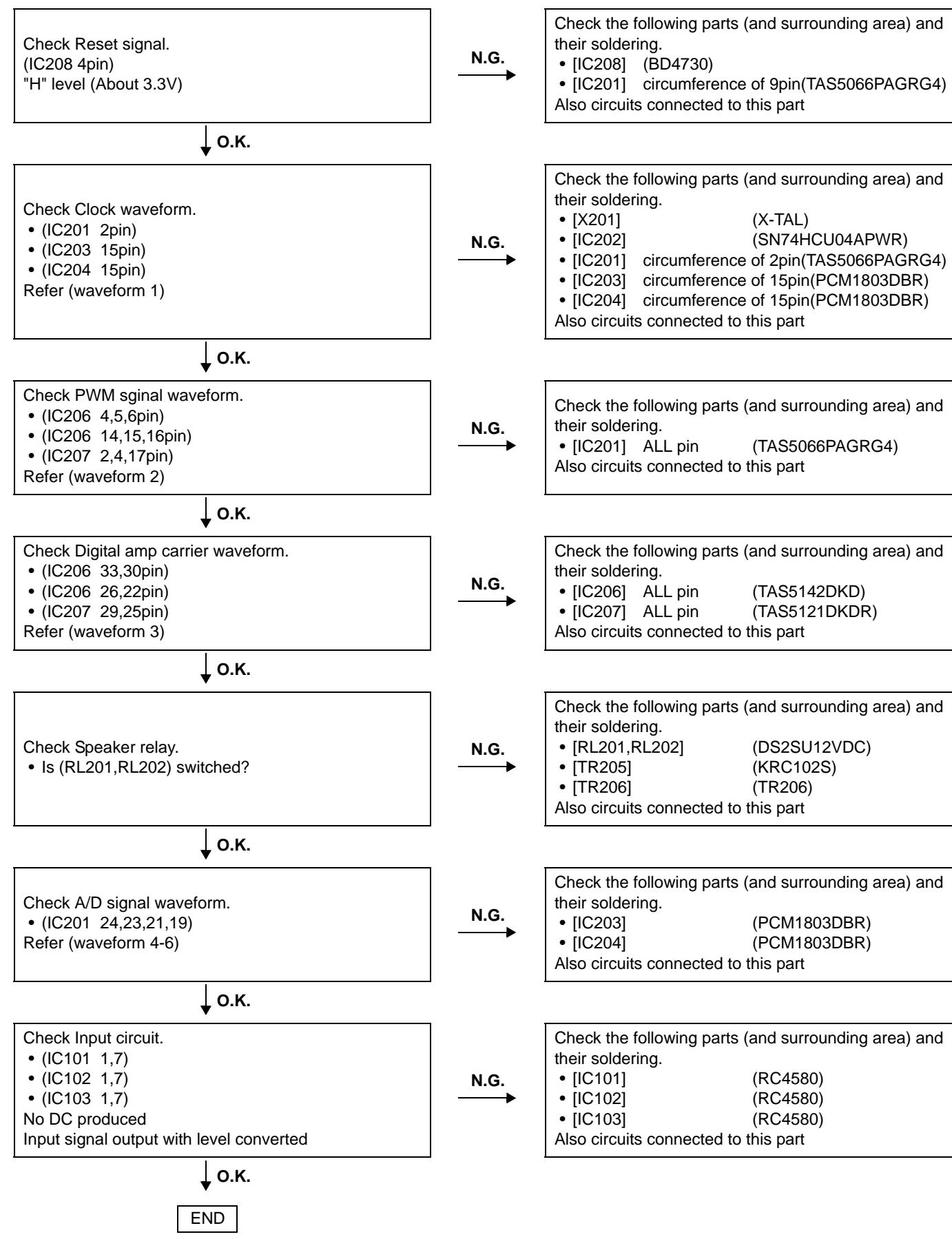
## (2) S端子入力



## ● DSW-S102

### 1. 1U-3811 (D.AMP/SMPS UNIT)

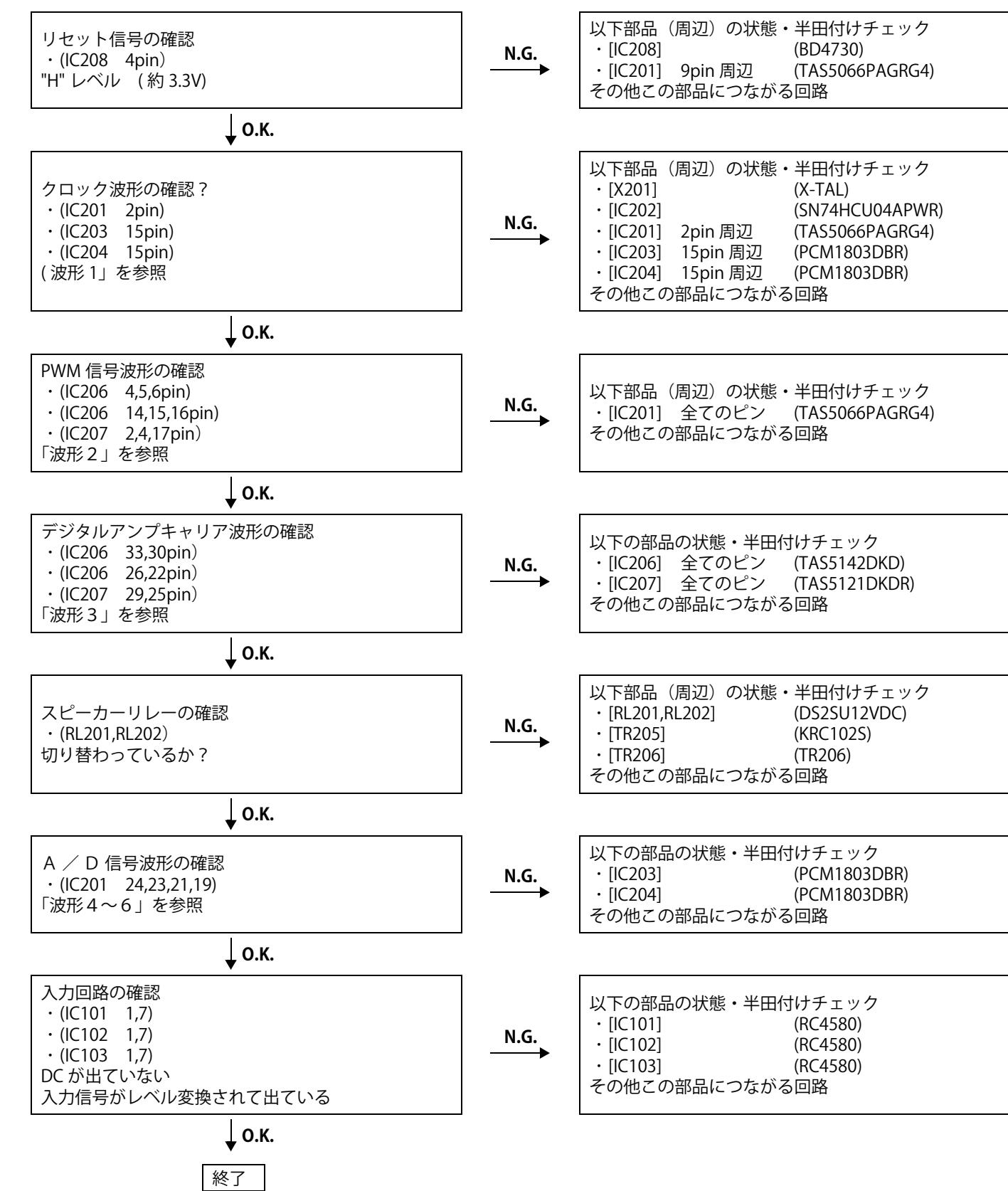
#### (1) AMPLIFIER



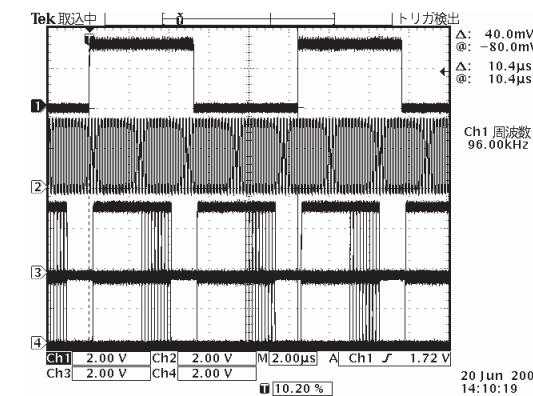
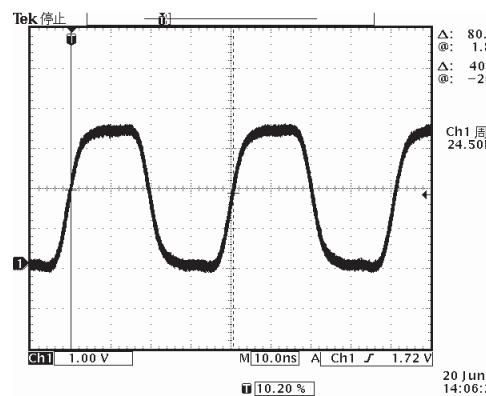
## ● DSW-S102

### 1. 1U-3811 (D.AMP/SMPS UNIT)

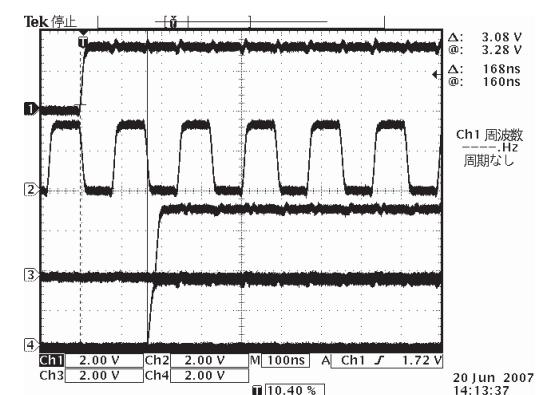
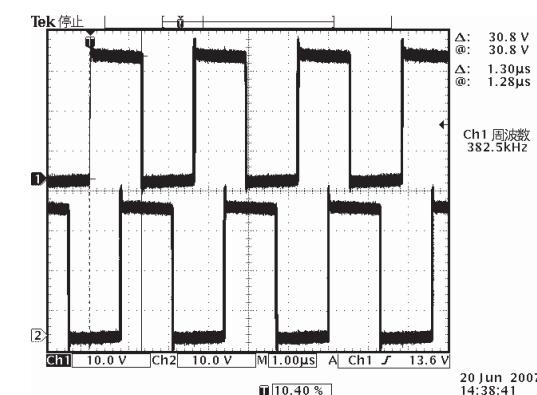
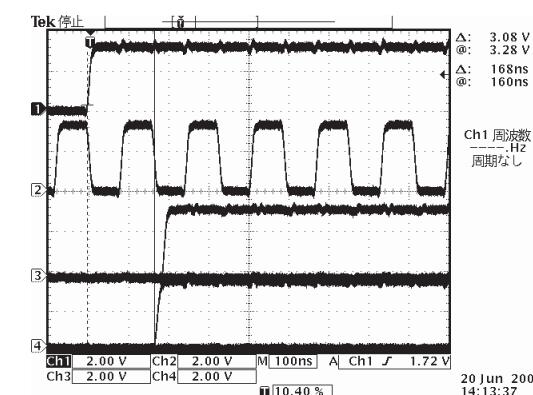
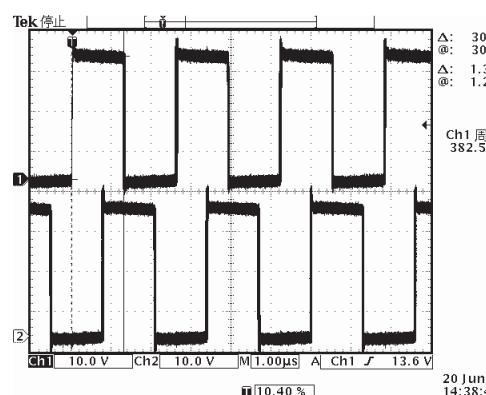
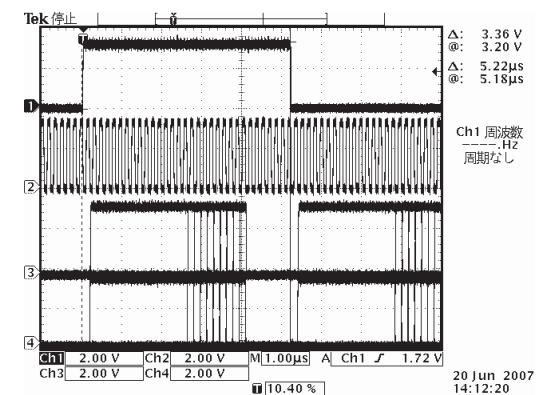
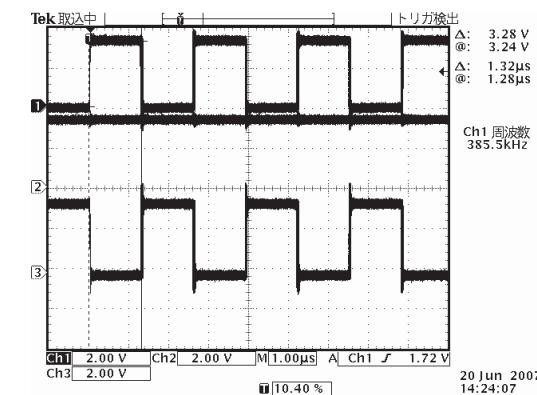
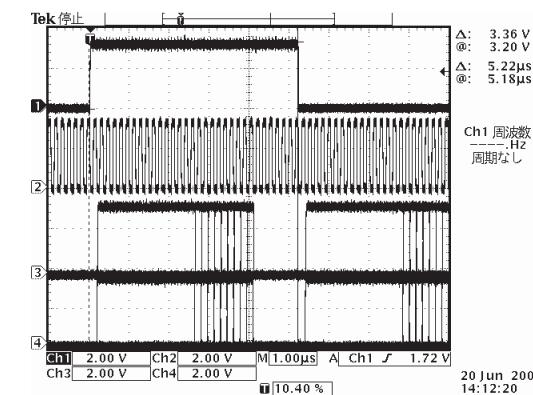
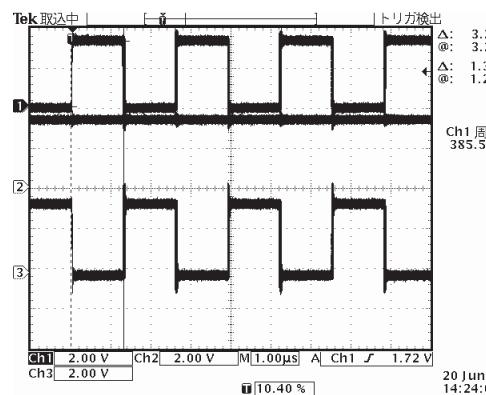
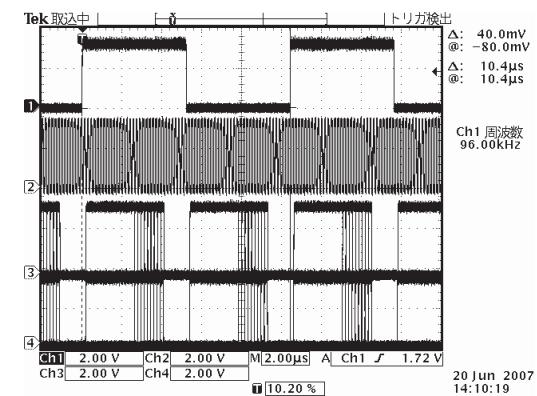
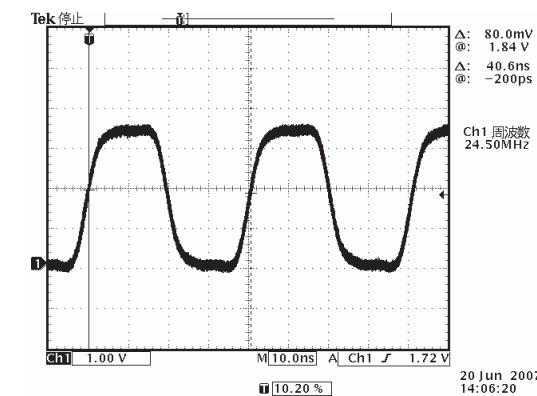
#### (1) アンプ



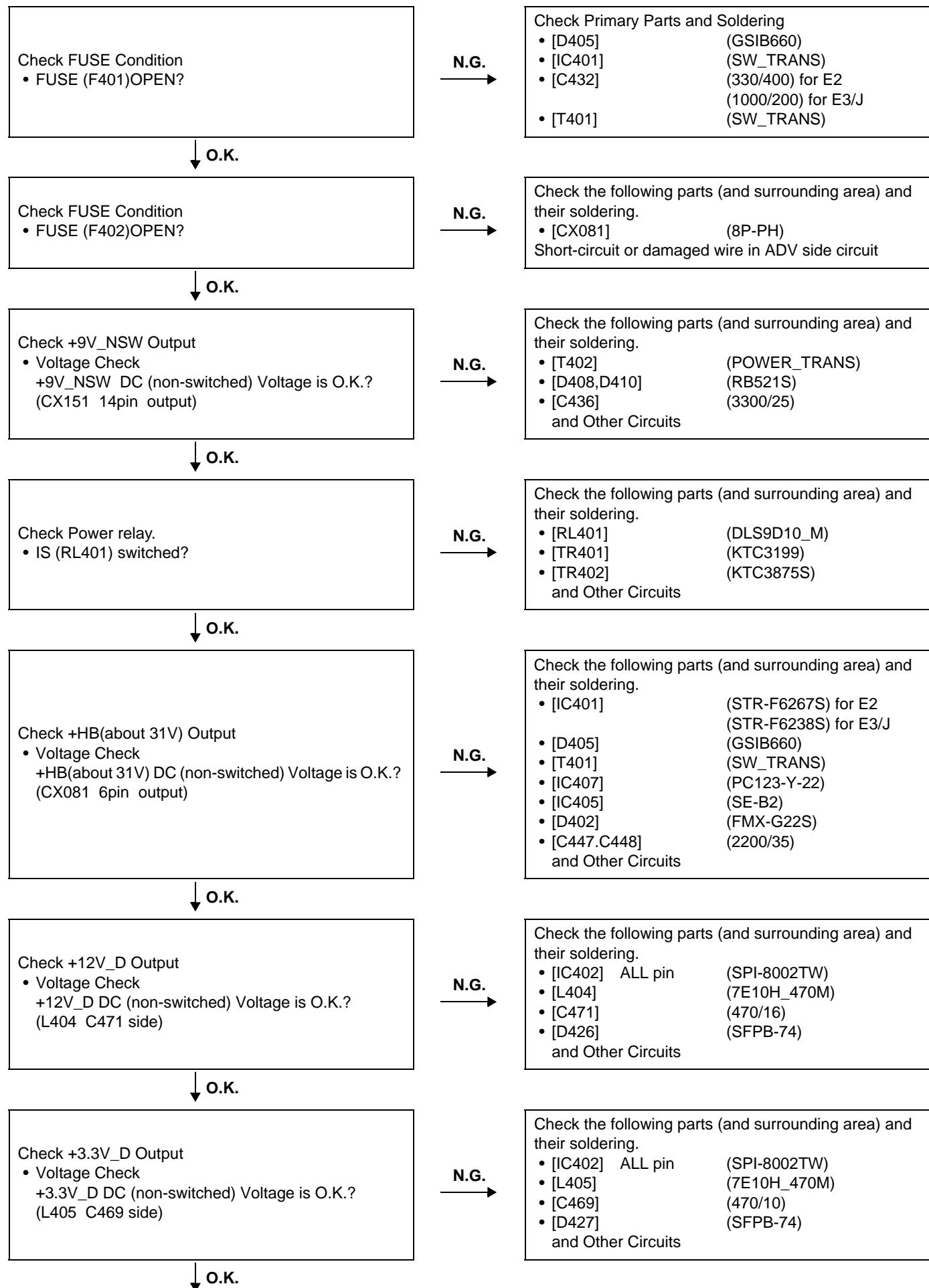
## (2) WAVEFORM



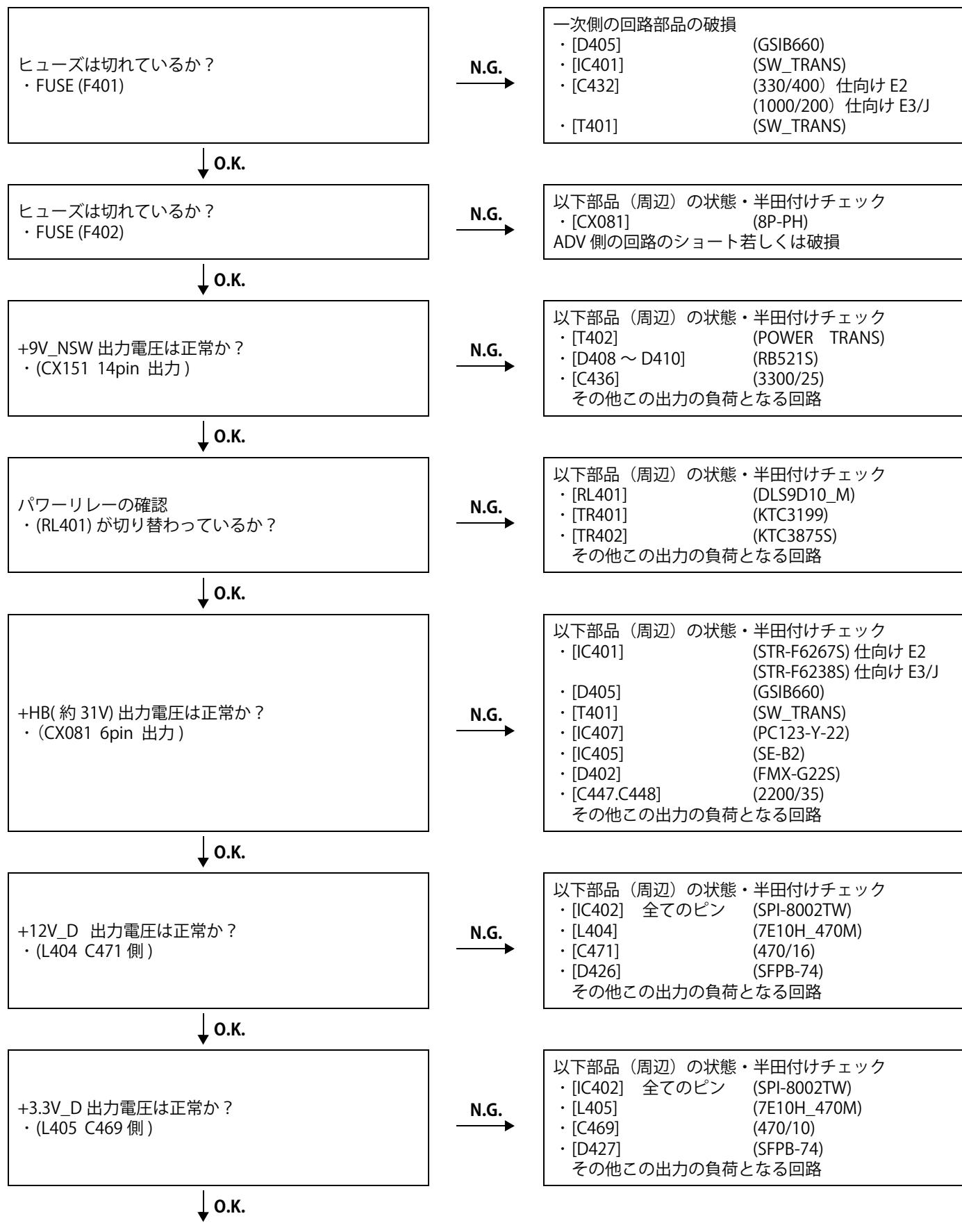
(2) 波形図

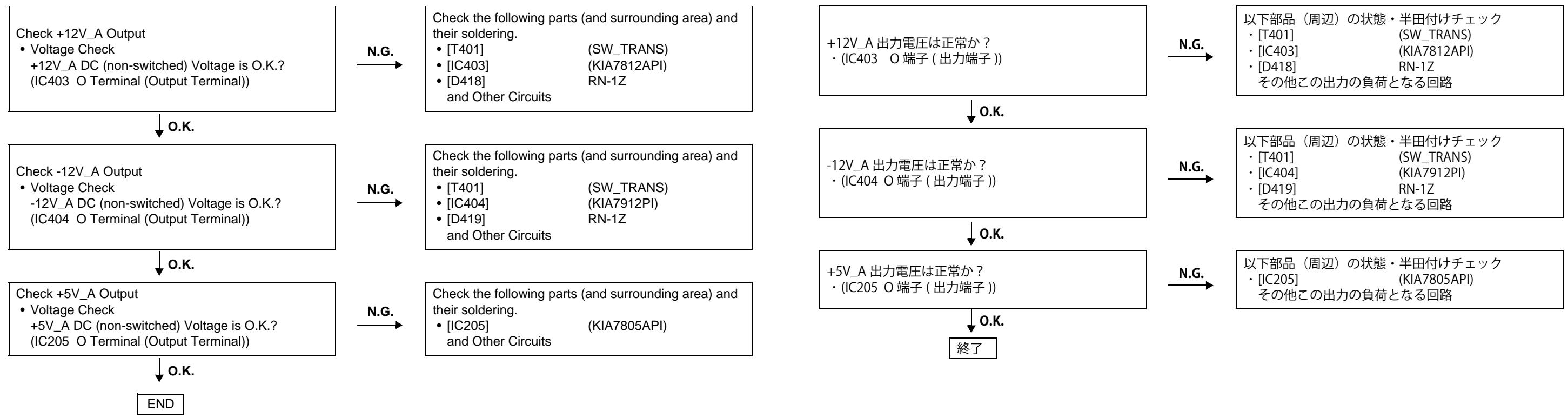


## (3) POWER SUPPLY



## (3) 電源





# ELECTRICAL ADJUSTMENT FOR VIDEO

## 1. SETTING

- (1) Connect the monitor TV to the video output terminal.
  - (2) Connect the oscilloscope to the Y-signal and C-signal of S-VIDEO output terminal and each terminate at 75 Ohms.
  - (3) Connect the oscilloscope to the Y-signal, Pb-signal and Pr-signal of Component video output terminal and each terminate at 75 Ohms.
- ※ Use the 75 Ohms resistance must be 1%
- (4) DVD test disc : VT502

## 2. BEFORE ADJUSTMENT

### 2.1. Setting the Oscilloscope as below.

- (1) Pb/PR
  - (a) TIME/DIV : 20μS
  - (b) VOLT/DIV : 100mV  
(Use the probe : x10)
- (2) Y
  - (a) TIME/DIV : 20μS
  - (b) VOLT/DIV : 200mV  
(Use the probe : x10)
- (3) C
  - (a) TIME/DIV : 20μS
  - (b) VOLT/DIV : 50mV  
(Use the probe : x10)

Power on. Power Supply

U.S.A. & Canada	:	120V
Europe & Asia	:	230V
China	:	220V
Japan	:	100V

### 2.2. Preparation

- (1) Power on.
- (2) Check the Component output signal is progressive.  
("PROGRESSIVE" is shown on the FL display)
- (3) Check the HDMI output is off.  
("HDMI" is not shown on the FL display)
- (4) Push [▲] button, then open the Disc Tray. Set DVD test disc (VT502) on the Disc Tray, and then push [▲] button.
- (5) FL display appear "STOP", push [▶] button to playback DVD.
- (6) Press the remote control unit [CALL] button twice to display the title number.
- (7) Press the remote control unit [▶] cursor button to select the title number to be played.
- (8) Push the [3] button, select title 3 of DVD.
- (9) Push the [ENTER] button, playback title 3. (color bar 100%)

## ビデオ回路の調整

### 1. セッティング手順

- (1) セットの VIDEO OUT 端子にテレビモニターを接続する。
- (2) セットの S2 VIDEO OUT 端子から Y 信号と C 信号をそれぞれオシロスコープ (終端抵抗 : 75Ω) に接続する。
- (3) セットの COMPONENT VIDEO OUT の端子 (Y/Pb/Pr) をそれぞれオシロスコープ (終端抵抗 : 75Ω) に接続する。  
※ 75Ω 抵抗は 1%品を使用する事。
- (4) DVD テストディスク : VT502 を用意する。

### 2. 調整のまえに

#### 2.1. オシロスコープを下記に設定する。

- (1) Pb/PR
    - (a) TIME/DIV : 20 μS
    - (b) VOLT/DIV : 100mV  
(プローブ x10 使用)
  - (2) Y
    - (a) TIME/DIV : 20 μS
    - (b) VOLT/DIV : 200mV  
(プローブ x10 使用)
  - (3) C
    - (a) TIME/DIV : 20 μS
    - (b) VOLT/DIV : 50mV  
(プローブ x10 使用)
- 電源電圧 : 100V (Japan)  
: 120V (U.S.A. & Canada)  
: 230V (Europe & Asia)  
: 220V (China)

### 2.2. 準備手順

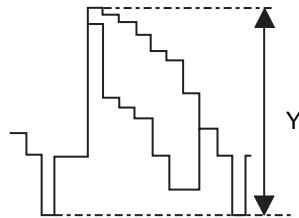
- (1) セットの AC コードをコンセントへ挿入し、セットの電源を ON する。
- (2) セットの COMPONENT VIDEO OUT 端子の出力が PROGRESSIVE になっていることを確認する。  
(FL 管の "PROGRESSIVE" が点灯していること)
- (3) HDMI 出力が OFF になっていることを確認する。  
(FL 管の "HDMI" が消灯していること)
- (4) セットの「▲」ボタンを押しトレイを開き、トレイ上に DVD テストディスク (VT502) をセット後、「▲」ボタンを押す。
- (5) セット表示管上に "STOP" が表示されてから、「▶」ボタンを押し、ディスクを再生する。
- (6) リモコンの「CALL」ボタンを 2 回押し、Title ナンバーを表示する。
- (7) リモコンのカーソル「▶」ボタンを押して、Title ナンバーを選択する。
- (8) 番号ボタンの [3] ボタンを押し、Title 3 を選択する。
- (9) 「ENTER」ボタンを押し、Title 3 を再生する (100% ラーバー信号)。

### 3. PROCEDURE

- (1) Adjust the signal of S-VIDEO out by the wave of oscilloscope.

(a) Target, Y-signal

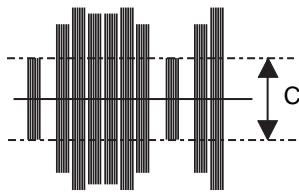
Point : VR801  
Adjustment Value :  $1000 \pm 20\text{mV}$   
Waveform



Y-signal of S-VIDEO out

(b) Target, C-signal

Point : VR802  
Check Value :  $286 \pm 10\text{mV}$   
Waveform

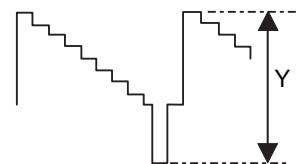


C-signal of S-VIDEO out

- (2) Adjust the signal of COMPONENT OUT (PROGRESSIVE) by the wave of oscilloscope.

(a) Target, Y-signal

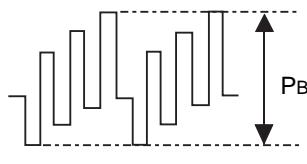
Point : VR803  
Adjustment Value :  $1000 \pm 20\text{mV}$   
Waveform



Y-signal

(b) Target, Pb-signal

Point : VR804  
Check Value :  $700 \pm 10\text{mV}$   
Waveform



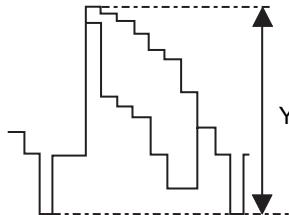
Pb-signal

### 3. 手順

- (1) セットの S2 VIDEO OUT の信号レベルをオシロスコープ上の波高値で調整する。

(a) Y 信号レベル

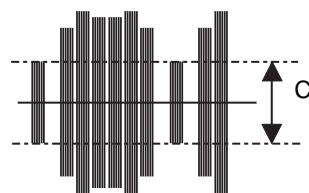
調整個所 : VR801  
調整値 :  $1000 \pm 20\text{mV}$   
波形



S2 VIDEO OUT の Y 信号レベル

(b) C 信号レベル

調整個所 : VR802  
確認 :  $286 \pm 10\text{mV}$   
波形

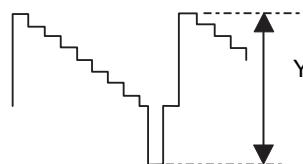


S2 VIDEO OUT の C 信号レベル

- (2) COMPONENT OUT (PROGRESSIVE) の信号レベルをオシロスコープ上の波高値で調整する。

(a) Y 信号レベル

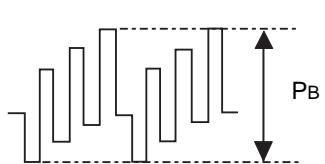
調整個所 : VR803  
調整値 :  $1000 \pm 20\text{mV}$   
波形



プログレッシブの Y 信号レベル

(b) Pb 信号レベル

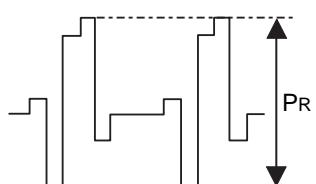
調整個所 : VR804  
確認 :  $700 \pm 10\text{mV}$   
波形



Pb 信号レベル

(c) Target, PR-signal

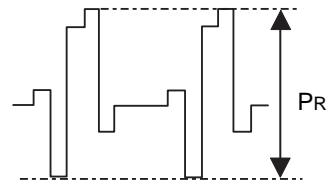
Point : VR805  
Check Value :  $700 \pm 10\text{mV}$   
Waveform



PR-signal

(c) PR 信号レベル

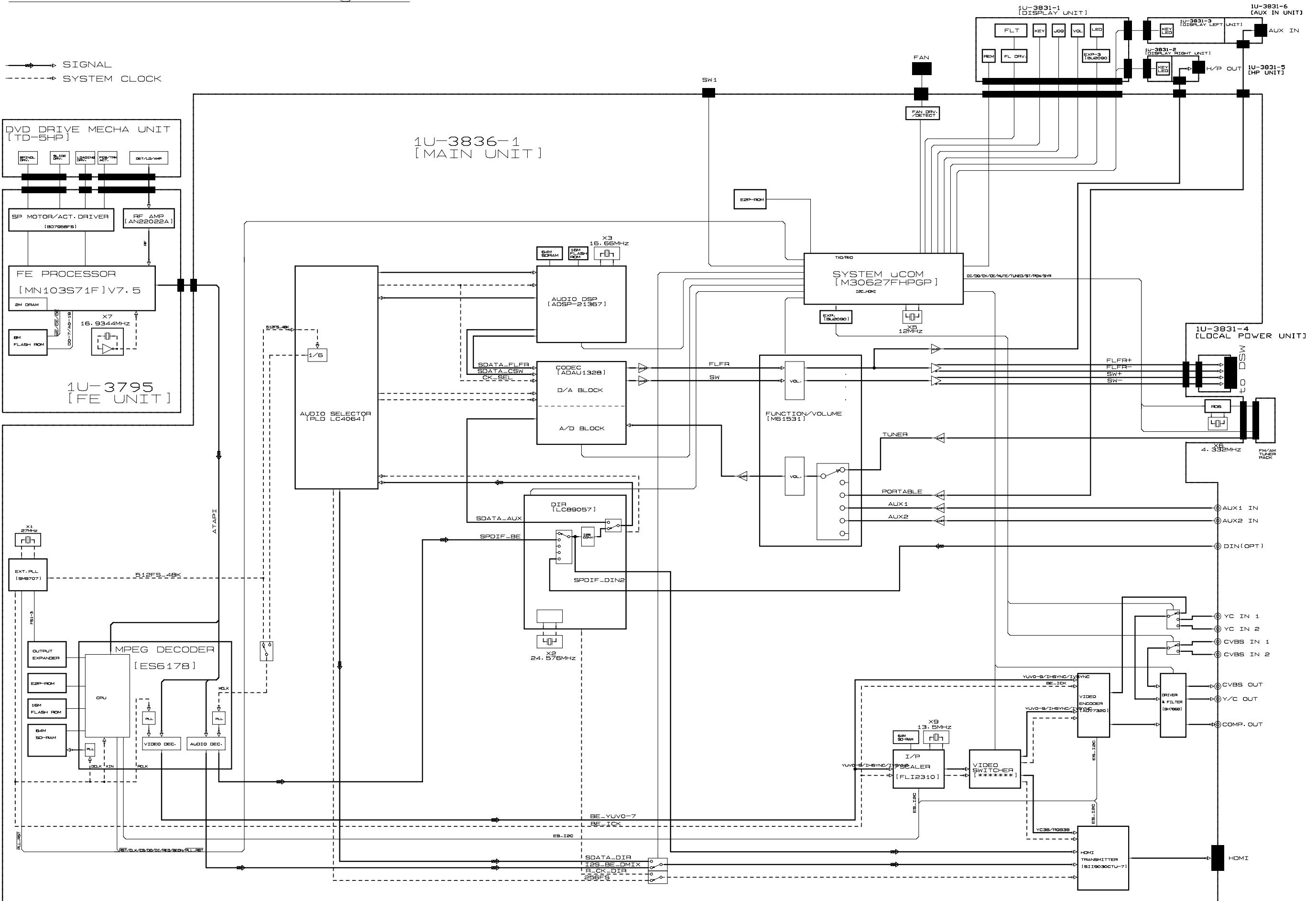
調整個所 : VR805  
調整値 :  $700 \pm 10\text{mV}$   
波形



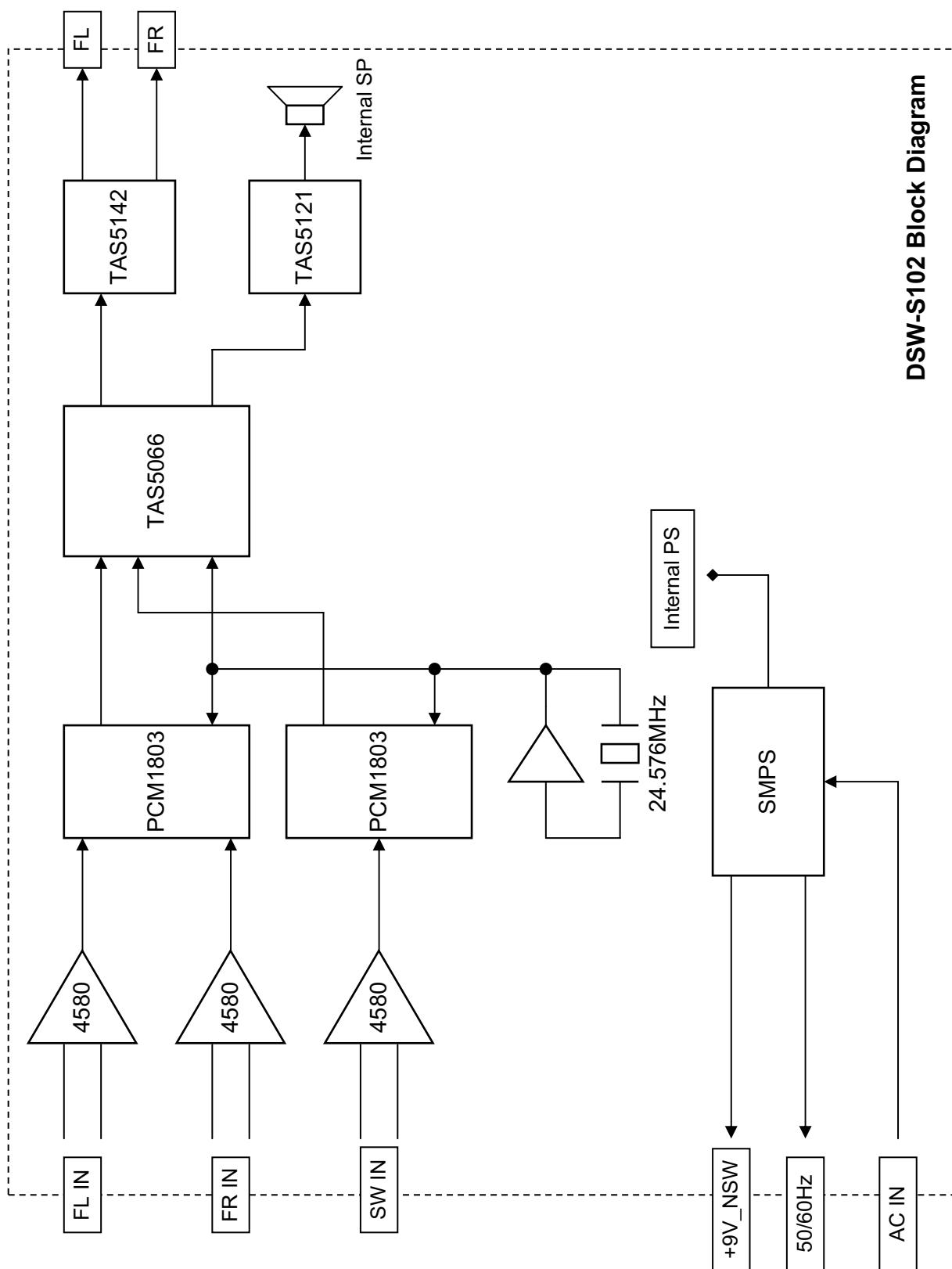
PR 信号レベル

**BLOCK DIAGRAMS****ADV-S102**

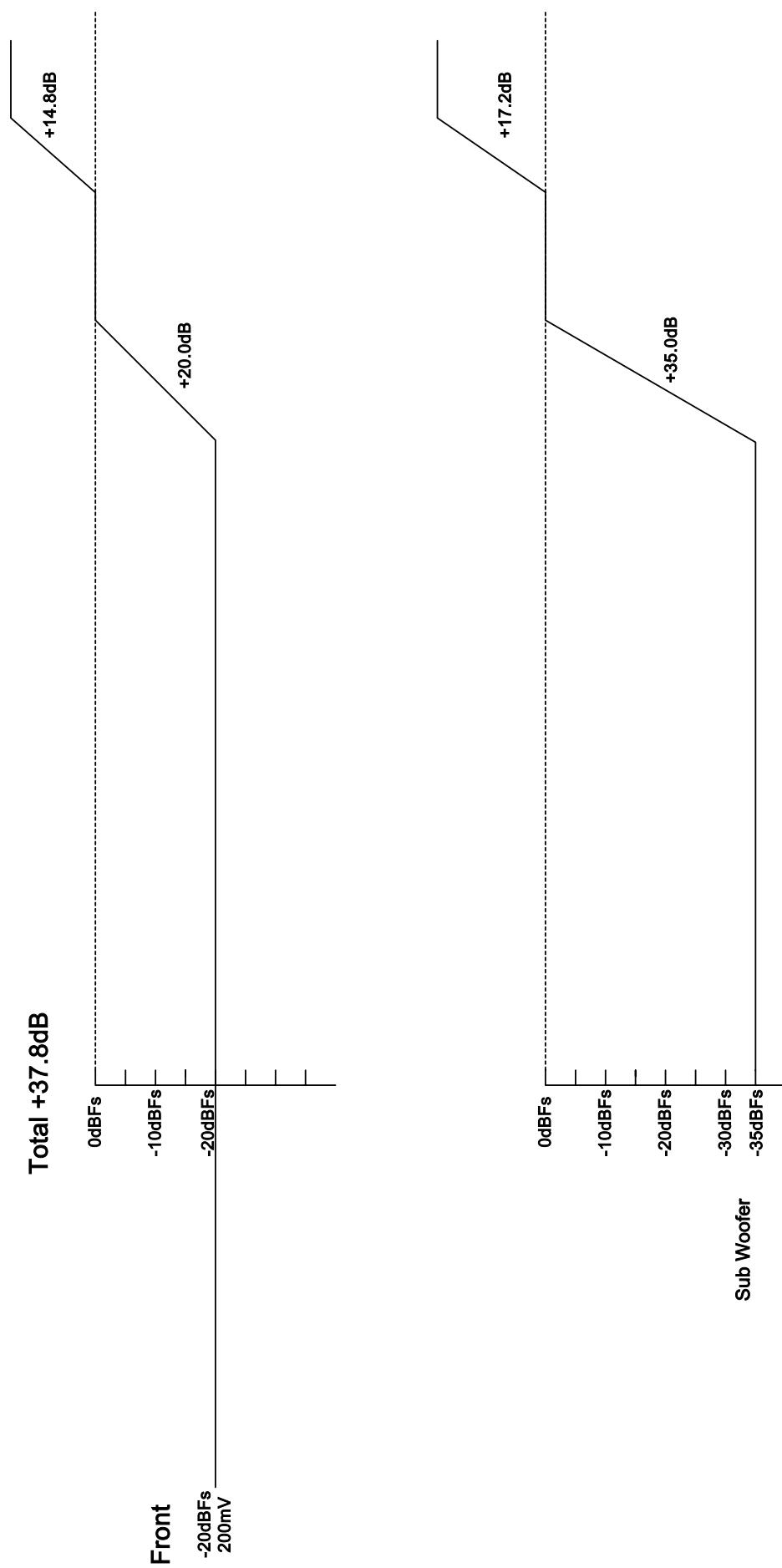
S-102 ADV Block Diagram



## DSW-S102



## LEVEL DIAGRAM



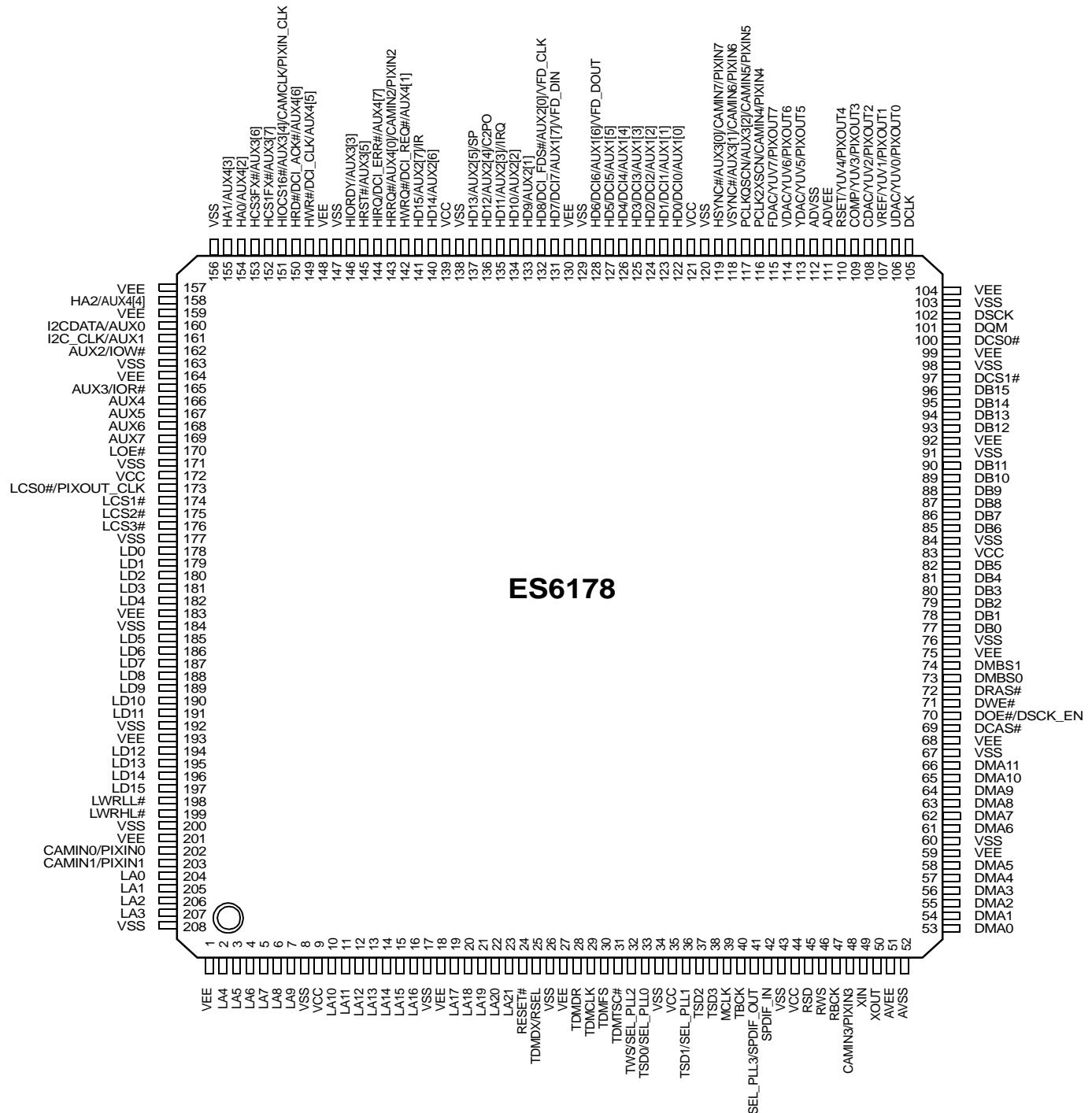
# SEMICONDUCTORS

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

### ES6178FF (IC101: 1U-3836)

#### PINOUT DIAGRAM



## ES6178FF PIN DESCRIPTION

Name	Pin Numbers	I/O	Definition																																				
VEE	1,18, 27, 59, 68, 75, 92, 99, 104, 130, 148, 157, 159, 164, 183, 193, 201	P	I/O power supply.																																				
LA[21:0]	2-7, 10-16, 19-23, 204-207	O	RISC port address bus.																																				
VSS	8, 17, 26, 34, 43, 60, 67, 76, 84, 91, 98, 103, 120, 129, 138, 147, 156, 163, 171, 177, 184, 192, 200, 208	G	Ground.																																				
VCC	9, 35, 44, 83, 121, 139, 172	P	Core power supply.																																				
RESET#	24	I	Reset input; (5V tolerant input).																																				
TDMMDX		O	TDM transmit data output.																																				
RSEL	25	I	LCS3 ROM Boot Data Width Select. Strapped to VCC or ground via 4.7-kΩ resistor; read only during reset. <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>RSEL</th> <th>Selection</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>16-bit ROM</td> </tr> <tr> <td>1</td> <td>8-bit ROM</td> </tr> </tbody> </table>	RSEL	Selection	0	16-bit ROM	1	8-bit ROM																														
RSEL	Selection																																						
0	16-bit ROM																																						
1	8-bit ROM																																						
TDMDR	28	I	TDM receive data input; (5V tolerant input).																																				
TDMCLK	29	I	TDM clock input; (5V tolerant input).																																				
TDMFS	30	I	TDM frame sync input; (5V tolerant input).																																				
TDMTSC#	31	O	TDM output enable.																																				
TWS		O	Audio transmit frame sync output.																																				
SEL_PLL2	32	I	System and DSCK output clock frequency selection is made at the rising edge of RESET#. The matrix below lists the available clock frequencies and their respective PLL bit settings. Strapped to VCC or ground via 4.7-kΩ resistor; read only during reset. <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>SEL_PLL2</th> <th>SEL_PLL1</th> <th>SEL_PLL0</th> <th>PLL Settings</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td>0</td> <td>DCLK × 4.5</td> </tr> <tr> <td>0</td> <td>0</td> <td>1</td> <td>DCLK × 5.0</td> </tr> <tr> <td>0</td> <td>1</td> <td>0</td> <td>Bypass</td> </tr> <tr> <td>0</td> <td>1</td> <td>1</td> <td>DCLK × 4.0</td> </tr> <tr> <td>1</td> <td>0</td> <td>0</td> <td>DCLK × 4.25</td> </tr> <tr> <td>1</td> <td>0</td> <td>1</td> <td>DCLK × 4.75</td> </tr> <tr> <td>1</td> <td>1</td> <td>0</td> <td>DCLK × 5.5</td> </tr> <tr> <td>1</td> <td>1</td> <td>1</td> <td>DCLK × 6.0</td> </tr> </tbody> </table>	SEL_PLL2	SEL_PLL1	SEL_PLL0	PLL Settings	0	0	0	DCLK × 4.5	0	0	1	DCLK × 5.0	0	1	0	Bypass	0	1	1	DCLK × 4.0	1	0	0	DCLK × 4.25	1	0	1	DCLK × 4.75	1	1	0	DCLK × 5.5	1	1	1	DCLK × 6.0
SEL_PLL2	SEL_PLL1	SEL_PLL0	PLL Settings																																				
0	0	0	DCLK × 4.5																																				
0	0	1	DCLK × 5.0																																				
0	1	0	Bypass																																				
0	1	1	DCLK × 4.0																																				
1	0	0	DCLK × 4.25																																				
1	0	1	DCLK × 4.75																																				
1	1	0	DCLK × 5.5																																				
1	1	1	DCLK × 6.0																																				

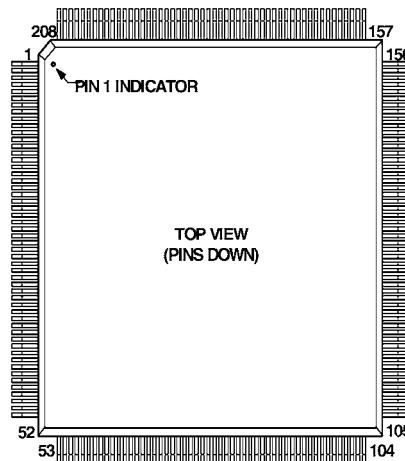
Name	Pin Numbers	I/O	Definition					
TSD0	33	O	Audio transmit serial data output 0.					
SEL_PLL0		I	Refer to the description and matrix for SEL_PLL2 pin 32.					
TSD1	36	O	Audio transmit serial data output 1.					
SEL_PLL1		I	Refer to the description and matrix for SEL_PLL2 pin 32.					
TSD2	37	O	Audio transmit serial data output 2. This pin must be pulled down to VSS via a 4.7-kΩ resistor for proper operation.					
TSD3	38	O	Audio transmit serial data output 3.					
MCLK	39	I/O	Audio master clock for audio DAC.					
TBCK	40	I/O	Audio transmit bit clock. TBCK is an input during reset and subsequently is programmed as an output via the AUDIOXMT register (addr 0x2000D00Ch, bit 4).					
SEL_PLL3	41	I	Clock source select. Strapped to VCC or ground via 4.7-kΩ resistor; read only during reset.					
			<table border="1"> <thead> <tr> <th>SEL_PLL3</th><th>Clock Source</th></tr> </thead> <tbody> <tr> <td>0</td><td>Crystal oscillator</td></tr> <tr> <td>1</td><td>DCLK input</td></tr> </tbody> </table>	SEL_PLL3	Clock Source	0	Crystal oscillator	1
SEL_PLL3	Clock Source							
0	Crystal oscillator							
1	DCLK input							
SPDIF_OUT		O	S/PDIF output.					
SPDIF_IN	42	I	S/PDIF input; (5V tolerant input).					
RSD	45	I	Audio receive serial data; (5V tolerant input).					
RWS	46	I	Audio receive frame sync; (5V tolerant input).					
RBCK	47	I	Audio receive bit clock; (5V tolerant input).					
CAMIN3	48	I	Camera YUV 3.					
PIXIN3		I	CCIR656 input pixel 3.					
XIN	49	I	27-MHz crystal input.					
XOUT	50	O	27-MHz crystal output.					
AVEE	51	P	Analog power for PLL.					
AVSS	52	G	Analog ground for PLL.					
DMA[11:0]	53-58, 61-66	O	DRAM address bus.					
DCAS#	69	O	DRAM column address strobe.					
DOE#	70	O	DRAM output enable.					
DSCK_EN		O	DRAM clock enable.					
DWE#	71	O	DRAM write enable.					
DRAS#	72	O	DRAM row address strobe.					
DMBS0	73	O	DRAM bank select 0.					
DMBS1	74	O	DRAM bank select 1.					
DB[15:0]	77-82, 85-90, 93-96	I/O	DRAM data bus.					
DCS[1:0]#	97,100	O	DRAM chip select.					
DQM	101	O	Data input/output mask.					
DSCK	102	O	Output clock to DRAM.					

Name	Pin Numbers	I/O	Definition					
DCLK	105	I	Clock input to PLL; (5V tolerant input).					
UDAC		O	Video DAC output.					
Value	F DAC (pin 115)	V DAC (pin 114)	Y DAC (pin 113)	C DAC (pin 108)	U DAC (pin 106)			
0	CVBS/Chroma	CVBS1	Y	C	N/A			
1	CVBS/Chroma	CVBS1	Y	C	CVBS2			
2	CVBS/Chroma	N/A	Y	C	N/A			
3	CVBS/Chroma	CVBS1	N/A	N/A	CVBS2			
4	CVBS/Chroma	CVBS1	N/A	N/A	N/A			
5	CVBS/Chroma	CVBS1	Y	Pb	Pr			
6	CVBS/Chroma	N/A	Y	Pb	Pr			
7	N/A	SYNC	G	B	R			
8	CVBS/Chroma	Chroma	Y	Pb	Pr			
9	CVBS	CVBS1	G	B	R			
10	CVBS	CVBS1	G	R	B			
11	N/A	SYNC	G	R	B			
12	CVBS/Chroma	N/A	Y	Pr	Pb			
13	CVBS/Chroma	CVBS1	Y	Pr	Pb			
14	Chroma	Y	G	R	B			
F: CVBS/chroma signal for simultaneous mode. Y: Luma component for YUV and Y/C processing. C: Chrominance signal for Y/C processing. U: Chrominance component signal for YUV mode. V: Chrominance component signal for YUV mode.								
YUV0		O	YUV pixel 0 output data.					
PIXOUT0		O	CCIR656 output pixel 0.					
VREF		I	Internal voltage reference to video DAC. Bypass to ground with 0.1- $\mu$ F capacitor.					
YUV1		O	YUV pixel 1 output data.					
PIXOUT1		O	CCIR656 output pixel 1.					
CDAC		O	Video DAC output. Refer to description and matrix for UDAC pin 106.					
YUV2		O	YUV pixel 2 output data.					
PIXOUT2		O	CCIR656 output pixel 2.					
COMP		I	Compensation input. Bypass to ADVEE with 0.1- $\mu$ F capacitor.					
YUV3		O	YUV pixel 3 output data.					
PIXOUT3		O	CCIR656 output pixel 3.					
RSET		I	DAC current adjustment resistor input.					
YUV4		O	YUV pixel 4 output data.					
PIXOUT4		O	CCIR656 output pixel 4.					

Name	Pin Numbers	I/O	Definition
ADVEE	111	P	Analog power for video DAC.
ADVSS	112	G	Analog ground for video DAC.
YDAC	113	O	Video DAC output. Refer to description and matrix for UDAC pin 106.
YUV5		O	YUV pixel 5 output data
PIXOUT5		O	CCIR656 output pixel 5.
VDAC	114	O	Video DAC output. Refer to description and matrix for UDAC pin 106.
YUV6		O	YUV pixel 6 output data.
PIXOUT6		O	CCIR656 output pixel 6.
FDAC	115	O	Video DAC output. Refer to description and matrix for UDAC pin 106.
YUV7		O	YUV pixel 7 output data.
PIXOUT7		O	CCIR656 output pixel 7.
PCLK2XSCN	116	I/O	27-MHz video output pixel clock.
CAMIN4		I	Camera YUV 4.
PIXIN4		I	CCIR656 input pixel 4.
PCLKQSCN	117	O	13.5-MHz video output pixel clock.
AUX3[2]		I/O	Aux3 data I/O; (5V tolerant input).
CAMIN5		I	Camera YUV 5.
PIXIN5		I	CCIR656 input pixel 5.
VSYNC#	118	I/O	Vertical sync; (5V tolerant input).
AUX3[1]		I/O	Aux3 data I/O; (5V tolerant input).
CAMIN6		I	Camera YUV 6.
PIXIN6		I	CCIR656 input pixel 6.
HSYNC#	119	I/O	Horizontal sync; (5V tolerant input).
AUX3[0]		I/O	Aux3 data I/O; (5V tolerant input).
CAMIN7		I	Camera YUV 7.
PIXIN7		I	CCIR656 input pixel 7.
HD[5:0]	122-127	I/O	Host data bus lines; (5V tolerant input).
DCI[5:0]		I/O	DVD channel data I/O; (5V tolerant input).
AUX1[5:0]		I/O	Aux1 data I/O; (5V tolerant input).
HD6	128	I/O	Host data bus line; (5V tolerant input).
DCI6		I/O	DVD channel data I/O; (5V tolerant input).
AUX1[6]		I/O	Aux1 data I/O; (5V tolerant input).
VFD_DOUT		I	VFD data output.
HD7	131	I/O	Host data bus line; (5V tolerant input).
DCI7		I/O	DVD channel data I/O; (5V tolerant input).
AUX1[7]		I/O	Aux1 data I/O; (5V tolerant input).
VFD_DIN		I	VFD data input.

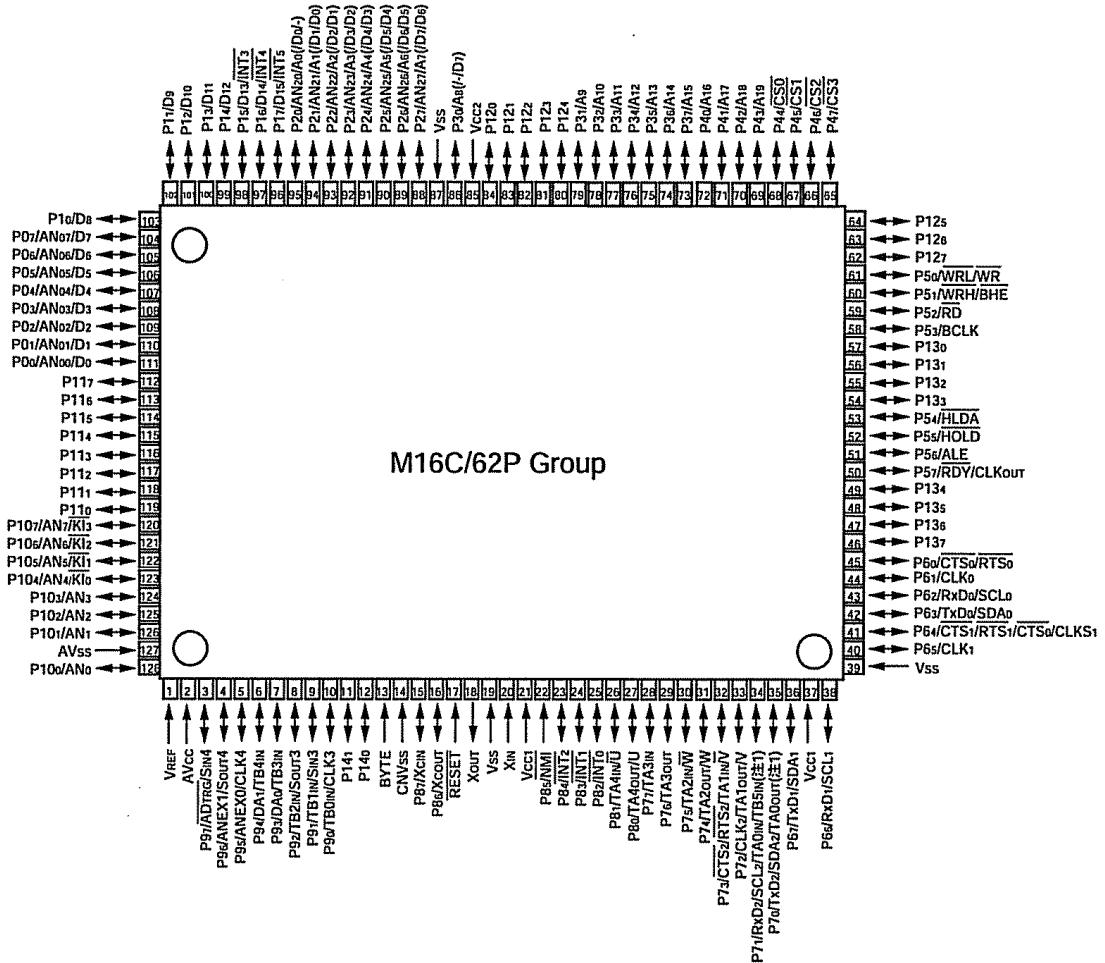
Name	Pin Numbers	I/O	Definition
HD8	132	I/O	Host data bus line; (5V tolerant input).
DCI_FDS#		I/O	DVD input sector start; (5V tolerant input).
AUX2[0]		I/O	Aux2 data I/O; (5V tolerant input).
VFD_CLK		I	VFD clock input.
HD9	133	I/O	Host data bus line; (5V tolerant input).
AUX2[1]		I/O	Aux2 data I/O; (5V tolerant input).
HD10	134	I/O	Host data bus line; (5V tolerant input).
AUX2[2]		I/O	Aux2 data I/O; (5V tolerant input).
HD11	135	I/O	Host data bus line; (5V tolerant input).
AUX2[3]		I/O	Aux2 data I/O; (5V tolerant input).
IRQ		O	IRQ.
HD12	136	I/O	Host data bus line; (5V tolerant input).
AUX2[4]		I/O	Aux2 data I/O; (5V tolerant input).
C2PO		I	C2PO error correction flag from CD-ROM; (5V tolerant input).
HD13	137	I/O	Host data bus line; (5V tolerant input).
AUX2[5]		I/O	Aux2 data I/O; (5V tolerant input).
SP		I	16550 UART serial port input.
HD14	140	I/O	Host data bus line; (5V tolerant input).
AUX2[6]		I/O	Aux2 data I/O; (5V tolerant input).
HD15	141	I/O	Host data bus line; (5V tolerant input).
AUX2[7]		I/O	Aux2 data I/O; (5V tolerant input).
IR		I	IR remote control input; (5V tolerant input).
HWRQ#	142	O	Host write request.
DCI_REQ#		O	DVD control interface request.
AUX4[1]		I/O	Aux4 data I/O; (5V tolerant input).
HRRQ#	143	O	Host read request.
AUX4[0]		I/O	Aux4 data I/O; (5V tolerant input).
CAMIN2		I	Camera YUV 2.
PIXIN2		I	CCIR656 input pixel 2.
HIRQ	144	I/O	Host interrupt.
DCI_ERR#		I/O	DVD channel data error; (5V tolerant input).
AUX4[7]		I/O	Aux4 data I/O; (5V tolerant input).
HRST#	145	O	Host reset.
AUX3[5]		I/O	Aux3 data I/O; (5V tolerant input).
HIORDY	146	I	Host I/O ready.
AUX3[3]		I/O	Aux3 data I/O; (5V tolerant input).

Name	Pin Numbers	I/O	Definition
HWR#	149	I/O	Host write.
DCI_CLK		I/O	DVD channel data clock; (5V tolerant input).
AUX4[5]		I/O	Aux4 data I/O; (5V tolerant input).
HRD#	150	O	Host read.
DCI_ACK#		I/O	DVD channel data valid; (5V tolerant input).
AUX4[6]		I/O	Aux4 data I/O; (5V tolerant input).
HIOCS16#	151	I	Device 16-bit data transfer.
AUX3[4]		I/O	Aux3 data I/O; (5V tolerant input).
CAMCLK		I	Camera port pixel clock input.
PIXIN_CLK		I	CCIR656 input pixel clock.
HCS1FX#	152	O	Host select 1.
AUX3[7]		I/O	Aux3 data I/O; (5V tolerant input).
HCS3FX#	153	O	Host select 3.
AUX3[6]		I/O	Aux3 data I/O; (5V tolerant input).
HA[2:0]	154, 155, 158	I/O	Host address bus.
AUX4[4:2]		I/O	Aux4 data I/Os; (5V tolerant input).
AUX0	160	I/O	Auxiliary port 0 (open collector); (5V tolerant input).
I2CDATA		I/O	I <sup>2</sup> C data I/O; (5V tolerant input).
AUX1	161	I/O	Auxiliary port 1 (open collector); (5V tolerant input).
I2C_CLK		I/O	I <sup>2</sup> C clock I/O; (5V tolerant input).
AUX2	162	I/O	Auxiliary port; (5V tolerant input).
IOW#		O	I/O write strobe (LCS1).
AUX3	165	I/O	Auxiliary port; (5V tolerant input).
IOR#		O	I/O read strobe (LCS1).
AUX4-7	166-169	I/O	Auxiliary ports; (5V tolerant input).
LOE#	170	O	RISC port output enable.
LCS0#	173	O	RISC port chip select 0.
PIXOUT_CLK		O	CCIR656 output pixel clock.
LCS[3:1]#	174-176	O	RISC port chip select [3:1].
LD[15:0]	178-182, 185-191, 194-197	I/O	RISC port data bus; (5V tolerant input).
LWRLL#	198	O	RISC port low-byte write enable.
LWRHL#	199	O	RISC port high-byte write enable.
CAMINO	202	I	Camera YUV 0.
PIXINO		I	CCIR656 input pixel 0.
CAMIN1	203	I	Camera YUV 1.
PIXIN1		I	CCIR656 input pixel 1.

**DSP21367 (IC401: 1U-3836)**

Pin No.	Signal						
1	VDD	53	VDD	105	VDD	157	VDD
2	DATA28	54	GND	106	GND	158	VDD
3	DATA27	55	IOVDD	107	IOVDD	159	GND
4	GND	56	ADDR0	108	SDCAS	160	VDD
5	IOVDD	57	ADDR2	109	SDRAS	161	VDD
6	DATA26	58	ADDR1	110	SDCKE	162	VDD
7	DATA25	59	ADDR4	111	SDWE	163	TDI
8	DATA24	60	ADDR3	112	WR	164	TRST
9	DATA23	61	ADDR5	113	SDA10	165	TCK
10	GND	62	GND	114	GND	166	GND
11	VDD	63	VDD	115	IOVDD	167	VDD
12	DATA22	64	GND	116	SDCLK0	168	TMS
13	DATA21	65	IOVDD	117	GND	169	CLK_CFG0
14	DATA20	66	ADDR6	118	VDD	170	BOOTCFG0
15	IOVDD	67	ADDR7	119	RD	171	CLK_CFG1
16	GND	68	ADDR8	120	ACK	172	EMU
17	DATA19	69	ADDR9	121	FLAG3	173	BOOTCFG1
18	DATA18	70	ADDR10	122	FLAG2	174	TDO
19	VDD	71	GND	123	FLAG1	175	DAI4
20	GND	72	VDD	124	FLAG0	176	DAI2
21	DATA17	73	GND	125	DAI20	177	DAI3
22	VDD	74	IOVDD	126	GND	178	DAI1
23	GND	75	ADDR11	127	VDD	179	IOVDD
24	VDD	76	ADDR12	128	GND	180	GND
25	GND	77	ADDR13	129	IOVDD	181	VDD
26	DATA16	78	GND	130	DAI19	182	GND
27	DATA15	79	VDD	131	DAI18	183	DPI14
28	DATA14	80	AVSS	132	DAI17	184	DPI13
29	DATA13	81	AVDD	133	DAI16	185	DPI12
30	DATA12	82	GND	134	DAI15	186	DPI11
31	IOVDD	83	CLKIN	135	DAI14	187	DPI10
32	GND	84	XTAL2	136	DAI13	188	DPI9
33	VDD	85	IOVDD	137	DAI12	189	DPI8
34	GND	86	GND	138	VDD	190	DPI7
35	DATA11	87	VDD	139	IOVDD	191	IOVDD
36	DATA10	88	ADDR14	140	GND	192	GND
37	DATA9	89	GND	141	VDD	193	VDD
38	DATA8	90	IOVDD	142	GND	194	GND
39	DATA7	91	ADDR15	143	DAI11	195	DPI6
40	DATA6	92	ADDR16	144	DAI10	196	DPI5
41	IOVDD	93	ADDR17	145	DAI8	197	DPI4
42	GND	94	ADDR18	146	DAI9	198	DPI3
43	VDD	95	GND	147	DAI6	199	DPI1
44	DATA4	96	IOVDD	148	DAI7	200	DPI2
45	DATA5	97	ADDR19	149	DAI5	201	CLKOUT
46	DATA2	98	ADDR20	150	IOVDD	202	RESET
47	DATA3	99	ADDR21	151	GND	203	IOVDD
48	DATA0	100	ADDR23	152	VDD	204	GND
49	DATA1	101	ADDR22	153	GND	205	DATA30
50	IOVDD	102	MS1	154	VDD	206	DATA31
51	GND	103	MS0	155	GND	207	DATA29
52	VDD	104	VDD	156	VDD	208	VDD

## M30627FHPGP (IC301: 1U-3836)



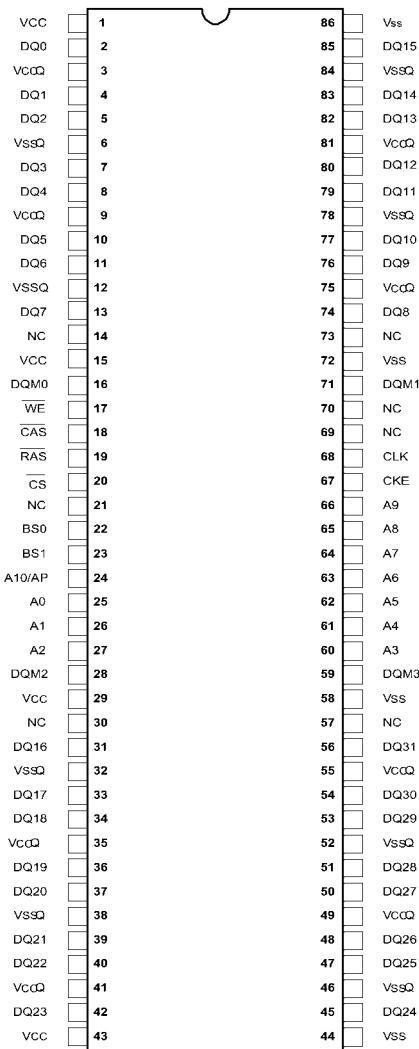
Pin No	Port Function	Port setting	Port Name	Explanation
1	VREF	-	VREF	Reference Voltage Input for A/D converter
2	AVCC	-	AVCC	Positive power
3	P97/SIN4	I	DSP_MISO	Serial Data input from DSP
4	P96/SOUT4	O	DSP_MOSI	Serial Data output to DSP
5	P95/CLK4	O	DSP_CK	Serial Clock output to DSP
6	P94	O	DSP_PWR	[DSP Power ON/OFF output]
7	P93	O	FL_CS	Chip Enable output to FLD
8	P92/SOUT3	O	FL_DOUT	Serial Data output to FLD
9	P91/SIN3	O	/FL_RST	Reset output to FLD
10	P90/CLK3	O	FL_CLK	Serial Clock output to FLD
11	P141	O	/VMONI_SELB	Select signal output of VIDEO OUTPUT(L:AUX1/2,H:DVD).
12	P140	O	/FLI_RST	Reset output to FLI2310
13	BYTE	-	BYTE	GND
14	CNVCS	-	CNVSS	Select input of Flash Memory write Mode
15	P87	O	ON_STBY	Main POWER ON/STANDBY switching output. H:ON
16	P86	O	/VMONI_SELA	Select signal output of VIDEO OUTPUT (H:AUX1, L:AUX2)
17	RESET	I	RST	Reset input
18	XOUT	O	X1	Xtal output
19	VSS	-	VSS	GND
20	XIN	I	X2	Xtal input
21	VCC1	-	VCC1	Positive power
22	P85/NMI	I	/NMI	Positive power
23	P84/INT2	I	/DIR_INT	Interrupt input from DIR
24	P83/INT1	INT	/BE_AUDIO_RST	Audio Reset input from ESS
25	P82/INT0	INT	BE_CS	CS Interrupt input from ESS

Pin No	Port Function	Port setting	Port Name	Explanation
26	P81	EC	P_DOWN( 50/60Hz )	50Hz/60Hz AC input
27	P80	I	PWB_CHK	Checking PWB input
28	P77	O	/SMONI_SELB	SelecteYC Video outputB
29	P76	O	/SMONI_SELA	Selecte YC Video outputA
30	P75	I	VOL_B	VOL encoder Pulse-B input
31	P74	I	VOL_A	VOL encoder Pulse-A input
32	P73/CTS2	O	NC(L:Output)	Not Used:N.C.
33	P72/CLK2	I	/TEMP_DET	Temperature Detect signal input from posister
34	P71/RXD2	I	IPOD_D_MRXD	Serial Data input from IPOD
35	P70/TXD2	O	IPOD_D_MTDXD	Serial Data output to IPOD
36	P67/TXD1	O	F_RXD2	Serial Data out to Flash Memory.
37	VCC1	-	VCC1	Positive power
38	P66	O	F_RXD2	Serial Data input from Flash Memory.
39	VSS	-	VSS	GND
40	P65	O	LED_ORG	Orenge(Yellow)LED output. L:ON
41	P64	O	DC/DC_ON	Power ON/OFF output to DC/DC Converter. H: Power ON
42	TXD0	SO	BE_STXD	Serial Data output to ESS
43	RXD0	SI	BE_SRXD	Serial Data input from ESS
44	CLK0	SI	BE_CLK	Serial Clock input from ESS
45	P60/CTS0	O	NC(L:Output)	Not Used:N.C.
46	P137	O	NC(L:Output)	Not Used:N.C.
47	P136	O	HD_SD	Select signal output of Video Encoder Clock ( L:SD, H:HD )
48	P135	O	/CHOP_ON	CHOPER REG. ON/OFF output. L:ON
49	P134	O	HDMI_DEBG6	For HDMI Debug
50	P57	O	/ENC_RST	Video Encoder Reset output
51	P56	O	NC(L:Output)	Not Used:N.C.
52	P55/EPM	O	F_EPM2	Writing Port for Flash Memory.
53	P54	I	AUX_SW	Front AUX IN insert detect signal input. H: Detected
54	P133	I	HP_SW	HEAD PHONE insert detect signal input. H: Detected
55	P132	O	NC(L:Output)	Not Used:N.C.
56	P131	O	HDMI_OE	HDMI Output Enable(Active Low)
57	P130	O	/VPLD_RST	Reset output to VPLD.
58	P53	O	NC(L:Output)	Not Used:N.C.
59	P52	O	LED_RED	Red LED output. L:ON
60	P51	O	LED_BLU	Blue LED output. H:ON
61	P50/CE	O	/F_CE2	Chip Enable output to Flash Memory.
62	P127	O	NC(L:Output)	Not Used:N.C.
63	P126	O	E2P_CS	Chip Select output to EEPROM
64	P125	O	SAN_CE	Chip Enable output to TUNER/RDS IC
65	P47	O	E2P_CLK	Serial Clock output to EEPROM
66	P46	O	E2P_MOSI	Serial Data output to EEPROM
67	P45	O	FNVL_DA	Serial Data output to FUNC/VOL IC.
68	P44	O	FNVL_CK	Serial Clock output to FUNC/VOL IC.
69	P43	O	FNVL_CE	Chip Enable output to FUNC/VOL IC.
70	P42	I	E2P_MISO	Serial Data input to EEPROM
71	P41	I	SAN_MISO	Serial Data input from TUNER/RDS IC
72	P40	I	TU_STEREO	"STEREO" indicator input from FM/AM TUNER pack
73	P37	I	TUNED	"TUNED" detect input from FM/AM TUNER pack
74	P36	O	/TU_MU	MUTE output to TUNER. L:MUTE
75	P35	O	TU_POWER	TUNER Power ON/OFF output. H: Power ON
76	P34	O	/SAN_RST	Reset output to TUNER/RDS IC
77	P33	O	SP_RL	SP RELAY ON/OFF output. H:ON
78	P32	I	CODEC_MISO	Serial Data input from CODEC
79	P31	O	NC(L:Output)	Not Used:N.C.
80	P124	O	SAN_CK	Serial Clock output to TUNER/RDS IC

Pin No	Port Function	Port setting	Port Name	Explanation
81	P123	O	SAN_MOSI	Serial Data output to TUNER/RDS IC
82	P122	O	/CODEC_RST	Reset output to CODEC
83	P121	O	PRE_MUTE_SUB	MUTE output to PRE OUT. H:MUTE
84	P120	O	HP_MUTE_SUB	MUTE output to HEAD PHONE output. H:MUTE
85	VCC2	-	VCC2	Positive power
86	P30	O	BE_DIR	Select audio line output.(H:ESS,L:DIR)
87	VSS	-	VSS	GND
88	P27	O	CODEC_CE	Chip Enable output to CODEC
89	P26	O	NC(L:Output)	Not Used:N.C.
90	P25	O	DSP_IO_MUTE	DSP IO MUTE output(H:Mute)
91	P24	O	/AD/DIG	Select audio line output.(H:DIGITAL, L:ADC IN)
92	P23	O	/ERR_MUTE	MUTE output at DSP Error.
93	P22	O	/BSE	Bit Stream Enable output(L:Enable)
94	P21	O	NC(L:Output)	Not Used:N.C.
95	P20	O	NC(L:Output)	Not Used:N.C.
96	INT5	INT	/PROTECT	Protect Signal input.
97	P16	O	NC(L:Output)	Not Used:N.C.
98	INT3	INT	/REMOCON	Remote Control signal input
99	P14	O	NC(L:Output)	Not Used:N.C.
100	P13	O	PRE_MUTE_MAIN	MUTE output to Output(H:Mute).
101	P12	O	/COMP_MUTE	COMPONENT VIDEO Mute output(H:Mute)
102	P11	O	/S/V_MUTE	S/COMPOSITE VIDEO Mute output(H:Mute)
103	P10	O	/BE_RST	Reset output to ESS
104	P07	O	DRV_ON	DRIVE POWER ON output(H:P.ON)
105	P06	O	SYS_REQ	SYSTEM REQUEST output to ESS.
106	P05	I	BE_ON	Active Flag input from ESS.
107	P04	O	NC(L:Output)	Not Used:N.C.
108	P03	O	NC(L:Output)	Not Used:N.C.
109	P02	O	/DIR_RST	Reset output to DIR.
110	P01	O	DIR_CE	Chip Enable output to DIR
111	P00	O	DIR/CODEC_CK	Serial Clock output to DIR/CODEC.
112	P117	I	DIR_MISO	Serial Data input from DIR.
113	P116	O	DIR/CODEC_MOSI	Serial Data output to DIR/CODEC
114	P115	O	/DSPROM_RST	Reset output to DSP ROM.
115	P114	O	/DSP_RST	Reset output to DSP.
116	P113	O	DSP_CS	Chip Select output to DSP
117	P112	I	FLAG0	DSP FLAG0 input
118	P111	O	FAN_ON	FAN ON/OFF output.H:FAN ON
119	P110	O	FAN_SPEED	FAN SPEED Control output(H:Slow L:Fast)
120	P107/AN7	I	Pull up	Pull up
121	P106/AN6	AD	KEY2	Unit Operation Button input2
122	P105/AN5	AD	KEY1	Unit Operation Button input1
123	P104/AN4	AD	KEY0	Unit Operation Button input0
124	P103/AN3	AD	MODE2_S102	Initial Setting input for Region No of DVD.
125	P102/AN2	AD	MODE1_S102	Initial Setting input the destination.(E2,E3)
126	P101/AN1	O	Pull up	Pull up
127	AVSS	-	AVSS	GND
128	SW1_IN	AD	SW1_IN	Select signal input of Video Signal. (H:HDMI/M:PROGRE/L:INTERLACE)

[ ]:Reserved

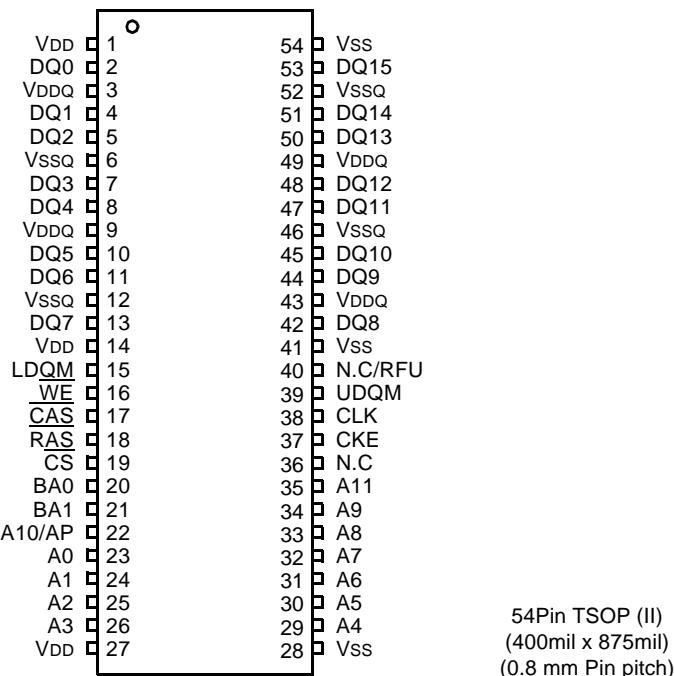
## W9864G2GH-7 (IC402: 1U-3836)



### PIN DESCRIPTION

PIN NAME	FUNCTION	DESCRIPTION
A0–A10	Address	Multiplexed pins for row and column address. Row address: A0–A10. Column address: A0–A7. A10 is sampled during a precharge command to determine if all banks are to be precharged or bank selected by BS0, BS1.
BS0, BS1	Bank Select	Select bank to activate during row address latch time, or bank to read/write during address latch time.
DQ0–DQ31	Data Input/Output	Multiplexed pins for data output and input.
CS	Chip Select	Disable or enable the command decoder. When command decoder is disabled, new command is ignored and previous operation continues.
RAS	Row Address Strobe	Command input. When sampled at the rising edge of the clock RAS, CAS and WE define the operation to be executed.
CAS	Column Address Strobe	Referred to RAS
WE	Write Enable	Referred to RAS
DQM0–DQM3	Input/output mask	The output buffer is placed at Hi-Z (with latency of 2) when DQM is sampled high in read cycle. In write cycle, sampling DQM high will block the write operation with zero latency.
CLK	Clock Inputs	System clock used to sample inputs on the rising edge of clock.
CKE	Clock Enable	CKE controls the clock activation and deactivation. When CKE is low, Power Down mode, Suspend mode, or Self Refresh mode is entered.
VCC	Power (+3.3V)	Power for input buffers and logic circuit inside DRAM.
VSS	Ground	Ground for input buffers and logic circuit inside DRAM.
VccQ	Power (+3.3V) for I/O buffer	Separated power from VCC, to improve DQ noise immunity.
VssQ	Ground for I/O buffer	Separated ground from Vss, to improve DQ noise immunity.
NC	No Connection	No connection

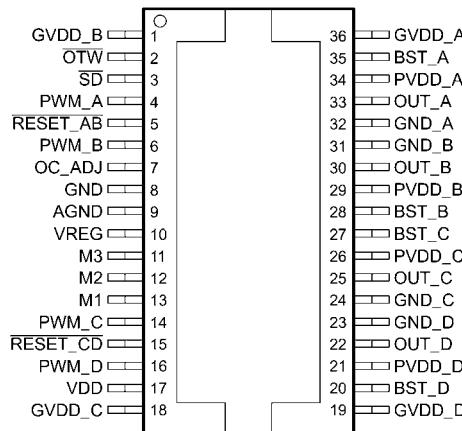
## K4S641632 (IC103: 1U-3836)



### PIN FUNCTION DESCRIPTION

Pin	Name	Input Function
CLK	System clock	Active on the positive going edge to sample all inputs.
CS	Chip select	Disables or enables device operation by masking or enabling all inputs except CLK, CKE and L(U)DQM
CKE	Clock enable	Masks system clock to freeze operation from the next clock cycle. CKE should be enabled at least one cycle prior to new command. Disable input buffers for power down in standby.
A0 ~ A11	Address	Row/column addresses are multiplexed on the same pins. Row address : RA0 ~ RA11, Column address : CA0 ~ CA7
BA0 ~ BA1	Bank select address	Selects bank to be activated during row address latch time. Selects bank for read/write during column address latch time.
RAS	Row address strobe	Latches row addresses on the positive going edge of the CLK with RAS low. Enables row access & precharge.
CAS	Column address strobe	Latches column addresses on the positive going edge of the CLK with CAS low. Enables column access.
WE	Write enable	Enables write operation and row precharge. Latches data in starting from CAS, WE active.
L(U)DQM	Data input/output mask	Makes data output Hi-Z, tSHZ after the clock and masks the output. Blocks data input when L(U)DQM active.
DQ0 ~ 15	Data input/output	Data inputs/outputs are multiplexed on the same pins.
VDD/Vss	Power supply/ground	Power and ground for the input buffers and the core logic.
VDDQ/VSSQ	Data output power/ground	Isolated power supply and ground for the output buffers to provide improved noise immunity.
N.C/RFU	No connection /reserved for future use	This pin is recommended to be left No Connection on the device.

## TAS5142DKD (IC206: 1U-3811)

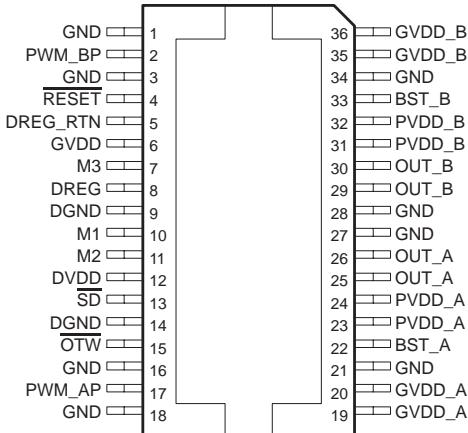


## Terminal Functions

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

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

## TAS5121DKD (IC207: 1U-3811)

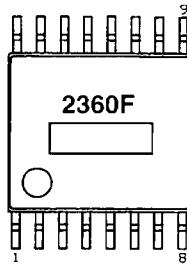


## Terminal Functions

TERMINAL		FUNCTION <sup>(1)</sup>	DESCRIPTION
NAME	DKD		
BST_A	22	P	High side bootstrap supply (BST), external resistor and capacitor to OUT_A required
BST_B	33	P	High side bootstrap supply (BST), external resistor and capacitor to OUT_B required
DGND	9, 14	P	I/O reference ground
DREG	8	P	Digital supply voltage regulator decoupling pin, 1 $\mu$ Fcapacitor connected to DREG_RTN
DREG_RTN	5	P	Decoupling return pin
DVDD	12	P	I/O reference supply input: 100 $\Omega$ to DREG, decoupled to GND, 0.1 $\mu$ F capacitor connected to GND
GND	1, 3, 16, 18, 21, 27, 28, 34	P	Power ground, connected to system GND
GVDD	6	P	Local GVDD decoupling \pin
GVDD_A	19, 20	P	Gate drive input voltage
GVDD_B	35, 36	P	Gate drive input voltage
M1	10	I	Protection mode selection pin, connect to GND
M2	11	I	Protection mode selection pin, connect to DREG
M3	7	I	Output mode selection pin; connect to GND
OTW	15	O	Overtemperature warning output, open drain with internal pullup, active-low when temperature exceeds 115°C
OUT_A	25, 26	O	Output, half-bridge A
OUT_B	29, 30	O	Output, half-bridge B
PVDD_A	23, 24	P	Power supply input for half-bridge A
PVDD_B	31, 32	P	Power supply input for half-bridge B
PWM_AP	17	I	PWM input signal, half-bridge A
PWM_BP	2	I	PWM input signal, half-bridge B
RESET	4	I	Reset signal, active low
SD	13	O	Shutdown signal for half-bridges A and B (open drain with internal pullup)

(1) I = input, O = Output, P = Power

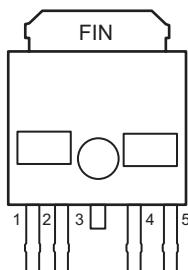
## BU2360FV (IC109: 1U-3836)



### ○Pin Function

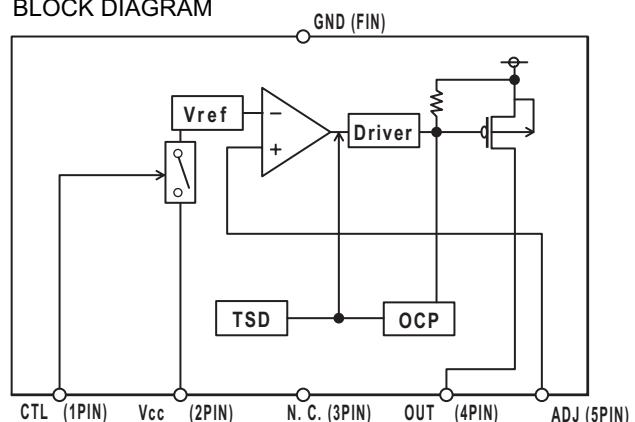
Pin No.	PIN NAME	Function
1	VDD2	Power supply for 27MHz
2	VSS2	GND for 27MHz
3	CLK27M1	27MHz Clock output terminal ( CL=40pF )
4	CLK27M2	27MHz Clock output terminal ( CL=25pF )
5	AVDD	Power supply for Analog block
6	AVSS	GND for Analog block
7	XTALIN	Crystal input terminal
8	XTALOUT	Crystal output terminal
9	CLK512FS2	512fs Clock output terminal 2 ( 22.5792 or 24.576MHz )
10	CLK512FS1	512fs Clock output terminal 1 ( 22.5792 or 24.576MHz )
11	DVSS	Power supply for Digital block
12	DVDD	GND for Digital block
13	CLK33M2	33.8688MHz Clock output terminal 2
14	FSEL	FS select (L : 44.1kHz, OPEN : 48kHz) : with pull-up
15	CLK33M1	33.8688MHz Clock output terminal 1
16	OE	Output enable (L : disable, OPEN : enable) : with pull-up

## BD7820 (IC111, IC707: 1U-3836)



Pin No.	Pin Name
1	CTL
2	Vcc
3	N.C.
4	OUT
5	ADJ
FIN	GND

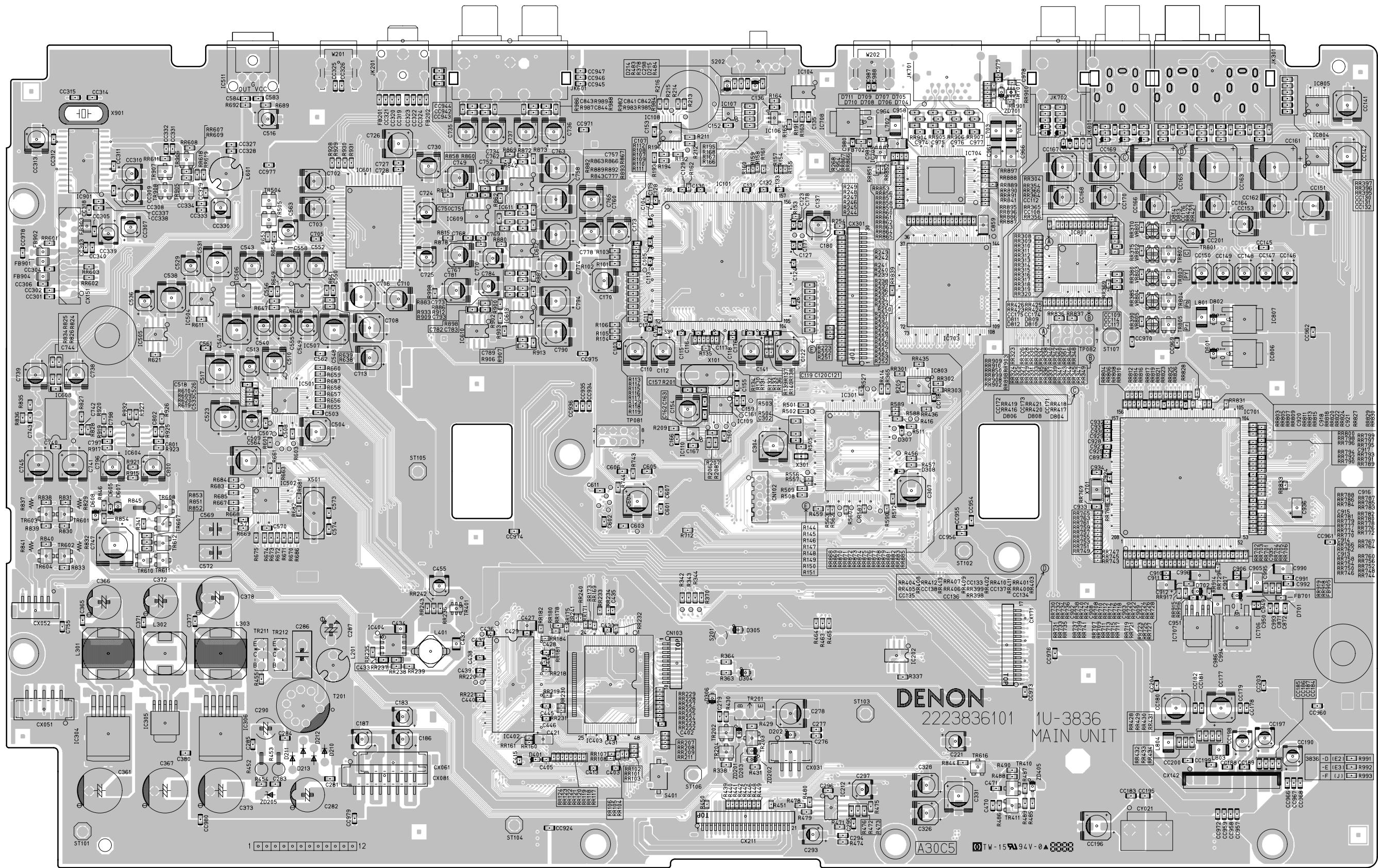
BLOCK DIAGRAM





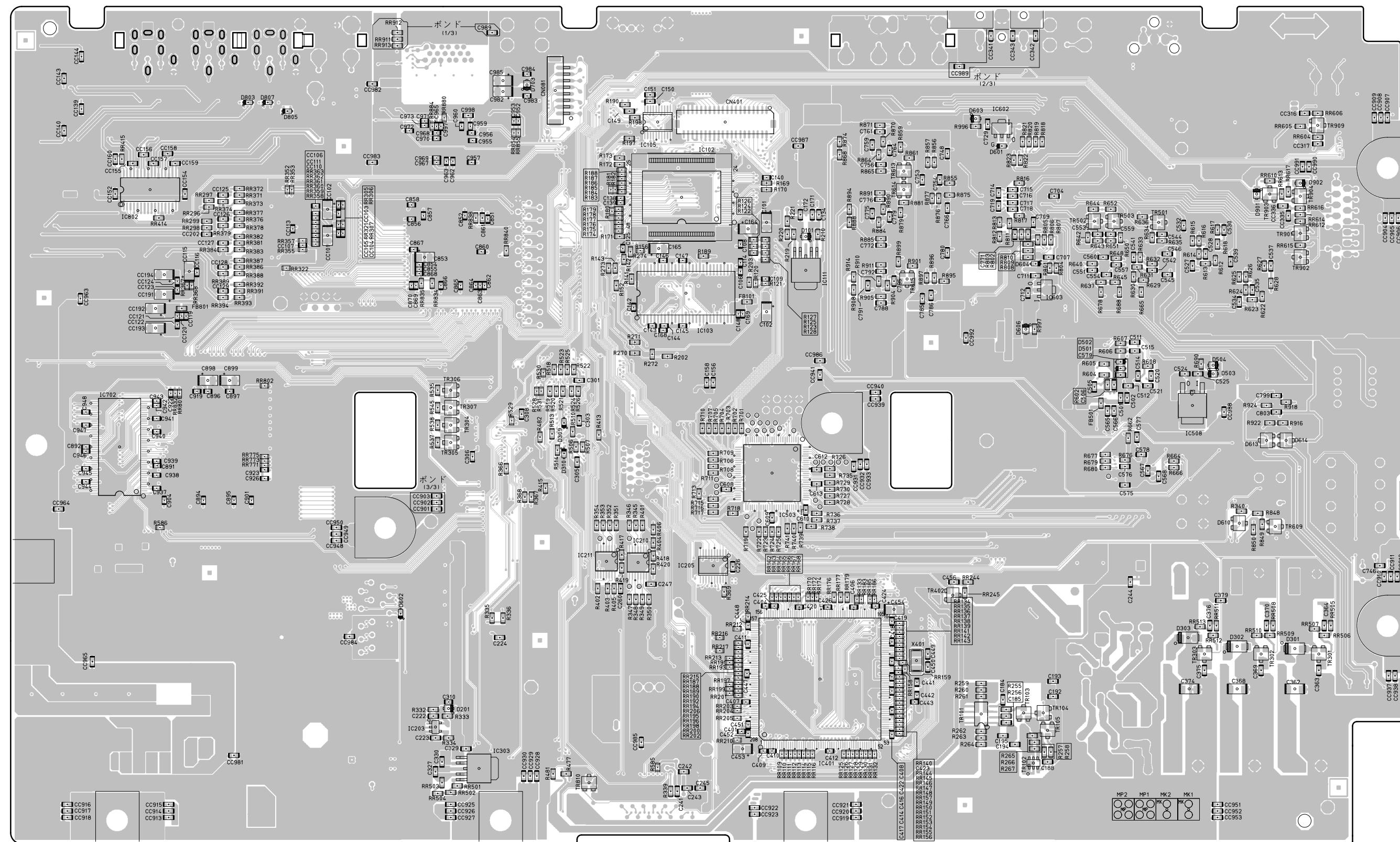
# PRINTED WIRING BOARDS

## 1U-3836 MAIN P.W.B. UNIT (1/2)



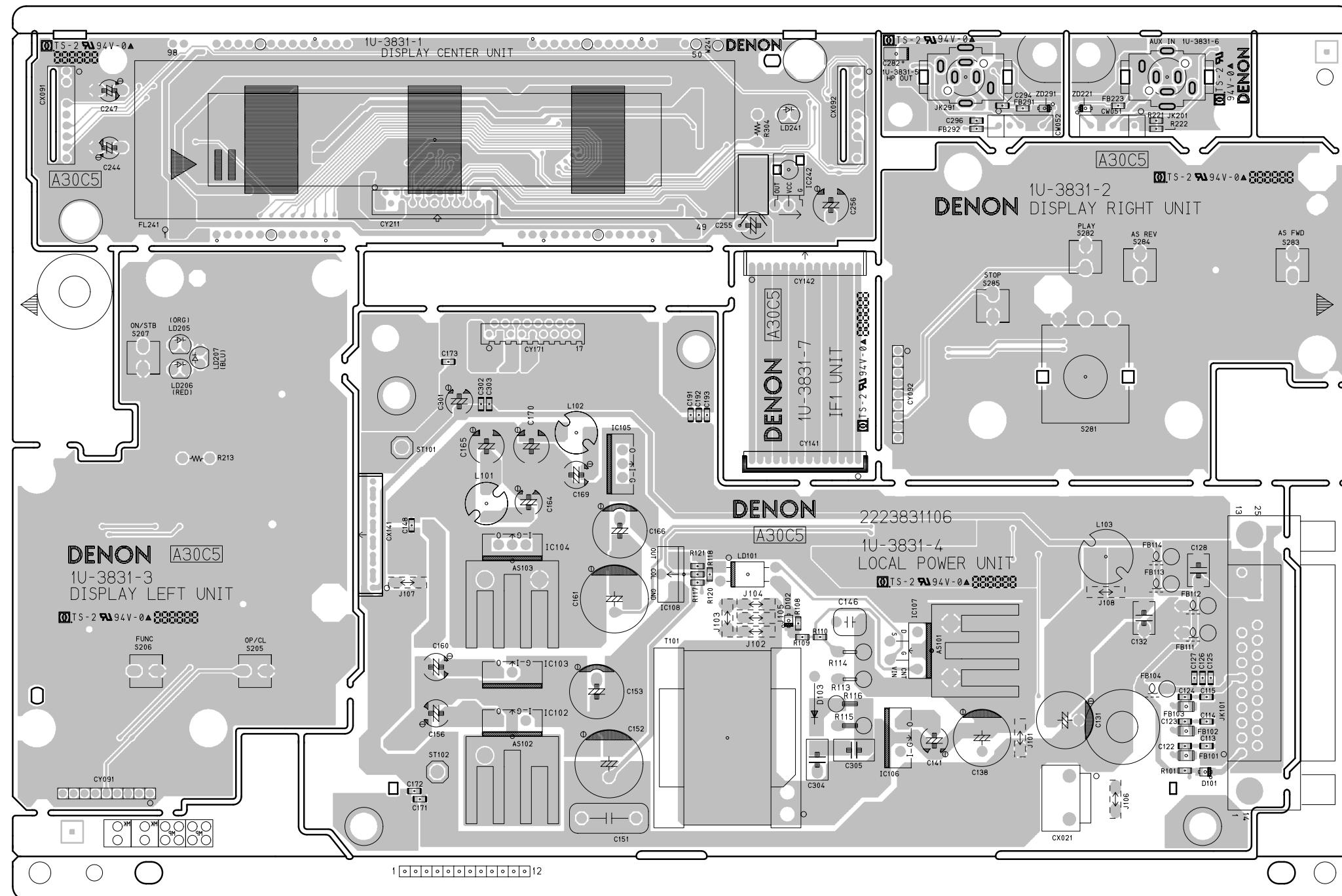
COMPONENT SIDE

## 1U-3836 MAIN P.W.B. UNIT (2/2)



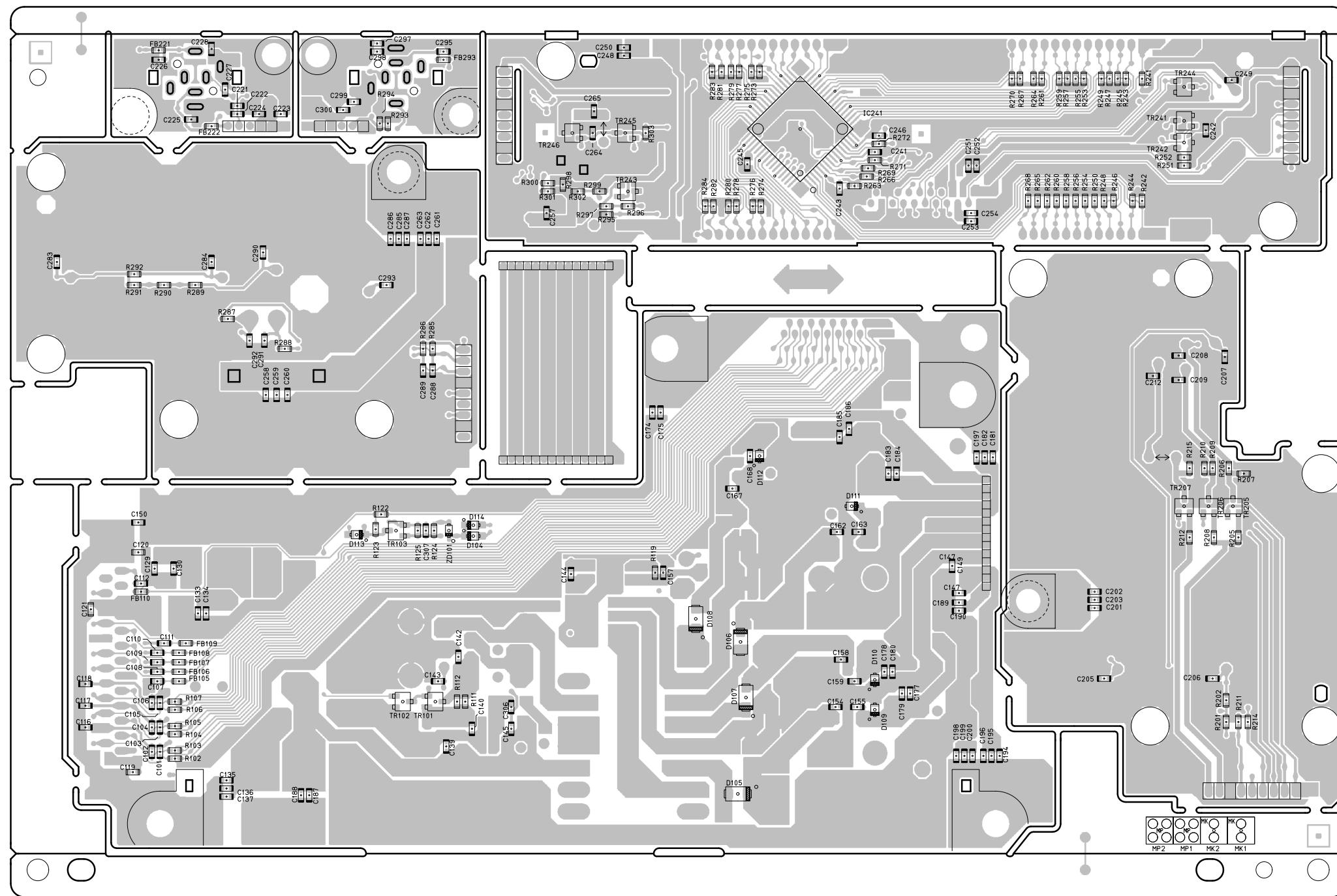
FOIL SIDE

## 1U-3831 LOC/PWR-DISP P.W.B. UNIT (1/2)



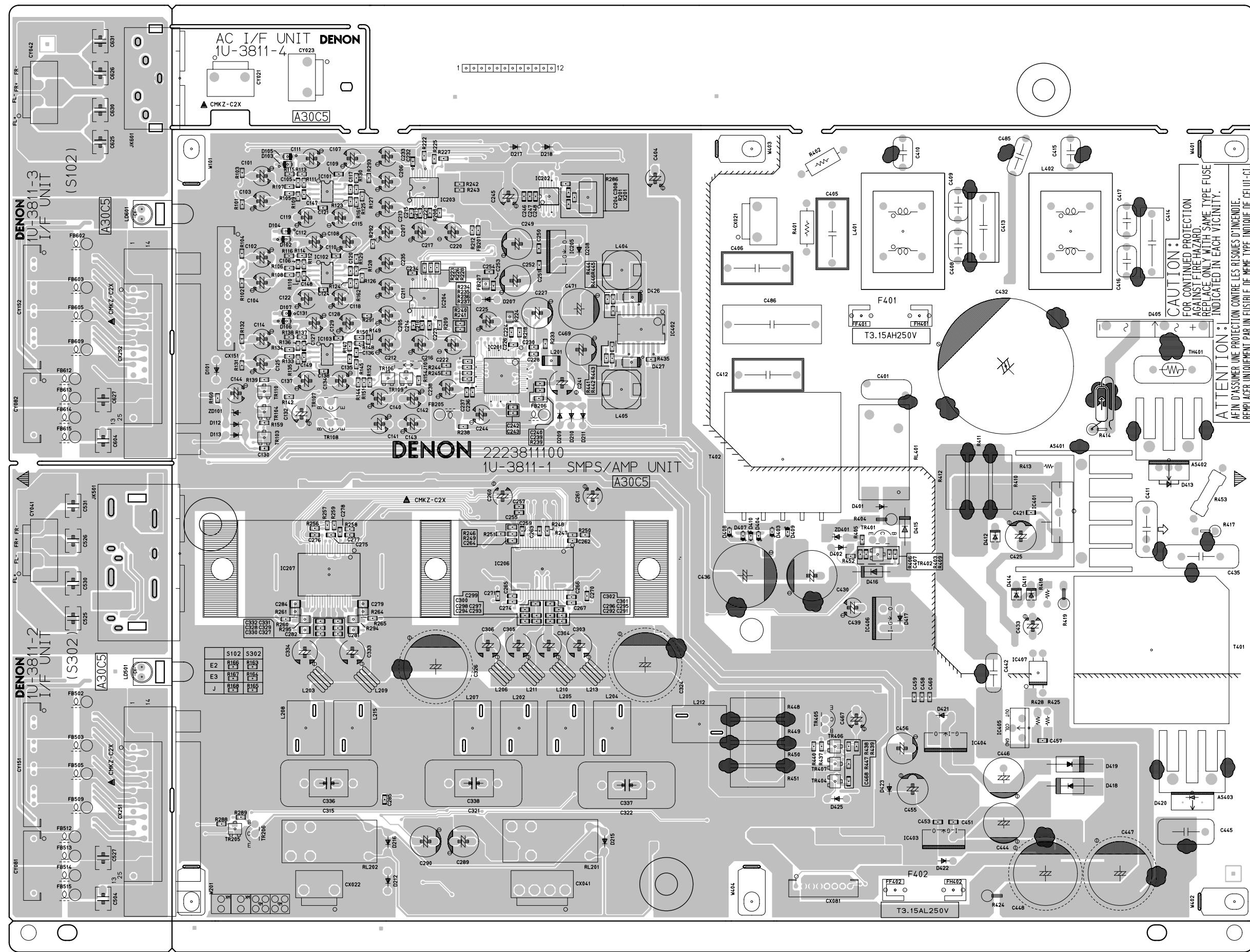
COMPONENT SIDE

## 1U-3831 LOC/PWR-DISP P.W.B. UNIT (2/2)

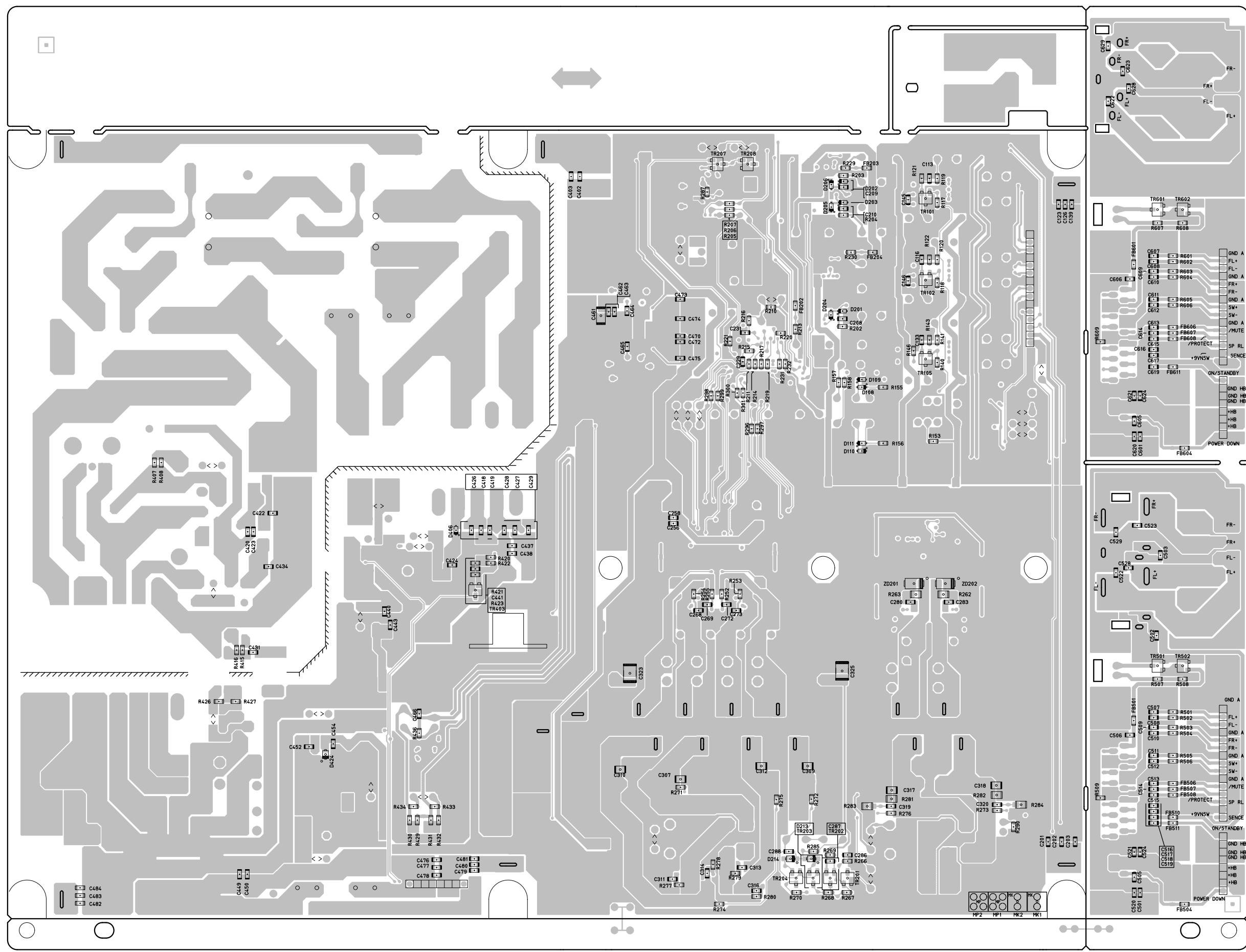


FOIL SIDE

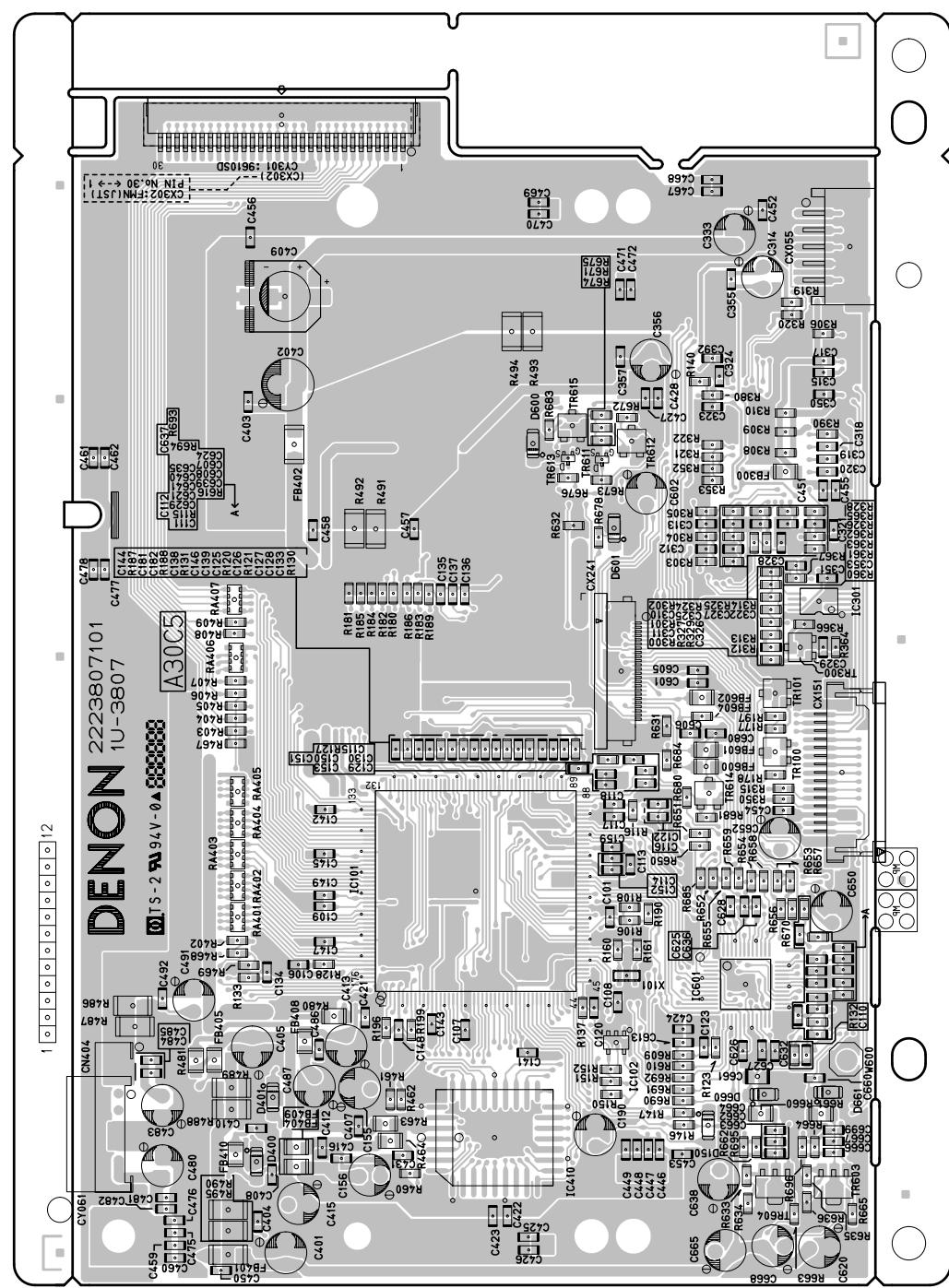
## 1U-3811 D.AMP/SMPS P.W.B. UNIT (1/2)



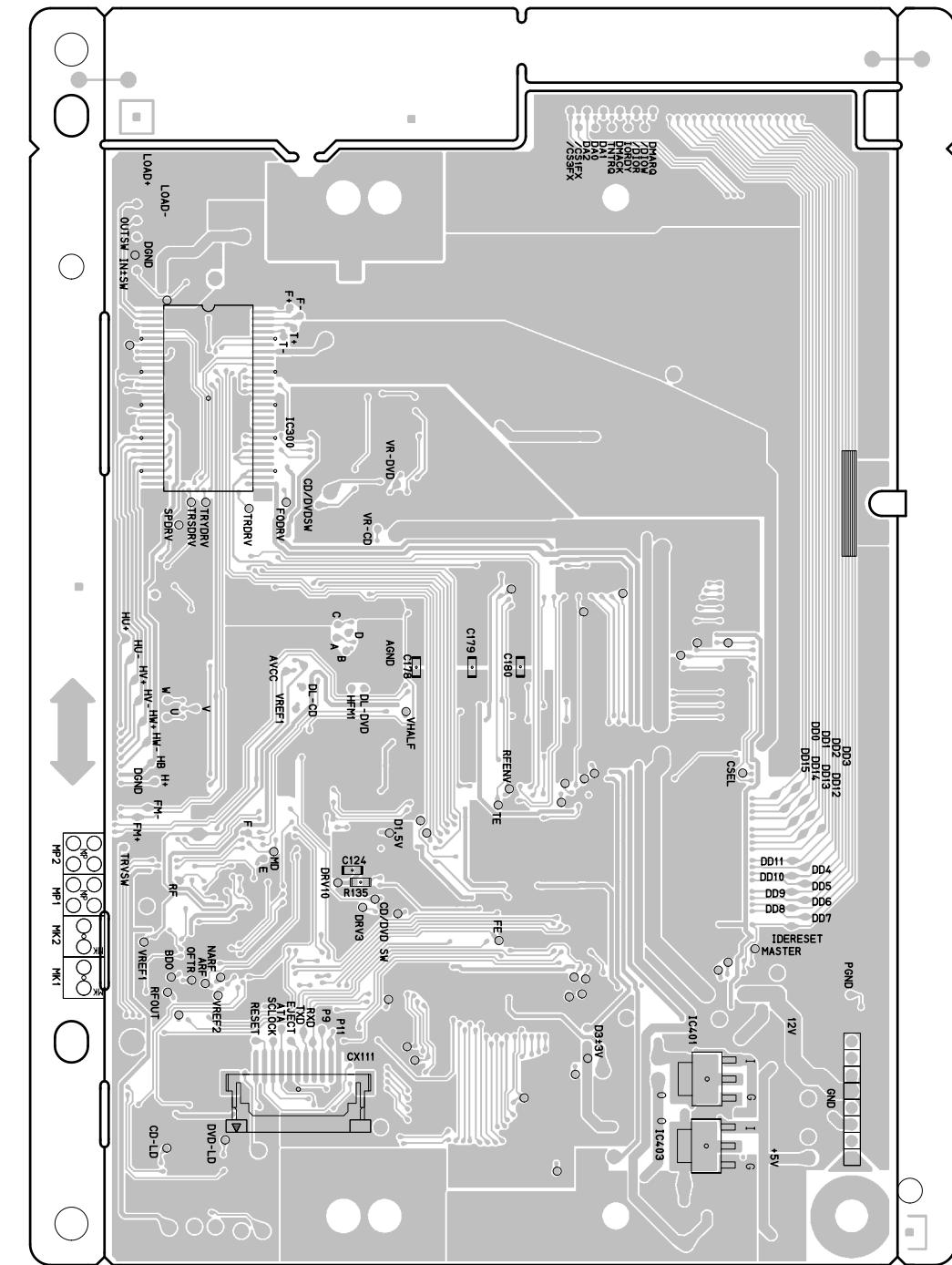
## 1U-3811 D.AMP/SMPS P.W.B. UNIT (2/2)



# 1U-3807 FEP P.W.B. UNIT



COMPONENT SIDE



FOIL SIDE



## 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

JP : Japan model

### 1U-3836D/E/F MAIN P.W.B. UNIT ASS'Y

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
<b>SEMICONDUCTORS GROUP</b>						
	IC101	00D 262 3708 004	ES6178FF			
	IC102	00D GEN 8571 -0	B/E ROM SUB ASSY			
	IC103	00D 262 3759 008	K4S641632K-UC60			
	IC104	00D 262 3402 902	BR24L32F-WE2 +C			
	IC105	00D 262 3242 900	SN74LV273APW-EL2 +REF			
	IC108	00D 262 2516 909	SN74LV32APW-EL2 +C			
	IC109	00D 262 3751 909	BU2360FV-FE2			
	IC110	00D 262 3046 902	TC7WH157FU +C			
	IC111	00D 263 1282 907	BD7820FP-E2			
	IC202	00D 262 3707 908	BR25L640F-WE2			
	IC203	00D 262 3082 924	BD4730G-TR			
	IC205	00D 262 2953 902	SN74HCT244APW +C			
	IC210	00D 262 2813 903	SN74AHCT08PW-EL2 +C			
	IC211	00D 262 2517 908	SN74LV08APW-EL2 +REF			
	IC301	00D GEN 8570 -0	SYSTEM ROM SUB ASSY	M30627FHPGP		
	IC303	00D 263 1240 907	BA33B00FP-E2			
	IC304	00D 263 1278 908	SI-8001FDE			
	IC305	00D 263 1279 907	SI-8008TM			
	IC306	00D 263 1278 908	SI-8001FDE			
	IC401	00D 262 3709 003	ADSP21367KSZ1A1138			
	IC402	00D 262 3746 008	W9864G2GH-7			
	IC403	00D GEN 8630 -0	DSP ROM ASSY			
	IC404	00D 263 1281 908	BD9130NV-E2			
	IC501	00D 262 3757 000	ADAU1328BSTZ1138			
	IC502	00D 262 3449 004	LC89057W-VF4A			
	IC503	00D 262 3750 007	LC4064V-75TN100C(S302)			
	IC504,505	00D 263 0934 900	BA4510F-E2 +C			
	IC506,507	00D 263 0896 909	NJM2068MD-TE1 +C			
	IC508	00D 262 2977 946	BA33BC0FP-E2 +REF			
	IC511	00D 269 0231 009	GP1FAV31RK0F			
	IC601	00D 263 1245 009	M61531FP			
	IC602	00D 263 1232 902	NJM79L07UA-TE1			
	IC603	00D 263 1231 903	NJM78L07UA-TE1			
	IC604	00D 263 0615 902	BA15218F-DXE2 +C			
	IC608	00D 263 0995 004	NJM4556AD +T			
	IC609,610	00D 263 0615 902	BA15218F-DXE2 +C			
	IC611-613	00D 263 1277 909	RC4580IDR			
	IC701	00D 262 3577 002	FLI2310-LF-CF			
	IC702	00D 262 3303 001	K4S643232H-UC60 +REF			
	IC703	00D 262 3752 005	XC2C128-7TQG144C-VSW1			
	IC704	00D 262 3364 011	SII9030CTU-7			
	IC706	00D 263 1296 906	TA48025BF(T6L1,NQ)			
	IC707	00D 263 1282 907	BD7820FP-E2			
	IC708	00D 263 1295 907	TA48018BF(T6L1,NQ)			
	IC801	00D 262 3478 004	ADV7320			
	IC802	00D 262 3365 900	BH7868FS			
	IC803	00D 262 3277 904	SN74LVC157APW-EL2 +C			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	IC804,805 IC806,807	00D 262 3446 900 00D 263 1296 906	TC4052BFT TA48025BF(T6L1,NQ)			
	IC901  TR201 TR202 TR203,204	00D 262 3360 905  00D 274 0188 905 00D 269 0184 907 00D 269 0192 902	LC72722PM-TLM  2SD1858TV2(Q/R) KRA102S-RTK/P (10K-10K) KRC102S-RTK/P (10K-10K)	for E2		
	TR211,212 TR301-307 TR501-503 TR504 TR505	00D 273 0488 000 00D 269 0192 902 00D 273 0460 905 00D 269 0192 902 00D 269 0184 907	2SC4614 (HFE S/T) KRC102S-RTK/P (10K-10K) KTC2875-B-RTK/P KRC102S-RTK/P (10K-10K) KRA102S-RTK/P (10K-10K)			
	TR601-604 TR607 TR608 TR609 TR610,611	00D 273 0460 905 00D 269 0184 907 00D 269 0192 902 00D 273 0384 900 00D 269 0184 907	KTC2875-B-RTK/P KRA102S-RTK/P (10K-10K) KRC102S-RTK/P (10K-10K) 2SC2412KT96(S) +C KRA102S-RTK/P (10K-10K)			
	TR612 TR613-615 TR616 TR701 TR801-805	00D 269 0192 902 00D 273 0460 905 00D 269 0192 902 00D 275 0110 905 00D 271 0293 901	KRC102S-RTK/P (10K-10K) KTC2875-B-RTK/P KRC102S-RTK/P (10K-10K) HN1K02FIU-TE85L 2SA1022-B +C			
	TR810 TR901,902 TR903 TR904 TR905	00D 273 0384 900 00D 273 0486 905 00D 269 0192 902 00D 269 0184 907 00D 269 0192 902	2SC2412KT96(S) +C KRC231S-RTK(2.2K) KRC102S-RTK/P (10K-10K) KRA102S-RTK/P (10K-10K) KRC102S-RTK/P (10K-10K)			
	TR906 TR907 TR908 TR909	00D 271 0331 902 00D 269 0184 907 00D 269 0192 902 00D 273 0464 901	2SA2092QTL KRA102S-RTK/P (10K-10K) KRC102S-RTK/P (10K-10K) KTC3875S-GR-RTK/P	for E2		
	D101 D201,202 D203 D210-213 D214,215	00D 276 0794 900 00D 276 0794 900 00D 276 0717 903 00D 276 0401 905 00D 276 0794 900	KDS160-RTK/P KDS160-RTK/P 1SS355 TE-17 +C 1SS133T77 (TAPE) KDS160-RTK/P			
	D301 D302 D303 D307-310 D401	00D 276 0825 905 00D 276 0824 906 00D 276 0825 905 00D 276 0750 902 00D 276 0750 902	SFPB-74V SFPB-64V SFPB-74V RB521S-30TE61 +REF RB521S-30TE61 +REF			
	D501,502 D601,602 D604,605 D610 D613	00D 276 0750 902 00D 276 0750 902 00D 276 0750 902 00D 276 0560 901 00D 276 0560 901	RB521S-30TE61 +REF RB521S-30TE61 +REF RB521S-30TE61 +REF DAN202KT146 +C DAN202KT146 +C			
	D614 D701-703 D704-711 D801,802 D901,902	00D 276 0559 909 00D 276 0794 900 00D 276 0833 900 00D 276 0794 900 00D 276 0794 900	DAP202KT146 +C KDS160-RTK/P ESD PROTECTOR(6802) KDS160-RTK/P KDS160-RTK/P			
	ZD201 ZD205 ZD701	00D 276 0683 914 00D 276 0760 989 00D 276 0683 930	UDZS9.1B-TE17 +C MTZJ7.5B T77 UDZS5.1B-TE17 +C			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
<b>RESISTORS GROUP</b>						
	R452,453	00D 241 2313 901	RD14B2E101GFRST			
	R845	00D 244 2051 974	RS14B3A102JNBST(S)			
	VR801-805	00D 211 6148 906	V03PB471MT(RH03ADCS) +REF			
<b>CAPACITORS GROUP</b>						
	C101,102	00D 257 2018 900	CS77B1A100MT(NOJ)			
	C103-105	nsp	CK73F1C104ZT +1005			
	C107	nsp	CK73F1H103ZT +1005			
	C108	nsp	CK73F1C104ZT +1005			
	C110	00D 254 4739 916	CE67W1A470MT(GV)			
	C111	nsp	CK73F1C104ZT +1005			
	C112	00D 254 4739 916	CE67W1A470MT(GV)			
	C113-121	nsp	CK73F1C104ZT +1005			
	C122	00D 254 4739 916	CE67W1A470MT(GV)			
	C123-133	nsp	CK73F1C104ZT +1005			
	C134	nsp	CK73F1E104ZT +1608			
	C137	00D 254 4739 916	CE67W1A470MT(GV)			
	C138	nsp	CK73B1H102KT +1005			
	C139	nsp	CK73F1C104ZT +1005			
	C140	nsp	CK73F1H103ZT +1005			
	C141	00D 254 4739 916	CE67W1A470MT(GV)			
	C142-148	nsp	CK73F1C104ZT +1005			
	C149	nsp	CK73F1H103ZT +1608			
	C150	nsp	CK73F1E104ZT +1608			
	C151	nsp	CK73B1H102KT +1608			
	C153	nsp	CK73F1E104ZT +1608			
	C154	00D 254 4739 916	CE67W1A470MT(GV)			
	C155	nsp	CC73CH1H6R0DT +1608			
	C156	nsp	CK73F1E104ZT +1608			
	C157	nsp	CC73CH1H6R0DT +1608			
	C158	nsp	CK73F1H103ZT +1608			
	C159	nsp	CK73F1E104ZT +1608			
	C160	nsp	CK73B1H102KT +1608			
	C161	nsp	CK73F1H103ZT +1608			
	C162	nsp	CK73F1E104ZT +1608			
	C163	nsp	CK73B1H102KT +1608			
	C166	nsp	CK73F1E104ZT +1608			
	C167	nsp	CK73B1H102KT +1608			
	C170	00D 254 4739 916	CE67W1A470MT(GV)			
	C171,172	nsp	CK73F1E104ZT +1608			
	C173	00D 254 4739 916	CE67W1A470MT(GV)			
	C180	nsp	CK73F1E104ZT +1608			
	C192	nsp	CK73F1E104ZT +1608			
	C193	nsp	CK73B1H102KT +1608			
	C194,195	nsp	CK73F1E104ZT +1608			
	C221	00D 254 4740 976	CE67W1C100MT(GV)			
	C222	nsp	CK73F1E104ZT +1608			
	C223	nsp	CK73B1H102KT +1608			
	C224	nsp	CK73F1E104ZT +1608			
	C226	nsp	CK73F1E104ZT +1608			
	C241-244	nsp	CK73F1E104ZT +1608			
	C245	nsp	CK73B1H102KT +1608			
	C247	nsp	CK73F1E104ZT +1608			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C260 C276 C277 C278 C279	nsp nsp nsp 00D 254 4740 934 nsp	CK73F1E104ZT +1608 CK73F1E104ZT +1608 CK73B1H102KT +1608 CE67W1C101MT(GV) CK73F1E104ZT +1608			
C281 C282 C283 C284,285 C286	nsp 00D 254 4756 902 nsp nsp 00D 255 1278 907	CK73F1H103ZT +1608 CE04W1H101MT HB5(KY) CK73F1E104ZT +1608 CK73F1H473ZT +1608 CQ93M2D562JT(B)			
C287 C293 C294 C298 C301	00D 254 4713 916 00D 254 4740 976 nsp nsp nsp	CE04W1E470MT E11(KY) CE67W1C100MT(GV) CK73F1E104ZT +1608 CK73F1H103ZT +1608 CK73F1E104ZT +1608			
C302 C303 C304 C305 C306	nsp nsp 00D 254 4740 921 nsp nsp	CK73F1H103ZT +1608 CK73F1E104ZT +1608 CE67W1C470MT(GV) CK73F1E104ZT +1608 CK73B1H102KT +1608			
C307 C308 C310 C326 C327	00D 254 4740 921 nsp nsp 00D 254 4739 916 nsp	CE67W1C470MT(GV) CK73F1E104ZT +1608 CK73F1C104ZT +1005 CE67W1A470MT(GV) CK73F1H103ZT +1608			
C328 C329,330 C331 C361 C362	00D 254 4739 916 nsp 00D 254 4740 921 00D 254 4709 700 00D 257 1020 915	CE67W1A470MT(GV) CK73F1H103ZT +1608 CE67W1C470MT(GV) CE04W1V221MC JC5(KY) CK73B1H225KT			
C363 C365 C366 C367 C368	nsp nsp 00D 254 4711 905 00D 254 4709 700 00D 257 1020 915	CK73B1H103KT (1608) +1608 CK73F1E104ZT +1608 CE04W1A471MT HB5(KY) CE04W1V221MC JC5(KY) CK73B1H225KT			
C369 C371 C372 C373 C374	nsp nsp 00D 254 4711 905 00D 254 4709 700 00D 257 1020 915	CK73B1E104KT +1608 CK73F1E104ZT +1608 CE04W1A471MT HB5(KY) CE04W1V221MC JC5(KY) CK73B1H225KT			
C375 C377 C378 C379 C380	nsp nsp 00D 254 4712 904 nsp nsp	CK73B1E104KT +1608 CK73F1E104ZT +1608 CE04W1C471MT JC5(KY) CK73F1E104ZT +1608 CK73B1H102KT +1608			
C401 C402-409 C410-415 C416-420 C421	nsp nsp nsp nsp 00D 257 2018 900	CK73F1C104ZT +1005 CK73F1H103ZT +1005 CC73CH1H101JT +1005 CK73B1H102KT +1005 CS77B1A100MT(NOJ)			
C422 C423 C424 C425,426 C427	nsp nsp nsp nsp 00D 257 2018 900	CC73CH1H101JT +1005 CK73F1H103ZT +1005 CK73B1H102KT +1005 CK73F1C104ZT +1005 CS77B1A100MT(NOJ)			
C428	nsp	CK73B1H102KT +1005			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C429 C430 C431 C432	nsp nsp nsp 00D 257 0039 910	CK73F1C104ZT +1005 CK73B1H102KT +1005 CK73F1C104ZT +1005 CK73B0J226MT			
C433 C434 C435 C436-446 C447,448	nsp nsp nsp nsp nsp	CK73B1H102KT +1608 CK73B1A106KT +2125 CK73F1C104ZT +1005 CK73F1H103ZT +1005 CK73F1C104ZT +1005			
C449,450 C451,452 C453,454 C501 C502	nsp nsp 00D 257 2018 900 nsp nsp	CC73CH1H8R0DT +1608 CK73F1C104ZT +1005 CS77B1A100MT(NOJ) CK73F1E104ZT +1608 CK73B1H102KT +1608			
C503 C504 C505 C506,507 C508	nsp 00D 254 4740 921 nsp nsp nsp	CK73B1E223KT +1608 CE67W1C470MT(GV) CK73F1E104ZT +1608 CK73F1H103ZT +1608 CK73F1E104ZT +1608			
C509 C510 C511,512 C513 C514,515	00D 254 4740 976 00D 254 4742 916 nsp 00D 254 4740 976 nsp	CE67W1C100MT(GV) CE67W1V100MT(GV) CK73F1E104ZT +1608 CE67W1C100MT(GV) CK73F1H103ZT +1608			
C517 C518 C520 C521 C523	00D 254 4740 921 nsp nsp nsp 00D 254 4740 921	CE67W1C470MT(GV) CK73F1E104ZT +1608 CK73B1H562KT +1608 CC73CH1H391JT +1608 CE67W1C470MT(GV)			
C524 C525 C526 C527 C528	nsp nsp nsp nsp nsp	CK73F1H103ZT +1608 CK73F1E104ZT +1608 CK73B1H102KT +1005 CK73F1E104ZT +1608 CC73CH1H121JT +1608			
C529 C530 C531 C532 C533	00D 254 4740 976 nsp 00D 254 4740 921 nsp nsp	CE67W1C100MT(GV) CC73CH1H101JT +1608 CE67W1C470MT(GV) CC73CH1H101JT +1608 CK73B1H102KT +1005			
C534 C535 C536 C537 C538	nsp nsp 00D 254 4740 976 nsp 00D 254 4740 921	CK73F1E104ZT +1608 CC73CH1H121JT +1608 CE67W1C100MT(GV) CC73CH1H101JT +1608 CE67W1C470MT(GV)			
C539 C541,542 C543 C544 C545,546	nsp nsp 00D 254 4742 916 nsp nsp	CC73CH1H101JT +1608 CC73CH1E681JT +1608 CE67W1V100MT(GV) CK73B1H332KT +1608 CK73F1E104ZT +1608			
C547,548 C550,551 C552 C553 C554	00D 254 4740 934 nsp 00D 254 4742 916 nsp nsp	CE67W1C101MT(GV) CC73CH1E681JT +1608 CE67W1V100MT(GV) CK73B1H332KT +1608 CK73F1E104ZT +1608			
C556,557 C558	nsp 00D 254 4742 916	CC73CH1E681JT +1608 CE67W1V100MT(GV)			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C559	nsp	CK73B1H332KT +1608			
	C560	nsp	CK73F1E104ZT +1608			
	C561	nsp	CK73F1H103ZT +1608			
	C563	00D 254 4743 902	CE67W1H0R1MT(GV)			
	C564	00D 254 4740 921	CE67W1C470MT(GV)			
	C565	nsp	CK73F1E104ZT +1608			
	C566	nsp	CK73B1H102KT +1608			
	C567,568	nsp	CK73F1E104ZT +1608			
	C569	00D 256 1058 971	CF93A1H104JT (JL)			
	C570,571	nsp	CK73F1E104ZT +1608			
	C572	00D 255 1265 978	CQ93M1H223JT(B)			
	C573	nsp	CC73CH1H100DT +1608			
	C574	nsp	CC73CH1H120JT +1608			
	C575	nsp	CK73B1H102KT +1608			
	C576	nsp	CK73F1E104ZT +1608			
	C577	nsp	CK73F1H103ZT +1608			
	C578	nsp	CK73F1E104ZT +1608			
	C579	nsp	CK73F1H103ZT +1608			
	C583	nsp	CK73F1E104ZT +1608			
	C584	nsp	CC73CH1H220JT +1608			
	C601	nsp	CK73B1H102KT +1608			
	C602	nsp	CK73F1H103ZT +1608			
	C603	nsp	CK73F1E104ZT +1608			
	C604	00D 254 4740 921	CE67W1C470MT(GV)			
	C605-613	nsp	CK73F1E104ZT +1608			
	C702,703	00D 254 4742 916	CE67W1V100MT(GV)			
	C704,705	nsp	CK73B1E473KT +1608			
	C706	00D 254 4740 934	CE67W1C101MT(GV)			
	C707	nsp	CK73F1H103ZT +1608			
	C708	00D 254 4740 921	CE67W1C470MT(GV)			
	C709	nsp	CK73F1H103ZT +1608			
	C710	00D 254 4742 916	CE67W1V100MT(GV)			
	C711	nsp	CK73F1H103ZT +1608			
	C712	nsp	CK73F1E104ZT +1608			
	C714	nsp	CK73B1H222KT +1608			
	C715	nsp	CK73B1E473KT +1608			
	C716,717	nsp	CK73B1A224KT +1608			
	C718	nsp	CK73B1E473KT +1608			
	C719	nsp	CK73B1H222KT +1608			
	C724,725	00D 254 4742 903	CE67W1V4R7MT(GV)			
	C726	00D 254 4740 921	CE67W1C470MT(GV)			
	C727,728	nsp	CK73F1H103ZT +1608			
	C729	nsp	CK73F1E104ZT +1608			
	C734-739	00D 254 4742 916	CE67W1V100MT(GV)			
	C740	nsp	CK73F1E104ZT +1608			
	C741	00D 254 4740 934	CE67W1C101MT(GV)			
	C742,743	nsp	CC73CH1H101JT +1608			
	C744	nsp	CK73F1E104ZT +1608			
	C745	00D 254 4740 934	CE67W1C101MT(GV)			
	C746	nsp	CK73F1H103ZT +1608			
	C747	00D 254 4740 947	CE67W1C221MT(GV)			
	C749	00D 254 4742 916	CE67W1V100MT(GV)			
	C751	nsp	CC73CH1H101JT +1608			
	C752	00D 254 4740 976	CE67W1C100MT(GV)			
	C753,754	nsp	CK73F1E104ZT +1608			
	C755	nsp	CK73B1H102KT +1608			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C758 C759	00D 254 4742 929 nsp	CE67W1V220MT(GV) CK73F1E104ZT +1608			
	C760 C762 C763 C764 C765	00D 254 4742 916 nsp 00D 254 4742 929 nsp 00D 254 4742 916	CE67W1V100MT(GV) CC73CH1H470JT +1608 CE67W1V220MT(GV) CK73F1E104ZT +1608 CE67W1V100MT(GV)			
	C767 C769 C770 C771 C774	00D 254 4742 916 nsp 00D 254 4740 976 nsp 00D 254 4742 929	CE67W1V100MT(GV) CC73CH1H101JT +1608 CE67W1C100MT(GV) CK73F1H103ZT +1608 CE67W1V220MT(GV)			
	C775 C777 C778 C779 C781	nsp nsp 00D 254 4742 929 nsp 00D 254 4742 916	CK73F1E104ZT +1608 CC73CH1H470JT +1608 CE67W1V220MT(GV) CK73F1E104ZT +1608 CE67W1V100MT(GV)			
	C783 C784 C785,786 C790 C791	nsp 00D 254 4740 976 nsp 00D 254 4742 929 nsp	CK73B1H152KT +1608 CE67W1C100MT(GV) CK73F1E104ZT +1608 CE67W1V220MT(GV) CK73F1E104ZT +1608			
	C793 C794 C795 C796 C798	nsp 00D 254 4742 929 nsp 00D 254 4742 916 nsp	CC73CH1H470JT +1608 CE67W1V220MT(GV) CK73F1E104ZT +1608 CE67W1V100MT(GV) CC73CH1H470JT +1608			
	C799 C800 C802 C803 C841-844	nsp 00D 254 4742 916 nsp nsp nsp	CK73F1E104ZT +1608 CE67W1V100MT(GV) CC73CH1H470JT +1608 CK73F1E104ZT +1608 CC73CH1H221JT +1608			
	C851,852 C853 C854 C855 C856-858	nsp 00D 257 2018 900 nsp nsp nsp	CK73F1C104ZT +1005 CS77B1A100MT(NOJ) CK73F1C104ZT +1005 CK73F1H103ZT +1005 CK73F1C104ZT +1005			
	C859 C860 C861 C862 C863	00D 257 2018 900 nsp nsp nsp nsp	CS77B1A100MT(NOJ) CK73F1C104ZT +1005 CK73F1H103ZT +1608 CK73B1H102KT +1005 CK73F1H103ZT +1005			
	C864-867 C868 C869 C870 C871	nsp nsp nsp nsp nsp	CK73F1C104ZT +1005 CK73B1H102KT +1005 CK73F1C104ZT +1005 CK73B1H102KT +1005 CK73B1H102KT +1608			
	C872 C901 C902-905 C906 C907	nsp nsp nsp nsp 00D 257 2018 900	CK73F1E104ZT +1608 CK73F1H103ZT +1005 CK73F1C104ZT +1005 CK73F1H103ZT +1005 CS77B1A100MT(NOJ)			
	C908,909 C910 C911 C912	nsp nsp nsp 00D 257 2018 900	CK73F1C104ZT +1005 CK73F1H103ZT +1005 CK73F1C104ZT +1005 CS77B1A100MT(NOJ)			

	<b>Ref. No.</b>	<b>Part No.</b>	<b>Part Name</b>	<b>Remarks</b>	<b>Q'ty</b>	<b>New</b>
	C913-928	nsp	CK73F1C104ZT +1005			
	C929	nsp	CK73F1H103ZT +1005			
	C930	nsp	CK73B1H102KT +1005			
	C931	nsp	CK73F1H103ZT +1005			
	C932	nsp	CK73F1C104ZT +1005			
	C933,934	nsp	CC73CH1H180JT +1608			
	C935	nsp	CK73F1H103ZT +1005			
	C936	00D 257 2018 900	CS77B1A100MT(NOJ)			
	C937-948	nsp	CK73F1C104ZT +1005			
	C949	nsp	CK73B1H102KT +1005			
	C950,951	nsp	CK73F1C104ZT +1005			
	C952,953	00D 257 5003 983	CC73CH1H470JT			
	C954	nsp	CK73F1C104ZT +1005			
	C955	nsp	CK73B1H102KT +1005			
	C956	nsp	CK73F1C104ZT +1005			
	C957	nsp	CK73B1H102KT +1005			
	C958	00D 257 2018 900	CS77B1A100MT(NOJ)			
	C959,960	nsp	CK73B1H102KT +1005			
	C961	00D 257 2018 900	CS77B1A100MT(NOJ)			
	C962,963	nsp	CK73F1C104ZT +1005			
	C965	nsp	CK73B1H102KT +1005			
	C966	00D 257 2018 900	CS77B1A100MT(NOJ)			
	C967	nsp	CK73B1H102KT +1005			
	C968-970	nsp	CK73F1C104ZT +1005			
	C972	nsp	CK73F1C104ZT +1005			
	C974-977	nsp	CK73B1E104KT +1608			
	C978	nsp	CK73F1C104ZT +1005			
	C979	nsp	CK73F1H103ZT +1005			
	C980,981	nsp	CK73B1H102KT +1005			
	C982	00D 257 2018 900	CS77B1A100MT(NOJ)			
	C983,984	nsp	CK73F1C104ZT +1005			
	C985	00D 257 2018 900	CS77B1A100MT(NOJ)			
	C986	nsp	CK73F1C104ZT +1005			
	C987	nsp	CK73F1H103ZT +1005			
	C988	nsp	CK73B1H102KT +1005			
	C989	nsp	CK73F1H103ZT +1608			
	C990	00D 257 2018 900	CS77B1A100MT(NOJ)			
	C991	nsp	CK73F1H103ZT +1608			
	C992	nsp	CK73F1E104ZT +1608			
	C993	nsp	CK73B1H102KT +1608			
	C994	00D 257 2018 900	CS77B1A100MT(NOJ)			
	C996	00D 257 2018 900	CS77B1A100MT(NOJ)			
	C997	nsp	CK73F1C104ZT +1005			
	C998	nsp	CK73F1E104ZT +1608			
	CC101,102	00D 257 2018 900	CS77B1A100MT(NOJ)			
	CC103-105	nsp	CK73F1C104ZT +1005			
	CC106	nsp	CK73B1H102KT +1005			
	CC107	nsp	CK73F1H103ZT +1005			
	CC108,109	nsp	CK73F1E104ZT +1608			
	CC113	nsp	CK73F1C104ZT +1005			
	CC114	nsp	CK73B1H821KT +1608			
	CC115	00D 257 2018 900	CS77B1A100MT(NOJ)			
	CC116	nsp	CK73F1C104ZT +1005			
	CC117	nsp	CK73B1H392KT +1608			
	CC118	nsp	CK73F1C104ZT +1005			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	CC119,120 CC121 CC122 CC123,124 CC125-129	nsp nsp nsp nsp nsp	CK73B1H102KT +1005 CK73F1C104ZT +1005 CK73B1H102KT +1005 CK73F1C104ZT +1005 CK73F1E104ZT +1608			
	CC139,140 CC141,142 CC143,144 CC145 CC146-150	nsp 00D 254 4740 921 nsp nsp 00D 254 4740 976	CK73F1E104ZT +1608 CE67W1C470MT(GV) CK73F1E104ZT +1608 CK73B1E104KT +1608 CE67W1C100MT(GV)			
	CC151 CC152 CC153 CC154 CC155-160	00D 254 4740 934 nsp 00D 254 4740 905 nsp nsp	CE67W1C101MT(GV) CK73F1E104ZT +1608 CE67W1C220MT(GV) CK73F1E104ZT +1608 CK73B1E104KT +1608			
	CC161 CC162 CC163 CC164 CC165	00D 254 4738 946 00D 254 4740 905 00D 254 4738 946 00D 254 4740 905 00D 254 4738 946	CE67W0J102MT(GV) CE67W1C220MT(GV) CE67W0J102MT(GV) CE67W1C220MT(GV) CE67W0J102MT(GV)			
	CC166 CC167 CC168 CC169 CC170	00D 254 4740 905 00D 254 4740 934 00D 254 4740 905 00D 254 4740 934 00D 254 4740 905	CE67W1C220MT(GV) CE67W1C101MT(GV) CE67W1C220MT(GV) CE67W1C101MT(GV) CE67W1C220MT(GV)			
	CC177 CC178 CC179 CC180 CC181	00D 254 4740 934 nsp nsp 00D 254 4740 934 nsp	CE67W1C101MT(GV) CK73F1E104ZT +1608 CK73F1H103ZT +1608 CE67W1C101MT(GV) CK73F1E104ZT +1608			
	CC182,183 CC184,185 CC186 CC187 CC188,189	nsp nsp nsp nsp nsp	CK73F1H103ZT +1608 CK73F1E104ZT +1608 CK73F1H103ZT +1608 CK73B1H102KT +1608 CK73F1E104ZT +1608			
	CC190 CC191 CC193,194 CC195 CC196	00D 254 4740 976 00D 257 2018 900 00D 257 2018 900 nsp 00D 254 4743 986	CE67W1C100MT(GV) CS77B1A100MT(NOJ) CS77B1A100MT(NOJ) CK73B1H102KT +1608 CE67W1H100MT(GV)			
	CC197,198 CC199,200 CC201 CC301-304 CC305,306	00D 254 4740 976 nsp 00D 254 4740 976 nsp nsp	CE67W1C100MT(GV) CK73F1E104ZT +1608 CE67W1C100MT(GV) CK73F1H103ZT +1608 CK73F1E104ZT +1608			
	CC307 CC308 CC309,310 CC311 CC312	00D 254 4740 976 nsp 00D 254 4740 976 nsp nsp	CE67W1C100MT(GV) CK73F1H103ZT +1608 CE67W1C100MT(GV) CC73CH1H561JT +1608 CK73F1H103ZT +1608	for E2 for E2 for E2 for E2 for E2		
	CC313 CC314 CC315 CC316 CC317	00D 254 4739 916 nsp nsp nsp nsp	CE67W1A470MT(GV) CC73CH1H220JT +1608 CC73CH1H180JT +1608 CK73F1H103ZT +1608 CC73CH1H331JT +1608	for E2 for E2 for E2 for E2 for E2		
	CC318	nsp	CK73F1H103ZT +1608			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	CC321	nsp	CC73CH1H101JT +1608			
	CC324	nsp	CC73CH1H101JT +1608			
	CC325	nsp	CK73F1E104ZT +1608			
	CC326	nsp	CK73F1H103ZT +1608			
	CC327	nsp	CK73B1E104KT +1608			
	CC328	nsp	CK73B1H103KT (1608) +1608			
	CC329	nsp	CK73B1E104KT +1608			
	CC330	00D 254 4740 976	CE67W1C100MT(GV)			
	CC331	nsp	CK73B1H102KT +1608			
	CC332,333	nsp	CK73F1E104ZT +1608			
	CC334,335	nsp	CK73B1H102KT +1608			
	CC336	nsp	CK73F1E104ZT +1608			
	CC337	nsp	CK73F1H103ZT +1608			
	CC338	nsp	CK73F1E104ZT +1608			
	CC339	00D 254 4740 976	CE67W1C100MT(GV)			
	CC340	nsp	CK73B1E104KT +1608			
	CC341	nsp	CK73F1H103ZT +1608			
	CC342	nsp	CK73B1H102KT +1608			
	CC343	nsp	CK73F1E104ZT +1608			
	CC901	nsp	CK73F1E104ZT +1608			
	CC902	nsp	CK73F1H103ZT +1608			
	CC903	nsp	CK73B1H102KT +1608			
	CC904	nsp	CK73F1E104ZT +1608			
	CC905	nsp	CK73F1H103ZT +1608			
	CC906	nsp	CK73B1H102KT +1608			
	CC907	nsp	CK73F1E104ZT +1608			
	CC908	nsp	CK73F1H103ZT +1608			
	CC909	nsp	CK73B1H102KT +1608			
	CC910	nsp	CK73F1E104ZT +1608			
	CC911	nsp	CK73F1H103ZT +1608			
	CC912	nsp	CK73B1H102KT +1608			
	CC913	nsp	CK73F1E104ZT +1608			
	CC914	nsp	CK73F1H103ZT +1608			
	CC915	nsp	CK73B1H102KT +1608			
	CC916	nsp	CK73F1E104ZT +1608			
	CC917	nsp	CK73F1H103ZT +1608			
	CC918	nsp	CK73B1H102KT +1608			
	CC919	nsp	CK73F1E104ZT +1608			
	CC920	nsp	CK73F1H103ZT +1608			
	CC921	nsp	CK73B1H102KT +1608			
	CC922	nsp	CK73F1E104ZT +1608			
	CC923	nsp	CK73F1H103ZT +1608			
	CC924	nsp	CK73B1H102KT +1608			
	CC925	nsp	CK73F1E104ZT +1608			
	CC926	nsp	CK73F1H103ZT +1608			
	CC927	nsp	CK73B1H102KT +1608			
	CC928	nsp	CK73F1E104ZT +1608			
	CC929	nsp	CK73F1H103ZT +1608			
	CC930	nsp	CK73B1H102KT +1608			
	CC931	nsp	CK73F1E104ZT +1608			
	CC932	nsp	CK73F1H103ZT +1608			
	CC933	nsp	CK73B1H102KT +1608			
	CC934	nsp	CK73F1E104ZT +1608			
	CC935	nsp	CK73F1H103ZT +1608			
	CC936	nsp	CK73B1H102KT +1608			
	CC937	nsp	CK73F1E104ZT +1608			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	CC938	nsp	CK73B1H102KT +1608			
	CC939	nsp	CK73F1E104ZT +1608			
	CC940	nsp	CK73F1H103ZT +1608			
	CC941	nsp	CK73B1H102KT +1608			
	CC942	nsp	CK73F1E104ZT +1608			
	CC943	nsp	CK73F1H103ZT +1608			
	CC944	nsp	CK73B1H102KT +1608			
	CC945	nsp	CK73F1E104ZT +1608			
	CC946	nsp	CK73F1H103ZT +1608			
	CC947	nsp	CK73B1H102KT +1608			
	CC948	nsp	CK73F1E104ZT +1608			
	CC949	nsp	CK73F1H103ZT +1608			
	CC950	nsp	CK73B1H102KT +1608			
	CC951	nsp	CK73F1H103ZT +1608			
	CC952	nsp	CK73B1H102KT +1608			
	CC954	nsp	CK73F1E104ZT +1608			
	CC955	nsp	CK73F1H103ZT +1608			
	CC956	nsp	CK73B1H102KT +1608			
	CC957	nsp	CK73F1E104ZT +1608			
	CC958	nsp	CK73F1H103ZT +1608			
	CC959-965	nsp	CK73B1H102KT +1608			
	CC966	nsp	CK73F1E104ZT +1608			
	CC967	nsp	CK73F1H103ZT +1608			
	CC968	nsp	CK73B1H102KT +1608			
	CC969-990	nsp	CK73F1H103ZT +1608			
	CC991	nsp	CK73B1H102KT +1608			
	CC992	nsp	CK73F1H103ZT +1608			
<b>OTHERS PARTS GROUP</b>						
	CX031	nsp	3P PH CON.BASE(TAPE) +REF			
	CX051	nsp	5P PH CON BASE(TAPE) +REF			
	CX052	00D 205 1154 958	5P ZH-ZR CON.BASE-T			
	CX061	nsp	6P PH CON.BASE +REF			
	CX142	nsp	14P PIN HEADER(9120)			
	CX151	00D 205 0736 076	15P FFC CON.BASE			
	CX171	00D 205 1343 989	17P FFC BASE(9610SC)			
	CX211	00D 205 1343 947	21P FFC BASE(9610SC)			
	CX301	00D 205 1401 902	30P-FFC-BASE(9610SC)			
	CY021	nsp	2P VH CON BASE (White)			
	FB101	00D 235 0136 907	FBJM1608HS280NT +1608			
	FB201,202	00D 235 0130 903	CHIP EMIFIL(11A121) +1608			
	FB501	00D 235 0130 903	CHIP EMIFIL(11A121) +1608			
	FB701,702	00D 235 0136 907	FBJM1608HS280NT +1608			
	FB801	00D 235 0136 907	FBJM1608HS280NT +1608			
	FB901	00D 235 0147 909	E.FIL(BLM21PG221SN1)+2125			
	JK201	00D 204 8637 006	MINI JACK (STEREO)			
	JK301	00D 204 8713 001	2P/S-TERM(SYK22)			
	JK601	00D 204 8748 005	4P PIN JACK(FGND NI)			
	JK701	00D 204 8719 005	19P HDMI CONNECTOR			
	JK702	00D 204 8746 007	3P PIN JACK(FG GBR)			
	JK801	00D 204 8711 003	1P/S-TERM(SYK22)			

	<b>Ref. No.</b>	<b>Part No.</b>	<b>Part Name</b>	<b>Remarks</b>	<b>Q'ty</b>	<b>New</b>
	L201 L301	00D 235 0166 003 00D 235 0186 902	INDUCTOR 100UH(7208M) INDUCTOR 47UH(7B12N)			
	L302 L303 L401 L702-704 L803,804	00D 235 0185 903 00D 235 0186 902 00D 235 0183 905 00D 235 0125 905 00D 235 0125 905	INDUCTOR 47UH(7E10H) INDUCTOR 47UH(7B12N) INDUCTOR 2.2UH(7E06N) INDUCTOR(FLC32C220K)+3216 INDUCTOR(FLC32C220K)+3216			
	S201 S202  ST101-103	00D 279 0051 008 00D 212 1204 000  nsp	NTSA0WB203EE1B0 SLIDE SW(SSAA110500)  STYLE PIN			
	ST105,106  T201  W201,202	nsp  00D 231 8087 001  nsp	STYLE PIN  D/D TRANS(060478026)  M3 SCREW TERMINAL			
	X101 X301 X401 X501	00D 399 0619 906 00D 399 0887 903 00D 399 1113 906 00D 399 1116 903	XTAL(27MHZ) +REF CSTCE16MOV53-R0 +2125 X-TAL(L5030-16.660) X-TAL(S-24.576)			
	X701 X901	00D 399 0864 900 00D 399 1009 007	XTAL(13.5MHZ) +REF X-TAL(S-4.332-14)	for E2		

## 1U-3831D LOC/PWR-DSP P.W.B. UNIT ASS'Y

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
<b>SEMICONDUCTORS GROUP</b>						
	IC102	00D 263 1259 008	BA12T			
	IC103	00D 263 1260 000	KIA79M12PI-U/P			
	IC104	00D 263 1227 001	BA50BC0T			
	IC105	00D 263 1268 002	KIA79M05PI-U/P			
	IC106	00D 263 1269 904	BA178M18CP-E2			
	IC107	00D 265 0130 001	STR-G7421(LF1129)			
	IC108	00D 263 1155 005	SE-B2(LF12)			
	IC241	00D 262 3228 005	M66005-0001AHP			
	IC242	00D 262 3602 003	GP1UE271XKVF			
	TR101	00D 269 0184 907	KRA102S-RTK/P (10K-10K)			
	TR102	00D 269 0192 902	KRC102S-RTK/P (10K-10K)			
	TR103	00D 273 0464 901	KTC3875S-GR-RTK/P			
	TR205-207	00D 269 0184 907	KRA102S-RTK/P (10K-10K)			
	TR244-246	00D 269 0192 902	KRC102S-RTK/P (10K-10K)			
	D101	00D 276 0794 900	KDS160-RTK/P			
	D103	00D 276 0724 912	SARS01T (V0)			
	D104	00D 276 0794 900	KDS160-RTK/P			
	D105-108	00D 276 0780 901	SFPX-62 +C			
	D109-112	00D 276 0773 905	RB501V-40 +2125			
	D113,114	00D 276 0794 900	KDS160-RTK/P			
	ZD101	00D 276 0848 908	UDZS22B-TE17			
	LD101	00D 262 3047 008	PC123Y22			
	LD205	00D 393 9654 003	SLI343YY3F (YEL)			
	LD206	00D 393 9655 002	SLI343UR3F (RED)			
	LD207	00D 393 9668 002	SLR343BCT3F			
	LD241	00D 393 9668 002	SLR343BCT3F			
	FL241	00D 393 8084 001	VFD (15-BT-102GN)			
<b>RESISTORS GROUP</b>						
	R113,114	00D 244 2671 927	RS14B3D0R1JNBST(S)			
	R115	00D 244 2043 953	RS14B3A471JNBST(S)			
	R116	00D 244 2051 987	RS14B3A4R7JNBST(S)			
<b>CAPACITORS GROUP</b>						
	C101-104	nsp	CK73F1H103ZT +1608			
	C107-114	nsp	CK73F1H103ZT +1608			
	C115	nsp	RM73B--0R0KT +1608			
	C119-121	nsp	RM73B--0R0KT +1608			
	C122-124	nsp	CK73F1H103ZT +1608			
	C125	nsp	CK73F1E104ZT +1608			
	C126	nsp	CK73F1H103ZT +1608			
	C127	nsp	CK73B1H102KT +1608			
	C128	00D 253 1210 901	CK45B1H104KT(RPER)			
	C129	nsp	CK73F1H103ZT +1608			
	C130	nsp	CK73B1H102KT +1608			
	C131	00D 254 4709 700	CE04W1V221MC JC5(KY)			
	C132	00D 253 1210 901	CK45B1H104KT(RPER)			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C133 C134 C135 C136 C137	nsp	CK73F1H103ZT +1608 CK73B1H102KT +1608 CK73F1E104ZT +1608 CK73F1H103ZT +1608 CK73B1H102KT +1608			
C138 C140 C141 C142 C143	00D 254 4709 700 nsp 00D 254 4721 911 nsp nsp	CE04W1V221MC JC5(KY) CK73F1E104ZT +1608 CE04W1V100MT(GR) CK73F1E104ZT +1608 CC73CH1H471JT +1608			
C145 C146 C147 C148,149 C150	nsp 00D 253 8033 709 nsp nsp nsp	CK73B1E223KT +1608 CK45B3D470KC(DEA) CK73B1H103KT (1608) +1608 CK73F1H103ZT +1608 CK73F1E104ZT +1608			
C151 C152 C153 C154,155 C156	00D 255 4261 704 00D 254 4807 709 00D 254 4713 903 nsp 00D 254 4718 940	CQ93P2J222KC(ECQP) CE04W1E102MC K20(KY) CE04W1E331MT JC5(KY) CK73F1E104ZT +1608 CE04W1C101MT(GR)			
C157 C158,159 C160 C161 C162,163	nsp nsp 00D 254 4718 940 00D 254 4807 709 nsp	CK73B1H102KT +1608 CK73F1E104ZT +1608 CE04W1C101MT(GR) CE04W1E102MC K20(KY) CK73F1E104ZT +1608			
C164 C165 C166 C167,168 C169	00D 254 4718 940 00D 254 4711 918 00D 254 4713 903 nsp 00D 254 4718 940	CE04W1C101MT(GR) CE04W1A221MT F11(KY) CE04W1E331MT JC5(KY) CK73F1E104ZT +1608 CE04W1C101MT(GR)			
C170 C171 C173,174 C175 C177,178	00D 254 4711 918 nsp nsp nsp nsp	CE04W1A221MT F11(KY) CK73F1H103ZT +1608 CK73F1E104ZT +1608 CK73F1H103ZT +1608 CK73F1E104ZT +1608			
C179,180 C181 C182 C183 C184	nsp nsp nsp nsp nsp	CK73F1H103ZT +1608 CK73F1E104ZT +1608 CK73F1H103ZT +1608 CK73F1E104ZT +1608 CK73F1H103ZT +1608			
C185 C186 C188 C189 C190	nsp nsp nsp nsp nsp	CK73F1E104ZT +1608 CK73F1H103ZT +1608 CK73F1H103ZT +1608 CK73F1E104ZT +1608 CK73F1H103ZT +1608			
C191 C192 C193 C194 C195	nsp nsp nsp nsp nsp	CK73F1E104ZT +1608 CK73B1H103KT (1608) +1608 CK73B1H102KT +1608 CK73F1E104ZT +1608 CK73B1H103KT (1608) +1608			
C196,197 C198 C199 C200 C201-203	nsp nsp nsp nsp nsp	CK73B1H102KT +1608 CK73F1E104ZT +1608 CK73F1H103ZT +1608 CK73B1H102KT +1608 CK73F1E104ZT +1608			
C205-207	nsp	CK73B1H102KT +1608			

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C208,209 C212 C221-224 C225,226	nsp nsp nsp nsp	CK73F1H103ZT +1608 CK73F1H103ZT +1608 CK73F1E104ZT +1608 CK73B1H222KT +1608			
C227,228 C241 C242,243 C244 C245	nsp nsp nsp 00D 254 4737 947 nsp	CK73F1E104ZT +1608 CK73F1H103ZT +1608 CK73F1E104ZT +1608 CE04W1H010MT(SF) CK73F1E104ZT +1608			
C246 C247 C248 C249,250 C251	nsp 00D 254 4737 947 nsp nsp nsp	CC73CH1H750JT +1608 CE04W1H010MT(SF) CK73F1E104ZT +1608 CK73F1H103ZT +1608 CK73F1E104ZT +1608			
C252 C253 C254 C256 C257	nsp nsp nsp 00D 254 4732 955 nsp	CK73B1H102KT +1608 CK73F1E104ZT +1608 CK73B1H102KT +1608 CE04W0J221MT(SF) CK73F1H103ZT +1608			
C264 C265 C282 C283,284 C285-287	nsp nsp 00D 257 2018 900 nsp nsp	CK73B1E104KT +1608 CK73F1H103ZT +1608 CS77B1A100MT(NOJ) CK73B1H102KT +1608 CK73F1E104ZT +1608			
C288,289 C290 C291,292 C293 C294-296	nsp nsp nsp nsp nsp	CK73F1H103ZT +1608 CK73B1H102KT +1608 CK73F1H103ZT +1608 CK73B1H102KT +1608 CK73F1H103ZT +1608			
C297-300 C301 C302 C303 C306	nsp 00D 254 4722 981 nsp nsp nsp	CK73F1E104ZT +1608 CE04W1H100MT(GR) CK73F1E104ZT +1608 CK73B1H102KT +1608 CK73B1E223KT +1608			
C307	nsp	CK73B1E104KT +1608			

**OTHERS PARTS GROUP**

AS103	00D 417 0476 007	RADIATOR		
AS202-204	nsp	FL SPACER		
CW051	00D 203 8582 022	5P PH-SAN CON.CORD		
CW052	00D 203 8581 023	5P ZH-SAN CON.CORD		
CX021 CX091,092 CX141	nsp 00D 205 1338 033 nsp	2P VH CON BASE (White) 9P CON.BASE(9117S) 14P SOCKET(9120)		
CY091,092	00D 205 1440 002	9P PIN HEADER(9210B)		
CY141 CY142 CY171 CY211	nsp nsp 00D 205 1100 038 00D 205 1006 022	14P PIN HEADER(9120) 14P SOCKET(9120) 17P FFC BASE(P=1) 21P FFC BASE (P=1)		
FB104 FB105-110	00D 235 0049 900 00D 235 0130 903	BEADS INDUCTOR TAPE CHIP EMIFIL(11A121) +1608		

	<b>Ref. No.</b>	<b>Part No.</b>	<b>Part Name</b>	<b>Remarks</b>	<b>Q'ty</b>	<b>New</b>
	FB111-114 FB221-223 FB291-293	00D 235 0049 900 00D 235 0130 903 00D 235 0130 903	BEADS INDUCTOR TAPE CHIP EMIFIL(11A121) +1608 CHIP EMIFIL(11A121) +1608			
	JK101 JK201 JK291	nsp 00D 204 8636 010 00D 204 8636 010	25P DSUB(MALE) MINI JACK(ST SW) MINI JACK(ST SW)			
	L101,102  S205-207 S281 S282-285	00D 235 0184 014  00D 212 5611 903 00D 212 0527 005 00D 212 5611 903	INDUCTOR 10UH(7208M)  TACT SWITCH(TAPE H5) ROTARY ENCODER TACT SWITCH(TAPE H5)			
	ST101,102  T101	nsp  00D 231 8084 004	STYLE PIN  DC-DC TRANS(ST3193)			
		0RD 470 0051 009	3X8 CPS(SW,W) ZNP			

## 1U-3811D/E/F D.AMP/SMPS P.W.B. UNIT ASS'Y

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
<b>SEMICONDUCTORS GROUP</b>						
	IC101-103	00D 263 1277 909	RC4580IDR			
	IC201	00D 262 3502 909	TAS5066PAGR4			
	IC202	00D 262 3504 907	SN74HCU04APWR			
	IC203,204	00D 262 3501 900	PCM1803DBR			
	IC205	00D 263 1100 005	KIA7805API-U/P			
	IC206	00D 262 3503 911	TAS5142DKD			
	IC207	00D 262 3503 908	TAS5121DKDR			
	IC208	00D 262 3082 924	BD4730G-TR			
	IC401	00D 265 0118 007	STR-F6267S(LF1351)	for E2		
	IC401	00D 265 0116 009	STR-F6238S(LF1351)	for E3, JP		
	IC402	00D 262 3508 903	SPI-8002TW			
	IC403	00D 263 1100 021	KIA7812API-U/P			
	IC404	00D 263 1099 022	KIA7912PI-U/P			
	IC405	00D 263 1155 005	SE-B2(LF12)			
⚠	IC406	00D 263 1100 063	KIA7809API-U/P			
	IC407	00D 262 3047 008	PC123Y22			
	TR101,102	00D 273 0460 905	KTC2875-B-RTK/P			
	TR103,104	00D 269 0192 902	KRC102S-RTK/P (10K-10K)			
	TR105	00D 273 0460 905	KTC2875-B-RTK/P			
	TR110	00D 269 0184 907	KRA102S-RTK/P (10K-10K)			
	TR201	00D 273 0464 901	KTC3875S-GR-RTK/P			
	TR202,203	00D 271 0312 905	KTA1504S-GR-RTK/P			
	TR204	00D 273 0464 901	KTC3875S-GR-RTK/P			
	TR205	00D 269 0192 902	KRC102S-RTK/P (10K-10K)			
	TR206	00D 273 0468 907	KTC3199-GR-AT/P			
	TR207	00D 269 0184 907	KRA102S-RTK/P (10K-10K)			
	TR208	00D 269 0192 902	KRC102S-RTK/P (10K-10K)			
	TR401	00D 273 0468 907	KTC3199-GR-AT/P			
	TR402,403	00D 273 0464 901	KTC3875S-GR-RTK/P			
	TR404	00D 271 0320 900	KTA1517-GR-RTK/P			
	TR405	00D 274 0160 907	2SD2144STPU			
	TR406,407	00D 271 0320 900	KTA1517-GR-RTK/P			
	TR601,602	00D 269 0192 902	KRC102S-RTK/P (10K-10K)			
	D101	00D 276 0401 905	1SS133T77 (TAPE)			
	D102-107	00D 276 0773 905	RB501V-40 +2125			
	D113	00D 276 0401 905	1SS133T77 (TAPE)			
	D201-206	00D 276 0750 902	RB521S-30TE61 +REF			
	D207-212	00D 276 0401 905	1SS133T77 (TAPE)			
	D213,214	00D 276 0717 903	1SS355 TE-17 +C			
	D215,216	00D 276 0401 905	1SS133T77 (TAPE)			
	D217	00D 276 0401 905	1SS133T77 (TAPE)			
	D401,402	00D 276 0401 905	1SS133T77 (TAPE)	for E3, JP		
	D403,404	00D 276 0750 902	RB521S-30TE61 +REF			
	D405	00D 276 0802 009	GS1B660			
	D406-410	00D 276 0750 902	RB521S-30TE61 +REF			
	D411,412	00D 276 0727 919	AL01ZT (WK)			
	D413	00D 276 0758 001	SARS03			
	D414	00D 276 0727 919	AL01ZT (WK)			
	D415,416	00D 276 0772 003	1N4004			
	D417	00D 276 0401 905	1SS133T77 (TAPE)			
	D418,419	00D 276 0782 909	RN1Z			
	D420	00D 276 0832 008	FMX-G22S			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	D423 D424 D425 D426,427	00D 276 0401 905 00D 276 0773 905 00D 276 0401 905 00D 276 0825 905	1SS133T77 (TAPE) RB501V-40 +2125 1SS133T77 (TAPE) SFPB-74V			
	ZD201,202 ZD401 LD601	00D 276 0823 907 00D 276 0761 975 00D 393 9666 004	P4SMAJ33CA MTZJ18B T77 LED(RED) SLI-560UT	for E3, JP		
	TH401	00D 279 0045 001	NTPAJ6R0LDBK0			
<b>RESISTORS GROUP</b>						
	R261	00D 247 0059 951	RM73B--2R7FT(RL1220 1/4) +2125			
	R264 R401 R402 R404 R411	00D 247 0059 951 00D 242 2009 001 00D 242 2009 001 00D 244 2051 961 00D 243 2094 019	RM73B--2R7FT(RL1220 1/4) +2125 RC1/2 225K B(UL) RC1/2 225K B(UL) RS14B3A101JNBST(S) RW99=3DR22JF	for E3 for E2		
	R411 R412 R412 R414 R414	00D 243 2094 035 00D 243 2094 019 00D 243 2094 006 00D 244 2682 916 00D 244 2682 932	RW99=3DR10JF RW99=3DR22JF RW99=3DR12JF RS14B3D104JNBST(S) RS14B3D333JNBST(S)	for E3, JP for E2 for E3, JP for E2 for E3, JP		
	R419 R424 R427 R428 R450,451	00D 241 2313 985 00D 244 2051 990 00D 247 2019 902 00D 245 2385 928 00D 243 2094 035	RD14B2E4R7JFRST RS14B3A472JNBST(S) RM73B--102FT +1608 RN14K2E393FT(EROS2) RW99=3DR10JF			
	R453 R453	00D 244 2675 732 00D 244 2675 716	RS14B3D104JNBF(ERG) RS14B3D683JNBF (ERG)	for E2 for E3, JP		
<b>CAPACITORS GROUP</b>						
	C101-104 C105,106 C107,108 C109,110 C111,112	00D 254 4722 981 nsp 00D 254 4722 981 nsp 00D 254 4722 981	CE04W1H100MT(GR) CC73CH1H101JT +1608 CE04W1H100MT(GR) CK73B1E104KT +1608 CE04W1H100MT(GR)			
	C113 C114,115 C116 C117 C118,119	nsp 00D 254 4722 981 nsp nsp 00D 254 4722 981	CK73B1H102KT +1608 CE04W1H100MT(GR) CK73B1H102KT +1608 CC73CH1H101JT +1608 CE04W1H100MT(GR)			
	C120 C121 C122 C123 C123	nsp nsp 00D 254 4722 981 nsp nsp	CC73CH1H101JT +1608 CK73B1E104KT +1608 CE04W1H100MT(GR) CK73B1H102KT +1608 RM73B--0R0KT +1608	for E3, E2 for JP		
	C124 C125 C126 C127 C128	nsp 00D 254 4722 981 nsp nsp 00D 254 4722 981	CK73B1E104KT +1608 CE04W1H100MT(GR) RM73B--0R0KT +1608 CC73CH1H101JT +1608 CE04W1H100MT(GR)	for JP		
	C129,130 C131	nsp 00D 254 4722 981	CK73B1E104KT +1608 CE04W1H100MT(GR)			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C132 C133 C134	00D 254 4722 936 nsp 00D 254 4722 981	CE04W1HR47MT(GR) CK73B1H102KT +1608 CE04W1H100MT(GR)			
	C135 C136 C137 C138 C139	nsp nsp 00D 254 4722 981 nsp nsp	CC73CH1H101JT +1608 CC73CH1H471JT +1608 CE04W1H100MT(GR) CK73B1E104KT +1608 CK73B1E104KT +1608			
	C139 C201 C201 C202 C203	nsp nsp nsp nsp nsp	RM73B--0R0KT +1608 CK73B1H102KT +1608 RM73B--0R0KT +1608 RM73B--0R0KT +1608 CK73B1E104KT +1608	for E3, E2 for JP for E3, E2 for JP for JP for E3, E2		
	C203 C204 C205-207 C208-210 C211-213	nsp nsp 00D 254 4722 981 nsp 00D 254 4722 981	RM73B--0R0KT +1608 CC73CH1H5R0CT +1608 CE04W1H100MT(GR) CK73B1H103KT (1608) +1608 CE04W1H100MT(GR)	for JP		
	C214,215 C216,217 C218,219 C220 C221	nsp 00D 254 4722 981 nsp 00D 254 4722 981 nsp	CK73B1E104KT +1608 CE04W1H100MT(GR) CK73B1E104KT +1608 CE04W1H100MT(GR) CK73B1E104KT +1608			
	C222 C223 C224 C225 C226	00D 254 4722 981 nsp nsp 00D 254 4722 981 nsp	CE04W1H100MT(GR) CK73B1E104KT +1608 CK73B1A224KT +1608 CE04W1H100MT(GR) CK73B1E223KT +1608			
	C227 C228 C232 C233 C234	00D 254 4711 905 nsp nsp 00D 254 4759 909 nsp	CE04W1A471MT HB5(KY) CK73B1H103KT (1608) +1608 CK73B1E104KT +1608 CE04W1H100MT E11(KY) CK73B1E104KT +1608			
	C235 C236 C237 C238 C240	00D 254 4759 909 nsp nsp 00D 254 4759 909 nsp	CE04W1H100MT E11(KY) CK73B1A224KT +1608 CK73B1H103KT (1608) +1608 CE04W1H100MT E11(KY) CK73B1H103KT (1608) +1608			
	C241 C243 C244,245 C248 C249	00D 254 4651 900 nsp 00D 254 4759 909 nsp 00D 254 4718 953	CE04W0J331MT F11(KY) CK73B1A224KT +1608 CE04W1H100MT E11(KY) CK73B1E104KT +1608 CE04W1C221MT(GR)			
	C250,251 C252 C253,254 C259 C260,261	nsp 00D 254 4718 953 nsp nsp 00D 254 4759 909	CK73B1H103KT (1608) +1608 CE04W1C221MT(GR) CK73B1E104KT +1608 CK73B1E104KT +1608 CE04W1H100MT E11(KY)			
	C262-266 C267 C270,271 C274 C275,276	nsp nsp nsp nsp nsp	CK73B1E104KT +1608 CK73B1E333KT +1608 CK73B1E333KT +1608 CK73B1E333KT +1608 CK73B1E104KT +1608			
	C277 C278 C279 C280	nsp nsp nsp nsp	CK73B1H103KT (1608) +1608 CK73B1E104KT +1608 CK73F1C105ZT +2125 CK73B1E333KT +1608			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C281,282	nsp	CK73B1H104KT +2125			
	C283	nsp	CK73B1E333KT +1608			
	C284	nsp	CK73F1C105ZT +2125			
	C285-288	nsp	CK73B1H102KT +1608			
	C289,290	00D 254 4718 953	CE04W1C221MT(GR)			
	C299-302	nsp	CK73B1H103KT (1608) +1608			
	C303-306	00D 254 4641 907	CE04W1H470MT F11(LXZ			
	C307	nsp	CK73B1H104KT +2125			
	C308	nsp	CC73CH1H5R0CT +1608			
	C309,310	nsp	CK73B1H104KT +2125			
	C311	nsp	CK73B1H103KT (1608) +1608			
	C312	nsp	CK73B1H104KT +2125			
	C313,314	nsp	CK73B1H103KT (1608) +1608			
	C316	nsp	CK73B1H103KT (1608) +1608			
	C317,318	nsp	CK73B1H104KT +2125			
	C319,320	nsp	CK73B1H103KT (1608) +1608			
	C323	00D 257 3013 933	CF73=1H104JT(ECHUC9) +C			
	C324	00D 254 4714 708	CE04W1V222MC LN3(KY)			
	C325	00D 257 3013 933	CF73=1H104JT(ECHUC9) +C			
	C326	00D 254 4714 708	CE04W1V222MC LN3(KY)			
	C335	nsp	CK73B1H102KT +1608			
⚠	C336-338	00D 256 1067 904	CF93A2A474JT(ECQV)			
	C339	nsp	CK73B1E104KT +1608			
	C401	00D 253 8026 703	CK45E2EAC472MC			
	C402,403	nsp	RM73B--0R0KT +1608			
⚠	IC405	00D 256 8039 003	CF99--2EAC104K(LEMX)	for E2 for E2, JP		
⚠	IC405	00D 256 8039 016	CF99--2EAC224K(LEMX)	for E3		
⚠	IC406	00D 256 8039 016	CF99--2EAC224K(LEMX)	for E3		
⚠	IC406	00D 256 8039 029	CF99--2EAC334K(LEMX)	for JP		
⚠	IC407	nsp	CK73B1H103KT (1608) +1608			
⚠	IC408-410	00D 253 8035 707	CK45E2EAC102MC(KY)	for E2		
⚠	IC408-410	00D 253 8035 710	CK45E2EAC222MC(KY)	for E3, JP		
⚠	IC411	00D 253 8030 003	CK45B3D681KC(ECKA)	for E2		
⚠	IC411	00D 255 4261 704	CQ93P2J222KC(ECQP)	for E3, JP		
⚠	IC412	00D 256 8039 016	CF99--2EAC224K(LEMX)	for E3		
⚠	IC412	00D 256 8039 003	CF99--2EAC104K(LEMX)	for JP		
⚠	IC413,414	00D 256 8039 003	CF99--2EAC104K(LEMX)			
	C418,419	nsp	CK73B1E223KT +1608			
	C421	nsp	CK73B1H332KT +1608			
	C422	nsp	CC73CH1H221JT +1608			
	C423	nsp	CK73B1H103KT (1608) +1608			
	C425	00D 254 4618 901	CE04W1H101MT H12(LXZ			
	C426-429	nsp	CK73B1H103KT (1608) +1608			
	C430	00D 254 4721 995	CE04W1V102MT(GR)			
	C431	nsp	CK73B1H103KT (1608) +1608			
	C432	00D 254 6229 000	CE68W2G331M 35B(KMM)	for E2		
	C432	00D 254 6228 001	CE68W2D102M 35B(KMM)	for E3, JP		
	C433	00D 254 4639 906	CE04W1H4R7MT(KMG)			
	C434	nsp	CK73B1H102KT +1608			
	C435	00D 255 4261 717	CQ93P2J332KC(ECQP)	for E2		
	C435	00D 255 4261 762	CQ93P2J103KC(ECQP)	for E3, JP		
	C436	00D 254 4728 707	CE04W1E332M (GR)			
	C437	nsp	CK73B1E104KT +1608			
	C439	00D 254 4718 940	CE04W1C101MT(GR)			
	C440	nsp	CK73B1E104KT +1608			
	C441	nsp	CK73B1C473KT +1608			
⚠	C442	00D 253 8032 700	CK452EAC102MC(KX)	for E2		

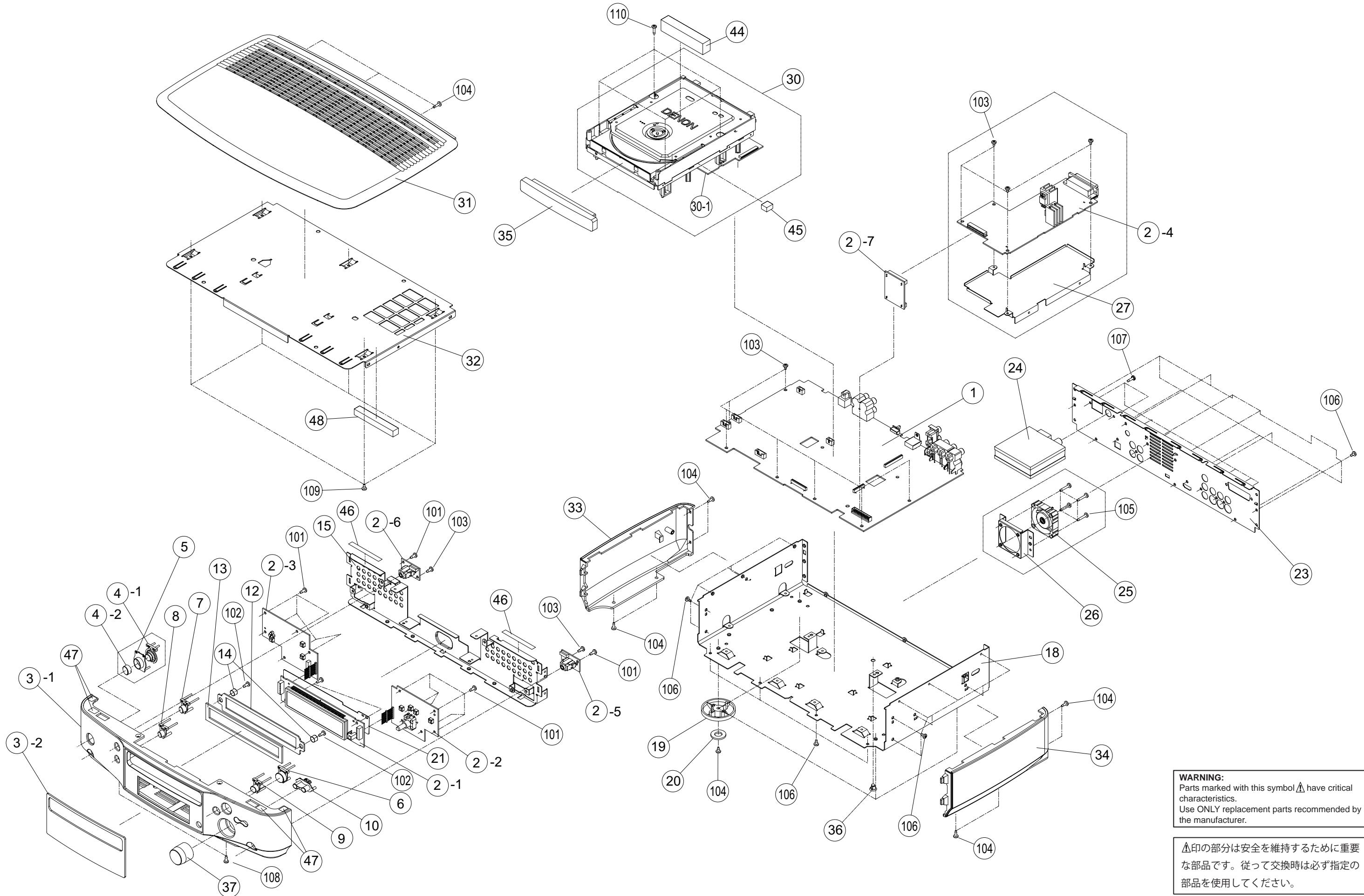
	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
⚠	C442 C443 C444 C445	00D 253 8029 700 nsp 00D 254 2708 701 00D 255 4261 720	CK45F2EAC222MC (KX) CK73B1E104KT +1608 CE04W1E471MC J16(KY) CQ93P2J472KC(ECQP)	for E3, JP		
	C446 C447,448 C449 C451-454 C455,456	00D 254 2708 701 00D 254 4714 708 nsp nsp 00D 254 4718 953	CE04W1E471MC J16(KY) CE04W1V222MC LN3(KY) CK73B1H103KT (1608) +1608 CK73B1H103KT (1608) +1608 CE04W1C221MT(GR)			
	C457 C458-460 C461 C462 C464,465	nsp nsp nsp nsp nsp	CC73CH1H221JT +1608 RM73B--0R0KT +1608 CK73B1H105KT CK73B1H103KT (1608) +1608 CK73B1E104KT +1608			
	C466 C467 C468 C469 C470	nsp 00D 254 4722 952 nsp 00D 254 4711 905 nsp	CK73B1H103KT (1608) +1608 CE04W1H2R2MT(GR) CK73B1H103KT (1608) +1608 CE04W1A471MT HB5(KY) CK73B1H103KT (1608) +1608			
	C471 C472,473 C474 C475 C476	00D 254 4712 700 nsp nsp nsp nsp	CE04W1C471MC JC5(KY) CK73B1E104KT +1608 CK73B1H103KT (1608) +1608 CK73B1H102KT +1608 CK73B1H103KT (1608) +1608			
	C477 C479 C481 C482-484 C485	nsp nsp nsp nsp 00D 253 8029 700	CK73B1H102KT +1608 CK73B1E104KT +1608 CK73B1H102KT +1608 RM73B--0R0KT +1608 CK45F2EAC222MC (KX)			
	C604 C606 C616 C619 C620	00D 253 1210 901 nsp nsp nsp nsp	CK45B1H104KT(RPER) CK73B1H102KT +1608 CK73B1H103KT (1608) +1608 CK73B1H102KT +1608 CK73B1H103KT (1608) +1608			
	C624 C625,626 C627 C630,631	nsp 00D 255 1264 908 00D 253 1210 901 00D 255 1264 908	CK73B1H103KT (1608) +1608 CQ93M1H102JT(B) CK45B1H104KT(RPER) CQ93M1H102JT(B)			

**OTHERS PARTS GROUP**

	AS401 AS402,403 AS601	nsp nsp nsp	HEAT SINK (MINI) RADIATOR LED SPACER SUPPORT A			
	CX021 CX022 CX041 CX081	nsp nsp nsp nsp	2P VH CON BASE (White) 2P VH CON BASE (Blue) 4P VH CON.BASE 8P CONN.BASE(KR-PH)			
	CX151 CX252	nsp 00D 205 1356 002	15P CONN.BASE(KR-PH) 25P DSUB(FEMALE)			
	CY021 CY023	nsp nsp	2P VH CON BASE (White) 2P VH CON BASE (White)			
	CY042 CY082 CY152	nsp nsp nsp	4P VH CON.BASE 8P CONN.BASE(KR-PH) 15P CONN.BASE(KR-PH)			

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
⚠️	F401	00D 206 1094 066	FUSE(233)T4AL125V	for E3, JP		
⚠️	F401	00D 206 1099 045	FUSE(02153.15MXP/250V)	for E2		
⚠️	F402	00D 206 1094 053	FUSE(233)T3.15AL125V	for E3, JP		
⚠️	F402	00D 206 1096 048	FUSE(218)T3.15AL250V	for E2		
	FB201-204	00D 235 0130 903	CHIP EMIFIL(11A121) +1608			
	FB205,206	00D 235 0049 900	BEADS INDUCTOR TAPE			
	FB207	00D 235 0147 909	E.FIL(BLM21PG221SN1)+2125			
	FB601	00D 235 0130 903	CHIP EMIFIL(11A121) +1608			
	FB602,603	00D 235 0049 900	BEADS INDUCTOR TAPE			
	FB604	00D 235 0130 903	CHIP EMIFIL(11A121) +1608			
	FB606-608	00D 235 0130 903	CHIP EMIFIL(11A121) +1608			
	FB609	00D 235 0049 900	BEADS INDUCTOR TAPE			
	FB611	00D 235 0130 903	CHIP EMIFIL(11A121) +1608			
	FB612-615	00D 235 0049 900	BEADS INDUCTOR TAPE			
	FF401,402	nsp	FUSE CLIP(TAPE)			
	FH401,402	nsp	FUSE CLIP(TAPE)			
	JK601	00D 205 1441 001	SPEAKER TERMINAL(2P)			
	L201	00D 235 0125 905	INDUCTOR(FLC32C220K)+3216			
	L202	00D 235 0192 006	INDUCTOR 7G14D-100M			
	L203	00D 231 0091 008	60NH(AIR COIL)			
	L204,205	00D 235 0192 006	INDUCTOR 7G14D-100M			
	L206	00D 231 0091 008	60NH(AIR COIL)			
	L207,208	00D 235 0192 006	INDUCTOR 7G14D-100M			
	L209-211	00D 231 0091 008	60NH(AIR COIL)			
	L212	00D 235 0192 006	INDUCTOR 7G14D-100M			
	L213	00D 231 0091 008	60NH(AIR COIL)			
	L215	00D 235 0192 006	INDUCTOR 7G14D-100M			
⚠️	L401,402	00D 239 0038 052	L.FILTER(HR28R-E123)	for E3, JP		
⚠️	L401,402	00D 239 0038 078	L.FILTER(HR28R-E333)	for E2		
	L404,405	00D 235 0185 903	INDUCTOR 47UH(7E10H)			
	RL201,202	00D 214 0217 010	RELAY(DS2SU12VDC)			
⚠️	RL401	00D 214 0242 001	RELAY(DLS9D1-O_M)			
⚠️	T401	00D 233 6604 000	SW_TRANS(E3/EJ 3590)	for E3, JP		
⚠️	T401	00D 233 6605 009	SW TRANS(E2/EK 3591)	for E2		
⚠️	T402	00D 233 6615 002	POWER TRANS(MINI/E2)	for E2		
⚠️	T402	00D 233 6614 003	POWER TRANS(MINI/E3)	for E3		
⚠️	T402	00D 233 0747 002	POWER TRANS(MINI/J)	for JP		
	W101	nsp	LUG PLATE			
	W201	nsp	LUG PLATE			
	W401-404	nsp	LUG PLATE			
	X201	00D 399 1114 905	X-TAL(L8450-24.576)			
		0RD 470 0012 022	3X12 CPS SW W	for IC401		
		0RD 470 0051 009	3X8 CPS(SW,W) ZNP	for D413,420		
		nsp	FUSE LABEL3.15A/125V	for E3, JP		
		nsp	FUSE LABEL(4A/125V)	for E3, JP		

## EXPLODED VIEW



## 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。
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- \* 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

JP : Japan mode

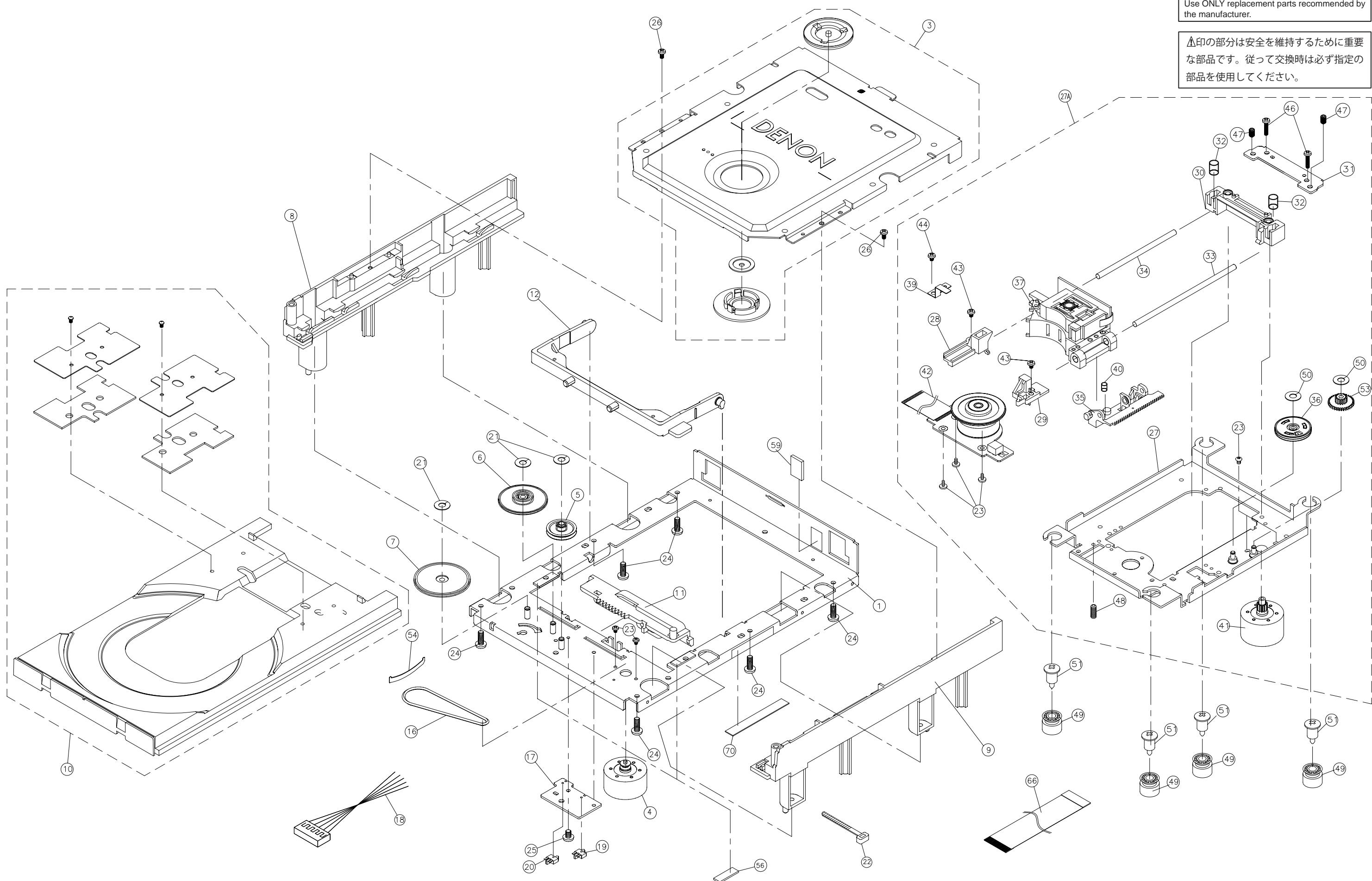
Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
1	00D1U-3836D	MAIN P.W.B. UNIT ASS'Y(E2)	for E2	1	*
1	00D1U-3836E	MAIN P.W.B. UNIT ASS'Y(E3)	for E3	1	*
1	00D1U-3836F	MAIN P.W.B. UNIT ASS'Y(J)	for JP	1	*
2	nsp	LOC/PWR-DSP P.W.B. UNIT ASS'Y(ALL)		1	*
2-1	-	DISPLAY CENT. UNIT		1	
2-2	-	DISPLAY RIGHT UNIT		1	
2-3	-	DISPLAY LEFT UNIT		1	
2-4	-	LOCAL POWER UNIT		1	
2-5	-	HP OUT UNIT		1	
2-6	-	AUX IN UNIT		1	
2-7	-	IF-1 UNIT		1	
3	00D 146 2502 103	FRONT PANEL ASSY		1	*
3-1	-	FRONT PANEL		1	
3-2	-	WINDOW		1	
4	00D 113 2099 001	POWER KNOB ASSY		1	*
4-1	-	POWER KNOB CAP		1	
4-2	-	KNOB BASE(POWER)		1	
5	00D 143 1292 004	LENS(POWER)		1	*
6	00D 113 2094 006	KNOB(PLAY)		1	*
7	00D 113 2095 005	KNOB(EJECT)		1	*
8	00D 113 2096 004	KNOB(FUNCTION)		1	*
9	00D 113 2098 002	KNOB(STOP)		1	*
10	00D 113 2097 003	KNOB(SKIP)		1	*
12	00D 461 1298 003	BLIND SHEET		1	*
13	00D 431 0452 001	BLIND		1	*
14	00D 463 0958 007	SPRING		2	
15	nsp	FRONT BRACKET		1	*
18	nsp	MAIN CHASSIS		1	*
19	00D 104 0351 022	FOOT		4	*
20	00D 461 1066 002	FELT		4	
21	00D 415 1012 008	PROTECT SHEET		1	*
23	00D 105 1691 108	REAR PANEL		1	*
24	00D 216 0125 001	AM FM TUNER(E2)	for E2	1	
24	00D 216 0129 007	AM FM TUNER(E3 RDBS)	for E3	1	
24	00D 216 0127 009	AM FM TUNER(J)	for JP	1	
25	00D 421 0839 009	FAN F410T-12L1C		1	
26	nsp	FAN BRACKET		1	
27	nsp	SHIELD BRACKET		1	*
30	FG5HPS1MS	DVD MECHA UNIT		1	
30-1	00D1U-3807	FEP P.W.B. UNIT		1	
31	00D 146 2506 031	TOP COVER	for E2	1	*
31	00D 146 2506 044	TOP COVER	for E3	1	*
31	00D 146 2506 057	TOP COVER	for JP	1	*
32	nsp	TOP BRACKET		1	*
33	00D 146 2504 004	SIDE PANEL(L)		1	*
34	00D 146 2505 003	SIDE PANEL(R)		1	*
35	00D 146 2492 019	LOADER PANEL		1	*

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	36	nsp	CARD SPACER		1	
	37	00D 112 1000 001	VOLUME KNOB		1	*
★	38	00D 342 0040 003	FERRITE CRAMP081610N		1	
	★ 39	nsp	CORD HOLDER (L50)	L=50	1	
	★ 40	nsp	E2 LASER CAUTION	for E2	1	
	★ 41	nsp	LABEL(A)	for E3	1	
	★ 42	nsp	R.SHEET(E2) SUB ASSY	for E2	1	*
	★ 42	nsp	R.SHEET(E3) SUB ASSY	for E3	1	*
	★ 42	nsp	R.SHEET(J) SUB ASSY	for JP	1	*
	★ 43	nsp	MANUFAC.(J)SUB ASSY	for JP	1	
	44	nsp	EMI GASKET RFSG100100	100mm	1	
	45	nsp	FFC PAD		1	*
	46	nsp	EMI GASKET RFSG010070	75mm	2	*
	47	nsp	SPACER		4	*
	48	nsp	EMI GASKET RFSG100100	60mm	1	
<b>wiers</b>						
	★ 51	00D 009 0236 017	15P FFC CABLE	for CX151	1	*
	★ 52	00D 009 0273 054	17P FFC(1.0)	for CY171	1	*
	★ 53	nsp	3P VH-VH CONN CORD	for CX021	1	*
	★ 54	00D 009 0273 067	21P FFC(1.0)	for CY211	1	*
	★ 55	nsp	6P PH-PH CON.CORD	for MAIN-DRIVE	1	*
	★ 56	00D 009 0285 026	30P FFC(1.0)	for CY302	1	*
<b>screws</b>						
	101	ORD 473 7500 015	3X8 CBTS (P)-Z		15	
	102	ORD 473 8044 004	SPECIAL SCREW		2	
	103	ORD 473 7005 073	3X5 CBTS(S)Z		13	
	104	ORD 473 7002 034	3X6 CBTS (S)-B		15	
	105	00D 473 8091 002	3X16 CUP SCREW		4	
	106	ORD 473 7015 005	3X6 CBTS(S)-B		27	
	107	00D 477 0064 107	FIXING SCREW		7	
	108	ORD 473 7002 021	3X8 CBTS (S)-B		2	
	109	ORD 473 7500 002	3X6 CBTS (P)-Z		5	
	110	ORD 473 7031 005	2.6X10 CBTS (S)-Z		4	

## EXPLODED VIEW OF DVD MECHANISM UNIT

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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 DVD MECHANISM UNIT

\* 本表に "nsp" と記載されている部品は供給できません。

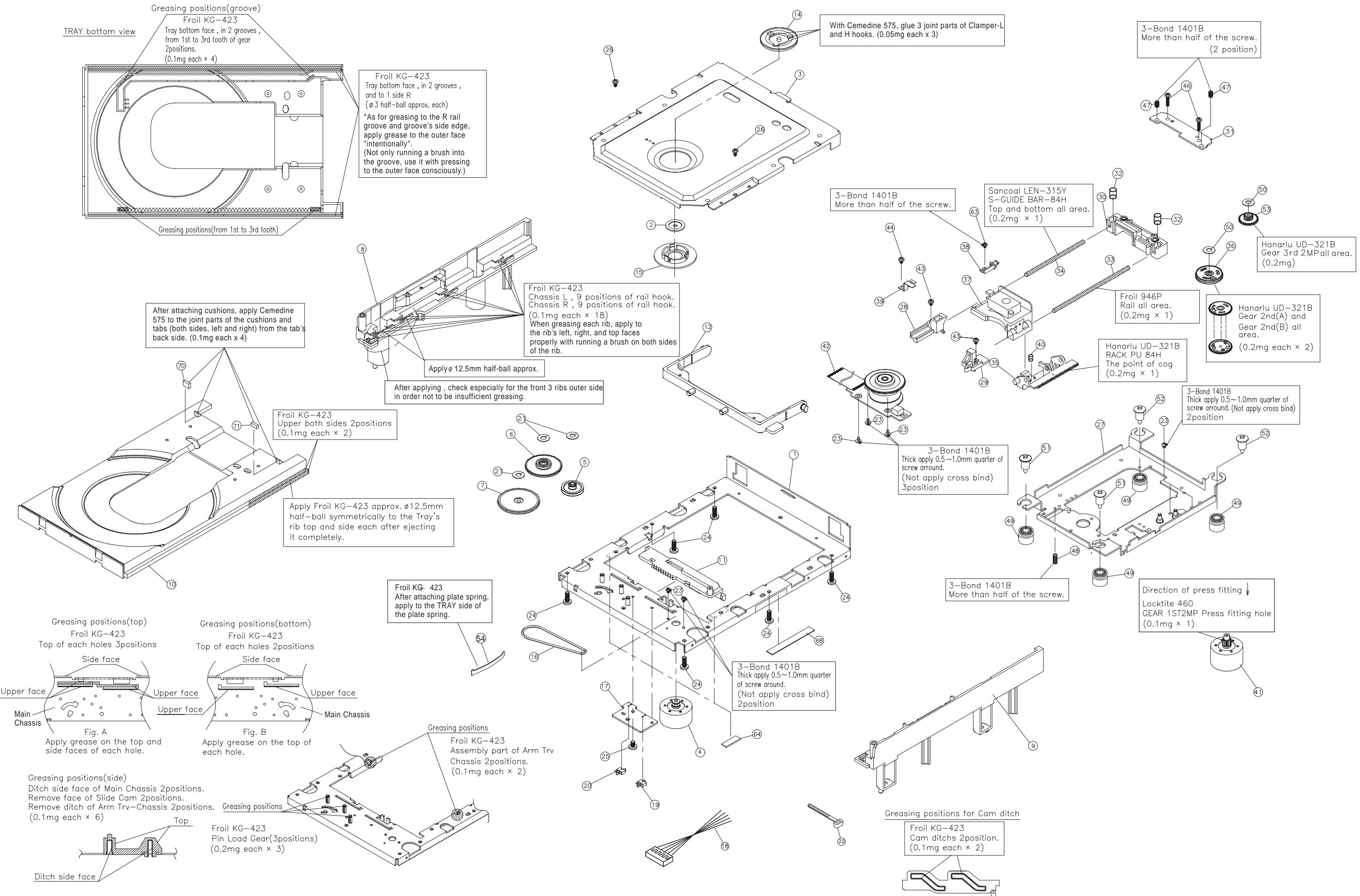
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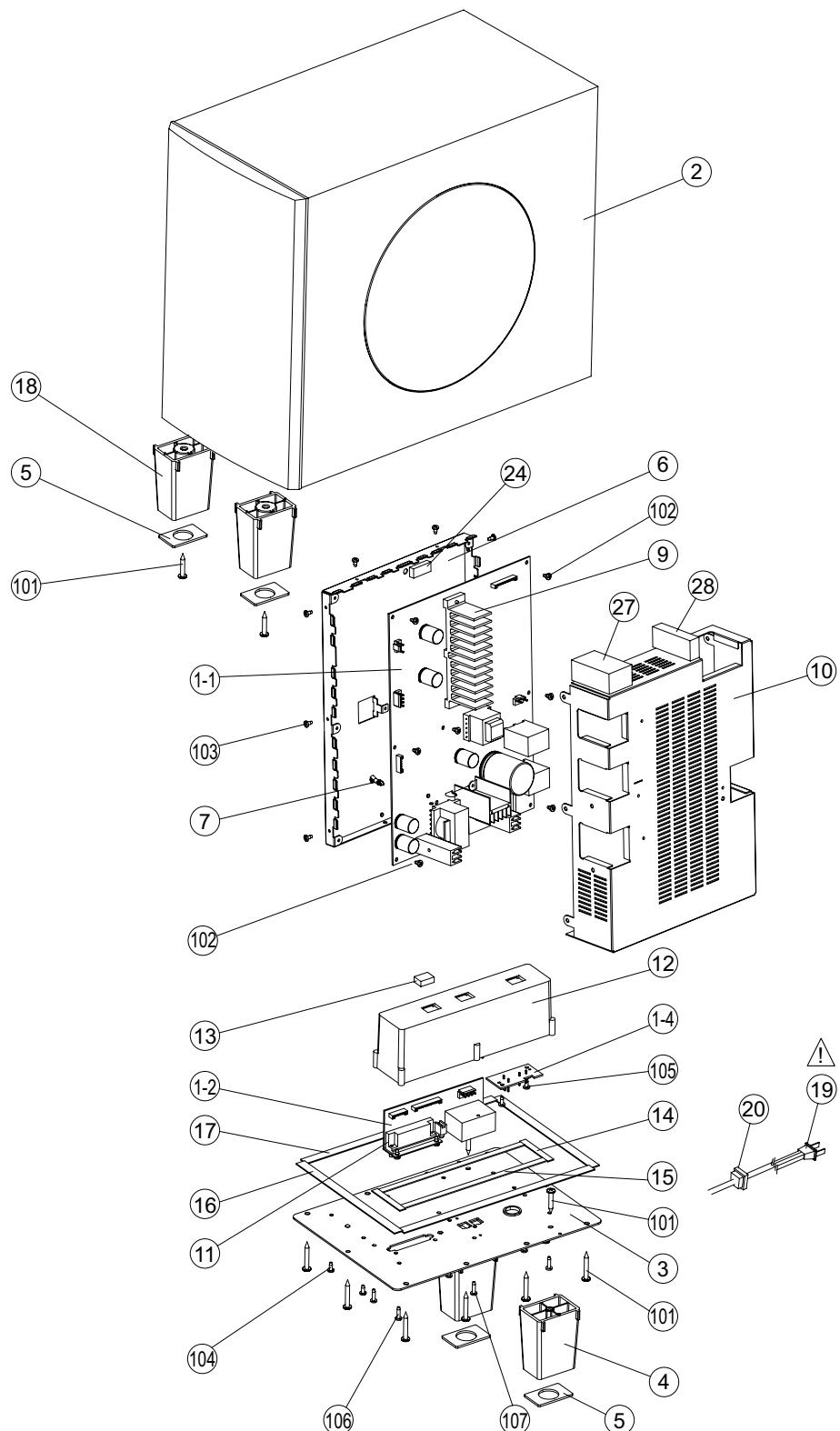
\* The parts listed below are for maintenance only, might differ from the parts used in the unit in appearances or dimensions.

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	1	nsp	MAIN CHASSIS ASS'Y		1	
	3	00D 9KA 2A73 8	GUIDE CLAMP ASS'Y		1	
	4	00D 9KC 2A00 3	LOADING MOTOR ASS'Y		1	
	5	00D 9KC 2G02 9	LOADING GEAR		1	
	6	00D 9KB 9G03 0	LOADING GEAR 2ND		1	
	7	00D 9KB 9G03 1	LOADING GEAR 3RD		1	
	8	nsp	SUB CHASSIS-L		1	
	9	nsp	SUB CHASSIS-R		1	
	10	00D 9KA 2A73 7	TRAY ASS'Y		1	
	11	00D 9KC 1G00 3	SLIDE-CAM		1	
	12	00D 9KC 1G00 4	TRAVERSE ARM		1	
	16	00D 9KB 9G01 5	LOADING BELT		1	
	17	nsp	SWITCH P.W.B.		1	
	18	nsp	5P PH WIRE		1	
	19	00D 9KS 01W2 04	SWITCH ESE22MH21		1	
	20	00D 9KS 01W2 05	SWITCH ESE22MH23		1	
	21	nsp	POLY.SLIT WASHER 2.6X6X0.25C		3	
	22	00D 445 8004 007	WIRE CLAMPER		1	
	23	nsp	PRECISION SCREW 1.7X2.2 TYPE3		2	
	24	nsp	SCREW 2.6X6 CBTS(B)-Z		6	
	25	nsp	PRECISION SCREW 2X3(S) TYPE3		1	
	26	nsp	SCREW 2X6 CBTS(P)-Z		2	
	27A	00D 9KA 2A69 3	TRAVERSE MECHA (FEED) ASS'Y	Assembled part	1	
	23	-	PRECISION SCREW 1.7X2.2 TYPE3		5	
	27	-	PU CHASSIS ASS'Y		1	
	28	-	SHAFT HOLDER L		1	
	29	-	SHAFT HOLDER R		1	
	30	-	SHAFT TILT BASE-W		1	
	31	-	SHAFT TILT PLATE-W		1	
	32	-	TILT SPRING		2	
	33	-	MAIN SHAFT		1	
	34	-	SUB SHAFT		1	
	35	-	PU RACK GEAR		1	
	36	-	FEED GEAR 2ND ASS'Y		1	
	37	-	PICK UP SF-HD65G		1	
	39	-	SHAFT SPRING		1	
	40	-	RACK GEAR SPRING		1	
	41	-	FEED MOTOR ASS'Y		1	
	42	-	T/T MOTOR ASS'Y		1	
	43	-	SCREW 2.6X6 CBTS(S)-Z		2	
	44	-	SCREW 2.6X4 CBTS(S)-Z		1	
	46	-	SCREW 2.6X15 CFTS(S)-Z		2	
	47	-	SCREW 3X4 BSS		2	
	48	-	SCREW 3X8 BSS (A)		1	
	50	-	POLY.SLIT WASHER 2.1X4X0.25C		2	
	53	-	FEED GEAR 3RD		1	
	49	00D 9KA 2G64 3	DAMPER		4	
	51	00D 9KC 1H01 2	SPECIAL SCREW		4	
	54	nsp	TRAY-SPRING-VXF		1	
	56	nsp	RUBBER CUSHION		2	
	59	nsp	TRAY-CUSHION		1	
	66	00D 009 0276 006	24P FFC(0.5)		1	
	70	nsp	TAPE W10X45 (NITTO NO.156)		1	

## POINTS OF GREASING



## DSW-S102 EXPLODED VIEW



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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。

# DSW-S102 PARTS LIST OF EXPLODED VIEW

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\* 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。

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

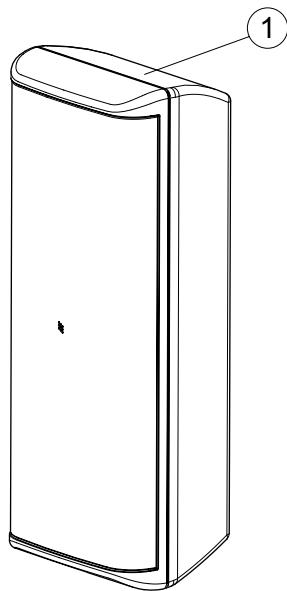
E3 : U.S A. & Canada model

E2 : Europe model

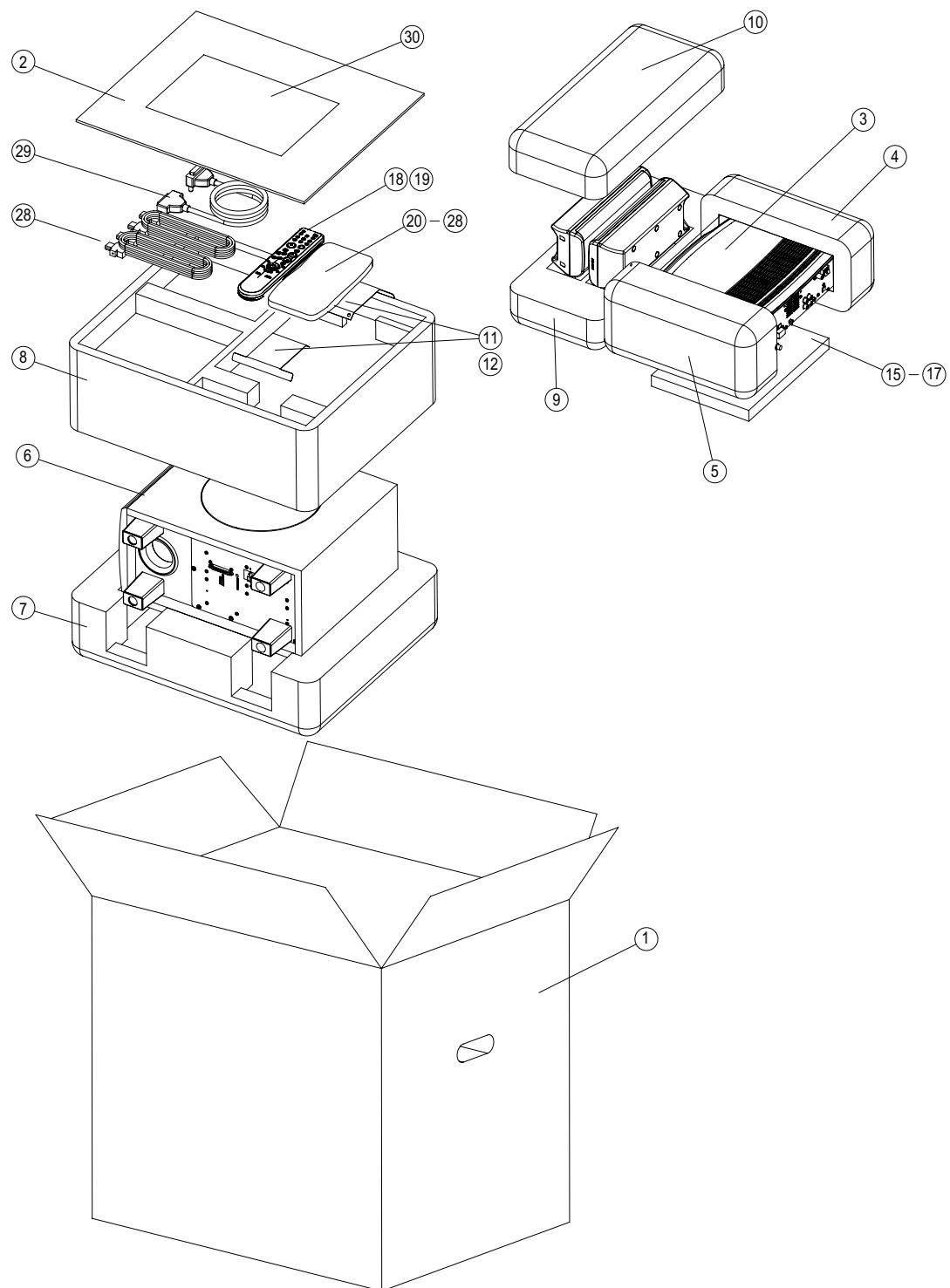
JP : Japan model

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New	
	1 1 1 1-1 1-2	nsp nsp nsp D.AMP/SMPS P.W.B. UNIT ASS'Y(E2) D.AMP/SMPS P.W.B. UNIT ASS'Y(E3) D.AMP/SMPS P.W.B. UNIT ASS'Y(J) SMPA/AMP UNIT I/F UNIT	for E2 for E3 for JP	1 1 1 1 1	*	
	1-4	AC I/F UNIT		1		
	2 3 4	00D 9H3 0001 728 00D 105 1680 232 00D 104 0354 003	DSWS102 CABINET ASSY REAR PANEL FOOT(REAR)	1 1 2	*	
	5 6 7 9 10	00D 461 1300 001 nsp nsp nsp nsp	FELT MAIN BRACKET P.W.B.HOLDER (H=12) HEAT SINK SHIELD COVER	4 1 1 1 1	*	
	11 12 13 14 15	nsp nsp 00D 445 0084 009 nsp nsp	CONNECTOR BRACKET TERMINAL COVER CORD BUSH PEF SHEET(7x48) PEF SHEET(7x177)	1 1 3 2 2	*	
⚠ ⚠ ⚠	16 17 18 I19 I19	nsp nsp 00D 104 0353 004 00D 206 2244 006 00D 206 2245 005	PEF SHEET(10x180) PEF SHEET(10x233) FOOT(FRONT) AC CORD E2withCON(V) AC CORD E3withCON(V)	2 2 2 1 1	*	
	I19 20 ★ 21 ★ 22 ★ 23	00D 206 2248 002 00D 445 0131 004 00D 461 1316 008 nsp 00D 342 0040 003	AC CORD JwithCON (V) CORD BUSH(SR-5K4) PEF SHEET(10x10) SPACER(CPVS-0.5F) FERRITE CRAMP081610N	for JP 1 1 1 2 CX041	1 1 1 2 1	
	24 ★ 25 ★ 26 27 28	nsp nsp nsp nsp nsp	PWB PAD PEF SHEET(10x15) PEF SHEET(30x120) CABINET PAD(70X15) CABINET PAD(70X15)	1 5 4 1 1	*	
	★ 29 ★ 29 ★ 29 ★ 30	nsp nsp nsp nsp	RATING SHEET(E2) RATING SHEET(E3) RATING SHEET(J) DATE LABEL	1 1 1 1	*	
<b>wires</b>						
	★ 51 ★ 52 ★ 53 ★ 54	00D 203 6644 001 00D 204 3021 002 00D 203 2447 008 00D 204 6821 018	4P VH-VH CON.CORD 8P PH-PH CON.CORD 2P VA-VA CON.CORD 15P PH-PH CON.CORD	CX04-1CY042 CX081-CY082 CX021-CY021 CX151-CY152	1 1 1 1	*

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
<b>screws</b>						
	101	0RD 473 3809 011	4X25 CBTS (1)		14	
	102	nsp	3X6 CBTS(S)-Z		7	
	103	nsp	3X6 CBTS(S)-B		10	
	104	nsp	3X8 CBTS (S)-B		9	
	105	nsp	3X10 CBTS (P)-Z		5	
	106	nsp	3X12 CBTS (P)-B		6	
	107	00D 477 0064 107	FIXING SCREW		1	
★	108	nsp	HEXAGON HEAD SCREW SET		2	

**SC-S102 PARTS LIST OF EXPLODED VIEW****SC-S102 PARTS LIST OF EXPLODED VIEW**

	Ref. No.	Part No.	Part Name	Remarks		Q'ty	New
	1	00D 9H3 0001 727	SPEAKER SYSTEM(L&R)			2	*

**PACKING VIEW**

## PARTS LIST OF PACKING & ACCESSORIES

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

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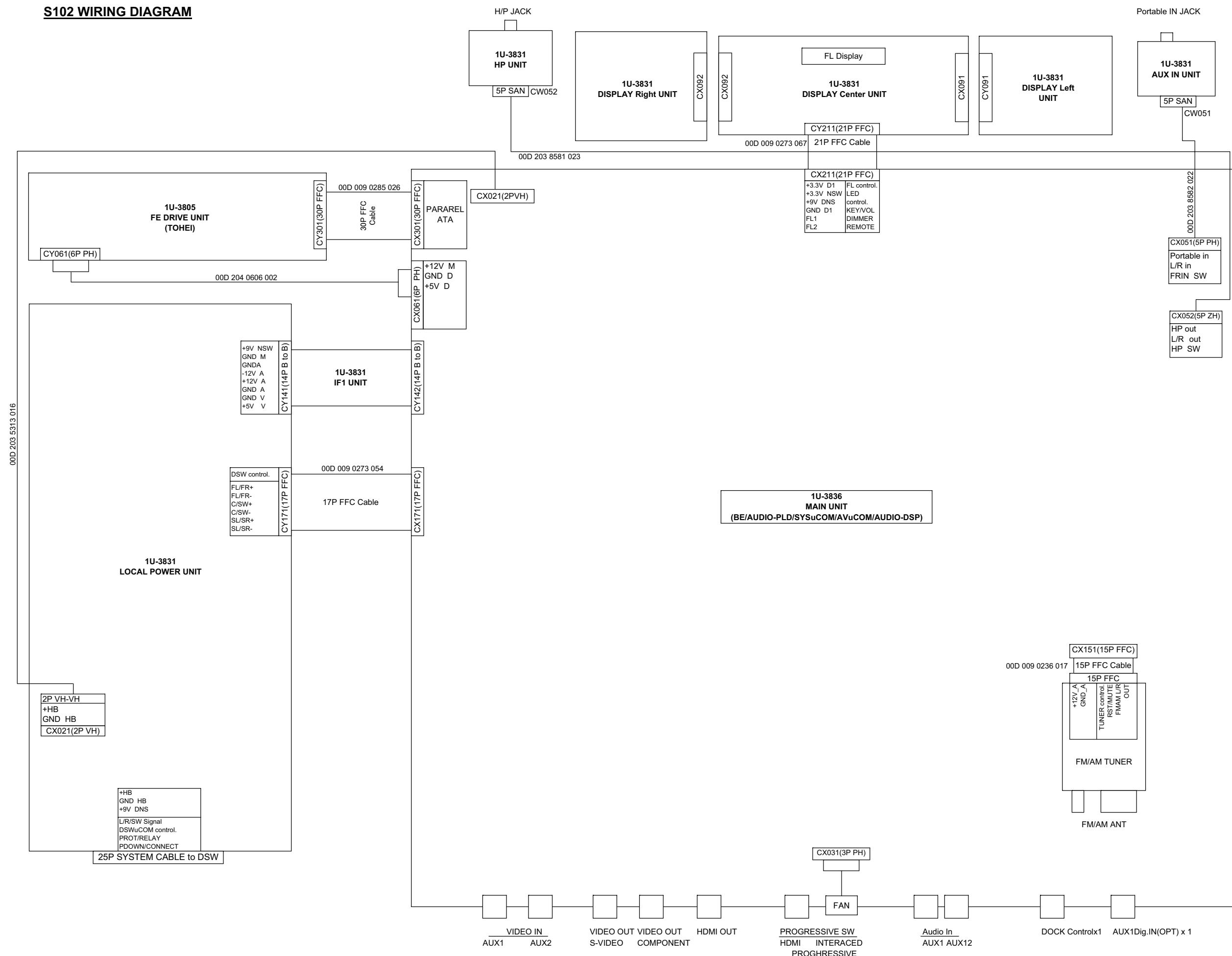
E2 : Europe model

JP : Japan model

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	1	00D 501 2374 033	MASTER CARTON	for E2	1	*
	1	00D 501 2374 017	MASTER CARTON	for E3	1	*
	1	00D 501 2374 020	MASTER CARTON	for JP	1	*
	2	00D 502 1143 103	TOP SPACER		1	*
	3	00D 505 0312 057	CABINET COVER		1	*
	4	00D 503 1554 009	CUSHION(L)		1	*
	5	00D 503 1555 008	CUSHION(R)		1	*
	6	00D 505 0312 060	CABINET COVER		1	
	7	00D 9H3 0001 725	CUSHION DSW(BOTTOM)		1	
	8	00D 9H3 0001 724	CUSHION DSW(UP)		1	
	9	00D 9H3 0001 721	CUSHION SC(BOTTOM)		1	
	10	00D 9H3 0001 720	CUSHION SC(UP)		1	
	11	00D 104 0355 002	SP STAND(EASY)		2	*
	12	00D 461 1236 007	PORON (HH48 F10 T1)		4	
	15	00D 505 0038 030	POLY COVER		1	
	16	00D 511 4645 000	INST. MANUAL(E2)	for E2	1	*
	16	00D 511 4646 009	INST. MANUAL(E3)	for E3	1	*
	16	00D 511 4647 008	INST. MANUAL(J)	for JP	1	*
	17	nsp	S.S.LIST(EX)	for E3, E2	1	
	17	nsp	SERVICE STATION LIST	for JP	1	
	18	00D 399 1102 001	REMOCON(RC1073)		1	*
	19	nsp	POLY COVER		1	
	20	nsp	POLY COVER		1	
	21	nsp	BATTERY (SUM-3) ASS		1	
	22	00D 203 0380 002	1P PIN CORD (VIDEO)		1	
	23	00D 231 1152 001	AM LOOP ANTENNA(S)		1	
	24	00D 395 0026 005	FM ANT. WIRE	for E2	1	
	24	00D 395 0028 003	FM ANT ASS Y(F/WELT)	for E3, JP	1	
	25	00D 461 1237 006	PORON (HH48 F6 T1)		1	
	26	00D 505 0343 000	ENVELOPE		1	
	27	0RD 471 3508 028	5X14 CBS-B		4	
	28	00D 203 2443 002	SP WIRE KIT(NLB193)		1	*
	29	00D 204 6794 006	25P D-SUB CABLE		1	
	30	00D 511 4648 007	SETUP GUIDE		1	*
★	31	nsp	WARRANTY (HOME)	for E3	1	
	★ 32	nsp	UPC LABEL	for E3	1	*
	★ 33	nsp	E2 POS LABEL	for E2	2	*
	★ 33	00D 517 1506 027	POS LABEL	for JP	1	*
	★ 34	nsp	DATE LABEL	for JP	1	
	★ 35	nsp	CONT.CARD(L)SUB ASSY	for E3, E2	1	
	★ 36	nsp	GUARANTEE(S)SUB ASSY	for JP	1	

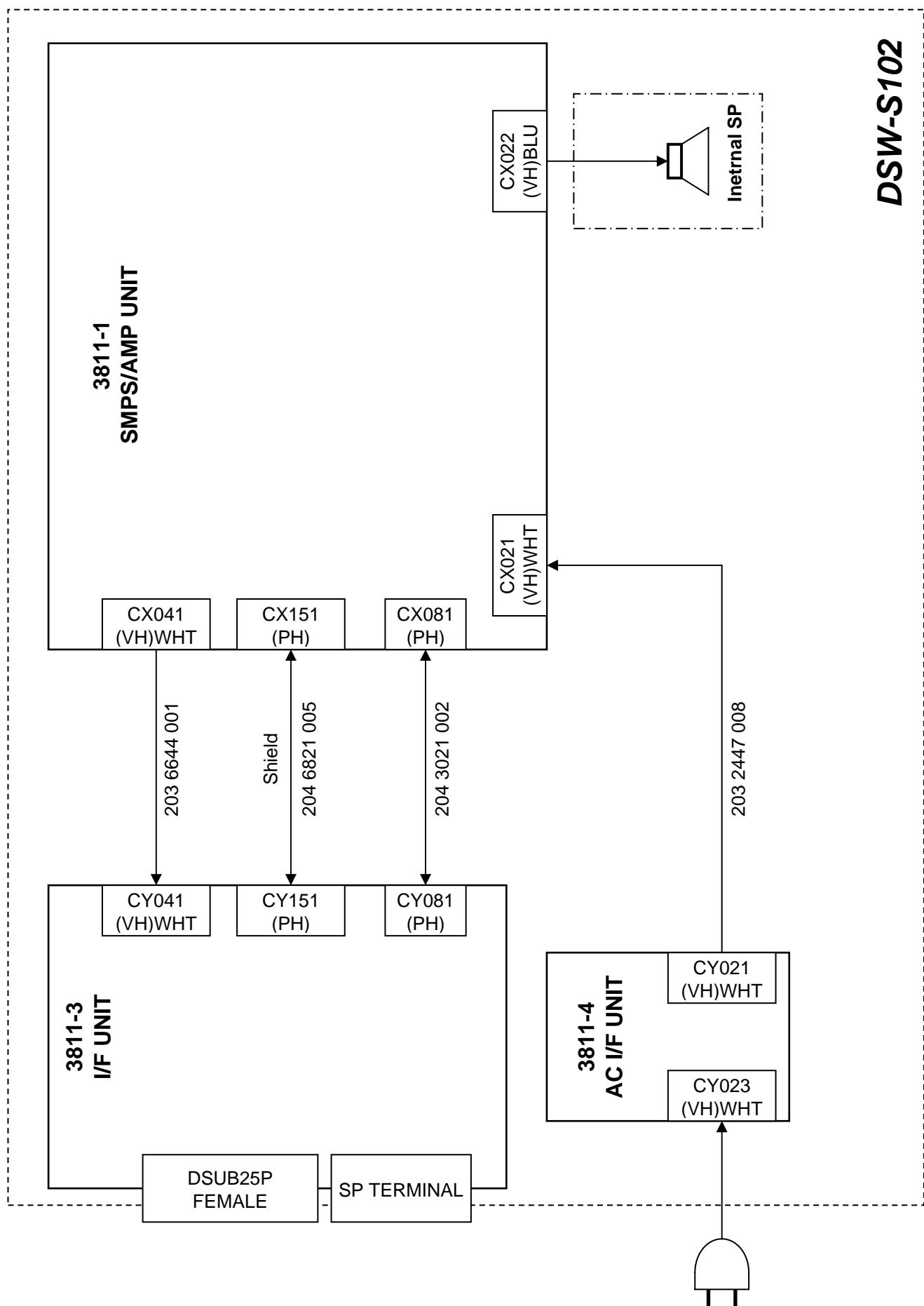
## WIRING DIAGRAMS

## ADV-S102

S102 WIRING DIAGRAM

## DSW-S102

DSW-S102



## MEASURING METHOD AND WAVEFORMS

To check the waveforms on the FEP, the GND (-) probe of the oscilloscope to "VHALF" point.  
(Except for Inner SW, TRVSW)

### NOTES

Measuring Disc: DVD/VT502 or TDV-520A  
CD/TCD-784

(It is better to use wires for extending between the probe and test points.)

- When watching the HF waveform, use the extending wire as short as possible.
- When HF waveform is noisy or cannot discriminate the eye-pattern, replace the Traverse Unit after measuring the loop.
- ① ~ ⑯ points have the certain test points shown below.

## 各部の波形と測定方法

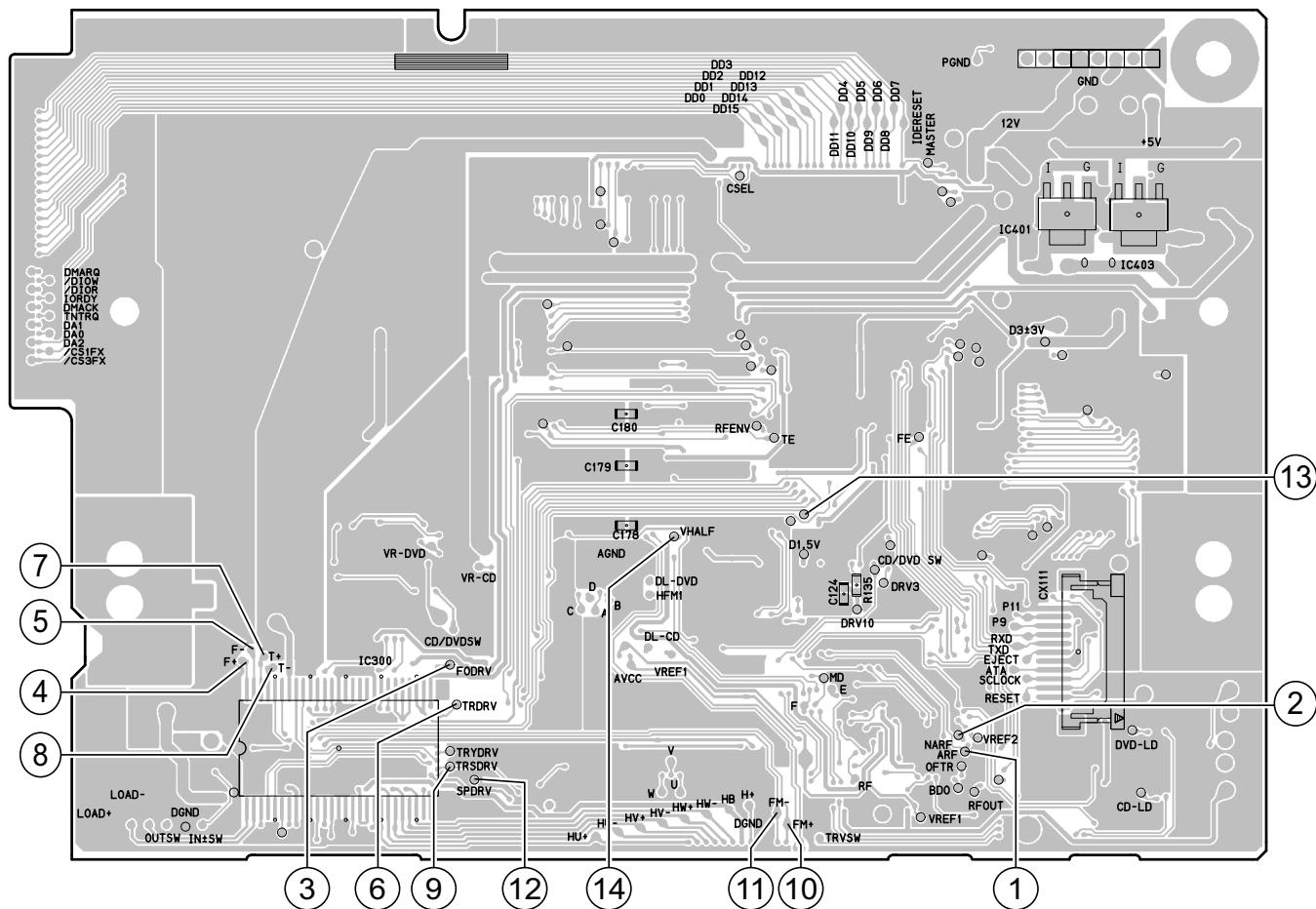
FEP 基板の波形チェックを行うためにはオシロスコープの GND(-) プローブを "VHALF" ポイントに接続します。

### 注意

測定ディスク: DVD/VT502 or TDV-520A  
CD/TCD-784

(テストポイントとプローブ間に延長ワイヤを使用するのがより良い方法です。)

- H F 波形を観測する場合、できるだけ短い延長ワイヤを使用してください。
- H F 波形がノイズで不明瞭、またはアイパターンが識別不能の場合は loop 測定後にトラバースユニットを交換してください。
- ポイント①~⑯は、下図のように特定テストポイント付きます。



IU-3807 FEP Unit : Foil Side

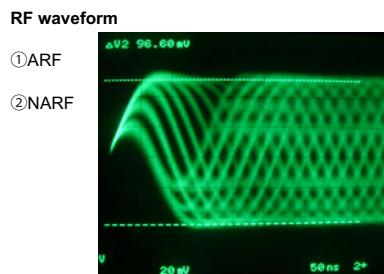
\* For ARF ① , use NARF ② as the reference (probe ⊖ ) for the oscilloscope, VHALF ⑭ as the reference voltage for other points.

\* ARF ①は NARF ②をオシロスコープの基準 ( プローブ⊖ ) とし、他のポイントの基準電圧は VHALF ⑭です。

## WAVEFORMS

### IU-3807 FEP Unit.

DVD PLAY Disc : TDV-520A



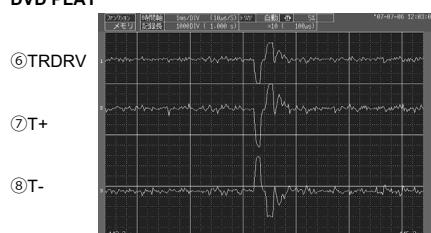
RANGE .2 v .05 μsec

DVD LOADING → PLAY



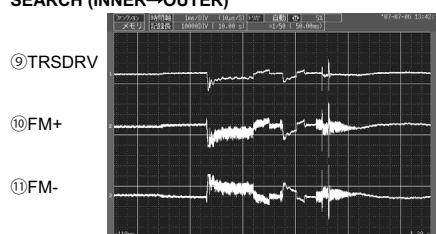
RANGE ③ .5 v  
④ .5 v 0.5 sec  
⑤ .5 v

DVD PLAY



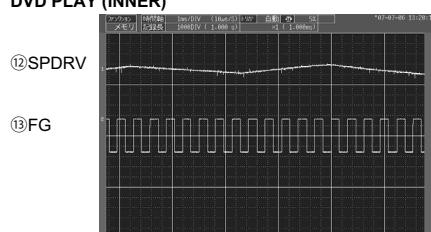
RANGE ⑥ .2 v  
⑦ .2 v 100 μsec  
⑧ .2 v

SEARCH (INNER→OUTER)



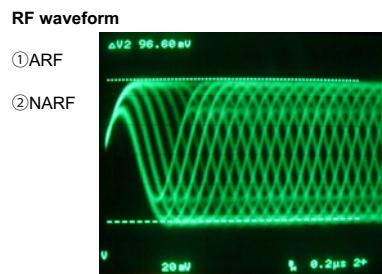
RANGE ⑨ 1 v  
⑩ 1 v 50 msec  
⑪ 1 v

DVD PLAY (INNER)



RANGE ⑫ .1 v  
⑬ 1 v 1 msec

CD PLAY Disc : TCD-784



RANGE .2 v .2 μsec

CD LOADING → PLAY



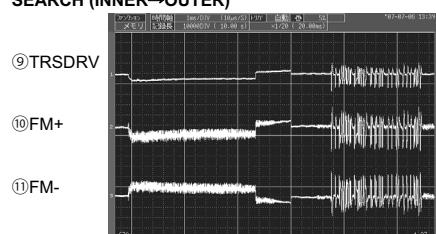
RANGE ③ .5 v  
④ .5 v 0.5 sec  
⑤ .5 v

CD PLAY



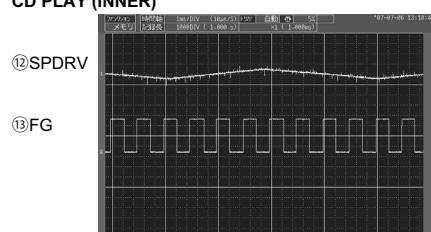
RANGE ⑥ .2 v  
⑦ .2 v 100 μsec  
⑧ .2 v

SEARCH (INNER→OUTER)



RANGE ⑨ 1 v  
⑩ 1 v 20 msec  
⑪ 1 v

CD PLAY (INNER)



RANGE ⑫ .1 v  
⑬ 1 v 1 msec

## NOTE FOR SCHEMATIC DIAGRAM

### 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.

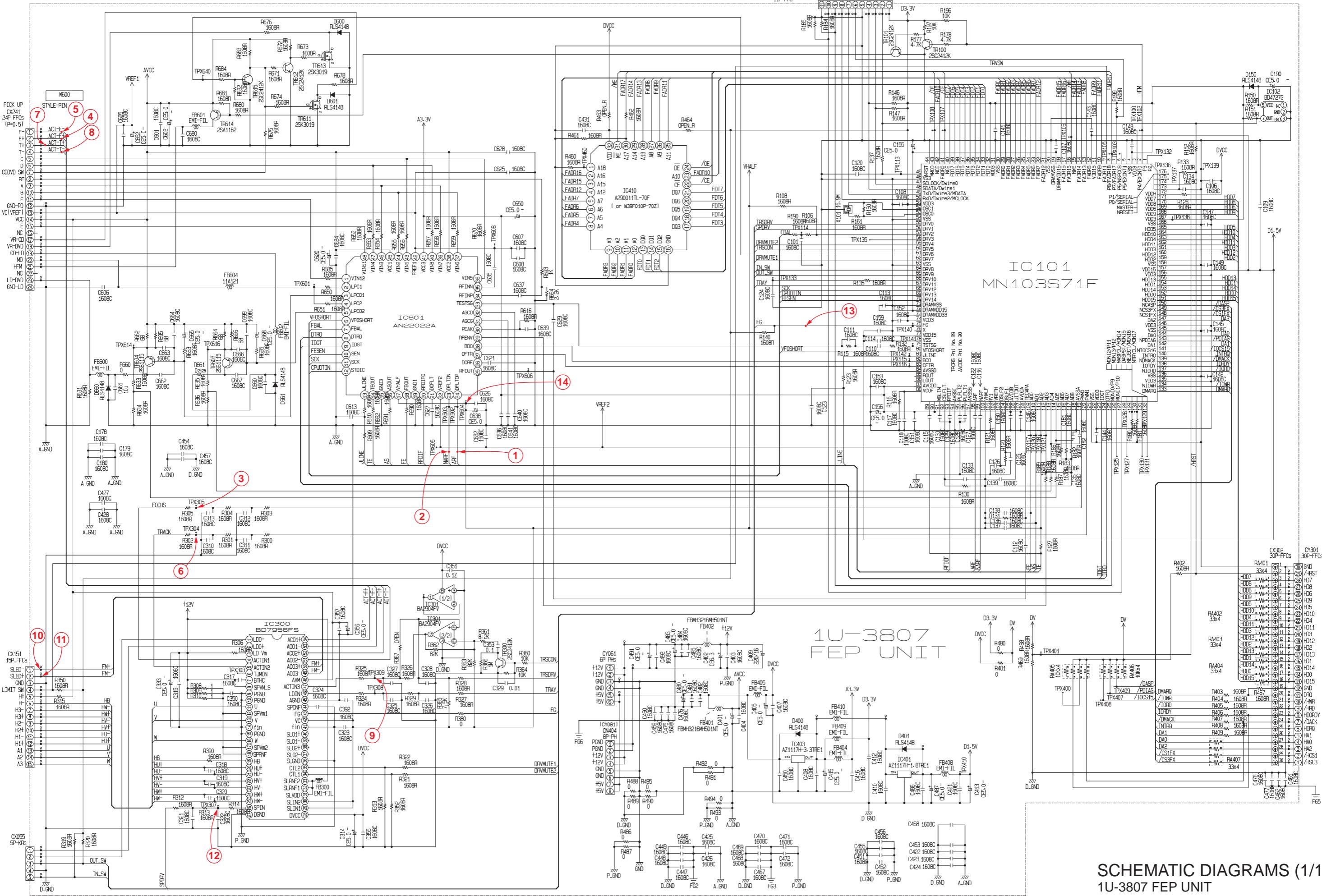
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE  
WITHOUT PRIOR NOTICE.

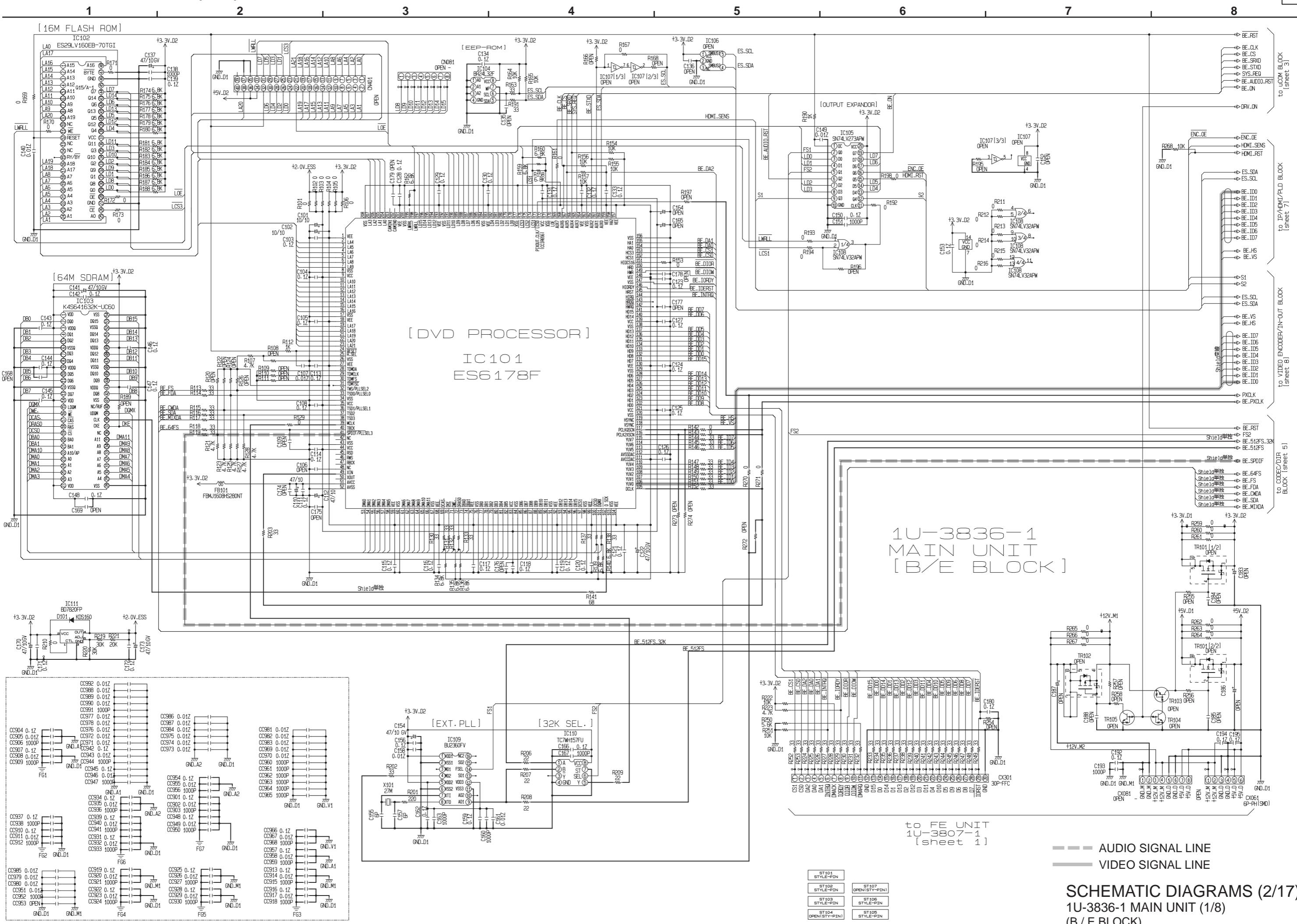
## 配線図について

△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。





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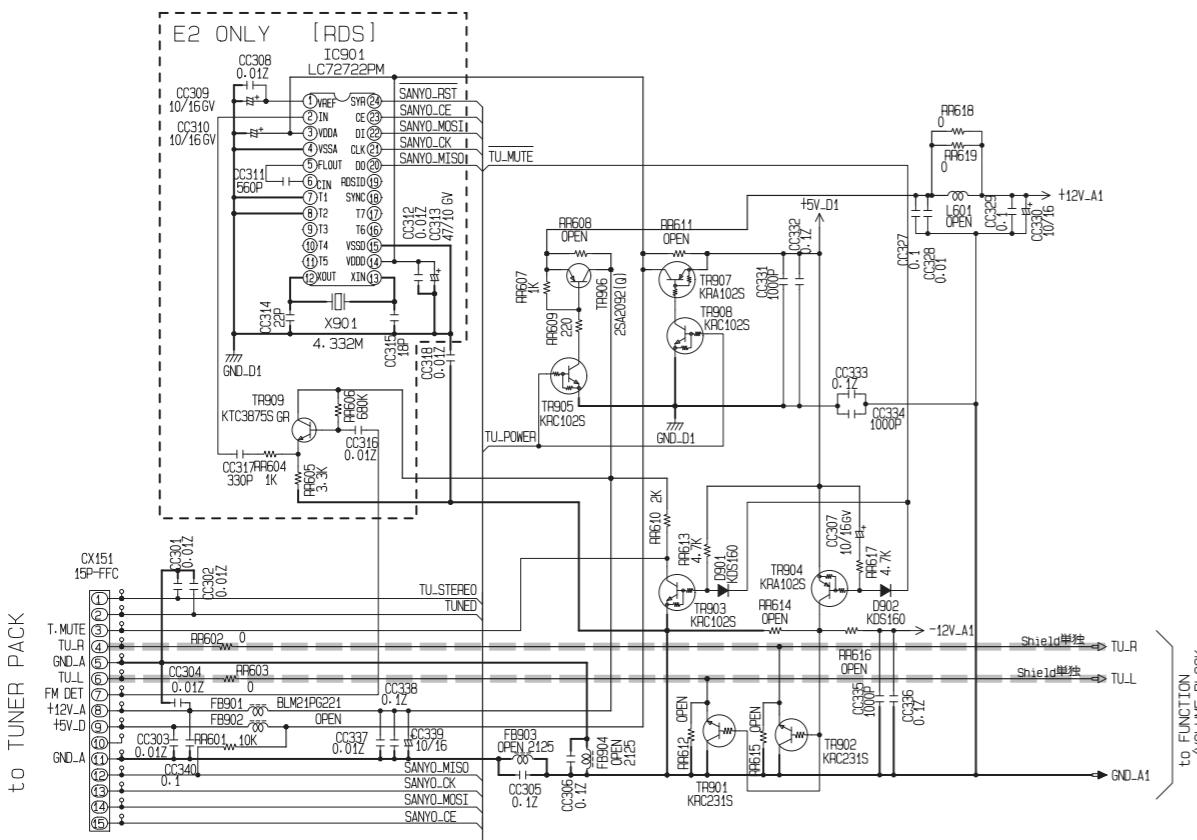
5

6

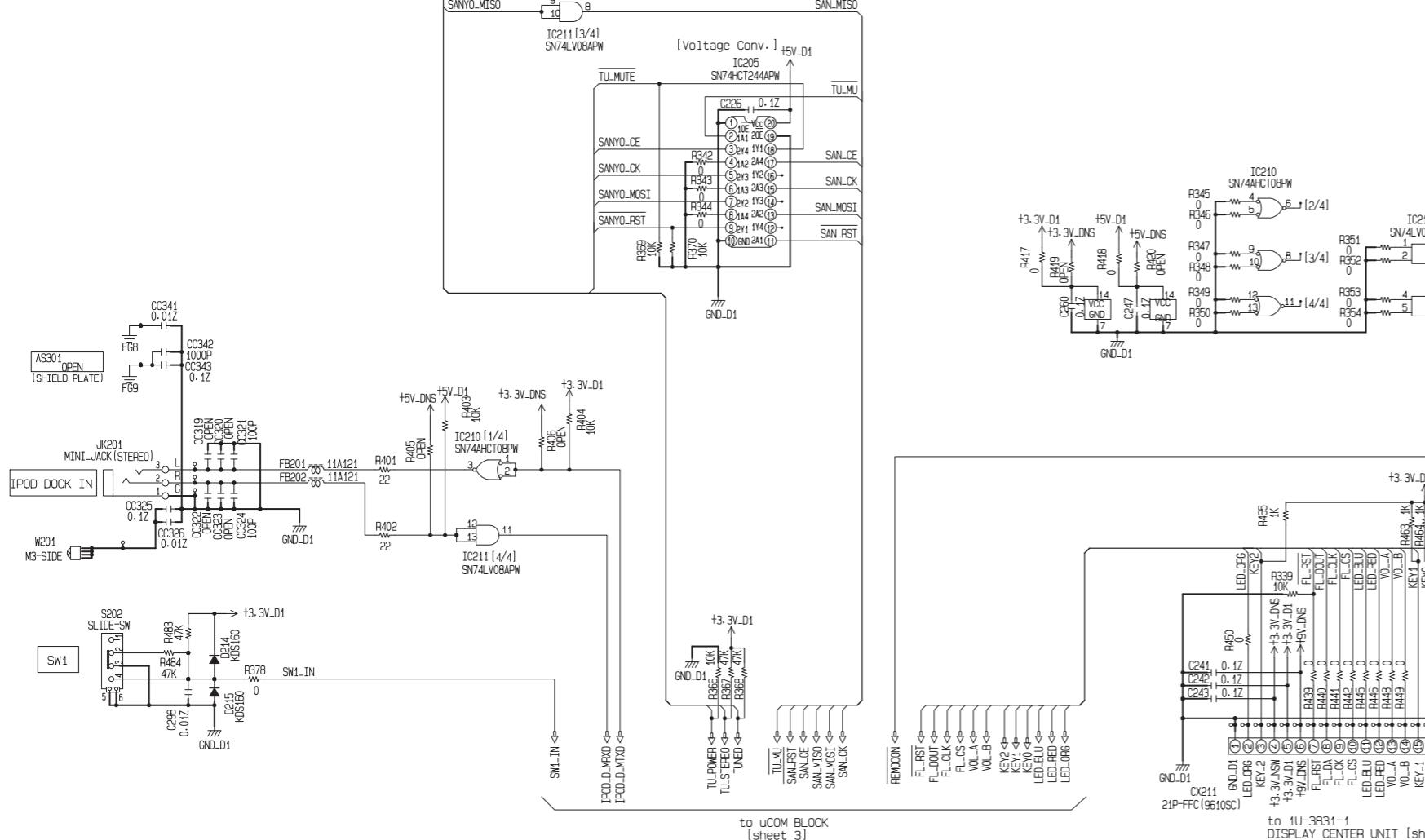
7

8

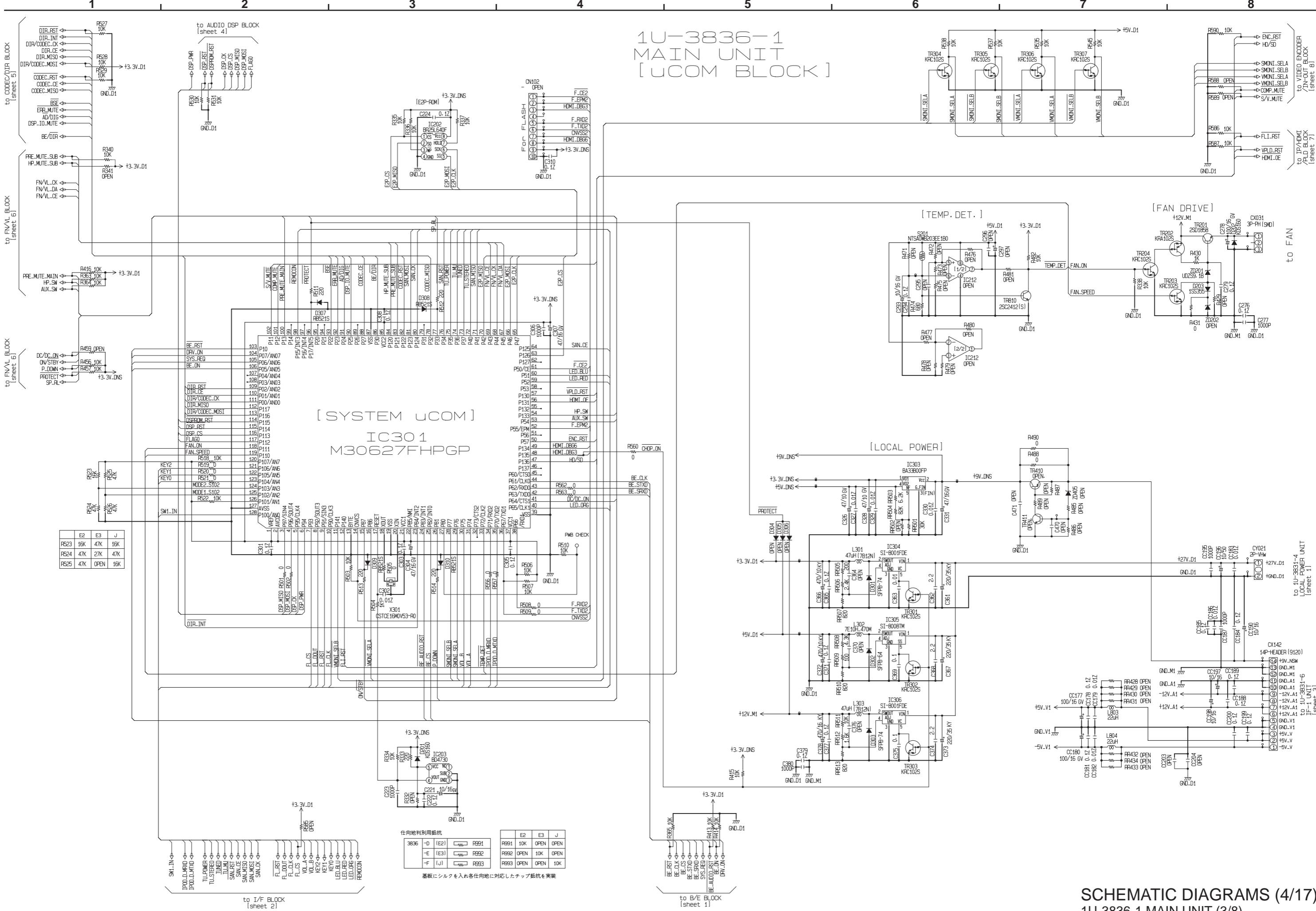
**1U-3836-1  
MAIN UNIT  
[ I/F BLOCK ]**



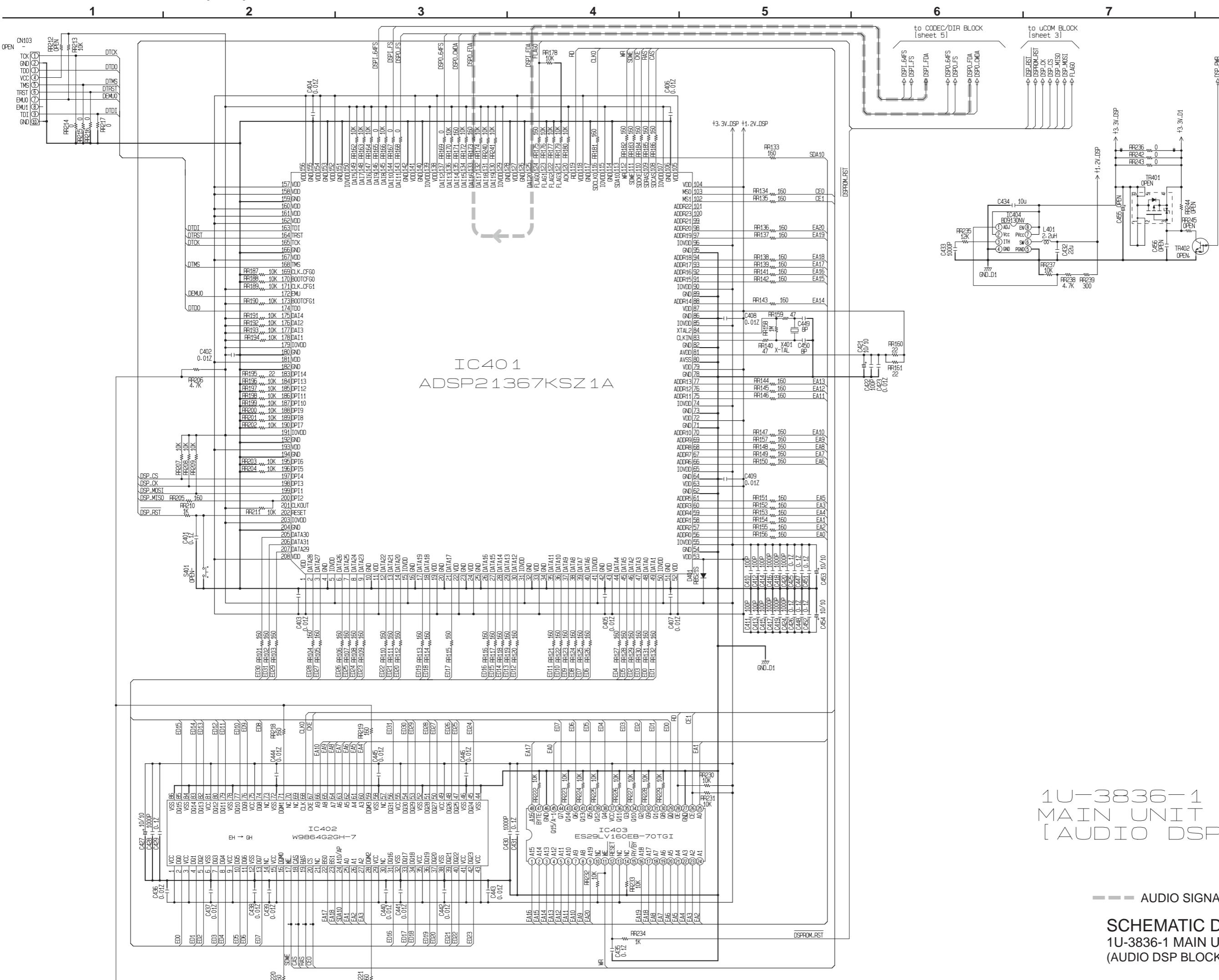
to TUNER PACK

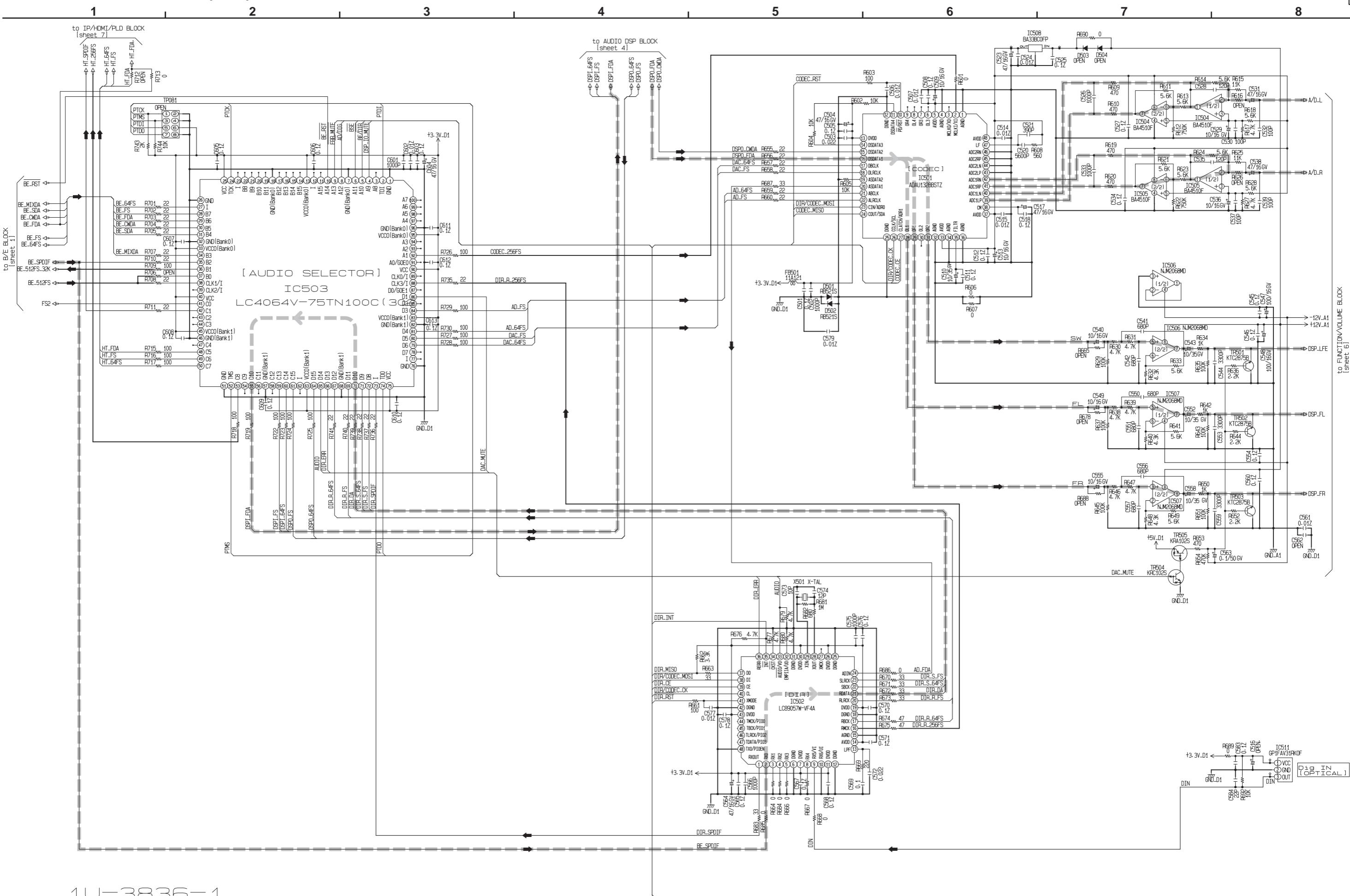


— — AUDIO SIGNAL LINE  
**SCHEMATIC DIAGRAMS (3/17)  
1U-3836-1 MAIN UNIT (2/8)  
(I / F BLOCK)**



SCHEMATIC DIAGRAMS (4/17)  
1U-3836-1 MAIN UNIT (3/8)  
(uCOM BLOCK)



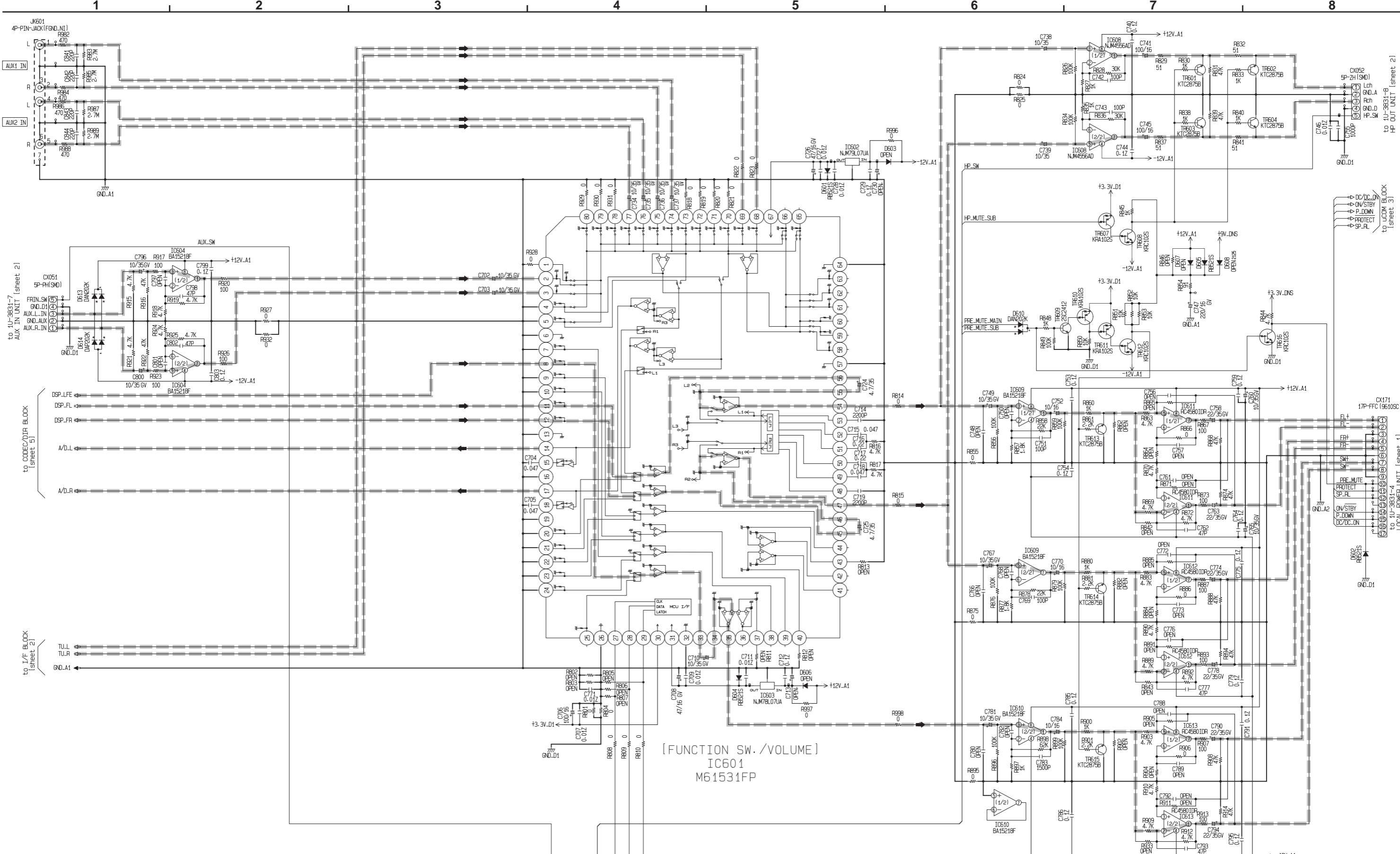


1U-3836-1  
MAIN UNIT  
[CODEC/DIR BLOCK]

DIN  
DIR\_CODEC\_CE  
DIR\_CODEC\_MOSI  
DIR\_CODEC\_MISO  
DIR\_CODEC\_CE  
CODEC\_RST  
CODEC\_PST  
CODEC\_FDA  
CODEC\_MSO  
ESE  
EPFMITE  
AD\_FMITE  
DSP\_10\_MUTE  
BE\_FMITE  
to uCOM BLOCK  
[sheet 3]

AUDIO SIGNAL LINE

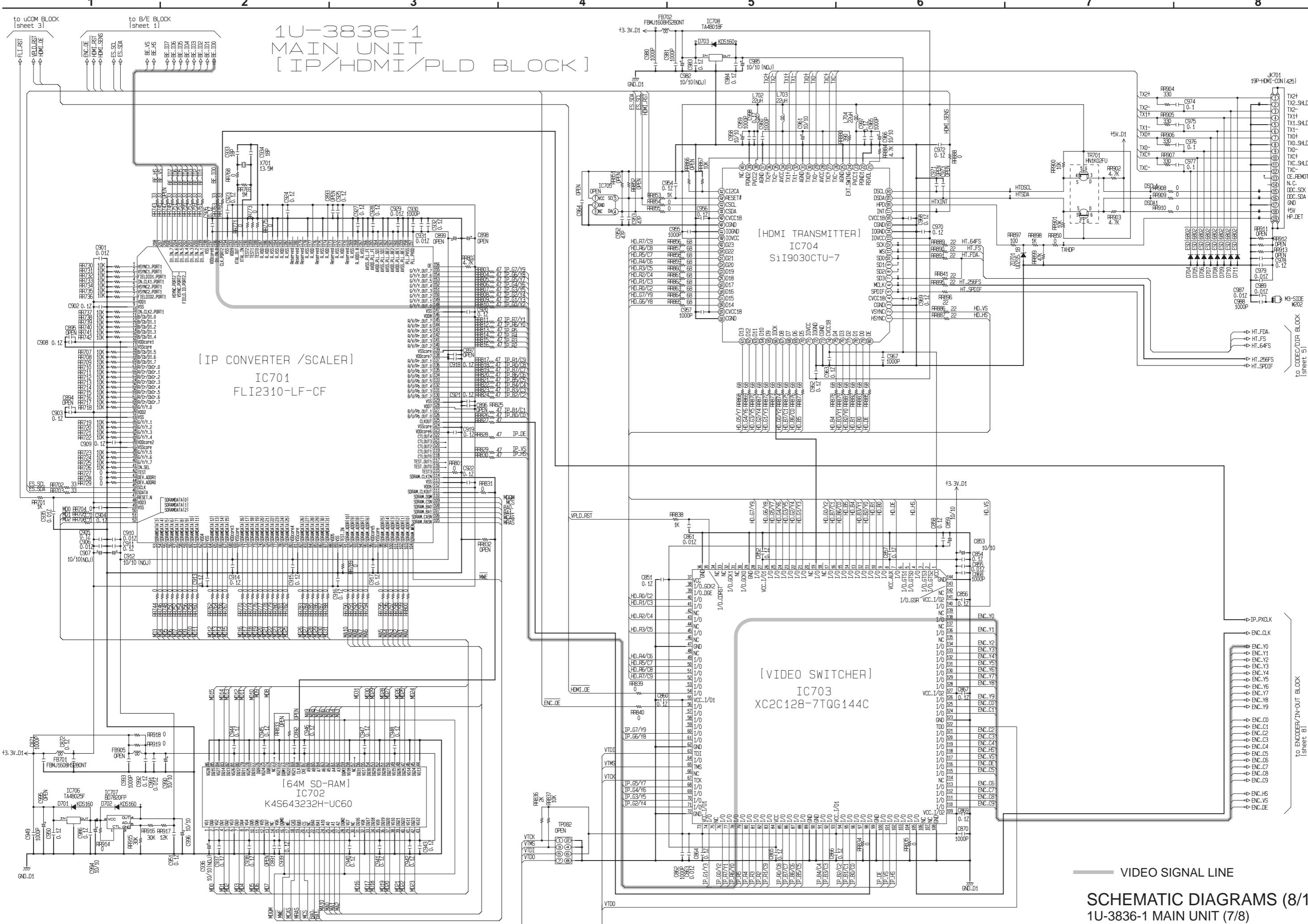
SCHEMATIC DIAGRAMS (6/17)  
1U-3836-1 MAIN UNIT (5/8)  
(CODEC / DIR BLOCK)



1U-3836-1  
MAIN UNIT  
[FUNCTION/VOLUME BOLOCK]

AUX\_SW ↔  
PRE-MUTE\_MAIN ↔  
HP\_SW ↔  
HP\_MUTE\_SUB ↔  
FMV\_LK ↔  
FMV\_LDA ↔  
FMV\_LDE ↔  
to uCOM BLOCK [sheet 3]

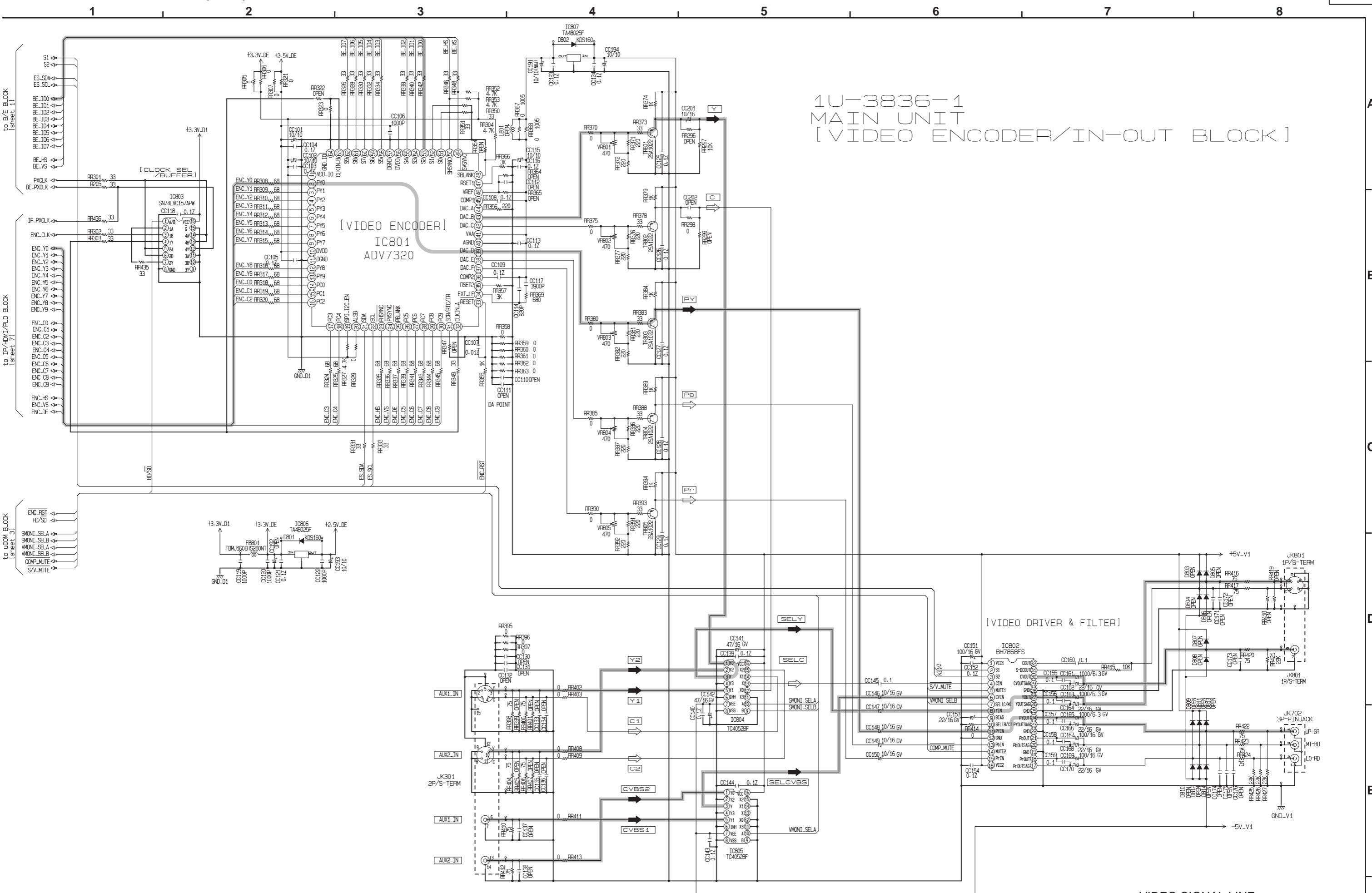
SCHEMATIC DIAGRAMS (7/17)  
1U-3836-1 MAIN UNIT (6/8)  
(FUNCTION / VOLUME BLOCK)



VIDEO SIGNAL LINE

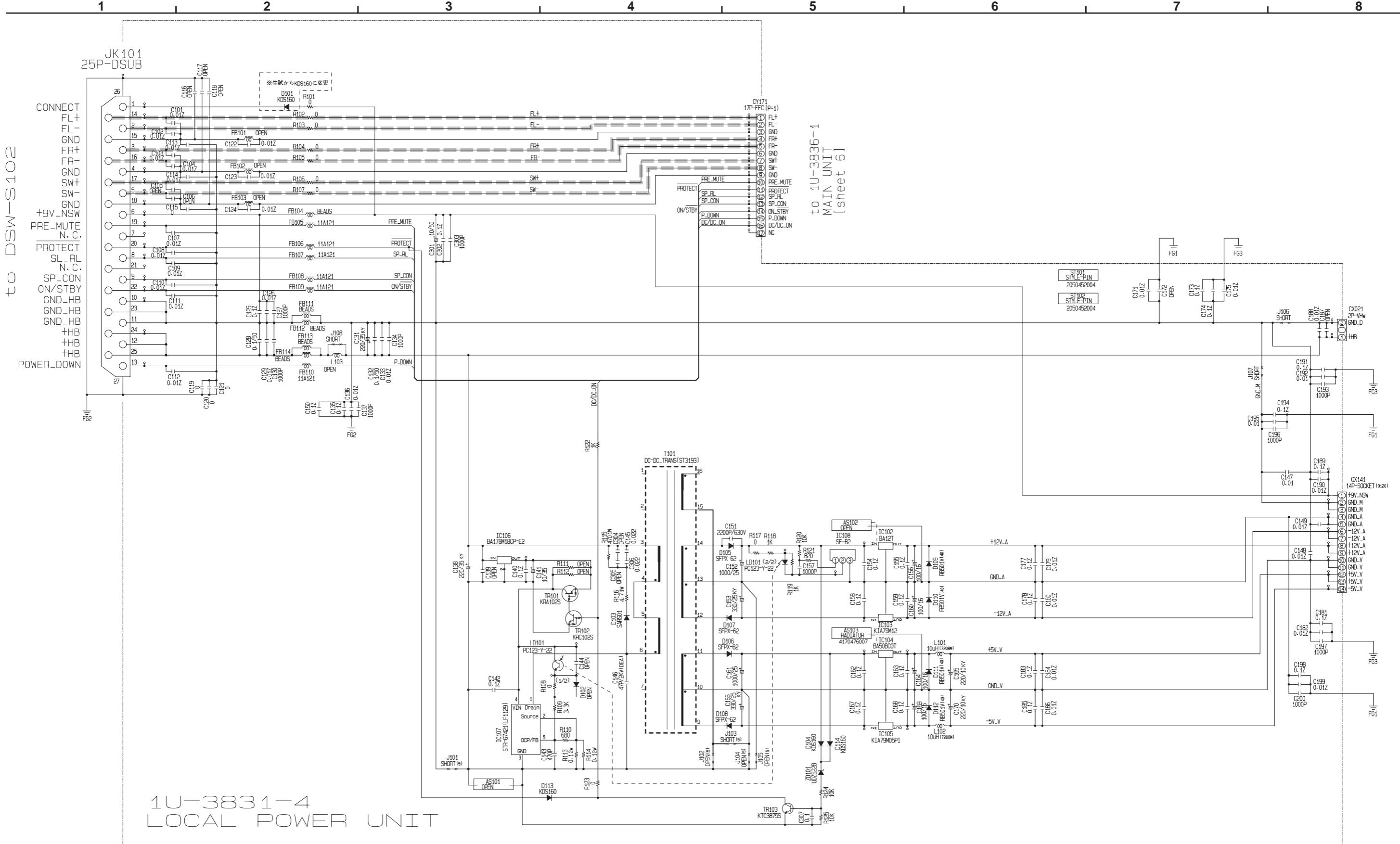
**SCHEMATIC DIAGRAMS (8/17)**  
**1U-3836-1 MAIN UNIT (7/8)**  
**(IP / HDMI / PLD BLOCK)**

**A****B****C****D****E****F****G****H****I****J****K****L****M****N****O****P****TX2+****TX2\_SHD****TX1+****TX1\_SHD****TX0+****TX0\_SHD****TXC+****TXC\_SHD****CE\_REMOTE****N\_C****DDC\_SDA****DDC\_SDA****GND****H5V****HP\_DET****to CODEC/DR BLOCK****[sheet 5]****A****B****C****D****E****F****G****H****I****J****K****L****M****N****O****P****Q****R****S****T****U****V****W****X****Y****Z**



# SCHEMATIC DIAGRAMS (10/17)

S-102



— — AUDIO SIGNAL LINE

SCHEMATIC DIAGRAMS (10/17)  
1U-3831-4 LOCAL POWER UNIT

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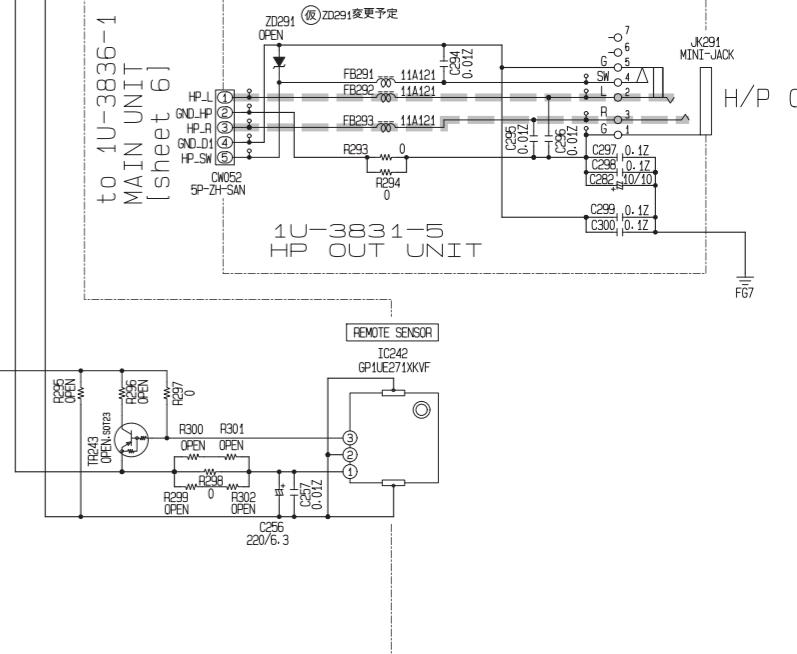
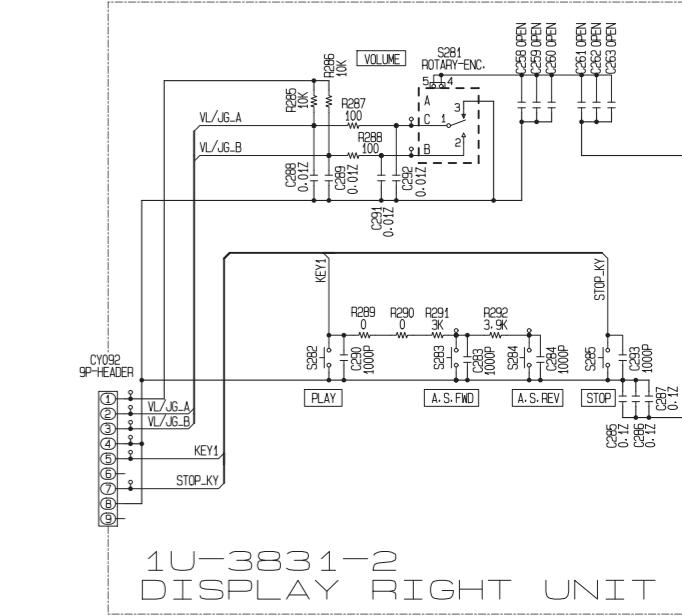
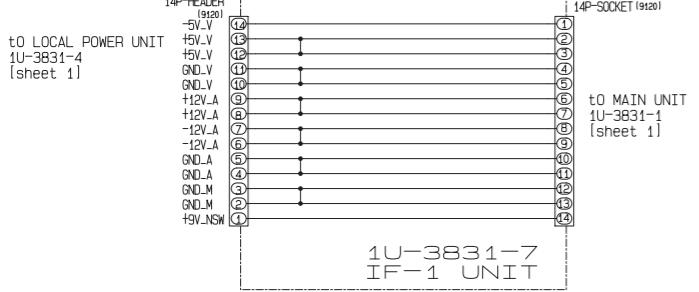
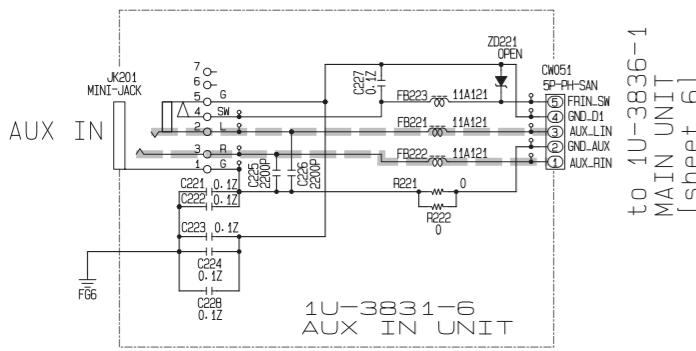
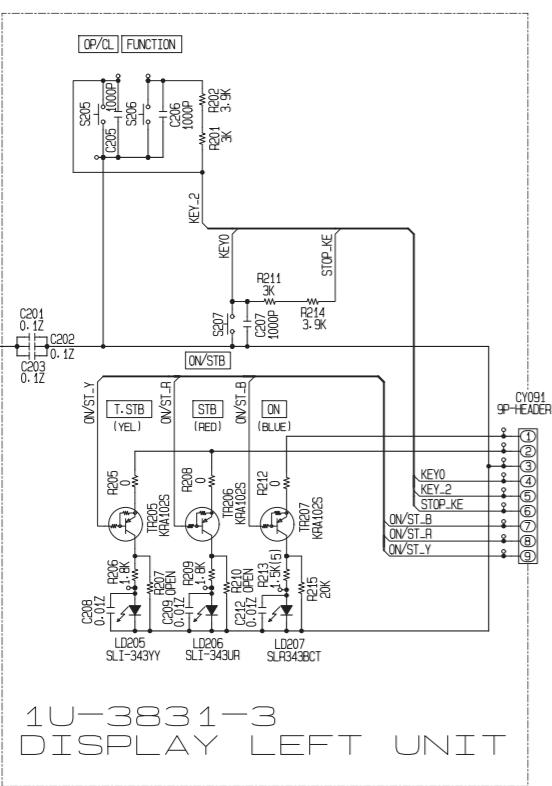
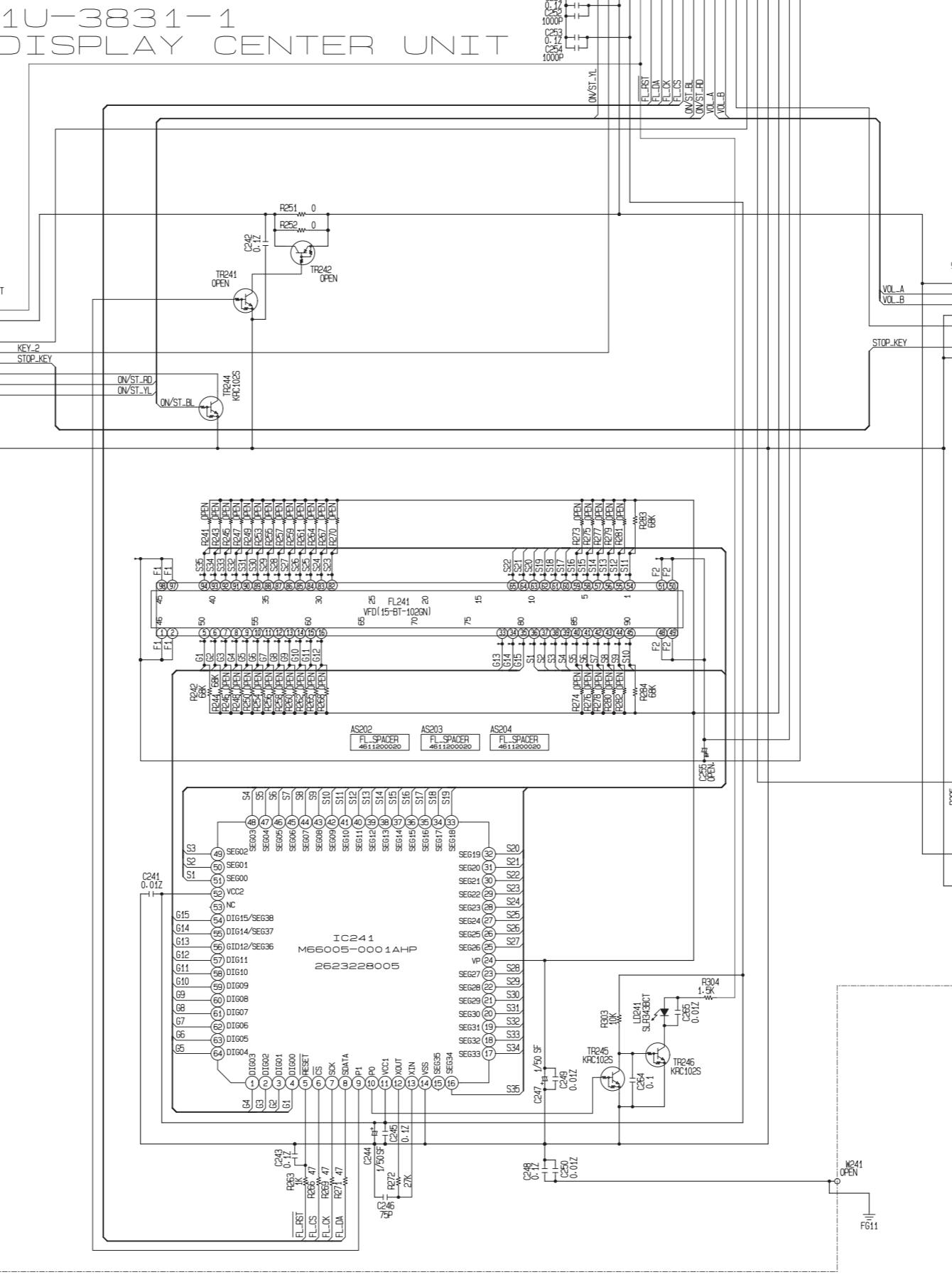
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**1U-3831-1  
DISPLAY CENTER UNIT**



S102X#ALL	S102X#J	S102X#E2	S102X#E3
Value-A	Value-A	Value-A	Value-A
CX081	8P-DA	8P DA-DA CON.CORD	8P DA-DA CON.CORD
CX091	9P-DA	9P DA-DA CON.CORD	9P DA-DA CON.CORD
CY081	8P-DA	8P DA-DA CON.CORD	8P DA-DA CON.CORD
CY091	9P-DA	9P DA-DA CON.CORD	9P DA-DA CON.CORD
ZD221	UD23-6B	OPEN	OPEN

**SCHEMATIC DIAGRAMS (11/17)**

**1U-3831-1 DISPLAY CENTER UNIT**

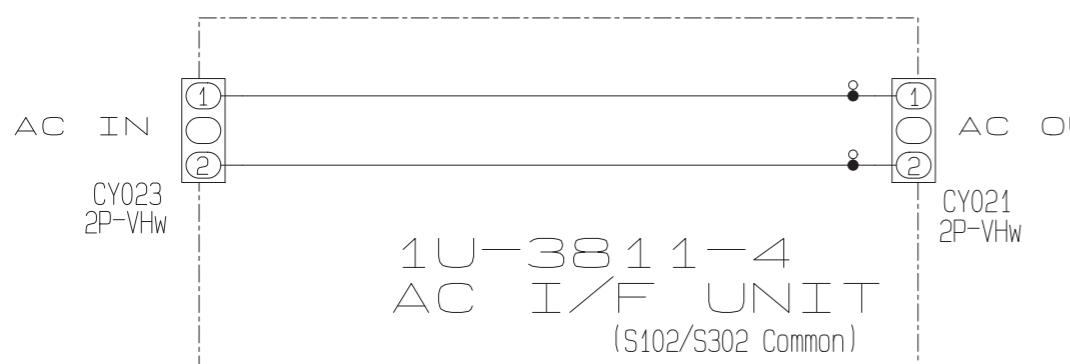
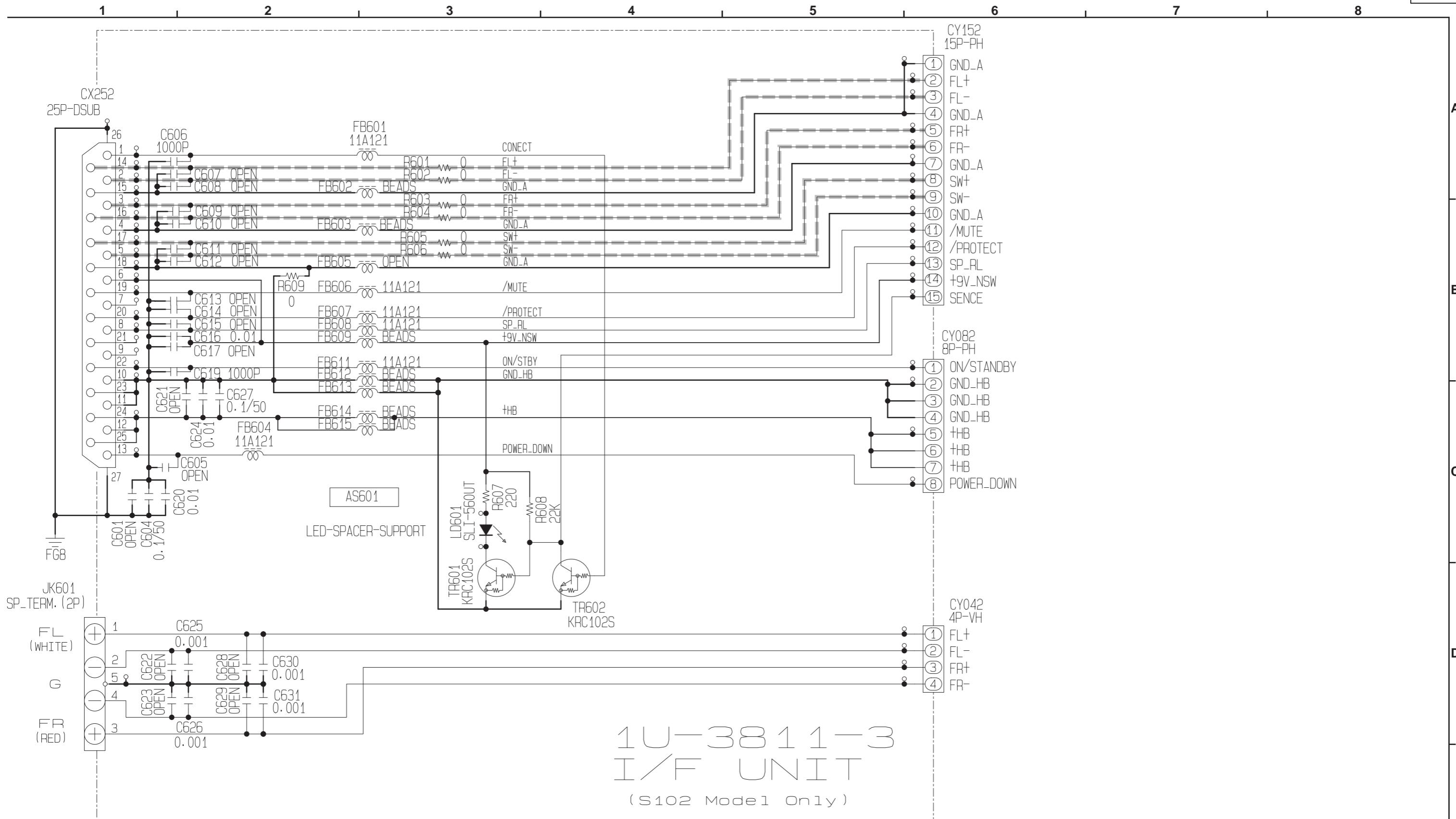
**1U-3831-2 DISPLAY RIGHT UNIT**

**1U-3831-3 DISPLAY LEFT UNIT**

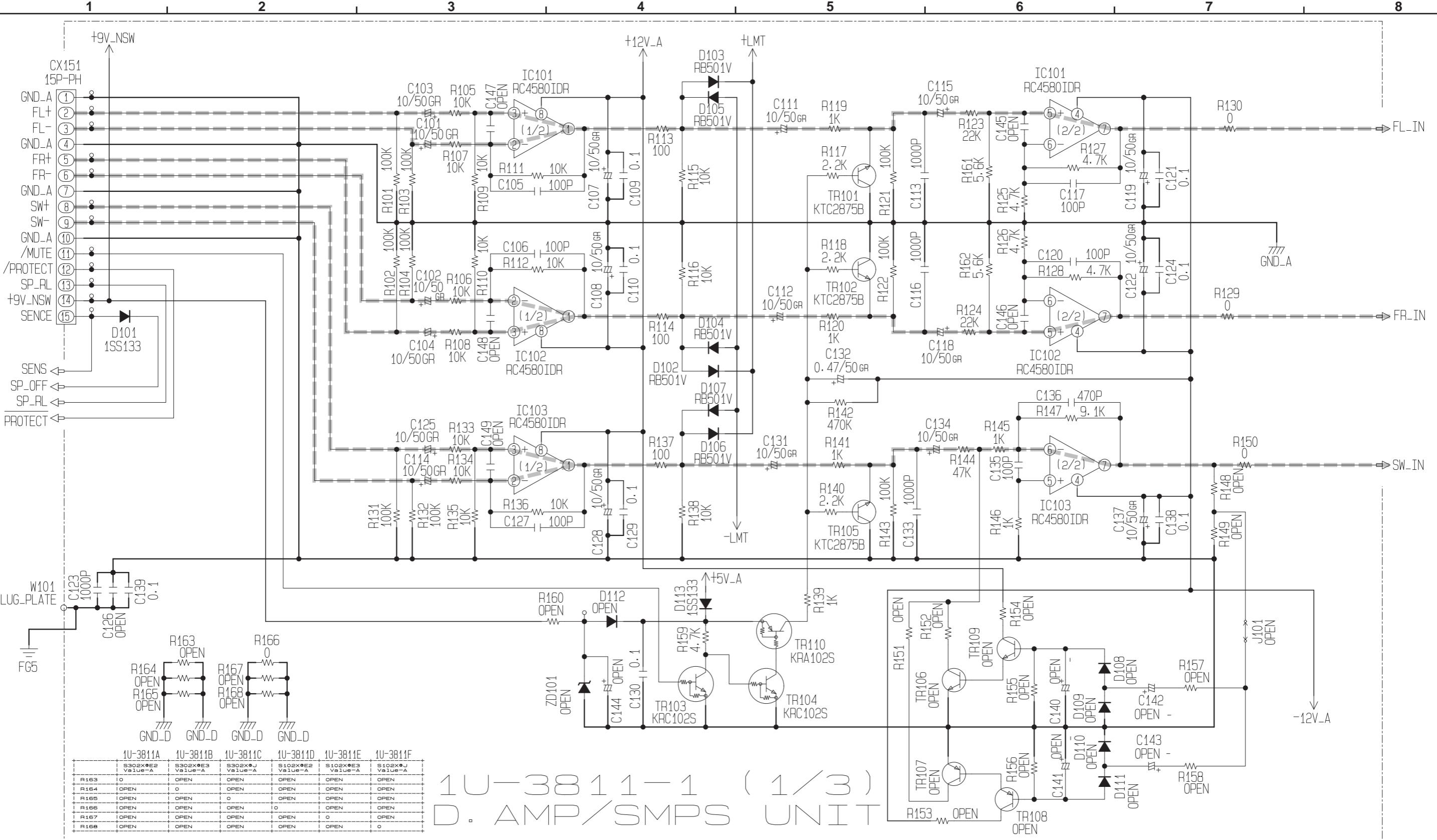
**1U-3831-5 HP OUT UNIT**

**1U-3831-6 AUX IN UNIT**

**1U-3831-7 IF-1 UNIT**



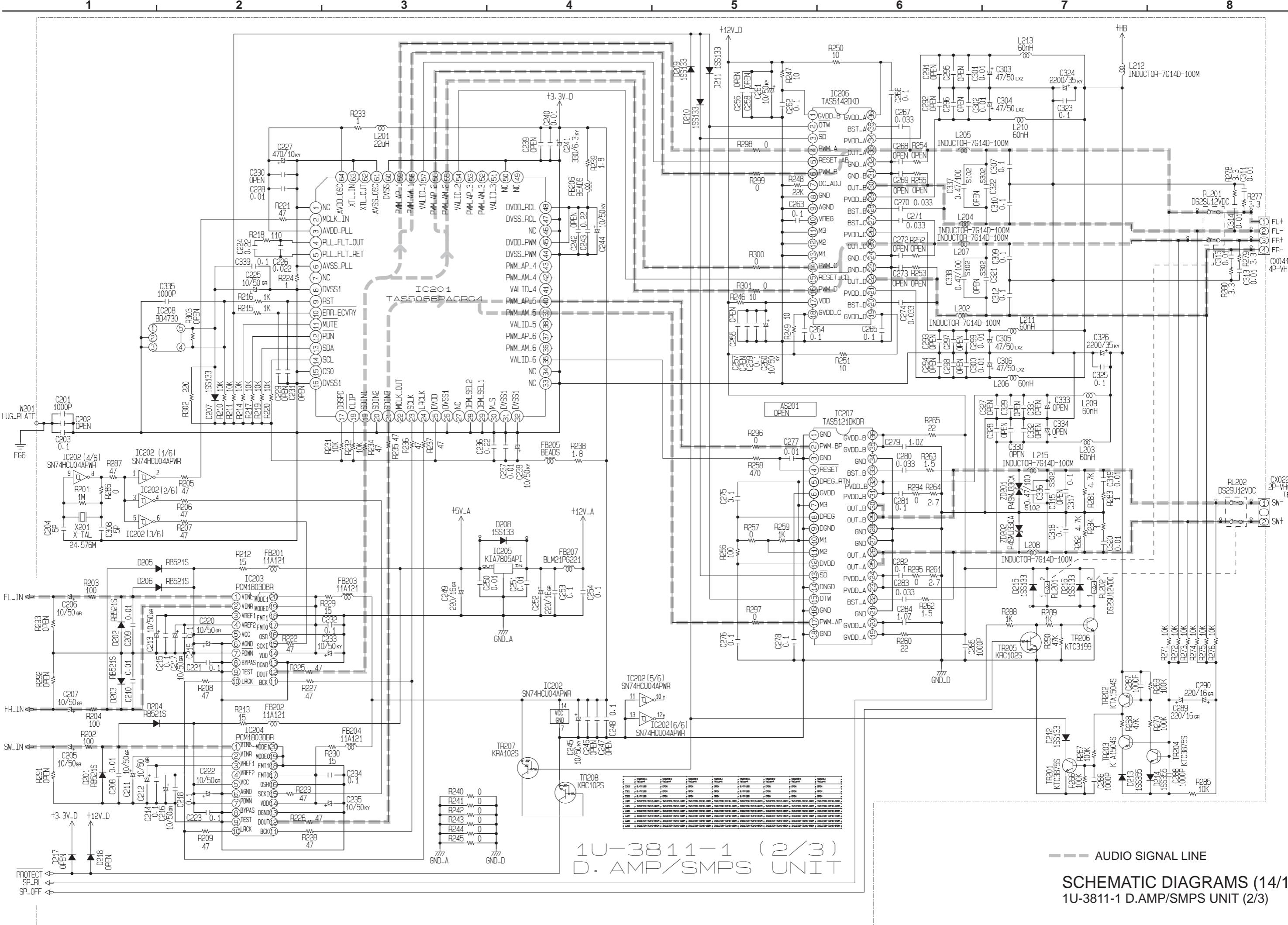
— — — AUDIO SIGNAL LINE

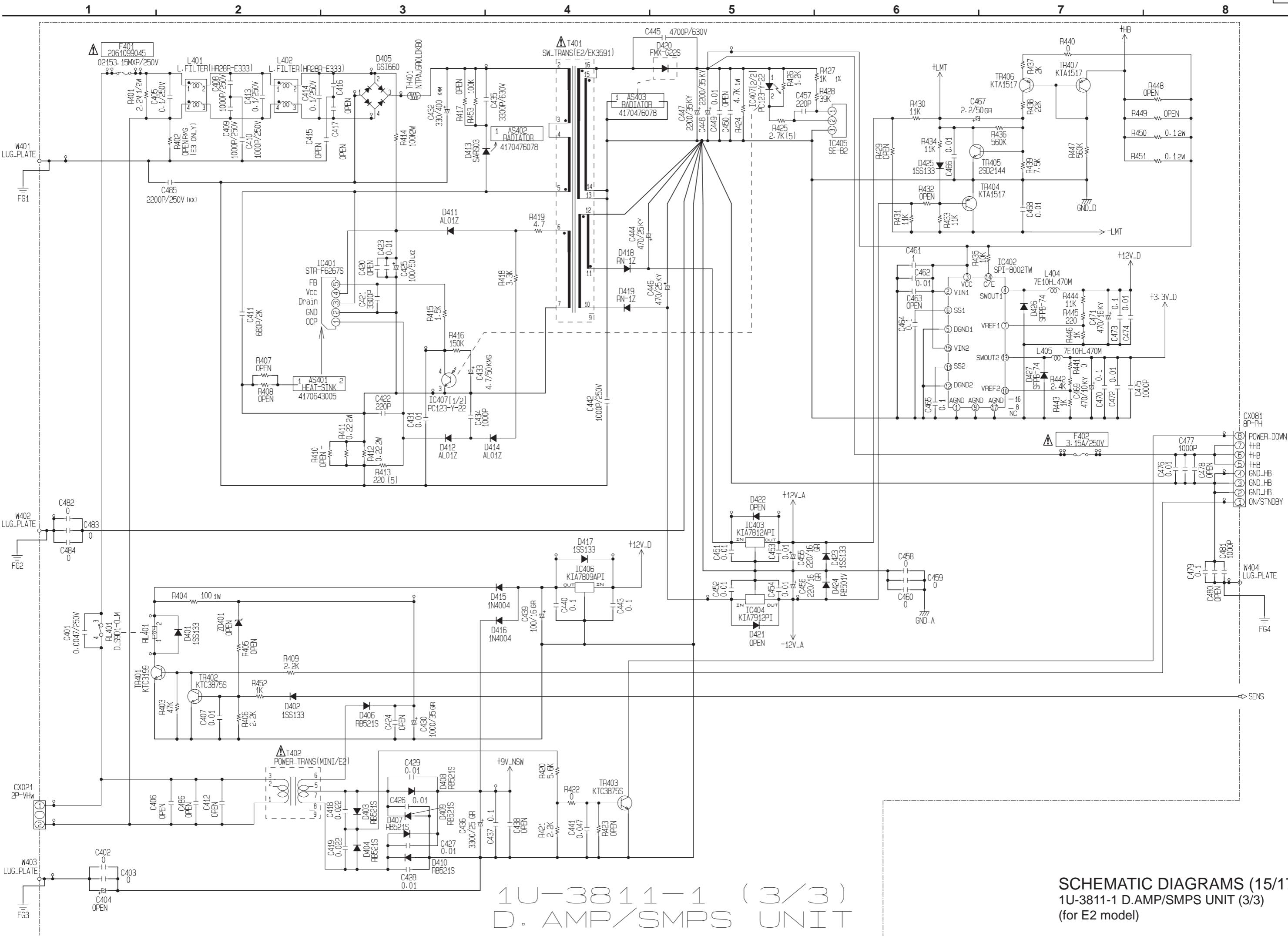


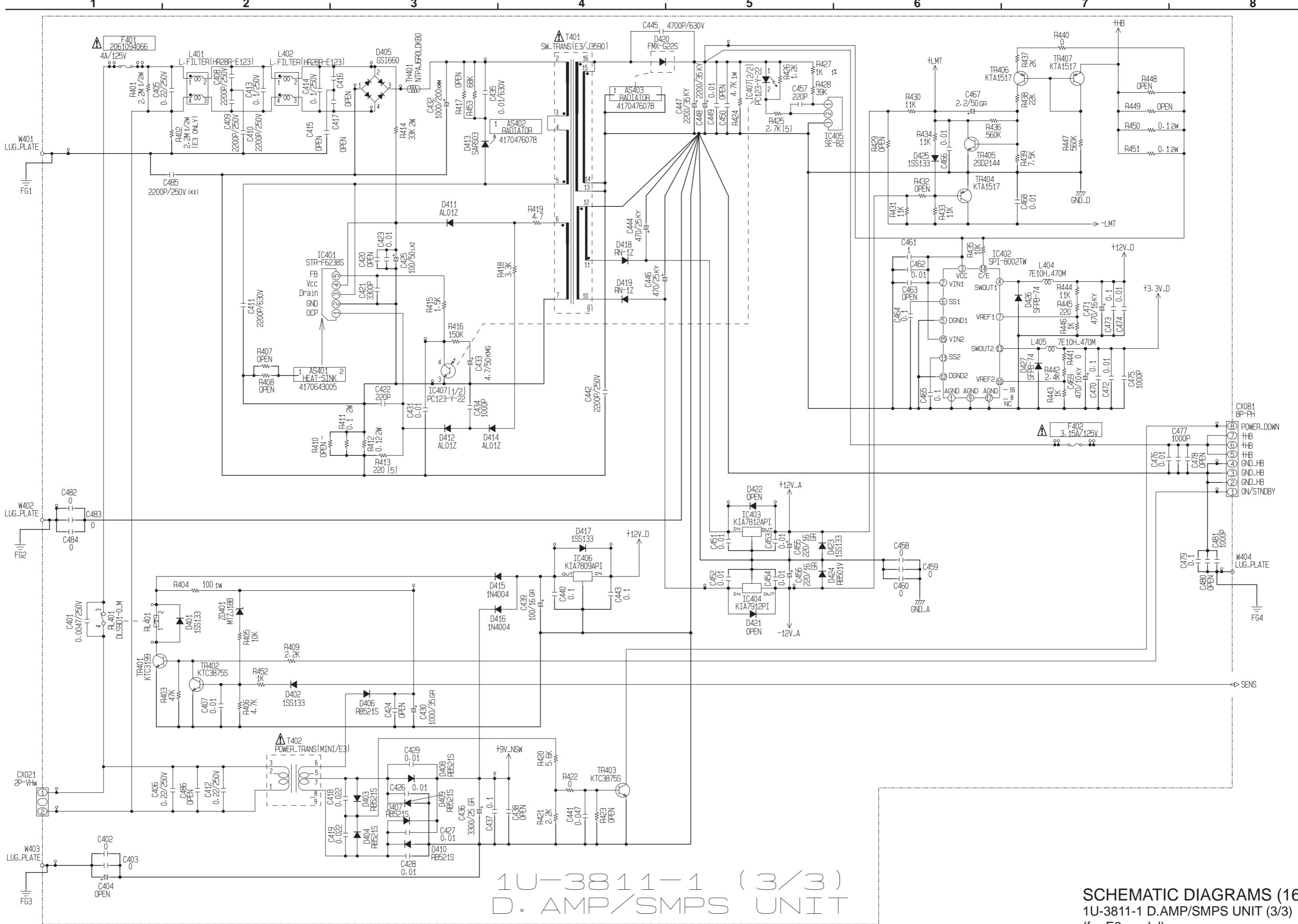
1U-3811-1 (1/3)  
D. AMP/SMPS UNIT

	S302X#E2 Value-A	S302X#E3 Value-A	S302X#J Value-A	S102X#E2 Value-A	S102X#E3 Value-A	S102X#J Value-A
R163	0	OPEN	OPEN	OPEN	OPEN	OPEN
R164	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
R165	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
R166	0	OPEN	OPEN	OPEN	OPEN	OPEN
R167	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
R168	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
GND-D	GND-D	GND-D	GND-D	GND-D	GND-D	GND-D

— — AUDIO SIGNAL LINE





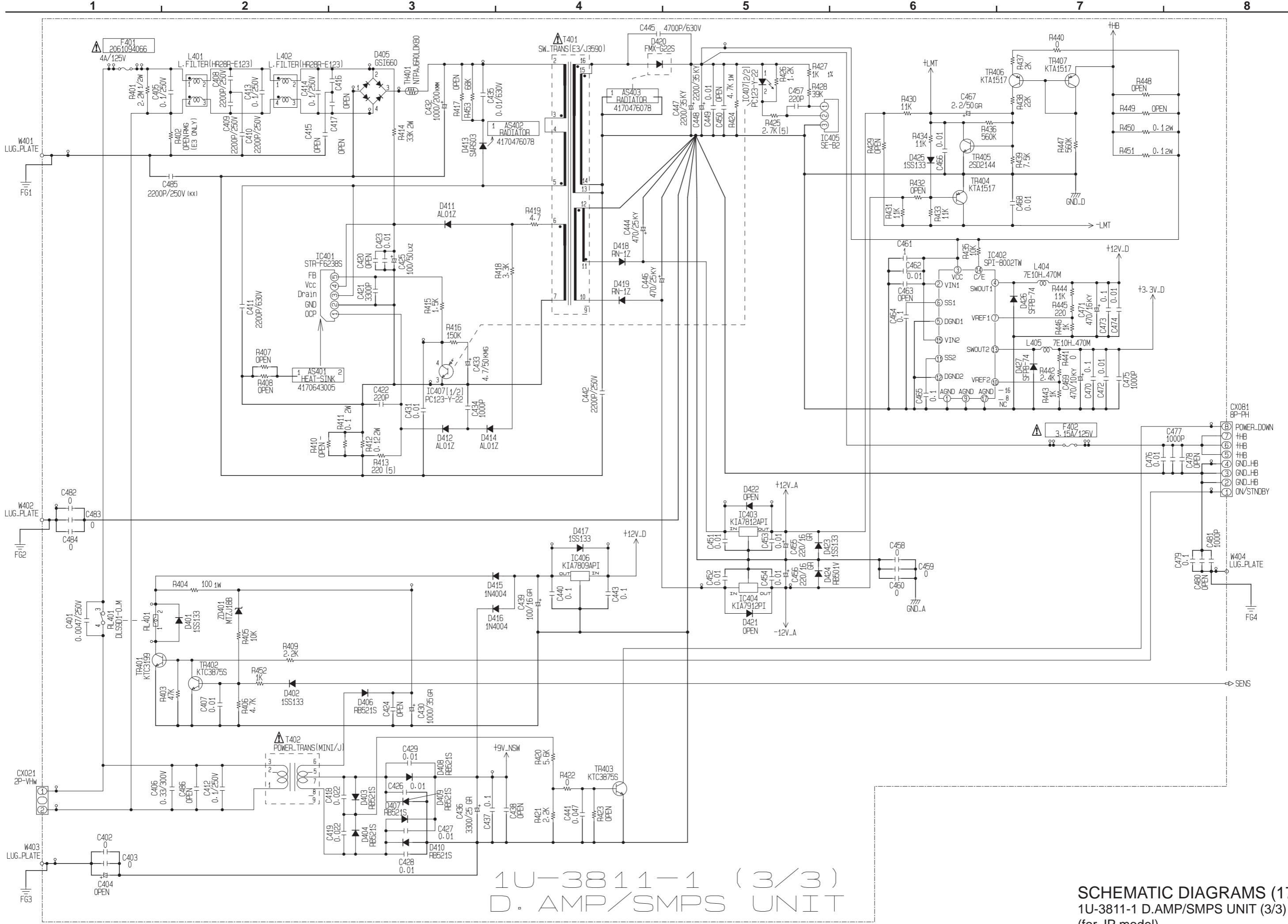


1U-3811-1 (3/3)  
D. AMP/SMPS UNIT

SCHEMATIC DIAGRAMS (16/17)  
1U-3811-1 D.AMP/SMPS UNIT (3/3)  
(for E3 model)

# SCHEMATIC DIAGRAMS (17/17)

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SCHEMATIC DIAGRAMS (17/17)  
1U-3811-1 D.AMP/SMPS UNIT (3/3)  
(for JP model)