

# DENON

For Europe model

**Ver. 1**

## SERVICE MANUAL

# MODEL DCD-1500AE

### SUPER AUDIO CD PLAYER

#### 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おります。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 milliamps, 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.

## 注意

サービス、点検時には次のことにご注意願います。

### ●注意事項をお守りください！

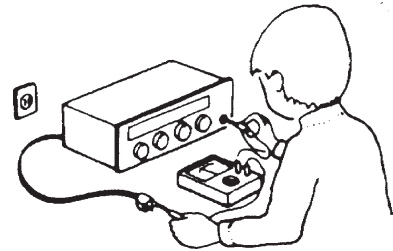
サービスのとき特に注意を必要とする個所については、キャビネット、部品、シャーシなどにラベルや捺印で、注意事項を表示しています。これらの注意書きおよび取扱説明書などの注意事項を必ずお守りください。

(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1MΩ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。

### ●感電に注意！

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



### ●指定部品の使用！

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

## 注意 安全上重要な部品について

### ●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プ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。

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。

### ●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。

(1) 配線図… △マークで表示しています。

(2) 部品表… △マークで表示しています。

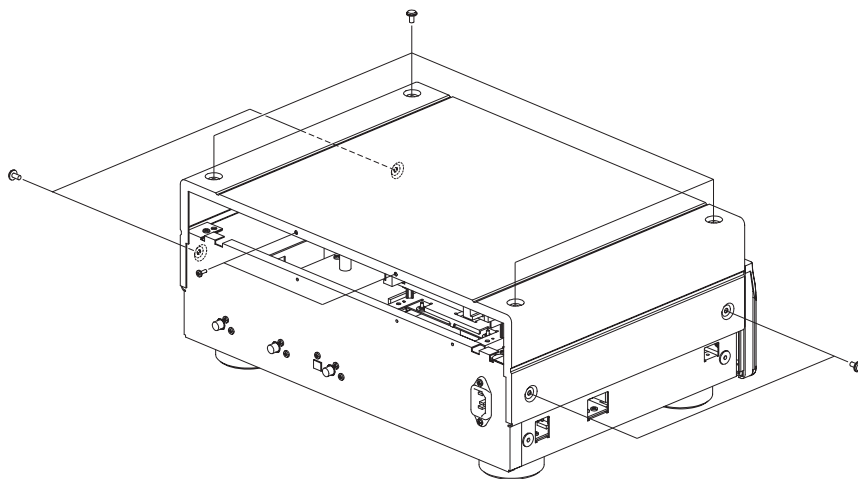
指定された部品と異なるものを使用した場合には、感電、火災などの危険を生じる恐れがあります。

## DISASSEMBLY

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

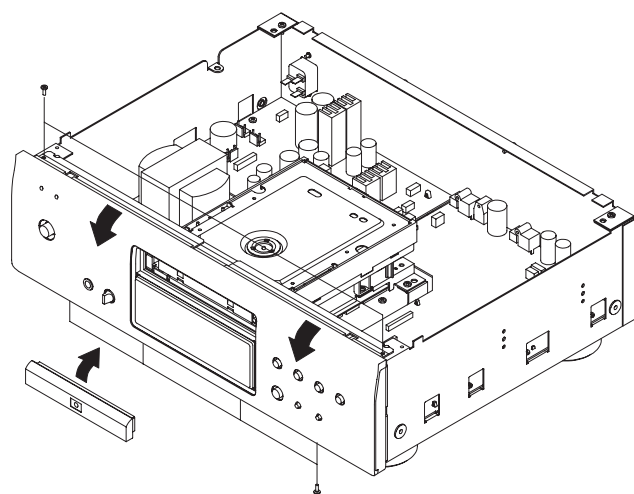
### 1. Top Cover

- (1) Remove 8 top and side screws. And remove 2 rear screws, then detach the Top cover.



### 2. Front Panel Ass'y

- (1) Detach the Loader panel Ass'y by lifting.
- (2) Remove 4 top screws and 2 bottom screws of Front Panel Ass'y.
- (3) Remove H/P BRACKET and CHASSIS screw, then detach the Front Panel Ass'y. (Refer to Fig. 1)



## 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。)

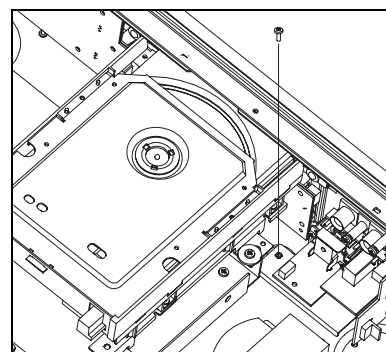
### 1. トップカバーのはずしかた

- (1) トップカバーを取り付けている上部、両サイドのネジ 8 本および後部のネジ 2 本をはずします。

### 2. フロントパネルのはずしかた

- (1) ローダーを開き、ローダーパネルを矢印の方向にはずします。
- (2) フロントパネル底部のネジ 4 本をはずします。
- (3) フロントパネル上部のネジ 2 本をはずします。
- (4) H/P BRACKET と CHASSIS を共締めしているネジをはずします。(Fig. 1 参照)
- (5) フロントパネルを矢印の方向にはずします。

Fig. 1



### 3. Mechanism

- (1) Remove 4 screws, then detach the Mechanism.

### 4. Attachment of Mechanism

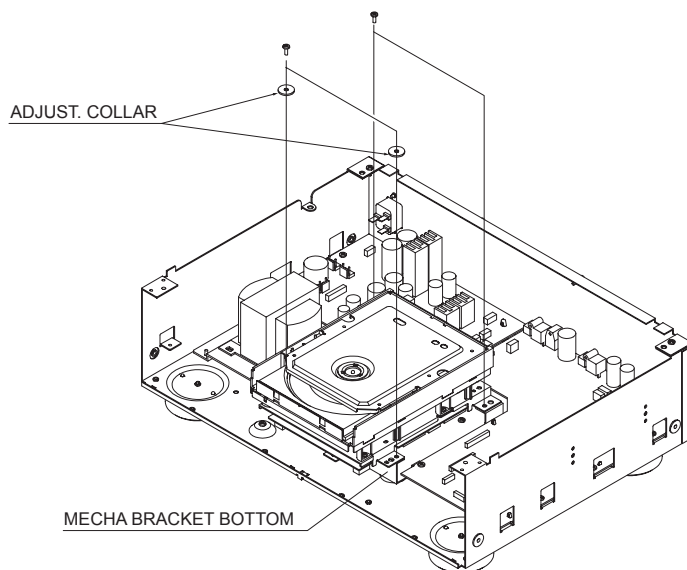
- (1) Mechanism is put on MECHA BRACKET BOTTOM.
- (2) ADJUST. COLLAR is put on 2 places of the front.
- (3) 2 front side screws are tightened.
- (4) 2 rear side screws are tightened.

### 3. メカのはずしかた

- (1) メカを取り付けているネジ 4 本をはずします。

### 4. メカの取り付けかた

- (1) MECHA BRACKET BOTTOM にメカを置く。
- (2) ADJUST. COLLAR を前側 2ヶ所にセットする。
- (3) 前側 2ヶ所をネジ止めする。
- (4) 後側 2ヶ所をネジ止めする。



### 5. Attachment of Mechanism

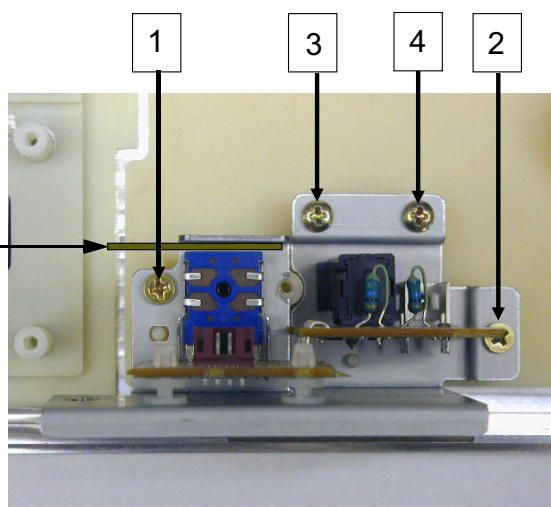
Follow the procedure below.

- (1) 1 screw of volume side is tightened.
- (2) 1 screw of H/P jack side is tightened.
- (3) (4) 2 screws of H/P jack top is tightened.

### 5. H/P ブラケットの取り付けかた

図のような順番にて取り付けてください。

- (1) ボリューム横をネジ止めする。
- (2) H/P ジャック横をネジ止めする。
- (3) (4) H/P ジャック上側をネジ止めする。



(Note) When assembling the volume pwb and the bracket, insert thickness 1.6mm board between the bracket and volume.

(注) ボリュームを H/P ブラケットに取り付けるとき ボリュームの上部と H/P ブラケットの曲げの間に 1.6mm 厚のスペーサを挟み込む。

## Note Handling and Replacement of the Laser pick-up

### 1. Disassembly

Do not disassemble or adjust this mechanism due to precision component.

### 2. Storage

Do not leave this mechanism in high temperature and humidity. Be sure to prevent this mechanism from static electricity, dust and excessive forces.

Do not leave this mechanism without a anti-static cover for the dust.

### 3. Handling

Do not shock to this mechanism.

Don't touch the parts as follows. To touch them may cause big trouble.

- ① Trim-potentiometer
- ② CD laser dode and Fixate of CD laser
- ③ Fixate plate of OEIC
- ④ High frequency module and DVD laser diode
- ⑤ Objective
- ⑥ Actuator (Include screw, spring, and connected point actuator and PWB)

※ The laser diode soldering portion of ② and ④ is sharp, be careful especially because it is dangerous.

## レーザーピックアップ取り扱い上の注意と交換

### 1. 分解

本メカニズムは、専門工場で、精密に組立て調整しております。安易に分解、調整を行わないで下さい。

### 2. 保管

高温、あるいは高湿度下での保管は避けて下さい。静電気、塵埃対策を行い異常な外力が加わらないように保管して下さい。

放置する場合は、必ず静電袋に入れて塵埃を避けて下さい。

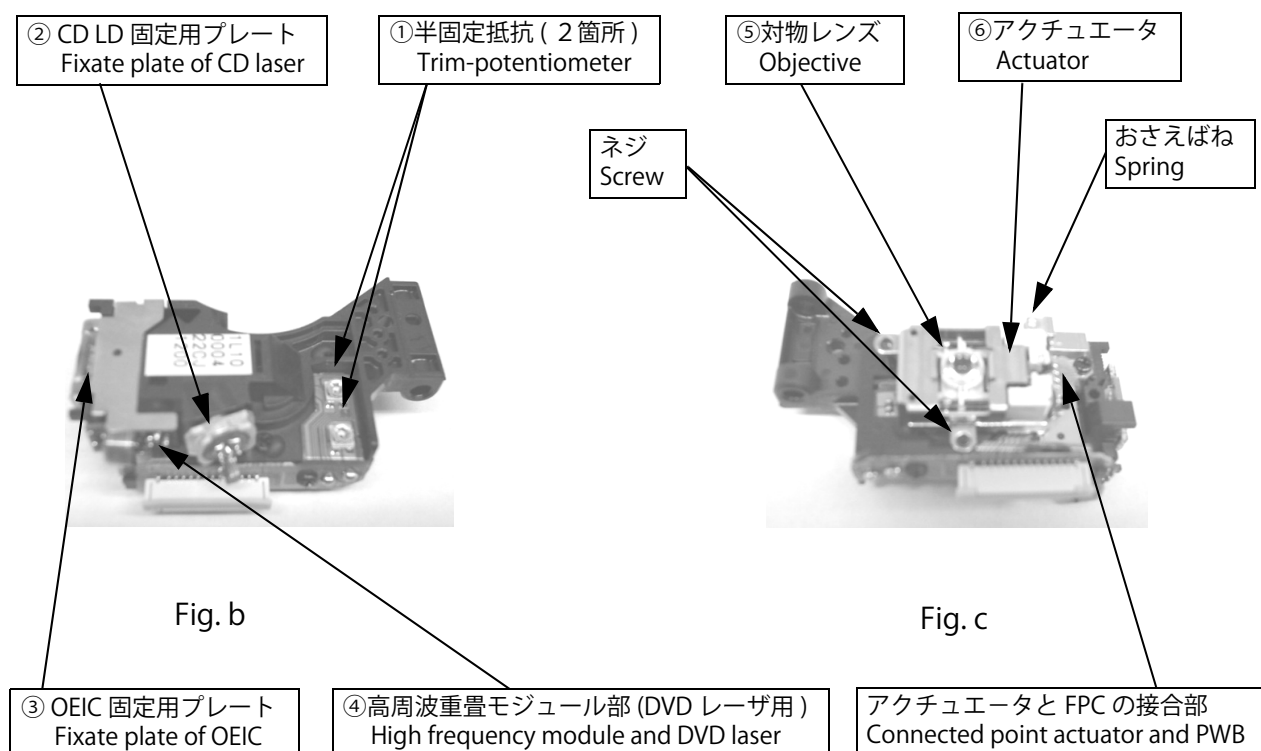
### 3. 取り扱い

落下などの、強い衝撃がかからないように取扱って下さい。

次に示す個所には絶対に触れないで下さい。触れた場合ピックアップの品質に大きく影響を及ぼす可能性があります。

- ① 半固定抵抗
- ② CD LD 固定用プレート (CD レーザ及び本体についているプレート)
- ③ OEIC 固定用プレート
- ④ 高周波重畳モジュール部 (DVD LD)
- ⑤ 対物レンズ
- ⑥ アクチュエータ (ネジ、おさえばね、アクチュエータと FPC の接合部含む)

※ ②及び④の LD はんだ付け部はリードカット処理を施しており、鋭利になっている為、危険ですので特に注意してください。



Never touch the objective lens, actuator, laser diode, photo detector and the trim-potentiometer.

Be sure no dust or soil on the objective lens.

If dust is on the objective lens, blow it away by clean air.

If dust or soil remain on the objective lens, use the cleaning liquid (B4) made by JCB INDUSTRY Ltd. No alternative.

Make sure that a person who handles this mechanism is well earthed. Be sure to earth to the manufacturing equipment.

Do not approach magnetic materials.

Too much forces on the leads of laser diode, OEIC, and the printed wiring board, may caused the pickup to damage.

Too much forces on the leads of laser diode, OEIC, and the printed wiring board, may caused the pickup to damage.

Guide shafts in mechanism should not be forced when you set the FFC to the connector, which may cause the guide shafts to deform.

#### 4. Surrounding atmosphere

For proper operation storage and operating environment should not contain corrosive gases. For example HS<sub>2</sub>, SO<sub>2</sub>, NO<sub>2</sub>, Cl<sub>2</sub> ets. In addition storage environment should not have materials that emit corrosive gases especially from silicic, cyanic, formalin and phenol group. In the mechanism or set, existence of corrosive gases may cause no rotation in motor.

#### 5. Laser drive circuit

We solder the Short land on PWB before shipment to protect laser diode. Open the short landsafe you connect pick-up your circuit by flat cable. (Refer to Fig. a)

When you unstrap the short solder for the laser diode protection in the condition which doesn't connect by a flat cable, the laser diode and PEIC may destroy by static electricity.

対物レンズ、アクチュエータ、レーザーダイオード、光検出器、及び半固定抵抗には絶対に触れないで下さい。

対物レンズに、塵埃や汚れが付かないように充分注意して下さい。

対物レンズに埃が付いた場合、きれいな空気を吹き付けて取り去って下さい。

取りきれない埃、汚れがある場合にはクリーニング液（日本綿棒（株）CD レンズクリーナー液 B4）を用い、糸屑の発生しない綿棒で軽く拭き取って下さい。尚、他のクリーニング液は絶対に使わないで下さい。

取り扱う作業者は、人体アースを確実に取って下さい。作業場、治工具など、関連設備は確実にアースを取って下さい。

ピックアップのアクチュエータ部は強力な磁気回路を有しているため磁性体を近づけないで下さい。

レーザーダイオードのリード部分、受光素子 (OEIC) 及び受光素子取り付け基板に力を加えると不良となることがありますので、取り扱い時は絶対に力を加えないように充分注意願います。

FFC をコネクタ部に挿入するときは、軸受け部及びガイドシャフトに力を加えないよう挿入願います。

力を加えますと、ガイドシャフトが変形し動作不良となることがありますので、充分注意願います。

#### 4. 雰囲気

腐食性ガス (H<sub>2</sub>S, SO<sub>2</sub>, NO<sub>2</sub>, Cl<sub>2</sub> 等) はもとより、有害なガス雰囲気中及び、有害なガスを発生する物質 (特に有機シリコン系、シアン系、ホルマリン系、フェノール系物質等) が存在する場所での使用及び保管は避けて下さい。特に、セット内に於いても上記物質が存在しないようにして下さい。モーターが回転しなくなります。

#### 5. レーザー駆動回路

レーザーダイオード保護用ランドのショート部の開放は、Fig. a の様にセットに接続されたフラットケーブルをピックアップのコネクタに差込後実施して下さい。フラットケーブルを接続しない状態で、レーザーダイオード保護用ランドを開放した場合 レーザーダイオード及び OEIC が静電破壊する可能性が大きいので十分ご注意ください。

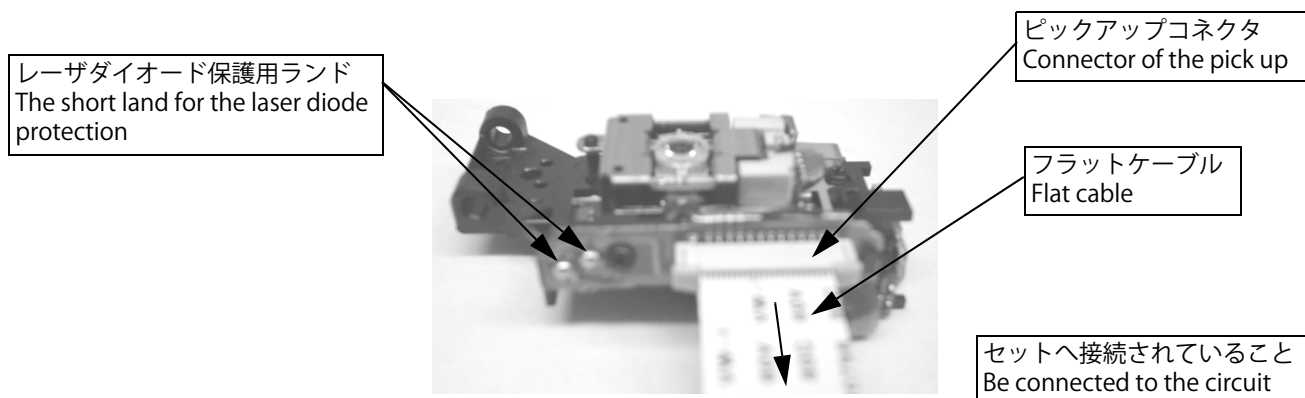


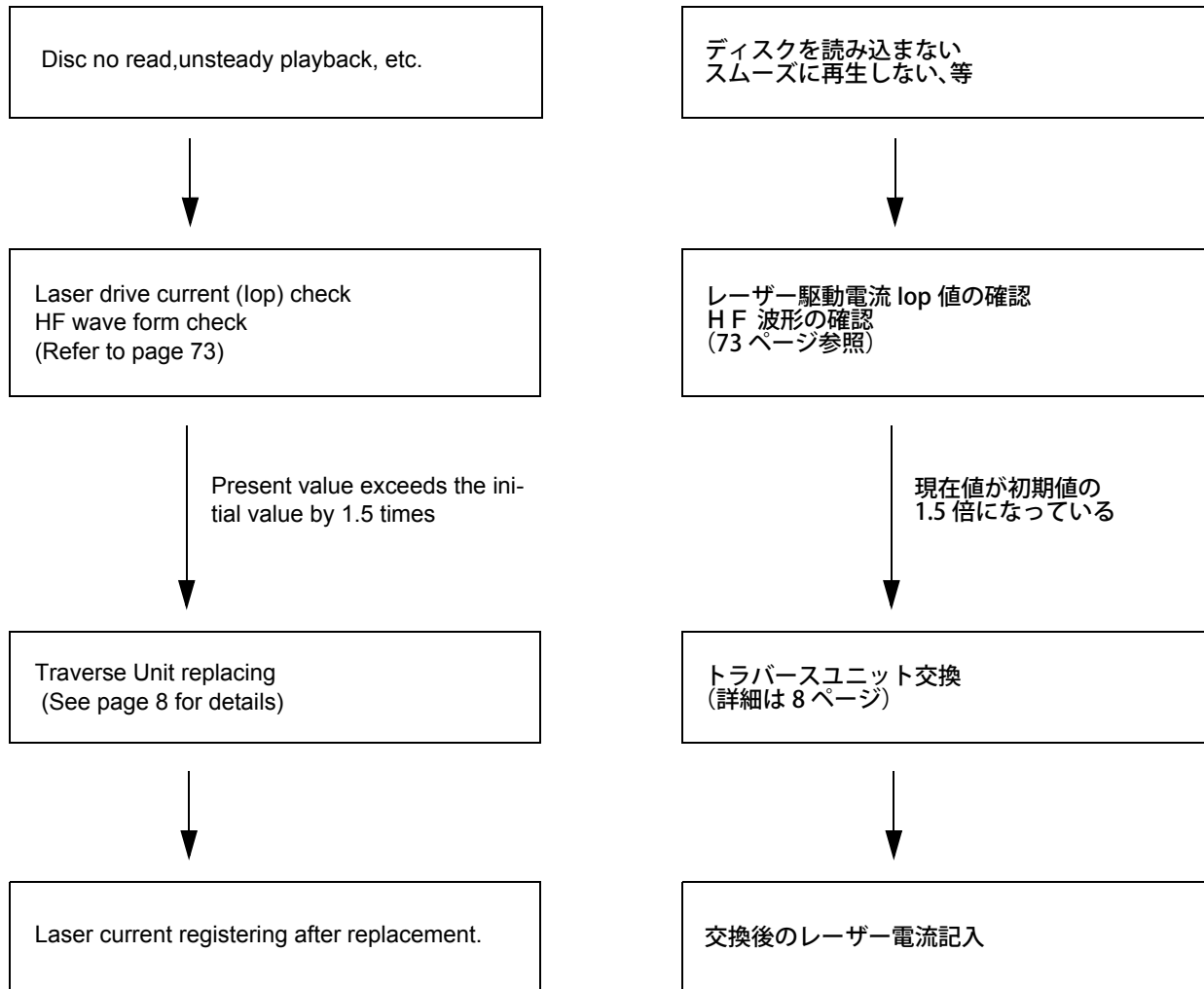
Fig. a

## DIAGNOSTICS OF OPTICAL PICKUP AND REPLACING TRAVERSE UNIT

Make failure diagnostics of the Optical Pickup as follows.  
 If the laser drive current (Iop) becomes more than 1.5 times of the initial value, the Optical Pickup should be replaced.  
 The laser drive current is registered on the seal attached to the rear of the Mecha.Unit.  
 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Iop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、メカの後部のシール上に記入されています。  
 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。

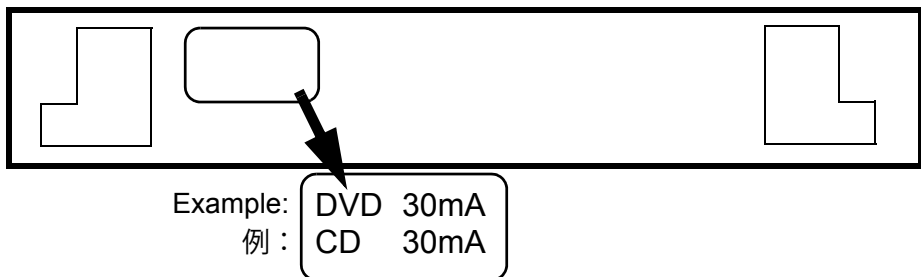


Step: Disc playback  
 Write the measured value on the seal attached to the Mecha. Unit  
 \*As to the measuring method, refer to page 8,9.

手順 : ディスクを再生  
 その時の Iop 値をメカ後方のシールの上に重ねて貼る  
 等で更新する。  
 \*Iop の測定方法は、8,9 ページ参照。

## 1. Label Indication of SACD Mechanism.

## 1. SACD メカのラベル表示



## 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.

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

Check the Iop(Laser drive current)

If the present Iop (current) value exceeds +50% of the initial value, replace the Traverse unit(Laser Pick-up) with a new one.

## 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 50%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. Iop Measurement Method

When measuring Laser drive current (Iop), playback the discs (CD,SACD) described below, measure Iop for CD Laser and DVD Laser by the test point (+5V-M2~LD(CD),LD(DVD))on the SACD P.W.B.

Test Disc :SACD/Philips DAC Test Disc or commercially available discs.  
:CD/TCD-784 (manufactured by ALMEDIO INC) or commercially available discs.

## 4. Iop の測定方法

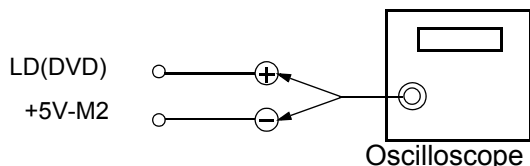
レーザー駆動電流を測定する場合、下記のディスク(CD,SACD)を再生します。

SACD 基板上のテストポイント(+5V-M2~LD(CD),LD(DVD))にて、CD レーザーと DVD レーザーの Iop を測定してください。

テストディスク : SACD/Philips DAC Test Disc または市販同等ディスク  
: CD/TCD-784 (ALMEDIO 社製) または市販同等ディスク



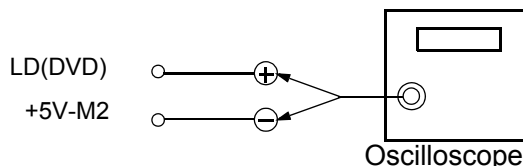
#### 4.1. DVD Laser current measurement



- (1) Connect the oscilloscope to +5V-M2 of test point for GND side and LD(DVD) of test point for signal side.
- (2) Playback the stereolayer track 1 of the SACD Test Disc.
- (3) Measure the voltage between +5V-M2 and LD(DVD), calculate  $I_{op}$  by the formula as shown below.

$$I_{op} = \frac{\text{Measurement Voltage Value}}{14 \text{ (Resistance value)}}$$

#### 4.1. DVD レーザー電流測定



- (1) オシロスコープをテストポイント +5V-M2(GND) と LD(DVD)(信号)へ接続します。
- (2) SACD テストディスクのステレオレイヤートラック 1 を再生します。
- (3) +5V-M2 と LD(DVD) 間の電圧を測定し、次式により  $I_{op}$  を算出します。

$$I_{op} = \frac{\text{測定電圧値}}{14(\text{抵抗値})}$$

#### 4.2. CD Laser current measurement

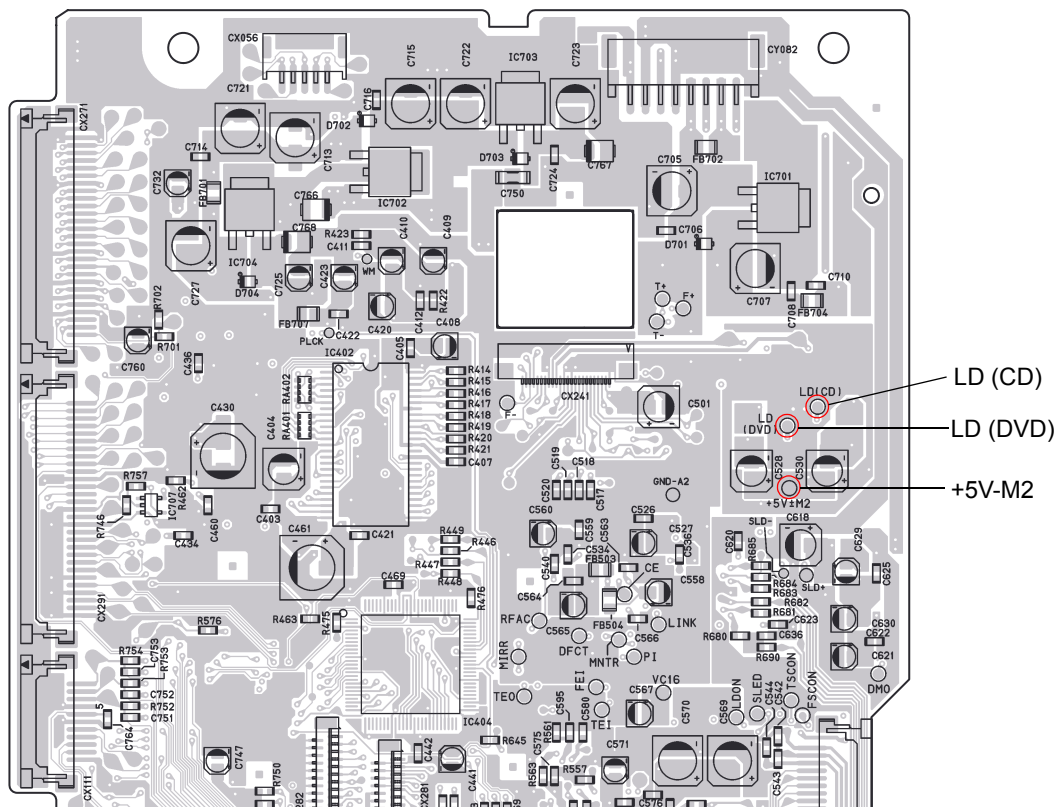
- (1) Connect the oscilloscope to +5V-M2 of test point for GND side and LD(CD) of test point for signal side.
- (2) Playback the track 1 of the CD Test Disc.
- (3) Measure the voltage between +5V-M2 and LD(CD), calculate  $I_{op}$  by the formula as shown below.

$$I_{op} = \frac{\text{Measurement Voltage Value}}{11.75 \text{ (Resistance value)}}$$

#### 4.2. CD レーザー電流測定

- (1) オシロスコープをテストポイント +5V-M2(GND) と LD(CD)(信号)へ接続します。
- (2) CD テストディスクのトラック 1 を再生します。
- (3) +5V-M2 と LD(CD) 間の電圧を測定し、次式より  $I_{op}$  を算出します。

$$I_{op} = \frac{\text{測定電圧値}}{11.75(\text{抵抗値})}$$



1U-3624 SACD MODULE P.W.B. unit foil side

## 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

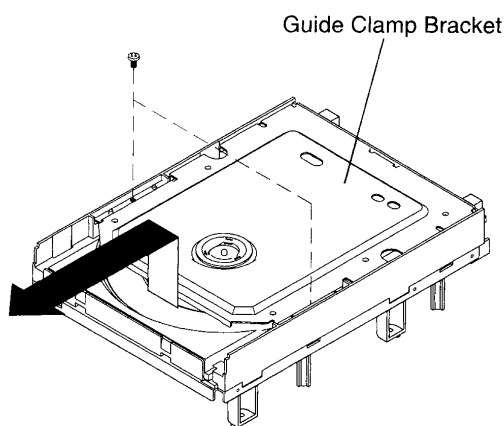
- (1) Remove 2 screws.
- (2) Remove Guide Clamp Bracket to arrow direction.

## 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。

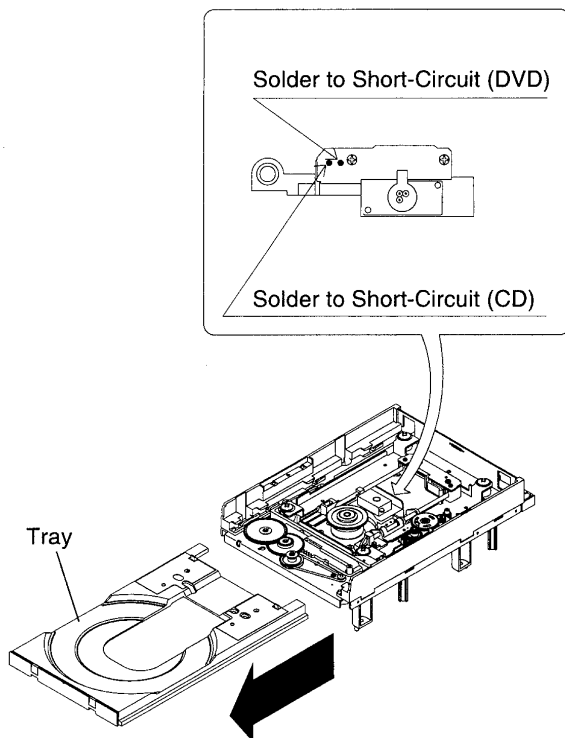


### 2. Tray disassembly

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

### 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)

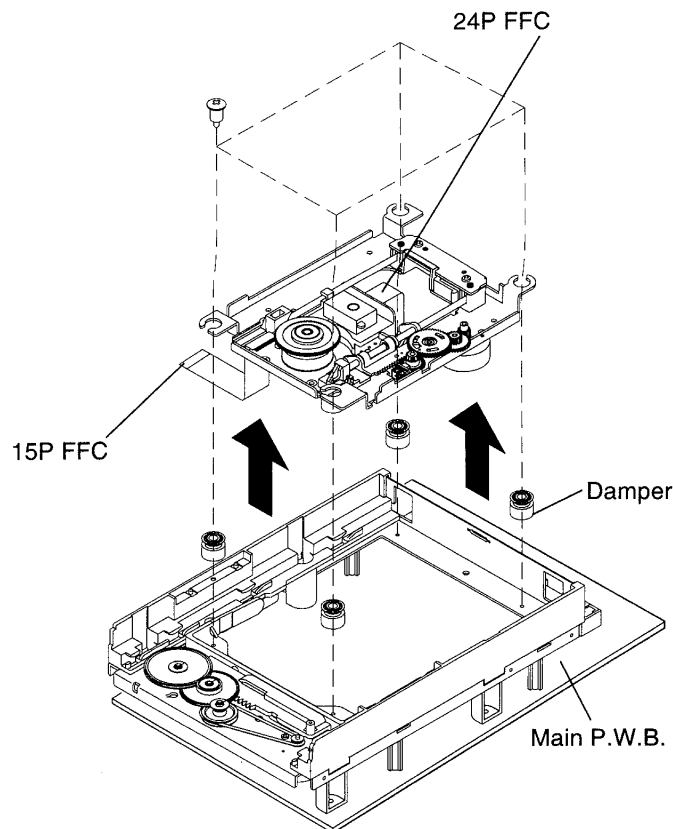


### 3. Traverse Unit disassembly

- (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.

### 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。

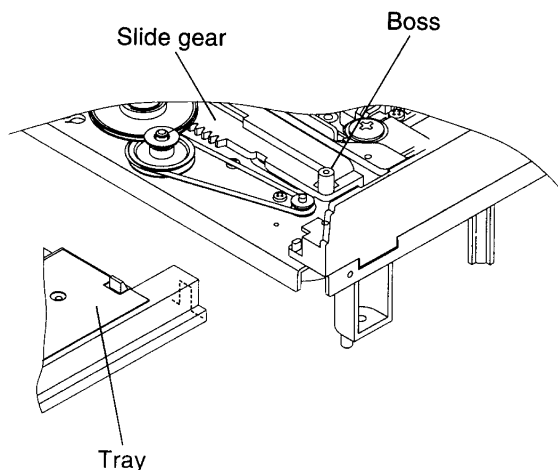


#### Note for disassembly Traverse Unit

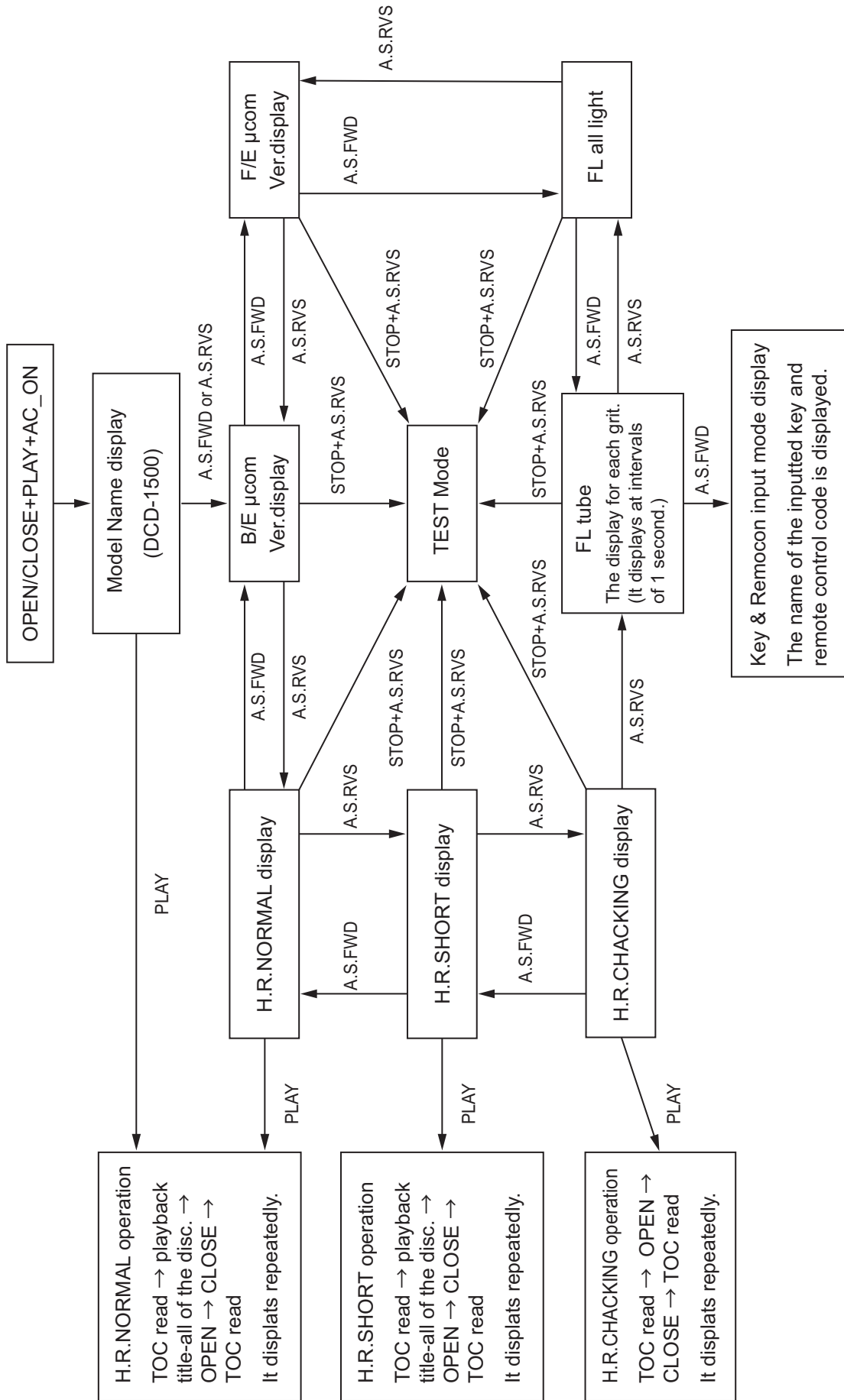
- (1) When assembling, reverse the order of the above.
- (2) When inserting Tray, confirm boss on Slide Cam set to ditch of the Tray (Compare with below drawing).

#### 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)



# CD TEST MODE & SERVICE MODE



## SETTING UP THE TEST MODE

### (1) Setting up

- In order to set up the test mode, you press STOP button and REV button simultaneously in the heat-run mode. Fundamentally, you can set up the test mode at the stop state after disc loading. (Heat-run mode is set up by pressing PLAY button, holding OPEN/CLOSE button. If it becomes heat run mode, PLAY indicator and PAUSE indicator will light up.)

LOADING display



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

### (2) Mode Select

- There are two, servo adjustment value display mode and trace mode (error rate display), in the mode.
- (a) If the REV button or the FWD button is pushed in the test mode, it will become servo adjustment value display mode.

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

- (b) If the REV button or the FWD button is pushed again, it will become the trace mode (error rate display).

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

### (3) Mode decision

- The mode will be decided if the PLAY button is pushed in the state where the mode is chosen.
- (a) In the case of servo adjustment value display mode, a focus offset adjustment value is displayed.

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

(n: adjustment value)

- (b) In the case of trace mode (error rate display), trace of the circumference in one layer is chosen.

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

(F: An address and an error rate display F at the time of undecided.)

### (4) Change within the mode

- If the REV button or the FWD button is pushed in the state where the mode is decided, a change within the mode will be made.
- (a) In the case of servo adjustment value display mode (refer to table 1 servo adjustment value display mode details)

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

(XX: selection mode [31~62] n: adjustment value)

## テストモード

### (1) テストモードへの投入

- テストモードへの投入はヒートランモード時に STOP キーと REV キーを 2 重押しすることで行う。基本的にディスクローディング後の停止状態でテストモードに投入する。(ヒートランモードへの投入は OPEN/CLOSE キーと PLAY キーを 2 重押しすることで行う。ヒートランモードになると PLAY インジケータと PAUSE インジケータが点灯する。)

LOADING 表示



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) モードの選択

- モードには、サーボ調整値表示モードとトレースモード (エラーレート表示) の 2 つがある。
- (a) テストモード投入後に REV キー又は FWD キーを押すと、サーボ調整値表示モードになる。

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	3											

- (b) 再度 REV キー又は FWD キーを押すとトレースモード (エラーレート表示) になる。

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	7											

### (3) モードの確定

- モードを選択してある状態で PLAY キーを押すとモードを確定する。
- (a) サーボ調整値表示モードの場合は、フォーカスオフセット調整値を表示する。

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	3	1	n	n	n	n	n	n	n	n	n	n

(n: 調整値)

- (b) トレースモード (エラーレート表示) の場合は、1 層内周のトレースを選択する。

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	7	1	F	F	F	F	F	F	F	F	F	F

(F: アドレス及びエラーレートは未確定時、F を表示する。)

### (4) モード内での変更

- モードを確定してある状態で REV キー又は FWD キーを押すとモード内での変更を行う。
- (a) サーボ調整値表示モードの場合 (表 1 サーボ調整値表示モード詳細 参照)

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	X	X	n	n	n	n	n	n	n	n	n	n

(X X: 選択モード [31~62], n: 調整値)

(b) In the case of trace mode (error rate display) (refer to table 2 trace mode details)

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

(YY: select mode [71--94], F: address and an error rate display F at the time of undecided)

(5) Execution of trace mode (error rate display) (refer to table 2 trace mode details)

- Trace will be performed if the PLAY 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	l	l	l	l

(YY:select mode[71~94],m:address[PBA][HEX], l:error rate[COUNT/SEC][HEX])

(Note) Renewal of data is carried out for every CD:300 frame and DVD:85ECC block.

- The mode chosen when selection mode was changed into the trace execution and the PLAY button was pushed is performed from the beginning. When the PLAY button is pushed without changing selection mode, the mode under selection is performed from the beginning. (If the PLAY button is pushed, the address corresponding to the chosen mode will be searched again.)

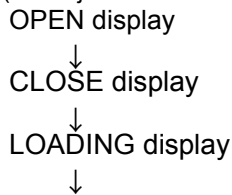
(6) Other operation

(a) If the STOP button is pushed into servo adjustment value display mode and trace mode (error rate display), it will return to the state at the time of a test mode injection.

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

(b) Push the OPEN/CLOSE button twice and carry out servo readjustment in OPEN operation ->CLOSE operation.

(It readjusts with test mode.)



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

(c) By pressing STOP button and REV button simultaneously in the test mode, it returns to heat-run mode.

(b) トレースモード (エラーレート表示) の場合 (表 2 トレースモード詳細 参照)

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	F	F	F	F	F	F	F	F	F	F

(YY: 選択モード [71 ~ 94]、F: アドレス及びエラーレートは未確定時、F を表示する。)

(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、PLAY キー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	l	l	l	l

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

(注) CD:300 フレーム、DVD:85ECC ブロック毎にデータ更新する。

- トレース実行中に選択モードを変更し、PLAY キー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 PLAY キーを押した場合も、選択中のモードを最初から実行する。

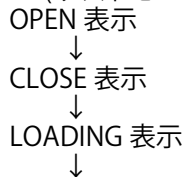
(PLAY キーを押したら、選択しているモードに対応したアドレスを再度サーチする。)

(6) その他の動作

(a) サーボ調整値表示モード、トレースモード (エラーレート表示) 中に STOP キーを押すとテストモード投入時の状態に戻る。

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												

(b) OPEN/CLOSE キーを 2 回押して、OPEN 動作→CLOSE 動作で、サーボ再調整する。(テストモードのまま再調整する。)



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												

(c) テストモード中に STOP キーと REV キーの 2 重押し (投入時と同じキー) で、ヒートランモードに戻る。

## (7) Test mode detailed table

Table 1: servo adjustment value display mode details

X X	Contents	Contents supplement	Contents explanation
31	RFP FE Offset	layer 0	PI of CXD1881AR An offset value and FE An offset value is displayed. Pi offset is shown in higher rank 1Byte. FE offset is shown in low rank 1Byte.
32	RFP TE Bal Gain	layer 0	TE balance gain value of CXD1881AR is displayed.
33	RFP TE Output Gain	layer 0	TE output gain value of CXD1881AR is displayed.
34	RFP TE Offset	layer 0	TE offset value of CXD1881AR is displayed.
35	DSP TE Offset	layer 0	TE offset value inside CXD1885Q is displayed.
36	Fcs Bias	layer 0	The focus bias value inside CXD1885Q is displayed.
37	Fcs AGC	layer 0	The inside focus gain (setting 0x2000 to 1) value of CXD1885Q is displayed. Therefore, 0x1FF2 and in the case of 0x2012, it is as follows. $0x1FF2(8178) / 0x2000(8192) = 0.998291015625(\text{fold})$ $0x2012(8210) / 0x2000(8192) = 1.002197265625(\text{fold})$ Notes: The inside of ( ) is a decimal system equivalent.
38	Trk AGC	layer 0	The inside tracking gain (setting 0x2000 to 1) value of CXD1885Q is displayed. Therefore, 0x1FF2 and in the case of 0x2012, it is as follows. $0x1FF2(8178) / 0x2000(8192) = 0.998291015625(\text{fold})$ $0x2012(8210) / 0x2000(8192) = 1.002197265625(\text{fold})$ Notes: The inside of ( ) is a decimal system equivalent
39	Pi Offset	layer 0	It is the parameter calculated inside CXD1885Q. The value displayed on a set serves as the number of complement of 2 of 2Bytes(es) doubled 256. A voltage value is 6.25mV per bit.
40	FE Offset	layer 0	It is the parameter calculated inside CXD1885Q. The value displayed on a set serves as the number of complement of 2 of 2Bytes(es) doubled 256. A voltage value is 6.25mV per bit.
41	SE Offset	layer 0	It is the parameter calculated inside CXD1885Q. The value displayed on a set serves as the number of complement of 2 of 2Bytes(es) doubled 256. A voltage value is 6.25mV per bit.
42	RFP FE Offset	layer 1	PI of CXD1881AR An offset value and FE An offset value is displayed. Pi offset is shown in higher rank 1Byte. FE offset is shown in low rank 1Byte.
43	RFP TE Bal Gain	layer 1	TE balance gain value of CXD1881AR is displayed.
44	RFP TE Output Gain	layer 1	TE output gain value of CXD1881AR is displayed.
45	RFP TE Offset	layer 1	TE offset value of CXD1881AR is displayed.
46	DSP TE Offset	layer 1	It is the parameter calculated inside CXD1885Q. The value displayed on a set serves as the number of complement of 2 of 2Bytes(es) doubled 256. A voltage value is 6.25mV per bit.
47	Fcs Bias	layer 1	It is the parameter calculated inside CXD1885Q. The value displayed on a set serves as the number of complement of 2 of 2Bytes(es) doubled 256. A voltage value is 6.25mV per bit.

## (7) 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

X X	内容	内容補足	内容説明
31	RFP FE Offset	レイヤ 0	CXD1881AR の PI オフセット値と FE オフセット値を表示。 上位 1Byte に Pi オフセットを示す。 下位 1Byte に FE オフセットを示す。
32	RFP TE Bal Gain	レイヤ 0	CXD1881AR の TE バランスゲイン値を表示す。
33	RFP TE Output Gain	レイヤ 0	CXD1881AR の TE 出力ゲイン値を表示す。
34	RFP TE Offset	レイヤ 0	CXD1881AR の TE オフセット値を表示。
35	DSP TE Offset	レイヤ 0	CXD1885Q 内部の TE オフセット値を表示。
36	Fcs Bias	レイヤ 0	CXD1885Q 内部のフォーカスバイアス値を表示。
37	Fcs AGC	レイヤ 0	CXD1885Q 内部フォーカスゲイン (0x2000 を 1 として) 値を表示。 0x1FF2 や 0x2012 の場合、以下のようになる。 $0x1FF2(8178) / 0x2000(8192) = 0.998291015625(\text{倍})$ $0x2012(8210) / 0x2000(8192) = 1.002197265625(\text{倍})$ 注:( )内は 10 進換算値
38	Trk AGC	レイヤ 0	CXD1885Q 内部トラッキングゲイン (0x2000 を 1 として) 値を表示。 0x1FF2 や 0x2012 の場合、以下のようになる。 $0x1FF2(8178) / 0x2000(8192) = 0.998291015625(\text{倍})$ $0x2012(8210) / 0x2000(8192) = 1.002197265625(\text{倍})$ 注:( )内は 10 進換算値
39	Pi Offset	レイヤ 0	CXD1885Q 内部で計算されるパラメータ。 セッティングに表示される値は、256 倍された 2Bytes の 2 の補数となる。 電圧値は 1bit あたり 6.25mV。
40	FE Offset	レイヤ 0	CXD1885Q 内部で計算されるパラメータ。 セッティングに表示される値は、256 倍された 2Bytes の 2 の補数となる。 電圧値は 1bit あたり 6.25mV。
41	SE Offset	レイヤ 0	CXD1885Q 内部で計算されるパラメータ。 セッティングに表示される値は、256 倍された 2Bytes の 2 の補数となる。 電圧値は 1bit あたり 6.25mV。
42	RFP FE Offset	レイヤ 1	CXD1881AR の PI オフセット値と FE オフセット値を表示。 上位 1Byte に Pi オフセットを示す。 下位 1Byte に FE オフセットを示す。
43	RFP TE Bal Gain	レイヤ 1	CXD1881AR の TE バランスゲイン値を表示。
44	RFP TE Output Gain	レイヤ 1	CXD1881AR の TE 出力ゲイン値を表示。
45	RFP TE Offset	レイヤ 1	CXD1881AR の TE オフセット値を表示。
46	DSP TE Offset	レイヤ 1	CXD1885Q 内部で計算されるパラメータ。 セッティングに表示される値は、256 倍された 2Bytes の 2 の補数となる。 電圧値は 1bit あたり 6.25mV。
47	Fcs Bias	レイヤ 1	CXD1885Q 内部で計算されるパラメータ。 セッティングに表示される値は、256 倍された 2Bytes の 2 の補数となる。 電圧値は 1bit あたり 6.25mV。

48	Fcs AGC	layer 1	The inside focus gain (setting 0x2000 to 1) value of CXD1885Q is displayed. Therefore, 0x1FF2 and in the case of 0x2012, it is as follows. $0x1FF2(8178) / 0x2000(8192) = 0.998291015625(\text{fold})$ $0x2012(8210) / 0x2000(8192) = 1.002197265625(\text{fold})$ Notes: The inside of ( ) is a decimal system equivalent.
49	Trk AGC	layer 1	The inside tracking gain (setting 0x2000 to 1) value of CXD1885Q is displayed. Therefore, 0x1FF2 and in the case of 0x2012, it is as follows. $0x1FF2(8178) / 0x2000(8192) = 0.998291015625(\text{fold})$ $0x2012(8210) / 0x2000(8192) = 1.002197265625(\text{fold})$ Notes: The inside of ( ) is a decimal system equivalent
50	Pi Offset	layer 1	It is the parameter calculated inside CXD1885Q. The value displayed on a set serves as the number of complement of 2 of 2Bytes(es) doubled 256. A voltage value is 6.25mV per bit.
51	FE Offset	layer 1	It is the parameter calculated inside CXD1885Q. The value displayed on a set serves as the number of complement of 2 of 2Bytes(es) doubled 256. A voltage value is 6.25mV per bit.
52	SE Offset	layer 1	It is the parameter calculated inside CXD1885Q. The value displayed on a set serves as the number of complement of 2 of 2Bytes(es) doubled 256. A voltage value is 6.25mV per bit.
53	PO error detection number	Error rate	It is invalid at the time of CD operation.
54	PO uncorrectable error number	Error Rate	It is invalid at the time of CD operation.
55	PI error detection number	Error Rate	CD: C1 error detection number
56	PI uncorrectable error number	Error Rate	CD: C2 uncorrectable error number
57	Mirr Count	Disc discriminant	They are the contents at the time of disk distinction. Please refer to "Table 3 Disc distinction information" about the contents of a value.
58	Mirr Width	Disc discriminant	They are the contents at the time of disk distinction. Please refer to "Table 3 Disc distinction information" about the contents of a value.
59	FZC Count	Disc discriminant	They are the contents at the time of disk distinction. Please refer to "Table 3 Disc distinction information" about the contents of a value.
60	Pi Level	Disc discriminant	They are the contents at the time of disk distinction. Please refer to "Table 3 Disc distinction information" about the contents of a value.
61	Disc Type	Disc Type	They are the contents at the time of disk type. Please refer to "Table 4 Disc classification information" about the contents of a value.
62	PO error detection number and address	Error rate	PO error detection number is invalid at the time of CD operation.

48	Fcs AGC	レイヤ 1	CXD1885Q 内部フォーカスゲイン(0x2000を1として)値を表示。 0x1FF2や0x2012の場合、以下のようになる。 $0x1FF2(8178) / 0x2000(8192) = 0.998291015625(\text{倍})$ $0x2012(8210) / 0x2000(8192) = 1.002197265625(\text{倍})$ 注:( )内は10進換算値
49	Trk AGC	レイヤ 1	CXD1885Q 内部トラッキングゲイン(0x2000を1として)値を表示。 0x1FF2や0x2012の場合、以下のようになる。 $0x1FF2(8178) / 0x2000(8192) = 0.998291015625(\text{倍})$ $0x2012(8210) / 0x2000(8192) = 1.002197265625(\text{倍})$ 注:( )内は10進換算値
50	Pi Offset	レイヤ 1	CXD1885Q 内部で計算されるパラメータ。 セットに表示される値は、256倍された2Bytesの2の補数となる。 電圧値は1bitあたり6.25mV。
51	FE Offset	レイヤ 1	CXD1885Q 内部で計算されるパラメータ。 セットに表示される値は、256倍された2Bytesの2の補数となる。 電圧値は1bitあたり6.25mV。
52	SE Offset	レイヤ 1	CXD1885Q 内部で計算されるパラメータ。 セットに表示される値は、256倍された2Bytesの2の補数となる。 電圧値は1bitあたり6.25mV。
53	PO 誤り検出数	エラーレート	CD時は無効。
54	PO 訂正不可数	エラーレート	CD時は無効。
55	PI 誤り検出数	エラーレート	CD時はC1誤り検出数。
56	PI 訂正不可数	エラーレート	CD時はC2訂正不可数。
57	Mirr Count	ディスク判別	ディスク判別時の内容。 値の内容は「表3ディスク判別情報」を参照。
58	Mirr Width	ディスク判別	ディスク判別時の内容。 値の内容は「表3ディスク判別情報」参照。
59	FZC Count	ディスク判別	ディスク判別時の内容。 値の内容は「表3ディスク判別情報」参照。
60	Pi Level	ディスク判別	ディスク判別時の内容。 値の内容は「表3ディスク判別情報」参照。
61	Disc Type	ディスク種別	ディスク種別の内容。 値の内容は「表4ディスク種別情報」参照。
62	PO 誤り検出数とアドレス	エラーレート	CD時はPO誤り検出数は無効。



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
74	A display of PI uncorrectable number of the inner circumference of 1-layer and an address.	CD : C2 uncorrectable error number
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
78	A display of PI uncorrectable number of the central circumference of 1-layer and an address.	CD : C2 uncorrectable error number
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
82	A display of PI uncorrectable number of the outer circumference of 1-layer and an address.	CD : C2 uncorrectable error number
83	A display of PO error detection number of the inner circumference of 2-layer and an address.	In the case of 1-layer 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 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 disc, it is invalid.
86	A display of PI uncorrectable number of the inner circumference of 2-layer and an address.	In the case of 1-layer 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 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 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 disc, it is invalid.
90	A display of PI uncorrectable number of the central circumference of 2-layer and an address.	In the case of 1-layer 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 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 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 disc, it is invalid.
94	A display of PI uncorrectable number of the outer circumference of 2-layer and an address.	In the case of 1-layer 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。
74	1層内周のPI訂正不可数とアドレスの表示	CD時はC2訂正不可数。
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。
78	1層中周のPI訂正不可数とアドレスの表示	CD時はC2訂正不可数。
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。
82	1層外周のPI訂正不可数とアドレスの表示	CD時はC2訂正不可数。
83	2層内周のPO誤り検出数とアドレスの表示	1層ディスクの場合、無効。
84	2層内周のPO訂正不可数とアドレスの表示	1層ディスクの場合、無効。
85	2層内周のPI誤り検出数とアドレスの表示	1層ディスクの場合、無効。
86	2層内周のPI訂正不可数とアドレスの表示	1層ディスクの場合、無効。
87	2層中周のPO誤り検出数とアドレスの表示	1層ディスクの場合、無効。
88	2層中周のPO訂正不可数とアドレスの表示	1層ディスクの場合、無効。
89	2層中周のPI誤り検出数とアドレスの表示	1層ディスクの場合、無効。
90	2層中周のPI訂正不可数とアドレスの表示	1層ディスクの場合、無効。
91	2層外周のPO誤り検出数とアドレスの表示	1層ディスクの場合、無効。
92	2層外周のPO訂正不可数とアドレスの表示	1層ディスクの場合、無効。
93	2層外周のPI誤り検出数とアドレスの表示	1層ディスクの場合、無効。
94	2層外周のPI訂正不可数とアドレスの表示	1層ディスクの場合、無効。

Table 3: Disc distinction information

	Mirr Count	Mirr Width	FZC Count	PI Level
No Disc	Except 2 and 3	-	-	-
CD High reflection	2	More than 0x8ED	-	More than 0x99
CD Low reflection	2	More than 0x8ED	-	Less than 0x98
DVD High reflection	2	Less than 0x8ED	1	More than 0x81
DVD Low reflection	2	Less than 0x8ED	1	Less than 0x80
DVD 2-layer	2	Less than 0x8ED	2	-
SACD Hybrid	3	-	-	-

PI level Formula : PI level (V) = Measured value × 1.6 ÷ 256  
 "-": Invalid

表3 ディスク判別情報

	Mirr Count	Mirr Width	FZC Count	PI Level
No Disc	2 と 3 以外	-	-	-
CD 高反射	2	0x8ED 以上	-	0x99 以上
CD 低反射	2	0x8ED 以上	-	0x98 以下
DVD 高反射	2	0x8ED 以下	1	0x81 以上
DVD 低反射	2	0x8ED 以下	1	0x80 以下
DVD 2層	2	0x8ED 以下	2	-
SACD Hybrid	3	-	-	-

PI level 計算式 : PI level (V) = 測定値 × 1.6 ÷ 256  
 "-": 無効

Table 4: Disc classification information

Disc Type	Media
0x00	No Disc
0x01	Unknown Disc
0x04	DVD Single High reflection
0x05	DVD Dual Parallel Low reflection
0x06	DVD Dual Opposite Low reflection
0x08	CDDA High reflection
0x0A	VCD High reflection
0x44	DVD Single Low reflection
0x48	CDDA Low reflection
0x4A	VCD Low reflection
0x8F	SACD Hybrid Disc

表4 ディスク種別情報

Disc Type	Media
0x00	No Disc
0x01	Unknown Disc
0x04	DVD Single 高反射
0x05	DVD Dual Parallel 低反射
0x06	DVD Dual Opposite 低反射
0x08	CDDA 高反射
0x0A	VCD 高反射
0x44	DVD Single 低反射
0x48	CDDA 低反射
0x4A	VCD 低反射
0x8F	SACD Hybrid Disc

Table 5: HEAT RUN ERROR CODE

No	Error contents	FL Display
1	Tray Error ( Back End )	E1 ****
2	Bad Disc	E2 ****
3	Focus Error	E2 ****
4	Read Error	E2 ****
5	Tracking Error	E4 ****
6	Tray Error (Front End )	E5 ****
7	Navigation Pack Read Error	E6 ****
8	Communication Error	E7 ****
9	No Disc	NO DISC ****

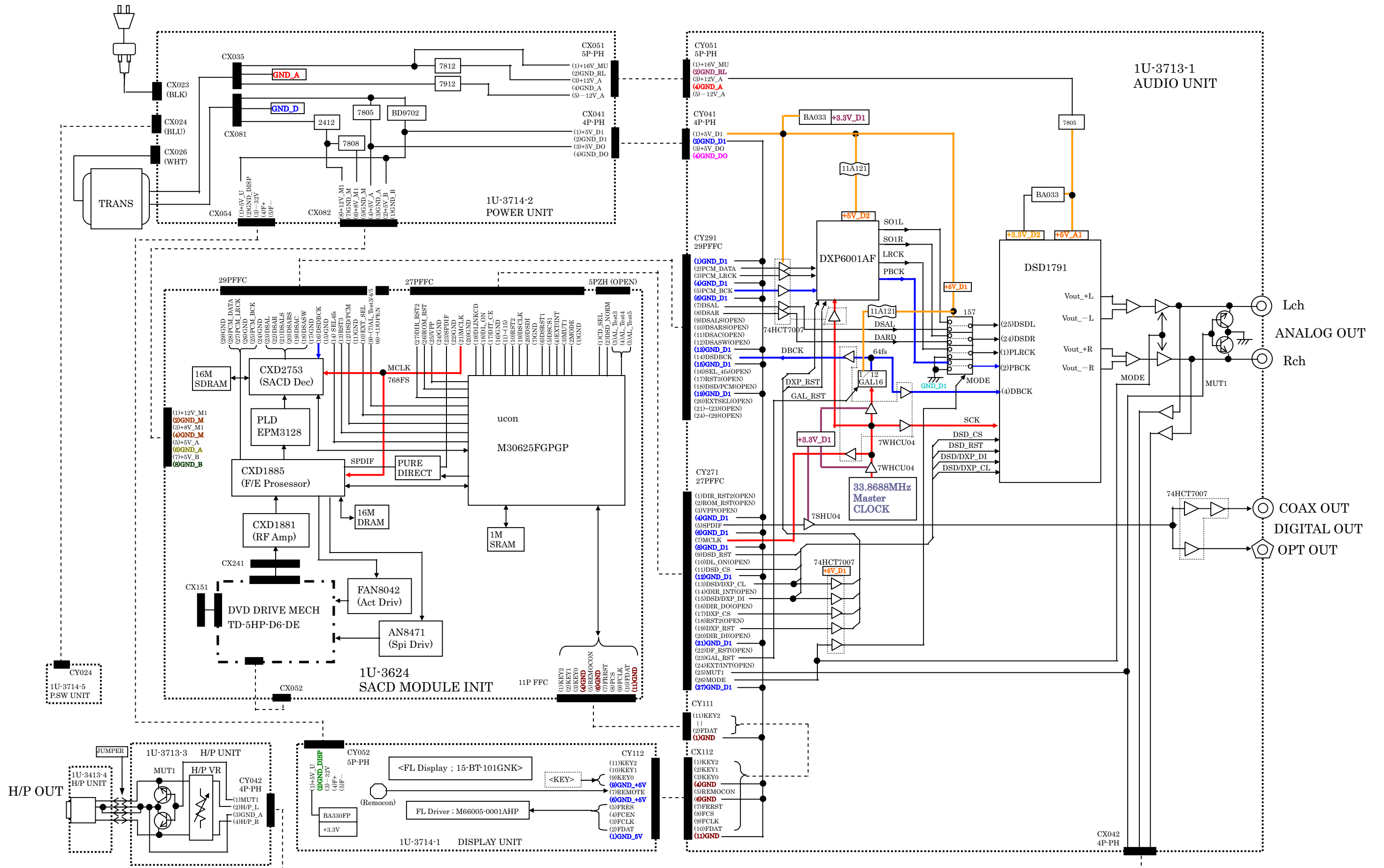
(\*\*\*\* ; Number of times to error generating. )

表5 ヒートランエラーコード表

No.	エラー内容	FL 管表示
1	トレイエラー ( Back End )	E1 ****
2	不良ディスク	E2 ****
3	フォーカスエラー	E2 ****
4	リードエラー	E2 ****
5	トラッキングエラー	E4 ****
6	トレイエラー (Front End )	E5 ****
7	ナビゲーションパックエラー	E6 ****
8	コマンド通信エラー	E7 ****
9	ディスクが無い	NO DISC ****

(\*\*\*\* ; エラー発生までの回数 )

# BLOCK DIAGRAM



# SEMICONDUCTORS

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

主な半導体を記載しています。汎用の半導体は記載を省略しています。

## 1. IC's

Note: Abbreviation ahead of IC No. indicates the name of P.W.B., etc.

注): IC No. の前の記号は、基板の名称を表します。

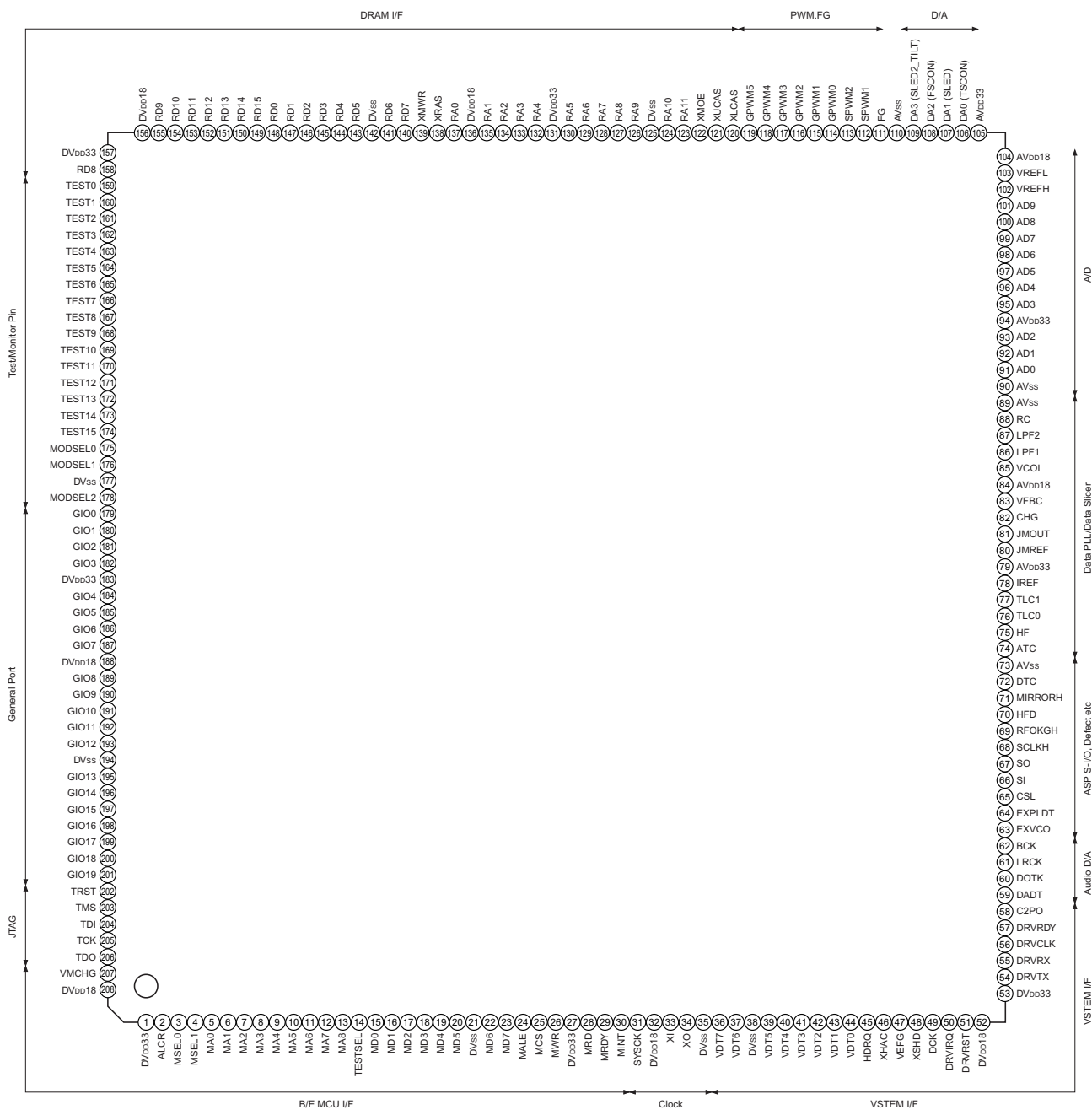
AD : AUDIO P.W.B.

PD : POWER/DISPLAY/HP P.W.B.

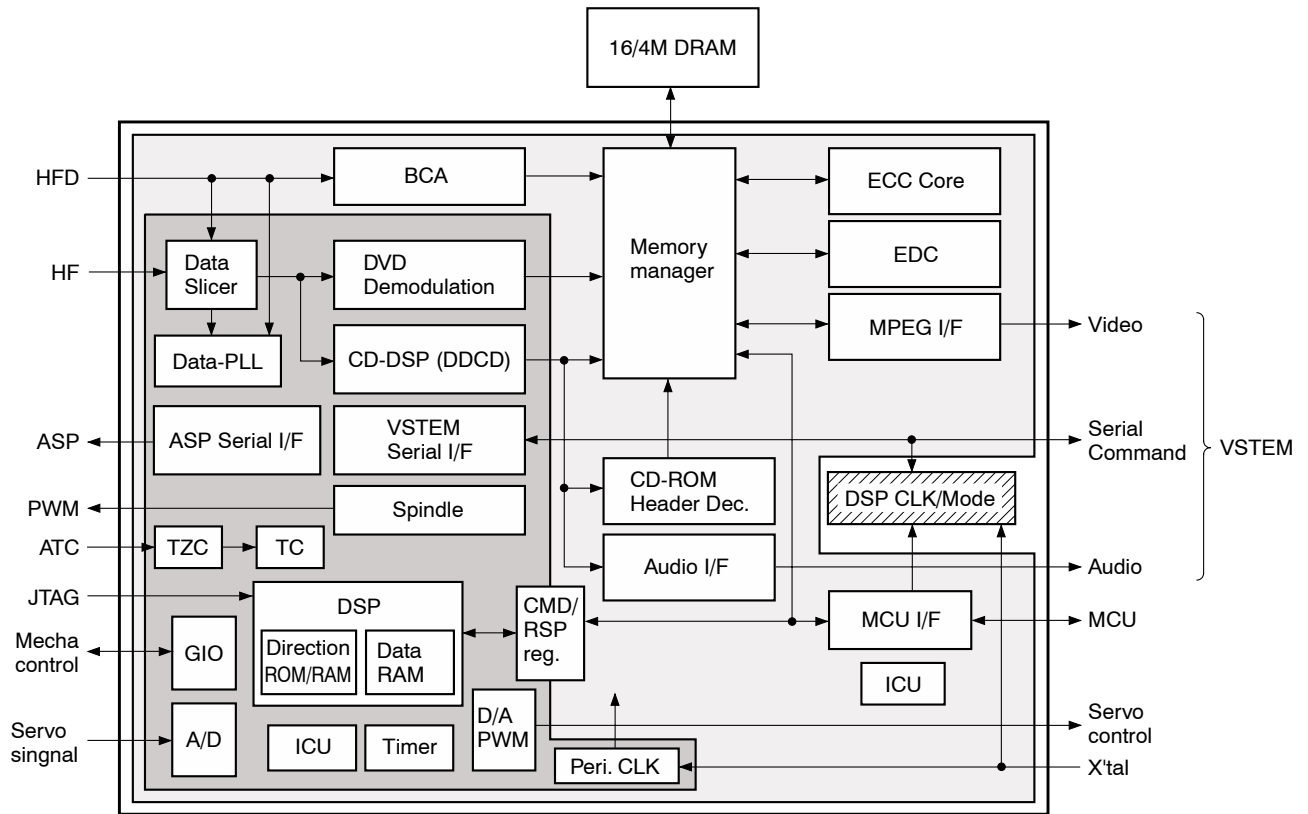
SM : SACD MODULE P.W.B.

## CXD1885Q (SM: IC502)

### Pin Assignment



**Block Diagram**



**Functions**

(A/D : Analog/Digital, PU : Pull-up, PD : Pull-down, SMT=Schumitt)

No.	Terminal Name	I/O	A/D	Classification	Function	PU	PD	SMT
1	DVDb33	P		VDD & GND	Digital 3.3V Power for I/O.			
2	ALCR	I	D	MCU I/F	Chip select input. (L: Reset)	*		*
3	MSEL0	I	D	MCU I/F	MCU I/F mode select 0.			*
4	MSEL1	I	D	MCU I/F	MCU I/F mode select 1.			*
5	MA0	I/O	D	MCU I/F	MCU Address input 0 / data I/O 0 <LSB>.			*
6	MA1	I/O	D	MCU I/F	MCU Address input 1 / data I/O 1.			*
7	MA2	I/O	D	MCU I/F	MCU Address input 2 / data I/O 2.			*
8	MA3	I/O	D	MCU I/F	MCU Address input 3 / data I/O 3.			*
9	MA4	I/O	D	MCU I/F	MCU Address input 4 / data I/O 4.			*
10	MA5	I/O	D	MCU I/F	MCU Address input 5 / data I/O 5.			*
11	MA6	I/O	D	MCU I/F	MCU Address input 6 / data I/O 6.			*
12	MA7	I/O	D	MCU I/F	MCU Address input 7 / data I/O 7.			*
13	MA8	I	D	MCU I/F	MCU Address input 8 <MSB>.			*
14	TESTSEL	I	D	MCU I/F	TEST Select input.			*
15	MD0	I/O	D	MCU I/F	MCU data I/O 0 <LSB>.			*
16	MD1	I/O	D	MCU I/F	MCU data I/O 1.			*
17	MD2	I/O	D	MCU I/F	MCU data I/O 2.			*
18	MD3	I/O	D	MCU I/F	MCU data I/O 3.			*
19	MD4	I/O	D	MCU I/F	MCU data I/O 4.			*
20	MD5	I/O	D	MCU I/F	MCU data I/O 5.			*
21	DVss	P		VDD & GND	Digital Ground.			
22	MD6	I/O	D	MCU I/F	MCU data I/O 6.			*
23	MD7	I/O	D	MCU I/F	MCU data I/O 7 <MSB>.			*
24	MALE	I	D	MCU I/F	MCU Address latch signal input.			*
25	MCS	I	D	MCU I/F	MCU Chip Select signal input.			*
26	MWR	I	D	MCU I/F	MCU Write strobe signal.			*
27	DVDb33	P		VDD & GND	digital 3.3V Power. (for I/O )			
28	MRD	I	D	MCU I/F	MCU Read Strobe signal.			*
29	MRDY	O	D	MCU I/F	MCU Ready signal. (L: Wait)			
30	MINT	O	D	MCU I/F	MCU Interrupt signal. (L: Interrupt request)			

No.	Terminal Name	I/O	A/D	Classification	Function	PU	PD	SMT
31	SYSCK	O	D	Clock	Clock Monitor output.			
32	DVDD18	P		VDD & GND	Digital 1.8V Power. (Internal logic system power)			
33	XI	I	D	Clock	Crystal oscillation input.			
34	XO	O	D	Clock	Crystal oscillation output.			
35	DVSS	P		VDD & GND	Digital Ground.			
36	VDT7	O	D	VSTEM A/V	MPEG data output 7.			
37	VTD6	O	D	VSTEM A/V	MPEG data output 6.			
38	DVSS	P		VDD & GND	Digital Ground.			
39	VDT5	O	D	VSTEM A/V	MPEG data output 5.			
40	VDT4	O	D	VSTEM A/V	MPEG data output 4.			
41	VDT3	O	D	VSTEM A/V	MPEG data output 3.			
42	VDT2	O	D	VSTEM A/V	MPEG data output 2.			
43	VDT1	O	D	VSTEM A/V	MPEG data output 1.			
44	VDT0	O	D	VSTEM A/V	MPEG data output 0.			
45	HDRQ	I	D	VSTEM A/V	MPEG data Request input.	*		
46	XHAC	O	D	VSTEM A/V	Data Valid output.			
47	VEFG	O	D	VSTEM A/V	ECC Error-sector Flag output. (L: error sector)			
48	XSHD	O	D	VSTEM A/V	DVD Sector Head Flag output.			
49	DCK	O	D	VSTEM A/V	Data Strobe output.			
50	DRVIRQ	O	D	VSTEM Command	Interrupt Request output for Host. (L: interruption is demanded)			
51	DRVRST	I	D	VSTEM Command	Drive H/W Reset input. (L: reset)	*		*
52	DVDD18	P		VDD & GND	Digital 1.8V power for Internal logic system.			
53	DVDD33	P		VDD & GND	Digital 3.3V Power for I/O.			
54	DRVTX	O	D	VSTEM Command	Transmitting serial data output to Host.			
55	DRVRX	I	D	VSTEM Command	Reception serial data input from Host.			
56	DRVCLK	I	D	VSTEM Command	Clock input from Host.			*
57	DRVRDY	O	D	VSTEM Command	Drive Ready signal output. (L: ready)			
58	C2PO	O	D	Audio I/F	CD-DSP C2 Pointer output.			
59	DADT	O	D	Audio I/F	Audio serial data output.			
60	DOTX	O	D	Audio I/F	Digital audio output.			
61	LRCK	O	D	Audio I/F	L/R Clock output.			
62	BCK	O	D	Audio I/F	Audio Bit Clock output.			
63	EXVCO	I	D	TEST/Monitor	External Channel clock input.			
64	EXPLDT	I	D	TEST/Monitor	External RF data input. (Logic level)			
65	CSL	O	D	ASP I/F	SIO for RF signal processing LSI control. Latch signal output.			
66	SI	I	D	ASP I/F	SIO for RF signal processing LSI control. Serial data input.			
67	SO	O	D	ASP I/F	SIO for RF signal processing LSI control. Serial data output.			
68	SCLKH	O	D	ASP I/F	SIO for RF signal processing LSI control. Serial clock output.			
69	RFOKGH	I	D	ASP I/F	RF O.K. Signal input.			*
70	HFD	I	D	ASP I/F	RF lack Signal input.			*
71	MIRRORH	I	D	ASP I/F	Mirror detected signal input.(H: Mirror detected)			*
72	DTC	I	D	ASP I/F	Track cross signal input. (Logic level input)			*
73	AVSS	P		VDD & GND	Analog Ground.			
74	ATC	I	A	Data PLL	Track Cross signal input. (Analog level input)			
75	HF	I	A	Data PLL	RF signal input.			
76	TLC0	O	A	Data PLL	Asymmetry Charge-pump output 0.			
77	TLC1	O	A	Data PLL	Asymmetry Charge-pump output 1			
78	IREF	I	A	Data PLL	Reference current setting terminal for Asymmetry Circuit.			
79	AVDD33	P		VDD & GND	Analog 3.3V Power.			
80	JMREF	I	A	Data PLL	Reference current setting terminal for Jitter Monitor			
81	JMOUT	O	A	Data PLL	Jitter Monitor output.			
82	CHG	I	A	Data PLL	Reference current setting terminal for data PLL.			
83	VFBC	I	A	Data PLL	VCO offset frequency setting terminal for data PLL.			
84	AVDD18	P		VDD & GND	Analog 1.8V Power.			
85	VCOI	I	A	Data PLL	VCO Control voltage input terminal for data PLL.			
86	LPF1	O	A	Data PLL	VCO Loop-filter connection terminal 1 for data PLL.			
87	LPF2	O	A	Data PLL	VCO Loop-filter connection terminal 2 for data PLL			
88	RC	I	A	Data PLL	VCO gain setting terminal for data PLL.			
89	AVSS	P		VDD & GND	Analog Ground.			
90	AVSS	P		VDD & GND	Analog Ground.			
91	AD0	I	A	ADC	AD0 Input.			

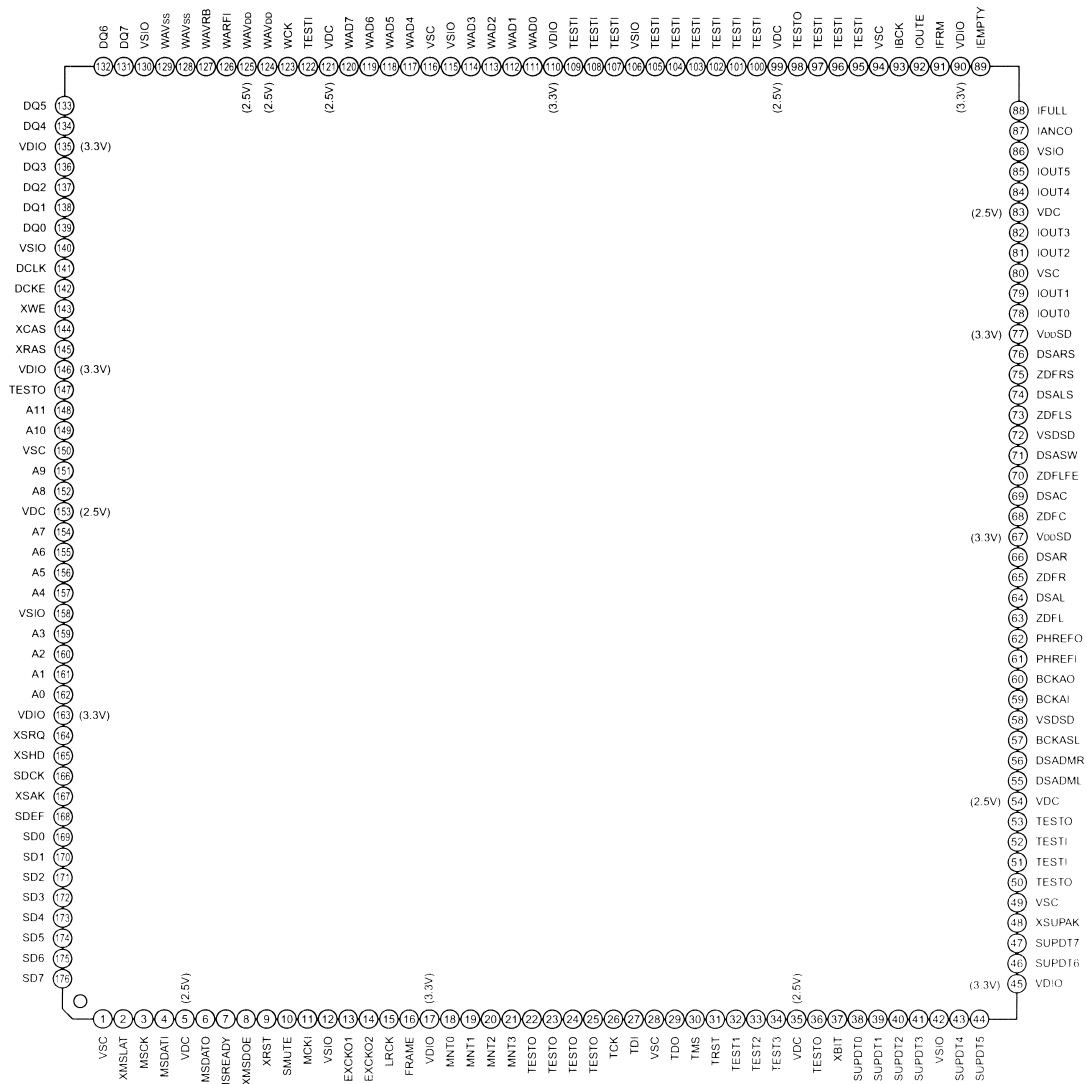
No.	Terminal Name	I/O	A/D	Classification	Function	PU	PD	SMT
92	AD1	I	A	ADC	AD1 Input.			
93	AD2	I	A	ADC	AD2 Input.			
94	AVDD33	P		VDD & GND	Analog 3.3V Power.			
95	AD3	I	A	ADC	AD3 Input.			
96	AD4	I	A	ADC	AD4 Input.			
97	AD5	I	A	ADC	AD5 Input.			
98	AD6	I	A	ADC	AD6 Input.			
99	AD7	I	A	ADC	AD7 Input.			
100	AD8	I	A	ADC	AD8 Input.			
101	AD9	I	A	ADC	AD9 Input.			
102	VREFH	I/O	A	ADC	Max Reference Voltage input for ADC. (Internal Reference Voltage mode, it will be an output state)			
103	VREFL	I/O	A	ADC	Min Reference Voltage input for ADC. (Internal Reference Voltage mode, it will be an output state)			
104	AVDD18	P		VDD & GND	Analog 1.8V Power.			
105	AVDD33	P		VDD & GND	Analog 3.3V Power.			
106	DA0 (TSCON)	O	A	DAC	DA0 output. (Track Servo output)			
107	DA1 (SLED)	O	A	DAC	DA1 output. (Sled Servo output)			
108	DA2 (FSCON)	O	A	DAC	DA2 output. (Focus Servo output)			
109	DA3 (SLED2_ TILT)	O	A	DAC	DA3 output. (Sled Servo / Tilt Servo output)			
110	AVSS	P		VDD & GND	Analog Ground			
111	FG	I	D	SPM	FG signal input.			*
112	SPWM1	O	D	SPM	Spindle motor PWM output 1.			
113	SPWM2	O	D	SPM	Spindle motor PWM output 2.			
114	GPWM0	O	D	General PWM	Multi-purpose PWM output 0.			
115	GPWM1	O	D	General PWM	Multi-purpose PWM output 1.			
116	GPWM2	O	D	General PWM	Multi-purpose PWM output 2.			
117	GPWM3	O	D	General PWM	Multi-purpose PWM output 3.			
118	GPWM4	O	D	General PWM	Multi-purpose PWM output 4.			
119	GPWM5	O	D	General PWM	Multi-purpose PWM output 5.			
120	XLCAS	O	D	DRAM I/F	DRAM LCAS output. (Low-Byte row address strobe output)			
121	XUCAS	O	D	DRAM I/F	DRAM UCAS output. (Upper-Byte row address strobe output)			
122	XMOE	O	D	DRAM I/F	DRAM output enable.			
123	RA11	O	D	DRAM I/F	DRAM address output terminal 11.			
124	RA10	O	D	DRAM I/F	DRAM address output terminal 10.			
125	DVSS	P		VDD & GND	Digital Ground.			
126	RA9	O	D	DRAM I/F	DRAM address output terminal 9.			
127	RA8	O	D	DRAM I/F	DRAM address output terminal 8.			
128	RA7	O	D	DRAM I/F	DRAM address output terminal 7.			
129	RA6	O	D	DRAM I/F	DRAM address output terminal 6.			
130	RA5	O	D	DRAM I/F	DRAM address output terminal 5.			
131	DVDD33	P		VDD & GND	Digital 3.3V Power. (for I/O)			
132	RA4	O	D	DRAM I/F	DRAM address output terminal 4.			
133	RA3	O	D	DRAM I/F	DRAM address output terminal 3.			
134	RA2	O	D	DRAM I/F	DRAM address output terminal 2.			
135	RA1	O	D	DRAM I/F	DRAM address output terminal 1.			
136	DVDD18	P		VDD & GND	Digital 1.8V Power. (for Internal Logic power)			
137	RA0	O	D	DRAM I/F	DRAM address output terminal 0.			
138	XRAS	O	D	DRAM I/F	DRAM RAS output. (Column address strobe output)			
139	XMWR	O	D	DRAM I/F	DRAM Write enable.			
140	RD7	I/O	D	DRAM I/F	DRAM data input/output terminal 7.	*		
141	RD6	I/O	D	DRAM I/F	DRAM data input/output terminal 6.	*		
142	DVSS	P		VDD & GND	Digital Ground.			
143	RD5	I/O	D	DRAM I/F	DRAM data input/output terminal 5.	*		
144	RD4	I/O	D	DRAM I/F	DRAM data input/output terminal 4.	*		
145	RD3	I/O	D	DRAM I/F	DRAM data input/output terminal 3.	*		
146	RD2	I/O	D	DRAM I/F	DRAM data input/output terminal 2.	*		
147	RD1	I/O	D	DRAM I/F	DRAM data input/output terminal 1.	*		
148	RD0	I/O	D	DRAM I/F	DRAM data input/output terminal 0.	*		
149	RD15	I/O	D	DRAM I/F	DRAM data input/output terminal 15.	*		
150	RD14	I/O	D	DRAM I/F	DRAM data input/output terminal 14.	*		

No.	Terminal Name	I/O	A/D	Classification	Function	PU	PD	SMT
151	RD13	I/O	D	DRAM I/F	DRAM data input/output terminal 13.	*		
152	RD12	I/O	D	DRAM I/F	DRAM data input/output terminal 12.	*		
153	RD11	I/O	D	DRAM I/F	DRAM data input/output terminal 11.	*		
154	RD10	I/O	D	DRAM I/F	DRAM data input/output terminal 10.	*		
155	RD9	I/O	D	DRAM I/F	DRAM data input/output terminal 9.	*		
156	DV <sub>DD</sub> 18	P		V <sub>DD</sub> & GND	Digital 1.8V Power. (for internal Logic system)			
157	DV <sub>DD</sub> 33	P		V <sub>DD</sub> & GND	Digital 3.3V power for I/O.			
158	RD8	I/O	D	DRAM I/F	DRAM data input/output terminal 8.	*		
159	TEST0	O	D	TEST/Monitor	TEST I/O 0.			
160	TEST1	O	D	TEST/Monitor	TEST I/O 1.			
161	TEST2	O	D	TEST/Monitor	TEST I/O 2.			
162	TEST3	O	D	TEST/Monitor	TEST I/O 3.			
163	TEST4	O	D	TEST/Monitor	TEST I/O 4.			
164	TEST5	O	D	TEST/Monitor	TEST I/O 5.			
165	TEST6	O	D	TEST/Monitor	TEST I/O 6.			
166	TEST7	O	D	TEST/Monitor	TEST I/O 7.			
167	TEST8	O	D	TEST/Monitor	TEST I/O 8.			
168	TEST9	O	D	TEST/Monitor	TEST I/O 9.			
169	TEST10	O	D	TEST/Monitor	TEST I/O 10.			
170	TEST11	O	D	TEST/Monitor	TEST I/O 11.			
171	TEST12	O	D	TEST/Monitor	TEST I/O 12.			
172	TEST13	O	D	TEST/Monitor	TEST I/O 13.			
173	TEST14	O	D	TEST/Monitor	TEST I/O 14.			
174	TEST15	O	D	TEST/Monitor	TEST I/O 15.			
175	MODSEL0	I	D	TEST/Monitor	TEST mode select 0. (GND, under normal conditions)			
176	MODSEL1	I	D	TEST/Monitor	TEST mode select 1. (GND, under normal conditions)			
177	DV <sub>SS</sub>	P		V <sub>DD</sub> & GND	Digital Ground.			
178	MODSEL2	I	D	TEST/Monitor	TEST mode select 2. (GND, under normal conditions)			
179	GIO0	I/O	D	Multi-purpose	Multi-purpose port 0.		*	*
180	GIO1	I/O	D	Multi-purpose	Multi-purpose port 1.		*	*
181	GIO2	I/O	D	Multi-purpose	Multi-purpose port 2.		*	*
182	GIO3	I/O	D	Multi-purpose	Multi-purpose port 3.		*	*
183	DV <sub>DD</sub> 33	P		V <sub>DD</sub> & GND	Digital 3.3V Power for I/O.			
184	GIO4	I/O	D	General Port	Multi-purpose port 4.		*	*
185	GIO5	I/O	D	General Port	Multi-purpose port 5.		*	*
186	GIO6	I/O	D	General Port	Multi-purpose port 6.		*	*
187	GIO7	I/O	D	General Port	Multi-purpose port 7.		*	*
188	DV <sub>DD</sub> 18	P		V <sub>DD</sub> & GND	Digital 1.8V Power for I/O. (for internal Logic system)			
189	GIO8	I/O	D	General Port	Multi-purpose port 8.		*	*
190	GIO9	I/O	D	General Port	Multi-purpose port 9.	*	*	*
191	GIO10	I/O	D	General Port	Multi-purpose port 10.		*	*
192	GIO11	I/O	D	General Port	Multi-purpose port 11.		*	*
193	GIO12	I/O	D	General Port	Multi-purpose port 12.	*	*	*
194	DV <sub>SS</sub>	P		V <sub>DD</sub> & GND	Digital Ground.			
195	GIO13	I/O	D	Multi-purpose	Multi-purpose port 13.	*	*	*
196	GIO14	I/O	D	General Port	Multi-purpose port 14.	*	*	*
197	GIO15	I/O	D	General Port	Multi-purpose port 15.	*	*	*
198	GIO16	I/O	D	General Port	Multi-purpose port 16.		*	*
199	GIO17	I/O	D	General Port	Multi-purpose port 17.		*	*
200	GIO18	I/O	D	General Port	Multi-purpose port 18.		*	*
201	GIO19	I/O	D	General Port	Multi-purpose port 19.		*	*
202	TRST	I	D	JTAG I/F	JTAG Reset input.		*	*
203	TMS	I	D	JTAG I/F	JTAG Mode Select input.	*		*
204	TDI	I	D	JTAG I/F	JTAG Data Input.	*		*
205	TCK	I	D	JTAG I/F	JTAG Clock input.	*		
206	TDO	O	D	JTAG I/F	JTAG Data output.			
207	VMCHG	I	D	MCU I/F	VSTEM / external MCU access selection terminal of system setting register for DSP. (L: VSTEM, H: external MCU)			
208	DV <sub>DD</sub> 18	P		V <sub>DD</sub> & GND	Digital 1.8V power for internal Logic system.			

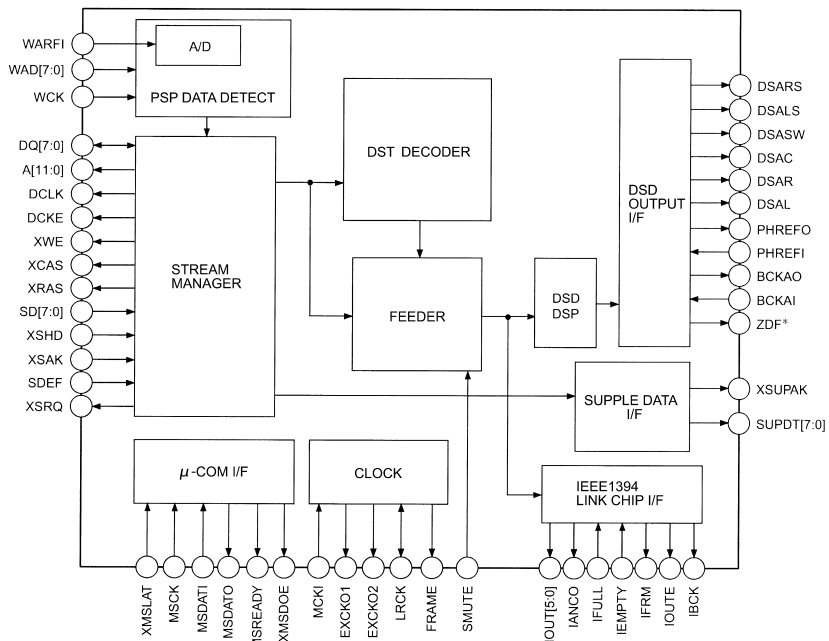


CXD2753R (SM: IC401)

Pin Assignment



Block Diagram



## Terminal Functions

	Pin Name	I/O	Functions
1	VSC	-	It fixed to ground.( for Core)
2	XMSLAT	I	Latch input for $\mu$ COM serial communication.
3	MSCK	I	Shift clock input for $\mu$ COM serial communication.
4	MSDATI	I	Data input for $\mu$ COM serial communication.
5	VDC	-	+2.5V Power for Core.
6	MSDATO	O	Data output for $\mu$ COM serial communication. "Hi-Z" potential except the output mode.
7	MSREADY	O	Completion flag of output preparation for $\mu$ COM serial communication. "L" is outputted at the time of completion.
8	XMSDOE	O	Output enable pin for $\mu$ COM serial communication. "L" is outputted at the time of MSDATO mode.
9	XRST	I	Reset pin. The whole IC is reset by at the time of "L" potential.
10	SMUTE	Ipd	Soft Mute. Soft mute of the audio output is carried out at the time of "H" potential. It releases at the time of "L" potential.
11	MCKI	I	Master Clock input.
12	VSIO	-	It fixed to Ground. Ground for I/O.
13	EXCKO1	O	External output Clock 1.
14	EXCKO2	O	External output Clock 2.
15	LRCK	O	44.1kHz, 1Fs Clock output.
16	FRAME	O	Frame signal output.
17	VDIO	-	+3.3V Power for I/O.
18	MNT0	O	Monitor output.
19	MNT1	O	Monitor output.
20	MNT2	O	Monitor output.
21	MNT3	O	Monitor output.
22	TESTO	O	Output terminal for a Test. (open)
23	TESTO	O	Output terminal for a Test.(open)
24	TESTO	O	Output terminal for a Test.(open)
25	TESTO	O	Output terminal for a Test.(open)
26	TCK	I	Clock input for a Test. It fixed to "L" potential.
27	TDI	Ipu	Input pin(pull-up) for a Test.(open)
28	VSC	-	It fixed to Ground. Ground for CORE.
29	TDO	O	Output for a Test.(open).
30	TMS	Ipu	Input pin(pull-up) for a Test.(open)
31	TRST	Ipu	Reset pin(pull-up) for a Test. Input the Power-on reset signal or fixed to "L" potential.
32	TEST1	I	Test input pin. It fixed to "L" potential.
33	TEST2	I	Test input pin. It fixed to "L" potential.
34	TEST3	I	Test input pin. It fixed to "L" potential.
35	VDC	-	+2.5V Power for CORE.
36	TESTO	O	Out put for TEST. It fixed to open.
37	XBIT	O	DST monitor.
38	SUPDT0	O	Supplementary data output. (LSB)
39	SUPDT1	O	Supplementary data output.
40	SUPDT2	O	Supplementary data output.
41	SUPDT3	O	Supplementary data output.
42	VSIO	-	Ground for I/O.
43	SUPDT4	O	Supplementary data output.
44	SUPDT5	O	Supplementary data output.
45	VDIO	-	+3.3V Power for I/O.
46	SUPDT6	O	Supplementary data output.
47	SUPDT7	O	Supplementary data output. (MSB)
48	XSUPAK	O	Supplementary data Acknowledge output terminal.
49	VSC	-	Ground for CORE.
50	TESTO	O	Output for TEST. (open)

	Pin Name	I/O	Functions
51	TESTI	I	Input for TEST. It fixed to "L" potential.
52	TESTI	I	Input for TEST. It fixed to "L" potential.
53	TESTO	O	Output for TEST. (open)
54	VDC	-	+2.5V Power for CORE.
55	DSADML	O	DSD Data output terminal for Lch Down Mix.
56	DSADMR	O	DSD Data output terminal for Rch Down Mix.
57	BCKASL	I	I/O selection terminal of the Bit clock for DSD data output. L=input (Slave), H=output (Master)
58	VSDSD	-	Ground terminal for DSD data output.
59	BCKAI	I	Bit clock input terminal for DSD data output. Input a Bit clock into this terminal at the time of BCKASL="L" potential.
60	BCKAO	O	Bit clock output terminal for DSD data output. Bit clock output from this terminal at the time of BCKASL="H" potential.
61	PHREFI	I	Reference phase signal input terminal for DSD output phase modulation.
62	PHREFO	O	Reference phase signal output terminal for DSD output phase modulation.
63	ZDFL	O	Lch zero-data detection flag (at the time of $\mu\text{com}$ setup). It will be set to "H" if non-sound data continues 300 msecs.
64	DSAL	O	DSD data output terminal for Lch speaker.
65	ZDFR	O	Rch zero-data detection flag (at the time of $\mu\text{com}$ setup). It will be set to "H" if non-sound data continues 300 msecs.
66	DSAR	O	DSD data output terminal for Rch speaker.
67	VDDSD	-	+3.3V Power for DSD data output.
68	ZDFC	O	Cch zero-data detection flag (at the time of $\mu\text{com}$ setup). It will be set to "H" if non-sound data continues 300 msecs.
69	DSAC	O	DSD data output terminal for Cch speaker.
70	ZDFLFE	O	LFech zero-data detection flag (at the time of $\mu\text{com}$ setup). It will be set to "H" if non-sound data continues 300 msecs.
71	DSASW	O	DSD data output terminal for SWch speaker.
72	VSDSD	-	Ground for DSD data output.
73	ZDFLS	O	LSch zero-data detection flag (at the time of $\mu\text{com}$ setup). It will be set to "H" if non-sound data continues 300 msecs.
74	DSALS	O	DSD data output terminal for LSch speaker.
75	ZDFRS	O	RSch zero-data detection flag (at the time of $\mu\text{com}$ setup). It will be set to "H" if non-sound data continues 300 msecs.
76	DSARS	O	DSD data output terminal for RSch speaker.
77	VDDSD	O	+3.3V Power for DSD data output.
78	IOUT0	O	Data output terminal 0 for IEEE1394 link chip I/F.
79	IOUT1	O	Data output terminal 1 for IEEE1394 link chip I/F.
80	VSC	-	Ground for CORE.
81	IOUT2	O	Data output terminal 2 for IEEE1394 link chip I/F.
82	IOUT3	O	Data output terminal 3 for IEEE1394 link chip I/F.
83	VDC	-	+2.5V Power for CORE.
84	IOUT4	O	Data output terminal 4 for IEEE1394 link chip I/F.
85	IOUT5	O	Data output terminal 5 for IEEE1394 link chip I/F.
86	VSIO	-	Ground for I/O.
87	IANCO	O	Transmission information data output terminal for IEEE1394 link chip I/F.
88	IFULL	I	Data transmission hold request signal input terminal for IEEE1394 link chip I/F.
89	IEMPTY	I	High speed transmission request signal input terminal for IEEE1394 link chip I/F.
90	VDIO	-	+3.3V Power for I/O.
91	IFRM	O	Frame reference signal output terminal for IEEE1394 link chip I/F.
92	IOUTE	O	Enable signal output terminal for IEEE1394 link chip I/F.
93	IBCK	O	Data transmission clock output terminal for IEEE1394 link chip I/F.
94	VSC	-	Ground for CORE.
95	TESTI	I	TEST input terminal. It fixed to "H" potential.
96	TESTI	I	TEST input terminal. It fixed to "L" potential.

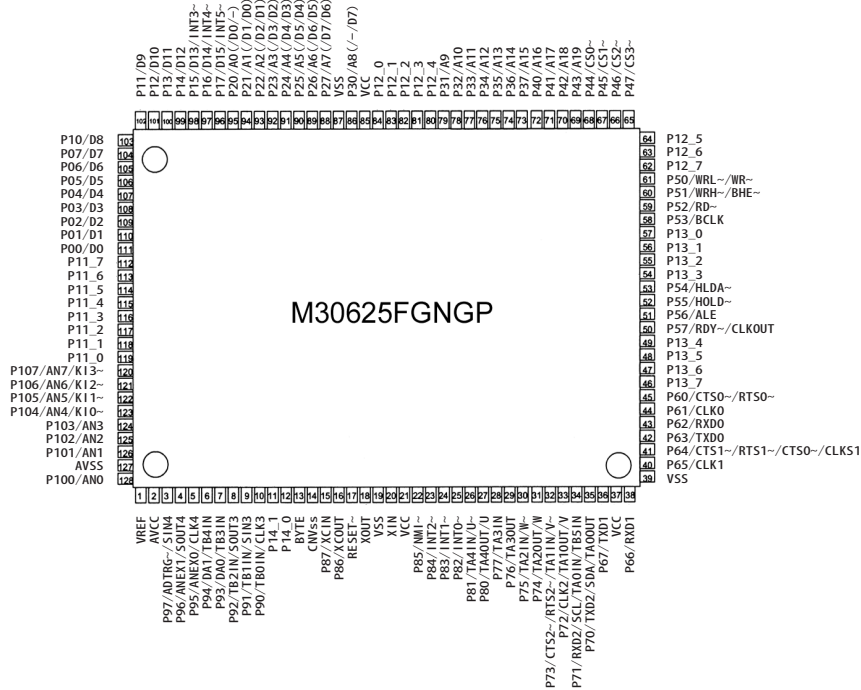
	Pin Name	I/O	Functions
97	TESTI	Ipu	TEST input terminal. It fixed to "H" potential.
98	TESTO	O	TEST output terminal. (open)
99	VDC	-	+2.5V Power for CORE.
100	TESTI	I	TEST input terminal. It fixed to "L" potential.
101	TESTI	I	TEST input terminal. It fixed to "L" potential.
102	TESTI	I	TEST input terminal. It fixed to "L" potential.
103	TESTI	I	TEST input terminal. It fixed to "L" potential.
104	TESTI	I	TEST input terminal. It fixed to "L" potential.
105	TESTI	I	TEST input terminal. It fixed to "L" potential.
106	VSIO	-	Ground for I/O.
107	TESTI	I	TEST input terminal. It fixed to "L" potential.
108	TESTI	I	TEST input terminal. It fixed to "L" potential.
109	TESTI	I	TEST input terminal. It fixed to "L" potential.
110	VDIO	-	+3.3V Power for I/O.
111	WAD0	I	External A/D data input terminal(LSB) for PSP physical disc mark detection.
112	WAD1	I	External A/D data input terminal for PSP physical disc mark detection.
113	WAD2	I	External A/D data input terminal for PSP physical disc mark detection.
114	WAD3	I	External A/D data input terminal for PSP physical disc mark detection.
115	VSIO	-	Ground for I/O.
116	VSC	-	Ground for CORE.
117	WAD4	I	External A/D data input terminal for PSP physical disc mark detection.
118	WAD5	I	External A/D data input terminal for PSP physical disc mark detection.
119	WAD6	I	External A/D data input terminal for PSP physical disc mark detection.
120	WAD7	I	External A/D data input terminal(MSB) for PSP physical disc mark detection.
121	VDC	-	+2.5V Power for CORE.
122	TESTI	I	TEST input terminal. It fixed to "L" potential.
123	WCK	I	Operation clock for PSP physical disc mark detection.
124	WAVDD	-	+2.5V Power. A/D Power supply for PSP physical disc mark detection.
125	WAVDD	-	+2.5V Power. A/D Power supply for PSP physical disc mark detection.
126	WARFI	Ai	Analog RF signal input terminal for PSP physical disc mark detection.
127	WAVRB	Ai	A/D bottom reference terminal for PSP physical disc mark detection.
128	WAVSS	-	A/D Ground terminal for PSP physical disc mark detection.
129	WAVSS	-	A/D Ground terminal for PSP physical disc mark detection.
130	VSIO	-	Ground for I/O.
131	DQ7	I/O	SDRAM data input/output terminal. (MSB)
132	DQ6	I/O	SDRAM data input/output terminal.
133	DQ5	I/O	SDRAM data input/output terminal.
134	DQ4	I/O	SDRAM data input/output terminal.
135	VDIO	-	+3.3V Power for I/O.
136	DQ3	I/O	SDRAM data input/output terminal.
137	DQ2	I/O	SDRAM data input/output terminal.
138	DQ1	I/O	SDRAM data input/output terminal.
139	DQ0	I/O	SDRAM data input/output terminal. (LSB)
140	VSIO	-	Ground for I/O.
141	DCLK	O	Clock output terminal for SDRAM.
142	DCKE	O	Clock enable output terminal for SDRAM.
143	XWE	O	Write enable output terminal for SDRAM.
144	XCAS	O	Column address strobe output terminal for SDRAM.
145	XRAS	O	Row address strobe output terminal for SDRAM.
146	VDIO	-	+3.3V Power for I/O.
147	TESTO	O	Output terminal for TEST. (open)
148	A11	O	Address output terminal for SDRAM. (MSB)

	Pin Name	I/O	Functions
149	A10	O	Address output terminal for SDRAM.
150	VSC	-	Ground for CORE.
151	A9	O	Address output terminal for SDRAM.
152	A8	O	Address output terminal for SDRAM.
153	VDC	-	+2.5V Power for CORE.
154	A7	O	Address output terminal for SDRAM.
155	A6	O	Address output terminal for SDRAM.
156	A5	O	Address output terminal for SDRAM.
157	A4	O	Address output terminal for SDRAM.
158	VSIO	-	Ground for I/O.
159	A3	O	Address output terminal for SDRAM.
160	A2	O	Address output terminal for SDRAM.
161	A1	O	Address output terminal for SDRAM.
162	A0	O	Address output terminal for SDRAM. (LSB)
163	VDIO	-	+3.3V Power for I/O.
164	XSRQ	O	Output terminal of the Data Request signal inputted a front-end processor.
165	XSHD	I	Input terminal of the header Flag outputted from a front-end processor.
166	SDCK	I	Input terminal of the data conveyance Clock outputted from a front-end processor.
167	XASK	I	Input terminal of the data valid Flag outputted from a front-end processor.
168	SDEF	I	Input terminal of the error Flag outputted from a front-end processor.
169	SD0	I	Input terminal of the stream Data outputted from a front-end processor.
170	SD1	I	Input terminal of the stream Data outputted from a front-end processor.
171	SD2	I	Input terminal of the stream Data outputted from a front-end processor.
172	SD3	I	Input terminal of the stream Data outputted from a front-end processor.
173	SD4	I	Input terminal of the stream Data outputted from a front-end processor.
174	SD5	I	Input terminal of the stream Data outputted from a front-end processor.
175	SD6	I	Input terminal of the stream Data outputted from a front-end processor.
176	SD7	I	Input terminal of the stream Data outputted from a front-end processor.

Ipu: Pull-up input Ipd: Pull-down input Ai: Analog input

M30625FGPGP (SM: IC739)

Pin Assignment



M30625FGNGP Port Assignment

pin	port	function	I/O	Initial	mode	action	NOTE
1	VREF						
2	AVCC						
3	P97/ADTRG~/SIN4	P97	O	L	OPEN	DIR_RST2	
4	P96/ANEX1/SOUT4	SOUT4	O	L	FDAT	DISPLAY DATA for FL DRIVER	
5	P95/ANEX0/CLK4	CLK4	O	L	FCLK	DISPLAY CLOCK for FL DRIVER	
6	P94/DA1/TB4IN	P94	O	L	DSRST1	RESET for DAC (DSD1791)	
7	P93/DA0/TB3IN	P93	O	H	GAL_RST	RESET for GAL16V8	
8	P92/TB2IN/SOUT3	P92	O	L	OPEN	OPEN	
9	P91/TB1IN/SIN3	P91	I	H	USER1	MODEL SELECT 1 (10k P.U)	
10	P90/TB0IN/CLK3	P90	O	L	OPEN	DL_ON	P.DN only
11	P14_1		O	L	OPEN	OPEN	
12	P14_0		O	H	DSCS1	CHIP SELECT for DAC (DSD1791)	
13	BYTE	BYTE	I		BYTE	PULL UP(8bit)	
14	CNVss	CNVss	I		CNVSS	PULL DOWN (5.6k ohm)	
15	P87/XCIN	P87	O	L	OPEN	CD_SEL (INTERNAL CD PLAY ONLT "H")	
16	P86/XCOUT	P86	O	H	OPEN	DSD_NORM (NORMAL DSD MODE ONLY "H")	
17	RESET~	RESET~	I		RESET	RESET INPUT	
18	XOUT	XOUT	O		X.TAL	OSC OUT	
19	VSS	VSS	-		VSS	GND	
20	XIN	XIN	I		X.TAL	OSC IN	
21	VCC	VCC	-		3.3V	POWER INPUT	
22	P85/NMI~	P85	I		P_UP1	10K PULL UP(NON CONECT)	NOT USE
23	P84/INT2~	INT2~	I		IR_IN	IR INPUTSIGNAL (SHARP FORMAT)	
24	P83/INT1~	INT1~	I		MINT	INT from CXD1885Q	
25	P82/INT0~	INT0~	I		DRVIRQ	CXD1885Q DATA REQUEST	
26	P81/TA4IN/U~	P81	I	H	OPEN	DL_IDD (DL ID WRITE MODE DETECTION ("L":Write Mode)	
27	P80/TA4OUT/U	TA4OUT	O	L	PWM	TRAY CONTROL PWM SIGNAL	
28	P77/TA3IN	P77	O	H	SELDSD	SELECT for DSD SIGNAL(PLD)	
29	P76/TA3OUT	P76	O	H	SMUTE	MUTING for CXD2753R	
30	P75/TA2IN/W~	P75	O	H	DSRST	RESET for CXD2753R	
31	P74/TA2OUT/W	P74	I		MSREADY	SERIAL DATA READY from CXD2753R	

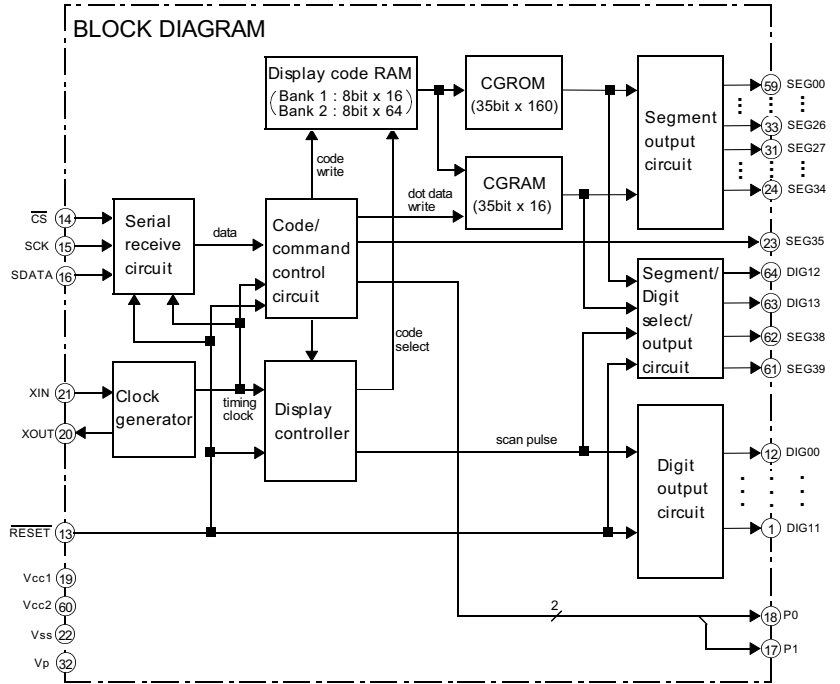
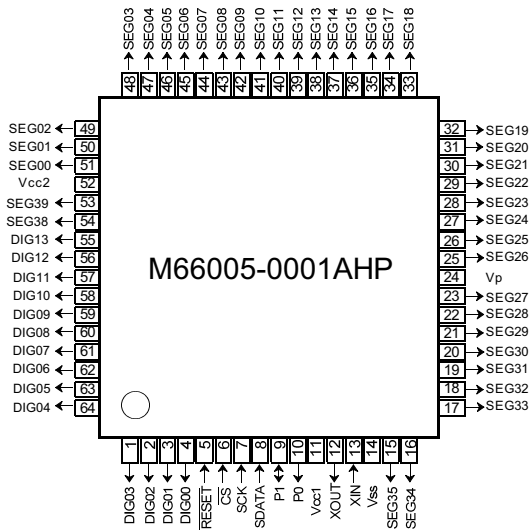
pin	port	function	I/O	Initial	mode	action	NOTE
32	P73/CTS2~/RTS2~/TA1IN/V~	P73	O	H	XMSLAT	SERIAL DATA LATCH for CXD2753R	
33	P72/CLK2/TA1OUT/V	CLK2	O	H	MSCK	SERIAL DATA CLK for CXD2753R	
34	P71/RXD2/SCL/TA0IN/TB5IN	RXD2	I		MSDATAO	SERIAL DATA INPUT from CXD2753R	PULL UP
35	P70/TXD2/SDA/TA0OUT	TXD2	O	H	MSDATAI	SERIAL DATA OUTPUT for CXD2753R	PULL UP
36	P67/TXD1	TXD1	O	H	CD_LED	WRITE USE (22k P.U)	Flash(w:pull up)
37	VCC				VCC		
38	P66/RXD1	RXD1	I	H	SA_LED	WRITE USE (22k P.U)	Flash(w:pull up)
39	VSS				VSS		
40	P65/CLK1	P65	I	H	PULL_DWN	5.1K PULL DOWN(NON CONECT)	Flash(w:pull down)
41	P64/CTS1~/RTS1~/CTS0~/CLKS1	P64	O	H	DRVRST	RESET for CXD1885Q(RESET=L)	Flash(w:pull up)
42	P63/TXD0	TXD0	O	H	DRVRX	SERIAL DATA for CXD1885Q	
43	P62/RXD0	RXD0	I		DRVTX	SERIAL DATA from CXD1885Q	
44	P61/CLK0	CLK0	O	H	DRVCLK	DATA CLOCK for CXD1885Q	
45	P60/CTS0~/RTS0~	CTS0~	I		DRVRDY	DATA READY SIGNAL from CXD1885Q	
46	P13_7		O		OPEN	New AL Test3	
47	P13_6		O		OPEN	New AL Test4	
48	P13_5		O		OPEN	New AL Test5	
49	P13_4		O	L	CD_SEL	INTERNAL CD PLAY ONLT "H" (RESERVE)	
50	P57/RDY~/CLKOUT	P57	I		MRDY	READY from CXD1885Q (NOT USE)	
51	P56/ALE	P56	I		OPEN1	OPEN(anytime)	Flash(w:pull up)
52	P55/HOLD~	P55	I		P_UP2	10K PULL UP(NON CONECT)	Flash(w:GND)
53	P54/HLDA~	P54	I		OPEN2	OPEN(must)	
54	P13_3		O	H	OPEN	DSPMOSI	
55	P13_2		I	(L)	OPEN	DSPMISO	
56	P13_1		O	L	OPEN	DSPSPICLK	
57	P13_0		O	H	OPEN	DSPSPICS	
58	P53/BCLK	P53	-		OPEN3	OPEN(must)	
59	P52/RD~	P52	I		MRD	READ STROBE for CXD1885Q(NOT USE)	
60	P51/WRH~/BHE~	P51	I		OPEN4	OPEN(must)	
61	P50/WRL~/WR~	P50	I		MWR	WRITE STROBE for CXD1885Q(NOT USE)	Flash(w:pull up)
62	P12_7		I	(L)	OPEN	BUSYEPROM	
63	P12_6		O	H	OPEN	VPP	
64	P12_5		O	L	OPEN	ROMRST	
65	P47/CS3~	CS3~	O	H	MCS	CHIP SELECT for CXD1885Q	
66	P46/CS2~	P46	O	H	CLS_DRV	TRAY CLOSE DRIVE CONTROL	
67	P45/CS1~	P45	O	H	OPN_DRV	TRAY OPEN DRIVE CONTROL	
68	P44/CS0~	CS2~	O	H	MCS2	CHIP SELECT for 1M-SRAM	
69	P43/A19	P43	O	L	OPEN	OPEN	
70	P42/A18	P42	O	L	OPEN	OPEN	
71	P41/A17	P41	O	L	OPEN	OPEN	
72	P40/A16	A16	O		A16	ADRRES LINE	
73	P37/A15	A15	O		A15	ADRRES LINE	
74	P36/A14	A14	O		A14	ADRRES LINE	
75	P35/A13	A13	O		A13	ADRRES LINE	
76	P34/A12	A12	O		A12	ADRRES LINE	
77	P33/A11	A11	O		A11	ADRRES LINE	
78	P32/A10	A10	O		A10	ADRRES LINE	
79	P31/A9	A9	O		A9	ADRRES LINE	
80	P12_4		O	L	OPEN	SEL4fs	
81	P12_3		O	L	OPEN	RST3	
82	P12_2		O	H	D_OUT	SPDIF SIGNAL LINE ON/OFF H: OUTPUT	
83	P12_1		O	L	OPEN	OPEN	
84	P12_0		O	L	OPEN	OPEN	
85	VCC	VCC	-		---	3.3V	
86	P30/A8(/-/D7)	A8	O		A8	ADRRES LINE	
87	VSS	VSS	-		---	GND	

pin	port	function	I/O	Initial	mode	action	NOTE
88	P27/A7(/D7/D6)	A7	O		A7	ADRRES LINE	
89	P26/A6(/D6/D5)	A6	O		A6	ADRRES LINE	
90	P25/A5(/D5/D4)	A5	O		A5	ADRRES LINE	
91	P24/A4(/D4/D3)	A4	O		A4	ADRRES LINE	
92	P23/A3(/D3/D2)	A3	O		A3	ADRRES LINE	
93	P22/A2(/D2/D1)	A2	O		A2	ADRRES LINE	
94	P21/A1(/D1/D0)	A1	O		A1	ADRRES LINE	
95	P20/A0(/D0/-)	A0	O		A0	ADRRES LINE	
96	P17/D15/INT5~	P17	O	L	OPEN	IIC CLK FOR EE_ROM(AT24C04N)	
97	P16/D14/INT4~	P16	I/O	H	OPEN	IIC DATA FOR EE_ROM(AT24C04N)	
98	P15/D13/INT3~	P15	I	(L)	OPEN	DIR_INT	
99	P14/D12	P14	I		OPN_SW	TRAY OPEN DETECT SW (P.U)	
100	P13/D11	P13	I		CLS_SW	TRAY CLOSE DETECT SW (P.U)	Flash(w:pull up)
101	P12/D10	P12	I		FILTI	NOT USE(10k P/U)	(Low:384fs/Hi:192fs)
102	P11/D9	P11	O	L	OPEN	EXT/INT	
103	P10/D8	P10	O	H	A_MUTE	MUTING (H:MUTE)	RELAY/TR
104	P07/D7	D7	I/O		D7	8bit DATA LINE	
105	P06/D6	D6	I/O		D6	8bit DATA LINE	
106	P05/D5	D5	I/O		D5	8bit DATA LINE	
107	P04/D4	D4	I/O		D4	8bit DATA LINE	
108	P03/D3	D3	I/O		D3	8bit DATA LINE	
109	P02/D2	D2	I/O		D2	8bit DATA LINE	
110	P01/D1	D1	I/O		D1	8bit DATA LINE	
111	P00/D0	D0	I/O		D0	8bit DATA LINE	
112	P11_7		I	(L)	OPEN	DIR_DO	
113	P11_6		O	H	DSDI	DSD_DI	
114	P11_5		O		DXP_CS	CHIP SELECT for DXP6001	
115	P11_4		O	L	DXP_RST	RESET for DXP6001	
116	P11_3		O		DXP/DSD_MDT	DATA for DXP6001/DSD1791	
117	P11_2		O		DXP/DSD_MCK	DATA_CLOCK for DXP6001/DSD1791	
118	P11_1		O	L	OPEN	RST2	
119	P11_0		O	L	OPEN	DSD/PCM	
120	P107/AN7/KI3~	P107	O	H	MODE	CD/SACD SWITCHING SIGNAL(L:CD,SACD:H)	
121	P106/AN6/KI2~	P106	O	L	FCS	DISPLAY CHIP SERECT for FL DRIVER	
122	P105/AN5/KI1~	P105	O	H	OPEN	SM5819 INPUT SWITC (H,EXTSERECT)	
123	P104/AN4/KI0~	P104	O	L	OPEN	DSD1792 RST	
124	P103/AN3	P103	O	L	FRRST	DISPLAY DRIVER RESET	
125	P102/AN2	AN2	I		KEY2	KEYS SENS	
126	P101/AN1	AN1	I		KEY1	KEYS SENS	
127	AVSS	AVSS	-		GND	AD GND	
128	P100/AN0	AN0	I		KEY0	KEYS SENS	

lpu: Pull-up input lpd: Pull-down input Ai: Analog input



M66005-0001AHP (PD: IC603)



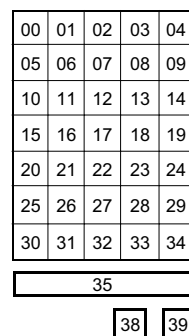
PIN DESCRIPTIONS

Symbol	Pin name	Comment
RESET	Reset input	When "L", M66005A is initialized.
CS	Chip select input	When "L", communication with the MCU is possible. When "H", any instruction from the MCU is neglected.
SCK	Shift clock input	Serial input data is taken and shifted by the positive edge of SCK.
SDATA	Serial data input	
XIN , XOUT	Clock input Clock output	When use as a CR oscillator, connect external resistor and capacitor. When use an external clock, input external clock to XIN, and XOUT must be opened.
DIG00~DIG15	Digit output	Connect to digit (grid) pins of VFD.
SEG00~SEG39	Segment output	Connect to segment (anode) pins of VFD. Pins from SEG00 to SEG39 correspond to segment pins of VFD as shown in the table below. SEG36~SEG39 pins are common to DIG12~DIG15 pins. So, when use SEG36~SEG39, the number of digit to be used is decreased.
P1, P0	Universal port P1 : bidirectional P0 : output	Generally, use this port as the static output port. This port also operates as the timing IN/OUT port to control another M66005A.
Vcc1		Positive power supply for internal logic.
Vcc2		Positive power supply for DIG and SEG outputs.
Vss		GND (0V)
Vp		Negative power supply to pull down.

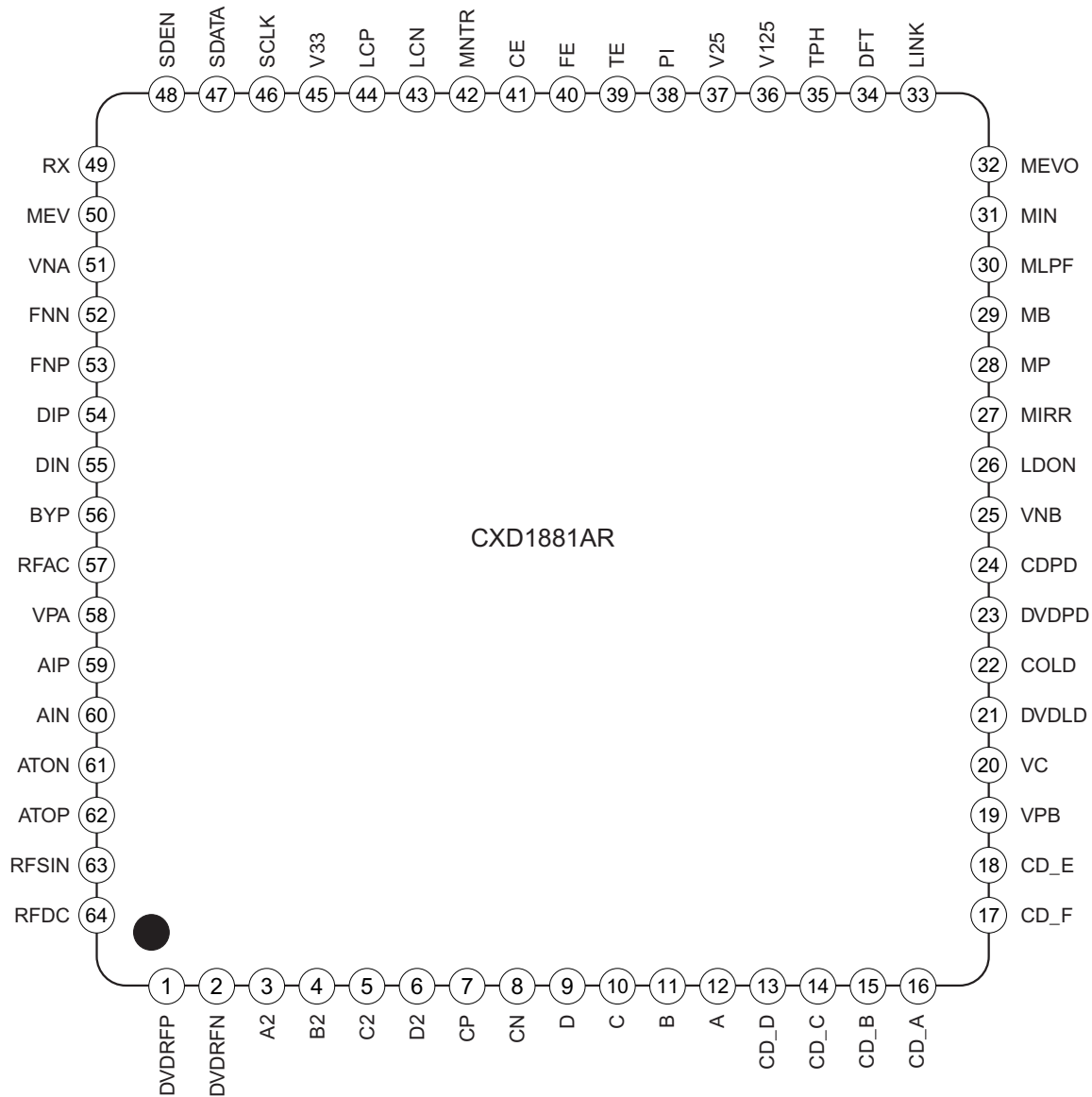
( Connection of segment output pins )

Each square shows one-dot segment and the figure in the square shows the output segment pin number SEGnn (nn=00~39) to be connected. SEG00~SEG34 are for character dot which are output from character ROM or user RAM, and SEG35~SEG39 are the dot which is controlled by command.

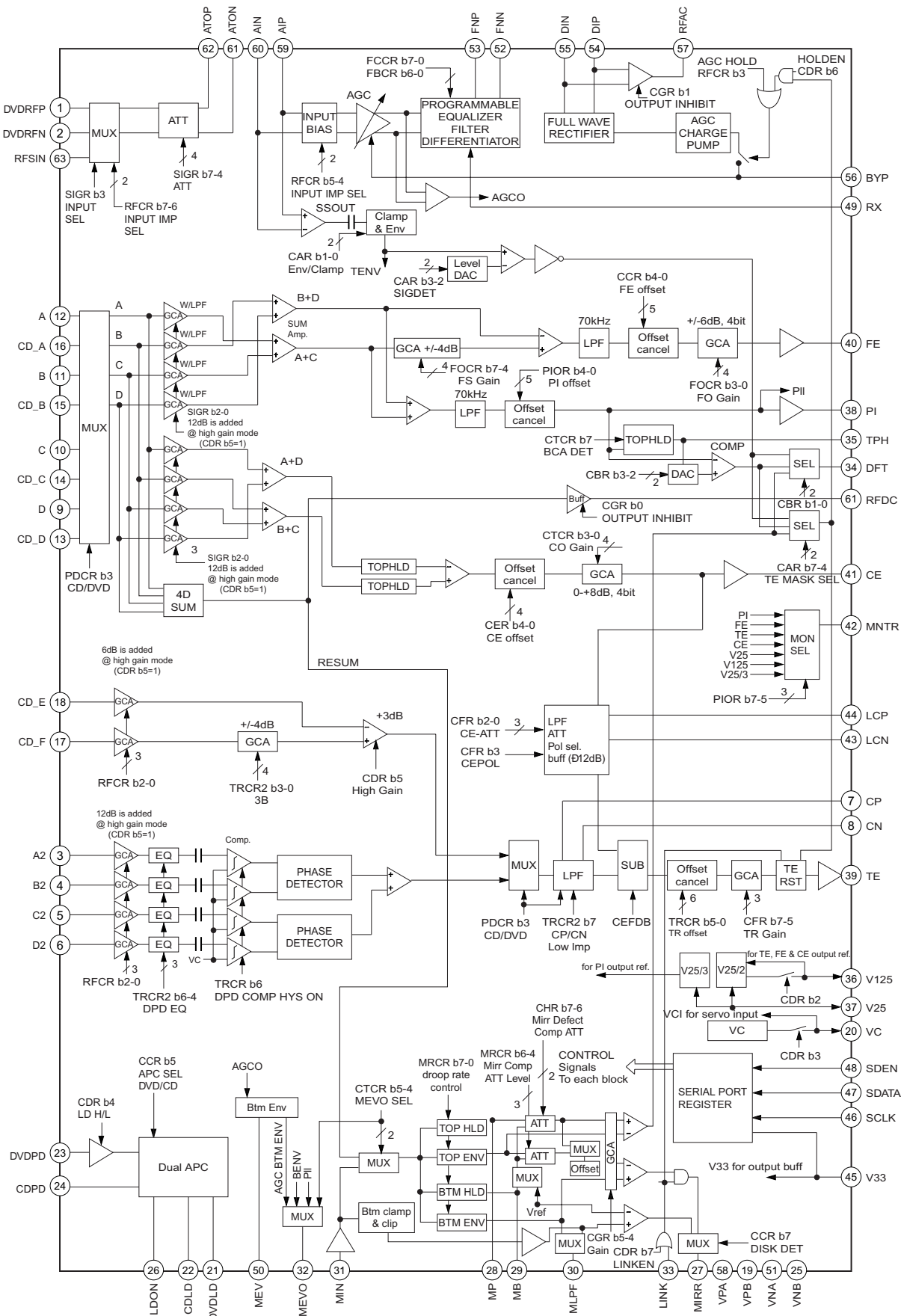
Front view of VFD



CXD1881AR (SM: IC501)



Block Diagram



## Terminal Function

### Power Supply Pins

Name	I/O	Function
VPA	-	Power for RF and serial port
VPB	-	Power for servo
VNA	-	GND for RF and serial port
VNB	-	GND for servo
V33	-	Power for output buffer
V25	-	Reference Power for servo output

### Input Pins

Name	I/O	Function
DVDRFP,DVDRFN	I	RF signal input
RFSIN	I	RF signal input
AIP,AIN	I	AGC amp. input
DIP,DIN	I	Analog input for RF single buffer
A,B,C,D	I	Photo detector interface input
A2,B2,C2,D2	I	Photo detector interface input
CD_A,B,C,D	I	CD photo detector interface input
CD_E,F	I	CD photo detector interface input
MIN	I	RF signal input for mirror
DVDPD	I	APC input
CDPD	I	APC input
LDON	I	APC input ON/OFF (L:Open)
	I	Link signal input (L:Open)
	O	Mirror monitor output

### Output Pins

Name	I/O	Function
ATOP,ATON	O	Differential attenuator output
FNP,FNN	O	Differential normal output
RFAC	O	Single end normal output
RFDC	O	RF signal output
FE	O	Focus error signal output
TE	O	Tracking error signal output
CE	O	Center error signal output
MEVO	O	RFDDC bottom envelope output
DFT	O	Defect output
MIRR	O	Mirror detected output
PI	O	Pull-in signal output
DVDLD	O	APC output
CDLD	O	APC output
MNTR	O	Monitor output

### Analog Pins

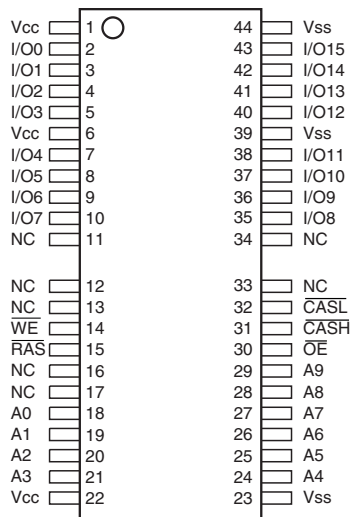
Name	I/O	Function
BYP	-	RF AGC integration capacitor connecting terminal
CP	-	Differential phase tracking LPF terminal
CN	-	Differential phase tracking LPF terminal
LCP	-	Lens shift offset cancel LPF terminal
LCN	-	Lens shift offset cancel LPF terminal
MP	-	MIRR top hold terminal

Name	I/O	Function
MB	-	MIRR bottom hold terminal
MEV	-	RFDC bottom envelope terminal
MLPF	-	Mirror LPF terminal
TPH	-	PI top hold terminal
VC	-	Reference voltage output
V125	-	Reference voltage output
RX	-	Reference resistor input

### Serial Port Pins

Name	I/O	Function
SDEN	I	Serial data enable
SDATA	I/O	Serial data
SCLK	I	Serial clock

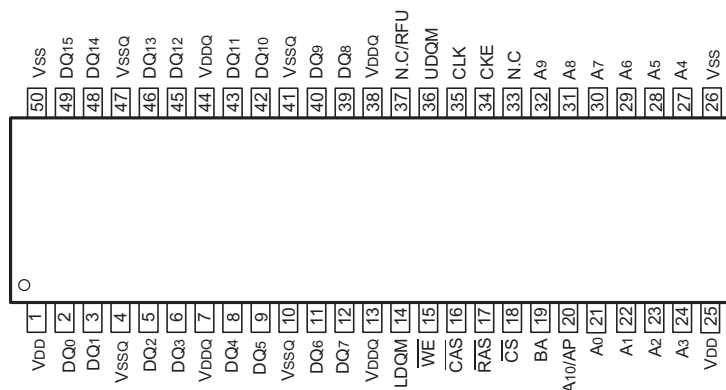
### MSM51V18165F-50TSK-7 (SM: IC503)



### Pin Descriptions

PIN NO.	PIN NAME	TYPE	DESCRIPTION
18, 21, 24 ~29	A0~A9	Input	Address Input Row Address : A0~A9 Column Address : A0~A9
15	$\overline{\text{RAS}}$	Input	Row Address Strobe
31	$\overline{\text{CASH}}$	Input	Column Address Strobe/Upper Byte Control
32	$\overline{\text{CASL}}$	Input	Column Address Strobe/Lower Byte Control
14	$\overline{\text{WE}}$	Input	Write Enable
30	$\overline{\text{OE}}$	Input	Output Enable
2~5, 7~10, 35~38, 40~43	I/O0~I/O15	Input/Output	Data Input/Output
1, 6, 22	Vcc	Supply	Power, (5V or 3.3V)
23, 39, 44	Vss	Ground	Ground
11~13, 16, 17, 33, 34	NC	-	No Connect

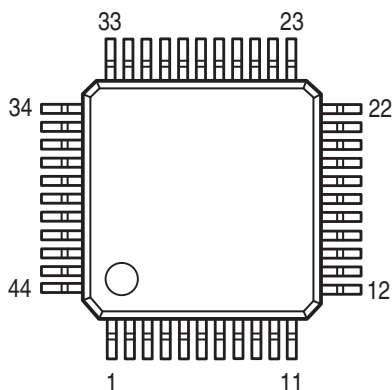
# 16M SDRAM (TSOP)-7/8 (SM: IC402) (EM636165ST-7)



## Terminal Function

Pin No.	Pin Name	Symbol	Function
1	VDD	Power Supply/Ground	Power and ground for the input buffer and the core logic
2	DQ0	Data Input/Output	Data input/output are multiplexed on the same pin
3	DQ1	Data Input/Output	Data input/output are multiplexed on the same pin
4	VSSQ	Data Output Power/Ground	Isolated power supply and ground for the output buffer
5	DQ2	Data Input/Output	Data input/output are multiplexed on the same pin
6	DQ3	Data Input/Output	Data input/output are multiplexed on the same pin
7	VDDQ	Data Output Power/Ground	Isolated power supply and ground for the output buffer
8	DQ4	Data Input/Output	Data input/output are multiplexed on the same pin
9	DQ5	Data Input/Output	Data input/output are multiplexed on the same pin
10	VSSQ	Data Output Power/Ground	Isolated power supply and ground for the output buffer
11	DQ6	Data Input/Output	Data input/output are multiplexed on the same pin
12	DQ7	Data Input/Output	Data input/output are multiplexed on the same pin
13	VDDQ	Data Output Power/Ground	Isolated power supply and ground for the output buffer
14	LDQM	Data Input/Output Mask	Blocks data input when active
15	WE	Write Enable	Enables write operation and row precharge
16	CAS	Column Address Strobe	Latches column address on the positive going edge of the CLK at low
17	RAS	Row Address Strobe	Latches row address on the positive going edge of the CLK at low
18	CS	Chip Select	Disables or enables device operation by masking or enabling all inputs except CLK, CKE, and LDQM
19	BA	Bank Select Address	Selects bank to be activated during row address latch time
20	A10/AP	Address	Row/column addresses are multiplexed on the same pin
21	A0	Address	Row/column addresses are multiplexed on the same pin
22	A1	Address	Row/column addresses are multiplexed on the same pin
23	A2	Address	Row/column addresses are multiplexed on the same pin
24	A3	Address	Row/column addresses are multiplexed on the same pin
25	VDD	Power Supply/Ground	Power and ground for the input buffer and the core logic
26	VSS	Power Supply/Ground	Power and ground for the input buffer and the core logic
27	A4	Address	Row/column addresses are multiplexed on the same pin
28	A5	Address	Row/column addresses are multiplexed on the same pin
29	A6	Address	Row/column addresses are multiplexed on the same pin
30	A7	Address	Row/column addresses are multiplexed on the same pin
31	A8	Address	Row/column addresses are multiplexed on the same pin
32	A9	Address	Row/column addresses are multiplexed on the same pin
33	N.C.	No Connection	No connect pin
34	CKE	Clock Enable	Masks system clock to freeze operation from the next clock cycle
35	CLK	System Clock	Active on the positive going edge to sample all inputs
36	UDQM	Data Input/Output Mask	Blocks data input when active
37	N.C./RFU	NC/Reserved	No connect pin
38	VDDQ	Data Output Power/Ground	Isolated power supply and ground for the output buffer
39	DQ8	Data Input/Output	Data input/output are multiplexed on the same pin
40	DQ9	Data Input/Output	Data input/output are multiplexed on the same pin
41	VSSQ	Data Output Power/Ground	Isolated power supply and ground for the output buffer
42	DQ10	Data Input/Output	Data input/output are multiplexed on the same pin
43	DQ11	Data Input/Output	Data input/output are multiplexed on the same pin
44	VDDQ	Data Output Power/Ground	Isolated power supply and ground for the output buffer
45	DQ12	Data Input/Output	Data input/output are multiplexed on the same pin
46	DQ13	Data Input/Output	Data input/output are multiplexed on the same pin
47	VSSQ	Data Output Power/Ground	Isolated power supply and ground for the output buffer
48	DQ14	Data Input/Output	Data input/output are multiplexed on the same pin
49	DQ15	Data Input/Output	Data input/output are multiplexed on the same pin
50	VSS	Power Supply/Ground	Power and ground for the input buffer and the core logic

## DXP6001AF (AD: IC102)



## DXP6001AF Terminal Function

Pin No.	Pin Name	I/O	Description													
1	MDT	Ip	Microcomputer Interface Data													
2	MCK	Ip	Microcomputer Interface Clock													
3	MLEN	Ip	Microcomputer Interface Latch Enable													
4	RSTN	Ip	Reset Terminal													
5	DLRCK	Ip	Audio Serial Input Data L/R Clock													
6	VSS	-	Ground Terminal													
7	DBCK	Ip	Audio Serial Input Bit Clock													
8	DDT	Ip	Audio Serial Input Data													
9	TEST2N	Ip	Test Setting Terminal 2 (Alpha-processor 1 Output shifts 12-bit.)													
10	TEST3N	Ip	Test Setting Terminal 3 (Alpha-processor 2 Output stops.)													
11	TEST4N	Ip	Test Setting Terminal 4 (Lambda-processor Output stops.)													
12	DFBCK	Ip	Lambda-processor Input Bit Clock													
13	DFWCK	Ip	Lambda-processor Input Word Clock													
14	DOL	Ip	Lambda-processor Input Data L-channel													
15	DOR	Ip	Lambda-processor Input Data R-channel													
16	LMOD	Ip	Lambda-processor Operation Mode Set													
17	OMOD1	Ip	Output Mode Setting Terminal 1													
18	OMOD2	Ip	Output Mode Setting Terminal 2													
			<table border="1"> <thead> <tr> <th colspan="2" rowspan="2"></th> <th colspan="2">OMOD1</th> </tr> <tr> <th>L</th> <th>H</th> </tr> </thead> <tbody> <tr> <th rowspan="2">OMOD2</th> <th>L</th> <td>18bit Alternate</td> <td>24bit Alternate</td> </tr> <tr> <th>H</th> <td>20bit Parallel</td> <td>24bit Parallel</td> </tr> </tbody> </table>			OMOD1		L	H	OMOD2	L	18bit Alternate	24bit Alternate	H	20bit Parallel	24bit Parallel
						OMOD1										
					L	H										
OMOD2	L	18bit Alternate	24bit Alternate													
	H	20bit Parallel	24bit Parallel													
19	INVIN	Ip	Lambda-processor Input Reversed Polarity Terminal													
20	BCKO	O	Lambda-processor Output Bit Clock													
21	WCKO	O	Lambda-processor Output Word Clock													
22	WCKO2	O	Lambda-processor Output Word Clock 2 (for Canceling OFFSET on 1DAC)													

Pin No.	Pin Name	I/O	Description															
23	-P24L	O	-/Lambda-processor Lch 24 <sup>th</sup> bit Output *1, *2															
24	-P23L	O	-/Lambda-processor Lch 23 <sup>rd</sup> bit Output *1, *2															
25	-P22L	O	-/Lambda-processor Lch 22 <sup>nd</sup> bit Output *1, *2															
26	-P21L	O	-/Lambda-processor Lch 21 <sup>st</sup> bit Output *1															
27	-P20L	O	-/Lambda-processor Lch 20 <sup>th</sup> bit Output *1															
28	VDD	-	Power Supply Terminal															
29	SO2L/P19L	O	Lambda-processor Lch(-) Output /19 <sup>th</sup> bit Output *1															
30	SO1L	O	Lambda-processor Lch(+) Output															
31	SO1R	O	Lambda-processor Rch(+) Output															
32	SO2R/P19R	O	Lambda-processor Rch(-) Output/19 <sup>th</sup> bit Output *1															
33	-P20R	O	-/Lambda-processor Rch 20 <sup>th</sup> bit Output *1															
34	-P21R	O	-/Lambda-processor Rch 21 <sup>st</sup> bit Output *1, *2															
35	-P22R	O	-/Lambda-processor Rch 22 <sup>nd</sup> bit Output *1, *2															
36	-P23R	O	-/Lambda-processor Rch 23 <sup>rd</sup> bit Output *1, *2															
37	-P24R	O	-/Lambda-processor Rch 24 <sup>th</sup> bit Output *1, *2															
38	TEST1N	Ip	Test Terminal 1 (Alpha-processor 1 stops)															
39	CKSLN	Ip	System Clock Select (384fs system / 256fs system)															
40	CKDV1	Ip	System Clock Divider Select Terminal 1															
41	CKDV2	Ip	System Clock Divider Select Terminal 2															
			<table border="1"> <thead> <tr> <th colspan="2" rowspan="2"></th> <th colspan="2">CKDV1</th> </tr> <tr> <th>L</th> <th>H</th> </tr> </thead> <tbody> <tr> <th rowspan="4">CKDV2</th> <th rowspan="2">L</th> <td>192fs (CKSLN=H)</td> <td rowspan="2">768fs</td> </tr> <tr> <td>256fs (CKSLN=H)</td> </tr> <tr> <th rowspan="2">H</th> <td>192fs (CKSLN=H)</td> <td rowspan="2">384fs</td> </tr> <tr> <td>256fs (CKSLN=H)</td> </tr> </tbody> </table>			CKDV1		L	H	CKDV2	L	192fs (CKSLN=H)	768fs	256fs (CKSLN=H)	H	192fs (CKSLN=H)	384fs	256fs (CKSLN=H)
						CKDV1												
					L	H												
CKDV2	L	192fs (CKSLN=H)	768fs															
		256fs (CKSLN=H)																
	H	192fs (CKSLN=H)	384fs															
		256fs (CKSLN=H)																
42	XTI	I	X-TAL Oscillator Input Terminal															
43	XTO	O	X-TAL Oscillator Output Terminal															
44	CKO	O	Clock Output Terminal															

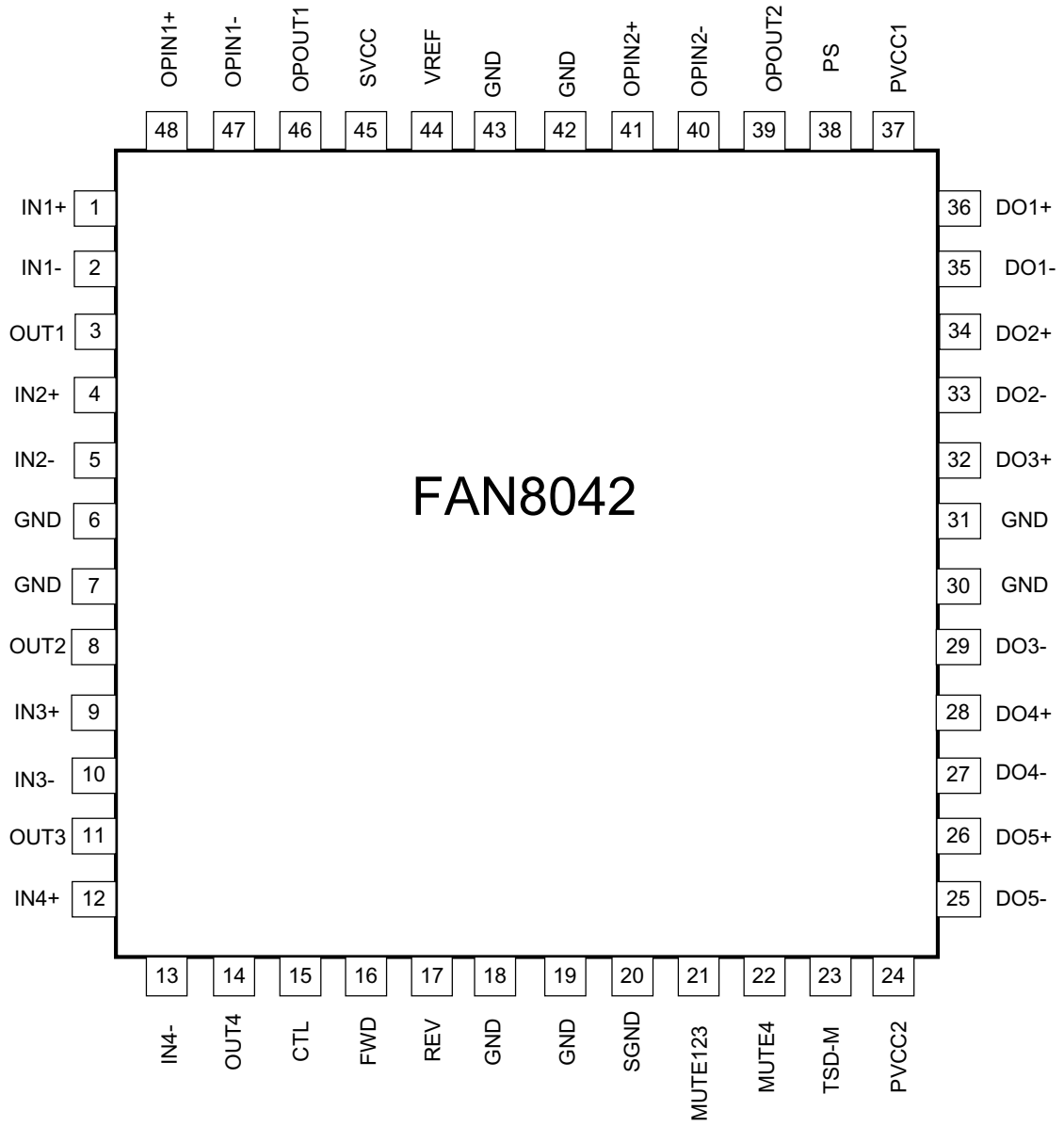
(Ip = Input Terminal with pull-up)

\*1: Outputted on OMOD1=L (18-bit Alternate Output or 20-bit Parallel Output)

\*2: Internal Signal is outputted on OMOD1=H (24-bit Alternate Output or 24-bit Parallel Output) and one of TEST1N, TEST2N, TEST3N or TEST4N is set to L.

FAN8042 (SM: IC508)

Pin Assignments

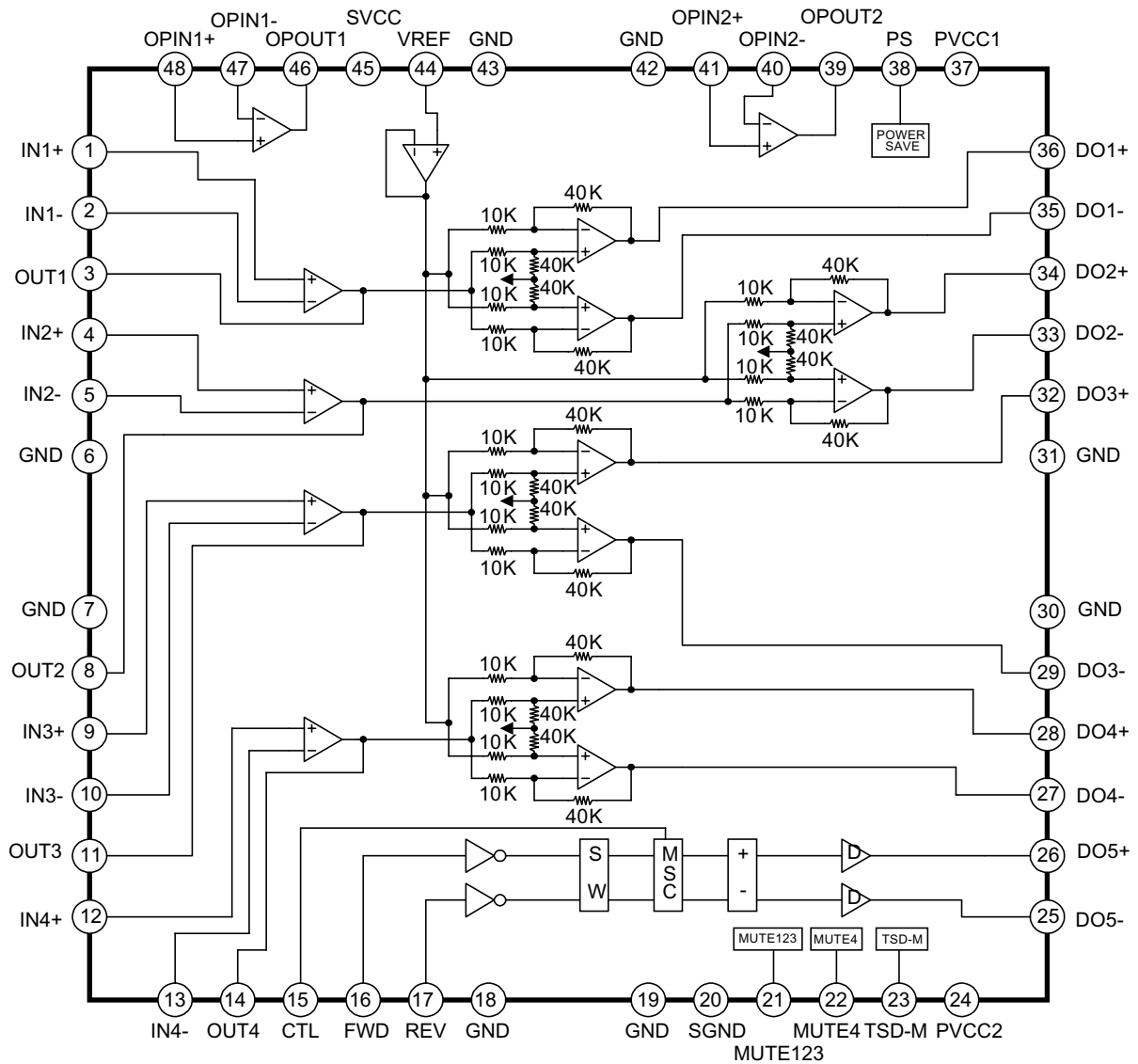




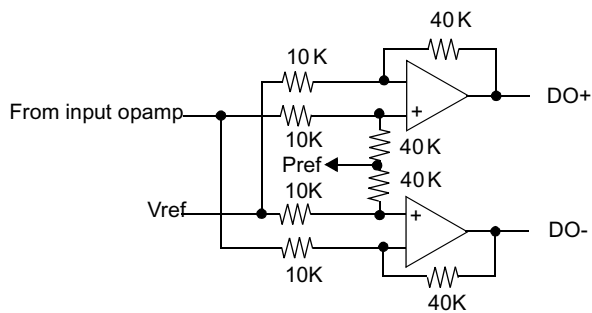
## Pin Definitions

Pin Number	Pin Name	I/O	Pin Function Description
1	IN1+	I	CH1 op-amp input (+)
2	IN1-	I	CH1 op-amp input (-)
3	OUT1	O	CH1 op-amp output
4	IN2+	I	CH2 op-amp input (+)
5	IN2-	I	CH2 op-amp input (-)
6	GND	-	Ground
7	GND	-	Ground
8	OUT2	O	CH2 op-amp output
9	IN3+	I	CH3 op-amp input (+)
10	IN3-	I	CH3 op-amp input (-)
11	OUT3	O	CH3 op-amp output
12	IN4+	I	CH4 op-amp input (+)
13	IN4-	I	CH4 op-amp input (-)
14	OUT4	O	CH4 op-amp output
15	CTL	I	CH5 motor speed control
16	FWD	I	CH5 forward input
17	REV	I	CH5 reverse input
18	GND	-	Ground
19	GND	-	Ground
20	SGND	-	Signal Ground
21	MUTE123	I	Mute for CH1,2,3
22	MUTE4	I	Mute for CH4
23	TSD-M	O	TSD monitor
24	PVCC2	-	Power supply voltage 2 (For CH4,CH5)
25	DO5-	O	CH5 drive output (-)
26	DO5+	O	CH5 drive output (+)
27	DO4-	O	CH4 drive output (-)
28	DO4+	O	CH4 drive output (+)
29	DO3-	O	CH3 drive output (-)
30	GND	-	Ground
31	GND	-	Ground
32	DO3+	O	CH3 drive output (+)
33	DO2-	O	CH2 drive output (-)
34	DO2+	O	CH2 drive output (+)
35	DO1-	O	CH1 drive output (-)
36	DO1+	O	CH1 drive output (+)
37	PVCC1	-	Power supply voltage 1 (FOR CH1 CH2,CH3)
38	PS	I	Power save
39	OPOUT2	O	Normal op-amp2 output
40	OPIN2-	I	Normal op-amp2 input (-)
41	OPIN2+	I	Normal op-amp2 input (+)
42	GND	-	Ground
43	GND	-	Ground
44	VREF	I	Bias voltage input
45	SVCC	-	Signal & OPAMPs supply voltage
46	OPOUT1	O	Normal op-amp1 output
47	OPIN1-	I	Normal op-amp1 input (-)
48	OPIN1+	I	Normal op-amp1 input (+)

Block Diagram

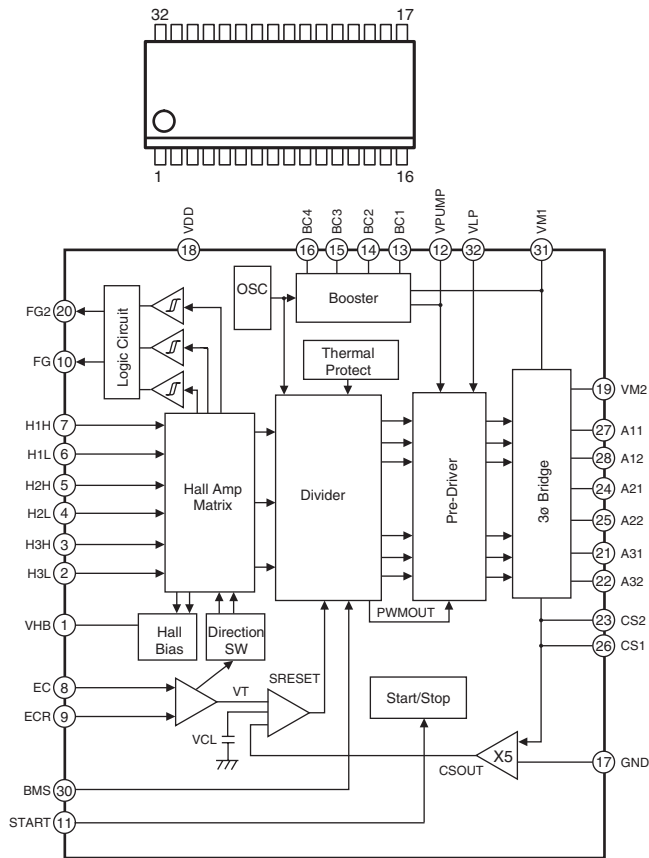


Note. Detailed circuit of the output power amp



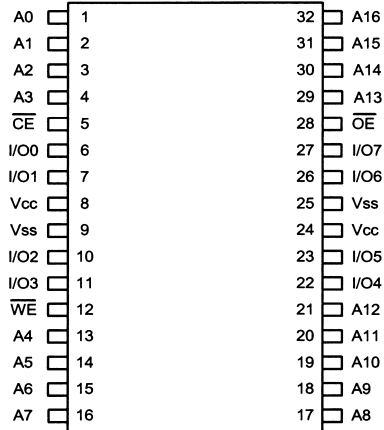
Pref1 is almost  $PVCC1 / 2$   
 Pref2 is almost  $PVCC2 / 2$

**AN8471SA (SM: IC505)**

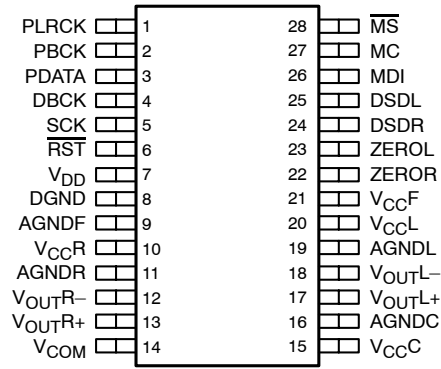


Pin No.	Pin Name	Function
1	VHB	Hall bias pin
2	H3L	Hall element 3 input (-)
3	H3H	Hall element 3 input (+)
4	H2L	Hall element 2 input (-)
5	H2H	Hall element 2 input (+)
6	H1L	Hall element 1 input (-)
7	H1H	Hall element 1 input (+)
8	EC	Torque command input pin
9	ECR	Torque command ref. input pin
10	FG1	FG signal lout put pin (0.C)
11	START	Start/Stop switching pin
12	VPUMP	Booster pin
13	BC1	Booster cap. connecting pin 1
14	BC2	Torque command input pin 2
15	BC3	Torque command input pin 3
16	BC4	Torque command input pin 4
17	GND	GND pin
18	V <sub>DD</sub>	Power pin
19	VM2	Motor power pin 2
20	FG2	3x FG signal output pin (0.C)
21	A31	Drive output 3
22	A32	Drive output 3
23	CS2	Current detect pin 2
24	A21	Drive output 2
25	A22	Drive output 2
26	CS1	Current detect pin 1
27	A11	Drive output 1
28	A12	Drive output 1
29	NC	N.C.
30	BMS	Brake mode switching pin
31	VM1	Motor power pin 1
32	VLP	Pre-driver lower power

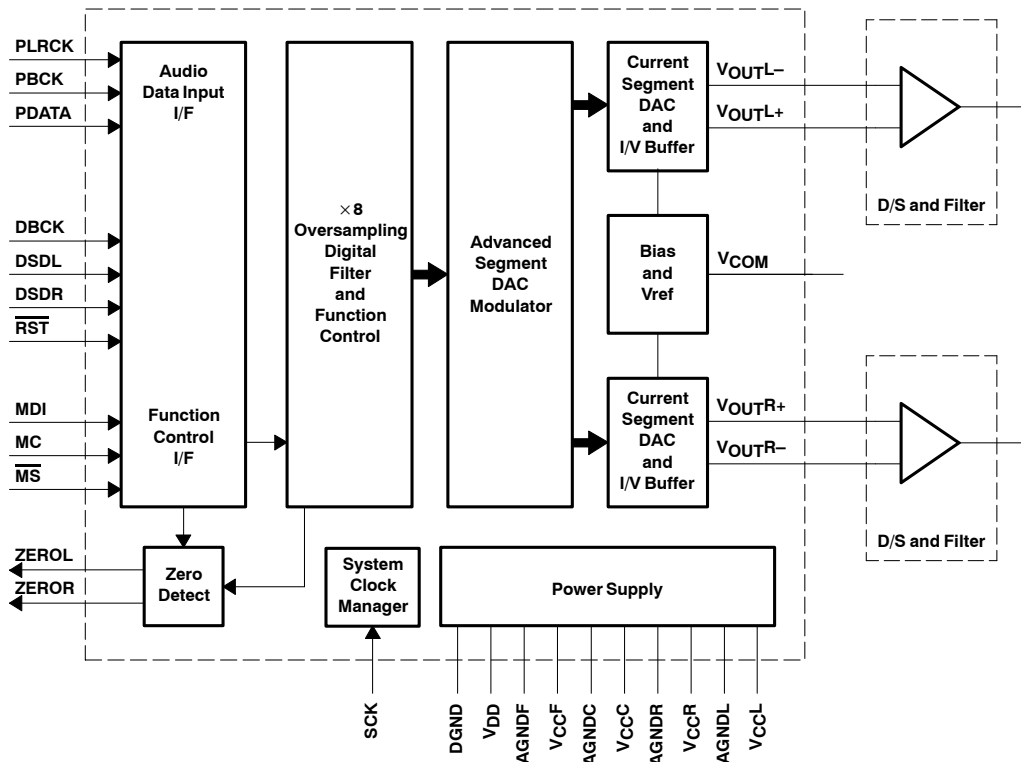
**T14L1024N (SM: IC732)**



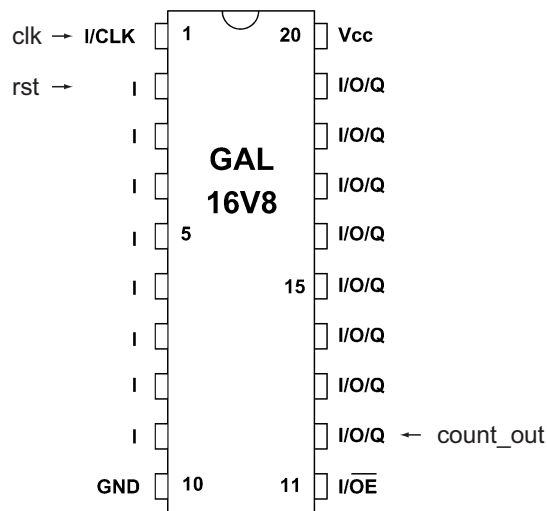
DSD1791DBR (AD: IC114)



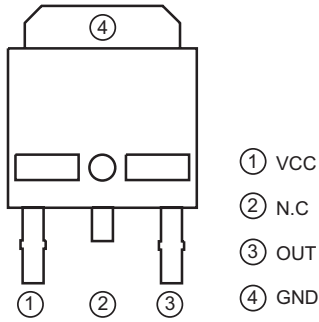
Block Diagram



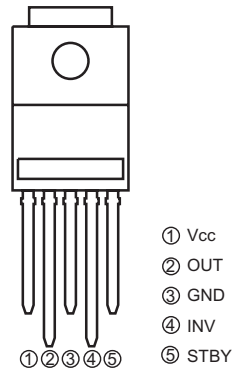
GAL16V8 (AD: IC110)



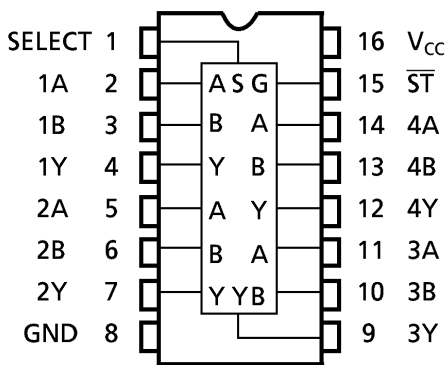
**BA33BC0FP-E2 (PD: IC604)**



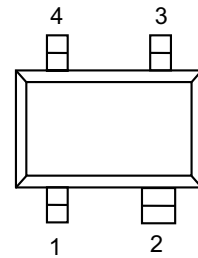
**BD9702T (PD: IC905)**



**TC74VHC157FT (AD: IC111)**



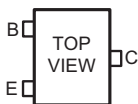
**S-80843C (SM: IC733)**



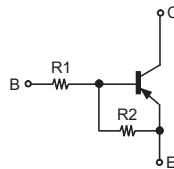
No.	Pin Name	Function
1	OUT	Voltage detection output terminal
2	VDD	Voltage input terminal
3	N.C.	No Connect
4	VSS	GND Terminal

**2. TRANSISTORS**

DTA114EK — PNP  
DTC114EK — NPN

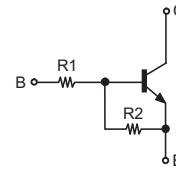


**DTA Series**



	R1	R2
DTA114EK	10kohm	10kohm

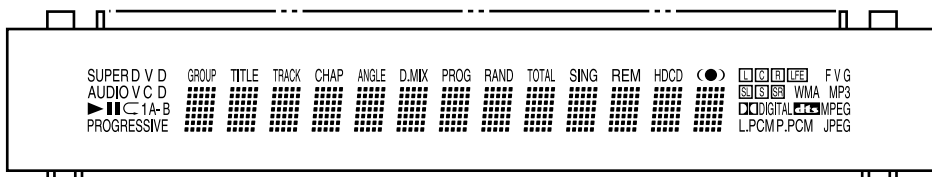
**DTC Series**



	R1	R2
DTC114EK	10kohm	10kohm

### 3. FL DISPLAY

#### 15-BT-101GNK (DI: FL601)



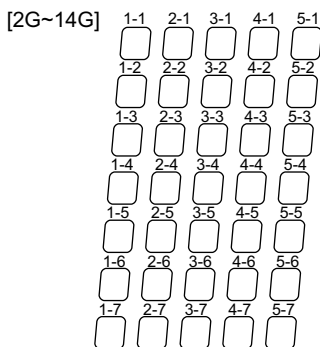
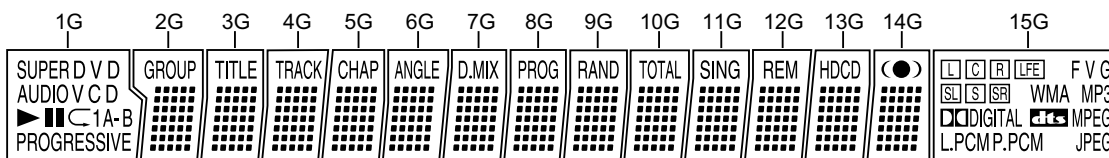
#### PIN CONNECTION

PIN NO.	54	44	44	44	44	44	44	44	33	33	33	33	33	33	22	22	22	22	22	22	11	11	11	11	11	11	11	11	09	87	65	43	21	10	98	76	54	32	10			
CONNECTION	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	F	+

PIN NO.	66	65	55	55	55	55	55	55	55	21	09	87	65	43	21
CONNECTION	F	N	N	N	N	N	N	N	N	X	P	P	P	P	P

- NOTE 1) F-,F+ ----- Filament  
 2) NP ----- No pin  
 7) NC ----- No connection  
 (NC pin should be electrically open on the PC board)  
 4) DL ----- Datum line  
 5) 1G~15G ----- Grid

#### GRID ASSIGNMENT

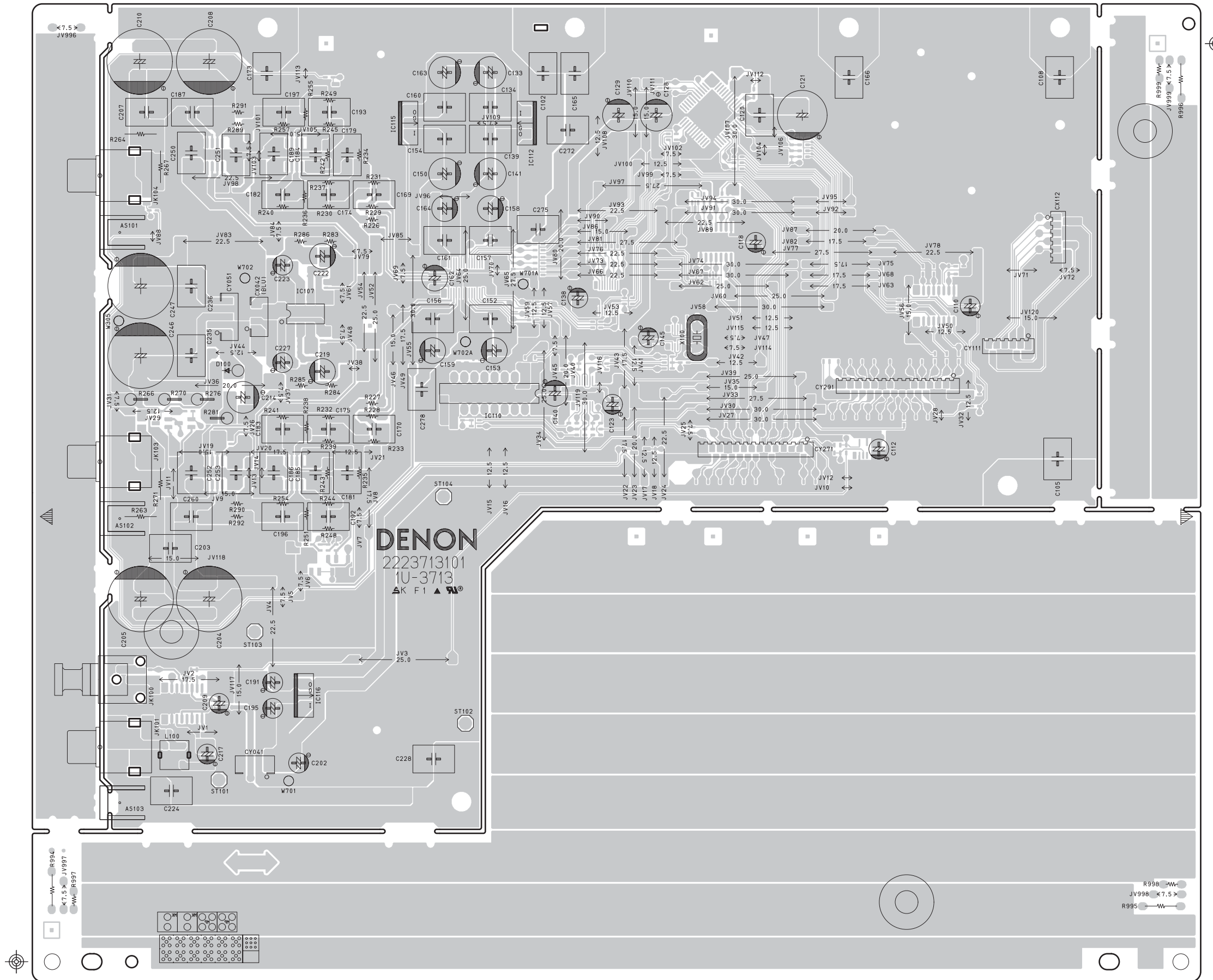


#### ANODE CONNECTION

	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	12G	13G	14G	15G
P1	SUPER	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	1-1	L
P2	DVD	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	2-1	C
P3	AUDIO	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1	LFE
P4	V(CD)	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	4-1	R
P5	(V) CD	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	SL
P6	VIDEO	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	SB
P7	VIDEO	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	S
P8	C	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	3-2	F
P9	A	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	4-2	V
P10	B	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	5-2	G
P11	PROGRESSIVE	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3	WMA
P12		2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	MP3
P13		3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	DIGITAL
P14		4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	4-3	L.PCM
P15		5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	5-3	MP3
P16		1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	1-4	L.PCM
P17		2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	P.PCM
P18		3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	JPEG
P19		4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	4-4	
P20		5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	5-4	
P21		1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	
P22		2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	
P23		3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	
P24		4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	
P25		5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	5-5	
P26		1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	
P27		2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	2-6	
P28		3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	3-6	
P29		4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	4-6	
P30		5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	5-6	
P31		1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	
P32		2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	
P33		3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	
P34		4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	4-7	
P35		5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	
P36		GROUP	TITLE	TRACK	CHAP	ANGLE	D.MIX	PROG	RAND	TOTAL	SING	REM	HDCD	(O)	

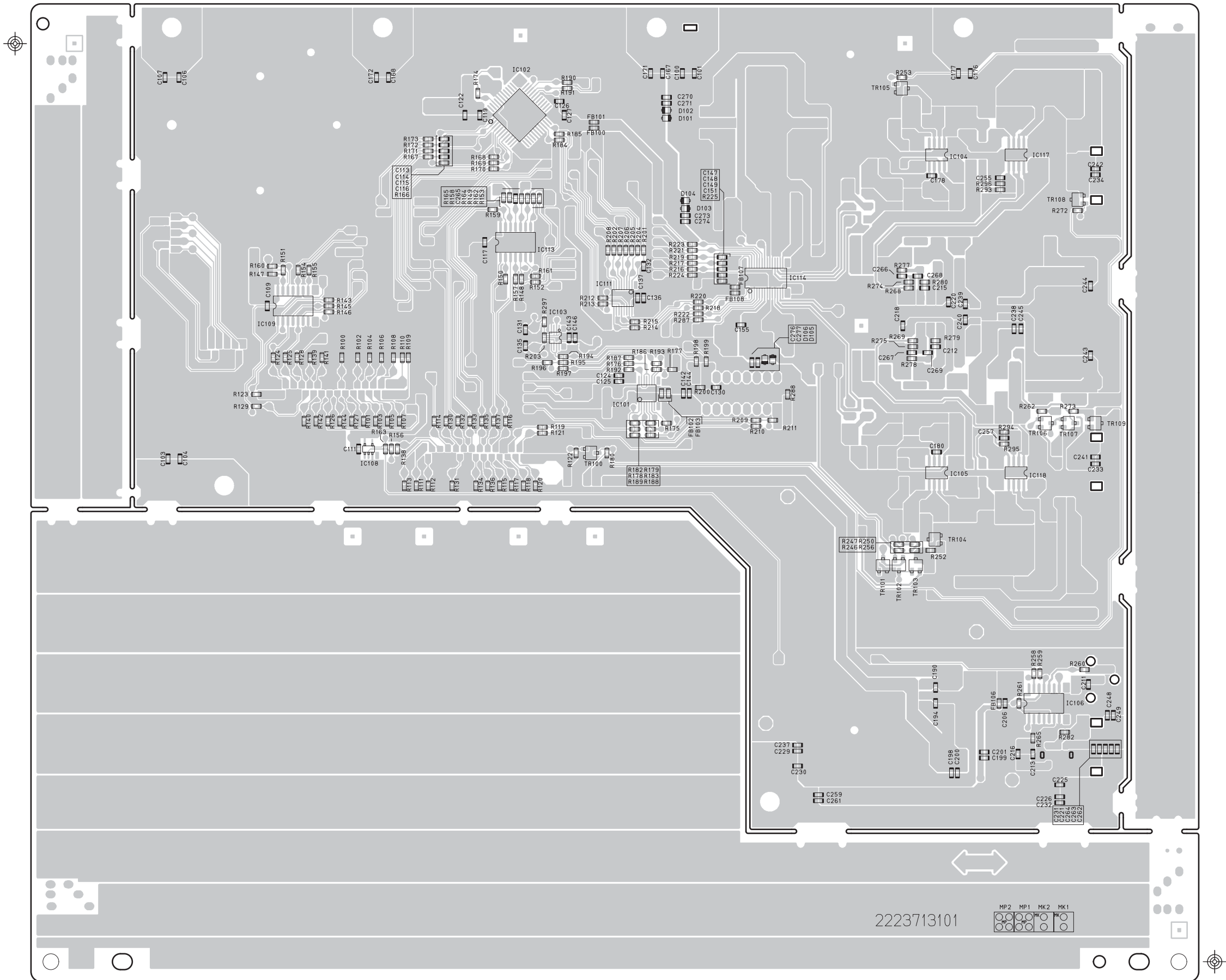


1U-3713 AUDIO P.W.B. UNIT



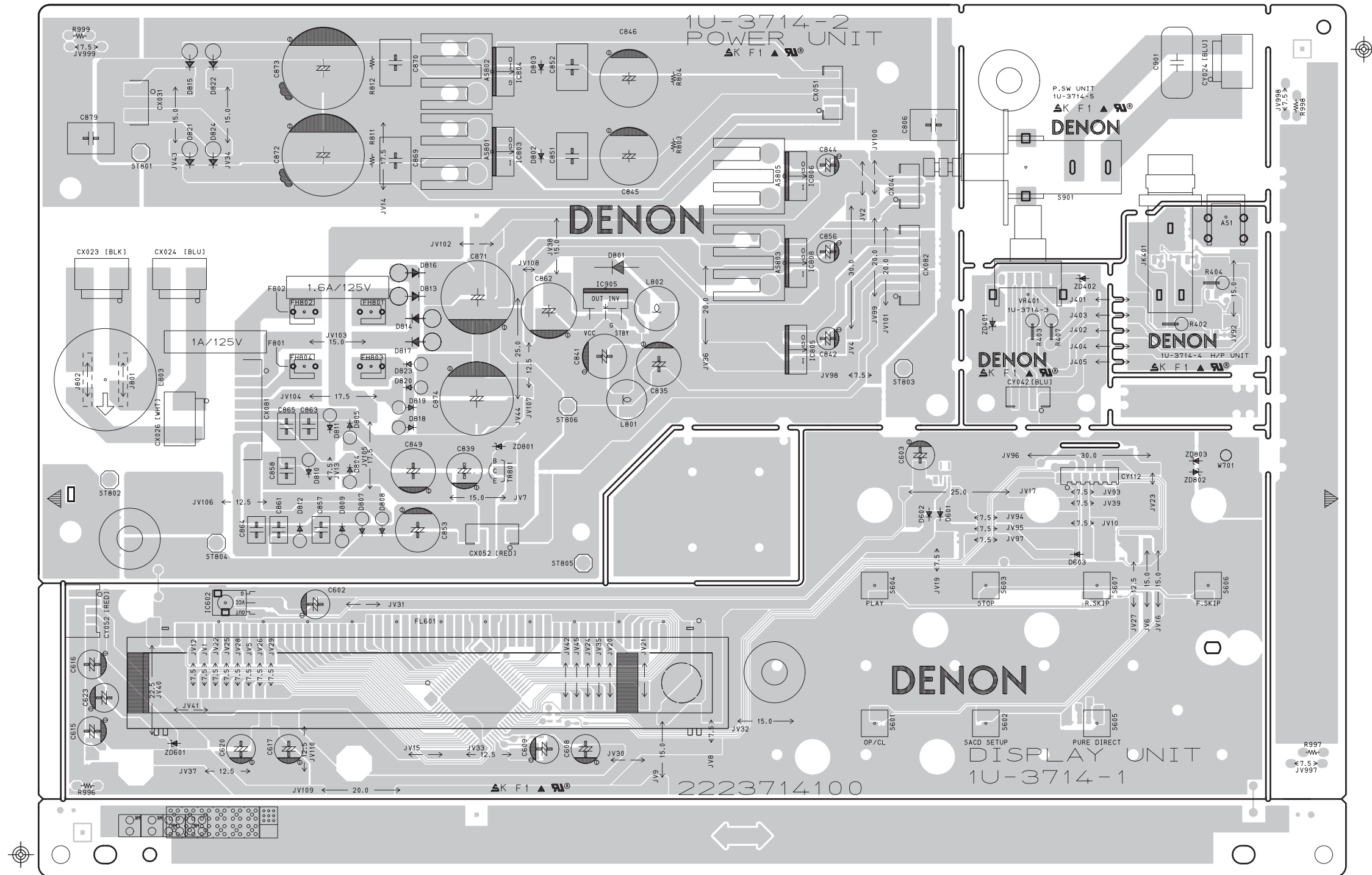
COMPONENT SIDE



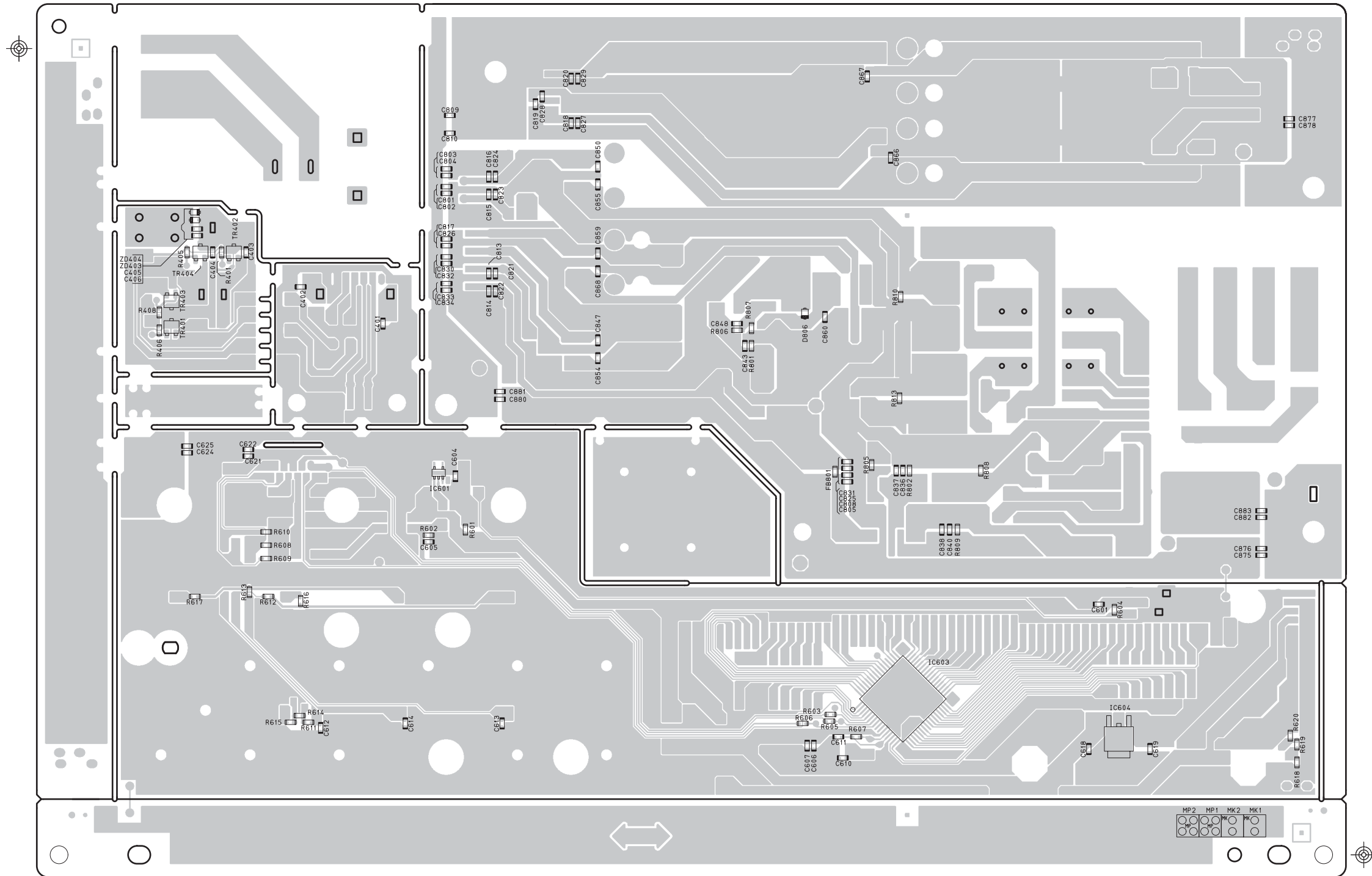


FOIL SIDE

1U-3714 POWER/DISPLAY/HP P.W.B. UNIT



COMPONENT SIDE



FOIL SIDE

# NOTE FOR PARTS LIST

- Part indicated with the mark "nsp" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "★" is not illustrated in the exploded view.
- Not including Carbon Film Resister ±5%, 1/4W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)
- Not including Carbon Chip Resister 1/16W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

**WARNING:**

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

● **Resistors**

Ex.: RN 14K 2E 182 G FR

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

\* **Resistance**

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

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

● **Capacitors**

Ex.: CE 04W 1H 2R2 M BP

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

\* **Capacity (electrolyte only)**

2 2 2 ⇒ 2200μF  
 Indicates number of zeros after effective number.  
 2-digit effective number.  
 • Units: μF.

2 R 2 ⇒ 2.2μF  
 1-digit effective number.  
 2-digit effective number, decimal point indicated by R.  
 • Units: μF.

\* **Capacity (except electrolyte)**

2 2 2 ⇒ 2200pF=0.0022μF  
 (More than 2) — Indicates number of zeros after effective number.  
 2-digit effective number.  
 • Units: pF.

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

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

# 部品表について

1. nsp 印の部品は常時在庫していませんので供給に長時間を要することがあります。場合によっては、供給をお断りすることがあります。
2. 部品を発注する際は特に数字の " 1 " と英字の " I " との区別をはっきり記入してください。
3. 部品番号を表示していない部品は供給できません。
4.  $\Delta$  印の部品は安全上重要な部品です。交換するときは、安全および性能維持のため必ず指定の部品をご使用ください。
5. ★印のついている部品は分解図中には記載していません。
6. カーボン抵抗器 ± 5%、1/4W 型は記載していません。定数は回路図を参照願います。
7. カーボンチップ抵抗器 1/16W 型は記載していません。定数は回路図を参照願います。
8. 部品表の抵抗器、コンデンサの品名記号の読み方は表を参照してください。

● **抵抗器**

例) RN 14K 2E 182 G FR

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

\* **抵抗値**

18 2 ⇒ 1800Ω=1.8kΩ  
 有効数字につづく0の数を表わす。  
 2桁の有効数字を表わす。

1R 2 ⇒ 1.2Ω  
 1桁の有効数字を表わす。  
 2桁の有効数字で小数点はRで表わす。  
 • 単位はΩ

● **コンデンサ**

例) CE 04W 1H 2R2 M BP

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

\* **容量値**

● **電解コンデンサの場合**

22 2 ⇒ 2200μF  
 有効数字につづく0の数を表わす。  
 2桁の有効数字を表わす。  
 • 単位はμF

2R 2 ⇒ 2.2μF  
 1桁の有効数字を表わす。  
 2桁の有効数字で小数点はRで表わす。  
 • 単位はμF

● **電解コンデンサ以外の場合**

22 2 ⇒ 2200pF=0.0022μF  
 有効数字につづく0の数を表わす。  
 (0の数が2以上の場合)  
 2桁の有効数字を表わす。  
 • 単位はpF

22 1 ⇒ 220pF  
 有効数字につづく0の数を表わす。  
 (0の数が0または1の場合)  
 2桁の有効数字を表わす。  
 • 単位はpF

● 耐圧を交流で表示する場合は、耐圧表示の次に「AC」を表示します。

## PARTS LIST OF P.W.B. UNIT

\*本表に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.

\* "nsp" 印の部品は常時在庫していませんので供給に長時間を要することがあります。場合によっては、供給をお断りする場合があります。  
 \* Part indicated with the mark "nsp" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.

### 00D1U-3624C SACD MODULE P.W.B. UNIT ASS'Y

Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
<b>SEMICONDUCTORS GROUP</b>						
IC401		00D 262 3217 003	CXD2753R +C			
IC402		00D 262 2875 006	16M SDRAM(TSOP)-7/8 +C			
IC403		00D 262 3195 905	AD8062-SO8 +C			
IC404		00D 262 3282 009	EMP3128ATC100-10(HARMONY-8LI)			
IC501		00D 262 3219 001	CXD1881AR/BR +C			
IC502		00D 262 3218 002	CXD1885Q +C			
IC503		00D 262 3409 002	MSM51V18165F-50TSK-7			
IC505		00D 263 1109 909	AN8471SA +C			
IC507		00D 262 3201 909	TC7WH08FU-TE12L +REF			
IC508		00D 262 3221 002	FAN8042 +C			
IC701,702		00D 262 2977 946	BA33BC0FP-E2 +REF			
IC703		00D 262 2977 904	BA18BC0FP-E2 +C			
IC704		00D 263 1182 900	NJM2391DL1-26-TE1 +REF			
IC706,707		00D 262 3203 907	TC7SHU04F-TE85L +REF			
IC732		00D 262 3310 900	T14L1024N-12J(TAPE) +REF			
IC733		00D 262 3206 904	S-80843CLNB-B64-T2 +C			
IC739		00D 262 3529 018	M30625FGPGP-DE3112			*
TR511,512		00D 272 0166 905	2SB798(DL/DK)-T1 +C			
D501		00D 276 0778 900	1SS300-TE85L +C			
D701-704		00D 276 0717 903	1SS355 TE-17 +C			
D731		00D 276 0717 903	1SS355 TE-17 +C			
<b>RESISTORS GROUP</b>						
RA401,402		00D 247 9003 908	MNR14=220JE0AB +C			
RA501-504		00D 247 9007 917	MNR14=103JE0 +C			
<b>CAPACITORS GROUP</b>						
C403	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C404		00D 254 4464 964	CE67C0J470MT(MV) +REF			
C405	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C406	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C407	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C408-410		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C411,412	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C413,414	nsp	00D 257 0502 942	CC73CH1H2R0CT +1608			
C415-419	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C420		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C421,422	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C423		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C424-429	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C430		00D 254 4603 958	CE67W1E101MT(P.CAP) +REF			
C432-434	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C436-438	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C441		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			

Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
C442	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C446	nsp	00D 257 0509 929	CK73B1H102KT +1608			
C460	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C461		00D 254 4603 958	CE67W1E101MT(P.CAP) +REF			
C467	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C469	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C501		00D 254 4464 964	CE67C0J470MT(MV) +REF			
C502	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C503	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C504	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C506	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C509		00D 257 2012 906	CS77B1A475MT +C			
C513-516	nsp	00D 257 0509 990	CK73B1H222KT +1608 CAPACITOR			
C517-520	nsp	00D 257 0504 908	CC73CH1H220JT +1608			
C521	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C522,523	nsp	00D 257 0510 934	CK73B1H472KT +1608			
C524	nsp	00D 257 0507 976	CC73CH1H331JT +1608			
C525,526	nsp	00D 257 0511 904	CK73F1H103ZT +1608			
C527		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C528		00D 254 4464 964	CE67C0J470MT(MV) +REF			
C529	nsp	00D 257 0509 929	CK73B1H102KT +1608			
C530		00D 254 4464 964	CE67C0J470MT(MV) +REF			
C531	nsp	00D 257 0509 929	CK73B1H102KT +1608			
C532-535	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C536	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C537	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C538	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C539	nsp	00D 257 0506 993	CC73CH1H151JT +1608			
C540	nsp	00D 257 0509 929	CK73B1H102KT +1608			
C541	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C545		00D 254 4464 906	CE67C0J101MT +REF			
C546,547	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C548	nsp	00D 257 0511 904	CK73F1H103ZT +1608			
C549		00D 254 4465 918	CE67C1C470MT +REF			
C550	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C551	nsp	00D 257 0521 907	CK73B1A105KT +1608			
C554	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C555	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C558		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C559	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C560		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C561	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C562	nsp	00D 257 0516 941	CK73B1E473KT +1608			
C563,564	nsp	00D 257 0511 904	CK73F1H103ZT +1608			
C565		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C566	nsp	00D 257 0511 904	CK73F1H103ZT +1608			
C567		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C568	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C569,570		00D 254 4645 903	CE67C0J221MT(MVA) +REF			
C571		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C572,573	nsp	00D 257 0511 904	CK73F1H103ZT +1608			
C575,576	nsp	00D 257 0511 904	CK73F1H103ZT +1608			
C578	nsp	00D 257 0511 904	CK73F1H103ZT +1608			
C580	nsp	00D 257 0511 904	CK73F1H103ZT +1608			
C581	nsp	00D 257 0516 941	CK73B1E473KT +1608			
C582,583	nsp	00D 257 0511 904	CK73F1H103ZT +1608			

Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
C587	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C588	nsp	00D 257 0507 976	CC73CH1H331JT +1608			
C589	nsp	00D 257 0520 908	CK73B1A154KT +1608			
C590		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C591	nsp	00D 257 0507 976	CC73CH1H331JT +1608			
C592	nsp	00D 257 0508 917	CC73CH1H471JT +1608 CAPACITOR			
C593	nsp	00D 257 0520 908	CK73B1A154KT +1608			
C594	nsp	00D 257 0508 917	CC73CH1H471JT +1608 CAPACITOR			
C595	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C596	nsp	00D 257 0511 904	CK73F1H103ZT +1608			
C597	nsp	00D 257 0506 951	CC73CH1H101JT +1608			
C598,599	nsp	00D 257 0516 909	CK73B1E223KT +1608			
C600-602	nsp	00D 257 0511 904	CK73F1H103ZT +1608			
C604-606	nsp	00D 257 0511 904	CK73F1H103ZT +1608			
C607	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C608,609		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C612	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C615	nsp	00D 257 0509 929	CK73B1H102KT +1608			
C616	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C618		00D 254 4575 905	CE67C1A330MT +REF			
C619,620	nsp	00D 257 0511 904	CK73F1H103ZT +1608			
C621		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C622-625	nsp	00D 257 0511 904	CK73F1H103ZT +1608			
C629,630		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C631,632	nsp	00D 257 0510 950	CK73B1H682KT +1608			
C633	nsp	00D 257 0509 929	CK73B1H102KT +1608			
C634,635	nsp	00D 257 0506 951	CC73CH1H101JT +1608			
C636	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C637	nsp	00D 257 0511 904	CK73F1H103ZT +1608			
C639	nsp	00D 257 0510 950	CK73B1H682KT +1608			
C701-704	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C705		00D 254 4464 906	CE67C0J101MT +REF			
C706	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C707		00D 254 4464 906	CE67C0J101MT +REF			
C708	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C709		00D 259 0015 901	NFM41CC223R2A3L +C			
C710	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C713		00D 254 4464 906	CE67C0J101MT +REF			
C714	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C715		00D 254 4464 906	CE67C0J101MT +REF			
C716	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C721-723		00D 254 4464 906	CE67C0J101MT +REF			
C724	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C725		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C726	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C727		00D 254 4464 906	CE67C0J101MT +REF			
C728	nsp	00D 257 0511 904	CK73F1H103ZT +1608			
C729,730	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C731	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C732		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C735	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C736		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C739	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C740		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C742		00D 259 0015 901	NFM41CC223R2A3L +C			
C743,744	nsp	00D 257 0512 903	CK73F1E104ZT +1608			

Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
C745		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C746	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C748-750		00D 259 0015 901	NFM41CC223R2A3L +C			
C751-753	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C760		00D 254 4464 951	CE67C0J220MT(MV-B) +REF			
C761,762	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C769	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C770,771	nsp	00D 257 0511 904	CK73F1H103ZT +1608			
C772	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
C773	nsp	00D 257 0511 904	CK73F1H103ZT +1608			
C774	nsp	00D 257 0512 903	CK73F1E104ZT +1608			
<b>OTHERS PARTS GROUP</b>						
CX052	nsp	00D 205 0863 952	5P PH CON.BASE(L) +REF			
CX111	nsp	00D 205 1314 905	11P FFC.BASE(9616SAA +REF			
CX112	nsp	00D 205 1257 949	11P FFC BASE (9610SD			
CX151	nsp	00D 205 1224 901	15P FFC BASE(P=1.0)L +REF			
CX241	nsp	00D 205 1152 905	24P FFC BASE(FLZ-SM1 +REF			
CX271	nsp	00D 205 1314 918	27P FFC.BASE(9616SAA +REF			
CX291	nsp	00D 205 1314 921	29P FFC.BASE(9616SAA +REF			
CY082	nsp	00D 205 0863 981	8P PH CON.BASE(L) +REF			
FB501	nsp	00D 235 0130 903	CHIP EMIFIL(11A121) +1608			
FB502-505		00D 235 0160 902	FB M J2125HM330-T +C			
FB506,507		00D 235 0130 903	CHIP EMIFIL(11A121) +1608			
FB703		00D 235 0136 907	FBMJ1608HS280NT +1608			
FB704,705		00D 235 0160 902	FB M J2125HM330-T +C			
FB706		00D 235 0136 907	FBMJ1608HS280NT +1608			
FB707,708		00D 235 0160 902	FB M J2125HM330-T +C			
FB711		00D 235 0136 907	FBMJ1608HS280NT +1608			
X731		00D 399 0887 903	CSTCE16MOV53-R0 +2125			



## 00D1U-3713 AUDIO P.W.B. UNIT ASS'Y

Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
<b>SEMICONDUCTORS GROUP</b>						
IC101		00D 262 3077 900	TC74VHCU04FT +REF			
IC102		00D 262 2531 007	DXP6001AF +C			
IC103		00M HC0 0800 5KY	TC7WHU04FU TRIPLE INVERTER			
IC104,105		00D 262 3555 901	SA5532ADR			
IC106		00D 262 2376 903	TC74HCT7007AF(TP1) +C			
IC107		00D 262 0864 006	UPC4570C +T			
IC108		00D 262 3203 907	TC7SHU04F-TE85L +REF			
IC109		00D 262 2376 903	TC74HCT7007AF(TP1) +C			
IC110		00D 262 3528 006	GAL16V8D-15LPN-DE01			*
IC111		00D 262 3198 902	TC74VHC157FT-EL +REF			
IC112		00D 263 1048 002	BA033T			
IC113		00D 262 2376 903	TC74HCT7007AF(TP1) +C			
IC114		00D 262 3299 908	DSD1791DBR			
IC115		00D 263 0809 006	NJM7805FA(S)			
IC116		00D 263 1048 002	BA033T			
IC117,118		00D 262 3555 901	SA5532ADR			
TR100,101		00D 269 0082 902	DTC114EKT96 +C			
TR102		00D 269 0083 901	DTA114EKT96 +C			
TR103		00D 269 0082 902	DTC114EKT96 +C			
TR104,105		00D 273 0460 905	KTC2875B-RTK +C			
TR106		00D 269 0083 901	DTA114EKT96 +C			
TR107		00D 269 0082 902	DTC114EKT96 +C			
TR108,109		00D 273 0460 905	KTC2875B-RTK +C			
D100		00D 276 0553 905	1SR35-200A(T93X)			
<b>RESISTORS GROUP</b>						
R263,264		00D 241 2472 965	RD14B2E104JT(AMRS)			
R266		00D 244 2043 953	RS14B3A471JNBST(S)			
R267		00D 241 2467 941	RD14B2E681JT(AMRS)			
R270		00D 244 2043 953	RS14B3A471JNBST(S)			
R271		00D 241 2467 941	RD14B2E681JT(AMRS)			
R276		00D 244 2043 953	RS14B3A471JNBST(S)			
R281		00D 244 2055 909	RS14B3A910JNBST(S)			
R994-996		00D 241 2472 965	RD14B2E104JT(AMRS)			
<b>CAPACITORS GROUP</b>						
C102		00D 255 4256 955	CQ93P2A103JT(NH2)			
C103	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C104	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C106	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C107	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C109	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C110		00D 254 4577 945	CE04W1C101MT(RE3)			
C111	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C112	nsp	00D 254 4577 945	CE04W1C101MT(RE3)			
C113-115	nsp	00D 257 0506 951	CC73CH1H101JT +1608			
C116	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C117	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C118		00D 254 4577 945	CE04W1C101MT(RE3)			
C119	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			

	Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
	C120		00D 255 4256 955	CQ93P2A103JT(NH2)			
	C121		00D 254 4580 712	CE04W1H101MC(ROB)			
	C122	nsp	00D 257 0516 954	CK73B1E104KT +1608			
	C123		00D 254 4577 945	CE04W1C101MT(RE3)			
	C124	nsp	00D 257 0516 954	CK73B1E104KT +1608			
	C126	nsp	00D 257 0509 929	CK73B1H102KT +1608			
	C127	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
	C130	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
	C131	nsp	00D 257 0503 909	CC73CH1H8R0DT +1608			
	C133		00D 254 4574 922	CE04W1H101MT(RE3)			
	C134		00D 255 4256 955	CQ93P2A103JT(NH2)			
	C135	nsp	00D 257 0503 909	CC73CH1H8R0DT +1608			
	C136	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
	C137	nsp	00D 257 0509 929	CK73B1H102KT +1608			
	C138		00D 254 4577 945	CE04W1C101MT(RE3)			
	C139		00D 255 4256 955	CQ93P2A103JT(NH2)			
	C140		00D 254 4694 909	CE04W1E101MT(RF0)			
	C141		00D 254 4574 922	CE04W1H101MT(RE3)			
	C142,143	nsp	00D 257 0516 954	CK73B1E104KT +1608			
	C145		00D 254 4577 945	CE04W1C101MT(RE3)			
	C150		00D 254 4693 939	CE04W1H101MT(RF0)			
	C151	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
	C152		00D 255 4256 955	CQ93P2A103JT(NH2)			
	C153		00D 254 4693 926	CE04W1H470MT(RF0)			
	C154		00D 255 4256 955	CQ93P2A103JT(NH2)			
	C155	nsp	00D 257 0516 954	CK73B1E104KT +1608			
	C156,157		00D 255 4256 955	CQ93P2A103JT(NH2)			
	C158,159		00D 254 4693 926	CE04W1H470MT(RF0)			
	C160,161		00D 255 4256 955	CQ93P2A103JT(NH2)			
	C162		00D 254 4693 926	CE04W1H470MT(RF0)			
	C163		00D 254 4693 939	CE04W1H101MT(RF0)			
	C164		00D 254 4693 926	CE04W1H470MT(RF0)			
	C167,168	nsp	00D 257 0516 954	CK73B1E104KT +1608			
	C169,170		00D 255 4254 973	CQ93P2A182JT(NH2)			
	C171,172	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
	C173		00D 255 4256 955	CQ93P2A103JT(NH2)			
	C174,175		00D 255 4255 956	CQ93P2A392JT(NH2)			
	C179		00D 255 4253 932	CQ93P2A471JT(NH2)			
	C181-183		00D 255 4253 932	CQ93P2A471JT(NH2)			
	C184-186		00D 255 4256 955	CQ93P2A103JT(NH2)			
	C187		00D 255 4255 914	CQ93P2A272JT(NH2)			
	C189		00D 255 4256 955	CQ93P2A103JT(NH2)			
	C190	nsp	00D 257 0516 954	CK73B1E104KT +1608			
	C191		00D 254 4577 945	CE04W1C101MT(RE3)			
	C192,193		00D 255 4255 914	CQ93P2A272JT(NH2)			
	C194	nsp	00D 257 0516 954	CK73B1E104KT +1608			
	C195		00D 254 4577 945	CE04W1C101MT(RE3)			
	C196,197		00D 255 4252 975	CQ93P2A271JT(NH2)			
	C199,200	nsp	00D 257 0516 954	CK73B1E104KT +1608			
	C201	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
	C202		00D 254 4577 945	CE04W1C101MT(RE3)			
	C204		00D 209 0293 906	0.6 JUMPER WIRE(JV)			
	C205		00D 254 4558 715	CE04W1H221MC(RFS)			
	C206	nsp	00D 257 0516 954	CK73B1E104KT +1608			
	C208		00D 209 0293 906	0.6 JUMPER WIRE(JV)			
	C209		00D 254 4577 945	CE04W1C101MT(RE3)			

Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
C210		00D 254 4558 715	CE04W1H221MC(RFS)			
C211	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C212	nsp	00D 257 0503 996	CC73CH1H200JT +1608			
C213	nsp	00D 257 0503 925	CC73CH1H100DT +1608			
C214		00D 254 4569 937	CE04W1E221MT(RE3)			
C215	nsp	00D 257 0503 996	CC73CH1H200JT +1608			
C216	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C217		00D 254 4574 906	CE04W1H330MT(RE3)			
C218	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C219		00D 254 4694 909	CE04W1E101MT(RF0)			
C220,221	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C222		00D 254 4694 909	CE04W1E101MT(RF0)			
C223		00D 254 4577 945	CE04W1C101MT(RE3)			
C225	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C226	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C227		00D 254 4577 945	CE04W1C101MT(RE3)			
C229	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C230	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C231	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C232	nsp	00D 257 0509 929	CK73B1H102KT +1608			
C235,236		00D 255 4256 955	CQ93P2A103JT(NH2)			
C237	nsp	00D 257 0509 929	CK73B1H102KT +1608			
C239,240	nsp	00D 257 0506 951	CC73CH1H101JT +1608			
C246,247		00D 254 4558 715	CE04W1H221MC(RFS)			
C248	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C249	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C250-253		00D 255 4256 955	CQ93P2A103JT(NH2)			
C255	nsp	00D 257 0509 990	CK73B1H222KT +1608 CAPACITOR			
C257	nsp	00D 257 0509 990	CK73B1H222KT +1608 CAPACITOR			
C259	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C260		00D 255 4255 914	CQ93P2A272JT(NH2)			
C261	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C262	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C263	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C264	nsp	00D 257 0509 929	CK73B1H102KT +1608			
C265	nsp	00D 257 0522 906	CK73B0J475KT +1608			
C266,267	nsp	00D 257 0506 951	CC73CH1H101JT +1608			
C268,269	nsp	00D 257 0504 924	CC73CH1H270JT +1608			
C277	nsp	00D 257 0516 954	CK73B1E104KT +1608			
<b>OTHERS PARTS GROUP</b>						
AS101-103	nsp	00D 205 1034 007	M3 SCREW TERMINAL			
CX042	nsp	00D 205 0406 047	4P CON BASE(KR-PH)			
CX112	nsp	00D 205 1260 017	11P FFC BASE(9610SA)			
CY041	nsp	00D 205 0343 045	4P CONN.BASE(KR-PH)			
CY051	nsp	00D 205 0343 058	5P CONN.BASE(KR-PH)			
CY111	nsp	00D 205 1260 017	11P FFC BASE(9610SA)			
CY271	nsp	00D 205 1260 033	27P FFC BASE (9610SA)			
CY291	nsp	00D 205 1260 046	29P FFC BASE (9610SA)			
FB100-103	nsp	00D 235 0130 903	CHIP EMIFIL(11A121) +1608			
FB106-108	nsp	00D 235 0130 903	CHIP EMIFIL(11A121) +1608			

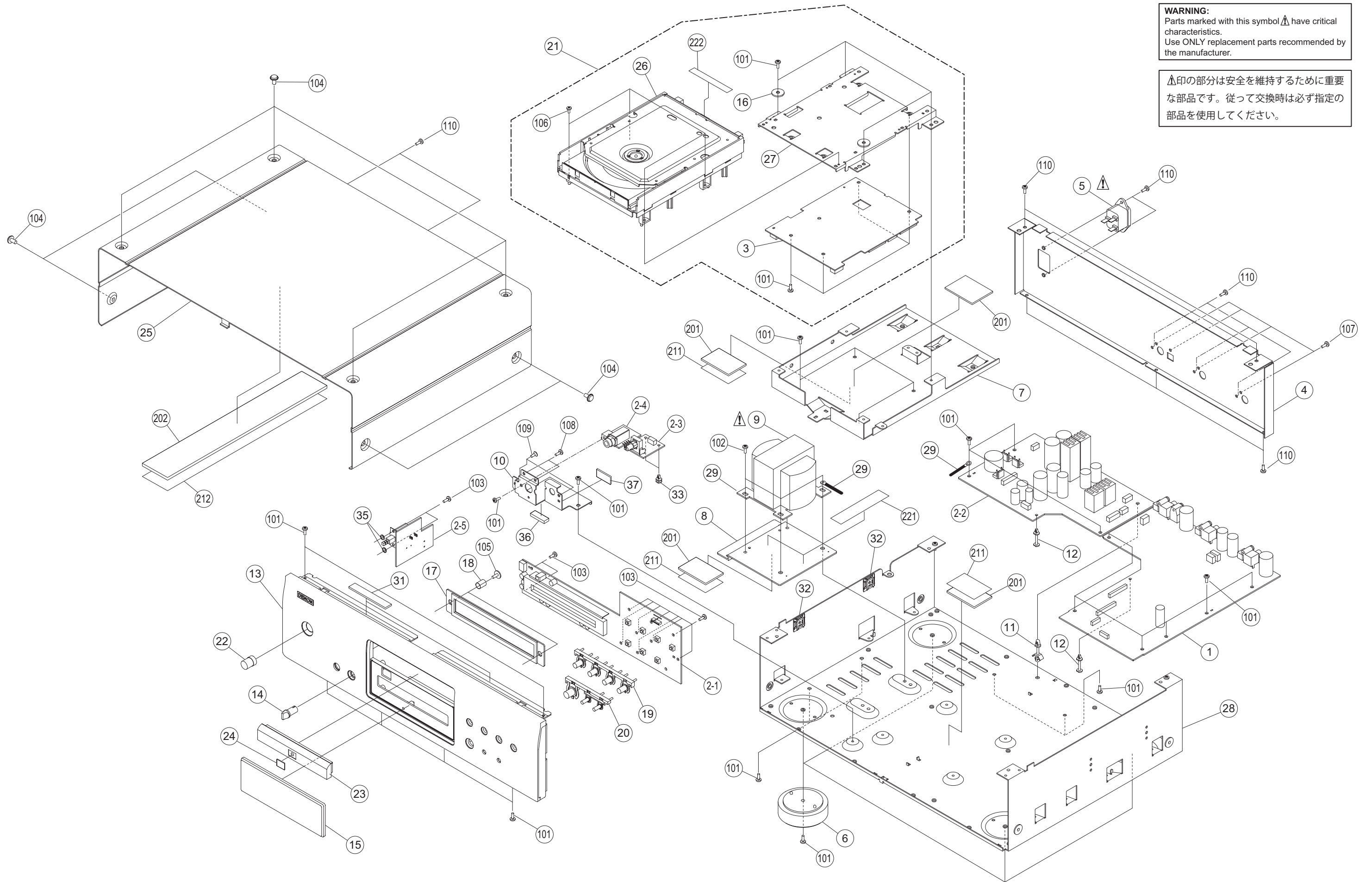
Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
JK100		00D 269 0211 003	GP1FA553TZ			
JK101		00D 204 8417 006	1P PIN JACK(S-GND)			
JK103,104		00D 204 8517 003	1P PIN JACK(S-GND)			
L100		00D 231 8063 009	PULSE TRANS			
ST101-104		-	STYLE PIN			
W702		-	1P SIN-SIN WIRE	W702A		
X100		00D 399 0901 009	XTAL(33.8688/HC-49)			*
		-	0.6 JUMPER WIRE			


## 00D1U-3714 POWER/DISP/HP P.W.B. UNIT ASS'Y


Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
<b>SEMICONDUCTORS GROUP</b>						
IC601		00D 262 3278 903	BD4928G-TR +C			
IC602		00D 499 0306 001	GP1UE271XK			
IC603		00D 262 3228 005	M66005-0001AHP			
IC604		00D 262 2977 946	BA33BC0FP-E2 +REF			
IC803		00D 263 0801 004	NJM7812FA(S)			
IC804		00D 263 0641 002	NJM7912FA			
IC805		00D 263 0810 008	NJM7808FA(S)			
IC806		00D 263 0809 006	NJM7805FA(S)			
IC808		00D 263 1057 006	UPC2412AHF			
IC905		00D 263 1219 006	BD9702T-V5			
TR401-404		00D 273 0460 905	KTC2875B-RTK +C			
TR801		00D 272 0025 907	2SB562(C)TF			
D601-603		00D 276 0723 900	RB721Q-40			
D801		00D 276 0713 703	31DQ06-FC6			
D804,805		00D 276 0704 903	1SR35-400A(T93X)			
D806		00D 276 0717 903	1SS355 TE-17 +C			
D807-812		00D 276 0704 903	1SR35-400A(T93X)			
D813,814		00D 276 0701 003	S2L20U-4002P7.5			
D815		00D 276 0714 003	21DQ06			
D816,817		00D 276 0701 003	S2L20U-4002P7.5			
D818-820		00D 276 0704 903	1SR35-400A(T93X)			
D821,822		00D 276 0714 003	21DQ06			
D823		00D 276 0704 903	1SR35-400A(T93X)			
D824		00D 276 0714 003	21DQ06			
ZD403,404		00D 276 0683 943	UDZS3.6B-TE17			
ZD601		00D 276 0643 954	MTZJ3.9A T77			
ZD801		00D 276 0484 906	HZS33-1TD			
<b>RESISTORS GROUP</b>						
R402-404		00D 241 2376 922	RD14B2E330JNBST			
R407		00D 241 2376 922	RD14B2E330JNBST			
VR401		00D 211 0903 008	V1420Q15FC202			
<b>CAPACITORS GROUP</b>						
C401,402	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C403,404	nsp	00D 257 0506 951	CC73CH1H101JT +1608			
C405	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C406	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C601	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C602,603		00D 254 4299 964	CE04W1C470MT(SRE)			
C604,605	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C606	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C607	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C608		00D 254 4299 964	CE04W1C470MT(SRE)			
C609		00D 254 4196 999	CE04W1H220MT (SRA)			
C610	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C611	nsp	00D 257 0506 951	CC73CH1H101JT +1608			
C612	nsp	00D 257 0516 954	CK73B1E104KT +1608			

Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
C613,614	nsp	00D 257 0509 929	CK73B1H102KT +1608			
C615,616		00D 254 4196 999	CE04W1H220MT (SRA)			
C617		00D 254 4299 964	CE04W1C470MT(SRE)			
C618,619	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C620		00D 254 4299 964	CE04W1C470MT(SRE)			
C621	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C622	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C623		00D 254 4196 999	CE04W1H220MT (SRA)			
C801	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C802	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C803	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C804,805	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C806		00D 255 4256 955	CQ93P2A103JT(NH2)			
C808	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C813-816	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C821-824	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C825	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C830	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C831,832	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C833	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C834	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C835		00D 254 4585 908	CE04W0J471MT(LXV)			
C836-838	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C839		00D 254 4574 922	CE04W1H101MT(RE3)			
C840	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C841		00D 254 4585 908	CE04W0J471MT(LXV)			
C842		00D 254 4577 945	CE04W1C101MT(RE3)			
C843	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C844		00D 254 4577 945	CE04W1C101MT(RE3)			
C845,846		00D 254 4580 709	CE04W1H221MC(ROB)			
C847	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C849		00D 254 4579 723	CE04W1H471MC(RE3)			
C850	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C851,852		00D 255 4256 955	CQ93P2A103JT(NH2)			
C853		00D 254 4539 705	CE04W1C102MC SMG/RE3			
C854,855	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C856		00D 254 4577 945	CE04W1C101MT(RE3)			
C857,858		00D 255 1265 936	CQ93M1H103JT(B)			
C859,860	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C861		00D 255 1265 936	CQ93M1H103JT(B)			
C862		00D 254 4611 704	CE04W1V102MC K30(LXV			
C863-865		00D 255 1265 936	CQ93M1H103JT(B)			
C868	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C869,870		00D 255 4256 955	CQ93P2A103JT(NH2)			
C871		00D 254 4442 708	CE04W1C682MC (SMG)			
C872,873		00D 254 4749 702	CE04W1E472MC(RFO)			
C874		00D 254 4403 734	CE04W1E472MC(SMG)			
C875	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C876	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C879		00D 255 4256 955	CQ93P2A103JT(NH2)			
C880	nsp	00D 257 0516 954	CK73B1E104KT +1608			
C881,882	nsp	00D 257 0501 901	CK73B1H103KT (1608) +1608			
C883	nsp	00D 257 0516 954	CK73B1E104KT +1608			
△ C901		00D 253 8022 707	CK45F2EAC103MC			

Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
<b>OTHERS PARTS GROUP</b>						
AS001	nsp	00D 205 1034 007	M3 SCREW TERMINAL			
CX023	nsp	00D 205 0581 056	2P VH CONNECTOR BASE			
CX024	nsp	00D 205 0581 085	2P VH CONNECTOR BASE			
CX026	nsp	00D 205 0581 001	2P VH CONNECTOR BASE			
CX031	nsp	00D 205 0233 032	3P EH CONNECTOR BASE			
CX041	nsp	00D 205 0343 045	4P CONN.BASE(KR-PH)			
CX051	nsp	00D 205 0343 058	5P CONN.BASE(KR-PH)			
CX052	nsp	00D 205 0321 054	5P CONNE.BASE (RED)			
CX081	nsp	00D 205 0233 087	8P EH CON BASE			
CX082	nsp	00D 205 0343 087	8P CONN.BASE(KR-PH)			
CY024	nsp	00D 205 0581 085	2P VH CONNECTOR BASE			
CY042	nsp	00D 205 0406 047	4P CON BASE(KR-PH)			
CY052	nsp	00D 205 0395 051	5P CONN.BASE(RED)L			
CY112	nsp	00D 205 1260 017	11P FFC BASE(9610SA)			
⚠ F801		00D 206 1092 026	FUSE 25RF 1.0A F002			
⚠ F802		00D 206 1092 000	FUSE 25RF 1.6A F002			
FB801	nsp	00D 235 0130 903	CHIP EMIFIL(11A121) +1608			
FL601	nsp	00D 393 8072 107	FL TUBE(15-BT-101GNK			*
JK401		00D 204 8264 000	H/P JACK (AU)			
L801	nsp	00D 235 0142 920	COIL LHL08TB100KT			
L802	nsp	00D 235 0140 919	COIL LHL10TB470KT			
L803	nsp	00D 239 8019 002	LINE FILTER COIL			
S601-607		00D 212 5604 907	TACT SWITCH-TA(ALPS)			
S901		00D 212 1030 009	POWER SWITCH (TV-5)			
ST801		-	STYLE PIN			
ST803-805		-	STYLE PIN			
AS802		-	RADIATOR			
AS803		-	RADIATOR			
AS805		-	RADIATOR			
	nsp	00D 461 0991 026	RUBBER SHEET	FL601		
	nsp	00D GEN 8020	FUSE LABEL SUB ASSY	F801		
	nsp	00D GEN 8020 -2	FUSE LABEL SUB ASSY	F802		*
		-	0.6 JUMPER WIRE			
	nsp	00D 471 3304 015	3X8 CBS-Z			



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

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



## PARTS LIST OF EXPLODED VIEW

\* 本表に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.

\* "nsp" 印の部品は常時在庫していませんので供給に長時間を要することがあります。場合によっては、供給をお断りする場合があります。

\* Part indicated with the mark "nsp" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.

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

E2 : Europe model

JP : Japan model

	Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
	1	nsp	00D 1U-3713	AUDIO UNIT ASS'Y		1	
	2	nsp	00D 1U-3714	POWER/DISPLAY/HP UNIT ASS'Y	for E2	1	*
	2	nsp	00D 1U-3714A	POWER/DISPLAY/HP UNIT ASS'Y	for JP	1	*
	2-1		-	DISPLAY UNIT			
	2-2		-	POWER UNIT			
	2-3		-	H/P VR UNIT			
	2-4		-	H/P UNIT			
	2-5		-	POWER SWITCH UNIT			
	3	nsp	00D 1U-3624C	SACD MODULE UNIT ASS'Y		1	
	4	nsp	00D 105 1653 104	REAR PANEL(E2)	for E2	1	*
⚠	4	nsp	00D 105 1653 117	REAR PANEL (J)	for JP	1	*
⚠	5		00D 203 3996 008	AC INLET (2P)	for E2	1	
	5		00D 203 3962 003	AC INLET	for JP	1	
	6		00D 104 0173 239	FOOT ASS'Y		4	*
	7	nsp	00D 412 5073 002	MECHA BRACKET BOTTOM		1	
⚠	8	nsp	00D 412 5074 108	TRANS BRACKET		1	*
⚠	9		00D 233 6518 002	POWER TRANS(E2)	for E2	1	*
	9		00D 233 0701 006	POWER TRANS(JP)	for JP	1	*
	10	nsp	00D 412 5264 002	H/P BRACKET		1	*
	11	nsp	00D 409 0052 006	HOLDER (A)		1	
	12	nsp	00D 412 2814 073	CARD SPACER (L=18)		2	
	13		00D 144 2966 109	FRONT PANEL (SP)	for Premium Silver model	1	*
	13		00D 144 2966 112	FRONT PANEL (BK)	for Black model	1	*
	14		00D 112 0811 042	KNOB(FUJI)	for Premium Silver model	1	
	14		00D 112 0811 039	KNOB(FUJI)	for Black model	1	
	15		00D 143 1235 003	WINDOW		1	*
	16	nsp	00D 443 1611 006	ADJUST. COLLAR		2	*
	17	nsp	00D 431 0442 008	BLIND ASS'Y		1	
	18	nsp	00D 463 0958 007	SPRING		2	
	19		00D 113 2037 005	FUNCTION KNOB (SP)	for Premium Silver model	1	*
	19		00D 113 2037 018	FUNCTION KNOB (BK)	for Black model	1	*
	20		00D 113 2036 006	OP/CL/FUNC KNOB (SP)	for Premium Silver model	1	*
	20		00D 113 2036 019	OP/CL/FUNC KNOB (BK)	for Black model	1	*
	21	nsp	FG1500AE	SACD MECHA UNIT		1	
	22		00D 113 1942 010	POWER KNOB ASS'Y	for Premium Silver model	1	
	22		00D 113 1942 023	POWER KNOB ASS'Y	for Black model	1	*
	23		00D 146 2443 000	LOADER PANEL (SP)	for Premium Silver model	1	*
	23		00D 146 2443 013	LOADER PANEL (BK)	for Black model	1	*
	24	nsp	00D 135 0068 005	SACD PLATE		1	
	25		00D GEN 6994	TOP COVER(SP)	for Premium Silver model	1	*
	25		00D GEN 6996	TOP COVER (BK)	for Black model	1	*
	26		00D 337 0127 102	DVD MECHA(TD-5HP-DE)		1	
	27	nsp	00D 412 5041 005	MECHA BRACKET TOP		1	
	28	nsp	00D 411 1371 307	CHASSIS		1	
	29	nsp	00D 445 0048 016	CORD HOLDER (L50)		1	
	31	nsp	00D 461 0501 005	RUBBER SHEET		2	
	32	nsp	00D 445 0074 006	WIRE BAND BASE		2	
	33	nsp	00D 412 2814 031	CARD SPACER(L=4)		2	

	Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
	★ 34	nsp	00D 513 1581 008	SERIAL NO. SHEET		1	
	35	nsp	00D 477 0231 053	4 W (S)		2	
	36	nsp	00D 461 1210 007	EMIGASKET SHSG060100	L=50	1	
	37	nsp	00D 441 2008 007	H/P SPACER		1	*
	★ 38	nsp	00D 513 3826 004	E2 LASER CAUTION	for E2	1	
	★ 46	nsp	00D 204 2661 078	8P PH-PH CON.CORD	CX082-CY082 POWER<->MECHA	1	
	★ 47		00D 009 0252 004	11P FFC (1.0)	CX111-CY111 MECHA<->AUDIO	1	
	★ 48		00D 009 0252 062	27P FFC (1.0)	CX271-CY271 MECHA<->AUDIO	1	
	★ 49		00D 009 0252 075	29P FFC (1.0)	CX291-CY291 MECHA<->AUDIO	1	
<b>SCREWS</b>							
	101	nsp	00D 473 7003 017	3X8 CFTS (S)-B	for E2	37	
	101	nsp	00D 473 7002 021	3X8 CBTS (S)-B	for JP	39	
	102	nsp	00D 473 7007 000	4X8 CBTS (S)-B		4	
	103	nsp	00D 473 7508 017	3X10 CBTS (P)-B		12	
	104	nsp	00D 477 0263 018	3P.SWELLING SCREW	for Premium Silver model	8	
	104	nsp	00D 477 0263 005	3P.SWELLING SCREW	for Black model	8	
	105	nsp	00D 473 8044 017	SPECIAL SCREW		2	
	106	nsp	00D 473 7001 035	2.6X6 CBTS (S)-Z		4	
	107	nsp	00D 477 0064 107	FIXING SCREW		4	
	108	nsp	00D 473 7500 015	3X8 CBTS (P)-Z		2	
	109	nsp	00D 473 7511 004	3X10 CFTS (P)-Z		2	
	110	nsp	00D 473 7015 018	3X8 CBTS (S)-B		10	

**BUTYL TAPE and NITOFロン TAPE**

- 購入単位は1巻となります。使用の際は本体分解図部品表「任意事項表示欄」の指定長さにカットしてください。
- Purchase unit is 1 volume. Please use it, cutting into the specification length of "Remarks" of "PARTS LIST OF EXPLODED VIEW" and a lower table.
- BUTYL TAPE と NITOFロン TAPE はペア使いになります (一部例外あり)。分解図中 BUTYL TAPE の番号と NITOFロン TAPE の番号が並記してある所は、貼り付けた BUTYL TAPE の表面に NITOFロン TAPE を貼ってください。
- BUTYL TAPE and NITOFロン TAPE become pair usage. (There is an exception in part.) The place as which the number of BUTYL TAPE and NITOFロン TAPE is filled in with the exploded view should stick NITOFロン TAPE on the surface of stuck BUTYL TAPE.

**< BUTYL TAPE >**

	Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
	201		-	BUTYL TAPE (W50 T2)	L=70 (10m of 1 volume)	4	
	202		-	BUTYL TAPE (W50 T2)	L=220	1	

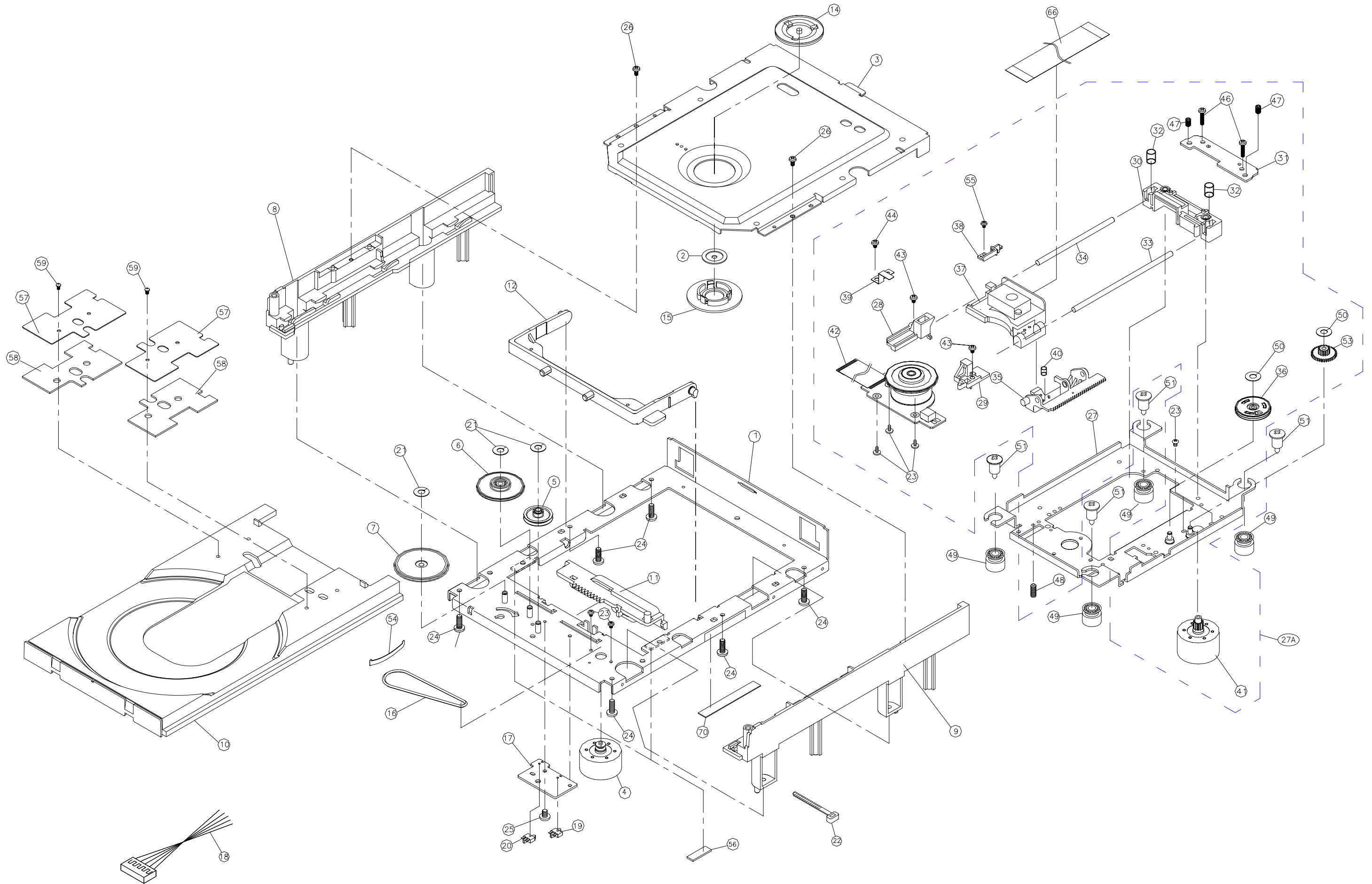
**< NITOFロン TAPE >**

	Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
	211		-	NITOFロン TAPE (W50)	L=70, Sticks on No.201 (30m of 1 volume)	3	
	212		-	NITOFロン TAPE (W50)	L=220, Sticks on No.202	1	

**< CHUKOH TAPE >**

	Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
	221		-	CHUKOH TAPE (W25 T0.13)	L=100 (10m of 1 volimu)	2	
	222		-	CHUKOH TAPE (W13 T0.13)	L=70 (10m of 1 volimu)	1	

# EXPLODED VIEW OF DVD MECHANISM UNIT



# PARTS LIST OF DVD MECHANISM UNIT

## 00D 337 0127 102 DVD MECHA. (TD-5HP-DE)

\* 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.

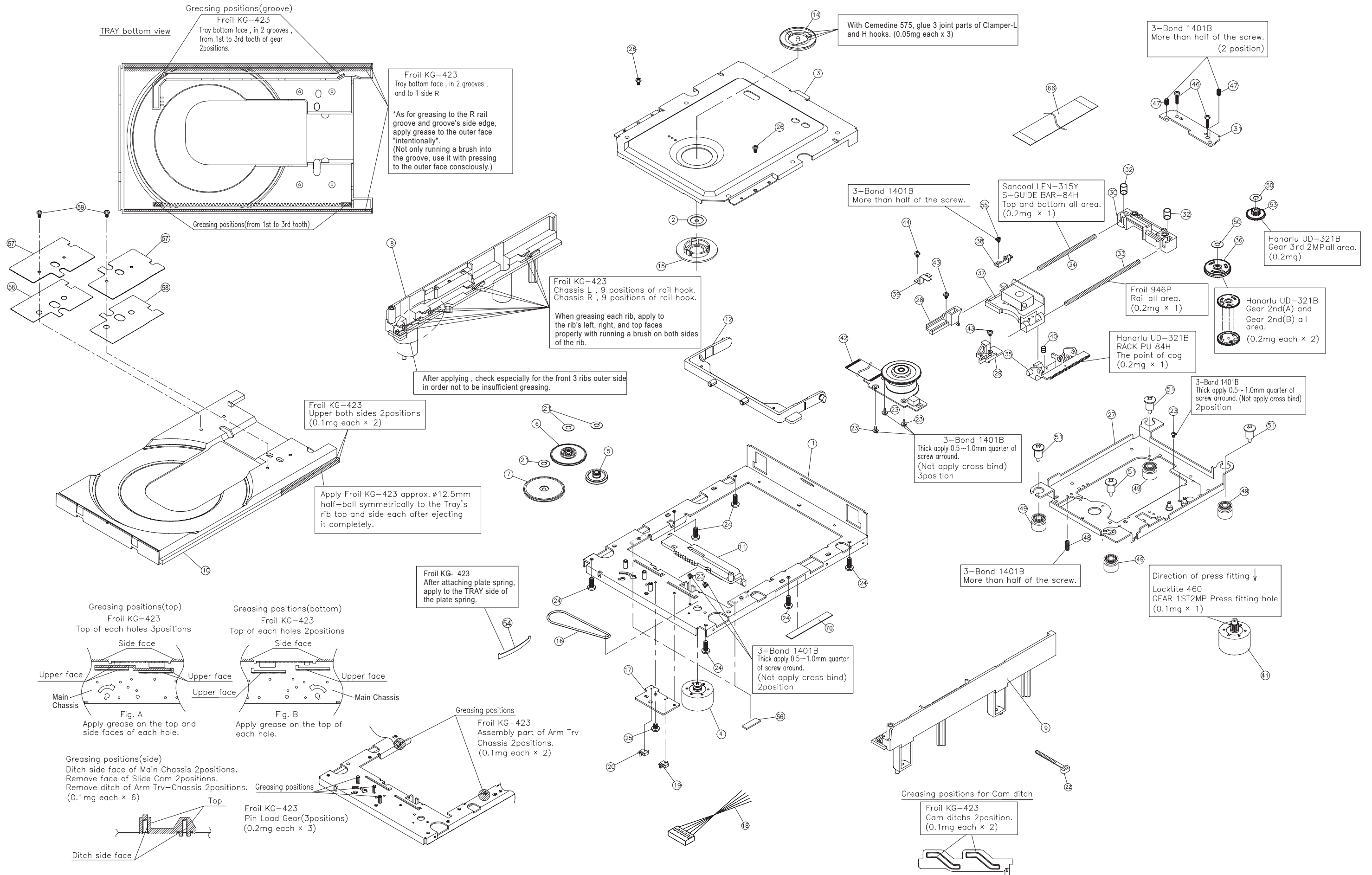
\* "nsp" 印の部品は常時在庫していませんので供給に長時間を要することがあります。場合によっては、供給をお断りする場合があります。

\* Part indicated with the mark "nsp" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.

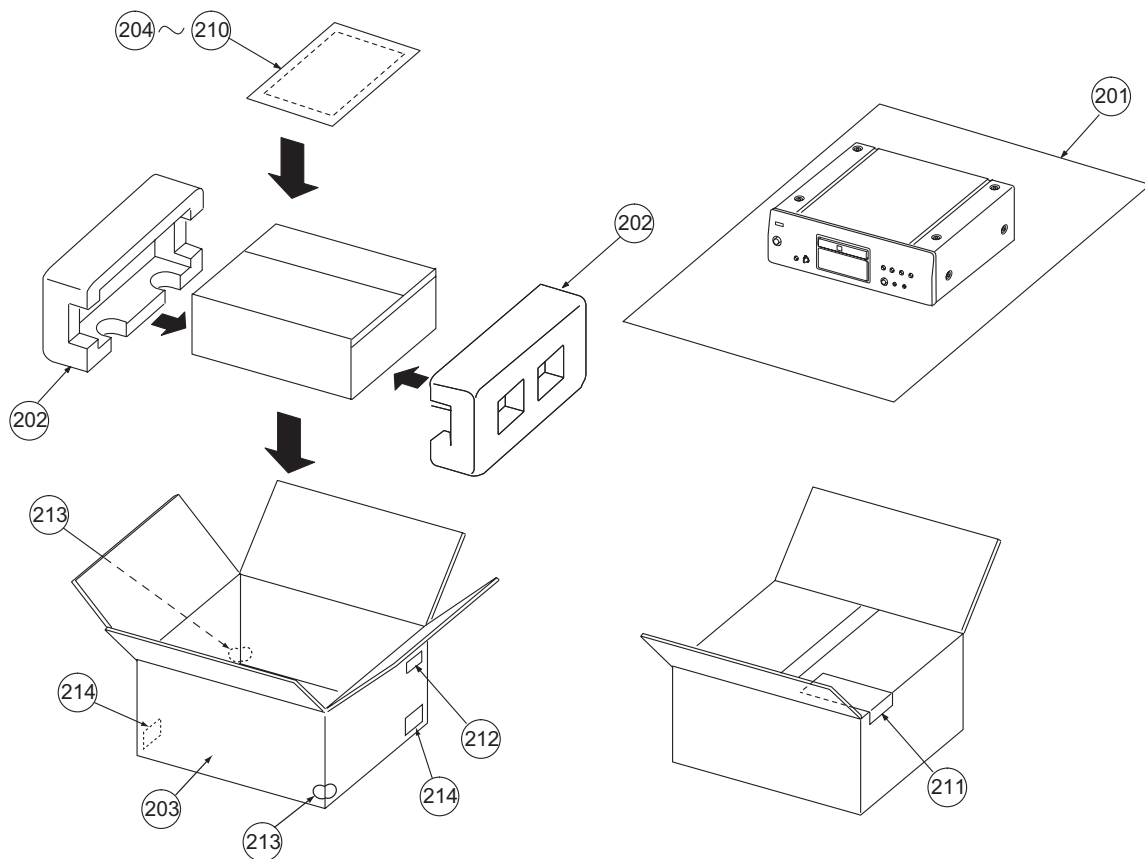
Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
1	nsp	00D 9KC 1A01 7	MAIN CHASSIS ASS'Y		1	
2	nsp	00D 9KA 7P08 5	CLAMPER BRACKET		1	
3	nsp	00D 9KA 2A49 5	GUIDE CLAMP BRACKET		1	*
4		00D 9KC 2A00 3	LOADING MOTOR ASS'Y		1	
5		00D 9KC 2G02 9	LOADING GEAR		1	
6		00D 9KB 9G03 0	LOADING GEAR 2ND		1	
7		00D 9KB 9G03 1	LOADING GEAR 3RD		1	
8	nsp	00D 9KA 2G41 7	SUB CHASSIS-L		1	
9	nsp	00D 9KA 2G41 8	SUB CHASSIS-R		1	
10		00D 9KA 2G53 2	TRAY		1	
11		00D 9KC 1G00 3	SLIDE-CAM		1	
12		00D 9KC 1G00 4	TRAVERSE ARM		1	
14		00D 9KA 7G20 2	CLAMPER H		1	
15		00D 9KA 7G20 3	CLAMPER L		1	
16		00D 9KB 9G01 5	LOADING BELT		1	
17	nsp	00D 9KC 1P01 4	SWITCH P.W.B.		1	
18	nsp	00D 9KC 2G04 3	5P PH WIRE		1	
19		00D 9KS 01W2 04	SWITCH ESE22MH21		1	
20		00D 9KS 01W2 05	SWITCH ESE22MH23		1	
21	nsp	00D 9KP 26C6 25	POLY.SLIT WASHER 2.6X6X0.25C		3	
22	nsp	00D 445 8004 007	WIRE CLAMPER		1	
23	nsp	00D 9KS 17N0 22	PRECISION SCREW 1.7X2.2 TYPE3		2	
24	nsp	00D 9KB 26BK 06	SCREW 2.6X6 CBTS(B)-Z		6	
25	nsp	00D 9KS 20TK 33	PRECISION SCREW 2X3(S) TYPE3		1	
26	nsp	00D 9KB 20PK 06	SCREW 2X6 CBTS(P)-Z		2	
27A		00D 9KC 2A11 1C	TRAVERSE MECHA (FEED) ASS'Y	Assembled part	1	
23		-	PRECISION SCREW 1.7X2.2 TYPE3		3	
27		-	PU CHASSIS ASS'Y		1	
28		-	SHAFT HOLDER L		1	
29		-	SHAFT HOLDER R		1	
30		-	SHAFT TILT BASE		1	
31		-	SHAFT TILT PLATE		1	
32		-	TILT SPRING		2	
33		-	MAIN SHAFT		1	
34		-	SUB SHAFT		1	
35		-	PU RACK GEAR		1	
37		-	PICK UP HOP-1200R		1	
38		-	PU SPRING		1	
39		-	SHAFT SPRING		1	
40		-	RACK GEAR SPRING		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	
55		-	PRECISION SCREW 1.7X5 TYPE3		1	
23		-	PRECISION SCREW 1.7X2.2 TYPE3		2	
36		-	FEED GEAR 2ND ASS'Y		1	

	Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
	41		-	FEED MOTOR ASS'Y		1	
	50		-	POLY.SLIT WASHER 2.1X4X0.25C		2	
	53		-	FEED GEAR 3RD		1	
	49		00D 9KA 2G64 3	DAMPER		4	*
	51	nsp	00D 9KC 1H01 1	DAMPER SCREW		4	
	54	nsp	00D 9KB 7P02 4	TRAY-SPRING-VXF		1	
	56	nsp	00D 9KC 1G04 2	RUBBER CUSHION		2	
	57	nsp	00D 9KC 2P03 1	PLATE-RE-2HPC		2	
	58	nsp	00D 9KC 2P03 2	WF-PLATE-RE-2HPC		2	
	59	nsp	00D 9KS 20P1 04	PRECISION SCREW 2X4(P) TYPE1		2	
	66		00D 009 0186 015	24P FFC CABLE L=70		1	*
	70		-	ACETATE TAPE W10X45		1	

# POINTS OF GREASING



## PACKING VIEW



## PARTS LIST OF PACKING & ACCESSORIES

\* 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.

\* "nsp" 印の部品は常時在庫していませんので供給に長時間を要することがあります。場合によっては、供給をお断りする場合があります。

\* Part indicated with the mark "nsp" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.

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

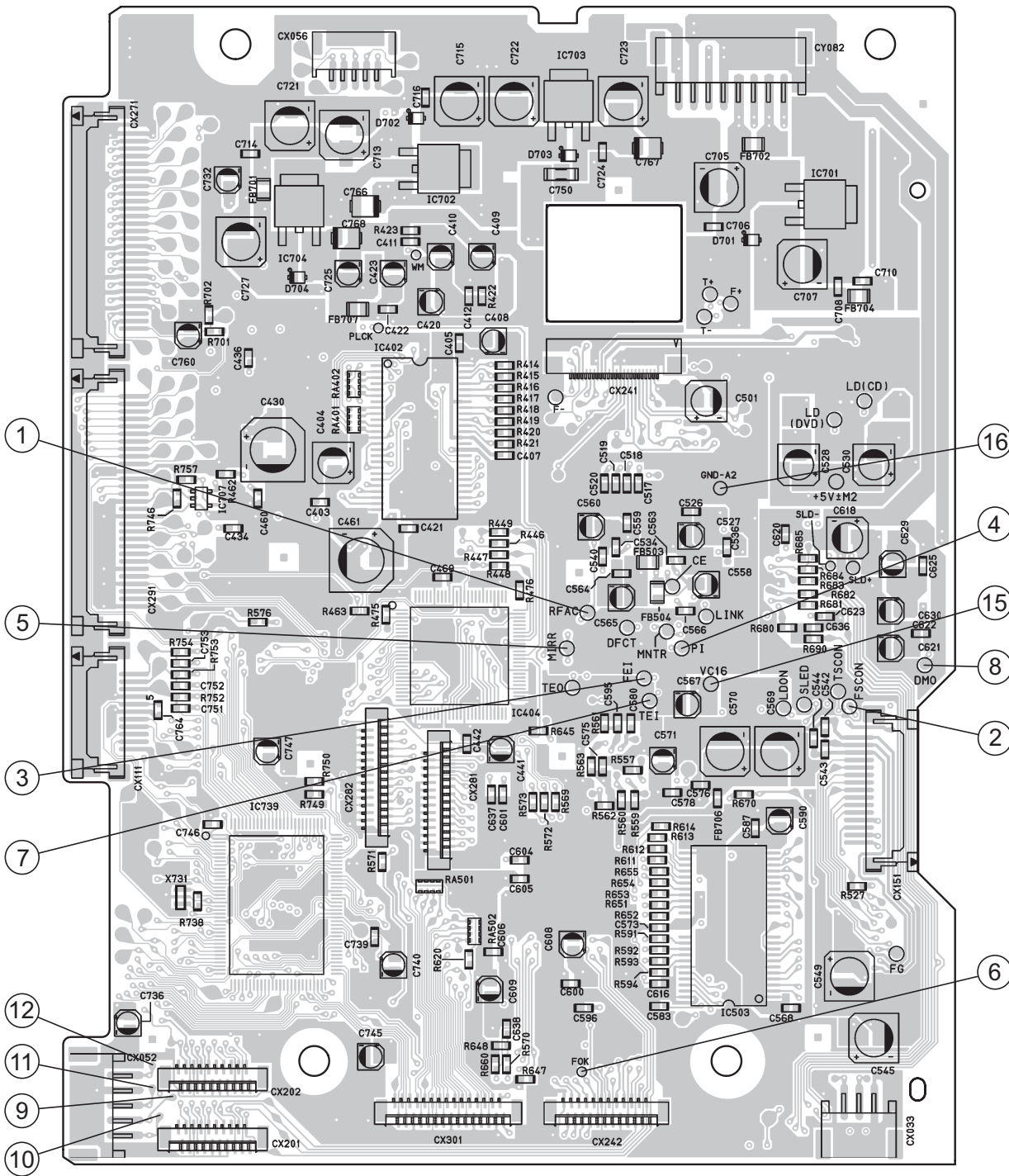
E2 : Europe model

JP : Japan model

Ref. No.	nsp	Part No.	Part Name	Remarks	Q'ty	New
201	nsp	00D 505 0131 076	CABINET COVER		1	
202	nsp	00D 503 1269 103	CUSHION		2	
203	nsp	00D 501 2053 066	CARTON CASE	for E2	1	*
203	nsp	00D 201 2053 079	CARTON CASE	for JP	1	*
204	nsp	00D 505 0038 030	POLY COVER		1	
205		00D 511 4376 007	INST.MANUAL(E2)	for E2	1	*
205		00D 511 4390 009	INST.MANUAL(J)	for JP	1	*
206	nsp	00D 515 0921 500	S.S.LIST(EX)	for E2	1	
206	nsp	00D 515 0918 403	SERVICE STATION LIST	for JP	1	
207		00D 399 1027 005	RC-1020		1	*
208		-	BATTERY (SUM-3) ASS		1	
209		00D 203 2360 004	2P PIN CORD		1	
210		00D 206 2215 006	AC CORD-E1/10A/INLET	for E2	1	
210		00D 206 2150 103	AC CORD WITH CONN.	for JP	1	
211	nsp	00D 515 0919 208	GUARANTEE CARD(S)		1	
212		-	BAR CODE LABEL ASS'Y		1	
213	nsp	00D 513 9111 030	COLOR LABEL	for Premium Silver model	2	
214		-	CONT.CARD(L)SUB ASSY	for E2	1	



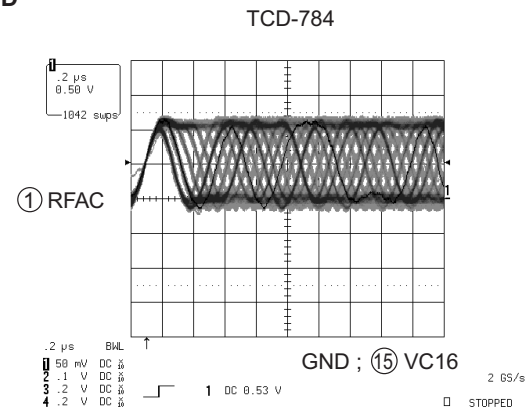
# WAVEFORMS



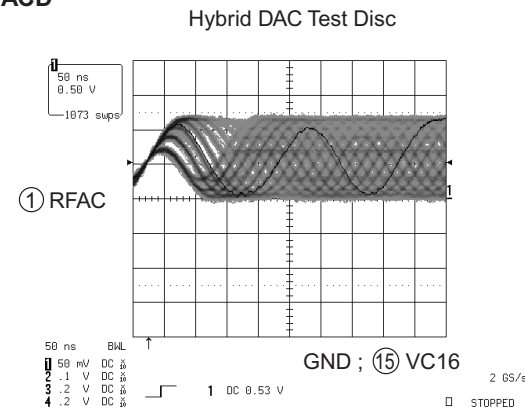
1U-3624 SACD MODULE P.W.B. unit component side

1. PLAY

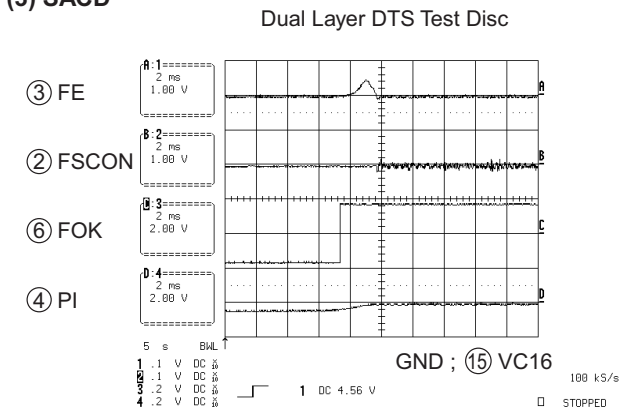
(1) CD



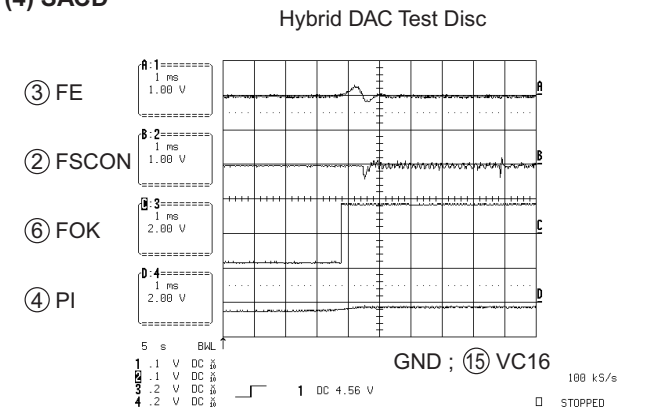
(2) SACD



(3) SACD

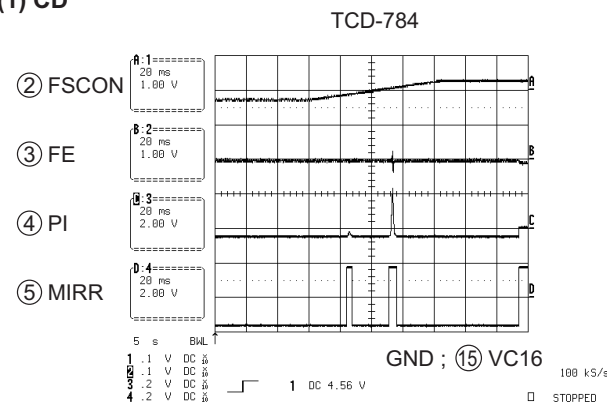


(4) SACD

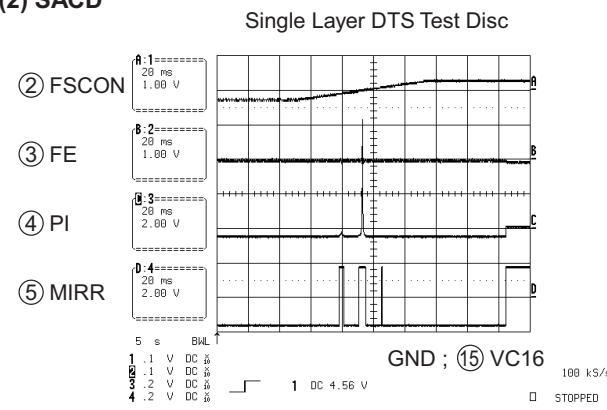


2. DISC detection

(1) CD

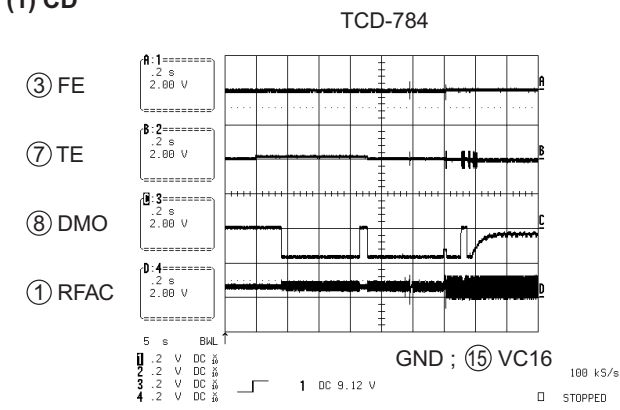


(2) SACD

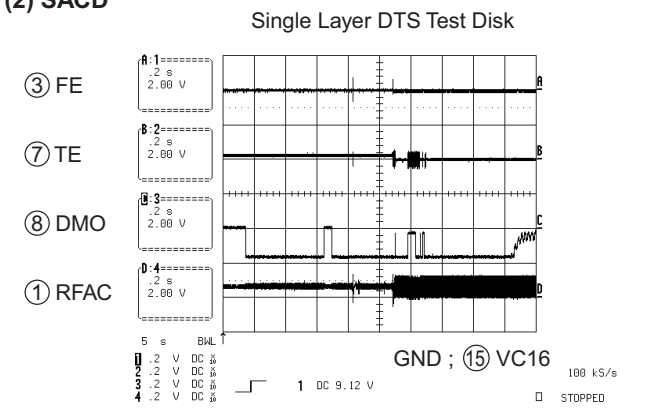


4. PLAY start

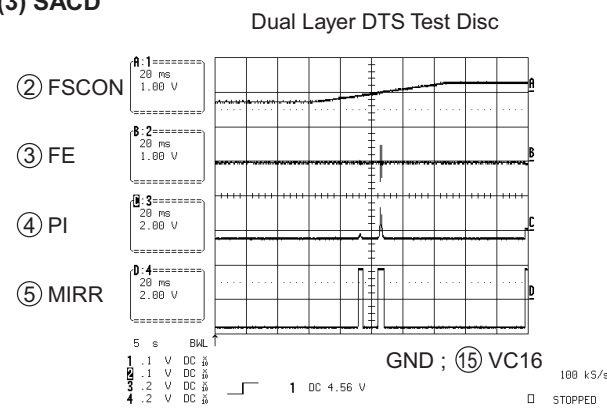
(1) CD



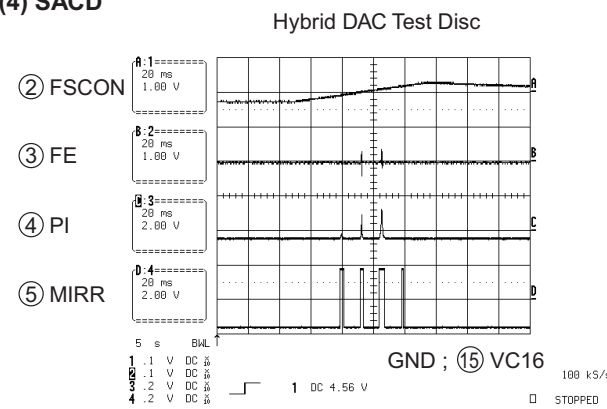
(2) SACD



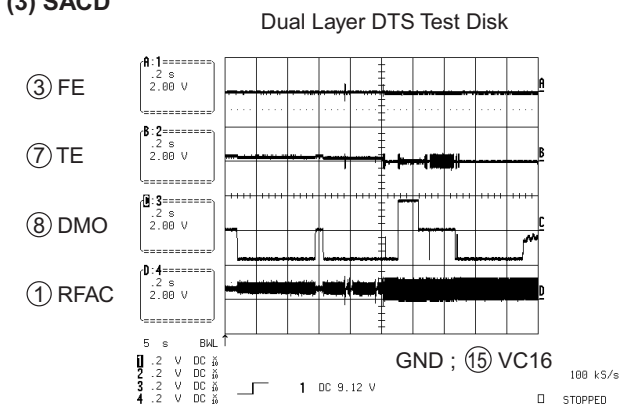
(3) SACD



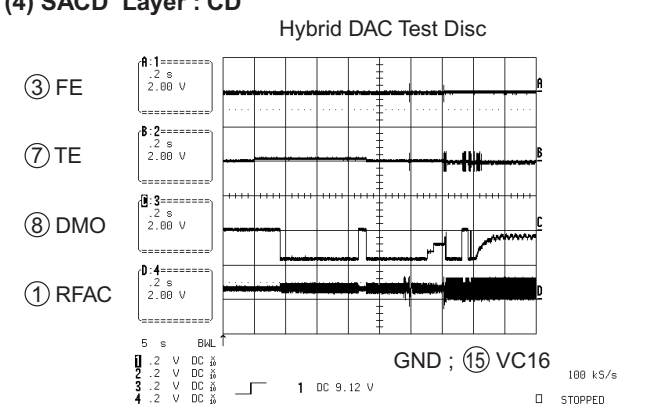
(4) SACD



(3) SACD

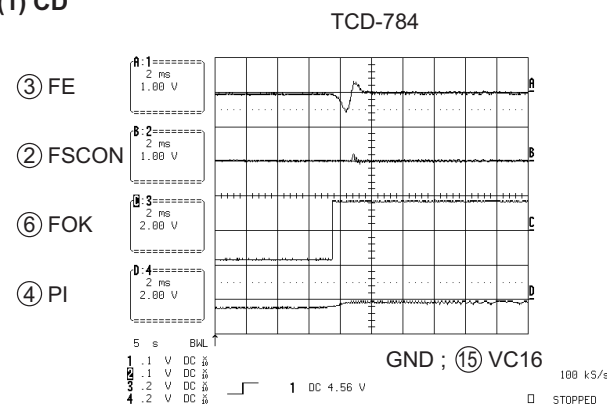


(4) SACD Layer : CD

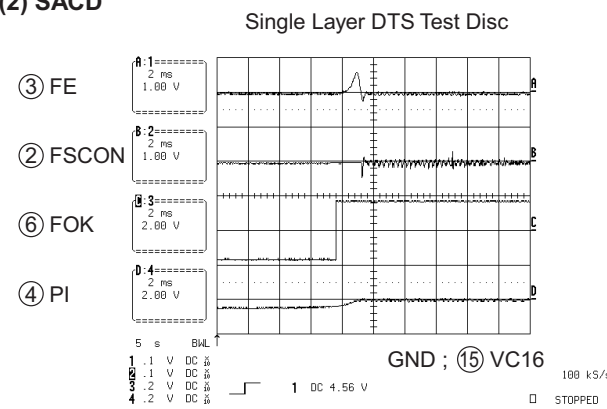


3. FOCUS inject

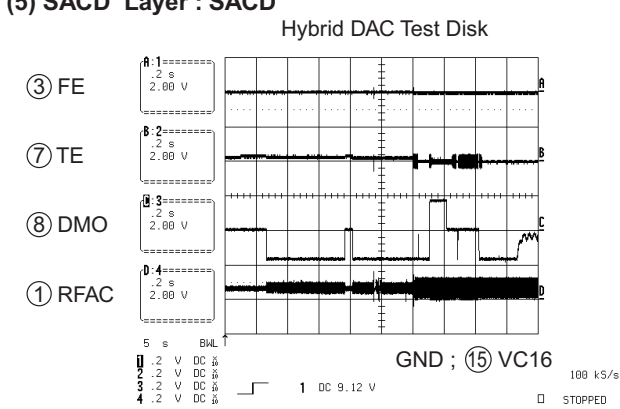
(1) CD



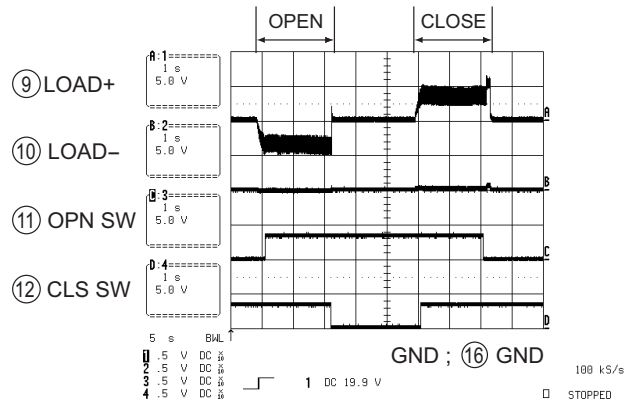
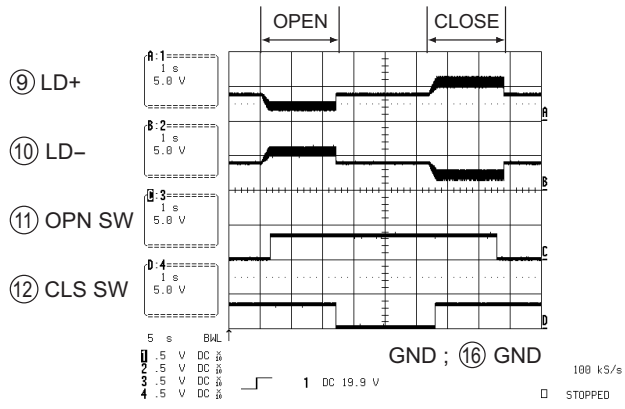
(2) SACD



(5) SACD Layer : SACD



### 5. LOADER open-close



## NOTE FOR SCHEMATIC DIAGRAM

### WARNING:

Parts marked with this symbol  $\triangle$  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 milliamps, 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.

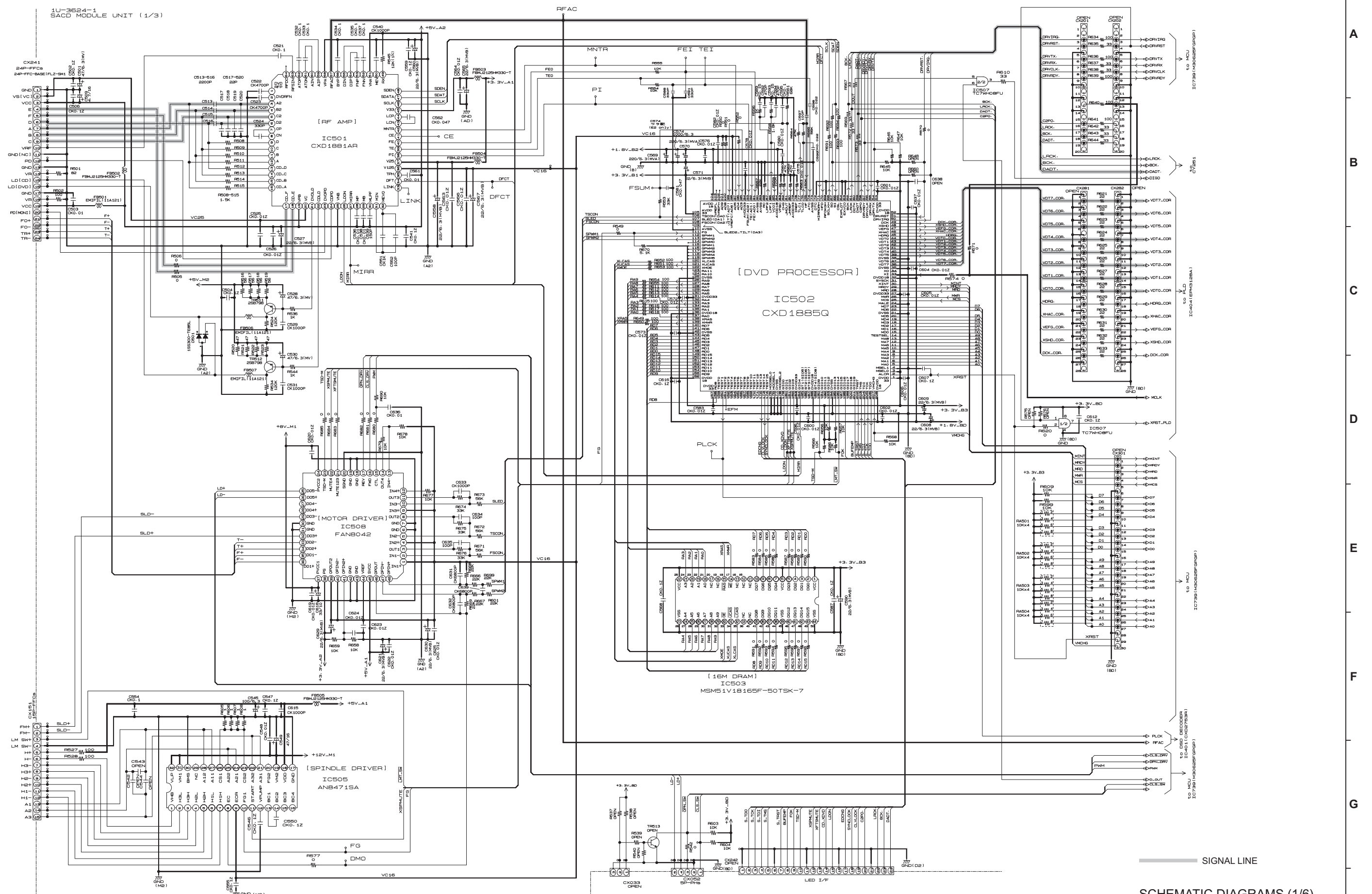
## 配線図について

$\triangle$ 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)

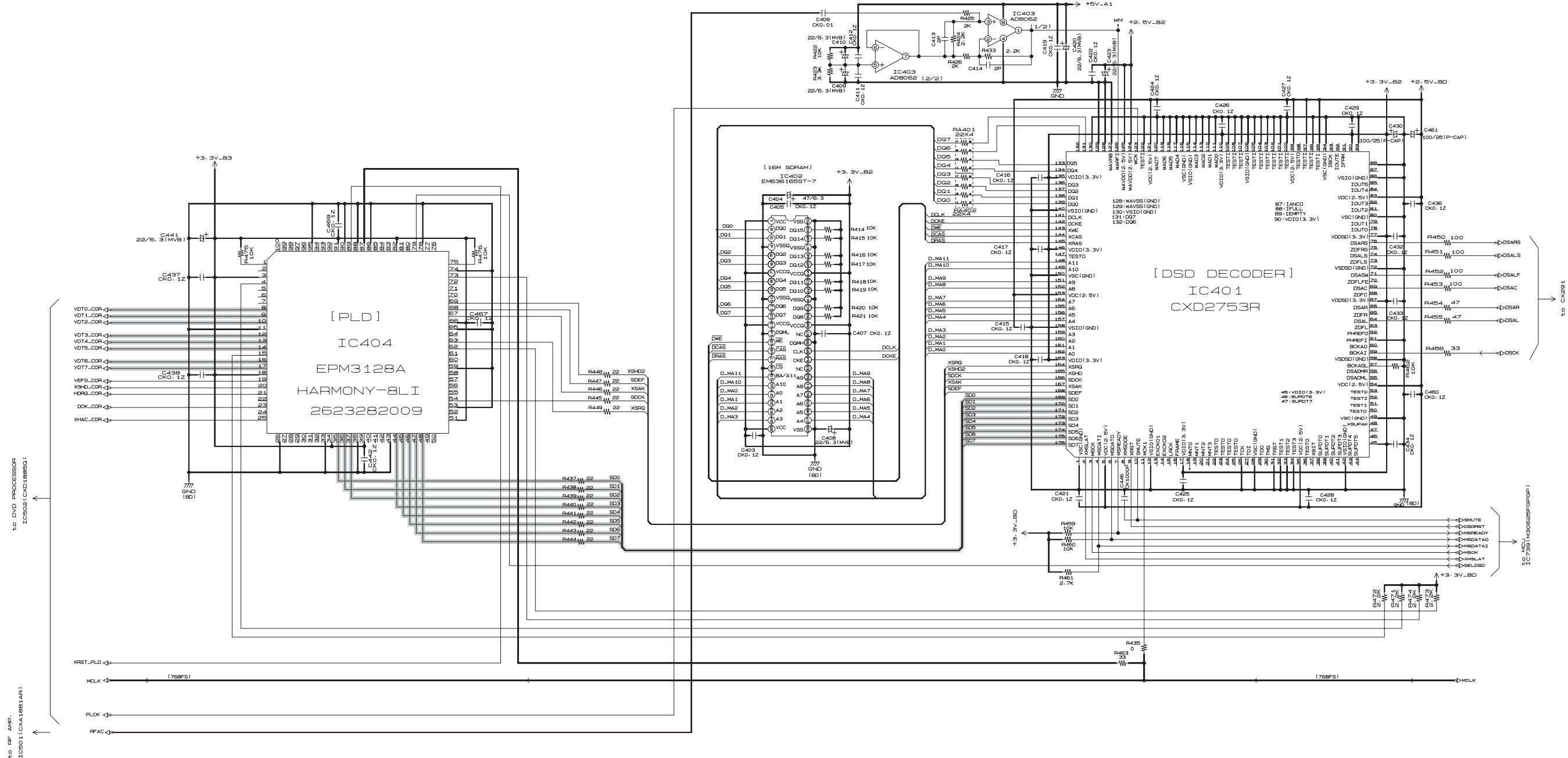
- (1) 指定なき抵抗値は  $\Omega$ 、k は k  $\Omega$ 、M は M  $\Omega$  を示す。
- (2) 指定なきコンデンサーの値は  $\mu\text{F}$ 、p は pF を示す。
- (3) 各部の電圧は無信号の値を示す。
- (4) この配線図は基本配線図です。改良等のため変更することがありますのでご了承ください。

1 2 3 4 5 6 7 8 9 10 11



SCHEMATIC DIAGRAMS (1/6)  
1U-3624C SACD MODULE UNIT (1/3)

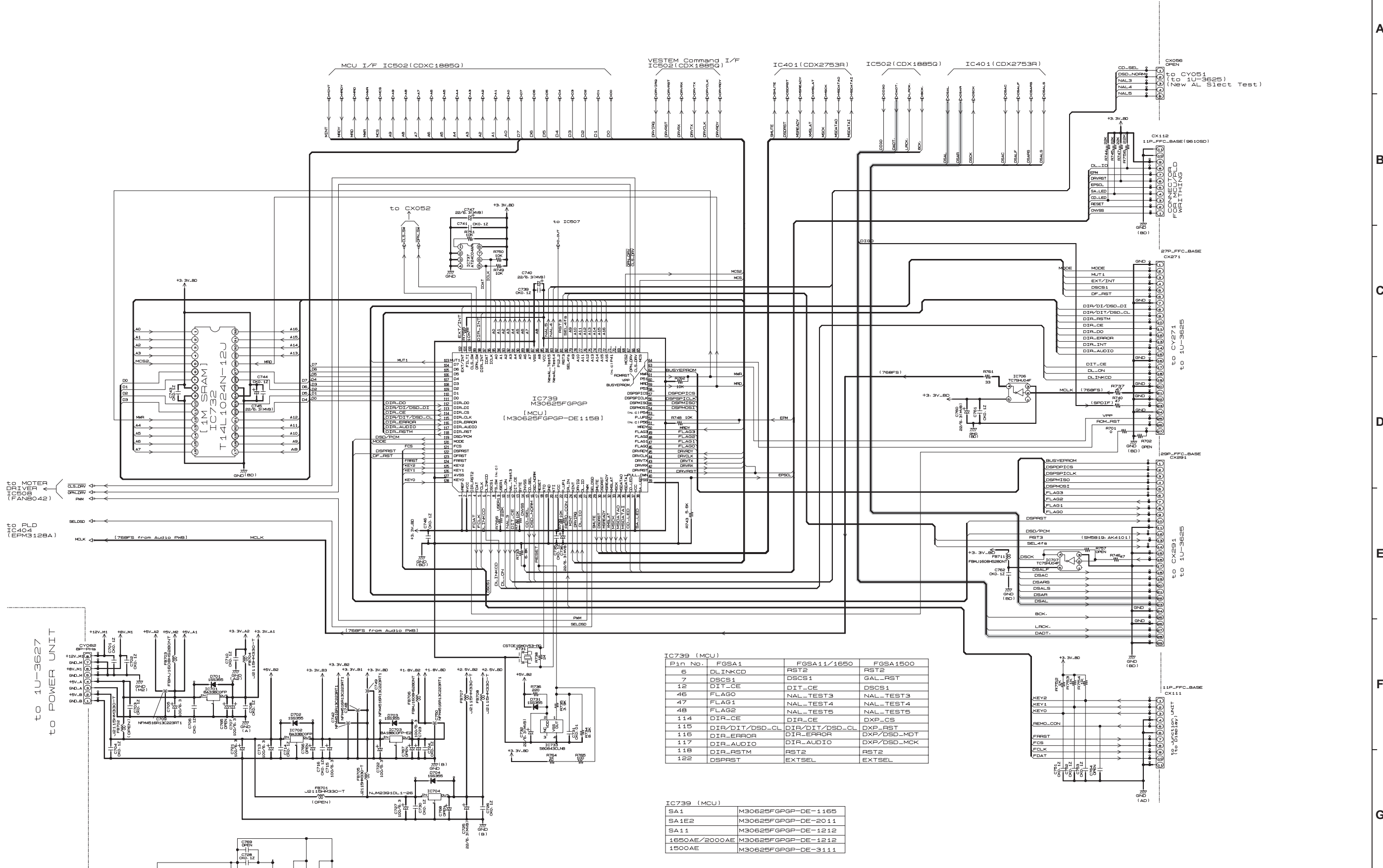
1 2 3 4 5 6 7 8 9 10 11



1U-3624-1 SACD MODULE UNIT (2/3)

— SIGNAL LINE

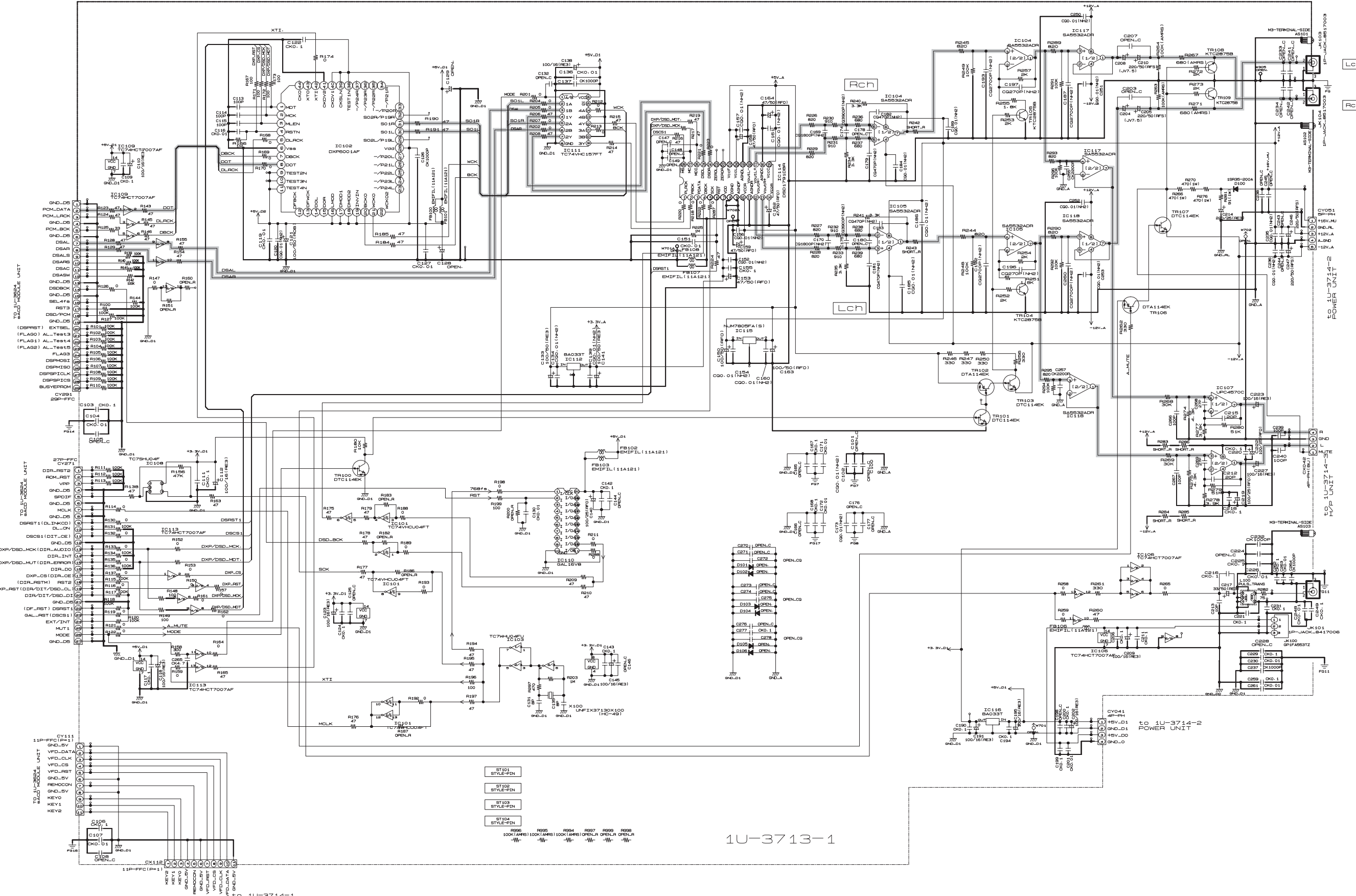
1 2 3 4 5 6 7 8 9 10 11



1U-3624-1 SACD MODULE UNIT (3/3)

— SIGNAL LINE

1 2 3 4 5 6 7 8 9 10 11



1U-3713-1

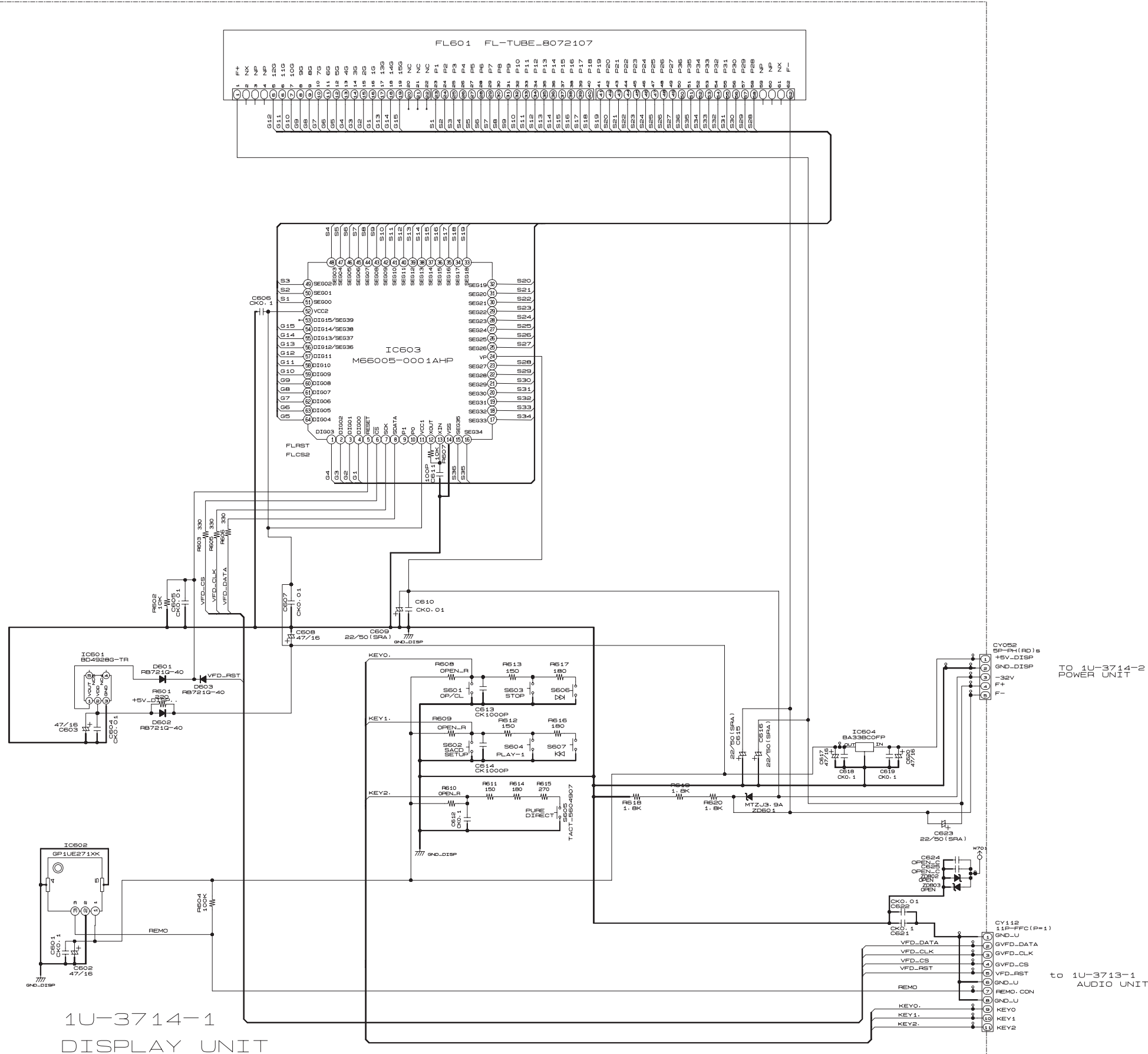
— SIGNAL LINE

SCHEMATIC DIAGRAMS (4/6)  
1U-3713 AUDIO UNIT

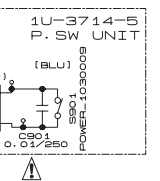


1 2 3 4 5 6 7 8 9 10 11

A  
B  
C  
D  
E  
F  
G  
H

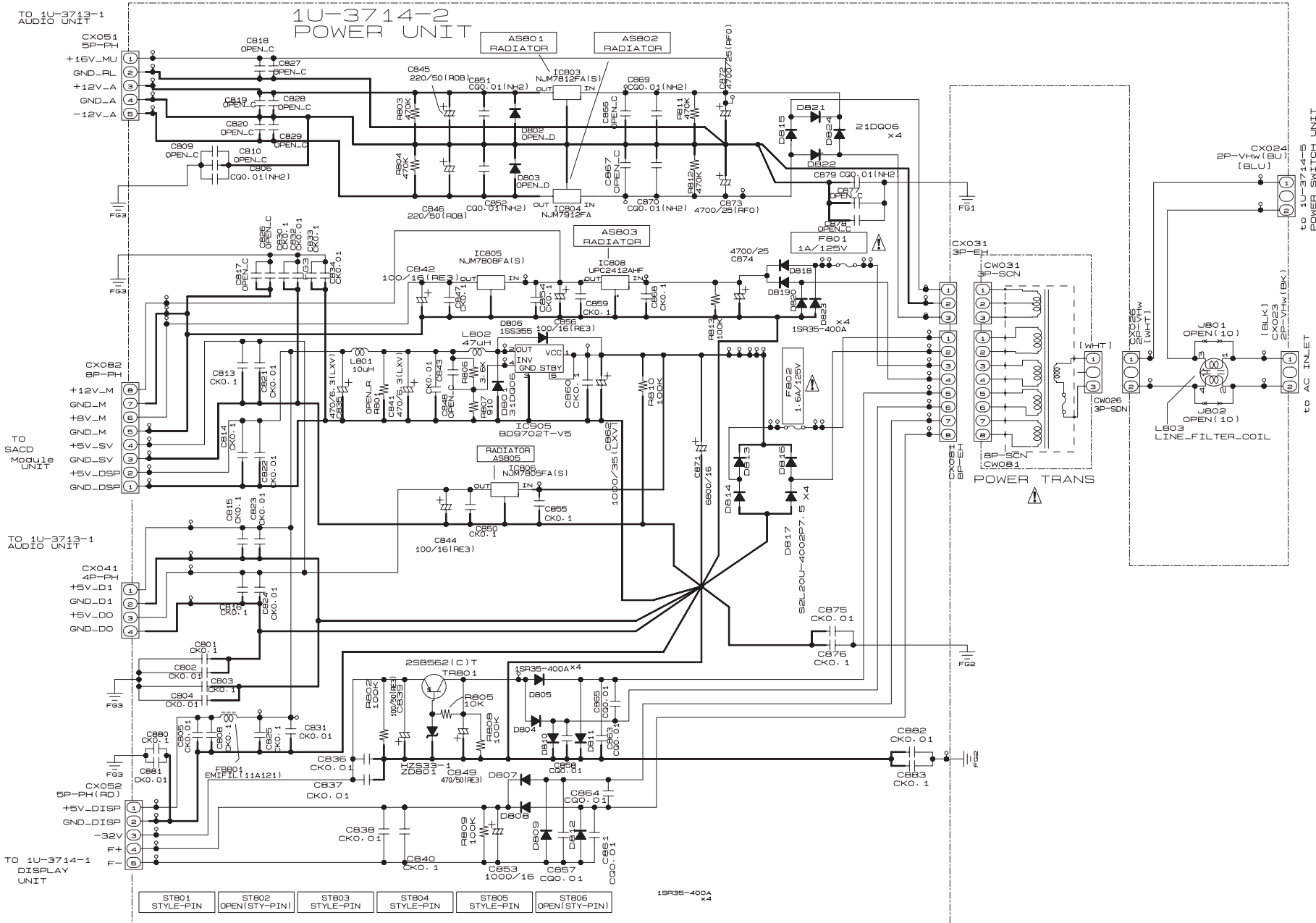
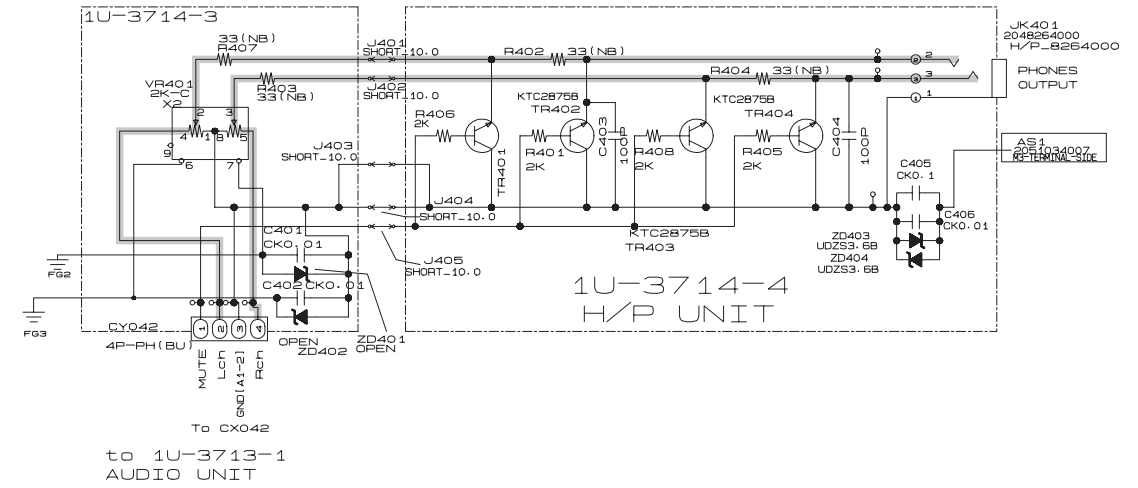


1U-3714-1  
DISPLAY UNIT



SCHEMATIC DIAGRAMS (5/6)  
1U-3714-1 DISPLAY UNIT  
1U-3714-5 P.S.W UNIT

1 2 3 4 5 6 7 8 9 10 11



— SIGNAL LINE

SCHEMATIC DIAGRAMS (6/6)  
1U-3714-2 POWER UNIT  
1U-3714-4 H/P UNIT

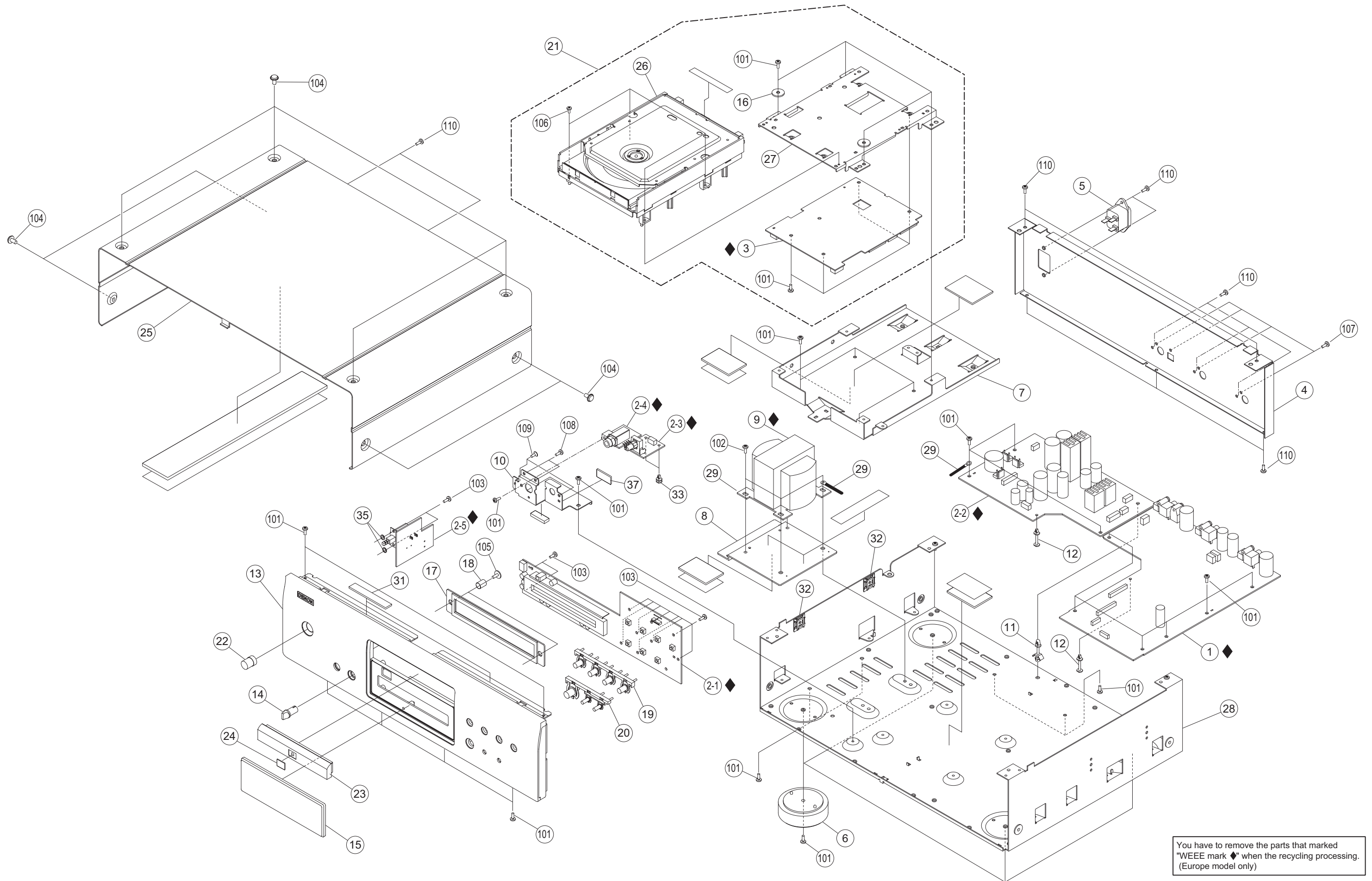
## DOCUMENTS FOR WEEE

### Details of Recycle parts for Main Unit

\* You have to remove the parts that marked "WEEE Mark ◆" when the recycling processing. (Europe model only)

Ref. No.	WEEE Mark	Part Name	Matrrial	Q'ty
1	◆	AUDIO UNIT ASS'Y	Complex	1
2-1	◆	DISPLAY UNIT	Complex	1
2-2	◆	POWER UNIT	Complex	1
2-3	◆	H/P VR UNIT	Complex	1
2-4	◆	H/P UNIT	Complex	1
2-5	◆	POWER SWITCH UNIT	Complex	1
3	◆	SACD MODULE UNIT ASS'Y	Complex	1
4		REAR PANEL(E2)	SECC	1
5		AC INLET (2P)	Complex	1
6		FOOT ASS'Y	ABS	4
7		MECHA BRACKET BOTTOM	SECC	1
8		TRANS BRACKET	SECC	1
9	◆	POWER TRANS(E2)	Complex	1
10		H/P BRACKET	SECC	1
11		HOLDER (A)	NYLON	1
12		CARD SPACER (L=18)	NYLON	2
13		FRONT PANEL (SP)	AL, ABS	1
14		KNOB(FUJI)	ABS	1
15		WINDOW	PMMA	1
16		ADJUST. COLLAR	C3604B	2
17		BLIND ASS'Y	Complex	1
18		SPRING	SUS	2
19		FUNCTION KNOB (SP)	ABS	1
20		OP/CL/FUNC KNOB (SP)	ABS	1
21		SACD MECHA UNIT	Complex	1
22		POWER KNOB ASS'Y	AL, ABS	1
23		LOADER PANEL (SP)	ABS	1
24		SACD PLATE	Ni Electroforming	1
25		TOP COVER(SP)	PVC, STEEL	1
26		DVD MECHA(TD-5HP-DE)	Complex	1
27		MECHA BRACKET TOP	SECC	1
28		CHASSIS	SECC	1
29		CORD HOLDER (L50)	Complex	1
31		RUBBER SHEET	CR	2
32		WIRE BAND BASE	NYLON	2
33		CARD SPACER(L=4)	NYLON	2
35		4 W (S)	PC	2
<b>SCREWS</b>				
101		3X8 CFTS (S)-B	STEEL	37
102		4X8 CBTS (S)-B	STEEL	4
103		3X10 CBTS (P)-B	STEEL	12
104		3P.SWELLING SCREW	STEEL	8
105		SPECIAL SCREW	STEEL	2
106		2.6X6 CBTS (S)-Z	STEEL	4
107		FIXING SCREW	STEEL	4
108		3X8 CBTS (P)-Z	STEEL	2
109		3X10 CFTS (P)-Z	STEEL	2
110		3X8 CBTS (S)-B	STEEL	10

## Exploded view of Main unit



You have to remove the parts that marked "WEEE mark ◆" when the recycling processing. (Europe model only)

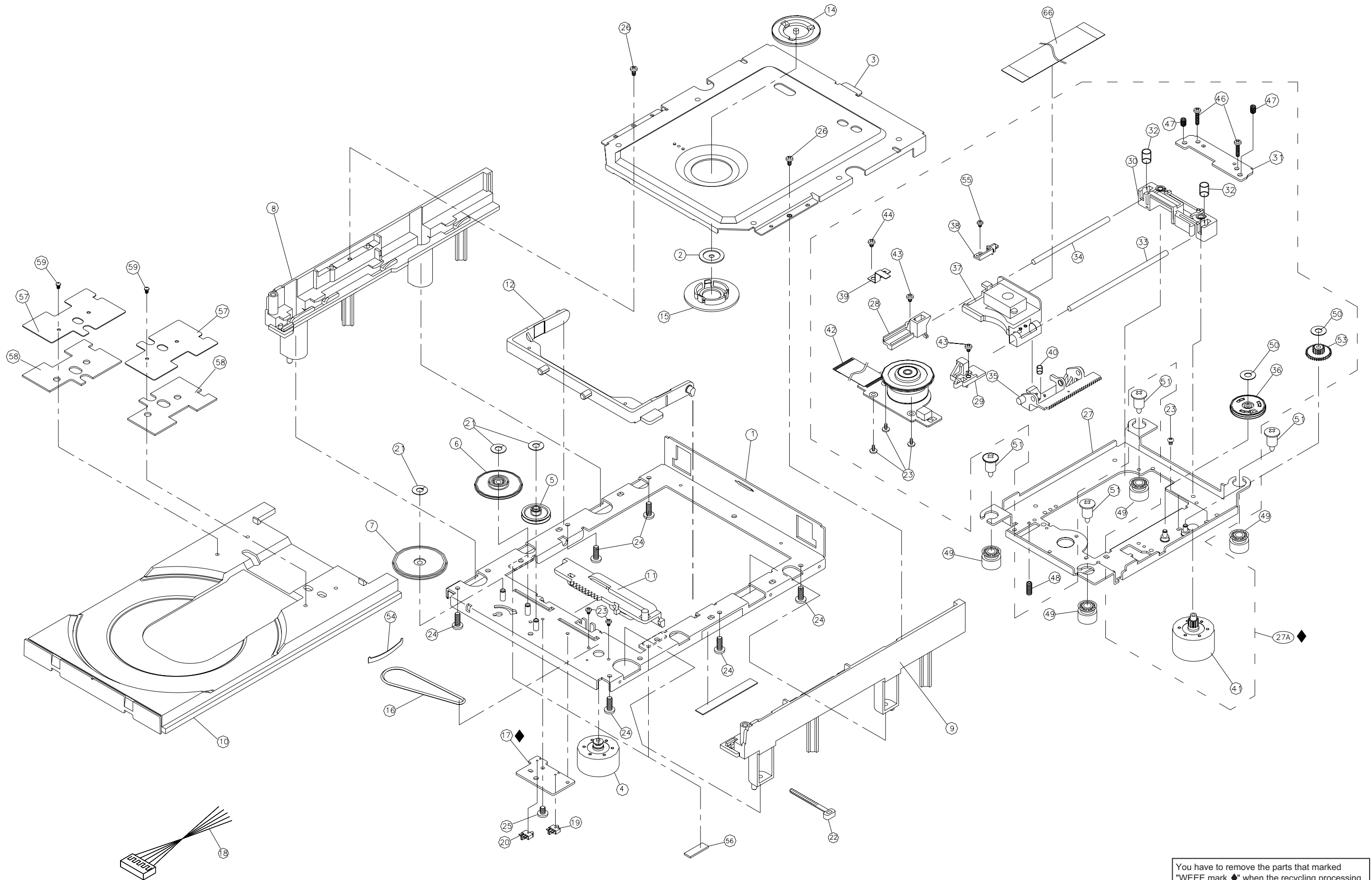
## Details of Recycle parts for Mechanism unit

\* You have to remove the parts that marked "WEEE Mark ◆" when the recycling processing. (Europe model only)

Ref. No.	WEEE Mark	Part Name	Material	Q'ty
1		MAIN CHASSIS ASS'Y	Complex	1
2		CLAMPER BRACKET	Steel	1
3		GUIDE CLAMP BRACKET	Steel	1
4		LOADING MOTOR ASS'Y	Complex	1
5		LOADING GEAR	POM	1
6		LOADING GEAR 2ND	POM	1
7		LOADING GEAR 3RD	POM	1
8		SUB CHASSIS-L	PC+ABS	1
9		SUB CHASSIS-R	PC+ABS	1
10		TRAY	PC+ABS	1
11		SLIDE-CAM	POM	1
12		TRAVERSE ARM	PC	1
14		CLAMPER H	POM	1
15		CLAMPER L	POM	1
16		LOADING BELT	Rubber	1
17	◆	SWITCH P.W.B.	Complex	1
18		5P PH WIRE	Complex	1
19		SWITCH ESE22MH21	Complex	1
20		SWITCH ESE22MH23	Complex	1
21		POLY.SLIT WASHER 2.6X6X0.25C	POLY	3
22		WIRE CLAMPER	POM	1
23		PRECISION SCREW 1.7X2.2 TYPE3	Steel	2
24		SCREW 2.6X6 CBTS(B)-Z	Steel	6
25		PRECISION SCREW 2X3(S) TYPE3	Steel	1
26		SCREW 2X6 CBTS(P)-Z	Steel	2
27A	◆	TRAVERSE MECHA (FEED) ASS'Y	Complex	1
23		PRECISION SCREW 1.7X2.2 TYPE3		3
27		PU CHASSIS ASS'Y		1
28		SHAFT HOLDER L		1
29		SHAFT HOLDER R		1
30		SHAFT TILT BASE		1
31		SHAFT TILT PLATE		1
32		TILT SPRING		2
33		MAIN SHAFT		1
34		SUB SHAFT		1
35		PU RACK GEAR		1
37		PICK UP HOP-1200R		1
38		PU SPRING		1
39		SHAFT SPRING		1
40		RACK GEAR SPRING		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
55		PRECISION SCREW 1.7X5 TYPE3		1
23		PRECISION SCREW 1.7X2.2 TYPE3		2
36		FEED GEAR 2ND ASS'Y		1
41		FEED MOTOR ASS'Y		1
50		POLY.SLIT WASHER 2.1X4X0.25C		2
53		FEED GEAR 3RD		1

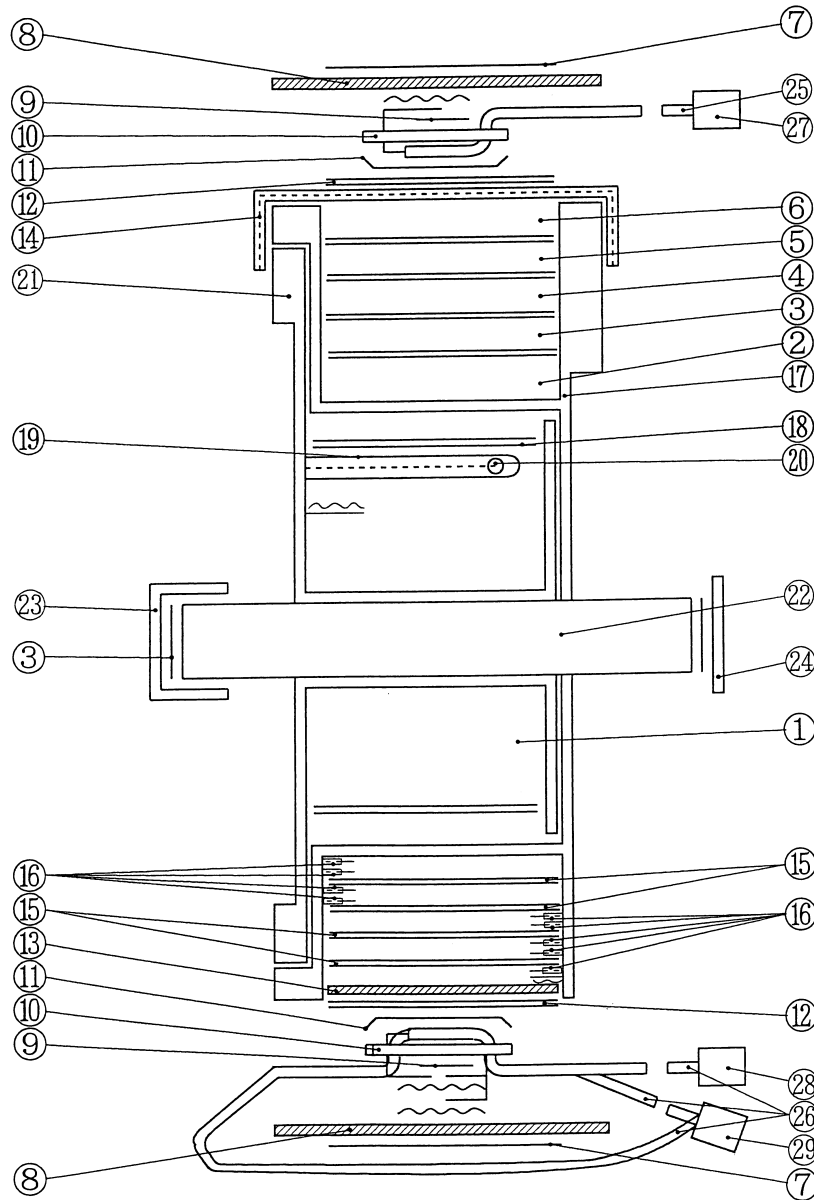
Ref. No.	WEEE Mark	Part Name	Material	Q'ty
49		DAMPER	Silicon	4
51		DAMPER SCREW	Steel	4
54		TRAY-SPRING-VXF	SUS	1
56		RUBBER CUSHION	Rubber	2
57		PLATE-RE-2HPC	Steel	2
58		WF-PLATE-RE-2HPC	---	2
59		PRECISION SCREW 2X4(P) TYPE1	Steel	2
66		24P FFC CABLE L=70	Complex	1

Exploded view of Mechanism unit



You have to remove the parts that marked "WEEE mark ◆" when the recycling processing. (Europe model only)

Details of Recycle parts for Power transformer



NO.	Material
1	Polyurethane Enameled Copper Wire
2	Polyurethane Enameled Copper Wire
3	Polyurethane Enameled Copper Wire
4	Polyurethane Enameled Copper Wire
5	Polyurethane Enameled Copper Wire
6	Polyurethane Enameled Copper Wire
7	Polyester Tape
8	Polyester Sheet
9	Polyester Tape
10	Pressed Paper
11	Polyester Tape
12	Polyester Tape
13	Polyester Sheet
14	Polyester Sheet
15	Polyester Tape

NO.	Material
16	Polyester Film/Polyester Non-woven Insulating Tape
17	Nylon
18	Polyester Tape
19	Polyester Tape
20	Thermal Fuse
21	Polyethylene Terephthalate
22	Silicon Steel
23	Steel
24	Steel
25	Polyurethane Enameled Copper Wire
26	Polyurethane Enameled Copper Wire
27	Complex
28	Complex
29	Complex