

# MICRO COMPONENT SYSTEM RDX-E600MK2 DVD PLAYER DVD-E600MK2 SERVICE MANUAL

The RDX-E600MK2 consists of the RX-E600MK2 and the DVD-E600MK2.  
This service manual is for the DVD-E600MK2.  
For the RX-E600MK2 service manual, please refer to the following publication number:

RX-E600MK2 100983

DVD-E600MK2

## IMPORTANT NOTICE

This manual has been provided for the use of authorized YAMAHA Retailers and their service personnel.  
It has been assumed that basic service procedures inherent to the industry, and more specifically YAMAHA Products, are already known and understood by the users, and have therefore not been restated.

**WARNING:** Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components, and failure of the product to perform as specified. For these reasons, we advise all YAMAHA product owners that any service required should be performed by an authorized YAMAHA Retailer or the appointed service representative.

**IMPORTANT:** The presentation or sale of this manual to any individual or firm does not constitute authorization, certification or recognition of any applicable technical capabilities, or establish a principle-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research, engineering, and service departments of YAMAHA are continually striving to improve YAMAHA products. Modifications are, therefore, inevitable and specifications are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

**WARNING:** Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground buss in the unit (heavy gauge black wires connect to this buss).

**IMPORTANT:** Turn the unit OFF during disassembly and part replacement. Recheck all work before you apply power to the unit.

## ■ CONTENTS

|                                             |      |                              |       |
|---------------------------------------------|------|------------------------------|-------|
| TO SERVICE PERSONNEL .....                  | 2~5  | MAINTENANCE FLOW CHART ..... | 11~15 |
| PREVENTION OF ELECTROSTATIC DISCHARGE ..... | 5    | IC DATA .....                | 16~17 |
| LOCALE MANAGEMENT INFORMATION .....         | 5    | DISPLAY DATA .....           | 18    |
| FRONT PANEL .....                           | 6    | BLOCK DIAGRAM .....          | 19    |
| REAR PANEL .....                            | 6    | PRINTED CIRCUIT BOARD .....  | 20~24 |
| REMOTE CONTROL PANEL .....                  | 6    | SCHEMATIC DIAGRAM .....      | 25~27 |
| SPECIFICATIONS .....                        | 6~7  | PIN CONNECTION DIAGRAM ..... | 29    |
| INTERNAL VIEW .....                         | 7    | PARTS LIST .....             | 30~33 |
| DISASSEMBLY PROCEDURES .....                | 8~10 |                              |       |



このサービスマニュアルは、エコマーク認定の再生紙を使用しています。  
This Service Manual uses recycled paper.

100984

© 2005 YAMAHA CORPORATION All rights reserved.  
This manual is copyrighted by YAMAHA and may not be copied or redistributed either in print or electronically without permission.



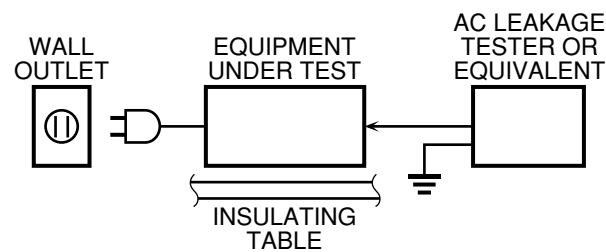
# YAMAHA

YAMAHA CORPORATION  
P.O.Box 1, Hamamatsu, Japan

'05.10

TO SERVICE PERSONNEL

- 1. Critical Components Information  
Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.
- 2. Leakage Current Measurement (For 120V Models Only)  
When service has been completed, it is imperative to verify that all exposed conductive surfaces are properly insulated from supply circuits.
- Meter impedance should be equivalent to 1500 ohms shunted by 0.15μF.



- Leakage current must not exceed 0.5mA.
- Be sure to test for leakage with the AC plug in both polarities.

WARNING: CHEMICAL CONTENT NOTICE!

The solder used in the production of this product contains LEAD. In addition, other electrical/electronic and/or plastic (where applicable) components may also contain traces of chemicals found by the California Health and Welfare Agency (and possibly other entities) to cause cancer and/or birth defects or other reproductive harm.

DO NOT PLACE SOLDER, ELECTRICAL/ELECTRONIC OR PLASTIC COMPONENTS IN YOUR MOUTH FOR ANY REASON WHATSOEVER!

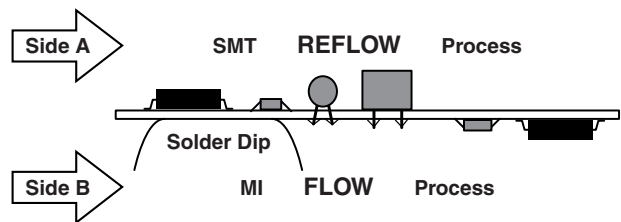
Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!

If you come in contact with solder or components located inside the enclosure of this product, wash your hands before handling food.

About Lead Free Solder

The P.C.B.s installed in this unit are soldered using the following solder.

|            | SIDE A | SIDE B           |
|------------|--------|------------------|
| MAIN P.C.B | -      | Lead Free Solder |



Among some types of lead free solder currently available, it is recommended to use one of the following types for the repair work.

- Sn + Ag + Cu (tin + silver + copper)
- Sn + Cu (tin + copper)
- Sn + Zn + Bi (tin + zinc + bismuth)

Caution:

1. As the melting point temperature of the lead free solder is about 30°C to 40°C (50°F to 70°F) higher than that of the lead solder, be sure to use a soldering iron suitable to each solder.
2. If lead solder must be used, be sure to remove lead free solder from each terminal section of the parts to be replaced and from the area around it completely before soldering, or make sure that the lead free solder and lead solder melt together fully.

## WARNING: Laser Safety

This product contains a laser beam component. This component may emit invisible, as well as visible radiation, which may cause eye damage. To protect your eyes and skin from laser radiation, the following precautions must be used during servicing of the unit.

- 1) When testing and/or repairing any component within the product, keep your eyes and skin more than 30 cm away from the laser pick-up unit at all times. Do not stare at the laser beam at any time.
- 2) Do not attempt to readjust, disassemble or repair the laser pick-up, unless noted elsewhere in this manual.
- 3) CAUTION : Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

## Laser Emitting conditions:

- 1) When the Top Cover is removed, and the STANDBY/ON SW is turned to the "ON" position, the laser component will emit a beam for several seconds to detect if a disc is present. During this time (5-10 sec.) the laser may radiate through the lens of the laser pick-up unit. Do not attempt any servicing during this period!  
If no disc is detected, the laser will stop emitting the beam. When a disc is loaded, you will not be exposed to any laser emissions.
- 2) The laser power level can be adjusted with the VR on the pick-up PWB, however, this level has been set by the factory prior to shipping from the factory. Do not adjust this laser level control unless instruction is provided elsewhere in this manual. Adjustment of this control can increase the laser emission level from the device.

## Laser Diode Properties

|                  |                                 |
|------------------|---------------------------------|
| Type:            | Semiconductor laser GaAlAs      |
| Wave length:     | 650 nm (DVD)<br>780 nm (VCD/CD) |
| Output Power:    | 7 mW (DVD)<br>10 mW (VCD/CD)    |
| Beam divergence: | 60 degree                       |

**VARO!** : AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASER-SÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

**VARNING!** : OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.

WARNING

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION

L'emploi de commandes, de réglages ou un choix de procédures différents des spécifications de cette brochure peut entraîner une exposition à d'éventuelles radiations pouvant être dangereuses.

ACHTUNG

Die Verwendung von Bedienungselementen oder Einstellungen oder die Durchführung von Bedienungsvorgängen, die nicht in dieser Anleitung aufgeführt sind, kann zu einem Kontakt mit gefährlichen Laserstrahlen führen.

OBSERVERA

Användning av kontroller och justeringar eller genomförande av procedurer andra än de som specificeras i denna bok kan resultera i att du utsätter dig för farlig strålning.

ATTENZIONE

Uso di controlli o regolazioni o procedure non specificamente descritte può causare l'esposizione a radiazioni di livello pericoloso.

PRECAUCIÓN

El uso de los controles o los procedimientos de ajuste o utilización diferentes de los especificados en este manual pueden causar una exposición peligrosa a la radiación.

VOORZICHTIG

Gebruik van bedieningsorganen of instellingen, of uitvoeren van handelingen anders dan staan beschreven in deze handleiding kunnen leiden tot blootstelling aan gevaarlijke stralen.

The unit is not disconnected from the AC power source as long as it is connected to the wall outlet, even if this unit itself is turned off. This state is called the standby mode. In this state, this unit is designed to consume a very small quantity of power.

L'appareil n'est pas isolé de la source d'alimentation aussi longtemps qu'il reste branché sur une prise murale, même lorsqu'il est éteint. Il est alors dit en mode «Veille». Dans ce mode, l'appareil consomme très peu de courant.

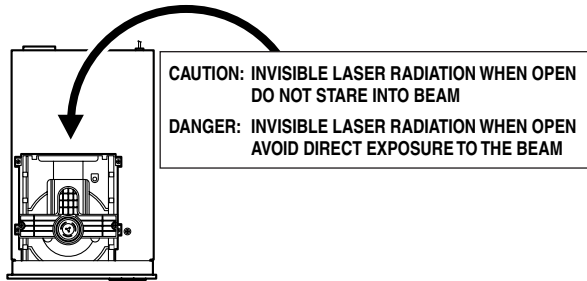
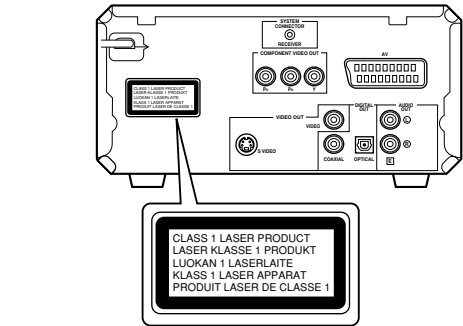
Das Gerät ist nicht vom Netz getrennt, solange der Netzstecker noch mit der Wandsteckdose verbunden ist, selbst wenn das Gerät ausgeschaltet wurde. Dieser Betriebszustand wird als Bereitschaftsmodus bezeichnet. In diesem Zustand nimmt das Gerät eine sehr geringe Menge Strom auf.

Enheten är inte urkopplad från nätet så länge som den är ansluten till vägguttaget även om enheten i sig självt är avstängd. Detta kallas för beredskapsläge och i detta tillstånd konsumerar apparaten minimalt med ström.

L'unità non è scollegata dall'impianto elettrico di casa sintanto che rimane collegata ad una presa di corrente anche se è spenta. Questo modo viene chiamato "modo di attesa". In esso, l'unità consuma una quantità molto bassa di energia per mantenere in memoria le impostazioni da voi fatte.

Aunque el propio aparato se encuentre apagado, éste no se desconectará de la fuente de CA siempre que se mantenga enchufado a la toma de corriente. Este estado recibe el nombre de "modo de espera". En este estado, este aparato ha sido diseñado para consumir una cantidad muy pequeña de energía.

De stroomtoevoer naar het toestel is niet afgesloten zolang de stekker nog in het stopcontact zit, zelfs niet als het toestel zelf uitgeschakeld is. Deze toestand wordt "standby" (waak- of paraatstand) genoemd. Het toestel is ontworpen om in deze toestand.



**CAUTION** VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.  
**ADVARSEL** SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING.  
**ADVARSEL** SYNLIG OG USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.  
**WARNING** SYNLIG OCH OSYNLIG LASERSTRÅLNING NÅR DENNA DEL ÄR ÖPPNAD. BETRakta EJ STRÅLEN.  
**VARO!** AVATTAESSA OLET ALTTIINA NÄKYVÄLLE JA NÄKYMÄTTÖMÄLLE LASER SÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.  
**VORSICHT** SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.  
**DANGER** VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.  
**ATTENTION** RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.

## Warning for power supply

**The primary side of the power supply carries live mains voltage when the player is connected to the mains even when the player is switched off !**

This primary area is not shielded so it is possible to touch copper tracks and/or components when servicing the player.

Service personnel have to take precautions to prevent touching this area or components in this area .

The primary side of the power supply has been indicated with a lightening stroke and a stripe-marked print on the printed wiring board.

### Note:

**The screws on the DVD mechanism may never be touched, removed or re-adjusted.**

**Handle the DVD mechanism with care when the unit has to be exchanged!**

**The DVD mechanism is very sensitive for dropping or giving shocks.**

## ■ PREVENTION OF ELECTROSTATIC DISCHARGE

The laser diode in the DVD mechanism may be damaged due to static electricity from clothes or the human body. Use caution to prevent electro static damage when servicing or handling the DVD-mechanism.

### 1. Grounding for electro static damage prevention

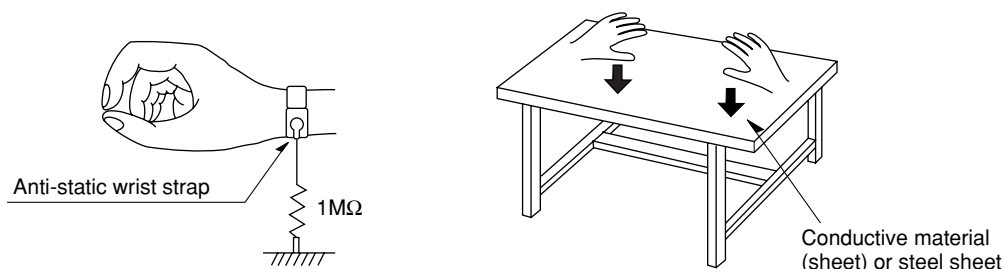
Some devices, such as the DVD player, use an optical pickup (laser diode) that will be damaged by static electricity in the working environment. Only attempt service after ensuring that all grounding procedures have been completed.

#### 1. Worktable grounding

Put a grounded conductive material (sheet) or iron sheet on the area where the optical pickup is placed.

#### 2. Human body grounding

Use an anti-static wrist strap to discharge the static electricity from your body.



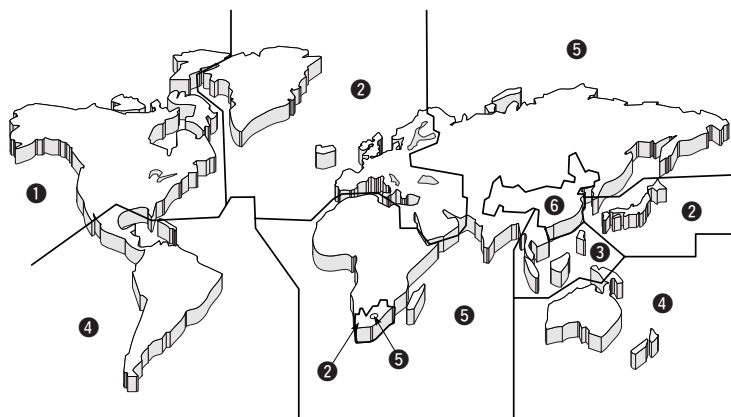
### 2. Handling Precautions for DVD mechanism

1. Handle the DVD mechanism gently, as it is an extremely high-precision assembly.
2. The flexible cable lines may break if an excessive force is applied to it. Use caution when handling the cable.
3. The semi-fixed resistor for laser power adjustment should not be adjusted. Do not turn the resistor.

## ■ LOCALE MANAGEMENT INFORMATION

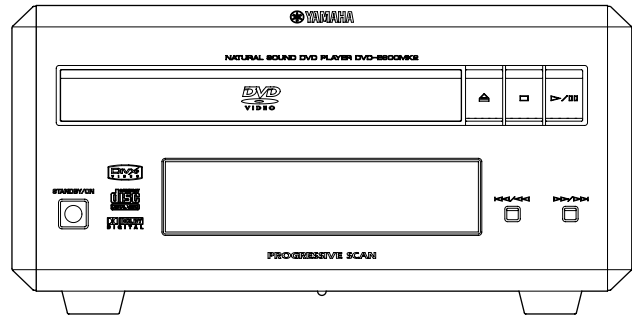
Locale Management Information : This DVD player is designed and manufactured to respond to the Locale Management Information that is recorded on a DVD disc. If the Locale number described on the DVD disc does not correspond to the Locale number of this DVD player, this DVD player cannot play this disc.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.



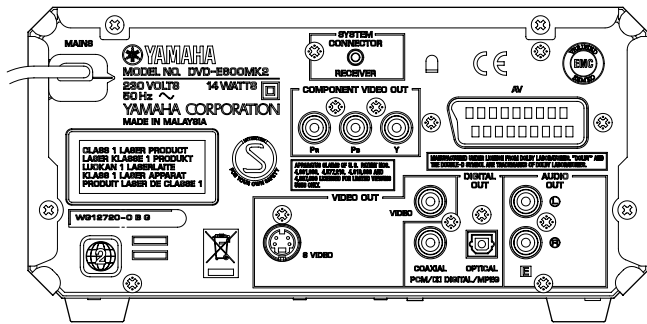
FRONT PANEL

B, G, E models

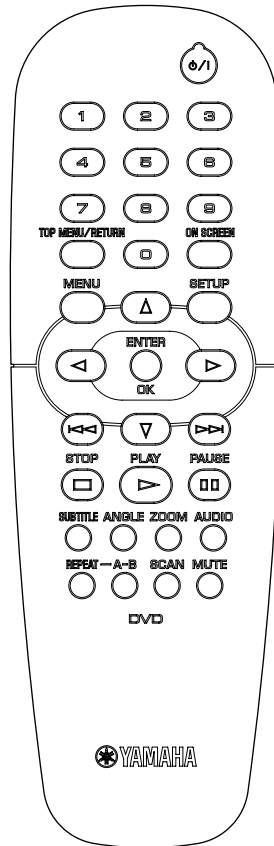


REAR PANEL

B, G, E models



REMOTE CONTROL PANEL



SPECIFICATIONS

PLAYBACK SYSTEM

DVD Video  
Video CD & SVCD  
CD  
PICTURE CD  
CD-R, CD-RW  
DVD+R, DVD+RW  
DVD-R, DVD-RW

VIDEO PERFORMANCE

Video (CVBS) Output 1 Vpp into 75 ohms  
S-Video Output Y: 1 Vpp into 75 ohms  
C: 0.3 Vpp into 75 ohms  
Component Video Output Y: 1 Vpp into 75 ohms  
Pb/Cb Pr/Cr: 0.7 Vpp into 75 ohms  
RGB (SCART) Output 0.7 Vpp into 75 ohms

AUDIO FORMAT

Digital Mpeg/Dolby Digital/Compressed Digital  
DTS  
PCM 16, 20, 24 bits  
fs, 44.1, 48, 96 kHz  
MP3 (ISO 9660) 24, 32, 56, 64, 96, 128, 256 kbps  
fs 16, 22.05, 24, 32, 44.1, 48 kHz  
WMA 32 kbps - 192 kbps, Mono, Stereo  
Analog Sound Stereo

AUDIO PERFORMANCE

DA Converter 24 bits  
Signal-Noise (1kHz) 105 dB  
Dynamic Range (1kHz) 100 dB  
DVD fs 96 kHz 2 Hz - 44 kHz  
fs 48 kHz 2 Hz - 22 kHz  
SVCD fs 48 kHz 2 Hz - 22 kHz  
fs 44.1 kHz 2 Hz - 20 kHz  
CD/VCD fs 44.1 kHz 2 Hz - 20 kHz  
Distortion and Noise (1kHz) 0.003%

TV STANDARD (PAL/50Hz) (NTSC/60Hz)

Number of lines 625 525  
Playback Multistandard (PAL/NTSC)

CONNECTIONS

Y Output RCA (green)  
Pb/Cb Output RCA (blue)  
Pr/Cr Output RCA (red)  
SCART Euroconnector  
S-Video Output Mini DIN, 4 pins  
Video Output RCA  
Audio Output (L+R) RCA  
Digital Output 1 coaxial, 1 optical  
IEC60958 for CDDA / LPCM / MPEG1  
IEC61937 for MPEG 2, Dolby Digital and DTS

**GENERAL**

Dimensions (W x H x D)

217 x 108 x 346 (8-9/16" x 4-1/4" x 13-5/8")

Weight Approx. 2.6 Kg (5 lbs. 12 oz.)

Finish

Gold color G, E models

Silver color B, G, E models

Power Supply AC230V, 50Hz

Power Consumption 14W

Standby Power Consumption (reference data) 1W

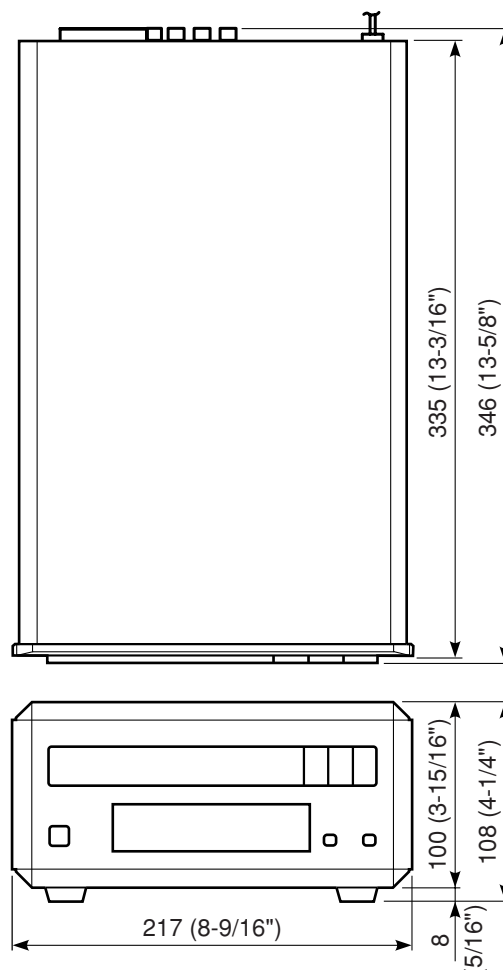
**ACCESSORIES**Remote Control x 1, Battery x 2, System Control Cable x 1,  
Audio Pin Cable x 1, Video Pin Cable x 1*\* Specifications subject to change without prior notice.***B** ..... British model**G** ..... European model**E** ..... South European model

Manufactured under license from Dolby Laboratories.  
"Dolby" and the double-D symbol are trademarks of  
Dolby Laboratories.

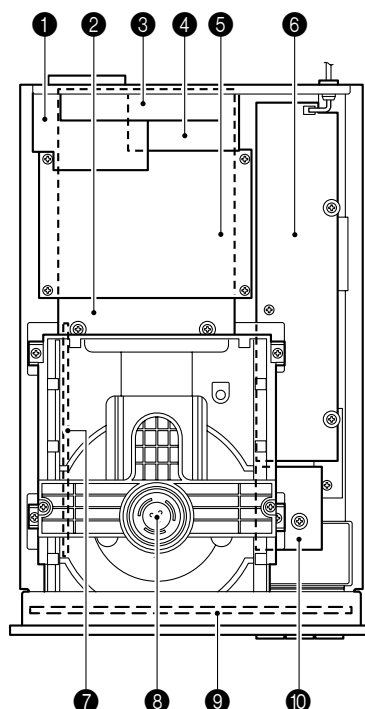


DivX, DivX Certified, and associated logos are  
trademarks of DivXNetworks, Inc and are used  
under license.

Kodak is a trademark of Eastman Kodak Company.

**● DIMENSIONS**

Unit: mm (inch)

**■ INTERNAL VIEW**

- ① MAIN (2) P.C.B.
- ② MAIN (5) P.C.B.
- ③ MAIN (3) P.C.B.
- ④ MAIN (4) P.C.B.
- ⑤ MONO BOARD
- ⑥ POWER SUPPLY UNIT
- ⑦ MAIN (7) P.C.B.
- ⑧ DVD MECHANISM UNIT
- ⑨ MAIN (1) P.C.B.
- ⑩ MAIN (6) P.C.B.

## ■ DISASSEMBLY PROCEDURES

(Remove parts in the order as numbered.)

Disconnect the power cable from the AC outlet.

### 1. Removal of Top Cover

- Remove 4 screws (①), 4 screws (②). (Fig. 1)
- Slide the Top Cover rearward to remove it.

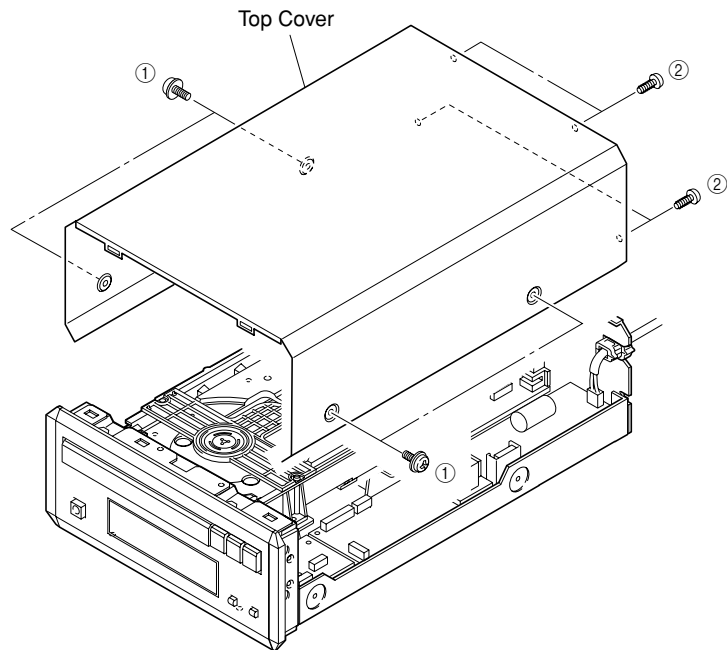


Fig. 1

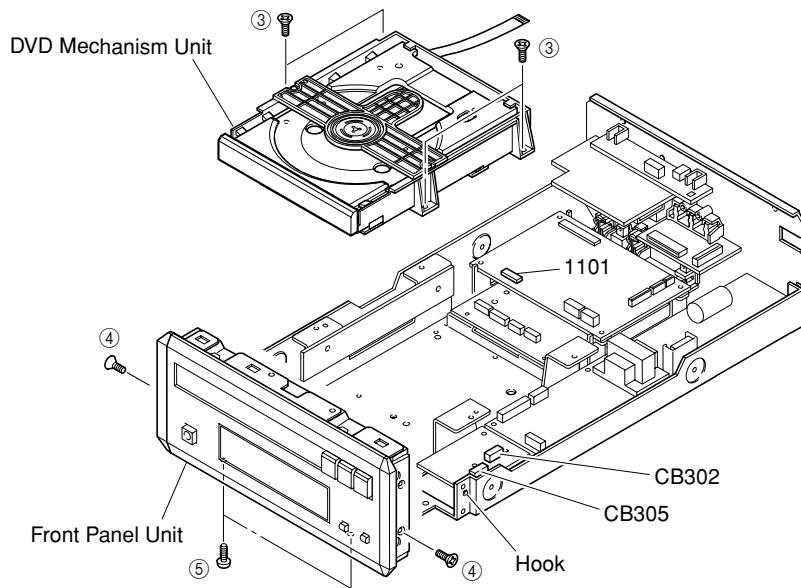


Fig. 2

### 2. Removal of DVD Mechanism Unit

- Remove 4 screws (③). (Fig. 2)
- Remove a connectors (1101, CB302, CB305). (Fig. 2)
- Remove the DVD Mechanism Unit backward.

### 3. Removal of Front Panel Unit

- Remove 2 screws (④), 2 screws (⑤). (Fig. 2)
- Remove a connectors (CB16, CB17). (Fig. 3)
- Release 2 hooks and remove the Front Panel Unit by pulling it forward. (Fig. 2)

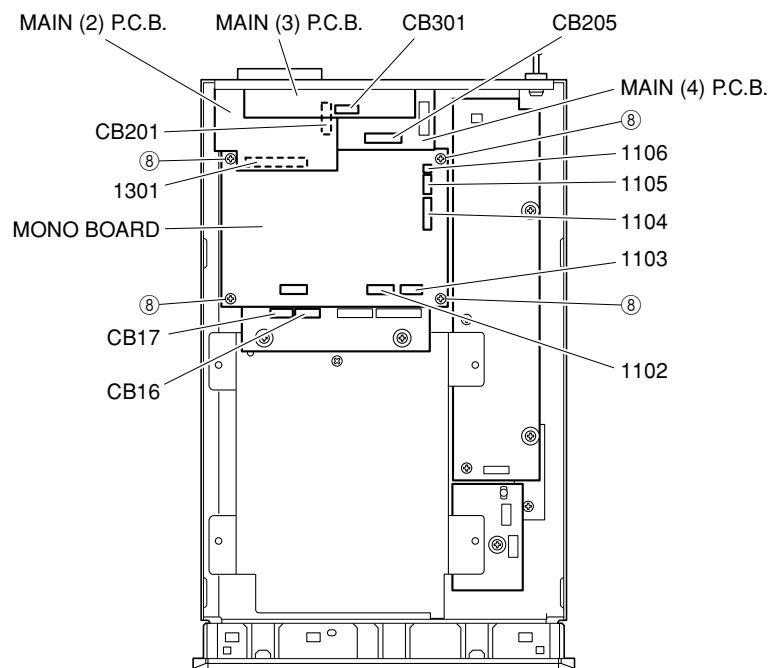


Fig. 3

**4. Removal of MAIN (3) P.C.B.**

- Remove 2 screws (⑥). (Fig. 4)
- Remove a connector (CB301). (Fig. 3)
- Remove the MAIN (3) P.C.B..

**6. Removal of MONO BOARD**

- Remove 4 screws (⑧). (Fig. 3)
- Remove a connectors (1102~1106, 1301). (Fig. 3)
- Remove the MONO P.C.B..

**5. Removal of MAIN (2) and MAIN (4) P.C.B.**

- Remove 4 screws (⑦). (Fig. 4)
- Remove a connector (CB205). (Fig. 3)
- Remove the MAIN (2) and MAIN (4) P.C.B..

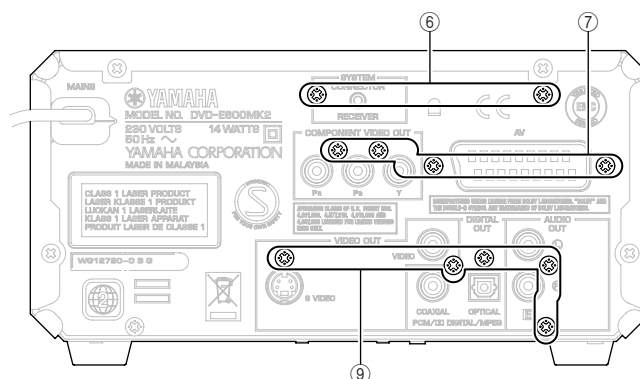


Fig. 4

## 7. Removal of MAIN (5), MAIN (6) P.C.B. and POWER SUPPLY UNIT

- Remove 5 screws (9). (Fig. 4)
- Remove 5 screws (10). (Fig. 5)
- Remove 2 screws (11). (Fig. 5)
- Loosen 1 Locking Card Spacer. (Fig. 5)
- Remove the MAIN (5), MAIN (6) P.C.B. and POWER SUPPLY UNIT.

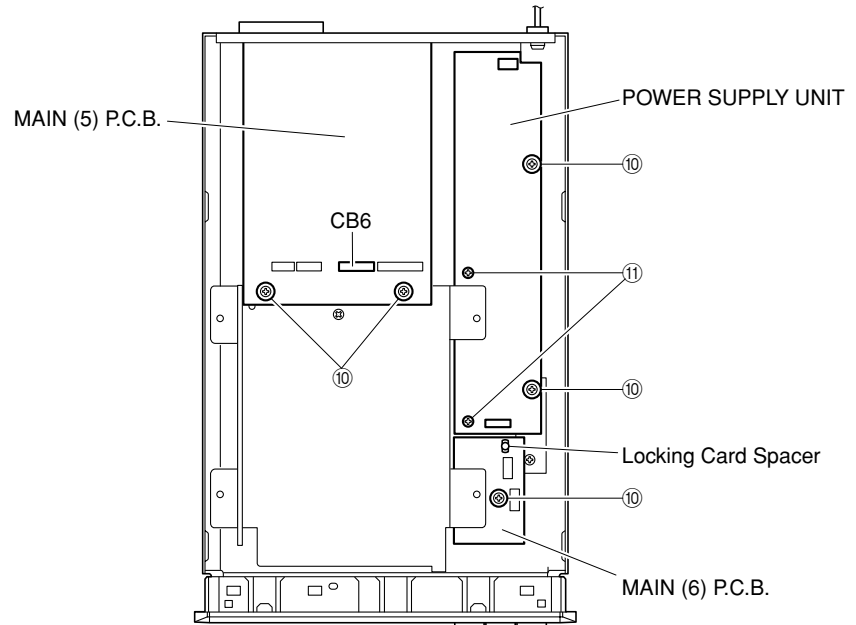


Fig. 5

### When checking the P.C.B.

- Reconnect all cables (connectors) that have been disconnected.
- When connecting the flat cable, use care for the polarity.

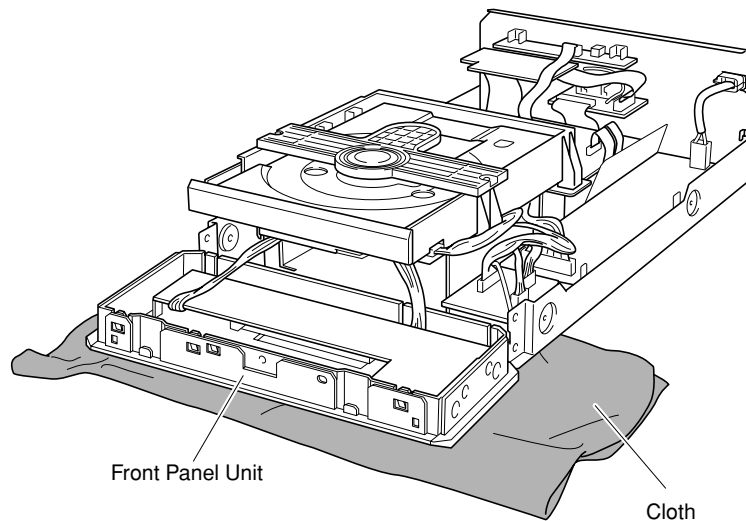
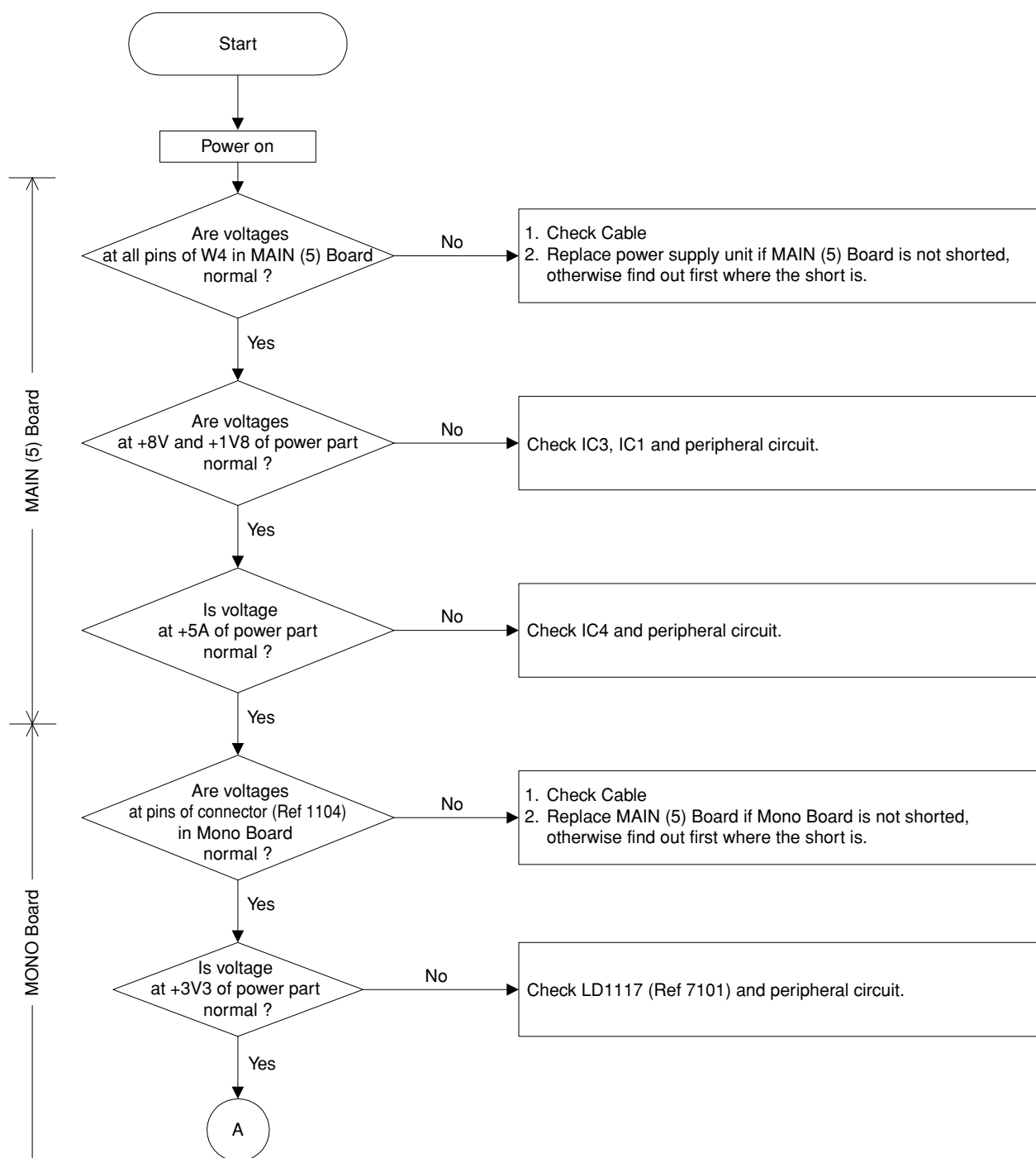
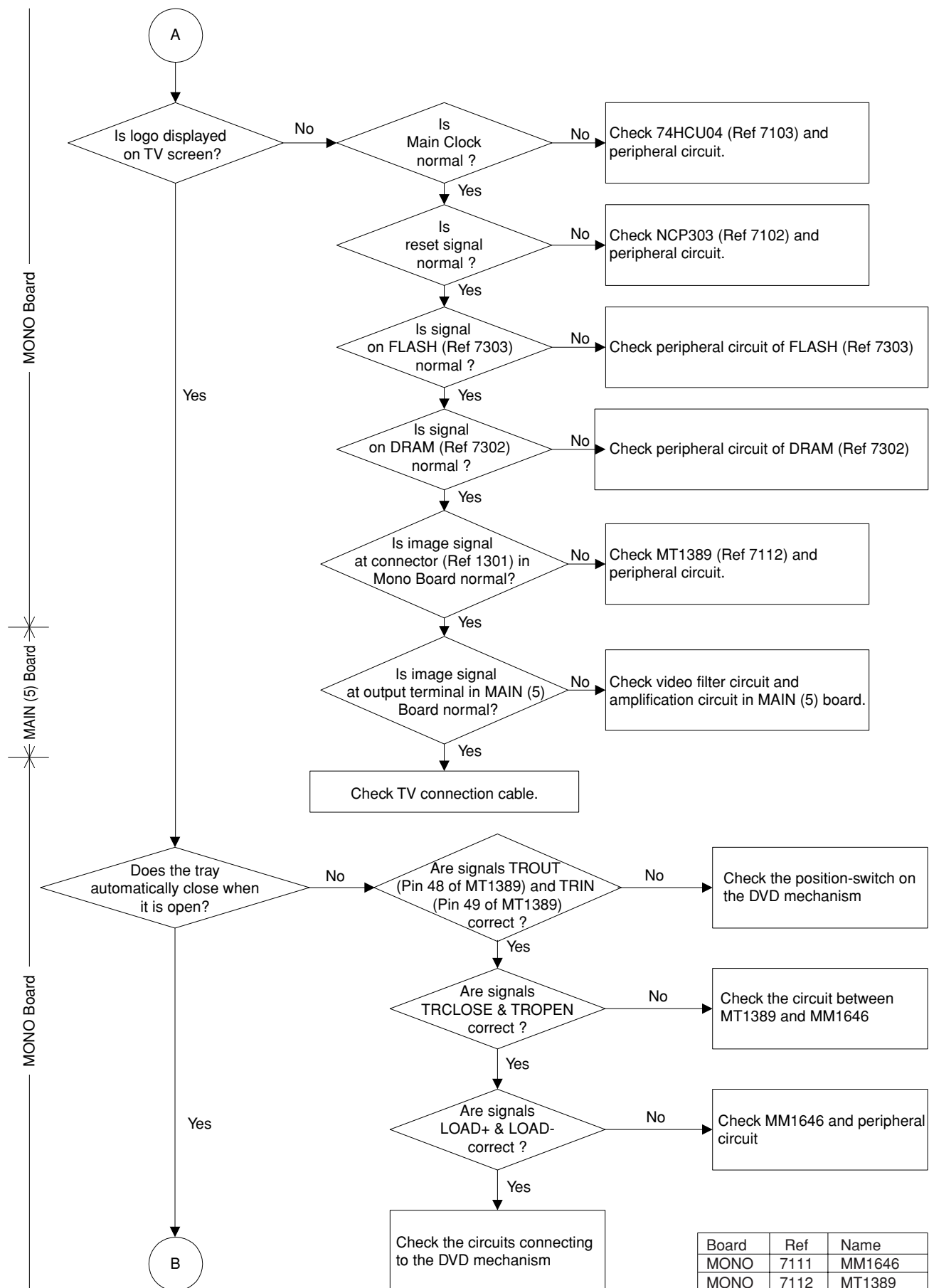
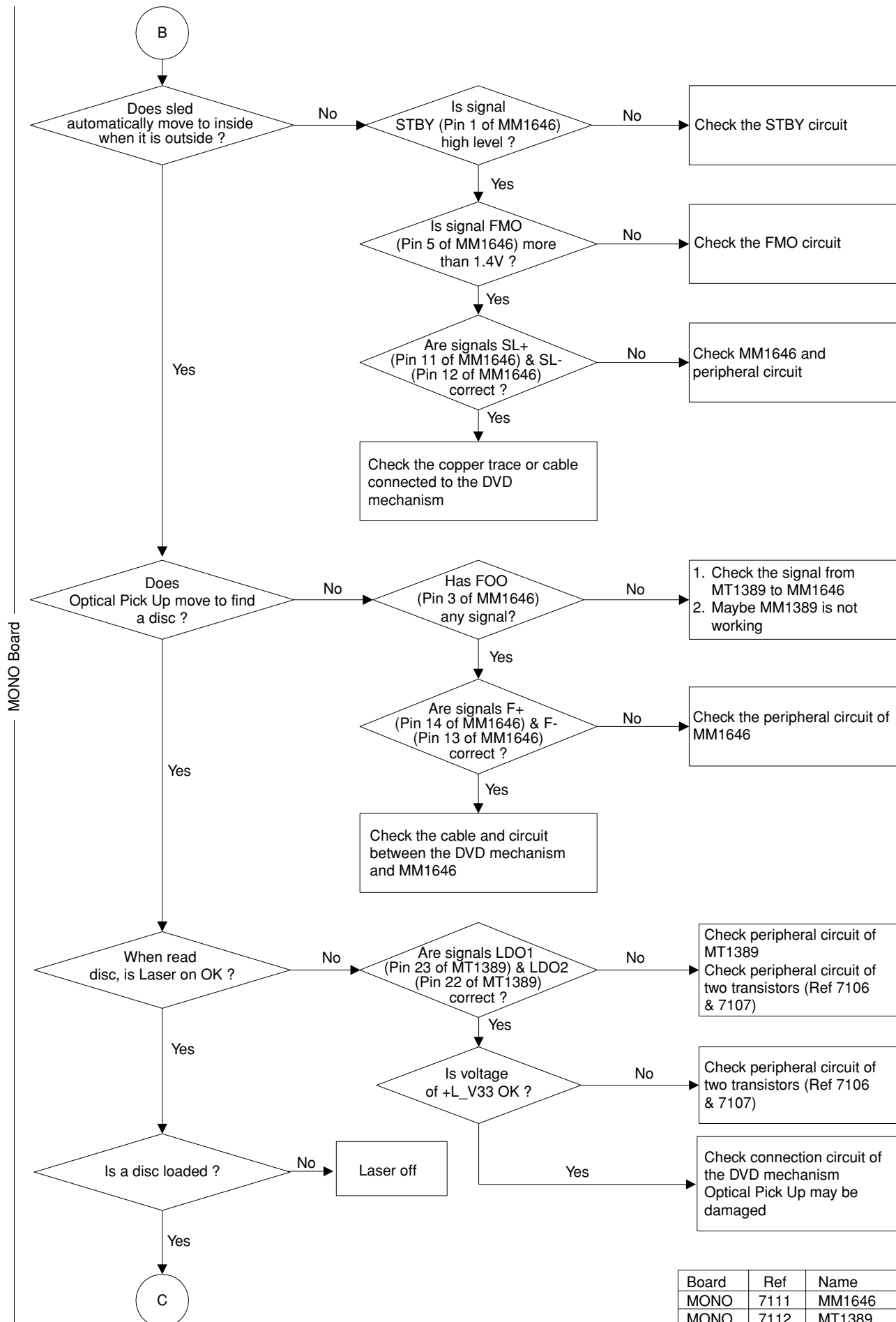


Fig. 6

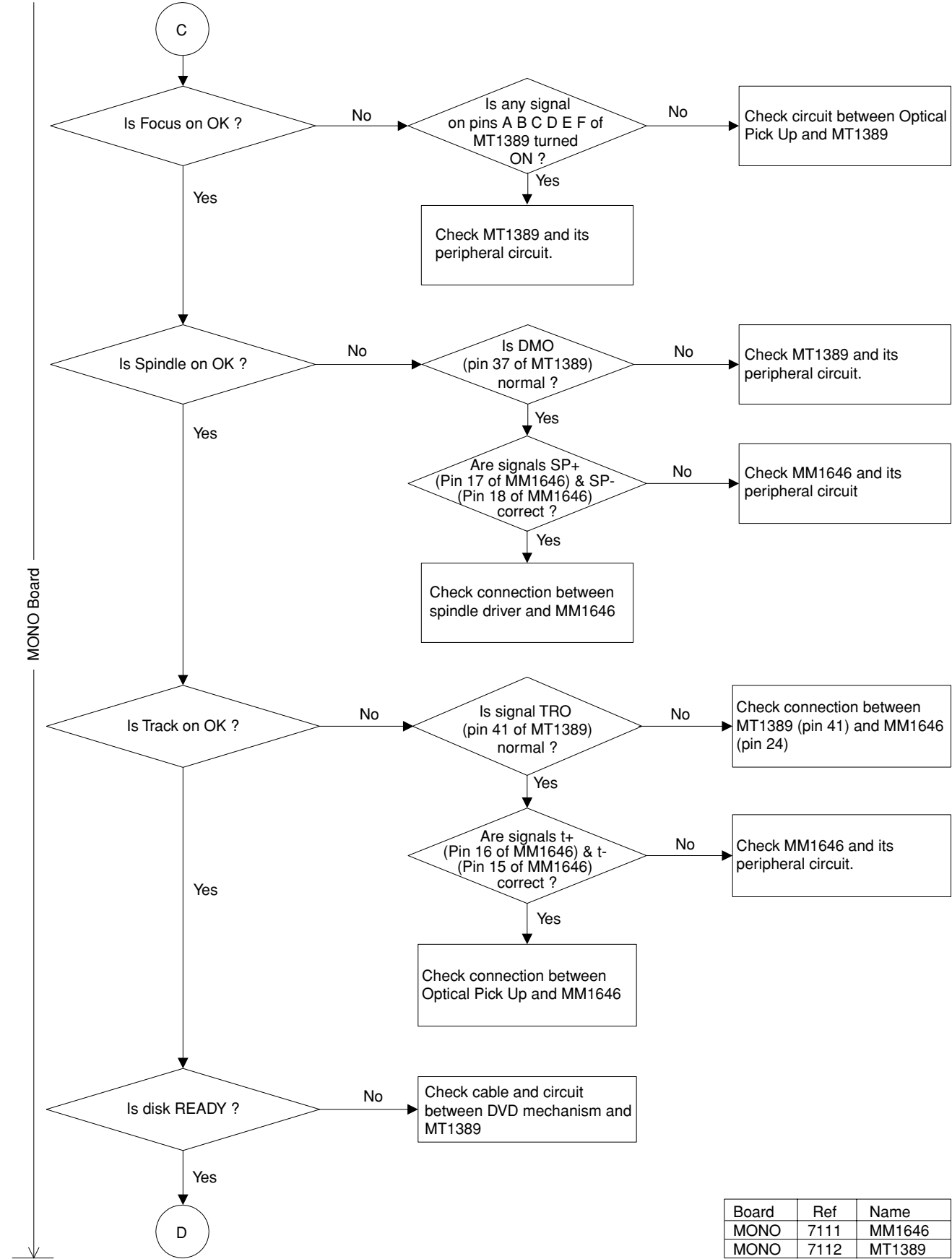
## MAINTENANCE FLOW CHART

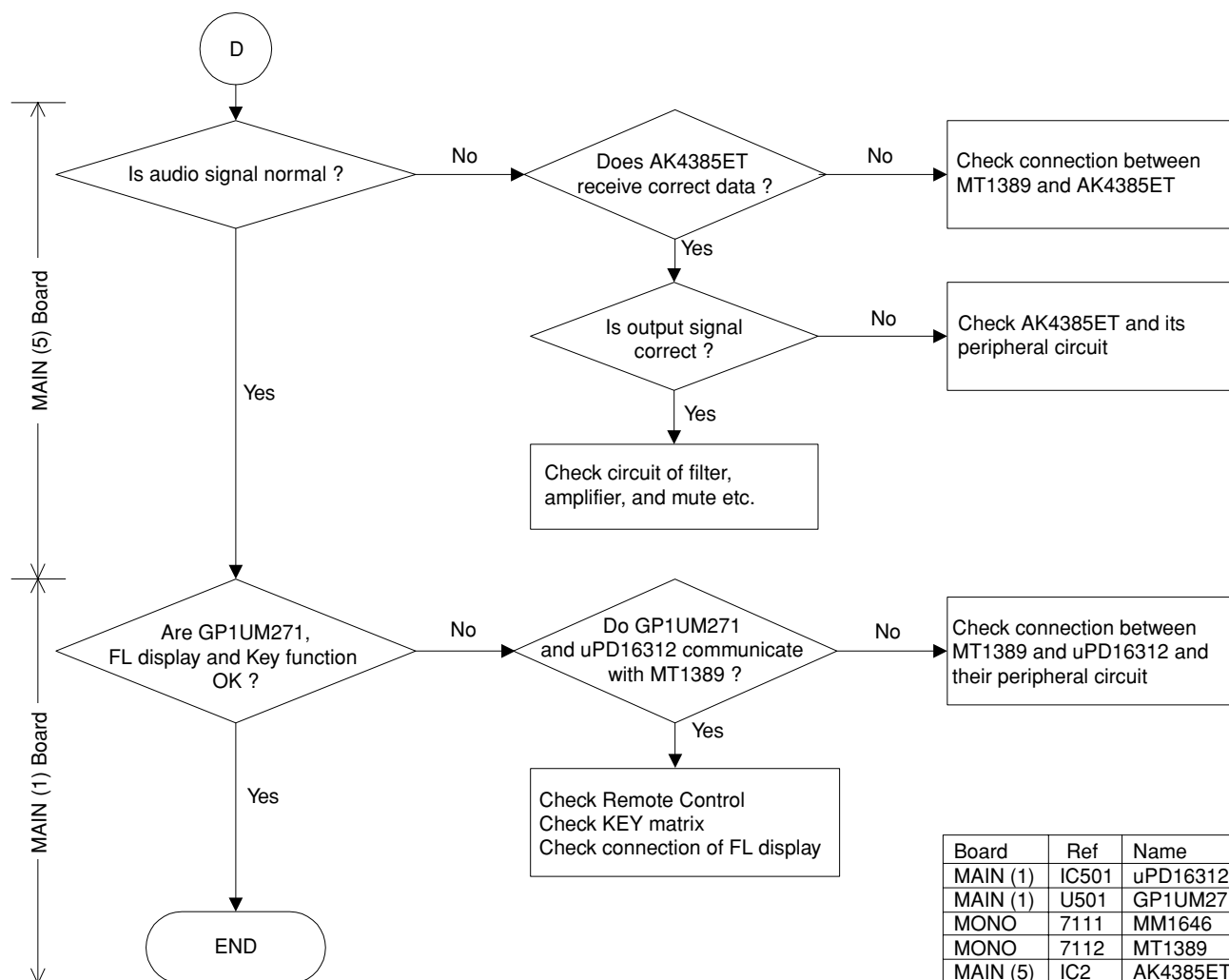






| Board | Ref  | Name   |
|-------|------|--------|
| MONO  | 7111 | MM1646 |
| MONO  | 7112 | MT1389 |

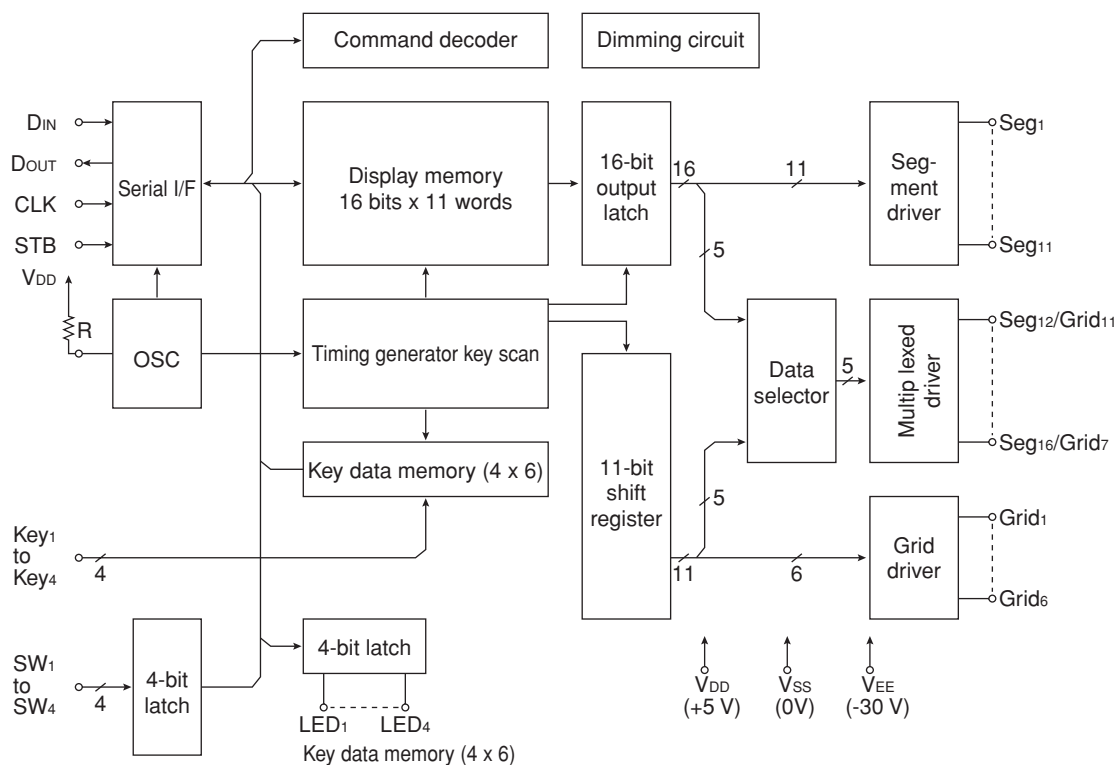
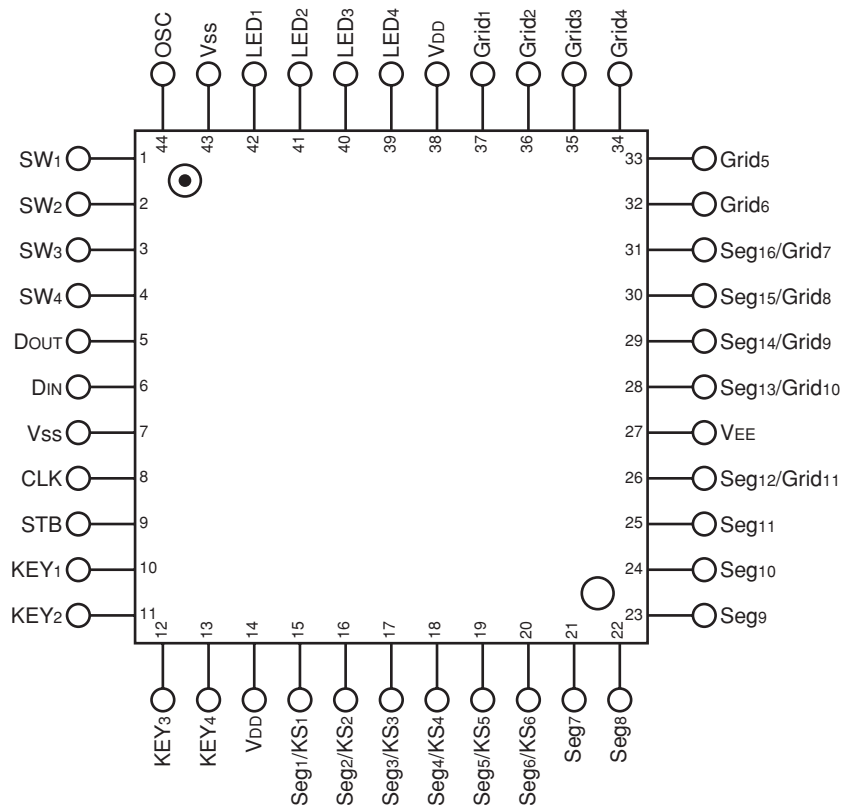




IC DATA

IC501:  $\mu$ PD16312GB-3B4 [MAIN (1) P.C.B.]  
8-bit Microprocessor

DVD-E600MK2



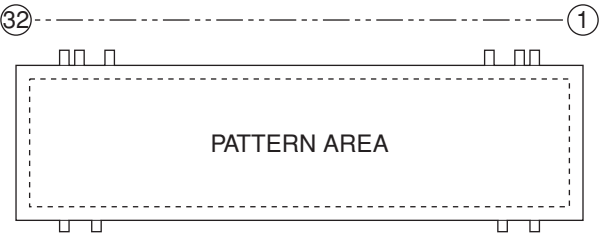
**IC501:  $\mu$ PD16312GB-3B4 [MAIN (1) P.C.B.]**

8-bit Microprocessor

| No. | Name                               | Symbol       | Description                                                                                                                                                                                                                                                                                                                       |
|-----|------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Switch input                       | SW1          | These pins constitute a 4-bit general-purpose input port.                                                                                                                                                                                                                                                                         |
| 2   |                                    | SW2          |                                                                                                                                                                                                                                                                                                                                   |
| 3   |                                    | SW3          |                                                                                                                                                                                                                                                                                                                                   |
| 4   |                                    | SW4          |                                                                                                                                                                                                                                                                                                                                   |
| 5   | Data output                        | DOUT         | Output serial data at the falling edge of the shift clock, starting from low order bit. This is N-ch open-drain output pin.                                                                                                                                                                                                       |
| 6   | Data input                         | DIN          | Input serial data at rising edge of shift clock, starting from the low order bit.                                                                                                                                                                                                                                                 |
| 7   | Logic ground                       | VSS          | Connect this pin to system GND.                                                                                                                                                                                                                                                                                                   |
| 8   | Clock input                        | CLK          | Reads serial data at the rising edge, and outputs data at the falling edge.                                                                                                                                                                                                                                                       |
| 9   | Strobe                             | STB          | Initializes serial interface at the rising or falling edge of the $\mu$ PD16312. It then waits for reception of a command. Data input after STB has fallen is processed as a command. While command data is processed, current processing is stopped, and the serial interface is initialized. While STB is high, CLK is ignored. |
| 10  | Key data input                     | KEY1         | Data input to these pins is latched at the end of the display cycle.                                                                                                                                                                                                                                                              |
| 11  |                                    | KEY2         |                                                                                                                                                                                                                                                                                                                                   |
| 12  |                                    | KEY3         |                                                                                                                                                                                                                                                                                                                                   |
| 13  |                                    | KEY4         |                                                                                                                                                                                                                                                                                                                                   |
| 14  | Logic power                        | VDD          | 5 V $\pm$ 10 %                                                                                                                                                                                                                                                                                                                    |
| 15  | High-voltage output                | Seg1/KS1     | Segment output pins (Dual function as key source)                                                                                                                                                                                                                                                                                 |
| 16  |                                    | Seg2/KS2     |                                                                                                                                                                                                                                                                                                                                   |
| 17  |                                    | Seg3/KS3     |                                                                                                                                                                                                                                                                                                                                   |
| 18  |                                    | Seg4/KS4     |                                                                                                                                                                                                                                                                                                                                   |
| 19  |                                    | Seg5/KS5     |                                                                                                                                                                                                                                                                                                                                   |
| 20  |                                    | Seg6/KS6     |                                                                                                                                                                                                                                                                                                                                   |
| 21  | High-voltage output (segment)      | Seg7         | Segment output pins                                                                                                                                                                                                                                                                                                               |
| 22  |                                    | Seg8         |                                                                                                                                                                                                                                                                                                                                   |
| 23  |                                    | Seg9         |                                                                                                                                                                                                                                                                                                                                   |
| 24  |                                    | Seg10        |                                                                                                                                                                                                                                                                                                                                   |
| 25  |                                    | Seg11        |                                                                                                                                                                                                                                                                                                                                   |
| 26  | High-voltage output (segment/grid) | Seg12/Grid11 | These pins are selectable for segment or grid driving.                                                                                                                                                                                                                                                                            |
| 27  | Pull-down level                    | VEE          | VDD - 35 V max.                                                                                                                                                                                                                                                                                                                   |
| 28  | High-voltage output (segment/grid) | Seg13/Grid10 | These pins are selectable for segment or grid driving.                                                                                                                                                                                                                                                                            |
| 29  |                                    | Seg14/Grid9  |                                                                                                                                                                                                                                                                                                                                   |
| 30  |                                    | Seg15/Grid8  |                                                                                                                                                                                                                                                                                                                                   |
| 31  |                                    | Seg16/Grid7  |                                                                                                                                                                                                                                                                                                                                   |
| 32  | High-voltage output (grid)         | Grid6        | Grid output pins                                                                                                                                                                                                                                                                                                                  |
| 33  |                                    | Grid5        |                                                                                                                                                                                                                                                                                                                                   |
| 34  |                                    | Grid4        |                                                                                                                                                                                                                                                                                                                                   |
| 35  |                                    | Grid3        |                                                                                                                                                                                                                                                                                                                                   |
| 36  |                                    | Grid2        |                                                                                                                                                                                                                                                                                                                                   |
| 37  |                                    | Grid1        |                                                                                                                                                                                                                                                                                                                                   |
| 38  | Logic power                        | VDD          | 5 V $\pm$ 10 %                                                                                                                                                                                                                                                                                                                    |
| 39  | LED output                         | LED4         | CMOS output. +20 mA max.                                                                                                                                                                                                                                                                                                          |
| 40  |                                    | LED3         |                                                                                                                                                                                                                                                                                                                                   |
| 41  |                                    | LED2         |                                                                                                                                                                                                                                                                                                                                   |
| 42  |                                    | LED1         |                                                                                                                                                                                                                                                                                                                                   |
| 43  | Logic ground                       | VSS          | Connect this pin to system GND.                                                                                                                                                                                                                                                                                                   |
| 44  | Oscillator pin                     | OSC          | Connect resistor to this pin to determine the oscillation frequency to this pin.                                                                                                                                                                                                                                                  |

■ DISPLAY DATA

● V1 : 7-BT-299GNK (WD602800)

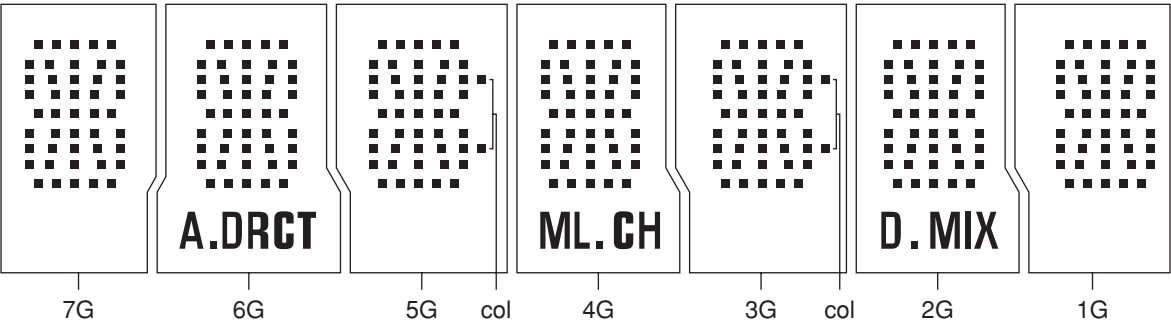


● PIN CONNECTION

|            |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |
|------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|
| PIN NO.    | 32 | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18  | 17  | 16  | 15  | 14  | 13  | 12 | 11 | 10 | 9  | 8  | 7  | 6  | 5  | 4  | 3  | 2  | 1  |
| CONNECTION | F2 | F2 | NP | 1G | 2G | 3G | 4G | 5G | 6G | 7G | NP | NP | NP | NP | P15 | P14 | P13 | P12 | P11 | P10 | P9 | P8 | P7 | P6 | P5 | P4 | P3 | P2 | P1 | NP | F1 | F1 |

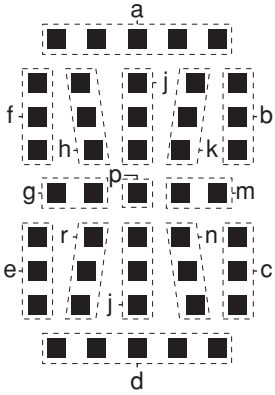
NOTE : 1) F1, F2 ..... Filament 2) NP ..... No pin 3) 1G ~ 7G ..... Grid

● GRIG ASSIGNMENT

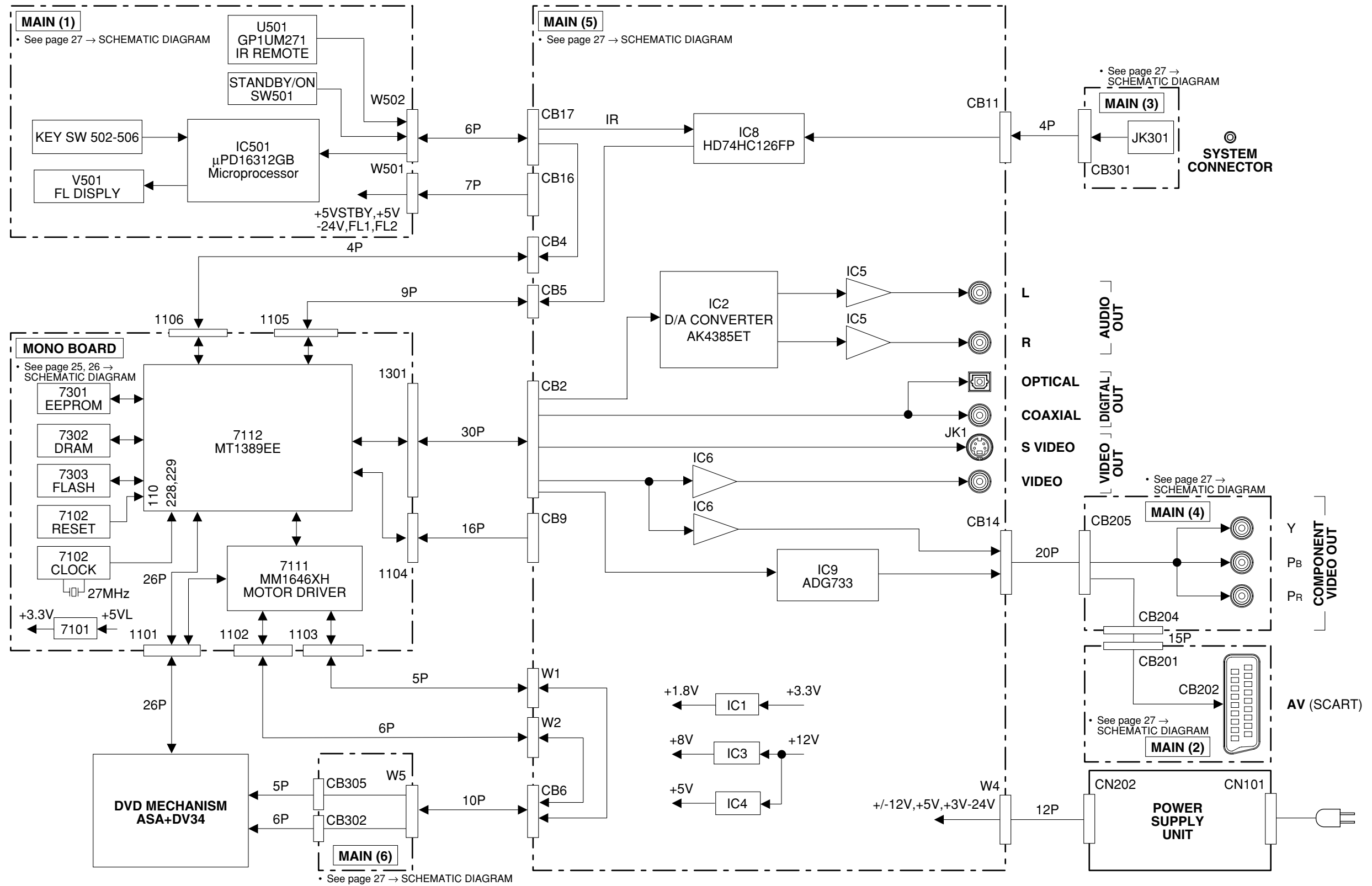


● ANODE CONNECTION

|     |    |        |     |       |     |       |    |
|-----|----|--------|-----|-------|-----|-------|----|
|     | 7G | 6G     | 5G  | 4G    | 3G  | 2G    | 1G |
| P1  | a  |        |     |       |     |       |    |
| P2  | j  |        |     |       |     |       |    |
| P3  | h  |        |     |       |     |       |    |
| P4  | k  |        |     |       |     |       |    |
| P5  | b  |        |     |       |     |       |    |
| P6  | f  |        |     |       |     |       |    |
| P7  | m  |        |     |       |     |       |    |
| P8  | g  |        |     |       |     |       |    |
| P9  | c  |        |     |       |     |       |    |
| P10 | e  |        |     |       |     |       |    |
| P11 | r  |        |     |       |     |       |    |
| P12 | n  |        |     |       |     |       |    |
| P13 | d  |        |     |       |     |       |    |
| P14 | -  | A.DRCT | col | ML.CH | col | D.MIX | -  |
| P15 | p  |        |     |       |     |       |    |

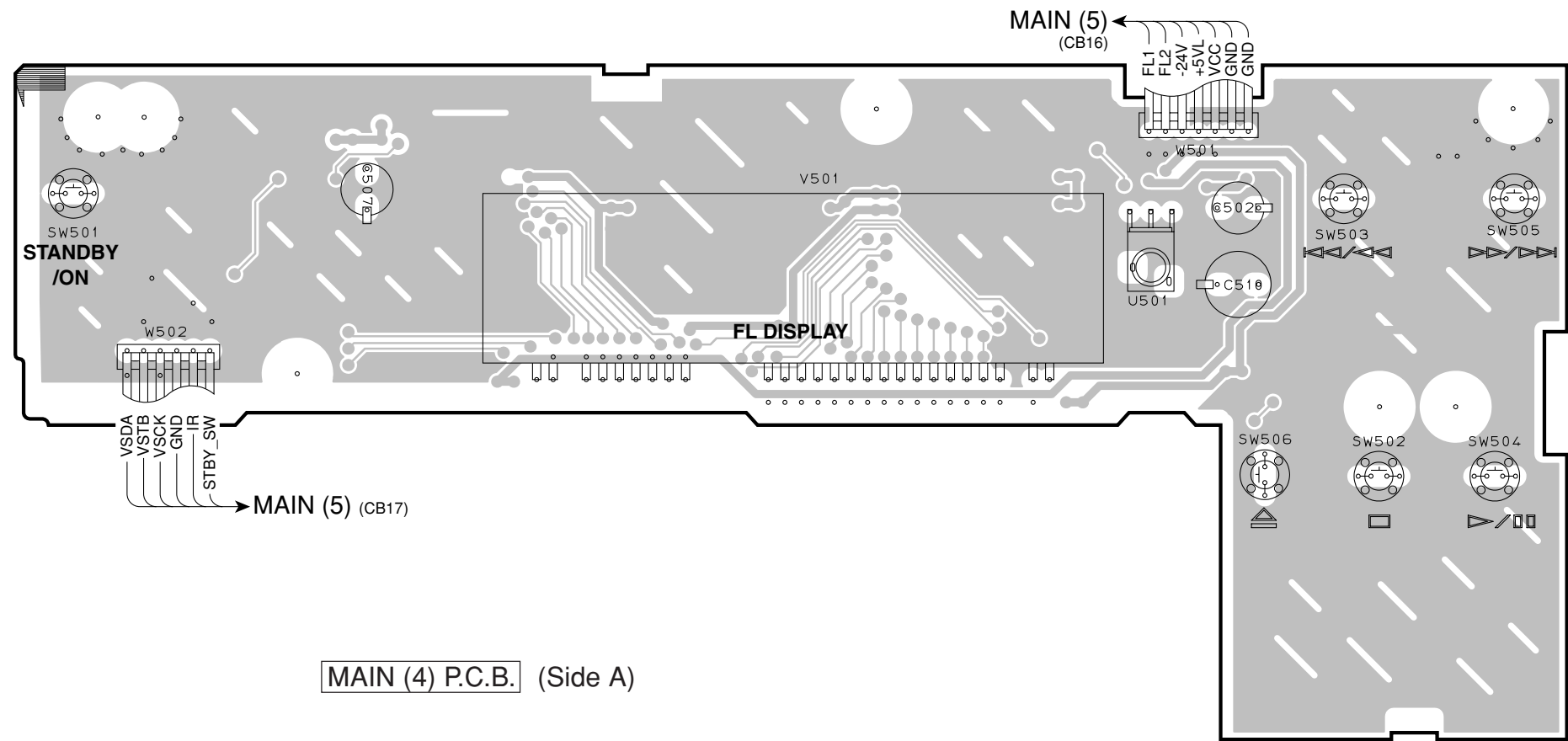


■ BLOCK DIAGRAM

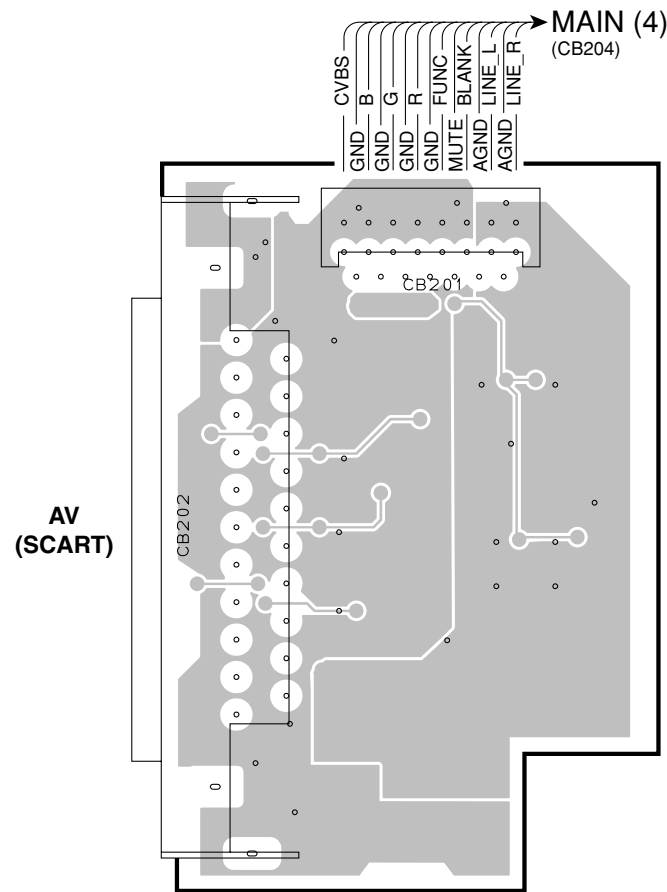


PRINTED CIRCUIT BOARD (Foil side)

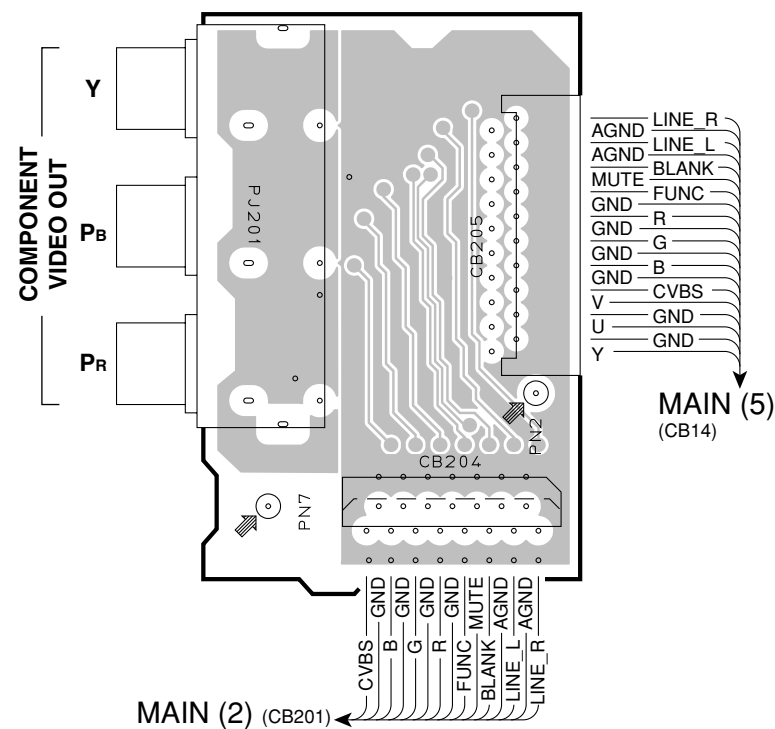
MAIN (1) P.C.B. (Side A)



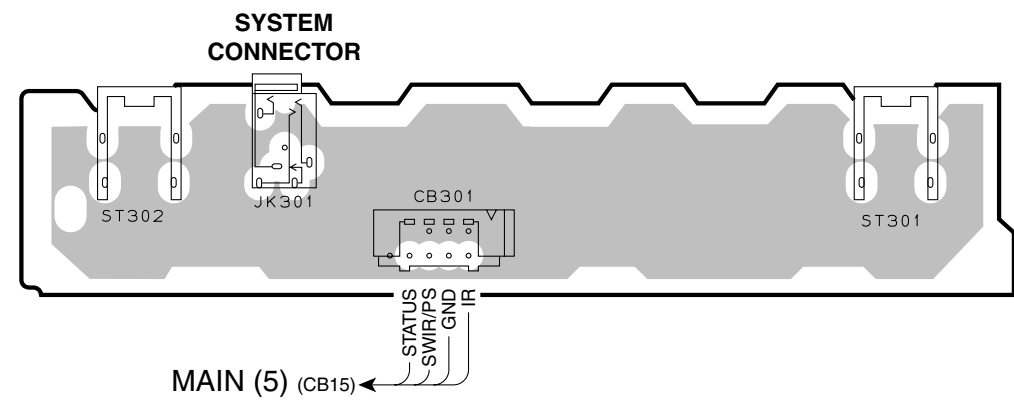
MAIN (2) P.C.B. (Side A)



MAIN (4) P.C.B. (Side A)

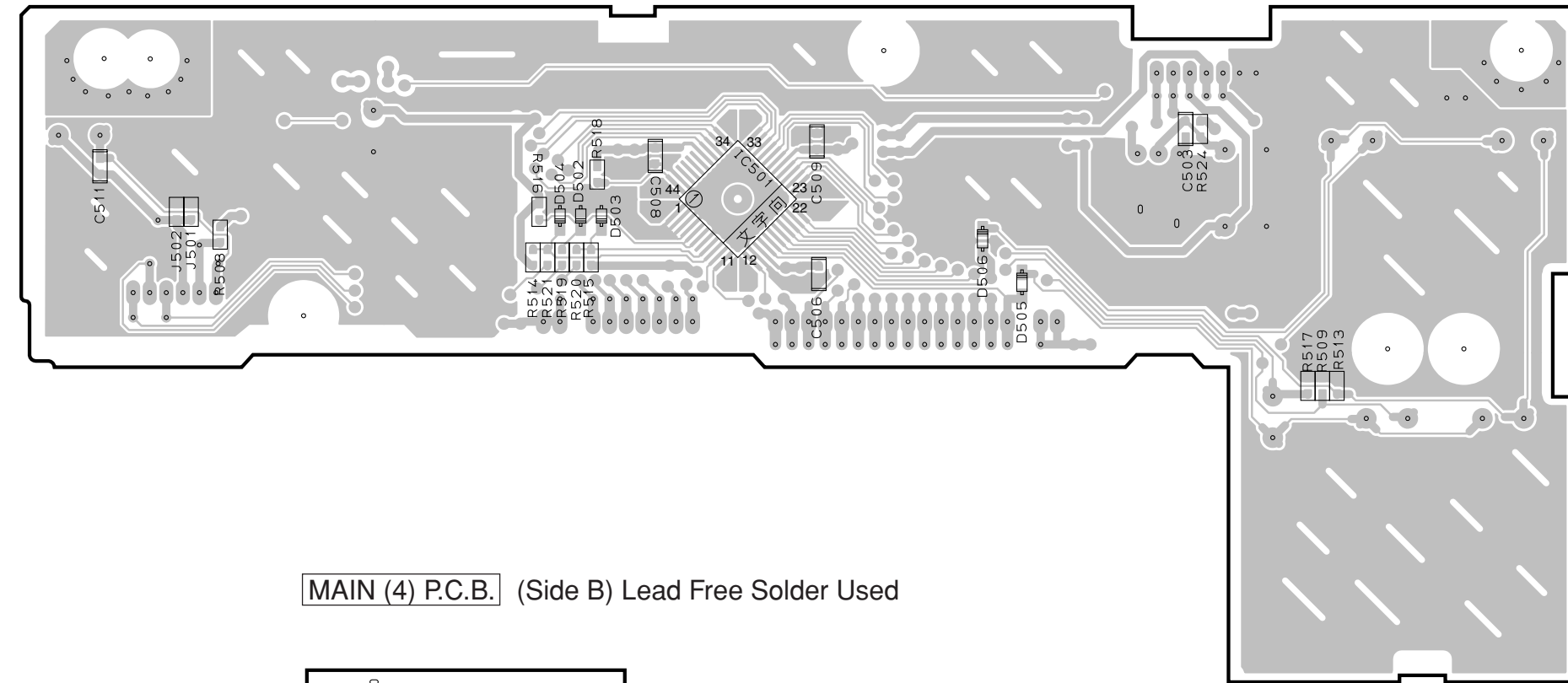


MAIN (3) P.C.B. (Side A)

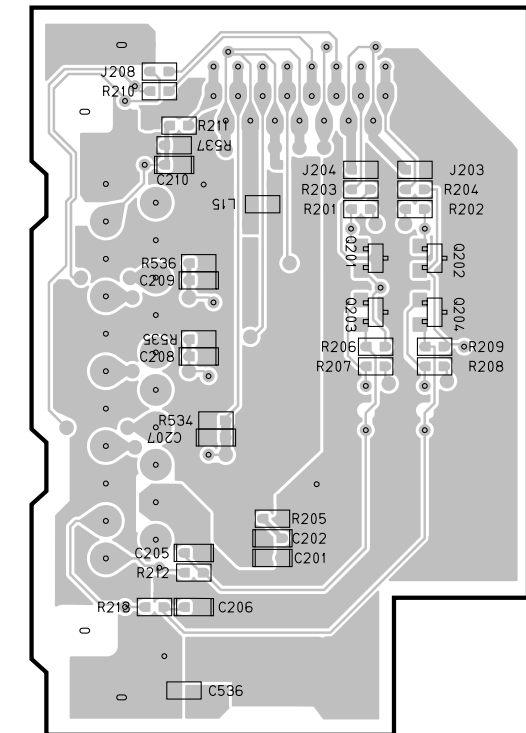


### ■ PRINTED CIRCUIT BOARD (Foil side)

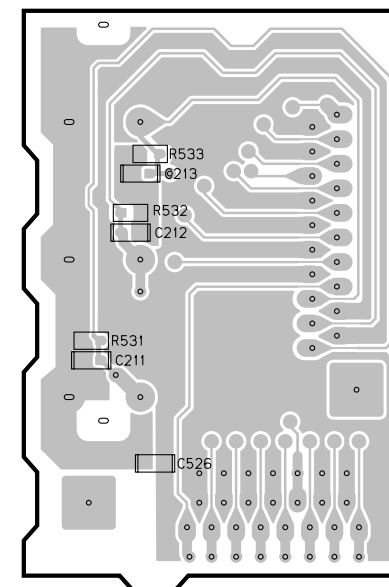
MAIN (1) P.C.B. (Side B) Lead Free Solder Used



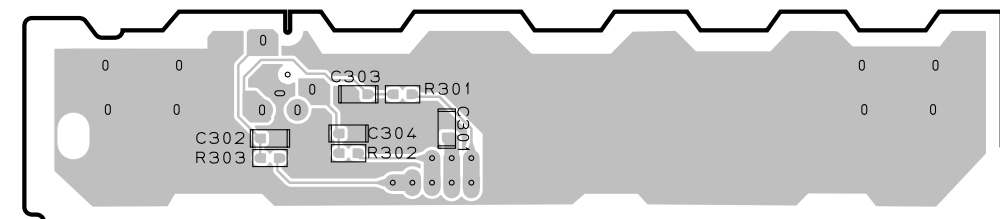
MAIN (2) P.C.B. (Side B) Lead Free Solder Used



MAIN (4) P.C.B. (Side B) Lead Free Solder Used



MAIN (3) P.C.B. (Side B) Lead Free Solder Used



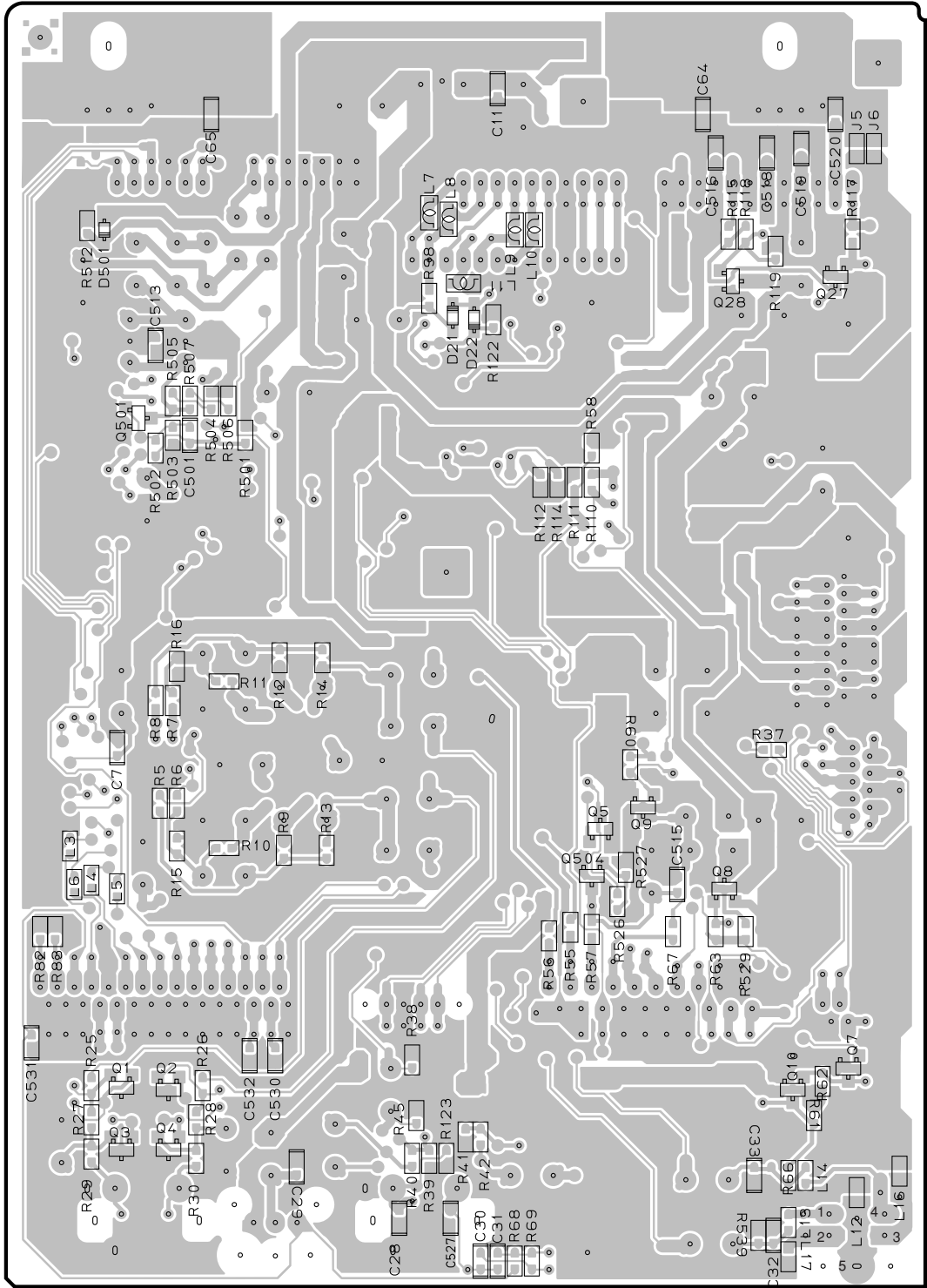
- **Semiconductor Location**

| Ref no. | Location |
|---------|----------|
| D502    | C3       |
| D503    | C3       |
| D504    | C3       |
| D505    | E3       |
| D506    | E3       |
| IC501   | D3       |
| Q201    | I3       |
| Q202    | I3       |
| Q203    | I3       |
| Q204    | I3       |

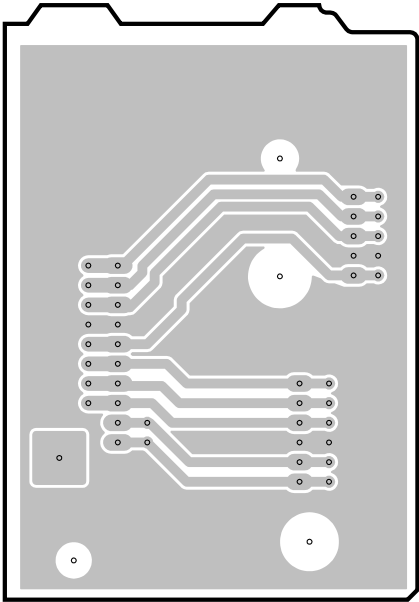
| Ref no. | Location | Ref no. | Location | Ref no. | Location | Ref no. | Location |
|---------|----------|---------|----------|---------|----------|---------|----------|
| D4      | B4       | D19     | C4       | IC6     | C6       | Q20     | C3       |
| D5      | B4       | D20     | C4       | IC8     | D4       | Q21     | C3       |
| D6      | B4       | D208    | C4       | IC9     | D9       | Q22     | D3       |
| D7      | B3       | IC1     | D4       | Q11     | B3       | Q24     | C4       |
| D8      | B4       | IC2     | B5       | Q12     | B4       | Q25     | C4       |
| D9      | C4       | IC3     | C2       | Q13     | B4       | Q26     | C4       |
| D10     | C4       | IC4     | D4       | Q14     | B4       | Q502    | B3       |
| D18     | C4       | IC5     | C5       | Q15     | C4       | Q503    | B3       |

PRINTED CIRCUIT BOARD (Foil side)

MAIN (5) P.C.B. (Side B) Lead Free Solder Used



MAIN (6) P.C.B. (Side B) Lead Free Solder Used



Semiconductor Location

| Ref no. | Location | Ref no. | Location |
|---------|----------|---------|----------|
| D21     | C3       | Q7      | D6       |
| D22     | C3       | Q8      | D5       |
| D501    | B3       | Q9      | D5       |
| Q1      | B6       | Q10     | D6       |
| Q2      | B6       | Q27     | D3       |
| Q3      | B6       | Q28     | D3       |
| Q4      | B6       | Q501    | B4       |
| Q5      | C5       | Q504    | C5       |

MAIN (7) P.C.B. (Side B) Lead Free Solder Used

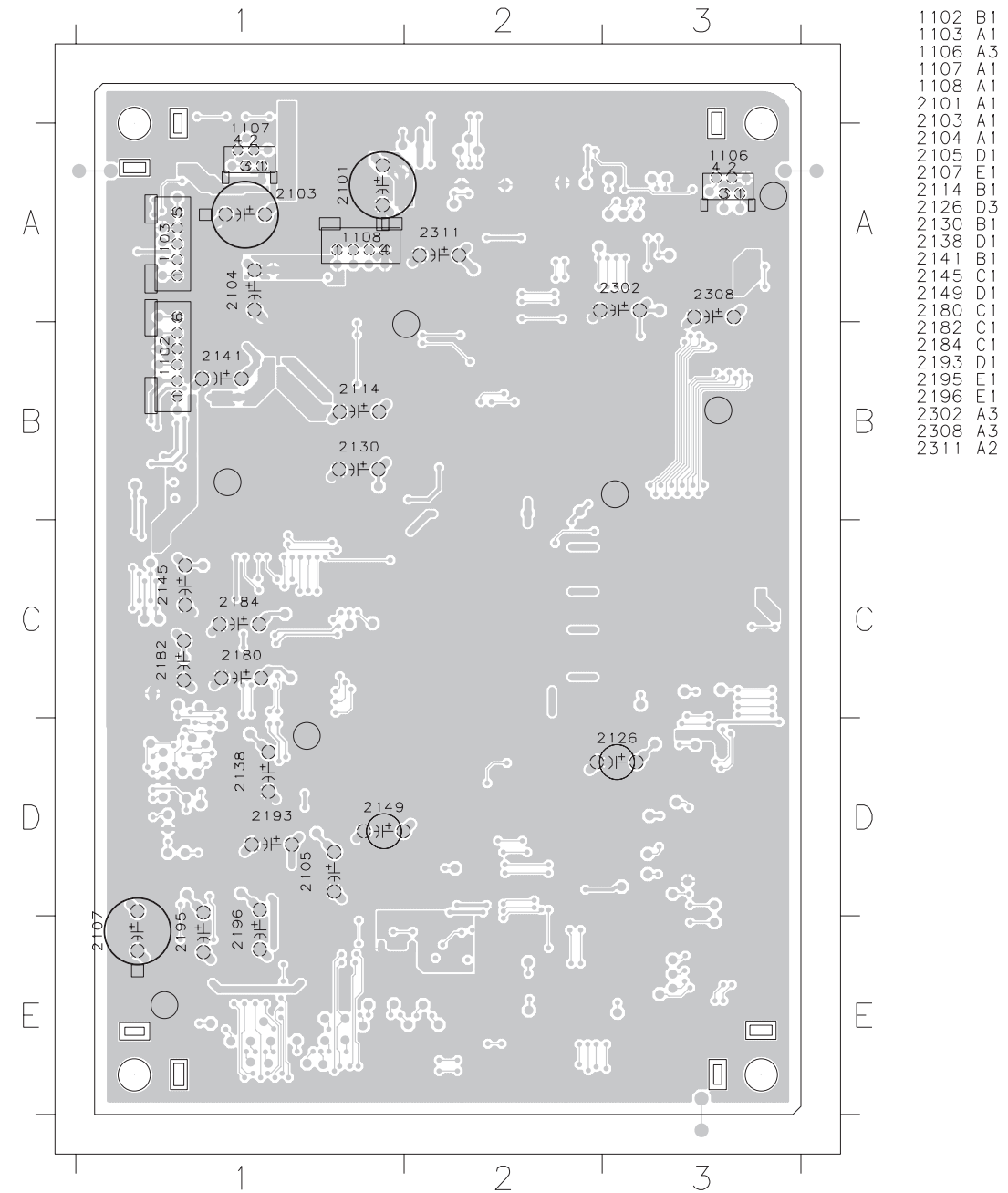
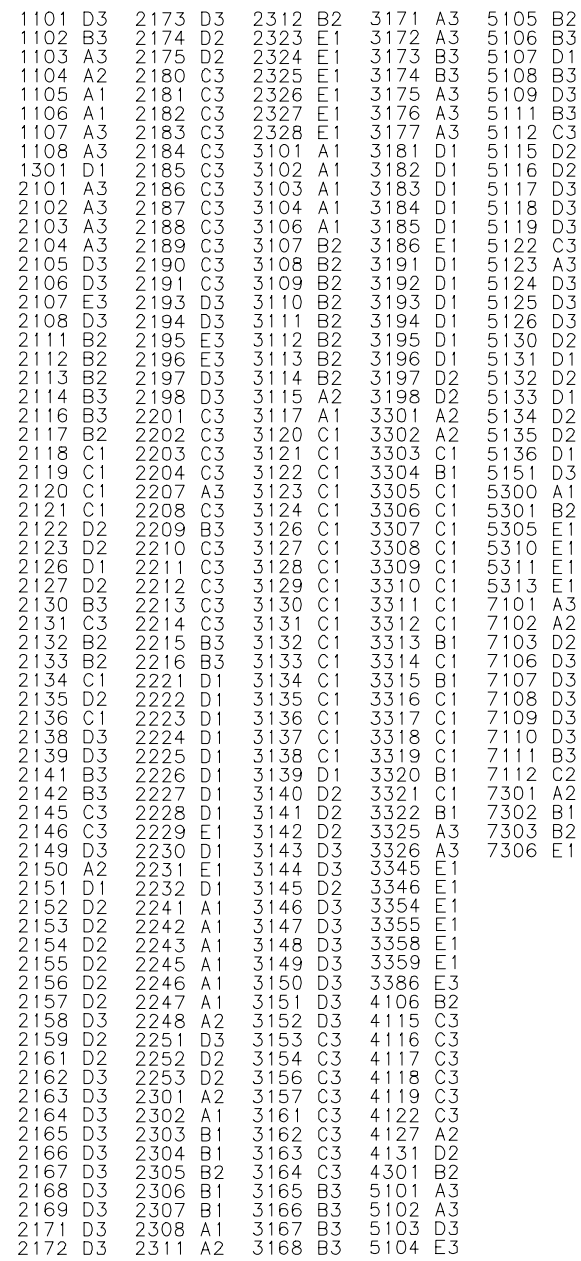


The first digit of a component indicates the component type.

7xxx : IC, Transistor, FET

9xxx : Wire jumper

### MONO Board-Bottom View



**MONO BOARD 1/2**

The schematic diagram illustrates the internal circuitry of the MONO BOARD 1/2, which is divided into six sections (1 through 6). The board features a voltage regulation section (1) using an LD1117T33 regulator, a signal processing section (2) with a 74HC04PW hex inverter, and a timing section (3) with a 74HC04PW hex inverter. The board is powered by a +5V input and a +3V output. The output of the board is a +3V signal, which is also used as a reference for the timing section. The board is designed to be used in a stereo configuration, with the output of the first board connected to the input of the second board.

The schematic shows the input stage of a two-stage CMOS op-amp. It features three differential pairs of MOSFETs:

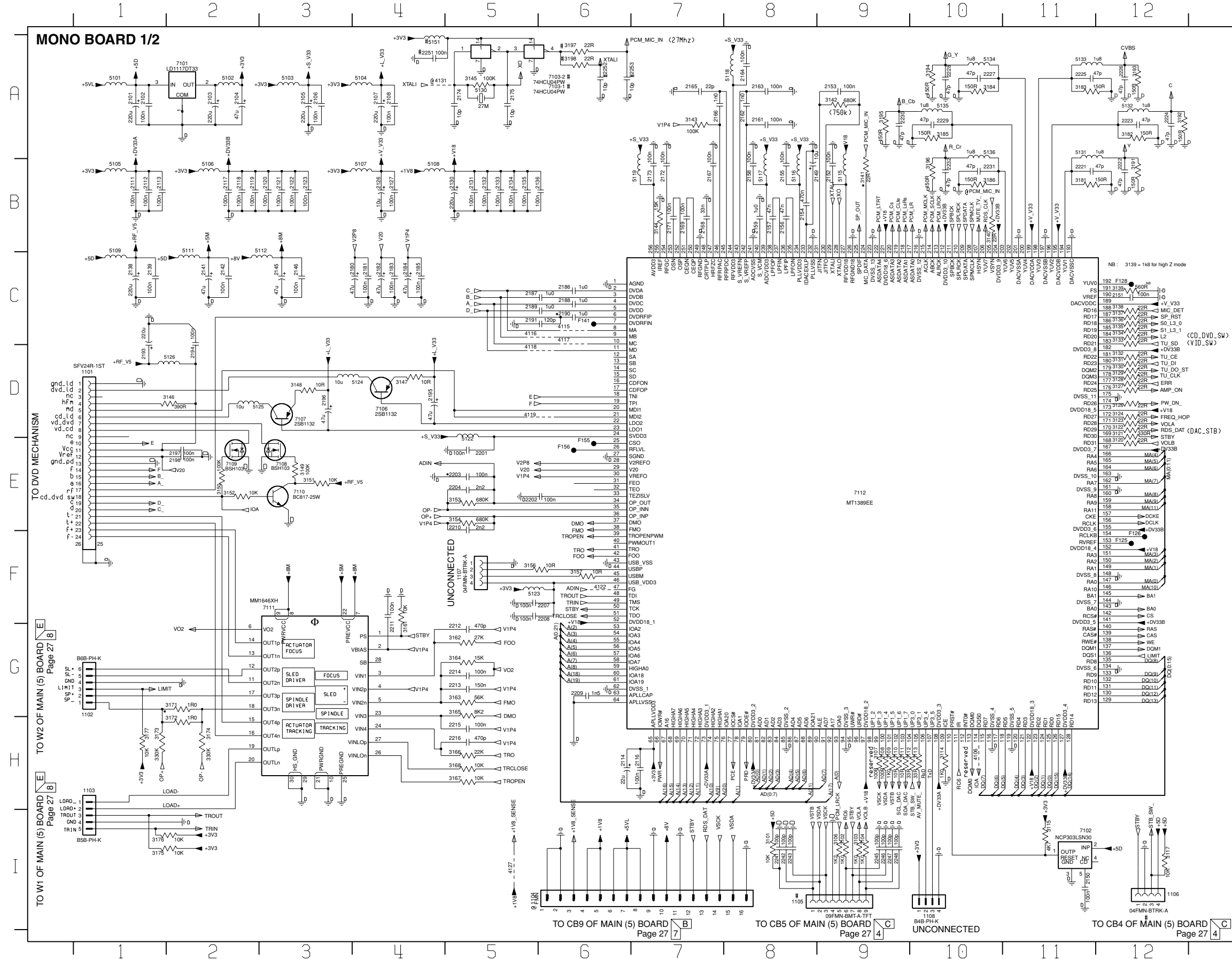
- PMOS Network:** Three PMOS transistors are connected in parallel between the supply rails (labeled 11 and 12) and the output nodes C, D, and E. Each PMOS transistor has its gate connected to node B and its source to ground. The gates are also connected to a common bias network consisting of a resistor divider (resistors 5133 and 3163) and a capacitor (C\_VBS).
- NMOS Network:** Three NMOS transistors are connected in parallel between the output nodes C, D, and E and ground. Each NMOS transistor has its gate connected to node A and its source to ground.

The circuit includes various passive components for biasing and stability:

- Resistors:** 5133, 3163, 2225, 47p, 50R, 5132, 2223, 47p, 50R, 5131, 2221, 47p, 50R, 2222, 47p, 50R, 3162, 50R, 3161, 50R.
- Capacitors:** 1u8, 47p, 50R, 1u8, 47p, 50R, 1u8, 47p, 50R.
- Biasing:** A current source I\_BIAS is connected to node B, which is biased by a voltage divider (resistors 5133 and 3163) from the supply rails.

[illegible][illegible]

1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 14  
 15  
 16  
 17  
 18  
 19  
 20  
 21  
 22  
 23  
 24  
 25  
 26  
 27  
 28  
 29  
 30  
 31  
 32  
 33  
 34  
 35  
 36  
 37  
 38  
 39  
 40  
 41  
 42  
 43  
 44  
 45  
 46  
 47  
 48  
 49  
 50  
 51  
 52  
 53  
 54  
 55  
 56  
 57  
 58  
 59  
 60  
 61  
 62  
 63  
 64  
 65  
 66  
 67  
 68  
 69  
 70  
 71  
 72  
 73  
 74  
 75  
 76  
 77  
 78  
 79  
 80  
 81  
 82  
 83  
 84  
 85  
 86  
 87  
 88  
 89  
 90  
 91  
 92  
 93  
 94  
 95  
 96  
 97  
 98  
 99  
 100  
 101  
 102  
 103  
 104  
 105  
 106  
 107  
 108  
 109  
 110  
 111  
 112  
 113  
 114  
 115  
 116  
 117  
 118  
 119  
 120  
 121  
 122  
 123  
 124  
 125  
 126  
 127  
 128  
 129  
 130  
 131  
 132  
 133  
 134  
 135  
 136  
 137  
 138  
 139  
 140  
 141  
 142  
 143  
 144  
 145  
 146  
 147  
 148  
 149  
 150  
 151  
 152  
 153  
 154  
 155  
 156  
 157  
 158  
 159  
 160  
 161  
 162  
 163  
 164  
 165  
 166  
 167  
 168  
 169  
 170  
 171  
 172  
 173  
 174  
 175  
 176  
 177  
 178  
 179  
 180  
 181  
 182  
 183  
 184  
 185  
 186  
 187  
 188  
 189  
 190  
 191  
 192  
 193  
 194  
 195  
 196  
 197  
 198  
 199  
 200  
 201  
 202  
 203  
 204  
 205  
 206  
 207  
 208  
 209  
 210  
 211  
 212  
 213  
 214  
 215  
 216  
 217  
 218  
 219  
 220  
 221  
 222  
 223  
 224  
 225  
 226  
 227  
 228  
 229  
 230  
 231  
 232  
 233  
 234  
 235  
 236  
 237  
 238  
 239  
 240  
 241  
 242  
 243  
 244  
 245  
 246  
 247  
 248  
 249  
 250  
 251  
 252  
 253  
 254  
 255  
 256  
 257  
 258  
 259  
 260  
 261  
 262  
 263  
 264  
 265  
 266  
 267  
 268  
 269  
 270  
 271  
 272  
 273  
 274  
 275  
 276  
 277  
 278  
 279  
 280  
 281  
 282  
 283  
 284  
 285  
 286  
 287  
 288  
 289  
 290  
 291  
 292  
 293  
 294  
 295  
 296  
 297  
 298  
 299  
 300  
 301  
 302  
 303  
 304  
 305  
 306  
 307  
 308  
 309  
 310  
 311  
 312  
 313  
 314  
 315  
 316  
 317  
 318  
 319  
 320  
 321  
 322  
 323  
 324  
 325  
 326  
 327  
 328  
 329  
 330  
 331  
 332  
 333  
 334  
 335  
 336  
 337  
 338  
 339  
 340  
 341  
 342  
 343  
 344  
 345  
 346  
 347  
 348  
 349  
 350  
 351  
 352  
 353  
 354  
 355  
 356  
 357  
 358  
 359  
 360  
 361  
 362  
 363  
 364  
 365  
 366  
 367  
 368  
 369  
 370  
 371  
 372  
 373  
 374  
 375  
 376  
 377  
 378  
 379  
 380  
 381  
 382  
 383  
 384  
 385  
 386  
 387  
 388  
 389  
 390  
 391  
 392  
 393  
 394  
 395  
 396  
 397  
 398  
 399  
 400  
 401  
 402  
 403  
 404  
 405  
 406  
 407  
 408  
 409  
 410  
 411  
 412  
 413  
 414  
 415  
 416  
 417  
 418  
 419  
 420  
 421  
 422  
 423  
 424  
 425  
 426  
 427  
 428  
 429  
 430  
 431  
 432  
 433  
 434  
 435  
 436  
 437  
 438  
 439  
 440  
 441  
 442  
 443  
 444  
 445  
 446  
 447  
 448  
 449  
 450  
 451  
 452  
 453  
 454  
 455  
 456  
 457  
 458  
 459  
 460  
 461  
 462  
 463  
 464  
 465  
 466  
 467  
 468  
 469  
 470  
 471  
 472  
 473  
 474  
 475  
 476  
 477  
 478  
 479  
 480  
 481  
 482  
 483  
 484  
 485  
 486  
 487  
 488  
 489  
 490  
 491  
 492  
 493  
 494  
 495  
 496  
 497  
 498  
 499  
 500  
 501  
 502  
 503  
 504  
 505  
 506  
 507  
 508  
 509  
 510  
 511  
 512  
 513  
 514  
 515  
 516  
 517  
 518  
 519  
 520  
 521  
 522  
 523  
 524  
 525



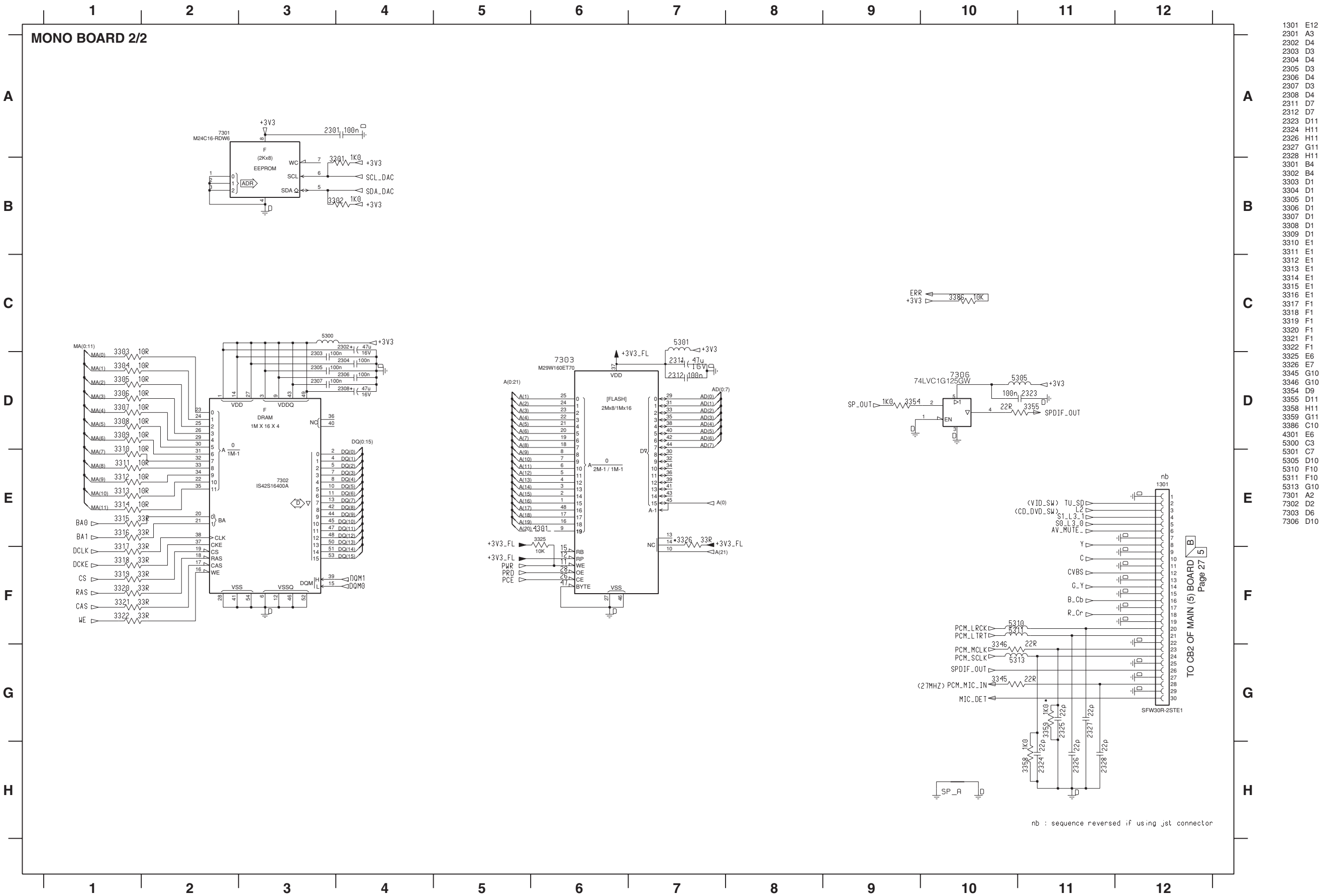
1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 14  
 15  
 16  
 17  
 18  
 19  
 20  
 21  
 22  
 23  
 24  
 25  
 26  
 27  
 28  
 29  
 30  
 31  
 32  
 33  
 34  
 35  
 36  
 37  
 38  
 39  
 40  
 41  
 42  
 43  
 44  
 45  
 46  
 47  
 48  
 49  
 50  
 51  
 52  
 53  
 54  
 55  
 56  
 57  
 58  
 59  
 60  
 61  
 62  
 63  
 64  
 65  
 66  
 67  
 68  
 69  
 70  
 71  
 72  
 73  
 74  
 75  
 76  
 77  
 78  
 79  
 80  
 81  
 82  
 83  
 84  
 85  
 86  
 87  
 88  
 89  
 90  
 91  
 92  
 93  
 94  
 95  
 96  
 97  
 98  
 99  
 100  
 101  
 102  
 103  
 104  
 105  
 106  
 107  
 108  
 109  
 110  
 111  
 112  
 113  
 114  
 115  
 116  
 117  
 118  
 119  
 120  
 121  
 122  
 123  
 124  
 125  
 126  
 127  
 128  
 129  
 130  
 131  
 132  
 133  
 134  
 135  
 136  
 137  
 138  
 139  
 140  
 141  
 142  
 143  
 144  
 145  
 146  
 147  
 148  
 149  
 150  
 151  
 152  
 153  
 154  
 155  
 156  
 157  
 158  
 159  
 160  
 161  
 162  
 163  
 164  
 165  
 166  
 167  
 168  
 169  
 170  
 171  
 172  
 173  
 174  
 175  
 176  
 177  
 178  
 179  
 180  
 181  
 182  
 183  
 184  
 185  
 186  
 187  
 188  
 189  
 190  
 191  
 192  
 193  
 194  
 195  
 196  
 197  
 198  
 199  
 200  
 201  
 202  
 203  
 204  
 205  
 206  
 207  
 208  
 209  
 210  
 211  
 212  
 213  
 214  
 215  
 216  
 217  
 218  
 219  
 220  
 221  
 222  
 223  
 224  
 225  
 226  
 227  
 228  
 229  
 230  
 231  
 232  
 233  
 234  
 235  
 236  
 237  
 238  
 239  
 240  
 241  
 242  
 243  
 244  
 245  
 246  
 247  
 248  
 249  
 250  
 251  
 252  
 253  
 254  
 255  
 256  
 257  
 258  
 259  
 260  
 261  
 262  
 263  
 264  
 265  
 266  
 267  
 268  
 269  
 270  
 271  
 272  
 273  
 274  
 275  
 276  
 277  
 278  
 279  
 280  
 281  
 282  
 283  
 284  
 285  
 286  
 287  
 288  
 289  
 290  
 291  
 292  
 293  
 294  
 295  
 296  
 297  
 298  
 299  
 300  
 301  
 302  
 303  
 304  
 305  
 306  
 307  
 308  
 309  
 310  
 311  
 312  
 313  
 314  
 315  
 316  
 317  
 318  
 319  
 320  
 321  
 322  
 323  
 324  
 325  
 326  
 327  
 328  
 329  
 330  
 331  
 332  
 333  
 334  
 335  
 336  
 337  
 338  
 339  
 340  
 341  
 342  
 343  
 344  
 345  
 346  
 347  
 348  
 349  
 350  
 351  
 352  
 353  
 354  
 355  
 356  
 357  
 358  
 359  
 360  
 361  
 362  
 363  
 364  
 365  
 366  
 367  
 368  
 369  
 370  
 371  
 372  
 373  
 374  
 375  
 376  
 377  
 378  
 379  
 380  
 381  
 382  
 383  
 384  
 385  
 386  
 387  
 388  
 389  
 390  
 391  
 392  
 393  
 394  
 395  
 396  
 397  
 398  
 399  
 400  
 401  
 402  
 403  
 404  
 405  
 406  
 407  
 408  
 409  
 410  
 411  
 412  
 413  
 414  
 415  
 416  
 417  
 418  
 419  
 420  
 421  
 422  
 423  
 424  
 425  
 426  
 427  
 428  
 429  
 430  
 431  
 432  
 433  
 434  
 435  
 436  
 437  
 438  
 439  
 440  
 441  
 442  
 443  
 444  
 445  
 446  
 447  
 448  
 449  
 450  
 451  
 452  
 453  
 454  
 455  
 456  
 457  
 458  
 459  
 460  
 461  
 462  
 463  
 464  
 465  
 466  
 467  
 468  
 469  
 470  
 471  
 472  
 473  
 474  
 475  
 476  
 477  
 478  
 479  
 480  
 481  
 482  
 483  
 484  
 485  
 486  
 487  
 488  
 489  
 490  
 491  
 492  
 493  
 494  
 495  
 496  
 497  
 498  
 499  
 500  
 501  
 502  
 503  
 504  
 505  
 506  
 507  
 508  
 509  
 510  
 511  
 512  
 513  
 514  
 515  
 516  
 517  
 518  
 519  
 520  
 521  
 522  
 523  
 524  
 525

[illegible]

■ SCHEMATIC DIAGRAM

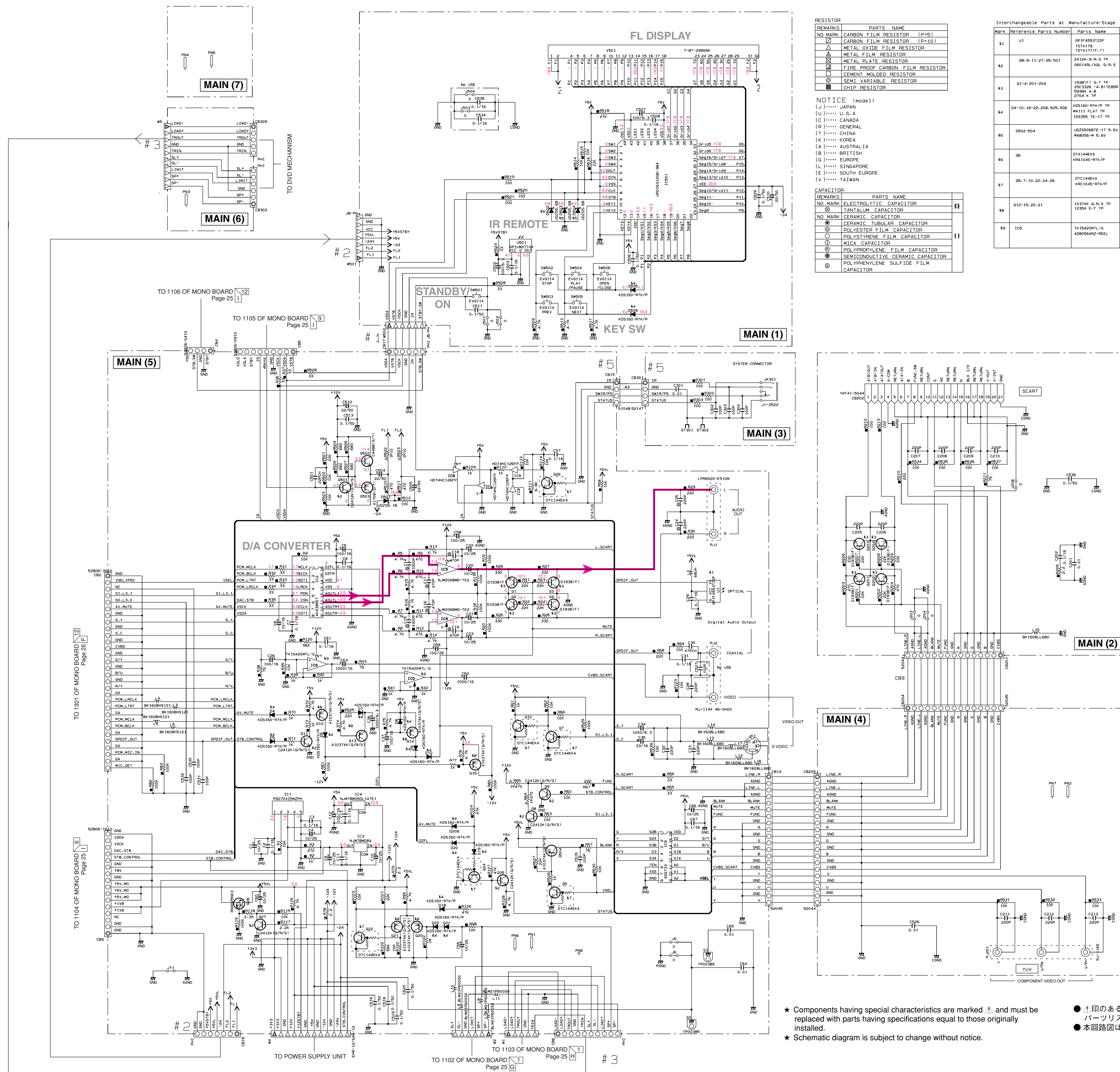
FOR INFORMATION ONLY (NO REPLACEMENT COMPONENT PARTS WILL BE AVAILABLE)

The first digit of a component indicates the component type.  
1xxx : Connector    3xxx : Resistor    5xxx : Coil    7xxx : IC, Transistor, FET  
2xxx : Capacitor    4xxx : SMD jumper    6xxx : Diode    9xxx : Wire jumper



# SCHEMATIC DIAGRAM (MAIN)

DVD-E600MK2



| REMARKS | PARTS NAME                      |
|---------|---------------------------------|
| NO MARK | CARBON FILM RESISTOR (P=5)      |
| ⊠       | CARBON FILM RESISTOR (P=10)     |
| △       | METAL OXIDE FILM RESISTOR       |
| ⊡       | METAL FILM RESISTOR             |
| ⊞       | METAL PLATE RESISTOR            |
| ⊞       | FINE PROOF CARBON FILM RESISTOR |
| ⊞       | CEMENT MOLDED RESISTOR          |
| ⊞       | SEMI VARIABLE RESISTOR          |
| ⊞       | CHIP RESISTOR                   |

NOTICE (model)

(J)..... JAPAN  
(U)..... U.S.A  
(C)..... CANADA  
(R)..... GENERAL  
(T)..... CHINA  
(K)..... KOREA  
(A)..... AUSTRALIA  
(B)..... BRITISH  
(G)..... EUROPE  
(L)..... SINGAPORE  
(E)..... SOUTH EUROPE  
(V)..... TAIWAN

| REMARKS | PARTS NAME                           |
|---------|--------------------------------------|
| NO MARK | ELECTROLYTIC CAPACITOR               |
| ⊞       | TANTALUM CAPACITOR                   |
| NO MARK | CERAMIC CAPACITOR                    |
| ⊞       | CERAMIC TUBULAR CAPACITOR            |
| ⊞       | POLYSTYRENE FILM CAPACITOR           |
| ⊞       | POLYPROPYLENE FILM CAPACITOR         |
| ⊞       | MICA CAPACITOR                       |
| ⊞       | SEMICONDUCTIVE CERAMIC CAPACITOR     |
| ⊞       | POLYPHENYLENE SULFIDE FILM CAPACITOR |

| Mark | Reference Parts Number  | Parts Name                                                     |
|------|-------------------------|----------------------------------------------------------------|
| 41   | U1                      | GP14553720P<br>101X179<br>101X177(F.1)                         |
| 42   | 08-9-11-27-26-501       | 2412K-G-R-S TP<br>50018K/ADL G-R-S                             |
| 43   | 01-4-201-204            | 1938(F) 5-T TP<br>25C3356 -A-BITEB9A<br>9335A A-B<br>2704 K TP |
| 44   | 04-10-18-20-208-505-506 | KDS160-RTK/P TP<br>M111 FLAT TP<br>ISS205 TE-17 TP             |
| 45   | 0502-504                | UD250568TE-17 5-6V<br>MAB056-W 5-6V                            |
| 46   | 06                      | DT144EXA<br>KRA1045-RTK/P                                      |
| 47   | 05-7-10-20-24-26        | DT144EXA<br>KRC1045-RTK/P                                      |
| 48   | 012-15-20-21            | 1037AK G-R-S TP<br>1235A E-F TP                                |
| 49   | IC6                     | Tk15420MTL-G<br>ADR056A2-REEL                                  |

★ Components having special characteristics are marked and must be replaced with parts having specifications equal to those originally installed.

★ Schematic diagram is subject to change without notice.

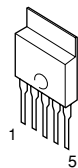
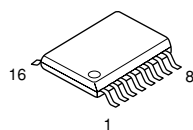
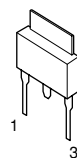
● 印のある部品は、安全性確保部品を示しています。部品の交換が必要な場合、パーツリストに記載されている部品を使用してください。

● 本回路図は標準回路図です。改良のため予告なく変更することがございます。

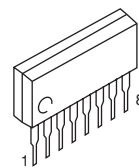
## PIN CONNECTION DIAGRAM

### ● ICs

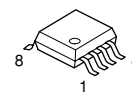
PQ070X25MZP

AK4385ET  
ADG733NJM78M05DL 1A  
NJM78M08A 8V

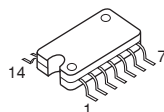
NJM2068MD



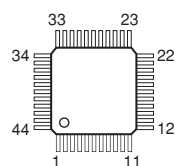
TK15420M



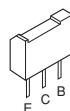
HD74HC126FP



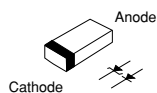
uPD16312GB



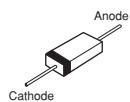
### ● Transistors

2SA1037K (Q, R, S)  
2SC2412K (Q, R, S)  
2SD1938F (S, T)  
DTC144EKA  
RSR025N032SA1708 (S, T)  
2SC4488 (S, T)

### ● Diodes

UDZ5.1B 5.1V  
UDZS5.6BTE-17 5.6V

KDS160-RTK



# PARTS LIST

## ■ ELECTRICAL PARTS

### ■ WARNING

- Components having special characteristics are marked  and must be replaced with parts having specifications equal to those originally installed.

### ABBREVIATIONS IN THIS LIST ARE AS FOLLOWS:

|            |                               |            |                                |
|------------|-------------------------------|------------|--------------------------------|
| C.A.EL.CHP | : CHIP ALUMI.ELECTROLYTIC CAP | L.EMIT     | : LIGHT EMITTING MODULE        |
| C.CE       | : CERAMIC CAP                 | LED.DSPLY  | : LED DISPLAY                  |
| C.CE.ARRAY | : CERAMIC CAP ARRAY           | LED.INFRD  | : LED,INFRARED                 |
| C.CE.CHP   | : CHIP CERAMIC CAP            | MODUL.RF   | : MODULATOR,RF                 |
| C.CE.ML    | : MULTILAYER CERAMIC CAP      | PHOT.CPL   | : PHOTO COUPLER                |
| C.CE.M.CHP | : CHIP MULTILAYER CERAMIC CAP | PHOT.INTR  | : PHOTO INTERRUPTER            |
| C.CE.SAFTY | : RECOGNIZED CERAMIC CAP      | PHOT.RFLCT | : PHOTO REFLECTOR              |
| C.CE.TUBLR | : CERAMIC TUBULAR CAP         | PIN.TEST   | : PIN,TEST POINT               |
| C.CE.SMI   | : SEMI CONDUCTIVE CERAMIC CAP | PLST.RIVET | : PLASTIC RIVET                |
| C.EL       | : ELECTROLYTIC CAP            | R.ARRAY    | : RESISTOR ARRAY               |
| C.EL.BP    | : BIPOLAR ELECTROLYTIC CAP    | R.CAR.     | : CARBON RESISTOR              |
| C.MICA     | : MICA CAP                    | R.CAR.CHP  | : CHIP RESISTOR                |
| C.ML.FLM   | : MULTILAYER FILM CAP         | R.CAR.FP   | : FLAME PROOF CARBON RESISTOR  |
| C.MP       | : METALLIZED PAPER CAP        | R.FUS      | : FUSABLE RESISTOR             |
| C.MYLAR    | : MYLAR FILM CAP              | R.MTL.CHP  | : CHIP METAL FILM RESISTOR     |
| C.MYLAR.ML | : MULTILAYER MYLAR FILM CAP   | R.MTL.FLM  | : METAL FILM RESISTOR          |
| C.PAPER    | : PAPER CAPACITOR             | R.MTL.OXD  | : METAL OXIDE FILM RESISTOR    |
| C.PLS      | : POLYSTYRENE FILM CAP        | R.MTL.PLAT | : METAL PLATE RESISTOR         |
| C.POL      | : POLYESTER FILM CAP          | RSNR.CE    | : CERAMIC RESONATOR            |
| C.POLY     | : POLYETHYLENE FILM CAP       | RSNR.CRYS  | : CRYSTAL RESONATOR            |
| C.PP       | : POLYPROPYLENE FILM CAP      | R.TW.CEM   | : TWIN CEMENT FIXED RESISTOR   |
| C.TNTL     | : TANTALUM CAP                | R.CEMENT   | : CEMENT RESISTOR              |
| C.TNTL.CHP | : CHIP TANTALUM CAP           | SCR.BND.HD | : BIND HEAD B-TITE SCREW       |
| C.TRIM     | : TRIMMER CAP                 | SCR.BW.HD  | : BW HEAD TAPPING SCREW        |
| CN         | : CONNECTOR                   | SCR.CUP    | : CUP TITE SCREW               |
| CN.BS.PIN  | : CONNECTOR,BASE PIN          | SCR.TERM   | : SCREW TERMINAL               |
| CN.CANNON  | : CONNECTOR,CANNON            | SCR.TR     | : SCREW,TRANSISTOR             |
| CN.DIN     | : CONNECTOR,DIN               | SUPRT.PCB  | : SUPPORT,P.C.B.               |
| CN.FLAT    | : CONNECTOR,FLAT CABLE        | SURG.PRTCT | : SURGE PROTECTOR              |
| CN.POST    | : CONNECTOR,BASE POST         | SW.TACT    | : TACT SWITCH                  |
| COIL.MX.AM | : COIL,AM MIX                 | SW.LEAF    | : LEAF SWITCH                  |
| COIL.AT.FM | : COIL,FM ANTENNA             | SW.LEVER   | : LEVER SWITCH                 |
| COIL.DT.FM | : COIL,FM DETECT              | SW.MICRO   | : MICRO SWITCH                 |
| COIL.MX.FM | : COIL,FM MIX                 | SW.PUSH    | : PUSH SWITCH                  |
| COIL.OUTPT | : OUTPUT COIL                 | SW.RT.ENC  | : ROTARY ENCODER               |
| DIOD.ARRAY | : DIODE ARRAY                 | SW.RT.MTR  | : ROTARY SWITCH WITH MOTOR     |
| DIODE.BRG  | : DIODE BRIDGE                | SW.RT      | : ROTARY SWITCH                |
| DIODE.CHP  | : CHIP DIODE                  | SW.SLIDE   | : SLIDE SWITCH                 |
| DIODE.VAR  | : VARACTOR DIODE              | TERM.SP    | : SPEAKER TERMINAL             |
| DIOD.Z.CHP | : CHIP ZENER DIODE            | TERM.WRAP  | : WRAPPING TERMINAL            |
| DIODE.ZENR | : ZENER DIODE                 | THRMST.CHP | : CHIP THERMISTOR              |
| DSCR.CE    | : CERAMIC DISCRIMINATOR       | TR.CHP     | : CHIP TRANSISTOR              |
| FER.BEAD   | : FERRITE BEADS               | TR.DGT     | : DIGITAL TRANSISTOR           |
| FER.CORE   | : FERRITE CORE                | TR.DGT.CHP | : CHIP DIGITAL TRANSISTOR      |
| FET.CHP    | : CHIP FET                    | TRANS      | : TRANSFORMER                  |
| FL.DSPLY   | : FLUORESCENT DISPLAY         | TRANS.PULS | : PULSE TRANSFORMER            |
| FLTR.CE    | : CERAMIC FILTER              | TRANS.PWR  | : POWER TRANSFORMER ASS'Y      |
| FLTR.COMB  | : COMB FILTER MODULE          | TUNER.AM   | : TUNER PACK,AM                |
| FLTR.LC.RF | : LC FILTER,EMI               | TUNER.FM   | : TUNER PACK,FM                |
| GND.MTL    | : GROUND PLATE                | TUNER.PK   | : FRONT-ENDTUNER PACK          |
| GND.TERM   | : GROUND TERMINAL             | VR         | : ROTARY POTENTIOMETER         |
| HOLDER.FUS | : FUSE HOLDER                 | VR.MTR     | : POTENTIOMETER WITH MOTOR     |
| IC.PRTCT   | : IC PROTECTOR                | VR.SW      | : POTENTIOMETER WITH ROTARY SW |
| JUMPER.CN  | : JUMPER CONNECTOR            | VR.SLIDE   | : SLIDE POTENTIOMETER          |
| JUMPER.TST | : JUMPER,TEST POINT           | VR.TRIM    | : TRIMMER POTENTIOMETER        |
| L.DTCT     | : LIGHT DETECTING MODULE      |            |                                |

P.C.B. MAIN

| Ref. No. | Part No. | Description |                | Markets |
|----------|----------|-------------|----------------|---------|
|          | WG111500 | P. C. B.    | MAIN:SI        | BGE     |
| CB2      | WG158500 | CN. BS. PIN | 30P TE 52806   |         |
| CB4      | WF730200 | CN. BS. PIN | 4P TE          |         |
| CB5      | WF730500 | CN. BS. PIN | 9P TE          |         |
| CB6      | VB390600 | CN. BS. PIN | 10P            |         |
| CB9      | WF730700 | CN. BS. PIN | 16P TE         |         |
| CB14     | VQ047500 | CN. BS. PIN | 20P            |         |
| CB16     | VB390300 | CN. BS. PIN | 7P             |         |
| CB17     | VB390200 | CN. BS. PIN | 6P             |         |
| CB201    | VM929900 | CN. BS. PIN | 15P            |         |
| CB202    | WB497100 | CN          | 21P YKF41-5044 |         |
| CB204    | VM859600 | CN. BS. PIN | 15P            |         |
| CB205    | VQ045000 | CN. BS. PIN | 20P            |         |
| CB301    | VK024800 | CN. BS. PIN | 4P             |         |
| CB302    | VB390200 | CN. BS. PIN | 6P             |         |
| CB305    | VB390100 | CN. BS. PIN | 5P             |         |
| C1       | UR847100 | C. EL       | 10uF 25V       |         |
| C2-3     | US135100 | C. CE. CHP  | 0. 1uF 16V     |         |
| C4       | UR847100 | C. EL       | 10uF 25V       |         |
| C5       | UR838100 | C. EL       | 100uF 16V      |         |
| C6       | UR837100 | C. EL       | 10uF 16V       |         |
| C7-8     | US135100 | C. CE. CHP  | 0. 1uF 16V     |         |
| C9-10    | UR847100 | C. EL       | 10uF 25V       |         |
| C11      | US135100 | C. CE. CHP  | 0. 1uF 16V     |         |
| C12      | UR838100 | C. EL       | 100uF 16V      |         |
| C13      | US135100 | C. CE. CHP  | 0. 1uF 16V     |         |
| C14-15   | UA653330 | C. MYLAR    | 3300pF 50V J   |         |
| C16-19   | UA652470 | C. MYLAR    | 470pF 50V J    |         |
| C20-23   | UR847100 | C. EL       | 10uF 25V       |         |
| C24-25   | UA652220 | C. MYLAR    | 220pF 50V J    |         |
| C26      | UR038100 | C. EL       | 100uF 16V      |         |
| C28      | US062220 | C. CE. CHP  | 220pF 50V B    |         |
| C29      | US135100 | C. CE. CHP  | 0. 1uF 16V     |         |
| C30      | US061470 | C. CE. CHP  | 47pF 50V B     |         |
| C31      | US135100 | C. CE. CHP  | 0. 1uF 16V     |         |
| C32-33   | US062220 | C. CE. CHP  | 220pF 50V B    |         |
| C34      | UR819100 | C. EL       | 1000uF 6. 3V   |         |
| C35      | UN837330 | C. EL. BP   | 33uF 16V       |         |
| C36      | UR819100 | C. EL       | 1000uF 6. 3V   |         |
| C37      | UR838100 | C. EL       | 100uF 16V      |         |
| C55      | UR847100 | C. EL       | 10uF 25V       |         |
| C57      | US135100 | C. CE. CHP  | 0. 1uF 16V     |         |
| C58-59   | UR848100 | C. EL       | 100uF 25V      |         |
| C60      | UR847100 | C. EL       | 10uF 25V       |         |
| C61      | US135100 | C. CE. CHP  | 0. 1uF 16V     |         |
| C62-63   | UR039100 | C. EL       | 1000uF 16V     |         |
| C64-65   | US064100 | C. CE. CHP  | 0. 01uF 50V B  |         |
| C66      | UR847100 | C. EL       | 10uF 25V       |         |

\* New Parts

P.C.B. MAIN

| Ref. No. | Part No. | Description |                      | Markets |
|----------|----------|-------------|----------------------|---------|
| C67      | US135100 | C. CE. CHP  | 0. 1uF 16V           |         |
| C201     | US064100 | C. CE. CHP  | 0. 01uF 50V B        |         |
| C202     | US135100 | C. CE. CHP  | 0. 1uF 16V           |         |
| C205-213 | US062220 | C. CE. CHP  | 220pF 50V B          |         |
| C301     | US064100 | C. CE. CHP  | 0. 01uF 50V B        |         |
| C302-304 | US062100 | C. CE. CHP  | 100pF 50V B          |         |
| C501     | US061220 | C. CE. CHP  | 22pF 50V B           |         |
| C502     | UM388100 | C. EL       | 100uF 10V            |         |
| C503     | US135100 | C. CE. CHP  | 0. 1uF 16V           |         |
| C504-505 | UR867220 | C. EL       | 22uF 50V             |         |
| C506     | US065100 | C. CE. CHP  | 0. 1uF 50V B         |         |
| C507     | UM388100 | C. EL       | 100uF 10V            |         |
| C508     | US135100 | C. CE. CHP  | 0. 1uF 16V           |         |
| C509     | US065100 | C. CE. CHP  | 0. 1uF 50V B         |         |
| C510     | UM417220 | C. EL       | 22uF 50V             |         |
| C511     | US065100 | C. CE. CHP  | 0. 1uF 50V B         |         |
| C512     | UR867220 | C. EL       | 22uF 50V             |         |
| C513     | US065100 | C. CE. CHP  | 0. 1uF 50V B         |         |
| C515     | US062100 | C. CE. CHP  | 100pF 50V B          |         |
| C516     | US065100 | C. CE. CHP  | 0. 1uF 50V B         |         |
| C518-520 | US065100 | C. CE. CHP  | 0. 1uF 50V B         |         |
| C526     | US064100 | C. CE. CHP  | 0. 01uF 50V B        |         |
| C530-532 | US062100 | C. CE. CHP  | 100pF 50V B          |         |
| C536     | US065100 | C. CE. CHP  | 0. 1uF 50V B         |         |
| D4-10    | WC398800 | DIODE       | KDS160-RTK           |         |
| D18-22   | WC398800 | DIODE       | KDS160-RTK           |         |
| D208     | WC398800 | DIODE       | KDS160-RTK           |         |
| D501     | VU171900 | DIODE. ZENR | UDZ5. 1B 5. 1V       |         |
| D502-504 | VU172000 | DIODE. ZENR | UDZS5. 6BTE-17 5. 6V |         |
| D505-506 | WC398800 | DIODE       | KDS160-RTK           |         |
| IC1      | X3204A00 | IC          | PQ070XZ5MZP          |         |
| IC2      | X6040A00 | IC          | AK4385ET             |         |
| IC3      | XJ601A00 | IC          | NJM78M08A 8V         |         |
| IC4      | XS534A00 | IC          | NJM78M05DL1A(Te1)    |         |
| IC5      | X3505A00 | IC          | NJM2068MD-TE2        |         |
| IC6      | XW939A00 | IC          | TK15420M VIDEO AMP   |         |
| IC8      | XY071A00 | IC          | HD74HC126FP BUS BU   |         |
| IC9      | X6509A00 | IC          | ADG733               |         |
| IC501    | X5751A00 | IC. CPU     | UPD16312GB-3BS-A     |         |
| JK1      | WG158400 | TERM. S     | S-JACK               |         |
| JK301    | WD662100 | JACK. PIN   | 4P JY-2522           |         |
| PJ1      | V7720900 | JACK. PIN   | LPR6520-E510M        |         |
| PJ2      | WG226800 | JACK. PIN   | 2P RJ-1144           |         |
| PJ201    | WG139700 | JACK. PIN   | 3P RJ-1165           |         |
| PN1-7    | V9637500 | PIN         | L=70 #18             |         |
| PN8      | V8637500 | PIN         | L=50 #18             |         |
| Q1-4     | VZ725900 | TR          | 2SD1938F S, T        |         |
| Q5       | VV655700 | TR. DGT     | DTC144EKA            |         |

\* New Parts

P.C.B. MAIN

| Ref. No.  | Part No. | Description  |                  | Markets |
|-----------|----------|--------------|------------------|---------|
| Q7        | VV655700 | TR. DGT      | DTC144EKA        |         |
| Q8-9      | VV556400 | TR           | 2SC2412K Q, R, S |         |
| Q10       | VV655700 | TR. DGT      | DTC144EKA        |         |
| Q11       | VV556400 | TR           | 2SC2412K Q, R, S |         |
| Q12-15    | VV556500 | TR           | 2SA1037K Q, R, S |         |
| Q20-21    | VV556500 | TR           | 2SA1037K Q, R, S |         |
| Q22       | VV655700 | TR. DGT      | DTC144EKA        |         |
| Q24       | VV655700 | TR. DGT      | DTC144EKA        |         |
| Q25       | VV556400 | TR           | 2SC2412K Q, R, S |         |
| Q26       | VV655700 | TR. DGT      | DTC144EKA        |         |
| Q27       | VV556400 | TR           | 2SC2412K Q, R, S |         |
| Q28       | WF764200 | FET          | RSR025N03        |         |
| Q201-204  | VZ725900 | TR           | 2SD1938F S, T    |         |
| Q501      | VV556400 | TR           | 2SC2412K Q, R, S |         |
| Q502      | VP872700 | TR           | 2SC4488 S, T     |         |
| Q503      | VP872600 | TR           | 2SA1708 S, T     |         |
| Q504      | VV556500 | TR           | 2SA1037K Q, R, S |         |
| R64-65    | VP940800 | R. MTL. OXD  | 470 Ω 1W         |         |
| R78-79    | HV753220 | R. CAR. FP   | 2. 2Ω 1/4W       |         |
| R510-511  | HV755470 | R. CAR. FP   | 470 Ω 1/4W       |         |
| R522-523  | VP939800 | R. MTL. OXD  | 10 Ω 1W          |         |
| ST301-302 | V4040500 | SCR. TERM    | M3               |         |
| SW501-506 | V4757100 | SW. TACT     | EVQ11A           |         |
| U1        | WB001600 | CN. PHOT. SN | 1P GP1FA553TZ    |         |
| U501      | V8444900 | L. DTCT      | GP1UM271XK       |         |
| V501      | WD602800 | FL. DSPLY    | 7-BT-299GNK      |         |
| %         | WD890100 | SHEET/FL     | ORANGE:GD        |         |
|           | WD890000 | SHEET/FL     | BLUE :SI         |         |

%: **Note on the MAIN P.C.B.**  
Of the MAIN P.C.B. part Nos., only the silver (SI) type part Nos. are included in the table.  
The only different part between the gold (GD) and silver (SI) type parts is the sheet/FL that is attached to the fluorescent character display tube. When a gold (GD) type MAIN P.C.B. becomes necessary, order a silver (SI) type MAIN P.C.B. and a gold (GD) type sheet/FL (WD890100) and replace the sheet/FL of the silver (SI) type MAIN P.C.B. with the gold (GD) type sheet/FL.

\* New Parts

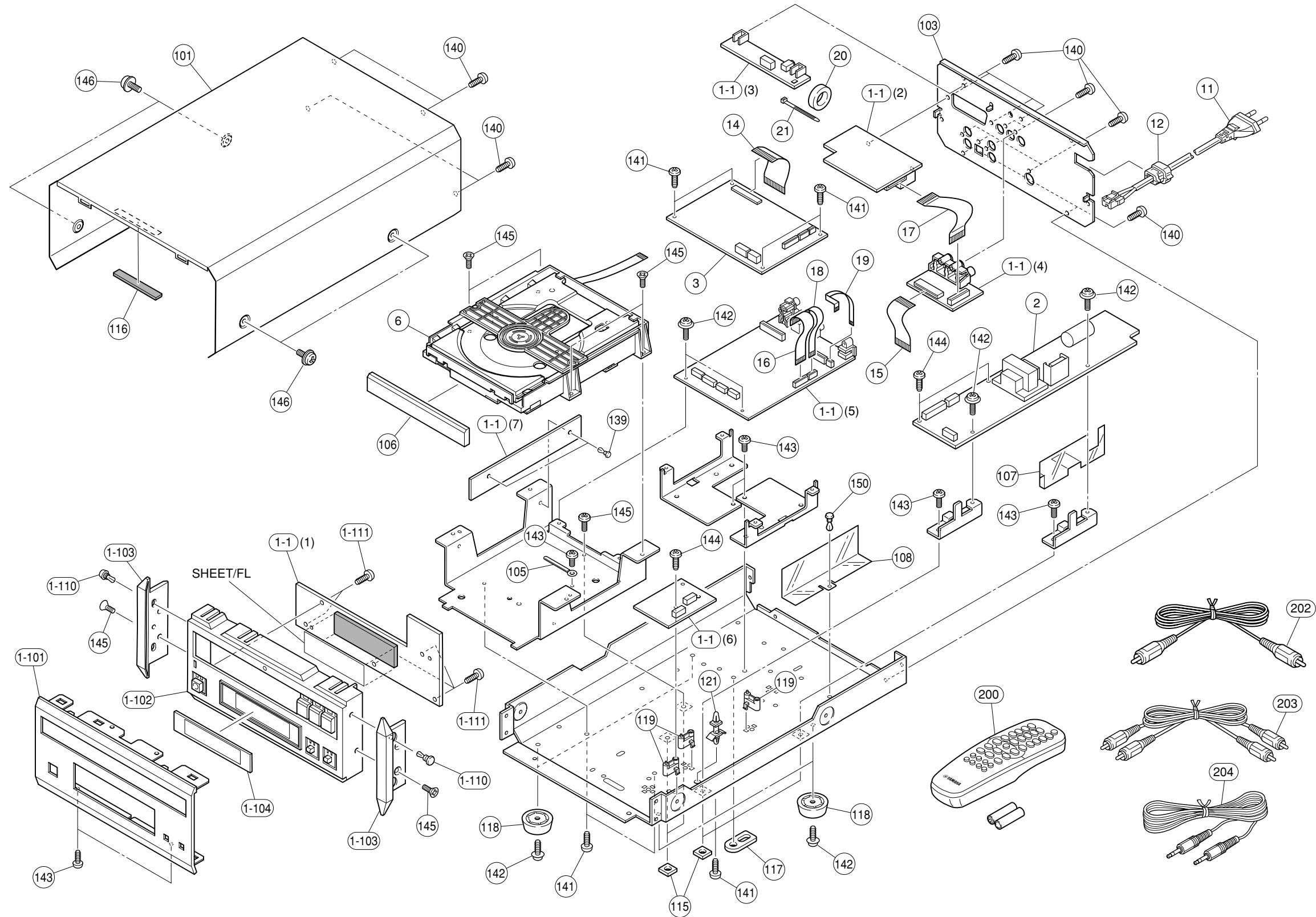
Chip Resistors

- The chip resistor is not supplied as a replacement part.
- \* When a chip resistor is necessary, use the following part.  
AAX60720: CHIP RESISTOR SAMPLE BOOK

| Ref. No. | Part No. | Description |                 | Markets |
|----------|----------|-------------|-----------------|---------|
|          | RD350000 | R. CHP      | 0 Ω 1/16W J     |         |
|          | RD353220 | R. CHP      | 2. 2Ω 1/16W J   |         |
|          | RD354330 | R. CHP      | 33Ω 1/16W J     |         |
|          | RD354750 | R. CHP      | 75Ω 1/16W J     |         |
|          | RD355100 | R. CHP      | 100Ω 1/16W J    |         |
|          | RD355220 | R. CHP      | 220 Ω 1/16W J   |         |
|          | RD355330 | R. CHP      | 330 Ω 1/16W J   |         |
|          | RD355470 | R. CHP      | 470 Ω 1/16W J   |         |
|          | RD355680 | R. CHP      | 680 Ω 1/16W J   |         |
|          | RD356100 | R. CHP      | 1K Ω 1/16W J    |         |
|          | RD356220 | R. CHP      | 2. 2K Ω 1/16W J |         |
|          | RD356470 | R. CHP      | 4. 7K Ω 1/16W J |         |
|          | RD356680 | R. CHP      | 6. 8K Ω 1/16W J |         |
|          | RD357100 | R. CHP      | 10K Ω 1/16W J   |         |
|          | RD357220 | R. CHP      | 22K Ω 1/16W J   |         |
|          | RD357470 | R. CHP      | 47K Ω 1/16W J   |         |
|          | RD357560 | R. CHP      | 56K Ω 1/16W J   |         |
|          | RD358100 | R. CHP      | 100K Ω 1/16W J  |         |
|          | RD359100 | R. CHP      | 1M Ω 1/16W J    |         |

\* New Parts

EXPLODED VIEW



%: Note on the MAIN P.C.B.

Of the MAIN P.C.B. part Nos., only the silver (SI) type part Nos. are included in the table.

The only different part between the gold (GD) and silver (SI) type parts is the sheet/FL that is attached to the fluorescent character display tube. When a gold (GD) type MAIN P.C.B. becomes necessary, order a silver (SI) type MAIN P.C.B. and a gold (GD) type sheet/FL (WD890100) and replace the sheet/FL of the silver (SI) type MAIN P.C.B. with the gold (GD) type sheet/FL.

MECHANICAL PARTS

|     | Ref. No. | Part No. | Description                  |                 | Remarks        | Markets |
|-----|----------|----------|------------------------------|-----------------|----------------|---------|
| *   | 1-1      | WG111500 | P. C. B. ASS'Y               | MAIN            | SI             |         |
| *   | 1-101    | WG127400 | FRONT PANEL                  |                 | GD             |         |
| *   | 1-101    | WG127300 | FRONT PANEL                  |                 | SI             |         |
|     | 1-102    | WE493500 | SUB PANEL-DVD                |                 | GD             |         |
|     | 1-102    | WE493400 | SUB PANEL-DVD                |                 | SI             |         |
|     | 1-103    | V8785200 | PANEL/SIDE                   | H100            |                |         |
|     | 1-104    | WD607500 | SHEET/WINDOW                 |                 |                |         |
|     | 1-110    | VQ368600 | PUSH RIVET                   | P3555-B         |                |         |
|     | 1-111    | VF617600 | PAN HEAD P-TIGHT SCREW       | 2.6x8 MFC2BL    |                |         |
| * ⚠ | 2        | X7186A00 | POWER SUPPLY UNIT            |                 | 3139 248 72062 |         |
| *   | 3        | X7187A00 | MONO BOARD                   |                 | 3139 248 86741 |         |
| *   | 6        | WG205300 | DVD MECHANISM UNIT           |                 | 3139 248 72251 |         |
| ⚠   | 11       | VN363600 | POWER CABLE                  |                 |                | GE      |
| ⚠   | 11       | WF723100 | POWER CABLE                  | 2m              |                | B       |
|     | 12       | V2438700 | CORD STOPPER                 | 10P1            |                |         |
| *   | 14       | WG226900 | FLEXIBLE FLAT CABLE          | 30P 70mm P=1.0  |                |         |
| *   | 15       | WG227300 | FLEXIBLE FLAT CABLE          | 20P 80mm P=1.25 |                |         |
| *   | 16       | WG227100 | FLEXIBLE FLAT CABLE          | 16P 80mm P=1.0  |                |         |
|     | 17       | MF115080 | FLEXIBLE FLAT CABLE          | 15P 80mm P=1.25 |                |         |
| *   | 18       | WG227200 | FLEXIBLE FLAT CABLE          | 9P 80mm P=1.0   |                |         |
| *   | 19       | WG227000 | FLEXIBLE FLAT CABLE          | 4P 70mm P=1.0   |                |         |
|     | 20       | VB933800 | FERRITE CORE                 | BP53RB310190NOA |                |         |
|     | 21       | VU590000 | BINDING TIE                  | CBTD001B        |                |         |
|     | 101      | V7127400 | TOP COVER                    |                 | GD             |         |
|     | 101      | V7127300 | TOP COVER                    |                 | SI             |         |
| *   | 103      | WG127200 | REAR PANEL                   |                 |                |         |
|     | 105      | WD397500 | BINDING TIE                  | MSF-085         |                |         |
| *   | 106      | WG127600 | LID/DVD                      |                 | GD             |         |
| *   | 106      | WG127500 | LID/DVD                      |                 | SI             |         |
|     | 107      | WE361000 | SHEET/BARRIER                |                 |                |         |
|     | 108      | WF754600 | BARRIER PSU                  |                 |                |         |
|     | 115      | WC879000 | DAMPER                       |                 |                |         |
|     | 116      | VP857700 | DAMPER                       | 4x6x55          |                |         |
|     | 117      | V7616600 | DAMPER                       |                 |                |         |
|     | 118      | V3688500 | LEG                          | M0080-M0        |                |         |
| *   | 119      | WG085200 | SUPPORT/PSU                  |                 |                |         |
|     | 121      | WA602600 | LOCKING CARD SPACER          | KGLS-8S         |                |         |
|     | 139      | VQ368500 | PUSH RIVET                   | P3545-B         |                |         |
|     | 140      | WE774100 | BIND HEAD BONDING B-T. SCREW | 3x8 MFZN2B3     |                |         |
|     | 141      | WE774300 | BIND HEAD B-TIGHT SCREW      | 3x8 MFZN2W3     |                |         |
|     | 142      | VT669300 | PW HEAD B-TIGHT SCREW        | 3x8-8 MFC2      |                |         |
|     | 143      | WE936300 | BIND HEAD B-TIGHT SCREW      | 3x6 MFZN2W3     |                |         |

\* New Parts

|   | Ref. No. | Part No. | Description             |              | Remarks        | Markets |
|---|----------|----------|-------------------------|--------------|----------------|---------|
|   | 144      | WE774800 | BIND HEAD P-TIGHT SCREW | 3x8 MFZN2W3  |                |         |
|   | 145      | EP600790 | FLAT HEAD B-TIGHT SCREW | 3x8 MFZN2BL  |                |         |
|   | 146      | VY712800 | PW HEAD B-TIGHT SCREW   | 3x8-8 MFN133 |                |         |
| * | 150      | WG432900 | PUSH RIVET              | P3535        |                |         |
| % |          | WD890100 | SHEET/FL                | ORANGE       | GD             |         |
|   |          | WD890000 | SHEET/FL                | BLUE         | SI             |         |
|   |          |          | ACCESSORIES             |              |                |         |
|   | 200      | WD882600 | REMOTE CONTROL          |              | 3139 248 71873 |         |
|   | 202      | VV209200 | VIDEO PIN CABLE         | 1P 1.0m      |                |         |
|   | 203      | VY952200 | AUDIO PIN CABLE         | 2P 1.0m 1pc  |                |         |
|   | 204      | WD865200 | SYSTEM CONTROL CABLE    | 1P 1.0m 1pc  |                |         |
|   |          |          | BATTERY, MANGANESE      | SUM-3M 2pcs  |                |         |

\* New Parts

# DVD-E600MK2

---

