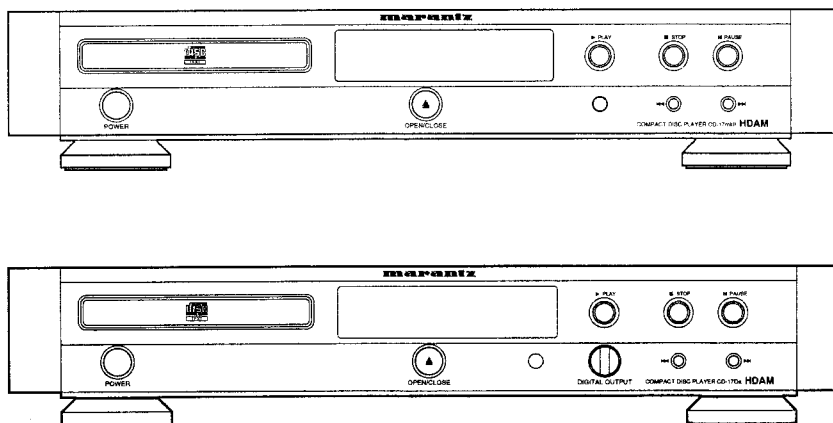


# Service Manual

74 CD17 /22B/22G  
CD-17Da F<sub>N</sub> K<sub>GL</sub>  
CD-17mkII K<sub>BL</sub> K<sub>GL</sub> U<sub>BL</sub>  
Compact disc player



V24937



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Please use this service manual with referring to the user guide ( D.F.U. ) without fail.

The Allen wrench (No. 1.5) is necessary to open the top cover.

修理の際は、必ず取扱説明書を準備し操作方法を確認の上作業を行ってください。

又、六角棒スパナNO. 1.5が必要です。

# marantz®

## model CD-17mkII/CD-17Da

4822 725 51178  
First Issue 1998.10  
356K855010 MIT

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SINGAPORE 319257.  
PHONE : +65 2583640  
FAX : +65 3564047

### SHOCK, FIRE HAZARD SERVICE TEST :

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

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

Ref. UL Standard N0. 1492.

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

## 1. TECHNICAL SPECIFICATIONS

### Audio Characteristics

|                                      |                                           |
|--------------------------------------|-------------------------------------------|
| Channels .....                       | 2 channels                                |
| Sampling frequency (CD mode) .....   | 44.1 kHz                                  |
| *Sampling frequency (D/A mode) ..... | 32/44.1/48 kHz                            |
| Quantization .....                   | 16-bit linear/channel                     |
| Error correction ...                 | Cross-interleave read solomon code (CIRC) |
| D/A conversion .....                 | 1-bit linear/channel                      |
| Wow & flutter .....                  | Precision of quartz                       |

### Optical Readout System

|                  |                      |
|------------------|----------------------|
| Laser .....      | AlGaAs semiconductor |
| Wavelength ..... | 780 nm               |

### Frequency Characteristics

|                                   |                  |
|-----------------------------------|------------------|
| Frequency range .....             | 5 Hz - 20 kHz    |
| Dynamic range .....               | > 98 dB          |
| S/N ratio .....                   | > 110 dB         |
| Channel separation (1 kHz) .....  | > 103 dB         |
| THD (1 kHz) .....                 | 0.0015 %         |
| Analog output                     |                  |
| Output level (cinch JACKS) .....  | 2.2 V RMS        |
| Output impedance .....            | 250 ohms         |
| Digital output                    |                  |
| Output level (cinch JACK) .....   | 0.5 Vp-p/75 ohms |
| Output level (optical JACK) ..... | -19 dBm          |
| *Digital input                    |                  |
| Input level (cinch JACK) .....    | 0.5 Vp-p/75 ohms |
| Input level (optical JACK) .....  | -19 dBm          |

### Power Supply

|                         |                        |
|-------------------------|------------------------|
| Power requirement       |                        |
| K version .....         | 110 / 220V AC 50/60 Hz |
| /22 version .....       | 230V AC 50 Hz          |
| U version .....         | 120V AC 60 Hz          |
| Power Consumption ..... | 19 W                   |

### Cabinet, etc.

|                              |                          |
|------------------------------|--------------------------|
| Dimensions                   |                          |
| Width .....                  | 458 mm                   |
| Height .....                 | 83mm                     |
| Depth .....                  | 313mm                    |
| Netweight .....              | 7.8 kg                   |
| Operating temperatures ..... | +5 °C ~ +35 °C           |
| Operating humidity .....     | 5 % ~ 90 % (without dew) |

### Accessories

|                                          |   |
|------------------------------------------|---|
| Remote control unit (RC-DA17CD) .....    | 1 |
| AAA (R03) Batteries .....                | 2 |
| Stereo audio cable with cinch pins ..... | 1 |
| Remote cable with cinch pin .....        | 1 |
| AC power cord .....                      | 1 |

#### \* : CD-17Da type only

Improvement may result in changes in specifications and design without notice.

### オーディオ特性

|                    |                                                     |
|--------------------|-----------------------------------------------------|
| チャンネル .....        | 2チャンネル                                              |
| 周波数特性 .....        | 2Hz~20,000Hz, $\pm 0.3$ dB                          |
| ダイナミックレンジ .....    | 98dB以上                                              |
| S/N比 .....         | 110dB                                               |
| チャンネルセパレーション ..... | 103dB (1kHz)                                        |
| 高調波歪率 .....        | 0.0015% (1kHz)                                      |
| ワウフラッター .....      | 水晶精度                                                |
| 誤り訂正方式 .....       | クロス・インターリーブ・リードソロン・コード (CIRC)                       |
| 音声出力 .....         | 2.2V RMSステレオ                                        |
| デジタル出力 .....       | ピンジャック 0.5Vp-p/75 $\Omega$<br>(角型光コネクター) 光出力 -19dBm |
| デジタル入力 .....       | ピンジャック 0.5Vp-p/75 $\Omega$<br>(角型光コネクター) 光出力 -19dBm |

### 光学読み取り方式

|            |            |
|------------|------------|
| レーザー ..... | AlGaAs 半導体 |
| 波長 .....   | 780nm      |

### 信号方式

|                          |                  |
|--------------------------|------------------|
| サンプリング周波数 (CD モード) ..... | 44.1kHz          |
| (D/A モード) .....          | 32/44.1/48kHz    |
| 量子化 .....                | 16ビットリニア / チャンネル |

### 電源部

|                      |                 |
|----------------------|-----------------|
| 電源 .....             | AC 100V 50/60Hz |
| 消費電力 (電気用品取締法) ..... | 19W             |

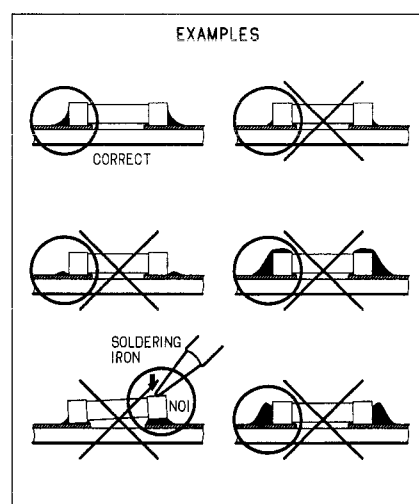
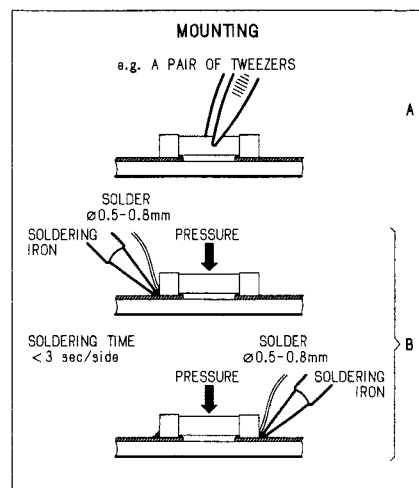
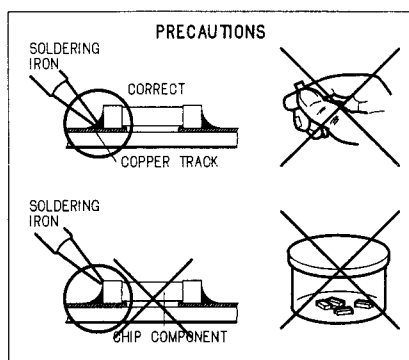
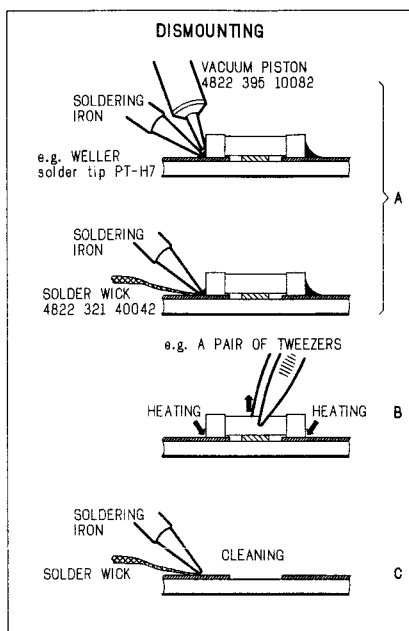
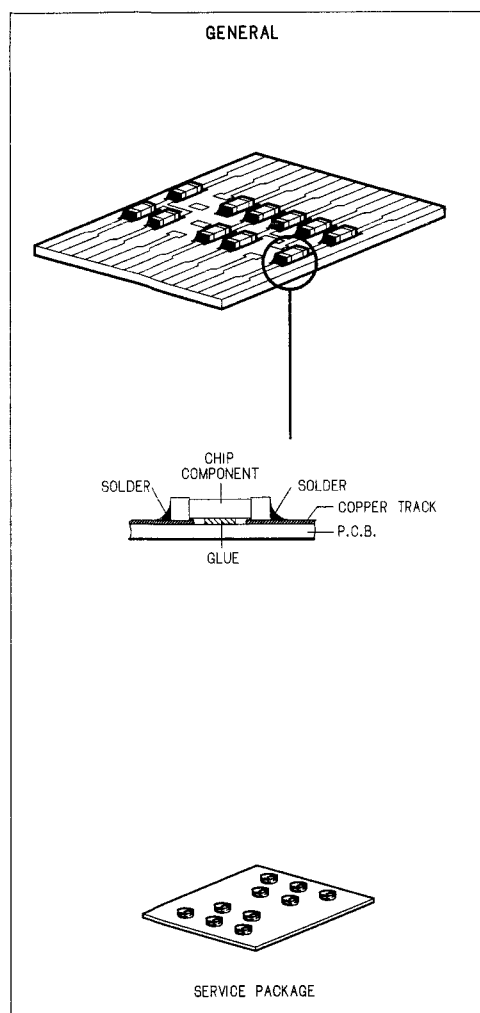
### キャビネット・その他

|                         |                  |
|-------------------------|------------------|
| 最大外形寸法 (幅×高さ×奥行き) ..... | 458×83×313mm     |
| 質量 .....                | 7.8kg            |
| 許容動作温度 .....            | +5°C ~ +35°C     |
| 許容動作湿度 .....            | 5%~90% (結露のないこと) |

### 付属品

|                                 |               |
|---------------------------------|---------------|
| リモートコントロール送信機 (RC-DA17CD) ..... | 1             |
| 外形寸法 (幅×高さ×奥行き) .....           | 44×17.5×239mm |
| 質量 (電池なし) .....                 | 175g          |
| 単四電池 (SUM-4) .....              | 2個            |
| RCAピンコード .....                  | 1組            |
| リモート接続コード .....                 | 1本            |
| 電源コード .....                     | 1本            |

## 2. SERVICING HINTS



## 3. SERVICE TOOLS

|                                                             |                |
|-------------------------------------------------------------|----------------|
| Audio signals disc                                          | 4822 397 30184 |
| Disc without errors (SBC444)+                               |                |
| Disc with DO errors, black spots and fingerprints (SBC444A) | 4822 397 30245 |
| Disc (65 min 1kHz) without no pause                         | 4822 397 30155 |
| Max. diameter disc (58.0 mm)                                | 4822 397 60141 |
| Torx screwdrivers                                           |                |
| Set (straight)                                              | 4822 395 50145 |
| Set (square)                                                | 4822 395 50132 |
| 13th order filter                                           | 4822 395 30204 |
| Allen wrench (No. 1.5)                                      |                |

## 4. SERVICE MODE

### 1. How to enter into the Service Mode

Turn the power on while pressing [PLAY]+[OPEN/CLOSE] buttons together.

The display shows "model number", "microprocessor version" and "mode".

CD 17 : 10 P 00  
 |            |            |  
 Model number Microprocessor version Mode number

### 2. Mode 0 (display "P 00")

Condition: [FOCUS OFF], [SPINDLE OFF], [RADIAL OFF], [MUTE ON]

- While pressing [▶▶] (Remote Control unit only) button, the sledge moves outside.  
And, release from this button. The sledge return to neutral position.

- Press [NEXT ▶▶] button, the function will change to "Mode 1".

### 3. Mode 1 (display "P 01")

Condition: [FOCUS ON], [SPINDLE OFF], [RADIAL OFF], [MUTE ON]

- Press [NEXT ▶▶] button, the function will change to "Mode 2".

- Press [PREV ◀◀] button, the function will change to "Mode 0".

### 4. Mode 2 (display "P 02")

Condition: [FOCUS ON], [SPINDLE ON], [RADIAL OFF], [MUTE ON]

- Press [NEXT ▶▶] button, the function will change to "Mode 3".

- Press [PREV ◀◀] button, the function will change to "Mode 1".

### 5. Mode 3 (display "P 03")

Condition: [FOCUS ON], [SPINDLE ON], [RADIAL ON], [MUTE OFF]

- Press [PREV ◀◀] button, the function will change to "Mode 2".

- \* The following button operations are available at the Service Mode.

- While pressing [STOP] button, FL display shows all segments.
- Press [PAUSE] button. FL display shows each segments one by one automatically. (Segments test mode) And, press [PAUSE] button again, this mode will be stopped.
- The same as Normal operation is performed by pressing [PLAY] button. (Except segments test mode.) However if some default is detected, display shows an error code. (For example: "Err 10") Refer to the "Table 1 ERROR CODE".

### 6. Canceling the Service Mode

The Service Mode is canceled by turning the power off.

## 4. サービスモード

### 1. サービスモードへの入り方

[PLAY]と[OPEN/CLOSE] ボタンを押しながら電源を入れます。モデル番号及びプロセッサバージョン番号、モード番号を表示します。

CD 17 : 10 P 00  
 |            |            |  
 モデル番号 プロセッサバージョン番号 モード番号

### 2. モード0 (表示 P 00)

状態: [FOCUS OFF] [SPINDLE OFF] [RADIAL OFF] [MUTE ON]

- リモコンの[▶▶] ボタンを押している間だけスレッドが外周へ移動します。ボタンを放すと原点に戻ります。
- [NEXT ▶▶] ボタンを押すとモード1へ移行します。

### 3. モード1 (表示 P 01)

状態: [FOCUS ON] [SPINDLE OFF] [RADIAL OFF] [MUTE ON]

- [NEXT ▶▶] ボタンを押すとモード2へ移行します。
- [PREV ◀◀] ボタンを押すとモード0へ移行します。

### 4. モード2 (表示 P 02)

状態: [FOCUS ON] [SPINDLE ON] [RADIAL OFF] [MUTE ON]

- [NEXT ▶▶] ボタンを押すとモード3へ移行します。
- [PREV ◀◀] ボタンを押すとモード0へ移行します。

### 5. モード3 (表示 P 03)

状態: [FOCUS ON] [SPINDLE ON] [RADIAL ON] [MUTE OFF]

- [PREV ◀◀] ボタンを押すとモード2へ移行します。

- \* サービスモードの全ての状態で以下のボタンが有効です。

- [STOP] ボタンを押している間だけFLが全点灯します。
- [PAUSE] ボタンを押すとFL各部自動点灯テストを行いません。もう一度押すとテストを中止します。
- [PLAY] ボタンを押すと通常 (サービスモード以外) と同じ動作となります。ただし、上記のFL各部自動点灯テスト中を除きます。  
動作中、異常が確認された時にエラー番号が表示されます。(例: Err 10)

下記の表を参考にしてください。

### 6. サービスモードの解除

電源を切るとサービスモードが解除されます。

Table 1 ERROR CODE

| Error Code  | Error              |
|-------------|--------------------|
| Err 02      | FOCUS Error        |
| Err 07      | SUB CODE Error     |
| Err 08      | T. O. C. Error     |
| Err 09      | DECODER Error      |
| Err 10      | RADIAL Error       |
| Err 11, 12  | SLEDGE Error       |
| Err 13      | SPINDLE Error      |
| Err 16 ~ 20 | SEARCH Error       |
| Err 30      | DOOR Error         |
| Err 31      | TRAY Error         |
| Err 32 ~ 47 | BUTTON INPUT Error |

## 5. MICROPROCESSOR AND IC DATA

### Q102 SAA7372GP

| PIN | SYMBOL   | DESCRIPTION                                                                 |
|-----|----------|-----------------------------------------------------------------------------|
| 1   | VSSA1    | *analog ground 1                                                            |
| 2   | VDDA1    | * analog supply voltage 1                                                   |
| 3   | D1       | unipolar current input (central diode signal input)                         |
| 4   | D2       | unipolar current input (central diode signal input)                         |
| 5   | D3       | unipolar current input (central diode signal input)                         |
| 6   | VRL      | reference voltage input for ADC                                             |
| 7   | D4       | unipolar current input (central diode signal input)                         |
| 8   | R1       | unipolar current input (satellite diode signal input)                       |
| 9   | R2       | unipolar current input (satellite diode signal input)                       |
| 10  | IrefT    | current reference output for ADC calibration                                |
| 11  | VRH      | reference voltage output from ADC                                           |
| 12  | VSSA2    | * analog ground 2                                                           |
| 13  | SELPLL   | selects whether internal clock multiplier PLL is used                       |
| 14  | ISLICE   | current feedback output from data slicer                                    |
| 15  | HFIN     | comparator signal input                                                     |
| 16  | VSSA3    | * analog ground 3                                                           |
| 17  | HFREF    | comparator common mode input                                                |
| 18  | Iref     | reference current output pin (nominally 0.5VDD )                            |
| 19  | VDDA2    | * analog supply voltage 2                                                   |
| 20  | TEST1    | test control input 1; this pin should be tied LOW                           |
| 21  | CRIN     | crystal/resonator input                                                     |
| 22  | CROUT    | crystal/resonator output                                                    |
| 23  | TEST2    | test control input 2; this pin should be tied LOW                           |
| 24  | CL16     | 16.9344 MHz system clock output                                             |
| 25  | CL11     | 11.2896 or 5.6448 MHz clock output (3-state)                                |
| 26  | RA       | radial actuator output                                                      |
| 27  | FO       | focus actuator output                                                       |
| 28  | SL       | sledge control output                                                       |
| 29  | TEST3    | test control input 3; this pin should be tied LOW                           |
| 30  | VDD1(P)  | * digital supply voltage 1 for periphery                                    |
| 31  | DOBM     | bi-phase mark output (externally buffered; 3-state)                         |
| 32  | VSSD1    | * digital ground 1                                                          |
| 33  | MOTO1    | motor output 1; versatile (3-state)                                         |
| 34  | MOTO2    | motor output 2; versatile (3-state)                                         |
| 35  | SBSY     | subcode block sync output (3-state)                                         |
| 36  | SFSY     | subcode frame sync output (3-state)                                         |
| 37  | RCK      | subcode clock input                                                         |
| 38  | SUB      | P-to-W subcode output bits (3-state)                                        |
| 39  | VSSD2    | * digital ground 2                                                          |
| 40  | V5       | versatile output pin 5                                                      |
| 41  | V4       | versatile output pin 4                                                      |
| 42  | V3       | versatile output pin 3 (open-drain)                                         |
| 43  | KILL     | kill output (programmable; open-drain)                                      |
| 44  | EF       | C2 error flag; output only defined in CD ROM modes and 1fs modes (3-state)  |
| 45  | DATA     | serial data output (3-state)                                                |
| 46  | WCLK     | word clock output (3-state)                                                 |
| 47  | VDDD2(P) | * digital supply voltage 2 for periphery                                    |
| 48  | SCLK     | serial bit clock output (3-state)                                           |
| 49  | VSSD3    | * digital ground 3                                                          |
| 50  | CL4      | 4.2336 MHz microcontroller clock output                                     |
| 51  | SDA      | microcontroller interface data I/O line (open-drain output)                 |
| 52  | SCL      | microcontroller interface clock line input                                  |
| 53  | RAB      | microcontroller interface R/W and load control line input (4-wire bus mode) |
| 54  | SILD     | microcontroller interface R/W and load control line input (4-wire-bus mode) |
| 55  | n.c.     | not connected                                                               |
| 56  | VSSD4    | * digital ground 4                                                          |
| 57  | RESET    | power-on reset input (active LOW)                                           |
| 58  | STATUS   | servo interrupt request line/decoder status register output (open-drain)    |
| 59  | VDDD3(C) | * digital supply voltage 3 for core                                         |
| 60  | C2FAIL   | indication of correction failure output (open-drain)                        |
| 61  | CFLG     | correction flag output (open-drain)                                         |
| 62  | V1       | versatile input pin 1                                                       |
| 63  | V2       | versatile input pin 2                                                       |
| 64  | LDON     | laser drive on output (open-drain)                                          |

• Note : All supply pins must be connected to the same external power supply voltage.

### Q101 TDA1302T

| PIN | SYMBOL | DESCRIPTION                                                 |
|-----|--------|-------------------------------------------------------------|
| 1   | O4     | output of diode current amplifier 4                         |
| 2   | O6     | output of diode current amplifier 6                         |
| 3   | O3     | output of diode current amplifier 3                         |
| 4   | O1     | output of diode current amplifier 1                         |
| 5   | O5     | output of diode current amplifier 5                         |
| 6   | O2     | output of diode current amplifier 2                         |
| 7   | LDON   | control pin for switching the laser ON and OFF              |
| 8   | VDDL   | laser supply voltage                                        |
| 9   | RFE    | equalized output voltage of sum signal of amplifiers 1 to 4 |
| 10  | RF     | unequalized output                                          |
| 11  | HG     | control pin for gain switch                                 |
| 12  | LS     | control pin for speed switch                                |
| 13  | CL     | external capacitor                                          |
| 14  | ADJ    | reference input normally connected to ground via a resistor |
| 15  | GND    | 0 V supply; substrate connection (ground)                   |
| 16  | LO     | current output to the laser diode                           |
| 17  | MI     | laser monitor diode input                                   |
| 18  | VDD    | amplifier supply voltage                                    |
| 19  | I2     | photo detector input 2 (central)                            |
| 20  | I5     | photo detector input 5 (satellite)                          |
| 21  | I1     | photo detector input 1 (central)                            |
| 22  | I3     | photo detector input 3 (central)                            |
| 23  | I6     | photo detector input 6 (satellite)                          |
| 24  | I4     | photo detector input 4 (central)                            |

### Q106/Q107/Q108 TDA7073A

| PIN | SYMBOL | DESCRIPTION             |
|-----|--------|-------------------------|
| 1   | IN1-   | negative input 1        |
| 2   | IN1+   | positive input 1        |
| 3   | n.c.   | not connected           |
| 4   | n.c.   | not connected           |
| 5   | VP     | positive supply voltage |
| 6   | IN2+   | positive input 2        |
| 7   | IN2-   | negative input 2        |
| 8   | n.c.   | not connected           |
| 9   | OUT2+  | positive output 2       |
| 10  | GND2   | ground 2                |
| 11  | n.c.   | not connected           |
| 12  | OUT2-  | negative output 2       |
| 13  | OUT1-  | negative output 1       |
| 14  | GND1   | ground 1                |
| 15  | n.c.   | not connected           |
| 16  | OUT1+  | positive output 1       |

### Q201 LC89170M

| PIN | SYMBOL | I/O | FUNCTION                                                                           |
|-----|--------|-----|------------------------------------------------------------------------------------|
| 1   | EXCK   | I/O | Subcode interface shift clock input and output                                     |
| 2   | SBSO   | I   | Subcode interface data Input                                                       |
| 3   | SCOR   | I   | Subcode interface block synchronization Input                                      |
| 4   | WFCK   | I   | Subcode interface frame synchronization Input                                      |
| 5   | MCK    | I   | Clock input (16.9344 MHz)                                                          |
| 6   | XMODE  | I   | System reset and low power mode                                                    |
| 7   | GND    |     | Ground                                                                             |
| 8   | TEST   | I   | Test pin (Must be connected to ground in normal operation.)                        |
| 9   | SW1    | I   | EXCK I/O setting (L: clock output, H: clock input)                                 |
| 10  | SW2    | I   | EXCK clock output pulse width selection (L: double speed support, H: normal speed) |
| 11  | SCLK   | I   | Command interface shift clock input                                                |
| 12  | SRDT   | O   | Command interface data output                                                      |
| 13  | DOSY   | O   | Command interface readout enable output                                            |
| 14  | VDD    |     | Power supply                                                                       |

Q301 TDA1315H

| SYMBOL              | PIN | PADCELL | DESCRIPTION                                                                                                                                                            |
|---------------------|-----|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RC <sub>fil</sub>   | 1   | E029    | PLL loop filter input                                                                                                                                                  |
| V <sub>ref</sub>    | 2   | E029    | decoupling internal reference voltage output                                                                                                                           |
| V <sub>DDA</sub>    | 3   | E008    | analog supply voltage                                                                                                                                                  |
| V <sub>SSA</sub>    | 4   | E004    | analog ground                                                                                                                                                          |
| IECIN1              | 5   | E007    | high sensitivity IEC input                                                                                                                                             |
| IECIN0              | 6   | IPP04   | TTL level IEC input                                                                                                                                                    |
| IECSEL              | 7   | IUP04   | select IEC input 0 or 1 (0 = IECIN0; 1 = IECIN1); this input has an internal pull-up resistor                                                                          |
| IECO                | 8   | OPFH3   | digital audio output for optical and transformer link                                                                                                                  |
| IECOEN              | 9   | IUP04   | digital audio output enable (0 = enabled; 1 = disabled/3-state); this input has an internal pull-up resistor                                                           |
| TESTB               | 10  | IPP04   | enable factory test input (0 = normal application; 1 = scan mode)                                                                                                      |
| TESTC               | 11  | IPP04   | enable factory test input (0 = normal application; 1 = observation outputs)                                                                                            |
| UNLOCK              | 12  | OPP41A  | PLL out-of-lock (0 = not locked; 1 = locked); this output can drive an LED                                                                                             |
| FS32                | 13  | OPP41A  | indicates sample frequency = 32 kHz (active LOW); this output can drive an LED                                                                                         |
| FS44                | 14  | OPP41A  | indicates sample frequency = 44.1 kHz (active LOW); this output can drive an LED                                                                                       |
| FS48                | 15  | OPP41A  | indicates sample frequency = 48 kHz (active LOW); this output can drive an LED                                                                                         |
| CHMODE              | 16  | OPP41A  | use of channel status block (0 = professional use; 1 = consumer use); this output can drive an LED                                                                     |
| V <sub>DD2</sub>    | 17  | E008    | digital supply voltage 2                                                                                                                                               |
| V <sub>SS2</sub>    | 18  | E009    | digital ground 2                                                                                                                                                       |
| RESET               | 19  | IDP09   | initialization after power-on, requires only an external capacitor connected to V <sub>DD0</sub> ; this is a Schmitt-trigger input with an internal pull-down resistor |
| PD                  | 20  | IPP04   | enable power-down input in the standby mode (0 = normal application; 1 = standby mode)                                                                                 |
| CTRLMODE            | 21  | IUP04   | select microcontroller/stand-alone mode (0 = microcontroller; 1 = stand-alone); this input has an internal pull-up resistor                                            |
| LADDR               | 22  | IPP04   | microcontroller interface address switch input (0 = 000001; 1 = 000010)                                                                                                |
| LMODE               | 23  | IPP09   | microcontroller interface mode line input                                                                                                                              |
| LCLK                | 24  | IPP09   | microcontroller interface clock line input                                                                                                                             |
| LDATA               | 25  | IOF24   | microcontroller interface data line input/output                                                                                                                       |
| STROBE              | 26  | IDP04   | strobe for control register (active HIGH); this input has an internal pull-down resistor                                                                               |
| UDAVAIL             | 27  | OPF23   | synchronization for output user data (0 = data available; 1 = no data)                                                                                                 |
| TESTA               | 28  | IPP04   | enable factory (scan) test input (0 = normal application; 1 = test clock enable)                                                                                       |
| COPY                | 29  | OPP41A  | copyright status bit (0 = copyright asserted; 1 = no copyright asserted); this output can drive an LED                                                                 |
| INVALID             | 30  | IOD24   | validity of audio sample input/output (0 = valid sample; 1 = invalid sample); this pin has an internal pull-down resistor                                              |
| DEEM                | 31  | OPF23   | pre-emphasis output bit (0 = no pre-emphasis; 1 = pre-emphasis)                                                                                                        |
| MUTE                | 32  | IUP04   | audio mute input (0 = permanent mute; 1 = mute on receive error); this pin has an internal pull-up resistor                                                            |
| I <sup>2</sup> SSEL | 33  | IUP04   | select auxiliary input or normal input in transmit mode                                                                                                                |
| SDAUX               | 34  | IPP04   | auxiliary serial data input; I <sup>2</sup> S-bus                                                                                                                      |
| SD                  | 35  | IOF24   | serial audio data input/output; I <sup>2</sup> S-bus                                                                                                                   |
| WS                  | 36  | IOF24   | word select input/output; I <sup>2</sup> S-bus                                                                                                                         |
| SCK                 | 37  | IOF29   | serial audio clock input/output; I <sup>2</sup> S-bus                                                                                                                  |
| I <sup>2</sup> SOEN | 38  | IUP04   | serial audio output enable (0 = enabled; 1 = disabled/3-state); this input has an internal pull-up resistor                                                            |
| SYSCCLKI            | 39  | IPP09   | system clock input (transmit mode)                                                                                                                                     |
| SYSCCLKO            | 40  | OPFA3   | system clock output (receive mode)                                                                                                                                     |
| V <sub>SSD1</sub>   | 41  | E009    | digital ground 1                                                                                                                                                       |
| V <sub>DD1</sub>    | 42  | E008    | digital supply voltage 1                                                                                                                                               |
| CLKSEL              | 43  | IUP04   | select system clock (0 = 384f <sub>s</sub> ; 1 = 256f <sub>s</sub> ); this input has an internal pull-up resistor                                                      |
| RC <sub>int</sub>   | 44  | E029    | integrating capacitor output                                                                                                                                           |

QD01 TDA1547

| SYMBOL             | PIN | DESCRIPTION                                                                                                             |
|--------------------|-----|-------------------------------------------------------------------------------------------------------------------------|
| DGND               | 1   | 0 V digital supply                                                                                                      |
| V <sub>DD0</sub>   | 2   | 5 V digital supply for both channels                                                                                    |
| IN R               | 3   | serial one-bit data input for the right channel                                                                         |
| n.c.               | 4   | pin not connected; should preferably be connected to digital ground                                                     |
| CLK R              | 5   | clock input for the right channel                                                                                       |
| V <sub>DD0 R</sub> | 6   | 5 V digital supply for the right channel; this voltage determines the internal logic HIGH level in the right channel    |
| V <sub>SSD R</sub> | 7   | −3.5 V digital supply for the right channel; this voltage determines the internal logic LOW level in the right channel  |
| V <sub>ref R</sub> | 8   | −4 V reference voltage for the right channel switched capacitor DAC                                                     |
| AGND DAC R         | 9   | 0 V reference voltage for the right channel switched capacitor DAC; this pin should be connected to analog ground       |
| −DAC R             | 10  | output from the right negative switched capacitor DAC; feedback connection for the right negative operational amplifier |
| +DAC R             | 11  | output from the right positive switched capacitor DAC; feedback connection for the right positive operational amplifier |
| AGND R             | 12  | 0 V reference voltage for both right channel operational amplifiers                                                     |
| n.c.               | 13  | pin not connected; should preferably be connected to analog ground                                                      |
| +OUT R             | 14  | + output of the switched capacitor operational amplifier                                                                |
| −OUT R             | 15  | − output of the switched capacitor operational amplifier                                                                |
| V <sub>SSA</sub>   | 16  | −5 V analog supply                                                                                                      |

Q501 TDA1307

| SYMBOL             | PIN | TYPE, I/O          | DESCRIPTION                                                                                                                                                                        |
|--------------------|-----|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WS                 | 1   | I                  | word select input to data interface                                                                                                                                                |
| SCK                | 2   | I                  | clock input to data interface                                                                                                                                                      |
| SD                 | 3   | I                  | data input to interface                                                                                                                                                            |
| EFAB               | 4   | I <sup>(1)</sup>   | error flag (active HIGH): input from decoder chip indicating unreliable data                                                                                                       |
| SBCL               | 5   | I                  | subcode clock: a 10-bit burst clock (typ. 2.8224 MHz) input which synchronizes the subcode data                                                                                    |
| SBDA               | 6   | I                  | subcode data: a 10-bit burst of data, including flags and sync bits, serially input once per frame, clocked by burst clock input SBCL                                              |
| CDEC               | 7   | O                  | decoder clock output: frequency division programmable by means of pins 14 (CLC1) and 17 (CLC2) to output 192, 256, 384 or 768 times f <sub>s</sub>                                 |
| V <sub>DDC3</sub>  | 8   |                    | positive supply 3                                                                                                                                                                  |
| V <sub>SSC2</sub>  | 9   |                    | ground 2                                                                                                                                                                           |
| DOBM               | 10  | O                  | digital audio output: this output contains digital audio samples which have received interpolation, attenuation and muting plus subcode data; transmission is in biphase-mark code |
| DSL                | 11  | O                  | digital silence detected (active LOW) on left channel                                                                                                                              |
| DSR                | 12  | O                  | digital silence detected (active LOW) on right channel                                                                                                                             |
| DSTB               | 13  | I <sup>(2)</sup>   | DOBM standby mode enforce pin (active HIGH)                                                                                                                                        |
| CLC1               | 14  | I                  | application mode programming pin for CDEC (pin 7) frequency division                                                                                                               |
| CMIC               | 15  | O                  | clock output, provided to be used as running clock by microprocessor (in master mode only), output 96f <sub>s</sub>                                                                |
| V <sub>SSC3</sub>  | 16  |                    | ground 3                                                                                                                                                                           |
| CLC2               | 17  | I                  | application mode programming pin for CDEC (pin 7) frequency division                                                                                                               |
| CDCC               | 18  | I                  | master / slave mode selection pin                                                                                                                                                  |
| RESYN <sub>C</sub> | 19  | O                  | resynchronization: out-of-lock indication from data input section (active HIGH)                                                                                                    |
| POR                | 20  | I <sup>(2)</sup>   | power-on reset (active LOW)                                                                                                                                                        |
| V <sub>DDC1</sub>  | 21  |                    | supply voltage 1                                                                                                                                                                   |
| XTAL1              | 22  | I                  | crystal oscillator terminal: local crystal oscillator sense forced input in slave mode                                                                                             |
| XTAL2              | 23  | O                  | crystal oscillator output: drive output to crystal                                                                                                                                 |
| V <sub>DDOSC</sub> | 24  |                    | positive supply connection to crystal oscillator circuitry                                                                                                                         |
| V <sub>SSOSC</sub> | 25  |                    | ground connection to crystal oscillator circuitry                                                                                                                                  |
| MODE               | 26  | I <sup>(2)</sup>   | evaluation mode programming pin (active LOW); in normal operation, this pin should be left open-circuit or connected to the positive supply                                        |
| DOL                | 27  | O                  | data output left channel to bitstream DAC TDA1547                                                                                                                                  |
| NDOL               | 28  | O                  | complementary data output left channel to TDA1547 in double differential mode                                                                                                      |
| V <sub>DDAL</sub>  | 29  |                    | positive supply connection to output data driving circuitry, left channel                                                                                                          |
| V <sub>SSAL</sub>  | 30  |                    | ground connection to output data driving circuitry, left channel                                                                                                                   |
| V <sub>SSAR</sub>  | 31  |                    | ground connection to output data driving circuitry, right channel                                                                                                                  |
| V <sub>DDAR</sub>  | 32  |                    | positive supply connection to output data driving circuitry, right channel                                                                                                         |
| DOR                | 33  | O                  | data output right channel to TDA1547                                                                                                                                               |
| NDOR               | 34  | O                  | complementary data output right channel to TDA1547 in double differential mode                                                                                                     |
| CDAC               | 35  | O                  | clock output to bitstream DAC TDA1547                                                                                                                                              |
| TEST1              | 36  | I <sup>(1)</sup>   | test mode input; in normal operation this pin should be connected to ground                                                                                                        |
| TEST2              | 37  | I <sup>(1)</sup>   | test mode input; in normal operation this pin should be connected to ground                                                                                                        |
| DA                 | 38  | I/O <sup>(2)</sup> | bidirectional data line intended for control data from the microprocessor and peak data from the TDA1307                                                                           |
| CL                 | 39  | I <sup>(2)</sup>   | clock input, to be generated by the microprocessor                                                                                                                                 |
| V <sub>SSC1</sub>  | 40  |                    | ground 1                                                                                                                                                                           |
| V <sub>DDC2</sub>  | 41  |                    | supply voltage 2                                                                                                                                                                   |
| RAB                | 42  | I <sup>(2)</sup>   | command / peak data request line                                                                                                                                                   |

Notes

1. These pins are configured as internal pull-down.
2. These pins are configured as internal pull-up.

| SYMBOL             | PIN | DESCRIPTION                                                                                                           |
|--------------------|-----|-----------------------------------------------------------------------------------------------------------------------|
| V <sub>DDA</sub>   | 17  | 5 V analog supply                                                                                                     |
| −OUT L             | 18  | − output of the switched capacitor operational amplifier                                                              |
| +OUT L             | 19  | + output of the switched capacitor operational amplifier                                                              |
| n.c.               | 20  | pin not connected; should preferably be connected to analog ground                                                    |
| AGND L             | 21  | 0 V reference voltage for both left channel operational amplifiers                                                    |
| +DAC L             | 22  | output from the left positive switched capacitor DAC; feedback connection for the left positive operational amplifier |
| −DAC L             | 23  | output from the left negative switched capacitor DAC; feedback connection for left negative operational amplifier     |
| AGND DAC L         | 24  | 0 V reference voltage for the left channel switched capacitor DAC; this pin should be connected to analog ground      |
| V <sub>ref L</sub> | 25  | −4 V reference voltage for the left channel switched capacitor DAC                                                    |
| V <sub>SSD L</sub> | 26  | −3.5 V digital supply for the left channel; this voltage determines the internal logic LOW level in the left channel  |
| V <sub>DDD L</sub> | 27  | 5 V digital supply for the left channel; this voltage determines the internal logic HIGH level in the left channel    |
| CLK L              | 28  | clock input for the left channel                                                                                      |
| n.c.               | 29  | pin not connected; should preferably be connected to digital ground                                                   |
| IN L               | 30  | serial one-bit data input for the left channel                                                                        |
| V <sub>SSD</sub>   | 31  | −5 V digital supply for both channels                                                                                 |
| V <sub>SUB</sub>   | 32  | −5 V substrate voltage                                                                                                |

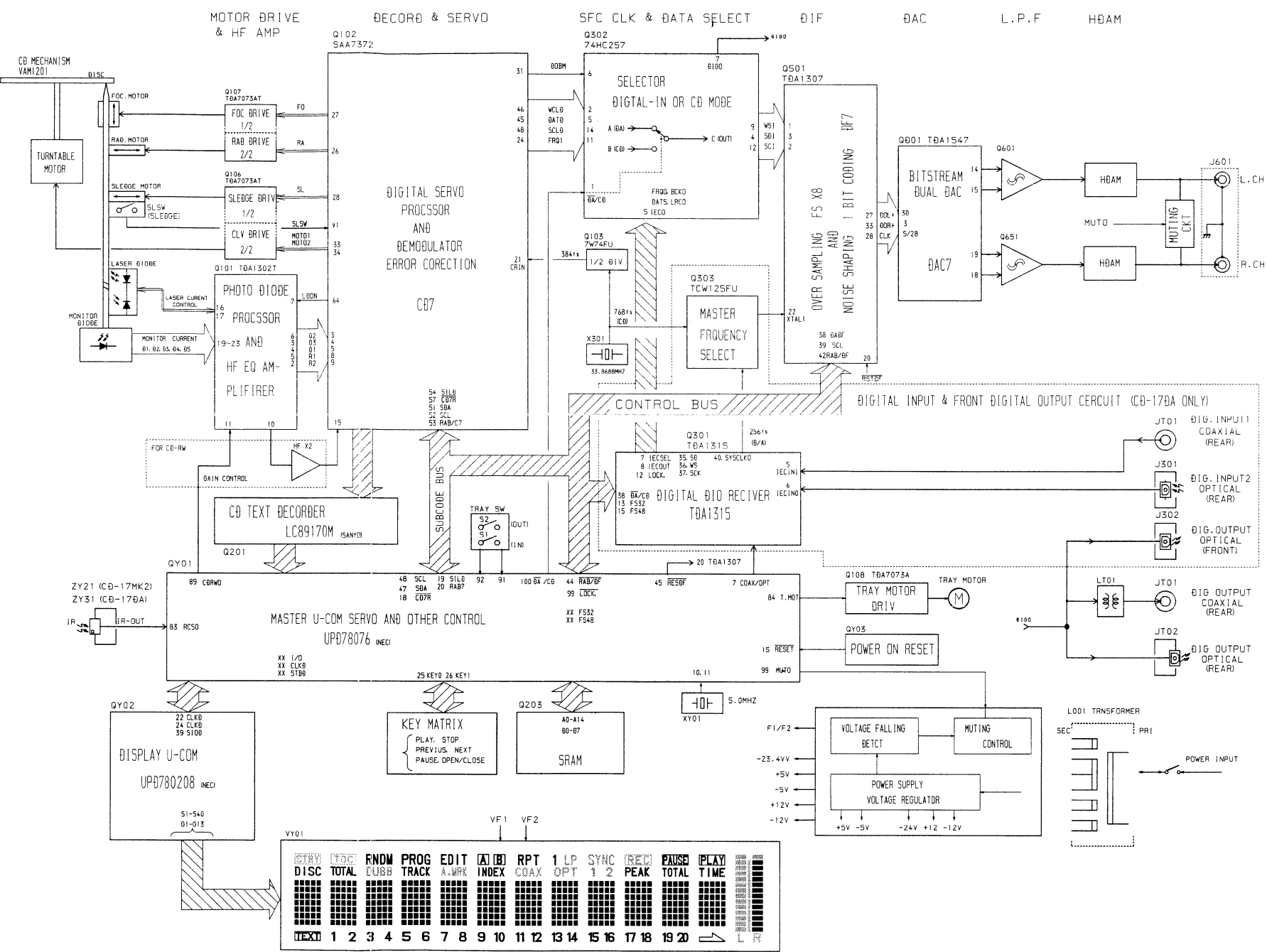
QY01 μPD78076 MAIN

| Pin No. | Port Name | Function | In/Out | Active | To/From        | Description                                                  |
|---------|-----------|----------|--------|--------|----------------|--------------------------------------------------------------|
| 1       | STRB      | P120     | Out    | High   | Q301           | Strobe signal for control resister                           |
| 2       | LMOD      | P121     | Out    | Low    | Q301           | Interface mode line                                          |
| 3       | OPT OFF   | P122     | In     | High   | Q308/Q309      | Control signal a front digital output?s power                |
| 4       | EMPHA     | P123     | In     | High   | Q301           | Emphasys signal (H = Emphasys on)                            |
| 5       | FS32      | P124     | In     | Low    | Q301           | Sampling frequency signal (L = 32KHz Receiving)              |
| 6       | FS48      | P125     | In     | Low    | Q301           | Sampling frequency signal (L = 48KHz Receiving)              |
| 7       | OPTIN     | P126     | Out    | Low    | Q301           | Digital input select signal (L = Optical , H = Coaxial)      |
| 8       | DMUT      | P127     | Out    | Low    | Q301           | Digital muting control signal                                |
| 9       | GND       | IC       |        |        | GND            |                                                              |
| 10      | X2        | X2       |        |        | XY01           | Clock out(5MHz)                                              |
| 11      | X1        | X1       |        |        | XY01           | Clock in(5MHz)                                               |
| 12      | +5VD      | Vdd      |        |        | +5VD           | Power supply +5V                                             |
| 13      | OPEN      | XT2      |        |        | OPEN           |                                                              |
| 14      | +5VD      | XT1      |        |        | +5VD           |                                                              |
| 15      | REST      | RESET    | In     |        | QY03           | Reset signal input                                           |
| 16      | RC5i      | INTP0    | In     | ↑ ↓    | ZY21/ZY31/EXT  | Input remote control signal                                  |
| 17      | DQST      | INTP1    | In     | ↓      | Q201           | Request signal to read datas from Q201                       |
| 18      | CD7R      | P02      | Out    | Low    | Q102           | CD7 Reset signal                                             |
| 19      | SILD      | P03      | Out    | Low    | Q102           | Strobe signal for servo part of Q102                         |
| 20      | RAB7      | P04      | Out    | Low    | Q102           | Strobe signal for servo part of Q102                         |
| 21      | LOCK      | P05      | Out    | Low    | Q301           | Unlock signal for digital interface                          |
| 22      | OPEN      | P06      | Out    |        | ---            |                                                              |
| 23      | +5VD      | Avdd     |        |        | +5VD           |                                                              |
| 24      | +5VD      | Avref0   |        |        | +5VD           |                                                              |
| 25      | KEY0      | ANI0     | In     | Level  | Tact Switch    | Key Sensor                                                   |
| 26      | KEY1      | ANI1     | In     | Level  | Tact Switch    | Key Sensor                                                   |
| 27      | GND       | ANI2     | In     |        | GND            | Key Sensor                                                   |
| 28      | GND       | ANI3     | In     |        | GND            | Key Sensor(REERVED)                                          |
| 29      | GND       | ANI4     | In     |        | GND            | Key Sensor(REERVED)                                          |
| 30      | GND       | ANI5     |        |        | GND            |                                                              |
| 31      | GND       | ANI6     |        |        | GND            |                                                              |
| 32      | GND       | ANI7     |        |        | GND            |                                                              |
| 33      | GND       | Avss     |        |        | GND            |                                                              |
| 34      | SDADF     | P130     | In/Out |        | Q501           | Serial data signal for Q501                                  |
| 35      | RSTD      | P131     | Out    |        | QY02           | Reset signal for QY02                                        |
| 36      | +5VD      | Avref    |        |        | +5VD           |                                                              |
| 37      | STBD      | P70      | Out    |        | QY02           | Strobe signal for QY02                                       |
| 38      | SIOD      | SO2      | Out    |        | QY02           | Serial data for QY02                                         |
| 39      | CLKD      | SCK2     | Out    |        | QY02           | Serial clock for QY02                                        |
| 40      | RSTD      | Vss      |        |        | GND            |                                                              |
| 41      | SIDT      | SI1      | In     |        | Q201           | Serial data signal from Q201                                 |
| 42      | OPEN      | SO1      |        |        | ---            |                                                              |
| 43      | CLKT      | SCK1     | Out    |        | Q201           | Serial clock signal from Q201                                |
| 44      | RABDF     | P23      | Out    | Low    | Q501           | Serial data's Strobe signal for Q501                         |
| 45      | RSTDF     | P24      | Out    | Low    | Q501           | Reset signal for Q501                                        |
| 46      | OPEN      | SB0      | ---    |        |                |                                                              |
| 47      | SDA       | SB1      | In/Out |        | Q102/Q301      | Serial data signal for Q102/Q301                             |
| 48      | SCL       | SCK0     | Out    |        | Q102/Q301/Q501 | Serial clock signal for Q102/Q301/Q501                       |
| 49      | A0        | A0       | Out    |        | Q203           | Address signal for Q203                                      |
| 50      | A1        | A1       | Out    |        | Q203           | Address signal for Q203                                      |
| 51      | A2        | A2       | Out    |        | Q203           | Address signal for Q203                                      |
| 52      | A3        | A3       | Out    |        | Q203           | Address signal for Q203                                      |
| 53      | A4        | A4       | Out    |        | Q203           | Address signal for Q203                                      |
| 54      | A5        | A5       | Out    |        | Q203           | Address signal for Q203                                      |
| 55      | A6        | A6       | Out    |        | Q203           | Address signal for Q203                                      |
| 56      | A7        | A7       | Out    |        | Q203           | Address signal for Q203                                      |
| 57      | AD0       | D0       | In/Out |        | Q203           | Data signal for Q203                                         |
| 58      | AD1       | D1       | In/Out |        | Q203           | Data signal for Q203                                         |
| 59      | AD2       | D2       | In/Out |        | Q203           | Data signal for Q203                                         |
| 60      | AD3       | D3       | In/Out |        | Q203           | Data signal for Q203                                         |
| 61      | AD4       | D4       | In/Out |        | Q203           | Data signal for Q203                                         |
| 62      | AD5       | D5       | In/Out |        | Q203           | Data signal for Q203                                         |
| 63      | AD6       | D6       | In/Out |        | Q203           | Data signal for Q203                                         |
| 64      | AD7       | D7       | In/Out |        | Q203           | Data signal for Q203                                         |
| 65      | A8        | A8       | Out    |        | Q203           | Address signal for Q203                                      |
| 66      | A9        | A9       | Out    |        | Q203           | Address signal for Q203                                      |
| 67      | A10       | A10      | Out    |        | Q203           | Address signal for Q203                                      |
| 68      | A11       | A11      | Out    |        | Q203           | Address signal for Q203                                      |
| 69      | A12       | A12      | Out    |        | Q203           | Address signal for Q203                                      |
| 70      | A13       | A13      | Out    |        | Q203           | Address signal for Q203                                      |
| 71      | OPEN      | Vss      |        |        | ---            |                                                              |
| 72      | OPEN      | A14      | Out    |        | ---            |                                                              |
| 73      | OPEN      | A15      | Out    |        | ---            |                                                              |
| 74      | OPEN      | P60      | Out    |        | ---            |                                                              |
| 75      | OPEN      | P61      | Out    |        | ---            |                                                              |
| 76      | OPEN      | P62      | Out    |        | ---            |                                                              |
| 77      | OPEN      | P63      | Out    |        | ---            |                                                              |
| 78      | RDN       | RD       | Out    |        | Q203           | Read signal for Q203                                         |
| 79      | WRN       | WR       | Out    |        | Q203           | Write signal for Q203                                        |
| 80      | OPEN      | P66      | Out    |        | ---            |                                                              |
| 81      | OPEN      | P67      | Out    |        | ---            |                                                              |
| 82      | KILL      | P100     | Out    |        | QF03           | Cancell RC5 from IR sensor during output RC5                 |
| 83      | RC5OUT    | TO6      | Out    |        | QF01           | Synccorecoding signal output                                 |
| 84      | TRM       | P102     |        |        | Q108           | Tray motor control signal                                    |
| 85      | OPEN      | P103     |        |        | ---            |                                                              |
| 86      | MDSEL1    | P30      | In     | Low    | +5VD or GND    | Model Select(HIGH :CD-17DA / LOW :CD-17MK2 )                 |
| 87      | MDSEL2    | P31      | In     | Low    | +5VD           | Model Select(HIGH :CD-17DA&17MK2 / LOW :CD-17                |
| 88      | OPEN      | P32      | In     | High   | ---            | Detect switch for CD-RW Disc (HIGH : CD-RW Disc , LOW : CD ) |
| 89      | CDRWO     | P33      | In     | High   | Q101           | In case of CD-RW disc, Gain up RF signal                     |
| 90      | SLSW      | P34      | In     | Low    | VAM1201        | Sledge detect switch (LOW : in end)                          |
| 91      | TROS      | P35      | In     | Low    | TRAY           | Tray in/out detect switch (LOW : out end)                    |
| 92      | TRIS      | P36      | In     | Low    | TRAY           | Tray in/out detect switch (LOW : in end)                     |
| 93      | OPEN      | P37      | In     |        | ---            |                                                              |
| 94      | OPEN      | P90      | In     |        | ---            |                                                              |
| 95      | OPEN      | P91      | Out    |        | ---            |                                                              |
| 96      | OPEN      | P93      | Out    |        | ---            |                                                              |
| 97      | OPEN      | P94      | Out    |        | ---            |                                                              |
| 98      | OPEN      | P95      | Out    |        | ---            |                                                              |
| 99      | AMUT      | P95      | Out    | Low    | QN04           | Analog muting on                                             |
| 100     | DA/CD     | P96      | Out    | Low    | Q302           | Mode select (LOW : D/A Mode , HIGH : CD Mode)                |

QY02 μPD780204 DISPLAY

| Pin No. | Port Name  | Function      | To/From | Descriptio                       | Active |
|---------|------------|---------------|---------|----------------------------------|--------|
| 1       | +5Vd       | Vdd           | +5Vd    |                                  |        |
| 2       | OPEN       | P37           | ---     | LED On/Off                       | Low    |
| 3       | OPEN       | P36/BUZ       | ---     | LED On/Off                       | Low    |
| 4       | OPEN       | P35/PCL       | ---     | LED On/Off                       | Low    |
| 5       | OPEN       | P34/TI2       | ---     | LED On/Off                       | Low    |
| 6       | OPEN       | P33/TI1       | ---     | LED On/Off                       | Low    |
| 7       | OPEN       | P32/TO2       | ---     | LED On/Off                       | Low    |
| 8       | OPEN       | P31/TO1       | ---     | LED On/Off                       | Low    |
| 9       | OPEN       | P30/TO0       | ---     | LED On/Off                       | Low    |
| 10      | RESO       | RESET         | QY01    |                                  |        |
| 11      | 5MHz X'tal | X2            | XY02    |                                  |        |
| 12      | 5MHz X'tal | X1            | XY02    |                                  |        |
| 13      | GND        | IC            | GND     |                                  |        |
| 14      | OPEN       | XT2           | ---     |                                  |        |
| 15      | OPEN       | P04/XT1       | ---     |                                  |        |
| 16      | +5Vd       | Vdd           | +5Vd    |                                  |        |
| 17      | OPEN       | P27/SCK0      | ---     |                                  |        |
| 18      | OPEN       | P26/SO0/SB1   | ---     |                                  |        |
| 19      | OPEN       | P25/SI0/SB0   | ---     |                                  |        |
| 20      | OPEN       | P24/BUSY      | ---     |                                  |        |
| 21      | OPEN       | P23/STB       | ---     |                                  |        |
| 22      | CLKD       | P22/SCK1      | ---     |                                  |        |
| 23      | OPEN       | P21/SO1       | ---     |                                  |        |
| 24      | SIOD       | P20/SI1       | QY01    |                                  |        |
| 25      | GND        | Avss          | GND     |                                  |        |
| 26      | OPEN       | P17/ANI7      | ---     |                                  |        |
| 27      | OPEN       | P16/ANI6      | ---     |                                  |        |
| 28      | OPEN       | P15/ANI5      | ---     |                                  |        |
| 29      | OPEN       | P14/ANI4      | ---     |                                  |        |
| 30      | OPEN       | P13/ANI3      | ---     |                                  |        |
| 31      | OPEN       | P12/ANI2      | ---     |                                  |        |
| 32      | OPEN       | P11/ANI1      | ---     |                                  |        |
| 33      | OPEN       | P10/ANI0      | ---     |                                  |        |
| 34      | OPEN       | Avdd          | ---     |                                  |        |
| 35      | GND        | Avref         | GND     |                                  |        |
| 36      | OPEN       | P03/INTP3     | ---     |                                  |        |
| 37      | OPEN       | P02/INTP2     | ---     |                                  |        |
| 38      | OPEN       | P01/INTP1     | ---     |                                  |        |
| 39      | STBD       | P00/INTP0/TI0 | QY01    |                                  |        |
| 40      | GND        | Vss           | GND     |                                  |        |
| 41      | OPEN       | P74           | ---     |                                  |        |
| 42      | OPEN       | P73           | ---     |                                  |        |
| 43      | OPEN       | P72           | ---     |                                  |        |
| 44      | GND        | P71           | GND     | Scroll rule select (LOW : CD-17) |        |
| 45      | GND        | P70           | GND     | Character select (LOW : CD-17)   |        |
| 46      | +5Vd       | Vdd           | +5Vd    |                                  |        |
| 47      | S40        | P127/FIP52    | FL      | Segment output                   |        |
| 48      | S39        | P126/FIP51    | FL      | Segment output                   |        |
| 49      | S38        | P125/FIP50    | FL      | Segment output                   |        |
| 50      | S37        | P124/FIP49    | FL      | Segment output                   |        |
| 51      | S36        | P123/FIP48    | FL      | Segment output                   |        |
| 52      | S35        | P122/FIP47    | FL      | Segment output                   |        |
| 53      | S34        | P121/FIP46    | FL      | Segment output                   |        |
| 54      | S33        | P120/FIP45    | FL      | Segment output                   |        |
| 55      | S32        | P117/FIP44    | FL      | Segment output                   |        |
| 56      | S31        | P116/FIP43    | FL      | Segment output                   |        |
| 57      | S30        | P115/FIP42    | FL      | Segment output                   |        |
| 58      | S29        | P114/FIP41    | FL      | Segment output                   |        |
| 59      | S28        | P113/FIP40    | FL      | Segment output                   |        |
| 60      | S27        | P112/FIP39    | FL      | Segment output                   |        |
| 61      | S26        | P111/FIP38    | FL      | Segment output                   |        |
| 62      | S25        | P110/FIP37    | FL      | Segment output                   |        |
| 63      | S24        | P107/FIP36    | FL      | Segment output                   |        |
| 64      | S23        | P106/FIP35    | FL      | Segment output                   |        |
| 65      | S22        | P105/FIP34    | FL      | Segment output                   |        |
| 66      | S21        | P104/FIP33    | FL      | Segment output                   |        |
| 67      | S20        | P103/FIP32    | FL      | Segment output                   |        |
| 68      | S19        | P102/FIP31    | FL      | Segment output                   |        |
| 69      | S18        | P101/FIP30    | FL      | Segment output                   |        |
| 70      | S17        | P100/FIP29    | FL      | Segment output                   |        |
| 71      | S16        | P97/FIP28     | FL      | Segment output                   |        |
| 72      | S15        | P96/FIP27     | FL      | Segment output                   |        |
| 73      | S14        | P95/FIP26     | FL      | Segment output                   |        |
| 74      | S13        | P94/FIP25     | FL      | Segment output                   |        |
| 75      | S12        | P93/FIP24     | FL      | Segment output                   |        |
| 76      | S11        | P92/FIP23     | FL      | Segment output                   |        |
| 77      | S10        | P91/FIP22     | FL      | Segment output                   |        |
| 78      | S9         | P90/FIP21     | FL      | Segment output                   |        |
| 79      | -VFT       | Vload         | -VFT    |                                  |        |
| 80      | S8         | P87/FIP20     | FL      | Segment output                   |        |
| 81      | S7         | P86/FIP19     | FL      | Segment output                   |        |
| 82      | S6         | P85/FIP18     | FL      | Segment output                   |        |
| 83      | S5         | P84/FIP17     | FL      | Segment output                   |        |
| 84      | S4         | P83/FIP16     | FL      | Segment output                   |        |
| 85      | S3         | P82/FIP15     | FL      | Segment output                   |        |
| 86      | S2         | P81/FIP14     | FL      | Segment output                   |        |
| 87      | S1         | P80/FIP13     | FL      | Gird output or Segment output    |        |
| 88      | G13        | FIP12         | FL      | Gird output or Segment output    |        |
| 89      | G12        | FIP11         | FL      | Gird output or Segment output    |        |
| 90      | G11        | FIP10         | FL      | Gird output or Segment output    |        |
| 91      | G10        | FIP9          | FL      | Gird output or Segment output    |        |
| 92      | G9         | FIP8          | FL      | Gird output or Segment output    |        |
| 93      | G8         | FIP7          | FL      | Gird output or Segment output    |        |
| 94      | G7         | FIP6          | FL      | Gird output or Segment output    |        |
| 95      | G6         | FIP5          | FL      | Gird output or Segment output    |        |
| 96      | G5         | FIP4          | FL      | Gird output or Segment output    |        |
| 97      | G4         | FIP3          | FL      | Gird output or Segment output    |        |
| 98      | G3         | FIP2          | FL      | Gird output or Segment output    |        |
| 99      | G2         | FIP1          | FL      | Gird output                      |        |
| 100     | G1         | FIP0          | FL      | Gird output                      |        |

6. BLOCK DIAGRAM



7. FLAG NO.

FLUG

| NO. | ITEM      | FUNCTION                              | NO. | ITEM   | FUNCTION                                | NO. | ITEM     | FUNCTION                                              |
|-----|-----------|---------------------------------------|-----|--------|-----------------------------------------|-----|----------|-------------------------------------------------------|
| 0   | MT-OUT    | MOTOR DRIVE OUTPUT                    | 24  | S0A    | MPU DATA FOR C07/T0A1307/T0A1315        | 48  | 0MUT     | T0A1315 MUTING SIGNAL                                 |
| 1   | HF-OUT    | T0A1302T HF SIGNAL OUT                | 25  | SCL    | MPU CLOCK FOR C07/T0A1307/T0A1315       | 49  | OPT/COAX | DIGITAL INPUT SELECT L:OPT H:COAX                     |
| 2   |           |                                       | 26  | MSFG   | MASTER FREQUENCY CLK FOR T0A1307        | 50  | 32K      | INDICATES SAMPLE FREQUENCY=32kHz (ACTIVE LOW)         |
| 3   | HF HPF    | HF SIGNAL HPF OUT                     | 27  |        |                                         | 51  | 44K      | INDICATES SAMPLE FREQUENCY=44kHz (ACTIVE LOW)         |
| 4   |           |                                       | 28  |        |                                         | 52  | 48K      | INDICATES SAMPLE FREQUENCY=48kHz (ACTIVE LOW)         |
| 5   | RA        | RADIAL MOTOR CONT PULSE (P0M)         | 29  |        |                                         | 53  | S0       | SERIAL AUDIO DATA INPUT/OUTPUT: I <sup>2</sup> S-BUS  |
| 6   | FO        | FOCUS MOTOR CONT PULSE (P0M)          | 30  |        |                                         | 54  | WS       | WORD SELECT INPUT/OUTPUT: I <sup>2</sup> S-BUS        |
| 7   | SL        | SLEDGE MOTOR CONT PULSE (P0M)         | 31  |        |                                         | 55  | SCK      | SERIAL AUDIO CLOCK INPUT/OUTPUT: I <sup>2</sup> S-BUS |
| 8   | MOTO1     | TURNABLE CONT PULSE (P0M)             | 32  | 00R    | 1 BIT DATA R                            | 56  | SYSCLKO  | T0A1315H SYSTEM CLOCK OUTPUT                          |
| 9   | MOTO2     | TURNABLE CONT PULSE (P0M)             | 33  | CLK    | 1 BIT DATA CLOCK OUT                    | 57  | UNLOCK   | PLL OUT-OF-LOCK (0=NOT LOCKED)                        |
| 10  | 00BM      | DIGITAL OUTPUT SIGNAL                 | 34  | 00L    | 1 BIT DATA L                            | 58  | FLOS     | FL 0R10 AND SEGMENT DRIVE                             |
| 11  | C07R      | C07 RESET PULSE                       | 35  | OSC2   | UPC IN CLK (5.0MHz)                     | 59  | COAX     | COAX INPUT SIGNAL                                     |
| 12  | SIL0      | DATA BUS R/W AND LOR0 CONTROL SERVO   | 36  | OSC1   | UPC OUT CLK (5.0MHz)                    | 60  | OPT      | OPTICAL INPUT SIGNAL                                  |
| 13  | RAB7      | DATA BUS R/W AND LOR0 CONTROL DECODER | 37  |        |                                         | 61  | RC I/O   | RC-5 SIGNAL INPUT/OUTPUT                              |
| 14  | SCLC      | AUDIO SERIAL DATA CLOCK               | 38  |        |                                         | 62  | IRSW     | RC-5 INTERNAL/EXTERNAL SWITCH                         |
| 15  | WCLK      | AUDIO WORD CLOCK                      | 39  | SLSW   | SLEDGE SWITCH L:IN EN0                  | 63  | RCSI     | RC-5 SIGNAL MPU INPUT                                 |
| 16  | 0AT       | AUDIO I <sup>2</sup> S DATA           | 40  | A.MUTE | AUDIO MUTE H:MUTED                      | 64  | IR       | RC-5 IR RECEIVE SIGNAL OUT                            |
| 17  | CL16      | SYSTEM CLOCK 16.9344MHz               | 41  | LOCK   | DELAYED UNLOCK SIGNAL (L:UNLOCK H:LOCK) | 65  |          |                                                       |
| 18  | WCKO/LRCI | WORD CLOCK SWITCH OUT                 | 42  | EMPHA  | T0A1315 EMPHA SIGNAL OUT (H:ON)         | 66  | LPFO     | AUDIO SIGNAL AT LPF OUTPUT                            |
| 19  | 0ATO      | SERIAL DATA SWITCH OUT                | 43  | 0A/C0  | MODE SELECT 0:A OR C0 (L:0/A H:C0)      | 67  | LR0UT    | AUDIO SIGNAL OUTPUTS                                  |
| 20  | 0ATO/0IN  | INV SERIAL 0ATO DATA                  | 44  |        |                                         | 68  | MUTO     | MUTING SIGNAL OUTPUT FOR AUDIO SIGNAL                 |
| 21  | BCKI/SCK0 | SERIAL DATA BIT CLOCK SWITCH OUT      | 45  | T.MOT  | TRAY MOTOR CONTROL SIGNAL               | 69  | PWMU     | POWER ON/OFF MUTING SET SIGNAL                        |
| 22  |           |                                       | 46  | TRIS   | TRAY IN/OUT DETECT SWITCH L:IN EN0      | 70  |          |                                                       |
| 23  | X1        | SYSTEM CLOCK (33.8688MHz)             | 47  | TROS   | TRAY IN/OUT DETECT SWITCH L:OUT EN0     | 71  |          |                                                       |



**VAM1201**

**SERVO PCB (PV16)**

**CONTROL PART**

**CD-17MK2 ONLY**

**CD-17DA ONLY**

**TO Q501 (TDA1307)**

**TO Q302**

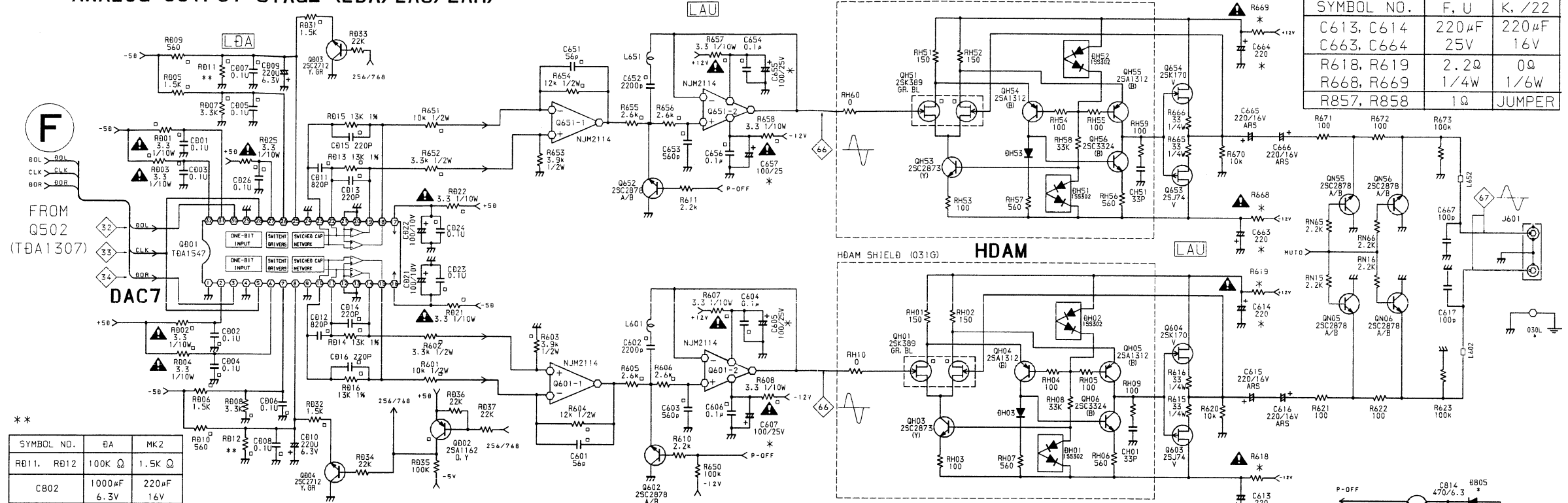
**TO Q303**

**TO QY01 (MAIN U-COM)**

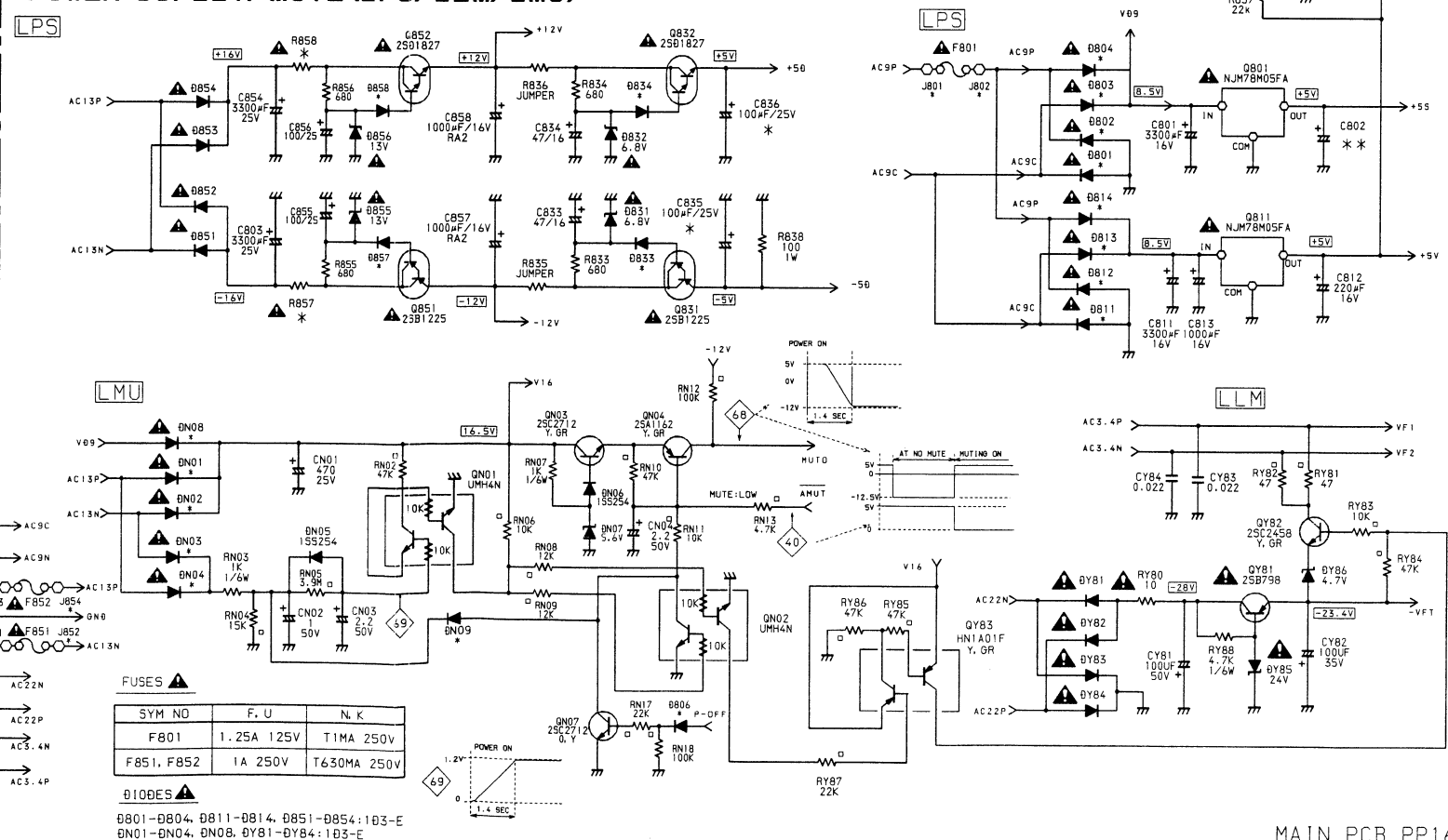




# ANALOG OUTPUT STAGE (LDA/LAU/LAH)



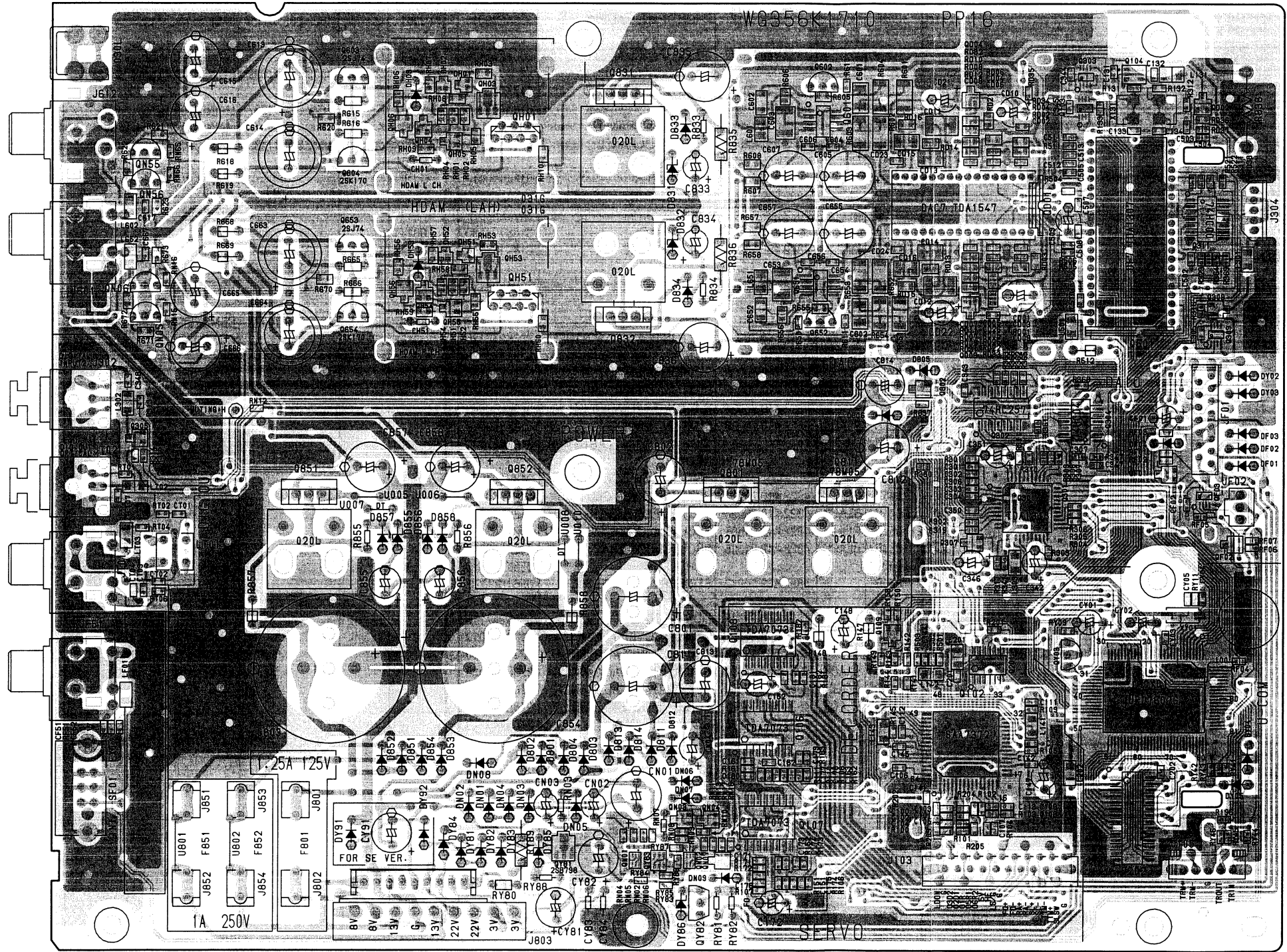
# POWER SUPPLY/MUTE (LPS/LLM/LMU)





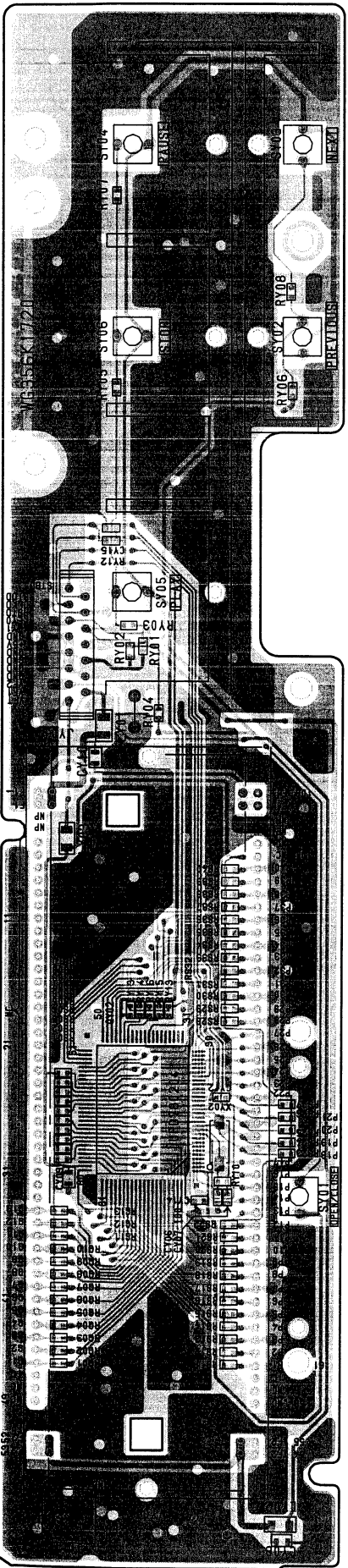
PP16

|      |      |             |      |                          |                |      |
|------|------|-------------|------|--------------------------|----------------|------|
| QN55 | Q603 |             | Q601 | QD04                     | Q103 Q303 Q104 | QD02 |
| QN56 | Q604 | QH06 ~ QH03 | Q601 |                          | Q501           | Q311 |
| QN06 | Q653 | QH56 ~ QH53 | Q831 | QD01                     |                | Q308 |
| QN05 | Q654 |             | Q832 |                          |                |      |
| Q305 | Q851 | Q852        | Q651 |                          |                |      |
|      |      |             | Q652 | Q802 QD03 Q302 Q301 Q304 | QF01           |      |



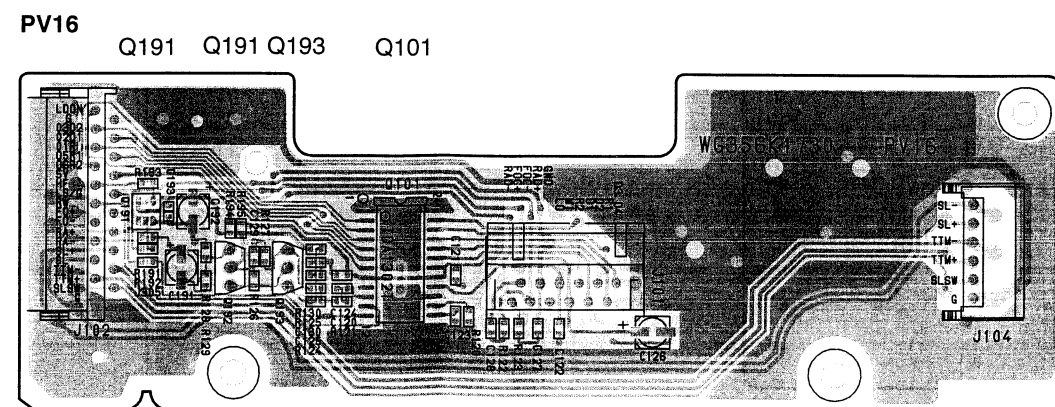
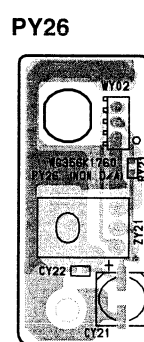
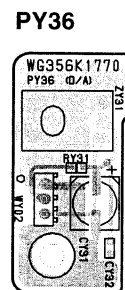
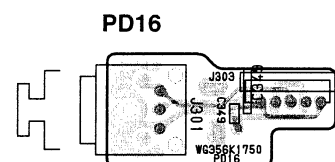
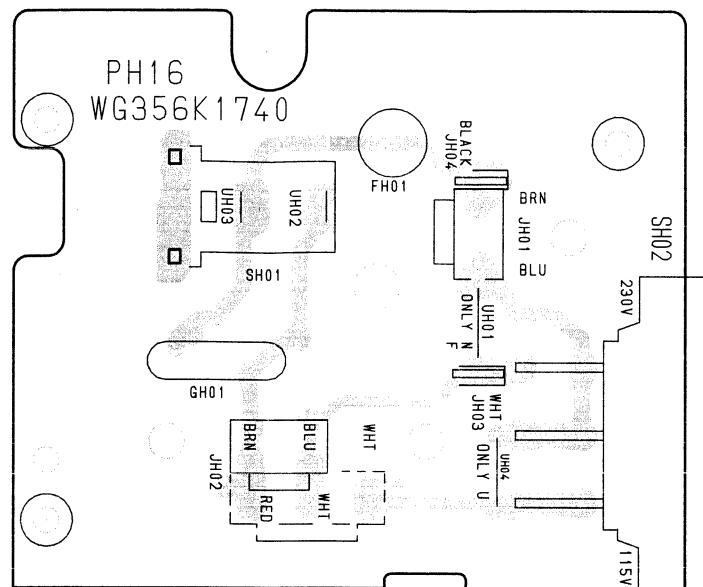
|                          |      |      |      |      |      |
|--------------------------|------|------|------|------|------|
| QN03 QN04                | Q108 | Q109 | Q101 | QY03 | QY01 |
| QY81 QN01 QY83 QN02 QN07 | Q106 |      | Q102 |      | Q202 |
| QY82                     | Q107 |      |      |      |      |

PY16



QY02

## (VERS.:VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, \*\*:EUROPE)



| POS. NO | VERS. COLOR | PART NO. (FOR PCS) | DESCRIPTION                    | PART NO. (MJI) | POS. NO | VERS. COLOR | PART NO. (FOR PCS) | DESCRIPTION             | PART NO. (MJI) |
|---------|-------------|--------------------|--------------------------------|----------------|---------|-------------|--------------------|-------------------------|----------------|
| 001B    | DA          |                    | FRONT PANEL ASSY GLD           | 356K248550     | 050M    |             | 4822 528 30429     | CAM                     | 305K054010     |
| 001B    | MK2 BLK     |                    | FRONT PANEL ASSY BLK           | 356K248500     | 051M    |             | 4822 522 10738     | NEW GEAR FOR VAM1201    | 305K058050     |
| 001B    | MK2 GLD     |                    | FRONT PANEL ASSY GLD           | 356K248510     | 060M    |             | 4822 492 33495     | SPRING                  | 305K115020     |
| 002B    | DA          |                    | FRONT PANEL AL GLD             | 356K248130     | 501M    |             | 4822 691 10615     | MECHANISM,VAM 1201      | 356K304500     |
| 002B    | MK2 BLK     | 4822 459 05171     | FRONT PANEL AL BLK             | 356K248010     | ▲ J001  | F           |                    | JACK 3P AC INLET        | YJ04002160     |
| 002B    | MK2 GLD     | 4822 459 05172     | FRONT PANEL AL GLD             | 356K248110     | ▲ J001  | /22,K,U     | 4822 265 11399     | JACK 2P AC INLET        | YJ04002360     |
| 003B    | GOLD        | 4822 444 40853     | ESCUTCHEON AL GLD              | 318K063110     | ▲ L001  | F           |                    | POWER TRANSF. 100V      | TS15742010     |
| 003B    | BLACK       | 4822 444 40852     | ESCUTCHEON AL BLK              | 318K063010     | ▲ L001  | /22,K,U     | 4822 146 11089     | POWER TRANSF. 115V/230V | TS15742020     |
| 014B    | GOLD        | 4822 381 12025     | IR LENS GLD PANEL              | 290J355110     | ▲ W001  | F           | 4822 321 11337     | MAINS CORD              | ZC01802080     |
| 014B    | BLACK       | 4822 381 12024     | IR LENS BLK PANEL              | 290J355010     | ▲ W001  | K           |                    | MAINS CORD,2.5A 250V    | ZC01803090     |
| 015B    | GOLD        | 4822 450 10143     | WINDOW GLD                     | 318K158110     | ▲ W001  | /22         | 4822 321 11439     | MAINS CORD,10A 250V     | ZC01803080     |
| 015B    | BLACK       | 4822 450 10141     | WINDOW BLK                     | 318K158010     | ▲ W001  | U           |                    | MAINS CORD,10A 125V     | ZC01803100     |
| 016B    | GOLD        | 4822 532 13091     | BUSHING GLD                    | 342K259110     |         |             |                    |                         |                |
| 016B    | BLACK       | 4822 532 13089     | BUSHING BLK                    | 342K259010     |         |             |                    |                         |                |
| 017B    | DA          |                    | RETAINER GL                    | 318K104130     |         |             |                    |                         |                |
| 017B    | MK2 BLK     | 4822 459 50977     | RETAINER BLK                   | 318K104010     | 001T    | F           |                    | PACKING                 | 356K851110     |
| 017B    | MK2 GLD     | 4822 459 50978     | RETAINER GLD                   | 318K104110     | 001T    | K           |                    | USER GUIDE,ENG/CHINA    | 356K851350     |
| 025B    | GOLD        | 4822 410 70032     | BUTTON,PLAY STOP PAUSE         | 318K270120     | 001T    | /22         | 4822 736 16577     | USER GUIDE              | 356K851310     |
| 025B    | BLACK       | 4822 410 70027     | BUTTON,PLAY STOP PAUSE         | 318K270020     | 001T    | U           |                    | USER GUIDE              | 356K851250     |
| 026B    | GOLD        | 4822 410 70033     | BUTTON,OPEN CLOSE GLD          | 318K270130     | T100    |             | 4822 219 10595     | REMOTE COMMANDER        | ZK355K0010     |
| 026B    | BLACK       | 4822 410 70028     | BUTTON,OPEN CLOSE BLK          | 318K270030     |         |             |                    | RC-DA17CD               |                |
| 027B    | GOLD        | 4822 410 70034     | BUTTON,TRACK GLD               | 318K270140     |         |             |                    |                         |                |
| 027B    | BLACK       | 4822 410 70029     | BUTTON,TRACK BLK               | 318K270040     |         |             |                    |                         |                |
| 035B    | DA          |                    | DIGITAL CAP IN ELASTOMER BROWN | 318K067110     |         |             |                    |                         |                |
| 036B    | DA          |                    | RETAINER OPTICAL JACK          | 318K104040     |         |             |                    |                         |                |
| 045B    | GOLD        | 4822 410 70031     | BUTTON,POWER GLD               | 318K270110     |         |             |                    |                         |                |
| 045B    | BLACK       | 4822 410 70026     | BUTTON,POWER BLK               | 318K270010     |         |             |                    |                         |                |
| 050B    | GOLD        | 4822 442 01607     | ESCUTCHEON,TRAY LID GLD        | 342K063150     |         |             |                    |                         |                |
| 050B    | BLACK       | 4822 442 01606     | ESCUTCHEON,TRAY LID BLK        | 342K063050     |         |             |                    |                         |                |
| 060B    |             |                    | FL HOLDER                      | 356K271010     |         |             |                    |                         |                |
| 061B    |             | 4822 459 10942     | STICKER ADHESIVE               | 056J122020     |         |             |                    |                         |                |
| 001D    | GOLD        | 4822 444 30517     | LID,TOP COVER AL GLD           | 318K257110     |         |             |                    |                         |                |
| 001D    | BLACK       | 4822 444 30516     | LID,TOP COVER AL BLK           | 318K257010     |         |             |                    |                         |                |
| 002D    | GOLD        | 4822 502 14425     | SCREW,THINHEAD 3X8NI           | 323S010020     |         |             |                    |                         |                |
| 002D    | BLACK       | 4822 502 21693     | SCREW,THINHEAD 3X8NI           | 323S010030     |         |             |                    |                         |                |
| 003D    | GOLD        | 4822 502 14462     | SCREW,THINHEAD 3X5NI           | 318K010020     |         |             |                    |                         |                |
| 003D    | BLACK       | 4822 502 14461     | SCREW,THINHEAD 3X5BL           | 318K010030     |         |             |                    |                         |                |
| 010D    | GOLD        | 4822 444 40855     | SIDE PANEL,GLD                 | 318K249110     |         |             |                    |                         |                |
| 010D    | BLACK       | 4822 444 40854     | SIDE PANEL,BLK                 | 318K249010     |         |             |                    |                         |                |
| 001M    | GOLD        | 4822 691 10763     | MECHANISM,LOADER LM302         | 305K304650     |         |             |                    |                         |                |
| 001M    | BLACK       | 4822 691 10762     | NEW TRAY BROWN                 | 305K304640     |         |             |                    |                         |                |
| 005M    |             | 4822 464 10054     | FRAME,K                        | 305K401500     |         |             |                    |                         |                |
| 010M    |             | 4822 361 21741     | D.C MOTOR,K                    | MM0030002R     |         |             |                    |                         |                |
| 016M    |             | 4822 271 30873     | MINI                           | SM01020620     |         |             |                    |                         |                |
| 020M    |             | 4822 522 33521     | GEAR                           | 305K058030     |         |             |                    |                         |                |
| 021M    |             | 4822 528 81537     | PULLEY                         | 305K262010     |         |             |                    |                         |                |
| 025M    |             | 4822 522 33522     | GEAR                           | 305K058500     | 001S    | F           |                    | PACKING CASE,GL         | 356K851060     |
| 030M    |             | 4822 358 31314     | BELT                           | 305K264010     | 001S    | U BLK       |                    | PACKING CASE,BL         | 356K851010     |
| 035M    |             | 4822 443 51265     | CASE                           | 305K064110     | 001S    | U GLD       |                    | PACKING CASE,GL         | 356K851020     |
| 036M    |             | 4822 462 72118     | BUFFER,SUSPENSION              | 305K056010     | 002S    | F U         |                    | CUSHION,PIECE           | 318K859010     |
| 040M    |             | 4822 402 11212     | NEW ARM FOR VAM1201            | 305K002050     |         |             |                    |                         |                |
| 043M    | GOLD        | 4822 449 80311     | CASE K,NEW STYLING BROWN       | 329K064610     | B001    |             |                    | BATTERY                 | ZF24302000     |
| 043M    | BLACK       | 4822 449 80312     | CASE K,NEW STYLING BLACK       | 329K064600     | J051    |             | 4822 321 62012     | CONNECTIVE CORD RCA     | ZD00000100     |
| 046M    |             | 4822 492 33494     | SPRING                         | 305K115010     | J081    | K           | 4822 265 10092     | JACK AC                 | YJ04001240     |
|         |             |                    |                                |                | J082    |             | 4822 321 22611     | CONNECTIVE CORD RCA     | ZD01000010     |





10. ELECTRICAL PARTS LIST

ASSIGNMENT OF COMMON PARTS CODES.

RESISTORS

R\*\*\*: 1) GD05 × × × 140, Carbon film fixed resistor, ±5% 1/4W  
R\*\*\*: 2) GD05 × × × 160, Carbon film fixed resistor, ±5% 1/6W

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

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

CAPACITORS

C\*\*\*: CERAMIC CAP.  
3) DD1 × × × × 370, Ceramic capacitor  
Disc type  
Temp.coef.P350 ~ N1000, 50V  
Capacity value  
Tolerance

Examples ;  
② Tolerance (Capacity deviation)  
±0.25 pF .... 0  
±0.5 pF .... 1  
±5% .... 5  
\* Tolerance of COMMON PARTS handled here are as follows :  
0.5 pF ~ 5 pF .... ±0.25 pF  
6 pF ~ 10 pF .... ±0.5 pF  
12 pF ~ 560 pF .... ±5%  
③ Capacity value  
0.5 pF .... 005    3 pF .... 030    100 pF .... 101  
1 pF .... 010    10 pF .... 100    220 pF .... 221  
1.5 pF .... 015    47 pF .... 470    560 pF .... 561

C\*\*\* : CERAMIC CAP.  
4) DK16 × × × 300, High dielectric constant ceramic capacitor  
Disc type  
Temp.chara. 2B4, 50V  
Capacity value

Examples ;  
④ Capacity value  
100 pF .... 101    1000 pF .... 102    10000 pF .... 103  
470 pF .... 471    2200 pF .... 222

C\*\*\* : 5) ELECTROLY CAP ( ⚡ ), 6) FILM CAP ( ⚡ )  
5) EA × × × × × 10, Electrolytic capacitor  
One-way lead type, Tolerance ±20%

⑤ Capacity value  
0.1 μF .... 104    4.7 μF .... 475    100 μF .... 107  
0.33 μF .... 334    10 μF .... 106    330 μF .... 337  
1 μF .... 105    22 μF .... 226    1100 μF .... 118  
2200 μF .... 228

⑥ Working voltage  
6.3V .... 006    25V .... 025  
10V .... 010    35V .... 035  
16V .... 016    50V .... 050

6) DF15 × × × 350 → Plastic film capacitor  
DF15 × × × 310 → One-way type, Mylar ±5% 50V  
DF16 × × × 310 → Plastic film capacitor  
One-way type, Mylar ±10% 50V  
Capacity value

Examples ;  
⑦ Capacity value  
0.001 μF (1000 pF) ..... 102    0.1 μF .... 104  
0.0018 μF ..... 182    0.56 μF .... 564  
0.01 μF ..... 103    1 μF .... 105  
0.015 μF ..... 153

NOTE : 1) The above CODES ( R\*\*\*, R\*\*\*, C\*\*\*, C\*\*\* and C\*\*\* ) are omitted on the schematic diagram in some case.  
2) On the occasion, be confirmed the common parts on the parts list.  
3) Refer to "Common Parts List" for the other common parts (R105, DD4, DK4).

NOTE ON SAFETY FOR FUSIBLE RESISTOR :

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

1. KOA Corporation  
Part No. (MJI)    Type No. (KOA)    Description  
NH05 × × × 140 → RF25S × × × × ΩJ (±5% 1/4W)  
NH05 × × × 120 → RF50S × × × × ΩJ (±5% 1/2W)  
NH85 × × × 110 → RF73B2A × × × × ΩJ (±5% 1/10W)  
NH95 × × × 140 → RF73B2E × × × × ΩJ (±5% 1/4W)  
\* Resistance value    Resistance value (0.1 Ω - 10 kΩ)

2. Matsushita Electronic Components Co., Ltd  
Part No. (MJI)    Type No. (MEC)    Description  
NF05 × × × 140 → ERD-2FCJ × × × (±5% 1/4W)  
RF05 × × × 140 → ERD-2FCG × × × (±2% 1/4W)  
NF02 × × × 140 → ERD-2FCG × × × (±2% 1/4W)  
RF02 × × × 140 → ERD-2FCG × × × (±2% 1/4W)  
\* Resistance value    \* Resistance value

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

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

NOTE ON SAFETY :

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

安全上の注意 :

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

(VERS. :VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, \*\*:EUROPE)

| POS. NO | VERS. COLOR | PART NO. (FOR PCS) | DESCRIPTION                | PART NO. (MJI) | POS. NO | VERS. COLOR | PART NO. (FOR PCS) | DESCRIPTION               | PART NO. (MJI) |
|---------|-------------|--------------------|----------------------------|----------------|---------|-------------|--------------------|---------------------------|----------------|
| GH01    |             | 4822 121 43732     | PH16-POWER SW              |                | C141    |             | 4822 126 11687     | CER. 0.1μF +80-20%        | DK98104200     |
| LH02    |             | 4822 526 10691     | CIRCUIT BOARD              |                | C145    |             |                    |                           |                |
| SH01    |             | 4822 276 13364     | FILM CAP. 0.01μF ±20% 250V | DF77103500     | C147    |             | 4822 124 41539     | ELECT 47μF ±20% 16V       | OA47601620     |
| SH02    | K           | 4822 277 21825     | FERRITE CORE TFCK-16-8-13  | FC50160030     | C148    |             | 4822 124 90353     | ELECT 100μF ±20% 10V      | OA10701020     |
|         |             |                    | PUSH SW SDDL1 POWER        | SP01011990     | C151    |             | 4822 126 11687     | CER. 0.1μF +80-20%        | DK98104200     |
|         |             |                    | SLIDE SW SDKGA4            | SS02021510     | C152    |             | 4822 124 41539     | ELECT 47μF ±20% 16V       | OA47601620     |
|         |             |                    |                            |                | C161    |             | 4822 126 13837     | CER. 0.1μF ±10% 10V       | DK98104200     |
|         |             |                    |                            |                | C162    |             | 4822 126 11687     | CER. 0.1μF +80-20%        | DK98104200     |
|         |             |                    |                            |                | C163    |             | 4822 126 13837     | CER. 0.1μF ±10% 10V       | DK98104200     |
|         |             |                    |                            |                | C171    |             | 4822 126 11685     | CER. 4700pF ±10% 50V      | DK98104200     |
|         |             |                    |                            |                | C172    |             | 4822 124 41539     | ELECT 47μF ±20% 16V       | OA47601620     |
|         |             |                    |                            |                | C173    |             | 4822 126 11687     | CER. 0.1μF +80-20%        | DK98104200     |
|         |             |                    |                            |                | C174    |             | 4822 126 11685     | CER. 4700pF ±10% 50V      | DK98104200     |
|         |             |                    |                            |                | C175    |             | 4822 126 11568     | CER. 470pF ±10%           | DK98104200     |
|         |             |                    |                            |                | C176    |             | 4822 126 11568     | CER. 470pF ±10%           | DK98104200     |
|         |             |                    |                            |                | C177    |             |                    |                           |                |
|         |             |                    |                            |                | C180    |             | 4822 126 13837     | CER. 0.1μF ±10% 10V       | DK98104200     |
|         |             |                    |                            |                | C181    |             | 4822 126 11687     | CER. 0.1μF +80-20%        | DK98104200     |
|         |             |                    |                            |                | C182    |             | 4822 126 11567     | CER. 0.022μF ±10% 16V     | DK98104200     |
|         |             |                    |                            |                | C193    |             | 4822 126 11687     | CER. 0.1μF +80-20%        | DK98104200     |
|         |             |                    |                            |                | C201    |             | 4822 126 11687     | CER. 0.1μF +80-20%        | DK98104200     |
|         |             |                    |                            |                | C202    |             | 4822 126 11687     | CER. 0.1μF +80-20%        | DK98104200     |
|         |             |                    |                            |                | C301    | DA          |                    | CER. 0.033μF ±10%         | DK98104200     |
|         |             |                    |                            |                | C302    | DA          |                    | CER. 0.22μF ±10%          | DK98104200     |
|         |             |                    |                            |                | C303    | DA          | 4822 126 11687     | CER. 0.1μF +80-20%        | DK98104200     |
|         |             |                    |                            |                | C304    | DA          | 4822 126 11687     | CER. 0.1μF +80-20%        | DK98104200     |
|         |             |                    |                            |                | C305    | DA          | 4822 126 11687     | CER. 0.1μF +80-20%        | DK98104200     |
|         |             |                    |                            |                | C306    | DA          | 4822 126 13837     | CER. 0.1μF ±10% 10V       | DK98104200     |
|         |             |                    |                            |                | C307    |             | 4822 126 11687     | CER. 0.1μF +80-20%        | DK98104200     |
|         |             |                    |                            |                | C308    | DA F        | 4822 124 22275     | ELECT 47μF ±20% 10V       | OA47601020     |
|         |             |                    |                            |                | C311    |             | 4822 126 11687     | CER. 0.1μF +80-20%        | DK98104200     |
|         |             |                    |                            |                | C342    | DA          | 4822 124 90357     | ELECT 2.2μF ±20% 50V      | OA22505020     |
|         |             |                    |                            |                | C343    | DA          | 4822 126 13837     | CER. 0.1μF ±10% 10V       | DK98104200     |
|         |             |                    |                            |                | C344    |             | 4822 126 11687     | CER. 0.1μF +80-20%        | DK98104200     |
|         |             |                    |                            |                | C345    |             | 4822 126 11687     | CER. 0.1μF +80-20%        | DK98104200     |
|         |             |                    |                            |                | C346    | DA          | 4822 124 41543     | ELECT 1μF ±20% 50V        | OA10505020     |
|         |             |                    |                            |                | C347    | DA          | 4822 126 13837     | CER. 0.1μF ±10% 10V       | DK98104200     |
|         |             |                    |                            |                | C348    | DA          | 4822 126 13837     | CER. 0.1μF ±10% 10V       | DK98104200     |
|         |             |                    |                            |                | C349    | DA          | 4822 126 13837     | CER. 0.1μF ±10% 10V       | DK98104200     |
|         |             |                    |                            |                | C350    | DA          | 4822 126 12516     | CER. 1000pF ±10% 50V      | DK98102300     |
|         |             |                    |                            |                | C351    | DA          | 4822 124 41539     | ELECT 47μF ±20% 16V       | OA47601620     |
|         |             |                    |                            |                | C502    |             |                    |                           |                |
|         |             |                    |                            |                | C505    |             | 4822 126 11687     | CER. 0.1μF ±10% 10V       | DK98104200     |
|         |             |                    |                            |                | C507    |             | 4822 126 11687     | CER. 0.1μF ±10% 10V       | DK98104200     |
|         |             |                    |                            |                | C508    |             | 4822 126 11687     | CER. 0.1μF ±10% 10V       | DK98104200     |
|         |             |                    |                            |                | C509    |             | 4822 124 41539     | ELECT 47μF ±20% 16V       | OA47601620     |
|         |             |                    |                            |                | C510    |             | 4822 126 11687     | CER. 0.1μF ±10% 10V       | DK98104200     |
|         |             |                    |                            |                | C511    |             |                    | CER. 18pF ±5%             | DD95180300     |
|         |             |                    |                            |                | C512    |             | 4822 126 11669     | CER. 27pF ±5%             | DD95270300     |
|         |             |                    |                            |                | C513    |             | 4822 126 14417     | CER. 0.01μF ±10% 50V      | DK98103300     |
|         |             |                    |                            |                | C601    |             | 4822 123 30361     | MICA CHIP 56pF ±5% 500WV  | DF95560500     |
|         |             |                    |                            |                | C602    |             | 4822 123 30387     | MICA CHIP 2200pF ±5%      | DF95222030     |
|         |             |                    |                            |                | C603    |             | 4822 123 30362     | MICA CHIP 560pF ±5% 100WV | DF95561510     |
|         |             |                    |                            |                | C604    |             | 4822 126 13837     | CER. 0.1μF ±10% 10V       | DK98104200     |
|         |             |                    |                            |                | C605    | F,U         | 4822 124 22238     | ELECT 100μF 25V           | OA10702550     |
|         |             |                    |                            |                | C606    | K/22        |                    | ELECT 100μF 25V           | OA10702540     |
|         |             |                    |                            |                | C607    | F,U         | 4822 126 13837     | CER. 0.1μF ±10% 10V       | DK98104200     |
|         |             |                    |                            |                | C607    | K/22        | 4822 124 22238     | ELECT 100μF 25V           | OA10702550     |
|         |             |                    |                            |                | C613    | F,U         | 4822 124 90051     | ELECT 220μF ±20% 25V      | OA22702550     |
|         |             |                    |                            |                | C613    | K/22        | 4822 124 80123     | ELECT 220μF 16V           | OA22701640     |
|         |             |                    |                            |                | C614    | F,U         | 4822 124 90051     | ELECT 220μF ±20% 25V      | OA22702550     |
|         |             |                    |                            |                | C614    | K/22        | 4822 124 80123     | ELECT 220μF 16V           | OA22701640     |
|         |             |                    |                            |                | C615    |             | 4822 124 80123     | ELECT 220μF 16V           | OA22701640     |
|         |             |                    |                            |                | C616    |             | 4822 124 80123     | ELECT 220μF 16V           | OA22701640     |
|         |             |                    |                            |                | C617    |             | 4822 126 11759     | CER. 100pF ±5% 50V        | DD95101300     |
|         |             |                    |                            |                | C651    |             | 4822 123 30361     | MICA CHIP 56pF ±5% 500WV  | DF95560500     |



(VERS.:VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, \*\*:EUROPE)

| POS. NO | VERS. COLOR | PART NO. (FOR PCS) | DESCRIPTION                          | PART NO. (MJI) | POS. NO | VERS. COLOR | PART NO. (FOR PCS)            | DESCRIPTION                   | PART NO. (MJI) |
|---------|-------------|--------------------|--------------------------------------|----------------|---------|-------------|-------------------------------|-------------------------------|----------------|
| C652    |             | 4822 123 30387     | MICA CHIP 2200pF $\pm 5\%$           | DF95222030     | RF04    |             | 4822 051 30103                | 10k $\Omega$ $\pm 5\%$ 1/16W  | NN05103610     |
| C653    |             | 4822 123 30362     | MICA CHIP 560pF $\pm 5\%$ 100WV      | DF95561510     | RF05    |             | 4822 051 30103                | 10k $\Omega$ $\pm 5\%$ 1/16W  | NN05103610     |
| C654    |             | 4822 126 13837     | CER. 0.1 $\mu$ F $\pm 10\%$ 10V      | DK96104200     | RF06    |             | 4822 051 30222                | 2.2k $\Omega$ $\pm 5\%$ 1/16W | NN05222610     |
| C655    | F,U         | 4822 124 22238     | ELECT 100 $\mu$ F 25V                | OA10702550     | RF07    |             | 4822 051 30103                | 10k $\Omega$ $\pm 5\%$ 1/16W  | NN05103610     |
| C655    | K/22        |                    | ELECT 100 $\mu$ F 25V                | OA10702540     | RF51    |             | 4822 117 12139                | 22 $\Omega$ $\pm 5\%$ 1/16W   | NN05220610     |
| C656    |             | 4822 126 13837     | CER. 0.1 $\mu$ F $\pm 10\%$ 10V      | DK96104200     |         |             |                               |                               |                |
| C657    | F,U         | 4822 124 22238     | ELECT 100 $\mu$ F 25V                | OA10702550     | RH01    |             | 4822 116 90503                | 150 $\Omega$ $\pm 5\%$ 1/10W  | NI05151110     |
| C657    | K/22        |                    | ELECT 100 $\mu$ F 25V                | OA10702540     | RH02    |             | 4822 116 90503                | 150 $\Omega$ $\pm 5\%$ 1/10W  | NI05151110     |
| C663    | F,U         | 4822 124 90051     | ELECT 220 $\mu$ F $\pm 20\%$ 25V     | OA22702550     | RH03    |             | 4822 111 90893                | 100 $\Omega$ $\pm 5\%$ 1/10W  | NI05101110     |
| C663    | K/22        | 4822 124 80123     | ELECT 220 $\mu$ F 16V                | OA22701640     | RH04    |             | 4822 111 90893                | 100 $\Omega$ $\pm 5\%$ 1/10W  | NI05101110     |
| C664    | F,U         | 4822 124 90051     | ELECT 220 $\mu$ F $\pm 20\%$ 25V     | OA22702550     | RH05    |             | 4822 111 90893                | 100 $\Omega$ $\pm 5\%$ 1/10W  | NI05101110     |
| C664    | K/22        | 4822 124 80123     | ELECT 220 $\mu$ F 16V                | OA22701640     | RH06    |             | 4822 116 83352                | 560 $\Omega$ $\pm 5\%$ 1/10W  | NI05561110     |
| C665    |             | 4822 124 80123     | ELECT 220 $\mu$ F 16V                | OA22701640     | RH07    |             | 4822 116 83352                | 560 $\Omega$ $\pm 5\%$ 1/10W  | NI05561110     |
| C666    |             | 4822 124 80123     | ELECT 220 $\mu$ F 16V                | OA22701640     | RH08    |             | 4822 116 83229                | 33k $\Omega$ $\pm 1\%$ 1/10W  | NI01333110     |
| C667    |             | 4822 126 11759     | CER. 100pF $\pm 5\%$ 50V             | DD95101300     | RH09    |             | 4822 111 90893                | 100 $\Omega$ $\pm 5\%$ 1/10W  | NI05101110     |
|         |             |                    |                                      |                | RH10    |             | 4822 111 90892                | 0 $\Omega$ $\pm 5\%$ 1/10W    | NI05000110     |
| C801    |             | 4822 124 23782     | ELECT 3300 $\mu$ F $\pm 20\%$ 16V    | OC33801620     | RH51    |             | 4822 116 90503                | 150 $\Omega$ $\pm 5\%$ 1/10W  | NI05151110     |
| C802    | DA          | 4822 124 22694     | ELECT 1000 $\mu$ F 6.3V              | OA10800620     | RH52    |             | 4822 116 90503                | 150 $\Omega$ $\pm 5\%$ 1/10W  | NI05151110     |
| C802    | MK2         | 4822 124 90364     | ELECT 220 $\mu$ F $\pm 20\%$ 16V     | OA22701620     | RH53    |             | 4822 111 90893                | 100 $\Omega$ $\pm 5\%$ 1/10W  | NI05101110     |
| C803    |             | 4822 124 81318     | ELECT 3300 $\mu$ F $\pm 20\%$ 25V    | OB33802510     | RH54    |             | 4822 111 90893                | 100 $\Omega$ $\pm 5\%$ 1/10W  | NI05101110     |
| C811    |             | 4822 124 23782     | ELECT 3300 $\mu$ F $\pm 20\%$ 16V    | OC33801620     | RH55    |             | 4822 111 90893                | 100 $\Omega$ $\pm 5\%$ 1/10W  | NI05101110     |
| C812    |             | 4822 124 90364     | ELECT 220 $\mu$ F $\pm 20\%$ 16V     | OA22701620     | RH56    |             | 4822 116 83352                | 560 $\Omega$ $\pm 5\%$ 1/10W  | NI05561110     |
| C813    |             | 4822 124 22722     | ELECT 1000 $\mu$ F $\pm 20\%$ 16V    | OA10801620     | RH57    |             | 4822 116 83352                | 560 $\Omega$ $\pm 5\%$ 1/10W  | NI05561110     |
| C814    |             | 4822 124 41544     | ELECT 470 $\mu$ F $\pm 20\%$ 6.3V    | OA47700620     | RH58    |             | 4822 116 83229                | 33k $\Omega$ $\pm 1\%$ 1/10W  | NI01333110     |
| C833    |             | 4822 124 41539     | ELECT 47 $\mu$ F $\pm 20\%$ 16V      | OA47601620     | RH59    |             | 4822 111 90893                | 100 $\Omega$ $\pm 5\%$ 1/10W  | NI05101110     |
| C834    |             | 4822 124 41539     | ELECT 47 $\mu$ F $\pm 20\%$ 16V      | OA47601620     | RH60    |             | 4822 111 90892                | 0 $\Omega$ $\pm 5\%$ 1/10W    | NI05000110     |
| C835    | F,U         | 4822 124 22238     | ELECT 100 $\mu$ F $\pm 20\%$ 25V     | OA10702550     |         |             |                               |                               |                |
| C835    | K/22        |                    | ELECT 100 $\mu$ F $\pm 20\%$ 25V     | OA10702540     | RN02    |             | 4822 051 30473                | 47k $\Omega$ $\pm 5\%$ 1/16W  | NN05473610     |
| C836    | F,U         | 4822 124 22238     | ELECT 100 $\mu$ F $\pm 20\%$ 25V     | OA10702550     | RN04    |             | 4822 051 30223                | 22k $\Omega$ $\pm 5\%$ 1/16W  | NN05223610     |
| C836    | K/22        |                    | ELECT 100 $\mu$ F $\pm 20\%$ 25V     | OA10702540     | RN05    |             | 4822 117 11977                | 3.9M $\Omega$ $\pm 5\%$ 1/16W | NN05395610     |
| C854    |             | 4822 124 81318     | ELECT 3300 $\mu$ F $\pm 20\%$ 25V    | OB33802510     | RN06    |             | 4822 051 30103                | 10k $\Omega$ $\pm 5\%$ 1/16W  | NN05103610     |
| C855    |             | 4822 124 41535     | ELECT 100 $\mu$ F $\pm 20\%$ 25V     | OA10702520     | RN08    |             | 4822 116 83208                | 12k $\Omega$ $\pm 5\%$ 1/16W  | NN05123610     |
| C856    |             | 4822 124 41535     | ELECT 100 $\mu$ F $\pm 20\%$ 25V     | OA10702520     | RN09    |             | 4822 116 83208                | 12k $\Omega$ $\pm 5\%$ 1/16W  | NN05123610     |
| C857    |             | 4822 124 22722     | ELECT 1000 $\mu$ F $\pm 20\%$ 16V    | OA10801620     | RN10    |             | 4822 051 30473                | 47k $\Omega$ $\pm 5\%$ 1/16W  | NN05473610     |
| C858    |             | 4822 124 22722     | ELECT 100 $\mu$ F $\pm 20\%$ 16V     | OA10801620     | RN11    |             | 4822 051 30103                | 10k $\Omega$ $\pm 5\%$ 1/16W  | NN05103610     |
|         |             |                    |                                      |                | RN12    |             | 4822 051 30104                | 100k $\Omega$ $\pm 5\%$ 1/16W | NN05104610     |
|         |             |                    |                                      |                | RN13    |             | 4822 051 30472                | 4.7k $\Omega$ $\pm 5\%$ 1/16W | NN05472610     |
|         |             |                    |                                      |                | RN15    |             | 4822 051 30222                | 2.2k $\Omega$ $\pm 5\%$ 1/16W | NN05222610     |
| ▲ RD01  |             | 4822 117 10145     | 3.3 $\Omega$ $\pm 5\%$ 1/10W FUSIBLE | NH85033110     | RN16    |             | 4822 051 30222                | 2.2k $\Omega$ $\pm 5\%$ 1/16W | NN05222610     |
| ▲ RD04  |             |                    |                                      |                | RN17    |             | 4822 051 30223                | 22k $\Omega$ $\pm 5\%$ 1/16W  | NN05223610     |
| RD05    |             | 4822 116 83253     | 1.5k $\Omega$ $\pm 1\%$ 1/10W        | NI01152110     | RN18    |             | 4822 051 30104                | 100k $\Omega$ $\pm 5\%$ 1/16W | NN05104610     |
| RD06    |             | 4822 116 83253     | 1.5k $\Omega$ $\pm 1\%$ 1/10W        | NI01152110     | RN65    |             | 4822 051 30222                | 2.2k $\Omega$ $\pm 5\%$ 1/16W | NN05222610     |
| RD07    |             | 4822 116 83255     | 3.3k $\Omega$ $\pm 1\%$ 1/10W        | NI01332110     | RN66    |             | 4822 051 30222                | 2.2k $\Omega$ $\pm 5\%$ 1/16W | NN05222610     |
| RD08    |             | 4822 116 83255     | 3.3k $\Omega$ $\pm 1\%$ 1/10W        | NI01332110     |         |             |                               |                               |                |
| RD09    |             | 4822 116 83352     | 560 $\Omega$ $\pm 5\%$ 1/10W         | NI05561110     | RT01    |             | 4822 116 82487                | 0 $\Omega$ $\pm 5\%$ 1/16W    | NN05000610     |
| RD10    |             | 4822 116 83352     | 560 $\Omega$ $\pm 5\%$ 1/10W         | NI05561110     | RT02    |             | 4822 051 30339                | 33 $\Omega$ $\pm 5\%$ 1/16W   | NN05330610     |
| RD11    | DA          | 4822 111 90884     | 100k $\Omega$ $\pm 1\%$ 1/10W        | NI01104110     | RT04    |             | 4822 051 30759                | 75 $\Omega$ $\pm 5\%$ 1/16W   | NN05750610     |
| RD11    | MK2         | 4822 116 83253     | 1.5k $\Omega$ $\pm 1\%$ 1/10W        | NI01152110     | RT06    |             | 4822 051 30759                | 75 $\Omega$ $\pm 5\%$ 1/16W   | NN05750610     |
| RD12    | DA          | 4822 111 90884     | 100k $\Omega$ $\pm 1\%$ 1/10W        | NI01104110     |         |             |                               |                               |                |
| RD12    | MK2         | 4822 116 83253     | 1.5k $\Omega$ $\pm 1\%$ 1/10W        | NI01152110     | RY09    |             | 4822 051 30224                | 220k $\Omega$ $\pm 5\%$ 1/16W | NN05224610     |
| RD13    |             | 4822 117 11976     | 13k $\Omega$ $\pm 1\%$ 1/10W         | NI01133110     | RY10    |             | 4822 051 30105                | 1M $\Omega$ $\pm 5\%$ 1/16W   | NN05105610     |
| RD14    |             | 4822 117 11976     | 13k $\Omega$ $\pm 1\%$ 1/10W         | NI01133110     | RY12    |             | 4822 051 30103                | 10k $\Omega$ $\pm 5\%$ 1/16W  | NN05103610     |
| RD15    |             | 4822 117 11976     | 13k $\Omega$ $\pm 1\%$ 1/10W         | NI01133110     | RY41    |             | 4822 051 30223                | 22k $\Omega$ $\pm 5\%$ 1/16W  | NN05223610     |
|         |             |                    |                                      |                | RY42    | MK2         | 4822 116 82487                | 0 $\Omega$ $\pm 5\%$ 1/16W    | NN05000610     |
| RD16    |             | 4822 117 11976     | 13k $\Omega$ $\pm 1\%$ 1/10W         | NI01133110     | RY43    | DA          | 4822 051 30223                | 22k $\Omega$ $\pm 5\%$ 1/16W  | NN05223610     |
| ▲ RD21  |             | 4822 117 10145     | 3.3 $\Omega$ $\pm 5\%$ 1/10W FUSIBLE | NH85033110     | RY44    |             | 4822 051 30223                | 22k $\Omega$ $\pm 5\%$ 1/16W  | NN05223610     |
| ▲ RD22  |             | 4822 117 10145     | 3.3 $\Omega$ $\pm 5\%$ 1/10W FUSIBLE | NH85033110     | RY45    |             | 4822 051 30103                | 10k $\Omega$ $\pm 5\%$ 1/16W  | NN05103610     |
| ▲ RD25  |             | 4822 117 10145     | 3.3 $\Omega$ $\pm 5\%$ 1/10W FUSIBLE | NH85033110     | RY46    |             | 4822 051 30103                | 10k $\Omega$ $\pm 5\%$ 1/16W  | NN05103610     |
| RD31    | DA          | 4822 116 83253     | 1.5k $\Omega$ $\pm 1\%$ 1/10W        | NI01152110     | ▲ RY80  |             | 10 $\Omega$ $\pm 5\%$ FUSIBLE | NH85100110                    |                |
| RD32    | DA          | 4822 116 83253     | 1.5k $\Omega$ $\pm 1\%$ 1/10W        | NI01152110     | RY83    |             | 4822 051 30103                | 10k $\Omega$ $\pm 5\%$ 1/16W  | NN05103610     |
| RD33    | DA          | 4822 051 30223     | 22k $\Omega$ $\pm 5\%$ 1/16W         | NN05223610     | RY84    |             | 4822 051 30473                | 47k $\Omega$ $\pm 5\%$ 1/16W  | NN05473610     |
| RD34    | DA          | 4822 051 30223     | 22k $\Omega$ $\pm 5\%$ 1/16W         | NN05223610     | RY85    |             | 4822 051 30473                | 47k $\Omega$ $\pm 5\%$ 1/16W  | NN05473610     |
| RD35    | DA          | 4822 051 30104     | 100k $\Omega$ $\pm 5\%$ 1/16W        | NN05104610     | RY86    |             | 4822 051 30473                | 47k $\Omega$ $\pm 5\%$ 1/16W  | NN05473610     |
| RD36    | DA          | 4822 051 30223     | 22k $\Omega$ $\pm 5\%$ 1/16W         | NN05223610     | RY87    |             | 4822 051 30223                | 22k $\Omega$ $\pm 5\%$ 1/16W  | NN05223610     |
| RD37    | DA          | 4822 051 30223     | 22k $\Omega$ $\pm 5\%$ 1/16W         | NN05223610     |         |             |                               |                               |                |
| RD38    | DA          | 4822 116 82487     | 0 $\Omega$ $\pm 5\%$ 1/16W           | NN05000610     | R100    |             | 4822 051 30103                | 10k $\Omega$ $\pm 5\%$ 1/16W  | NN05103610     |
| RF01    |             | 4822 051 30473     | 47k $\Omega$ $\pm 5\%$ 1/16W         | NN05473610     | R101    |             | 4822 051 30103                | 10k $\Omega$ $\pm 5\%$ 1/16W  | NN05103610     |
| RF02    |             | 4822 051 30472     | 4.7k $\Omega$ $\pm 5\%$ 1/16W        | NN05472610     | R102    |             | 4822 051 30274                | 270k $\Omega$ $\pm 5\%$ 1/16W | NN05274610     |
| RF03    |             | 4822 051 30101     | 100 $\Omega$ $\pm 5\%$ 1/16W         | NN05101610     | R103    |             | 4822 051 30223                | 22k $\Omega$ $\pm 5\%$ 1/16W  | NN05223610     |
|         |             |                    |                                      |                | R104    |             | 4822 051 30102                | 1k $\Omega$ $\pm 5\%$ 1/16W   | NN05102610     |

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| POS.<br>NO | VERS.<br>COLOR | PART NO.<br>(FOR PCS) | DESCRIPTION           | PART NO.<br>(MJI) | POS.<br>NO | VERS.<br>COLOR | PART NO.<br>(FOR PCS) | DESCRIPTION                    | PART NO.<br>(MJI) |
|------------|----------------|-----------------------|-----------------------|-------------------|------------|----------------|-----------------------|--------------------------------|-------------------|
| R105       |                | 4822 051 30104        | 100kΩ ±5% 1/16W       | NN05104610        | R506       |                | 4822 051 30479        | 47Ω ±5% 1/16W                  | NN05470610        |
| R106       |                | 4822 116 83208        | 12kΩ ±5% 1/16W        | NN05123610        | R511       |                | 4822 051 30104        | 100kΩ ±5% 1/16W                | NN05104610        |
| R107       |                | 4822 116 83208        | 12kΩ ±5% 1/16W        | NN05123610        | R521       |                | 4822 051 30223        | 22kΩ ±5% 1/16W                 | NN05223610        |
| R108       |                | 4822 116 83208        | 12kΩ ±5% 1/16W        | NN05123610        | R522       |                | 4822 116 82487        | 0Ω ±5% 1/16W                   | NN05000610        |
| R109       |                | 4822 051 30101        | 100Ω ±5% 1/16W        | NN05101610        | R601       |                |                       | 10kΩ ±1% 1/4W NON CHIP         | GM11410020        |
| R110       |                | 4822 116 83208        | 12kΩ ±5% 1/16W        | NN05123610        | R602       |                | 4822 117 11981        | 3.3kΩ ±5% 1/2W                 | RI05332120        |
| R111       |                | 4822 116 83208        | 12kΩ ±5% 1/16W        | NN05123610        | R603       |                | 4822 117 11982        | 3.9kΩ ±5% 1/2W                 | RI05392120        |
| R131       |                | 4822 051 30334        | 330kΩ ±5% 1/16W       | NN05334610        | R604       |                | 4822 117 11979        | 12kΩ ±5% 1/2W                  | RI05123120        |
| R132       |                | 4822 117 12968        | 820Ω ±5% 1/16W        | NN05821610        | R605       |                | 4822 117 10183        | 2.6kΩ ±1% 1/10W                | NI01262110        |
| R133       |                | 4822 116 82487        | 0Ω ±5% 1/6W           | NN05000610        | R606       |                | 4822 117 10183        | 2.6kΩ ±1% 1/10W                | NI01262110        |
| R141       |                |                       |                       |                   | ▲ R607     |                | 4822 117 10145        | 3.3Ω ±5% 1/10W FUSIBLE         | NH85033110        |
| R145       |                | 4822 051 30223        | 22kΩ ±5% 1/16W        | NN05223610        | ▲ R608     |                | 4822 117 10145        | 3.3Ω ±5% 1/10W FUSIBLE         | NH85033110        |
| ▲ R147     |                | 4822 116 60309        | 2.2Ω ±5% 1/4W FUSIBLE | NH05022140        | R610       |                | 4822 051 30222        | 2.2kΩ ±5% 1/16W                | NN05222610        |
| ▲ R148     |                | 4822 116 60309        | 2.2Ω ±5% 1/4W FUSIBLE | NH05022140        | R611       |                | 4822 051 30222        | 2.2kΩ ±5% 1/16W                | NN05222610        |
| R149       |                | 4822 051 30223        | 22kΩ ±5% 1/16W        | NN05223610        | R615       |                |                       | 33Ω ±5% 1/6W NON CHIP          | GG05330160        |
| R150       |                | 4822 051 30223        | 22kΩ ±5% 1/16W        | NN05223610        | R616       |                |                       | 33Ω ±5% 1/6W NON CHIP          | GG05330160        |
| R151       |                | 4822 051 30102        | 1kΩ ±5% 1/16W         | NN05102610        | ▲ R618     | F,U            | 4822 116 60309        | 2.2Ω ±5% 1/4W FUSIBLE          | NH05022140        |
| R152       |                | 4822 051 30102        | 1kΩ ±5% 1/16W         | NN05102610        | ▲ R619     | F,U            | 4822 116 60309        | 2.2Ω ±5% 1/4W FUSIBLE          | NH05022140        |
| R153       |                | 4822 051 30223        | 22kΩ ±5% 1/16W        | NN05223610        | R620       |                | 4822 111 90895        | 10kΩ ±5% 1/10W                 | NI05103110        |
| R161       |                | 4822 051 30102        | 1kΩ ±5% 1/16W         | NN05102610        | R621       |                | 4822 111 90893        | 100Ω ±5% 1/10W                 | NI05101110        |
| R162       |                | 4822 051 30103        | 10kΩ ±5% 1/16W        | NN05103610        | R622       |                | 4822 111 90893        | 100Ω ±5% 1/10W                 | NI05101110        |
| R163       |                | 4822 051 30102        | 1kΩ ±5% 1/16W         | NN05102610        | R623       |                | 4822 111 90896        | 100kΩ ±5% 1/10W                | NI05104110        |
| R171       |                | 4822 116 83207        | 1.2kΩ ±5% 1/16W       | NN05122610        | R650       |                | 4822 051 30104        | 100kΩ ±5% 1/16W                | NN05104610        |
| R172       |                | 4822 051 30103        | 10kΩ ±5% 1/16W        | NN05103610        | R651       |                |                       | 10kΩ ±1% 1/4W NON CHIP         | GM11410020        |
| R173       |                | 4822 051 30102        | 1kΩ ±5% 1/16W         | NN05102610        | R652       |                | 4822 117 11981        | 3.3kΩ ±5% 1/2W                 | RI05332120        |
| R174       |                | 4822 051 30103        | 10kΩ ±5% 1/16W        | NN05103610        | R653       |                | 4822 117 11982        | 3.9kΩ ±5% 1/2W                 | RI05392120        |
| R181       |                | 4822 051 30471        | 470Ω ±5% 1/16W        | NN05471610        | R654       |                | 4822 117 11979        | 12kΩ ±5% 1/2W                  | RI05123120        |
| R182       |                | 4822 116 83208        | 12kΩ ±5% 1/16W        | NN05123610        | R655       |                | 4822 117 10183        | 2.6kΩ ±1% 1/10W                | NI01262110        |
| R201       |                | 4822 051 30223        | 22kΩ ±5% 1/16W        | NN05223610        |            |                |                       |                                |                   |
| R202       |                |                       |                       |                   | R656       |                | 4822 117 10183        | 2.6kΩ ±1% 1/10W                | NI01262110        |
| R205       |                | 4822 051 30103        | 10kΩ ±5% 1/16W        | NN05103610        | ▲ R657     |                | 4822 117 10145        | 3.3Ω ±5% 1/10W FUSIBLE         | NH85033110        |
| R301       | DA             | 4822 051 30471        | 470Ω ±5% 1/16W        | NN05471610        | ▲ R658     |                | 4822 117 10145        | 3.3Ω ±5% 1/10W FUSIBLE         | NH85033110        |
| R302       | DA             | 4822 051 30101        | 100Ω ±5% 1/16W        | NN05101610        | R665       |                |                       | 33Ω ±5% 1/6W NON CHIP          | GG05330160        |
| R303       | DA             | 4822 116 82487        | 0Ω ±5% 1/16W          | NN05000610        | R666       |                |                       | 33Ω ±5% 1/6W NON CHIP          | GG05330160        |
| R304       | DA             | 4822 051 30479        | 47Ω ±5% 1/16W         | NN05470610        | ▲ R668     | F,U            | 4822 116 60309        | 2.2Ω ±5% 1/4W FUSIBLE          | NH05022140        |
| R305       | DA             | 4822 051 30479        | 47Ω ±5% 1/16W         | NN05470610        | ▲ R669     | F,U            | 4822 116 60309        | 2.2Ω ±5% 1/4W FUSIBLE          | NH05022140        |
| R306       | DA             | 4822 051 30479        | 47Ω ±5% 1/16W         | NN05470610        | R670       |                | 4822 111 90895        | 10kΩ ±5% 1/10W                 | NI05103110        |
| R307       | DA             | 4822 051 30101        | 100Ω ±5% 1/16W        | NN05101610        | R671       |                | 4822 111 90893        | 100Ω ±5% 1/10W                 | NI05101110        |
| R308       | DA             | 4822 051 30101        | 100Ω ±5% 1/16W        | NN05101610        | R672       |                | 4822 111 90893        | 100Ω ±5% 1/10W                 | NI05101110        |
| R309       | DA             | 4822 051 30101        | 100Ω ±5% 1/16W        | NN05101610        | R673       |                | 4822 111 90896        | 100kΩ ±5% 1/10W                | NI05104110        |
| R310       | DA             | 4822 051 30101        | 100Ω ±5% 1/16W        | NN05101610        | R837       |                | 4822 051 30223        | 22kΩ ±5% 1/16W                 | NN05223610        |
| R311       | DA             | 4822 051 30223        | 22kΩ ±5% 1/16W        | NN05223610        | R838       |                | 4822 116 60327        | 100Ω ±5% 1W NON CHIP           | GAG1 01010        |
| R312       |                | 4822 116 82487        | 0Ω ±5% 1/16W          | NN05000610        | ▲ R857     | F,U            | 4822 116 60307        | 1Ω ±5% 1/4W FUSIBLE            | NH05010140        |
| R313       | DA             | 4822 116 82487        | 0Ω ±5% 1/16W          | NN05000610        | ▲ R858     | F,U            | 4822 116 60307        | 1Ω ±5% 1/4W FUSIBLE            | NH05010140        |
| R314       | DA             | 4822 051 30223        | 22kΩ ±5% 1/16W        | NN05223610        |            |                |                       |                                |                   |
| R315       | DA             | 4822 051 30223        | 22kΩ ±5% 1/16W        | NN05223610        | R***       |                |                       | <b>PP16-RESISTORS (COMMON)</b> |                   |
| R316       |                | 4822 051 30223        | 22kΩ ±5% 1/16W        | NN05223610        |            |                |                       | CARBON FILM FIXED RES.         |                   |
| R317       | DA             | 4822 051 30223        | 22kΩ ±5% 1/16W        | NN05223610        |            |                |                       | ±5% 1/6W : RF08 RN03 RN07      |                   |
| R319       |                | 4822 051 30223        | 22kΩ ±5% 1/16W        | NN05223610        |            |                |                       | RY81 RY82 RY88 [R618 R619      |                   |
| R323       | DA             | 4822 116 82487        | 0Ω ±5% 1/16W          | NN05000610        |            |                |                       | R668 R669 : K/22] R833 R834    |                   |
| R341       | DA             | 4822 051 30223        | 22kΩ ±5% 1/16W        | NN05223610        |            |                |                       | R855 R856                      |                   |
| R347       | DA             | 4822 051 30223        | 22kΩ ±5% 1/16W        | NN05223610        |            |                |                       | <b>PP16-SEMICONDUCTORS</b>     |                   |
| R360       | MK2            | 4822 116 82487        | 0Ω ±5% 1/16W          | NN05000610        | DF01       |                |                       |                                |                   |
| R361       | MK2            | 4822 051 30101        | 100Ω ±5% 1/16W        | NN05101610        | DF04       |                | 4822 130 32362        | DIODE 1SS176 MA165             | HD20 02000        |
| R362       | MK2            | 4822 051 30101        | 100Ω ±5% 1/16W        | NN05101610        |            |                |                       | 1SS254 30V 0.1A                |                   |
| R363       | MK2            | 4822 051 30101        | 100Ω ±5% 1/16W        | NN05101610        | DH01       |                | 4822 130 81324        | CHIP DIODE 1SS302              | HZ20 18050        |
| R364       | MK2            | 4822 116 82487        | 0Ω ±5% 1/16W          | NN05000610        | DH02       |                | 4822 130 81324        | CHIP DIODE 1SS302              | HZ20 18050        |
| R365       | DA             | 4822 051 30101        | 100Ω ±5% 1/16W        | NN05101610        | DH03       |                | 4822 130 32362        | DIODE 1SS176 MA165             | HD20 02000        |
| R366       | DA             | 4822 051 30101        | 100Ω ±5% 1/16W        | NN05101610        |            |                |                       | 1SS254 30V 0.1A                |                   |
| R368       |                | 4822 051 30101        | 100Ω ±5% 1/16W        | NN05101610        | DH51       |                | 4822 130 81324        | CHIP DIODE 1SS302              | HZ20 18050        |
| R369       |                | 4822 116 82487        | 0Ω ±5% 1/16W          | NN05000610        | DH52       |                | 4822 130 81324        | CHIP DIODE 1SS302              | HZ20 18050        |
| R501       |                | 4822 051 30101        | 100Ω ±5% 1/16W        | NN05101610        | DH53       |                | 4822 130 32362        | DIODE 1SS176 MA165             | HD20 02000        |
| R502       |                | 4822 051 30101        | 100Ω ±5% 1/16W        | NN05101610        | ▲ DN01     |                |                       | 1SS254 30V 0.1A                |                   |
| R503       |                | 4822 051 30101        | 100Ω ±5% 1/16W        | NN05101610        | DN04       |                | 4822 130 82421        | DIODE 1D3 1A 200V              | HD20 02710        |
| R504       |                | 4822 051 30479        | 47Ω ±5% 1/16W         | NN05470610        | DN05       |                | 4822 130 32362        | DIODE 1SS176 MA165             | HD20 02000        |
| R505       |                | 4822 051 30479        | 47Ω ±5% 1/16W         | NN05470610        |            |                |                       | 1SS254 30V 0.1A                |                   |

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| POS. NO | VERS. COLOR | PART NO. (FOR PCS) | DESCRIPTION                           | PART NO. (MJI) | POS. NO | VERS. COLOR | PART NO. (FOR PCS) | DESCRIPTION                           | PART NO. (MJI) |
|---------|-------------|--------------------|---------------------------------------|----------------|---------|-------------|--------------------|---------------------------------------|----------------|
| DN06    |             | 4822 130 32362     | DIODE 1SS176 MA165<br>1SS254 30V 0.1A | HD20002000     | QN01    |             |                    | DIG.TRS. UMH4N                        | BA20070210     |
| DN07    |             | 4822 130 33948     | ZENER DIODE<br>RD5.6JB2 MTZJ5.6B      | HD30561000     | QN02    |             |                    | DIG.TRS. UMH4N                        | BA20070210     |
| ▲ DN08  |             | 4822 130 82421     | DIODE 1D3 1A 200V                     | HD20002710     | QN03    |             | 4822 130 61355     | CHIP TRS. 2SC2712 0 Y                 | HX327122A0     |
| DN09    |             | 4822 130 32362     | DIODE 1SS176 MA165<br>1SS254 30V 0.1A | HD20002000     | QN04    |             | 4822 130 61311     | CHIP TRS. 2SA1162 0 Y                 | HX111622A0     |
| DY02    |             |                    |                                       |                | QN05    |             | 4822 130 43818     | TRS. 2SC2878 A BRANK                  | HT328782A0     |
| Y       |             |                    |                                       |                | QN06    |             | 4822 130 43818     | TRS. 2SC2878 A BRANK                  | HT328782A0     |
| DY04    |             | 4822 130 32362     | DIODE 1SS176 MA165<br>1SS254 30V 0.1A | HD20002000     | QN07    |             | 4822 130 61355     | CHIP TRS. 2SC2712 0 Y                 | HX327122A0     |
| DY05    | DA          | 4822 130 32362     | DIODE 1SS176 MA165<br>1SS254 30V 0.1A | HD20002000     | QN55    |             | 4822 130 43818     | TRS. 2SC2878 A BRANK                  | HT328782A0     |
| ▲ DY81  |             |                    |                                       |                | QN56    |             | 4822 130 43818     | TRS. 2SC2878 A BRANK                  | HT328782A0     |
| Y       |             |                    |                                       |                | QY01    |             |                    | MICROPROCESSOR<br>μPD78076            | HU356KN00F     |
| ▲ DY84  |             | 4822 130 82421     | DIODE 1D3 1A/200V                     | HD20002710     | QY03    |             | 4822 209 15921     | IC S-806D-Z                           | HC10077530     |
| DY85    |             | 4822 130 80116     | ZENER DIODE<br>RD24JB2 MTZJ24D        | HD32401000     | QY81    |             | 4822 130 42734     | CHIP TRS. 2SB798 DL DK                | HX207982A0     |
| DY86    |             | 4822 130 10667     | ZENER DIODE<br>RD4.7JB2 MTZJ4.7B      | HD30471000     | QY82    |             | 4822 130 60839     | TRS. 2SC2458 Y GR                     | HT324582B0     |
| ▲ D801  |             |                    |                                       |                | QY83    |             | 4822 111 92195     | DIG.TRS. HN1A01F Y GR                 | BA10011050     |
| Y       |             |                    |                                       |                | Q102    |             | 4822 209 91174     | IC SAA7372GP                          | HC10132490     |
| ▲ D804  |             | 4822 130 82421     | DIODE 1D3 1A 200V                     | HD20002710     | Q103    |             | 4822 209 90909     | IC TC7W74FU                           | HC10400050     |
| D805    |             | 4822 130 32362     | DIODE 1SS176 MA165<br>1SS254 30V 0.1A | HD20002000     | Q104    |             | 4822 209 32984     | IC TC7SHU04F                          | HC10427050     |
| D806    |             | 4822 130 32362     | DIODE 1SS176 MA165<br>1SS254 30V 0.1A | HD20002000     | Q106    |             | 4822 209 16372     | IC TDA7073AT                          | HC10165490     |
| ▲ D811  |             |                    |                                       |                | Q107    |             | 4822 209 16372     | IC TDA7073AT                          | HC10165490     |
| Y       |             |                    |                                       |                | Q108    |             | 4822 209 16372     | IC TDA7073AT                          | HC10165490     |
| ▲ D814  |             |                    |                                       |                | Q109    |             | 4822 130 61355     | CHIP TRS. 2SC2712 0 Y                 | HX327122A0     |
| D831    |             | 4822 130 80318     | ZENER DIODE<br>RD6.8JB2 MTZJ6.8C      | HD30681000     | Q201    |             | 4822 209 14864     | IC LC89170M                           | HC10390030     |
| D832    |             | 4822 130 80318     | ZENER DIODE<br>RD6.8JB2 MTZJ6.8C      | HD30681000     | Q202    |             | 4822 209 14864     | IC 8X32K SRAM <35NS                   | HC10076000     |
| D833    |             | 4822 130 32362     | DIODE 1SS176 MA165<br>1SS254 30V 0.1A | HD20002000     | Q301    | DA          | 4822 209 33578     | IC TDA1315                            | HC10117490     |
| D834    |             | 4822 130 32362     | DIODE 1SS176 MA165<br>1SS254 30V 0.1A | HD20002000     | Q302    | DA          | 4822 209 91176     | IC 74HC257AF                          | HC725705R0     |
| ▲ D851  |             |                    |                                       |                | Q303    |             | 4822 209 90597     | IC TCW125FU                           | HC10409050     |
| Y       |             |                    |                                       |                | Q304    |             |                    | IC 74HC04                             | HC700400Z0     |
| ▲ D854  |             | 4822 130 82421     | DIODE 1D3 1A 200V                     | HD20002710     | Q305    | DA          | 4822 130 61311     | CHIP TRS. 2SA1162 0 Y                 | HX111622A0     |
| D855    |             | 4822 130 80623     | ZENER DIODE<br>RD13JB2 MTZJ13B        | HD31301000     | Q307    | DA          | 4822 130 61311     | CHIP TRS. 2SA1162 0 Y                 | HX111622A0     |
| D856    |             | 4822 130 80623     | ZENER DIODE<br>RD13JB2 MTZJ13B        | HD31301000     | Q308    | DA          | 4822 130 61311     | CHIP TRS. 2SA1162 0 Y                 | HX111622A0     |
| D857    |             | 4822 130 32362     | DIODE 1SS176 MA165<br>1SS254 30V 0.1A | HD20002000     | Q309    | DA          | 4822 209 90597     | IC TCW125FU                           | HC10409050     |
| D858    |             | 4822 130 32362     | DIODE 1SS176 MA165<br>1SS254 30V 0.1A | HD20002000     | Q311    | DA          | 4822 209 30426     | IC 74HC00                             | HC700000Z0     |
| QD01    |             | 4822 209 31355     | IC TDA1547                            | HC10066490     | Q501    |             | 4822 209 15923     | IC TDA1307                            | HC10139490     |
| QD02    | DA          | 4822 130 61311     | CHIP TRS. 2SA1162 0 Y                 | HX111622A0     | Q601    |             | 4822 209 91175     | IC NJM2114                            | HC10175090     |
| QD03    | DA          | 4822 130 61355     | CHIP TRS. 2SC2712 0 Y                 | HX327122A0     | Q602    |             | 4822 130 43818     | TRS. 2SC2878 A BRANK                  | HT328782A0     |
| QD04    | DA          | 4822 130 61355     | CHIP TRS. 2SC2712 0 Y                 | HX327122A0     | Q603    |             | 4822 130 62649     | F.E.T. 2SJ74 V LANK                   | HF100741H0     |
| QF01    |             | 4822 130 61311     | CHIP TRS. 2SA1162 0 Y                 | HX111622A0     | Q604    |             | 5322 130 41844     | F.E.T. 2SK170 V LANK                  | HF201701H0     |
| QF02    |             | 4822 130 61355     | CHIP TRS. 2SC2712 0 Y                 | HX327122A0     | Q651    |             | 4822 209 91175     | IC NJM2114                            | HC10175090     |
| QF03    |             | 4822 209 90597     | IC TCW125FU                           | HC10409050     | Q652    |             | 4822 130 43818     | TRS. 2SC2878 A BRANK                  | HT328782A0     |
| QH01    |             | 4822 130 42843     | F.E.T. 2SK389 GR BL                   | HF203892A0     | Q653    |             | 4822 130 62649     | F.E.T. 2SJ74 V LANK                   | HF100741H0     |
| QH03    |             | 4822 130 61425     | CHIP TRS. 2SC2873 Y                   | HX328731B0     | Q654    |             | 5322 130 41844     | F.E.T. 2SK170 V LANK                  | HF201701H0     |
| QH04    |             | 4822 130 63928     | CHIP TRS. 2SA1312 B                   | HX113121B0     | ▲ Q801  |             | 4822 209 61847     | IC NJM78M05FA 5V 0.5A                 | HC38505090     |
| QH05    |             | 4822 130 63928     | CHIP TRS. 2SA1312 B                   | HX113121B0     | Q802    |             | 4822 130 61311     | CHIP TRS. 2SA1162 0 Y                 | HX111622A0     |
| QH06    |             | 4822 130 63929     | CHIP TRS. 2SC3324 B                   | HX333241B0     | ▲ Q811  |             | 4822 209 61847     | IC NJM78M05FA 5V 0.5A                 | HC38505090     |
| QH51    |             | 4822 130 42843     | F.E.T. 2SK389 GR BL                   | HF203892A0     | ▲ Q831  |             | 4822 130 62704     | TRS. 2SB1225 PNP                      | HT212251A0     |
| QH53    |             | 4822 130 61425     | CHIP TRS. 2SC2873 Y                   | HX328731B0     | ▲ Q832  |             | 5322 130 41842     | TRS. 2SD1827 NPN                      | HT418271A0     |
| QH54    |             | 4822 130 63928     | CHIP TRS. 2SA1312 B                   | HX113121B0     | ▲ Q851  |             | 4822 130 62704     | TRS. 2SB1225 PNP                      | HT212251A0     |
| QH55    |             | 4822 130 63928     | CHIP TRS. 2SA1312 B                   | HX113121B0     | ▲ Q852  |             | 5322 130 41842     | TRS. 2SD1827 NPN                      | HT418271A0     |
| QH56    |             | 4822 130 63929     | CHIP TRS. 2SC3324 B                   | HX333241B0     | ▲ F801  | F,U         |                    | PP16-MISCELLANEOUS<br>FUSE 1.25A 125V | FS10125350     |
|         |             |                    |                                       |                | ▲ F801  | K/22        | 4822 070 31002     | FUSE T1A 250V                         | FS10100850     |
|         |             |                    |                                       |                | ▲ F851  | F,U         |                    | FUSE 1A 250V                          | FS10100350     |
|         |             |                    |                                       |                | ▲ F851  | K/22        | 4822 070 36301     | FUSE T630MA 250V                      | FS10063850     |
|         |             |                    |                                       |                | ▲ F852  | F,U         |                    | FUSE 1A 250V                          | FS10100350     |
|         |             |                    |                                       |                | ▲ F852  | K/22        | 4822 070 36301     | FUSE T630MA 250V                      | FS10063850     |
|         |             |                    |                                       |                | JF51    |             | 4822 267 41009     | TERMINAL 2P RCA                       | YT02020890     |
|         |             |                    |                                       |                | JT01    | DA          | 4822 290 81598     | TERMINAL 2P RCA GOLD                  | YT02021130     |
|         |             |                    |                                       |                | JT01    | MK2         | 4822 290 81638     | TERMINAL RCA 1P                       | YT02010790     |
|         |             |                    |                                       |                | J601    |             | 4822 265 31045     | TERMINAL RCA GOLD                     | YT02021080     |
|         |             |                    |                                       |                | ▲ J801  |             | 4822 256 30329     | JACK FUSE CLIP                        | YJ08000430     |
|         |             |                    |                                       |                | ▲ J802  |             | 4822 267 30978     | JACK FUSE CLIP                        | YJ08000450     |
|         |             |                    |                                       |                | ▲ J851  |             | 4822 256 30329     | JACK FUSE CLIP                        | YJ08000430     |
|         |             |                    |                                       |                | ▲ J852  |             | 4822 267 30978     | JACK FUSE CLIP                        | YJ08000450     |

(VERS.:VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, \*:EUROPE)

| POS.<br>NO | VERS.<br>COLOR | PART NO.<br>(FOR PCS) | DESCRIPTION                     | PART NO.<br>(MJI) | POS.<br>NO | VERS.<br>COLOR | PART NO.<br>(FOR PCS) | DESCRIPTION                     | PART NO.<br>(MJI) |
|------------|----------------|-----------------------|---------------------------------|-------------------|------------|----------------|-----------------------|---------------------------------|-------------------|
| ▲ J853     |                | 4822 256 30329        | JACK FUSE CRIP                  | YJ08000430        |            |                |                       | <b>PY16-FRONT CIRCUIT BOARD</b> |                   |
| ▲ J854     |                | 4822 267 30978        | JACK FUSE CRIP                  | YJ08000450        |            |                |                       | <b>PY16-CAPACITORS CHIP</b>     |                   |
| LF01       |                | 4822 158 60654        | FERRITE CORE BLM31A02           | FC90030070        | CY06       |                |                       | CER. 30pF ±5%                   | DD95300300        |
| LT01       |                | 4822 142 60422        | PULSE TRANSF.                   | TP41042030        | CY07       |                |                       | CER. 30pF ±5%                   | DD95300300        |
| LT02       |                | 4822 158 60654        | FERRITE CORE BLM31A02           | FC90030070        | CY12       |                |                       |                                 |                   |
| LT03       |                | 4822 158 60654        | FERRITE CORE BLM31A02           | FC90030070        | Y          |                | 4822 126 11687        | CER. 0.1μF +80-20%              | DK98104200        |
| L131       |                |                       | INDUCTANCE CHIP 3.3μH           | LU12332010        | CY15       |                |                       |                                 |                   |
| L141       |                | 4822 158 60654        | FERRITE CORE BLM31A02           | FC90030070        |            |                |                       | <b>PY16-RESISTORS CHIP</b>      |                   |
| L142       |                | 4822 158 60654        | FERRITE CORE BLM31A02           | FC90030070        | RY01       |                | 4822 051 30472        | 4.7kΩ ±5% 1/16W                 | NN05472610        |
| L143       |                | 4822 158 60654        | FERRITE CORE BLM31A02           | FC90030070        | RY02       |                | 4822 051 30472        | 4.7kΩ ±5% 1/16W                 | NN05472610        |
| L201       |                | 4822 158 60654        | FERRITE CORE BLM31A02           | FC90030070        | RY03       |                |                       |                                 |                   |
| L202       |                | 4822 158 60654        | FERRITE CORE BLM31A02           | FC90030070        | Y          |                | 4822 051 30222        | 2.2kΩ ±5% 1/16W                 | NN05222610        |
| L301       | DA             | 4822 158 60654        | FERRITE CORE BLM31A02           | FC90030070        | RY06       |                |                       |                                 |                   |
| L302       | DA             | 4822 158 60654        | FERRITE CORE BLM31A02           | FC90030070        | RY07       |                | 4822 051 30682        | 6.8kΩ ±5% 1/16W                 | NN05682610        |
| L303       | DA             | 4822 158 60654        | FERRITE CORE BLM31A02           | FC90030070        | RY08       |                | 4822 051 30682        | 6.8kΩ ±5% 1/16W                 | NN05682610        |
| L501       |                | 4822 158 60654        | FERRITE CORE BLM31A02           | FC90030070        | RY11       |                | 4822 051 30105        | 1MΩ ±5% 1/16W                   | NN05105610        |
| L601       |                | 4822 157 53873        | INDUCTANCE CHIP 100μH           | LU12104010        | RY13       |                | 4822 116 82487        | 0Ω ±5% 1/16W                    | NN05000610        |
| L602       |                | 4822 158 60654        | FERRITE CORE BLM31A02           | FC90030070        | RY16       |                | 4822 116 82487        | 0Ω ±5% 1/16W                    | NN05000610        |
| L651       |                | 4822 157 53873        | CHIP INDUCTANCE 100μH           | LU12104010        |            |                |                       | <b>PY16-SEMICONDUCTORS</b>      |                   |
| L652       |                | 4822 158 60654        | FERRITE CORE BLM31A02           | FC90030070        | QY02       |                |                       | MICROPROCESSOR<br>μPD780204     | HU356KN10F        |
| SF01       |                | 4822 277 21559        | SLIDE INT/EXT                   | SS02021150        |            |                |                       | <b>PY16-MISCELLANEOUS</b>       |                   |
| XY01       |                |                       | CERAMIC RESONATOR 5MHz          | FQ05004030        | LY01       |                | 4822 158 60654        | FERRITE CORE BLM31A02           | FC90030070        |
| X131       |                | 4822 242 10818        | CRYSTAL 33.8688MHz              | JX33001380        | LY02       |                | 4822 158 60654        | FERRITE CORE BLM31A02           | FC90030070        |
|            |                |                       | <b>PV16-SERVO CIRCUIT BOARD</b> |                   | LY03       |                | 4822 158 60654        | FERRITE CORE BLM31A02           | FC90030070        |
|            |                |                       | <b>PV16-CAPACITORS CHIP</b>     |                   |            |                |                       |                                 |                   |
| C120       |                |                       | CER. 5600pF ±10% 50V            | DK96562300        | SY01       |                |                       |                                 |                   |
| C121       |                | 4822 126 13837        | CER. 0.1μF ±10% 10V             | DK96104200        | Y          |                | 4822 276 14009        | PUSH TACT                       | SP01013310        |
| C122       |                | 4822 126 11704        | CER. 0.022μF +80-20% 16V        | DK98223300        | SY06       |                |                       |                                 |                   |
| C123       |                | 4822 126 12516        | CER. 1000pF ±10% 50V            | DK96102300        | VY01       |                |                       | DISPLAY UNIT                    | HQ31301410        |
| C124       |                | 4822 126 13837        | CER. 0.1μF ±10% 10V             | DK96104200        |            |                |                       | FTD DISP 13-MT-79G              |                   |
| C125       |                | 4822 122 33753        | CER. 150pF ±5% 50V              | DD95151300        | XY02       |                |                       | CERAMIC RESONATOR 5MHz          | FQ05004030        |
| C126       |                | 4822 124 11074        | ELECT 10μF 16V                  | EY10601620        |            |                |                       | <b>PY26-IR SENSOR</b>           |                   |
| C127       |                | 4822 126 13837        | CER. 0.1μF ±10% 10V             | DK96104200        |            |                |                       | <b>CIRCUIT BOARD</b>            |                   |
| C128       |                | 4822 126 13837        | CER. 0.1μF ±10% 10V             | DK96104200        |            |                |                       | <b>PY26-CAPACITORS CHIP</b>     |                   |
| C129       |                | 4822 126 13837        | CER. 0.1μF ±10% 10V             | DK96104200        | CY21       | MK2            | 4822 124 11432        | ELECT 100μF 10V                 | EY10701020        |
| C130       |                | 4822 126 11759        | CER. 100pF ±5% 50V              | DD95101300        | CY22       | MK2            | 4822 126 11687        | CER. 0.1μF +80-20%              | DK98104200        |
| C191       |                |                       | ELECT 0.47μF 50V                | EY47405020        |            |                |                       | <b>PY26-RESISTORS CHIP</b>      |                   |
| C192       |                | 4822 124 11074        | ELECT 10μF 16V                  | EY10601620        |            |                |                       | 100Ω ±5% 1/16W                  | NN05101610        |
|            |                |                       | <b>PV16-RESISTORS CHIP</b>      |                   | RY21       | MK2            | 4822 051 30101        |                                 |                   |
| R120       |                | 4822 051 30104        | 100kΩ ±5% 1/16W                 | NN05104610        |            |                |                       | <b>PY26-MISCELLANEOUS</b>       |                   |
| R121       |                | 4822 051 30681        | 680Ω ±5% 1/16W                  | NN05681610        |            |                |                       | PHOTO UNIT PNA4655M00HB         | HW10006020        |
| R122       |                | 4822 117 12139        | 22Ω ±5% 1/16W                   | NN05220610        | ZY21       | MK2            | 4822 209 16735        |                                 |                   |
| R123       |                | 4822 117 12139        | 22Ω ±5% 1/16W                   | NN05220610        |            |                |                       | <b>PY36-IR SENSOR</b>           |                   |
| R124       |                | 4822 051 30681        | 680Ω ±5% 1/16W                  | NN05681610        |            |                |                       | <b>CIRCUIT BOARD</b>            |                   |
| R125       |                | 4822 051 30153        | 15kΩ ±5% 1/16W                  | NN05153610        |            |                |                       | <b>PY36-CAPACITORS CHIP</b>     |                   |
| R126       |                | 4822 051 30332        | 3.3kΩ ±5% 1/16W                 | NN05332610        | CY31       | DA             | 4822 124 11432        | ELECT 100μF 10V                 | EY10701020        |
| R127       |                | 4822 051 30222        | 2.2kΩ ±5% 1/16W                 | NN05222610        | CY32       | DA             | 4822 126 11687        | CER. 0.1μF +80-20%              | DK98104200        |
| R128       |                | 4822 051 30392        | 3.9kΩ ±5% 1/16W                 | NN05392610        |            |                |                       | <b>PY36-RESISTORS CHIP</b>      |                   |
| R129       |                | 4822 051 30101        | 100Ω ±5% 1/16W                  | NN05101610        |            |                |                       | 100Ω ±5% 1/16W                  | NN05101610        |
| R130       |                | 4822 051 30273        | 27kΩ ±5% 1/16W                  | NN05273610        | RY31       | DA             | 4822 051 30101        |                                 |                   |
| R191       |                | 4822 051 30103        | 10kΩ ±5% 1/16W                  | NN05103610        |            |                |                       | <b>PY36-MISCELLANEOUS</b>       |                   |
| R192       |                | 4822 051 30153        | 15kΩ ±5% 1/16W                  | NN05153610        |            |                |                       | PHOTO UNIT PNA4655M00HB         | HW10006020        |
| R193       |                | 4822 051 30331        | 330Ω ±5% 1/16W                  | NN05331610        |            |                |                       |                                 |                   |
| R194       |                | 4822 051 30101        | 100Ω ±5% 1/16W                  | NN05101610        | ZY31       | DA             | 4822 209 16735        |                                 |                   |
| R195       |                | 4822 051 30101        | 100Ω ±5% 1/16W                  | NN05101610        |            |                |                       |                                 |                   |
| R196       |                | 4822 116 82487        | 0Ω ±5% 1/16W                    | NN05000610        |            |                |                       |                                 |                   |
|            |                |                       | <b>PV16-SEMICONDUCTORS</b>      |                   |            |                |                       |                                 |                   |
| Q101       |                | 4822 209 33992        | IC TDA1302T                     | HC10136490        |            |                |                       |                                 |                   |
| Q191       |                | 4822 209 32984        | IC TC7SHU04F                    | HC10427050        |            |                |                       |                                 |                   |
| Q192       |                | 4822 130 41947        | TRS. 2SC2458                    | HT30001000        |            |                |                       |                                 |                   |
|            |                |                       | 2SC1740S 2SC3199                |                   |            |                |                       |                                 |                   |
| Q193       |                | 4822 130 41947        | TRS. 2SC2458                    | HT30001000        |            |                |                       |                                 |                   |
|            |                |                       | 2SC1740S 2SC3199                |                   |            |                |                       |                                 |                   |