

# SERVICE MANUAL

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STEREO CAR  
CD CHANGER SYSTEM

BASIC CD MECHANISM : 8ZG-3 RNF

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# aiwa

S/M Code No. 09-001-404-5R4

# SPECIFICATIONS

|                        |                                                                                                                                  |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <Compact disc changer> |                                                                                                                                  |
| System                 | Compact disc digital audio system                                                                                                |
| Frequency Response     | 5 Hz - 20 kHz                                                                                                                    |
| Wow and flutter        | Below measurable limit                                                                                                           |
| Signal to noise ratio  | 91 dB or more                                                                                                                    |
| Outputs                | Line output (for changer connector only)                                                                                         |
| Operating temperature  | -10 °C to 55 °C                                                                                                                  |
| Dimensions             | 244 x 63 x 169 mm (w/h/d)<br>(9 <sup>5</sup> / <sub>8</sub> x 2 <sup>1</sup> / <sub>2</sub> x 6 <sup>5</sup> / <sub>8</sub> in.) |
| Weight                 | 1.8 kg (3.96 lbs.)                                                                                                               |
| Power requirement      | 12 V DC car battery<br>(negative ground)                                                                                         |
| D/A converter          | 1 bit DAC, 8 times over sampling                                                                                                 |
| Sampling rate          | 44.1 kHz                                                                                                                         |
| Disc size              | 120 mm                                                                                                                           |

• Design and specifications are subject to change without notice.

# PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

## WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

## VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylitävälle näkymättömälle lasersäteilylle.

## WARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

## CAUTION

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

## ATTENTION

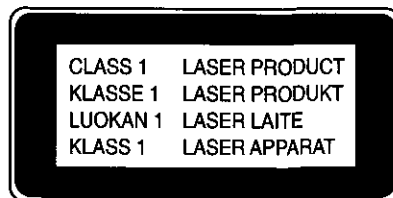
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

## ADVARSEL!

Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.

The CLASS 1 LASER PRODUCT label is located on the rear exterior.



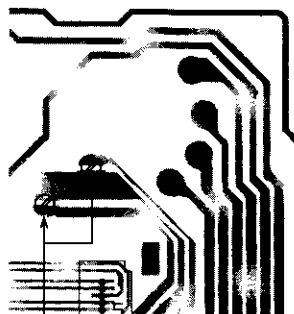
## Precaution to replace Optical block

### (KSS - 710A)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

- 1) After the connection, remove solder shown in right figure.

PICK-UP Assy P.C.B



Solder

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

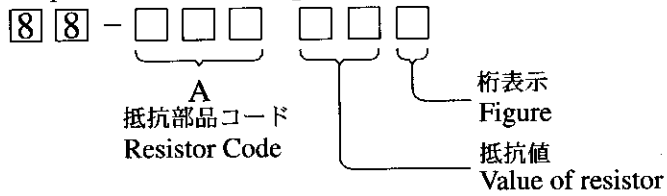
- 4 -

| REF. NO.    | PART NO.       | KANRI NO. | DESCRIPTION               |
|-------------|----------------|-----------|---------------------------|
| SW802       | 87-036-312-080 |           | C-SW, PUSH ESE102MH4-Q    |
| W803        | 8Z-KM3-625-010 |           | F-CABLE, 4P (SWITCH)      |
| LED C.B     |                |           |                           |
| CON803      | 87-009-863-010 |           | CONN, 2P WHT ZH           |
| LED801      | 87-A40-319-080 |           | C-LED, LT1E40A GRN        |
| LED802      | 87-A40-320-080 |           | C-LED, LT1H40A Y          |
| LED803      | 87-A40-319-080 |           | C-LED, LT1E40A GRN        |
| CONNECT C.B |                |           |                           |
| CON801      | 87-A61-155-080 |           | C-CONN, 30P H XF2H-3015-1 |
| CON802      | 87-A61-240-080 |           | C-CONN, 16P H FLZ-RSM1-TB |
| M802        | 87-A91-054-010 |           | MOT, FF-050SK             |
| M803        | 87-A91-054-010 |           | MOT, FF-050SK             |
| M804        | 87-A90-926-010 |           | MOT, RF-3L0PA             |

| REF. NO.         | PART NO.       | KANRI NO. | DESCRIPTION            |
|------------------|----------------|-----------|------------------------|
| LIMIT C.B        |                |           |                        |
| SW803            | 87-036-312-080 |           | C-SW, PUSH ESE102MH4-Q |
| W804             | 8Z-KM3-624-010 |           | F-CABLE, 2P (LIMIT)    |
| FLEX PICK UP C.B |                |           |                        |
|                  | 8Z-KM4-631-010 |           | PWB, FLEX PICK UP (AK) |

チップ抵抗部品コード／CHIP RESISTOR PART CODE

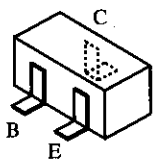
チップ抵抗部品コードの成り立ち  
Chip Resistor Part Coding



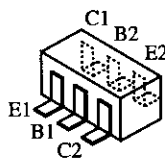
チップ抵抗  
Chip resistor

| 容量<br>Wattage | 種類<br>Type | 許容誤差<br>Tolerance | 記号<br>Symbol | 寸法/Dimensions (mm) |     |      |      | 抵抗コード : A<br>Resistor Code : A |
|---------------|------------|-------------------|--------------|--------------------|-----|------|------|--------------------------------|
|               |            |                   |              | 外形/Form            | L   | W    | t    |                                |
| 1/16W         | 1005       | ± 5%              | CJ           |                    | 1.0 | 0.5  | 0.35 | 104                            |
| 1/16W         | 1608       | ± 5%              | CJ           |                    | 1.6 | 0.8  | 0.45 | 108                            |
| 1/10W         | 2125       | ± 5%              | CJ           |                    | 2   | 1.25 | 0.45 | 118                            |
| 1/8W          | 3216       | ± 5%              | CJ           |                    | 3.2 | 1.6  | 0.55 | 128                            |

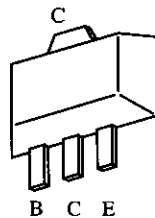
TRANSISTOR ILLUSTRATION



2SA1037  
2SB1197  
2SC2712  
2SD1623  
DTA124EKA  
DTC124EKA



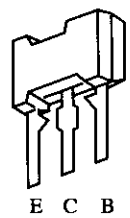
UPA608T



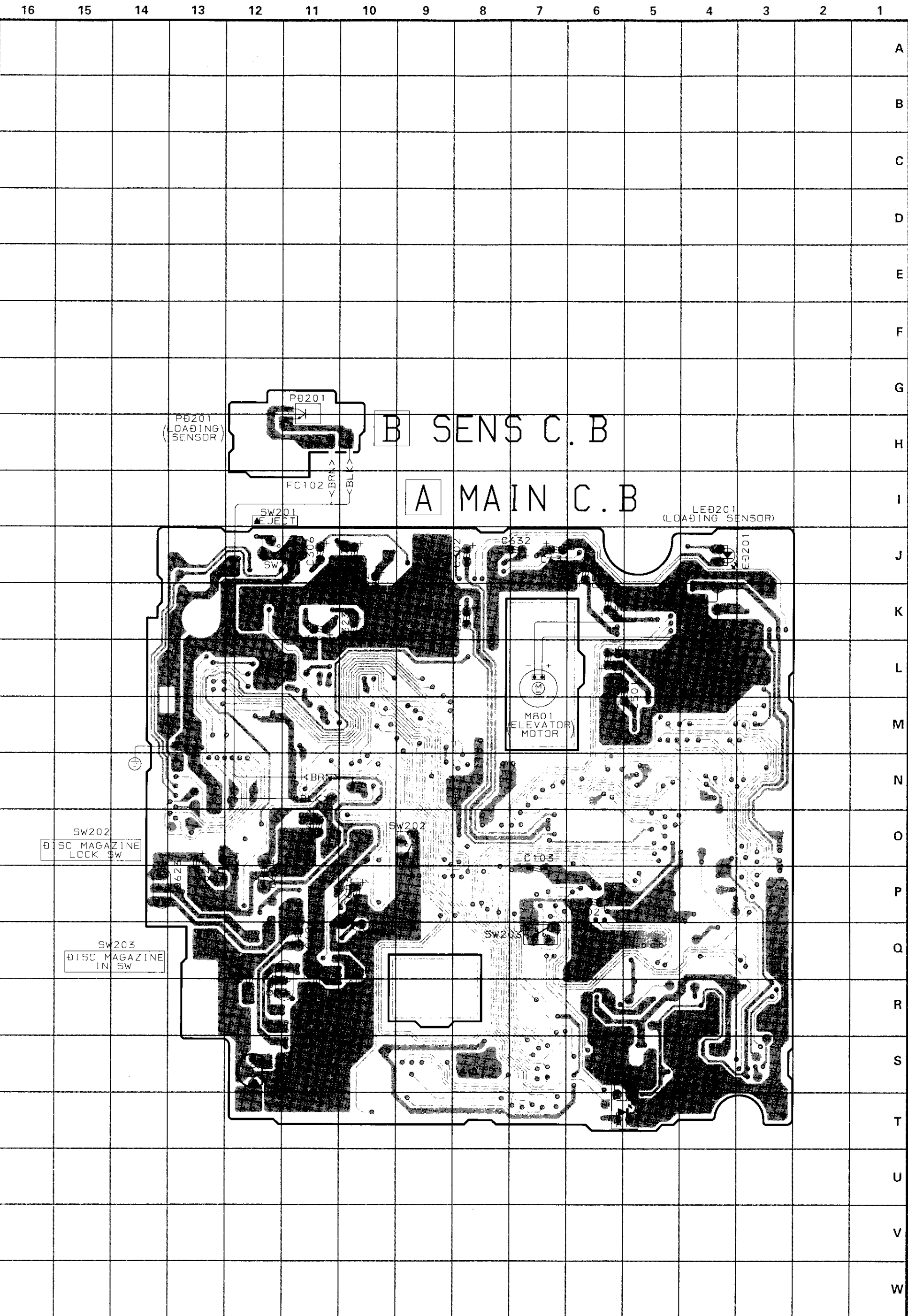
2SD1622

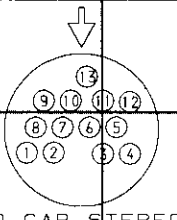
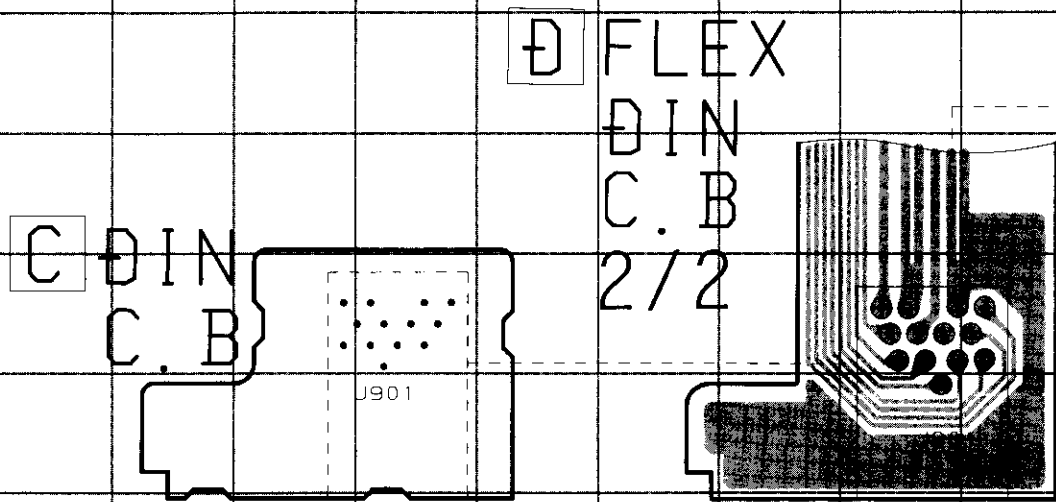


2SD2395

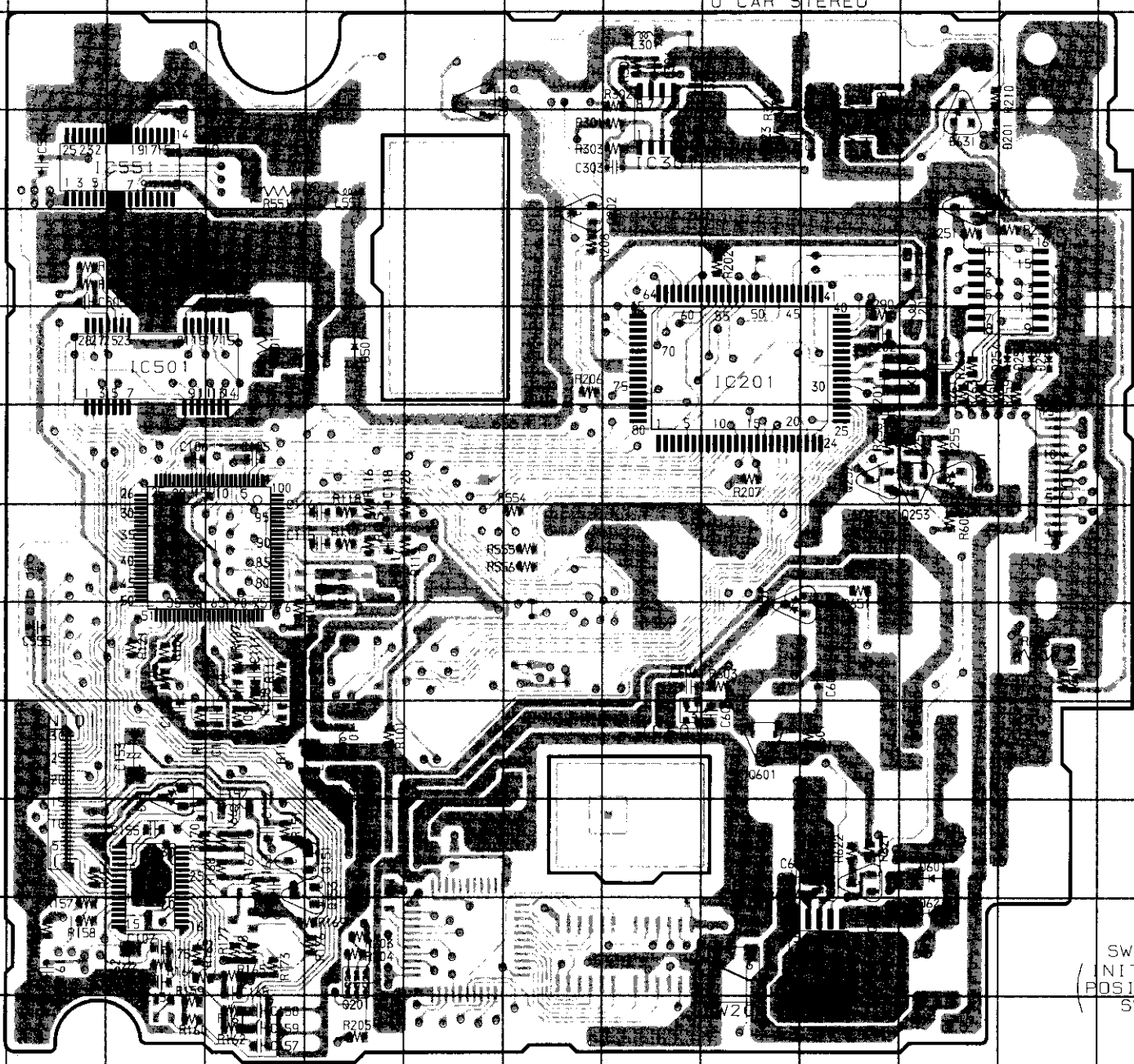


2SA1702





**A** MAIN C.B



1. This diagram is for the purpose of showing the location of the components on the circuit board. It is not intended to be a substitute for the component list or the wiring diagram.

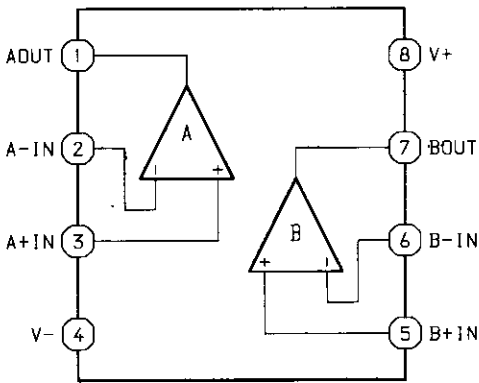
**D** FLEX DIN C.B 1/2



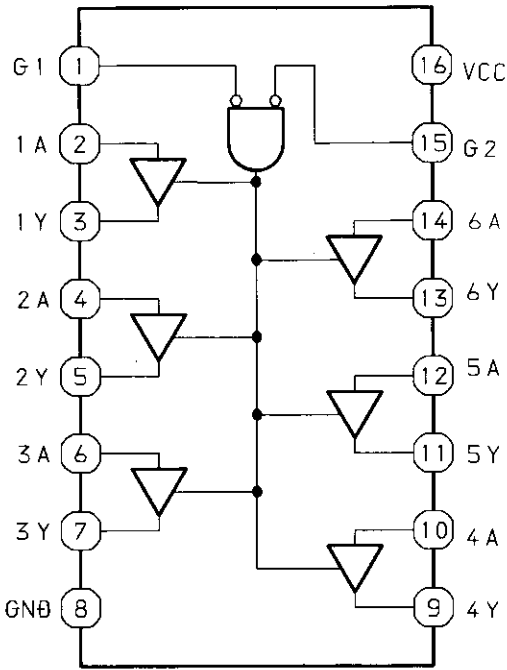


IC BLOCK DIAGRAM

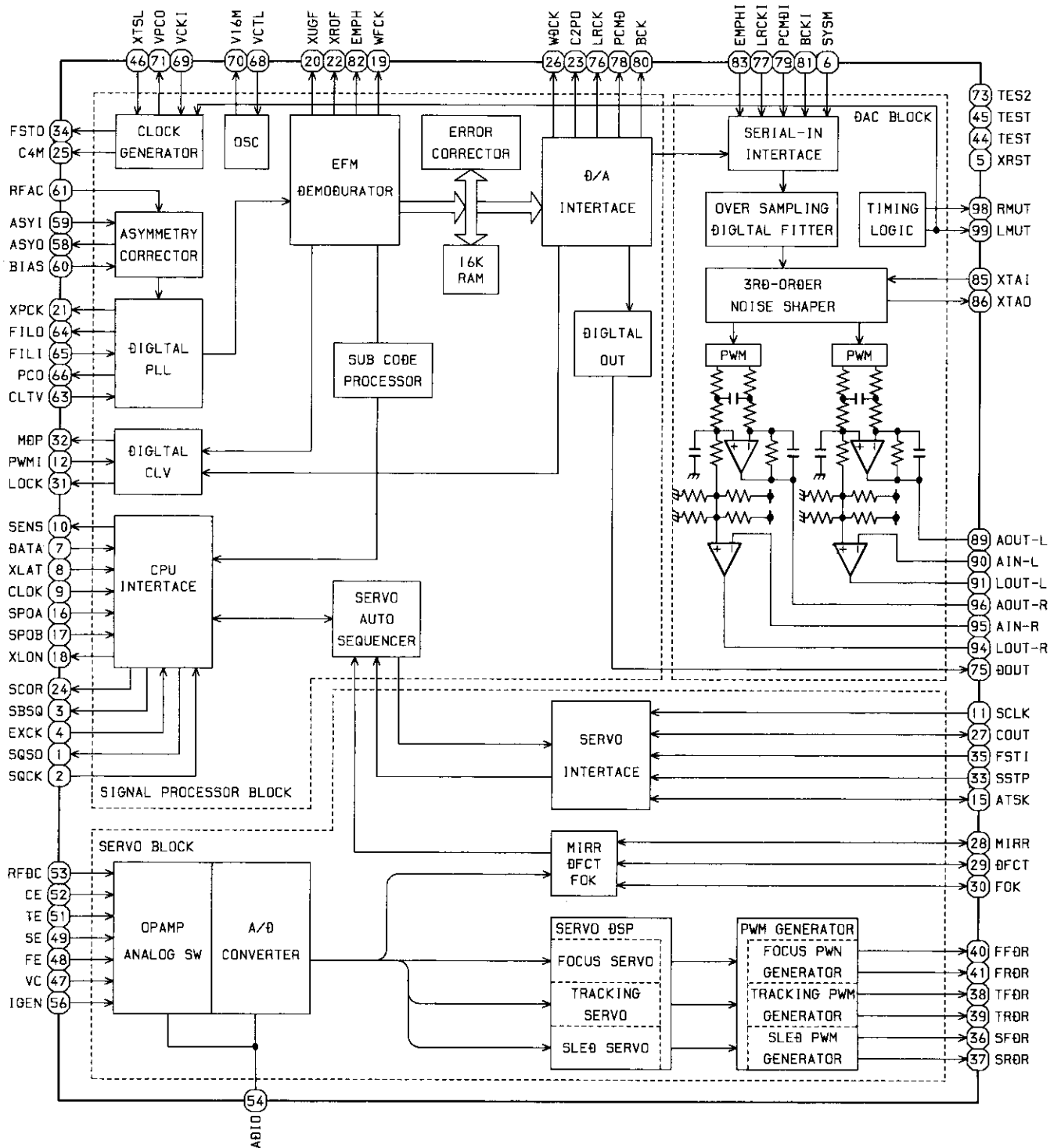
IC, NJM4558MD



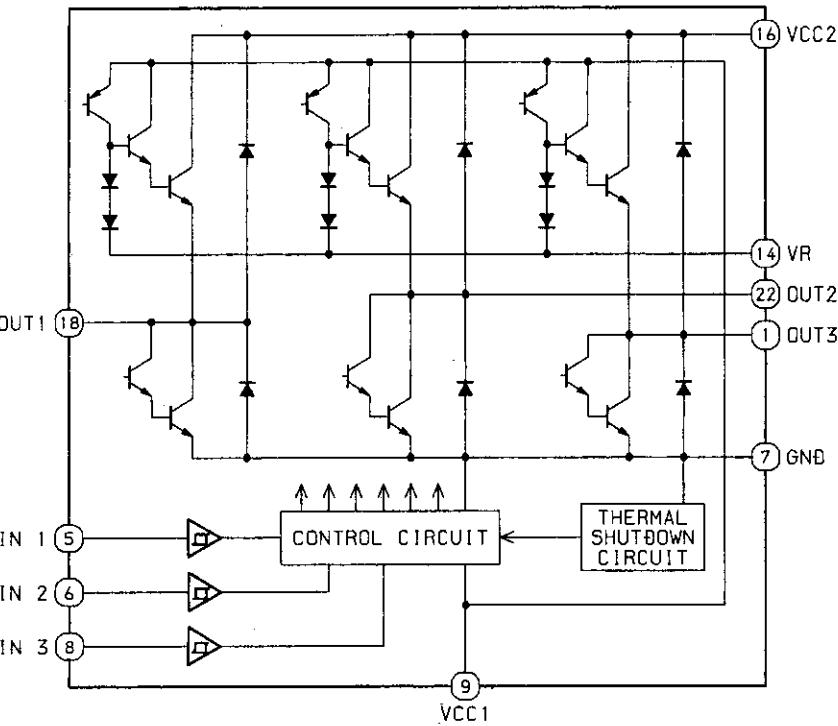
IC, TC74HC365AF



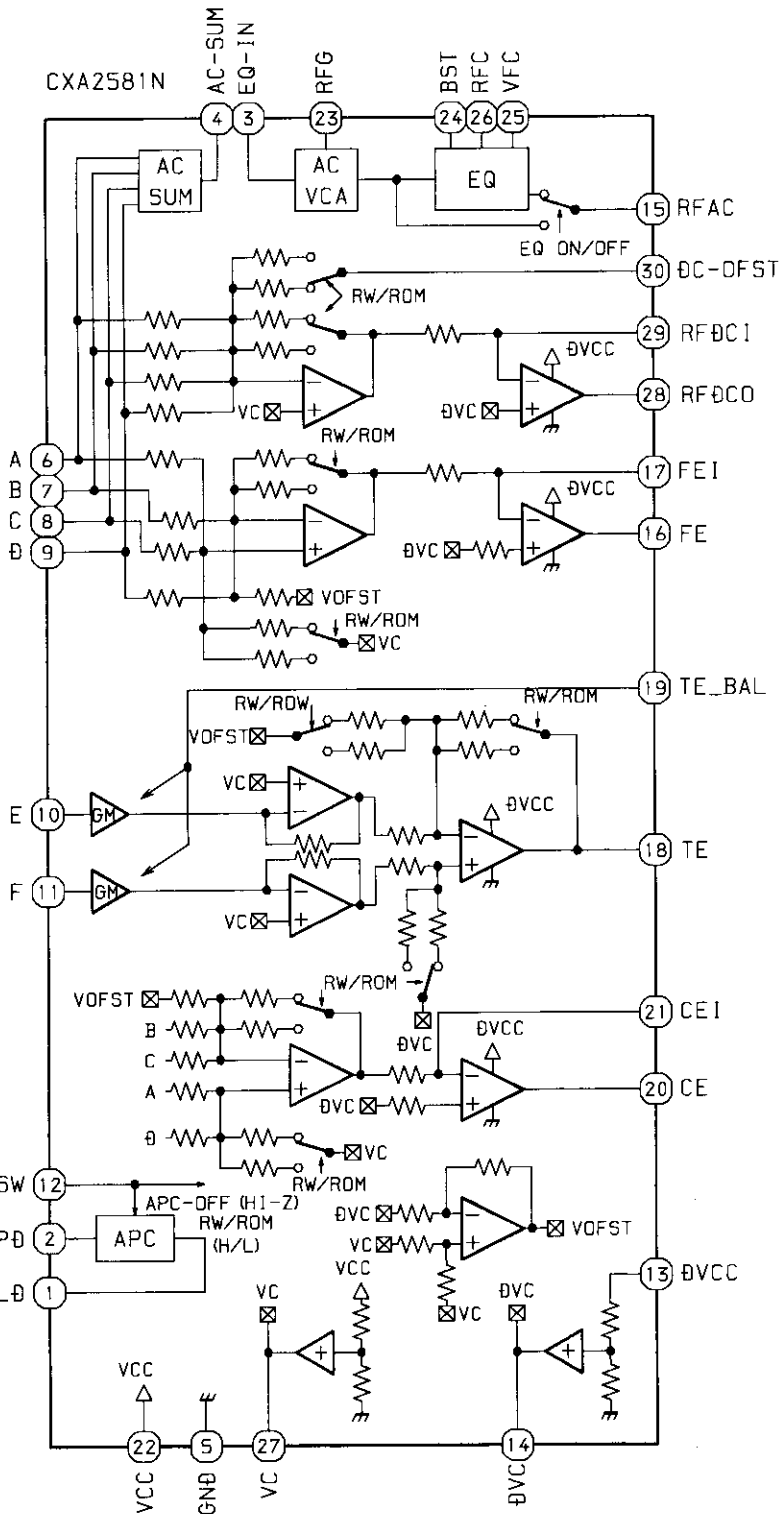
IC, CXD2588R



IC, BA6247FP



IC, CXA2581N

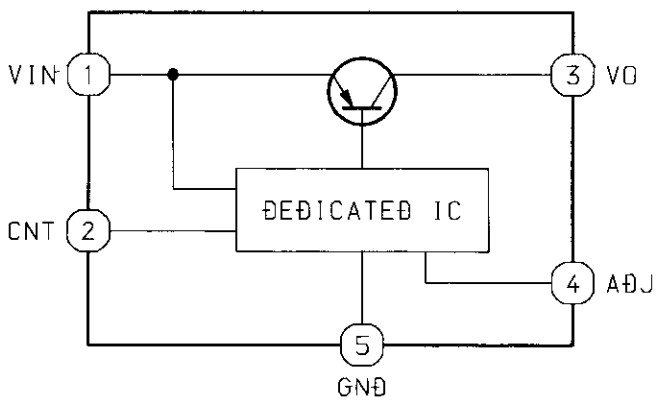


VCC

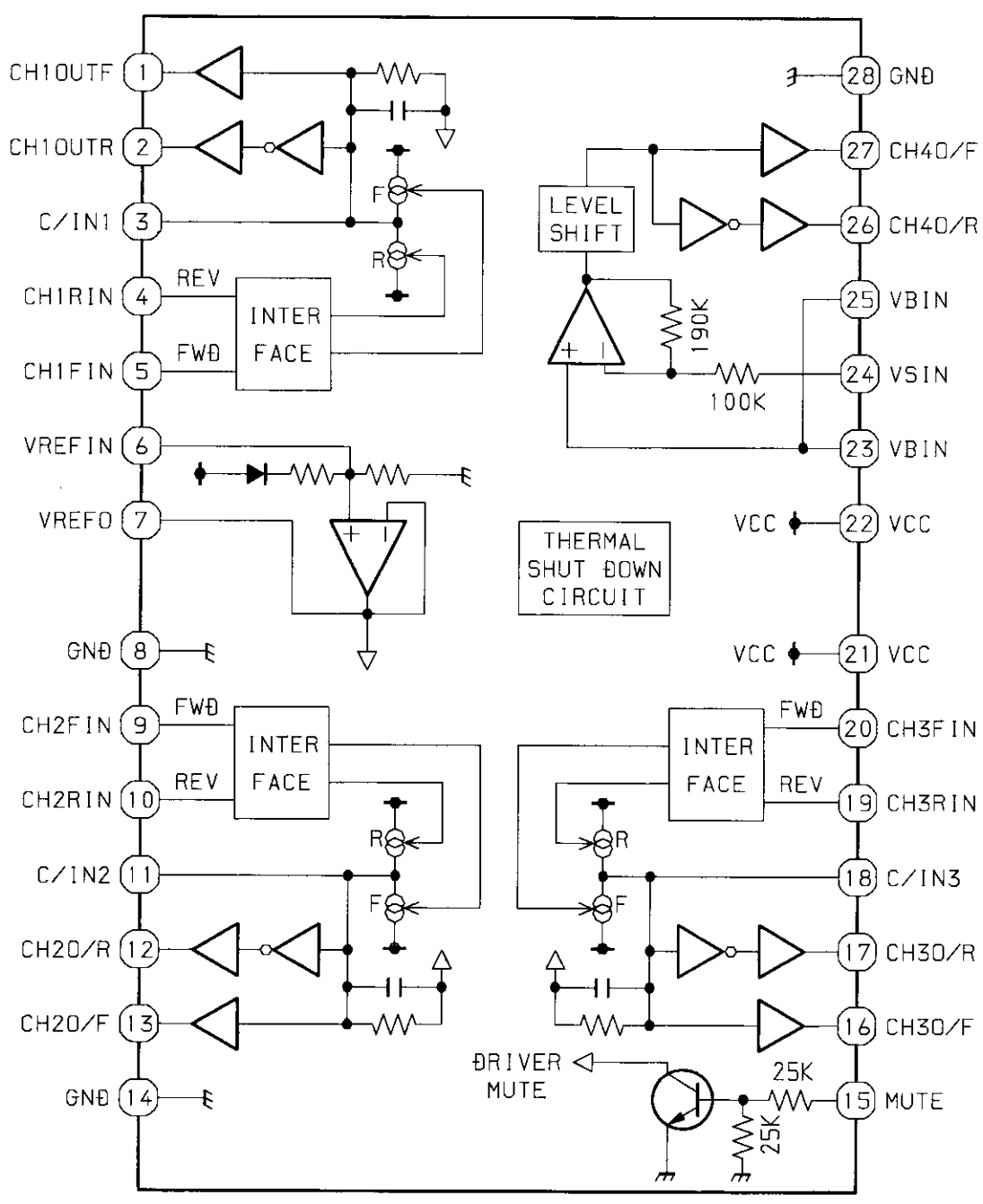
92

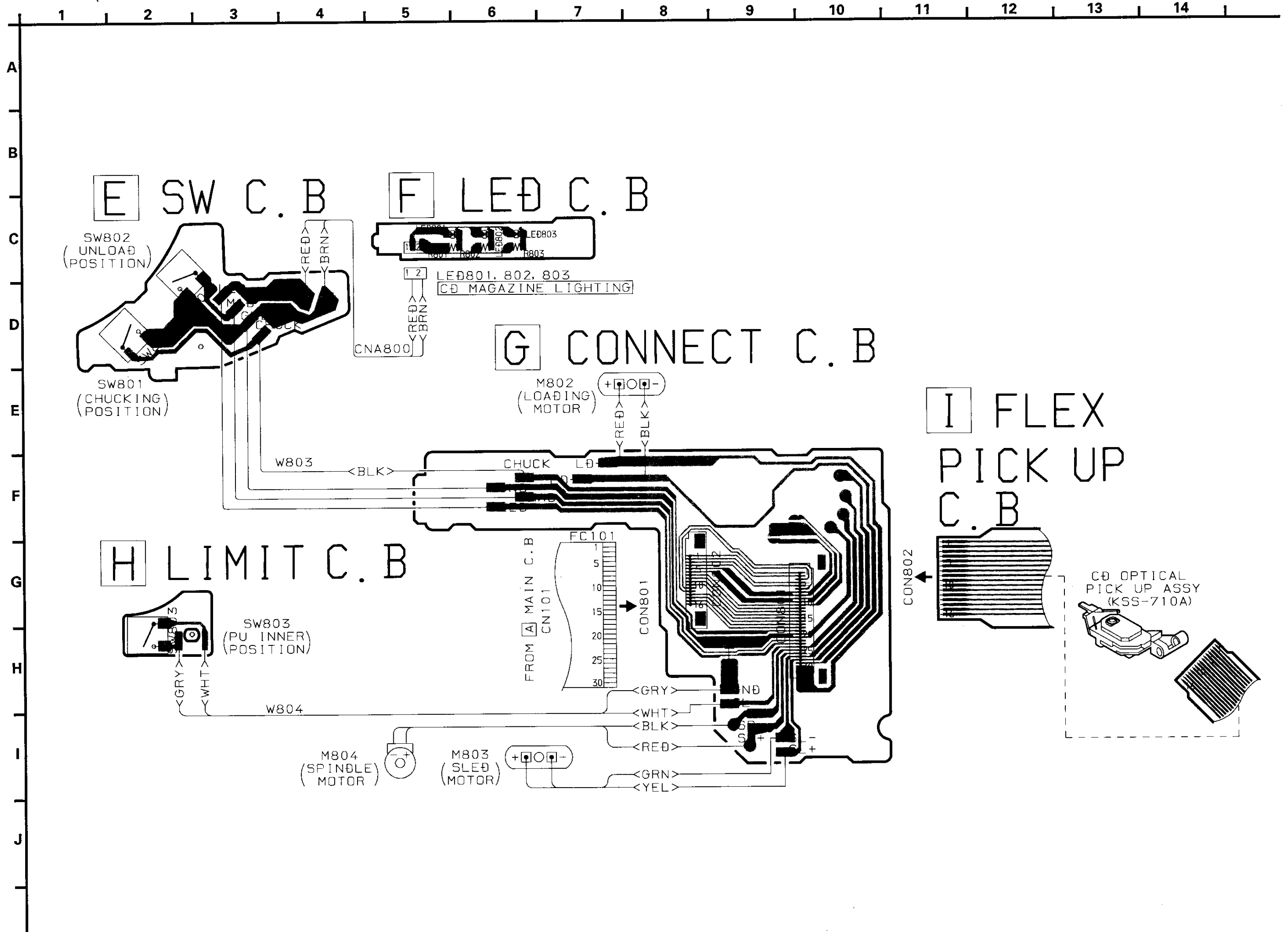
4

# IC, PQ20WZ1U



# IC, BA6392FP





# IC DESCRIPTION

IC, CXP84632-143Q

| Pin No. | Pin Name       | I/O | Description                                                    |
|---------|----------------|-----|----------------------------------------------------------------|
| 1 ~ 4   | NC             | -   | Not connected.                                                 |
| 5       | EEPDI          | -   | Connected to GND. (Not used)                                   |
| 6       | SCLK           | O   | SENS read clock output.                                        |
| 7       | SENS           | I   | SENS input.                                                    |
| 8       | XLAT           | O   | DSP data latch output.                                         |
| 9       | SYSM           | O   | DSP (DAC) system mute control output. ("H" : MUTE)             |
| 10      | DRST           | O   | DSP IC reset output. ("L" : RESET)                             |
| 11      | EMPHA          | O   | DSP (DAC) de-emphasis control output. ("H" : ON)               |
| 12, 13  | PWRCNT1, 2     | O   | POWER control output 1, 2.                                     |
| 14      | SENS           | I   | DISC IN detect sensor input.                                   |
| 15      | RFSW           | O   | RF-AMP gain select output. ("H" : CD-RW)                       |
| 16      | (EASSON) RFSEL | O   | RF-AMP Fs select output. ("L" : X2 speed)                      |
| 17      | LEDCONT        | O   | LED on/off output. ("H" : ON)                                  |
| 18      | ELCONT         | O   | Motor driver control output 1.                                 |
| 19      | LDCONT         | O   | Motor driver control output 2.                                 |
| 20      | MCONT          | O   | Motor driver control output 3.                                 |
| 21      | PHPWR          | O   | Photo sensor on/off output. ("H" : ON)                         |
| 22      | EJECT          | I   | Eject switch input. ("L" : ON)                                 |
| 23      | INIT           | I   | Initial position switch input.                                 |
| 24      | PACK           | I   | Disc magazine in switch input.                                 |
| 25      | MZLOCK         | I   | Disc magazine lock switch input.                               |
| 26      | UNLOAD         | I   | Unload position switch input.                                  |
| 27      | LS             | I   | Pick-up inner position switch input.                           |
| 28      | CHUCK          | I   | Chuck position switch input.                                   |
| 29      | CD6/10         | I   | 6/10 disc selector input. ("OPEN" : 6 disc, "SHORT" : 10 disc) |
| 30      | <u>RESET</u>   | -   | IC reset. ("L" : RESET)                                        |
| 31      | EXTAL          | -   | 12 MHz clock.                                                  |
| 32      | XTAL           | -   | 12 MHz clock.                                                  |
| 33      | VSS            | -   | IC GND.                                                        |
| 34      | TX             | -   | Not used.                                                      |
| 35      | TEX            | -   | Not used.                                                      |
| 36      | AVSS           | -   | GND. (A/D in GND)                                              |
| 37      | AVREF          | -   | VDD. (A/D in Vref)                                             |
| 38      | TEST0          | I/O | Test mode select (L) / TEST KEY connect.                       |
| 39 ~ 42 | TEST1 ~ 4      | -   | Not used.                                                      |
| 43      | TEST5          | I   | CD text function select input. ("L" : NO TEXT)                 |
| 44      | TEST6          | I   | Initial check skip select input ("L" : NO CHECK) (Not used)    |
| 45      | TEST7          | I   | EASS function select input. ("L" : NO EASS)                    |
| 46      | NC             | -   | Not connected.                                                 |
| 47      | SQSI           | I   | SUBCODE CRC flag check input.                                  |
| 48      | SQCLK          | O   | SUBCODE read clock output.                                     |
| 49      | SQSI           | I   | SUBCODE data input.                                            |

| Pin No. | Pin Name | I/O | Description                                        |
|---------|----------|-----|----------------------------------------------------|
| 50      | NC       | -   | Not connected.                                     |
| 51      | DCLK     | O   | DSP/DRAM controller data clock output.             |
| 52      | ZSENS    | I   | DRAM controller data input. (Not used)             |
| 53      | DATAO    | O   | DSP/DRAM controller data output.                   |
| 54      | PHSENS   | I   | Photo sensor input.                                |
| 55      | C2PO     | I   | C2 error flag input. ("H" : C2 error)              |
| 56      | LOCK     | I   | LOCK input. ("H" : spindle servo lock)             |
| 57      | FOK      | I   | FOK input. ("H" : focus OK).                       |
| 58, 59  | NC       | -   | Not connected.                                     |
| 60      | ACCCNT   | I   | ACC CONT input. ("H" : ON)                         |
| 61      | CLKO     | O   | Adjust serial clock output.                        |
| 62      | CLKI     | I   | Serial clock input.                                |
| 63      | SCOR     | I   | SUBCODE SYNC input.                                |
| 64      | DSPSEL   | I   | Serial bus enable input.                           |
| 65      | SBCLKI   | I   | Adjust serial clock input.                         |
| 66      | SBDTI    | I   | Serial data input.                                 |
| 67      | NC       | -   | Not connected.                                     |
| 68      | SBCLKO   | O   | Serial clock output.                               |
| 69      | SBDTO    | O   | Serial data output.                                |
| 70      | NC       | -   | Not connected.                                     |
| 71      | BUCHK    | I   | Connected to VDD. (Not used)                       |
| 72      | VDD      | -   | IC VDD.                                            |
| 73      | NC       | -   | Connected to VDD.                                  |
| 74      | AMUTE    | O   | Analog line mute output. (Not used)                |
| 75      | SPCON    | O   | Motor driver standby control output. ("L" : MUTE)  |
| 76      | NRST     | O   | DRAM controller IC reset. ("L" : RESET) (Not used) |
| 77      | YMLD     | O   | DRAM controller data latch output. (Not used)      |
| 78      | LED1     | O   | DISC detect sensor LED on/off output. ("L" : ON)   |
| 79, 80  | LED2, 3  | -   | Not used.                                          |

VOLTAGE CHART

IC101, CXD2588R

| PIN NO. | CD x 1    | CD x 2    | RW x 1    |
|---------|-----------|-----------|-----------|
| 1       | DATA LINE | DATA LINE | DATA LINE |
| 2       | 4.56      | 4.56      | 4.56      |
| 3       | 0.11      | 0.11      | 0.11      |
| 4       | 0         | 0         | 0         |
| 5       | 4.60      | 4.60      | 4.60      |
| 6       | 0         | 0         | 0         |
| 7       | DATA LINE | DATA LINE | DATA LINE |
| 8       | 4.59      | 4.59      | 4.59      |
| 9       | 4.57      | 4.57      | 4.57      |
| 10      | 0.03      | 0.03      | 0.03      |
| 11      | 4.61      | 4.61      | 4.61      |
| 12~14   | 4.06      | 4.06      | 4.06      |
| 15~18   | 0         | 0         | 0         |
| 19~20   | 2.03      | 2.03      | 2.03      |
| 21      | 1.92      | 1.92      | 1.92      |
| 22      | 4.06      | 4.06      | 4.06      |
| 23      | 0         | 0         | 0         |
| 24      | 0.05      | 0.05      | 0.05      |
| 25      | 1.92      | 1.92      | 1.92      |
| 26      | 2.00      | 2.00      | 2.00      |
| 27~28   | 0.01      | 0.01      | 0.01      |
| 29      | 0.04      | 0.04      | 0.04      |
| 30~31   | 4.06      | 4.06      | 4.06      |
| 32      | 2.25      | 2.25      | 2.25      |
| 33      | 0         | 0         | 0         |
| 34~35   | 2.25      | 2.25      | 2.25      |
| 36~41   | DATA LINE | DATA LINE | DATA LINE |
| 42~46   | 0         | 0         | 0         |
| 47      | 2.02      | 2.02      | 2.02      |
| 48      | 1.98      | 1.98      | 1.98      |
| 49~50   | 0         | 0         | 0         |
| 51      | DATA LINE | DATA LINE | DATALINE  |
| 52      | 2.02      | 2.02      | 2.02      |
| 53      | 2.79      | 2.79      | 2.79      |
| 54      | 1.95      | 1.95      | 1.95      |
| 55      | 0         | 0         | 0         |
| 56      | 1.73      | 1.73      | 1.73      |
| 57      | 3.92      | 3.92      | 3.92      |
| 58      | 1.95      | 1.95      | 1.95      |
| 59      | 1.96      | 1.96      | 1.96      |
| 60      | 0.80      | 0.80      | 0.80      |

| PIN NO. | CD x 1 | CD x 2 | RW x 1 |
|---------|--------|--------|--------|
| 61      | 1.96   | 1.96   | 1.96   |
| 62      | 0      | 0      | 0      |
| 63~64   | 2.04   | 2.04   | 2.04   |
| 65~66   | 1.96   | 1.96   | 1.96   |
| 67      | 3.92   | 3.92   | 3.92   |
| 68      | 0      | 0      | 0      |
| 69~70   | 1.63   | 1.63   | 1.63   |
| 71      | 0.01   | 0.01   | 0.01   |
| 72~73   | 0      | 0      | 0      |
| 74      | 4.06   | 4.06   | 4.06   |
| 75      | 0.01   | 0.01   | 0.01   |
| 76      | 2.02   | 2.02   | 2.02   |
| 77~78   | 2.03   | 2.03   | 2.03   |
| 79      | 1.35   | 1.35   | 1.35   |
| 80      | 1.96   | 1.96   | 1.96   |
| 81      | 2.00   | 2.00   | 2.00   |
| 82      | 4.06   | 4.06   | 4.06   |
| 83      | 4.60   | 4.60   | 4.60   |
| 84      | 4.06   | 4.06   | 4.06   |
| 85      | 0      | 0      | 0      |
| 86      | 1.98   | 1.98   | 1.98   |
| 87      | 0      | 0      | 0      |
| 88      | 3.91   | 3.91   | 3.91   |
| 89      | 0      | 0      | 0      |
| 90~91   | 1.62   | 1.62   | 1.62   |
| 92~93   | 0      | 0      | 0      |
| 94      | 1.61   | 1.61   | 1.61   |
| 95      | 1.62   | 1.62   | 1.62   |
| 96      | 1.63   | 1.63   | 1.63   |
| 97      | 3.93   | 3.93   | 3.93   |
| 98~99   | 4.06   | 4.06   | 4.06   |
| 100     | 0      | 0      | 0      |

## IC151, CXA2581N

| PIN NO. | CD x 1 | CD x 2 | RW x 1 |
|---------|--------|--------|--------|
| 1       | 2.57   | 2.57   | 2.57   |
| 2       | 0.158  | 0.158  | 0.158  |
| 3       | 2.03   | 2.03   | 2.03   |
| 4       | 2.10   | 2.10   | 2.10   |
| 5       | 0      | 0      | 0      |
| 6       | 2.15   | 2.15   | 2.15   |
| 7       | 2.14   | 2.14   | 2.14   |
| 8~9     | 2.13   | 2.13   | 2.13   |
| 10~11   | 2.04   | 2.04   | 2.04   |
| 12      | 0      | 0      | 4.61   |
| 13      | 4.06   | 4.06   | 4.06   |
| 14      | 2.04   | 2.04   | 2.04   |
| 15      | 2.19   | 2.19   | 2.19   |
| 16      | 2.00   | 2.00   | 2.00   |
| 17      | 2.04   | 2.04   | 2.04   |
| 18      | 1.95   | 1.95   | 1.95   |
| 19      | 2.04   | 2.04   | 2.04   |
| 20      | 2.02   | 2.02   | 2.02   |
| 21      | 2.04   | 2.04   | 2.04   |
| 22      | 4.06   | 4.06   | 4.06   |
| 23      | 2.97   | 2.97   | 2.97   |
| 24      | 2.43   | 2.43   | 2.43   |
| 25      | 1.57   | 1.57   | 1.57   |
| 26      | 2.80   | 2.77   | 2.77   |
| 27      | 2.04   | 2.04   | 2.04   |
| 28      | 2.19   | 2.19   | 2.19   |
| 29      | 2.04   | 2.04   | 2.04   |
| 30      | 1.54   | 1.54   | 1.54   |

## IC201, CXP84632-143Q

| PIN NO. | CD x 1 | CD x 2 | RW x 1          |
|---------|--------|--------|-----------------|
| 1       | 0      | 0      | 0               |
| 2~3     | 4.64   | 4.64   | 4.64            |
| 4~5     | 0      | 0      | 0               |
| 6       | 4.61   | 4.61   | 4.61            |
| 7       | 0.03   | 0.03   | 0.03            |
| 8       | 4.59   | 4.59   | 4.59            |
| 9       | 0      | 0      | 0               |
| 10~11   | 4.59   | 4.59   | 4.59            |
| 12~13   | 4.57   | 4.57   | 4.57            |
| 14      | 4.59   | 4.59   | 4.59            |
| 15      | 0      | 0      | 4.6             |
| 16      | 4.63   | 0.09   | 4.63x1 / 0.09x2 |

| PIN NO. | CD x 1    | CD x 2    | RW x 1    |
|---------|-----------|-----------|-----------|
| 17      | 4.62      | 4.62      | 4.62      |
| 18~21   | 0         | 0         | 0         |
| 22~23   | 4.59      | 4.59      | 4.59      |
| 24~25   | 0         | 0         | 0         |
| 26~27   | 4.59      | 4.59      | 4.59      |
| 28      | 0         | 0         | 0         |
| 29      | 4.6       | 4.6       | 4.6       |
| 30      | 4.16      | 4.16      | 4.16      |
| 31      | 2.27      | 2.27      | 2.27      |
| 32      | 2.43      | 2.43      | 2.43      |
| 33      | 0         | 0         | 0         |
| 34      | 4.64      | 4.64      | 4.64      |
| 35~36   | 0         | 0         | 0         |
| 37      | 4.65      | 4.65      | 4.65      |
| 38      | 4.62      | 4.62      | 4.62      |
| 39~41   | 0         | 0         | 0         |
| 42      | 4.60      | 0         | 0         |
| 43      | 0         | 0         | 0         |
| 44      | 4.60      | 0         | 0         |
| 45      | 0         | 0         | 0         |
| 46      | 4.60      | 4.60      | 4.60      |
| 47      | DATA LINE | DATA LINE | DATA LINE |
| 48      | 4.56      | 4.56      | 4.56      |
| 49      | DATA LINE | DATA LINE | DATA LINE |
| 50      | 0         | 0         | 0         |
| 51      | 4.57      | 4.57      | 4.57      |
| 52~53   | DATA LINE | DATA LINE | DATA LINE |
| 54      | 4.64      | 4.64      | 4.64      |
| 55      | 0         | 0         | 0         |
| 56~57   | 4.06      | 4.06      | 4.06      |
| 58~59   | 0         | 0         | 0         |
| 60      | 4.65      | 4.65      | 4.65      |
| 61      | 4.64      | 4.64      | 4.64      |
| 62      | 0         | 0         | 0         |
| 63      | 0.05      | 0.05      | 0.05      |
| 64      | DATA LINE | DATA LINE | DATA LINE |
| 65      | 4.64      | 4.64      | 4.64      |
| 66~67   | 0         | 0         | 0         |
| 68      | 4.64      | 4.64      | 4.64      |
| 69      | DATA LINE | DATA LINE | DATA LINE |
| 70      | 0         | 0         | 0         |
| 71~73   | 4.65      | 4.65      | 4.65      |



| PIN NO. | CD x 1 | CD x 2 | RW x 1 |
|---------|--------|--------|--------|
| 74      | 0      | 0      | 0      |
| 75      | 4.59   | 4.59   | 4.59   |
| 76~77   | 4.63   | 4.63   | 4.63   |
| 78      | 4.00   | 4.00   | 4.00   |
| 79~80   | 0      | 0      | 0      |

#### IC251, TC74HC365AF

| PIN NO. | CD x 1    | CD x 2    | RW x 1    |
|---------|-----------|-----------|-----------|
| 1~8     | 0         | 0         | 0         |
| 9~10    | 4.64      | 4.64      | 4.64      |
| 11~14   | DATA LINE | DATA LINE | DATA LINE |
| 15      | 0         | 0         | 0         |
| 16      | 4.65      | 4.65      | 4.65      |

#### IC301, NJM4558MD

| PIN NO. | CD x 1 | CD x 2 | RW x 1 |
|---------|--------|--------|--------|
| 1~3     | 6.30   | 6.30   | 6.30   |
| 4       | 0      | 0      | 0      |
| 5~7     | 6.30   | 6.30   | 6.30   |
| 8       | 10.65  | 10.65  | 10.65  |

#### IC501, BA6392FP

| PIN NO. | CD x 1    | CD x 2    | RW x 1    |
|---------|-----------|-----------|-----------|
| 1       | 4.45      | 4.45      | 4.45      |
| 2       | 5.03      | 5.03      | 5.03      |
| 3       | 4.48      | 4.48      | 4.48      |
| 4~5     | DATA LINE | DATA LINE | DATA LINE |
| 6       | 4.75      | 4.75      | 4.75      |
| 7       | 4.77      | 4.77      | 4.77      |
| 8       | 0         | 0         | 0         |
| 9~10    | DATA LINE | DATA LINE | DATA LINE |
| 11      | 4.73      | 4.73      | 4.73      |
| 12      | 4.71      | 4.71      | 4.71      |
| 13      | 4.76      | 4.76      | 4.76      |
| 14      | 0         | 0         | 0         |
| 15      | 4.59      | 4.59      | 4.59      |
| 16      | 4.78      | 4.78      | 4.78      |
| 17      | 4.69      | 4.69      | 4.69      |
| 18      | 4.76      | 4.76      | 4.76      |
| 19~20   | DATA LINE | DATA LINE | DATA LINE |
| 21~22   | 9.90      | 9.90      | 9.90      |
| 23      | 2.03      | 2.03      | 2.03      |
| 24      | 2.22      | 2.03      | 2.03      |
| 25      | 2.03      | 2.03      | 2.03      |
| 26      | 5.02      | 5.02      | 5.02      |

| PIN NO. | CD x 1 | CD x 2 | RW x 1 |
|---------|--------|--------|--------|
| 27      | 4.36   | 4.36   | 4.36   |
| 28      | 0      | 0      | 0      |

#### IC551, BA6247FP

| PIN NO. | CD x 1    | CD x 2    | RW x 1    |
|---------|-----------|-----------|-----------|
| 1       | 0.55      | 0.55      | 0.55      |
| 2~4     | 0         | 0         | 0         |
| 5~6     | DATA LINE | DATA LINE | DATA LINE |
| 7       | 0         | 0         | 0         |
| 8       | DATA LINE | DATA LINE | DATA LINE |
| 9       | 10.33     | 10.33     | 10.33     |
| 10~15   | 0         | 0         | 0         |
| 16      | 10.33     | 10.33     | 10.33     |
| 17      | 0         | 0         | 0         |
| 18      | 0.55      | 0.55      | 0.55      |
| 19~21   | 0         | 0         | 0         |
| 22      | 0.55      | 0.55      | 0.55      |
| 23~25   | 0         | 0         | 0         |

#### IC622, PQ20WZ1U

| PIN NO. | CD x 1 | CD x 2 | RW x 1 |
|---------|--------|--------|--------|
| 1       | 13.10  | 13.10  | 13.10  |
| 2       | 4.57   | 4.57   | 4.57   |
| 3       | 11.11  | 11.11  | 11.11  |
| 4       | 2.67   | 2.67   | 2.67   |
| 5       | 0      | 0      | 0      |

#### Q151, 2SB1197KQ

| PIN | CD x 1 | CD x 2 | RW x 1 |
|-----|--------|--------|--------|
| E   | 3.18   | 3.18   | 3.18   |
| C   | 2.18   | 2.18   | 2.18   |
| B   | 2.54   | 2.54   | 2.54   |

#### Q153, 2SA1037K(R)

| PIN | CD x 1 | CD x 2 | RW x 1 |
|-----|--------|--------|--------|
| E   | 2.80   | 2.80   | 2.80   |
| C   | 0      | 0      | 0      |
| B   | 2.19   | 2.19   | 2.19   |

#### Q201, UPA608T

| PIN | CD x 1 | CD x 2 | RW x 1 |
|-----|--------|--------|--------|
| E1  | 4.65   | 0      | 4.65   |
| E2  | 0      | 4.64   | 0      |
| C1  | 0      | 4.65   | 0      |
| C2  | 4.64   | 0      | 4.64   |
| B1  | 4.65   | 4.65   | 4.65   |
| B2  | 0      | 0      | 0      |

Q202, 2SC2712GR

| PIN | CD x 1 | CD x 2 | RW x 1 |
|-----|--------|--------|--------|
| E   | 2.15   | 2.15   | 2.15   |
| C   | 4.63   | 4.63   | 4.63   |
| B   | 2.83   | 2.83   | 2.83   |

Q621, 2SA1702

| PIN | CD x 1 | CD x 2 | RW x 1 |
|-----|--------|--------|--------|
| E   | 13.10  | 13.10  | 13.10  |
| C   | 13.05  | 13.05  | 13.05  |
| B   | 0      | 0      | 0      |

Q251, 2SC2712GR

| PIN | CD x 1 | CD x 2 | RW x 1 |
|-----|--------|--------|--------|
| E   | 0      | 0      | 0      |
| C   | 0      | 0      | 0      |
| B   | 0.64   | 0.64   | 0.64   |

Q622, DTC124EKA

| PIN | CD x 1 | CD x 2 | RW x 1 |
|-----|--------|--------|--------|
| E   | 0      | 0      | 0      |
| C   | 0.13   | 0.13   | 0.13   |
| B   | 4.57   | 4.57   | 4.57   |

Q252, DTA124EKA

| PIN | CD x 1 | CD x 2 | RW x 1 |
|-----|--------|--------|--------|
| E   | 4.65   | 4.65   | 4.65   |
| C   | 4.65   | 4.65   | 4.65   |
| B   | 0      | 0      | 0      |

Q623, 2SD2395E

| PIN | CD x 1 | CD x 2 | RW x 1 |
|-----|--------|--------|--------|
| E   | 4.62   | 4.62   | 4.62   |
| C   | 13.03  | 13.03  | 13.03  |
| B   | 4.07   | 4.07   | 4.07   |

Q253, 2SC2712GR

| PIN | CD x 1 | CD x 2 | RW x 1 |
|-----|--------|--------|--------|
| E   | 0      | 0      | 0      |
| C   | 0      | 0      | 0      |
| B   | 0.68   | 0.68   | 0.68   |

Q631, 2SD1623

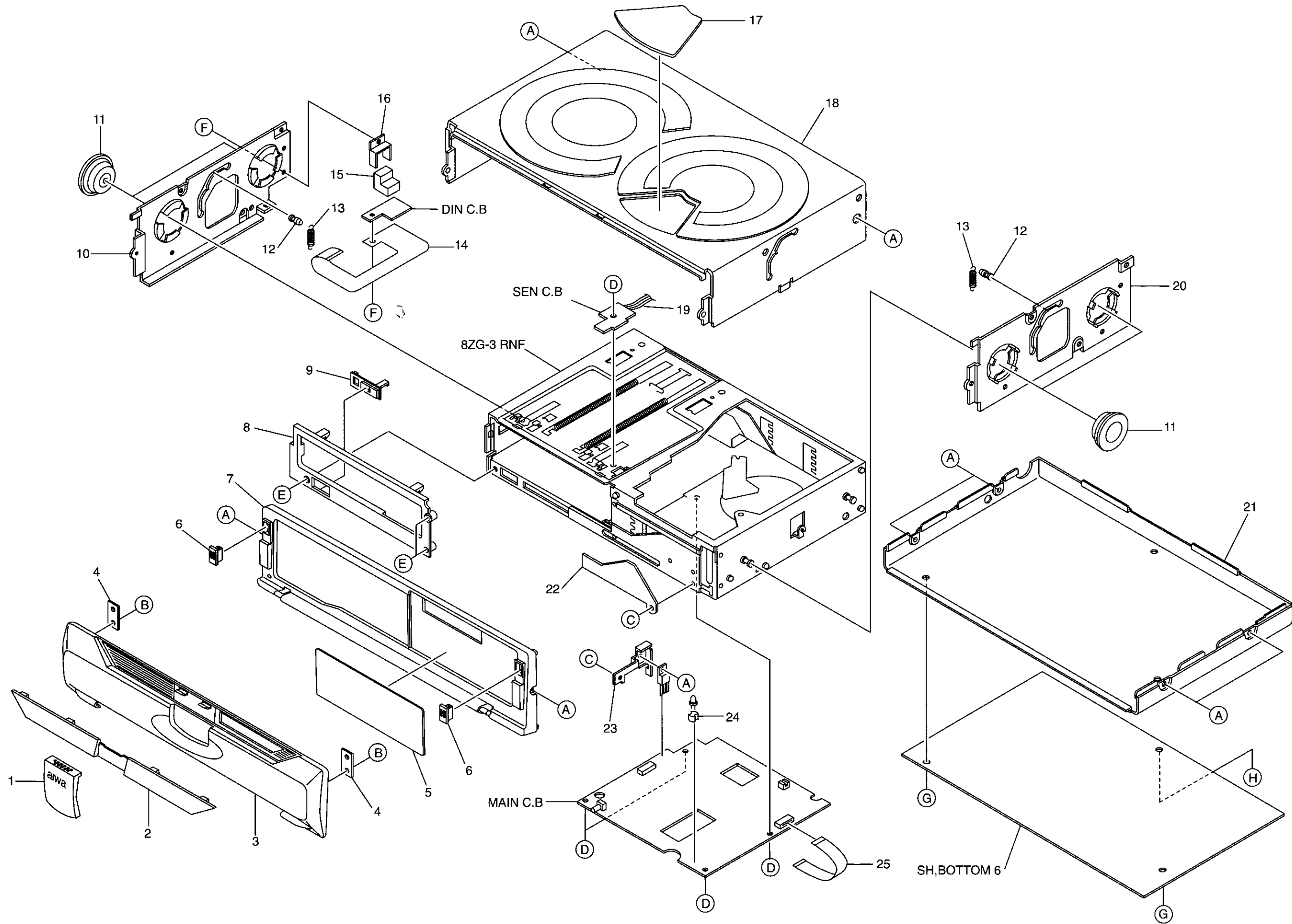
| PIN | CD x 1 | CD x 2 | RW x 1 |
|-----|--------|--------|--------|
| E   | 11.06  | 11.06  | 11.06  |
| C   | 11.10  | 11.10  | 11.10  |
| B   | 11.65  | 11.65  | 11.65  |

Q601, 2SD1622S-TD

| PIN | CD x 1 | CD x 2 | RW x 1 |
|-----|--------|--------|--------|
| E   | 4.65   | 4.65   | 4.65   |
| C   | 13.10  | 13.10  | 13.10  |
| B   | 5.23   | 5.23   | 5.23   |

PD201, PT4850F

| PIN | CD x 1 | CD x 2 | RW x 1 |
|-----|--------|--------|--------|
| E   | 0      | 0      | 0      |
| C   | 4.58   | 4.58   | 4.58   |
| B   | -      | -      | -      |



MECHANICAL PARTS LIST 1 / 1

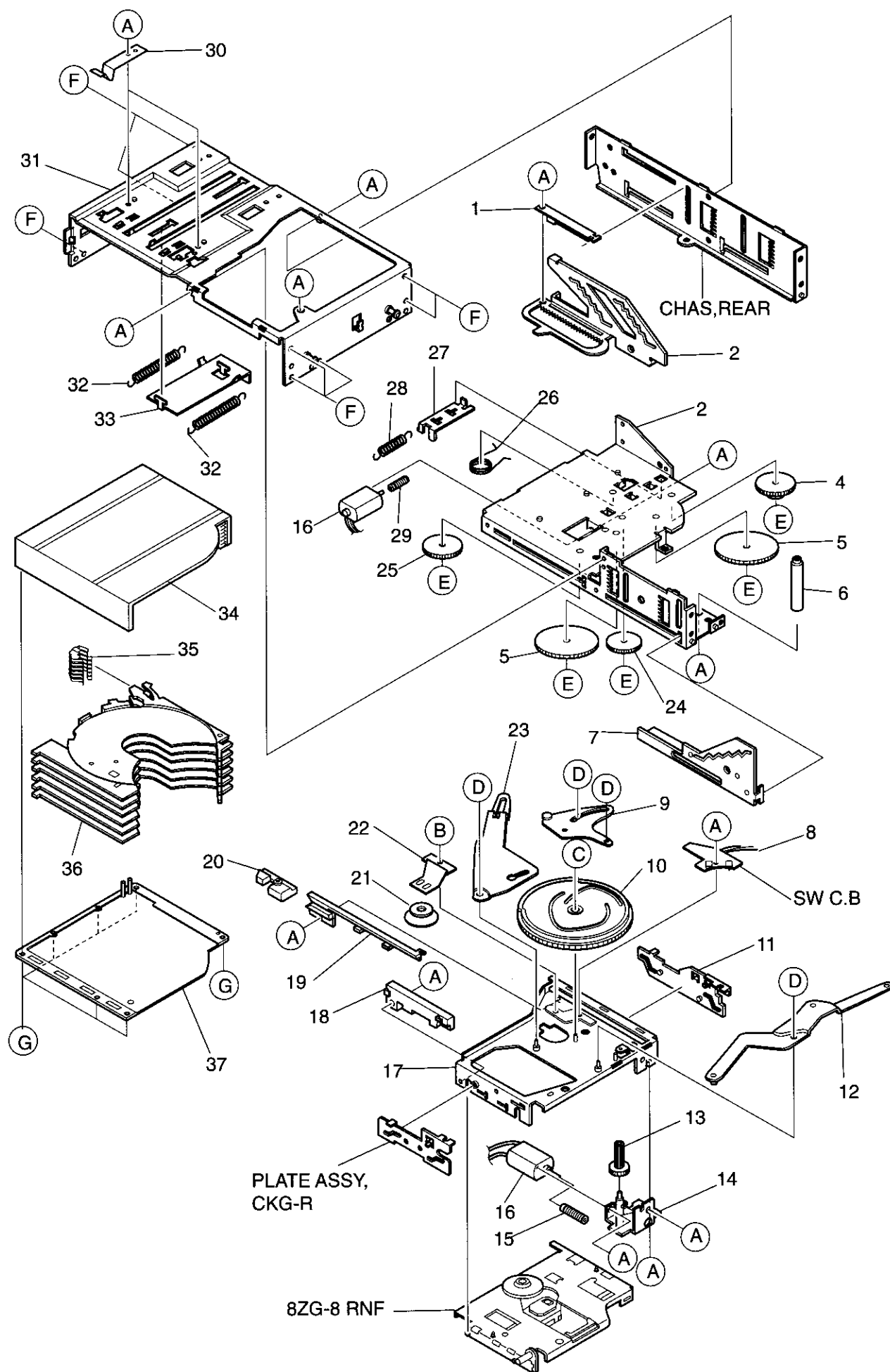
If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

| REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION                  |
|----------|----------------|-----------|------------------------------|
| 1        | 8Z-KM2-003-010 |           | PANEL,FRONT 6                |
| 2        | 8Z-KM2-004-010 |           | WINDOW,FRONT 6               |
| 3        | 8Z-KM4-003-010 |           | CABI,FRONT M65               |
| 4        | 8Z-KM1-207-010 |           | PLATE,MAG                    |
| 5        | 8Z-KM4-005-010 |           | WINDOW,DECK M65              |
| 6        | 8Z-KM1-220-010 |           | MAGNET,HLDR ASS'Y            |
| 7        | 8Z-KM4-004-010 |           | CABI,FRAME 6S                |
| 8        | 8Z-KM2-208-010 |           | COVER, DECK 6                |
| 9        | 8Z-KM1-006-110 |           | KEY,EJECT                    |
| 10       | 8Z-KM2-203-010 |           | HLDR,DECK L6                 |
| 11       | 88-ZG3-371-010 |           | DMPR,                        |
| 12       | 8Z-KM1-202-010 |           | SHAFT,FRAME                  |
| 13       | 88-ZG3-355-010 |           | SPR-E,DMPR                   |
| 14       | 8Z-KM4-606-010 |           | PWB,FLEX DIN (ZKM4)          |
| 15       | 8Z-KM3-638-010 |           | JACK,DIN 13 P TCS5125-014151 |
| 16       | 8Z-KM1-201-010 |           | HLDR,CD                      |
| 17       | 8Z-KM3-033-010 |           | WINDOW,CD S                  |
| 18       | 8Z-KM4-006-010 |           | CABI,TOP 6S                  |
| 19       | 8Z-KM4-608-010 |           | F-CABLE,2P (SENS KM4)        |
| 20       | 8Z-KM2-204-010 |           | HLDR,DECK R6                 |
| 21       | 8Z-KM4-013-010 |           | CABI,BOTTOM 6S               |
| 22       | 8Z-KM2-207-010 |           | COVER, PLATE 6               |
| 23       | 8Z-KM1-225-010 |           | HLDR,REG                     |
| 24       | 8Z-KM1-232-010 |           | HLDR,LED                     |
| A        | 87-B10-260-010 |           | VTT+2.6-6 W/O SLOT BLK       |
| B        | 8Z-KM1-223-010 |           | S-SCREW,2-5 (BLK)            |
| C        | 87-B10-255-010 |           | U+2-3 W/O CR                 |
| D        | 87-571-032-410 |           | VIT+2-3                      |
| E        | 87-B10-244-010 |           | V+2-5 W/O BLK                |
| F        | 87-B10-245-010 |           | U+2.6-4 W/O CR               |
| G        | 8Z-KM2-205-010 |           | S-SCREW,M3-5-10              |
| H        | 8Z-KM2-209-010 |           | S-SCREW,M3-7-7               |

COLOR NAME TABLE

| Basic color symbol | Color             | Basic color symbol | Color              | Basic color symbol | Color              |
|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| B                  | Black             | C                  | Cream              | D                  | Orange             |
| G                  | Green             | H                  | Gray               | L                  | Blue               |
| LT                 | Transparent Blue  | N                  | Gold               | P                  | Pink               |
| R                  | Red               | S                  | Silver             | ST                 | Titan Silver       |
| T                  | Brown             | V                  | Violet             | W                  | White              |
| WT                 | Transparent White | Y                  | Yellow             | YT                 | Transparent Yellow |
| LM                 | Metallic Blue     | LL                 | Light Blue         | GT                 | Transparent Green  |
| LD                 | Dark Blue         | DT                 | Transparent Orange | GM                 | Metallic Green     |
| YM                 | Metallic Yellow   |                    |                    |                    |                    |

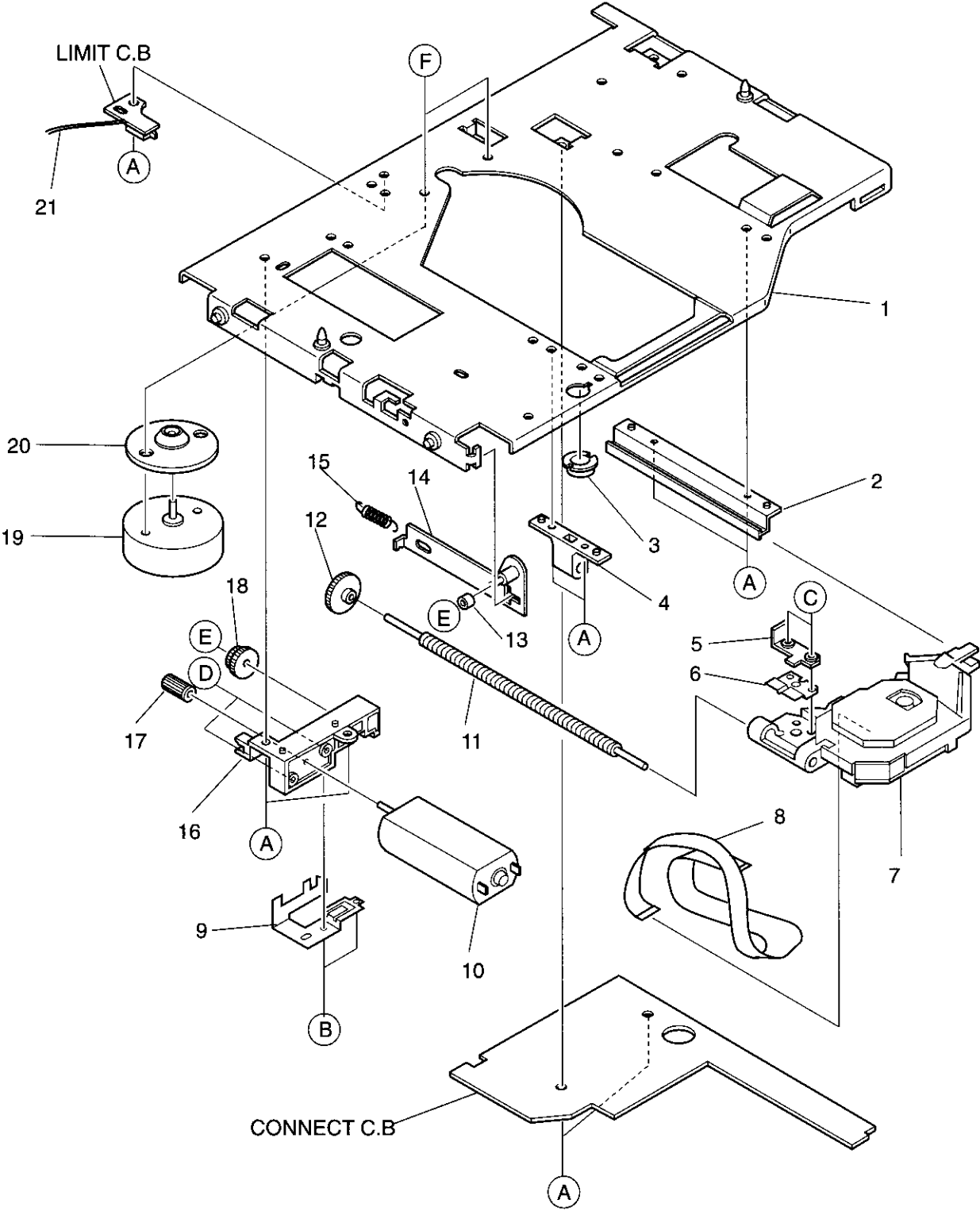
# CD MECHANISM EXPLODED VIEW 1 / 2 (8ZG-3 RNF)



# CD MECHANISM PARTS LIST 1 / 2 (8ZG - 3 RNF)

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

| REF. NO. | PART NO.       | KANRI<br>NO. | DESCRIPTION          |
|----------|----------------|--------------|----------------------|
| 1        | 88-ZG3-306-210 |              | PLATE, SLIT          |
| 2        | 88-ZG3-273-110 |              | PLATE, ELV-R         |
| 3        | 88-ZG3-201-110 |              | CHAS ASSY, MAIN      |
| 4        | 88-ZG3-305-010 |              | GEAR, ELV-R          |
| 5        | 88-ZG3-303-010 |              | GEAR, ELV            |
| 6        | 88-ZG3-331-010 |              | SHAFT, GATA          |
| 7        | 88-ZG3-272-110 |              | PLATE, ELV-F         |
| 8        | 8Z-KM3-625-010 |              | F-CABLE, 4P (SWITCH) |
| 9        | 88-ZG3-226-010 |              | LEVER ASSY, SLD-1    |
| 10       | 88-ZG3-313-010 |              | CAM, SLD             |
| 11       | 88-ZG3-246-010 |              | PLATE ASSY, CKG-R    |
| 12       | 88-ZG3-231-010 |              | LEVER ASSY, CKG      |
| 13       | 88-ZG3-312-110 |              | WORM-WHL, SLD        |
| 14       | 88-ZG3-221-010 |              | HLDR ASSY, MOT ELV   |
| 15       | 88-ZG3-311-010 |              | GEAR, WORM SLD       |
| 16       | 87-A91-054-010 |              | MOT, FF-050SK        |
| 17       | 88-ZG3-211-110 |              | CHAS ASSY, ELV       |
| 18       | 88-ZG3-314-010 |              | GUIDE, F             |
| 19       | 88-ZG3-315-210 |              | GUIDE, R             |
| 20       | 88-ZG3-236-010 |              | ARM ASSY,            |
| 21       | 88-ZG3-266-110 |              | CLAMP ASSY,          |
| 22       | 88-ZG3-276-310 |              | SPR-P, CLAMP         |
| 23       | 88-ZG3-275-010 |              | LEVER, SLD-2         |
| 24       | 88-ZG3-302-010 |              | WORM-WHL, ELV        |
| 25       | 88-ZG3-304-010 |              | GEAR, ELV-F          |
| 26       | 88-ZG3-351-110 |              | SPR-T, LEVER LOCK    |
| 27       | 88-ZG3-274-010 |              | PLATE, LOCK SW       |
| 28       | 88-ZG3-352-010 |              | SPR-E, LOCK SW       |
| 29       | 88-ZG3-301-010 |              | GEAR, WORM ELV       |
| 30       | 88-ZG3-277-010 |              | SPR-P, MAGAZINE      |
| 31       | 88-ZG3-251-010 |              | CHAS ASSY, TOP       |
| 32       | 88-ZG3-353-010 |              | SPR-E, EJECT         |
| 33       | 88-ZG3-278-010 |              | PLATE, EJECT         |
| 34       | 88-ZG3-001-210 |              | MAGAZINE, T          |
| 35       | 88-ZG3-279-210 |              | SPR-P, TRAY          |
| 36       | 88-ZG3-003-210 |              | TRAY,                |
| 37       | 88-ZG3-002-210 |              | MAGAZINE, B          |
| A        | 87-262-545-310 |              | V+2-2.5              |
| B        | 87-261-031-410 |              | V+2-2                |
| C        | 87-B10-258-010 |              | W-P, 2.15-3.5-0.5    |
| D        | 86-544-437-010 |              | PW, 1.5-3.5-0.5      |
| E        | 87-067-310-010 |              | PW, 2.1-4-0.15 C     |
| F        | 87-571-032-410 |              | VIT+2-3              |
| G        | 87-067-869-010 |              | V+1.7-8 HL BLK       |



CD MECHANISM PARTS LIST 2 / 2 (8ZG-8 RNF)

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

| REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION             |
|----------|----------------|-----------|-------------------------|
| 1        | 88-ZG8-401-210 |           | CHAS ASSY,MECHA         |
| 2        | 88-ZG8-425-010 |           | GUIDE,PICKUP            |
| 3        | 88-ZG3-317-010 |           | CLR,ELV                 |
| 4        | 88-ZG8-426-010 |           | HLDR,LEAD               |
| 5        | 88-ZG8-428-110 |           | LEVER,PUSH SW           |
| 6        | 88-ZG8-412-010 |           | SPR-P,PICKUP            |
| 7        | 87-A91-630-010 |           | PICKUP,KSS-710A         |
| 8        | 8Z-KM4-631-010 |           | PWB,FLEX PICK UP (AK)   |
| 9        | 88-ZG8-411-110 |           | SPR-P,LEAD              |
| 10       | 87-A91-054-010 |           | MOT,FF-050SK            |
| 11       | 88-ZG8-431-010 |           | SHAFT,LEAD              |
| 12       | 88-ZG8-424-010 |           | GEAR,MECHA 3            |
| 13       | 88-ZG3-332-010 |           | CLR,LEVER ATK           |
| 14       | 88-ZG3-256-110 |           | LEVER ASSY,ATK-F        |
| 15       | 88-ZG3-354-010 |           | SPR-E,LEVER ATK         |
| 16       | 88-ZG8-427-010 |           | HLDR,MOT MECHA          |
| 17       | 88-ZG8-422-010 |           | GEAR,MECHA 1            |
| 18       | 88-ZG8-423-010 |           | GEAR,MECHA 2            |
| 19       | 87-A90-926-010 |           | MOT,RF-3L0PA            |
| 20       | 88-ZG8-421-010 |           | TURN TABLE              |
| 21       | 8Z-KM3-624-010 |           | F-CABLE,2P (LIMIT)      |
| A        | 87-571-032-410 |           | VIT+2-3                 |
| B        | 87-352-529-310 |           | VT2+1.7-4.0 BLK         |
| C        | 88-ZG8-432-010 |           | S-SCREW,V+1.7-5 IB LOCK |
| D        | 87-262-547-310 |           | V+2-3 BLK               |
| E        | 87-078-018-010 |           | PW 1.55-3.6-0.25        |
| F        | 87-262-523-310 |           | V+1.7-2 3 BLK           |

ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

| REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION          |
|----------|----------------|-----------|----------------------|
| 1        | 8Z-KM4-907-010 |           | IB,YU(3L) M65-I      |
| 2        | 87-B10-208-010 |           | VWWS+4-12 BLK        |
| 3        | 8Z-KM1-210-110 |           | PLATE,UNIT ASSY      |
| 4        | 8Z-KM1-218-010 |           | NUT,5 HEX-FLANGE     |
| 5        | 8Z-KM2-202-010 |           | HLDR,UNIT 6A         |
| 6        | 8Z-KM2-206-010 |           | HLDR,UNIT 6B         |
| 7        | 8Z-KM4-651-010 |           | CABLE ASSY,13PIN-DIN |



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