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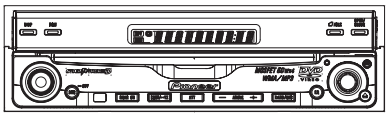
Service Manual



AVH-P6600DVD/UC

ORDER NO.
CRT3193

AV RECEIVER/DVD PLAYER WITH 6.5 INCH WIDE DISPLAY

AVH-P6600DVD/UC
AVH-P6600DVD/EW
AVH-P6650DVD/RC
AVH-P6650DVD/RD

This service manual should be used together with the following manual(s):

Model No.	Order No.	Mech.Module	Remarks
CX-3078	CRT3257	MS-3V1	DVD Mech. Module:Circuit Description, Mech. Description, Disassembly

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For details, refer to "Important symbols for good services".

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ⓒ**PIONEER CORPORATION 2004**
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SAFETY INFORMATION

UC

CAUTION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer.
Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty.
If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.
Health & Safety Code Section 25249.6 - Proposition 65

This product contains mercury. Disposal of this material may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or the Electronics Industries Alliance: www.eiae.org.

EW

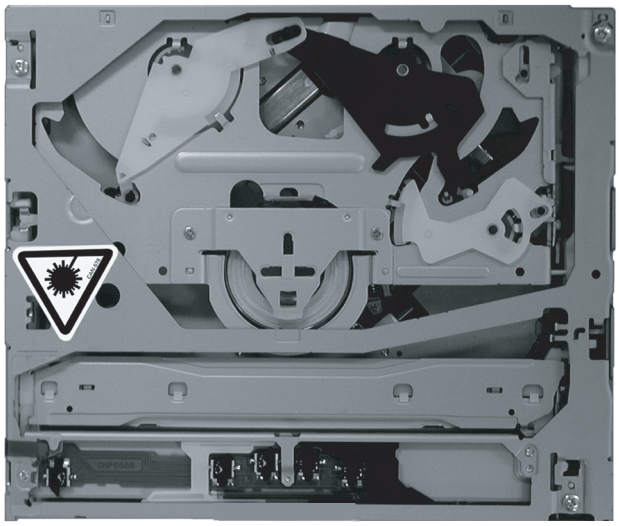
1. Safety Precautions for those who Service this Unit.

- **Follow the adjustment steps (see pages 143 through 156)in the service manual when servicing this unit. When checking or adjusting the emitting power of the laser diode exercise caution in order to get safe, reliable results.**

Caution:

1. **During repair or tests, minimum distance of 13cm from the focus lens must be kept.**
2. **During repair or tests, do not view laser beam for 10 seconds or longer.**

2. The triangular label is attached to the mechanism unit frame.



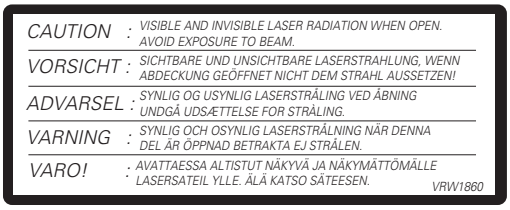
CAUTION

This product contains a laser diode of higher class than 1. To ensure continued safety, do not remove any covers or attempt to gain access to the inside of the product.
Refer all servicing to qualified personnel.

The following caution label appears on your unit.

Location: on the bottom of the unit

On the top of the player.



WARNING!

The AEL (accessible emission level)of the laser power output is less than CLASS 1 but the laser component is capable of emitting radiation exceeding the limit for CLASS 1.
A specially instructed person should do servicing operation of the apparatus.

Laser diode characteristics

Wave length:
DVD:640~660nm
CD:770~810nm
DVD : 2.48mw(Emitting period :9sec.)
CD : 705μw(Emitting period : unlimited)

Additionla Laser Caution

Transistors Q1101 and Q1102 in PCB drive the laser diodes for DVD and CD respectively. When Q1101 or Q1102 is shorted between their terminals, the laser diodes for DVD or CD will radiate beam. If the top cover is removed with no disc loaded while such short-circuit is continued, the naked eyes may be exposed to the laser beam.

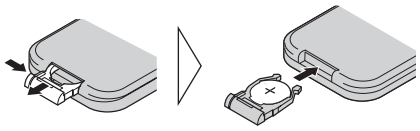
CAUTION

Danger of explosion if battery is incorrectly replaced.
Replaced only with the same or equivalent type recommended by the manufacture.
Discord used batteries according to the manufacture's instructions.

RC,RD

Battery

Slide the tray out on the back of the remote controller and insert the battery with the (+) and (–) poles pointing in the proper direction.



Note :

- Use a CR2025 (3V) lithium battery only. Never use other types of battery with this unit.

CAUTION

Danger of explosion if battery is incorrectly replaced.
Replaced only with the same or equivalent type.

NOTE:

● **Inverter for LCD back light becomes a high voltage.**

● **Method of FAN Operation Confirmation**

1. In the state of FAN being attached to the mother unit, the voltage of about 6 to 8 V is impressed between TEST point (FAN1) on surface A of the base plate and adequate GND to confirm its operation by visual observation.

2. After product assembly, a waveform observation is conducted using oscilloscope while playing DVD on TEST point (TEST1) in front of chassis hole on lower face and adequate GND to confirm the existence of operation noise (pulse) shape.

[Important symbols for good services]
In this manual, the symbols shown-below indicate that adjustments, settings or cleaning should be made securely.
When you find the procedures bearing any of the symbols, be sure to fulfill them:

1. Product safety

You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.

2. Adjustments

To keep the original performances of the product, optimum adjustments or specification confirmation is indispensable. In accordance with the procedures or instructions described in this manual, adjustments should be performed.

3. Cleaning

For optical pickups, tape-deck heads, lenses and mirrors used in projection monitors, and other parts requiring cleaning, proper cleaning should be performed to restore their performances.

4. Shipping mode and shipping screws

To protect the product from damages or failures that may be caused during transit, the shipping mode should be set or the shipping screws should be installed before shipping out in accordance with this manual, if necessary.

5. Lubricants, glues, and replacement parts

Appropriately applying grease or glue can maintain the product performances. But improper lubrication or applying glue may lead to failures or troubles in the product. By following the instructions in this manual, be sure to apply the prescribed grease or glue to proper portions by the appropriate amount.For replacement parts or tools, the prescribed ones should be used.

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1. SPECIFICATIONS

● AVH-P6600DVD/UC

General

Power source ..... 14.4 V DC (10.8 – 15.1 V allowable)
Grounding system ..... Negative type
Head unit:
Max. current consumption
..... 10.0 A
Backup current ..... 5 mA or less
Dimensions (W × H × D):
DIN
Chassis ..... 178 × 50 × 160 mm (7 × 2 × 6-1/4 in.)
Nose ..... 188 × 58 × 36 mm (7-3/8 × 2-1/4 × 1-3/8 in.)
D
Chassis ..... 178 × 50 × 165 mm (7 × 2 × 6-1/2 in.)
Nose ..... 170 × 46 × 31 mm (6-3/4 × 1-3/4 × 1-1/4 in.)
Weight ..... 2.3 kg (4.8 lbs)
Hideaway unit:
Max. current consumption
..... 1.0 A
Dimensions (W × H × D)
..... 150 × 28 × 100 mm (5-7/8 × 1-1/8 × 3-7/8 in.)
Weight ..... 0.4 kg (0.7 lbs)

Display

Screen size/aspect ratio ..... 6.5 inch wide/16:9 (effective display area: 144 × 77 mm)
Pixels ..... 336,960 (1,440 × 234)
Type ..... TFT active matrix, transmissive type
Color system ..... NTSC compatible
Operating temperature range
..... +14 – +122 °F
Storage temperature range
..... -4 – +176 °F
Angle adjustment ..... 50 – 110° (initial settings: 110°)

Audio

Continuous power output is 22 W per channel minimum into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD.
Maximum power output ..... 50 W × 4
50 W × 2/4 Ω + 70 W × 1/2 Ω (for subwoofer)
Load impedance ..... 4 Ω (4 – 8 Ω [2 Ω for 1 ch] allowable)
Preout max output level/output impedance
..... 4.0 V/100 Ω
Equalizer (3-Band Parametric Equalizer):
Low
Frequency ..... 40/80/100/160 Hz
Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain ..... ±12dB
Mid
Frequency ..... 200/500/1k/2k Hz
Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain ..... ±12dB
High
Frequency ..... 3.15k/8k/10k/12.5k Hz
Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain ..... ±12dB
Loudness contour
Low ..... +3.5 dB (100 Hz), +3 dB (10 kHz)
Mid ..... +10 dB (100 Hz), +6.5 dB (10 kHz)
High ..... +11 dB (100 Hz), +11 dB (10 kHz) (volume: –30 dB)
Tone controls:
Bass
Frequency ..... 40/63/100/160 Hz
Gain ..... ±12dB
Treble
Frequency ..... 2.5k/4k/6.3k/10k Hz
Gain ..... ±12dB
HPF:
Frequency ..... 50/80/125 Hz
Slope ..... –12 dB/oct
Subwoofer:
Frequency ..... 50/80/125 Hz
Slope ..... –18 dB/oct
Gain ..... ±12dB
Phase ..... Normal/Reverse

DVD Player

System ..... DVD video, Video CD, Compact disc audio system
Usable discs ..... DVD video, Video CD, Compact disc
Region number 1
Signal format:
Sampling frequency ..... 44.1/48/96 kHz

Number of quantization bits ..... 16/20/24; linear
Frequency response ..... 5 – 44,000 Hz (with DVD, at sampling frequency 96 kHz)
Signal-to-noise ratio ..... 97 dB (1 kHz) (IHF-A network)
(CD: 96 dB (1 kHz) (IHF-A network))
Dynamic range ..... 95 dB (1 kHz)
(CD: 94 dB (1 kHz))
Distortion ..... 0.008 % (1 kHz)
Output level:
Video ..... 1.0 Vp-p/75 Ω (±0.2 V)
Audio ..... 1.0 V (1 kHz, 0 dB)
Number of channels ..... 2 (stereo)
MP3 decoding format ..... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7 & 8

FM tuner

Frequency range ..... 87.9 – 107.9 MHz
Usable sensitivity ..... 8 dBf (0.7 μV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity ..... 10 dBf (0.9 μV/75 Ω, mono)
Signal-to-noise ratio ..... 75 dB (IHF-A network)
Distortion ..... 0.3 % (at 65 dBf, 1 kHz, stereo)
0.1 % (at 65 dBf, 1 kHz, mono)
Frequency response ..... 30 – 15,000 Hz (±3 dB)
Stereo separation ..... 45 dB (at 65 dBf, 1 kHz)
Selectivity ..... 80 dB (±200 kHz)
Three-signal intermodulation (desired signal level) ..... 30 dBf (two undesired signal level: 100 dBf)

AM tuner

Frequency range ..... 530 – 1,710 kHz (10 kHz)
Usable sensitivity ..... 18 μV (S/N: 20 dB)
Signal-to-noise ratio ..... 65 dB (IHF-A network)

Note

Specifications and the design are subject to possible modifications without notice due to improvements. ▣

● AVH-P6600DVD/EW

General

Rated power source ..... 14.4 V DC
(allowable voltage range: 12.0 – 14.4 V DC)
Grounding system ..... Negative type
Head unit:
Max. current consumption ..... 10.0 A
Backup current ..... 5mA or less
Dimensions (W × H × D):
DIN
Chassis ..... 178 × 50 × 160 mm
Nose ..... 188 × 58 × 36 mm
D
Chassis ..... 178 × 50 × 165 mm
Nose ..... 170 × 46 × 31 mm
Weight ..... 2.3 kg
Hideaway unit:
Max. current consumption ..... 1.0 A
Dimensions (W × H × D) ..... 150 × 28 × 100 mm
Weight ..... 0.4 kg

Display

Screen size/aspect ratio ..... 6.5 inch wide/16:9
(effective display area: 144 × 77 mm)
Pixels ..... 336,960 (1,440 × 234)
Type ..... TFT active matrix, transmissive type
Color system ..... NTSC/PAL compatible
Operating temperature range ..... –10 – +50 °C
Storage temperature range ..... –20 – +80 °C
Angle adjustment ..... 50 – 110°
(initial settings: 110°)

Audio

Maximum power output ..... 50 W × 4
50 W × 2/4 Ω + 70 W × 1/2 Ω (for subwoofer)
Continuous power output ... 27 W × 4 (DIN 45324, +B=14.4 V)
Load impedance ..... 4 Ω (4 – 8 Ω [2 Ω for 1 ch] allowable)
Preout max output level/output impedance ..... 4.0 V/100 Ω
Equalizer (3-Band Parametric Equalizer):
Low
Frequency ..... 40/80/100/160 Hz
Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain ..... ±12dB
Mid
Frequency ..... 200/500/1k/2k Hz
Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain ..... ±12dB
High
Frequency ..... 3.15k/8k/10k/12.5k Hz
Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain ..... ±12dB
Loudness contour
Low ..... +3.5 dB (100 Hz), +3 dB (10 kHz)
Mid ..... +10 dB (100 Hz), +6.5 dB (10 kHz)
High ..... +11 dB (100 Hz), +11 dB (10 kHz)
(volume: –30 dB)
Tone controls:
Bass
Frequency ..... 40/63/100/160 Hz
Gain ..... ±12dB
Treble
Frequency ..... 2.5k/4k/6.3k/10k Hz
Gain ..... ±12dB
HPF:
Frequency ..... 50/80/125 Hz
Slope ..... –12 dB/oct
Subwoofer:
Frequency ..... 50/80/125 Hz
Slope ..... –18 dB/oct
Gain ..... ±12dB
Phase ..... Normal/Reverse

DVD Player

System ..... DVD video, Video CD, Compact disc audio system
Usable discs ..... DVD video, Video CD, Compact disc
Region number 2
Signal format:
Sampling frequency ..... 44.1/48/96 kHz
Number of quantization bits ..... 16/20/24; linear
Frequency response ..... 5 – 44,000 Hz (with DVD, at sampling frequency 96 kHz)

Signal-to-noise ratio	97 dB (1 kHz) (IEC-A network) (CD: 96 dB (1 kHz) (IEC-A network))
Dynamic range	95 dB (1 kHz) (CD: 94 dB (1 kHz))
Distortion	0.008 % (1 kHz)
Output level:	
Video	1.0 Vp-p/75 Ω (±0.2 V)
Audio	1.0 V (1 kHz, 0 dB)
Number of channels	2 (stereo)
MP3 decoding format	MPEG-1 & 2 Audio Layer 3
WMA decoding format	Ver. 7 & 8

FM tuner

Frequency range	87.5 – 108.0 MHz
Usable sensitivity	8 dBf (0.7 μV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity	10 dBf (0.9 μV/75 Ω, mono)
Signal-to-noise ratio	75 dB (IEC-A network)
Distortion	0.3 % (at 65 dBf, 1 kHz, stereo) 0.1 % (at 65 dBf, 1 kHz, mono)
Frequency response	30 – 15,000 Hz (±3 dB)
Stereo separation	45 dB (at 65 dBf, 1 kHz)
Selectivity	80 dB (±200 kHz)

MW tuner

Frequency range	531 – 1,602 kHz (9 kHz)
Usable sensitivity	18 μV (S/N: 20 dB)
Signal-to-noise ratio	65 dB (IEC-A network)

LW tuner

Frequency range	153 – 281 kHz
Usable sensitivity	30 μV (S/N: 20 dB)
Signal-to-noise ratio	65 dB (IEC-A network)

Note

Specifications and the design are subject to possible modifications without notice due to improvements. ▣

● AVH-P6650DVD/RC,RD

General

Power source ..... 14.4 V DC (10.8 – 15.1 V allowable)
Grounding system ..... Negative type
Head unit:
Max. current consumption ..... 10.0 A
Backup current ..... 5 mA or less
Dimensions (W × H × D):
DIN
Chassis ..... 178 × 50 × 160 mm
Nose ..... 188 × 58 × 36 mm
D
Chassis ..... 178 × 50 × 165 mm
Nose ..... 170 × 46 × 31 mm
Weight ..... 2.3 kg
Hideaway unit:
Max. current consumption ..... 1.0 A
Dimensions (W × H × D) ..... 150 × 28 × 100 mm
Weight ..... 0.4 kg

Display

Screen size/aspect ratio ..... 6.5 inch wide/16:9 (effective display area: 144 × 77 mm)
Pixels ..... 336,960 (1,440 × 234)
Type ..... TFT active matrix, transmissive type
Color system ..... NTSC/PAL compatible
Operating temperature range ..... –10 – +50 °C
Storage temperature range ..... –20 – +80 °C
Angle adjustment ..... 50 – 110° (initial settings: 110°)

Audio

Continuous power output is 22 W per channel minimum into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD.
Maximum power output ..... 50 W × 4
50 W × 2/4 Ω + 70 W × 1/2 Ω (for subwoofer)
Load impedance ..... 4 Ω (4 – 8 Ω [2 Ω for 1 ch] allowable)
Preout max output level/output impedance ..... 4.0 V/100 Ω
Equalizer (3-Band Parametric Equalizer):
Low
Frequency ..... 40/80/100/160 Hz
Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain ..... ±12dB
Mid
Frequency ..... 200/500/1k/2k Hz
Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain ..... ±12dB
High
Frequency ..... 3.15k/8k/10k/12.5k Hz
Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain ..... ±12dB
Loudness contour
Low ..... +3.5 dB (100 Hz), +3 dB (10 kHz)
Mid ..... +10 dB (100 Hz), +6.5 dB (10 kHz)
High ..... +11 dB (100 Hz), +11 dB (10 kHz) (volume: –30 dB)
Tone controls:
Bass
Frequency ..... 40/63/100/160 Hz
Gain ..... ±12dB
Treble
Frequency ..... 2.5k/4k/6.3k/10k Hz
Gain ..... ±12dB
HPF:
Frequency ..... 50/80/125 Hz
Slope ..... –12 dB/oct
Subwoofer:
Frequency ..... 50/80/125 Hz
Slope ..... –18 dB/oct
Gain ..... ±12dB
Phase ..... Normal/Reverse

DVD Player

System ..... DVD video, Video CD, Compact disc audio system
Usable discs ..... DVD video, Video CD, Compact disc
Region number:
for Southeast Asian models 3
for South American and Oceanian models 4
Signal format:
Sampling frequency ..... 44.1/48/96 kHz

Number of quantization bits ..... 16/20/24; linear
Frequency response ..... 5 – 44,000 Hz (with DVD, at sampling frequency 96 kHz)
Signal-to-noise ratio ..... 97 dB (1 kHz) (IEC-A network)
(CD: 96 dB (1 kHz) (IEC-A network))
Dynamic range ..... 95 dB (1 kHz)
(CD: 94 dB (1 kHz))
Distortion ..... 0.008 % (1 kHz)
Output level:
Video ..... 1.0 Vp-p/75 Ω (±0.2 V)
Audio ..... 1.0 V (1 kHz, 0 dB)
Number of channels ..... 2 (stereo)
MP3 decoding format ..... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7 & 8

FM tuner

Frequency range ..... 87.5 – 108.0 MHz
Usable sensitivity ..... 8 dBf (0.7 μV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity ..... 10 dBf (0.9 μV/75 Ω, mono)
Signal-to-noise ratio ..... 75 dB (IEC-A network)
Distortion ..... 0.3 % (at 65 dBf, 1 kHz, stereo)
0.1 % (at 65 dBf, 1 kHz, mono)
Frequency response ..... 30 – 15,000 Hz (±3 dB)
Stereo separation ..... 45 dB (at 65 dBf, 1 kHz)

AM tuner

Frequency range ..... 531 – 1,602 kHz (9 kHz)
530 – 1,640 kHz (10 kHz)
Usable sensitivity ..... 18 μV (S/N: 20 dB)
Signal-to-noise ratio ..... 65 dB (IEC-A network)

Infrared remote control

Wavelength ..... 945 nm
Output ..... typ; 10 mw/sr per Infrared LED

Note

Specifications and the design are subject to possible modifications without notice due to improvements.

A

B

C

D

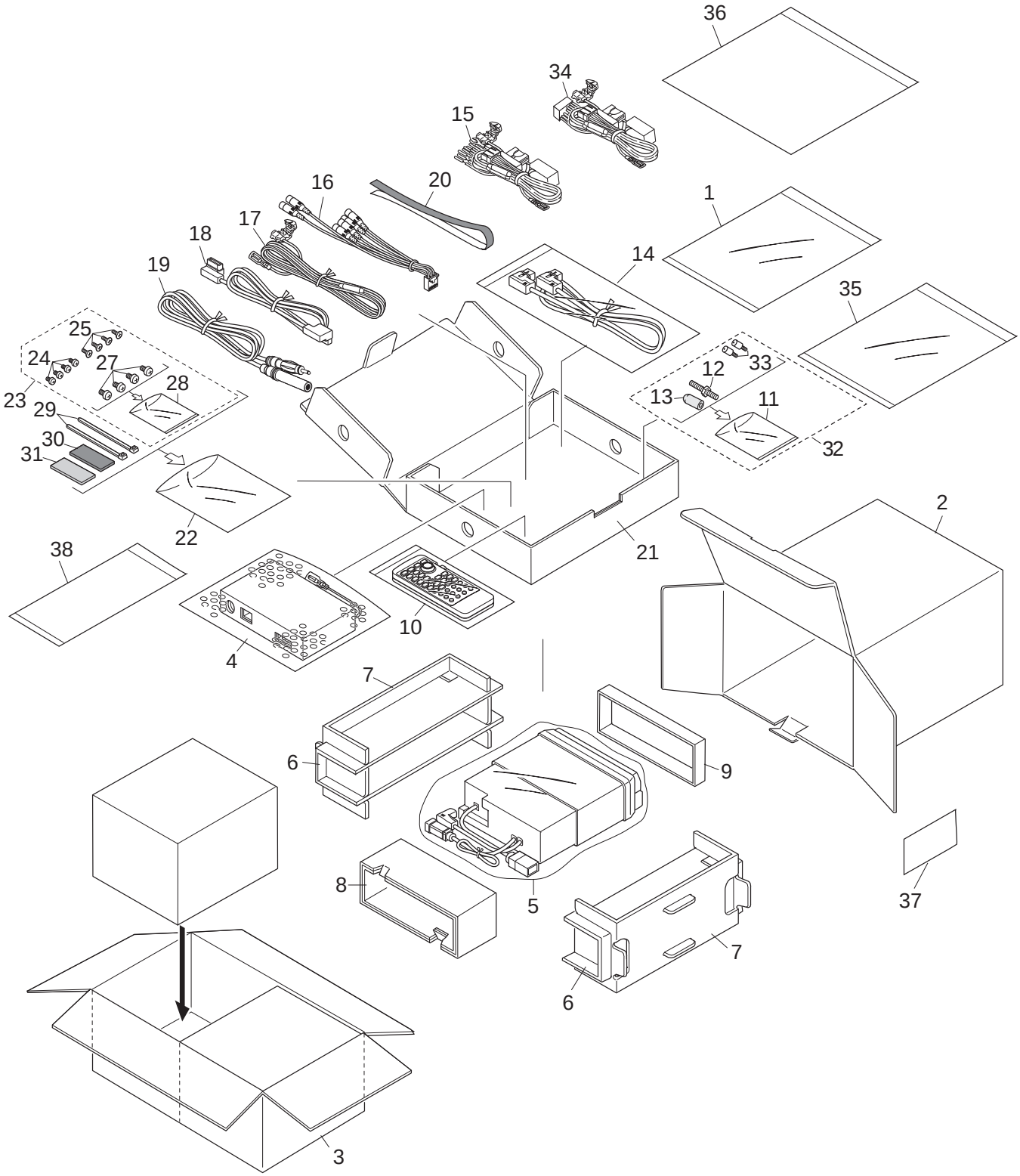
E

F

2. EXPLODED VIEWS AND PARTS LIST

*NOTES : • Parts marked by " * " are generally unavailable because they are not in our Master Spare Parts List.*
• Screw adjacent to ▽ mark on the product are used for disassembly.
• For the applying amount of lobricants or glue, follow the instructions in this manual.
(In the case of no amount instructions,apply as you think it appropriate.)

2.1 PACKING



PACKING SECTION PARTS LIST

Mark	NO	Description	P6600DVD/UC	P6600DVD/EW	P6650DVD/RC	P6650DVD/RD
	1-1	Polyethylene Bag	CEG1116	CEG1116	CEG1116	CEG1116
	1-2	Owner's Manual	CRB1927	CRB1921	CRB1929	CRB1929
	1-3	Owner's Manual	CRB1928	CRB1922	CRB1930	CRB1931
	1-4	Owner's Manual	Not used	Not used	Not used	CRB1932
	1-5	Installation Manual	CRD3858	CRD3897	CRD3859	CRD3860
*	1-6	Card	ARY1048	Not used	Not used	Not used
	1-7	Caution Card	CRP1310	Not used	CRP1310	CRP1310
	2	Carton	CHG5221	CHG5220	CHG5222	CHG5222
	3	Contain Box	CHL5221	CHL5220	CHL5222	CHL5223
	4	Air Cushioned Bag	CEG1089	CEG1089	CEG1089	CEG1089
	5	Polyethylene Bag	CEG1185	CEG1088	CEG1088	CEG1088
	6	Protector	CHP2707	CHP2707	CHP2707	CHP2707
	7	Protector	CHP2706	CHP2706	CHP2706	CHP2706
	8	Protector	CHP2708	CHP2708	CHP2708	CHP2708
	9	Protector	CHP2387	CHP2387	CHP2387	CHP2387
	10	Remote Control Unit	CXC3074	CXC3075	CXC3075	CXC3075
*	11	Polyethylene Bag	E36-615	E36-615	E36-615	E36-615
	12	Screw	CBA1650	CBA1650	CBA1650	CBA1650
	13	Bush	CNV1917	CNV1917	CNV1917	CNV1917
	14	Cord Assy	CDE7445	CDE7445	CDE7445	CDE7445
	15	Cord Assy	CDE7609	Not used	CDE7609	CDE7609
	16	Cord Assy	CDE7194	CDE7194	CDE7194	CDE7194
	17	Cord Assy	CDE7321	CDE7321	CDE7321	CDE7321
	18	Cord Assy	CDE7187	CDE7187	CDE7187	CDE7187
	19	Antenna Cable	CDH1281	CDH1281	CDH1281	CDH1281
	20	Sheet	CNM8603	CNM8603	CNM8603	CNM8603
	21	Sub Craton	CHG5080	CHG5080	CHG5080	CHG5080
*	22	Polyethylene Bag	CEG-158	CEG-158	CEG-158	CEG-158
	23	Screw Assy	CEA3686	CEA3686	CEA3686	CEA3686
	24	Screw(M4x3)	CBA1468	CBA1468	CBA1468	CBA1468
	25	Screw	CMZ50P060FTC	CMZ50P060FTC	CMZ50P060FTC	CMZ50P060FTC
	26	•••••				
	27	Screw	BMZ50P060FTC	BMZ50P060FTC	BMZ50P060FTC	BMZ50P060FTC
*	28	Polyethylene Sheet	CNM4338	CNM4338	CNM4338	CNM4338
*	29	Lock Tie	Not used	CNV-754	CNV-754	CNV-754
*	30	Fastener	CNM6544	CNM6544	CNM6544	CNM6544
*	31	Fastener	CNM6545	CNM6545	CNM6545	CNM6545
	32	Accessory Assy	CEA3685	CEA3685	CEA3743	CEA3743
	33	Fixing Screw	JGZ20P070FTC	JGZ20P070FTC	Not used	Not used
	34	Cord Assy	Not used	CDE7608	Not used	Not used
	35-1	Polyethylene Bag	Not used	CEG1116	Not used	Not used
	35-2	Owner's Manual	Not used	CRB1923	Not used	Not used
	35-3	Owner's Manual	Not used	CRB1924	Not used	Not used
	35-4	Owner's Manual	Not used	CRB1925	Not used	Not used
	35-5	Owner's Manual	Not used	CRB1926	Not used	Not used
*	35-6	Passport	Not used	CRY1013	Not used	Not used
*	35-7	Warranty Card	Not used	CRY1157	Not used	Not used
	36	Cleaning Cloth Assy	CEA3952	CEA3952	CEA3952	CEA3952
	37	Seal	Not used	Not used	Not used	CAN4722
	38	Opt Terminal Change	Not used	Not used	CXC3584	CXC3584

Owner's Manual,Installation Manual

Part No.	Language
CRB1921	English
CRB1922	Spanish
CRB1923	German
CRB1924	French
CRB1925	Italian
CRB1926	Dutch
CRD3897	English,Spanish,German,French,Italian,Dutch
CRB1927	English
CRB1928	French
CRD3858	English,French
CRB1929	English
CRB1930	Traditional Chinese
CRD3859	English,Traditional Chinese
CRB1931	Spanish
CRB1932	Portuguese(B)
CRD3860	English,Spanish,Portuguese(B)

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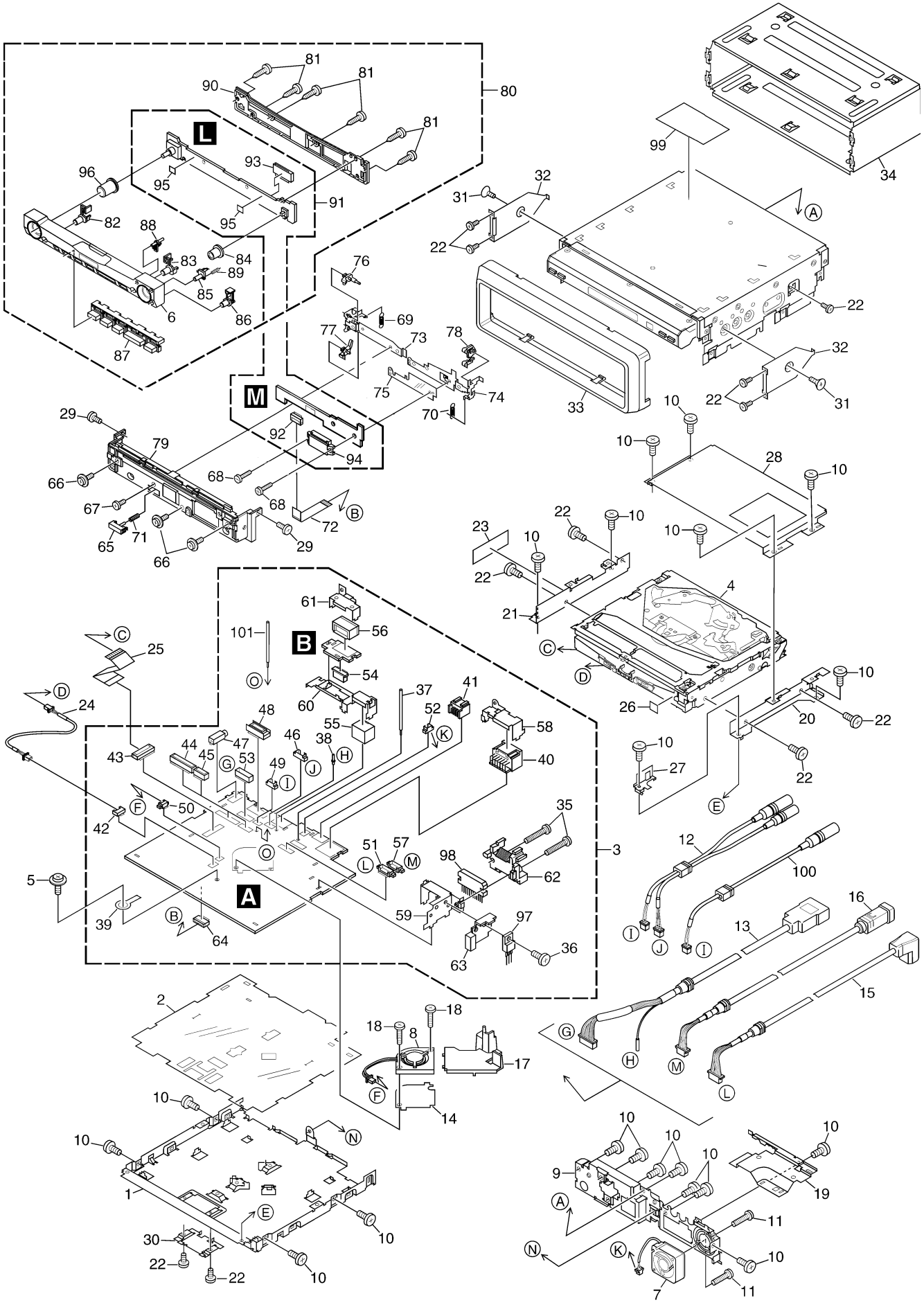
2.2 EXTERIOR(1)



(1)EXTERIOR(1) SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Case	CNB2948
	2	Insulator	CNM8646
	3	Mother Unit	See Contrast table(2)
	4	DVD Mechanism Mdule(MS-3V1)	CXK6410
	5	Screw	IMS26P040FTC
	6	Grille Unit(Service)	See Contrast table(2)
	7	Fan Motor(M1001)	CXM1262
	8	Fan Motor(M1002)	CXM1276
	9	Panel	See Contrast table(2)
	10	Screw	BMZ26P030FTC
	11	Screw	BMZ20P160FTC
	12	Cord Assy	See Contrast table(2)
	13	Cord Assy	See Contrast table(2)
	14	Insulator	CNM8864
	15	Cord Assy	CDE7450
	16	Cord Assy	CDE7449
	17	Guide	CNV7973
	18	Screw(M2x8)	CBA1752
	19	Holder	CND2034
	20	Bracket	CND1438
	21	Bracket	CND1439
	22	Screw	BMZ20P030FZK
	23	Insulator	CNM8495
	24	Cord	CDE7715
	25	Cable	CDE7452
	26	Spacer	CNM9272
	27	Earth	CBL1660
	28	Bracket	CND1603
	29	Screw(M2x2)	CBA1753
	30	Holder	CND1441
	31	Screw	CMZ50P060FTC
	32	Bracket	CND1482
	33	Panel	See Contrast table(2)
	34	Holder	CNC9510
	35	Screw	BMZ26P160FTC
	36	Screw	BSZ26P100FTC
	37	Clamper	CEF1036
	38	Terminal(CN102)	See Contrast table(2)
	39	Terminal(CN901)	CKF1064
	40	Connector(CN701)	CKM1332
	41	Connector(CN201)	CKM1389
	42	Connector(CN107)	CKS4282
	43	Connector(CN151)	CKS4052
	44	Connector(CN501)	CKS3930
	45	Connector(CN502)	VKN1533
	46	Connector(CN109)	See Contrast table(2)
	47	Jack(CN108)	CKN1022
	48	Connector(CN104)	CKS4800
	49	Connector(CN110)	CKS3125
	50	Connector(CN802)	CKS2191
	51	Connector(CN106)	CKS3132
	52	Connector(CN801)	CKS3124
	53	Connector(CN101)	See Contrast table(2)
	54	Connector(CN1500)	CKS4799
	55	Connector(CN103)	CKS4663
	56	Connector(CN1502)	CKS4467
	57	Connector(CN105)	CKS3130
	58	Holder	CND1433
	59	Holder	CND1434
	60	Holder	CND2035
	61	Holder	CND2036
	62	Heat Sink	CNR1684
	63	Heat Sink	CNR1703
	64	Connector(CN601)	CKS3986
	65	Button	CAC7953
	66	Screw(M2x4)	CBA1734
	67	Screw(M2.6x2.5)	CBA1777
	68	Screw(M2x4)	CBA1778
	69	Spring	CBH2681
	70	Spring	CBH2682
	71	Spring	CBH2683
	72	Flat Cable	CDE7179
	73	Holder	CND1840
	74	Holder	CND1841
	75	Insulator	CNM8510
	76	Arm	CNV7567
	77	Arm	CNV7568
	78	Arm	CNV7569
	79	Panel Unit	See Contrast table(2)
	80	Grille Assy	See Contrast table(2)
	81	Screw	BPZ20P080FZK
	82	Button(SRC)	CAC7946
	83	Button(EQ)	CAC7947
	84	Button	CAC8149
	85	Button(Detach Eject)	See Contrast table(2)
	86	Button(Disc Eject)	See Contrast table(2)
	87	Button	See Contrast table(2)
	88	Button(Reset)	See Contrast table(2)
	89	Spring	CBH2680
	90	Cover	CNS7441
	91	Keyboard Unit	See Contrast table(2)
	92	Connector(CN5901)	CKS3986
	93	Connector(CN5501)	CKS4657
	94	Connector(CN5902)	CKS4658
	95	Insulator	CNM8521
	96	Knob Unit	CXC2034
	97	Transistor(Q836)	2SD1275
	98	IC(IC202)	PAL007A
	99	Label	See Contrast table(2)
	100	Cord Assy	See Contrast table(2)
	101	Clamper	See Contrast table(2)

(2) CONTRAST TABLE

AVH-P6600DVD/UC , AVH-P6600DVD/EW , AVH-P6650DVD/RC and AVH-P6650DVD/RD are constructed the same except for the following:

Mark	NO	Description	P6600DVD/UC	P6600DVD/EW	P6650DVD/RC	P6650DVD/RD
	3	Mother Unit	CWM9143	CWM9142	CWM9144	CWM9145
	6	Grille Unit(Service)	CXX1801	CXX1800	CXX1802	CXX1802
	9	Panel	CNB2946	CNB2946	CNB2947	CNB2947
	12	Cord Assy	CDE7456	CDE7456	Not used	Not used
	13	Cord Assy	CDE7451	CDE7451	Not used	Not used
	33	Panel	CNS7785	CNS7785	CNS7481	CNS7481
	38	Terminal(CN102)	CKF-047	CKF-047	Not used	Not used
	46	Connector(CN109)	CKS3126	CKS3126	Not used	Not used
	53	Connector(CN101)	CKS4454	CKS4454	Not used	Not used
	79	Panel Unit	CXC2662	CXC2662	CXC3277	CXC3277
	80	Grille Assy	GXC1007	GXC1009	GXC1008	GXC1008
	85	Button(Detach Eject)	CAC8452	CAC8452	CAC7951	CAC7951
	86	Button(Disc Eject)	CAC8453	CAC8453	CAC7950	CAC7950
	87	Button	CAC8454	CAC8454	CAC8922	CAC8922
	88	Button(Reset)	CAC8456	CAC8456	CAC8054	CAC8054
	91	Keyboard Unit	CWM8766	CWM8765	CWM8766	CWM8766
	99	Label	Not used	VRW1860	Not used	Not used
	100	Cord Assy	Not used	Not used	CDE7457	CDE7457
	101	Clamper	CEF1036	CEF1036	Not used	Not used

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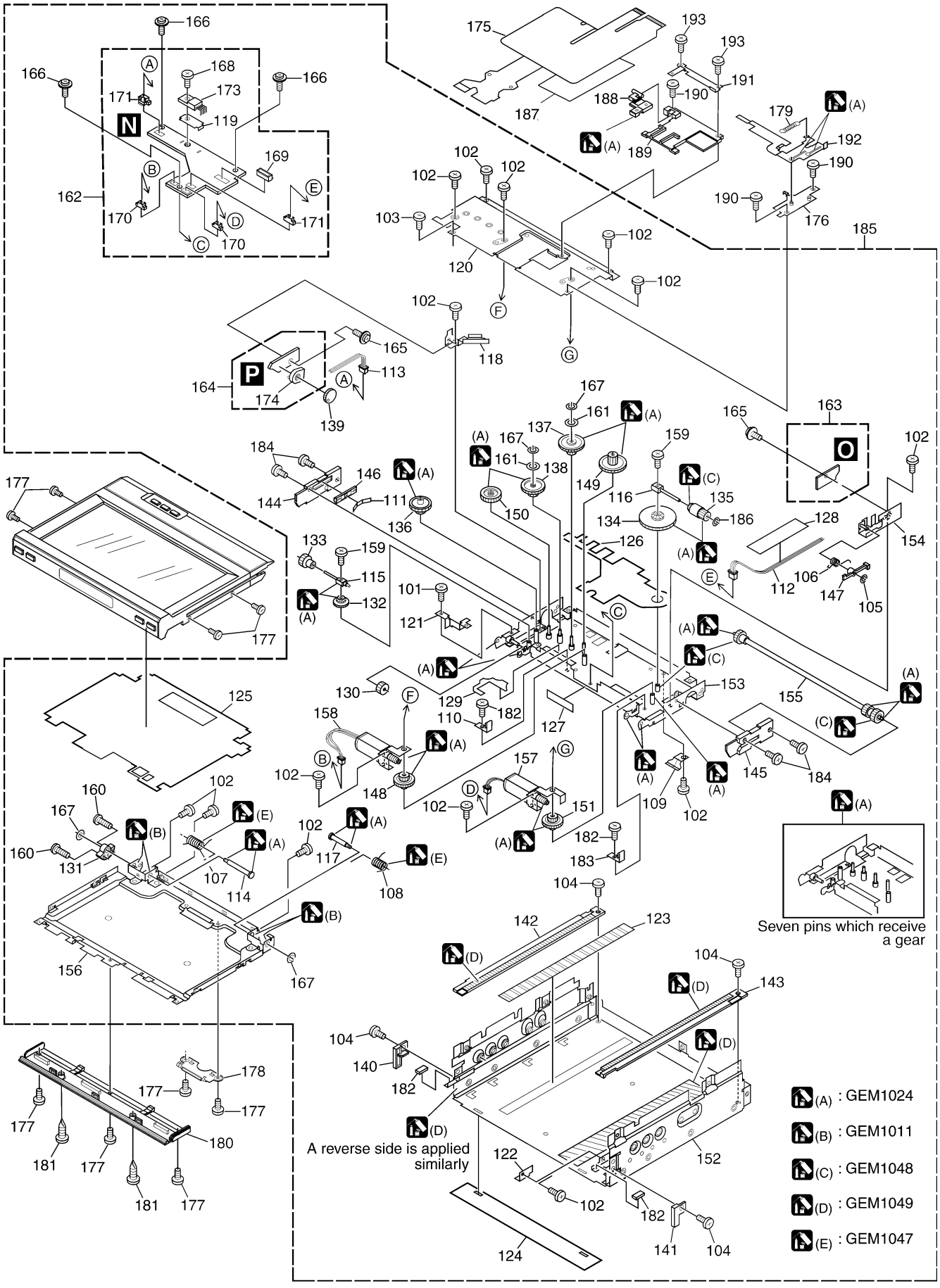
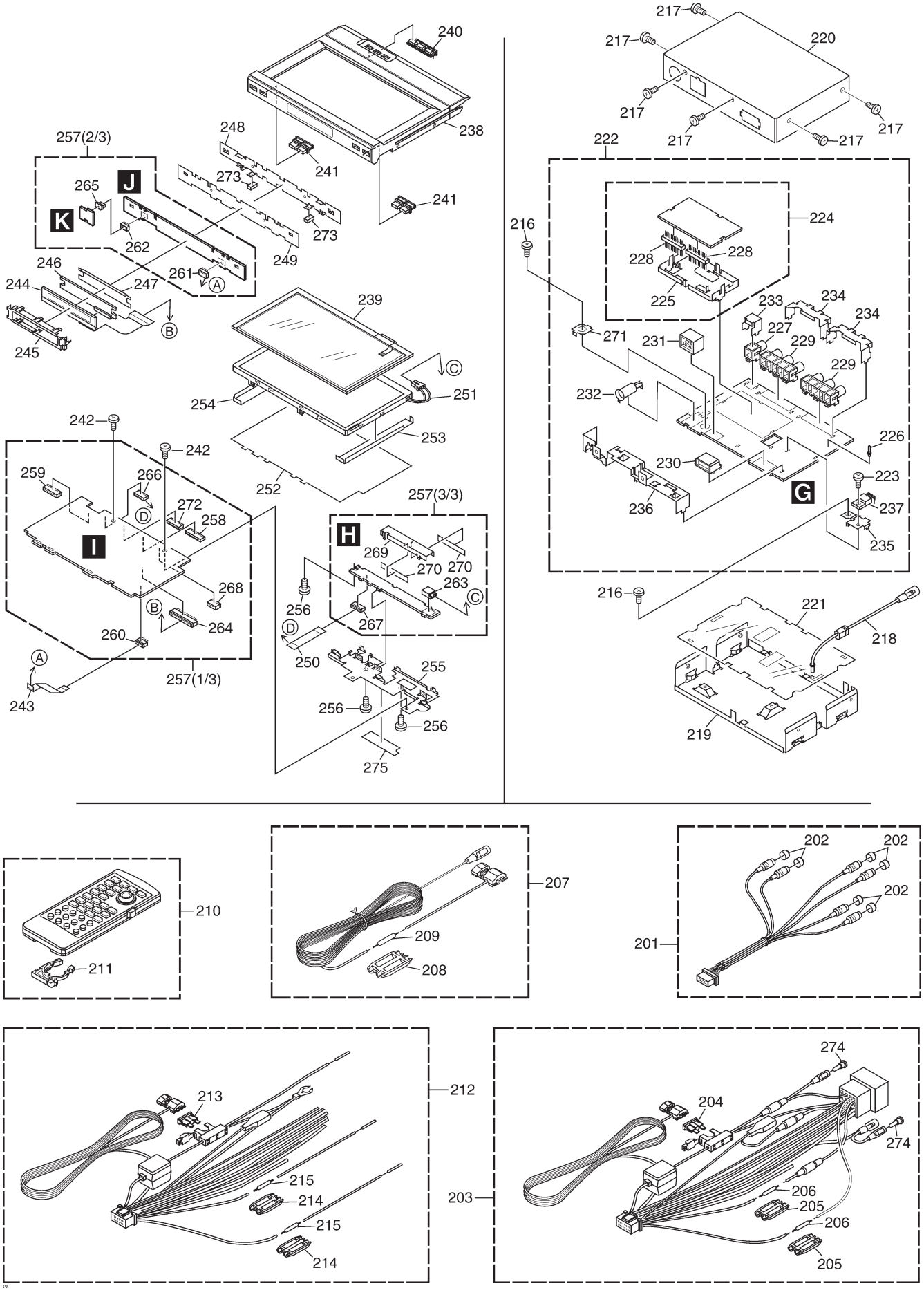
2.3 EXTERIOR(2)



EXTERIOR(2) SECTION PARTS LIST

Mark	No.	Description	Part No.
	101	Screw(M2x3)	CBA1082
	102	Screw(M2x2.5)	CBA1250
	103	Screw(M2x4)	CBA1277
	104	Screw(M2x1.5)	CBA1615
	105	Washer	CBF1038
	106	Spring	CBH2645
	107	Spring	CBH2646
	108	Spring	CBH2647
	109	Spring	CBL1585
	110	Spring	CBL1586
	111	Spring	CBL1587
	112	Cord Assy	CDE7047
	113	Cord Assy	CDE7213
	114	Shaft	CLA4270
	115	Shaft	CLA4305
	116	Shaft	CLA4306
	117	Shaft	CLA4309
	118	Bracket	CND1221
	119	Heat Sink	CND1228
	120	Case	CND1229
	121	Holder	CND1318
	122	Holder	CND1449
	123	Sheet	CNM8522
	124	Sheet	CNM8037
	125	Insulator	CNM8048
	126	Insulator	CNM8158
	127	Sheet	CNM8159
	128	Tape	CNM8160
	129	Insulator	CNM8294
	130	Gear	CNR1664
	131	Gear	CNR1665
	132	Gear	CNR1677
	133	Gear	CNR1678
	134	Gear	CNR1679
	135	Gear	CNR1680
	136	Gear	CNR1688
	137	Gear	CNR1708
	138	Gear	CNR1709
	139	Gear	CNV7383
	140	Holder	CNV7384
	141	Holder	CNV7385
	142	Rack	CNV7386
	143	Rack	CNV7387
	144	Slider	CNV7388
	145	Slider	CNV7389
	146	Holder	CNV7390
	147	Arm	CNV7391
	148	Gear	CNV7522
	149	Gear	CNV7523
	150	Gear	CNV7524
	151	Gear	CNV7529
	152	Chassis Unit	CXB9509
	153	Frame Unit	CXB9511
	154	Holder Unit	CXB9512
	155	Shaft Unit	CXB9513
	156	Holder Unit	CXB9514
	157	Motor Unit(M3001)(Position)	CXB9515
	158	Motor Unit(M3002)(Angle)	CXB9516
	159	Screw	CZB3082
	160	Screw	CZB3083
	161	Washer	CZB3084
	162	Main Unit	CZW3087
	163	SW Unit	CZW3088
	164	Volume Unit	CZW3089
	165	Screw	IMS20P020FTC
	166	Screw	IMS20P030FZK
	167	Washer	YE15S
	168	Screw	BMZ26P050FTC
	169	Connector(CN3801)	CKS4068
	170	Connector(CN3802,CN3803)	CKS3124
	171	Connector(CN3807,3809)	CKS3125
	172	•••••	
	173	IC(IC3801)	BA00AST
	174	Volume(VR3841)	CCW1025
	175	Flexible PCB	CNP7682
	176	Bracket Unit	CXC3048
	177	Screw(M2x2)	CBA1753
	178	Holder	CND2243
	179	Spring	CBH2750
	180	Cover	CNS7438
	181	Screw	BPZ20P080FZK
	182	Screw(M2x1.8)	CZB3085
	183	Spring	CBL1642
	184	Screw(M2x4)	CZB3088
	185	Drive Unit	CXB9508
	186	Washer	CZB3089
	187	Sheet	CNM8952
	188	Arm	CNV8065
	189	Holder	CNV8066
	190	Screw(M2x3)	CBA1780
	191	Spring	CBL1679
	192	Lever	CND2202
	193	Screw(M2x3)	CBA1797

2.4 EXTERIOR(3)



(1)EXTERIOR(3) SECTION PARTS LIST

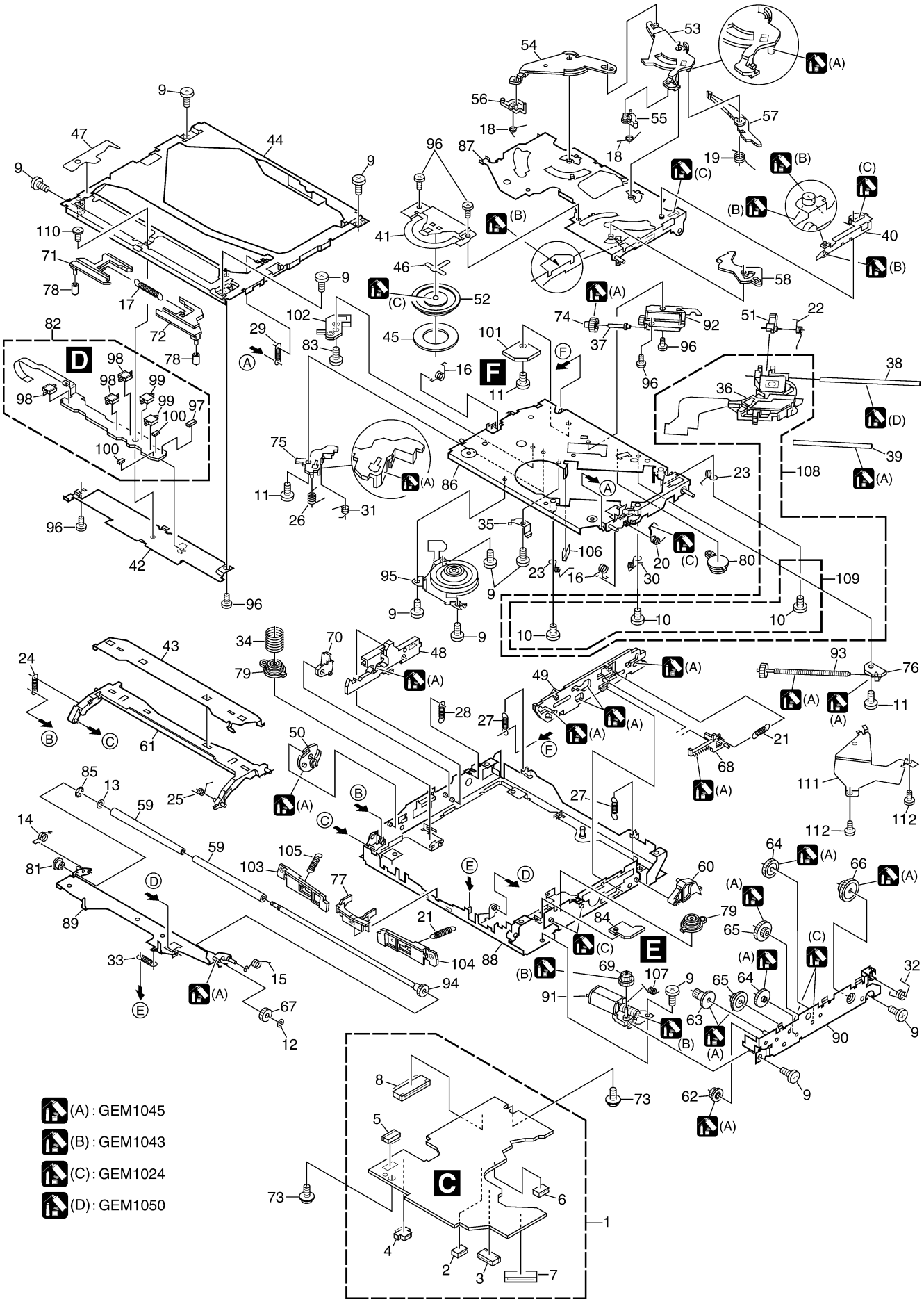
Mark	No.	Description	Part No.
	201	Cord Assy	CDE7194
	202	Cap	CNV6727
	203	Cord Assy	See Contrast table(2)
	204	Fuse(10A)	See Contrast table(2)
	205	Cap	See Contrast table(2)
	206	Resistor	See Contrast table(2)
	207	Cord Assy	CDE7321
	208	Cap	CNS1472
	209	Resistor	RS1/2PMF102J
	210	Remote Control Unit	See Contrast table(2)
	211	Cover	CZN5357
	212	Cord Assy	See Contrast table(2)
	213	Fuse(10A)	See Contrast table(2)
	214	Cap	See Contrast table(2)
	215	Resistor	See Contrast table(2)
	216	Screw	ISS26P055FTC
	217	Screw	BSZ30P060FZK
	218	Cord Assy	CDE7280
	219	Chassis	CNA2774
	220	Case	See Contrast table(2)
	221	Insulator	CNM9193
	222	Tuner Unit	See Contrast table(2)
	223	Screw	BMZ30P050FTC
	224	FM/AM Tuner Unit	See Contrast table(2)
	225	Holder	CND1432
	226	Terminal(CN1412)	CKF-047
	227	Pin Jack(CN1403)	CKS1065
	228	Connector(CN101,CN102)	CKS4653
	229	Pin Jack(CN1401,CN1402)	CKS2918
	230	Connector(CN1404)	CKS4467
	231	Connector(CN1405)	CKS4663
	232	Antenna Jack(CN1406)	CKX1056
	233	Holder	CNC6746
	234	Holder	CNC7205
	235	Holder	CNC9888
	236	Holder	CND1451
	237	Transistor(Q1404)	2SD2375
	238	Grille Unit	See Contrast table(2)
	239	Touch Panel	CSX1064
	240	Button(ENT,WIDE,MENU)	See Contrast table(2)
	241	Button	CAC7936
	242	Screw(M2x2.2)	CBA1753
	243	FFC	CDE7195
	244	LCD	CAW1805
	245	Holder	CND1468
	246	Lighting Conductor	CNV7564
	247	Sheet	CNM8488
	248	Holder	CND1469
	249	Insulator	CNM8131
	250	FFC	CDE7196
	251	LCD Panel	CWX3056
	252	Insulator	CNM8930
	253	Sheet	CNM8265
	254	Sheet	CNM7784
	255	Holder	CND2037
	256	Screw	BPZ20P060FTC
	257	Monitor Unit	See Contrast table(2)
	258	Connector(CN4461)	CKS3968
	259	Connector(CN4801)	CKS3991
	260	Connector(CN4201)	CKS4054
	261	Connector(CN4301)	CKS4054
	262	Connector(CN4311)	CKS4374
	263	Connector(CN5002)	CKS4428
	264	Connector(CN4701)	CKS4495
	265	Connector(CN4312)	CKS4496
	266	Connector(CN4451)	CKS4595
	267	Connector(CN5001)	CKS4595
	268	Connector(CN4401)	CKS4675
	269	Holder	CND1677
	270	Insulator	CNM9251
	271	Holder(CN1407)	CNC5399
	272	Connector(CN4481)	CKS4319
	273	Cushion	CNM8440
	274	Cap See Contrast table(2)	
	275	Insulator	CNM9216

(2) CONTRAST TABLE

AVH-P6600DVD/UC , AVH-P6600DVD/EW , AVH-P6650DVD/RC and AVH-P6650DVD/RD are constructed the same except for the following:

Mark	NO	Description	P6600DVD/UC	P6600DVD/EW	P6650DVD/RC	P6650DVD/RD
	203	Cord Assy	Not used	CDE7608	Not used	Not used
	204	Fuse(10A)	Not used	CEK1136	Not used	Not used
	205	Cap	Not used	CNS1472	Not used	Not used
	206	Resistor	Not used	RS1/2PMF102J	Not used	Not used
	210	Remote Control Unit	CXC3074	CXC3075	CXC3075	CXC3075
	212	Cord Assy	CDE7609	Not used	CDE7609	CDE7609
	213	Fuse(10A)	CEK1136	Not used	CEK1136	CEK1136
	214	Cap	CNS1472	Not used	CNS1472	CNS1472
	215	Resistor	RS1/2PMF102J	Not used	RS1/2PMF102J	RS1/2PMF102J
	220	Case	CNB2963	CNB2963	CNB2964	CNB2964
	222	Tuner Unit	CWM9203	CWM9202	CWM9203	CWM9203
	224	FM/AM Tuner Unit	CWE1651	CWE1650	CWE1651	CWE1651
	238	Grille Unit	CXC2660	CXC2659	CXC2661	CXC2661
	240	Button (ENT,WIDE,MENU)	CAC8451	CAC8451	CAC8688	CAC8688
	257	Monitor Unit	CWM9148	CWM9147	CWM9149	CWM9149
	274	Cap	Not used	CKX-003	Not used	Not used

2.5 DVD MECHANISM MODULE



DVD MECHANISM MODULE SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	DVD Core Unit(MS-3V1)	CWX2883
	2	Connector(CN1902)	CKS4374
	3	Connector(CN1201)	CKS4067
	4	Connector(CN1551)	CKS4817
	5	Connector(CN1231)	CKS4624
	6	Connector(CN1903)	CKS4374
	7	Connector(CN1101)	CKS4625
	8	Connector(CN1901)	CKS3971
	9	Screw	BMZ20P020FTC
	10	Screw(M2 x 3.5)	CBA1571
	11	Screw(M2 x 2.5)	CBA1623
	12	Washer	CBF1038
	13	Washer	CBF1064
	14	Spring	CBH2586
	15	Spring	CBH2587
	16	Spring	CBH2588
	17	Spring	CBH2589
	18	Spring	CBH2590
	19	Spring	CBH2591
	20	Spring	CBH2592
	21	Spring	CBH2593
	22	Spring	CBH2594
	23	Spring	CBH2595
	24	Spring	CBH2596
	25	Spring	CBH2597
	26	Spring	CBH2598
	27	Spring	CBH2599
	28	Spring	CBH2600
	29	Spring	CBH2601
	30	Spring	CBH2602
	31	Spring	CBH2603
	32	Spring	CBH2604
	33	Spring	CBH2605
	34	Spring	CBH2711
	35	Spring	CBL1564
	36	Pickup Unit(Service)	CXX1770
	37	Shaft	CLA3881
	38	Shaft	CLA4206
	39	Shaft	CLA4207
	40	Lever	CNC9933
	41	Holder	CNC9939
	42	Holder	CND2251
	43	Holder	CNC9941
	44	Frame	CND2250
	45	Sheet	CNM6883
	46	Sheet	CNM8283
	47	Sheet	CNM8643
	48	Lever	CNV8076
	49	Lever	CNV7155
	50	Cam	CNV7156
	51	Rack	CNV7157
	52	Clamper	CNV7158
	53	Arm	CNV7159
	54	Arm	CNV7160
	55	Arm	CNV7161
	56	Arm	CNV7162
*	57	Arm	CNV7163
	58	Arm	CNV7164
	59	Roller	CNV7165
	60	Arm	CNV7166
	61	Guide	CNV8093
	62	Gear	CNV7169
	63	Gear	CNV7170
	64	Gear	CNV7171
	65	Gear(Black)	CNV7172
	66	Gear	CNV7173
	67	Gear	CNV7174
	68	Rack	CNV7175
	69	Gear	CNV7176
	70	Arm	CNV8077
	71	Lever	CNV7178
	72	Lever	CNV7179
	73	Screw	IMS20P030FTC
	74	Gear	CNV7181
	75	Holder	CNV7183
	76	Holder	CNV7184
	77	Guide	CNV7745
	78	Roller	CNV7344
	79	Damper	CNV7470
	80	Damper	CNV7471
	81	Collar	CNV7645
	82	Compound(A)	CWX3024
	83	Screw(M2x2)	CBA1802
	84	Compound(B)	CWX2753
	85	Washer	YE20FTC
	86	Chassis Unit	CXC3629
	87	Arm Unit	CXB8681
	88	Frame Unit	CXB8683
	89	Arm Unit	CXC2988
	90	Bracket Unit	CXB8685
	91	Motor Unit(LOADING)(M1)	CXB8687
	92	Motor Unit(CARRIAGE)(M2)	CXB8688
	93	Screw Unit	CXB8689
	94	Roller Unit	CXB8690
	95	Motor(SPINDLE)(M3)	CXM1272
	96	Screw	JFZ20P018FTC
	97	Photo-transistor(Q1299)	CPT231SCTD
	98	Switch(S1201,S1202,S1203)	CSN1051
	99	Spring Switch(S1204,S1205)	CSN1052
	100	Resistor(R1298,R1299)	RS1/16S0R0J
	101	Gathering PCB	CNX4320
	102	Holder	CNV8186
	103	Arm	CNV7742
	104	Arm	CNV7743
	105	Spring	CBH2710
	106	Spring	CBL1643
	107	Spring	CBH2712
	108	Pickup Unit(Service)(Screw)	GXX1242
	109	Screw Assy	CXX1750
	110	Screw(M1.4xM1.4)	CBA1787
	111	Cover	CNC9943
	112	Screw	JFZ20P018FTC

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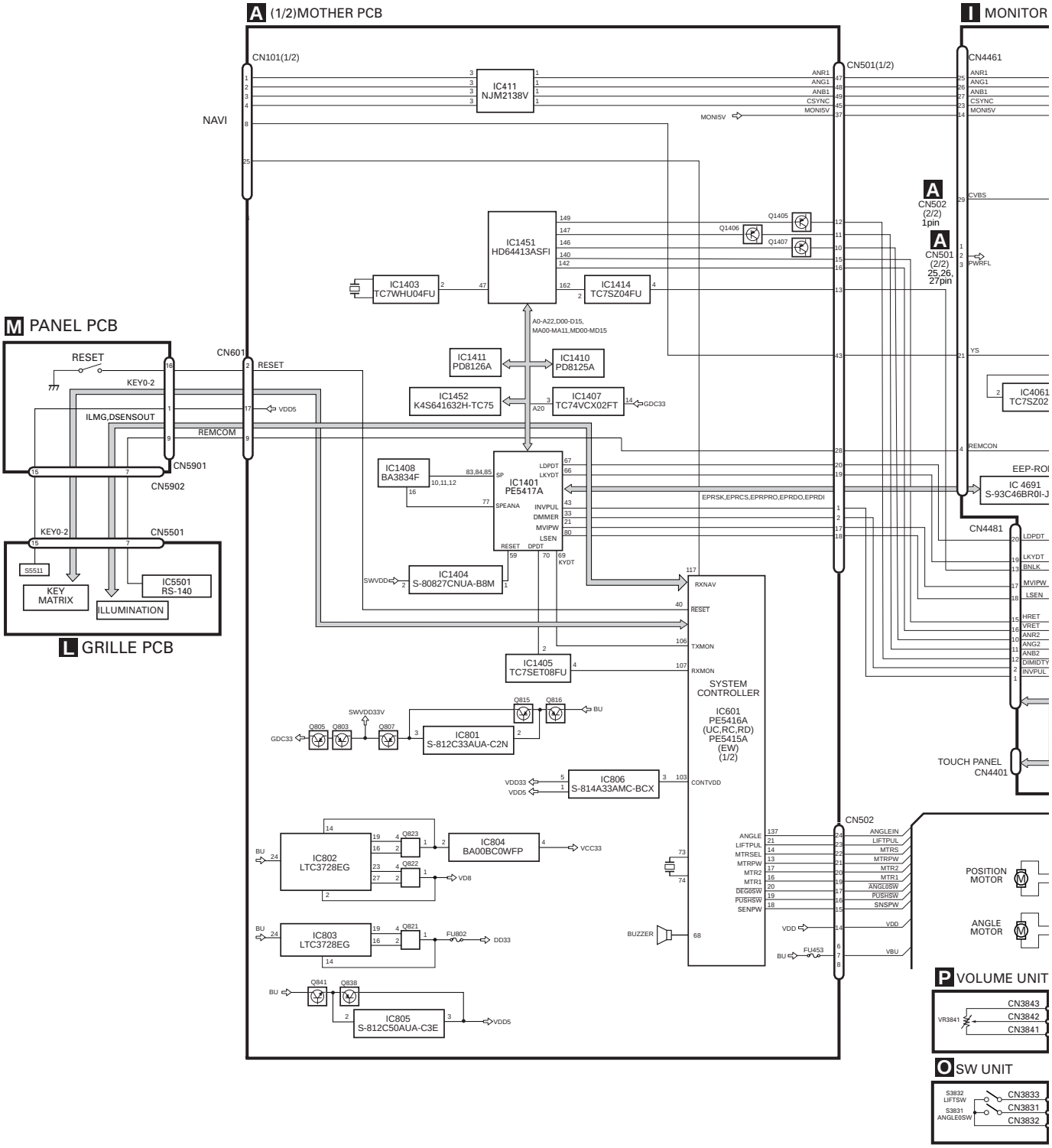
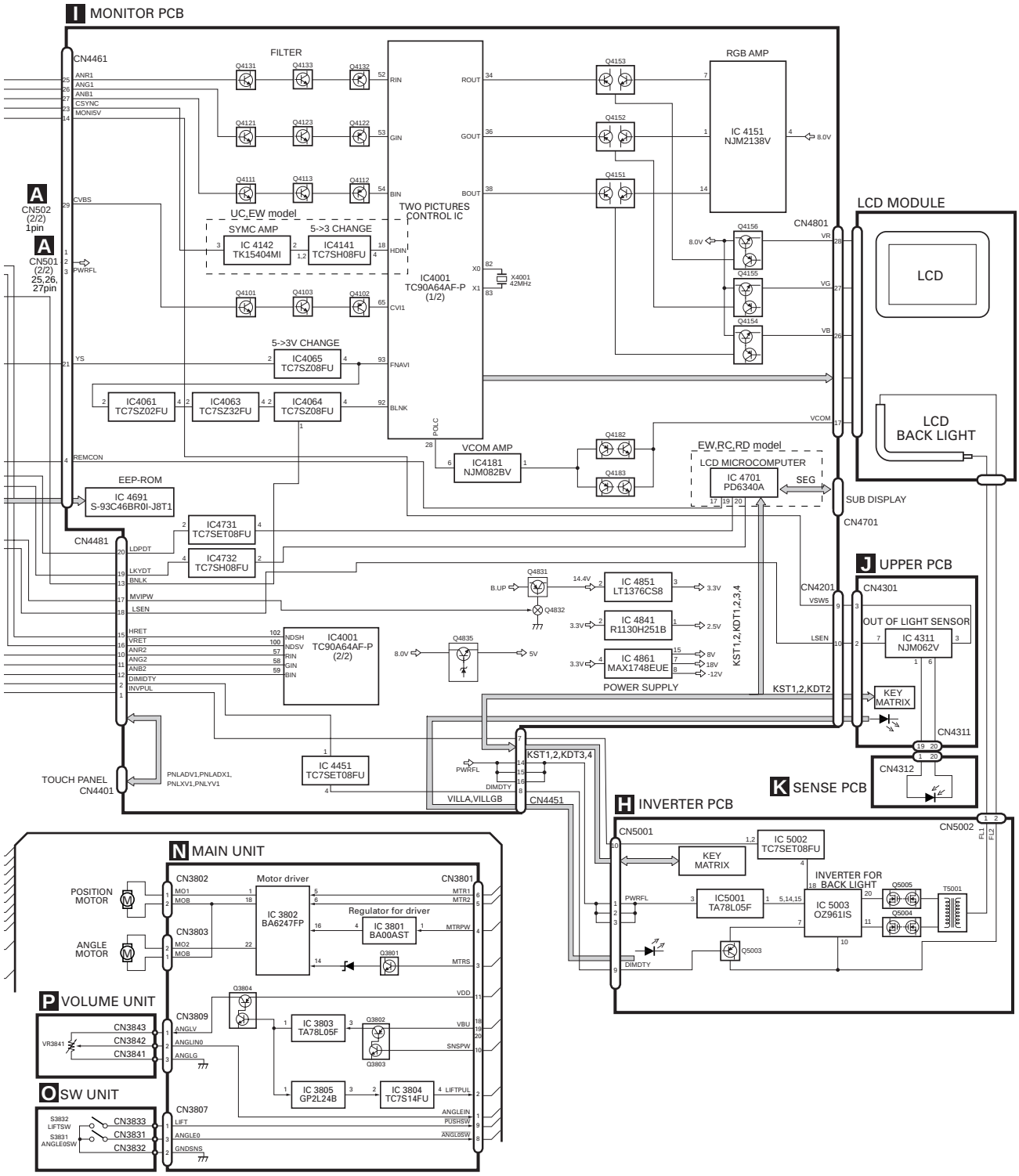
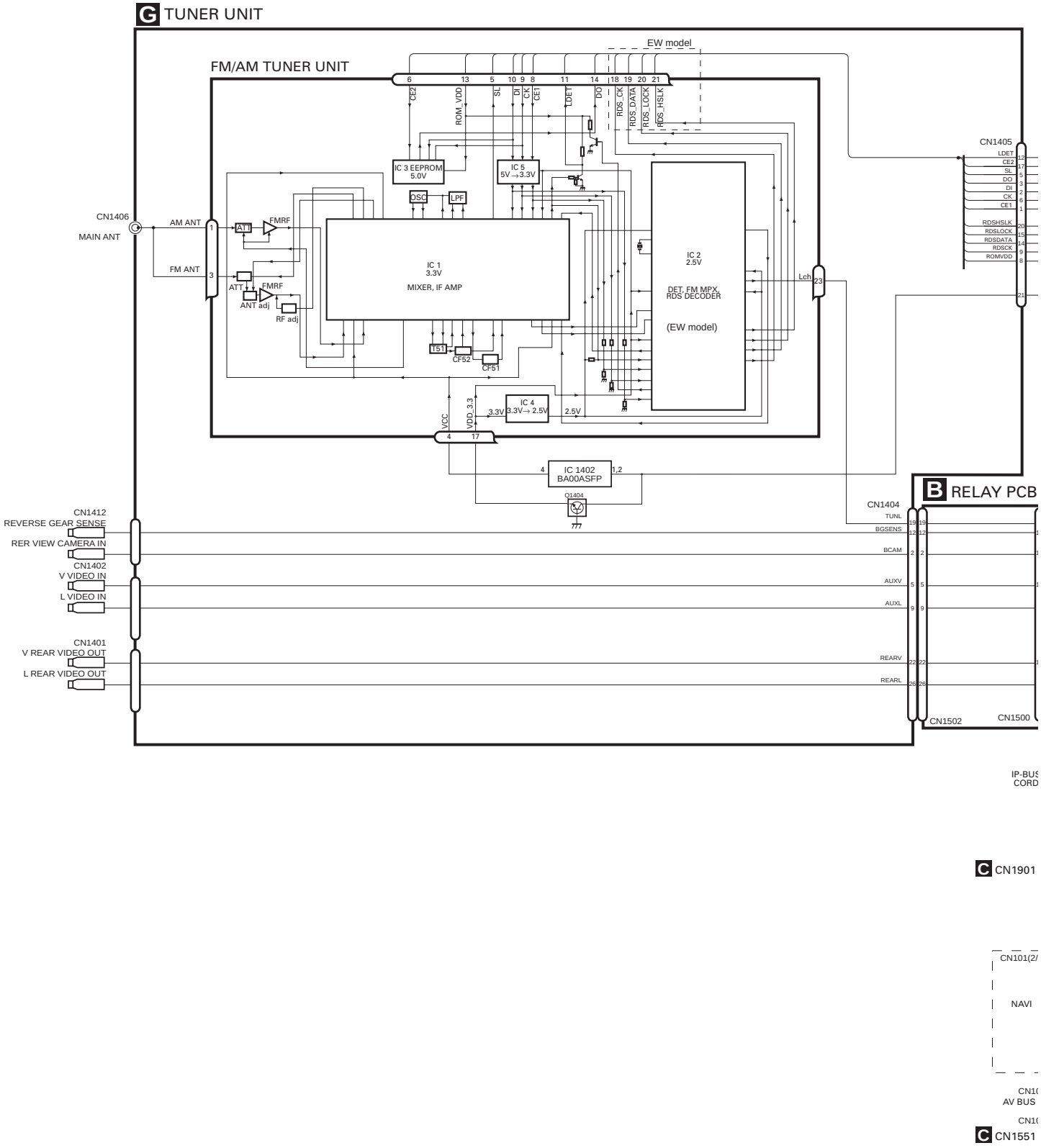
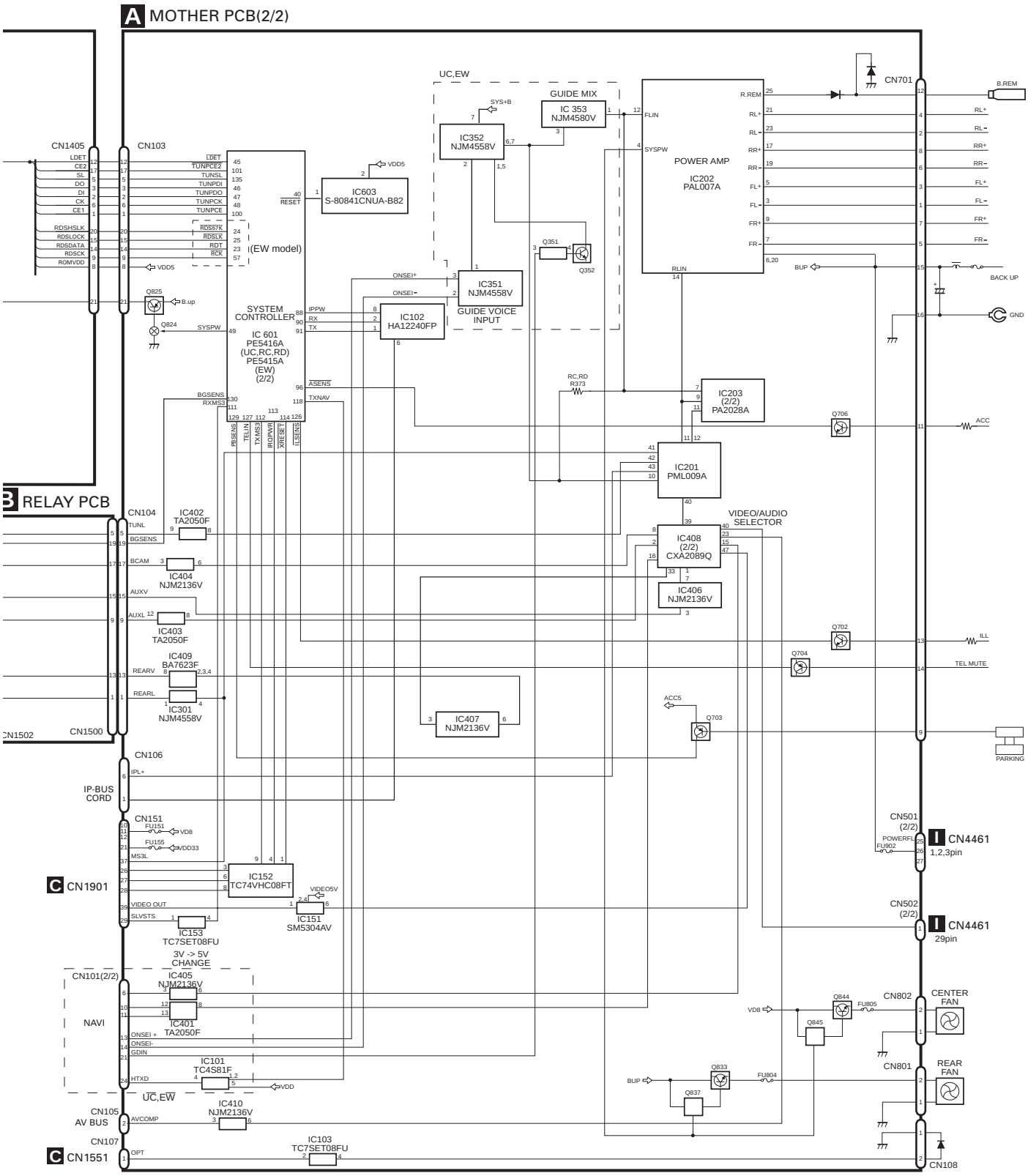
3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

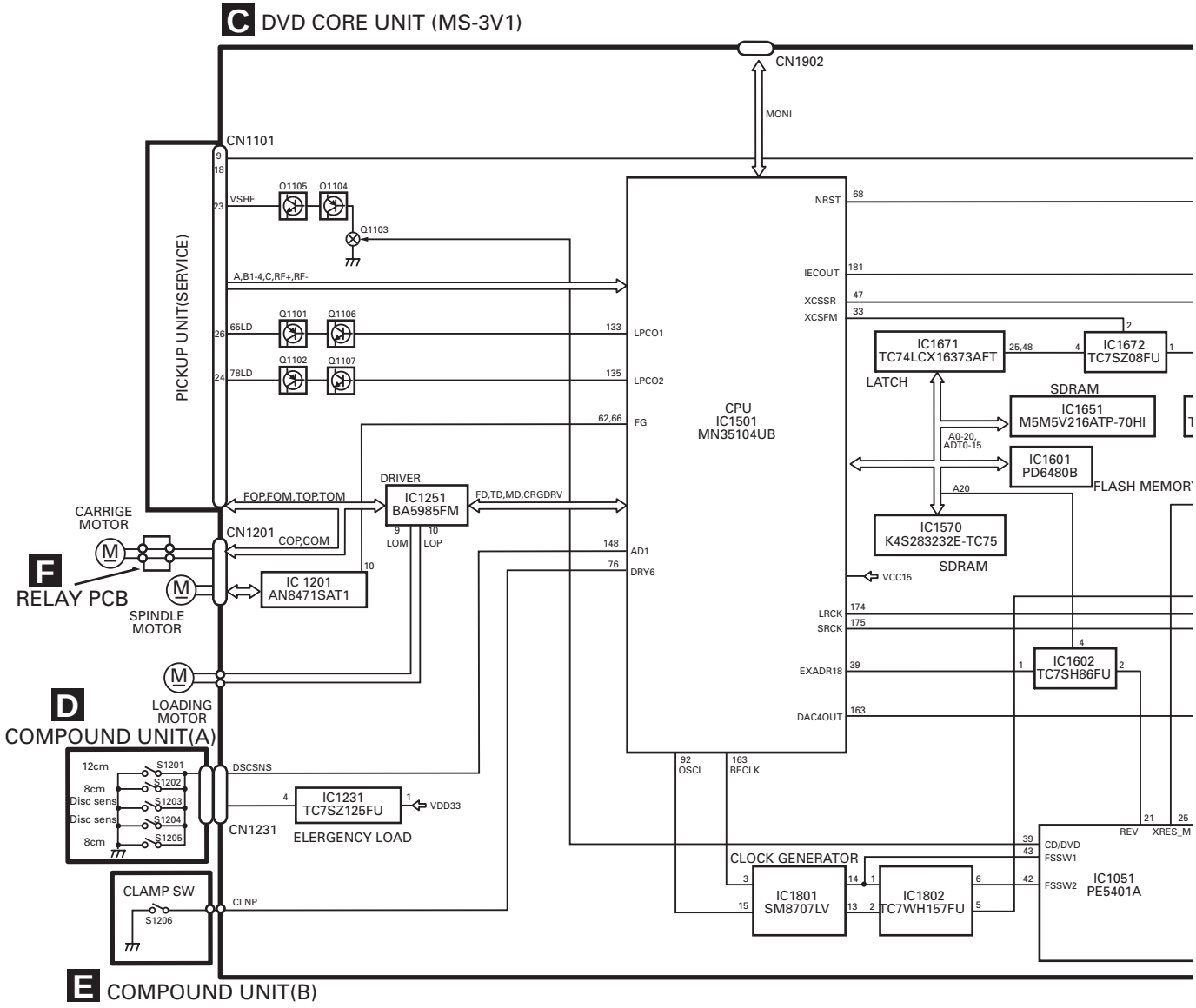
3.1 BLOCK DIAGRAM

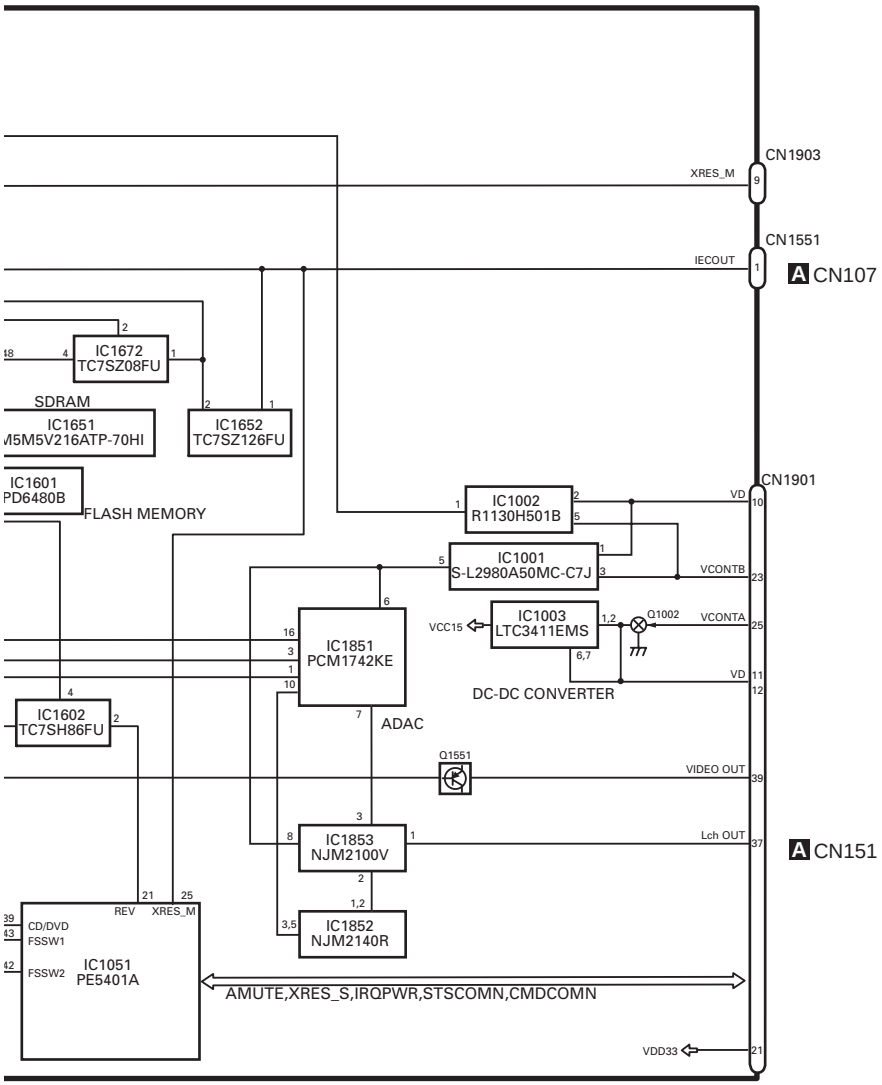



I MONITOR PCB
CN4461
FILTER
RGB AMP
IC 4151
NJM2138V
TWO PICTURES
CONTROL IC
IC4001
TC90A64AF-P
(1/2)
UC,EW model
SYMC AMP
IC 4142
TK15404MI
5->3 CHANGE
IC4141
TC7SH08FU
5->3V CHANGE
IC4065
TC7SZ08FU
IC4061
TC7SZ02FU
IC4063
TC7SZ32FU
IC4064
TC7SZ08FU
VCOM AMP
IC4181
NJM082BV
EW,RC,RD model
LCD MICROCOMPUTER
IC 4701
PD6340A
SEG
LCD MODULE
LCD
LCD
BACK LIGHT
CN4801
CN4701
SUB DISPLAY
EEP-ROM
IC 4691
S-93C46BR0I-J8T1
CN4481
IC4731
TC7SET08FU
IC4732
TC7SH08FU
IC 4451
TC7SET08FU
TOUCH PANEL
CN4401
J UPPER PCB
CN4301
OUT OF LIGHT SENSOR
IC 4311
NJM062V
KEY
MATRIX
CN4311
CN4312
K SENSE PCB
IC 4851
LT1376CS8
IC 4841
R1130H251B
IC 4861
MAX1748EUE
POWER SUPPLY
KST1,2,KDT1,2,3,4
KST1,2,KDT2
KST1,2,KDT3,4
CN4451
H INVERTER PCB
CN5001
CN5002
IC 5002
TC7SET08FU
IC5001
TA78L05F
IC 5003
OZ961IS
INVERTER FOR
BACK LIGHT
T5001
N MAIN UNIT
CN3802
CN3803
CN3801
Motor driver
IC 3802
BA6247FP
Regulator for driver
IC 3801
BA00AST
POSITION
MOTOR
ANGLE
MOTOR
P VOLUME UNIT
CN3843
CN3842
CN3841
VR3841
CN3809
IC 3803
TA78L05F
IC 3805
GP2L24B
IC 3804
TC7S14FU
O SW UNIT
CN3807
CN3833
CN3831
CN3832
S3832
LIFTSW
S3831
ANGLE0SW
A
CN502
(2/2)
1pin
A
CN501
(2/2)
25,26,
27pin
PWRFL
CVBS
YS
REMCON
PNLADV1,PNLADX1,
PNLXV1,PNLYV1
VILLA,VILLGB
DIMDTY
X4001
42MHz

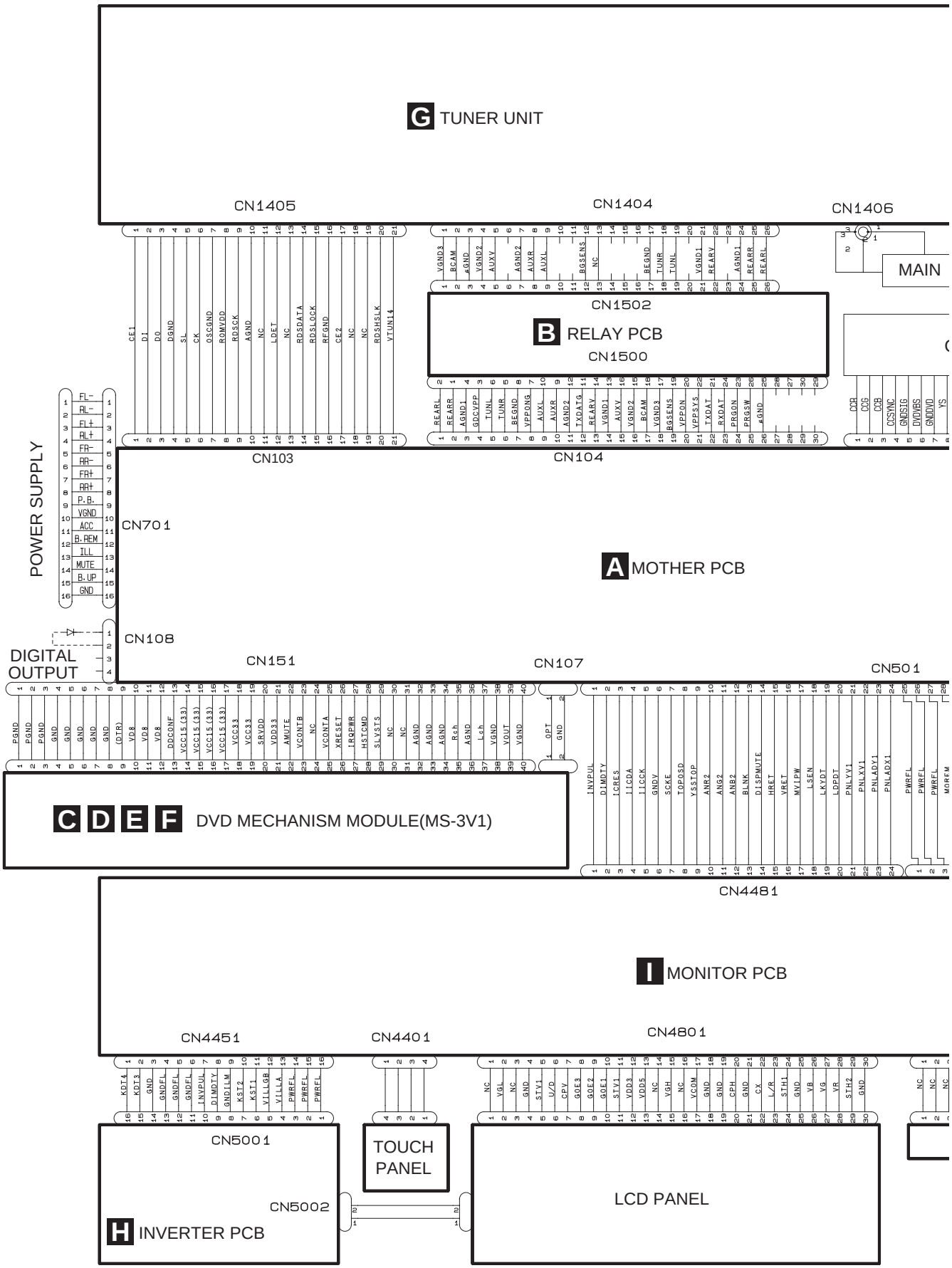

G TUNER UNIT
EW model
FM/AM TUNER UNIT
CE2
ROM_VDD
SL
DI
CK
CE1
LDET
DO
RDS_CK
RDS_DATA
RDS_LOCK
RDS_HSLK
IC 3 EEPROM 5.0V
IC 5 5V→3.3V
OSC
LPF
CN1405
LDET
CE2
SL
DO
DI
CK
CE1
RDSHSLK
RDSLOCK
RDSDATA
RDSCK
ROMVDD
CN1406
MAIN ANT
AM ANT
FM ANT
ATT
FMRF
ANT adj
RF adj
IC 1 3.3V
MIXER, IF AMP
IC 2 2.5V
DET, FM MPX, RDS DECODER
(EW model)
Lch
T51
CF52
CF51
VCC
VDD_3.3
3.3V
IC 4 3.3V→ 2.5V
2.5V
IC 1402 BA00ASFP
Q1404
B RELAY PCB
CN1404
TUNL
BGSENS
BCAM
AUXV
AUXL
REARV
REARL
CN1412
REVERSE GEAR SENSE
RER VIEW CAMERA IN
CN1402
V VIDEO IN
L VIDEO IN
CN1401
V REAR VIDEO OUT
L REAR VIDEO OUT
CN1502
CN1500
IP-BUS CORD
C CN1901
CN101(2/
NAVI
CN1(
AV BUS
CN1(
C CN1551

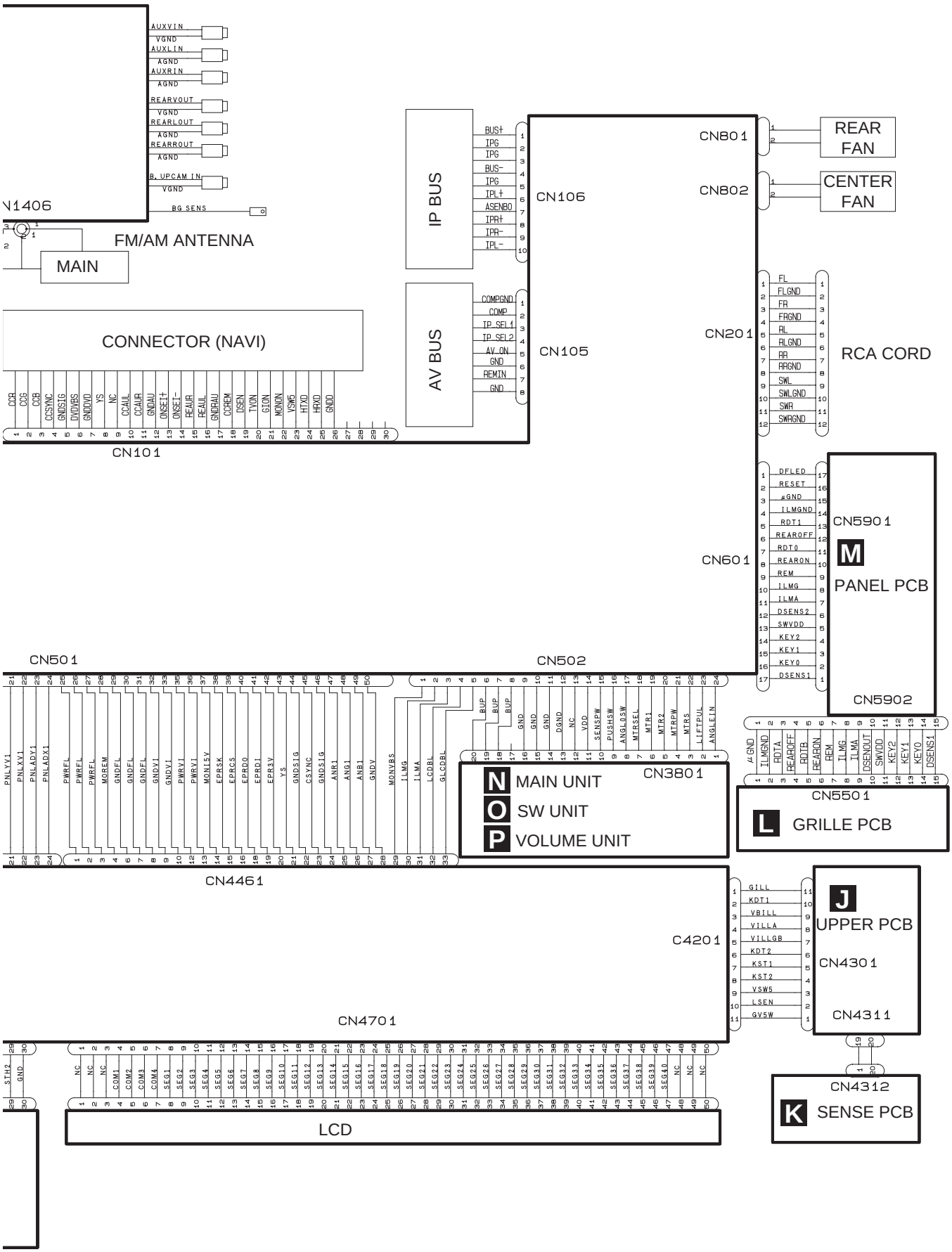

A MOTHER PCB(2/2)
B RELAY PCB
C CN1901
C CN1551
I CN4461 1,2,3pin
I CN4461 29pin
UC,EW
GUIDE MIX
IC 353 NJM4580V
IC352 NJM4558V
IC603 S-80841CNUA-B82
IC351 NJM4558V
GUIDE VOICE INPUT
IC102 HA12240FP
SYSTEM CONTROLLER
IC 601 PE5416A (UC,RC,RD) PE5415A (EW) (2/2)
(EW model)
POWER AMP
IC202 PAL007A
IC203 (2/2) PA2028A
IC201 PML009A
IC408 (2/2) CXA2089Q
VIDEO/AUDIO SELECTOR
IC404 NJM2136V
IC403 TA2050F
IC402 TA2050F
IC409 BA7623F
IC301 NJM4558V
IC406 NJM2136V
IC407 NJM2136V
IC152 TC74VHC08FT
IC151 SM5304AV
IC153 TC7SET08FU
3V -> 5V CHANGE
IC405 NJM2136V
IC401 TA2050F
IC101 TC4S81F
IC410 NJM2136V
IC103 TC7SET08FU
NAVI
UC,EW
IP-BUS CORD
CN1405
CN103
CN104
CN106
CN151
CN1500
CN1502
CN105 AV BUS
CN107
CN701
CN501 (2/2)
CN502 (2/2)
CN802
CN801
CN108
B.REM
BACK UP
GND
ACC
ILL
TEL MUTE
PARKING
CENTER FAN
REAR FAN
Q825
Q824
Q351
Q352
Q706
Q702
Q704
Q703
Q844
Q845
Q833
Q837
FU902
FU805
FU804
VDD5
VDD8
VDD33
VDD
VIDEO5V
B.up
SYS+B
SYSPW
ONSEI+
ONSEI-
IPPW
RX
TX
ASENS
TXNAV
BGSENS
RXMS3
RC,RD R373
ACC5
BUP
RLIN
FLIN
R.REM
RL+
RL-
RR+
RR-
FL+
FL-
FR+
FR-
IPL+
AVCOMP
OPT
HTXD
GDIN
TUNL
BCAM
AUXV
AUXL
REARV
REARL
MS3L
VIDEO OUT
SLVSTS
POWERFL
LDET
CE2
SL
DO
DI
CK
CE1
RDSHSLK
RDSLOCK
RDSDATA
RDSCK
ROMVDD
TUNPCE2
TUNSL
TUNPDI
TUNPDO
TUNPCK
TUNPCE
RESET
RDS57K
RDSLK
RDT
RCK
PBSENS
TELIN
TXMS3
IRQPWR
XRESET
LSENS


C DVD CORE UNIT (MS-3V1)
CN1902
MONI
CN1101
PICKUP UNIT(SERVICE)
VSHF
Q1105
Q1104
Q1103
A,B1-4,C,RF+,RF-
65LD
Q1101
Q1106
78LD
Q1102
Q1107
CPU
IC1501
MN35104UB
NRST
IECOUT
XCSSR
XCSFM
LPCO1
LPCO2
FG
AD1
DRY6
VCC15
IC1671
TC74LCX16373AFT
LATCH
IC1672
TC7SZ08FU
SDRAM
IC1651
M5M5V216ATP-70HI
A0-20,
ADT0-15
IC1601
PD6480B
FLASH MEMOR
A20
IC1570
K4S283232E-TC75
SDRAM
DRIVER
FOP,FOM,TOP,TOM
IC1251
BA5985FM
FD,TD,MD,CRGDRV
LOM
LOP
CARRIGE
MOTOR
CN1201
COP,COM
F
RELAY PCB
IC 1201
AN8471SAT1
SPINDLE
MOTOR
LOADING
MOTOR
D
COMPOUND UNIT(A)
12cm
8cm
Disc sens
Disc sens
8cm
S1201
S1202
S1203
S1204
S1205
DSCSNS
CN1231
IC1231
TC7SZ125FU
VDD33
ELERGENCY LOAD
CLAMP SW
S1206
CLNP
LRCK
SRCK
EXADR18
DAC4OUT
IC1602
TC7SH86FU
REV
XRES_M
OSCI
BECLK
CLOCK GENERATOR
IC1801
SM8707LV
IC1802
TC7WH157FU
CD/DVD
FSSW1
FSSW2
IC1051
PE5401A
E COMPOUND UNIT(B)


CN1903
XRES_M
9
CN1551
IECOUT
1
A CN107
IC1672
TC7SZ08FU
SDRAM
IC1651
IC1652
TC7SZ126FU
IC1601
FLASH MEMORY
CN1901
IC1002
R1130H501B
VD
10
IC1001
S-L2980A50MC-C7J
VCONTB
23
IC1003
LTC3411EMS
VCC15
Q1002
VCONTA
25
IC1851
PCM1742KE
DC-DC CONVERTER
VD
11
12
IC1602
TC7SH86FU
ADAC
Q1551
VIDEO OUT
39
IC1853
NJM2100V
Lch OUT
37
A CN151
IC1852
NJM2140R
REV
XRES_M
CD/DVD
FSSW1
FSSW2
IC1051
PE5401A
AMUTE,XRES_S,IRQPWR,STSCOMN,CMDCOMN
VDD33
21

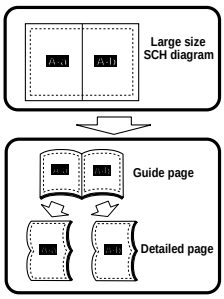
3.2 OVERALL CONNECTION DIAGRAM

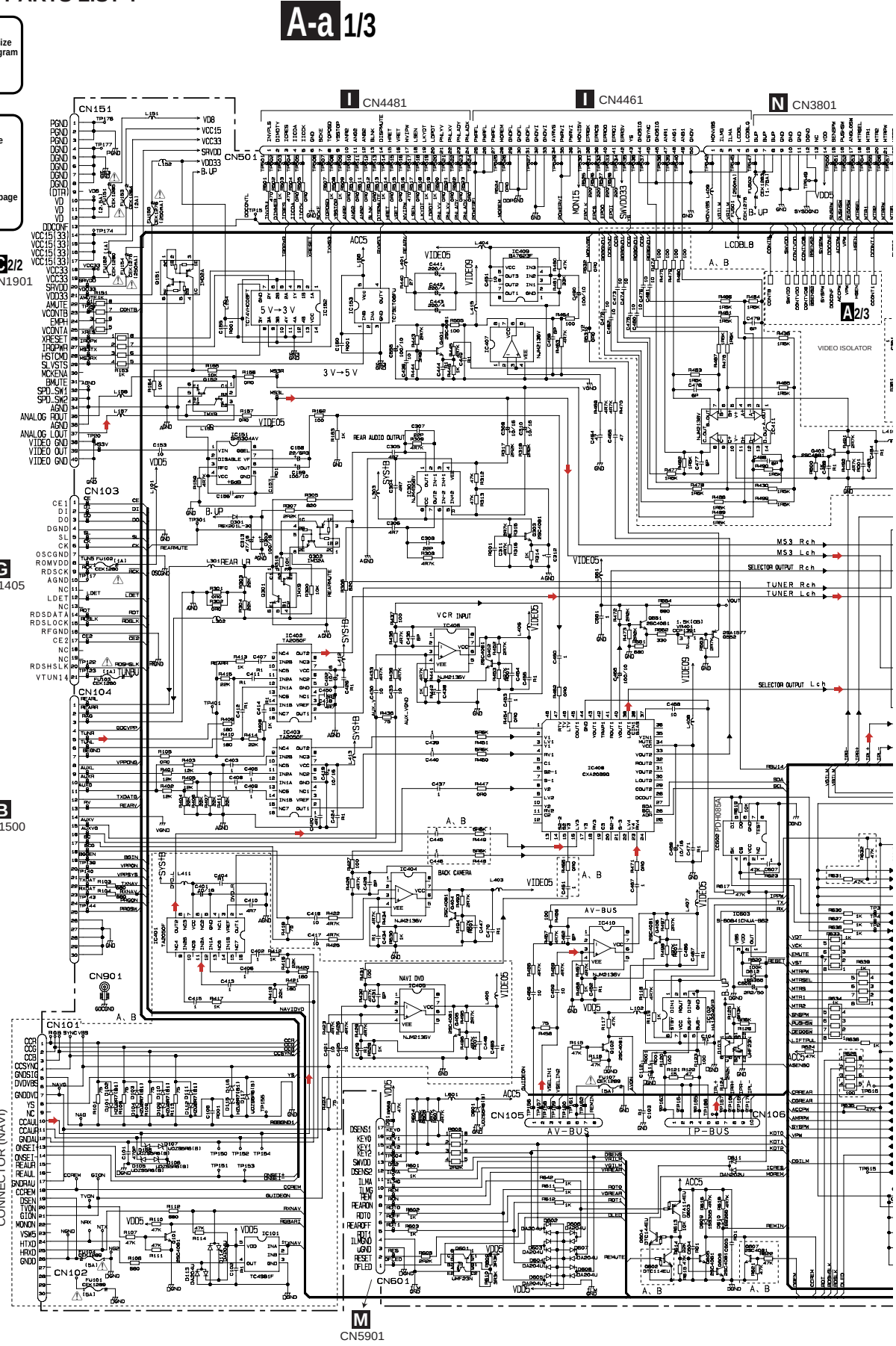



AUXVIN
VGND
AUXLIN
AGND
AUXRIN
AGND
REARVOUT
VGND
REARLOUT
AGND
REARROUT
AGND
B. UPCAM IN
VGND
BG SENS
N1406
FM/AM ANTENNA
MAIN
CONNECTOR (NAVI)
CN101
IP BUS
AV BUS
CN106
CN105
CN801
CN802
CN201
CN601
REAR FAN
CENTER FAN
RCA CORD
CN5901
M
PANEL PCB
CN5902
CN501
CN502
CN3801
N MAIN UNIT
O SW UNIT
P VOLUME UNIT
CN4461
CN5501
L GRILLE PCB
C4201
CN4301
J
UPPER PCB
CN4311
CN4312
K SENSE PCB
CN4701
LCD

3.3 MOTHER(1/3) PCB(GUIDE PAGE)

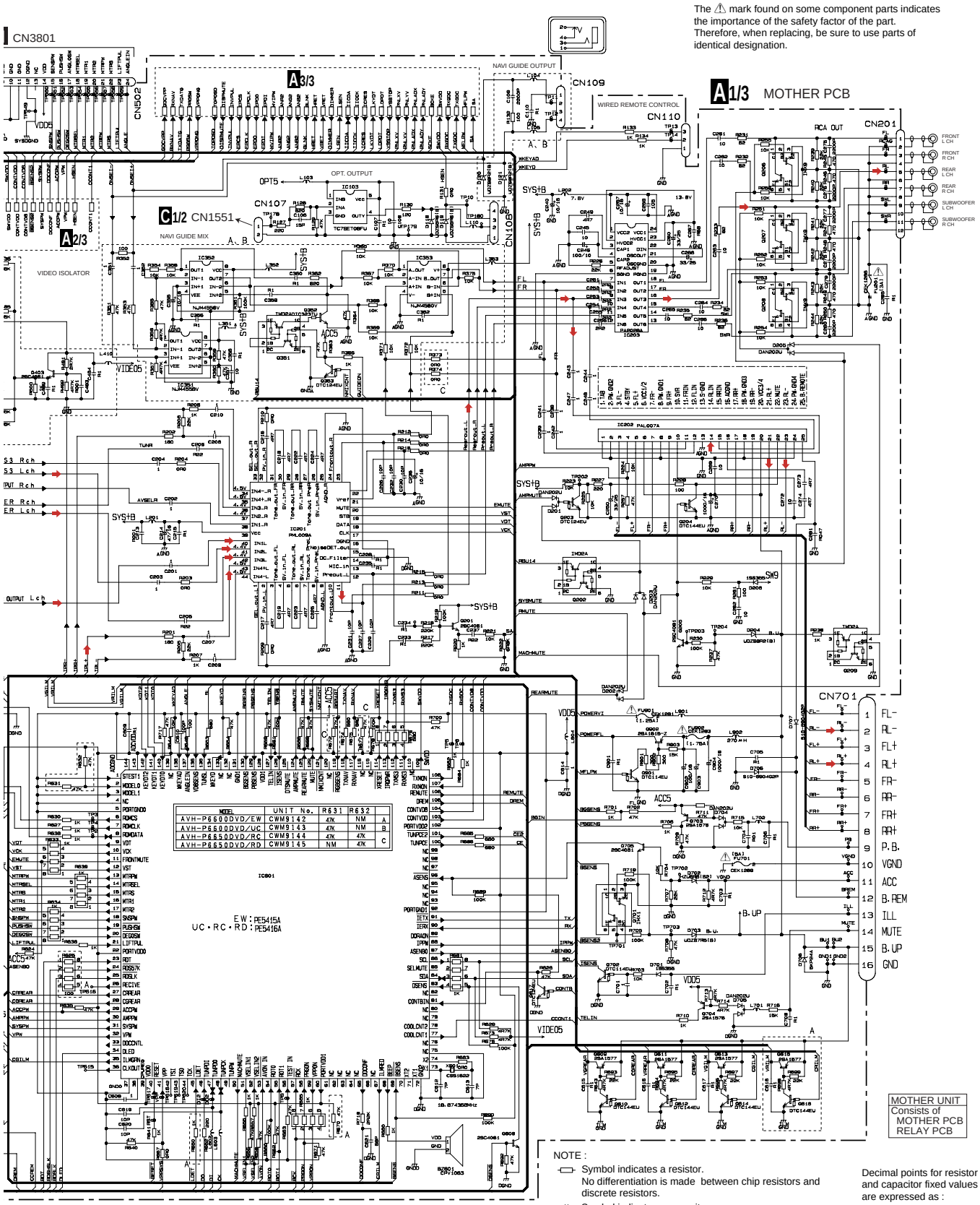
Note: When ordering service parts, be sure to refer to " EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".





A-b 1/3

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

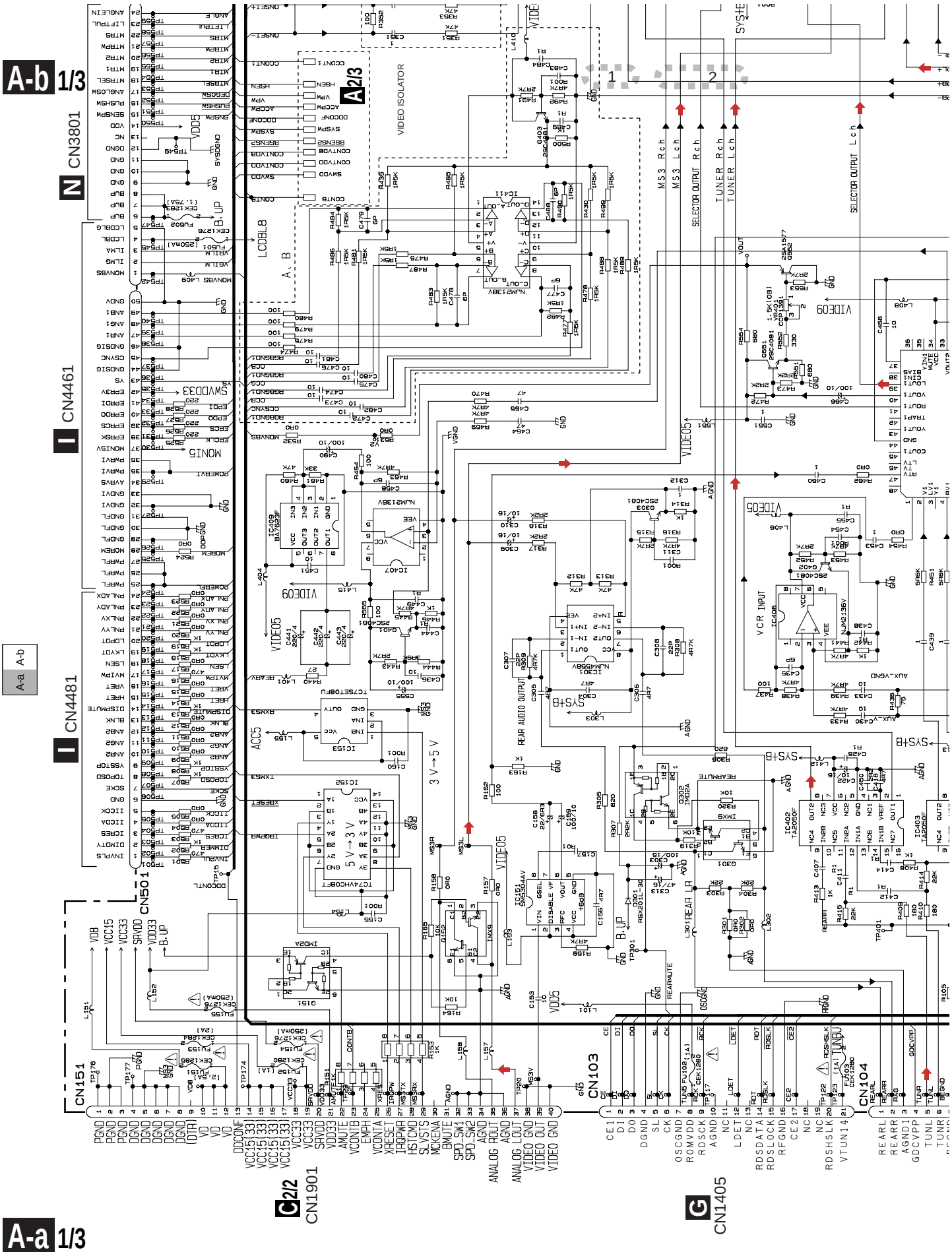


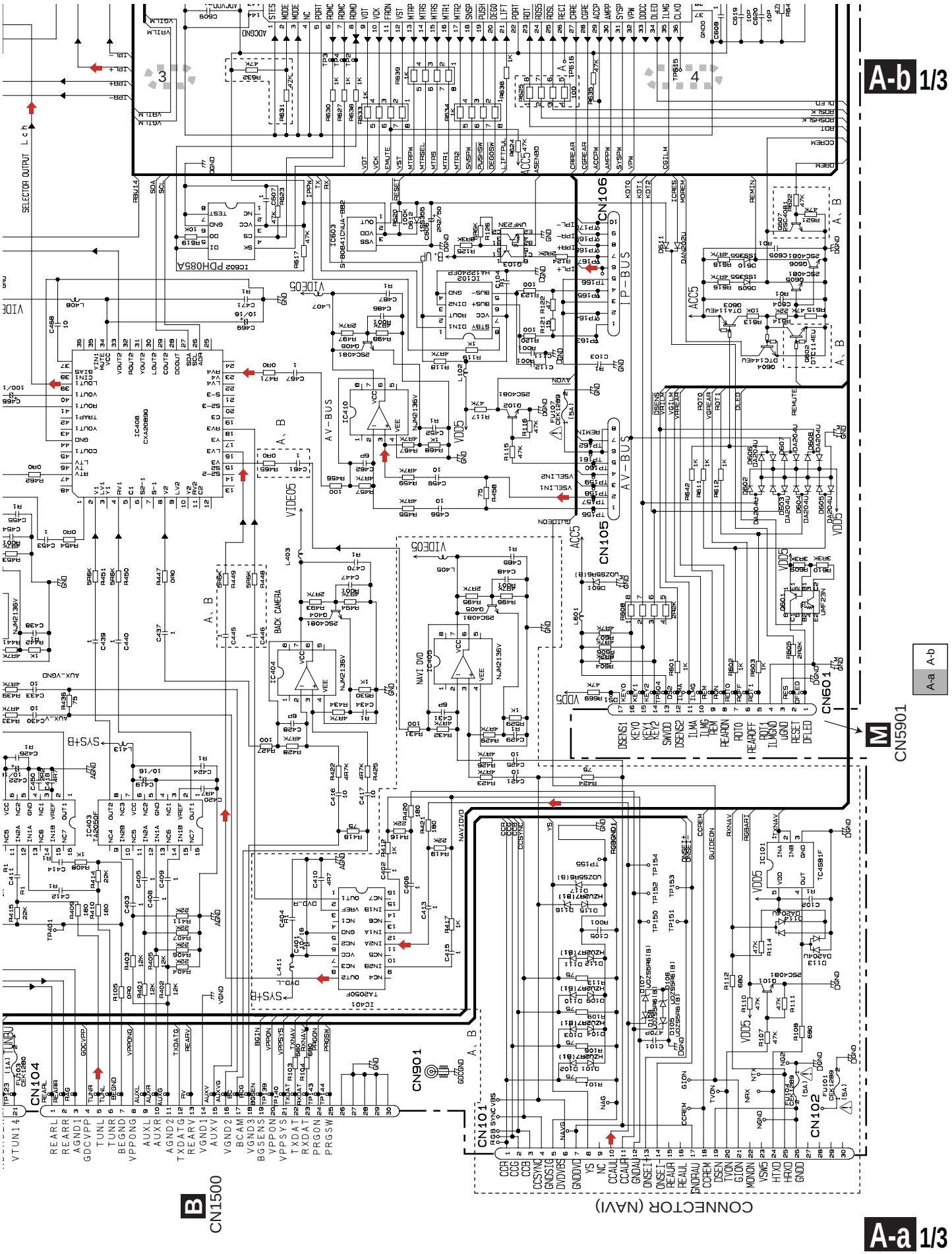
NOTE :

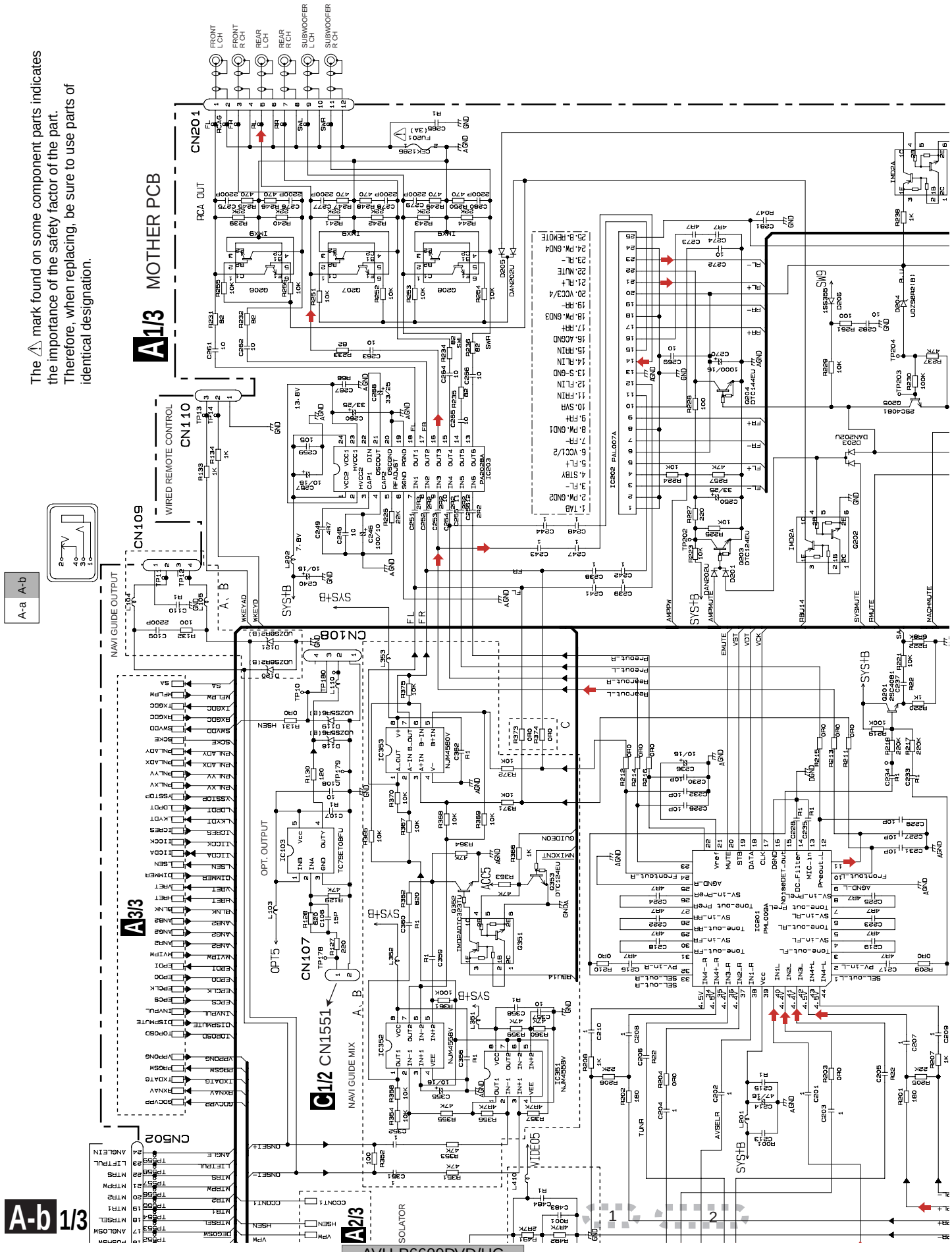
- Symbol indicates a resistor. No differentiation is made between chip resistors and discrete resistors.
- Symbol indicates a capacitor. No differentiation is made between chip capacitors and discrete capacitors.

Decimal points for resistor and capacitor fixed values are expressed as :
2.2→2R2
0.022→R022

A1/3


A-b 1/3
A-a 1/3
CN3801
CN4461
CN4481
CN501
CN1901
CN103
CN1405
CN151
CN104
A2/3
C2/2
G
VIDEO ISOLATOR
SELECTOR OUTPUT Lch
SELECTOR OUTPUT Rch
TUNER Lch
TUNER Rch
MS3 Lch
MS3 Rch
VCR INPUT
REAR AUDIO OUTPUT
3 V→5 V
5 V→3 V
VIDEO5
VIDEO9
SYS+B
B.UP
VDD
VCC15
VCC33
SRVDD
VDD33
PGND
DGND
AGND
VIDEO GND
VIDEO OUT
ANALOG GND
ANALOG OUT
REARL
REARR
TUNR
TUNL

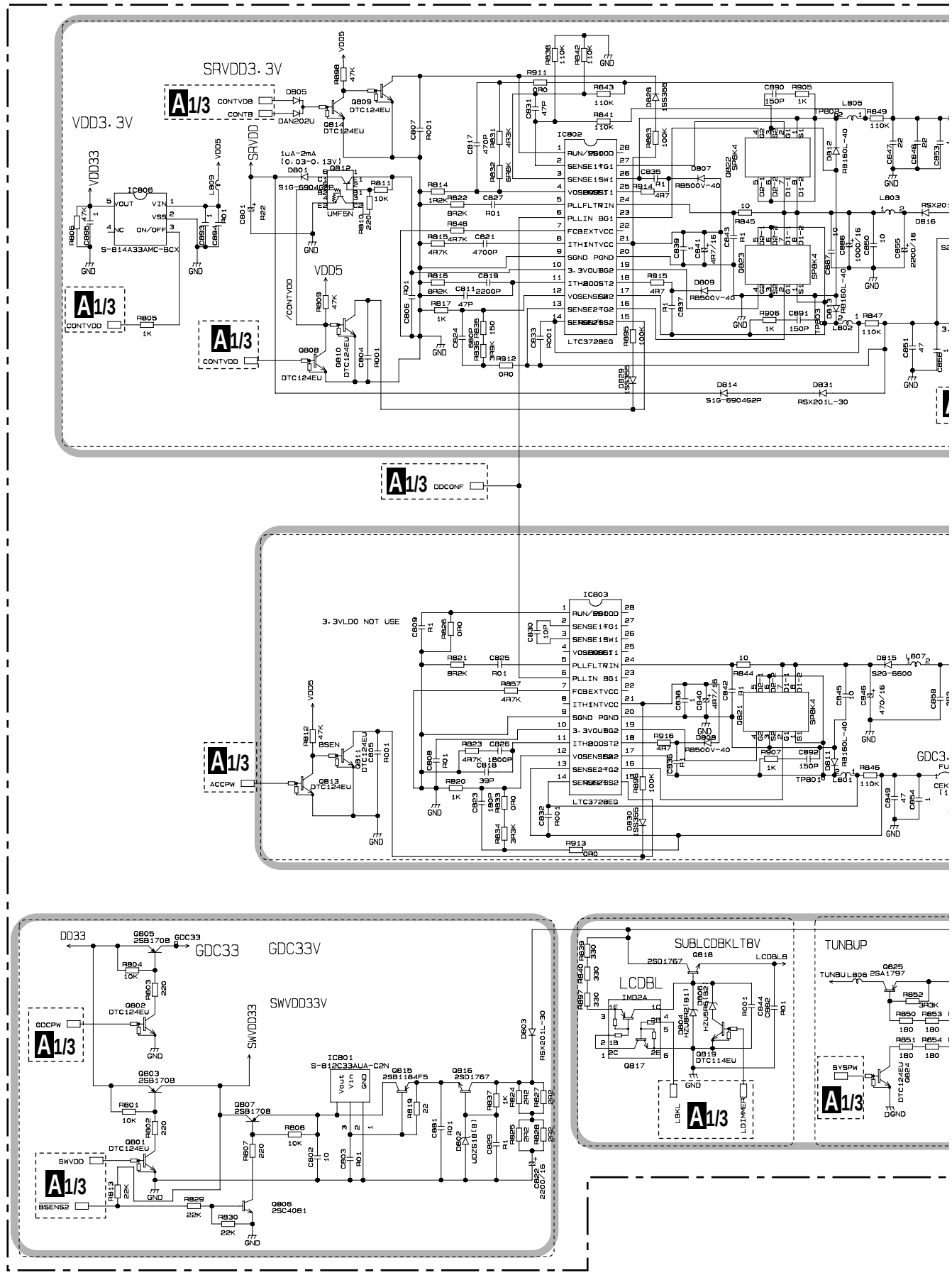

A-b 1/3
A-a 1/3
A-b
A-a
CN5901
CN1500
CONNECTOR (NAVI)
CN104
CN101
CN102
CN105
CN106
CN601
CN901
IP-BUS
AV-BUS
SELECTOR OUTPUT Lch
BACK CAMERA
NAVI DVD



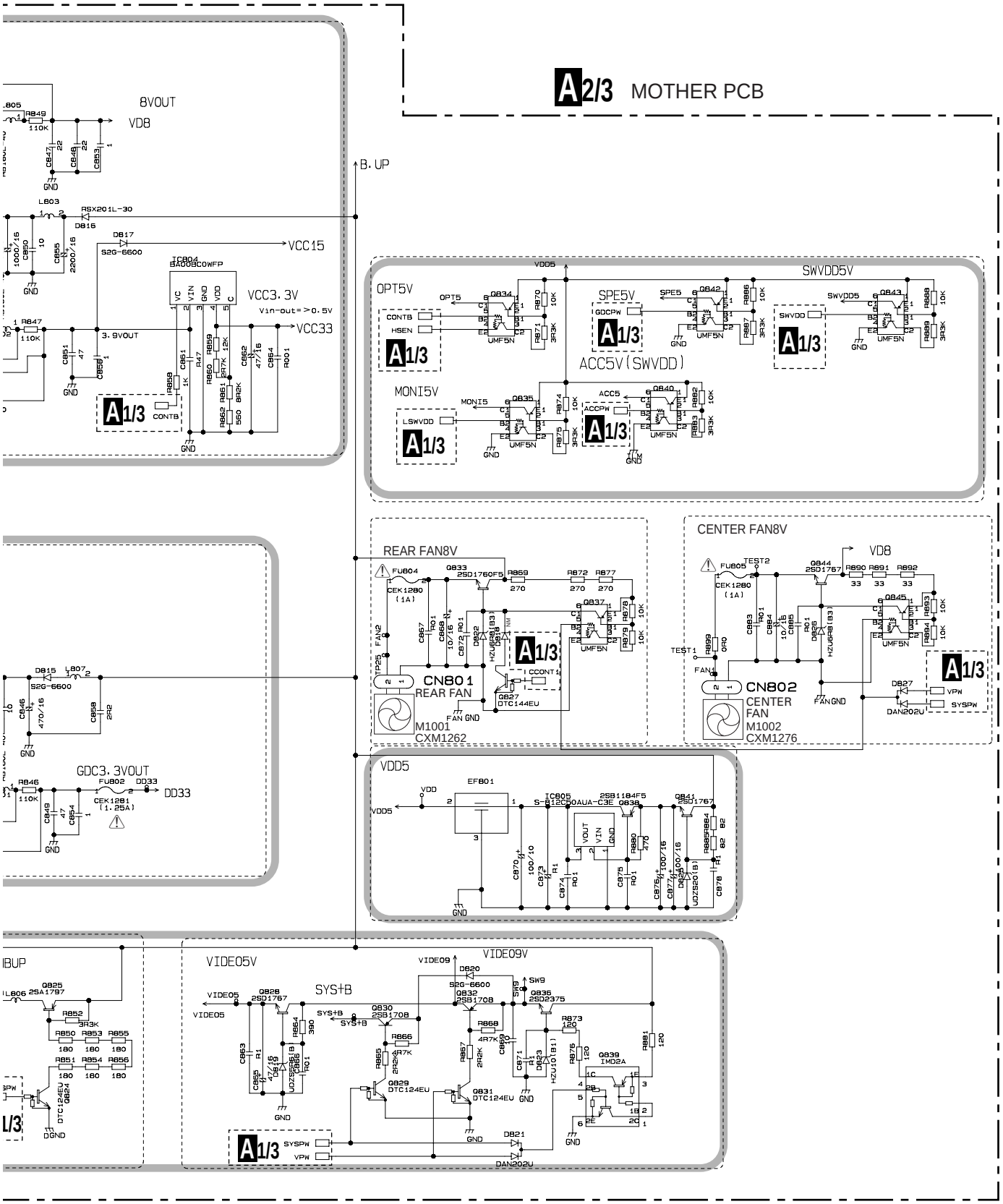
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

MOTHER UNIT
Consists of
MOTHER PCB
RELAY PCB
Decimal points for resistor and capacitor fixed values are expressed as :
2.2 → 2R2
0.022 → R022
NOTE :
Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.
Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.
CN701
FL-
RL-
FL+
RL+
FR-
RR-
FR+
RR+
P.B.
VGND
ACC
B.REM
ILL
MUTE
B.UP
GND
IC601
UC • RC • RD : PE5415A
EW : PE5416A
MODEL
UNIT No.
R631
R632
AVH-P6600DVD/EW
CWM9142
47K
N.M
A
AVH-P6600DVD/UC
CWM9143
47K
N.M
B
AVH-P6650DVD/RC
CWM9144
47K
47K
C
AVH-P6650DVD/RD
CWM9145
N.M
47K
A-a
A-b
A-b 1/3
AVH-P6600DVD/UC
43

3.4 MOTHER(2/3) PCB

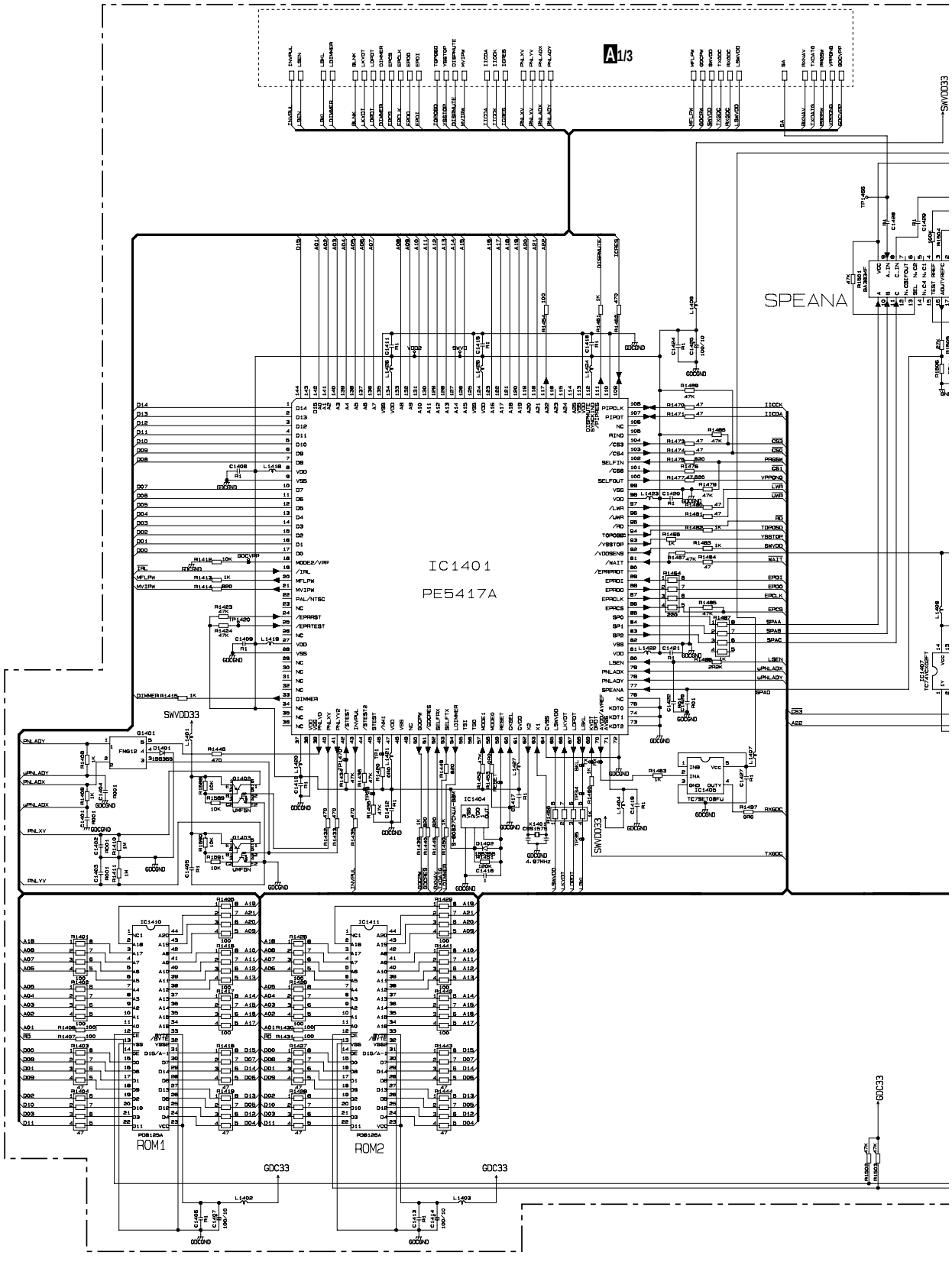


A2/3 MOTHER PCB

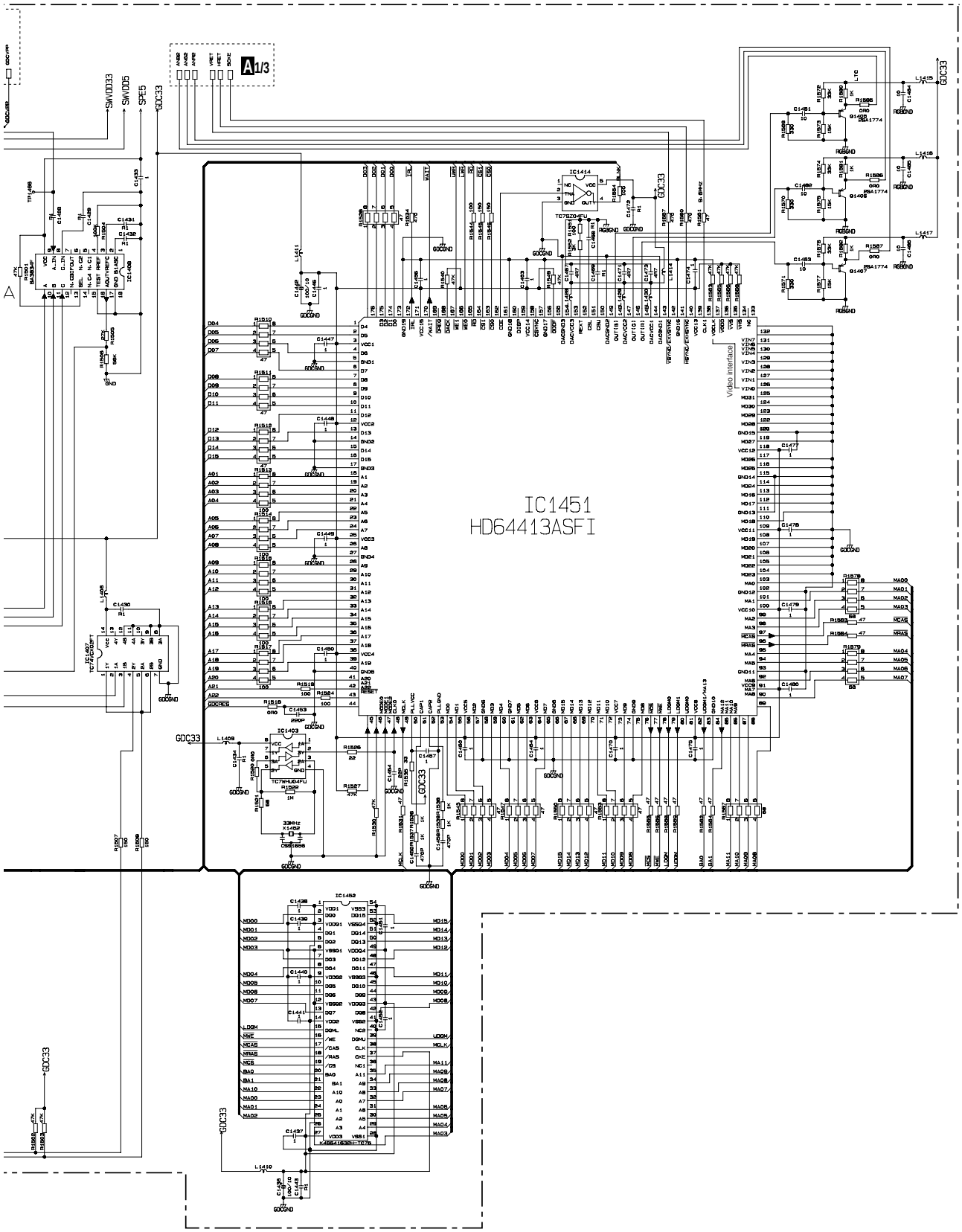


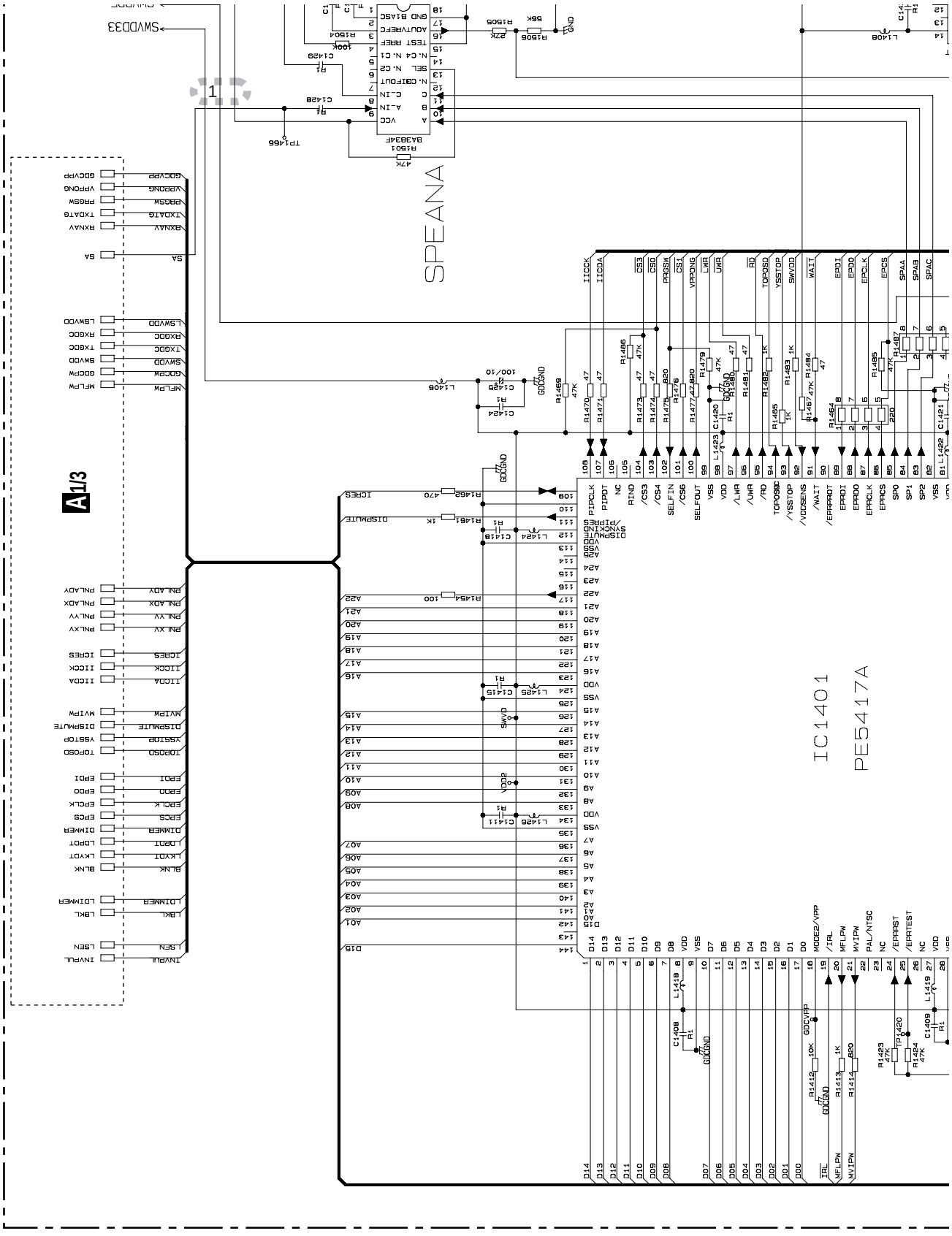
: The power supply is shown with the marked box.

3.5 MOTHER(3/3) PCB(GUIDE PAGE)

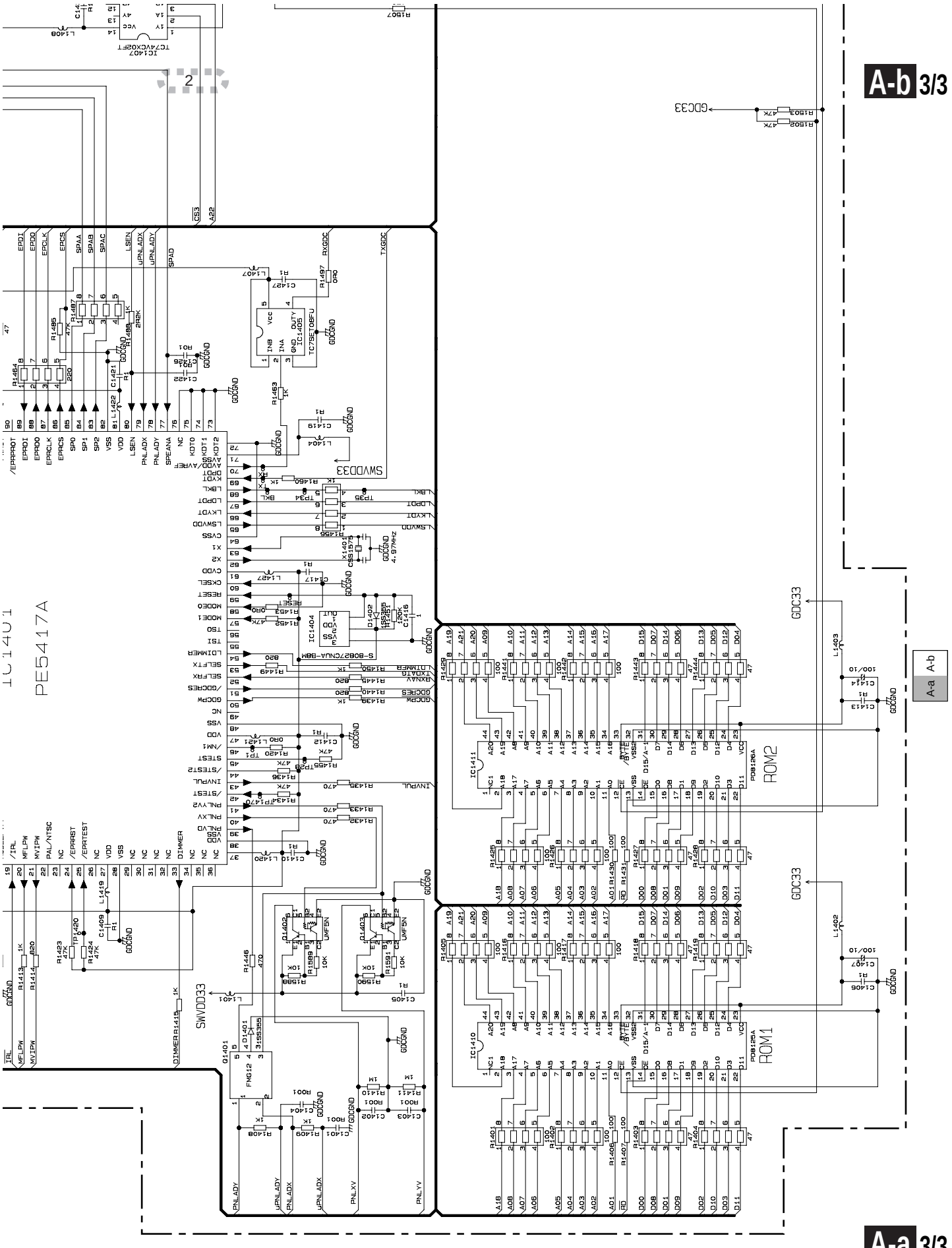


A3/3 MOTHER PCB




SPEANA
IC1401
PE5417A
A1/3
SWVDD33
TP1466
R1505
56K
2.7K
R1504
100K
C1429
C1428
B3383AF
4.7K
GND
GDCVPP
VPPONG
PRGSW
TXDATG
RXNAV
SA
LSWVDD
RXGDC
TXGDC
SWVDD
GDCPW
MFLPW
INVPUL
LSEN
LBKL
LDIMMER
BLNK
LKYDT
LDPDT
DIMMER
EPCS
EPCLK
EPDO
EPDI
TOPOSD
YSSTOP
DISPMUTE
MVIPW
IICDA
IICCK
ICRES
PNL_ADY
PNL_ADX
PNL_YY
PNL_XY
ICCK
ICDA
CS3
CSD
PRGSW
CS1
VPPONG
LWR
UWR
RD
TOPOSD
YSSTOP
SWVDD
WAIT
EPDI
EPDO
EPCLK
EPCS
SPAA
SPAB
SPAC
R1469
47K
R1470
R1471
R1473
R1474
R1475
R1476
R1477
R1478
R1479
R1480
R1481
R1482
R1483
R1484
R1485
R1486
R1487
C1420
C1424
C1406
100/10
GDCGND
R1462
470
R1461
1K
R1454
100
C1418
C1415
C1411
L1425
L1426
L1423
L1424
SWVD
VDDP
ICRES
DISPMUTE
PIPCLK
PIPDT
NC
/CS3
/CS4
SELFIN
/CS6
SELFOUT
VSS
VDD
/LWR
/UWR
/RD
TOPOSD
/YSSTOP
/VDDSENS
/WAIT
/ERPRPDT
ERPDI
ERPDO
ERPCLK
ERPCS
SP0
SP1
SP2
VSS
VDD
MODE2/VPP
/IRL
MFLPW
MVIPW
PAL/NTSC
NC
/EPRRST
/EPRTEST
NC
VDD
VSS
R1412
10K
R1413
1K
R1414
820
R1423
47K
R1424
47K
TP1420
C1409
L1419
L1408
C1408
L1418

A-a 3/3


A-b 3/3
A-a 3/3
A-b
A-a
PE5417A
IC1401
ROM1
ROM2
SWVDD33
GDC33
GDGND

A

B

C

D

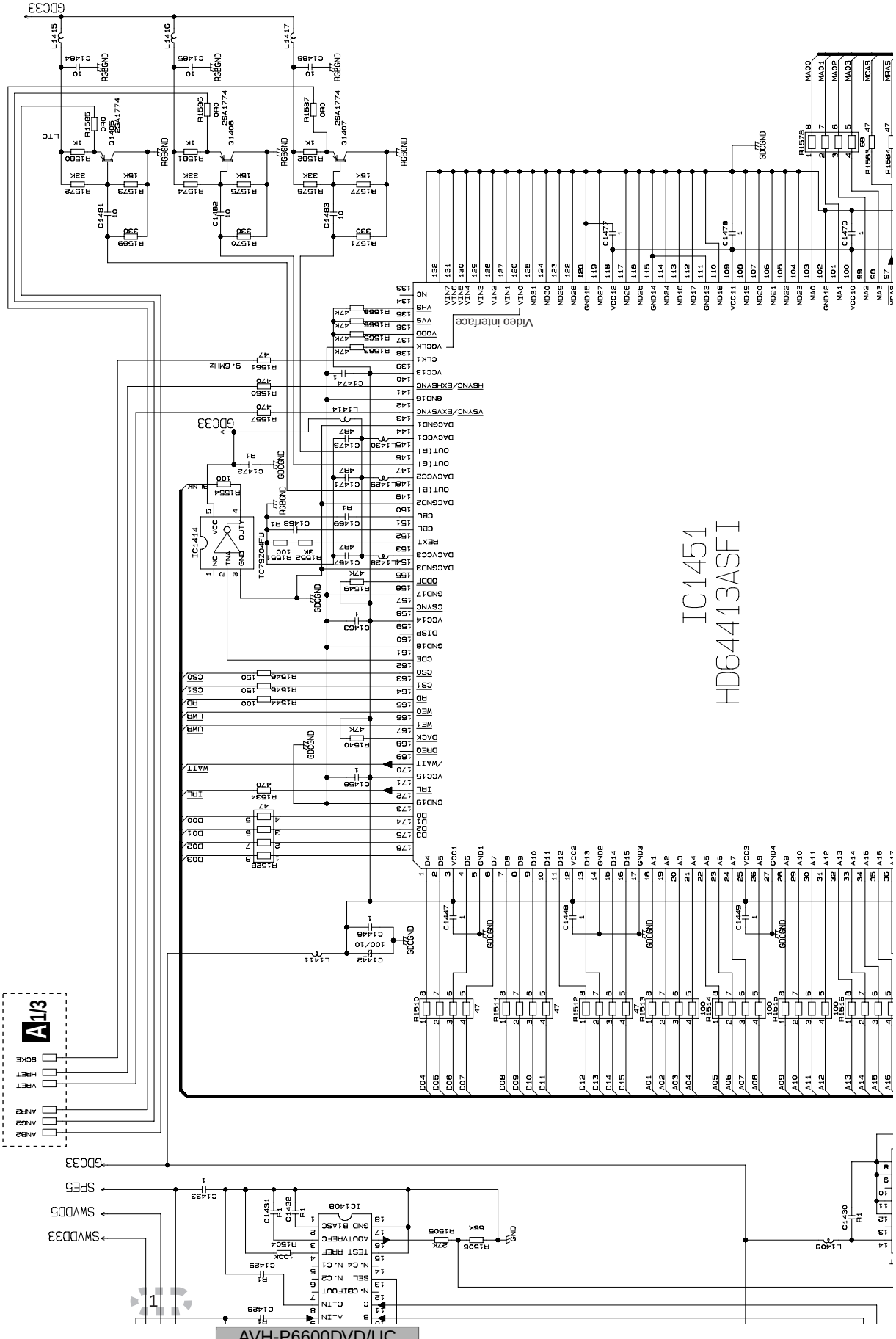
E

F

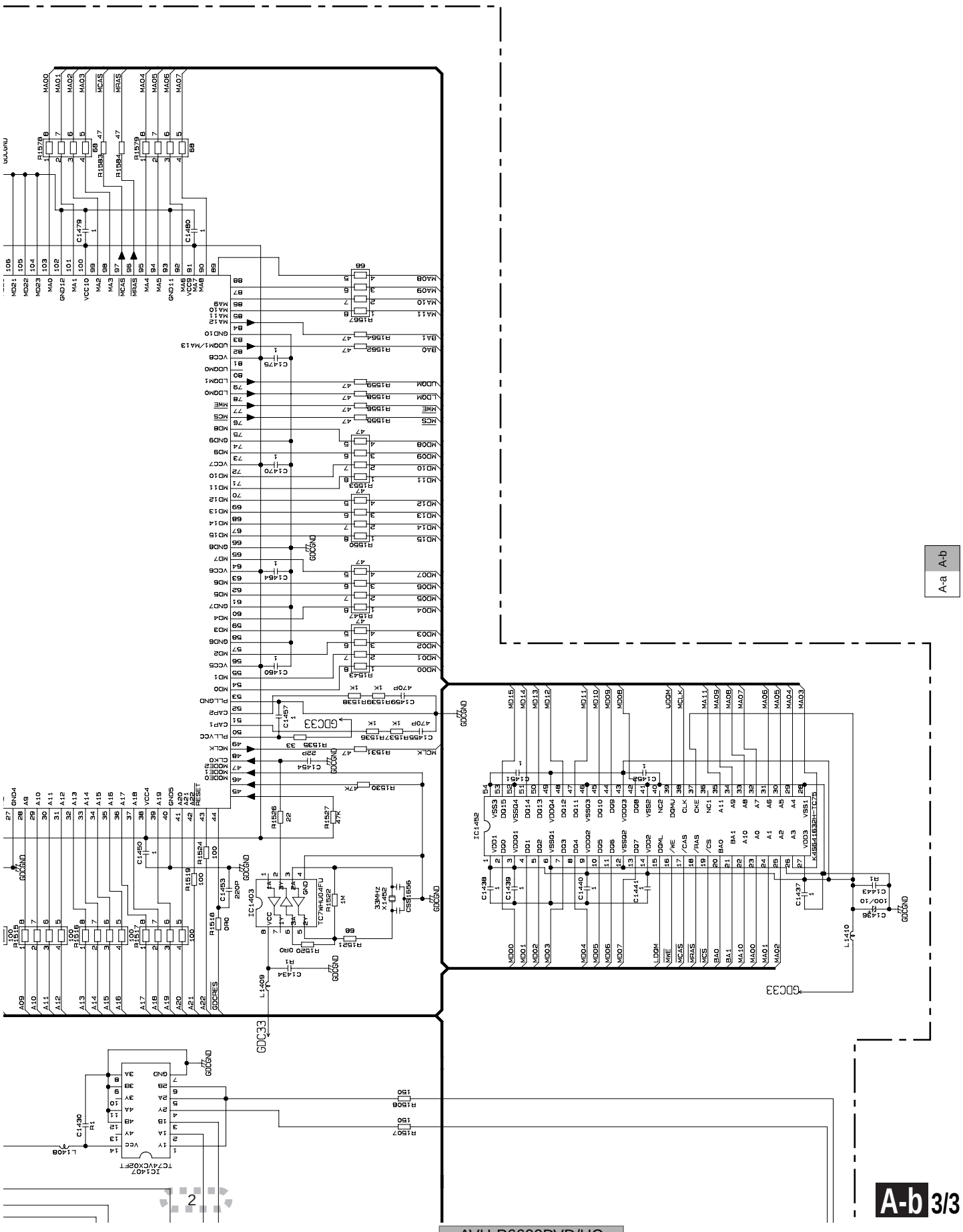
A-a A-b

MOTHER PCB

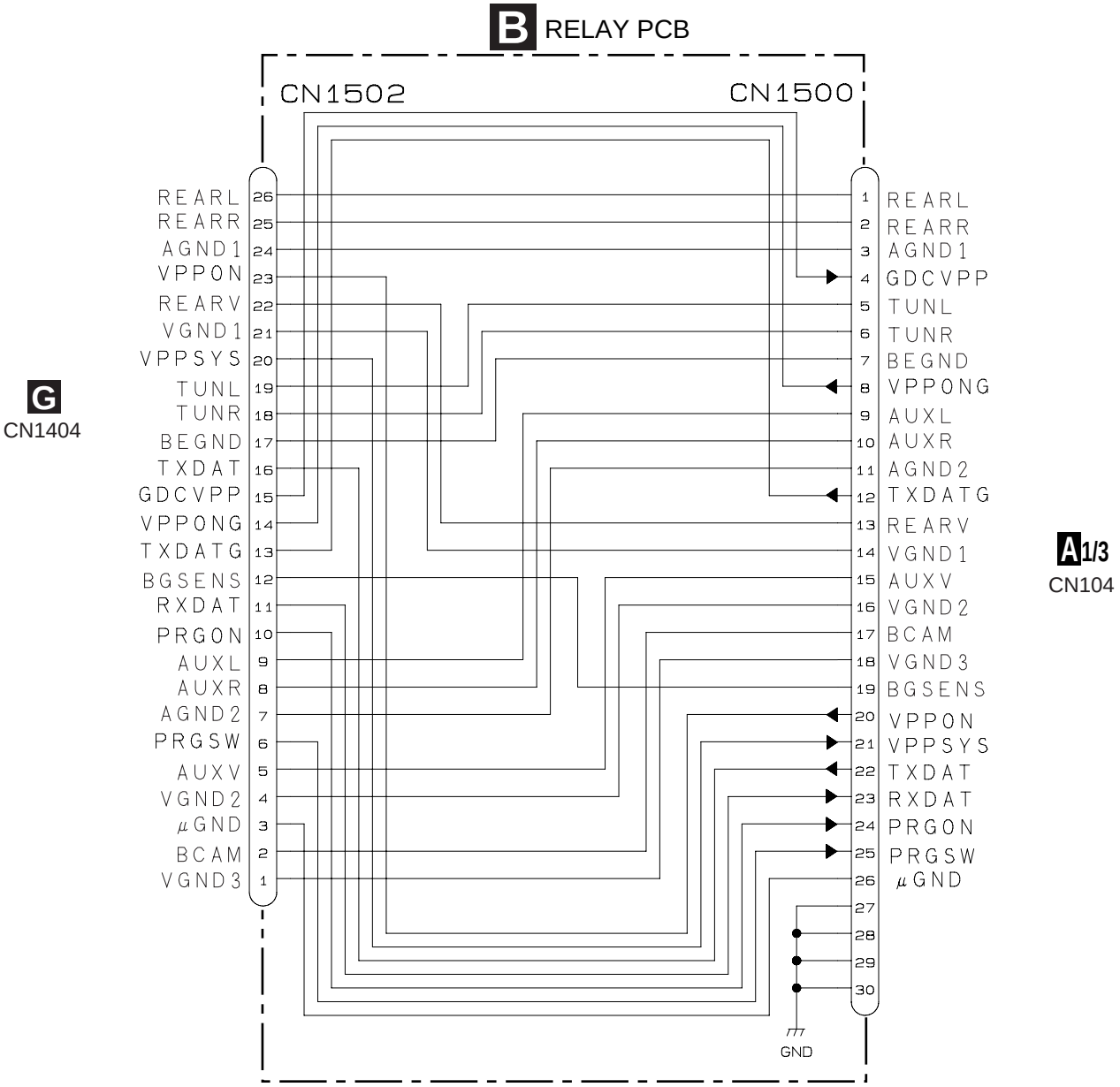
A3/3



A-b 3/3



3.6 RELAY PCB



MOTHER UNIT
Consists of MOTHER PCB RELAY PCB

B

A

B

C

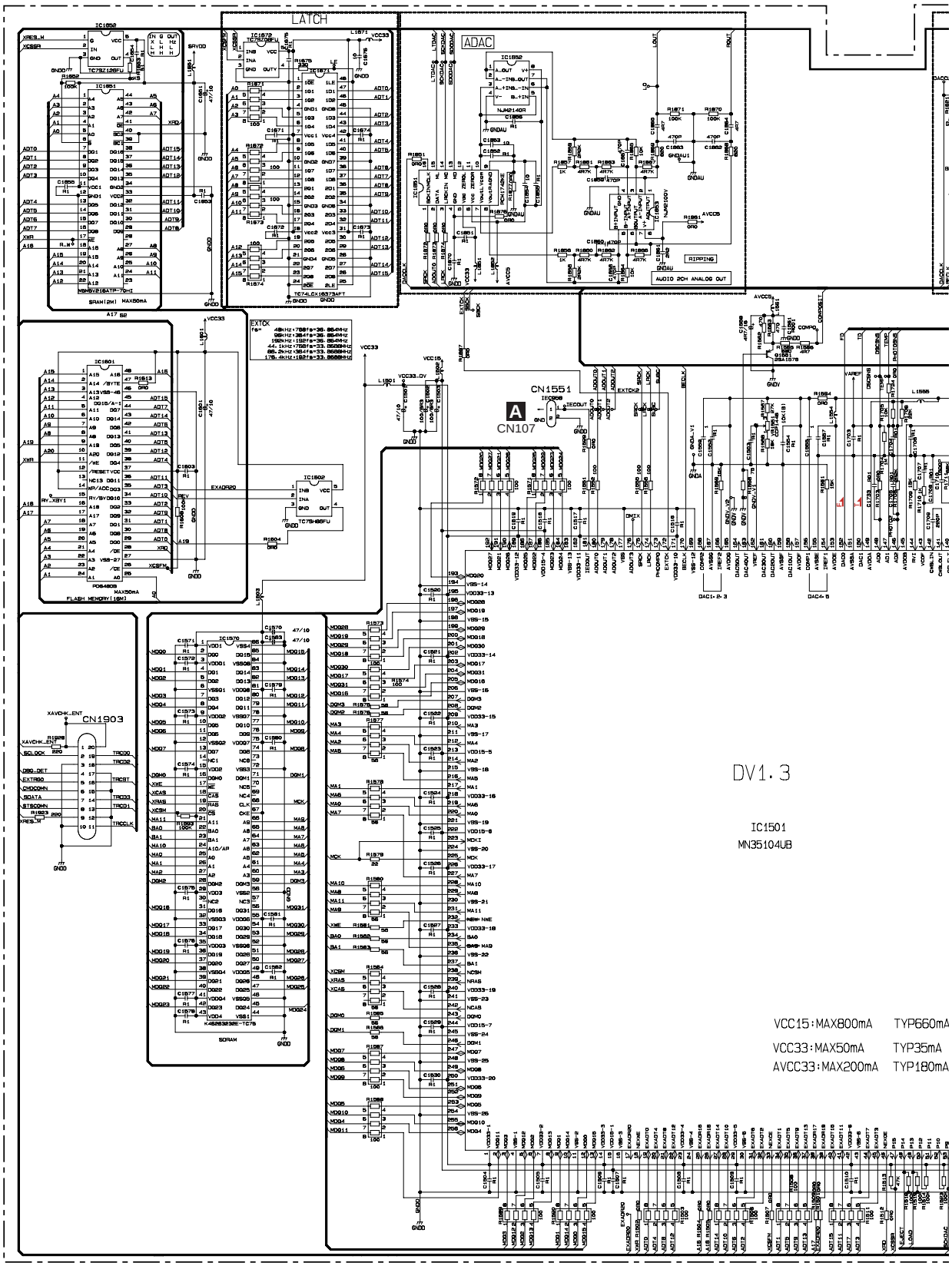
D

E

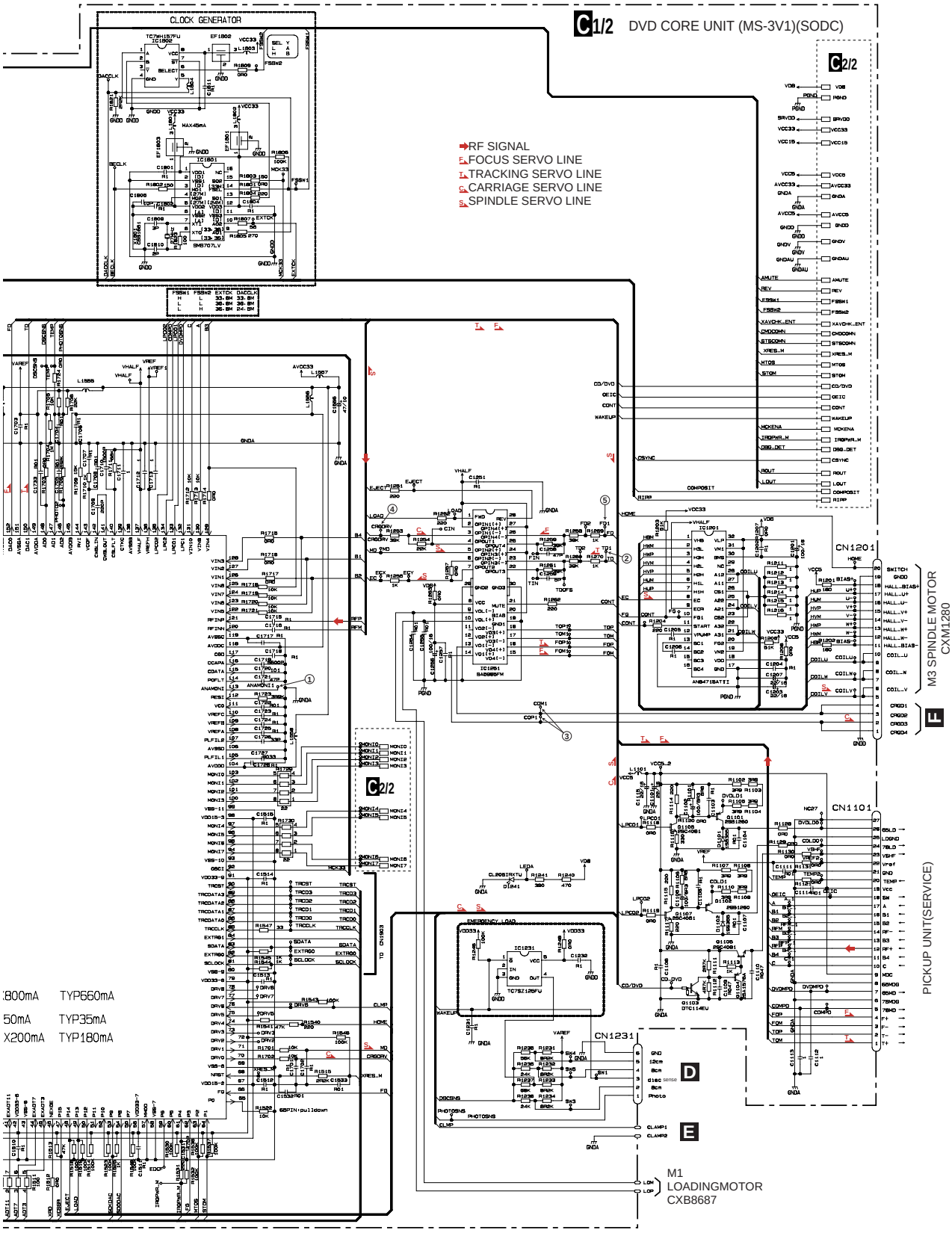
F

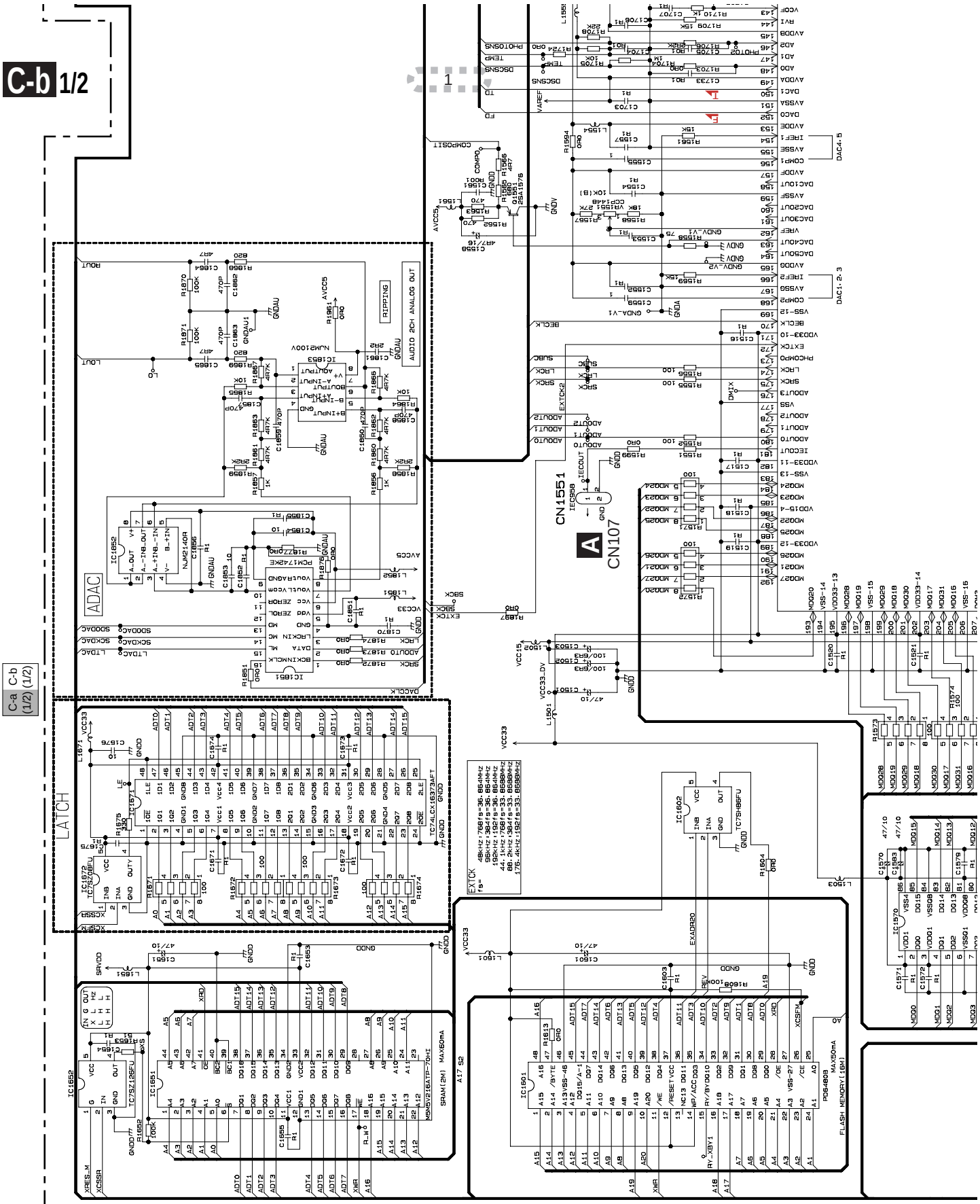
3.7 DVD CORE UNIT(MS-3V1)(SODC)(GUIDE PAGE)

C-a 1/2



C 1/2


C1/2 DVD CORE UNIT (MS-3V1)(SODC)
C2/2
CLOCK GENERATOR
RF SIGNAL
FOCUS SERVO LINE
TRACKING SERVO LINE
CARRIAGE SERVO LINE
SPINDLE SERVO LINE
CN1201
M3 SPINDLE MOTOR
CXM1280
CN1101
PICKUP UNIT(SERVICE)
CN1231
M1
LOADINGMOTOR
CXB8687
:800mA TYP660mA
50mA TYP35mA
X200mA TYP180mA



DV1.3
IC1501
MN35104UB
VCC15:MAX800mA TYP56
VCC33:MAX50mA TYP35
AVCC33:MAX200mA TYP18
C-b 1/2
C-a 1/2
C-a C-b (1/2) (1/2)
CN1903
IC1570
SDRAM
K4S643232E-TC75
5
6
7
8
A
B
C
D
E
F

C1/2 DVD CORE UNIT (MS-3V1)(SODC)

C2/2

RF SIGNAL
F FOCUS SERVO LINE
T TRACKING SERVO LINE
C CARRIAGE SERVO LINE
S SPINDLE SERVO LINE

C-a (1/2) C-b (1/2)

CLOCK GENERATOR

CN1201

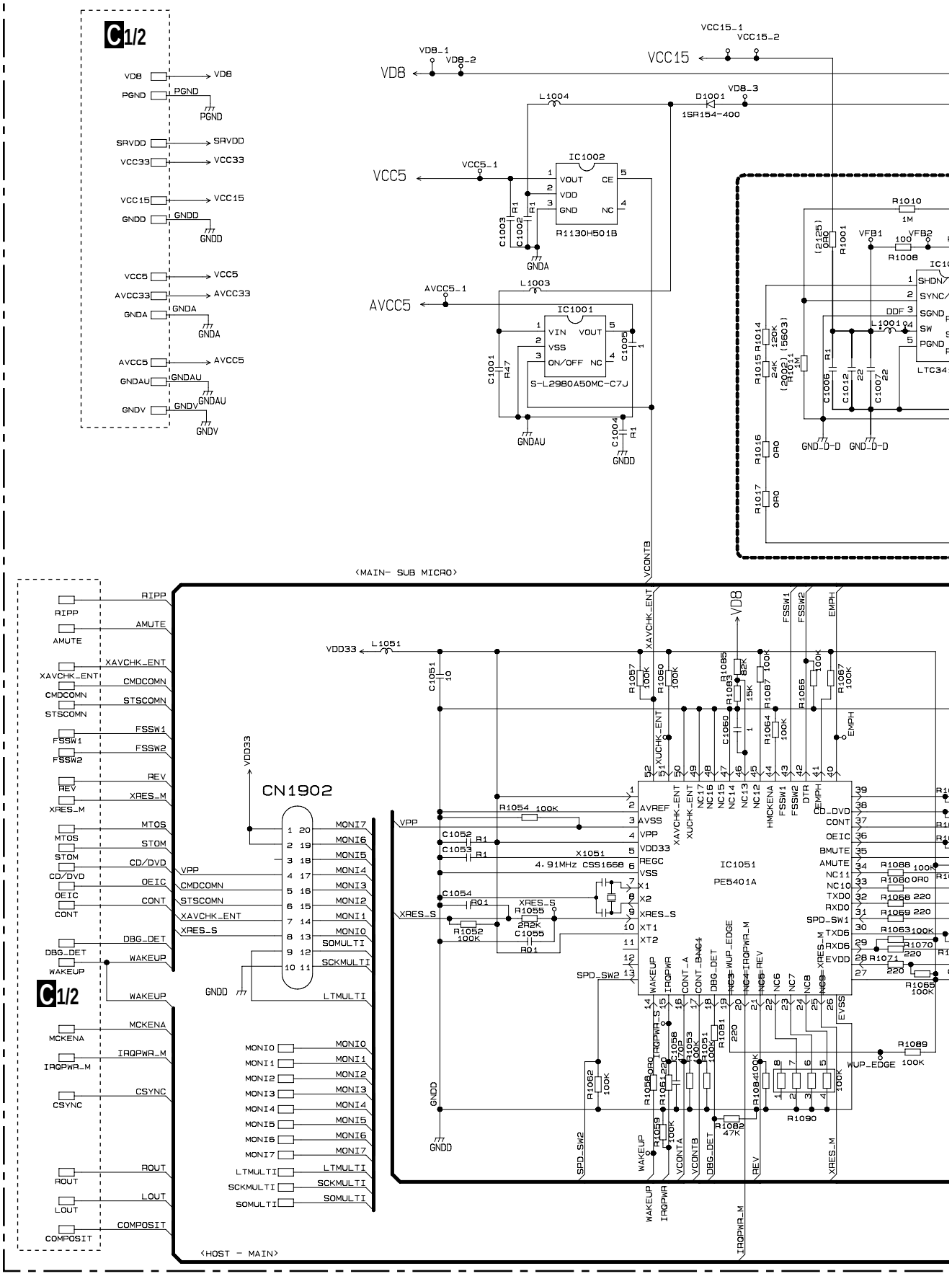
3 SPINDLE MOTOR
CXM1280

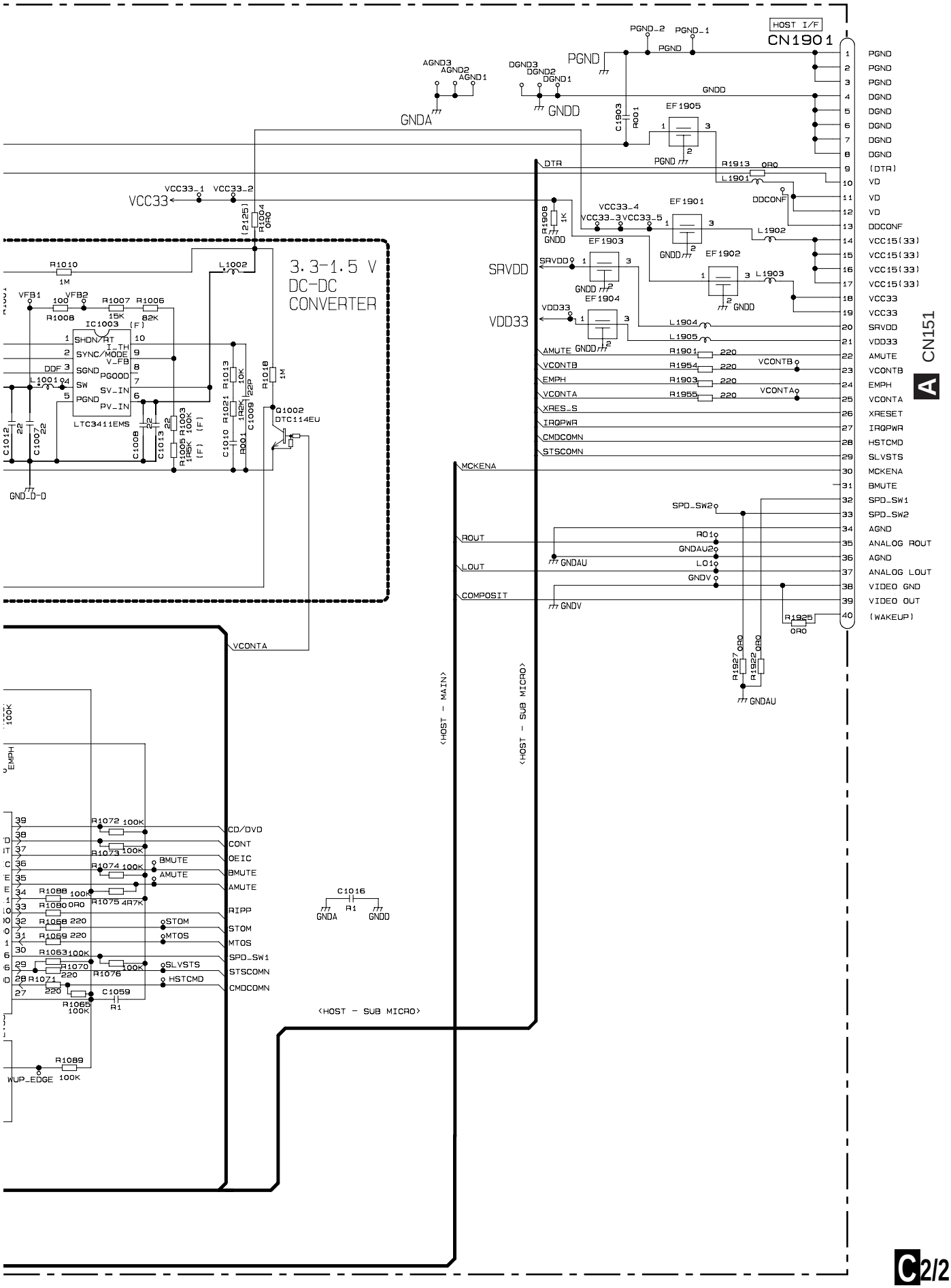
C-b 1/2

M3 SPINDLE MOT
CXM1280
PICKUP UNIT(SERVICE)
CN1101
CN1231
M1
LOADINGMOTOR
CXB8687
C2/2
TO CN1803
TYP660mA
TYP35mA
TYP180mA
C-a (1/2) C-b (1/2)
C-b 1/2

3.8 DVD CORE UNIT(MS-3V1)(CPU)

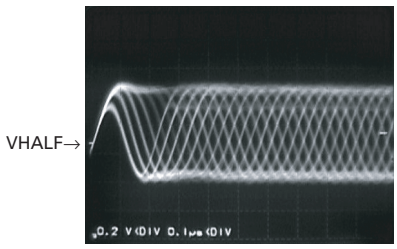
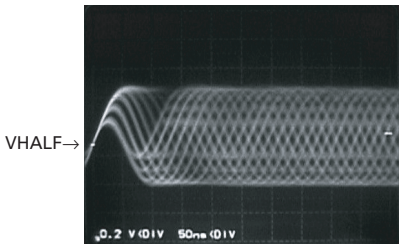
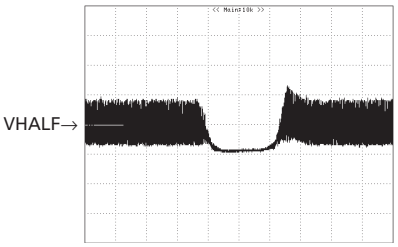
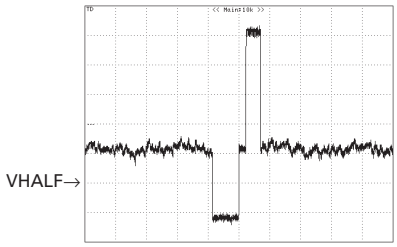
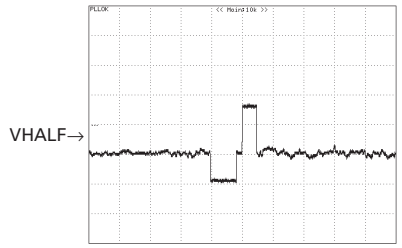
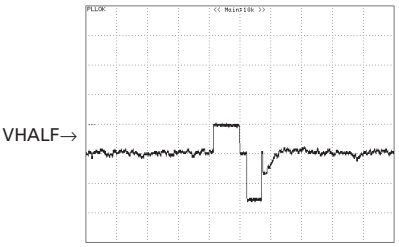
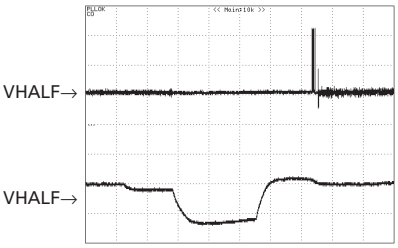
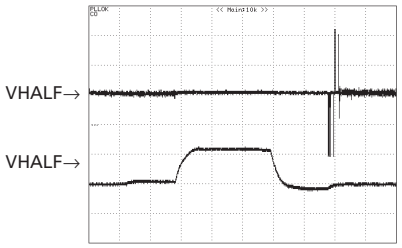
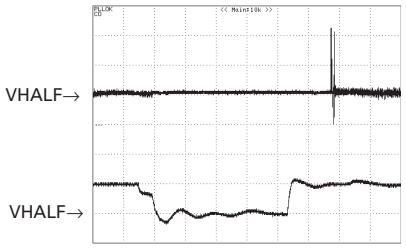
C2/2 DVD CORE UNIT (MS-3V1)(CPU)




HOST I/F
CN1901
3.3-1.5 V
DC-DC
CONVERTER
IC1003
LTC3411EMS
Q1002
DTC114EU
CN151
A
VCC33
SRVDD
VDD33
PGND
GNDA
GNDD
GNDAU
GNDV
GND_D-D
VCONTA
MCKENA
ROUT
LOUT
COMPOSIT
<HOST - MAIN>
<HOST - SUB MICRO>
CD/DVD
CONT
OEIC
BMUTE
AMUTE
RIPP
STOM
MTOS
SPD_SW1
STSCOMN
CMDCOMN
HSTCMD
WUP_EDGE

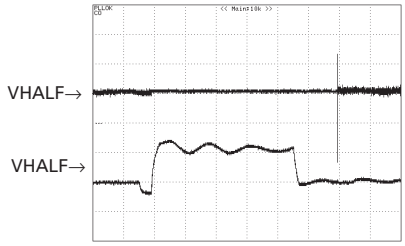
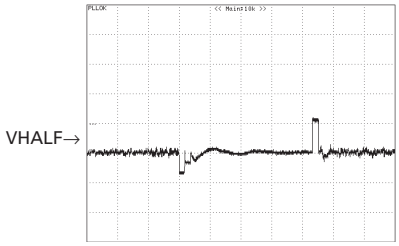
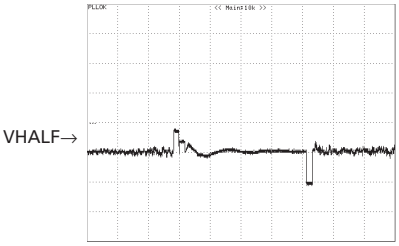
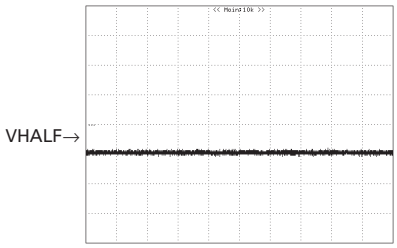
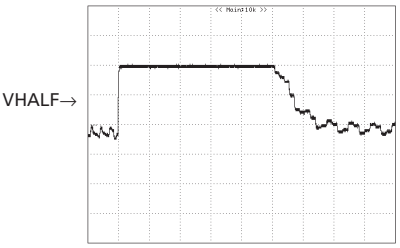
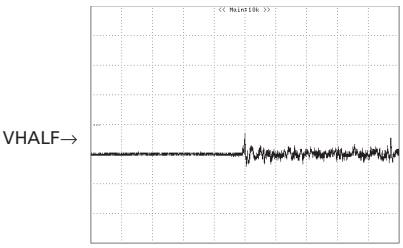
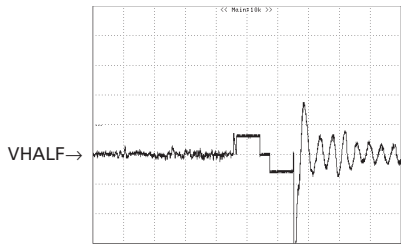
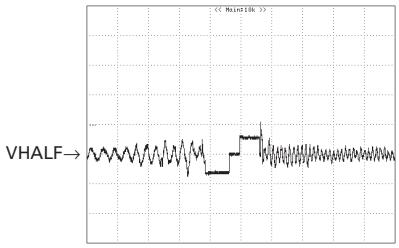
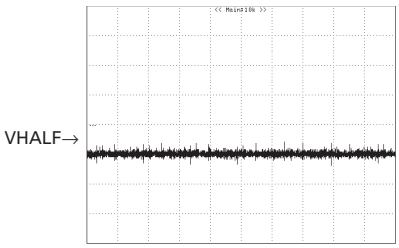
● Waveforms

Note:1. The encircled number denote measuring pointes in the circuit diagram.
2. Reference voltage VHALF : 1.65V(TD1,FD1,CRGDRV)
: 2V Center(ANAMONI1)
In this waveform, it is seeing on the GND standard.
Offset of 1.65V or 2V is put in.

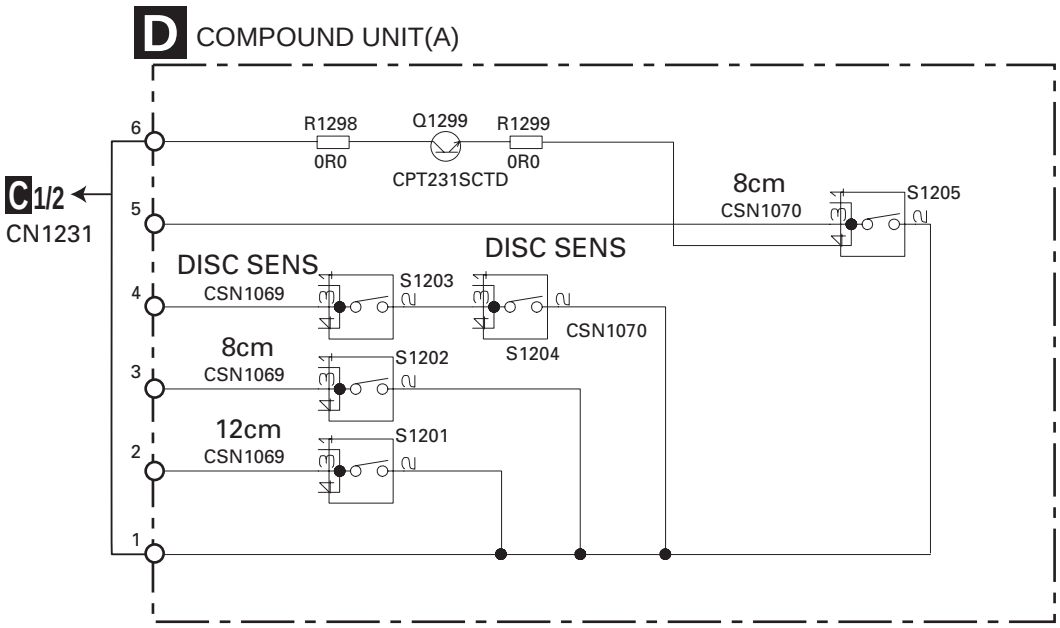
① ANAMONI1 0.2V/div. 0.1µs/div. CDRF 	① ANAMONI1 0.2V/div. 0.1µs/div. DVDRF 	① ANAMONI1 0.5V/div. 100µs/div. DVDRF(BD1mm) 
② TD1 0.2V/div. 100µs/div. Interval 	② TD1 0.5V/div. 100µs/div. Interval FWD 	② TD1 0.5V/div. 100µs/div. Interval REV 
② CH1: TD1 0.5V/div.5ms/div. ③ CH2: COP1-COM1 2.0V/div.5ms/div. Traverse501FWD 	② CH1: TD1 0.5V/div.5ms/div. ③ CH2: COP1-COM1 2.0V/div.5ms/div. Traverse501REV 	② CH1: TD1 0.5V/div.5ms/div. ③ CH2: COP1-COM1 2.0V/div.5ms/div. Traverse5000FWD 

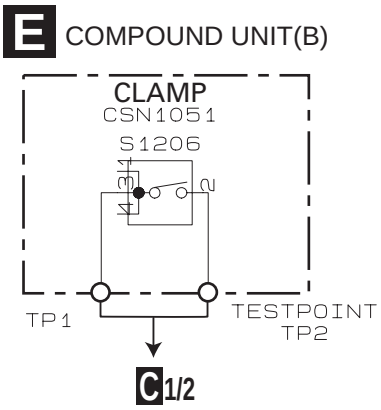
● Waveforms

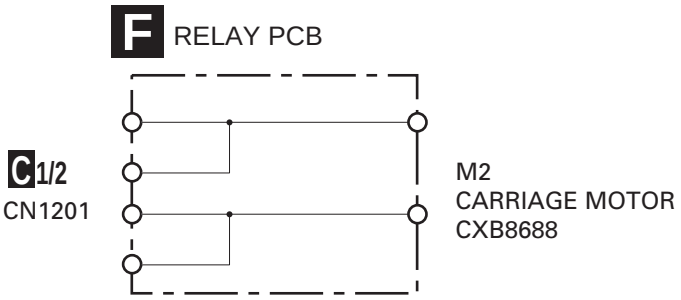
Note:1. The encircled number denote measuring pointes in the circuit diagram.
2. Reference voltage VHALF : 1.65V(TD1,FD1,CRGDRV)
: 2V Center(ANAMONI1)
In this waveform, it is seeing on the GND standard.
Offset of 1.65V or 2V is put in.

② CH1: TD1 0.5V/div.5ms/div. ③ CH2: COP1-COM1 2.0V/div.5ms/div. Traverse5000REV 	② TD1 0.5V/div.500µs/div. Multi 32FWD 	② TD1 0.5V/div.500µs/div. Multi 32REV 
② TD1 0.5V/div.20ms/div. Play TD 	④ CRGPRV 0.5V/div. 100µs/div. ID search Insaide → Outside 	⑤ FD1 0.5V/div. 1ms/div. Focus close 
⑤ FD1 0.5V/div.500µs/div. Focus jamp L 0 → L1 	⑤ FD1 0.5V/div.500µs/div. Focus jamp L1 → L 0 	⑤ FD1 0.5V/div.20ms/div. Play TD 

3.9 COMPOUND UNIT(A) , COMPOUND UNIT(B) AND RELAY PCB

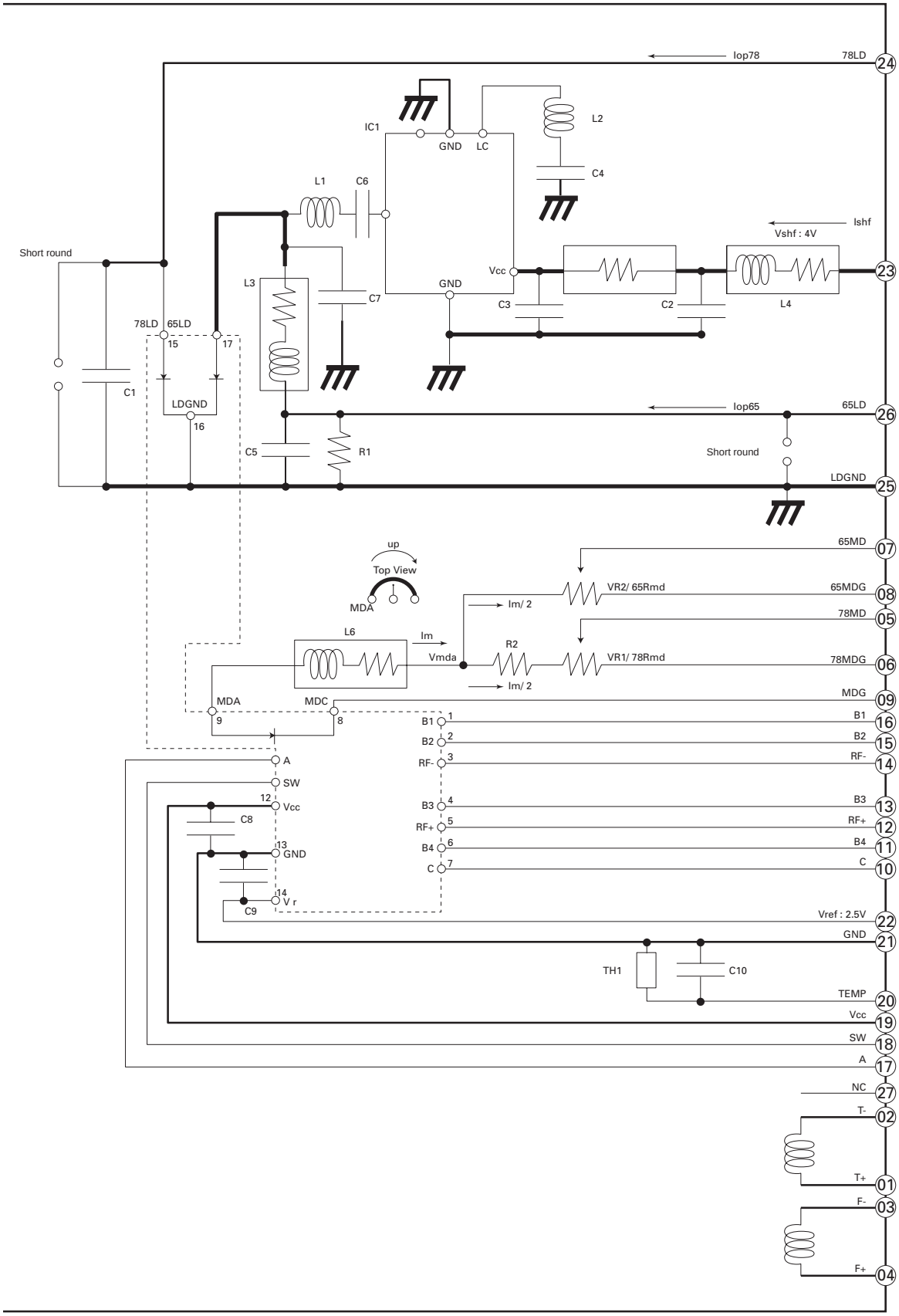






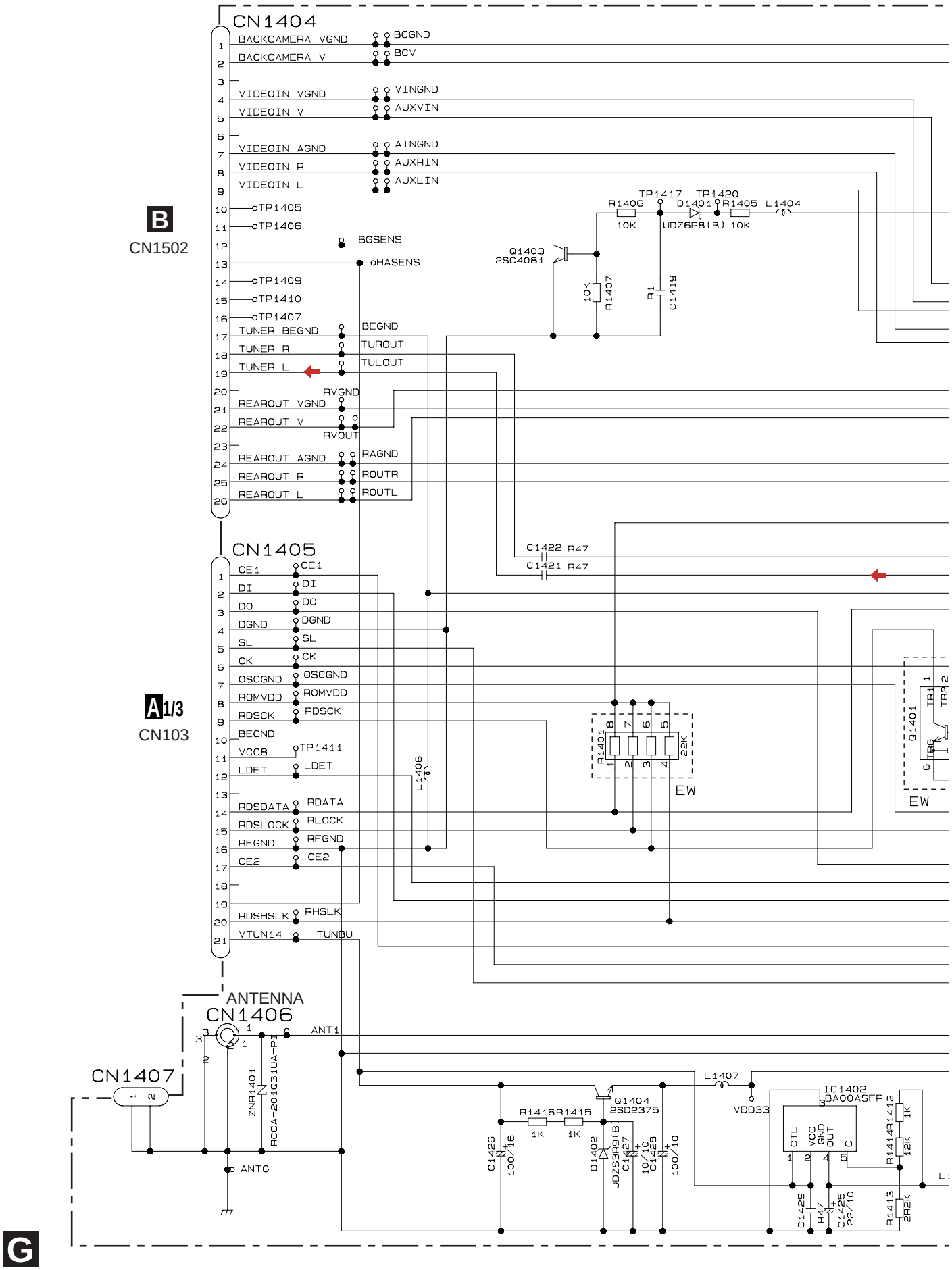
D E F

3.10 PU UNIT(REFERENCE)

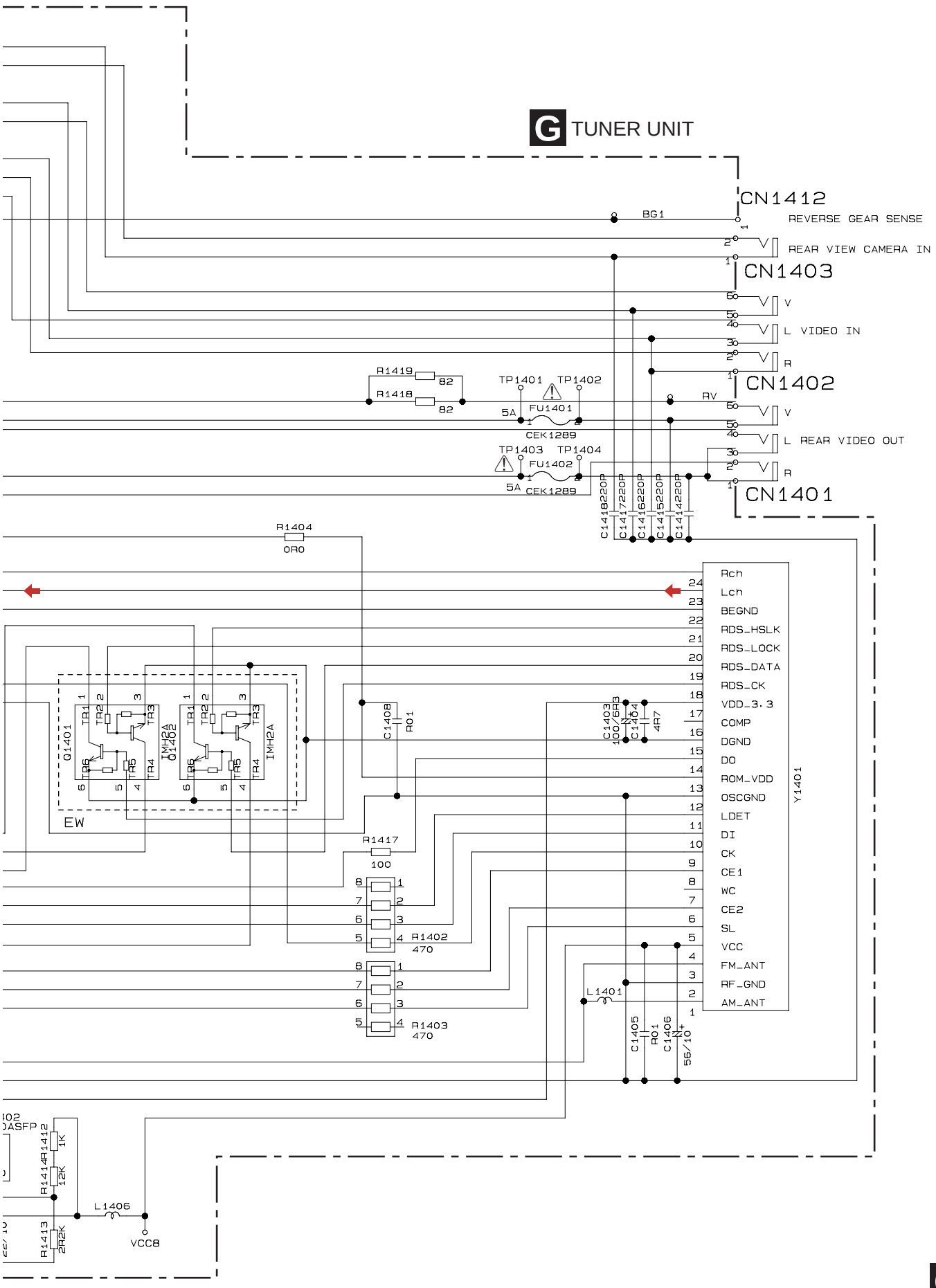


C 1/2 CN1101

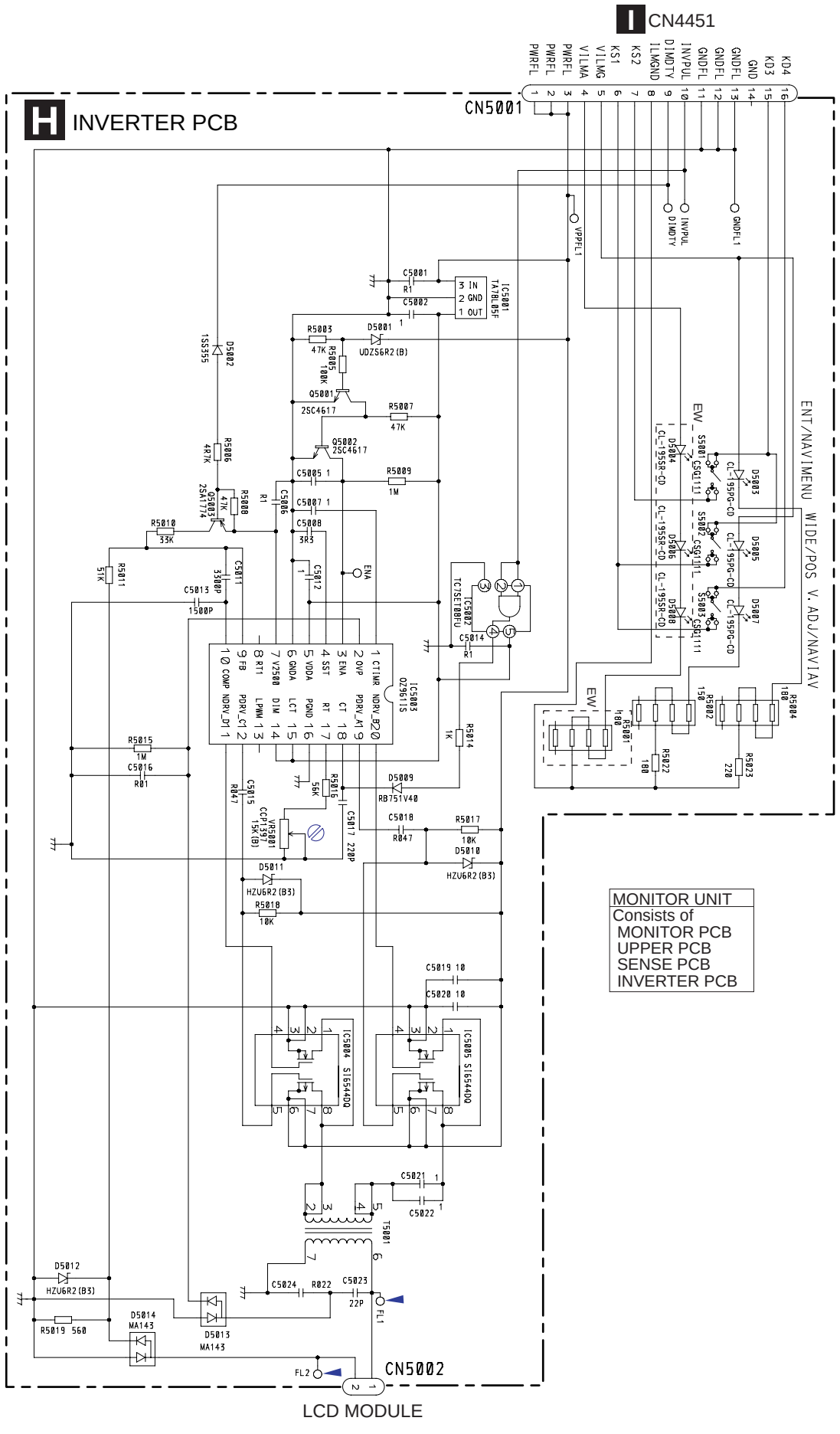
3.11 TUNER UNIT



G TUNER UNIT


CN1412
BG1
REVERSE GEAR SENSE
REAR VIEW CAMERA IN
CN1403
V
L VIDEO IN
R
CN1402
RV
V
L REAR VIDEO OUT
R
CN1401
R1419 82
R1418 82
TP1401 TP1402
FU1401 5A CEK1289
TP1403 TP1404
FU1402 5A CEK1289
C1418 220P
C1417 220P
C1416 220P
C1415 220P
C1414 220P
R1404 0R0
Rch
Lch
BEGND
RDS_HSLK
RDS_LOCK
RDS_DATA
RDS_CK
VDD_3.3
COMP
DGND
DO
ROM_VDD
OSCGND
LDET
DI
CK
CE1
WC
CE2
SL
VCC
FM_ANT
RF_GND
AM_ANT
Y1401
Q1401
IMH2A
EW
C1408 R01
C1403 100/6R3
C1404 4R7
R1417 100
R1402 470
R1403 470
L1401
C1405 R01
C1406 56/10
R1414 1K
R1412 12K
R1413 2R2K
L1406
VCC8

3.12 INVERTER PCB



A

B

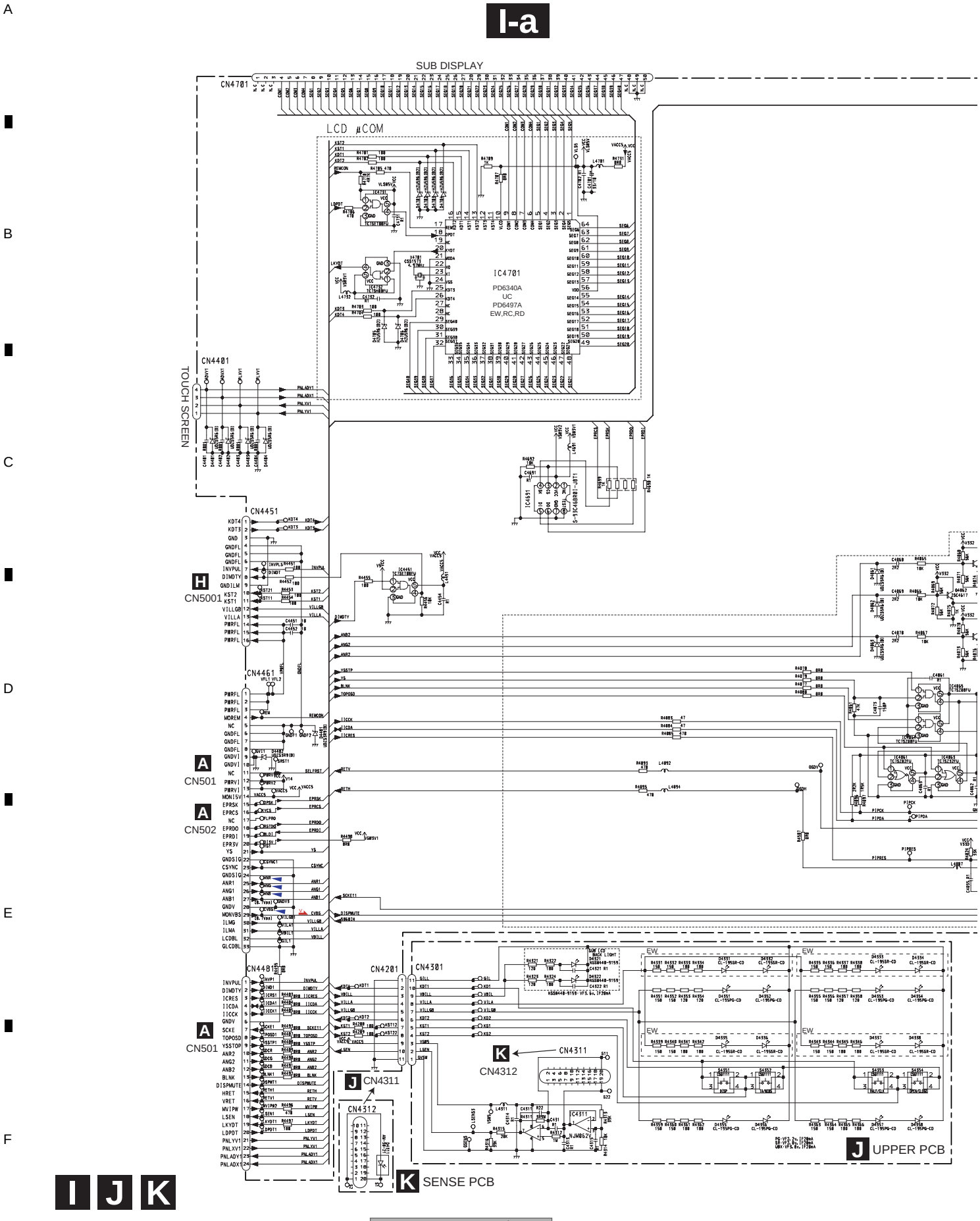
C

D

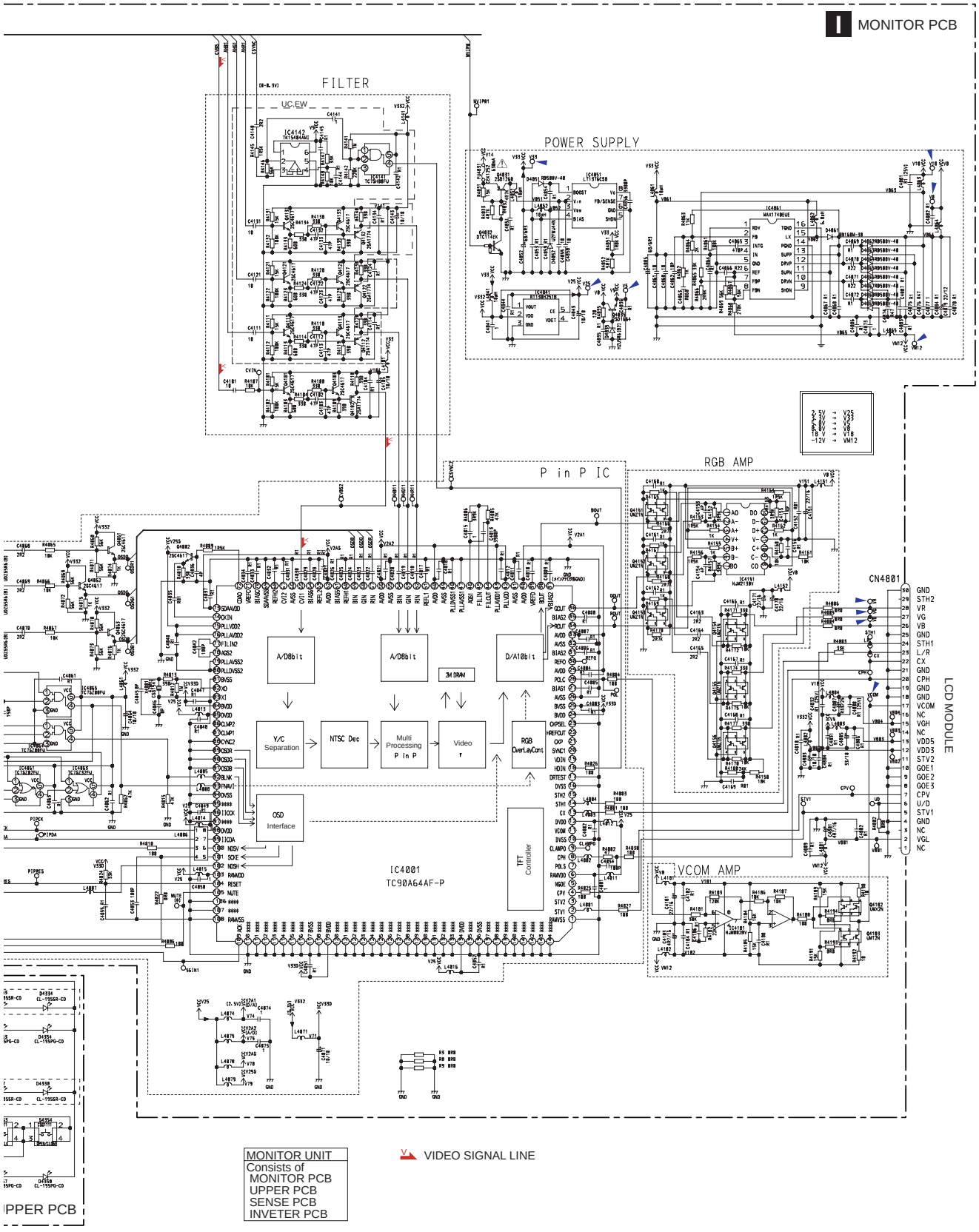
E

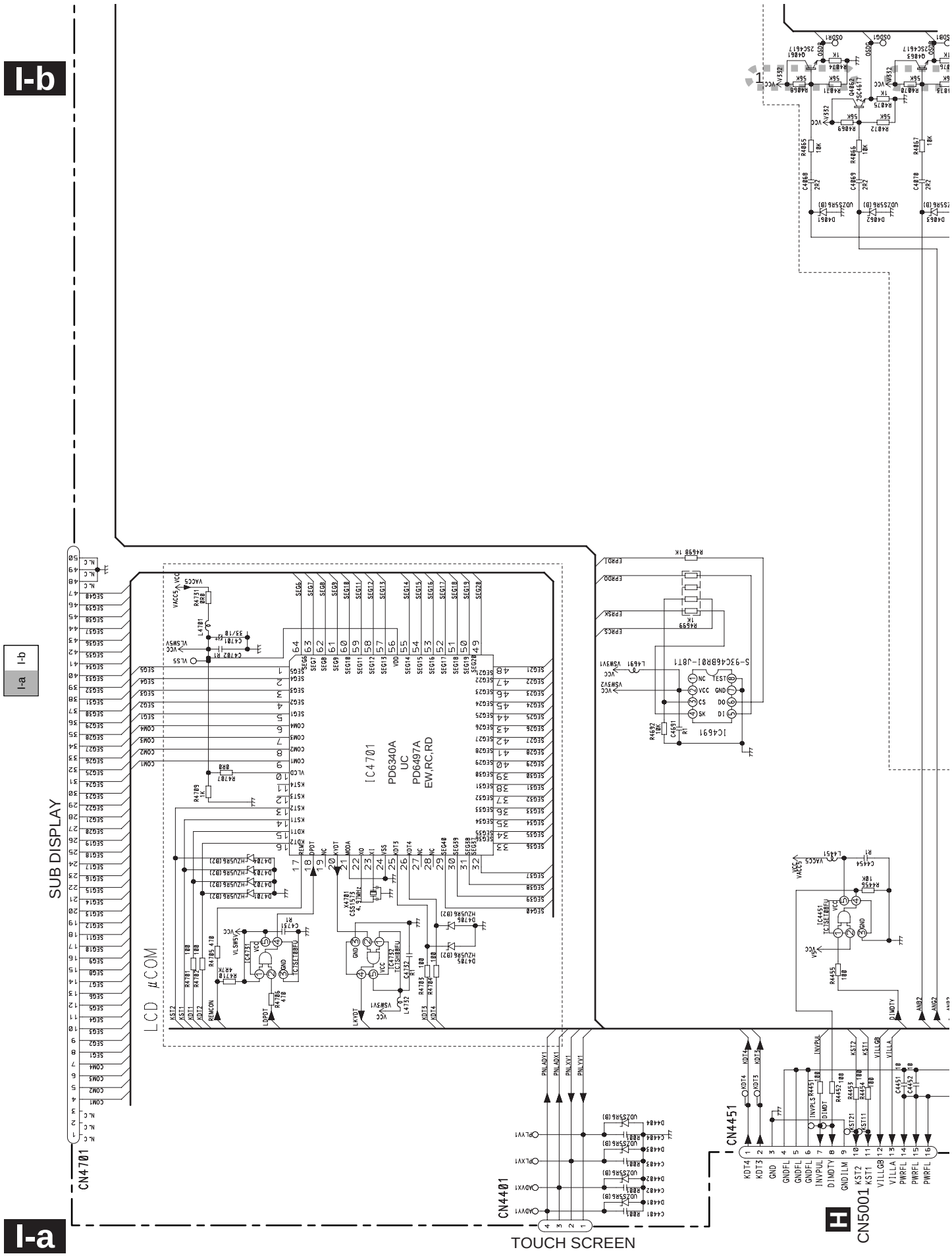
F

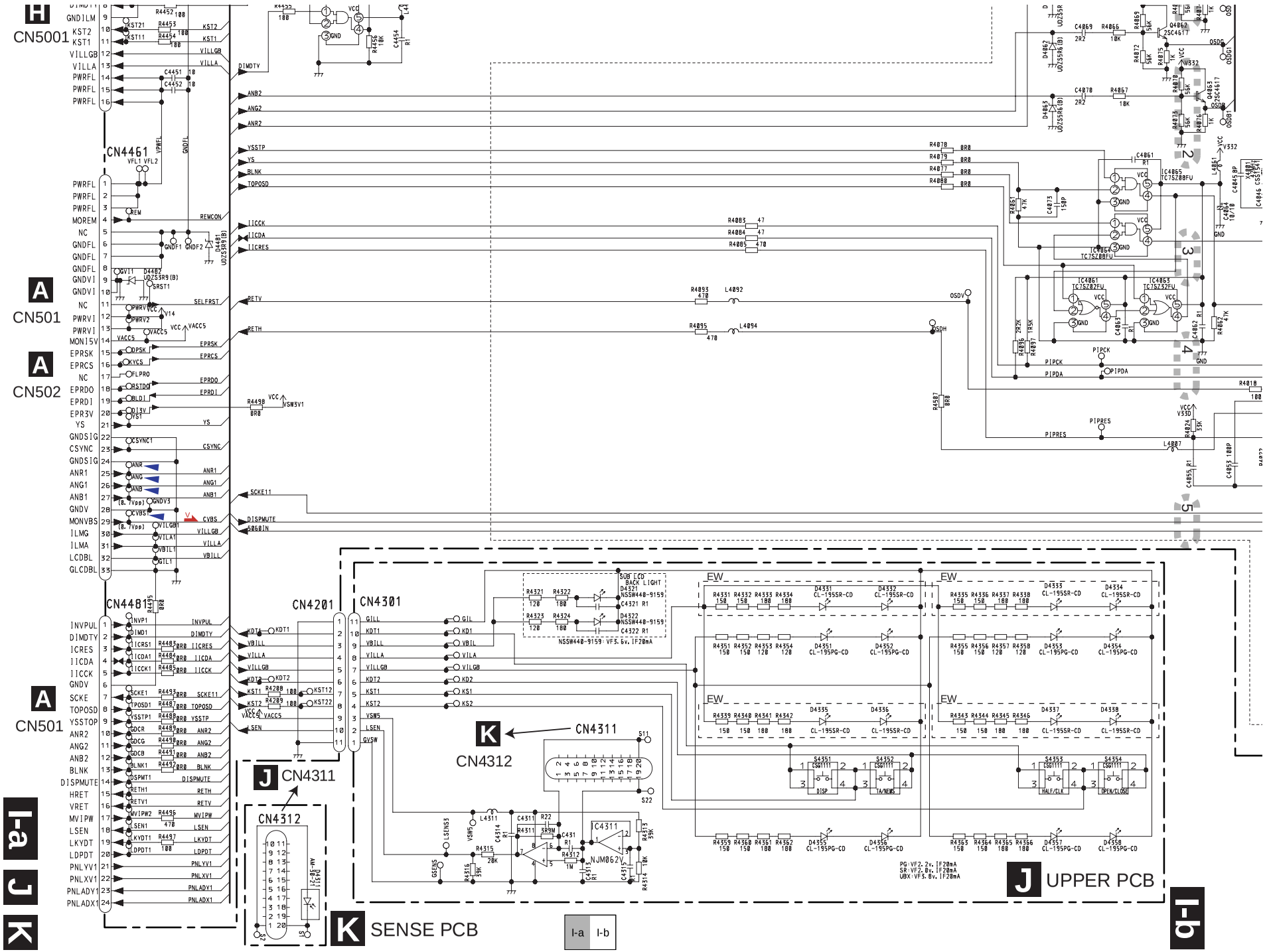
3.13 MONITOR PCB(GUIDE PAGE)



I-b


I MONITOR PCB
FILTER
UC,EW
POWER SUPPLY
P in P IC
RGB AMP
VCOM AMP
CN4801
LCD MODULE
IC4001
TC90A64AF-P
A/D8bit
A/D8bit
D/A10bit
2M DRAM
Y/C Separation
NTSC Dec
Multi Processing P in P
Video
RGB Over Lay/Cont
OSD Interface
TFT Controller
MONITOR UNIT
Consists of
MONITOR PCB
UPPER PCB
SENSE PCB
INVETER PCB
VIDEO SIGNAL LINE


I-b
I-a
SUB DISPLAY
LCD µCOM
IC4701
PD6340A
UC
PD6497A
EW,RC,RD
CN4701
CN4401
CN4451
CN5001
TOUCH SCREEN


H
CN5001
A
CN501
A
CN502
A
CN501
I-a
J
K
CN4461
CN4481
CN4201
CN4301
CN4311
CN4312
J CN4311
CN4312
K
CN4311
CN4312
K SENSE PCB
J UPPER PCB
I-b
I-a I-b

A

B

C

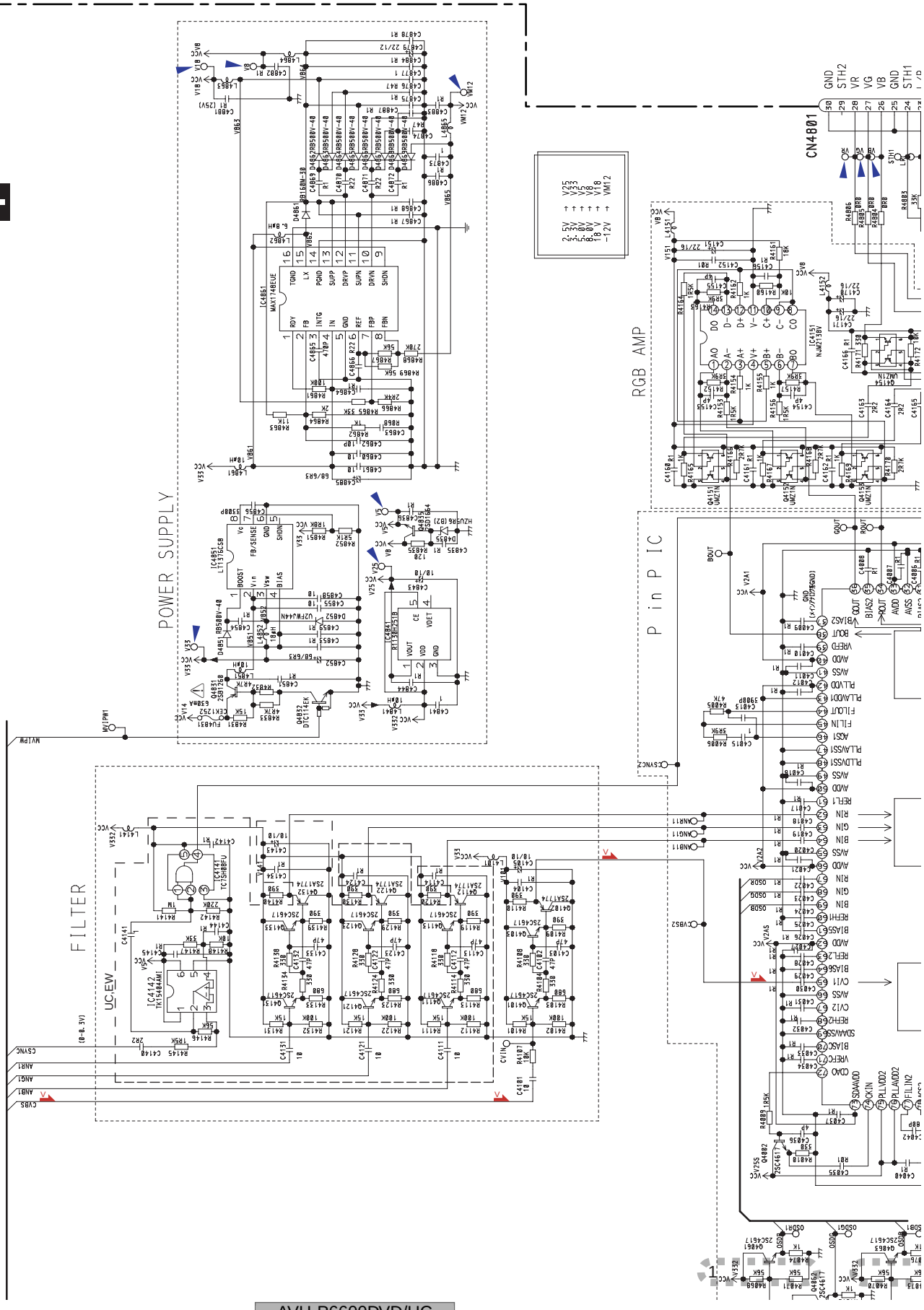
D

E

F

I MONITOR PCB

I-a I-b



I-b

LCD MODULE

CN4801

VCOM AMP

IC4001
TC90A64AF-P

TFT Controller

RGB OverLayCont

D/A10Bit

2M DRAM

Video r

A/D8bit

Multi Processing P in P

NTSC Dec

Y/C Separation

OSD Interface

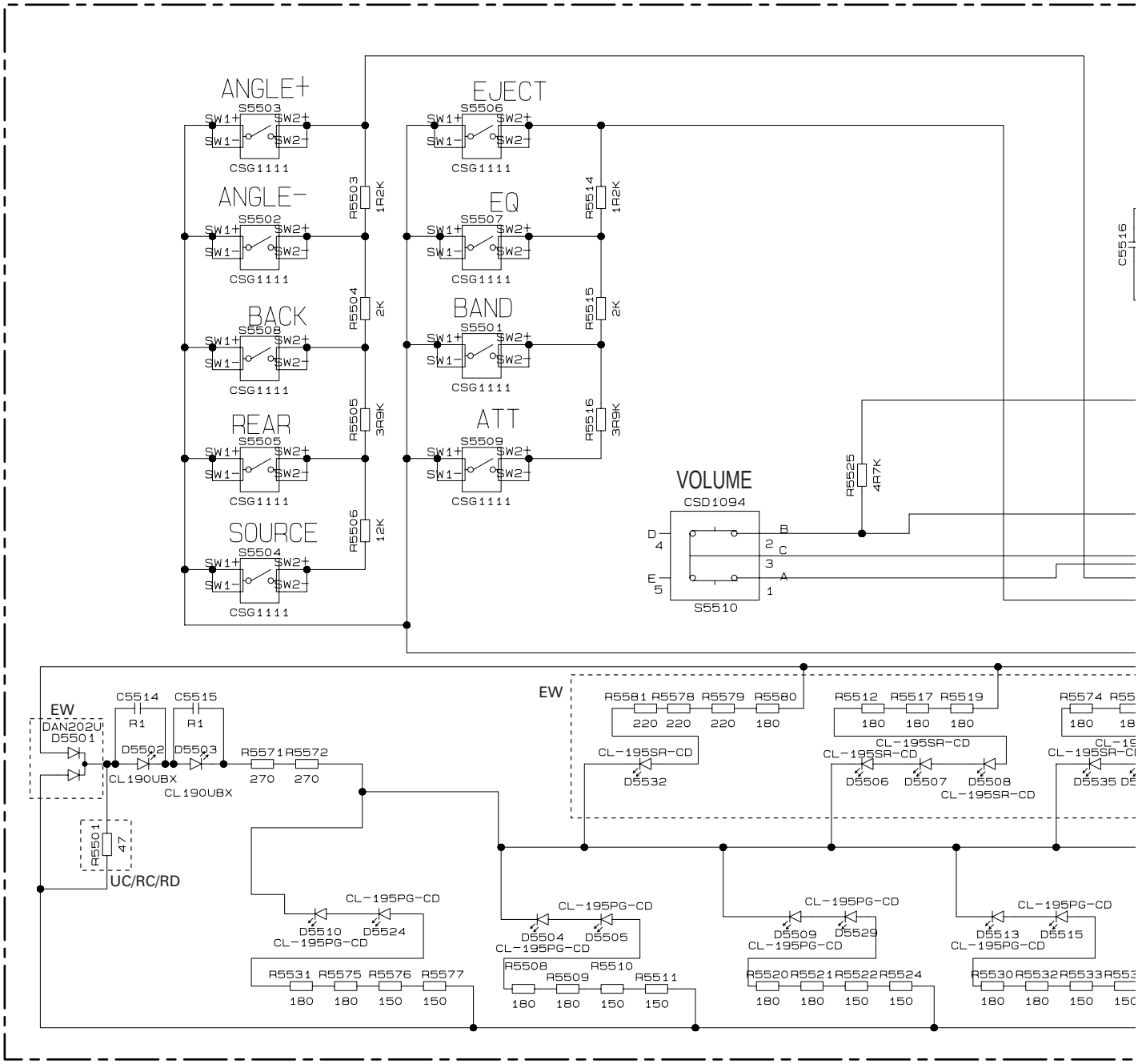
VIDEO SIGNAL LINE

MONITOR UNIT
Consists of
MONITOR PCB
UPPER PCB
SENSE PCB
INVETER PCB

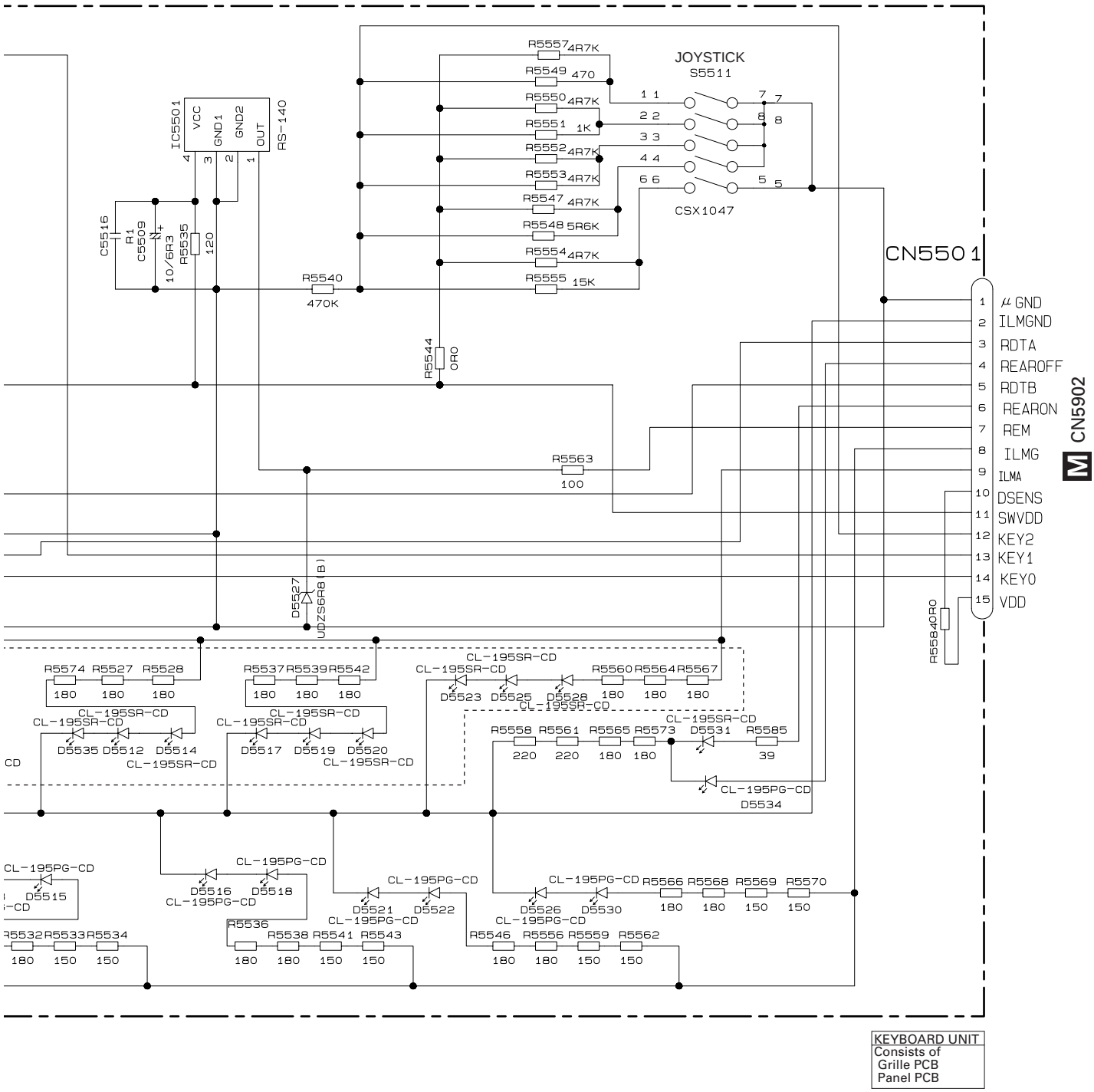
I-a I-b

I-b

3.14 GRILLE PCB

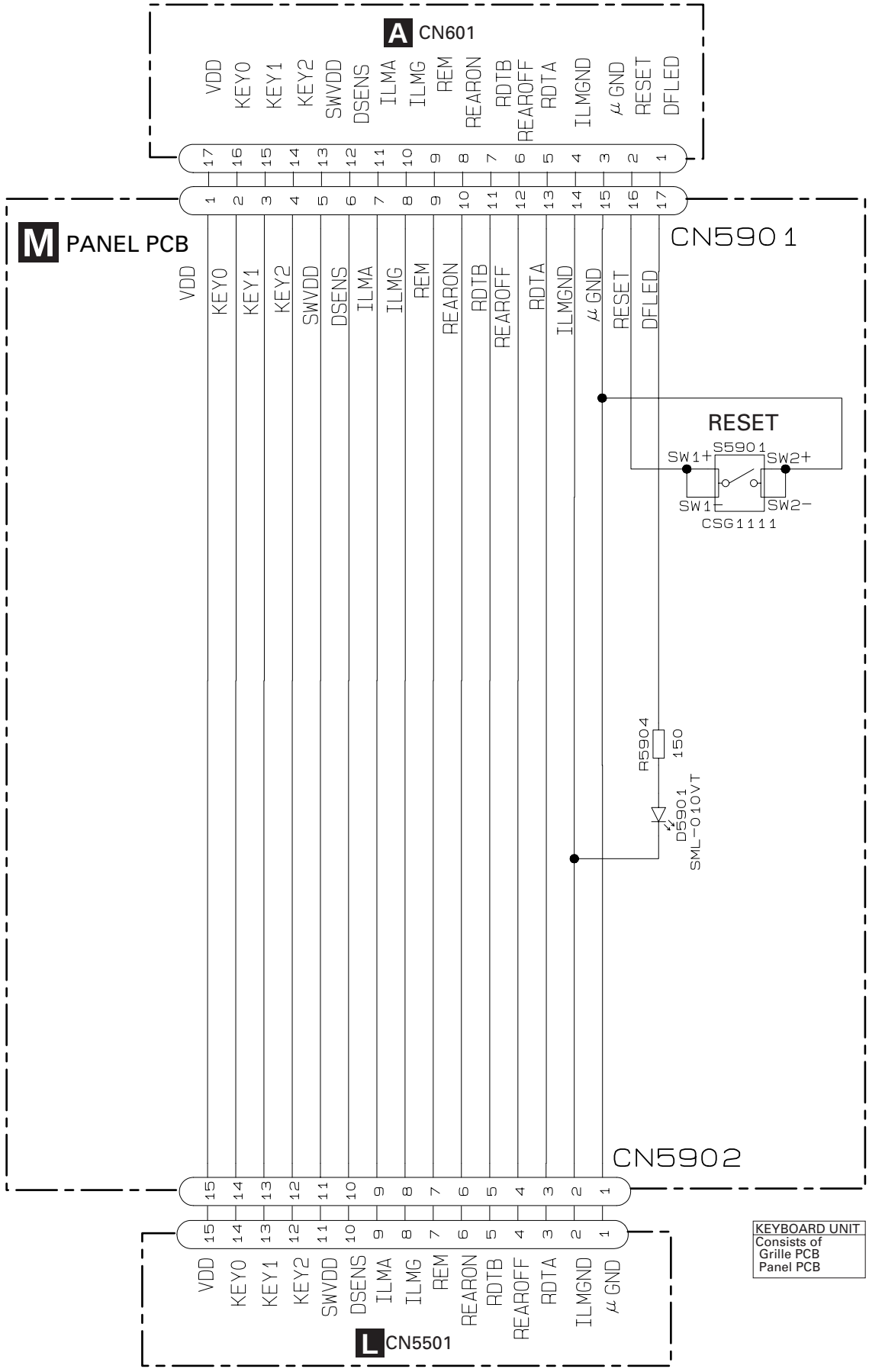


L GRILLE PCB

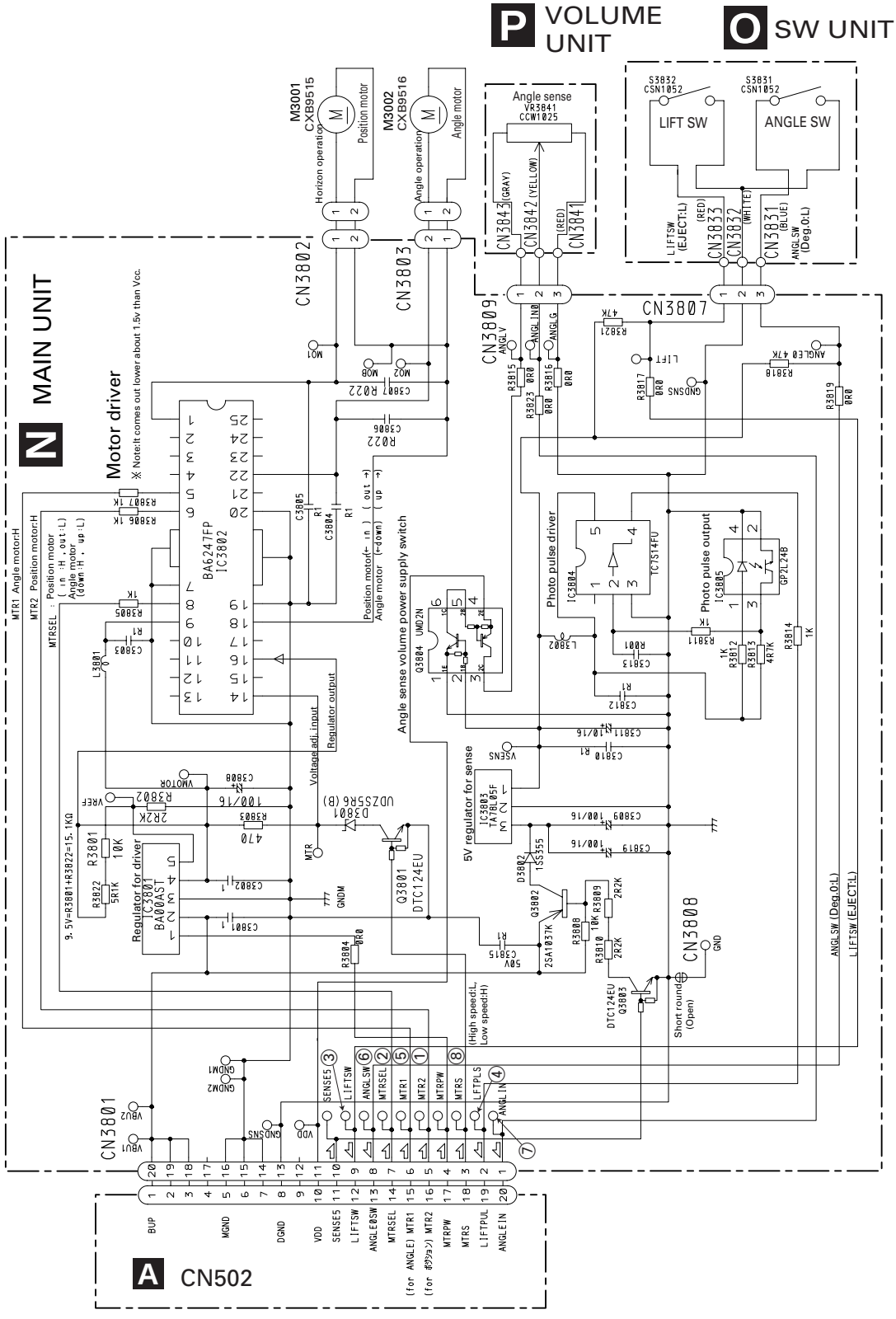


KEYBOARD UNIT
Consists of
Grille PCB
Panel PCB

3.15 PANEL PCB



3.16 MAIN UNIT, SW UNIT AND VOLUME UNIT

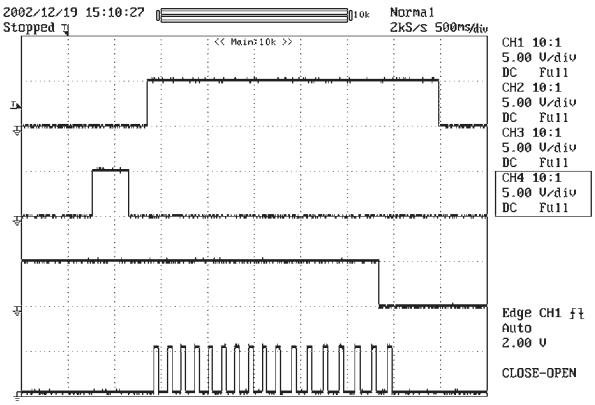


● Waveforms

The encircled number denote measuring pointes in the circuit diagram.

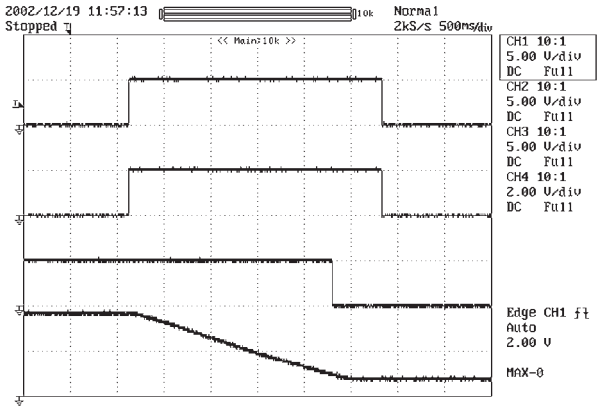
• CLOSE -> OPEN

① CH1:MTR2 ② CH2:MTRSEL
③ CH3:LIFTSW ④ CH4:LFTPLS



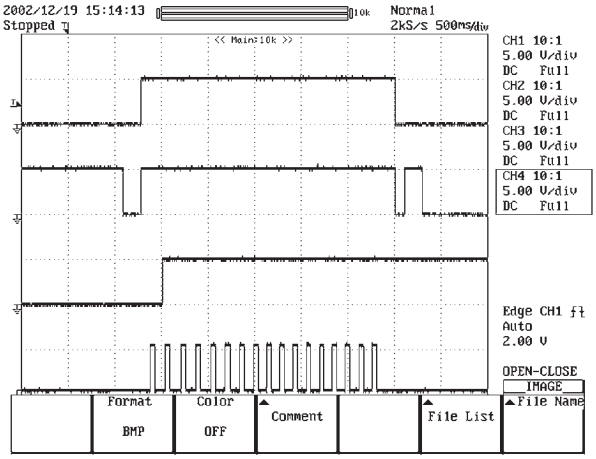
• MAX -> Deg.0 DOWN

⑤ CH1:MTR1 ② CH2:MTRSEL
⑥ CH3:ANGLSW ⑦ CH4:ANGLIN



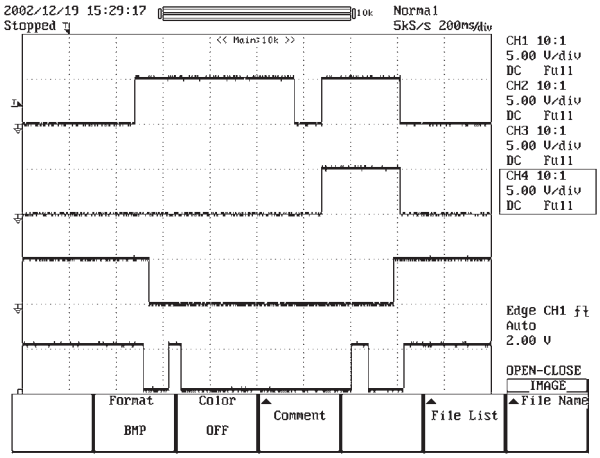
• OPEN -> CLOSE

① CH1:MTR2 ② CH2:MTRSEL
③ CH3:LIFTSW ④ CH4:LFTPLS



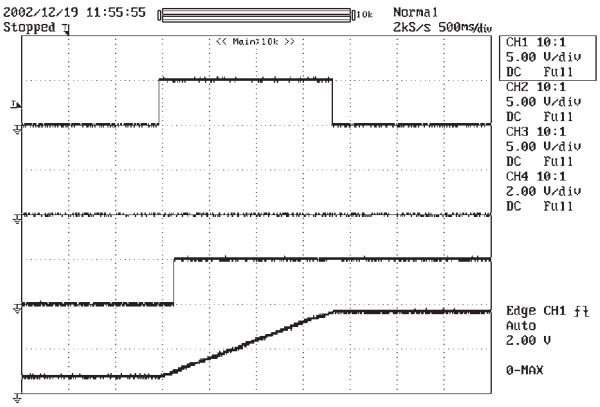
• Set back open -> Set

① CH1:MTR2 ⑧ CH2:MTRS
③ CH3:LIFTSW ④ CH4:LFTPLS



• 0->MAX

⑤ CH1:MTR1 ② CH2:MTRSEL
⑥ CH3:ANGLSW ⑦ CH4:ANGLIN



A

B

C

D

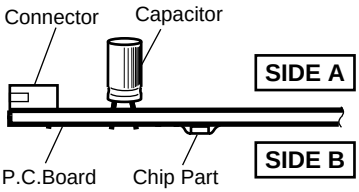
E

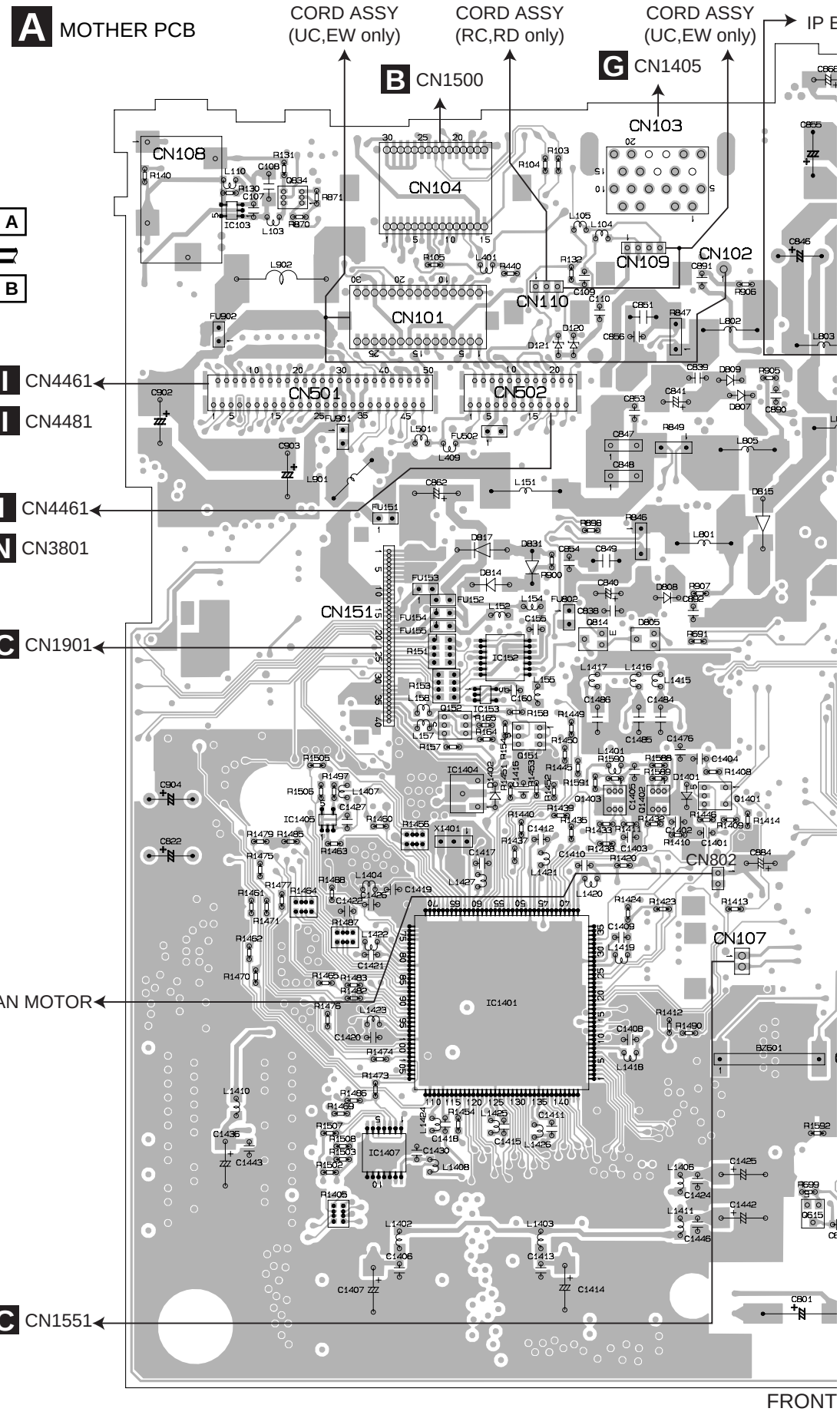
F

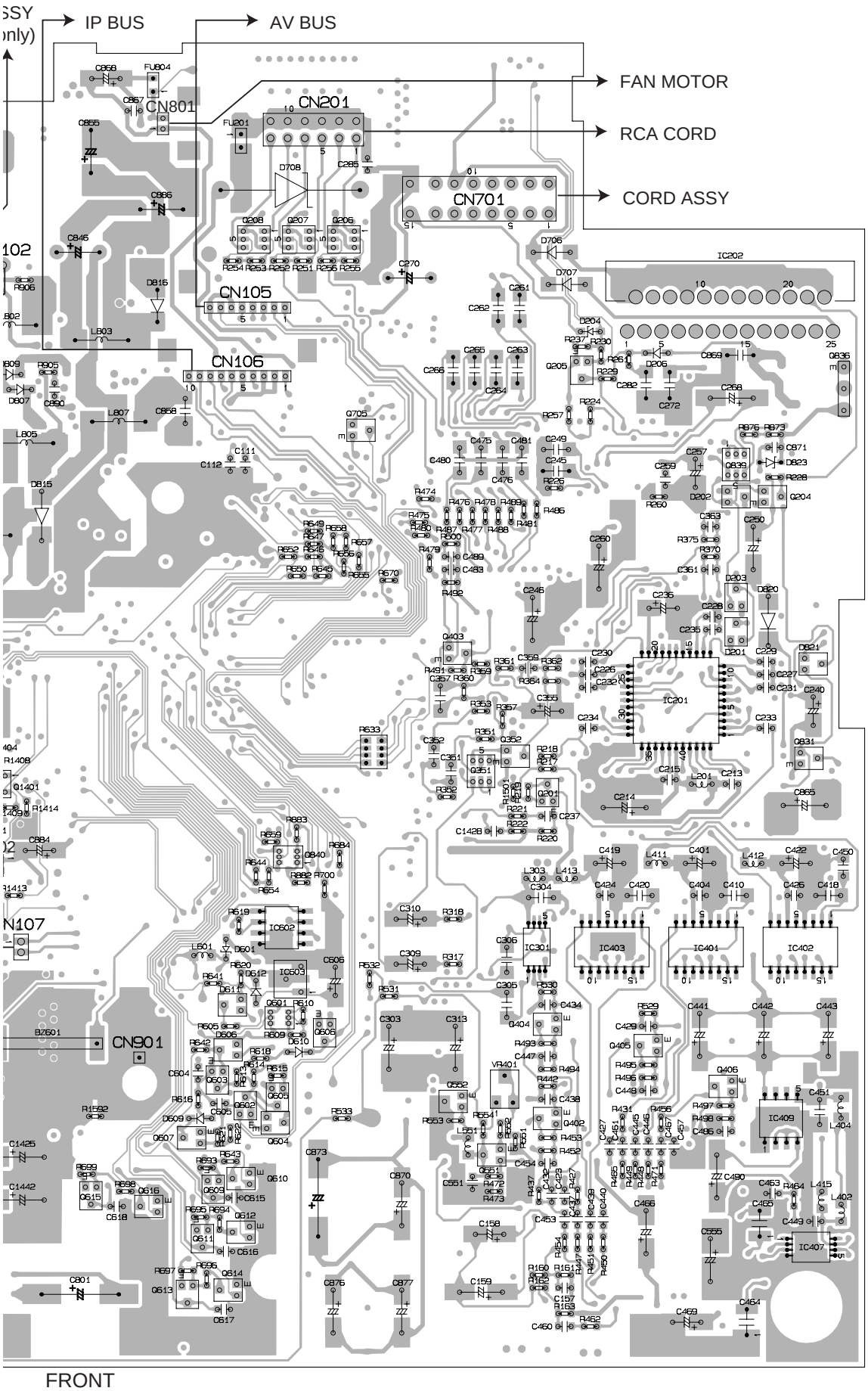
4. PCB CONNECTION DIAGRAM
4.1 MOTHER PCB

NOTE FOR PCB DIAGRAMS

1. The parts mounted on this PCB include all necessary parts for several destination.
   For further information for respective destinations, be sure to check with the schematic diagram.
2. Viewpoint of PCB diagrams







SIDE A

IC,Q

Q834

IC103

Q208 Q207 Q206

IC202

Q836

Q205

Q705

Q839

Q204

Q814

Q403

IC152

Q152 IC153 IC201

Q352 Q831 Q151

IC1404 Q1402

Q351

Q1401 Q1403 Q201

IC1405

Q840

IC301

IC602

IC403 IC401 IC402

IC603

IC1401

Q601

Q404

Q405 Q503

Q606 VR401 Q406

Q552 Q602

Q505

IC409 Q402

IC1407 Q607 Q551 Q604

Q510

Q609 Q616 Q615

Q612

Q611

IC407

Q614

Q613

A MOTHER PCB

IC,Q

Q901
Q825
Q824
Q301

Q833
Q902

Q827 Q823
Q101 Q837
Q103 IC101 Q102
Q835 IC802
Q810 Q808 Q702
Q822 Q704 Q701
IC102 Q809
Q817 Q818 IC203 Q811 Q703
Q813

Q819 IC353
IC803 IC411 Q821
Q202 IC804
Q805 Q815
Q209 Q302 Q816
Q829 Q803 Q802 Q203 Q617
Q812 IC352 IC351
IC601 Q807 Q844 IC801
Q845 Q1405 Q843 Q1406 Q830
Q1407 Q353 Q801
Q805 Q842
IC805 Q832

IC1408 Q828

Q303

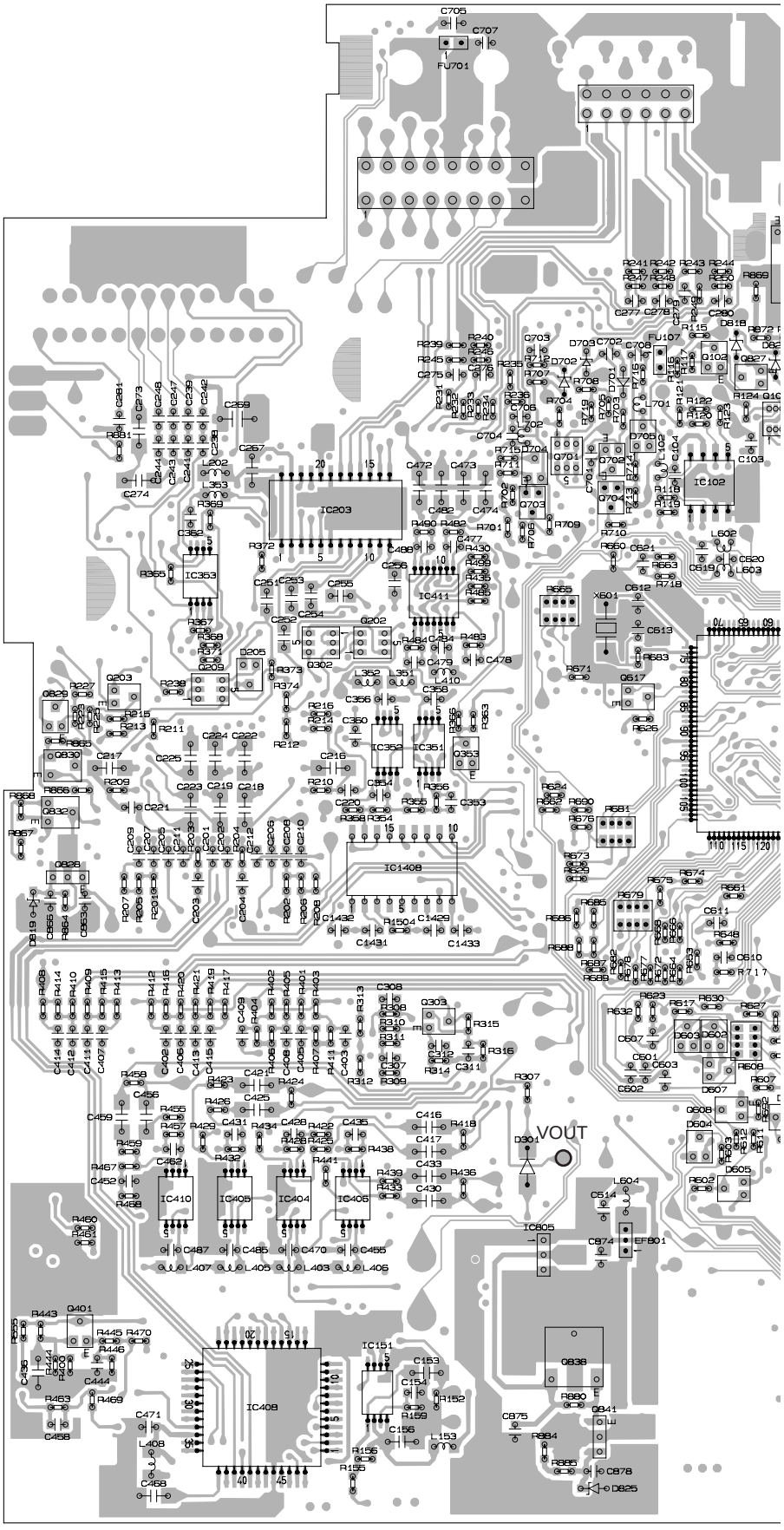
IC1451 IC1414

Q608

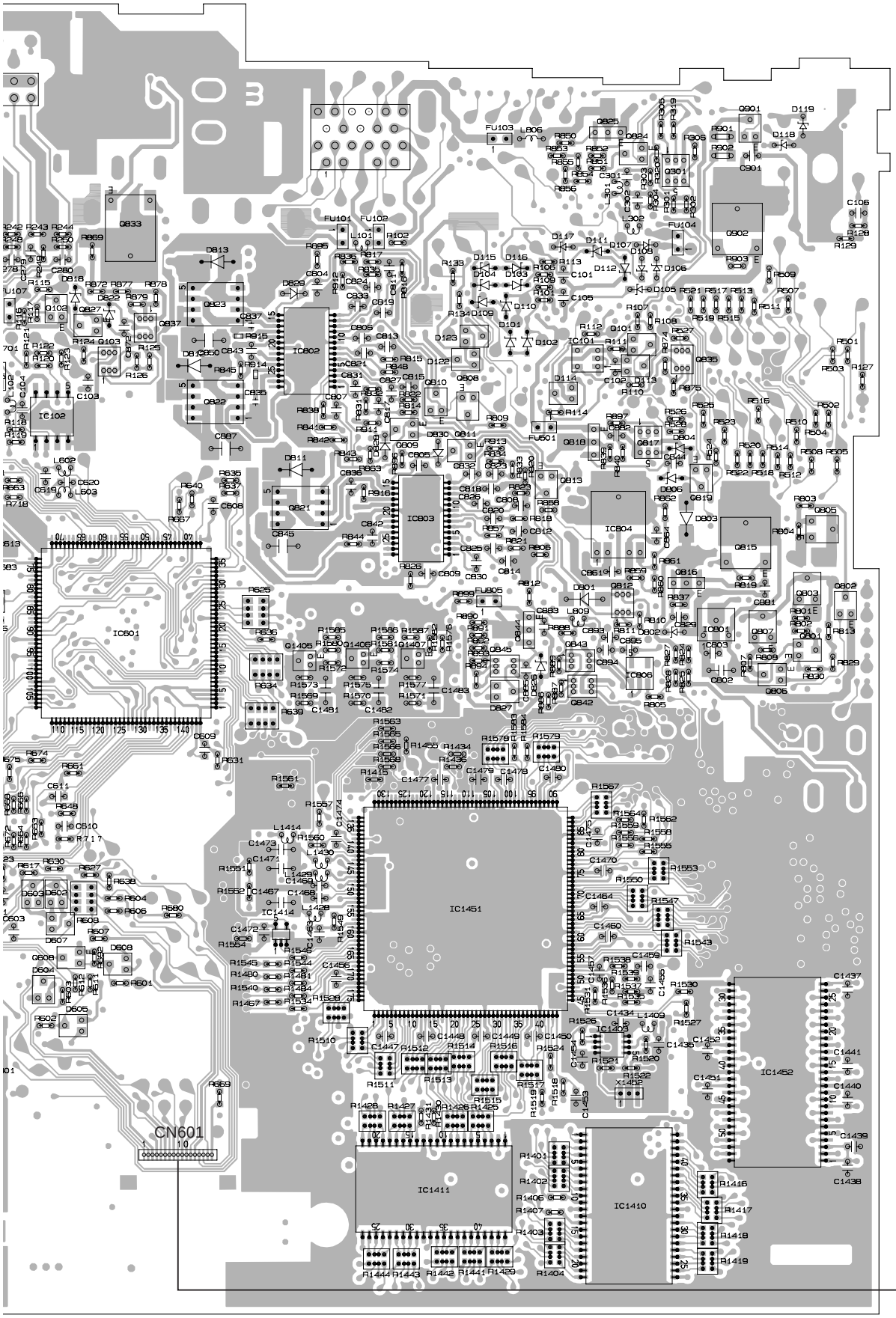
IC1403
IC410 IC405 IC404 IC406
IC805
IC1452

Q401

IC151
Q838
IC1411
Q841 IC408 IC1410



SIDE B


CN601
IC1451
IC1411
IC1410
IC1452
IC601
IC803
IC804
IC802
IC1414
M CN5901

A

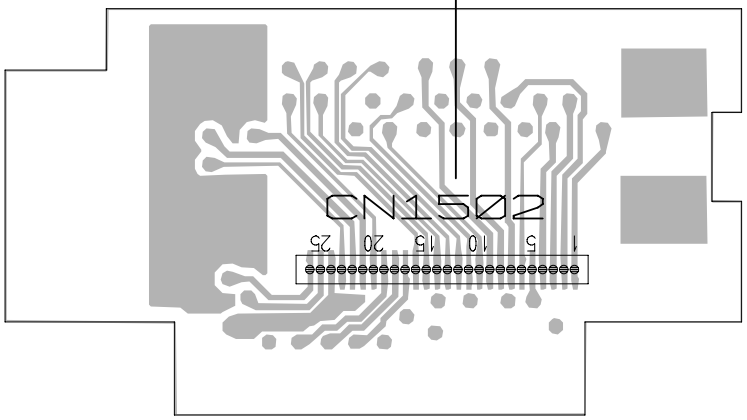
4.2 RELAY PCB

A

B RELAY PCB

SIDE A

G CN1404

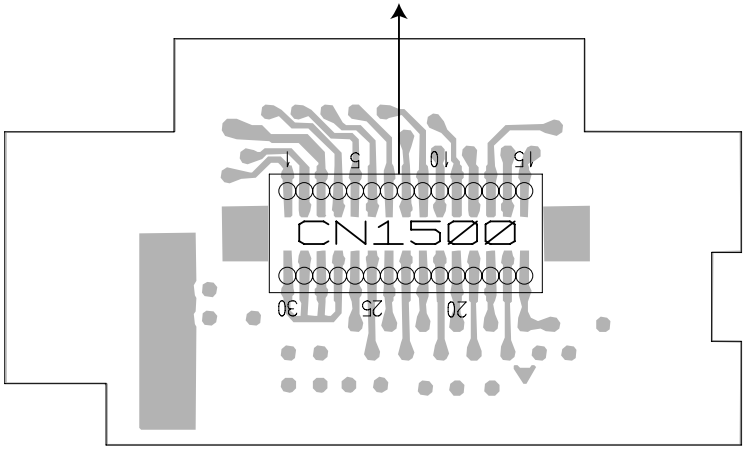


C

B RELAY PCB

A CN104

SIDE B



D

E

F

B

A

B

C

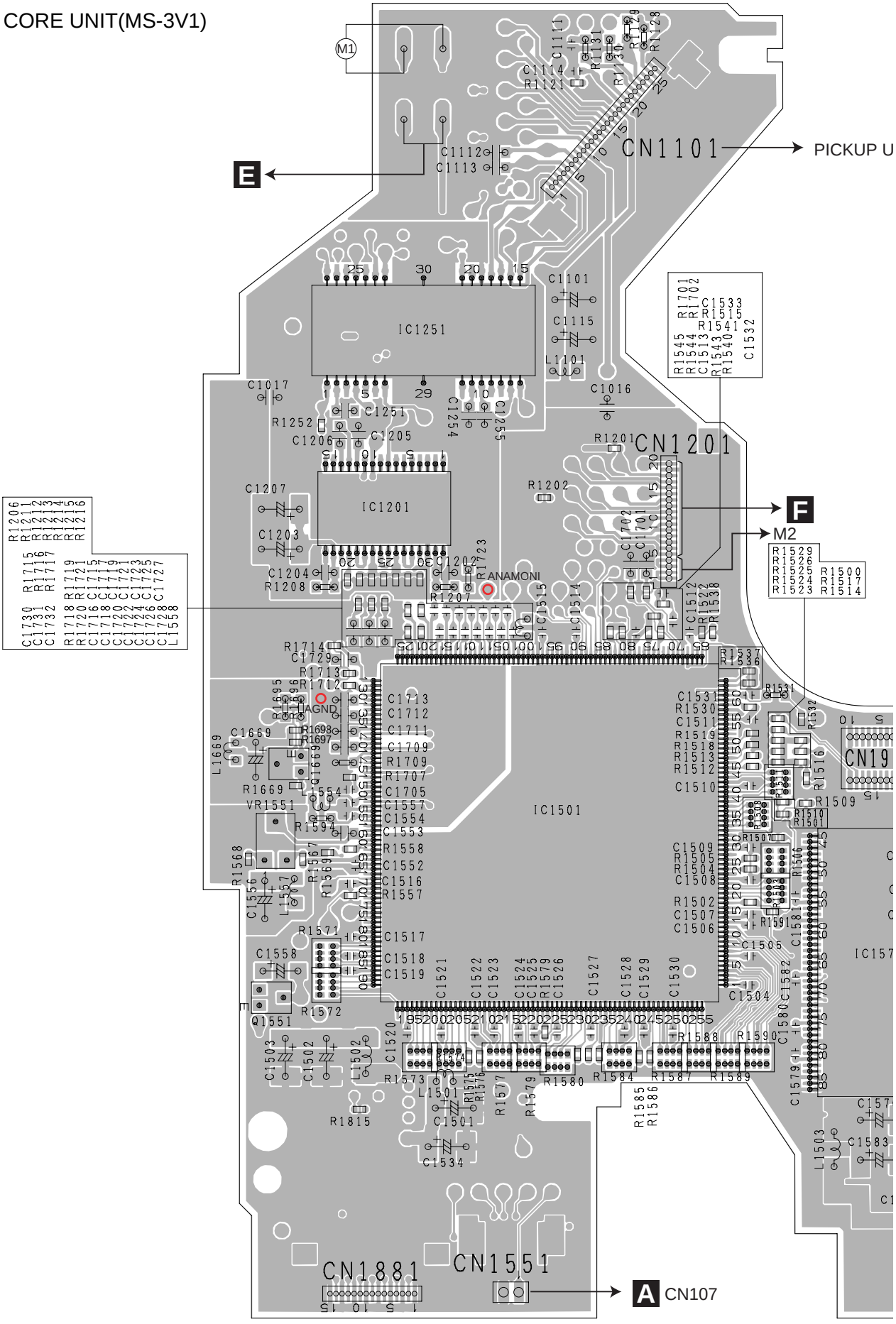
D

E

F

4.3 DVD CORE UNIT(MS-3V1)

C DVD CORE UNIT(MS-3V1)



SIDE A

A

IC,Q

→ PICKUP UNIT(SERVICE)

B

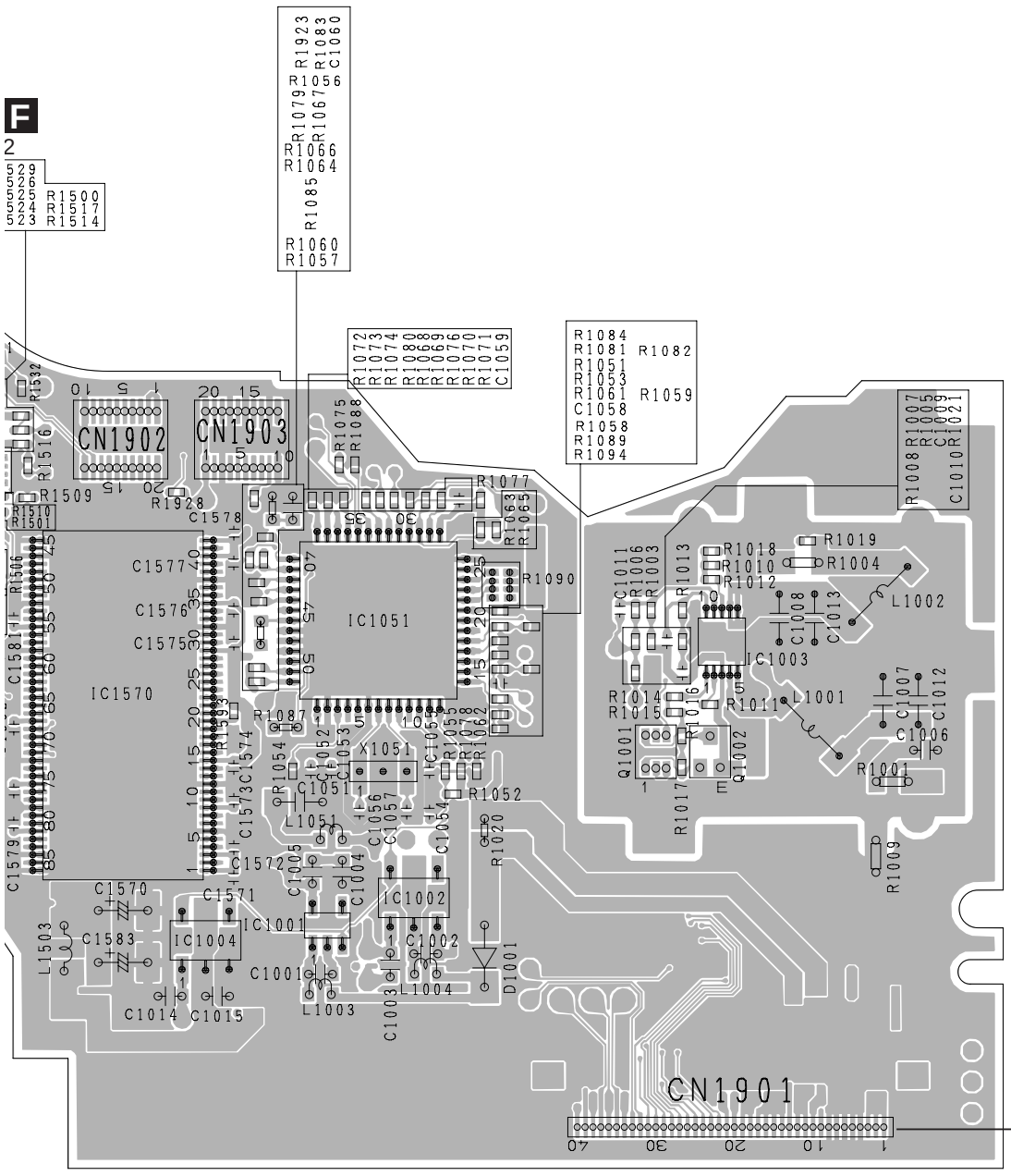
IC1251

F

2

C

IC1201



D

Q1669

VR1551

IC1501

IC1051

IC1003

IC1570

E

Q1001

Q1551

Q1002

IC1002

IC1001

IC1004

F

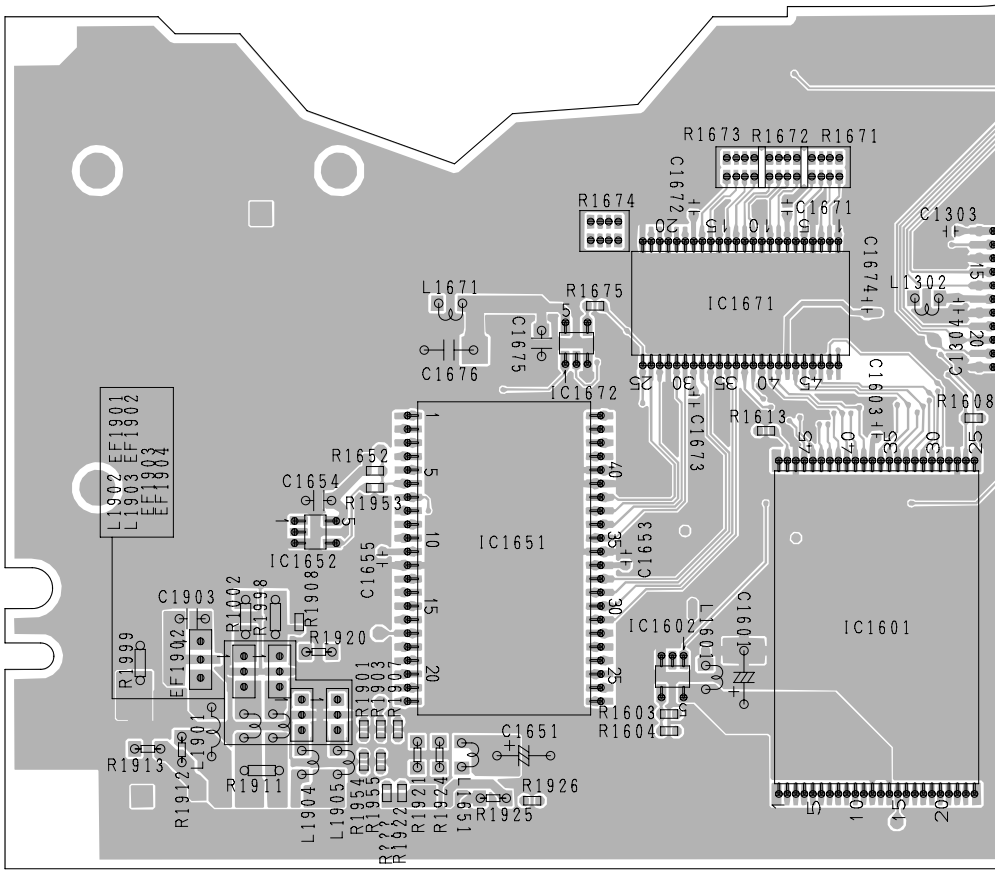
A CN151

C

C DVD CORE UNIT(MS-3V1)

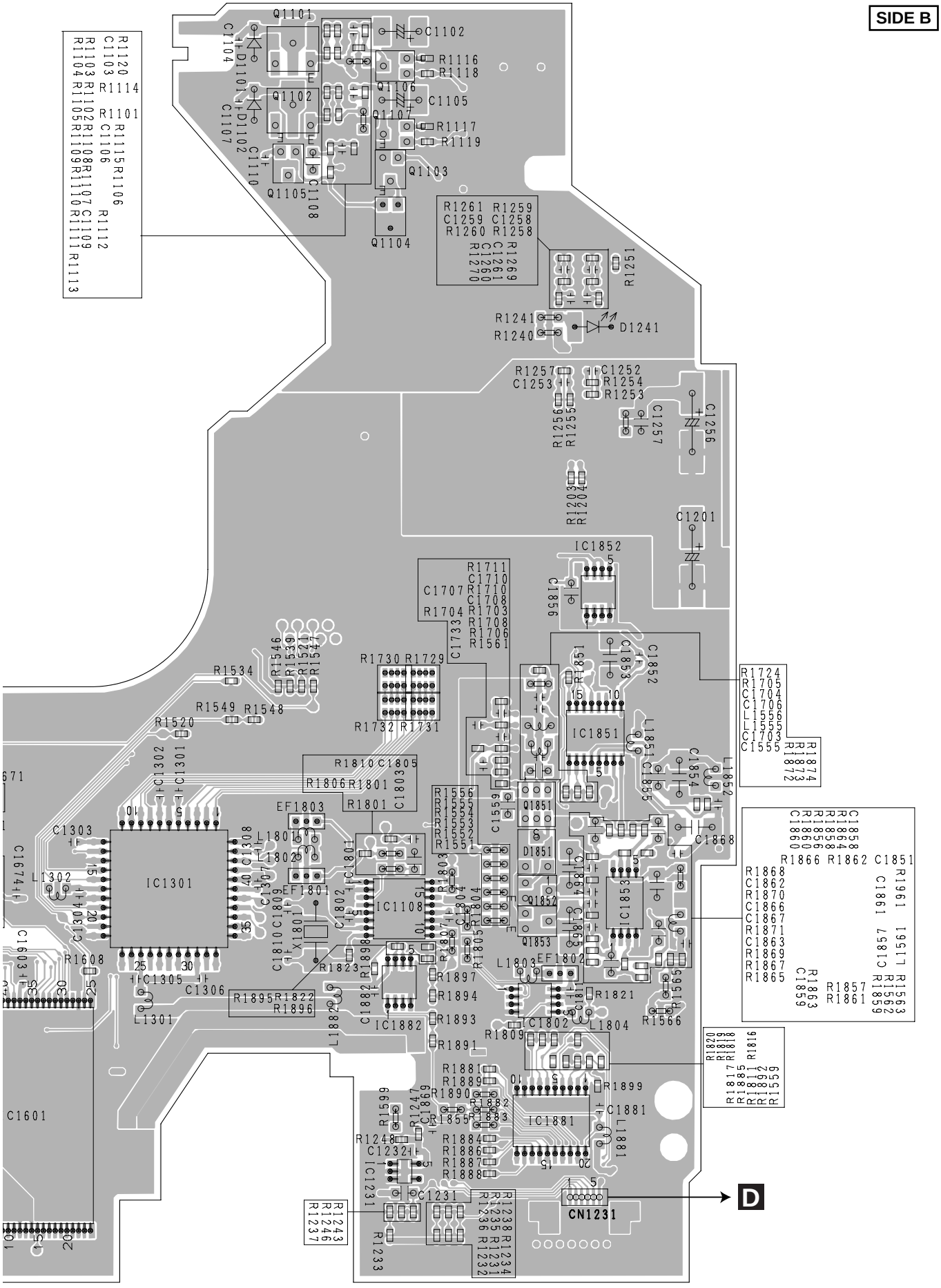
IC,Q
Q1101
Q1106
Q1102
Q1107
Q1103
Q1105
Q1104
IC1852
IC1851
Q1851
IC1301 Q1852
IC1671
IC1672
IC1108 IC1853
Q1853 IC1882
IC1802
IC1651
IC1652
IC1881
IC1601
IC1602
IC1231

R1103 R1102 R1108 R1107 C1109
R1104 R1105 R1109 R1110 R1111 R1113



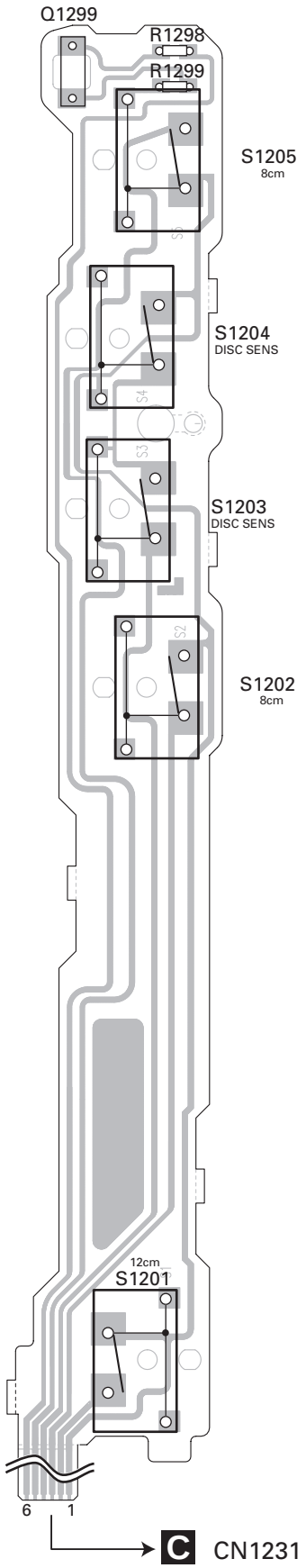
C

SIDE B

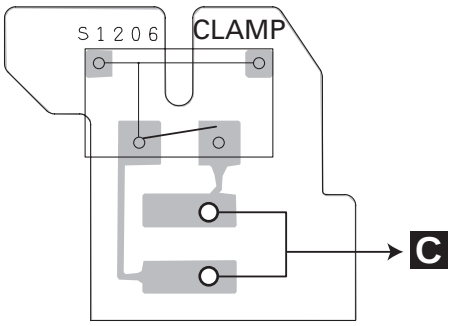

Q1101
C1104
D1101
C1102
R1116
R1118
Q1102
Q1106
C1105
Q1107
C1107
D1102
R1117
R1119
C1110
C1108
Q1103
Q1105
Q1104
R1120
C1103
R1114
R1101
R1115
R1106
C1106
R1112
R1103
R1102
R1108
R1107
C1109
R1104
R1105
R1109
R1110
R1111
R1113
R1261
R1259
C1259
C1258
R1260
R1258
C1261
R1269
C1260
R1270
R1251
R1241
R1240
D1241
R1257
C1253
C1252
R1254
R1253
R1256
R1255
C1257
C1256
R1203
R1204
C1201
IC1852
C1856
R1711
C1710
C1707
R1710
C1708
R1704
R1703
C1733
R1708
R1706
R1561
C1853
C1852
R1851
R1730
R1729
R1534
R1546
R1539
R1521
R1547
R1549
R1548
R1520
R1732
R1731
IC1851
L1851
C1855
C1854
L1852
R1724
R1705
C1704
C1706
C1555
R1874
R1873
R1810
C1805
R1806
R1801
C1803
EF1803
C1303
C1302
C1301
C1308
L1803
L1802
C1307
C1309
EF1801
C1810
C1809
X1801
IC1301
C1674
L1302
C1304
C1603
R1608
IC1305
C1306
L1301
R1895
R1822
R1896
C1601
IC1108
C1804
C1801
C1802
R1823
R1898
C1882
IC1882
L1882
R1897
R1894
R1893
R1891
R1551
C1551
R1552
R1803
R1804
R1805
Q1851
D1851
Q1852
Q1853
C1858
R1864
R1858
R1856
R1860
R1866
R1862
C1851
R1868
C1862
R1870
C1866
C1867
R1871
C1863
R1869
R1867
R1865
C1861
C1857
R1961
L1561
R1563
R1562
R1859
R1863
C1859
R1857
R1861
L1803
EF1802
R1821
R1566
L1804
IC1802
R1809
R1820
R1819
R1818
R1817
R1885
R1811
R1816
R1892
R1559
R1881
R1889
R1890
R1899
C1881
L1881
IC1881
R1882
R1883
R1855
R1884
R1886
R1887
R1888
R1248
C1232
IC1231
C1231
R1243
R1246
R1237
R1233
R1238
R1234
R1235
R1231
R1236
R1232
CN1231
D
C

4.4 COMPOUND UNIT(A), COMPOUND UNIT(B) AND RELAY PCB

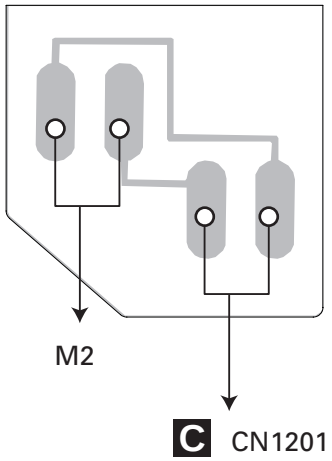
D COMPOUND UNIT(A)



E COMPOUND UNIT(B)



F RELAY PCB



D E F

A

B

C

D

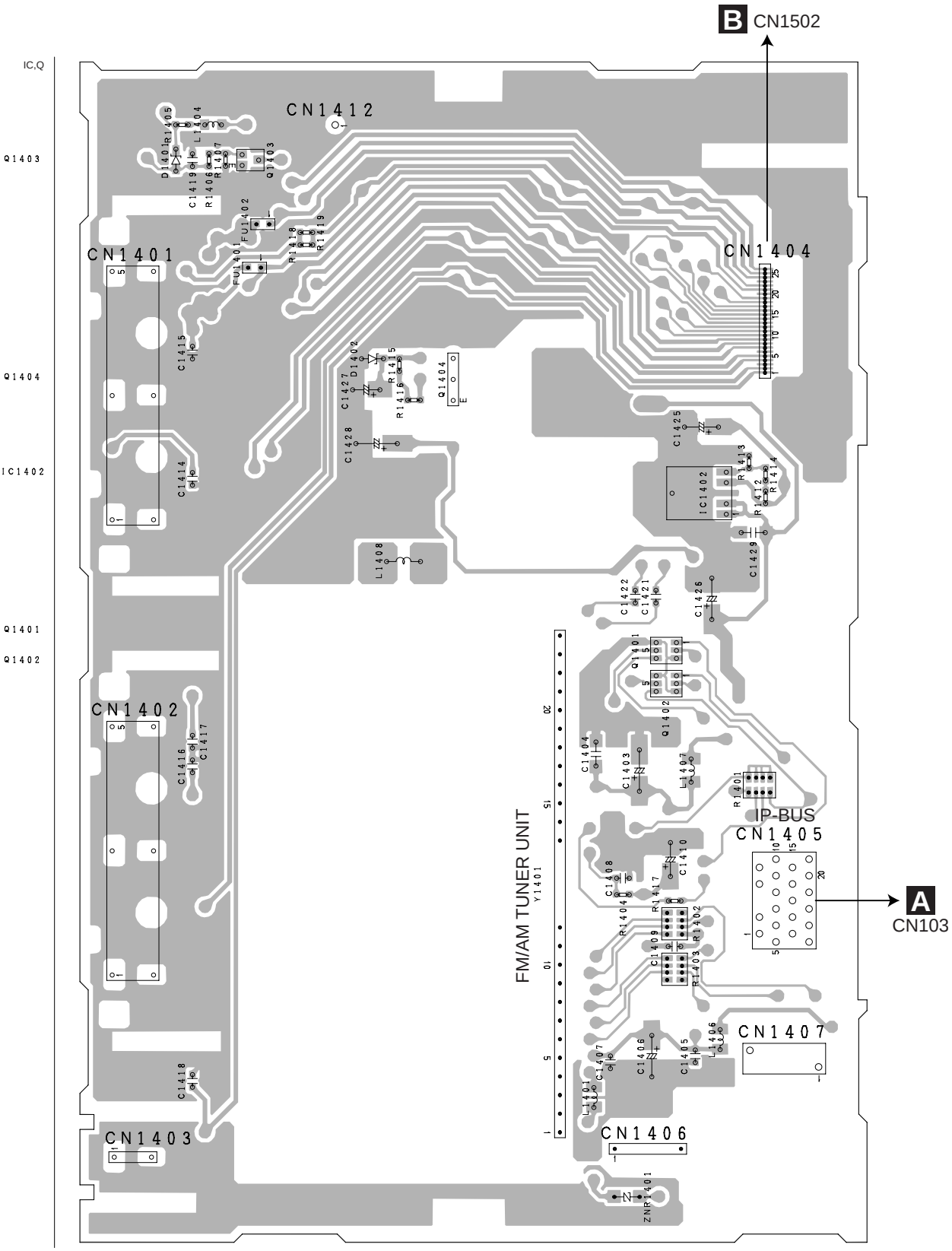
E

F

4.5 TUNER UNIT

G TUNER UNIT

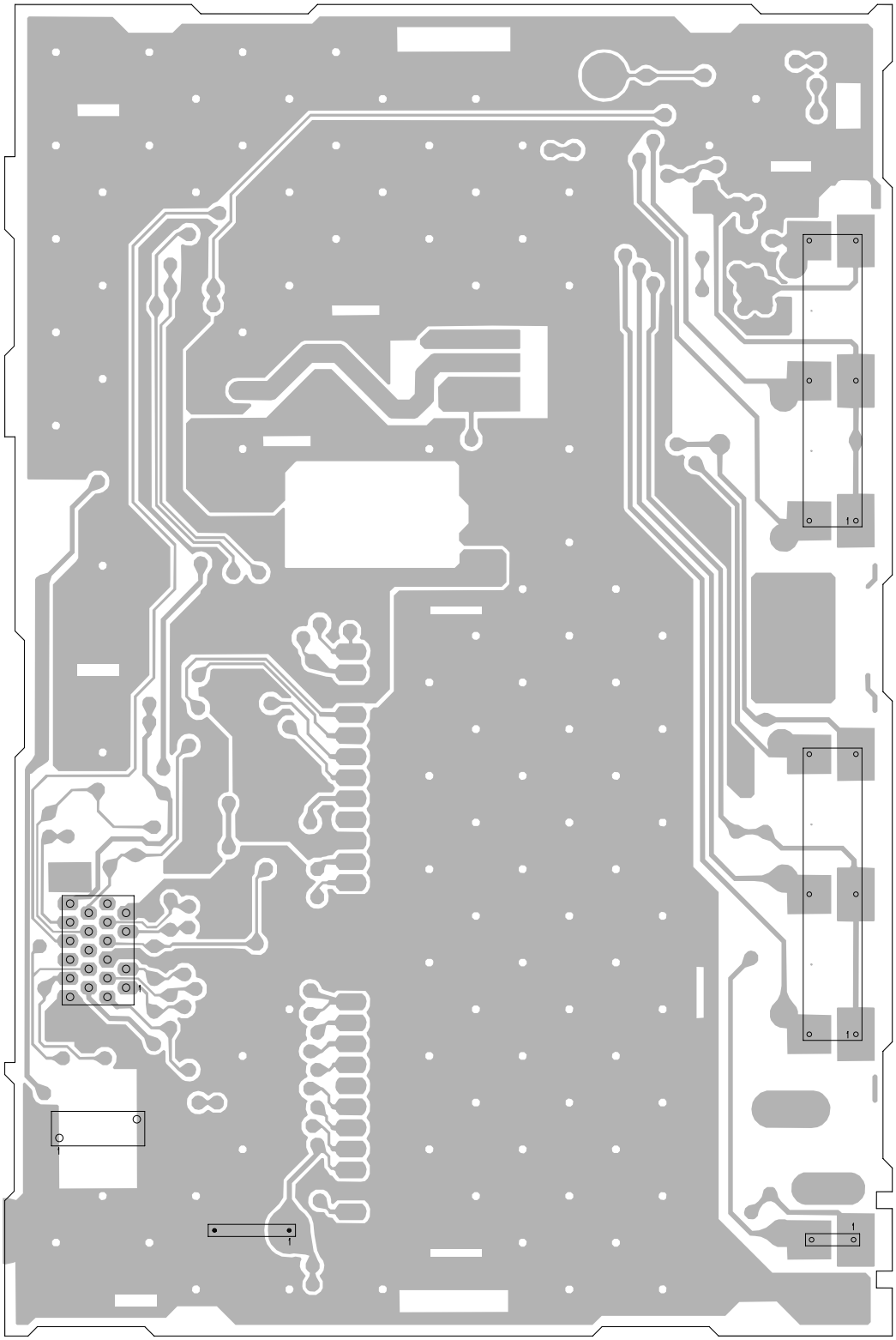
SIDE A



G

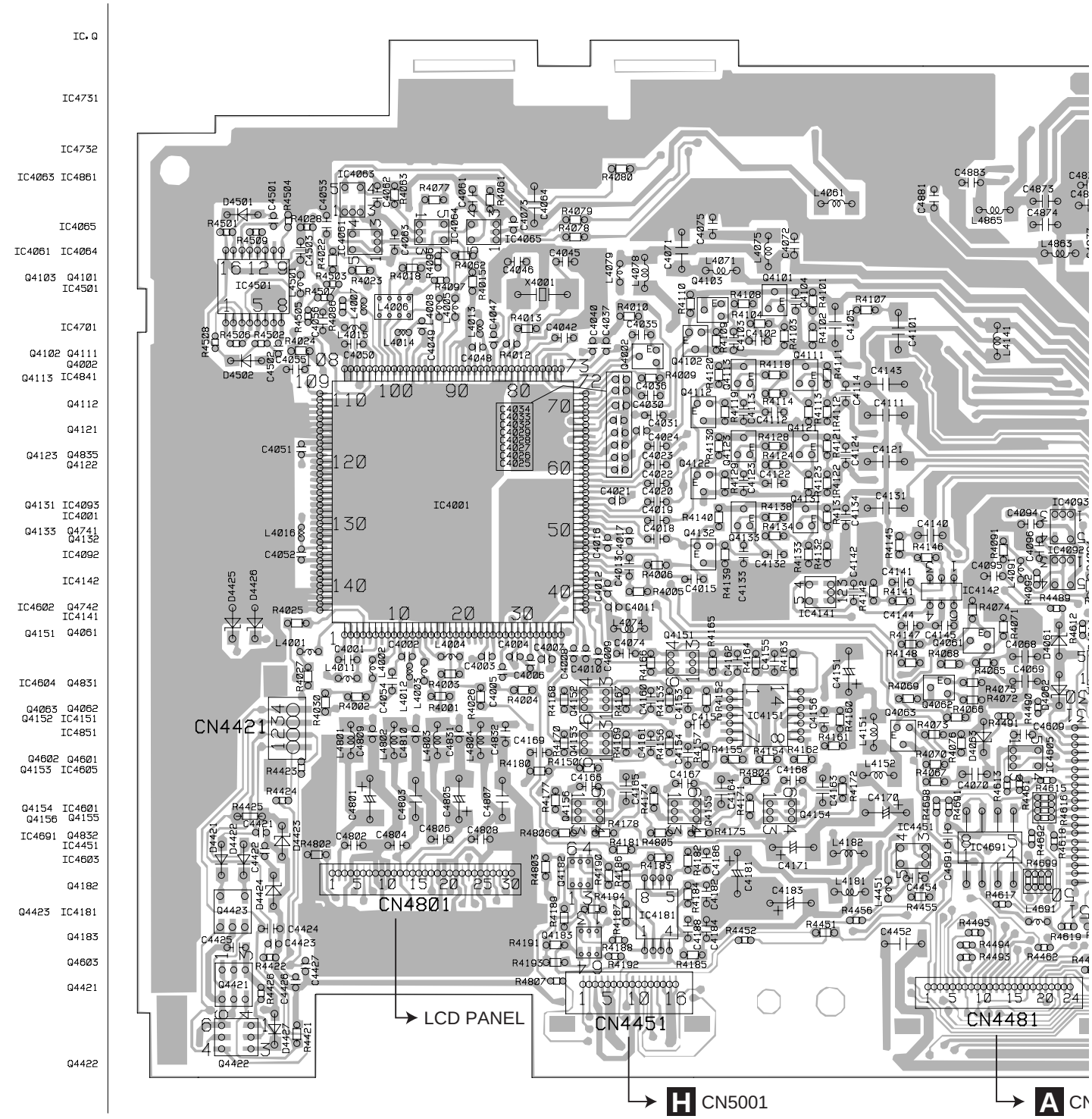
G TUNER UNIT

SIDE B



4.6 MONITOR PCB

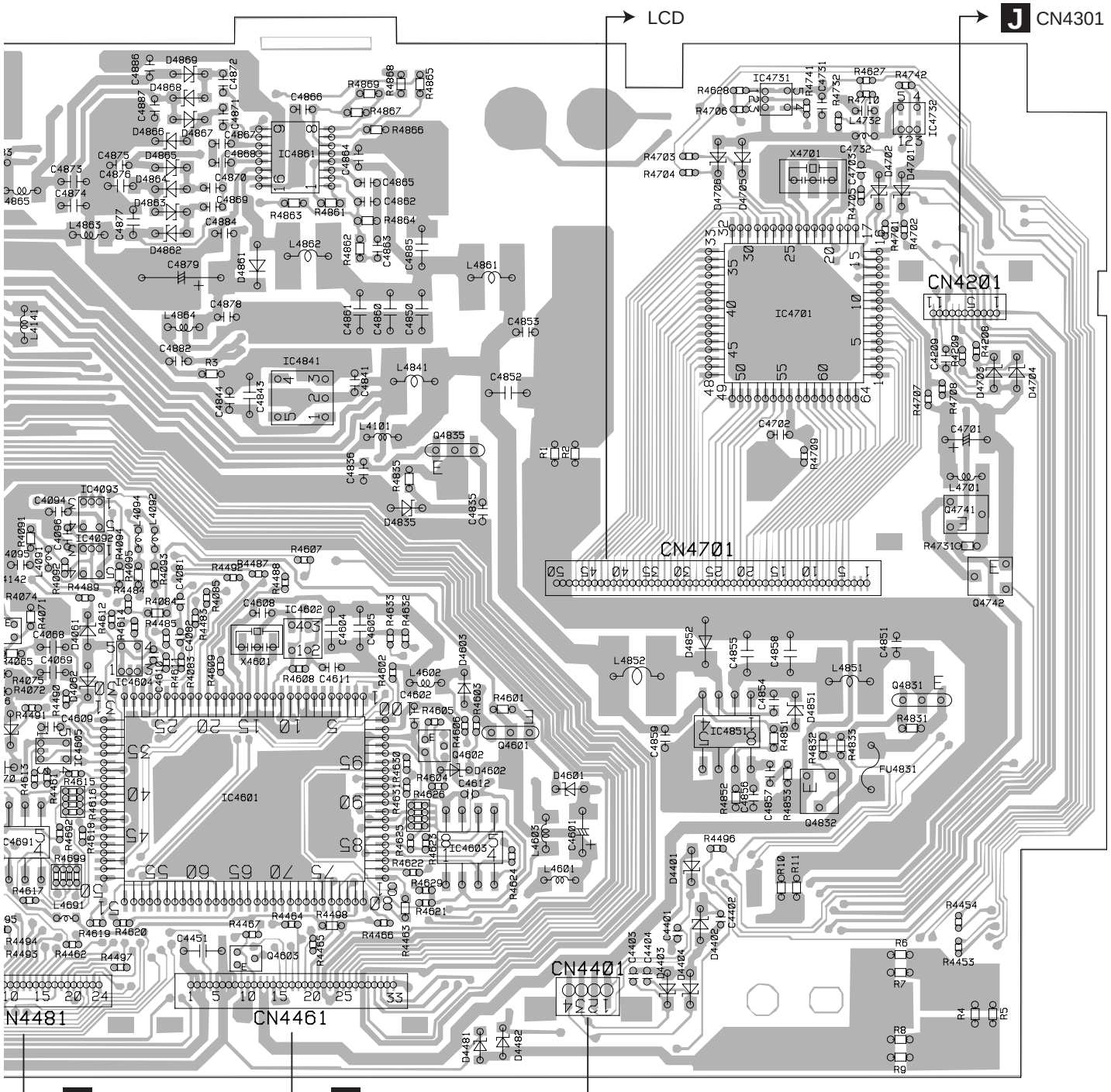
I MONITOR PCB



FRONT

I

SIDE A


LCD
J CN4301
CN4201
CN4701
CN4401
CN4461
N4481
A CN501
A CN501
A CN502
TOUCH PANEL
FRONT

A

B

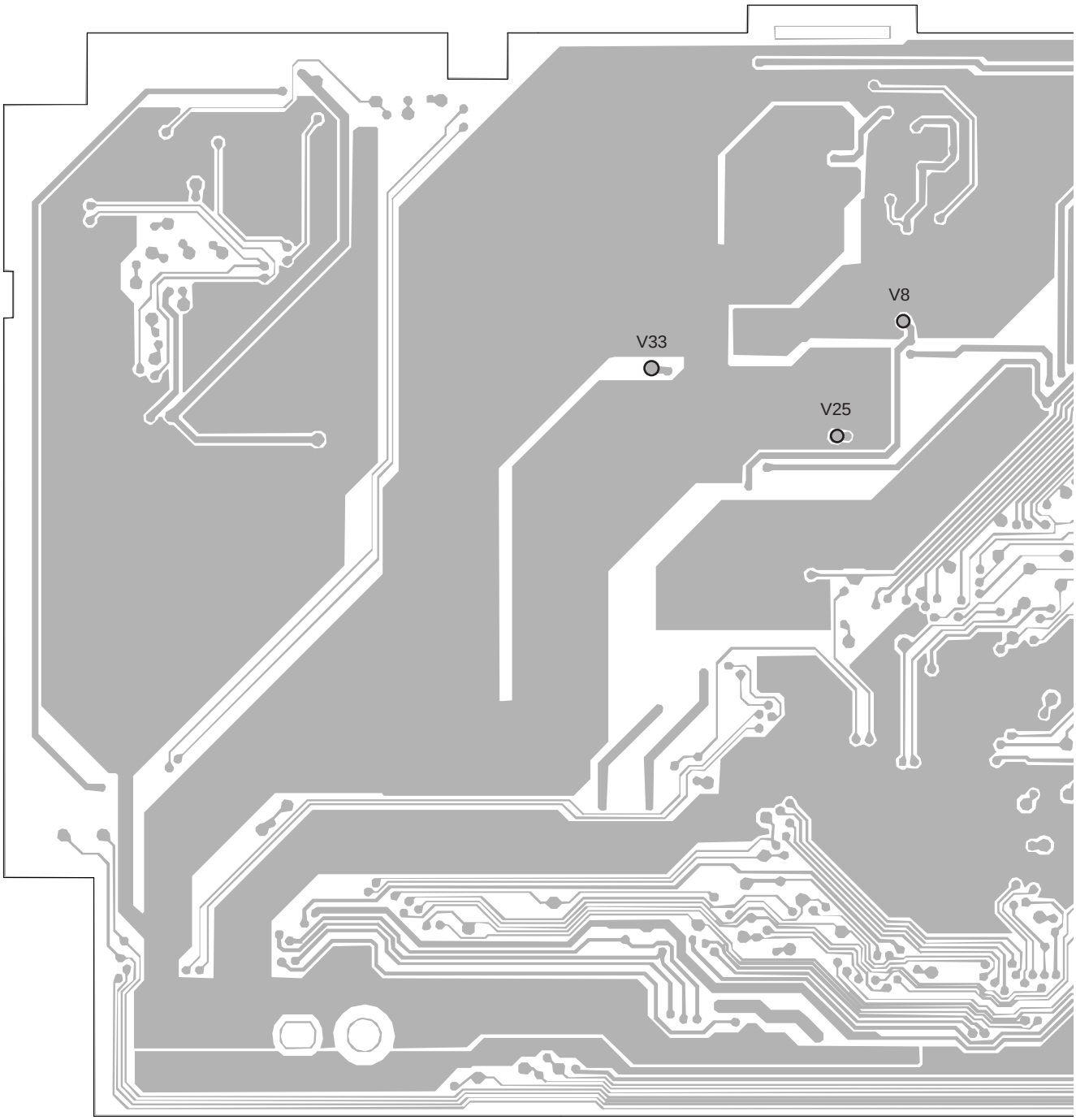
C

D

E

F

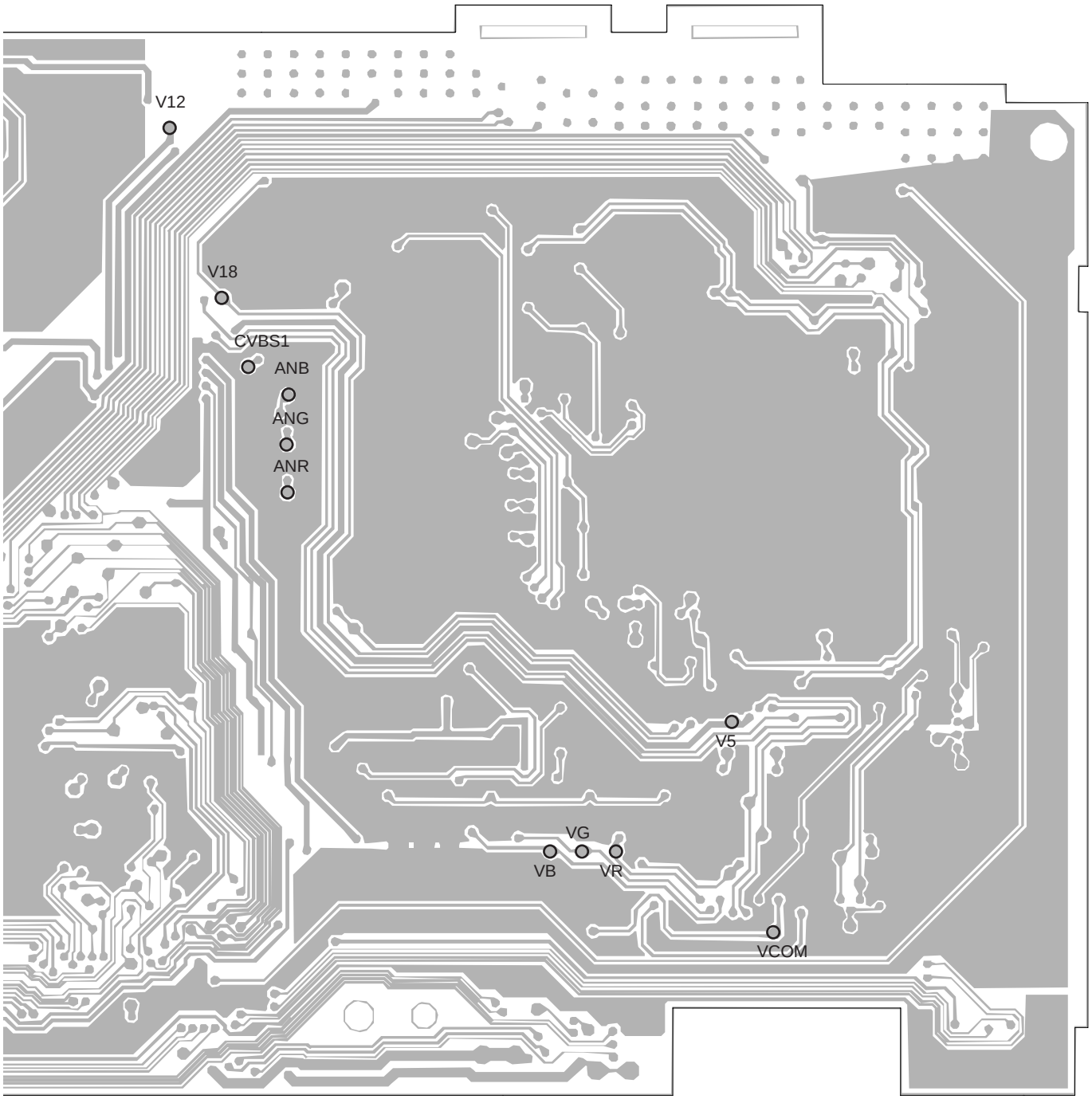
MONITOR PCB



A

SIDE B

B



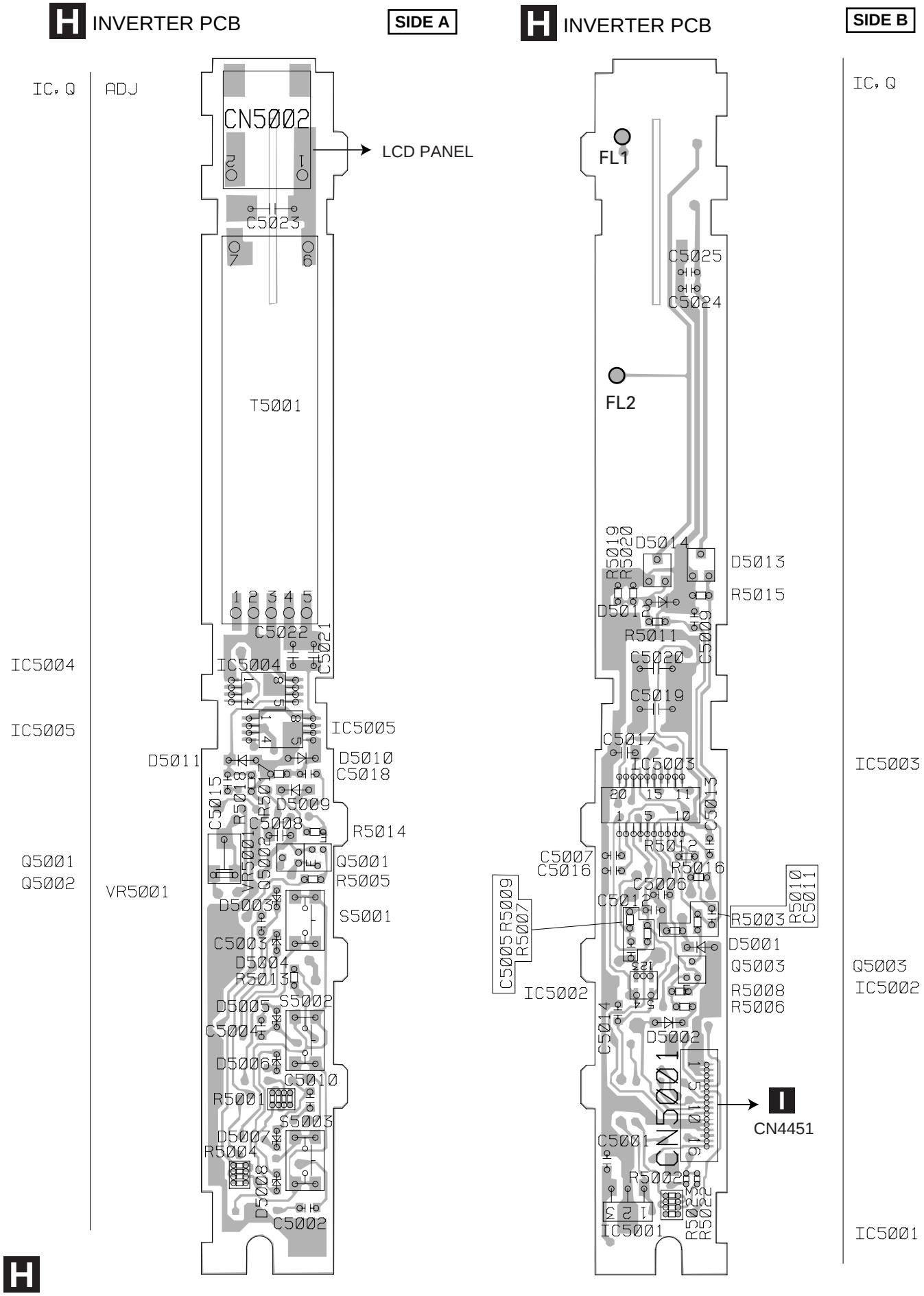
C

D

E

F

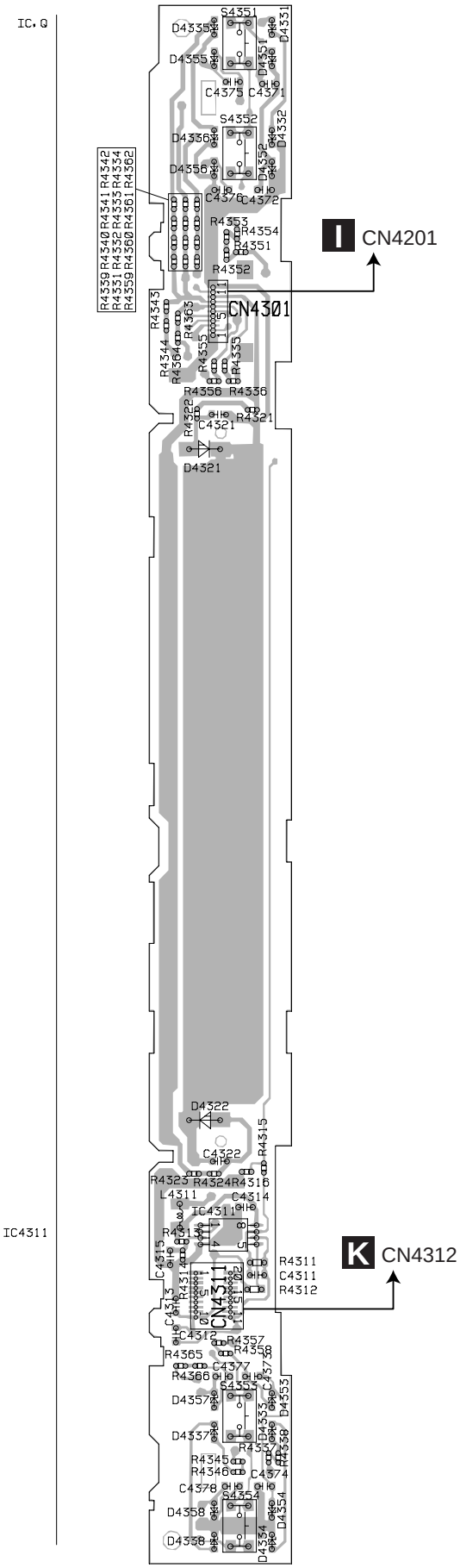
4.7 INVERTER PCB



4.8 UPPER PCB

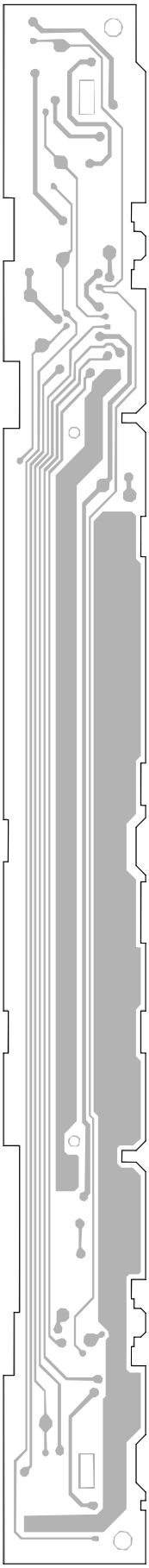
J UPPER PCB

SIDE A



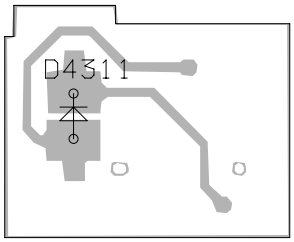
J UPPER PCB

SIDE B

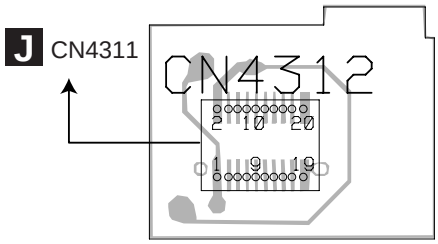


4.9 SENSE PCB

K SENSE PCB **SIDE A**



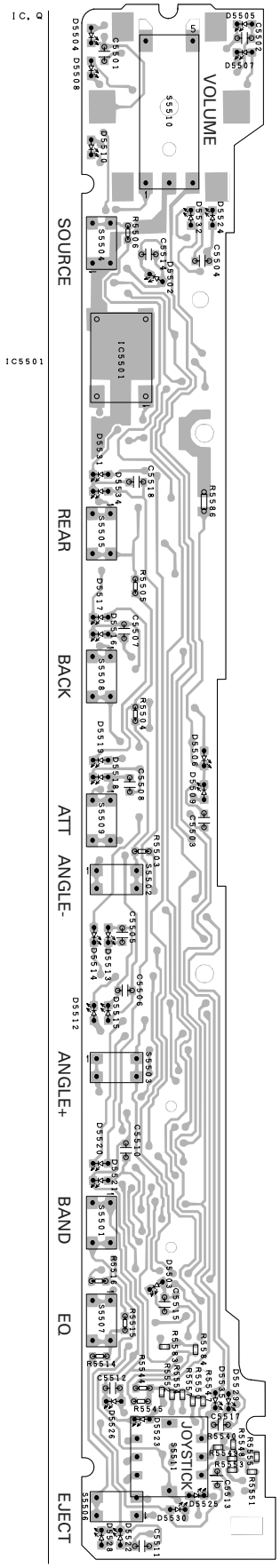
K SENSE PCB **SIDE B**



4.10 GRILLE PCB

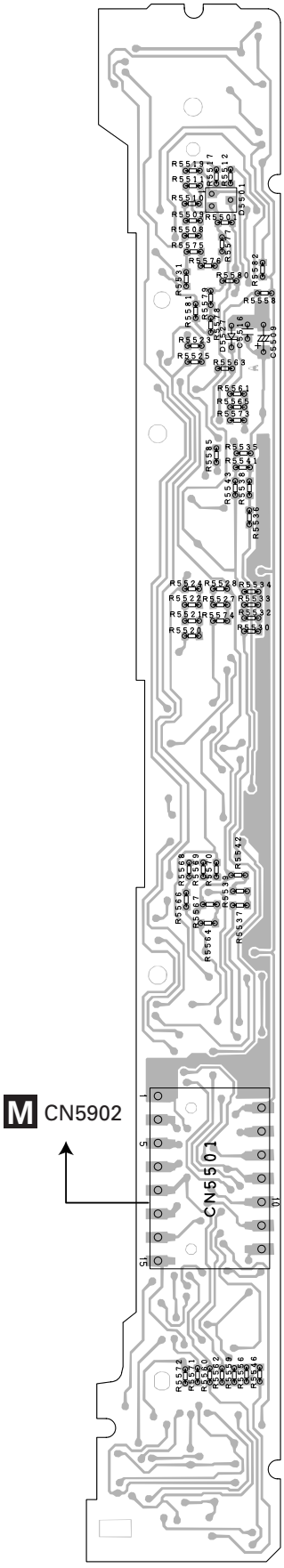
L GRILLE PCB

SIDE A

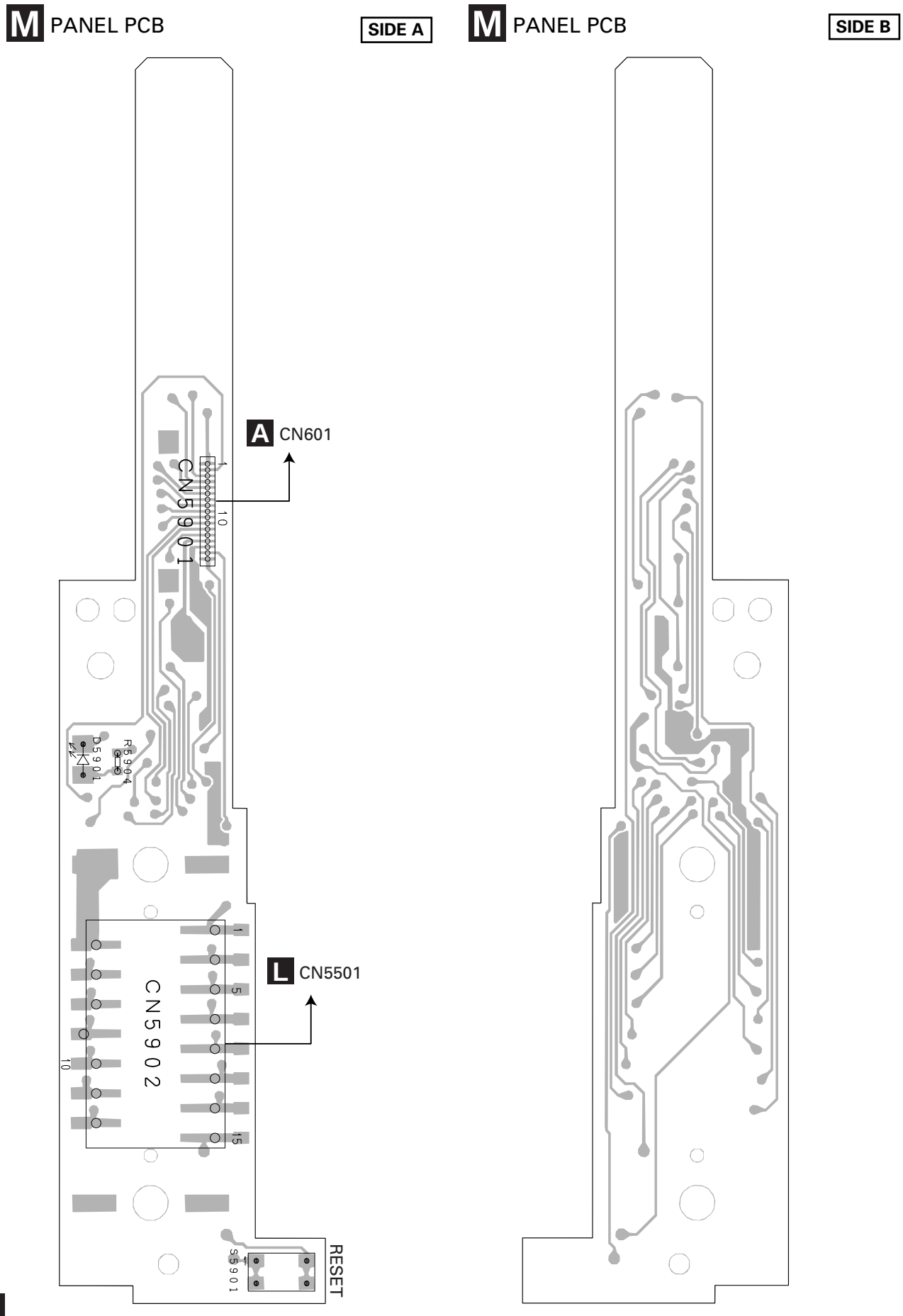


L GRILLE PCB

SIDE B

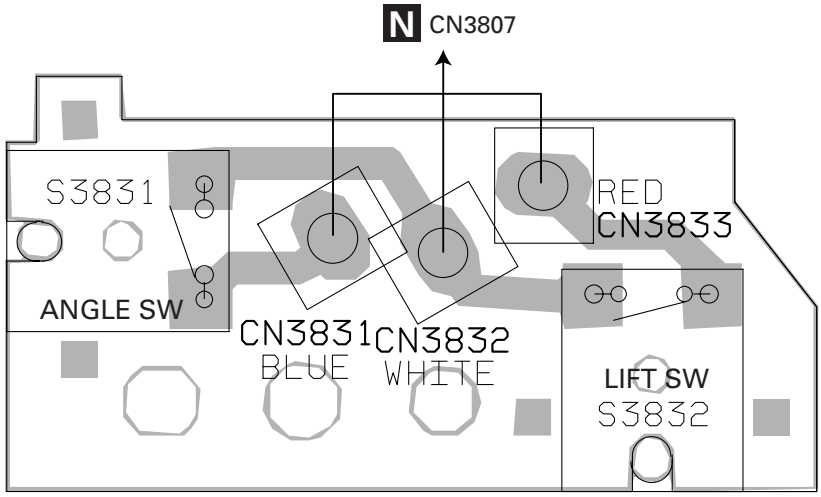


4.11 KEYBOARD PCB

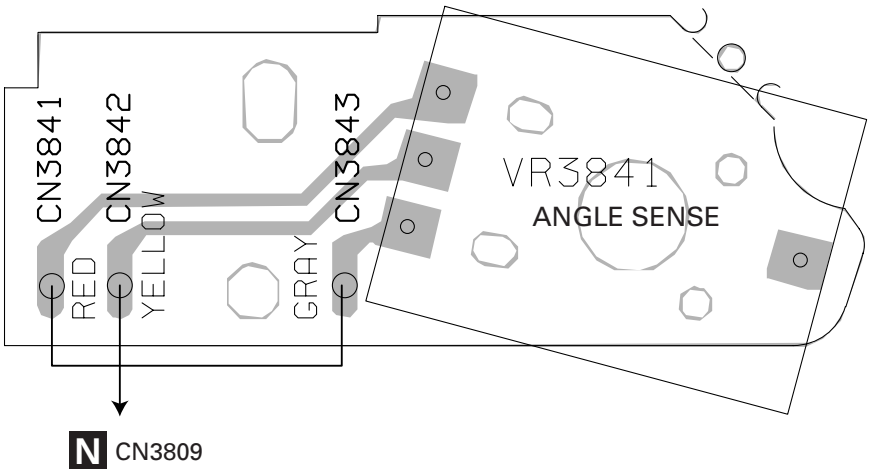


4.12 SW UNIT AND VOLUME UNIT

O SW UNIT



P VOLUME UNIT

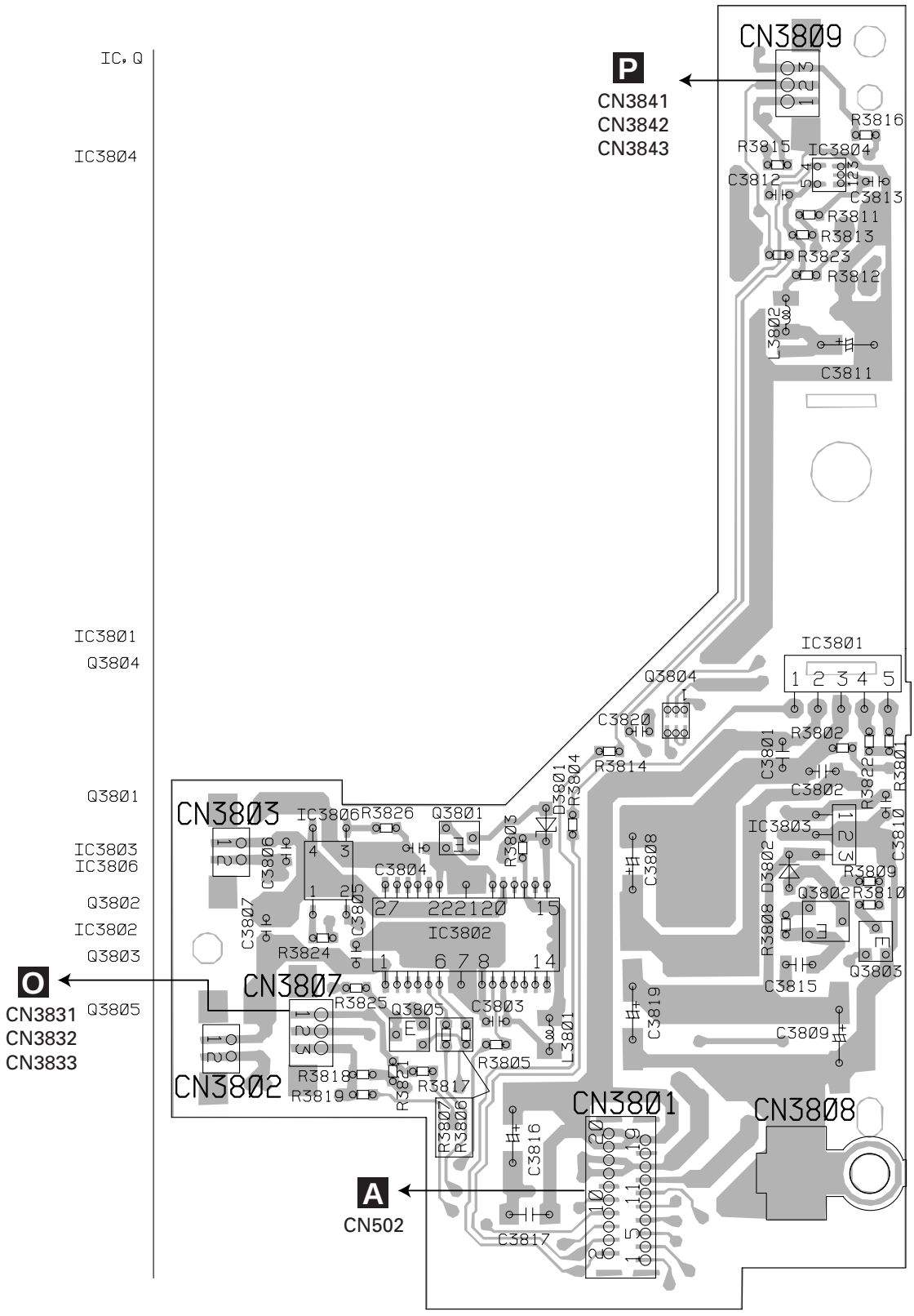


O P

4.13 MAIN UNIT

N MAIN UNIT

SIDE A



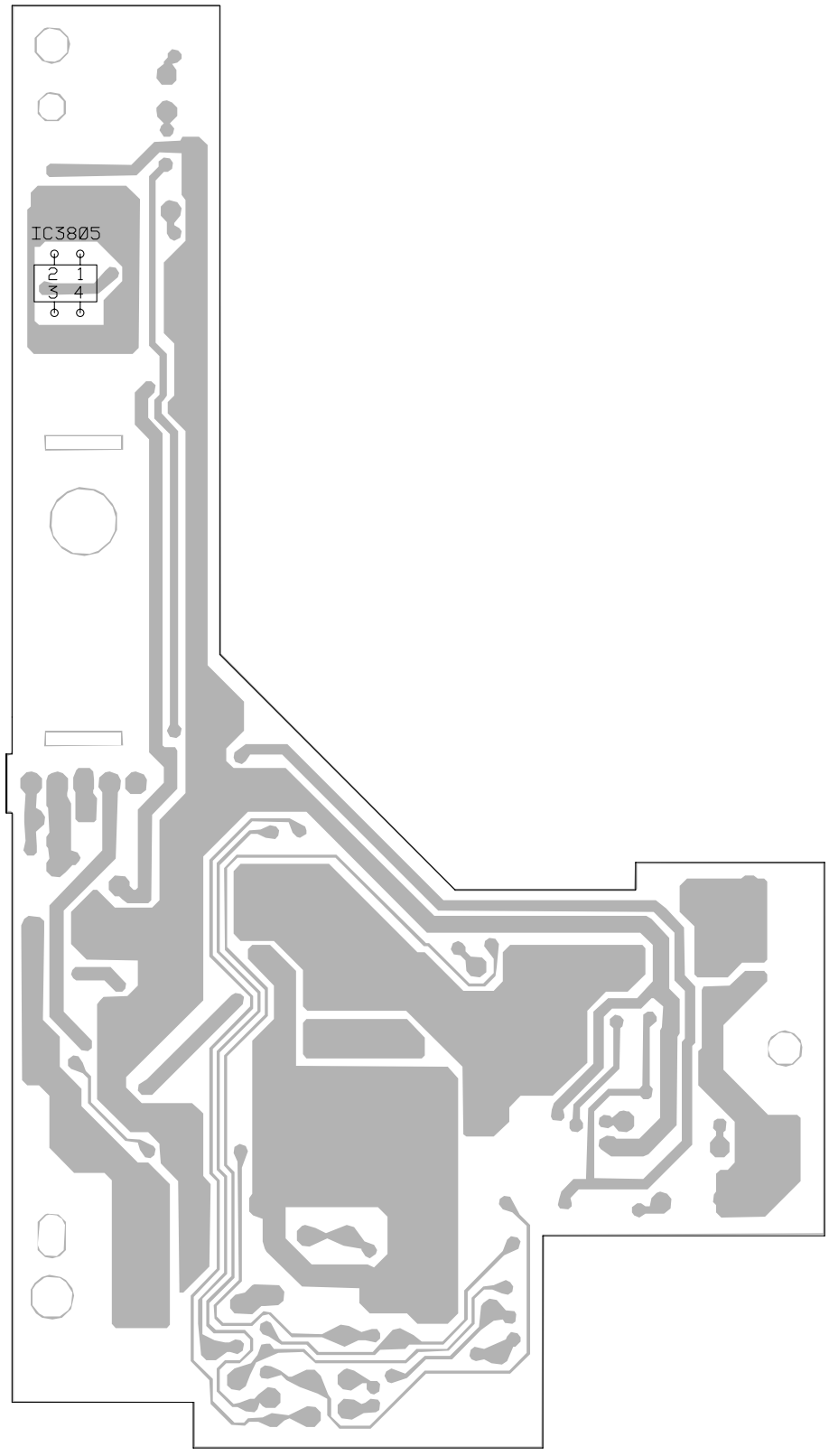
N

N MAIN UNIT

SIDE B

IC, Q

IC3805



5. ELECTRICAL PARTS LIST

NOTE:

- *Parts whose parts numbers are omitted are subject to being not supplied.*
- *The part numbers shown below indicate chip components.*

Chip Resistor

RS1/◯S◯◯◯J,RS1/◯◯S◯◯◯J

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

Mother Unit
Consists of
Mother PCB
Relay PCB

A B

Unit Number:CWM9143(UC model)
Unit Number:CWM9142(EW model)
Unit Name:Mother Unit

MISCELLANEOUS

Circuit Symbol and No.		Part No.
IC 101	IC	TC4S81F
IC 102	IC	HA12240FP
IC 103	IC	TC7SET08FU
IC 151	IC	SM5304AV
IC 152	IC	TC74VHC08FT
IC 153	IC	TC7SET08FU
IC 201	IC	PML009A
IC 202	IC	PAL007A
IC 203	IC	PA2028A
IC 301	IC	NJM4558V
IC 351	IC	NJM4558V
IC 352	IC	NJM4558V
IC 353	IC	NJM4580V
IC 401	IC	TA2050F
IC 402	IC	TA2050F
IC 403	IC	TA2050F
IC 404	IC	NJM2136V
IC 405	IC	NJM2136V
IC 406	IC	NJM2136V
IC 407	IC	NJM2136V
IC 408	IC	CXA2089Q
IC 409	IC	BA7623F
IC 410	IC	NJM2136V
IC 411	IC	NJM2138V
IC 601	IC(UC model)	PE5416A
IC 601	IC(EW model)	PE5415A
IC 602	IC	PDH089A
IC 603	IC	S-80841CNUA-B82
IC 801	IC	S-812C33AUA-C2N
IC 802	IC	LTC3728EG
IC 803	IC	LTC3728EG
IC 804	IC	BA00BC0WFP
IC 805	IC	S-812C50AUA-C3E
IC 806	IC	S-814A33AMC-BCX
IC 1401	IC	PE5417A
IC 1403	IC	TC7WHU04FU
IC 1404	IC	S-80827CNUA-B8M
IC 1405	IC	TC7SET08FU
IC 1407	IC	TC74VCX02FT
IC 1408	IC	BA3834F
IC 1410	IC	PD8125A
IC 1411	IC	PD8126A
IC 1414	IC	TC7SZ04FU
IC 1451	IC	HD64413ASFI
IC 1452	IC	K4S641632H-TC75
Q 101	Transistor	2SC4081
Q 102	Transistor	2SC4081
Q 103	Transistor	UMF23N
Q 151	Transistor	IMD2A
Q 152	Transistor	IMX9
Q 201	Transistor	2SC4081
Q 202	Transistor	IMD2A
Q 203	Transistor	DTC124EU
Q 204	Transistor	DTC144EU
Q 205	Transistor	2SC4081
Q 206	Transistor	IMX9
Q 207	Transistor	IMX9
Q 208	Transistor	IMX9
Q 209	Transistor	IMD2A
Q 301	Transistor	IMX9
Q 302	Transistor	IMD2A
Q 303	Transistor	2SC4081
Q 351	Transistor	IMD2A
Q 352	Transistor	DTC323TU
Q 353	Transistor	DTC124EU
Q 401	Transistor	2SC4081
Q 402	Transistor	2SC4081
Q 403	Transistor	2SC4081
Q 404	Transistor	2SC4081
Q 405	Transistor	2SC4081
Q 406	Transistor	2SC4081
Q 551	Transistor	2SC4081
Q 552	Transistor	2SA1577
Q 601	Transistor	UMF23N
Q 602	Transistor	DTC114EU
Q 603	Transistor	DTA114EU
Q 604	Transistor	DTC144EU
Q 605	Transistor	2SC4081
Q 606	Transistor	2SC4081
Q 607	Transistor	2SC4081
Q 608	Transistor	2SC4081
Q 609	Transistor	2SA1577

Circuit Symbol and No.		Part No.
Q 610	Transistor	DTC144EU
Q 611	Transistor	2SA1577
Q 612	Transistor	DTC144EU
Q 613	Transistor	2SA1577
Q 614	Transistor	DTC144EU
Q 615	Transistor(EW model)	2SA1577
Q 616	Transistor(EW model)	DTC144EU
Q 617	Transistor	DTC124EU
Q 701	Transistor	IMX1
Q 702	Transistor	DTC114EU
Q 703	Transistor	2SA1576
Q 704	Transistor	2SA1576
Q 705	Transistor	2SC4081
Q 801	Transistor	DTC124EU
Q 802	Transistor	DTC124EU
Q 803	Transistor	2SB1708
Q 805	Transistor	2SB1708
Q 806	Transistor	2SC4081
Q 807	Transistor	2SB1708
Q 808	Transistor	DTC124EU
Q 809	Transistor	DTC124EU
Q 810	Transistor	DTC124EU
Q 811	Transistor	DTC124EU
Q 812	Transistor	UMF5N
Q 813	Transistor	DTC124EU
Q 814	Transistor	DTC124EU
Q 815	Transistor	2SB1184F5
Q 816	Transistor	2SD1767
Q 817	Transistor	IMD2A
Q 818	Transistor	2SD1767
Q 819	Transistor	DTC114EU
Q 821	FET	SP8K4
Q 822	FET	SP8K4
Q 823	FET	SP8K4
Q 824	Transistor	DTC124EU
Q 825	Transistor	2SA1797
Q 827	Transistor	DTC144EU
Q 828	Transistor	2SD1767
Q 829	Transistor	DTC124EU
Q 830	Transistor	2SB1708
Q 831	Transistor	DTC124EU
Q 832	Transistor	2SB1708
Q 833	Transistor	2SD1760F5
Q 834	Transistor	UMF5N
Q 835	Transistor	UMF5N
Q 836	Transistor	2SD2375
Q 837	Transistor	UMF5N
Q 838	Transistor	2SB1184F5
Q 839	Transistor	IMD2A
Q 840	Transistor	UMF5N
Q 841	Transistor	2SD1767
Q 842	Transistor	UMF5N
Q 843	Transistor	UMF5N
Q 844	Transistor	2SD1767
Q 845	Transistor	UMF5N
Q 901	Transistor	DTC114EU
Q 902	Transistor	2SA1615-Z
Q 1401	Transistor	FMG12
Q 1402	Transistor	UMF5N
Q 1403	Transistor	UMF5N

Circuit Symbol and No.		Part No.
Q 1405	Transistor	2SA1774
Q 1406	Transistor	2SA1774
Q 1407	Transistor	2SA1774
D 101	Diode	HZU2R7(B1)
D 102	Diode	HZU2R7(B1)
D 103	Diode	HZU2R7(B1)
D 104	Diode	HZU2R7(B1)
D 105	Diode	UDZS5R6(B)
D 106	Diode	UDZS5R6(B)
D 107	Diode	UDZS5R6(B)
D 108	Diode	UDZS5R6(B)
D 109	Diode	HZU2R7(B1)
D 110	Diode	HZU2R7(B1)
D 111	Diode	HZU2R7(B1)
D 112	Diode	HZU2R7(B1)
D 113	Diode Network	DA204U
D 114	Diode Network	DA204U
D 115	Diode	HZU2R7(B1)
D 116	Diode	HZU2R7(B1)
D 117	Diode	UDZS5R6(B)
D 118	Diode	UDZS5R6(B)
D 119	Diode	UDZS5R6(B)
D 120	Diode	UDZS8R2(B)
D 121	Diode	UDZS8R2(B)
D 201	Diode	DAN202U
D 202	Diode	DAN202U
D 203	Diode	DAN202U
D 204	Diode	UDZS8R2(B)
D 205	Diode	DAN202U
D 206	Diode	1SS355
D 301	Diode	RSX201L-30
D 601	Diode	UDZS5R6(B)
D 602	Diode Network	DA204U
D 603	Diode Network	DA204U
D 604	Diode Network	DA204U
D 605	Diode Network	DA204U
D 606	Diode Network	DA204U
D 607	Diode Network	DA204U
D 608	Diode Network	DA204U
D 609	Diode	1SS355
D 610	Diode	1SS355
D 611	Diode	DAN202U
D 612	Diode	1SS355
D 701	Diode	1SS355
D 702	Diode	HZU6R8(B2)
D 703	Diode	UDZS7R5(B)
D 704	Diode	DAN202U
D 705	Diode	DAN202U
D 706	Diode	S1G-6904G2P
D 707	Diode	S1G-6904G2P
D 708	Diode	5KP24A
D 801	Diode	S1G-6904G2P
D 802	Diode	UDZS18(B)
D 803	Diode	RSX201L-30
D 804	Diode	HZU8R2(B1)
D 805	Diode	DAN202U
D 806	Diode	HZU5R6(B2)
D 807	Diode	RB500V-40
D 808	Diode	RB500V-40
D 809	Diode	RB500V-40

Circuit Symbol and No.		Part No.
D 811	Diode	RB160L-40
D 812	Diode	RB160L-40
D 813	Diode	RB160L-40
D 814	Diode	S1G-6904G2P
D 815	Diode	S2G-6600
D 816	Diode	RSX201L-30
D 817	Diode	S2G-6600
D 819	Diode	UDZS5R6(B)
D 820	Diode	S2G-6600
D 821	Diode	DAN202U
D 822	Diode	HZU6R8(B3)
D 823	Diode	HZU10(B1)
D 825	Diode	UDZS20(B)
D 826	Diode	HZU6R8(B3)
D 827	Diode	DAN202U
D 828	Diode	1SS355
D 829	Diode	1SS355
D 830	Diode	1SS355
D 831	Diode	RSX201L-30
D 1401	Diode	1SS355
D 1402	Diode	1SS355
L 101	Inductor	CTF1379
L 102	Inductor	LCTC2R2K1608
L 103	Inductor	CTF1379
L 104	Inductor	CTF1558
L 105	Inductor	CTF1558
L 110	Inductor	CTF1389
L 151	Coil	CTH1295
L 152	Inductor	CTF1399
L 153	Inductor	CTF1399
L 154	Inductor	CTF1305
L 155	Inductor	CTF1305
L 157	Inductor	CTF1473
L 158	Inductor	CTF1473
L 201	Inductor	LCTA2R2J2520
L 202	Inductor	LCTA101J2520
L 301	Inductor	CTF1379
L 302	Inductor	CTF1379
L 303	Inductor	CTF1399
L 351	Inductor	CTF1399
L 352	Inductor	CTF1399
L 353	Inductor	CTF1399
L 401	Inductor	CTF1383
L 403	Inductor	CTF1399
L 404	Inductor	LCTA150J2520
L 405	Inductor	CTF1399
L 406	Inductor	CTF1399
L 407	Inductor	CTF1399
L 408	Inductor	LCTA100J2520
L 409	Inductor	CTF1383
L 410	Inductor	CTF1399
L 411	Inductor	CTF1399
L 412	Inductor	CTF1399
L 413	Inductor	CTF1399
L 415	Inductor	CTF1399
L 551	Inductor	CTF1399
L 601	Inductor	CTF1399
L 602	Inductor	CTF1306
L 603	Inductor	CTF1306
L 604	Inductor	LCTA2R2J2520

Circuit Symbol and No.		Part No.
L 701	Inductor	LCTC2R2K1608
L 702	Inductor	LCTC2R2K1608
L 801	Coil	CTH1308
L 802	Coil	CTH1308
L 803	Coil	CTH1308
L 805	Coil	CTH1308
L 806	Inductor	LCTA1R0J3225
L 807	Coil	CTH1308
L 809	Inductor	CTF1383
L 901	Coil	CTH1267
L 902	Choke Coil 270µH	CTH1263
L 1401	Inductor	CTF1379
L 1402	Inductor	CTF1399
L 1403	Inductor	CTF1399
L 1404	Inductor	CTF1379
L 1406	Inductor	CTF1399
L 1407	Inductor	CTF1379
L 1408	Inductor	CTF1379
L 1409	Inductor	CTF1379
L 1410	Inductor	CTF1399
L 1411	Inductor	CTF1396
L 1414	Inductor	CTF1379
L 1415	Inductor	LCTC2R2K1608
L 1416	Inductor	LCTC2R2K1608
L 1417	Inductor	LCTC2R2K1608
L 1418	Inductor	CTF1379
L 1419	Inductor	CTF1379
L 1420	Inductor	CTF1379
L 1421	Inductor	CTF1379
L 1422	Inductor	CTF1379
L 1423	Inductor	CTF1379
L 1424	Inductor	CTF1379
L 1425	Inductor	CTF1379
L 1426	Inductor	CTF1379
L 1427	Inductor	CTF1379
L 1428	Inductor	CTF1389
L 1429	Inductor	CTF1389
L 1430	Inductor	CTF1389
X 601	Resonator 18.874368MHz	CSS1622
X 1401	Ceramic Resonator 4.97MHz	CSS1575
X 1452	Resonator 33.0MHz	CSS1656
VR401	Semi-fixed 1.5kΩ(OB)	CCP1391
FU101	Fuse 5A	CEK1289
FU102	Fuse 1A	CEK1280
FU103	Fuse 1A	CEK1280
FU104	Fuse 5A	CEK1289
FU107	Fuse 5A	CEK1289
FU151	Fuse 2.5A	CEK1285
FU152	Fuse 1A	CEK1280
FU153	Fuse 2A	CEK1284
FU154	Fuse 250mA	CEK1276
FU155	Fuse 250mA	CEK1276
FU201	Fuse 3A	CEK1286
FU501	Fuse 250mA	CEK1276
FU502	Fuse 1.75A	CEK1283
FU701	Fuse 5A	CEK1289
FU802	Fuse 1.25A	CEK1281
FU804	Fuse 1A	CEK1280
FU805	Fuse 1A	CEK1280
FU901	Fuse 1.25A	CEK1281

Circuit Symbol and No.		Part No.
FU902	Fuse 1.75A	CEK1283
EF801	EMI Filter	CCG1142
BZ601	Buzzer	CPV1063

RESISTORS

R 101	RS1/16S750J
R 103	RS1/16S681J
R 104	RS1/16S681J
R 105	RS1/16S0R0J
R 106	RS1/16S750J
R 107	RS1/16S473J
R 108	RS1/16S681J
R 109	RS1/16S750J
R 110	RS1/16S473J
R 111	RS1/16S473J
R 112	RS1/16S681J
R 113	RS1/16S750J
R 114	RS1/16S473J
R 115	RS1/16S473J
R 116	RS1/16S473J
R 117	RS1/16S473J
R 118	RS1/16S472J
R 119	RS1/16S102J
R 120	RS1/16S101J
R 121	RS1/16S150J
R 122	RS1/16S470J
R 123	RS1/16S101J
R 124	RS1/16S222J
R 125	RS1/16S332J
R 126	RS1/16S562J
R 127	RS1/16S221J
R 128	RS1/16S621J
R 129	RS1/16S473J
R 130	RS1/16S121J
R 131	RS1/16S0R0J
R 132	RS1/16S101J
R 133	RS1/16S102J
R 134	RS1/16S102J
R 151	RAB4C102J
R 153	RAB4C102J
R 157	RS1/16S0R0J
R 158	RS1/16S0R0J
R 159	RS1/16S472J
R 162	RS1/16S101J
R 163	RS1/16S102J
R 164	RS1/16S103J
R 165	RS1/16S103J
R 201	RS1/16S181J
R 202	RS1/16S181J
R 203	RS1/16S0R0J
R 204	RS1/16S0R0J
R 205	RS1/16S223J
R 206	RS1/16S223J
R 207	RS1/16S102J
R 208	RS1/16S102J
R 209	RS1/16S0R0J
R 210	RS1/16S0R0J
R 211	RS1/16S0R0J
R 212	RS1/16S0R0J
R 213	RS1/16S0R0J

Circuit Symbol and No.	Part No.
R 214	RS1/16S0R0J
R 215	RS1/16S0R0J
R 216	RS1/16S0R0J
R 217	RS1/16S224J
R 218	RS1/16S224J
R 219	RS1/16S104J
R 220	RS1/16S102J
R 221	RS1/16S103J
R 222	RS1/16S682J
R 223	RS1/16S103J
R 224	RS1/16S103J
R 225	RS1/16S103J
R 226	RS1/16S223J
R 227	RS1/16S221J
R 228	RS1/16S101J
R 229	RS1/16S103J
R 230	RS1/16S104J
R 231	RS1/16S820J
R 232	RS1/16S820J
R 233	RS1/16S820J
R 234	RS1/16S820J
R 235	RS1/16S820J
R 236	RS1/16S820J
R 237	RS1/16S473J
R 238	RS1/16S102J
R 239	RS1/16S223J
R 240	RS1/16S223J
R 241	RS1/16S223J
R 242	RS1/16S223J
R 243	RS1/16S223J
R 244	RS1/16S223J
R 245	RS1/16S471J
R 246	RS1/16S471J
R 247	RS1/16S471J
R 248	RS1/16S471J
R 249	RS1/16S471J
R 250	RS1/16S471J
R 251	RS1/16S103J
R 252	RS1/16S103J
R 253	RS1/16S103J
R 254	RS1/16S103J
R 255	RS1/16S103J
R 256	RS1/16S103J
R 257	RS1/16S473J
R 261	RS1/16S101J
R 301	RS1/16S0R0J
R 302	RS1/16S0R0J
R 303	RS1/16S223J
R 304	RS1/16S223J
R 305	RS1/16S821J
R 306	RS1/16S821J
R 307	RS1/16S222J
R 308	RS1/16S472J
R 309	RS1/16S472J
R 312	RS1/16S473J
R 313	RS1/16S473J
R 314	RS1/16S102J
R 315	RS1/16S272J
R 316	RS1/16S472J
R 317	RS1/16S222J

Circuit Symbol and No.	Part No.	Circuit Symbol and No.	Part No.
R 318	RS1/16S222J	R 435	RS1/16S152J
R 319	RS1/16S103J	R 436	RS1/16S750J
R 320	RS1/16S103J	R 437	RS1/16S101J
R 351	RS1/16S473J	R 438	RS1/16S472J
R 352	RS1/16S101J	R 439	RS1/16S472J
R 353	RS1/16S473J	R 440	RS1/16S270J
R 354	RS1/16S103J	R 441	RS1/16S472J
R 355	RS1/16S473J	R 442	RS1/16S102J
R 356	RS1/16S472J	R 443	RS1/16S272J
R 357	RS1/16S472J	R 444	RS1/16S392J
R 358	RS1/16S103J	R 445	RS1/16S472J
R 359	RS1/16S473J	R 446	RS1/16S102J
R 360	RS1/16S473J	R 447	RS1/16S0R0J
R 361	RS1/16S104J	R 448	RS1/16S562J
R 362	RS1/16S821J	R 449	RS1/16S562J
R 363	RS1/16S473J	R 450	RS1/16S562J
R 364	RS1/16S473J	R 451	RS1/16S562J
R 365	RS1/16S103J	R 452	RS1/16S272J
R 366	RS1/16S102J	R 453	RS1/16S472J
R 367	RS1/16S103J	R 454	RS1/16S0R0J
R 368	RS1/16S103J	R 455	RS1/16S472J
R 369	RS1/16S103J	R 456	RS1/16S101J
R 370	RS1/16S103J	R 457	RS1/16S472J
R 371	RS1/16S103J	R 458	RS1/16S750J
R 372	RS1/16S103J	R 459	RS1/16S472J
R 375	RS1/16S103J	R 460	RS1/16S473J
R 401	RS1/16S123J	R 461	RS1/16S333J
R 402	RS1/16S123J	R 462	RS1/16S0R0J
R 403	RS1/16S123J	R 463	RS1/16S472J
R 404	RS1/16S223J	R 464	RS1/16S101J
R 405	RS1/16S123J	R 465	RS1/16S0R0J
R 406	RS1/16S223J	R 467	RS1/16S472J
R 407	RS1/16S223J	R 468	RS1/16S102J
R 408	RS1/16S102J	R 469	RS1/16S472J
R 409	RS1/16S181J	R 470	RS1/16S472J
R 410	RS1/16S181J	R 471	RS1/16S0R0J
R 411	RS1/16S223J	R 472	RS1/16S222J
R 412	RS1/16S102J	R 473	RS1/16S222J
R 413	RS1/16S102J	R 474	RS1/16S101J
R 414	RS1/16S223J	R 475	RS1/16S101J
R 415	RS1/16S223J	R 476	RS1/16S152J
R 416	RS1/16S223J	R 477	RS1/16S152J
R 417	RS1/16S102J	R 478	RS1/16S152J
R 418	RS1/16S750J	R 479	RS1/16S101J
R 419	RS1/16S223J	R 480	RS1/16S101J
R 420	RS1/16S181J	R 481	RS1/16S152J
R 421	RS1/16S181J	R 482	RS1/16S152J
R 422	RS1/16S472J	R 483	RS1/16S152J
R 423	RS1/16S472J	R 484	RS1/16S152J
R 424	RS1/16S750J	R 485	RS1/16S152J
R 425	RS1/16S472J	R 486	RS1/16S152J
R 426	RS1/16S472J	R 487	RS1/16S152J
R 427	RS1/16S101J	R 488	RS1/16S152J
R 428	RS1/16S472J	R 489	RS1/16S152J
R 429	RS1/16S472J	R 490	RS1/16S152J
R 430	RS1/16S152J	R 491	RS1/16S272J
R 431	RS1/16S101J	R 492	RS1/16S472J
R 432	RS1/16S472J	R 493	RS1/16S272J
R 433	RS1/16S472J	R 494	RS1/16S472J
R 434	RS1/16S472J	R 495	RS1/16S272J

Circuit Symbol and No.		Part No.
R 496		RS1/16S472J
R 497		RS1/16S272J
R 498		RS1/16S472J
R 499		RS1/16S152J
R 500		RS1/16S102J
R 501		RS1/16S471J
R 502		RS1/16S102J
R 503		RS1/16S471J
R 504		RS1/16S0R0J
R 505		RS1/16S0R0J
R 507		RS1/16S102J
R 508		RS1/16S102J
R 509		RS1/16S0R0J
R 510		RS1/16S0R0J
R 511		RS1/16S0R0J
R 512		RS1/16S0R0J
R 513		RS1/16S102J
R 514		RS1/16S0R0J
R 515		RS1/16S0R0J
R 516		RS1/16S471J
R 517		RS1/16S0R0J
R 518		RS1/16S102J
R 519		RS1/16S102J
R 520		RS1/16S0R0J
R 521		RS1/16S0R0J
R 522		RS1/16S0R0J
R 523		RS1/16S0R0J
R 524		RS1/16S0R0J
R 525		RS1/16S221J
R 526		RS1/16S221J
R 527		RS1/16S221J
R 528		RS1/16S221J
R 529		RS1/16S102J
R 530		RS1/16S102J
R 531		RS1/16S0R0J
R 532		RS1/16S0R0J
R 551		RS1/16S681J
R 552		RS1/16S331J
R 553		RS1/16S272J
R 554		RS1/16S681J
R 555		RS1/16S101J
R 601		RS1/16S102J
R 602		RS1/16S102J
R 603		RS1/16S102J
R 604		RS1/16S822J
R 605		RS1/16S222J
R 606		RS1/16S472J
R 607		RS1/16S472J
R 608		RAB4C222J
R 609		RS1/16S332J
R 610		RS1/16S332J
R 611		RS1/16S102J
R 612		RS1/16S102J
R 613		RS1/16S103J
R 614		RS1/16S223J
R 615		RS1/16S473J
R 616		RS1/16S472J
R 617		RS1/16S473J
R 618		RS1/16S472J
R 619		RS1/16S103J
R 620		RS1/16S104J
R 621		RS1/16S473J
R 622		RS1/16S473J
R 623		RS1/16S473J
R 624		RS1/16S473J
R 625	(EW model)	RAB4C101J
R 626		RS1/16S473J
R 627		RS1/16S102J
R 629		RS1/16S472J
R 630		RS1/16S102J
R 631		RS1/16S473J
R 633		RAB4C102J
R 634		RAB4C102J
R 635		RS1/16S473J
R 636		RS1/16S102J
R 638		RS1/16S102J
R 639		RAB4C102J
R 640		RS1/16S473J
R 641		RS1/16S102J
R 642		RS1/16S102J
R 643		RS1/16S472J
R 644		RS1/16S103J
R 648		RS1/16S101J
R 650	(EW model)	RS1/16S102J
R 652		RS1/16S221J
R 653		RS1/16S681J
R 654		RS1/16S473J
R 655		RS1/16S102J
R 656		RS1/16S473J
R 657		RS1/16S102J
R 658		RS1/16S473J
R 659		RS1/16S473J
R 660		RS1/16S104J
R 661		RS1/16S104J
R 662		RS1/16S473J
R 663		RS1/16S473J
R 665		RAB4C102J
R 666		RS1/16S473J
R 667		RS1/16S0R0J
R 668		RS1/16S473J
R 669		RS1/16S473J
R 670	(EW model)	RS1/16S473J
R 671		RS1/16S473J
R 673		RS1/16S472J
R 674		RS1/16S681J
R 675		RS1/16S681J
R 676		RS1/16S104J
R 678		RS1/16S104J
R 679		RAB4C681J
R 680		RS1/16S102J
R 681		RAB4C102J
R 682		RS1/16S102J
R 683		RS1/16S0R0J
R 684		RS1/16S102J
R 685		RS1/16S681J
R 686		RS1/16S681J
R 689		RS1/16S104J
R 690		RS1/16S104J
R 692		RS1/16S473J
R 693		RS1/16S223J

Circuit Symbol and No.		Part No.	Circuit Symbol and No.		Part No.
R 694		RS1/16S472J	R 836		RS1/16S3901D
R 695		RS1/16S223J	R 837		RS1/16S102J
R 696		RS1/16S472J	R 838	2.7kΩ	CCN1143
R 697		RS1/16S223J	R 839		RS1/16S331J
R 698	(EW model)	RS1/16S472J	R 840		RS1/16S331J
R 699	(EW model)	RS1/16S223J	R 841	2.7kΩ	CCN1143
R 700		RS1/16S473J	R 842	2.7kΩ	CCN1143
R 701		RS1/16S102J	R 843	2.7kΩ	CCN1143
R 702		RS1/16S473J	R 844		RS1/16S100J
R 703		RS1/16S103J	R 845		RS1/16S100J
R 704		RS1/16S103J	R 846	10Ω	CCN1148
R 705		RS1/16S104J	R 847	10Ω	CCN1148
R 706		RS1/16S102J	R 848		RS1/16S472J
R 707		RS1/16S223J	R 849	10Ω	CCN1148
R 708		RS1/16S473J	R 850		RS1/16S181J
R 709		RS1/16S473J	R 851		RS1/16S181J
R 710		RS1/16S102J	R 852		RS1/16S332J
R 711		RS1/16S473J	R 853		RS1/16S181J
R 712		RS1/16S472J	R 854		RS1/16S181J
R 713		RS1/16S472J	R 855		RS1/16S181J
R 714		RS1/16S472J	R 856		RS1/16S181J
R 715		RS1/16S103J	R 857		RS1/16S472J
R 716		RS1/16S153J	R 858		RS1/16S102J
R 717		RS1/16S473J	R 859		RS1/16S1202D
R 718		RS1/16S222J	R 860		RS1/16S2701D
R 719		RS1/16S104J	R 861		RS1/16S8201D
R 801		RS1/16S103J	R 862		RS1/16S5600D
R 802		RS1/16S221J	R 863		RS1/16S104J
R 803		RS1/16S221J	R 864		RS1/16S391J
R 804		RS1/16S103J	R 865		RS1/16S222J
R 805		RS1/16S102J	R 866		RS1/16S472J
R 806		RS1/16S473J	R 867		RS1/16S222J
R 807		RS1/16S221J	R 868		RS1/16S472J
R 808		RS1/16S103J	R 869		RS1/16S271J
R 809		RS1/16S473J	R 870		RS1/16S103J
R 810		RS1/16S221J	R 871		RS1/16S332J
R 811		RS1/16S103J	R 872		RS1/16S271J
R 812		RS1/16S473J	R 873		RS1/16S121J
R 813		RS1/16S223J	R 874		RS1/16S103J
R 814		RS1/16S1201D	R 875		RS1/16S332J
R 815		RS1/16S4701D	R 876		RS1/16S121J
R 816		RS1/16S8201D	R 877		RS1/16S271J
R 817		RS1/16S1001D	R 878		RS1/16S103J
R 819		RS1/16S220J	R 879		RS1/16S103J
R 820		RS1/16S1001D	R 880		RS1/16S471J
R 821		RS1/16S822J	R 881		RS1/16S121J
R 822		RS1/16S822J	R 882		RS1/16S103J
R 823		RS1/16S4701D	R 883		RS1/16S332J
R 824		RS1/16S2R2J	R 884		RS1/16S820J
R 825		RS1/16S2R2J	R 885		RS1/16S820J
R 826		RS1/16S0R0J	R 886		RS1/16S103J
R 827		RS1/16S2R2J	R 887		RS1/16S332J
R 828		RS1/16S2R2J	R 888		RS1/16S103J
R 829		RS1/16S223J	R 889		RS1/16S332J
R 830		RS1/16S223J	R 890		RS1/16S330J
R 831		RS1/16S4301D	R 891		RS1/16S330J
R 832		RS1/16S6801D	R 892		RS1/16S330J
R 833		RS1/16S0R0J	R 893		RS1/16S103J
R 834		RS1/16S3301D	R 894		RS1/16S103J
R 835		RS1/16S1500D	R 895		RS1/16S104J

Circuit Symbol and No.	Part No.	Circuit Symbol and No.	Part No.
R 896	RS1/16S104J	R 1451	RS1/16S124J
R 897	RS1/16S331J	R 1452	RS1/16S473J
R 898	RS1/16S473J	R 1453	RS1/16S0R0J
R 899	RS1/16S0R0J	R 1454	RS1/16S101J
R 901	RS1/10S301J	R 1455	RS1/16S473J
R 902	RS1/10S301J	R 1456	RAB4CQ102J
R 903	RS1/16S153J	R 1460	RS1/16S102J
R 905	RS1/16S102J	R 1461	RS1/16S102J
R 906	RS1/16S102J	R 1462	RS1/16S471J
R 907	RS1/16S102J	R 1463	RS1/16S102J
R 911	RS1/16S0R0J	R 1464	RAB4CQ221J
R 912	RS1/16S0R0J	R 1465	RS1/16S102J
R 913	RS1/16S0R0J	R 1467	RS1/16S473J
R 914	RS1/16SS4R7J	R 1469	RS1/16S473J
R 915	RS1/16SS4R7J	R 1470	RS1/16S470J
R 916	RS1/16S4R7J	R 1471	RS1/16S470J
R 1401	RAB4CQ101J	R 1473	RS1/16S470J
R 1402	RAB4CQ101J	R 1474	RS1/16S470J
R 1403	RAB4CQ470J	R 1475	RS1/16S821J
R 1404	RAB4CQ470J	R 1476	RS1/16S470J
R 1405	RAB4CQ101J	R 1477	RS1/16S821J
R 1406	RS1/16S101J	R 1479	RS1/16S473J
R 1407	RS1/16S101J	R 1480	RS1/16S470J
R 1408	RS1/16S102J	R 1481	RS1/16S470J
R 1409	RS1/16S102J	R 1482	RS1/16S102J
R 1410	RS1/16S105J	R 1483	RS1/16S102J
R 1411	RS1/16S105J	R 1484	RS1/16S470J
R 1412	RS1/16S103J	R 1485	RS1/16S473J
R 1413	RS1/16S102J	R 1486	RS1/16S473J
R 1414	RS1/16S821J	R 1487	RAB4CQ102J
R 1415	RS1/16S102J	R 1488	RS1/16S222J
R 1416	RAB4CQ101J	R 1497	RS1/16S0R0J
R 1417	RAB4CQ101J	R 1501	RS1/16S473J
R 1418	RAB4CQ470J	R 1502	RS1/16S473J
R 1419	RAB4CQ470J	R 1503	RS1/16S473J
R 1420	RS1/16S0R0J	R 1504	RS1/16S104J
R 1423	RS1/16S473J	R 1505	RS1/16S273J
R 1424	RS1/16S473J	R 1506	RS1/16S563J
R 1425	RAB4CQ101J	R 1507	RS1/16S151J
R 1426	RAB4CQ101J	R 1508	RS1/16S151J
R 1427	RAB4CQ470J	R 1510	RAB4CQ470J
R 1428	RAB4CQ470J	R 1511	RAB4CQ470J
R 1429	RAB4CQ101J	R 1512	RAB4CQ470J
R 1430	RS1/16S101J	R 1513	RAB4CQ101J
R 1431	RS1/16S101J	R 1514	RAB4CQ101J
R 1432	RS1/16S471J	R 1515	RAB4CQ101J
R 1433	RS1/16S471J	R 1516	RAB4CQ101J
R 1434	RS1/16S473J	R 1517	RAB4CQ101J
R 1435	RS1/16S471J	R 1518	RS1/16S0R0J
R 1436	RS1/16S473J	R 1519	RS1/16S101J
R 1439	RS1/16S102J	R 1520	RS1/16S0R0J
R 1440	RS1/16S821J	R 1521	RS1/16S680J
R 1441	RAB4CQ101J	R 1522	RS1/16S105J
R 1442	RAB4CQ101J	R 1524	RS1/16S101J
R 1443	RAB4CQ470J	R 1526	RS1/16S220J
R 1444	RAB4CQ470J	R 1527	RS1/16S473J
R 1445	RS1/16S821J	R 1528	RAB4CQ470J
R 1446	RS1/16S471J	R 1530	RS1/16S473J
R 1449	RS1/16S821J	R 1531	RS1/16S470J
R 1450	RS1/16S102J	R 1534	RS1/16S471J

Circuit Symbol and No.	Part No.
R 1535	RS1/16S330J
R 1536	RS1/16S102J
R 1537	RS1/16S102J
R 1538	RS1/16S102J
R 1539	RS1/16S102J
R 1540	RS1/16S473J
R 1543	RAB4CQ470J
R 1544	RS1/16S101J
R 1545	RS1/16S151J
R 1546	RS1/16S151J
R 1547	RAB4CQ470J
R 1549	RS1/16S473J
R 1550	RAB4CQ470J
R 1551	RS1/16S101J
R 1552	RS1/16S302J
R 1553	RAB4CQ470J
R 1554	RS1/16S101J
R 1555	RS1/16S470J
R 1556	RS1/16S470J
R 1557	RS1/16S471J
R 1558	RS1/16S470J
R 1559	RS1/16S470J
R 1560	RS1/16S471J
R 1561	RS1/16S470J
R 1562	RS1/16S470J
R 1563	RS1/16S473J
R 1564	RS1/16S470J
R 1565	RS1/16S473J
R 1566	RS1/16S473J
R 1567	RAB4CQ680J
R 1568	RS1/16S473J
R 1569	RS1/16S331J
R 1570	RS1/16S331J
R 1571	RS1/16S331J
R 1572	RS1/16S333J
R 1573	RS1/16S153J
R 1574	RS1/16S333J
R 1575	RS1/16S153J
R 1576	RS1/16S333J
R 1577	RS1/16S153J
R 1578	RAB4CQ680J
R 1579	RAB4CQ680J
R 1580	RS1/16S102J
R 1581	RS1/16S102J
R 1582	RS1/16S102J
R 1583	RS1/16S470J
R 1584	RS1/16S470J
R 1585	RS1/16S0R0J
R 1586	RS1/16S0R0J
R 1587	RS1/16S0R0J
R 1588	RS1/16S103J
R 1589	RS1/16S103J
R 1590	RS1/16S103J
R 1591	RS1/16S103J

CAPACITORS

Circuit Symbol and No.		Part No.
C 101		CCSRCH471J50
C 102		CKSRYB104K16
C 103		CKSRYB104K16
C 104		CKSRYB104K16
C 105		CKSRYB102K50
C 106		CCSRCH150J50
C 107		CKSRYB104K16
C 108		CKSYB106K6R3
C 109		CKSRYB222K50
C 110		CKSRYB104K16
C 111		CKSRYB102K50
C 112		CKSRYB102K50
C 153		CKSYB106K6R3
C 155		CKSRYB102K50
C 156		CKSYB475K10
C 157		CKSRYB103K50
C 158		CEVLW220M6R3
C 159		CEVLW101M10
C 160		CKSRYB102K50
C 201		CKSRYB105K6R3
C 202		CKSRYB105K6R3
C 203		CKSRYB105K6R3
C 204		CKSRYB105K6R3
C 205		CKSRYB224K10
C 206		CKSRYB224K10
C 207		CKSRYB105K6R3
C 208		CKSRYB105K6R3
C 209		CKSRYB105K6R3
C 210		CKSRYB105K6R3
C 213		CKSRYB102K50
C 214		CEVLW470M16
C 215		CKSRYB104K16
C 216		CKSYB475K10
C 217		CKSYB475K10
C 218		CKSYB475K10
C 219		CKSYB475K10
C 222		CKSYB475K10
C 223		CKSYB475K10
C 224		CKSYB475K10
C 225		CKSYB475K10
C 226		CCSRCH100D50
C 227		CCSRCH100D50
C 228		CKSRYB104K16
C 229		CCSRCH100D50
C 230		CCSRCH100D50
C 231		CCSRCH100D50
C 232		CCSRCH100D50
C 233		CKSRYB104K16
C 234		CKSRYB104K16
C 235		CKSRYB104K16
C 236		CEVLW100M16
C 237		CKSRYB224K10
C 238		CKSRYB105K10
C 239		CKSRYB105K10
C 240		CEVLW100M16
C 241		CKSRYB105K10
C 242		CKSRYB105K10
C 243		CKSRYB105K10
C 244		CKSRYB105K10
C 245	10µF	CCG1182
C 246		CEVLW101M10
C 247		CKSRYB105K10
C 248		CKSRYB105K10

Circuit Symbol and No.		Part No.
C 249		CKSYB475K10
C 250		CEVLW330M25
C 251		CKSQYB225K10
C 252		CKSQYB225K10
C 253		CKSQYB225K10
C 254		CKSQYB225K10
C 255		CKSQYB225K10
C 256		CKSQYB225K10
C 257		CEVLW100M16
C 259		CKSRYB105K10
C 260		CEVLW330M25
C 261	10µF	CCG1182
C 262	10µF	CCG1182
C 263	10µF	CCG1182
C 264	10µF	CCG1182
C 265	10µF	CCG1182
C 266	10µF	CCG1182
C 267		CKSYB684K16
C 268		CEVLW330M25
C 269	10µF	CCG1138
C 270	1000µF/16V	CCH1428
C 272	10µF	CCG1182
C 273		CKSYB475K16
C 274		CKSYB475K16
C 275		CKSRYB222K50
C 276		CKSRYB222K50
C 277		CKSRYB222K50
C 278		CKSRYB222K50
C 279		CKSRYB222K50
C 280		CKSRYB222K50
C 281		CKSRYB473K50
C 282	10µF	CCG1182
C 285		CKSRYB104K16
C 303		CEVW101M16
C 304		CKSYB475K10
C 305		CKSYB475K16
C 306		CKSYB475K16
C 307		CCSRCH220J50
C 308		CCSRCH220J50
C 309		CEVLW100M16
C 310		CEVLW100M16
C 311		CKSRYB102K50
C 312		CKSRYB105K10
C 313		CEVLW470M16
C 351		CKSQYB105K16
C 352		CKSQYB105K16
C 355		CEVLW100M16
C 356		CKSRYB104K16
C 357		CKSYB106K6R3
C 358		CKSRYB104K16
C 359		CKSRYB104K16
C 360		CKSRYB104K16
C 362		CKSRYB104K16
C 401		CEVLW100M16
C 402		CKSRYB105K6R3
C 403		CKSRYB105K6R3
C 404		CKSRYB104K16
C 405		CKSRYB105K6R3
C 406		CKSRYB105K6R3
C 407		CKSRYB104K16

Circuit Symbol and No.		Part No.
C 408		CKSRYB105K6R3
C 409		CKSRYB105K6R3
C 410		CKSYB475K16
C 411		CKSRYB104K16
C 412		CKSRYB104K16
C 413		CKSRYB105K6R3
C 414		CKSRYB104K16
C 415		CKSRYB105K6R3
C 416		CKSYB106K6R3
C 417		CKSYB106K6R3
C 418		CKSYB475K16
C 419		CEVLW100M16
C 420		CKSYB475K16
C 421		CKSYB106K6R3
C 422		CEVLW100M16
C 424		CKSRYB104K16
C 425		CKSYB106K6R3
C 426		CKSRYB104K16
C 428		CCSRCH6R0D50
C 429		CKSRYB104K16
C 430		CKSYB106K6R3
C 431		CCSRCH6R0D50
C 433		CKSYB106K6R3
C 434		CKSRYB104K16
C 435		CCSRCH6R0D50
C 436		CKSYB106K6R3
C 437		CKSRYB105K6R3
C 438		CKSRYB104K16
C 439		CKSRYB105K6R3
C 440		CKSRYB105K6R3
C 441		CEVLW221M4
C 442		CEVLW221M4
C 443		CEVLW221M4
C 444		CKSRYB104K16
C 445		CKSRYB105K6R3
C 446		CKSRYB105K6R3
C 447		CKSRYB102K50
C 448		CKSRYB102K50
C 449		CKSRYB104K16
C 450		CKSQYB225K10
C 451		CKSYB106K6R3
C 452		CKSRYB104K16
C 453		CKSRYB105K6R3
C 454		CKSRYB102K50
C 455		CKSRYB104K16
C 456		CKSYB106K6R3
C 458		CCSRCH6R0D50
C 459		CKSYB106K6R3
C 460		CKSRYB105K6R3
C 461		CKSRYB105K6R3
C 462		CCSRCH6R0D50
C 464	47µF	CCG1181
C 465	47µF	CCG1181
C 466		CEVLW101M10
C 467		CKSRYB105K6R3
C 468		CKSYB106K6R3
C 469		CEVLW100M16
C 470		CKSRYB104K16
C 471		CKSRYB104K16
C 472		CKSYB106K6R3

Circuit Symbol and No.		Part No.	Circuit Symbol and No.		Part No.
C 473		CKSYB106K6R3	C 824		CCSRCH681J50
C 474		CKSYB106K6R3	C 825		CKSRYB103K50
C 475		CKSYB106K6R3	C 826		CKSRYB182K50
C 476		CKSYB106K6R3	C 827		CKSRYB103K50
C 477		CCSRCH6R0D50	C 829		CKSRYB104K16
C 478		CCSRCH6R0D50	C 830		CCSRCH100D50
C 479		CCSRCH6R0D50	C 831		CCSRCH470J50
C 480		CKSYB106K6R3	C 832		CCSRCH102J50
C 481		CKSYB106K6R3	C 833		CCSRCH102J50
C 482		CKSYB106K6R3	C 835		CKSSYB104K10
C 483		CKSRYB102K50	C 836		CKSRYB104K16
C 484		CKSRYB104K16	C 837		CKSSYB104K10
C 485		CKSRYB104K16	C 838		CKSQYB105K16
C 486		CKSRYB102K50	C 839		CKSQYB105K16
C 487		CKSRYB104K16	C 840		CSZS4R7M16
C 488		CCSRCH6R0D50	C 841		CSZS4R7M16
C 489		CKSRYB104K16	C 842		CKSRYB104K16
C 490		CEVLW101M10	C 843		CKSRYB104K16
C 551		CKSRYB105K6R3	C 844		CKSRYB102K50
C 555		CEVLW101M10	C 845	10µF	CCG1138
C 604		CKSRYB103K50	C 846		CEHAZL471M16
C 605		CKSRYB103K50	C 847	22µF	CCG1183
C 606		CEVLW2R2M50	C 848	22µF	CCG1183
C 607		CKSRYB105K6R3	C 849	47µF	CCG1181
C 608		CKSRYB105K6R3	C 850	10µF	CCG1138
C 609		CKSRYB104K16	C 851	47µF	CCG1181
C 610		CCSRCH101J50	C 853		CKSRYB105K10
C 612		CCSRCH7R0D50	C 854		CKSRYB105K10
C 613		CCSRCH7R0D50	C 855	2200µF/16V	CCH1405
C 614		CKSRYB105K6R3	C 856		CKSRYB105K10
C 615		CKSRYB104K25	C 858		CKSYB225K16
C 616		CKSRYB104K25	C 861		CKSRYB474K10
C 617		CKSRYB104K25	C 862		CEVLW470M16
C 618	(EW model)	CKSRYB104K25	C 863		CKSRYB104K16
C 619		CCSRCH100D50	C 864		CCSRCH102J50
C 620		CCSRCH100D50	C 865		CEVLW470M16
C 621		CCSRCH680J50	C 866		CKSRYB103K50
C 701		CKSRYB105K10	C 867		CKSRYB103K50
C 702		CKSRYB104K16	C 868		CEVLW100M16
C 703		CKSRYB104K16	C 869	10µF	CCG1182
C 704		CKSRYB103K50	C 870		CEVLW101M10
C 705		CKSQYB104K16	C 871		CKSRYB104K16
C 706		CKSRYB104K16	C 872		CKSRYB103K50
C 708		CKSRYB104K16	C 873	0.1µF	CCL1059
C 801	0.22µF	CCL1058	C 874		CKSRYB103K50
C 802		CKSYB106K6R3	C 875		CKSRYB103K50
C 803		CKSRYB103K50	C 876		CEVW101M16
C 804		CCSRCH102J50	C 877		CEVW101M16
C 805		CCSRCH102J50	C 878		CKSRYB104K16
C 806		CKSRYB103K50	C 881		CKSRYB103K50
C 807		CCSRCH102J50	C 882		CKSRYB103K50
C 808		CKSRYB103K50	C 883		CKSRYB103K50
C 809		CKSRYB104K16	C 884		CEVLW100M16
C 811		CCSRCH470J50	C 885		CKSRYB103K50
C 817		CCSRCH471J50	C 886	1000µF/16V	CCH1428
C 818		CCSRCH390J50	C 887	10µF	CCG1138
C 819		CKSRYB222K50	C 890		CCSRCH151J50
C 821		CKSRYB472K50	C 891		CCSRCH151J50
C 822	2200µF/16V	CCH1405	C 892		CCSRCH151J50
C 823		CCSRCH181J50	C 893		CKSRYB105K6R3

Circuit Symbol and No.		Part No.
C 894		CKSRYB103K50
C 895		CKSRYB105K6R3
C 901		CKSRYB104K16
C 902	100µF/16V	CCH1228
C 903	100µF/16V	CCH1228
C 904	1000µF/16V	CCH1428
C 1401		CKSRYB102K50
C 1402		CKSRYB102K50
C 1403		CKSRYB102K50
C 1404		CKSRYB102K50
C 1405		CKSRYB104K16
C 1406		CKSRYB104K16
C 1407		CSZSC101M10
C 1408		CKSRYB104K16
C 1409		CKSRYB104K16
C 1410		CKSRYB104K16
C 1411		CKSRYB104K16
C 1412		CKSRYB104K16
C 1413		CKSRYB104K16
C 1414		CSZSC101M10
C 1415		CKSRYB104K16
C 1416		CKSRYB105K6R3
C 1417		CKSRYB104K16
C 1418		CKSRYB104K16
C 1419		CKSRYB104K16
C 1420		CKSRYB104K16
C 1421		CKSRYB104K16
C 1422		CKSRYB103K50
C 1424		CKSRYB104K16
C 1425		CSZSC101M10
C 1426		CKSRYB103K50
C 1427		CKSRYB104K16
C 1428		CKSRYB104K16
C 1429		CKSRYB104K16
C 1430		CKSRYB104K16
C 1431		CKSRYB104K16
C 1432		CKSRYB104K16
C 1433		CKSRYB105K6R3
C 1434		CKSRYB104K16
C 1436		CSZSC101M10
C 1437		CKSRYB105K6R3
C 1438		CKSRYB105K6R3
C 1439		CKSRYB105K6R3
C 1440		CKSRYB105K6R3
C 1441		CKSRYB105K6R3
C 1442		CSZSC101M10
C 1443		CKSRYB104K16
C 1446		CKSRYB105K6R3
C 1447		CKSRYB105K6R3
C 1448		CKSRYB105K6R3
C 1449		CKSRYB105K6R3
C 1450		CKSRYB105K6R3
C 1451		CKSRYB105K6R3
C 1452		CKSRYB105K6R3
C 1453		CCSRCH221J50
C 1454		CCSRCH220J50
C 1455		CCSRCH471J50
C 1456		CKSRYB105K6R3
C 1457		CKSRYB105K6R3
C 1459		CCSRCH471J50

Circuit Symbol and No.	Part No.
C 1460	CKSRYB105K6R3
C 1463	CKSRYB105K6R3
C 1464	CKSRYB105K6R3
C 1467	CKSYB475K10
C 1468	CKSRYB104K16
C 1469	CKSRYB104K16
C 1470	CKSRYB105K6R3
C 1471	CKSYB475K10
C 1472	CKSRYB104K16
C 1473	CKSYB475K10
C 1474	CKSRYB105K6R3
C 1475	CKSRYB105K6R3
C 1477	CKSRYB105K6R3
C 1478	CKSRYB105K6R3
C 1479	CKSRYB105K6R3
C 1480	CKSRYB105K6R3
C 1481	CKSYB106K6R3
C 1482	CKSYB106K6R3
C 1483	CKSYB106K6R3
C 1484	CKSYB106K6R3
C 1485	CKSYB106K6R3
C 1486	CKSYB106K6R3

Mother Unit
Consists of
Mother PCB
Relay PCB

A B

Unit Number:CWM9144(RC model)
Unit Number:CWM9145(RD model)
Unit Name:Mother Unit

MISCELLANEOUS

IC 102	IC	HA12240FP
IC 103	IC	TC7SET08FU
IC 151	IC	SM5304AV
IC 152	IC	TC74VHC08FT
IC 153	IC	TC7SET08FU
IC 201	IC	PML009A
IC 202	IC	PAL007A
IC 203	IC	PA2028A
IC 301	IC	NJM4558V
IC 402	IC	TA2050F
IC 403	IC	TA2050F
IC 404	IC	NJM2136V
IC 406	IC	NJM2136V
IC 407	IC	NJM2136V
IC 408	IC	CXA2089Q
IC 409	IC	BA7623F
IC 410	IC	NJM2136V
IC 601	IC	PE5416A
IC 602	IC	PDH089A
IC 603	IC	S-80841CNUA-B82
IC 801	IC	S-812C33AUA-C2N
IC 802	IC	LTC3728EG
IC 803	IC	LTC3728EG
IC 804	IC	BA00BC0WFP

Circuit Symbol and No.		Part No.
IC 805	IC	S-812C50AUA-C3E
IC 806	IC	S-814A33AMC-BCX
IC 1401	IC	PE5417A
IC 1403	IC	TC7WHU04FU
IC 1404	IC	S-80827CNUA-B8M
IC 1405	IC	TC7SET08FU
IC 1407	IC	TC74VCX02FT
IC 1408	IC	BA3834F
IC 1410	IC	PD8125A
IC 1411	IC	PD8126A
IC 1414	IC	TC7SZ04FU
IC 1451	IC	HD64413ASFI
IC 1452	IC	K4S641632H-TC75
Q 102	Transistor	2SC4081
Q 103	Transistor	UMF23N
Q 151	Transistor	IMD2A
Q 152	Transistor	IMX9
Q 201	Transistor	2SC4081
Q 202	Transistor	IMD2A
Q 203	Transistor	DTC124EU
Q 204	Transistor	DTC144EU
Q 205	Transistor	2SC4081
Q 206	Transistor	IMX9
Q 207	Transistor	IMX9
Q 208	Transistor	IMX9
Q 209	Transistor	IMD2A
Q 301	Transistor	IMX9
Q 302	Transistor	IMD2A
Q 303	Transistor	2SC4081
Q 401	Transistor	2SC4081
Q 402	Transistor	2SC4081
Q 404	Transistor	2SC4081
Q 406	Transistor	2SC4081
Q 551	Transistor	2SC4081
Q 552	Transistor	2SA1577
Q 601	Transistor	UMF23N
Q 603	Transistor	DTA114EU
Q 604	Transistor	DTC144EU
Q 605	Transistor	2SC4081
Q 606	Transistor	2SC4081
Q 608	Transistor	2SC4081
Q 609	Transistor	2SA1577
Q 610	Transistor	DTC144EU
Q 611	Transistor	2SA1577
Q 612	Transistor	DTC144EU
Q 613	Transistor	2SA1577
Q 614	Transistor	DTC144EU
Q 617	Transistor	DTC124EU
Q 701	Transistor	IMX1
Q 702	Transistor	DTC114EU
Q 703	Transistor	2SA1576
Q 704	Transistor	2SA1576
Q 705	Transistor	2SC4081
Q 801	Transistor	DTC124EU
Q 802	Transistor	DTC124EU
Q 803	Transistor	2SB1708
Q 805	Transistor	2SB1708
Q 806	Transistor	2SC4081
Q 807	Transistor	2SB1708
Q 808	Transistor	DTC124EU

Circuit Symbol and No.		Part No.
Q 809	Transistor	DTC124EU
Q 810	Transistor	DTC124EU
Q 811	Transistor	DTC124EU
Q 812	Transistor	UMF5N
Q 813	Transistor	DTC124EU
Q 814	Transistor	DTC124EU
Q 815	Transistor	2SB1184F5
Q 816	Transistor	2SD1767
Q 817	Transistor	IMD2A
Q 818	Transistor	2SD1767
Q 819	Transistor	DTC114EU
Q 821	FET	SP8K4
Q 822	FET	SP8K4
Q 823	FET	SP8K4
Q 824	Transistor	DTC124EU
Q 825	Transistor	2SA1797
Q 827	Transistor	DTC144EU
Q 828	Transistor	2SD1767
Q 829	Transistor	DTC124EU
Q 830	Transistor	2SB1708
Q 831	Transistor	DTC124EU
Q 832	Transistor	2SB1708
Q 833	Transistor	2SD1760F5
Q 834	Transistor	UMF5N
Q 835	Transistor	UMF5N
Q 836	Transistor	2SD2375
Q 837	Transistor	UMF5N
Q 838	Transistor	2SB1184F5
Q 839	Transistor	IMD2A
Q 840	Transistor	UMF5N
Q 841	Transistor	2SD1767
Q 842	Transistor	UMF5N
Q 843	Transistor	UMF5N
Q 844	Transistor	2SD1767
Q 845	Transistor	UMF5N
Q 901	Transistor	DTC114EU
Q 902	Transistor	2SA1615-Z
Q 1401	Transistor	FMG12
Q 1402	Transistor	UMF5N
Q 1403	Transistor	UMF5N
Q 1405	Transistor	2SA1774
Q 1406	Transistor	2SA1774
Q 1407	Transistor	2SA1774
D 118	Diode	UDZS5R6(B)
D 119	Diode	UDZS5R6(B)
D 201	Diode	DAN202U
D 202	Diode	DAN202U
D 203	Diode	DAN202U
D 204	Diode	UDZS8R2(B)
D 205	Diode	DAN202U
D 206	Diode	1SS355
D 301	Diode	RSX201L-30
D 601	Diode	UDZS5R6(B)
D 602	Diode Network	DA204U
D 603	Diode Network	DA204U
D 604	Diode Network	DA204U
D 605	Diode Network	DA204U
D 606	Diode Network	DA204U
D 607	Diode Network	DA204U
D 608	Diode Network	DA204U

Circuit Symbol and No.		Part No.
D 609	Diode	1SS355
D 610	Diode	1SS355
D 611	Diode	DAN202U
D 612	Diode	1SS355
D 701	Diode	1SS355
D 702	Diode	HZU6R8(B2)
D 703	Diode	UDZS7R5(B)
D 704	Diode	DAN202U
D 705	Diode	DAN202U
D 706	Diode	S1G-6904G2P
D 707	Diode	S1G-6904G2P
D 708	Diode	5KP24A
D 801	Diode	S1G-6904G2P
D 802	Diode	UDZS18(B)
D 803	Diode	RSX201L-30
D 804	Diode	HZU8R2(B1)
D 805	Diode	DAN202U
D 806	Diode	HZU5R6(B2)
D 807	Diode	RB500V-40
D 808	Diode	RB500V-40
D 809	Diode	RB500V-40
D 811	Diode	RB160L-40
D 812	Diode	RB160L-40
D 813	Diode	RB160L-40
D 814	Diode	S1G-6904G2P
D 815	Diode	S2G-6600
D 816	Diode	RSX201L-30
D 817	Diode	S2G-6600
D 819	Diode	UDZS5R6(B)
D 820	Diode	S2G-6600
D 821	Diode	DAN202U
D 822	Diode	HZU6R8(B3)
D 823	Diode	HZU10(B1)
D 825	Diode	UDZS20(B)
D 826	Diode	HZU6R8(B3)
D 827	Diode	DAN202U
D 828	Diode	1SS355
D 829	Diode	1SS355
D 830	Diode	1SS355
D 831	Diode	RSX201L-30
D 1401	Diode	1SS355
D 1402	Diode	1SS355
L 101	Inductor	CTF1379
L 102	Inductor	LCTC2R2K1608
L 103	Inductor	CTF1379
L 110	Inductor	CTF1389
L 151	Coil	CTH1295
L 152	Inductor	CTF1399
L 153	Inductor	CTF1399
L 154	Inductor	CTF1305
L 155	Inductor	CTF1305
L 157	Inductor	CTF1473
L 158	Inductor	CTF1473
L 201	Inductor	LCTA2R2J2520
L 202	Inductor	LCTA101J2520
L 301	Inductor	CTF1379
L 302	Inductor	CTF1379
L 303	Inductor	CTF1399
L 401	Inductor	CTF1383
L 403	Inductor	CTF1399

Circuit Symbol and No.		Part No.
L 404	Inductor	LCTA150J2520
L 406	Inductor	CTF1399
L 407	Inductor	CTF1399
L 408	Inductor	LCTA100J2520
L 409	Inductor	CTF1383
L 412	Inductor	CTF1399
L 413	Inductor	CTF1399
L 415	Inductor	CTF1399
L 551	Inductor	CTF1399
L 601	Inductor	CTF1399
L 602	Inductor	CTF1306
L 603	Inductor	CTF1306
L 604	Inductor	LCTA2R2J2520
L 701	Inductor	LCTC2R2K1608
L 702	Inductor	LCTC2R2K1608
L 801	Coil	CTH1308
L 802	Coil	CTH1308
L 803	Coil	CTH1308
L 805	Coil	CTH1308
L 806	Inductor	LCTA1R0J3225
L 807	Coil	CTH1308
L 809	Inductor	CTF1383
L 901	Coil	CTH1267
L 902	Choke Coill 270µH	CTH1263
L 1401	Inductor	CTF1379
L 1402	Inductor	CTF1399
L 1403	Inductor	CTF1399
L 1404	Inductor	CTF1379
L 1406	Inductor	CTF1399
L 1407	Inductor	CTF1379
L 1408	Inductor	CTF1379
L 1409	Inductor	CTF1379
L 1410	Inductor	CTF1399
L 1411	Inductor	CTF1396
L 1414	Inductor	CTF1379
L 1415	Inductor	LCTC2R2K1608
L 1416	Inductor	LCTC2R2K1608
L 1417	Inductor	LCTC2R2K1608
L 1418	Inductor	CTF1379
L 1419	Inductor	CTF1379
L 1420	Inductor	CTF1379
L 1421	Inductor	CTF1379
L 1422	Inductor	CTF1379
L 1423	Inductor	CTF1379
L 1424	Inductor	CTF1379
L 1425	Inductor	CTF1379
L 1426	Inductor	CTF1379
L 1427	Inductor	CTF1379
L 1428	Inductor	CTF1389
L 1429	Inductor	CTF1389
L 1430	Inductor	CTF1389
X 601	Resonator 18.874368MHz	CSS1622
X 1401	Ceramic Resonator 4.97MHz	CSS1575
X 1452	Resonator 33.0MHz	CSS1656
VR401	Semi-fixed 1.5kΩ(OB)	CCP1391
FU102	Fuse 1A	CEK1280
FU103	Fuse 1A	CEK1280
FU107	Fuse 5A	CEK1289
FU151	Fuse 2.5A	CEK1285
FU152	Fuse 1A	CEK1280

Circuit Symbol and No.		Part No.
FU153	Fuse 2A	CEK1284
FU154	Fuse 250mA	CEK1276
FU155	Fuse 250mA	CEK1276
FU201	Fuse 3A	CEK1286
FU501	Fuse 250mA	CEK1276
FU502	Fuse 1.75A	CEK1283
FU701	Fuse 5A	CEK1289
FU802	Fuse 1.25A	CEK1281
FU804	Fuse 1A	CEK1280
FU805	Fuse 1A	CEK1280
FU901	Fuse 1.25A	CEK1281
FU902	Fuse 1.75A	CEK1283
EF801	EMI Filter	CCG1142
BZ601	Buzzer	CPV1063

RESISTORS

R 103		RS1/16S681J
R 104		RS1/16S681J
R 105		RS1/16S0R0J
R 115		RS1/16S473J
R 116		RS1/16S473J
R 117		RS1/16S473J
R 118		RS1/16S472J
R 119		RS1/16S102J
R 120		RS1/16S101J
R 121		RS1/16S150J
R 122		RS1/16S470J
R 123		RS1/16S101J
R 124		RS1/16S222J
R 125		RS1/16S332J
R 126		RS1/16S562J
R 127		RS1/16S221J
R 128		RS1/16S621J
R 129		RS1/16S473J
R 130		RS1/16S121J
R 131		RS1/16S0R0J
R 133		RS1/16S102J
R 134		RS1/16S102J
R 151		RAB4C102J
R 153		RAB4C102J
R 157		RS1/16S0R0J
R 158		RS1/16S0R0J
R 159		RS1/16S472J
R 162		RS1/16S101J
R 163		RS1/16S102J
R 164		RS1/16S103J
R 165		RS1/16S103J
R 201		RS1/16S181J
R 202		RS1/16S181J
R 203		RS1/16S0R0J
R 204		RS1/16S0R0J
R 205		RS1/16S223J
R 206		RS1/16S223J
R 207		RS1/16S102J
R 208		RS1/16S102J
R 209		RS1/16S0R0J
R 210		RS1/16S0R0J
R 211		RS1/16S0R0J
R 212		RS1/16S0R0J

Circuit Symbol and No.	Part No.
R 213	RS1/16S0R0J
R 214	RS1/16S0R0J
R 215	RS1/16S0R0J
R 216	RS1/16S0R0J
R 217	RS1/16S224J
R 218	RS1/16S224J
R 219	RS1/16S104J
R 220	RS1/16S102J
R 221	RS1/16S103J
R 222	RS1/16S682J
R 223	RS1/16S103J
R 224	RS1/16S103J
R 225	RS1/16S103J
R 226	RS1/16S223J
R 227	RS1/16S221J
R 228	RS1/16S101J
R 229	RS1/16S103J
R 230	RS1/16S104J
R 231	RS1/16S820J
R 232	RS1/16S820J
R 233	RS1/16S820J
R 234	RS1/16S820J
R 235	RS1/16S820J
R 236	RS1/16S820J
R 237	RS1/16S473J
R 238	RS1/16S102J
R 239	RS1/16S223J
R 240	RS1/16S223J
R 241	RS1/16S223J
R 242	RS1/16S223J
R 243	RS1/16S223J
R 244	RS1/16S223J
R 245	RS1/16S471J
R 246	RS1/16S471J
R 247	RS1/16S471J
R 248	RS1/16S471J
R 249	RS1/16S471J
R 250	RS1/16S471J
R 251	RS1/16S103J
R 252	RS1/16S103J
R 253	RS1/16S103J
R 254	RS1/16S103J
R 255	RS1/16S103J
R 256	RS1/16S103J
R 257	RS1/16S473J
R 261	RS1/16S101J
R 301	RS1/16S0R0J
R 302	RS1/16S0R0J
R 303	RS1/16S223J
R 304	RS1/16S223J
R 305	RS1/16S821J
R 306	RS1/16S821J
R 307	RS1/16S222J
R 308	RS1/16S472J
R 309	RS1/16S472J
R 312	RS1/16S473J
R 313	RS1/16S473J
R 314	RS1/16S102J
R 315	RS1/16S272J
R 316	RS1/16S472J

Circuit Symbol and No.	Part No.	Circuit Symbol and No.	Part No.
R 317	RS1/16S222J	R 473	RS1/16S222J
R 318	RS1/16S222J	R 493	RS1/16S272J
R 319	RS1/16S103J	R 494	RS1/16S472J
R 320	RS1/16S103J	R 497	RS1/16S272J
R 373	RS1/16S0R0J	R 498	RS1/16S472J
R 374	RS1/16S0R0J	R 501	RS1/16S471J
R 401	RS1/16S123J	R 502	RS1/16S102J
R 402	RS1/16S123J	R 503	RS1/16S471J
R 403	RS1/16S123J	R 504	RS1/16S0R0J
R 404	RS1/16S223J	R 505	RS1/16S0R0J
R 405	RS1/16S123J	R 507	RS1/16S102J
R 406	RS1/16S223J	R 508	RS1/16S102J
R 407	RS1/16S223J	R 509	RS1/16S0R0J
R 408	RS1/16S102J	R 510	RS1/16S0R0J
R 409	RS1/16S181J	R 511	RS1/16S0R0J
R 410	RS1/16S181J	R 512	RS1/16S0R0J
R 411	RS1/16S223J	R 513	RS1/16S102J
R 413	RS1/16S102J	R 514	RS1/16S0R0J
R 414	RS1/16S223J	R 515	RS1/16S0R0J
R 415	RS1/16S223J	R 516	RS1/16S471J
R 418	RS1/16S750J	R 517	RS1/16S0R0J
R 422	RS1/16S472J	R 518	RS1/16S102J
R 425	RS1/16S472J	R 519	RS1/16S102J
R 427	RS1/16S101J	R 520	RS1/16S0R0J
R 428	RS1/16S472J	R 521	RS1/16S0R0J
R 433	RS1/16S472J	R 522	RS1/16S0R0J
R 434	RS1/16S472J	R 523	RS1/16S0R0J
R 436	RS1/16S750J	R 524	RS1/16S0R0J
R 437	RS1/16S101J	R 525	RS1/16S221J
R 438	RS1/16S472J	R 526	RS1/16S221J
R 439	RS1/16S472J	R 527	RS1/16S221J
R 440	RS1/16S270J	R 528	RS1/16S221J
R 441	RS1/16S472J	R 530	RS1/16S102J
R 442	RS1/16S102J	R 531	RS1/16S0R0J
R 443	RS1/16S272J	R 532	RS1/16S0R0J
R 444	RS1/16S392J	R 551	RS1/16S681J
R 445	RS1/16S472J	R 552	RS1/16S331J
R 446	RS1/16S102J	R 553	RS1/16S272J
R 447	RS1/16S0R0J	R 554	RS1/16S681J
R 450	RS1/16S562J	R 555	RS1/16S101J
R 451	RS1/16S562J	R 601	RS1/16S102J
R 452	RS1/16S272J	R 602	RS1/16S102J
R 453	RS1/16S472J	R 603	RS1/16S102J
R 454	RS1/16S0R0J	R 604	RS1/16S822J
R 455	RS1/16S472J	R 605	RS1/16S222J
R 456	RS1/16S101J	R 606	RS1/16S472J
R 457	RS1/16S472J	R 607	RS1/16S472J
R 458	RS1/16S750J	R 608	RAB4C222J
R 459	RS1/16S472J	R 609	RS1/16S332J
R 460	RS1/16S473J	R 610	RS1/16S332J
R 461	RS1/16S333J	R 611	RS1/16S102J
R 462	RS1/16S0R0J	R 612	RS1/16S102J
R 463	RS1/16S472J	R 613	RS1/16S103J
R 464	RS1/16S101J	R 614	RS1/16S223J
R 467	RS1/16S472J	R 615	RS1/16S473J
R 468	RS1/16S102J	R 616	RS1/16S472J
R 469	RS1/16S472J	R 617	RS1/16S473J
R 470	RS1/16S472J	R 618	RS1/16S472J
R 471	RS1/16S0R0J	R 619	RS1/16S103J
R 472	RS1/16S222J	R 620	RS1/16S104J

Circuit Symbol and No.		Part No.	Circuit Symbol and No.		Part No.
R 623		RS1/16S473J	R 697		RS1/16S223J
R 624		RS1/16S473J	R 700		RS1/16S473J
R 626		RS1/16S473J	R 701		RS1/16S102J
R 627		RS1/16S102J	R 702		RS1/16S473J
R 629		RS1/16S472J	R 703		RS1/16S103J
R 630		RS1/16S102J	R 704		RS1/16S103J
R 631	(RC model)	RS1/16S473J	R 705		RS1/16S104J
R 632		RS1/16S473J	R 706		RS1/16S102J
R 633		RAB4C102J	R 707		RS1/16S223J
R 634		RAB4C102J	R 708		RS1/16S473J
R 635		RS1/16S473J	R 709		RS1/16S473J
R 636		RS1/16S102J	R 710		RS1/16S102J
R 638		RS1/16S102J	R 711		RS1/16S473J
R 639		RAB4C102J	R 712		RS1/16S472J
R 640		RS1/16S473J	R 713		RS1/16S472J
R 641		RS1/16S102J	R 714		RS1/16S472J
R 642		RS1/16S102J	R 715		RS1/16S103J
R 643		RS1/16S472J	R 716		RS1/16S153J
R 644		RS1/16S103J	R 717		RS1/16S473J
R 648		RS1/16S101J	R 718		RS1/16S222J
R 652		RS1/16S221J	R 719		RS1/16S104J
R 653		RS1/16S681J	R 801		RS1/16S103J
R 654		RS1/16S473J	R 802		RS1/16S221J
R 655		RS1/16S102J	R 803		RS1/16S221J
R 656		RS1/16S473J	R 804		RS1/16S103J
R 657		RS1/16S102J	R 805		RS1/16S102J
R 658		RS1/16S473J	R 806		RS1/16S473J
R 659		RS1/16S473J	R 807		RS1/16S221J
R 660		RS1/16S104J	R 808		RS1/16S103J
R 661		RS1/16S104J	R 809		RS1/16S473J
R 662		RS1/16S473J	R 810		RS1/16S221J
R 663		RS1/16S473J	R 811		RS1/16S103J
R 665		RAB4C102J	R 812		RS1/16S473J
R 666		RS1/16S473J	R 813		RS1/16S223J
R 667		RS1/16S0R0J	R 814		RS1/16S1201D
R 668		RS1/16S473J	R 815		RS1/16S4701D
R 669		RS1/16S473J	R 816		RS1/16S8201D
R 671		RS1/16S473J	R 817		RS1/16S1001D
R 672		RS1/16S473J	R 819		RS1/16S220J
R 673		RS1/16S472J	R 820		RS1/16S1001D
R 674		RS1/16S681J	R 821		RS1/16S822J
R 675		RS1/16S681J	R 822		RS1/16S822J
R 676		RS1/16S104J	R 823		RS1/16S4701D
R 677		RS1/16S473J	R 824		RS1/16S2R2J
R 678		RS1/16S104J	R 825		RS1/16S2R2J
R 679		RAB4C681J	R 826		RS1/16S0R0J
R 680		RS1/16S102J	R 827		RS1/16S2R2J
R 681		RAB4C102J	R 828		RS1/16S2R2J
R 682		RS1/16S102J	R 829		RS1/16S223J
R 683		RS1/16S0R0J	R 830		RS1/16S223J
R 684		RS1/16S102J	R 831		RS1/16S4301D
R 685		RS1/16S681J	R 832		RS1/16S6801D
R 686		RS1/16S681J	R 833		RS1/16S0R0J
R 689		RS1/16S104J	R 834		RS1/16S3301D
R 690		RS1/16S104J	R 835		RS1/16S1500D
R 692		RS1/16S473J	R 836		RS1/16S3901D
R 693		RS1/16S223J	R 837		RS1/16S102J
R 694		RS1/16S472J	R 838	2.7kΩ	CCN1143
R 695		RS1/16S223J	R 839		RS1/16S331J
R 696		RS1/16S472J	R 840		RS1/16S331J

Circuit Symbol and No.		Part No.
R 841	2.7kΩ	CCN1143
R 842	2.7kΩ	CCN1143
R 843	2.7kΩ	CCN1143
R 844		RS1/16S100J
R 845		RS1/16S100J
R 846	10Ω	CCN1148
R 847	10Ω	CCN1148
R 848		RS1/16S472J
R 849	10Ω	CCN1148
R 850		RS1/16S181J
R 851		RS1/16S181J
R 852		RS1/16S332J
R 853		RS1/16S181J
R 854		RS1/16S181J
R 855		RS1/16S181J
R 856		RS1/16S181J
R 857		RS1/16S472J
R 858		RS1/16S102J
R 859		RS1/16S1202D
R 860		RS1/16S2701D
R 861		RS1/16S8201D
R 862		RS1/16S5600D
R 863		RS1/16S104J
R 864		RS1/16S391J
R 865		RS1/16S222J
R 866		RS1/16S472J
R 867		RS1/16S222J
R 868		RS1/16S472J
R 869		RS1/16S271J
R 870		RS1/16S103J
R 871		RS1/16S332J
R 872		RS1/16S271J
R 873		RS1/16S121J
R 874		RS1/16S103J
R 875		RS1/16S332J
R 876		RS1/16S121J
R 877		RS1/16S271J
R 878		RS1/16S103J
R 879		RS1/16S103J
R 880		RS1/16S471J
R 881		RS1/16S121J
R 882		RS1/16S103J
R 883		RS1/16S332J
R 884		RS1/16S820J
R 885		RS1/16S820J
R 886		RS1/16S103J
R 887		RS1/16S332J
R 888		RS1/16S103J
R 889		RS1/16S332J
R 890		RS1/16S330J
R 891		RS1/16S330J
R 892		RS1/16S330J
R 893		RS1/16S103J
R 894		RS1/16S103J
R 895		RS1/16S104J
R 896		RS1/16S104J
R 897		RS1/16S331J
R 898		RS1/16S473J
R 899		RS1/16S0R0J
R 901		RS1/10S301J

Circuit Symbol and No.	Part No.
R 902	RS1/10S301J
R 903	RS1/16S153J
R 905	RS1/16S102J
R 906	RS1/16S102J
R 907	RS1/16S102J
R 911	RS1/16S0R0J
R 912	RS1/16S0R0J
R 913	RS1/16S0R0J
R 914	RS1/16SS4R7J
R 915	RS1/16SS4R7J
R 916	RS1/16S4R7J
R 1401	RAB4CQ101J
R 1402	RAB4CQ101J
R 1403	RAB4CQ470J
R 1404	RAB4CQ470J
R 1405	RAB4CQ101J
R 1406	RS1/16S101J
R 1407	RS1/16S101J
R 1408	RS1/16S102J
R 1409	RS1/16S102J
R 1410	RS1/16S105J
R 1411	RS1/16S105J
R 1412	RS1/16S103J
R 1413	RS1/16S102J
R 1414	RS1/16S821J
R 1415	RS1/16S102J
R 1416	RAB4CQ101J
R 1417	RAB4CQ101J
R 1418	RAB4CQ470J
R 1419	RAB4CQ470J
R 1420	RS1/16S0R0J
R 1423	RS1/16S473J
R 1424	RS1/16S473J
R 1425	RAB4CQ101J
R 1426	RAB4CQ101J
R 1427	RAB4CQ470J
R 1428	RAB4CQ470J
R 1429	RAB4CQ101J
R 1430	RS1/16S101J
R 1431	RS1/16S101J
R 1432	RS1/16S471J
R 1433	RS1/16S471J
R 1434	RS1/16S473J
R 1435	RS1/16S471J
R 1436	RS1/16S473J
R 1439	RS1/16S102J
R 1440	RS1/16S821J
R 1441	RAB4CQ101J
R 1442	RAB4CQ101J
R 1443	RAB4CQ470J
R 1444	RAB4CQ470J
R 1445	RS1/16S821J
R 1446	RS1/16S471J
R 1449	RS1/16S821J
R 1450	RS1/16S102J
R 1451	RS1/16S124J
R 1452	RS1/16S473J
R 1453	RS1/16S0R0J
R 1454	RS1/16S101J
R 1455	RS1/16S473J

Circuit Symbol and No.	Part No.
R 1456	RAB4CQ102J
R 1460	RS1/16S102J
R 1461	RS1/16S102J
R 1462	RS1/16S471J
R 1463	RS1/16S102J
R 1464	RAB4CQ221J
R 1465	RS1/16S102J
R 1467	RS1/16S473J
R 1469	RS1/16S473J
R 1470	RS1/16S470J
R 1471	RS1/16S470J
R 1473	RS1/16S470J
R 1474	RS1/16S470J
R 1475	RS1/16S821J
R 1476	RS1/16S470J
R 1477	RS1/16S821J
R 1479	RS1/16S473J
R 1480	RS1/16S470J
R 1481	RS1/16S470J
R 1482	RS1/16S102J
R 1483	RS1/16S102J
R 1484	RS1/16S470J
R 1485	RS1/16S473J
R 1486	RS1/16S473J
R 1487	RAB4CQ102J
R 1488	RS1/16S222J
R 1497	RS1/16S0R0J
R 1501	RS1/16S473J
R 1502	RS1/16S473J
R 1503	RS1/16S473J
R 1504	RS1/16S104J
R 1505	RS1/16S273J
R 1506	RS1/16S563J
R 1507	RS1/16S151J
R 1508	RS1/16S151J
R 1510	RAB4CQ470J
R 1511	RAB4CQ470J
R 1512	RAB4CQ470J
R 1513	RAB4CQ101J
R 1514	RAB4CQ101J
R 1515	RAB4CQ101J
R 1516	RAB4CQ101J
R 1517	RAB4CQ101J
R 1518	RS1/16S0R0J
R 1519	RS1/16S101J
R 1520	RS1/16S0R0J
R 1521	RS1/16S680J
R 1522	RS1/16S105J
R 1524	RS1/16S101J
R 1526	RS1/16S220J
R 1527	RS1/16S473J
R 1528	RAB4CQ470J
R 1530	RS1/16S473J
R 1531	RS1/16S470J
R 1534	RS1/16S471J
R 1535	RS1/16S330J
R 1536	RS1/16S102J
R 1537	RS1/16S102J
R 1538	RS1/16S102J
R 1539	RS1/16S102J
R 1540	RS1/16S473J
R 1543	RAB4CQ470J
R 1544	RS1/16S101J
R 1545	RS1/16S151J
R 1546	RS1/16S151J
R 1547	RAB4CQ470J
R 1549	RS1/16S473J
R 1550	RAB4CQ470J
R 1551	RS1/16S101J
R 1552	RS1/16S302J
R 1553	RAB4CQ470J
R 1554	RS1/16S101J
R 1555	RS1/16S470J
R 1556	RS1/16S470J
R 1557	RS1/16S471J
R 1558	RS1/16S470J
R 1559	RS1/16S470J
R 1560	RS1/16S471J
R 1561	RS1/16S470J
R 1562	RS1/16S470J
R 1563	RS1/16S473J
R 1564	RS1/16S470J
R 1565	RS1/16S473J
R 1566	RS1/16S473J
R 1567	RAB4CQ680J
R 1568	RS1/16S473J
R 1569	RS1/16S331J
R 1570	RS1/16S331J
R 1571	RS1/16S331J
R 1572	RS1/16S333J
R 1573	RS1/16S153J
R 1574	RS1/16S333J
R 1575	RS1/16S153J
R 1576	RS1/16S333J
R 1577	RS1/16S153J
R 1578	RAB4CQ680J
R 1579	RAB4CQ680J
R 1580	RS1/16S102J
R 1581	RS1/16S102J
R 1582	RS1/16S102J
R 1583	RS1/16S470J
R 1584	RS1/16S470J
R 1585	RS1/16S0R0J
R 1586	RS1/16S0R0J
R 1587	RS1/16S0R0J
R 1588	RS1/16S103J
R 1589	RS1/16S103J
R 1590	RS1/16S103J
R 1591	RS1/16S103J

CAPACITORS

C 103	CKSRYB104K16
C 104	CKSRYB104K16
C 106	CCSRCH150J50
C 107	CKSRYB104K16
C 108	CKSYB106K6R3
C 111	CKSRYB102K50
C 112	CKSRYB102K50
C 153	CKSYB106K6R3

Circuit Symbol and No.		Part No.
C 155		CKSRYB102K50
C 156		CKSYB475K10
C 157		CKSRYB103K50
C 158		CEVLW220M6R3
C 159		CEVLW101M10
C 160		CKSRYB102K50
C 201		CKSRYB105K6R3
C 202		CKSRYB105K6R3
C 203		CKSRYB105K6R3
C 204		CKSRYB105K6R3
C 205		CKSRYB224K10
C 206		CKSRYB224K10
C 207		CKSRYB105K6R3
C 208		CKSRYB105K6R3
C 209		CKSRYB105K6R3
C 210		CKSRYB105K6R3
C 213		CKSRYB102K50
C 214		CEVLW470M16
C 215		CKSRYB104K16
C 216		CKSYB475K10
C 217		CKSYB475K10
C 218		CKSYB475K10
C 219		CKSYB475K10
C 222		CKSYB475K10
C 223		CKSYB475K10
C 224		CKSYB475K10
C 225		CKSYB475K10
C 226		CCSRCH100D50
C 227		CCSRCH100D50
C 228		CKSRYB104K16
C 229		CCSRCH100D50
C 230		CCSRCH100D50
C 231		CCSRCH100D50
C 232		CCSRCH100D50
C 233		CKSRYB104K16
C 234		CKSRYB104K16
C 235		CKSRYB104K16
C 236		CEVLW100M16
C 237		CKSRYB224K10
C 238		CKSRYB105K10
C 239		CKSRYB105K10
C 240		CEVLW100M16
C 241		CKSRYB105K10
C 242		CKSRYB105K10
C 243		CKSRYB105K10
C 244		CKSRYB105K10
C 245	10µF	CCG1182
C 246		CEVLW101M10
C 247		CKSRYB105K10
C 248		CKSRYB105K10
C 249		CKSYB475K10
C 250		CEVLW330M25
C 251		CKSQYB225K10
C 252		CKSQYB225K10
C 253		CKSQYB225K10
C 254		CKSQYB225K10
C 255		CKSQYB225K10
C 256		CKSQYB225K10
C 257		CEVLW100M16
C 259		CKSRYB105K10

Circuit Symbol and No.		Part No.
C 260		CEVLW330M25
C 261	10µF	CCG1182
C 262	10µF	CCG1182
C 263	10µF	CCG1182
C 264	10µF	CCG1182
C 265	10µF	CCG1182
C 266	10µF	CCG1182
C 267		CKSYB684K16
C 268		CEVLW330M25
C 269	10µF	CCG1138
C 270	1000µF/16V	CCH1428
C 272	10µF	CCG1182
C 273		CKSYB475K16
C 274		CKSYB475K16
C 275		CKSRYB222K50
C 276		CKSRYB222K50
C 277		CKSRYB222K50
C 278		CKSRYB222K50
C 279		CKSRYB222K50
C 280		CKSRYB222K50
C 281		CKSRYB473K50
C 282	10µF	CCG1182
C 285		CKSRYB104K16
C 303		CEVW101M16
C 304		CKSYB475K10
C 305		CKSYB475K16
C 306		CKSYB475K16
C 307		CCSRCH220J50
C 308		CCSRCH220J50
C 309		CEVLW100M16
C 310		CEVLW100M16
C 311		CKSRYB102K50
C 312		CKSRYB105K10
C 313		CEVLW470M16
C 403		CKSRYB105K6R3
C 405		CKSRYB105K6R3
C 407		CKSRYB104K16
C 408		CKSRYB105K6R3
C 409		CKSRYB105K6R3
C 411		CKSRYB104K16
C 412		CKSRYB104K16
C 414		CKSRYB104K16
C 416		CKSYB106K6R3
C 417		CKSYB106K6R3
C 418		CKSYB475K16
C 419		CEVLW100M16
C 420		CKSYB475K16
C 422		CEVLW100M16
C 424		CKSRYB104K16
C 426		CKSRYB104K16
C 428		CCSRCH6R0D50
C 430		CKSYB106K6R3
C 433		CKSYB106K6R3
C 434		CKSRYB104K16
C 435		CCSRCH6R0D50
C 436		CKSYB106K6R3
C 437		CKSRYB105K6R3
C 438		CKSRYB104K16
C 439		CKSRYB105K6R3
C 440		CKSRYB105K6R3

Circuit Symbol and No.		Part No.	Circuit Symbol and No.		Part No.
C 441		CEVLW221M4	C 808		CKSRYB103K50
C 442		CEVLW221M4	C 809		CKSRYB104K16
C 443		CEVLW221M4	C 811		CCSRCH470J50
C 444		CKSRYB104K16	C 817		CCSRCH471J50
C 447		CKSRYB102K50	C 818		CCSRCH390J50
C 449		CKSRYB104K16	C 819		CKSRYB222K50
C 450		CKSQYB225K10	C 821		CKSRYB472K50
C 451		CKSYB106K6R3	C 822	2200µF/16V	CCH1405
C 452		CKSRYB104K16	C 823		CCSRCH181J50
C 453		CKSRYB105K6R3	C 824		CCSRCH681J50
C 454		CKSRYB102K50	C 825		CKSRYB103K50
C 455		CKSRYB104K16	C 826		CKSRYB182K50
C 456		CKSYB106K6R3	C 827		CKSRYB103K50
C 458		CCSRCH6R0D50	C 829		CKSRYB104K16
C 459		CKSYB106K6R3	C 830		CCSRCH100D50
C 460		CKSRYB105K6R3	C 831		CCSRCH470J50
C 462		CCSRCH6R0D50	C 832		CCSRCH102J50
C 464	47µF	CCG1181	C 833		CCSRCH102J50
C 465	47µF	CCG1181	C 835		CKSSYB104K10
C 466		CEVLW101M10	C 836		CKSRYB104K16
C 467		CKSRYB105K6R3	C 837		CKSSYB104K10
C 468		CKSYB106K6R3	C 838		CKSQYB105K16
C 469		CEVLW100M16	C 839		CKSQYB105K16
C 470		CKSRYB104K16	C 840		CSZS4R7M16
C 471		CKSRYB104K16	C 841		CSZS4R7M16
C 486		CKSRYB102K50	C 842		CKSRYB104K16
C 487		CKSRYB104K16	C 843		CKSRYB104K16
C 490		CEVLW101M10	C 844		CKSRYB102K50
C 551		CKSRYB105K6R3	C 845	10µF	CCG1138
C 555		CEVLW101M10	C 846		CEHAZL471M16
C 604		CKSRYB103K50	C 847	10µF	CCG1183
C 605		CKSRYB103K50	C 848	10µF	CCG1183
C 606		CEVLW2R2M50	C 849	47µF	CCG1181
C 607		CKSRYB105K6R3	C 850	10µF	CCG1138
C 608		CKSRYB105K6R3	C 851	47µF	CCG1181
C 609		CKSRYB104K16	C 853		CKSRYB105K10
C 610		CCSRCH101J50	C 854		CKSRYB105K10
C 612		CCSRCH7R0D50	C 855	2200µF/16V	CCH1405
C 613		CCSRCH7R0D50	C 856		CKSRYB105K10
C 614		CKSRYB105K6R3	C 858		CKSYB225K16
C 615		CKSRYB104K25	C 861		CKSRYB474K10
C 616		CKSRYB104K25	C 862		CEVLW470M16
C 617		CKSRYB104K25	C 863		CKSRYB104K16
C 619		CCSRCH100D50	C 864		CCSRCH102J50
C 620		CCSRCH100D50	C 865		CEVLW470M16
C 621		CCSRCH680J50	C 866		CKSRYB103K50
C 701		CKSRYB105K10	C 867		CKSRYB103K50
C 702		CKSRYB104K16	C 868		CEVLW100M16
C 703		CKSRYB104K16	C 869	10µF	CCG1182
C 704		CKSRYB103K50	C 870		CEVLW101M10
C 705		CKSQYB104K16	C 871		CKSRYB104K16
C 706		CKSRYB104K16	C 872		CKSRYB103K50
C 708		CKSRYB104K16	C 873	0.1µF	CCL1059
C 801	0.22µF	CCL1058	C 874		CKSRYB103K50
C 802		CKSYB106K6R3	C 875		CKSRYB103K50
C 803		CKSRYB103K50	C 876		CEVW101M16
C 804		CCSRCH102J50	C 877		CEVW101M16
C 805		CCSRCH102J50	C 878		CKSRYB104K16
C 806		CKSRYB103K50	C 881		CKSRYB103K50
C 807		CCSRCH102J50	C 882		CKSRYB103K50

Circuit Symbol and No.		Part No.
C 883		CKSRYB103K50
C 884		CEVLW100M16
C 885		CKSRYB103K50
C 886	1000µF/16V	CCH1428
C 887	10µF	CCG1138
C 890		CCSRCH151J50
C 891		CCSRCH151J50
C 892		CCSRCH151J50
C 893		CKSRYB105K6R3
C 894		CKSRYB103K50
C 895		CKSRYB105K6R3
C 901		CKSRYB104K16
C 902	100µF/16V	CCH1228
C 903	100µF/16V	CCH1228
C 904	1000µF/16V	CCH1428
C 1401		CKSRYB102K50
C 1402		CKSRYB102K50
C 1403		CKSRYB102K50
C 1404		CKSRYB102K50
C 1405		CKSRYB104K16
C 1406		CKSRYB104K16
C 1407		CSZSC101M10
C 1408		CKSRYB104K16
C 1409		CKSRYB104K16
C 1410		CKSRYB104K16
C 1411		CKSRYB104K16
C 1412		CKSRYB104K16
C 1413		CKSRYB104K16
C 1414		CSZSC101M10
C 1415		CKSRYB104K16
C 1416		CKSRYB105K6R3
C 1417		CKSRYB104K16
C 1418		CKSRYB104K16
C 1419		CKSRYB104K16
C 1420		CKSRYB104K16
C 1421		CKSRYB104K16
C 1422		CKSRYB103K50
C 1424		CKSRYB104K16
C 1425		CSZSC101M10
C 1426		CKSRYB103K50
C 1427		CKSRYB104K16
C 1428		CKSRYB104K16
C 1429		CKSRYB104K16
C 1430		CKSRYB104K16
C 1431		CKSRYB104K16
C 1432		CKSRYB104K16
C 1433		CKSRYB105K6R3
C 1434		CKSRYB104K16
C 1436		CSZSC101M10
C 1437		CKSRYB105K6R3
C 1438		CKSRYB105K6R3
C 1439		CKSRYB105K6R3
C 1440		CKSRYB105K6R3
C 1441		CKSRYB105K6R3
C 1442		CSZSC101M10
C 1443		CKSRYB104K16
C 1446		CKSRYB105K6R3
C 1447		CKSRYB105K6R3
C 1448		CKSRYB105K6R3
C 1449		CKSRYB105K6R3

Circuit Symbol and No.	Part No.
C 1450	CKSRYB105K6R3
C 1451	CKSRYB105K6R3
C 1452	CKSRYB105K6R3
C 1453	CCSRCH221J50
C 1454	CCSRCH220J50
C 1455	CCSRCH471J50
C 1456	CKSRYB105K6R3
C 1457	CKSRYB105K6R3
C 1459	CCSRCH471J50
C 1460	CKSRYB105K6R3
C 1463	CKSRYB105K6R3
C 1464	CKSRYB105K6R3
C 1467	CKSYB475K10
C 1468	CKSRYB104K16
C 1469	CKSRYB104K16
C 1470	CKSRYB105K6R3
C 1471	CKSYB475K10
C 1472	CKSRYB104K16
C 1473	CKSYB475K10
C 1474	CKSRYB105K6R3
C 1475	CKSRYB105K6R3
C 1477	CKSRYB105K6R3
C 1478	CKSRYB105K6R3
C 1479	CKSRYB105K6R3
C 1480	CKSRYB105K6R3
C 1481	CKSYB106K6R3
C 1482	CKSYB106K6R3
C 1483	CKSYB106K6R3
C 1484	CKSYB106K6R3
C 1485	CKSYB106K6R3
C 1486	CKSYB106K6R3

C

Unit Number:CWX2883
Unit Name:DVD Core Unit(MS-3V1)

MISCELLANEOUS

IC 1001	IC	S-L2980A50MC-C7J
IC 1002	IC	R1130H501B
IC 1003	IC	LTC3411EMS
IC 1051	IC	PE5401A
IC 1201	IC	AN8471SAT1
IC 1231	IC	TC7SZ125FU
IC 1251	IC	BA5985FM
IC 1501	IC	MN35104UB
IC 1570	IC	K4S283232E-TC75
IC 1601	IC	PD6480B
IC 1602	IC	TC7SH86FU
IC 1651	IC	M5M5V216ATP-70HI
IC 1652	IC	TC7SZ126FU
IC 1671	IC	TC74LCX16373AFT
IC 1672	IC	TC7SZ08FU
IC 1801	IC	SM8707LV
IC 1802	IC	TC7WH157FU
IC 1851	IC	PCM1742KE
IC 1852	IC	NJM2140R
IC 1853	IC	NJM2100V
Q 1002	Transistor	DTC114EU
Q 1101	Transistor	2SB1260

Circuit Symbol and No.		Part No.
Q 1102	Transistor	2SB1260
Q 1103	Transistor	DTC114EU
Q 1104	Transistor	2SA1576A
Q 1105	Transistor	2SC4081
Q 1106	Transistor	2SC4081
Q 1107	Transistor	2SC4081
Q 1551	Transistor	2SA1576
D 1001	Diode	1SR154-400
D 1101	Diode	1SS355
D 1102	Diode	1SS355
D 1241	Chip LED	CL205IRXTU
L 1001	Inductor	CTF1623
L 1002	Inductor	CTF1624
L 1003	Inductor	CTF1558
L 1004	Inductor	CTF1558
L 1051	Inductor	CTF1473
L 1101	Inductor	CTF1305
L 1501	Inductor	CTF1378
L 1502	Inductor	CTF1487
L 1503	Inductor	CTF1488
L 1554	Inductor	CTF1473
L 1555	Inductor	CTF1473
L 1556	Inductor	CTF1400
L 1557	Inductor	CTF1395
L 1558	Inductor	CTF1473
L 1561	Inductor	CTF1473
L 1601	Inductor	CTF1464
L 1651	Inductor	CTF1464
L 1671	Inductor	CTF1473
L 1801	Inductor	CTF1558
L 1802	Inductor	CTF1558
L 1803	Inductor	CTF1464
L 1804	Inductor	CTF1468
L 1851	Inductor	CTF1464
L 1852	Inductor	CTF1473
L 1901	Inductor	CTF1487
L 1902	Inductor	CTF1558
L 1903	Inductor	CTF1558
L 1904	Inductor	CTF1468
L 1905	Inductor	CTF1468
X 1051	Resonator 4.91MHz	CSS1668
X 1801	Resonator 27.0000MHz	CSS1661
VR1551	Semi-fixed 10kΩ(B)	CCP1448
EF1801		DTL1106
EF1802		DTL1106
EF1803		DTL1106
EF1901		DTL1106
EF1902		DTL1106
EF1903		DTL1106
EF1904		DTL1106
EF1905		DTF1106

RESISTORS

Circuit Symbol and No.	Part No.
R 1001	RS1/10S0R0J
R 1003	RS1/16SS1003D
R 1004	RS1/10S0R0J
R 1005	RS1/16SS1501D
R 1006	RS1/16SS8202D
R 1007	RS1/16SS1502D
R 1008	RS1/16SS101J
R 1010	RS1/16SS105J
R 1011	RS1/16SS105J
R 1013	RS1/16SS103J
R 1014	RS1/16SS1203D
R 1015	RS1/16SS2402D
R 1016	RS1/16SS0R0J
R 1017	RS1/16SS0R0J
R 1018	RS1/16SS105J
R 1021	RS1/16SS122J
R 1051	RS1/16SS104J
R 1052	RS1/16SS104J
R 1053	RS1/16SS104J
R 1054	RS1/16SS104J
R 1055	RS1/16SS222J
R 1057	RS1/16SS104J
R 1058	RS1/16SS0R0J
R 1059	RS1/16SS104J
R 1060	RS1/16SS104J
R 1061	RS1/16SS221J
R 1062	RS1/16SS104J
R 1063	RS1/16SS104J
R 1064	RS1/16SS104J
R 1065	RS1/16SS104J
R 1066	RS1/16SS104J
R 1067	RS1/16SS104J
R 1068	RS1/16SS221J
R 1069	RS1/16SS221J
R 1070	RS1/16SS221J
R 1071	RS1/16SS221J
R 1072	RS1/16SS104J
R 1073	RS1/16SS104J
R 1074	RS1/16SS104J
R 1075	RS1/16SS472J
R 1076	RS1/16SS104J
R 1080	RS1/16SS0R0J
R 1081	RS1/16SS221J
R 1082	RS1/16SS473J
R 1083	RS1/16S153J
R 1084	RS1/16SS104J
R 1085	RS1/16S823J
R 1087	RS1/16S104J
R 1088	RS1/16SS104J
R 1089	RS1/16SS104J
R 1090	RAB4CQ104J
R 1101	RS1/16S6R8J
R 1102	RS1/16SS3R9J
R 1103	RS1/16SS3R9J
R 1104	RS1/16SS3R9J
R 1105	RS1/16SS3R9J
R 1106	RS1/16S6R8J
R 1107	RS1/16SS3R9J
R 1108	RS1/16SS3R9J
R 1109	RS1/16SS3R9J
R 1110	RS1/16SS3R9J
R 1111	RS1/16SS272J
R 1112	RS1/16SS472J
R 1113	RS1/16SS102J
R 1114	RS1/16SS221J
R 1115	RS1/16SS221J

Circuit Symbol and No.	Part No.	Circuit Symbol and No.	Part No.
R 1116	RS1/16SS331J	R 1513	RS1/16SS473J
R 1117	RS1/16SS221J	R 1514	RS1/16SS104J
R 1118	RS1/16SS0R0J	R 1515	RS1/16SS222J
R 1119	RS1/16SS0R0J	R 1518	RS1/16SS104J
R 1120	RS1/16SS0R0J	R 1519	RS1/16SS104J
R 1121	RS1/16SS0R0J	R 1522	RS1/16SS103J
R 1128	RS1/16S0R0J	R 1523	RS1/16SS104J
R 1129	RS1/16S0R0J	R 1525	RS1/16SS102J
R 1130	RS1/16S0R0J	R 1530	RS1/16SS104J
R 1131	RS1/16S0R0J	R 1531	RS1/16S221J
R 1201	RS1/16SS181J	R 1532	RS1/16SS104J
R 1202	RS1/16SS181J	R 1536	RS1/16SS104J
R 1203	RS1/16SS513J	R 1537	RS1/16SS104J
R 1204	RS1/16SS221J	R 1540	RS1/16SS221J
R 1206	RS1/16SS513J	R 1541	RS1/16SS473J
R 1207	RS1/16S0R0J	R 1543	RS1/16SS104J
R 1208	RS1/16S0R0J	R 1544	RS1/16SS102J
R 1211	RS1/16SS1R0J	R 1545	RS1/16SS102J
R 1212	RS1/16SS1R0J	R 1546	RS1/16SS104J
R 1213	RS1/16SS1R0J	R 1547	RS1/16SS330J
R 1214	RS1/16SS1R0J	R 1548	RS1/16SS104J
R 1215	RS1/16SS1R0J	R 1551 Inductor	CTF1387
R 1216	RS1/16SS1R0J	R 1552	RS1/16S101J
R 1231	RS1/16SS822J	R 1555	RS1/16S101J
R 1232	RS1/16SS822J	R 1556	RS1/16S101J
R 1233	RS1/16SS822J	R 1558	RS1/16SS750J
R 1234	RS1/16SS822J	R 1561	RS1/16SS153J
R 1235	RS1/16SS563J	R 1562	RS1/16SS471J
R 1236	RS1/16SS243J	R 1563	RS1/16SS471J
R 1237	RS1/16SS683J	R 1565	RS1/16S68R0D
R 1238	RS1/16SS243J	R 1566	RS1/16S4R7J
R 1240	RS1/16S471J	R 1567	RS1/16SS273J
R 1241	RS1/16S391J	R 1568	RS1/16SS183J
R 1246	RS1/16SS104J	R 1569	RS1/16SS153J
R 1248	RS1/16SS0R0J	R 1571	RAB4CQ101J
R 1251	RS1/16SS221J	R 1572	RAB4CQ101J
R 1252	RS1/16SS221J	R 1573	RAB4CQ101J
R 1253	RS1/16SS393J	R 1574	RAB4CQ101J
R 1254	RS1/16SS223J	R 1575	RS1/16SS560J
R 1256	RS1/16SS102J	R 1576	RS1/16SS560J
R 1257	RS1/16SS0R0J	R 1577	RAB4CQ560J
R 1258	RS1/16SS393J	R 1578	RAB4CQ560J
R 1259	RS1/16SS393J	R 1579	RS1/16SS220J
R 1260	RS1/16SS393J	R 1580	RAB4CQ560J
R 1261	RS1/16SS393J	R 1581	RS1/16SS560J
R 1262	RS1/16SS221J	R 1582	RS1/16SS560J
R 1263	RS1/16S0R0J	R 1583	RS1/16SS560J
R 1269	RS1/16SS102J	R 1584	RAB4CQ560J
R 1270	RS1/16SS102J	R 1585	RS1/16SS560J
R 1501	RS1/16SS0R0J	R 1586	RS1/16SS560J
R 1502	RS1/16SS0R0J	R 1587	RAB4CQ101J
R 1503	RAB4CQ101J	R 1588	RAB4CQ101J
R 1504	RS1/16SS0R0J	R 1589	RAB4CQ101J
R 1505	RS1/16SS0R0J	R 1590	RAB4CQ101J
R 1506	RAB4CQ101J	R 1593	RS1/16SS104J
R 1507	RS1/16SS0R0J	R 1594	RS1/16S0R0J
R 1508	RAB4CQ101J	R 1599	RS1/16S221J
R 1509	RS1/16SS0R0J	R 1604	RS1/16SS0R0J
R 1511	RAB4CQ101J	R 1608	RS1/16SS104J
R 1512	RS1/16SS0R0J	R 1613	RS1/16SS0R0J

Circuit Symbol and No.	Part No.
R 1652	RS1/16SS104J
R 1653	RS1/16SS510J
R 1671	RAB4CQ101J
R 1672	RAB4CQ101J
R 1673	RAB4CQ101J
R 1674	RAB4CQ101J
R 1675	RS1/16SS331J
R 1701	RS1/16SS103J
R 1702	RS1/16SS103J
R 1703	RS1/16SS0R0J
R 1704	RS1/16SS105J
R 1705	RN1/16SE1002D
R 1706	RS1/16SS222J
R 1708	RS1/16SS223J
R 1709	RS1/16S1502D
R 1710	RS1/16SS102J
R 1711	RS1/16SS683J
R 1712	RS1/16SS103J
R 1713	RS1/16SS103J
R 1714	RS1/16SS0R0J
R 1715	RS1/16SS0R0J
R 1716	RS1/16SS0R0J
R 1717	RS1/16SS0R0J
R 1718	RS1/16SS103J
R 1719	RS1/16SS103J
R 1720	RS1/16SS103J
R 1721	RS1/16SS103J
R 1723	RN1/16SE3901D
R 1724	RS1/16SS0R0J
R 1729	RAB4CQ220J
R 1730	RAB4CQ220J
R 1801	RS1/16S0R0J
R 1802	RS1/16S151J
R 1803	RS1/16S151J
R 1804	RS1/16S221J
R 1805	RS1/16S271J
R 1806	RS1/16SS104J
R 1807	RS1/16S560J
R 1809	RS1/16SS0R0J
R 1821	RS1/16SS222J
R 1823	RS1/16SS101J
R 1851	RS1/16SS0R0J
R 1856	RS1/16SS102J
R 1857	RS1/16SS102J
R 1858	RS1/16SS222J
R 1859	RS1/16SS222J
R 1860	RS1/16SS472J
R 1861	RS1/16SS472J
R 1862	RS1/16SS472J
R 1863	RS1/16SS472J
R 1864	RS1/16SS103J
R 1865	RS1/16SS103J
R 1866	RS1/16SS472J
R 1867	RS1/16SS472J
R 1868	RS1/16SS821J
R 1869	RS1/16SS821J
R 1870	RS1/16SS104J
R 1871	RS1/16SS104J
R 1872	RS1/16SS0R0J
R 1873	RS1/16SS0R0J

Circuit Symbol and No.	Part No.
R 1874	RS1/16SS0R0J
R 1876	RS1/16SS0R0J
R 1877	RS1/16SS0R0J
R 1885	RS1/16SS0R0J
R 1897	RS1/16SS0R0J
R 1899	RS1/16SS0R0J
R 1901	RS1/16SS221J
R 1903	RS1/16SS221J
R 1908	RS1/16SS102J
R 1913	RS1/16S0R0J
R 1922	RS1/16SS0R0J
R 1923	RS1/16SS221J
R 1925	RS1/16S0R0J
R 1927	RS1/16SS0R0J
R 1928	RS1/16SS221J
R 1954	RS1/16SS221J
R 1955	RS1/16SS221J
R 1961	RS1/16S0R0J

CAPACITORS

C 1001		CKSRYB474K16
C 1002		CKSRYB104K25
C 1003		CKSRYB104K25
C 1004		CKSRYB104K25
C 1005		CKSRYB105K10
C 1006		CKSRYB104K25
C 1007	22µF	CCG1178
C 1008	22µF	CCG1178
C 1009		CCSSCH220J50
C 1010		CKSSYB102K16
C 1012	22µF	CCG1178
C 1013	22µF	CCG1178
C 1016		CKSRYB104K25
C 1051		CKSYB106K6R3
C 1052		CKSSYB104K10
C 1053		CKSSYB104K10
C 1054		CKSSYB103K16
C 1055		CKSSYB103K16
C 1058		CKSSYB471K50
C 1059		CKSSYB104K10
C 1060		CKSRYB105K10
C 1101		CSZSR220M16
C 1102		CSZSR101M6R3
C 1103		CKSSYB104K10
C 1104		CKSSYB103K16
C 1105		CSZSR101M6R3
C 1106		CKSSYB104K10
C 1107		CKSSYB103K16
C 1108		CKSRYB104K25
C 1109		CKSSYB473K10
C 1110		CKSSYB473K10
C 1111		CKSSYB103K16
C 1112		CKSRYB105K10
C 1113		CKSRYB105K10
C 1114		CKSSYB103K16
C 1115		CSZSR220M16
C 1201		CEV101M16
C 1202		CKSRYB104K25
C 1203		CSZSR220M16
C 1204		CKSRYB104K25

Circuit Symbol and No.	Part No.	Circuit Symbol and No.	Part No.
C 1205	CKSRYB104K25	C 1576	CKSSYB104K10
C 1206	CKSRYB104K25	C 1577	CKSSYB104K10
C 1207	CSZSR220M16	C 1578	CKSSYB104K10
C 1231	CKSRYB104K25	C 1579	CKSSYB104K10
C 1232	CKSSYB104K10	C 1580	CKSSYB104K10
C 1251	CKSRYB104K25	C 1581	CKSSYB104K10
C 1254	CKSRYB103K50	C 1582	CKSSYB104K10
C 1255	CKSRYB103K50	C 1583	CSZSR470M10
C 1256	CEV101M16	C 1601	CSZSR470M10
C 1257	CKSRYB104K25	C 1603	CKSSYB104K10
C 1258	CCSSCH470J50	C 1651	CSZSR470M10
C 1259	CCSSCH5R0C50	C 1653	CKSSYB104K10
C 1501	CSZSR470M10	C 1654	CKSRYB104K25
C 1502	CSZSR101M6R3	C 1655	CKSSYB104K10
C 1503	CSZSR101M6R3	C 1671	CKSSYB104K10
C 1504	CKSSYB104K10	C 1672	CKSSYB104K10
C 1505	CKSSYB104K10	C 1673	CKSSYB104K10
C 1506	CKSSYB104K10	C 1674	CKSSYB104K10
C 1507	CKSSYB104K10	C 1675	CKSRYB104K25
C 1508	CKSSYB104K10	C 1676	CKSYB106K6R3
C 1509	CKSSYB104K10	C 1701	CKSRYB104K25
C 1510	CKSSYB104K10	C 1702	CKSRYB104K25
C 1511	CKSSYB104K10	C 1703	CKSSYB104K10
C 1512	CKSSYB104K10	C 1704	CKSSYB103K16
C 1513	CKSSYB104K10	C 1705	CKSSYB103K16
C 1514	CKSSYB104K10	C 1706	CKSSYB104K10
C 1515	CKSSYB104K10	C 1707	CKSSYB104K10
C 1516	CKSSYB104K10	C 1708	CKSSYB103K16
C 1517	CKSSYB104K10	C 1709	CCSRCH221J50
C 1518	CKSSYB104K10	C 1710	CKSSYB152K50
C 1519	CKSSYB104K10	C 1711	CKSRYB105K10
C 1520	CKSSYB104K10	C 1712	CKSRYB105K10
C 1521	CKSSYB104K10	C 1713	CKSRYB105K10
C 1522	CKSSYB104K10	C 1715	CKSSYB104K10
C 1523	CKSSYB104K10	C 1716	CKSSYB104K10
C 1524	CKSSYB104K10	C 1717	CKSSYB104K10
C 1525	CKSSYB104K10	C 1718	CKSSYB104K10
C 1526	CKSSYB104K10	C 1719	CKSSYB562K25
C 1527	CKSSYB104K10	C 1720	CCSSCH101J50
C 1528	CKSSYB104K10	C 1721	CCSSCH470J50
C 1529	CKSSYB104K10	C 1722	CKSSYB103K16
C 1530	CKSSYB104K10	C 1723	CKSSYB104K10
C 1531	CKSSYB471K50	C 1724	CKSSYB104K10
C 1532	CKSSYB103K16	C 1725	CKSSYB104K10
C 1533	CKSSYB103K16	C 1726	CCSSCH330J50
C 1552	CKSSYB104K10	C 1727	CKSSYB333K16
C 1553	CKSRYB104K25	C 1728	CKSSYB104K10
C 1554	CKSSYB104K10	C 1733	CKSSYB103K16
C 1555	CKSRYB105K10	C 1801	CKSSYB104K10
C 1556	CSZSR470M10	C 1802	CKSSYB104K10
C 1557	CKSSYB104K10	C 1804	CKSSYB104K10
C 1558	CSZS4R7M16	C 1805	CCSSCH100D50
C 1559	CKSRYB105K10	C 1809	CCSSCJ3R0C50
C 1561	CKSSYB102K50	C 1810	CCSSCK2R0C50
C 1570	CSZSR470M10	C 1811	CKSSYB104K10
C 1571	CKSSYB104K10	C 1851	CKSSYB104K10
C 1572	CKSSYB104K10	C 1852	CKSSYB104K10
C 1573	CKSSYB104K10	C 1853	CKSYB106K6R3
C 1574	CKSSYB104K10	C 1854	CKSYB106K6R3
C 1575	CKSSYB104K10	C 1855	CKSRYB104K25

Circuit Symbol and No.		Part No.
C 1856		CKSRYB104K25
C 1857		CCSRCH471J50
C 1858		CCSRCH471J50
C 1859		CCSRCH471J50
C 1860		CCSRCH471J50
C 1861		CKSQYB225K10
C 1862		CKSSYB471K50
C 1863		CKSSYB471K50
C 1864		CKSYB475K10
C 1865		CKSYB475K10
C 1870		CKSSYB104K10
C 1903		CKSRYB102K50

D

Unit Number:CWX3024
Unit Name:Compound Unit(A)

Q 1299	Photo-taransistor	CPT231SCTD
S 1201	Spring Switch(12cm)	CSN1069
S 1202	Spring Switch(8cm)	CSN1069
S 1203	Spring Switch(DISC SENS)	CSN1069
S 1204	Spring Switch(DISC SENS)	CSN1070
S 1205	Spring Switch(8cm)	CSN1070
R 1298		RS1/16S0R0J
R 1299		RS1/16S0R0J

E

Unit Number:CWX2753
Unit Name:Compound Unit(B)

S 1206	Switch(CLAMP)	CSN1051

G

Unit Number:CWM9203(UC,RC,RD model)
Unit Number:CWM9202(EW model)
Unit Name:Tuner Unit

MISCELLANEOUS

IC 1402	IC	BA00ASFP
Q 1401	Transistor(EW model)	IMH2A
Q 1402	Transistor(EW model)	IMH2A
Q 1403	Transistor	2SC4081
Q 1404	Transistor	2SD2375
D 1401	Diode	UDZ6R8(B)
D 1402	Diode	UDZS3R9(B)
ZNR1401	Surge Protector	RCCA-201Q31UA-PI
L 1401	Inductor	LCTA4R7J2520
L 1404	Inductor	CTF1295
L 1406	Inductor	LCTA1R0J2520
L 1407	Inductor	LCTA1R0J3225
L 1408	Inductor	LCTA680J4532
FU1401	Fuse 5A	CEK1289
FU1402	Fuse 5A	CEK1289

RESISTORS

R 1401	(EW model)	RAB4C223J
R 1402		RAB4C471J
R 1403		RAB4C471J
R 1404		RS1/16S0R0J
R 1405		RS1/16S103J
R 1406		RS1/16S103J
R 1407		RS1/16S103J
R 1412		RS1/16S1001D
R 1413		RS1/16S2201D
R 1414		RS1/16S1202D
R 1415		RS1/16S102J
R 1416		RS1/16S102J
R 1417		RS1/16S101J
R 1418		RS1/16S820J
R 1419		RS1/16S820J

CAPACITORS

C 1403	100µF/6.3V	CCH1496
C 1404		CKSYB475K10
C 1405		CKSRYB103K50
C 1406	56µF/10V	CCH1497
C 1408		CKSRYB103K50
C 1414		CCSRCH221J50
C 1415		CCSRCH221J50
C 1416		CCSRCH221J50
C 1417		CCSRCH221J50
C 1418		CCSRCH221J50
C 1419		CKSRYB104K16
C 1421		CKSRYB474K10
C 1422		CKSRYB474K10
C 1425		CEVW220M10
C 1426		CEVW101M16
C 1427		CEVW100M10
C 1428		CEVW101M10
C 1429		CKSYB474K16

Monitor Unit
Consists of
Inverter PCB
Monitor PCB
Upper PCB
Sense PCB

H I J K

Unit Number:CWM9148(UC model)
Unit Number:CWM9147(EW model)
Unit Number:CWM9149(RC,RD model)
Unit Name:Monitor Unit

MISCELLANEOUS

IC 4001	IC	TC90A64AF-P
IC 4061	L-MOS(NOR)	TC7SZ02FU
IC 4063	IC	TC7SZ32FU
IC 4064	IC	TC7SZ08FU
IC 4065	IC	TC7SZ08FU
IC 4141	IC(UC,EW model)	TC7SH08FU
IC 4142	IC(UC,EW model)	TK15404AMI
IC 4151	IC	NJM2138V

Circuit Symbol and No.		Part No.
IC 4181	IC	NJM082BV
IC 4311	IC	NJM062V
IC 4451	IC	TC7SET08FU
IC 4691	IC	S-93C46BR0I-J8T1
IC 4701	IC(UC model)	PD6340A
IC 4701	IC(EW,RC,RD model)	PD6347A
IC 4731	IC	TC7SET08FU
IC 4732	IC	TC7SH08FU
IC 4841	IC	R1130H251B
IC 4851	IC	LT1376CS8
IC 4861	IC	MAX1748EUE
IC 5001	IC	TA78L05F
IC 5002	IC	TC7SET08FU
IC 5003	IC	OZ961IS
IC 5004	FET	SI6544DQ
IC 5005	FET	SI6544DQ
Q 4002	Transistor	2SC4617
Q 4061	Transistor	2SC4617
Q 4062	Transistor	2SC4617
Q 4063	Transistor	2SC4617
Q 4101	Transistor	2SC4617
Q 4102	Transistor	2SA1774
Q 4103	Transistor	2SC4617
Q 4111	Transistor(UC,EW model)	2SC4617
Q 4112	Transistor(UC,EW model)	2SA1774
Q 4113	Transistor(UC,EW model)	2SC4617
Q 4121	Transistor(UC,EW model)	2SC4617
Q 4122	Transistor(UC,EW model)	2SA1774
Q 4123	Transistor(UC,EW model)	2SC4617
Q 4131	Transistor(UC,EW model)	2SC4617
Q 4132	Transistor(UC,EW model)	2SA1774
Q 4133	Transistor(UC,EW model)	2SC4617
Q 4151	Transistor	UMZ1N
Q 4152	Transistor	UMZ1N
Q 4153	Transistor	UMZ1N
Q 4154	Transistor	UMZ1N
Q 4155	Transistor	UMZ1N
Q 4156	Transistor	UMZ1N
Q 4182	Transistor	UMX2N
Q 4183	Transistor	UMT2N
Q 4831	Transistor	2SB1260
Q 4832	Transistor	DTC114EK
Q 4835	Transistor	2SD1664
Q 5001	Transistor	2SC4617
Q 5002	Transistor	2SC4617
Q 5003	Transistor	2SA1774
D 4061	Diode	UDZS5R6(B)
D 4062	Diode	UDZS5R6(B)
D 4063	Diode	UDZS5R6(B)
D 4311		AM-30-21
D 4321	LED	NSSW440-9159
D 4322	LED	NSSW440-9159
D 4331	LED(EW model)	CL-195SR-CD
D 4332	LED(EW model)	CL-195SR-CD
D 4333	LED(EW model)	CL-195SR-CD
D 4334	LED(EW model)	CL-195SR-CD
D 4335	LED(EW model)	CL-195SR-CD
D 4336	LED(EW model)	CL-195SR-CD
D 4337	LED(EW model)	CL-195SR-CD
D 4338	LED(EW model)	CL-195SR-CD

Circuit Symbol and No.		Part No.
D 4351	LED	CL-195PG-CD
D 4352	LED	CL-195PG-CD
D 4353	LED	CL-195PG-CD
D 4354	LED	CL-195PG-CD
D 4355	LED	CL-195PG-CD
D 4356	LED	CL-195PG-CD
D 4357	LED	CL-195PG-CD
D 4358	LED	CL-195PG-CD
D 4401	Diode	UDZS5R6(B)
D 4402	Diode	UDZS5R6(B)
D 4403	Diode	UDZS5R6(B)
D 4404	Diode	UDZS5R6(B)
D 4481	Diode	UDZS3R9(B)
D 4482	Diode	UDZS3R9(B)
D 4701	Diode	HZU5R6(B2)
D 4702	Diode	HZU5R6(B2)
D 4703	Diode	HZU5R6(B2)
D 4704	Diode	HZU5R6(B2)
D 4705	Diode	HZU5R6(B2)
D 4706	Diode	HZU5R6(B2)
D 4835	Diode	HZU5R6(B2)
D 4851	Diode	RB500V-40
D 4852	Diode	U2FWJ44N
D 4861	Diode	RB160M-30
D 4862	Diode	RB500V-40
D 4863	Diode	RB500V-40
D 4864	Diode	RB500V-40
D 4865	Diode	RB500V-40
D 4866	Diode	RB500V-40
D 4867	Diode	RB500V-40
D 4868	Diode	RB500V-40
D 4869	Diode	RB500V-40
D 5001	Diode	UDZS6R2(B)
D 5002	Diode	1SS355
D 5003	LED	CL-195PG-CD
D 5004	LED(EW model)	CL-195SR-CD
D 5005	LED	CL-195PG-CD
D 5006	LED(EW model)	CL-195SR-CD
D 5007	LED	CL-195PG-CD
D 5008	LED(EW model)	CL-195SR-CD
D 5009	Diode	RB751V40
D 5010	Diode	HZU6R2(B3)
D 5011	Diode	HZU6R2(B3)
D 5012	Diode	HZU6R2(B3)
D 5013	Diode	MA143
D 5014	Diode	MA143
L 4001	Inductor	CTF1306
L 4002	Inductor	CTF1306
L 4003	Inductor	CTF1306
L 4004	Inductor	CTF1306
L 4005	Inductor	CTF1306
L 4006	Inductor-Array	CTF1421
L 4007	Ferrite Bead	CTF1528
L 4008	Inductor	CTF1306
L 4011	Inductor	CTF1306
L 4012	Ferrite Bead	CTF1528
L 4013	Ferrite Bead	CTF1528
L 4014	Ferrite Bead	CTF1528
L 4015	Inductor	CTF1306
L 4016	Ferrite Bead	CTF1528

Circuit Symbol and No.		Part No.
L 4061	Inductor	LCKAW101J2520
L 4071	Inductor	LCKBW100K2520
L 4074	Inductor	LCKBW100K2520
L 4075	Inductor	LCKBW100K2520
L 4078	Inductor	LCKBW100K2520
L 4079	Inductor	CTF1306
L 4092	Inductor	CTF1306
L 4094	Inductor	CTF1306
L 4101	Inductor	LCKBW100K2520
L 4141	Inductor	LCKBW100K2520
L 4151	Inductor	LCKBW100K2520
L 4152	Inductor	LCKBW100K2520
L 4181	Inductor	LCKAW101J2520
L 4182	Inductor	LCKAW101J2520
L 4311	Inductor	LCKBW100K2520
L 4451	Inductor	CTF1306
L 4691	Inductor	CTF1306
L 4701	Inductor	LCKBW100K2520
L 4732	Inductor	CTF1306
L 4801	Inductor	LCKBW100K2520
L 4802	Inductor	LCKBW100K2520
L 4803	Inductor	LCKBW100K2520
L 4804	Inductor	LCKBW100K2520
L 4841	Choke Coil 10µH	CTH1249
L 4851	Choke Coil 10µH	CTH1259
L 4852	Choke Coil 18µH	CTH1250
L 4861	Choke Coil 10µH	CTH1249
L 4862	Choke Coil 6.8µH	CTH1248
L 4863	Inductor	LCKBW100K2520
L 4864	Inductor	LCKBW100K2520
L 4865	Inductor	LCKBW100K2520
T 5001	Transformer	CTT1103
X 4001	Crystal Resonator 42MHz	CSS1541
X 4701	Ceramic Resonator 4.97MHz	CSS1573
S 4351	Push Switch	CSG1111
S 4352	Push Switch	CSG1111
S 4353	Push Switch	CSG1111
S 4354	Push Switch	CSG1111
S 5001	Push Switch	CSG1111
S 5002	Push Switch	CSG1111
S 5003	Push Switch	CSG1111
VR5001	Semi-fixed 15kΩ(B)	CCP1397
FU4831	Fuse 630mA	CEK1252

RESISTORS

R 3		RS1/16S0R0J
R 8		RS1/16S0R0J
R 9		RS1/16S0R0J
R 4001		RS1/16S101J
R 4002		RS1/16S470J
R 4003		RS1/16S101J
R 4004		RS1/16S101J
R 4005		RS1/16S473J
R 4006		RS1/16S392J
R 4009		RS1/16S152J
R 4010		RS1/16S331J
R 4012		RS1/16SS105J
R 4013		RS1/16S391J
R 4015		RS1/16S473J
R 4018		RS1/16S101J
R 4022		RS1/16S0R0J
R 4024		RS1/16S333J
R 4025		RS1/16S101J
R 4026	(UC,EW model)	RS1/16S101J
R 4027		RS1/16S101J
R 4030		RS1/16S101J
R 4061		RS1/16S473J
R 4062		RS1/16S473J
R 4065		RS1/16S1002D
R 4066		RS1/16S1002D
R 4067		RS1/16S1002D
R 4068		RS1/16S5602F
R 4069		RS1/16S5602F
R 4070		RS1/16S5602F
R 4071		RS1/16S5602F
R 4072		RS1/16S5602F
R 4073		RS1/16S5602F
R 4074		RS1/16S102J
R 4075		RS1/16S102J
R 4076		RS1/16S102J
R 4077		RS1/16S0R0J
R 4078		RS1/16S0R0J
R 4079		RS1/16S0R0J
R 4080		RS1/16S0R0J
R 4083		RS1/16SS470J
R 4084		RS1/16S470J
R 4085		RS1/16SS471J
R 4086		RS1/16SS101J
R 4093		RS1/16S471J
R 4095		RS1/16S471J
R 4096		RS1/16SS222J
R 4097		RS1/16SS152J
R 4101		RS1/16S1502F
R 4102		RS1/16S1003F
R 4103		RS1/16S681J
R 4104		RS1/16S331J
R 4107		RS1/16S1002F
R 4108		RS1/16S331J
R 4109		RS1/16S391J
R 4110		RS1/16S391J
R 4111	(UC,EW model)	RS1/16S153J
R 4112	(UC,EW model)	RS1/16S104J
R 4113	(UC,EW model)	RS1/16S681J
R 4114	(UC,EW model)	RS1/16S331J
R 4118	(UC,EW model)	RS1/16S331J
R 4119	(UC,EW model)	RS1/16S391J
R 4120		RS1/16S391J
R 4121	(UC,EW model)	RS1/16S153J
R 4122	(UC,EW model)	RS1/16S104J
R 4123	(UC,EW model)	RS1/16S681J
R 4124	(UC,EW model)	RS1/16S331J
R 4128	(UC,EW model)	RS1/16S331J
R 4129	(UC,EW model)	RS1/16S391J
R 4130		RS1/16S391J
R 4131	(UC,EW model)	RS1/16S153J
R 4132	(UC,EW model)	RS1/16S104J
R 4133	(UC,EW model)	RS1/16S681J
R 4134	(UC,EW model)	RS1/16S331J
R 4138	(UC,EW model)	RS1/16S331J

Circuit Symbol and No.		Part No.
R 4139	(UC,EW model)	RS1/16S391J
R 4140		RS1/16S391J
R 4141	(UC,EW model)	RS1/16S105J
R 4142	(UC,EW model)	RS1/16S224J
R 4145	(UC,EW model)	RS1/16S1501F
R 4146	(UC,EW model)	RS1/16S5602F
R 4147	(UC,EW model)	RS1/16S3302F
R 4148	(UC,EW model)	RS1/16S1002F
R 4150		RS1/16S183J
R 4152		RS1/16S3901F
R 4153		RS1/16S1501F
R 4154		RS1/16S102J
R 4155		RS1/16S102J
R 4156		RS1/16S1501F
R 4157		RS1/16S3901F
R 4160		RS1/16S1002F
R 4161		RS1/16S1802F
R 4162		RS1/16S102J
R 4163		RS1/16S3901F
R 4164		RS1/16S1501F
R 4165		RS1/16S102J
R 4166		RS1/16S272J
R 4167		RS1/16S102J
R 4168		RS1/16S272J
R 4169		RS1/16S102J
R 4170		RS1/16S272J
R 4171		RS1/16S331J
R 4172		RS1/16S103J
R 4174		RS1/16S331J
R 4175		RS1/16S103J
R 4177		RS1/16S331J
R 4178		RS1/16S103J
R 4180		RS1/16S243J
R 4181		RS1/16S3002F
R 4182		RS1/16S223J
R 4183		RS1/16S1203F
R 4184		RS1/16S1602F
R 4185		RS1/16S1502F
R 4186		RS1/16S1002F
R 4187		RS1/16S1002F
R 4188		RS1/16SS101J
R 4189		RS1/16S153J
R 4190		RS1/16S100J
R 4191		RS1/16S153J
R 4192		RS1/16SS100J
R 4193		RS1/16S0R0J
R 4194		RS1/16S0R0J
R 4208		RS1/16SS101J
R 4209		RS1/16SS101J
R 4311		RS1/16S395J
R 4312		RS1/16S105J
R 4313		RS1/16SS393J
R 4314		RS1/16SS103J
R 4315		RS1/16SS203J
R 4316		RS1/16SS393J
R 4321		RS1/16SS121J
R 4322		RS1/16SS181J
R 4323		RS1/16SS121J
R 4324		RS1/16SS181J
R 4331	(EW model)	RS1/16SS151J

Circuit Symbol and No.		Part No.
R 4332	(EW model)	RS1/16SS151J
R 4333	(EW model)	RS1/16SS181J
R 4334	(EW model)	RS1/16SS181J
R 4335	(EW model)	RS1/16SS151J
R 4336	(EW model)	RS1/16SS151J
R 4337	(EW model)	RS1/16SS181J
R 4338	(EW model)	RS1/16SS181J
R 4339	(EW model)	RS1/16SS151J
R 4340	(EW model)	RS1/16SS151J
R 4341	(EW model)	RS1/16SS181J
R 4342	(EW model)	RS1/16SS181J
R 4343	(EW model)	RS1/16SS151J
R 4344	(EW model)	RS1/16SS151J
R 4345	(EW model)	RS1/16SS181J
R 4346	(EW model)	RS1/16SS181J
R 4351		RS1/16SS151J
R 4352		RS1/16SS151J
R 4353		RS1/16SS121J
R 4354		RS1/16SS121J
R 4355		RS1/16SS151J
R 4356		RS1/16SS151J
R 4357		RS1/16SS121J
R 4358		RS1/16SS121J
R 4359		RS1/16SS151J
R 4360		RS1/16SS151J
R 4361		RS1/16SS181J
R 4362		RS1/16SS181J
R 4363		RS1/16SS151J
R 4364		RS1/16SS151J
R 4365		RS1/16SS181J
R 4366		RS1/16SS181J
R 4451		RS1/16S101J
R 4452		RS1/16SS101J
R 4453		RS1/16SS101J
R 4454		RS1/16SS101J
R 4455		RS1/16S101J
R 4456		RS1/16SS103J
R 4483		RS1/16SS0R0J
R 4484		RS1/16SS0R0J
R 4485		RS1/16SS0R0J
R 4487		RS1/16SS0R0J
R 4488		RS1/16SS0R0J
R 4489		RS1/16SS0R0J
R 4490		RS1/16SS0R0J
R 4491		RS1/16SS0R0J
R 4492		RS1/16SS0R0J
R 4493		RS1/16SS0R0J
R 4495		RS1/16SS0R0J
R 4496		RS1/16SS471J
R 4497		RS1/16SS101J
R 4498		RS1/16S0R0J
R 4507		RS1/16SS0R0J
R 4692		RS1/16SS103J
R 4698		RS1/16SS102J
R 4699		RAB4CQ102J
R 4701		RS1/16SS101J
R 4702		RS1/16SS101J
R 4703		RS1/16SS101J
R 4704		RS1/16SS101J
R 4705		RS1/16SS471J

Circuit Symbol and No.		Part No.
R 4706		RS1/16SS471J
R 4707		RS1/16SS0R0J
R 4709		RS1/16SS102J
R 4710		RS1/16SS472J
R 4731		RS1/16S0R0J
R 4802		RS1/16S0R0J
R 4803		RS1/16S333J
R 4804		RS1/16S0R0J
R 4805		RS1/16S0R0J
R 4806		RS1/16S0R0J
R 4831		RS1/16S153J
R 4832		RS1/16S472J
R 4833		RS1/16S472J
R 4835		RS1/16S121J
R 4851		RS1/16S182J
R 4852		RS1/16S512J
R 4861		RS1/16S104J
R 4862		RS1/16S102J
R 4863		RS1/16S1102F
R 4864		RS1/16S2001F
R 4865		RS1/16S3302F
R 4866		RS1/16S2401F
R 4867		RS1/16S5602F
R 4868		RS1/16S2703F
R 4869		RS1/16S5602F
R 5001	(EW model)	RAB4CQ181J
R 5002		RAB4CQ151J
R 5003		RS1/16S473J
R 5004		RAB4CQ181J
R 5005		RS1/16S104J
R 5006		RS1/16S472J
R 5007		RS1/16S473J
R 5008		RS1/16S473J
R 5009		RS1/16S105J
R 5010		RS1/16S333J
R 5011		RS1/16S513J
R 5014		RS1/16S102J
R 5015		RS1/16S105J
R 5016		RS1/16S563J
R 5017		RS1/16S103J
R 5018		RS1/16S103J
R 5019		RS1/16S561J
R 5022		RS1/16SS181J
R 5023		RS1/16SS221J

CAPACITORS

C 4001		CKSRYB105K6R3
C 4002		CKSSYB104K10
C 4003		CKSSYB104K10
C 4004		CKSSYB104K10
C 4005		CKSSYB104K10
C 4006		CKSSYB104K10
C 4007		CKSSYB104K10
C 4008		CKSSYB104K10
C 4009		CKSSYB104K10
C 4010		CKSSYB104K10
C 4011		CKSSYB104K10
C 4012		CKSSYB104K10
C 4013		CKSRYB392K50
C 4015		CKSRYB105K6R3
C 4016		CKSSYB104K10
C 4017		CKSSYB104K10
C 4018		CKSRYB104K16
C 4019		CKSRYB104K16
C 4020		CKSRYB104K16
C 4021		CKSSYB104K10
C 4022		CKSRYB104K16
C 4023		CKSRYB104K16
C 4024		CKSRYB104K16
C 4025		CKSSYB104K10
C 4026		CKSSYB104K10
C 4027		CKSSYB104K10
C 4028		CKSSYB104K10
C 4029		CKSSYB104K10
C 4030		CKSRYB104K16
C 4031		CKSSYB104K10
C 4032		CKSSYB104K10
C 4033		CKSSYB104K10
C 4034		CKSSYB104K10
C 4035		CKSRYB103K50
C 4036		CCSRCH4R0C50
C 4037		CKSSYB104K10
C 4040		CKSSYB104K10
C 4042		CCSRCH181J50
C 4045		CCSRCH8R0D50
C 4046		CCSRCH8R0D50
C 4047		CKSSYB104K10
C 4048		CKSSYB104K10
C 4049		CKSSYB104K10
C 4050		CKSRYB105K6R3
C 4051		CKSSYB104K10
C 4052		CKSSYB104K10
C 4053		CCSRCH101J50
C 4054		CCSRCH101J50
C 4055		CKSRYB104K16
C 4061		CKSRYB104K16
C 4062		CKSRYB104K16
C 4063		CKSRYB104K16
C 4064		CSZS100M10
C 4068		CKSQYB225K10
C 4069		CKSQYB225K10
C 4070		CKSQYB225K10
C 4071		CSZS100M10
C 4073	(UC,EW model)	CCSSCH151J50
C 4074		CKSRYB105K6R3
C 4075		CKSRYB105K6R3
C 4101		CKSYB106K6R3
C 4102		CCSRCH470J50
C 4103		CCSRCH470J50
C 4104		CKSRYB104K16
C 4105		CSZS100M10
C 4111	(UC,EW model)	CKSYB106K6R3
C 4112	(UC,EW model)	CCSRCH470J50
C 4113	(UC,EW model)	CCSRCH470J50
C 4114	(UC,EW model)	CKSRYB104K16
C 4121	(UC,EW model)	CKSYB106K6R3
C 4122	(UC,EW model)	CCSRCH470J50
C 4123	(UC,EW model)	CCSRCH470J50
C 4124	(UC,EW model)	CKSRYB104K16

Circuit Symbol and No.		Part No.
C 4131	(UC,EW model)	CKSYB106K6R3
C 4132	(UC,EW model)	CCSRCH470J50
C 4133	(UC,EW model)	CCSRCH470J50
C 4134	(UC,EW model)	CKSRYB104K16
C 4140	(UC,EW model)	CKSQYB225K10
C 4141	(UC,EW model)	CKSRYB105K6R3
C 4142	(UC,EW model)	CKSRYB104K16
C 4143	(UC,EW model)	CSZS100M10
C 4144	(UC,EW model)	CKSRYB104K16
C 4145	(UC,EW model)	CKSRYB104K16
C 4151		CSZSR220M16
C 4152		CKSRYB103K50
C 4153		CCSRCH4R0C50
C 4154		CCSRCH4R0C50
C 4155		CCSRCH4R0C50
C 4156		CKSRYB104K16
C 4160		CKSRYB104K16
C 4161		CKSRYB104K16
C 4162		CKSRYB104K16
C 4163		CKSQYB225K10
C 4164		CKSQYB225K10
C 4165		CKSQYB225K10
C 4166		CKSRYB104K16
C 4167		CKSRYB104K16
C 4168		CKSRYB104K16
C 4169		CKSRYB103K50
C 4170		CSZSR220M16
C 4171		CSZSR220M16
C 4181		CSZSR220M16
C 4182		CKSRYB104K16
C 4183		CSZSR4R7M16
C 4184		CKSRYB104K16
C 4186		CKSRYB104K16
C 4188		CKSRYB104K16
C 4311		CKSRYB224K10
C 4312		CKSRYB104K16
C 4313		CKSRYB104K16
C 4314		CKSRYB104K16
C 4315		CKSRYB104K16
C 4321		CKSRYB104K16
C 4322		CKSRYB104K16
C 4401		CKSSYB102K50
C 4402		CKSSYB102K50
C 4403		CKSSYB102K50
C 4404		CKSSYB102K50
C 4451	10µF	CCG1138
C 4452	10µF	CCG1138
C 4454		CKSRYB104K16
C 4691		CKSRYB104K16
C 4701		CSZSR330M10
C 4702		CKSRYB104K16
C 4731		CKSRYB104K16
C 4732		CKSRYB104K16
C 4801		CSZSR4R7M16
C 4802		CKSRYB104K16
C 4803		CSZS100M10
C 4804		CKSRYB104K16
C 4805		CSZSR330M10
C 4806		CKSRYB104K16
C 4807		CSZSR33M25

Circuit Symbol and No.		Part No.
C 4808		CKSRYB104K25
C 4809		CKSSYB104K10
C 4810		CKSSYB104K10
C 4831		CKSSYB104K10
C 4832		CKSRYB104K25
C 4835		CKSRYB104K16
C 4836		CKSRYB104K16
C 4841		CKSRYB105K6R3
C 4843		CSZS100M10
C 4844		CKSRYB104K16
C 4851		CKSRYB104K16
C 4852	68µF/6.3V	CCH1440
C 4853		CKSRYB104K16
C 4854		CKSRYB104K16
C 4855	10µF	CCG1138
C 4856		CKSRYB332K50
C 4858	10µF	CCG1138
C 4859		CKSRYB104K16
C 4860		CKSYB106K6R3
C 4861		CKSYB106K6R3
C 4862		CCSRCH100D50
C 4863		CKSRYB683K16
C 4864		CKSRYB104K16
C 4865		CKSRYB471K50
C 4866		CKSRYB224K16
C 4867		CKSRYB104K16
C 4868		CKSRYB104K16
C 4869		CKSRYB104K16
C 4870		CKSRYB224K16
C 4871		CKSRYB224K16
C 4872		CKSRYB104K16
C 4873		CKSQYB105K16
C 4874		CKSQYB474K25
C 4875		CKSRYB104K16
C 4876		CKSQYB474K25
C 4877		CKSQYB105K16
C 4878		CKSRYB104K16
C 4879	22µF/12V	CCH1359
C 4881		CKSRYB104K25
C 4882		CKSRYB104K16
C 4883		CKSRYB104K16
C 4884		CKSRYB104K16
C 4885	68µF/6.3V	CCH1440
C 4886		CKSRYB104K16
C 4887		CKSRYB104K16
C 5001		CKSRYB104K16
C 5002		CKSRYB105K6R3
C 5005		CKSRYB105K6R3
C 5006		CKSRYB104K16
C 5007		CKSRYB105K6R3
C 5008		CKSQYB335K6R3
C 5011		CKSRYB332K50
C 5012		CKSRYB105K6R3
C 5013		CKSRYB152K50
C 5014		CKSRYB104K16
C 5015		CKSRYB473K50
C 5016		CKSRYB103K50
C 5017		CFHSQ221J50
C 5018		CKSRYB473K50
C 5019	10µF	CCG1138

Circuit Symbol and No.		Part No.
C 5020	10µF	CCG1138
C 5021		CKSQYB105K16
C 5022		CKSQYB105K16
C 5023	22pF	CCG1140
C 5024		CKSRYB223K50

Keyboard Unit
Consists of
Grille PCB
Panel PCB

LM

Unit Number:CWM8766

(UC,RC,RD model)

Unit Number:CWM8765(EW model)

Unit Name:Keyboard Unit

MISCELLANEOUS

IC 5501	HIC	RS-140
D 5501	Diode(EW model)	DAN202U
D 5502	LED	CL190UBX
D 5503	LED	CL190UBX
D 5504	LED	CL-195PG-CD
D 5505	LED	CL-195PG-CD
D 5506	LED(EW model)	CL-195SR-CD
D 5507	LED(EW model)	CL-195SR-CD
D 5508	LED(EW model)	CL-195SR-CD
D 5509	LED	CL-195PG-CD
D 5510	LED	CL-195PG-CD
D 5512	LED(EW model)	CL-195SR-CD
D 5513	LED	CL-195PG-CD
D 5514	LED(EW model)	CL-195SR-CD
D 5515	LED	CL-195PG-CD
D 5516	LED	CL-195PG-CD
D 5517	LED(EW model)	CL-195SR-CD
D 5518	LED	CL-195PG-CD
D 5519	LED(EW model)	CL-195SR-CD
D 5520	LED(EW model)	CL-195SR-CD
D 5521	LED	CL-195PG-CD
D 5522	LED	CL-195PG-CD
D 5523	LED(EW model)	CL-195SR-CD
D 5524	LED	CL-195PG-CD
D 5525	LED(EW model)	CL-195SR-CD
D 5526	LED	CL-195PG-CD
D 5527	Diode	UDZS6R8(B)
D 5528	LED(EW model)	CL-195SR-CD
D 5529	LED	CL-195PG-CD
D 5530	LED	CL-195PG-CD
D 5531	LED	CL-195SR-CD
D 5532	LED(EW model)	CL-195SR-CD
D 5534	LED	CL-195PG-CD
D 5535	LED(EW model)	CL-195SR-CD
D 5901	LED	SML-010VT
S 5501	Push Switch	CSG1111
S 5502	Push Switch	CSG1111
S 5503	Push Switch	CSG1111
S 5504	Push Switch	CSG1111
S 5505	Push Switch	CSG1111

Circuit Symbol and No.		Part No.
S 5506	Push Switch	CSG1111
S 5507	Push Switch	CSG1111
S 5508	Push Switch	CSG1111
S 5509	Push Switch	CSG1111
S 5510	Encoder(Volume)	CSD1094
S 5511	Switch(Joystick)	CSX1047
S 5901	Push Switch	CSG1111

RESISTORS

R 5501	(UC,RC,RD model)	RS1/16S470J
R 5503		RS1/16S122J
R 5504		RS1/16S202J
R 5505		RS1/16S392J
R 5506		RS1/16S123J
R 5508		RS1/16S181J
R 5509		RS1/16S181J
R 5510		RS1/16S151J
R 5511		RS1/16S151J
R 5512	(EW model)	RS1/16S181J
R 5514		RS1/16S122J
R 5515		RS1/16S202J
R 5516		RS1/16S392J
R 5517	(EW model)	RS1/16S181J
R 5519	(EW model)	RS1/16S181J
R 5520		RS1/16S181J
R 5521		RS1/16S181J
R 5522		RS1/16S151J
R 5524		RS1/16S151J
R 5525		RS1/16S472J
R 5527	(EW model)	RS1/16S181J
R 5528	(EW model)	RS1/16S181J
R 5530		RS1/16S181J
R 5531		RS1/16S181J
R 5532		RS1/16S181J
R 5533		RS1/16S151J
R 5534		RS1/16S151J
R 5535		RS1/16S121J
R 5536		RS1/16S181J
R 5537	(EW model)	RS1/16S181J
R 5538		RS1/16S181J
R 5539	(EW model)	RS1/16S181J
R 5540		RS1/16SS474J
R 5541		RS1/16S151J
R 5542	(EW model)	RS1/16S181J
R 5543		RS1/16S151J
R 5544		RS1/16S0R0J
R 5546		RS1/16S181J
R 5547		RS1/16SS472J
R 5548		RS1/16SS562J
R 5549		RS1/16SS471J
R 5550		RS1/16SS472J
R 5551		RS1/16SS102J
R 5552		RS1/16SS472J
R 5553		RS1/16SS472J
R 5554		RS1/16SS472J
R 5555		RS1/16SS153J
R 5556		RS1/16S181J
R 5557		RS1/16SS472J
R 5558		RS1/16S221J

Circuit Symbol and No.		Part No.
R 5559		RS1/16S151J
R 5560	(EW model)	RS1/16S181J
R 5561		RS1/16S221J
R 5562		RS1/16S151J
R 5563		RS1/16S101J
R 5564	(EW model)	RS1/16S181J
R 5565		RS1/16S181J
R 5566		RS1/16S181J
R 5567	(EW model)	RS1/16S181J
R 5568		RS1/16S181J
R 5569		RS1/16S151J
R 5570		RS1/16S151J
R 5571		RS1/16S271J
R 5572		RS1/16S271J
R 5573		RS1/16S181J
R 5574	(EW model)	RS1/16S181J
R 5575		RS1/16S181J
R 5576		RS1/16S151J
R 5577		RS1/16S151J
R 5578	(EW model)	RS1/16S221J
R 5579	(EW model)	RS1/16S221J
R 5580	(EW model)	RS1/16S181J
R 5581	(EW model)	RS1/16S221J
R 5584		RS1/16SS0R0J
R 5585		RS1/16S390J
R 5904		RS1/16S151J

CAPACITORS

C 5509		CSZSQ100M6R3
C 5514		CKSRYB104K16
C 5515		CKSRYB104K16
C 5516		CKSRYB104K16

N

Unit Number:CZW3087
Unit Name:Main Unit

MISCELLANEOUS

IC 3801	IC	BA00AST
IC 3802	IC	BA6247FP
IC 3803	IC	TA78L05F
IC 3804	IC	TC7S14FU
IC 3805	Photo-interrupter	GP2L24B
Q 3801	Transistor	DTC124EU
Q 3802	Transistor	2SA1037K
Q 3803	Transistor	DTC124EU
Q 3804	Transistor	UMD2N
D 3801	Diode	UDZS5R6(B)
D 3802	Diode	1SS355
L 3801	Inductor	LCTA150J2520
L 3802	Inductor	LCTA150J2520

RESISTORS

R 3801		RS1/16S103J
R 3802		RS1/16S222J
R 3803		RS1/16S471J
R 3804		RS1/16S102J
R 3805		RS1/16S102J

Circuit Symbol and No.	Part No.
R 3806	RS1/16S102J
R 3807	RS1/16S102J
R 3808	RS1/16S103J
R 3809	RS1/16S222J
R 3810	RS1/16S222J
R 3811	RS1/16S102J
R 3812	RS1/16S102J
R 3813	RS1/16S472J
R 3814	RS1/16S102J
R 3815	RS1/16S0R0J
R 3816	RS1/16S0R0J
R 3817	RS1/16S0R0J
R 3818	RS1/16S473J
R 3819	RS1/16S0R0J
R 3821	RS1/16S473J
R 3822	RS1/16S512J
R 3823	RS1/16S0R0J

CAPACITORS

C 3801	CKSQYB105K16
C 3802	CKSQYB105K16
C 3803	CKSRYB104K16
C 3804	CKSRYB104K16
C 3805	CKSRYB104K16
C 3806	CKSRYB223K50
C 3807	CKSRYB223K50
C 3808	CEVW101M16
C 3809	CEVW101M16
C 3810	CKSRYB104K16
C 3811	CEVW100M16
C 3812	CKSRYB104K16
C 3813	CKSRYB102K50
C 3815	CKSQYB104K50
C 3819	CEVW101M16

O

Unit Number:CZW3088
Unit Name:SW Unit

S 3831	Spring Switch(ANGLE)	CSN1052
S 3832	Spring Switch(LIFT)	CSN1052

P

Unit Number:CZW3089
Unit Name:Volume Unit

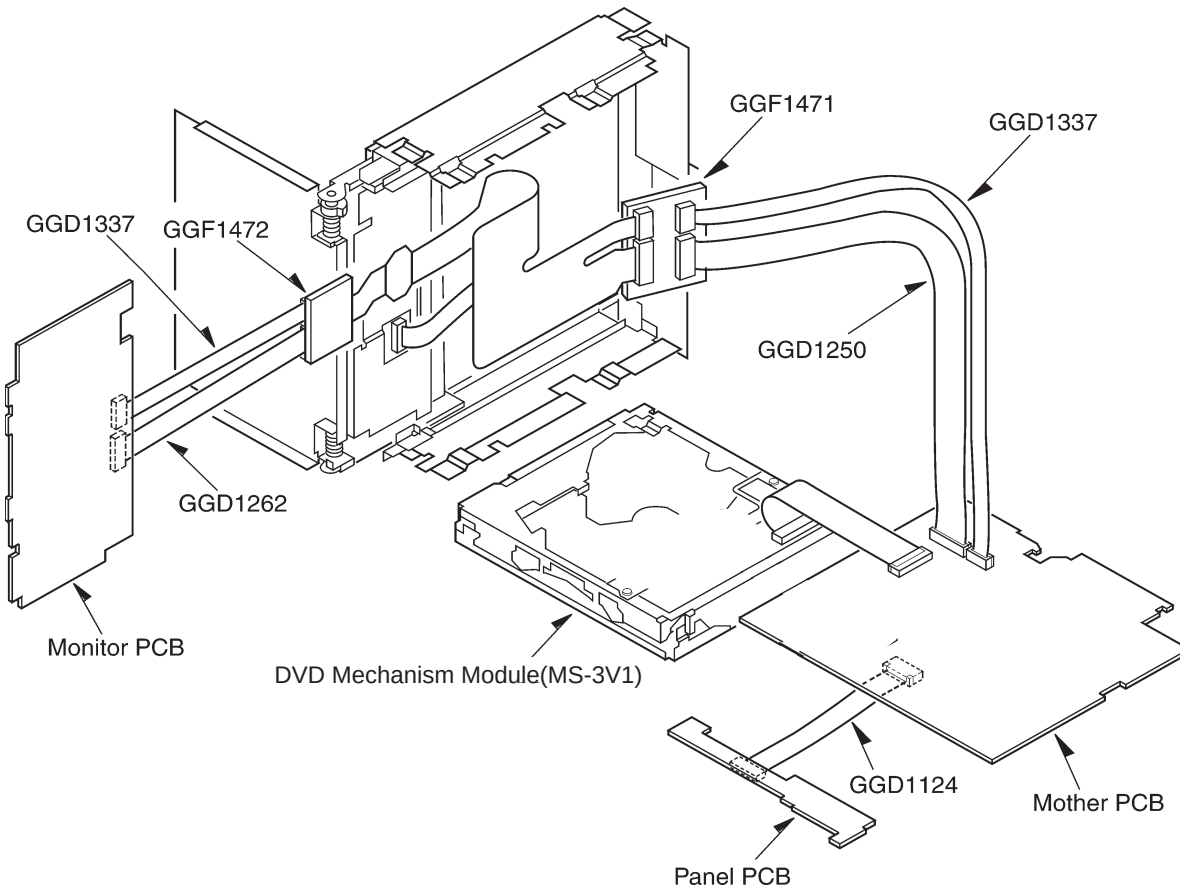
VR3841	Volume(Angle sense)	CCW1025

Miscellaneous Parts List

	Pickup Unit(Service)	CXX1770
M 1	Motor Unit(LOADING)	CXB8687
M 2	Motor Unit(CARRIAGE)	CXB8688
M 3	Motor(SPINDLE)	CXM1272
M 1001	Fan Motor(REAR)	CXM1262
M 1002	Fan Motor(CENTER)	CXM1276
M 3001	Motor Unit(Position)	CXB9515
M 3002	Motor Unit(Angle)	CXB9516

6. ADJUSTMENT

6.1 JIG CONNECTION DIAGRAM



Function Name		Jig No.
Mother PCB(CN501) <-> Main Unit(CN3801)	PCB	GGF1471
Mother PCB(CN501) <-> GGF1471	50P FFC	GGD1250
Mother PCB(CN502) <-> GGF1471	24P FFC	GGD1337
Mother PCB(CN501,CN502) <-> Monitor PCB(CN4461,CN4481)	PCB	GGF1472
Monitor PCB(CN4461) <-> GGF1472	33P FFC	GGD1262
Monitor PCB(CN4481) <-> GGF1472	24P FFC	GGD1337
Mother PCB(CN601) <-> Panel PCB(CN5901)	17PFFC	GGD1124

6.2 DVD ADJUSTMENT

1) Precautions

This product uses 5V and 3.3V as standard voltages. The electrical potential that is the reference for signals, is not GND, but VREF (approximately 2.2V) and VHALF (approximately 1.65V).

During product adjustments, if the reference voltage is mistakenly taken as GND, and a grounding contact is made, not only would it be impossible to measure the accurate electrical potential, but also the servo motor would malfunction, resulting in the application of a strong impact on the pick up. The following precautionary measures should be strictly adhered to, in order to avoid such problems.

The reference voltage and GND should not be confused when using the minus probe of a measurement device. When an oscilloscope is being used special care should be taken to make sure that the reference voltage is not connected to the probe of ch1 (on the minus side), while the probe of ch2 (on the minus side), is connected to GND. Further, since the body frame of most measurement devices have the same electrical potential as the minus side of the probe, the body frame of the measurement device should be set to floating ground.

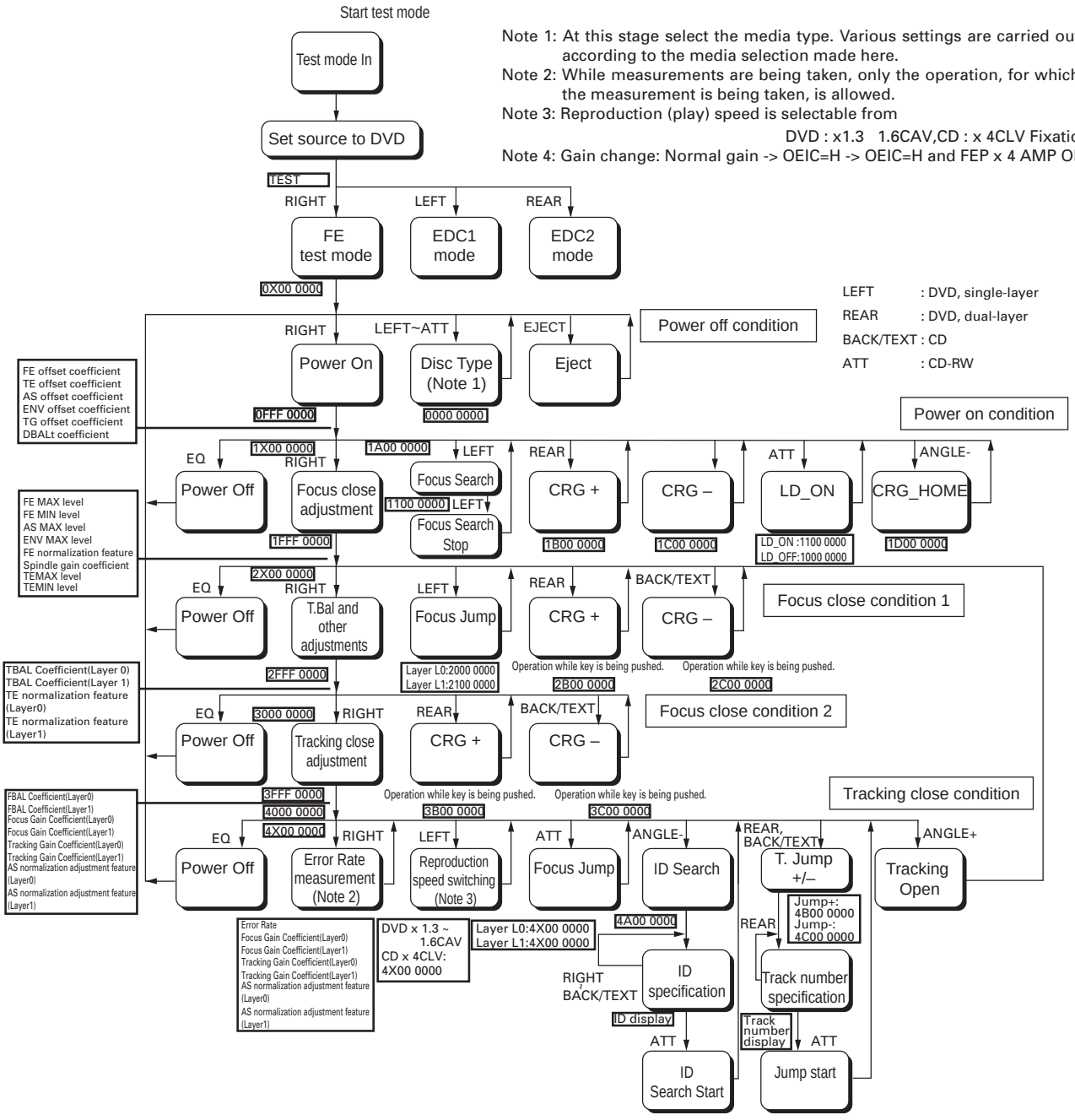
If the reference voltage is connected to GND by mistake, turn the regulator OFF immediately, or turn the power OFF.

- Remove the filters and wires used for measurements only after the regulator has been turned OFF.
- After the power supply is turned on, regulator ON the following adjustment and measurement are promptly done.
- Whenever the product is in the test mode, the software will not take any protective action. For this reason, special care should be taken to make sure that no mechanical or electrical shock could be applied to the product when taking measurements in the test mode.
- Whenever the EJECT key is pressed to eject the disk, no other keys, other than the EJECT key, should be pressed until the disk eject action has been completed.
- Press the EJECT key only after the disk has stopped completely.
- If the product hangs up turn the power OFF immediately.
- Laser didoes may be damaged, if the volume switch for the laser power adjustment of the pick up unit, is turned.

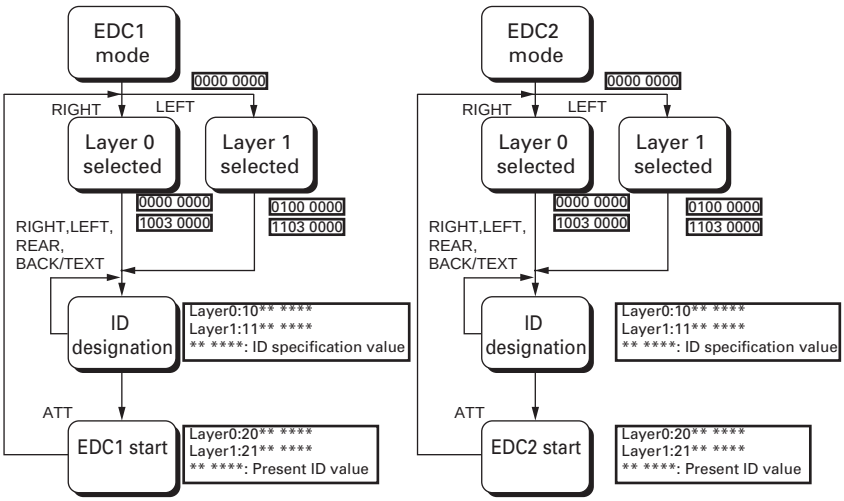
Attention)

- Test mode starting procedure
  ACC ON while pressing the BAND/ESC and ANGLE- keys together.
- Test mode stopping procedure
  ACC and Backup OFF.

● Front-End test mode flow chart



Note 1: At this stage select the media type. Various settings are carried out according to the media selection made here.
Note 2: While measurements are being taken, only the operation, for which the measurement is being taken, is allowed.
Note 3: Reproduction (play) speed is selectable from
DVD : x1.3 1.6CAV,CD : x 4CLV Fixation
Note 4: Gain change: Normal gain -> OEIC=H -> OEIC=H and FEP x 4 AMP ON



F-close and F-search cannot be executed, unless LD-ON is set.
[If F-close isn't executed within 9 seconds after LD-ON, it switches to LD-OFF automatically.
And even if F-search is executed within 9 seconds after LD-ON, it also switches to LD-OFF.]
Please carry out F-close after carrying out power-off at once and carrying out power-on again, when carrying out F-close after performing F-search.

The track number designation is selected from the track numbers already prepared for selection.
Switching to cyclic operation is made at step REAR, and the decision is finalized (entered) in step ATT.

For CD: Tracks 1, 4, 10, 11 and 32.

For DVD: Tracks 1, 4, 10, 11, 32, 64 and 100.

Method for designating an ID address:

- A number of digits are determined through commands RIGHT and LEFT. Numerical UP/DOWN operations are performed through commands REAR and BACK/TEXT. The decision is finalized (entered) with command ATT.

Display

Error Code List

Error status from DVD micurocomputer	Contents	Display
0X50	Mecha. error	No dislay
0X40	No disc	No dislay
0X30	The temperature is abnormal	Thermal Protection in Motion
0X20	Read error	Error-02-XX
0XE2	Non-playable disc	NON-PLAYABLE DISC
0X90	Different region disc	DIFFERENT REGION DISC
0XFF	Undefined error	Error-FF

Error code of read error(Part of XX)

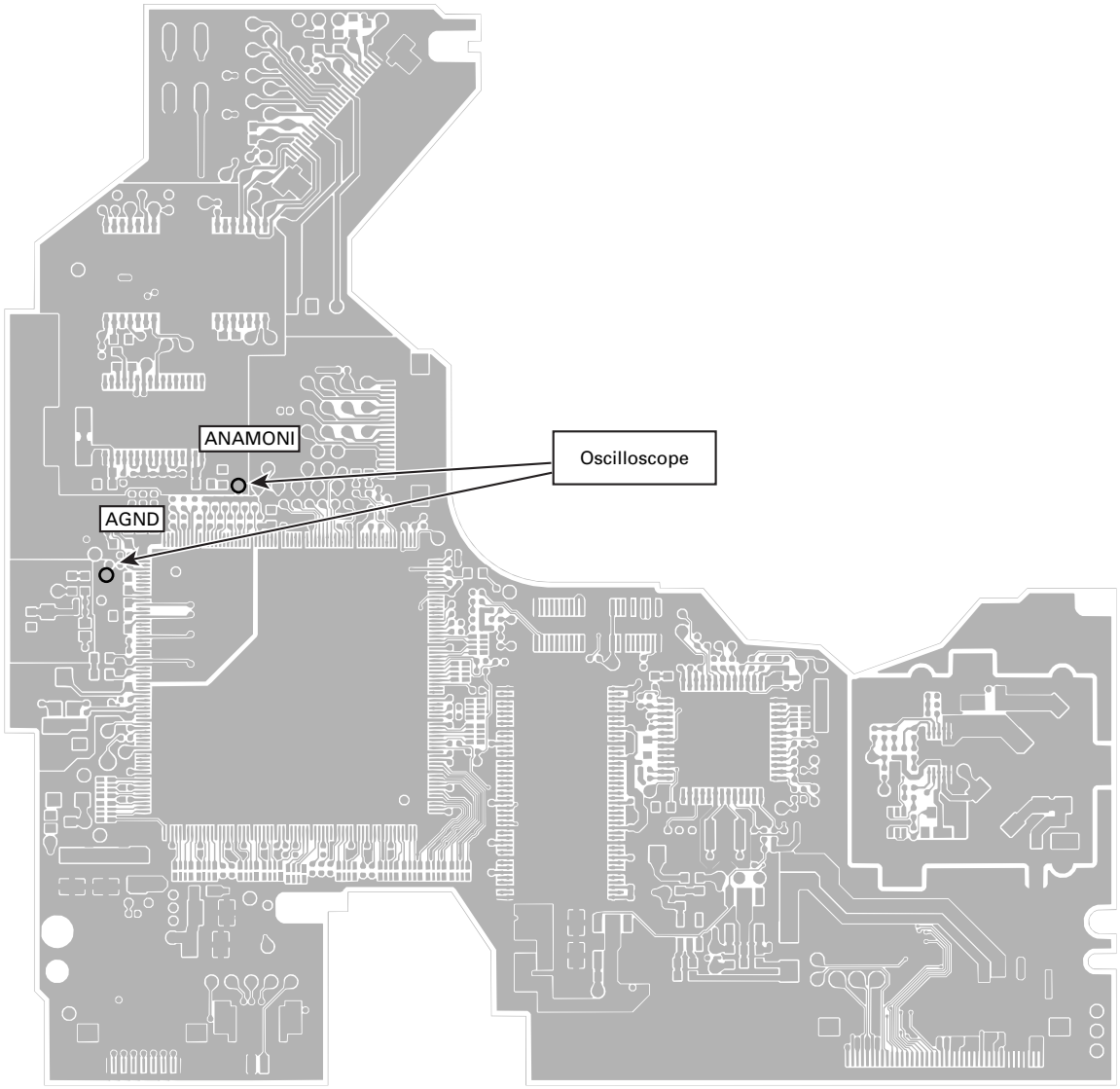
Error Code	Contents	Display
0X99	Data cannot read	Please confirm the disc
0X80	The address cannot be found	Please confirm the disc
0X90	Focus error	Please confirm the disc
0X91	Spindle lock NG	DVD is stopping because mechanism detected abnormality
0X92	Carrige home NG	DVD is stopping because mechanism detected abnormality
0X93	FOK error	Please confirm the disc
0X94	ID/Subcode cannot be read	Please confirm the disc
0X95	High spindle rotation	Please confirm the disc
0X96	Row spindle rotation	DVD is stopping because mechanism detected abnormality
0X98	TOC cannot be found	Please confirm the disc
0X9A	AV chip error	DVD is stopping because mechanism detected abnormality
0X9B	RecaveryNG(BE)	DVD is stopping because mechanism detected abnormality

●Skew adjustment

If any of the following replacements have been performed on the system, adjustments for pick up, must be conducted:

1. Pick up unit replacement
2. Spindle motor replacement
3. Carriage chassis replacement
4. Pick up unit main shaft replacement
5. Pick up unit sub-shaft replacement

Measurement device and tools : Oscilloscope
Allen key wrench
40-pin flexible extension (GGD1170)
Disk used : GGV1018
Measurement reference : AGND3
Measurement point : ANAMONI
Connection diagram
DVD core unit



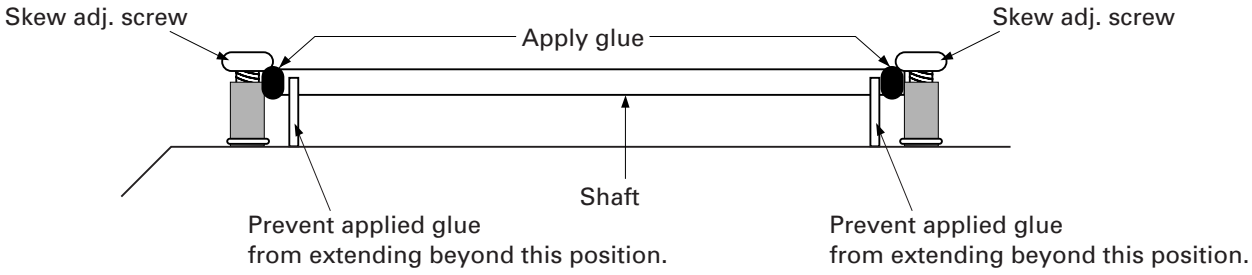
Symptoms in case of poor adjustment: Error efficiency deteriorated: 10^{-3} (Optimum value: 10^{-4} or lower)
High jitter of the RF signal RF waveform deformed
Unstable operation in tracking closing and servo control

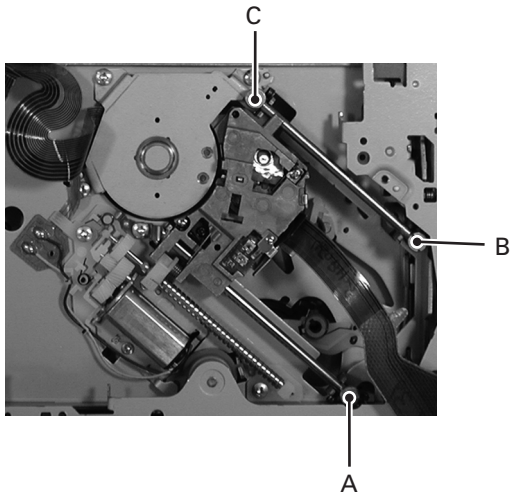
Caution: Avoid exposing your eyes to laser beams for a long time.

Preparation for adjustment: Clean both ends of the shafts.
Use brand new skew screws supplied with the service kit CXX1639.

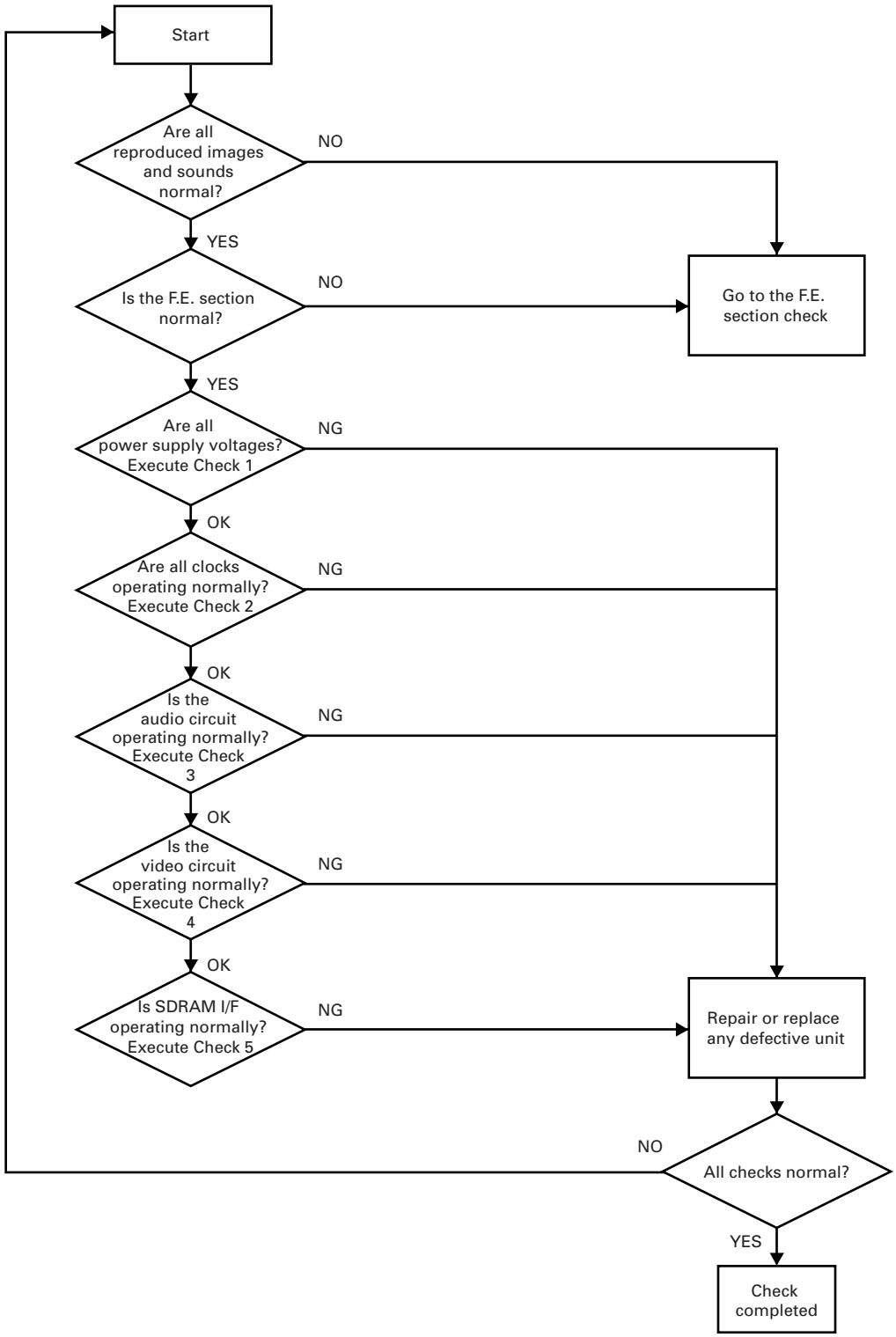
Procedures:

1. Place the DVD mechanism module upside down.
2. After replacing the pickup (by referring to the procedures of "Removing the Pickup."), roughly adjust the three skew screws through visual check so that the pickup is mounted in parallel to the CRG chassis around the inner and outer tacks.
3. Connect an oscilloscope as shown in the connecting diagram.
4. Turn on the power of the product. Load the test disc (GGV1018).
5. In the front-end test mode, set the disc type to DVD layer 1. Then, turn on the power. Move the pickup toward the inner tracks.
6. Turn on the laser diodes.
7. With the focus servo closed, complete all automatic adjustments. Close the tracking servo, and then complete all automatic adjustments.
8. Observing the RF waveform on the oscilloscope, slightly turn the skew adj. screw C to maximize the RF level. Next, move the pickup toward the outer track. Slightly turn the skew adj. B to maximize the RF level. Furthermore, turn the skew adj. screws A and B in the same direction keeping their rotating angles the same until the RF level becomes the maximum. Lastly, move the pickup toward the inner tracks. Turn the skew adj. screw C so that the RF level becomes the maximum.Repeat the step 8 three times.
9. Turn off the power in the test mode. After confirming that the disc has stopped, eject the disc.
10. Adjust with a screw rock the shaft and skew adjustment screw to the same state as initial one.





Back end section check flow chart



Check 1 : Are all power supply voltages?

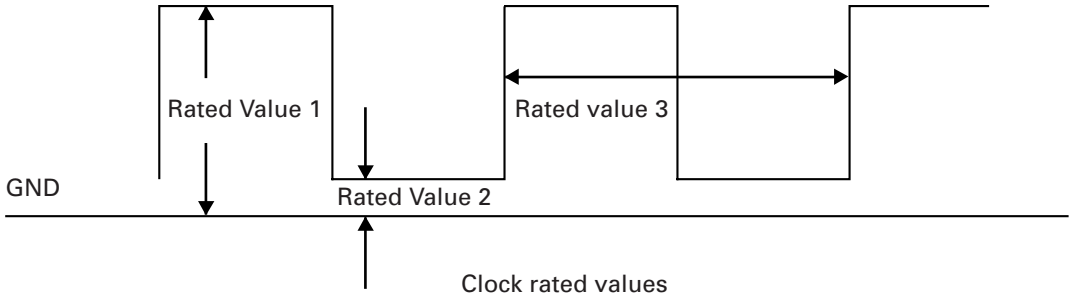
Reproduce DVD-REF-A1 Title 1.
Verify the voltage of the sensing pin.

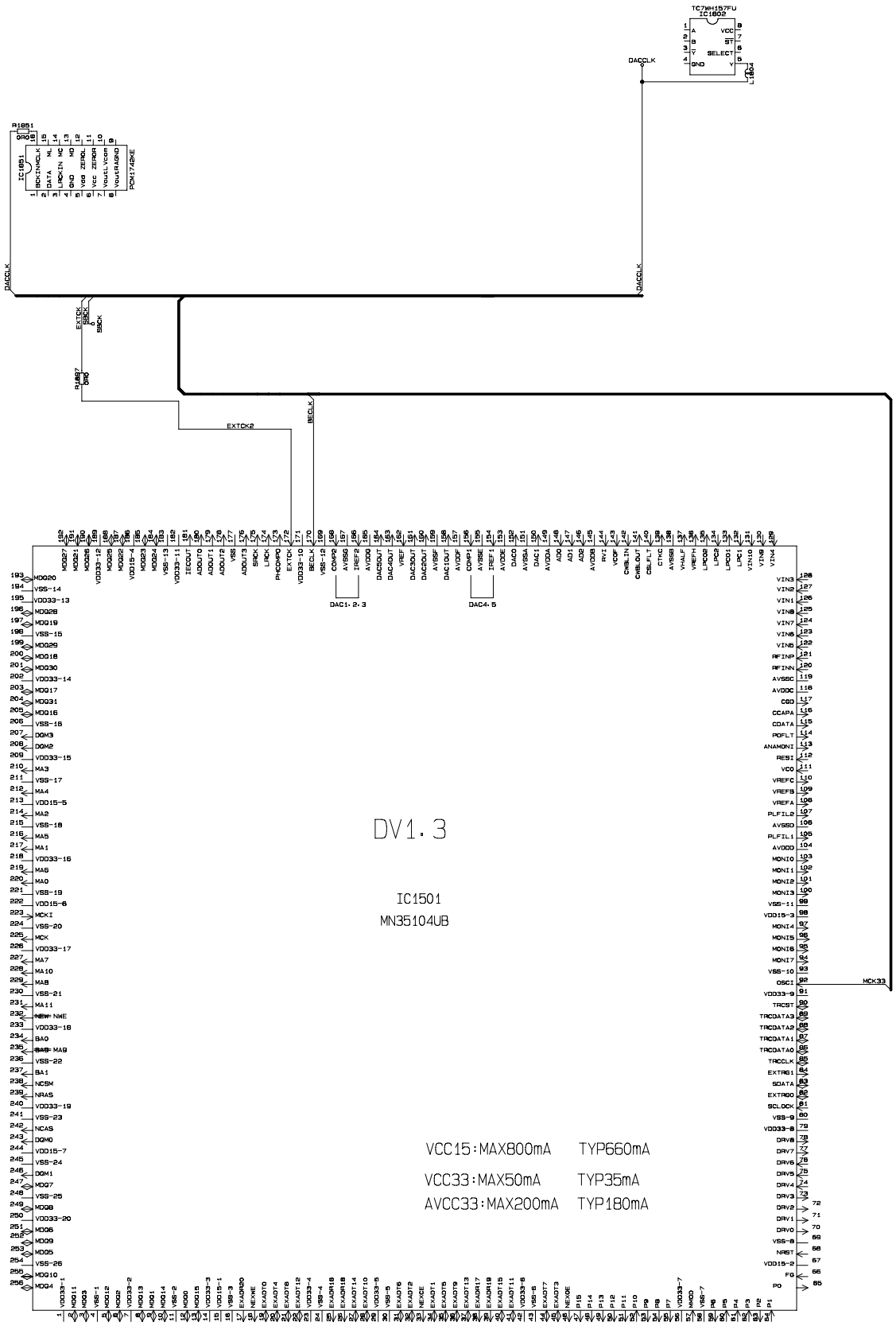
No.	Verification location	Rated value	Unit
1	VD8_1/2 – PGND_1/2	8.0 ± 0.4	V
2	VDD33 – DGND1/2/3	3.3 ± 0.15	V
3	SRVDD – DGND1/2/3	3.3 ± 0.15	V
4	VCC5_1 – AGND1	5.0 ± 0.1	V
5	AVCC5_1 – AGND1	5.0 ± 0.1	V
6	VCC33_1/2 – DGND1/2/3	3.3 ± 0.15	V
7	VCC33_3/4/5 – DGND1/2/3	3.3 ± 0.3	V
8	VCC15_1/2 – DGND1/2/3	1.5 ± 0.1	V
9	VCC18 – DGND1/2/3	****	V

Check 2 : Are all clock operating normally?

Reproduce DVD-REF-A1 Title 1
Check Circuit Diagram ①.
Checks are to conducted with a GND reference.
If locations listed under "verification location 2", can be verified, there will be no need to perform verifications for the locations listed under "verification location 1."
If the result is not satisfactory, check to see if there are any problems with the resin flux cored solder and other defects in the applicable line, vicinity of IC 1802 (Circuit Diagram ①) and peripheral components.

No.	Verification location 1 (Sensing pin)	Verification location 2	Media	Rated value 1	Rated value 2	Rated value 3
1	BECLK	IC1501 170pin	ALL	2.3V ～ VCC33	GND ～ 0.8V	27MHz ± 50ppm
2	EXTCK	IC1501 172pin	DVD	2.3V ～ VCC33	GND ～ 0.8V	36.8640MHz ± 300ppm
3	EXTCK	IC1501 172pin	CD	2.3V ～ VCC33	GND ～ 0.8V	33.8688MHz ± 300ppm
4	MCK33	IC1501 92pin	ALL	2.2V ～ VCC33	GND ～ 0.8V	33.898MHz ± 300ppm
5	DACCLK	IC1851 16pin	DVD	2.0V ～ VCC33	GND ～ 0.8V	33.8688MHz ± 300ppm
6	DACCLK	IC1881 3pin	DVD	2.3V ～ VCC33	GND ～ 0.99V	33.8689MHz ± 300ppm



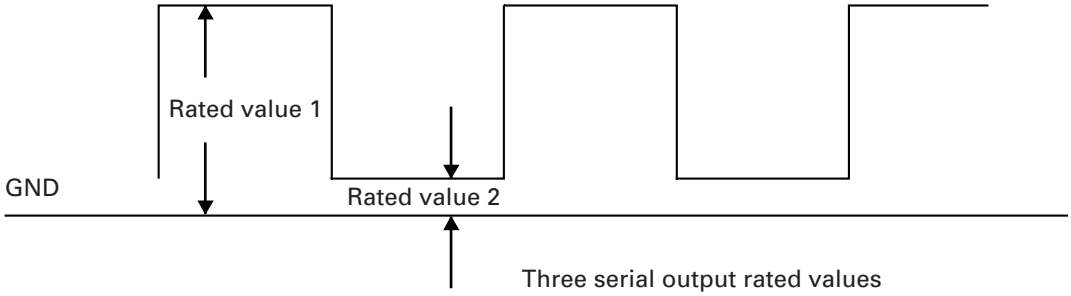


Circuit Diagram ①

Check 3 : Is the audio circuit operating normally?

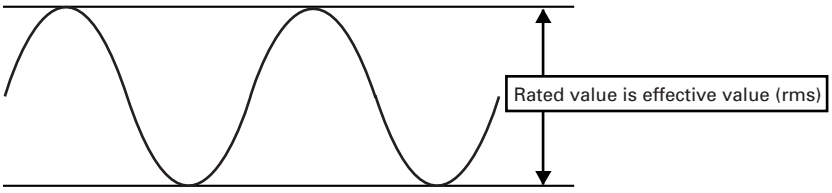
Reproduce DVD-REF-A1 Title 2 Chapter (48k/16-bit 1 kHz/0dB).
Checks are to be conducted using GNDAU1 (sensing pins) as a reference.
If the locations, listed under "verification location 2", can be verified, there is no need to conduct verifications for the locations listed under "verification location 1."
If the result is not satisfactory, check to see if there are any problems with resin flux cored solder and other defects in the applicable line, vicinity of major parts stated in the above diagram (Circuit Diagram ②) and peripheral components.

No.	Verification location 1 (Sensing pin)	Verification location 2	Rated value 1	Rated value 2	Reference waveform
1	AOUT0	IC1851 2pin	2.0V and over	0.8V and lower	Waveform 1
2	SRCK	IC1851 1pin	2.0V and over	0.8V and lower	Waveform 1
3	LRCK	IC1851 3pin	2.0V and over	0.8V and lower	Waveform 1

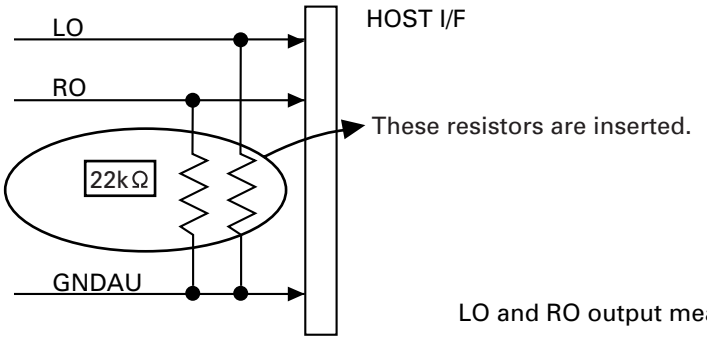


Checks are conducted with the measurement circuit below.

No.	Verification location 1 (Sensing pin)	Verification location 2	Rated value (rms)	Reference waveform
4	LO	CN1901 37pin	1100±150mV	Waveform 2
5	RO	CN1901 35pin	1100±150mV	Waveform 2

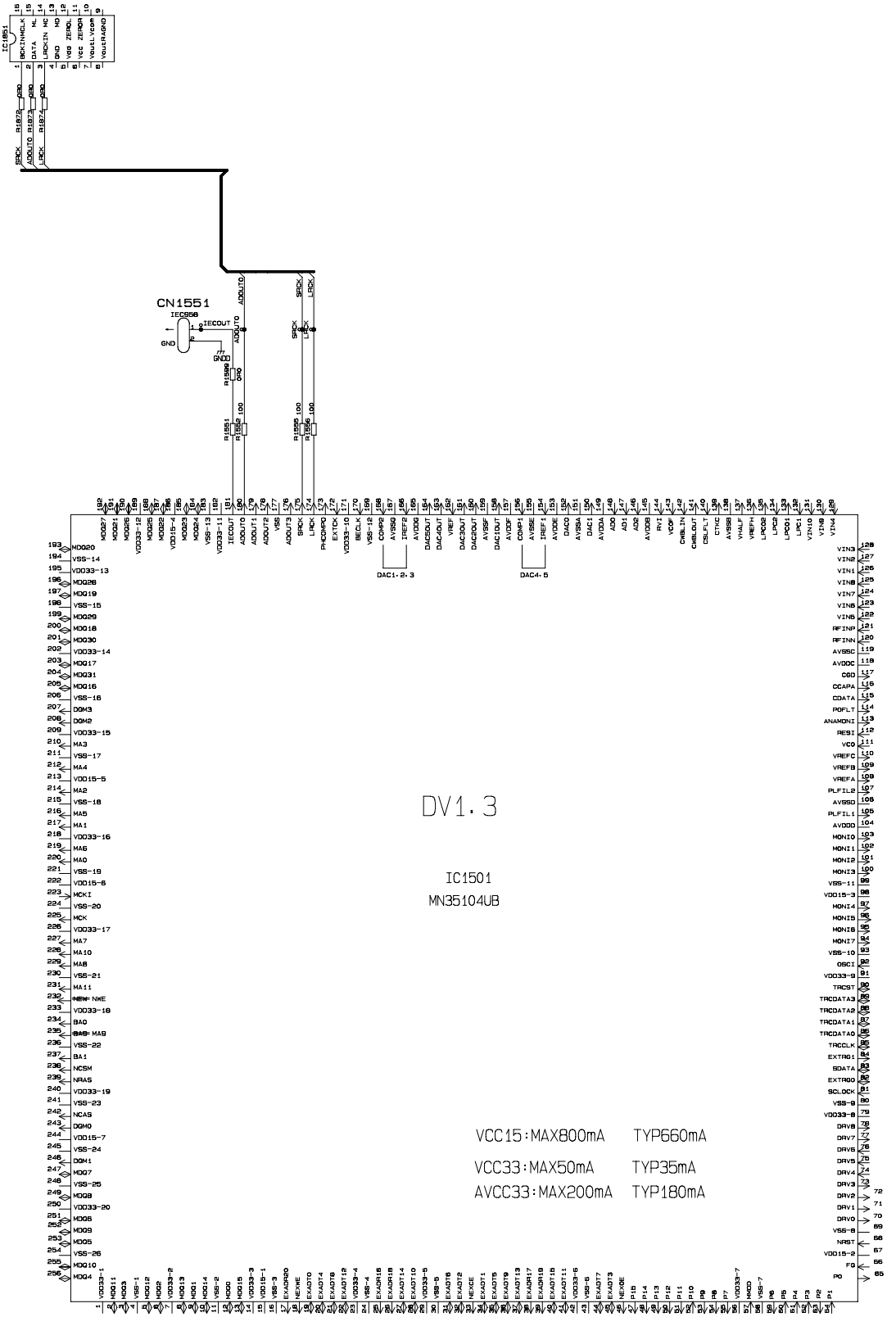


Analog audio outputs (LO and RO) rated values



LO and RO output measurement circuit

No.	Verification location 1 (Sensing pin)	Verification location 2	Rated value 1	Rated value 2	Reference waveform
6	IEC958	CN1551 1pin	VCC33V−0.6V and over	0.4Vand lower	Waveform 3



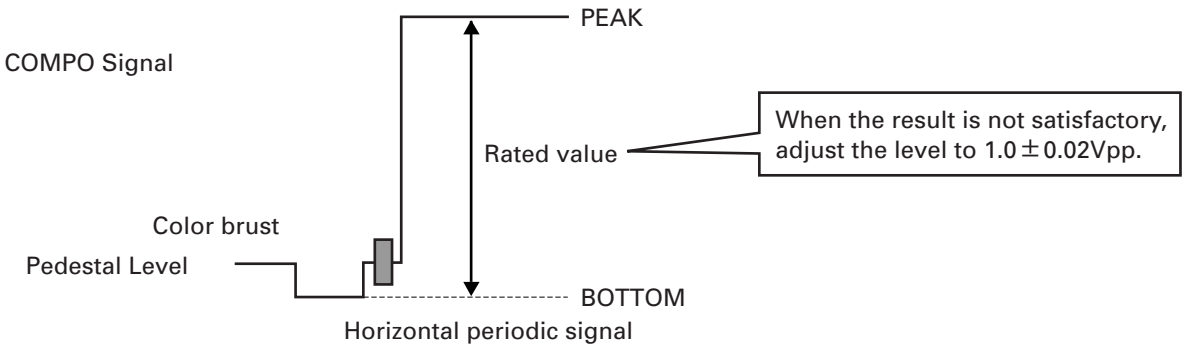
Circuit Diagram ②

Check 4 : Is the video circuit operated normally?

Reproduce DVD-REF-A1 Title 2 Chapters (White 1000IRE)
Monitor the output with the oscilloscope, by setting the COMPO signal to a GND reference.
Set the Trigger mode to the TV trigger, and the Trigger line to line-150.

No.	Verification location 1 (Sensing pin)	Rated value	Reference waveform
1	COMPO	1.0±0.02Vpp	Waveform 4

If the result is not satisfactory, check to see if there are any problems with resin flux cored solder and other defects in the applicable line, vicinity of major parts stated in the above diagram (Circuit Diagram③) and peripheral components.



Composite signal white 100% output waveform

< Method of Readjusting Video Levels >

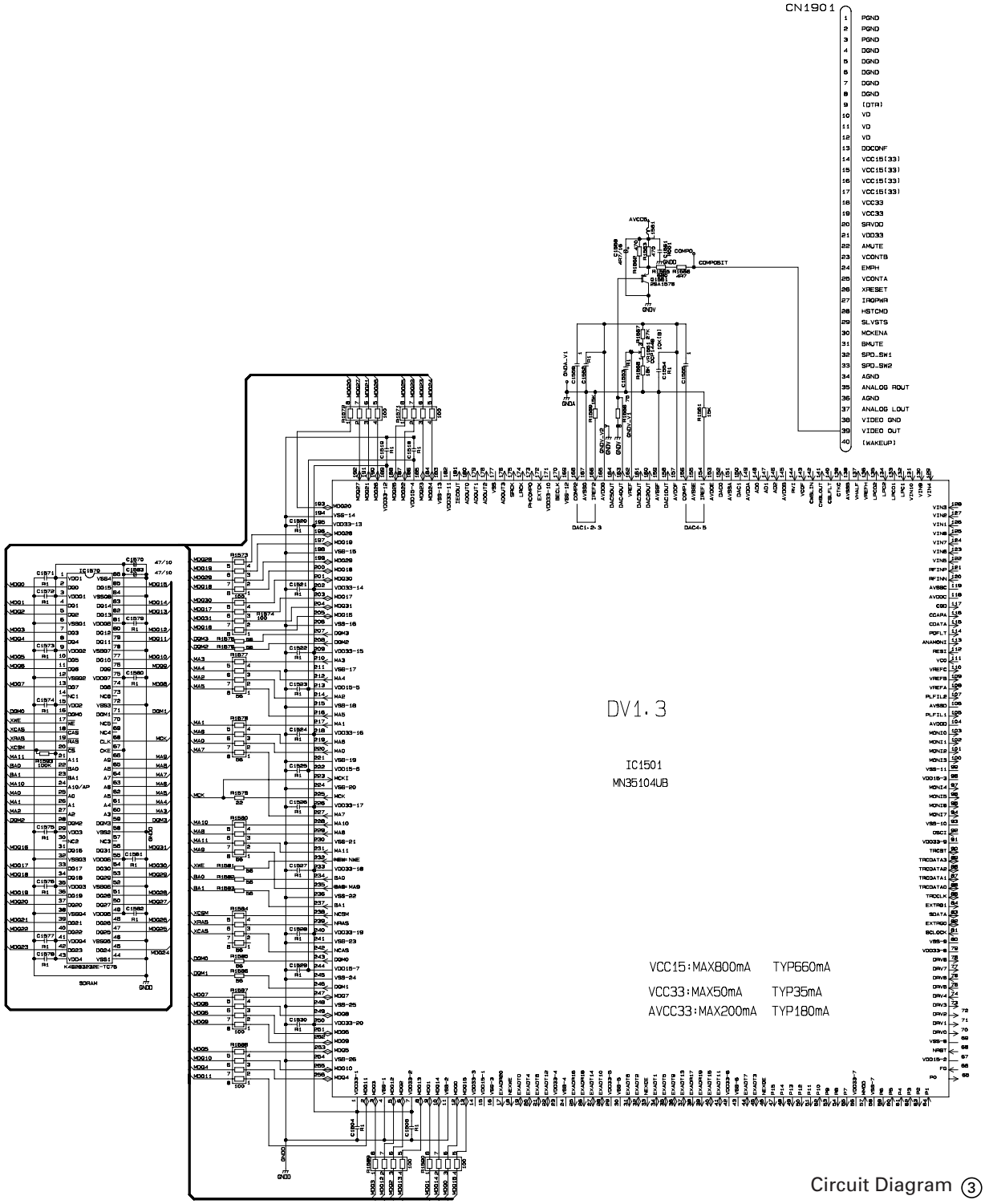
If the video composite output is not within the range of rated value, the video level is readjusted in the following method.
Turn the video level adjustment volume (VR1551) to adjust its level to 1.0 ± 0.02Vpp.

Check 5 : Is SDRAM I/F operated normally?

Reproduce DVD-REF-A1 Title 1.
Check Circuit Diagram③
Common to all DVD-V adapted modules
Check the conductivity of both the "Verification location 1"and the "Verification location 2."
If the result is not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components, in areas where as problem occurs, for the overall sequence of "output" "input" of the checked location.

No.	Signal name	Verification location 1	Verification location 2	Rated value
1	MA0	IC1570 25pin	IC1501 220pin	56Ω±5%
2	MA1	IC1570 26pin	IC1501 217pin	56Ω±5%
3	MA2	IC1570 27pin	IC1501 214pin	56Ω±5%
4	MA3	IC1570 60pin	IC1501 210pin	56Ω±5%
5	MA4	IC1570 61pin	IC1501 212pin	56Ω±5%
6	MA5	IC1570 62pin	IC1501 216pin	56Ω±5%
7	MA6	IC1570 63pin	IC1501 219pin	56Ω±5%
8	MA7	IC1570 64pin	IC1501 227pin	56Ω±5%
9	MA8	IC1570 65pin	IC1501 229pin	56Ω±5%
10	MA9	IC1570 66pin	IC1501 235pin	56Ω±5%
11	MA10	IC1570 24pin	IC1501 228pin	56Ω±5%
12	MA11	IC1570 21pin	IC1501 231pin	56Ω±5%

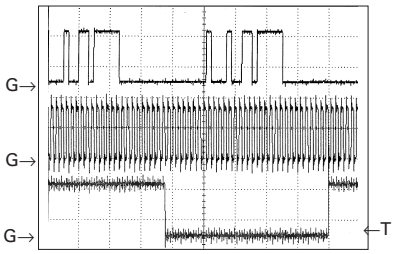
No.	Signal name	Verification location 1	Verification location 2	Rated value
13	MDQ0	IC1570 2pin	IC1501 12pin	100Ω± 5%
14	MDQ1	IC1570 4pin	IC1501 9pin	100Ω± 5%
15	MDQ2	IC1570 5pin	IC1501 6pin	100Ω± 5%
16	MDQ3	IC1570 7pin	IC1501 3pin	100Ω± 5%
17	MDQ4	IC1570 8pin	IC1501 256pin	100Ω± 5%
18	MDQ5	IC1570 10pin	IC1501 253pin	100Ω± 5%
19	MDQ6	IC1570 11pin	IC1501 251pin	100Ω± 5%
20	MDQ7	IC1570 13pin	IC1501 247pin	100Ω± 5%
21	MDQ8	IC1570 74pin	IC1501 249pin	100Ω± 5%
22	MDQ9	IC1570 76pin	IC1501 252pin	100Ω± 5%
23	MDQ10	IC1570 77pin	IC1501 255pin	100Ω± 5%
24	MDQ11	IC1570 79pin	IC1501 2pin	100Ω± 5%
25	MDQ12	IC1570 80pin	IC1501 5pin	100Ω± 5%
26	MDQ13	IC1570 82pin	IC1501 8pin	100Ω± 5%
27	MDQ14	IC1570 83pin	IC1501 10pin	100Ω± 5%
28	MDQ15	IC1570 85pin	IC1501 13pin	100Ω± 5%
29	MDQ16	IC1570 31pin	IC1501 205pin	100Ω± 5%
30	MDQ17	IC1570 33pin	IC1501 203pin	100Ω± 5%
31	MDQ18	IC1570 34pin	IC1501 200pin	100Ω± 5%
32	MDQ19	IC1570 36pin	IC1501 197pin	100Ω± 5%
33	MDQ20	IC1570 37pin	IC1501 193pin	100Ω± 5%
34	MDQ21	IC1570 39pin	IC1501 191pin	100Ω± 5%
35	MDQ22	IC1570 40pin	IC1501 187pin	100Ω± 5%
36	MDQ23	IC1570 42pin	IC1501 185pin	100Ω± 5%
37	MDQ24	IC1570 45pin	IC1501 184pin	100Ω± 5%
38	MDQ25	IC1570 47pin	IC1501 188pin	100Ω± 5%
39	MDQ26	IC1570 48pin	IC1501 190pin	100Ω± 5%
40	MDQ27	IC1570 50pin	IC1501 192pin	100Ω± 5%
41	MDQ28	IC1570 51pin	IC1501 196pin	100Ω± 5%
42	MDQ29	IC1570 53pin	IC1501 199pin	100Ω± 5%
43	MDQ30	IC1570 54pin	IC1501 201pin	100Ω± 5%
44	MDQ31	IC1570 56pin	IC1501 204pin	56 Ω±5%
45	MCK	IC1570 68pin	IC1501 225pin	22 Ω±5%
46	XWE	IC1570 17pin	IC1501 232pin	56 Ω±5%
47	XCAS	IC1570 18pin	IC1501 242pin	56 Ω±5%
48	XRAS	IC1570 19pin	IC1501 239pin	56 Ω±5%
49	XCSM	IC1570 20pin	IC1501 238pin	56 Ω±5%
50	DQM0	IC1570 16pin	IC1501 243pin	56 Ω±5%
51	DQM1	IC1570 71pin	IC1501 246pin	56 Ω±5%
52	DQM2	IC1570 28pin	IC1501 208pin	56 Ω±5%
53	DQM3	IC1570 59pin	IC1501 207pin	56 Ω±5%
54	BA0	IC1570 22pin	IC1501 234pin	56 Ω±5%
55	BA1	IC1570 23pin	IC1501 237pin	56 Ω±5%



Circuit Diagram ③

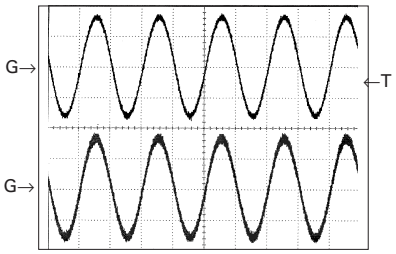
Note: Reference voltage VHALF : 1.65V

CH1: AOUT0
CH2: SRCKAV
CH3: LRCKAV
2V/div. 2µs/div.



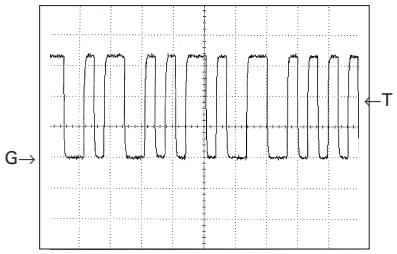
Waveform1

CH1: LO
CH2: RO
1V/div. 500µs/div.



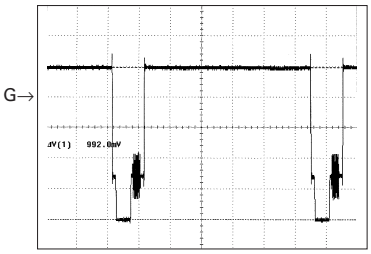
Waveform2

CH1: IEC958 1V/div. 500ns/div.



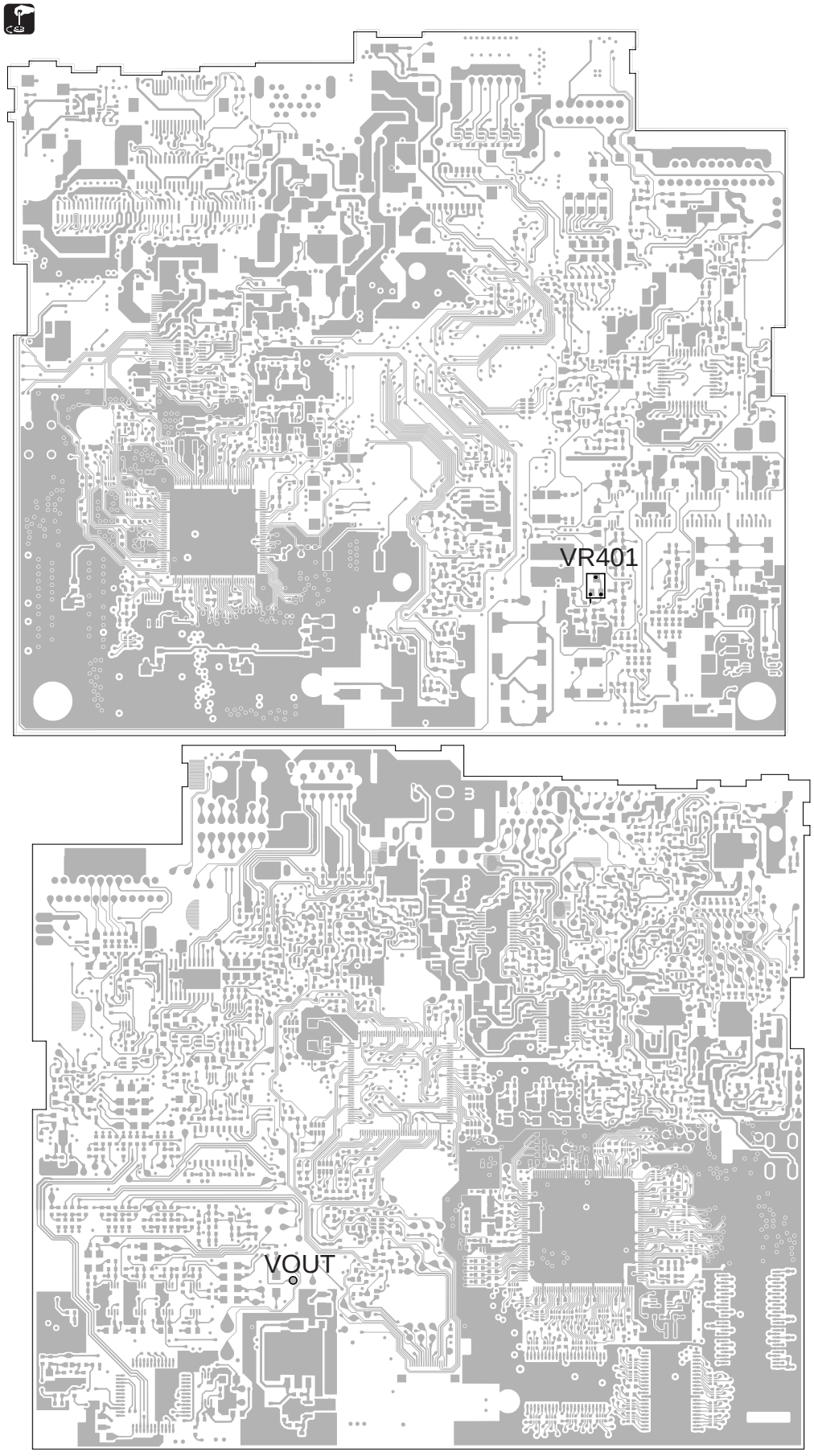
Waveform3

CH1: COMPO 200mV/div. 10µs/div.
[White 100% output]



Waveform4

6.3 MOTHER PCB ADJUSTMENT



Notes:
1) When the power supply for TC90A64AF-P (IC4001) is OFF, be careful not to apply any voltage to its terminals except for IIC lines(SDA and SCL). The IIC lines can accept a maximum of 5V.

No	Adjustment item	Input	Measuring point	Adjusting point	Measuring method and specs.	Remarks
1	3.3V power supply verification	Apply 14.4V to TP PWRV1 and TP PWRV2.	C4852 hot side (TP V33)	—	V33 = 3.3V 0.3V	
2	2.5V power supply verification	Apply 14.4V to TP VVI.	(TP V25)	—	V25 = 2.5V 0.2V	
3	5V power supply verification	Apply 14.4V to TP VVI.	(TP V5)	—	V5 = 5.0V 0.3V	
4	8V power supply verification	Apply 14.4V to TP VVI.	(TP V8)	—	V8 = 8.0V 0.6V	
5	18.5V power supply verification	Apply 14.4V to TP VVI.	(TP V18)	—	V18 = 18.5V 0.8V	
6	-12V power supply verification	Apply 14.4V to TP VVI.	(TP VM12)	—	VM12 = -12.0V 0.6V	

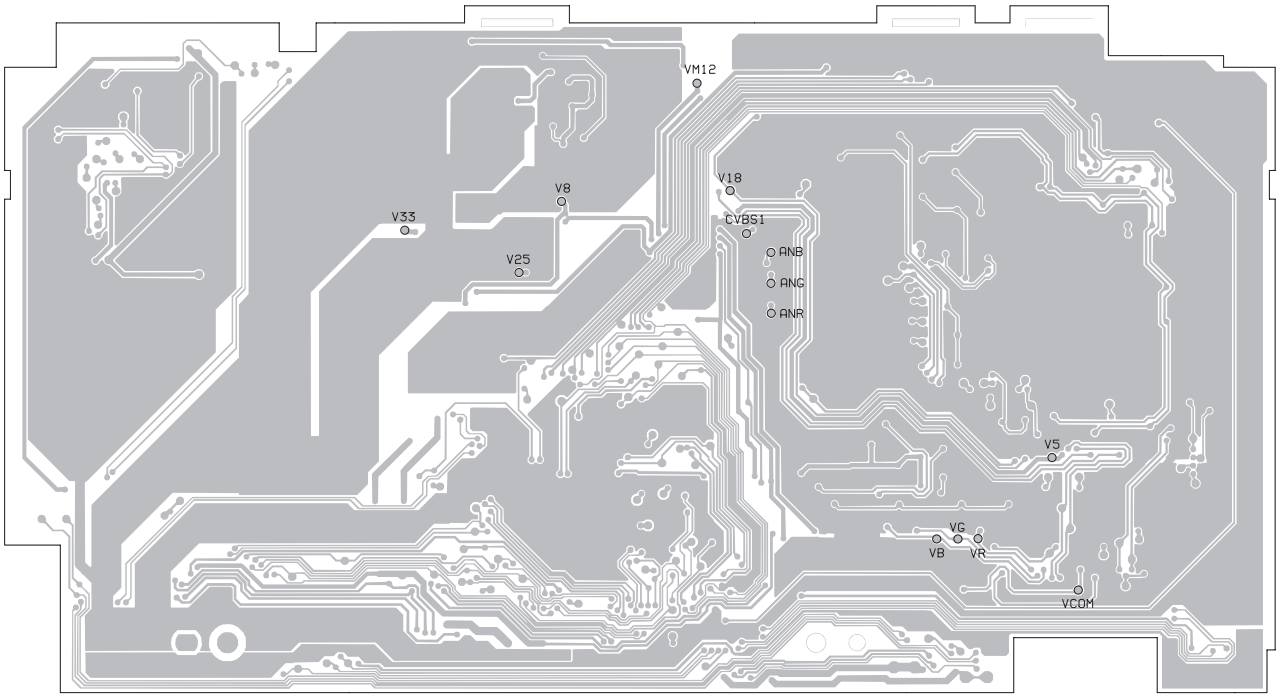
Step	Mother PCB adjustment	Mode	Input (input test pin,specs, other conditions)	Output (measuring point, waveform)	Measuring instruments	Specs	Adjusting point
7	Main video level	AV	Input test pin: MS-3V1 ····100 IRE (white 100%), 1.0Vp-p, (input via 75ohms) TP20····VIDEO GND Note : A monitor is the connected state.	Measuring point: VOUT or V2 	Oscilloscope	1.35V ± 0.05Vp-p Measure between the sync tip and 100 IRE (top wave). Symptoms with poor adjustment. Over lever : Luminance is too high. Under level : Luminance is too low.	VR401

6.4 MONITOR PCB ADJUSTMENT

Notes: Flicker adjustment is needed when monitor PCB is exchanged.

● **Adjustment Point**

Monitor PCB (Side B)

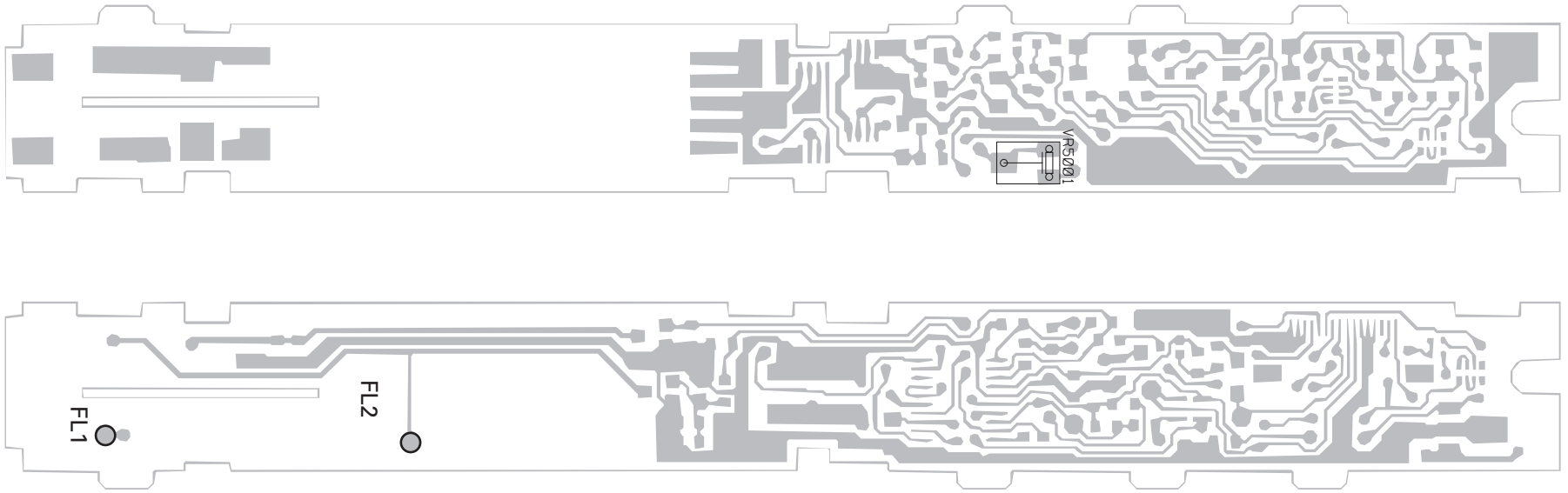


Notes:
1) When the power supply for TC90A64AF-P is OFF, be careful not to apply any voltage to its terminals except for IIC lines(SDA and SCL). The IIC lines can accept a maximum of 5V.
2) In the following table, SA**h is a sub-address of TC90A64AF-P.

No	Adjustment item	Input	Measuring point	Adjusting point	Measuring method and specs.	Remarks
1	Aging	Any input signal	—	—	Keep the unit in the operation mode for 30 minutes or longer.	
2	Flicker	Input a signal for alternate white and black lines to TP ANR, TP ANG and TP ANB.	Screen	Register setting of SA22h D15 - 8	Adjust so that the flickers become minimum in all	If it input a signal for alternate white into TP CVBS1, it is possible. The luminance level of the input signal: 50%. In the flicker adjustment mode, COM DC can be used as the adjusting point.

•Flicker adjustment has been deviated The images flicker.
•Signal for flicker adjustment
EEPROM setting mode
[Operations]
To enter the setting mode, while keeping the TP1420 terminal(IC1401 pin25) at "Low",
turn reset the micro computer. To switch between the adjustment modes, click the joystick.
Flicker adjustment mode
Line adjustment 1 mode
Line adjustment 2 mode
Dimmer parameter setting mode
[↑ ↓] button: Used to select a desired adjustment item in each mode
[← →] button: Used to adjust the selected item
[↑ ↓] button: Flicker adjustment mode
[BAND/ESC] button: alternate white and black lines
[← →] button: Adjust so that the flickers become minimum in all

6.5 INVERTER PCB ADJUSTMENT



No	Adjustment item	Input signal	Measuring point	Adjusting point	Measuring method and specs.	Remarks
1	BACK LIGHT DRIVE FREQUENCY	Apply 14.4V ± 0.2V to TP VPPFL1 Apply 5.0V to TP DIMDTY TP GNDFL1 and TP INVPUL : GND	TP:FL1,FL2	VR 5001	48.0 ± 0.1kHz	100k ohms is connected between TP FL1 and TP FL2. It acts as the monitor of the waveform after potential. Don't acts as the monitor of the TP FL2 directly. (there is a possibility that a measuring instrument may be destroyed, for high voltage.) Out of spec., when frequency change of following may become impossible.
2	FREQUENCY CHANGE CHECK	Apply wave of 98.0V ± 1kHz to TP INVPUL 10 ± 2%, 5V, 0V	TP:FL1,FL2		49.0 ± 0.5kHz	It checks that the waveform after potential is set to 49 kHz
3	FREQUENCY CHANGE CHECK	Apply wave of 104.0V ± 1kHz to TP INVPUL 10 ± 2%, 5V, 0V	TP:FL1,FL2		52.0 ± 0.5kHz	It checks that the waveform after potential is set to 52 kHz

6.6 MONITOR TEST MODE

●EEPROM setting mode

[Operations]

To enter the setting mode, while keeping the EPRTEST terminal(probe land EPRTSTA) at "Low", turn reset the monitor micro computer. To switch between the adjustment modes, click the joystick.

Flicker adjustment mode

Line adjustment 1 mode

Line adjustment 2 mode

Dimmer parameter setting mode

[↑ ↓] button: Used to select a desired adjustment item in each mode

[←→] button: Used to adjust the selected item

Notes:

1) The setting values are written in the EEPROM,and then the read-out data is displayed on the screen. WRITE and READ operations are processed by the block data of 16 bits. The total bits for the settings depend on adjusting items.

2) For CS (Check Sum) items, when the settings are changed, the CS value is written in 8 bits by applying the exclusive OR (XOR). The CS value is first written in the EEPROM, and then the read-out data is displayed. If the written data is different from the read-out data, the letter color for the read-out data is changed.

● Memory items and addresses on the EEPROM(S-93C46BR01-J8T1)

Memory array	EEPROM address	Bit15	Bit14	Bit13	Bit12	Bit11	Bit10	Bit9	Bit8	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Bank 1	00H	Dimmer external light threshold (high)								Dimmer external light threshold (low)							
	01H	Backlight output (upper limit)								Backlight output (lower limit)							
	02H	Common reverse output center (COM DC)								Don'tcare		Common reserve output amplitude (COM AMP) PIP SA:22h[B7-2]					
	03H	Don'tcare		Output clamp DC (RGB BIAS) PIP SA:23h[B13-8]						Don'tcare				γ0 inflection point (GAMMA 0) PIP SA:23h[B3-0]			
	04H	γ3 inflection point (GAMMA 3) PIP SA:24h[B15-12]				γ2 inflection point (GAMMA 2) PIP SA:24h[B11-8]				Don'tcare				γ1 inflection point (GAMMA 1) PIP SA:24h[B7-3]			
	05H	Don'tcare	Output sub contrast R (SUB CON R) PIP SA:26h[B15-9]							Don'tcare	Output sub contrast B (SUB CON B) PIP SA:26h[B7-1]						
	06H	Sub brightness R after γ circuit (SUB BRI R) PIP SA:39h[B15-12]				Sub brightness B after g circuit (SUB BRI B) PIP SA:39h[B11-8]				Don'tcare							
	07H	Don'tcare								Don'tcare				Clock phase adjustment (DOT CLK) PIP SA:2Ah[B3-0]			
	08H	Don'tcare								Don'tcare						Sharpness (SHARPNESS) PIP SA:05h[B2-1]	
	09H	Touch panel X coordinates 1								Touch panel Y coordinates 1							
	0AH	Touch panel X coordinates 2								Touch panel Y coordinates 2							
	0BH	Touch panel X coordinates 3								Touch panel Y coordinates 3							
	0CH	Touch panel X coordinates 4								Touch panel Y coordinates 4							
	0DH	Touch panel X coordinates 5								Touch panel Y coordinates 5							
	0EH	Touch panel X coordinates 6								Touch panel Y coordinates 6							
	0FH	Touch panel X coordinates 7								Touch panel Y coordinates 7							
	10H	Touch panel X coordinates 8								Touch panel Y coordinates 8							
	11H	Touch panel X coordinates 9								Touch panel Y coordinates 9							
	12H	Touch panel X coordinates 10								Touch panel Y coordinates 10							
	13H	Touch panel X coordinates 11								Touch panel Y coordinates 11							
	14H	Touch panel X coordinates 12								Touch panel Y coordinates 12							
	15H	Touch panel X coordinates 13								Touch panel Y coordinates 13							
	16H	Touch panel X coordinates 14								Touch panel Y coordinates 14							
	17H	Touch panel X coordinates 15								Touch panel Y coordinates 15							
	18H	Touch panel X coordinates 16								Touch panel Y coordinates 16							
	19H	Touch panel X coordinates 17 (Not used)								Touch panel Y coordinates 17 (Not used)							
	1AH	Outer most Xmin								Outer most Ymin							
	1BH	Outer most Xmax								Outer most Ymax							
	1CH	Check sum address															
	1DH	Don'tcare								Common reverse output center(Reference)							
	1EH	Don'tcare												Clock phase adjustment initial value			
	1FH	Don'tcare															

Memory array	EEPROM address	Bit15	Bit14	Bit13	Bit12	Bit11	Bit10	Bit9	Bit8	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Bank 2	20H	External light of dimmer adjustment(H)								Back light of dimmer adjustment(H)							
	21H	External light of dimmer adjustment(M)								Back light of dimmer adjustment(M)							
	22H	External light of dimmer adjustment(L)								Back light of dimmer adjustment(L)							
	23H-3FH	Don'tcare															

● EEPROM initial value

Item	Meaning	initial value(DEC)	initial value(hex)
COM_DC	Common reverse output center	140	8C
COM_AMP	Common reverse output amplitude	30	1E
RGB_BIAS	Out clamp DC	00	00
GAMMA0	γ 0	02	02
GAMMA3	γ 3	04	04
GAMMA2	γ 2	04	04
GAMMA1	γ 1	19	13
SUB_CON_R	Output sub contrast R	64	40
SUB_CON_B	Output sub contrast B	64	40
SUB_BRI_R	Sub brightness R after γ circuit	08	08
SUB_BRI_B	Sub brightness B after γ circuit	08	08
DOT_CLK	Clock phase adjustment	07	07
SHARPNESS	Sharpness	03	03
BL_MAX	Back light output (Max.)	196	C4
BL_MIN	Back light output (Min.)	91	5B
REF_HIGH	Dimmer (H)	192	C0
REF_LOW	Dimmer (L)	96	60
LUM_HIGH	External light (H)	226	E2
LUM_MID	External light (M)	135	87
LUM_LOW	External light (L)	82	52
BL_HIGH	Back light (H)	196	C4
BL_MID	Back light (M)	196	C4
BL_LOW	Back light (L)	104	68

Touch panel initial value(Before a calibration)

TOUCH_X01-TOUCH_X17	Touch panel compensation (X)	00	00
TOUCH_Y01-TOUCH_Y17	Touch panel compensation (Y)	00	00
GAISYU_MIN_X	Outermost X (Min.)	56	38
GAISYU_MAX_X	Outermost X (Max.)	243	F3
GAISYU_MIN_Y	Outermost Y (Min.)	63	3F
GAISYU_MAX_Y	Outermost Y (Max.)	234	EA

[Displays in each mode]
In the following figures, the letters and numbers surrounded by a large square are for OSD examples.
On the screen, the adjustment names and the settings (or written data) are listed.
The settings (or written data) will change when some adjustments are made in each mode.
(The following examples show the maximum values.)

(1) Flicker adjustment mode

Adjustment item	Adjustment range	Adjustable name	Settings or written data (DEC)		
Common reverse output center	[0 - 255]	COM DC	140		

Notes: The CONTRAST data is [88], and used as refference data for other adjustment items.

(2) Line adjustment 1 mode

Adjustment item	Adjustment item	Adjustable range	Settings or written data (DEC)		
Bright (SA22: B7-2)	[0 - 63]	BRIGHT	30		LINE1
Contrast (SA25: B7-1)	[0 - 127]	CONTRAST	88		
Common reverse output center	[0-255]	COM DC	140		
Common reverse output amplitude	[0-63]	COM AMP	30		
Output clamp DC	[0-63]	RGB BIAS	0		
γ0 inflection point	[0-15]	GAMMA0	2		
γ3 inflection point	[0-15]	GAMMA3	4		
γ2 inflection point	[0-15]	GAMMA2	4		
γ1 inflection point	[0-31]	GAMMA1	19		
				CS	AFC3

Notes:
1) CONTRAST data
The CONTRAST data is adjustable, and used as reference data for other adjustment items, which is not memorized in the EEPROM.
2) BRIGHT and COM AMP data
The BRIGHT and COM AMP adjustments are made by using the same 2-screen IC register (SA22h B7-2: common reverse output amplitude).
Therefore, adjusting one of the data will change the other one.

Notes: The CONTRAST data is [88], and used as refference data for other adjustment items,

(3) Line adjustment 2 mode

Adjustment item	Adjustment range	Adjustable name	Settings or written data (DEC)		
Bright (SA22: B7-2)	[0 - 63]	BRIGHT	30		LINE2
Contrast (SA25: B7-1)	[0 - 127]	CONTRAST	88		
Output sub contrast R	[0 - 127]	SUB CON R	64		
Output sub contrast B	[0 - 127]	SUB CON B	64		
Sub brightness R after γ circuit	[0 - 15]	SUB BRI R	8		
Sub brightness B after γ circuit	[0 - 15]	SUB BRI B	8		
Clock phase adjustment	[0 - 15]	DOT CLK	7		
Sharpness	[0 - 3]	SHARPNESS			
				CS	AFC3

Notes:

1) CONTRAST data

The CONTRAST data is adjustable, and used as reference data for other adjustment items, which is not memorized in the EEPROM.

2) SUB BRI R and SUB BRI B data

The displayed value or EEPROM written data is different from the setting value for the 2-screen IC register (TC90A64AF : IC1).

(Before displayed on the screen, the setting value is converted via some software.)

Displayed value (adjusting value) (DEC)	E2PROM written value. (DEC)	2-screen IC register setting (BIN)	
15	15	0111	(MAX)
14	14	0110	
. .	. .	. .	
9	9	0001	
8	8	0000	(TIP)
7	7	1111	
. .	. .	. .	
1	1	1001	
0	0	1000	(MIN)

(4) Dimmer parameter setting mode

Adjustment item	Adjustment item	Adjustable range	Settings or written data (DEC)		
Backlight output (MAX)	[0 - 255]	BL MAX	196		DIMMER
Backlight output(MIN)	[0 - 255]	BL MIN	91		
Dimmer threshold (high)	[0 - 255]	REF H	192		
Dimmer threshold (low)	[0 - 255]	REF L	96		
External light point (high)	[0 - 255]	LUM H	226		
External light point (middle)	[0 - 255]	LUM M	135		
External light point (low)	[0 - 255]	LUM L	82		
Backlight point (high)	[0 - 255]	BL H	196		
Backlight point (middle)	[0 - 255]	BL M	196		
Backlight point (low)	[0 - 255]	BL L	104	CS	AFC3

Note: The dimmer point data is memorized in the EEPROM, but not treated as a CS item. It's because the settings are adjustable by the user.

6.7 DOT CLOCK ADJUSTMENT

● Dot Clock Adjustment Mode

[Operations]

· [Dot Clock adjustment mode] starting procedure
Reset start while pressing the [ATT] and [SOURCE] Keys together.
· [Dot Clock adjustment mode] cancellation Monitor's microcomputer OFF.
· The operation after this should use remote control.
· [↓ ↑] button : Used to select a desired adjustment item in each mode.
· [← →] button : Used to adjust the selected item.

[EEPROM : S-93C46BR01-J8T1]

The setting values are written in the EEPROM,and then the read-out data is displayed on the screen.
WRITE and READ operations are processed by the block data of 16 bits.

[Display]

In the following figures,a large square are for OSD examples.

Dot Clock adjustment mode

Adjustment item	Adjustment range	Display	Setting or written data (DEC)		
Clock phase adjustment	[0-15]	DOT CLK	15		
''(initial)	[0-15]	[FACTORY	7	]	
Common reverse output center	[0-255]	COM DC	255		
Common reverse output center adjustment	[0-255]	[FACTORY	140	]	
initial					

* CS(Check Sum)display is not performed.

6.8 TOUCH PANEL TEST MODE

1. Touch panel calibration

1.1 To enter the touch panel calibration mode

While pressing the ATT and BACK keys on the main unit, reset and start the unit.

1.2 Adjustment outline

1) Touch panel effective range check

2) Touch panel 16-point calibration

The touch panel calibration consists of the above two checks.

When finishing the above checks, exit from the calibration mode by turning off the ACC.

1.3 Adjustment screen menu

Top menu

1) Setup TP effective range

The effective range (outer limit) of the touch panel is obtained.

2) Setup calibration

By touching the 16 points on the screen (excluding the last one for finalization), whole screen calibration will be performed.

* Pressing any screen points far from the (+) marks will not allow you to proceed to the next (+) point.

* To stop the calibration, press the ESC key .

3) TP coordinates test (Not used)

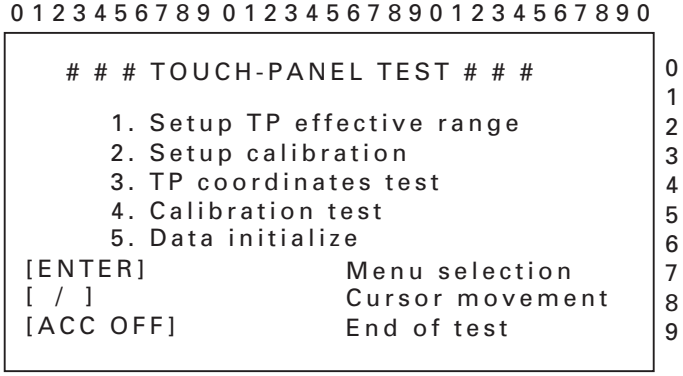
For each (+) mark, the OSD coordinates, AD values, and coordinates before and after correction are displayed.

4) Calibration test

For touched points, coordinates before and after correction are displayed.

5) Data initialize

The range and the calibration data are returned to an initial value.



1.4 Cautions on adjustment

At the TP effective range check, never use a pointed thing like nails to trace the edge of the screen. Use a round-headed thing (R1.6 or more) and push the screen softly to prevent the screen from being damaged.

1.5 Detailed adjustment procedures

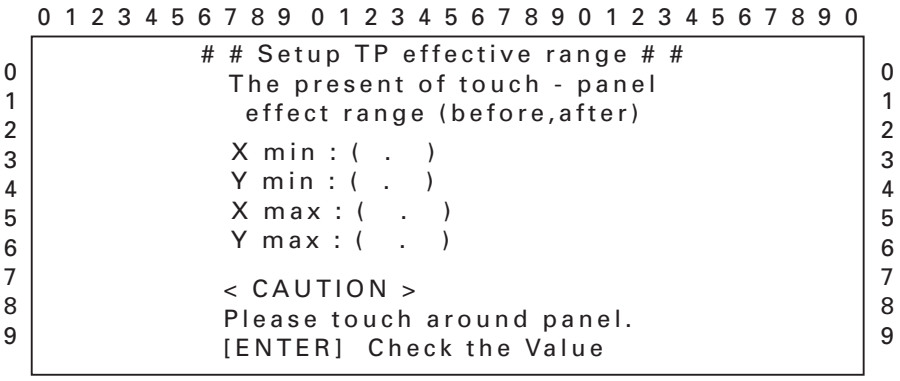
On the main unit or the remote control, use the UP/DOWN keys to select the check item from the menu, and then press the ENTER key

When finishing both checks, turn off the ACC to exit from the calibration mode.

(1) Setup TP effective range

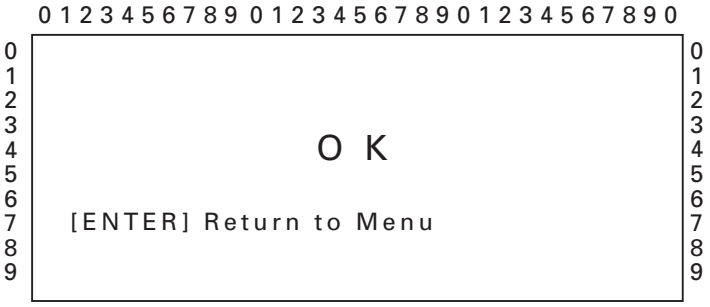
The checking data for the edge of the TP screen is memorized in the EEPROM.

[Display]

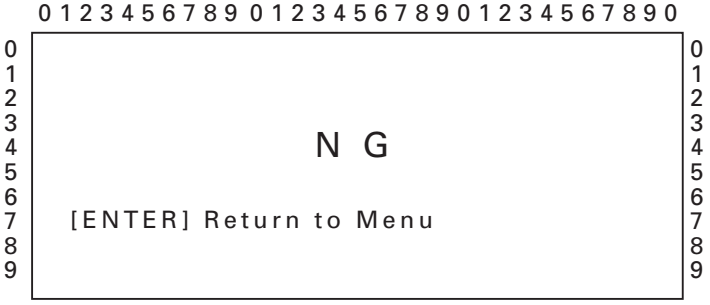


* The range (before) is the data that has been stored in the EEPROM before calibration.
* The range (after) is the data that will be stored after calibration. (Default: min 120, max 180)

Checking result - OK



Checking result - NG



[Adjustment steps]

1) Trace the edge of the screen along the monitor resin frame with a round-headed thing (R1 or more) to obtain the coordinates (as shown by a white line in the right figure).

* The black frame is the outer resin frame of the monitor.

Caution:

Never use a pointed thing like nails when tracing the edge of the screen. Use a round-headed thing (R1 or more) and push the screen softly to prevent the screen from being damaged

2) Press the ENTER key on the main unit or remote control.

If the checking result is within the allowable range, "OK" will be displayed in the center of the screen. If not, "NG" will be displayed.

* When the checking result exceeds the default values by 10% or more, "NG" is displayed on the screen.

3) To return to the top menu, press the ENTER key on the main unit or remote control.

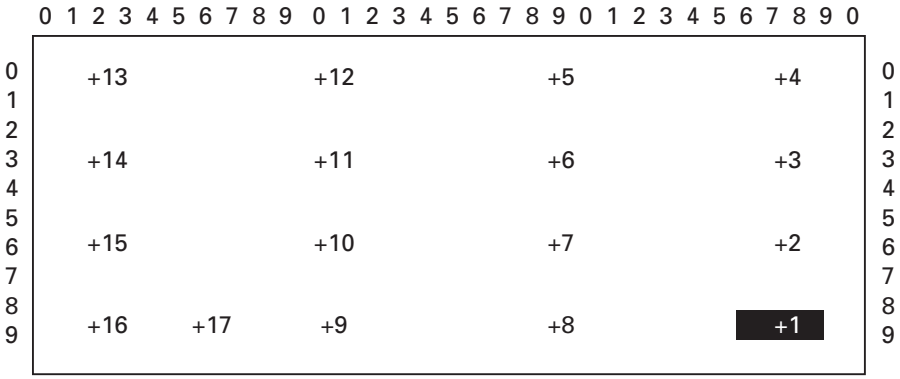
Default data list

Coordinates	Min.	Max.
X	56	243
Y	63	234

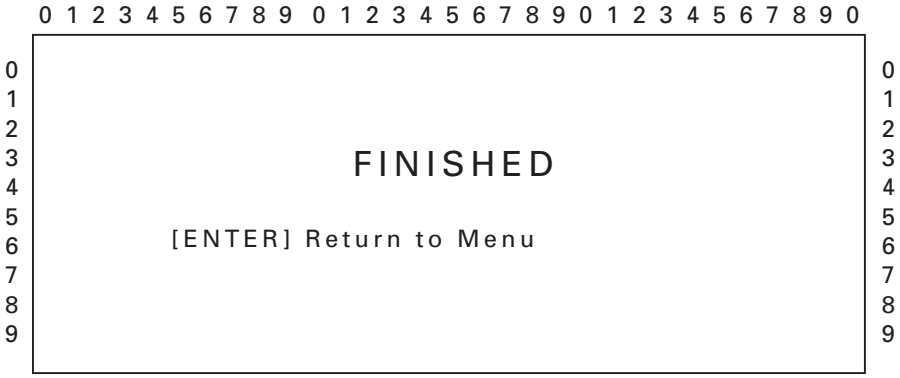
(2) Setup calibration

By touching the (+) marks on the screen one by one, their calibration results are memorized in the EEPROM.

[Display]



* Pressing any screen points far from the (+) marks is ignored.



* In the above figure, the numbers after (+) (from 1 to 17) shows the order where the cursor moves.
* When the 17th (+) mark is pressed, "FINISHED" will be displayed.

[Adjustment steps]

1) Push the 16 (+) marks one by one by following the cursor's movement. (The plus marks appear in turn on the screen. When you push one properly, the next mark will be displayed.)

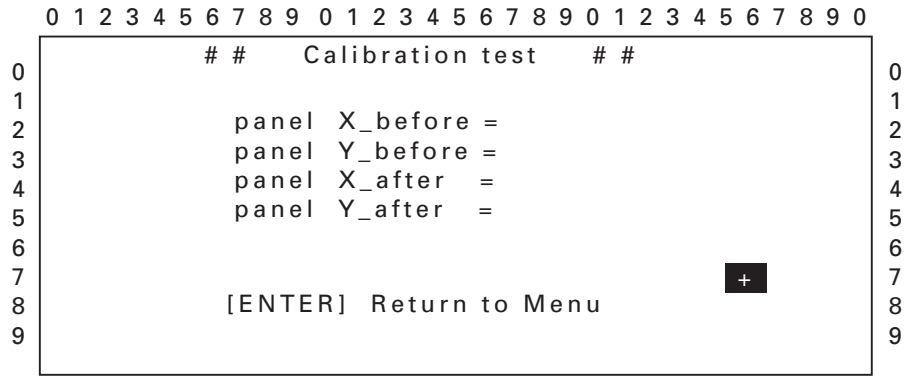
2) Lastly, push the 17th (+) mark. "FINISHED" will be displayed in the center of the screen.

3) To return to the top menu, press the ENTER key on the main unit or remote control.
* If you press the ESC key during adjustment, the screen mode will return to the top menu without any adjustment results stored.

(3) Calibration test

For touched points, coordinates before and after correction are displayed.

[Display]



* The 16 (+) marks are displayed on a screen.

[Adjustment steps]

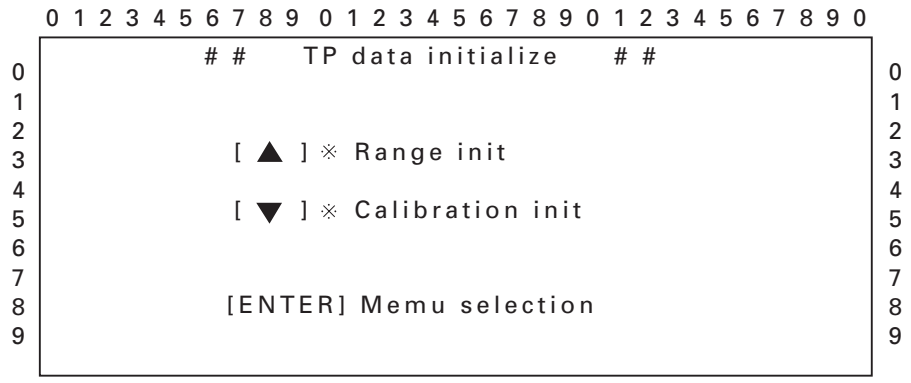
1) For touched points, coordinates before and after correction are displayed.

2) To return to the top menu, press the ENTER key on the main unit or remote control.

(4) TP data initialize

The range and the calibration data are returned to an initial value.

[Display]



※ : Setup complete.
The mark will disappear when initialization is complete.

[Adjustment steps]

1) [▲] : The range data initialize.
[▼] : The calibration data initialize.

2) To return to the top menu, press the ENTER key on the main unit or remote control.

6.9 FREQUENCY CHECK FOR CLOCK

1. PCL output

In the normal operation mode (with the detachable panel installed, the ACC switched ON, the standby mode cancelled), shift the TESTIN terminal (Pin56) to H. The clock signal is output from the CLKOUT terminal (Pin 36).

The frequency of the clock signal is 18.874368MHz±754Hz that is the fundamental frequency.

7. GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 DISASSEMBLY

● **Removing the Grille Assy (Fig.1)**

1 Remove the two screws and then remove the Holder.
Disconnect the connector.

2 Remove the two screws and then remove the Grille Assy.

● **Removing the Case**

3 Remove the five screws.(Fig.1)

4 Remove the screw.(Fig.1)

5 Remove the two screws and then remove the Case.(Fig.1)

Note) Inside the product there is a flexible substrate that connects the Case and the Bracket.
Be very careful and do not give it a strong pull when removing the Case, otherwise it may be torn.

6 Remove the four screws. (Fig.2)

Disconnect the connector and then remove the Bracket. (Fig.2)
Remove the Case.(Fig.1)

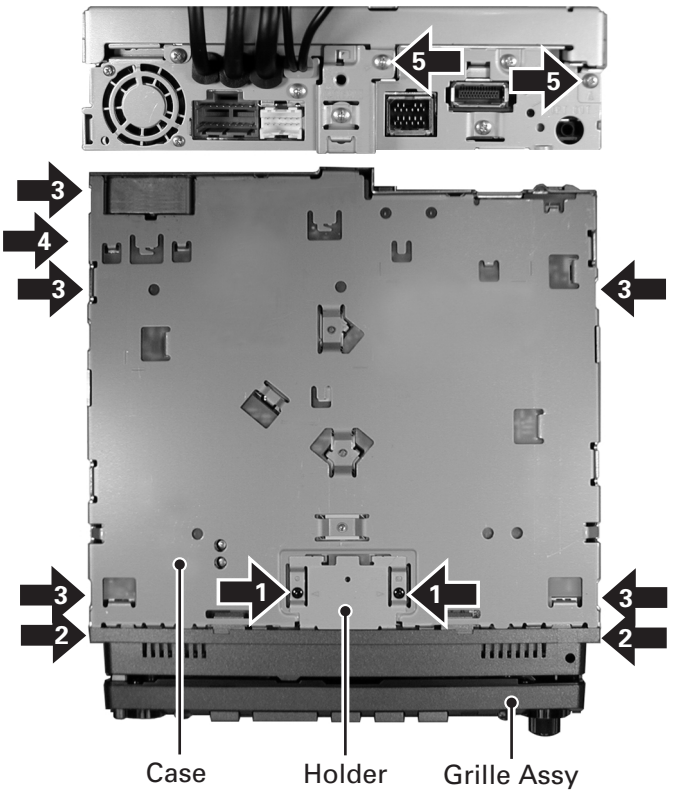


Fig.1

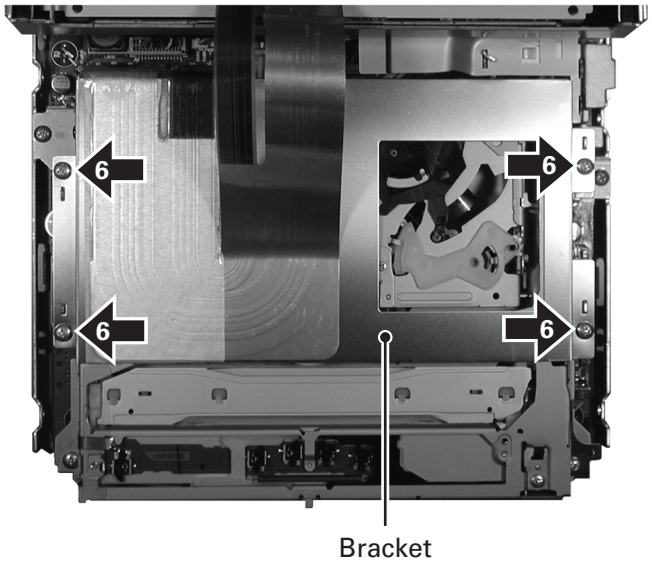


Fig.2

● Removing the DVD Mechanism Module (Fig.3)

1 Remove the four screws.

Disconnect the connector and then remove the DVD Mechanism Module.

Fig.3

● Removing the Tuner Unit (Fig.4)

1 Straighten the tabs at two locations indicated.

2 Remove the screw and then remove the Holder.

3 Remove the two screws.

Disconnect the connector and then remove the Fan Motor.

4 Remove the two screws.

5 Remove the four screws and then remove the Bracket.

6 Straighten the tabs at five locations indicated.

7 Remove the screw and then remove the Tuner Unit

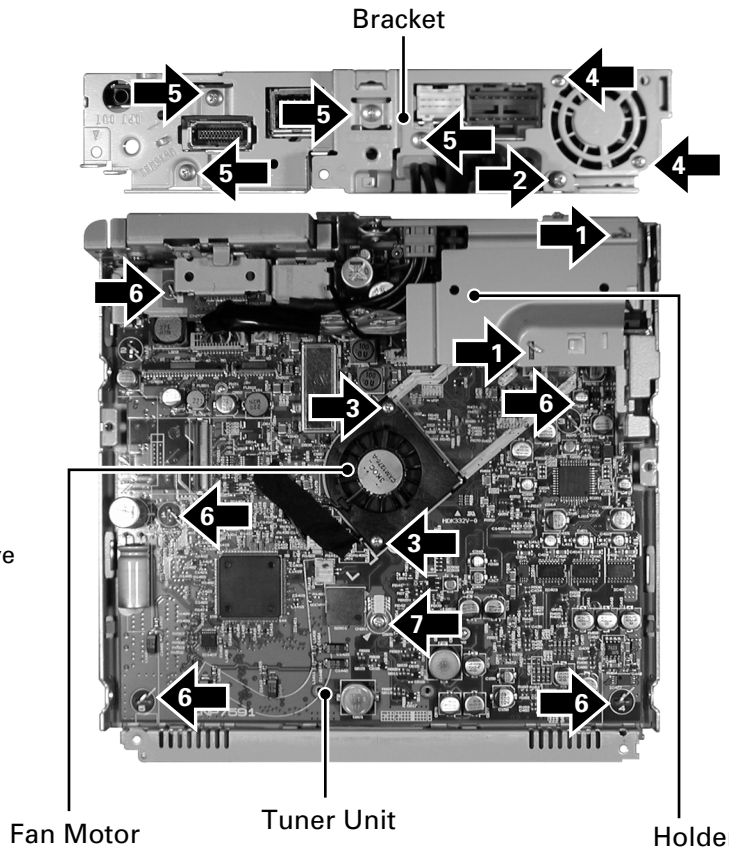


Fig.4

● Removing the Case (Fig.5)

1 Remove the two screws and then remove the Lever.

2 Remove the three screws and then remove the Holder.

3 Disconnect the connector.

4 Remove the screw.

5 Remove the five screws and then remove the Case.

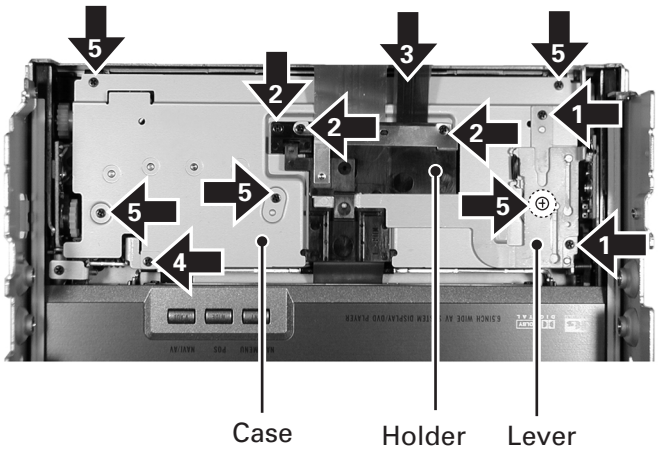


Fig.5

● Removing the Display Assy (Fig.6)

1 Remove the screw.

Disconnect the connector and then remove the Motor Unit.

2 Remove the two screws and then remove the two Holders.

3 Pull out the Display Assy in the arrow indicated direction.

Note) When reassembling, hold the switch down with tweezers or the like and put the Display Assy back to the Chassis. Otherwise, the switch may be damaged and not function properly.

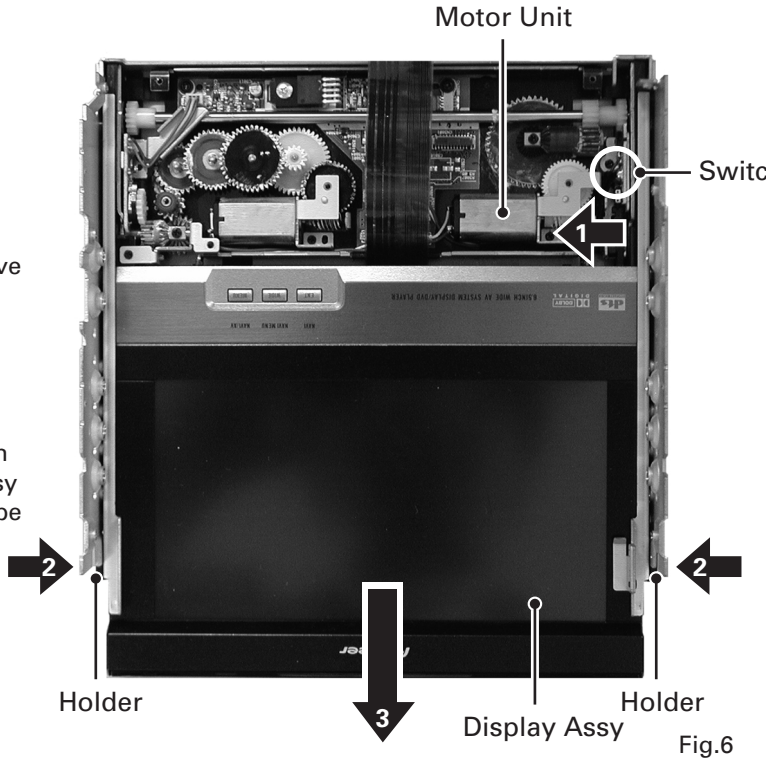


Fig.6

● Removing the Main Unit (Fig.7)

1 Remove the screw and then remove the Bracket.

2 Remove the four screws and then remove the Shaft Unit.

3 Remove the three screws.

Disconnect the connector and then remove the Main Unit.

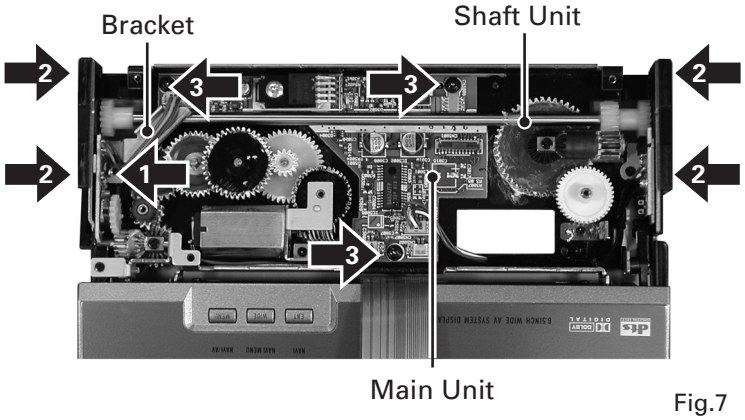


Fig.7

● Removing the Display Assy (Fig.8)

1 Remove the two screws and then remove the Holder.

2 Remove the three screws.

3 Remove the two screws and then remove the Cover Unit.

4 Remove the four screws.

Disconnect the connector and then remove the Display Assy.

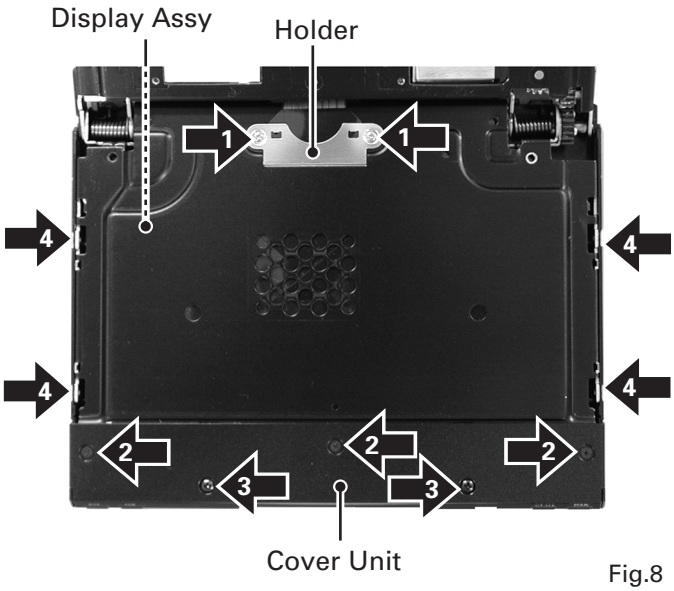


Fig.8

● Removing the Monitor PCB (Fig.9)

1 Straighten the tabs at two locations indicated.

2 Remove the three screws.

Disconnect the connector and then remove the Monitor PCB.

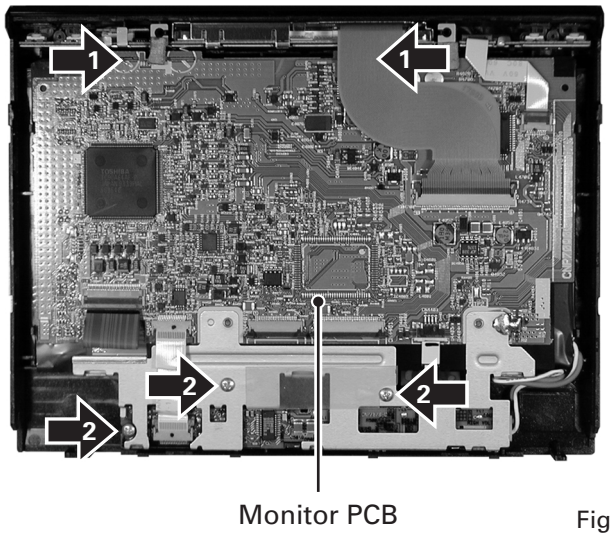
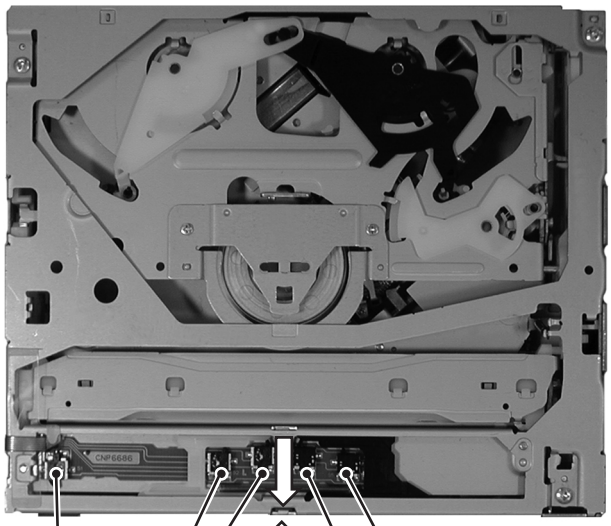


Fig.9

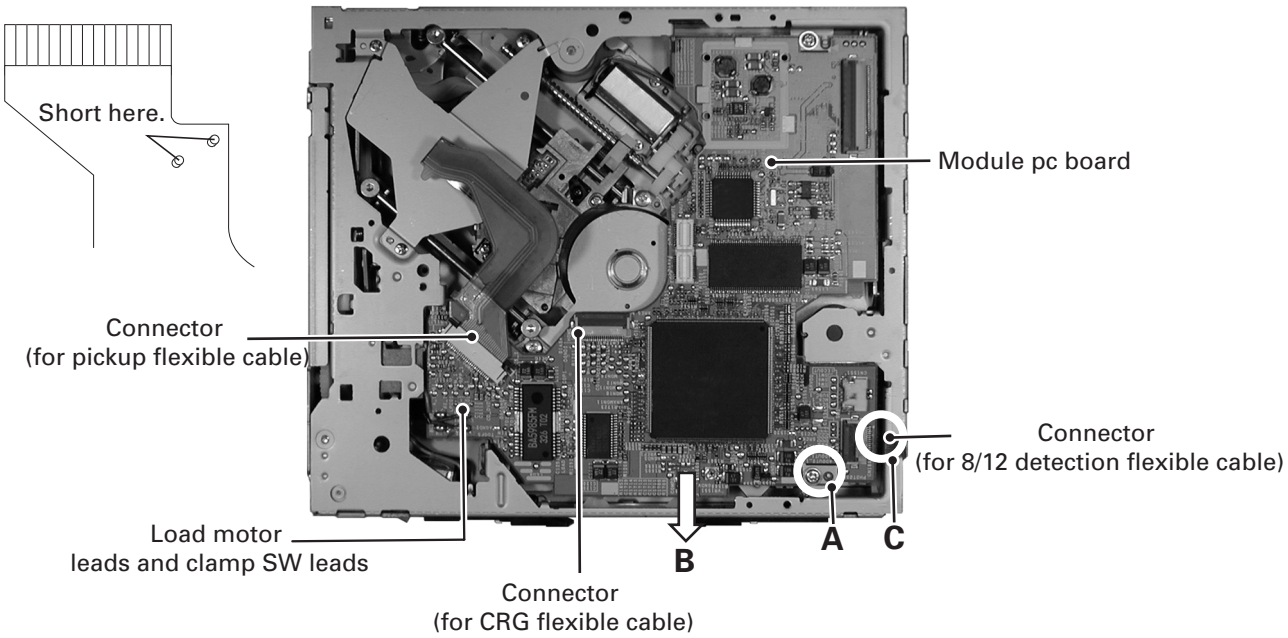
● Precautions on handling the mechanism module

1. Hold the upper and main frames.
2. Do not hold the front portion of the upper frame. It is a delicate part.
3. Do not touch the switches on the top panel.
4. Be careful not to catch the flexible cables.



● Removing the module pc board

1. Set the mechanism to the lock position (disc load standby position).
2. Place the mechanism module upside down.
3. Short the two lands on the pickup flexible cable as shown below.
4. Be sure to disconnect the pickup flexible cable and the CRG flexible cable from the connectors to protect them from damages.
5. Remove solder from the load motor leads and clamp SW leads.
6. Loosen the two fixing screws. Lift the position A of the module pc board lightly and move it in the direction B to remove it. Be careful not to damage the flexible cable C.
7. Disconnect the 8/12 detection flexible-cable from the connector.

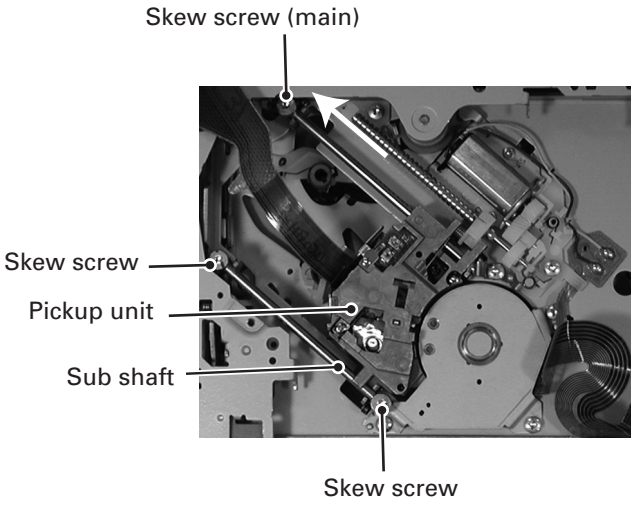


● Removing the pickup unit

1. Remove the module pc board in accordance with the procedure of "Removing the module pc board."
2. While holding the pickup case, remove the skew screw (main).
3. Lifting the end of the pickup rack, slide the main shaft, and remove the pickup unit.

Notes:

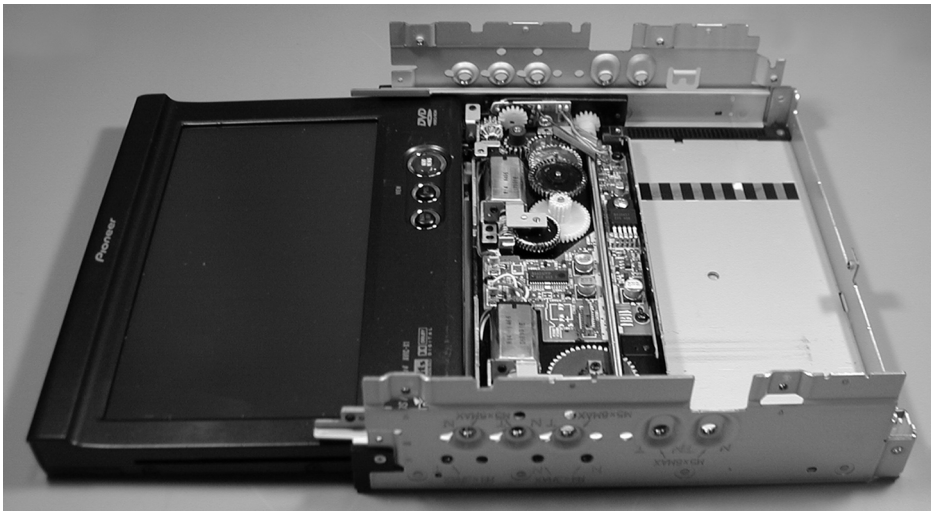
Replacing the pickup unit requires the skew adjustment.
Remove glue from both ends of the main and sub shafts, and skew stud.
Do not reuse the old skew screw. Be sure to use a brand-new skew screw supplied with a new pickup unit.
Fix the skew screw with glue (GYL1001) after adjustment.



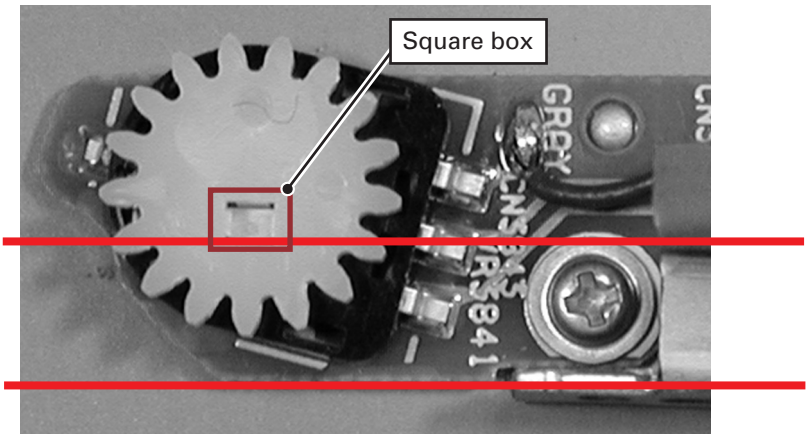
● How to install the Volume Unit fo the Drive Unit

When install the Volume Unit, adjust the positioning of the rotating angle of the gear.

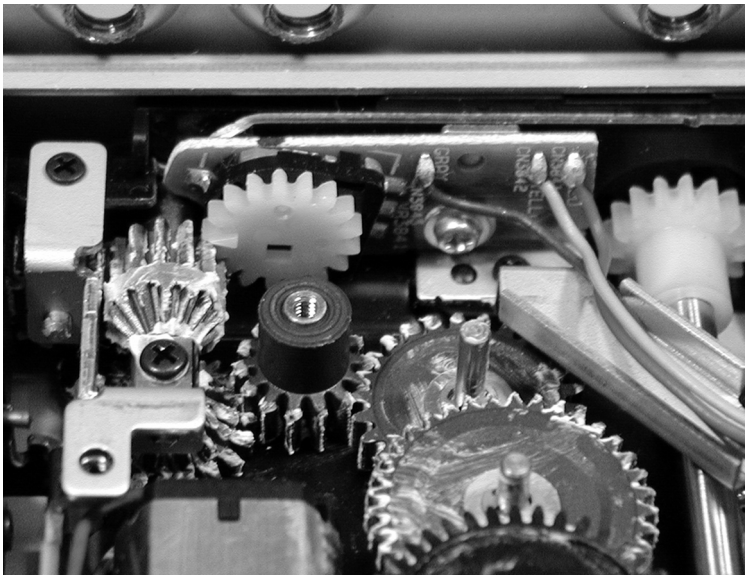
1. Set the Monitor Unit horizontally with the Main Unit of the Drive Unit.



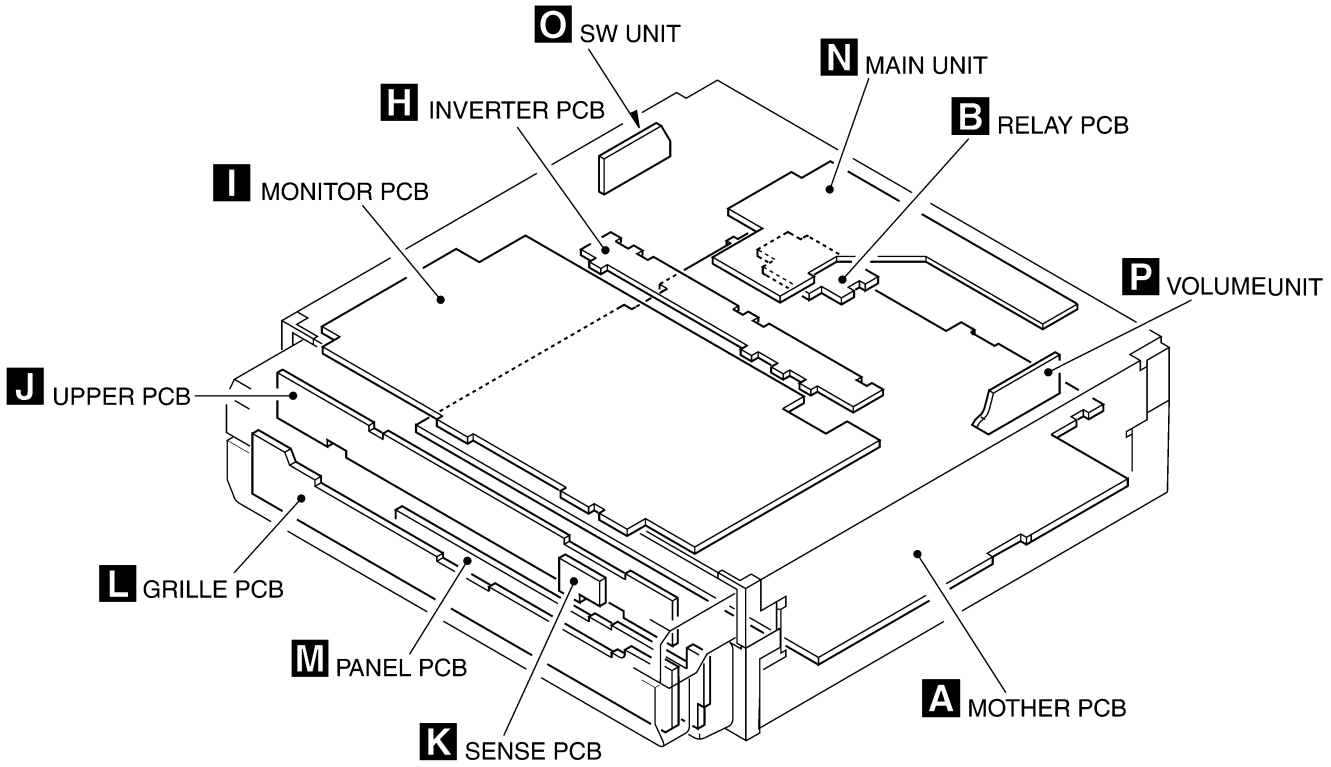
2. When install the gear unit, rotate the gear by hand until the square box of the gear keeps in a horizontal position like the figure below.

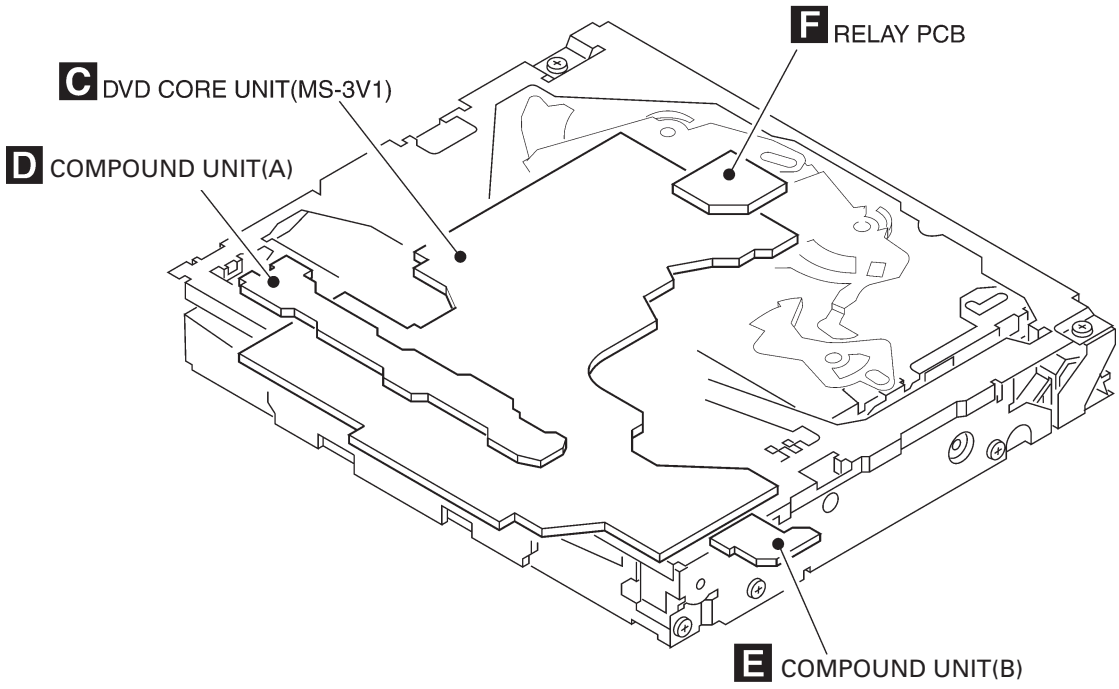


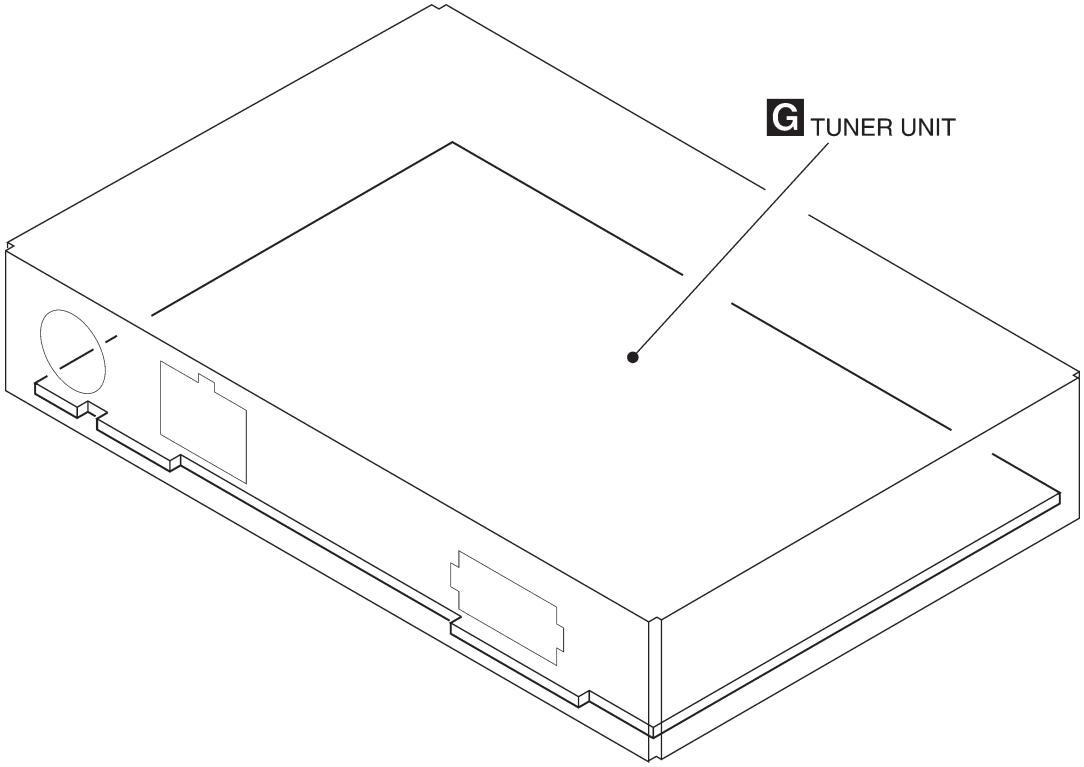
*Gap of one teeth is acceptable.



7.1.2 PCB LOCATIONS

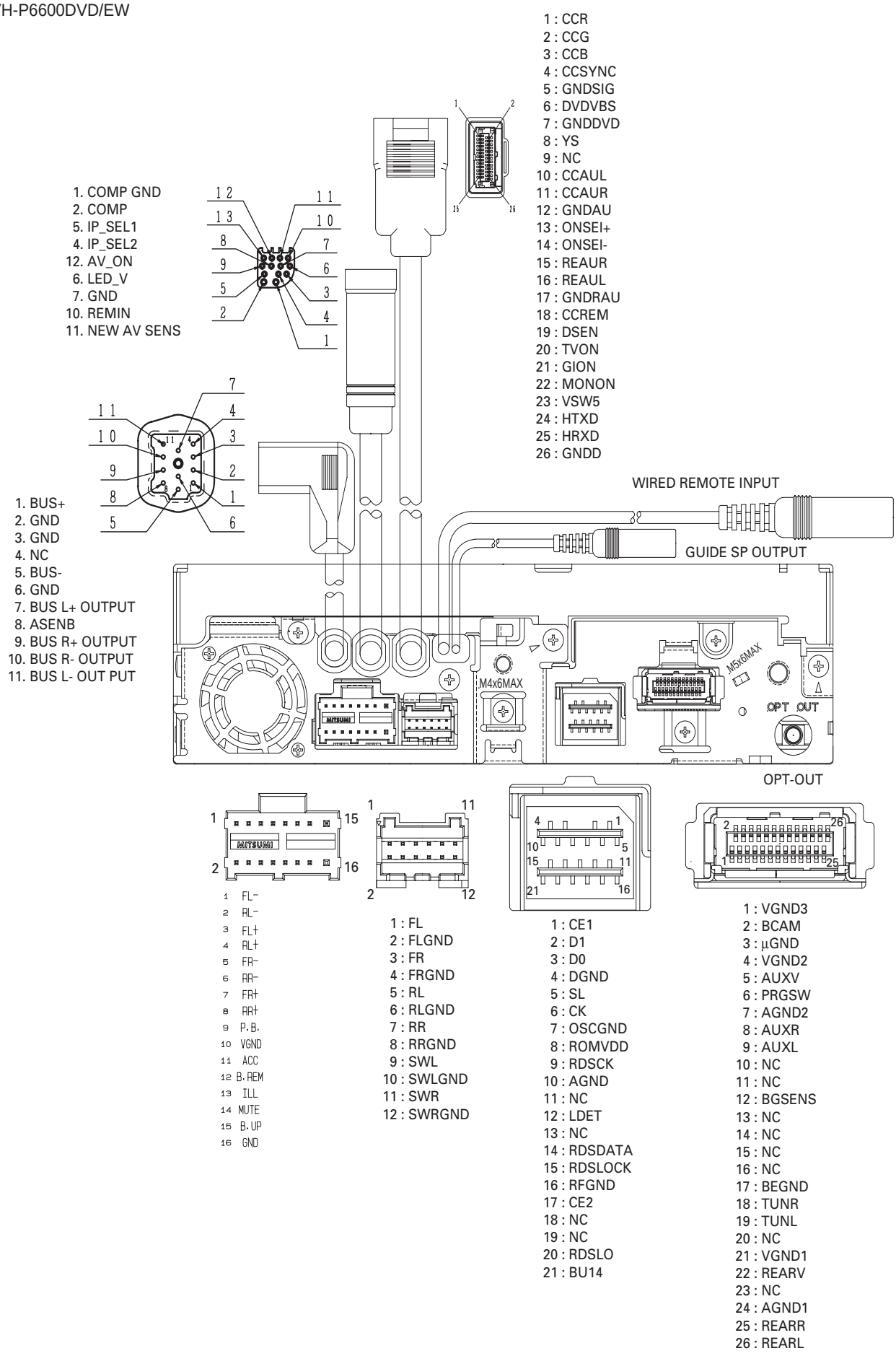





G TUNER UNIT

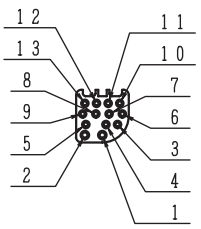
7.1.3 CONNECTOR FUNCTION DESCRIPTION

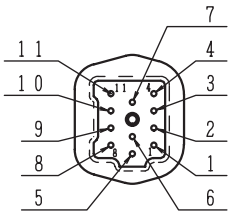
AVH-P6600DVD/UC
AVH-P6600DVD/EW



AVH-P6650DVD/RC
AVH-P6650DVD/RD

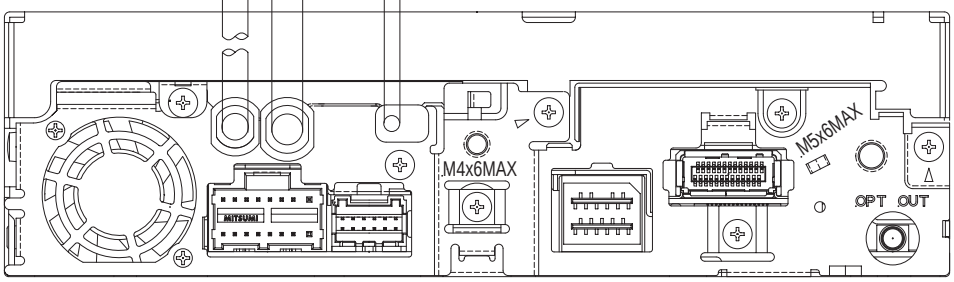
1. COMP GND
2. COMP
5. IP_SEL1
4. IP_SEL2
12. AV_ON
6. LED_V
7. GND
10. REMIN
11. NEW AV SENS



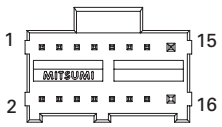


1. BUS+
2. GND
3. GND
4. NC
5. BUS-
6. GND
7. BUS L+ OUTPUT
8. ASENB
9. BUS R+ OUTPUT
10. BUS R- OUTPUT
11. BUS L- OUT PUT

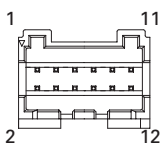
WIRED REMOTE INPUT



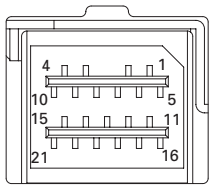
OPT-OUT



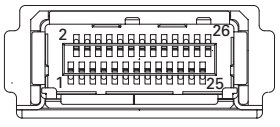
1 FL-
2 RL-
3 FL+
4 RL+
5 FR-
6 RR-
7 FR+
8 RR+
9 P.B.
10 VGND
11 ACC
12 B.REM
13 ILL
14 MUTE
15 B.UP
16 GND



1 : FL
2 : FLGND
3 : FR
4 : FRGND
5 : RL
6 : RLGND
7 : RR
8 : RRGND
9 : SWL
10 : SWLGND
11 : SWR
12 : SWRGND



1 : CE1
2 : D1
3 : D0
4 : DGND
5 : SL
6 : CK
7 : OSCGND
8 : ROMVDD
9 : RDSCK
10 : AGND
11 : NC
12 : LDET
13 : NC
14 : RDSDATA
15 : RDSLOCK
16 : RFGND
17 : CE2
18 : NC
19 : NC
20 : RDSLO
21 : BU14



1 : VGND3
2 : BCAM
3 : μGND
4 : VGND2
5 : AUXV
6 : PRGSW
7 : AGND2
8 : AUXR
9 : AUXL
10 : NC
11 : NC
12 : BGSENS
13 : NC
14 : NC
15 : NC
16 : NC
17 : BEGND
18 : TUNR
19 : TUNL
20 : NC
21 : VGND1
22 : REARV
23 : NC
24 : AGND1
25 : REARR
26 : REARL

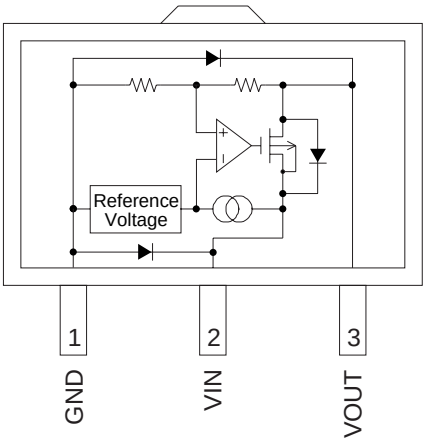
7.2 PARTS

7.2.1 IC

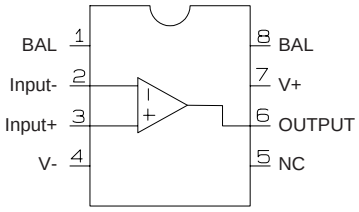
S-812C33AUA-C2N	S-812C50AUA-C3E	TC7SZ32FU	PE5401A
NJM2136V	PD8125A	S-80827CNUA-B8M	PD6480B
SM5304AV	PD8126A	TC74VCX02FT	S-L2980A50MC-C7J
S-80841CNUA-B82	K4S641632H-TC75	PD6340A	LTC3411EMS
TC7WHU04FU	TC7SZ04FU	K4S283232E-TC75	TC7SZ125FU
NJM4580V	TC7SZ02FU	NJM2140R	MN35104UB
PE5415A : EW	LTC3728EG	TC7WH157FU	
PE5416A : UC,RC,RD	TK15404AMI	R1130H501B	
HA12240FP	SI6544DQ	SM8707LV	
PE5417A	S-93C46BR0I-J8T1	TC74LCK16373AFT	

IC's marked by * are MOS type.
Be careful in handling them because they are very liable to be damaged by electrostatic induction.

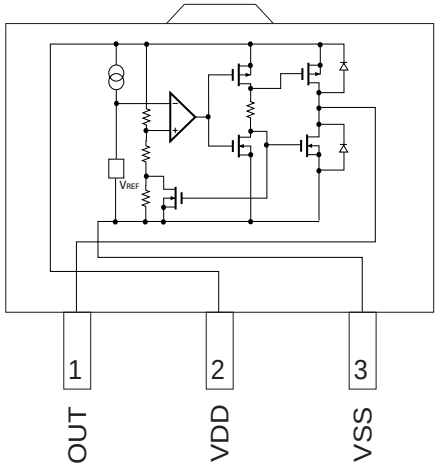
*S-812C33AUA-C2N



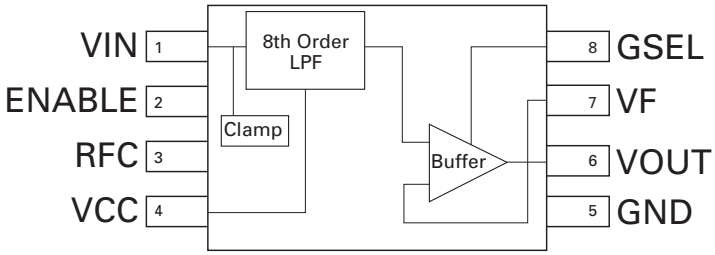
NJM2136V



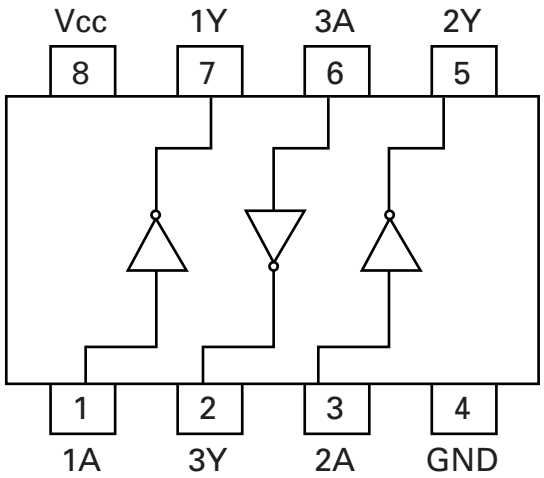
*S-80841CNUA-B82



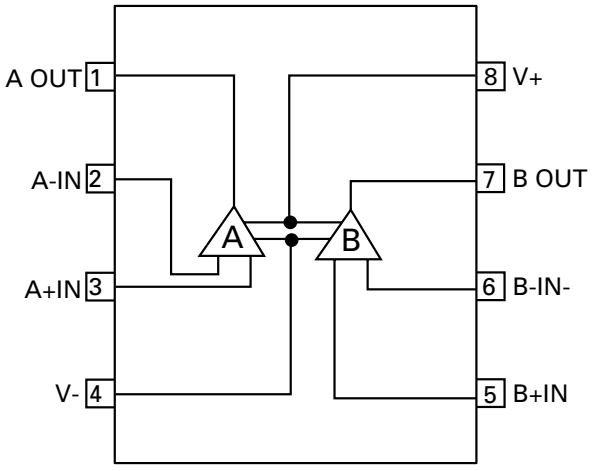
SM5304AV



*TC7WHU04FU



NJM4580V



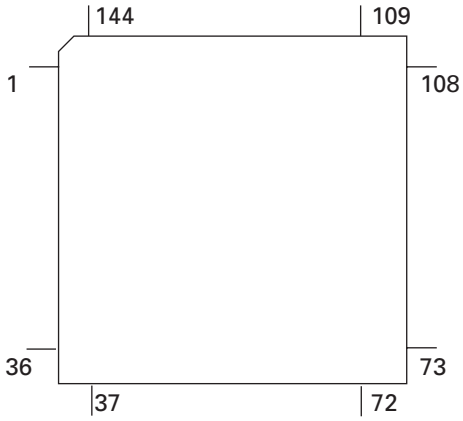
● Pin Function(PE5415A:EW,PE5416A:UC,RC,RD)

Pin No.	Pin Name	I/O	Function and operation
1	STEST1	I	Test input
2	MODEL1	I	Model select input
3	MODEL2	I	Model select input
4	NC		Not used
5	PORTGND0		Port GND
6	ROMCS	O	ROM Chip select output
7	ROMCLK	O	ROM Clock output
8	ROMDATA	I/O	ROM Data Input output
9	VDT	O	EVOL Data output
10	VCK	O	EVOL Clock output
11	FRONTMUTE	O	Front Mute output
12	VST	O	EVOL Strobe output
13	MTRPW	O	FLAP Motor power supply control output
14	MTRSEL	O	FLAP motor control output
15	MTRS	O	FLAP Motor speed contorl output
16	MTR1	O	FLAP angle motor control signal output
17	MTR2	O	FLAP position motor control signal
18	SNSPW	O	FLAP sense power supply output
19	$\overline{\text{PUSHSW}}$	I	FLAP push switch input
20	$\overline{\text{DEG0SW}}$	I	FLAP monitor angle 0 sense input
21	LIFTPUL	I	FLAP lift pulse input
22	PORTVDD0		Port power supply
23	RDT	I	RDS data input (EW model)
24	$\overline{\text{RDS57K}}$	I	RDS 57kHz input (EW model)
25	$\overline{\text{RDSLK}}$	I	RDS signal input (EW model)
26	RECIVE	O	RDS receive
27	CRREAR	O	Rear key output
28	CGREAR	O	Rear output
29	ACCPW	O	ACC power control output
30	SRCPW	O	Source power control output
31	AMPPW	O	Amp power control output
32	VPW	O	Video power control output
33	DDCCNTL	O	DD converter output
34	DLED	O	LED output
35	ILMGRN	O	Illumination output
36	CLKOUT	O	System clock ouptut
37	GND0		GND
38	CPUREG		Regulator output
39	VDD0		Power supply(/RESET)
40	$\overline{\text{RESET}}$	I	Reset input
41	VPP		Vpp
42	TSI	I	Test data input
43	TSO	O	Test data output
44	TCK	I	Test data clock input
45	$\overline{\text{LDET}}$	I	RDS PLL signal (EW model)
46	TUNPDI	I	TUNER PLL data input
47	TUNPDO	I/O	TUNER PLL data input/output
48	TUNPCK	I/O	TUNER PLL clock input/output
49	TUNPW	O	Tuner power control output
50	MACHMUTE	O	RCA REAR/SW mute output
51	VSELIN1	I	VSEL input
52	VSELIN2	I	VSEL input
53	AVONIN	I	AV-BUS AV video input sense
54	ROT0	I	Rotary encoder input
55	ROT1	I	Rotary encoder input
56	TESTIN	I	Test mode input
57	$\overline{\text{RCK}}$	I	RDS data clock (EW model)
58	PRGON	I	System microcomputer program mode
59	VPPON	O	VPP ON/OFF
60	PORTVDD1	O	Port power supply

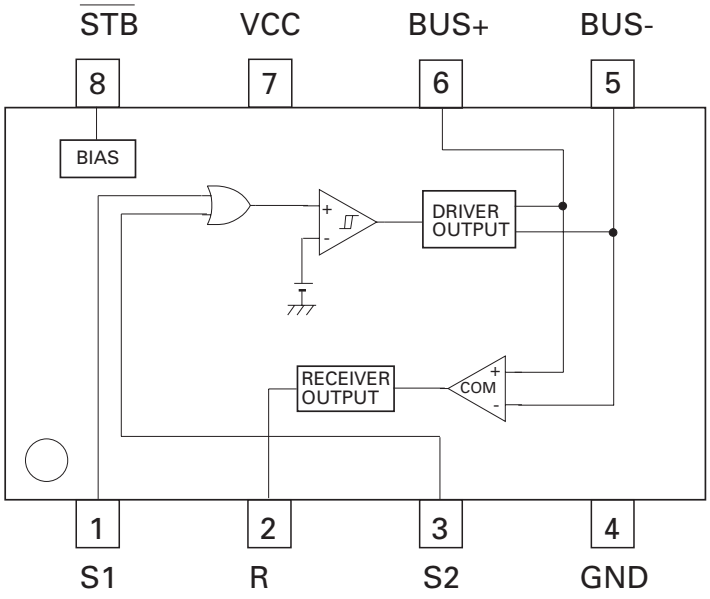
Pin No.	Pin Name	I/O	Function and operation
61-64	NC		Not used
65	DDCONF	O	DD converter control output
66	NC		Not used
67	ILMRED	O	Illumination output (EW model)
68	BEEP	O	BEEP output
69	$\overline{\text{BSENS}}$	I	Back up sense input
70	XT2		Sub clock oscillator connect
71	XT1		Sub clock oscillator connect
72	GND2		GND
73	X1		Main clock oscillator connect
74	X2		Main clock oscillator connect
75,76	NC		Not used
77	COOLCNT1	O	Fan control output
78	COOLCNT2	O	Fan control output
79,80	NC		Not used
81	CONTBIN	I	Back up off intput
82	NC		Notused
83	$\overline{\text{DSENS}}$	I	Detach sense intput
84	SDA	I/O	AV selector data input/output
85	SELMUTE	O	AV selector sound mute output
86	SCL	O	AV selector clock output
87	ASENBO	O	Slave ACC sense output
88	IPPW	O	IPBUS driver power supply contorl output
89	NC		Not used
90	$\overline{\text{IERX}}$	I	IPBUS data input
91	$\overline{\text{IETX}}$	O	IPBUS data output
92	PORTGND1		Port GND
93-95	NC	O	Not used
96	$\overline{\text{ASENS}}$	I	ACC sense input
97-99	NC		Not used
100	TUNPCE	O	TUNER PLL chip enable output
101	$\overline{\text{TUNPCE2}}$	O	TUNER PLL chip enable output 2
102	PORTVDD2		Port power supply
103	CONTVDD	O	MS3 digital power control output
104	CONTVD8	O	MS3 motor power control output
105	DREM	O	NAVI Reboot remote control output
106	REMUTE	O	NAVI remote control mute output
107	RXMOM	I	Display microcomputer data input
108	TXMON	O	Display microcomputer data output
109	SWVDD	O	Display microcomputer power supply output
110	NC		Not used
111	RXMS3	I	MS3 data input
112	TXMS3	O	MS3 data output
113	IRQPWR	O	MS3 backup power output
114	$\overline{\text{XRESET}}$	O	MS3 mechanism CPU reset output
115-116	NC		Not used
117	RXNAV	I	NAVI data input
118	TXNAV	O	NAVI command output
119	$\overline{\text{RGBSENS}}$	I	RGB navigation ON sense input
120	NC		Not used
121	NMIXCNT	O	Voice guide mute output
122	MUTE	O	Mute output
123	REARMUTE	O	Rear monitor mute output
124	AMPMUTE	O	AMP mute output
125	NC		Not used

Pin No.	Pin Name	I/O	Function and operation
126	$\overline{\text{ISENS}}$	I	Illumination sense input
127	TELIN	I	TEL mute input
128	VDD1		Power supply
129	PBSENS	I	Packing brake sense input
130	BGSENS	I	Back gear sense input
131	GND1		GND
132,133	NC		Not used
134	WKYD	I	Remote control intput
135	TUNSL	I	TUNER signal level input
136	VD8SENS	I	VD8 sense input
137	ANGLEIN	I	Mechanism volume for angle sense input
138	WKYAD	I	Remote control input(Analog)
139	NC	I	Not used
140-142	KEYDTA0-2	I	Key data input
143	ADCVDD		A/D Power supply
144	ADCGND		A/D GND

*PE5415A : EW,PE5416A : UC,RC,RD



HA12240FP

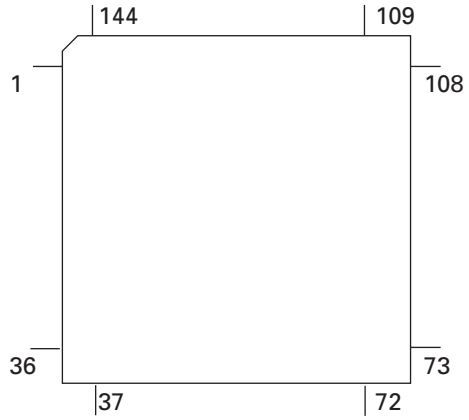


● Pin Function(PE5417A)

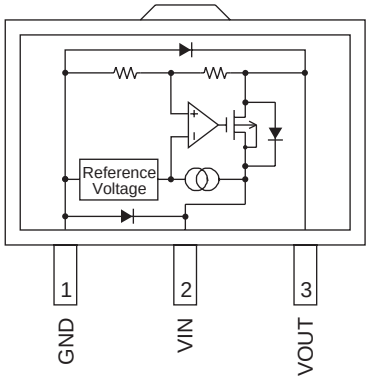
Pin No.	Pin Name	I/O	Function and operation
1-7	D14-8	I/O	Exterior ROM/RAM data bus input/output
8	VDD		Power supply
9	VSS		GND
10-17	D7-0	I/O	Exterior ROM/RAM data bus
18	MODE2		Operation mode select
19	$\overline{IRL}$	I	GDC interruption demand input
20	MFLPW	O	TFT backlight output
21	MVIPW	O	Video power supply output
22,23	NC		Not used
24	$\overline{EPRST}$	I	EEPROM data reset mode input
25	$\overline{EPRTEST}$	I	EEPROM data test mode input
26	NC		Not used
27	VDD		Power supply
28	VSS		GND
29-32	NC		Not used
33	DIMMER	O	Dimmer output
34-36	NC		Not used
37	VDD		Power supply
38	VSS		GND
39	PNLVD	O	Pouch panel push sense output
40	PNLXV	O	Hi output is carried out when X directions is detected output
41	PNLYV2	O	Hi output is carried out when Y directions is detected output
42	$\overline{STEST}$	I	Monitor operation mode input
43	INVPUL	O	Inverter pulse output
44	$\overline{STEST2}$	I	Touch panel test mode input
45	STEST	I	Test input
46	$\overline{NM1}$		Not used
47	VDD		Power supply
48	VSS		GND
49	NC		Not used
50	GDCPW	O	GDC IC power supply output
51	$\overline{GDCRES}$	O	GDC IC reset output
52	SELFRX	I	Data input for self writting
53	SELFTX	O	Data output for self writting
54	LDIMMER	O	LCD dimmer output
55,56	NC		Not used
57,58	MODE1,0		Operation mode pin
59	RESET		Reset pin
60	CKSEL		Clock generator select
61	CVDD		Clock generator power supply
62,63	X2,1		Oscillation pin
64	CVSS		Clock generator GND
65	LSWVDD	O	LCD micro computer power supply control output
66	LKYDT	I	Data input from LCD micro computer
67	LDPDT	O	Data output from LCD micro computer
68	LBKL	O	LCD micro computer backlight power supply control output
69	DPDT	I	Data input for test mode/data input from system micro computer
70	KYDT	O	Data output for test mode/data output from system micro computer
71	AVDD		A/D power supply
72	AVSS		A/D GND
73-76	NC		Not used
77	SPEANA	I	Spectrumanalyzer level input
78	PNLADY	I	Y directions analog input
79	PNLADXLSEN	I	X directions analog input
80	LSEN	I	Lens sense input
81	VDD		Power supply
82	VSS		GND
83-85	SP2-0	O	Spectrumanalyzer band select output
86	EPRCS	O	Memory for adjustment chip select output
87	EPRCLK	O	Memory for adjustment clock output

Pin No.	Pin Name	I/O	Function and operation
88	EPRDO	O	Memory for adjustment data output
89	EPRDI	I	Memory for adjustment data input
90	$\overline{\text{EPRPROT}}$	O	Memoty for adjustment protect output
91	$\overline{\text{WAIT}}$	I	GDC wait input
92	$\overline{\text{VDDSENS}}$		EEPROM power supply
93	$\overline{\text{YSSTOP}}$	O	YS stop output
94	TOPGDC	O	NAVI/GDC select output
95	$\overline{\text{RD}}$	O	Read output
96	$\overline{\text{UWR}}$	O	RAM write output
97	$\overline{\text{LWR}}$	O	RAM write output
98	VDD		Power supply
99	VSS		GND
100	SELFOUT	O	Self write output
101	$\overline{\text{CS6}}$	I	Exterior RAM chip select input
102	SELFIN	I	Self write input
103	$\overline{\text{CS4}}$	O	Exterior RAM chip select output
104	$\overline{\text{CS3}}$	O	Exterior ROM chip select output
105	RIND		Not used
106	NC		Not used
107	PIPDT	O	Pin P IC data input output
108	PIPCLK	O	Pin P IC clock output
109	pipres	O	Pin P IC reset output
110	SYNCKIND	I	RGB signal input
111	DISPMUTE	O	Video mute output
112	VDD		Power supply
113	VSS		GND
114-116	NC		Not used
117-123	A22-16	O	Exterior ROM/RAM address output
124	VDD		Power supply
125	VSS		GND
126-133	A15-A8	O	Exterior ROM/RAM address output
134	VDD		Power supply
135	VSS		GND
136-143	A7-0	O	Exterior ROM/RAM address output
144	D15	I/O	Exterior ROM/RAM data bus input/output

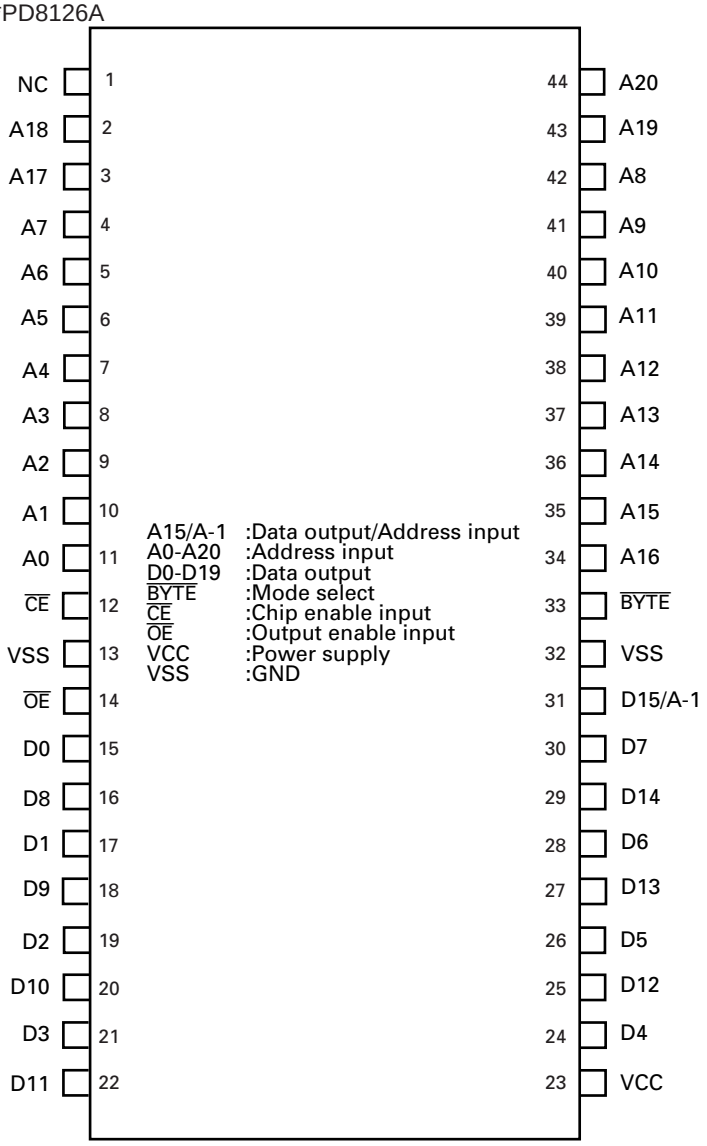
*PE5417A



*S-812C50AUA-C3E



*PD8125A,
*PD8126A



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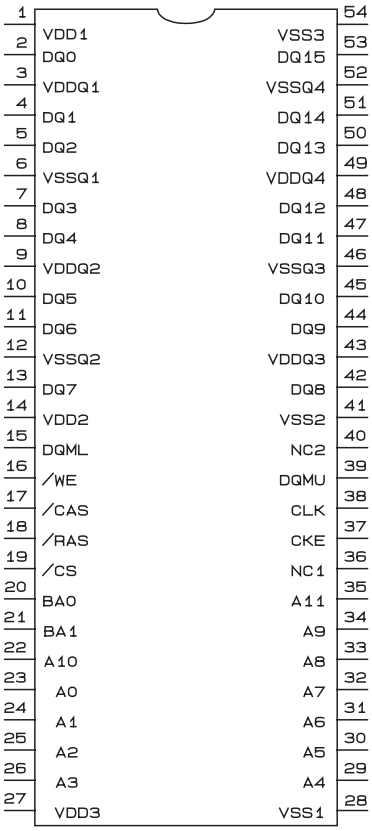
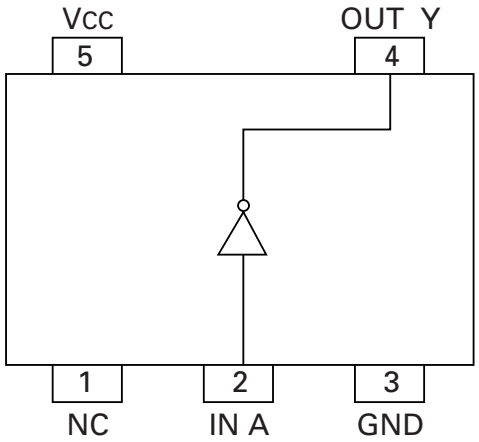
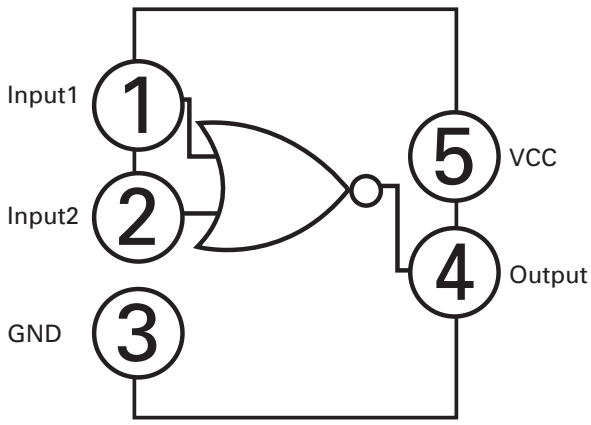


A0-A11 :Address input
DQ0-DQ19 :Data request output
VDD :Power supply
VSS :GND
BA :Memory address input
/CS :Chip enable
/RAS :Row address strobe
/CAS :Column address strobe
/WE :Write enable
DQML :Low byte DQ mask
DQMU :Upper byte DQ mask
CLK :Clock output
CKE :Clock enable

*TC7SZ04FU



*TC7SZ02FU



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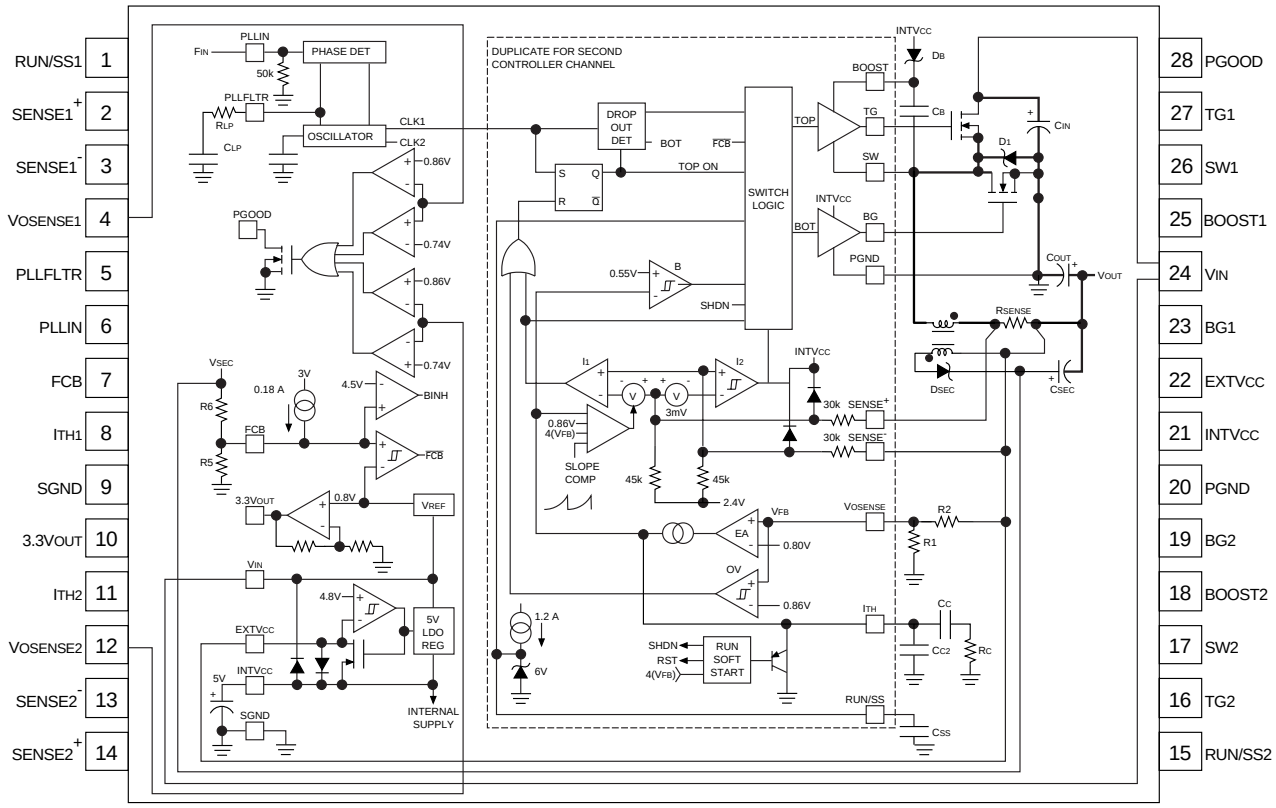

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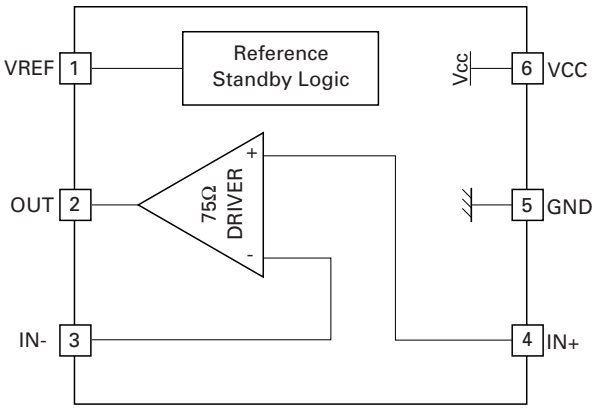

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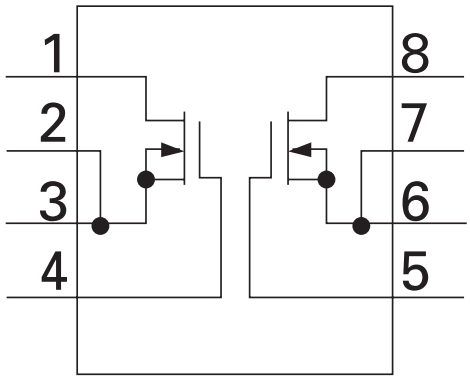

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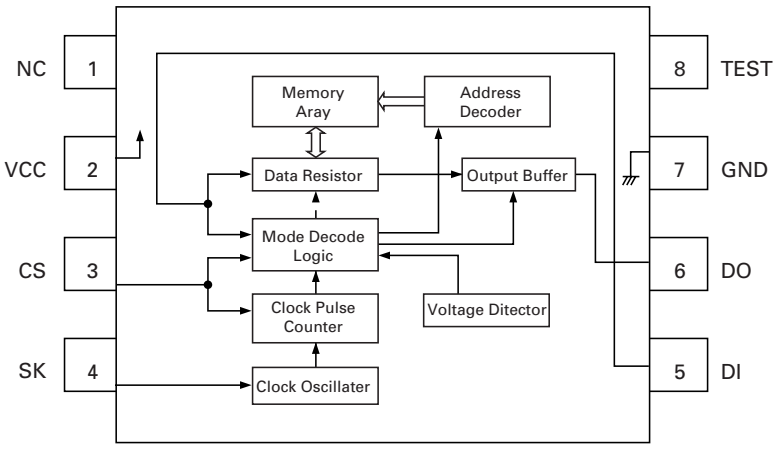

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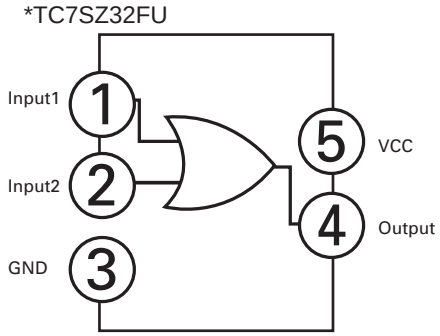

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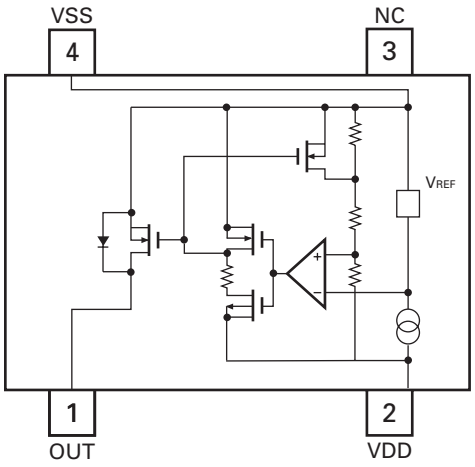

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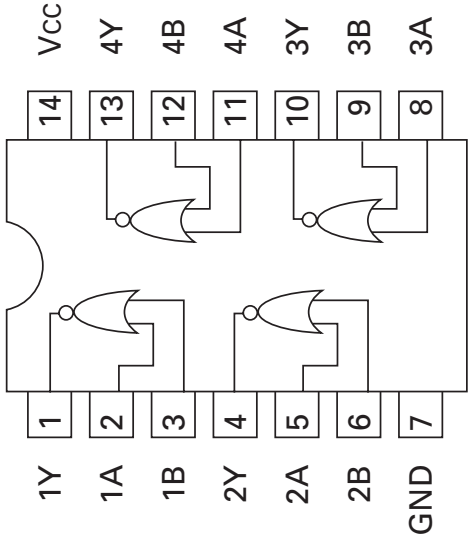
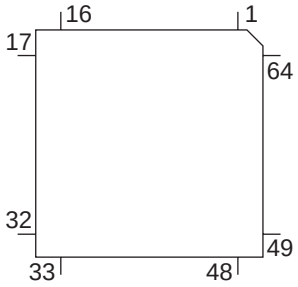


● Pin Functions (PD6340A)

Pin No.	Pin Name	I/O	Function and Operation
1,2	SEG1,0	O	LCD segment signal output
3-5	NC		Not used
6-9	COM3-0	O	LCD common signal output
10	VLCD		LCD driver power supply
11-14	KST3-0	O	Key strobe output
15,16	KDT0,1	I	Key data intput(Analog)
17	REM	I	Remote control data input
18	DPDT	I	Display data input
19	NC		Not used
20	KYDT	O	Key data output
21	MODA		GND
22	X0		Crystal oscillating element connection pin
23	X1		Crystal oscillating element connection pin
24	VSS		GND
25,26	KDT2,3	I	Key data input
27	NC		Not used
28	KST4	O	Key strobe output
29-33	NC		Not used
34-55	SEG31-10	O	LCD segment signal output
56	VDD		Power suplly
57-64	SEG9-2	O	LCD segment signal output

*PD6340A



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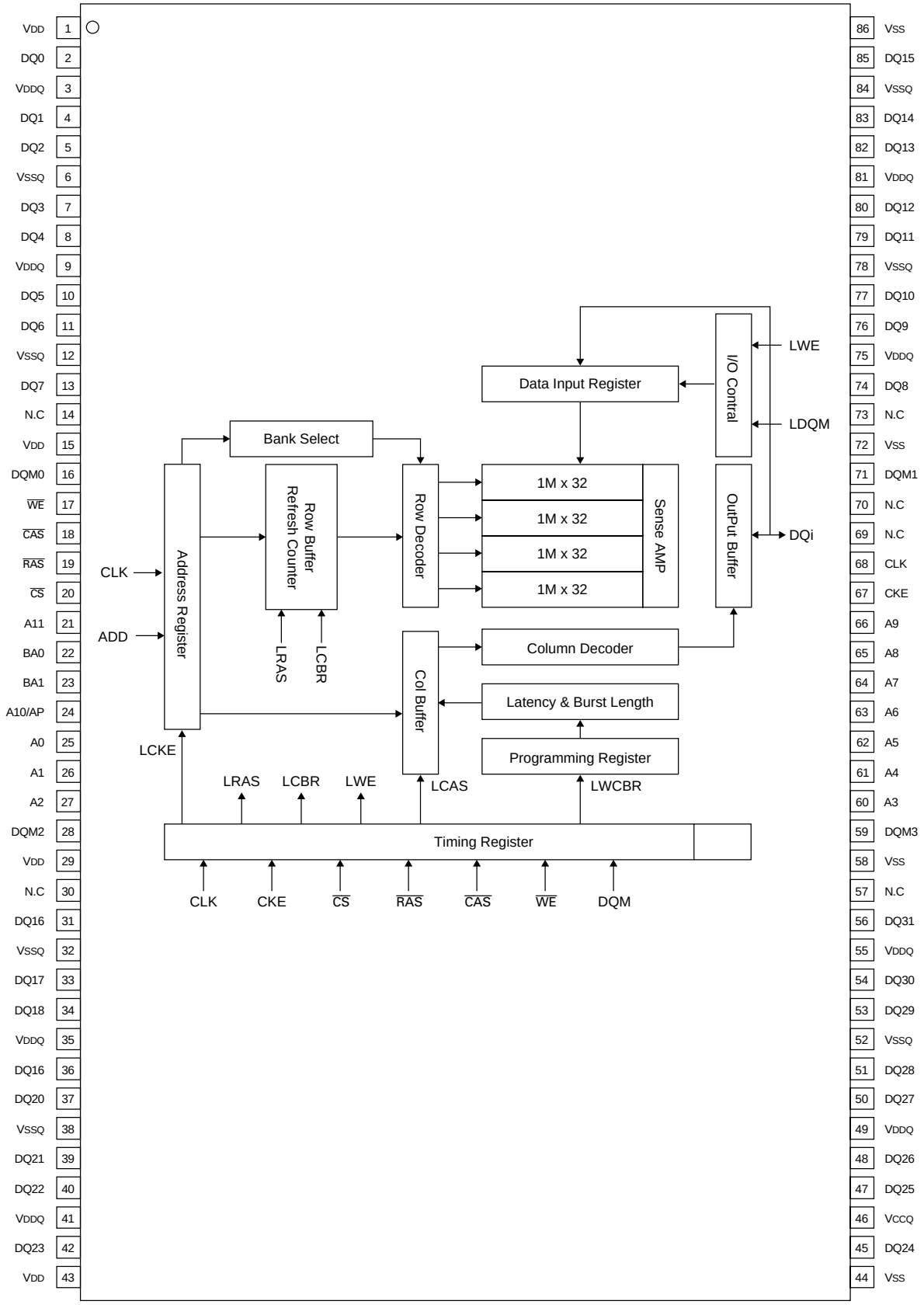

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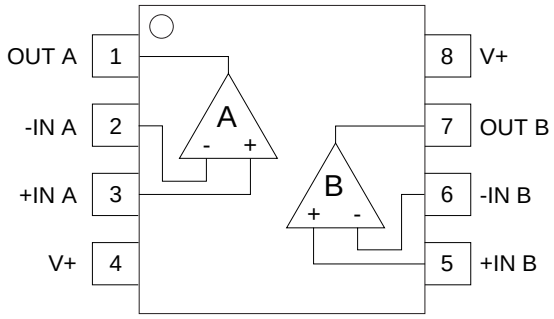

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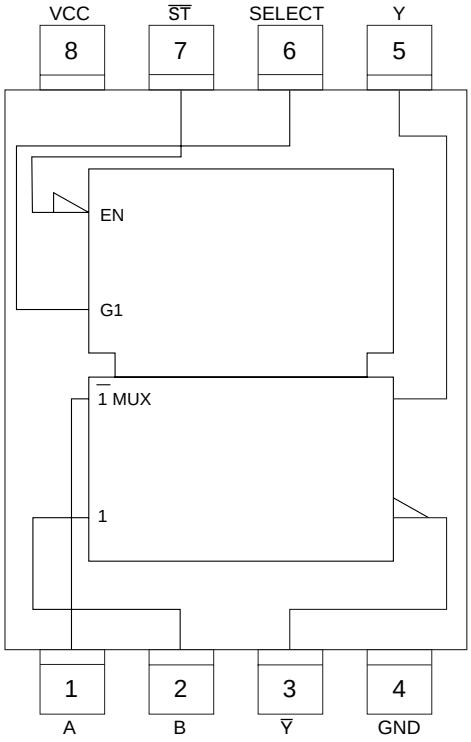

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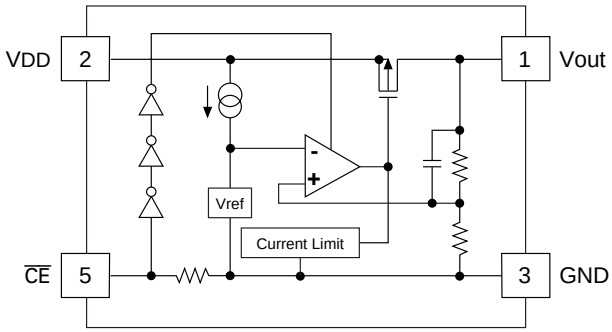

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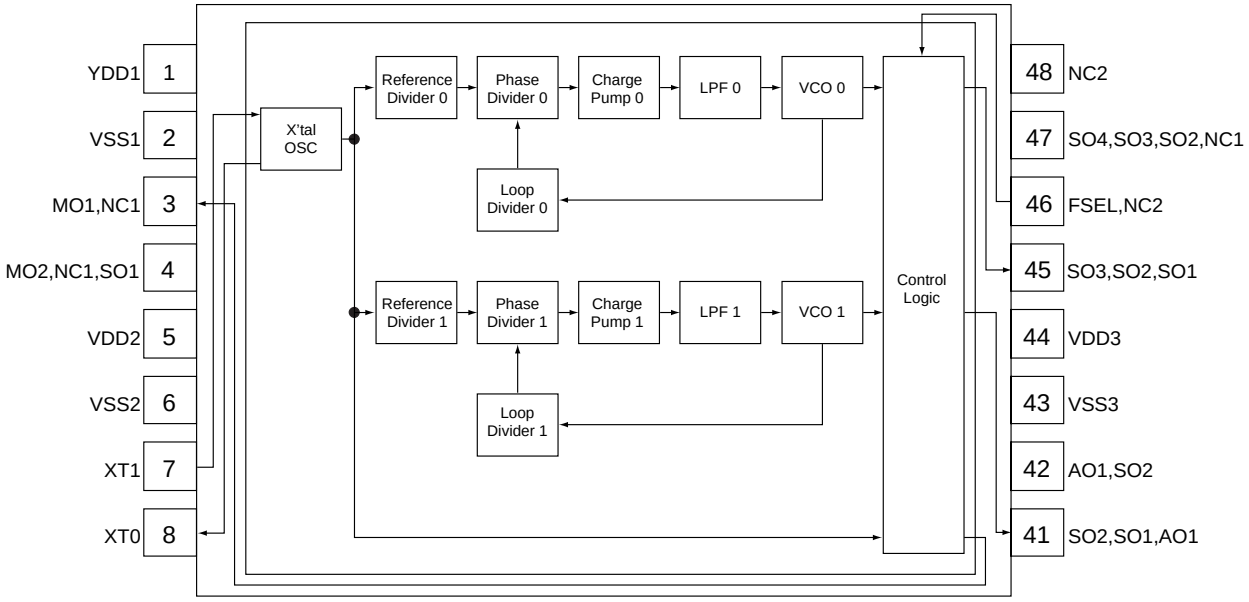

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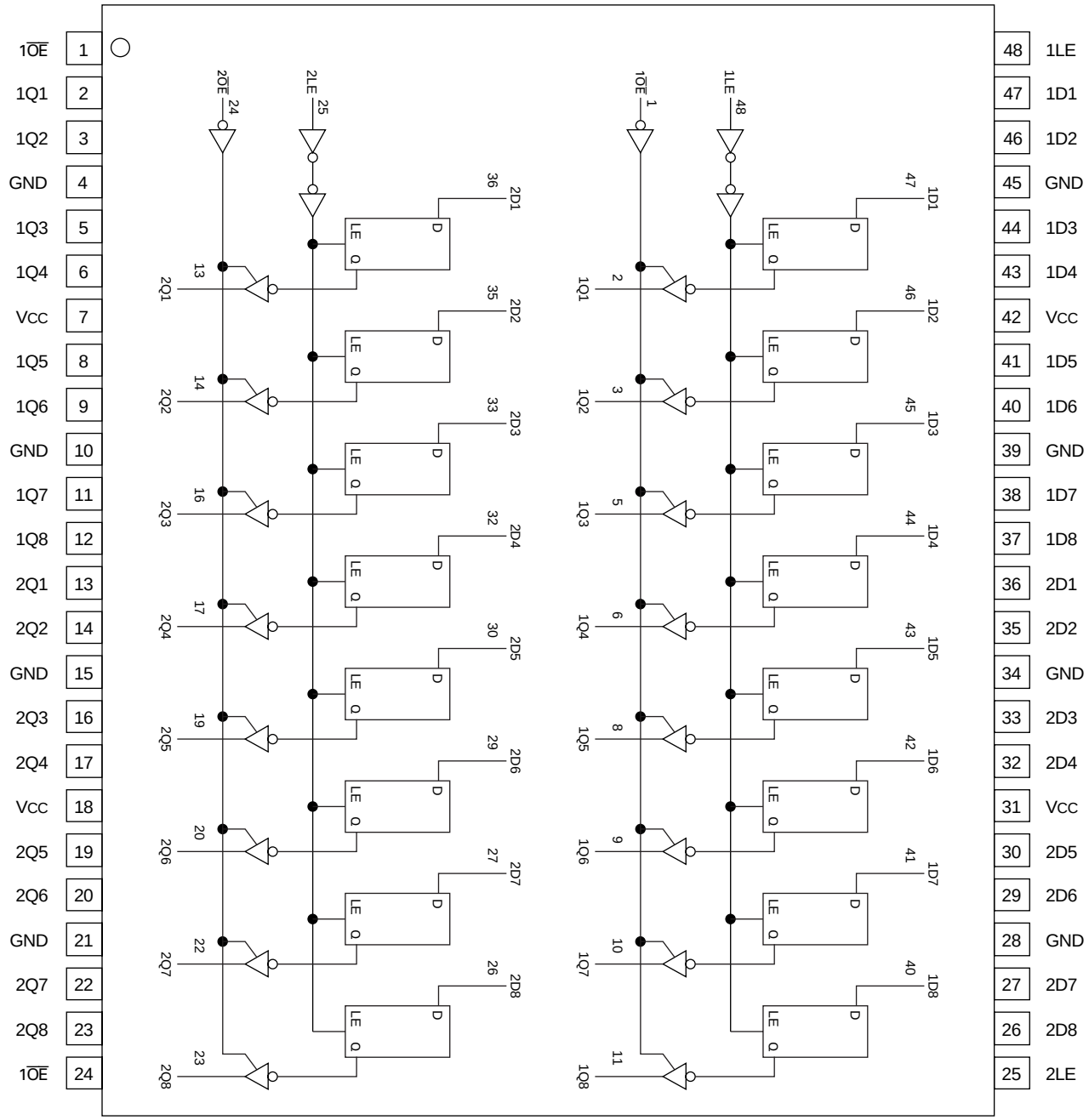

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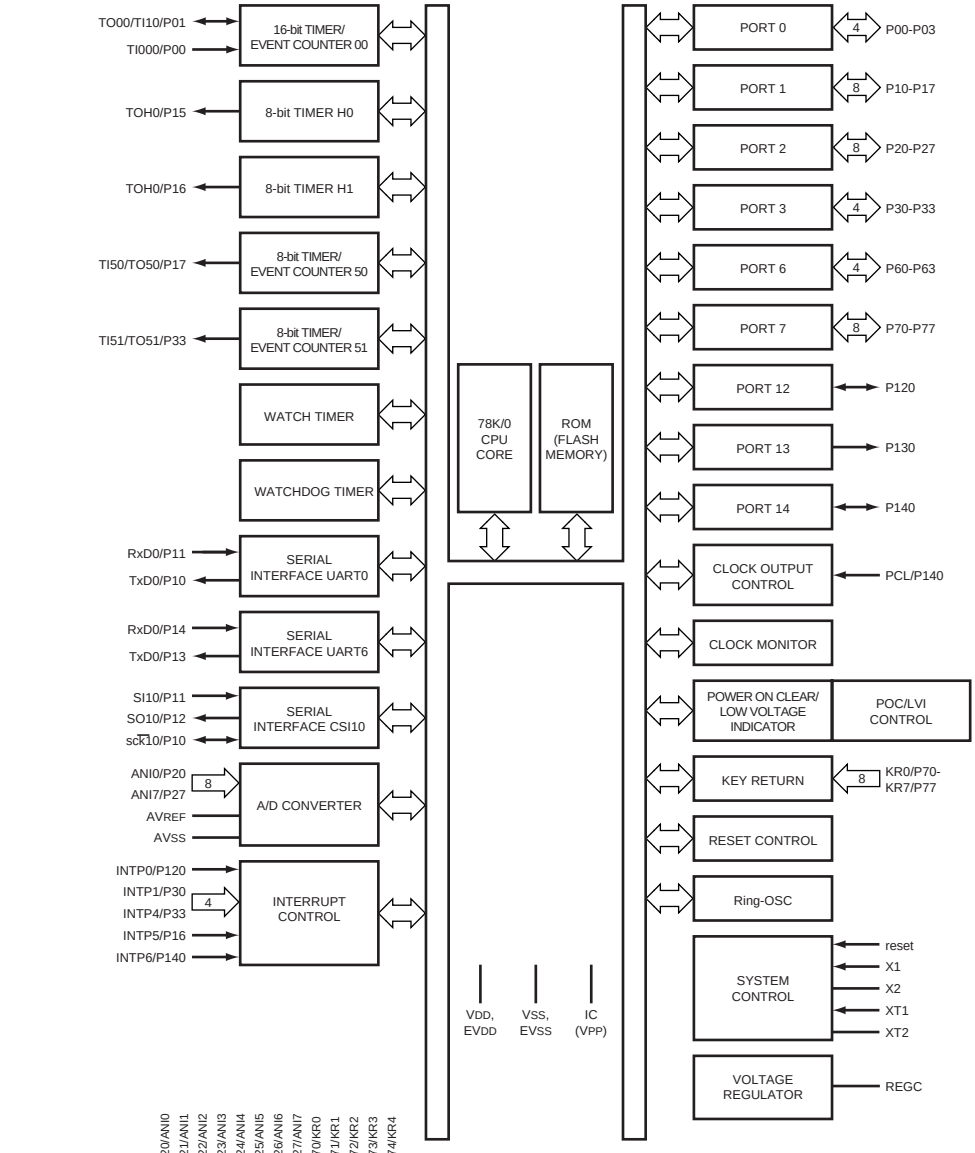
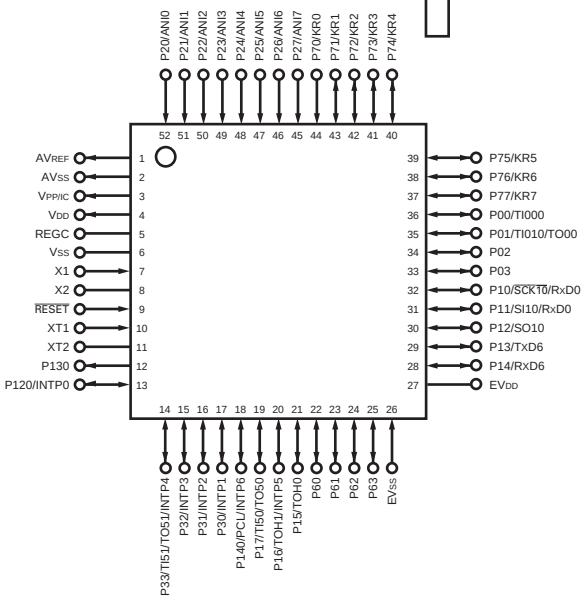
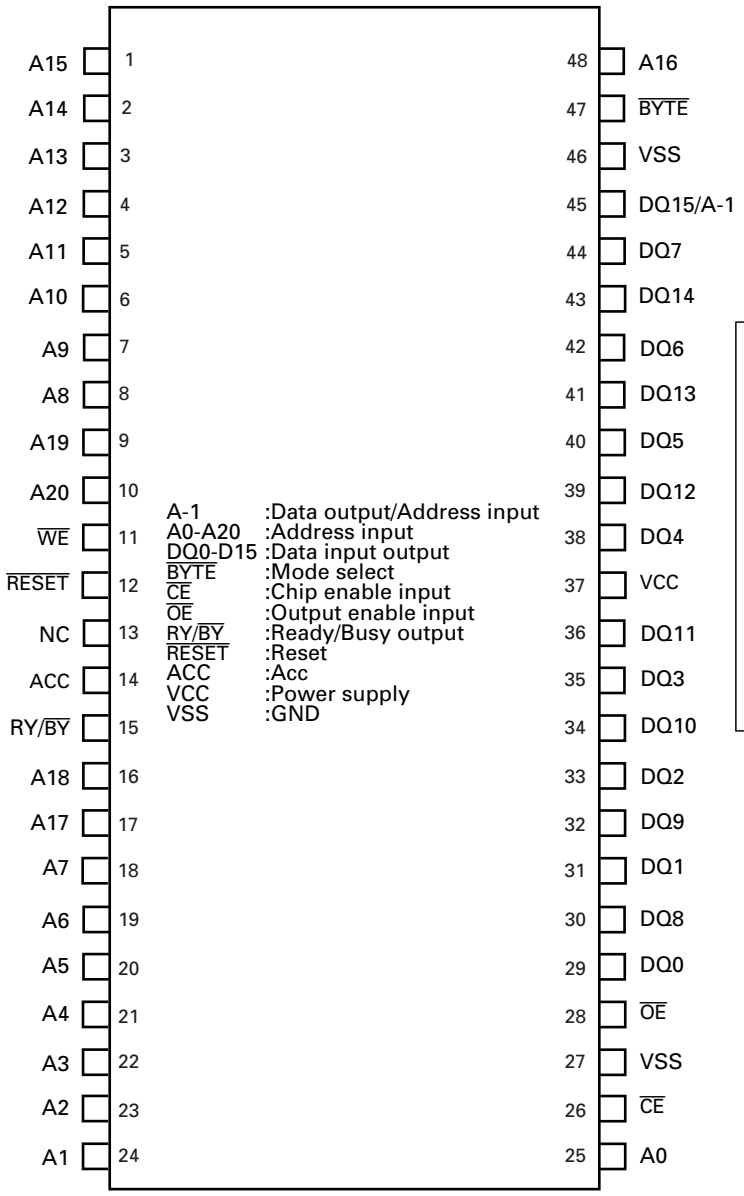

TO00/TI10/P01
TI000/P00
16-bit TIMER/ EVENT COUNTER 00
TOH0/P15
8-bit TIMER H0
TOH0/P16
8-bit TIMER H1
TI50/TO50/P17
8-bit TIMER/ EVENT COUNTER 50
TI51/TO51/P33
8-bit TIMER/ EVENT COUNTER 51
WATCH TIMER
WATCHDOG TIMER
RxD0/P11
TxD0/P10
SERIAL INTERFACE UART0
RxD0/P14
TxD0/P13
SERIAL INTERFACE UART6
SI10/P11
SO10/P12
sck10/P10
SERIAL INTERFACE CSI10
ANI0/P20
ANI7/P27
AVREF
AVSS
A/D CONVERTER
INTP0/P120
INTP1/P30
INTP4/P33
INTP5/P16
INTP6/P140
INTERRUPT CONTROL
78K/0 CPU CORE
ROM (FLASH MEMORY)
VDD, EVDD
VSS, EVSS
IC (VPP)
PORT 0
P00-P03
PORT 1
P10-P17
PORT 2
P20-P27
PORT 3
P30-P33
PORT 6
P60-P63
PORT 7
P70-P77
PORT 12
P120
PORT 13
P130
PORT 14
P140
CLOCK OUTPUT CONTROL
PCL/P140
CLOCK MONITOR
POWER ON CLEAR/ LOW VOLTAGE INDICATOR
POC/LVI CONTROL
KEY RETURN
KR0/P70-KR7/P77
RESET CONTROL
Ring-OSC
SYSTEM CONTROL
reset
X1
X2
XT1
XT2
VOLTAGE REGULATOR
REGC


P20/ANI0
P21/ANI1
P22/ANI2
P23/ANI3
P24/ANI4
P25/ANI5
P26/ANI6
P27/ANI7
P70/KR0
P71/KR1
P72/KR2
P73/KR3
P74/KR4
52 51 50 49 48 47 46 45 44 43 42 41 40
AVREF 1
AVSS 2
VPP/IC 3
VDD 4
REGC 5
VSS 6
X1 7
X2 8
RESET 9
XT1 10
XT2 11
P130 12
P120/INTP0 13
39 P75/KR5
38 P76/KR6
37 P77/KR7
36 P00/TI000
35 P01/TI010/TO00
34 P02
33 P03
32 P10/SCK10/RxD0
31 P11/SI10/RxD0
30 P12/SO10
29 P13/TxD6
28 P14/RxD6
27 EVDD
14 15 16 17 18 19 20 21 22 23 24 25 26
P33/TI51/TO51/INTP4
P32/INTP3
P31/INTP2
P30/INTP1
P140/PCLI/INTP6
P17/TI50/TO50
P16/TOH1/INTP5
P15/TOH0
P60
P61
P62
P63
EVSS

*PD6480B



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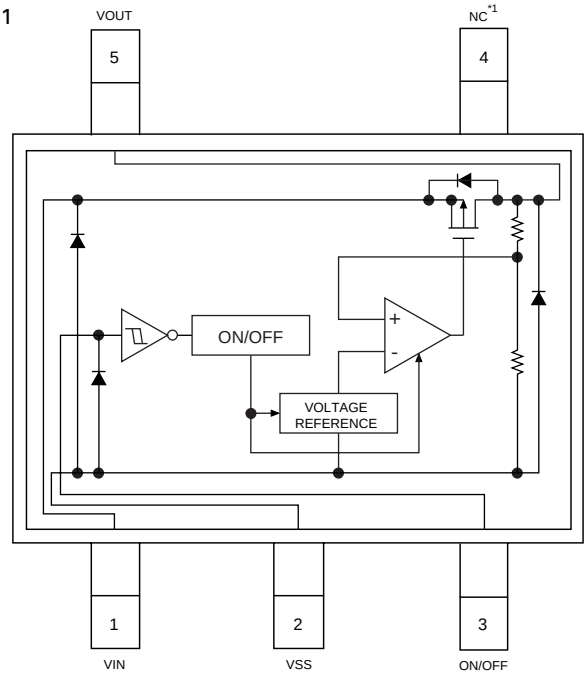

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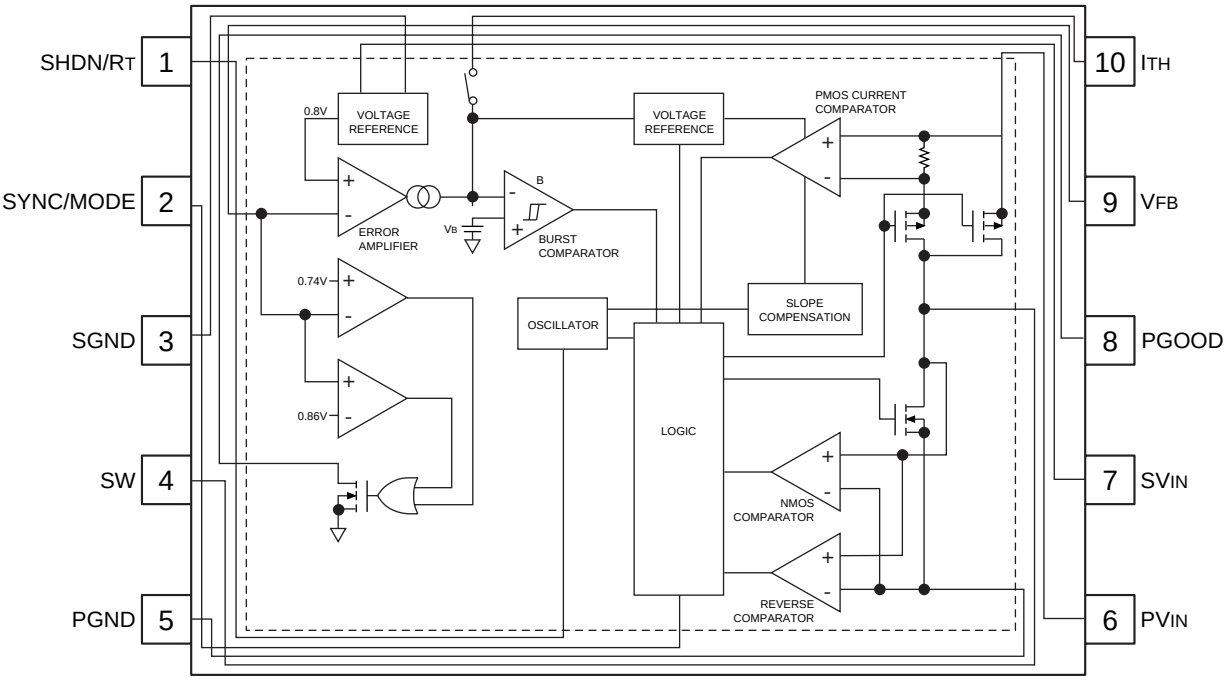

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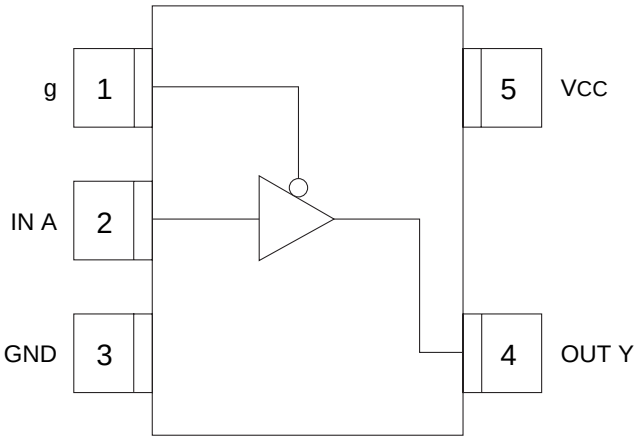

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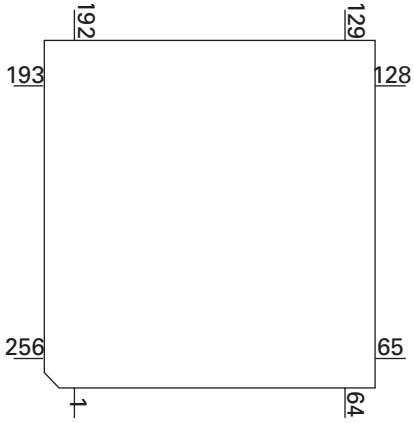


● Pin Functions(MN35104UB)

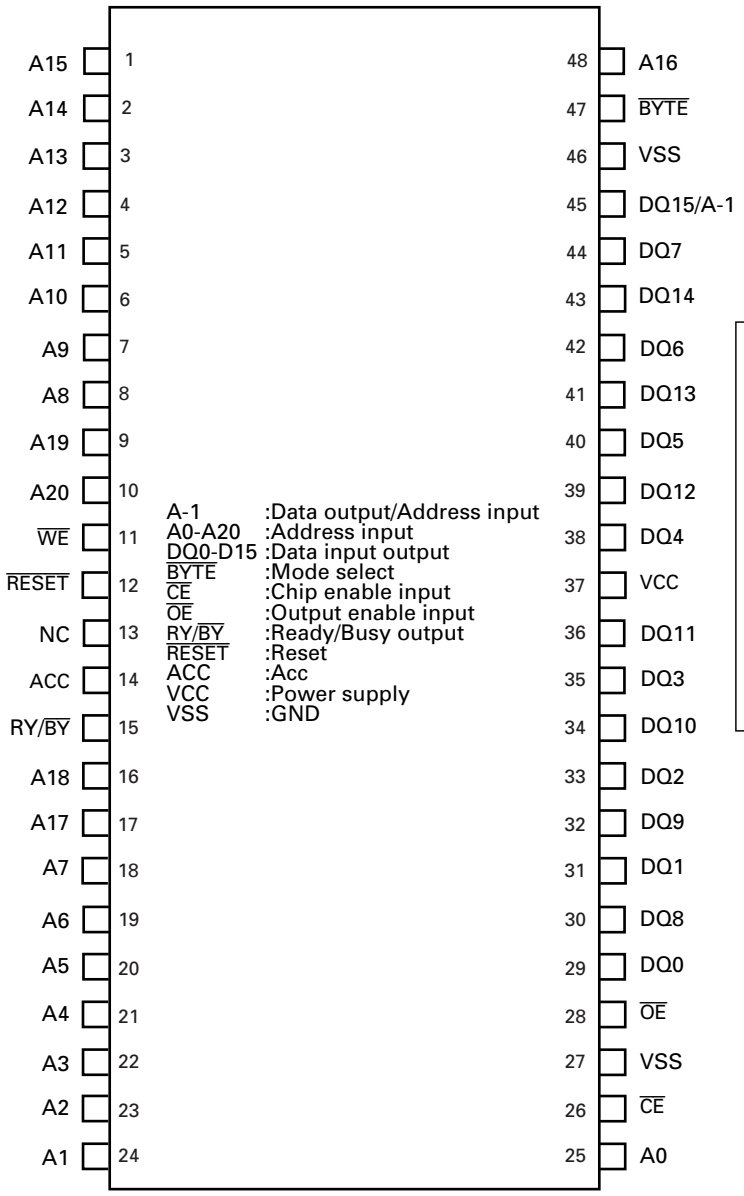
Pin No.	Pin Name	I/O	Function and Operation
1	VDD33		IO power supply
2,3	MDQ	I / O	SDRAM data
4	VSS		GND
5,6	MDQ	I / O	SDRAM data
7	VDD33		IO power supply
8,10	MDQ	I / O	SDRAM data
11	VSS		GND
12,13	MDQ	I / O	SDRAM data
14	VDD33		IO power supply
15	VDD15		Power supply
16	VSS		GND
17	EXADR	I / O	Memory address
18	NEXWE	O	Memory write enable
19-22	EXADT	I / O	Memory address data
23	VDD33		IO power supply
24	VSS		GND
25,26	EXADR	I / O	Memory address
27,28	EXADT	I / O	Memory address data
29	VDD33		IO power supply
30	VSS		GND
31,32	EXADT	I / O	Memory address data
33	NEXCE	O	Memory chip select
34-37	EXADT	I / O	Memory address data
38,39	EXADR	I / O	Memory address
40,41	EXADT	I / O	Memory address data
42	VD33		IO power supply
43	VSS		GND
44,45	EXADT	I / O	Memory address data
46	NEXOE	O	Memory output(Read) enable
47	P15	I / O	Memory address bus
48	P14	I / O	The flag of transmitting end
49	P13	I / O	The flag of transmitting start
50	P12	I / O	Serial clock
51	P11	I / O	Serial output data
52	P10	I / O	Serial input data
53	P9	I / O	Serial clock
54	P8	I / O	Serial output data
55	P7	I / O	Serial input data
56	VDD3		IO power supply
57	MMOD	I	Test mode setting
58	VSS		GND
59	P6	I / O	Serial clock

Pin No.	Pin Name	I/O	Function and Operation
60	P5	I / O	Serial output data
61	P4	I / O	Serial input data
62	P3	I / O	Serial clock
63	P2	I / O	Serial output data
64	P1	I / O	Serial input data
65	P0	I / O	Serial clock
66	FG	I	Motor FG
67	VDD15		Power supply
68	NRST	I	Master reset
69	VSS		GND
70-77	DRV	I / O	Servo port
78	DRV8		Servo port
79	VDD33		IO power supply
80	VSS	I / O	GND
81	SCLOCK	I / O	Input clock for debug
82	EXTRG	I / O	I/O trigger for debug
83	SDATA	I / O	I/O data for debug
84	EXTRG	I / O	I/O trigger for debug
85	TRCCLK	I / O	Output trace clock for debug
86-89	TRCDATA	I / O	I/O trace data for debug
90	TRCST	I / O	Output trace status for debug
91	VDD33		Power supply
92	OSCI	I	Front end clock input
93	VSS		GND
94-97	MONI	I / O	Inside monitor
98	VDD15		Power supply
99	VSS		GND
100-103	MONI	I / O	Inside monitor
104	AVDDD	O	Power supply
105	PLFIL1		DRC VCO
106	AVSSD	O	GND
107	PLFIL2	O	DRC VCO
108-110	VREF	I	Reference voltage
111	VC0	I	gm-cEQ
112	RESI	O	gm-cEQ
113	ANAMONI	O	Inside analog monitor
114	POFLT	O	DPDOFTR
115	CDATA		Inline data
116	CCAPA	O	Inline capacitor
117	CGD	O	Reference voltage
118	AVDDC		Analog current
119	AVSSC	I	Analog GND

Pin No.	Pin Name	I/O	Function and Operation
120	RFINN	I	RF input
121	RFINP	I	RF input
122-131	VIN	I	Head input
132	LPC1	O	DVDLPC input
133	LPCO1	I	DVDLPC output
134	LPC2	O	CDLPC input
135	LPCO2	O	CDLPC output
136	VREFH	O	Reference voltage
137	VHALF		Reference voltage
138	AVSSB	O	Analog GND
139	CTKC	I	TC
140	CSLFLT	O	Capasitor
141	CWBLOUT	I	DC cut for wobble
142	CWBLIN		DC cut for wobble
143	VCOF	I	JFVCO control voltage
144	RVI		VREFH reference current
145	AVDDB	I	Analog current
146-148	AD	I	AD input
149	AVDDA		Analog current
150	DAC1	O	Tracking drive output
151	AVSSA		Analog GND
152	DAC0	O	Focus drive output
153	AVDDE		Analog current
154	IREF1	I	Inside DAC bias current
155	AVSSE		Analog GND
156	COMP1	I	Inside DAC
157	AVDDF		Analog current
158	DAC1OUT	O	Analog signal
159	AVSSF		Analog GND
160	DAC2OUT	O	Analog signal
161	DAC3OUT	O	Analog signal
162	VREF	I	Reference voltage
163	DAC4OUT	O	Analog signal
164	DAC5OUT	O	Analog signal
165	AVDDG	I	Analog power suplly
166	IREF2		Inside DAC bias current
167	VSSG	I	Analog GND
168	COMP2		Inside DAC
169	VSS	I	GND
170	BECLK		Backend clock input
171	VDD33	I	IO power supply
172	EXTCK		Exterior audio clock

Pin No.	Pin Name	I/O	Function and Operation
173	PHCOMPO		Composite audio clock
174	LRCK	O	LR chanel clock output
175	SRCK	O	Bit clock output
176	ADOUT3	O	Audio down mixing
177	VSS	O	GND
178-180	ADOUT	O	Audio data
181	IECOUT	O	IEC958 digital audio output
182	VDD33		IO power supply
183	VSS		GND
184,185	MDQ	I / O	SDRAM data
186	VDD15		Power supply
187,188	MDQ	I / O	SDRAM data
189	VDD33		IO power supply
190-193	MDQ	I / O	SDRAM data
194	VSS		GND
195	VDD33		IO power supply
196,197	MDQ	I / O	SDRAM data
198	VSS		GND
199,201	MDQ	I / O	SDRAM data
202	VDD33		GND
203-205	MDQ	I / O	SDRAM data
206	VSS		GND
207,208	DQM	O	SDRAM data mask
209	VDD33		Power supply
210	MA	O	SDRAM address
211	VSS		GND
212	MA4	O	SDRAM address
213	VDD15		Power supply
214	MA2	O	SDRAM address
215	VSS		GND
216,217	MA	O	SDRAM address
218	VDD33		Power supply
219-220	MA	O	SDRAM address
221	VSS		GND
222	VDD15		Power supply
223	MCKI	I	SDRAM output clock
224	VSS		GND
225	MCK	O	SDRAM input clock
226	VDD33		IO power supply
227-229	MA	O	SDRAM address
230	VSS		GND
231	MA	O	SDRAM address

*PD6480B



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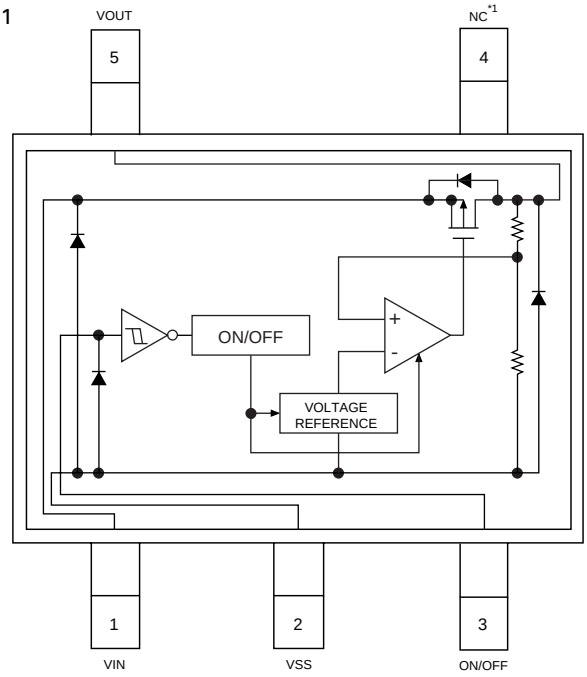

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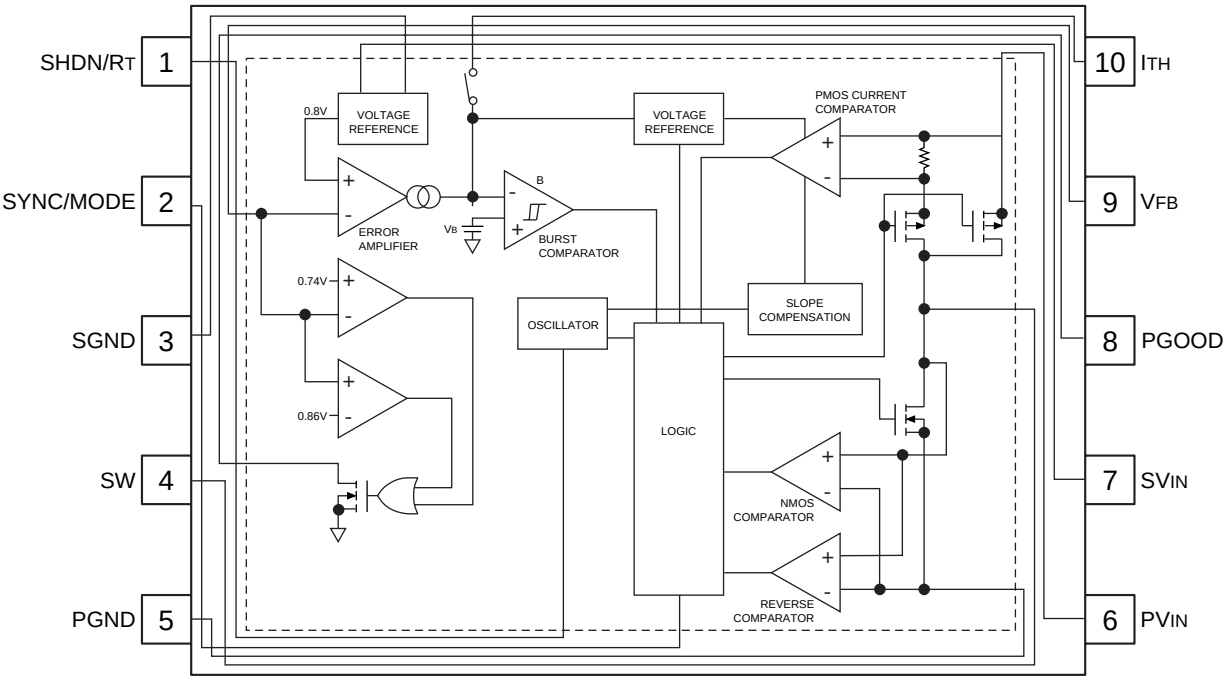

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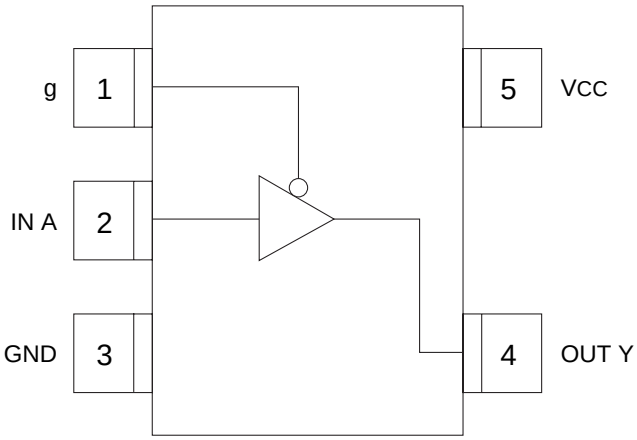

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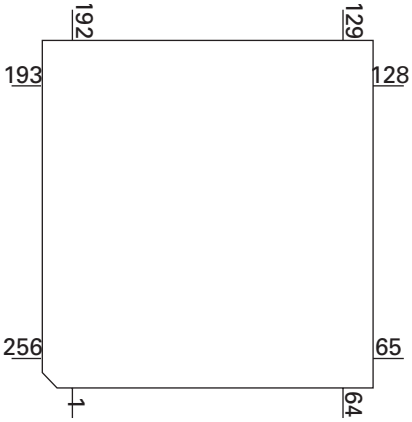


● Pin Functions(MN35104UB)

Pin No.	Pin Name	I/O	Function and Operation
1	VDD33		IO power supply
2,3	MDQ	I / O	SDRAM data
4	VSS		GND
5,6	MDQ	I / O	SDRAM data
7	VDD33		IO power supply
8,10	MDQ	I / O	SDRAM data
11	VSS		GND
12,13	MDQ	I / O	SDRAM data
14	VDD33		IO power supply
15	VDD15		Power supply
16	VSS		GND
17	EXADR	I / O	Memory address
18	NEXWE	O	Memory write enable
19-22	EXADT	I / O	Memory address data
23	VDD33		IO power supply
24	VSS		GND
25,26	EXADR	I / O	Memory address
27,28	EXADT	I / O	Memory address data
29	VDD33		IO power supply
30	VSS		GND
31,32	EXADT	I / O	Memory address data
33	NEXCE	O	Memory chip select
34-37	EXADT	I / O	Memory address data
38,39	EXADR	I / O	Memory address
40,41	EXADT	I / O	Memory address data
42	VD33		IO power supply
43	VSS		GND
44,45	EXADT	I / O	Memory address data
46	NEXOE	O	Memory output(Read) enable
47	P15	I / O	Memory address bus
48	P14	I / O	The flag of transmitting end
49	P13	I / O	The flag of transmitting start
50	P12	I / O	Serial clock
51	P11	I / O	Serial output data
52	P10	I / O	Serial input data
53	P9	I / O	Serial clock
54	P8	I / O	Serial output data
55	P7	I / O	Serial input data
56	VDD3		IO power supply
57	MMOD	I	Test mode setting
58	VSS		GND
59	P6	I / O	Serial clock

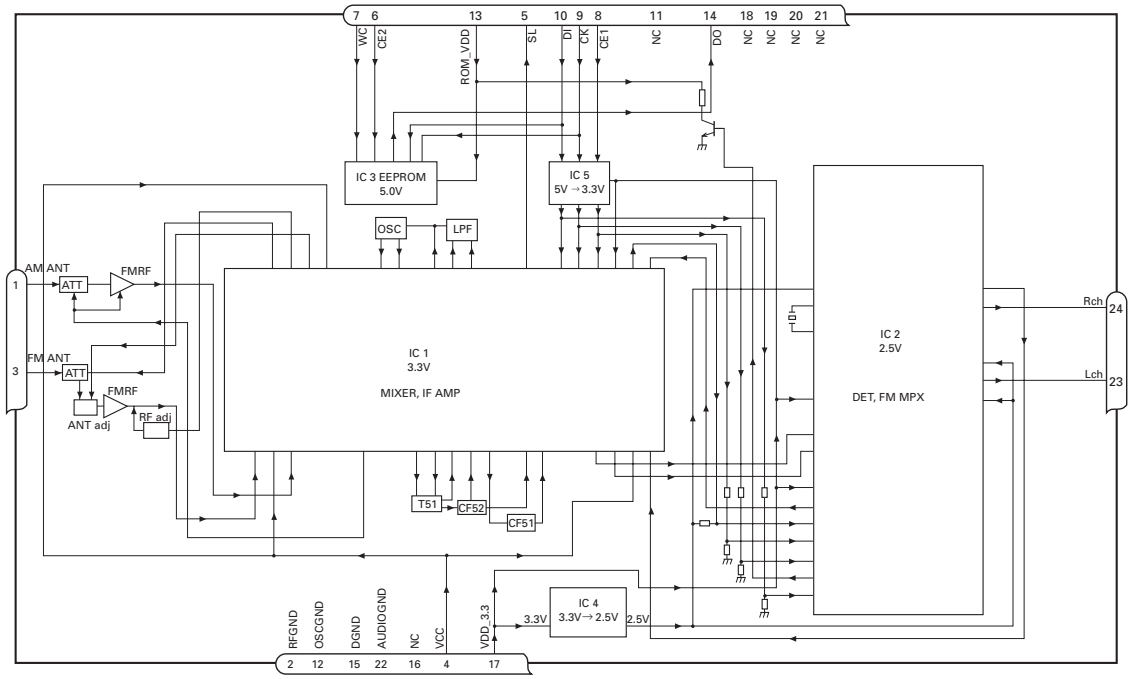
Pin No.	Pin Name	I/O	Function and Operation
60	P5	I / O	Serial output data
61	P4	I / O	Serial input data
62	P3	I / O	Serial clock
63	P2	I / O	Serial output data
64	P1	I / O	Serial input data
65	P0	I / O	Serial clock
66	FG	I	Motor FG
67	VDD15		Power supply
68	NRST	I	Master reset
69	VSS		GND
70-77	DRV	I / O	Servo port
78	DRV8		Servo port
79	VDD33		IO power supply
80	VSS	I / O	GND
81	SCLOCK	I / O	Input clock for debug
82	EXTRG	I / O	I/O trigger for debug
83	SDATA	I / O	I/O data for debug
84	EXTRG	I / O	I/O trigger for debug
85	TRCCLK	I / O	Output trace clock for debug
86-89	TRCDATA	I / O	I/O trace data for debug
90	TRCST	I / O	Output trace status for debug
91	VDD33		Power supply
92	OSCI	I	Front end clock input
93	VSS		GND
94-97	MONI	I / O	Inside monitor
98	VDD15		Power supply
99	VSS		GND
100-103	MONI	I / O	Inside monitor
104	AVDDD	O	Power supply
105	PLFIL1		DRC VCO
106	AVSSD	O	GND
107	PLFIL2	O	DRC VCO
108-110	VREF	I	Reference voltage
111	VC0	I	gm-cEQ
112	RESI	O	gm-cEQ
113	ANAMONI	O	Inside analog monitor
114	POFLT	O	DPDOFTR
115	CDATA		Inline data
116	CCAPA	O	Inline capacitor
117	CGD	O	Reference voltage
118	AVDDC		Analog current
119	AVSSC	I	Analog GND

Pin No.	Pin Name	I/O	Function and Operation
120	RFINN	I	RF input
121	RFINP	I	RF input
122-131	VIN	I	Head input
132	LPC1	O	DVDLPC input
133	LPCO1	I	DVDLPC output
134	LPC2	O	CDLPC input
135	LPCO2	O	CDLPC output
136	VREFH	O	Reference voltage
137	VHALF		Reference voltage
138	AVSSB	O	Analog GND
139	CTKC	I	TC
140	CSLFLT	O	Capasitor
141	CWBLOUT	I	DC cut for wobble
142	CWBLIN		DC cut for wobble
143	VCOF	I	JFVCO control voltage
144	RVI		VREFH reference current
145	AVDDB	I	Analog current
146-148	AD	I	AD input
149	AVDDA		Analog current
150	DAC1	O	Tracking drive output
151	AVSSA		Analog GND
152	DAC0	O	Focus drive output
153	AVDDE		Analog current
154	IREF1	I	Inside DAC bias current
155	AVSSE		Analog GND
156	COMP1	I	Inside DAC
157	AVDDF		Analog current
158	DAC1OUT	O	Analog signal
159	AVSSF		Analog GND
160	DAC2OUT	O	Analog signal
161	DAC3OUT	O	Analog signal
162	VREF	I	Reference voltage
163	DAC4OUT	O	Analog signal
164	DAC5OUT	O	Analog signal
165	AVDDG	I	Analog power suplly
166	IREF2		Inside DAC bias current
167	VSSG	I	Analog GND
168	COMP2		Inside DAC
169	VSS	I	GND
170	BECLK		Backend clock input
171	VDD33	I	IO power supply
172	EXTCK		Exterior audio clock

Pin No.	Pin Name	I/O	Function and Operation
173	PHCOMPO		Composite audio clock
174	LRCK	O	LR chanel clock output
175	SRCK	O	Bit clock output
176	ADOUT3	O	Audio down mixing
177	VSS	O	GND
178-180	ADOUT	O	Audio data
181	IECOUT	O	IEC958 digital audio output
182	VDD33		IO power supply
183	VSS		GND
184,185	MDQ	I / O	SDRAM data
186	VDD15		Power supply
187,188	MDQ	I / O	SDRAM data
189	VDD33		IO power supply
190-193	MDQ	I / O	SDRAM data
194	VSS		GND
195	VDD33		IO power supply
196,197	MDQ	I / O	SDRAM data
198	VSS		GND
199,201	MDQ	I / O	SDRAM data
202	VDD33		GND
203-205	MDQ	I / O	SDRAM data
206	VSS		GND
207,208	DQM	O	SDRAM data mask
209	VDD33		Power supply
210	MA	O	SDRAM address
211	VSS		GND
212	MA4	O	SDRAM address
213	VDD15		Power supply
214	MA2	O	SDRAM address
215	VSS		GND
216,217	MA	O	SDRAM address
218	VDD33		Power supply
219-220	MA	O	SDRAM address
221	VSS		GND
222	VDD15		Power supply
223	MCKI	I	SDRAM output clock
224	VSS		GND
225	MCK	O	SDRAM input clock
226	VDD33		IO power supply
227-229	MA	O	SDRAM address
230	VSS		GND
231	MA	O	SDRAM address

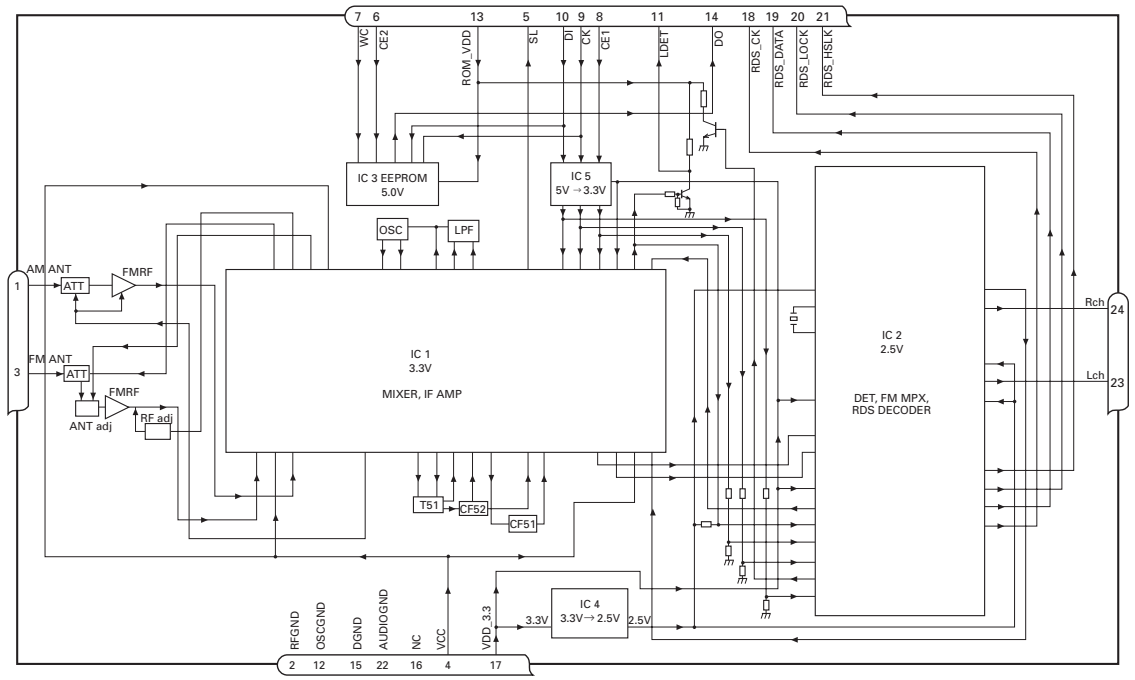
Pin No.	Pin Name	I/O	Function and Operation
232	NWE	O	SDRAM writte enable
233	VDD33		IO power supply
234	BA0	O	SDRAM bank address
235	MA	O	SDRAM address
236	VSS		GND
237	BA1	O	SDRAM bank address
238	NCSM	O	SDRAM chip select
239	NRAS	O	SDRAM low address strobe
240	VDD33		IO power supply
241	VSS		GND
242	NCAS	O	SDRAM column address strobe
243	DQM0	O	SDRAM data mask
244	VDD15		Power supply
245	VSS		GND
246	DQM	O	SDRAM data mask
247	MDQ	I / O	SDRAM data
248	VSS		GND
249	MDQ	I / O	SDRAM data
250	VDD33		IO power supply
251-253	MDQ	I / O	SDRAM data
254	VSS		GND
255,256	MDQ	I / O	SDRAM data

● FM/AM Tuner Unit



No.	Symbol	I/O	Explain	
1	AMANT	I	AM antenna input	AM antenna input high impedance AMANT pin is connected with an all antenna by way of 4.7μH. (LAU type inductor) A series circuit including an inductor and a resistor is connected with RF ground for the countermeasure against the ham of power transmission line.
2	RFGND		RF ground	Ground of antenna block
3	FMANT	I	FM antenna input	Input of FM antenna 75Ω Surge absorber(DSP-201M-S00B) is necessary.
4	VCC		power supply	The power supply for analog block. D.C 8.4V ± 0.3V
5	SL	O	signal level	Output of FM/AM signals level
6	CE2	I	chip enable-2	Chip enable for EEPROM "Low" active
7	WC	I	write control	You can write EEPROM, when EEPROM write control is "Low". Ordinary non connection
8	CE1	I	chip enable-1	Chip enable for AF•RF "High" active
9	CK	I	clock	Clock
10	DI	I	data in	Data input
11	NC		non connection	Not used
12	OSCGND		osc ground	Ground of oscillator block
13	ROM_VDD		power supply	Power supply for EEPROM pin 13 is connected with a power supply of micro computer.
14	DO	O	data out	Data output
15	DGND		digital ground	Ground of digital block
16	NC		non connection	Not used
17	VDD_3.3		power supply	The power supply for digital block. 3.3V ± 0.2V
18	NC		non connection	Not used
19	NC		non connection	Not used
20	NC		non connection	Not used
21	NC		non connection	Not used
22	AUDIOGND		audio ground	Ground of audio block
23	L ch	O	L channel output	FM stereo "L-ch" signal output or AM audio output
24	R ch	O	R channel output	FM stereo "R-ch" signal output or AM audio output

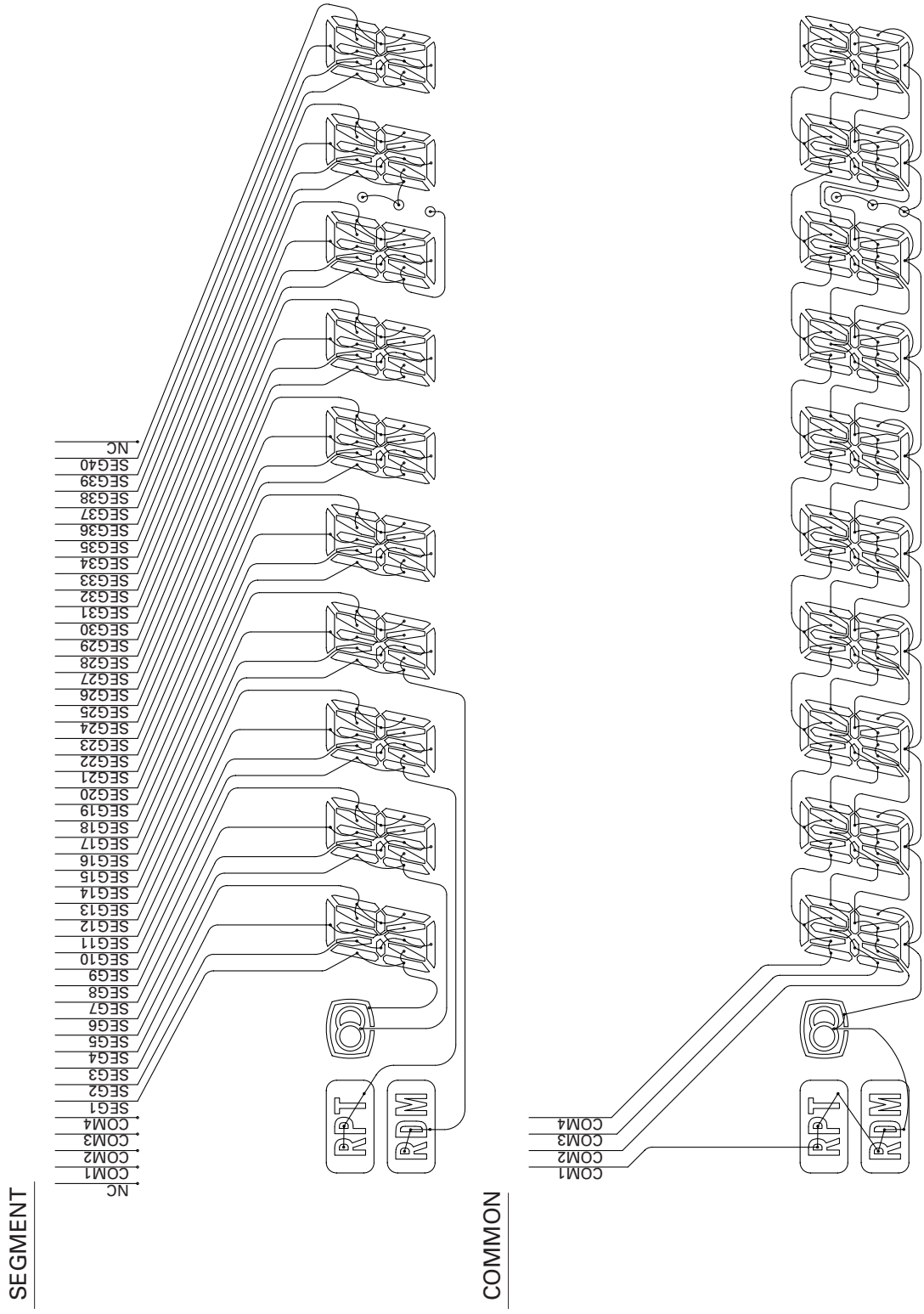
● FM/AM Tuner Unit



No.	Symbol	I/O	Explain	
1	AMANT	I	AM antenna input	AM antenna input high impedance AMANT pin is connected with an all antenna by way of 4.7μH. (LAU type inductor) A series circuit including an inductor and a resistor is connected with RF ground for the countermeasure against the ham of power transmission line.
2	RFGND		RF ground	Ground of antenna block
3	FMANT	I	FM antenna input	Input of FM antenna 75Ω Surge absorber(DSP-201M-S00B) is necessary.
4	VCC		power supply	The power supply for analog block. D.C 8.4V ± 0.3V
5	SL	O	signal level	Output of FM/AM signals level
6	CE2	I	chip enable-2	Chip enable for EEPROM "Low" active
7	WC	I	write control	You can write EEPROM, when EEPROM write control is "Low". Ordinary non connection
8	CE1	I	chip enable-1	Chip enable for AF•RF "High" active
9	CK	I	clock	Clock
10	DI	I	data in	Data input
11	LDET	O	lock detector	"Low" active
12	OSCGND		osc ground	Ground of oscillator block
13	ROM_VDD		power supply	Power supply for EEPROM pin 13 is connected with a power supply of micro computer.
14	DO	O	data out	Data output
15	DGND		digital ground	Ground of digital block
16	NC		non connection	Not used
17	VDD_3.3		power supply	The power supply for digital block. 3.3V ± 0.2V
18	RDS_CK	O	RDS clock	Output of RDS clock(2.5V)
19	RDS_DATA	O	RDS data	Output of RDS data(2.5V)
20	RDS_LOCK	O	RDS lock	Output unit "High" active(2.5V) (RDS_LOCK turns over by the external transistor. "Low" active)
21	RDS_HSLK	O	RDS high speed lock	Output unit "High" active(2.5V)(RDS_HSLK turns over by the external transistor. "Low" active)
22	AUDIOGND		audio ground	Ground of audio block
23	L ch	O	L channel output	FM stereo "L-ch" signal output or AM audio output
24	R ch	O	R channel output	FM stereo "R-ch" signal output or AM audio output

7.2.2 DISPLAY

● **LCD(CAW1805)**



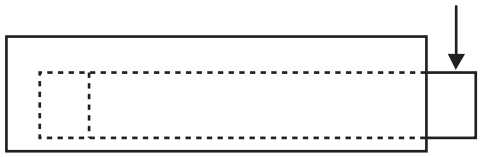
7.3 EXPLANATION
7.3.1 MECHANISM DESCRIPTIONS

● Outline of the FLAP motion

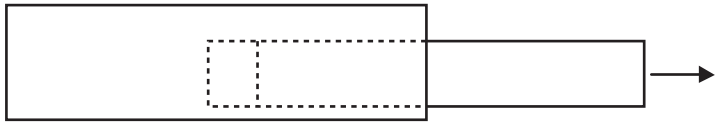
1. The motion is actuated made by two motors, the forward/backward driving motor (CXB9515) and the angle driving motor (CXB9516).
2. Analog electric potential generated by the angle encoder is detected to detect angle motion status and motion position.
3. Memory function for the angle last position is accomplished by the micro processor using the 256 resolution steps of the VDD.
4. A pulse is detected by the photo interrupter to detect the horizontal motion status.
5. In the case of reset start, the monitor will be in a stored position first, and ejection motion will take place, which puts the system in the booted up state.
6. Angle adjustment is made by the angle key (+/-).
7. OPEN/CLOSE key makes the monitor stored or ejected, and temporary folding key folds the monitor temporarily.
8. Setting of the monitor auto storage/ejection ON/OFF and set back ON/OFF at the time of ACC ON/OFF is made on the navigation menu screen.
9. A backlight is switched-off during forward/backward and storage.

● Explanation on the FLAP ejection motion

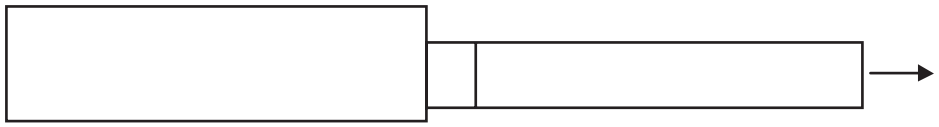
1. When the OPEN key is pressed or ACC is set to ON while the auto OPEN/CLOSE is being set to ON, angle driving motor rotates in the 0° direction for 500ms. (Pressed down.)



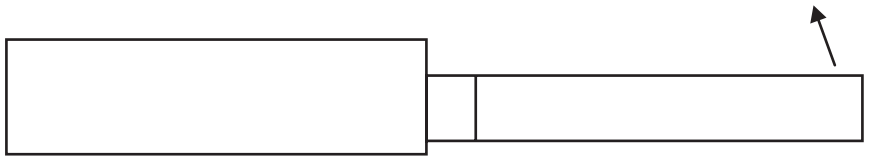
2. After 500ms, the angle driving motor is stopped, and the forward/backward driving motor rotates in the ejection direction.



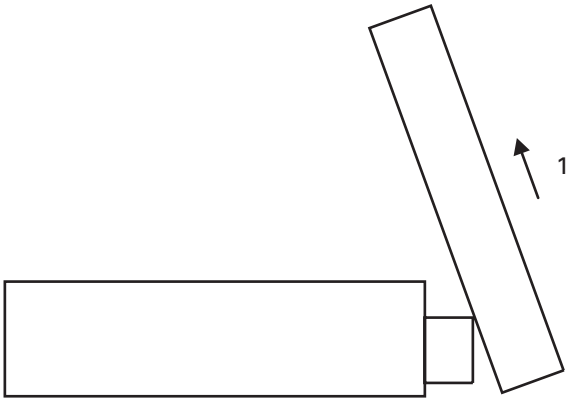
3. For a period of 600ms from the time when LIFTSW is switched from H to L, the forward/backward driving motor keeps rotating in the ejection direction.



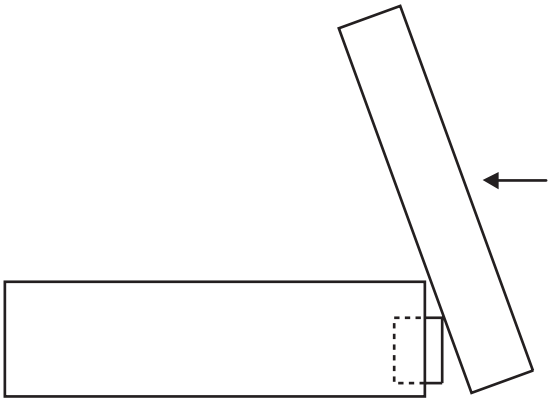
4. After 600ms, the forward/backward driving motor is stopped, and the angle driving motor rotates in the UP direction.



5. When the angle voltage reaches the voltage for 110°, brake is applied to the angle driving motor, and the ejection is completed. (In case the previous angle is stored in the memory, the motion continues to that angle.)

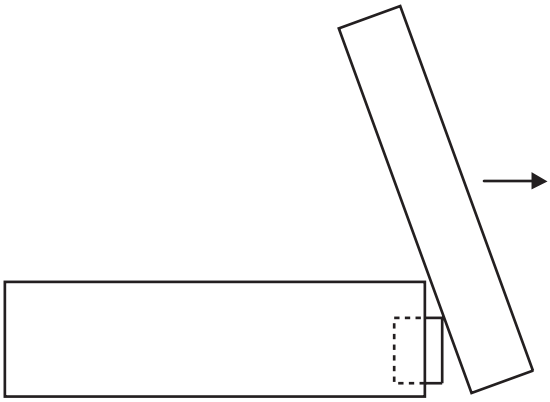


6. When the setback is set to ON, after the monitor angle voltage has reached the previously memorized voltage, brake is applied to the angle driving motor, then the forward/backward driving motor is rotated in slow speed in the storage direction. After that, when LIFTSW has switched from L to H, the forward/backward driving motor is stopped.

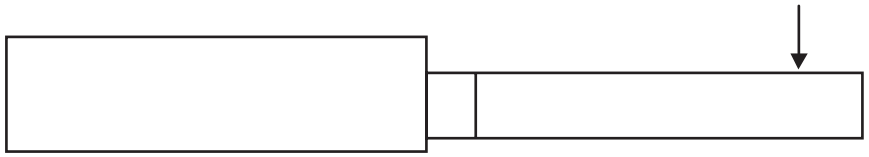


● Explanation of the FLAP storage motion

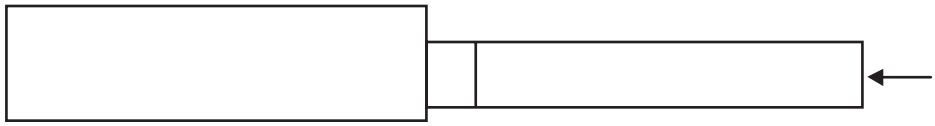
1. When CLOSE key is pressed, or after 6 seconds from ACC OFF when auto OPEN/CLOSE is being set to ON, the angle driving motor is rotated in the 0° direction. In case the setback setting is ON, the forward/backward driving motor is rotated in high speed in the ejection direction and the motor continues to rotate for 600ms from the time when LIFTSW is switched from H to L, then the angle driving motor is rotated in the 0° direction.



2. For a period of 500ms from the time when DIGOSW is switched from H to L, the angle driving motor is rotated in the 0° direction for the "pressed down" motion.



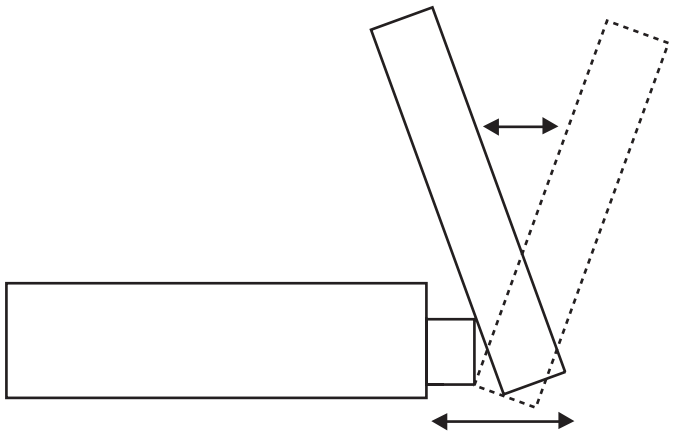
3. After 500ms, brake is applied to the angle driving motor, and then the forward/backward driving motor is rotated in the storage direction.



4. When the horizontal motion detection pulse is no longer detected for 200ms, brake is applied and the monitor storage motion is completed.

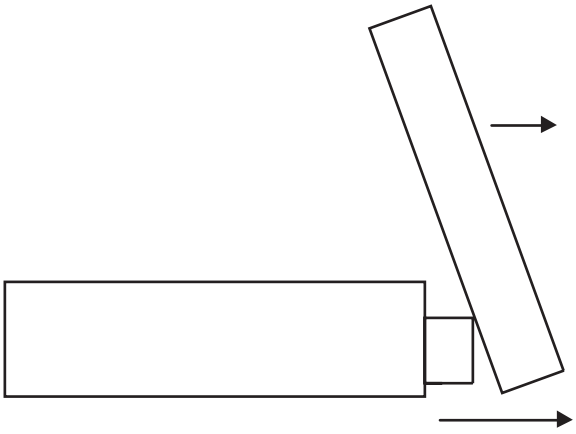
● Explanation on the FLAP angle adjustment

1. The angle driving motor is rotated in UP direction by the "+" key and in DOWN direction by the "–" key from the monitor stop position. If the key is kept pressed, the monitor will keep changing the angle without steps within the range of 50 to 110 degrees. When the setback is being set to ON, the forward/backward driving motor is rotated in the horizontal ejection direction while the key is being pressed, and angle adjustment is made by changing the angle voltage to the extent the angle adjustment key is effective after 600ms has elapsed from the time when LIFTSW has switched from H to L. When 3 seconds have elapsed from the time of angle adjustment completion, the forward/backward driving motor is rotated in slow speed in the horizontal storage direction, and brake is applied when LIFTSW has switched from L to H.

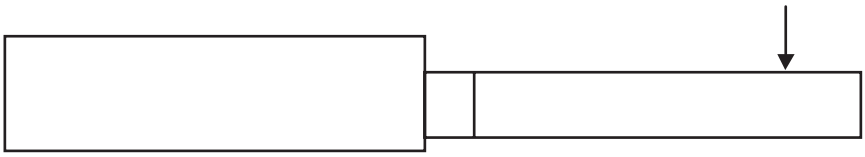


● Explanation on the FLAP temporary folding operation

1. By pressing the temporary folding key, the angle driving motor is rotated from the monitor stop position toward 0° direction. When the setback is being set to ON, the forward/backward driving motor is rotated when the key is pressed, brake is applied after 600ms has elapsed from the time when LIFTSW has switched from H to L, and the angle driving motor is rotated in 0° direction.



2. For a period of 500ms after DEGOSW has switched from H to L, the angle driving motor is rotated, and the monitor stops at its horizontal position by the brake. After 7 seconds, navigator operation sound is heard three times in 1 second interval. After 10 seconds, the angle driving motor is rotated in UP direction, and then the brake is applied to stop the motor at the last memory position. When the setback is being set to ON, after the angle driving motor stops at the last memory position, the forward/backward driving motor is rotated in slow speed in the horizontal storage direction, and the motor stops after LIFTSW has switched from L to H.



● Notes related to the FLAP motion

1. Regarding the angle position, angle voltage is always checked, and the last memory is stored by addition or subtraction of the voltage. It should be noted, however, that the last memory will not be stored when the monitor is manually moved by force.
2. If the expected pulse is not detected during horizontal motion, the monitor will stop at that position.

● Table of driving unit operations by different preset modes

		OPEN state	In OPEN motion	In CLOSE motion	CLOSE state
Auto OPEN/CLOSE setting ON	Bup ON (Reset start)	CLOSE state ↓ CLOSE ↓ OPEN state ↓ Last angle	——	——	Continue OPEN motion ↓ Last angle
	Bup OFF	To stand-by	To stand-by	To stand-by	To stand-by
	Bup OFF→ON	No state change	Continue OPEN motion ↓ Last angle ↓ Return	Continue CLOSE motion ↓ CLOSE	No state change
	ACC ON	No state change	——	——	OPEN motion ↓ Last angle ↓ Return
	ACC OFF→ON	No state change	Continue OPEN motion ↓ Last angle ↓ Return	Continue CLOSE motion ↓ CLOSE	No state change
	ACC OFF	6 sec from ACC OFF ↓ Advance ↓ CLOSE motion ↓ CLOSE	Continue OPEN motion ↓ Last angle ↓ Return ↓ 6 sec from ACC OFF ↓ Advance ↓ CLOSE motion ↓ CLOSE	Continue CLOSE motion ↓ CLOSE	No state change
	Last memory	OPEN	OPEN	CLOSE	CLOSE
Auto OPEN/CLOSE setting OFF	Bup ON (Reset start)	——	——	——	——
	Bup OFF	To stand-by	To stand-by	To stand-by	To stand-by
	Bup OFF→ON	No state change	Continue OPEN motion ↓ Last angle ↓ Return	Continue CLOSE motion ↓ CLOSE	No state change
	ACC ON	No state change	——	——	No state change
	ACC OFF→ON	No state change	Continue OPEN motion ↓ Last angle ↓ Return	Continue CLOSE motion ↓ CLOSE	No state change
	ACC OFF	No state change	Continue OPEN motion ↓ Last angle ↓ Return	Continue CLOSE motion ↓ CLOSE	No state change
	Last memory	OPEN	OPEN	CLOSE	CLOSE

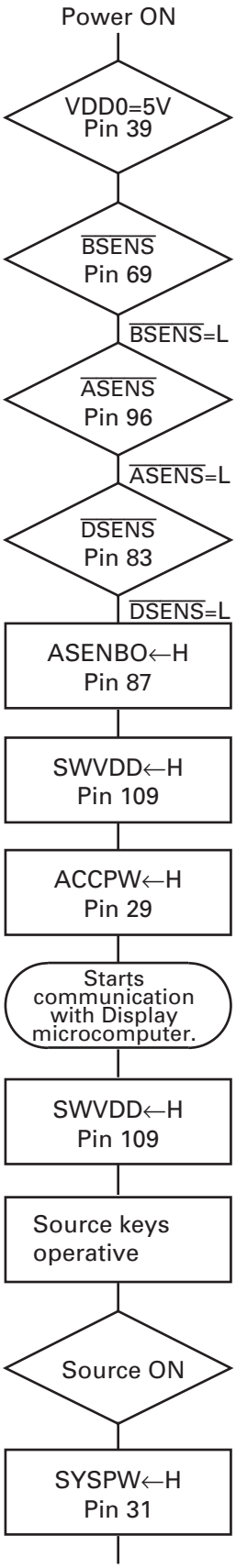
* When the setback is being set to OFF, there will be no advance/return motion.
After ACC OFF, if ACC is switched ON again during the 6 seconds counting, standby will be passed and the FLAP status will not change.

● Table of temporary folding control

		Temporary folding state (horizontal position)	Temporary folding reset (horizontal position→last angle)	Temporary folding in motion (last angle→horizontal position)
Auto OPEN/CLOSE setting ON	Bup ON	———	———	———
	Bup OFF	To stand-by	To stand-by	To stand-by
	Bup OFF→ ON	Continue temporary folding motion	Continue OPEN motion ↓ Last angle ↓ Return	Continue temporary folding motion ↓ Temporary folding
	ACC ON	———	———	———
	ACC OFF→ ON	OPEN motion ↓ Last angle ↓ Return	Continue OPEN motion ↓ Last angle ↓ Return	Continue temporary folding motion ↓ Temporary folding
	ACC OFF	6 sec from ACC OFF ↓ CLOSE motion ↓ CLOSE	Continue OPEN motion ↓ Last angle ↓ Return ↓ 6 sec from ACC OFF ↓ Advance ↓ CLOSE motion ↓ CLOSE	Continue temporary folding motion ↓ Temporary folding ↓ 6 sec from ACC OFF ↓ CLOSE motion ↓ CLOSE
	Last memory	OPEN	OPEN	OPEN
Auto OPEN/CLOSE setting OFF	Bup ON	———	———	———
	Bup OFF	To stand-by	To stand-by	To stand-by
	Bup OFF→ ON	Continue temporary folding motion	Temporary folding reset	Temporary folding in motion
	ACC ON	———	———	———
	ACC OFF→ ON	OPEN motion ↓ Last angle ↓ Return	Continue OPEN motion ↓ Last angle ↓ Return	OPEN motion ↓ Last angle ↓ Return
	ACC OFF	OPEN motion ↓ Last angle ↓ Return	Continue OPEN motion ↓ Last angle ↓ Return	OPEN motion ↓ Last angle ↓ Return
	Last memory	OPEN	OPEN	OPEN

* When the setback is being set to OFF, there will be no advance/return motion.

7.3.2 OPERATIONAL FLOW CHART



Completes power-on operation.
(After that, proceed to each source operation)

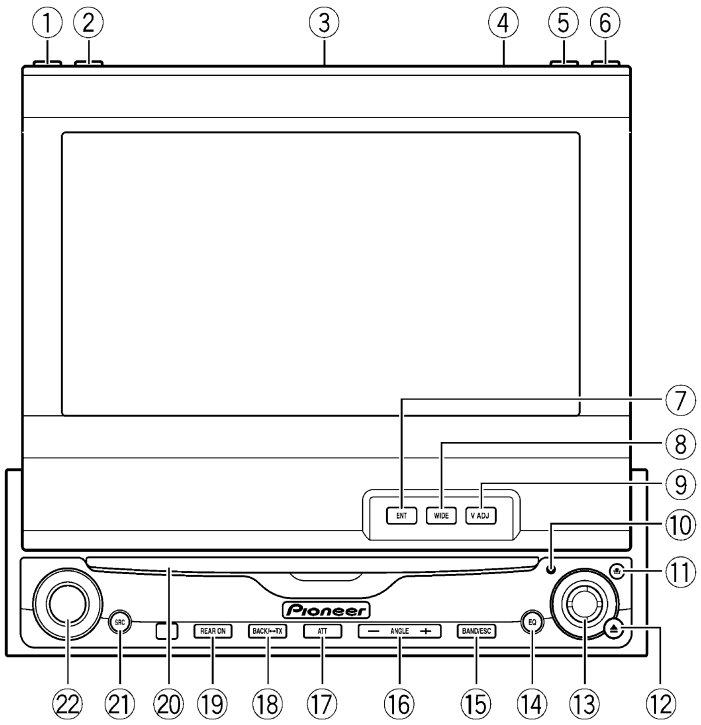
7.4 CLEANING

Before shipping out the product, be sure to clean the following portions by using the prescribed cleaning tools:

Portions to be cleaned	Cleaning tools
DVD pickup lenses	Cleaning liquid : GEM1004 Cleaning paper : GED-008

Portions to be cleaned	Cleaning tools
Fans	Cleaning paper : GED-008

8. OPERATIONS



Head unit

① **DISPLAY button**
Press to select different displays.

② **PGM button**
Press to operate the preprogrammed functions for each source.

③ **Sub display**
Displays the basic information for the each source and the other settings when the LCD panel is closed.

④ **Ambient light sensor**
Senses ambient light. This system automatically adjusts the brightness of the display to compensate for ambient light.

⑤ **FLIP DOWN/CLOCK button**
Press to turn the LCD panel horizontal temporarily from upright position.

Press to turn the clock display on or off when the LCD panel is closed.

⑥ **OPEN/CLOSE button**
Press to open or close the LCD panel.

⑦ **ENTERTAINMENT button**
Press to switch between the background displays.

⑧ **WIDE button**
Press to select a desired mode for enlarging a 4:3 picture to a 16:9 one.

⑨ **V.ADJ button**
Press and hold to display the picture adjustment menu.

⑩ **RESET button**
Press to return to the factory settings (initial settings).

⑪ **DETACH button**
Press to remove the front panel from the head unit.

⑫ **EJECT button**
Press to eject a disc from this unit.

⑬ **Joystick**
Move to do manual seek tuning, fast forward, reverse and track search controls. Also used for controlling functions.

⑭ **EQ button**
Press to select various equalizer curves.

⑮ **BAND/ESC button**
Press to select among three FM bands and one AM band and to cancel the control mode of functions.

⑯ **ANGLE (+/–) button**
Press to change the LCD panel angle.

⑰ **ATT button**
Press to quickly lower the volume level, by about 90%. Press once more to return to the original volume level.

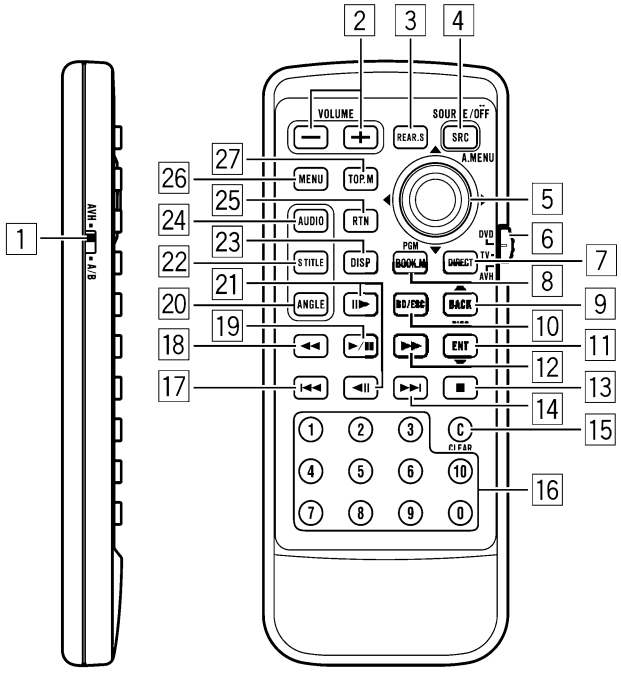
⑱ **BACK/TEXT button**
Press to return to the previous display.

⑲ **REAR ON button**
Press to watch a DVD/Video CD on a rear display if **DVD** (built-in DVD player) is not selected as the source.

⑳ **Disc loading slot**
Insert a disc to play.

㉑ **SOURCE button**
This unit is turned on by selecting a source. Press to cycle through all the available sources.

㉒ **VOLUME**
Rotate it to increase or decrease the volume.



Remote control

1 Remote control selection switch

Switch to change the setting of the remote control.

2 VOLUME buttons

Press to increase or decrease the volume.

3 REAR.S button

Press to watch a DVD/Video CD on a rear display if **DVD** (built-in DVD player) is not selected as the source.

4 SOURCE button

This unit is turned on by selecting a source. Press to cycle through all the available sources.

5 Joystick

Move to do manual seek tuning, fast forward, reverse and track search controls. Also used for controlling functions.

6 Remote control operation mode switch

Switch the operation mode between **AVH**, **DVD** and **TV** modes. Normally, set to **AVH**.

- **AVH** – For common operation of this unit
- **DVD** – Only for DVD player operation
- **TV** – Only for TV tuner operation

7 DIRECT button

Press to do direct channel select when using an XM tuner.

8 BOOKMARK (BOOK.M) button

AVH mode

Press to operate the preprogrammed functions for each source.

DVD mode

Press to turn the bookmark function on or off.

9 **BACK button**
Press to return to the previous display.

10 **BAND/ESC button**
Press to select among three FM bands and one AM band and to cancel the control mode of functions.

11 **ENTERTAINMENT button**
Press to switch between the background displays.

12 **FORWARD (►►) button**
Press to perform fast forward.

13 **STOP (■) button**
Press to stop playback.

14 **NEXT (►►I) button**
Press to go to the next track (chapter).

15 **CLEAR button**
Press to cancel the input number when **0–10** are used.

16 **0–10 buttons**
Press to directly select the desired track, preset tuning or disc. Buttons **1–6** can operate the preset tuning for the tuner or disc number search for the multi-CD player.

17 **PREVIOUS (I◄◄) button**
Press to return to the previous track (chapter).

18 **REVERSE (◄◄) button**
Press to perform fast reverse.

19 **PLAY/PAUSE (►/II) button**
Press to switch sequentially between playback and pause.

20 **ANGLE button**
Press to change the viewing angle during DVD playback.

21 **STEP (II►/◄II) button**
Press to move ahead one frame at a time during DVD/VideoCD playback. Press and hold for one second to activate slow playback.

22 **SUBTITLE (S.TITLE) button**
Press to change the subtitle language during DVD playback.

23 **DISPLAY button**
Press to select different displays.

24 **AUDIO button**
Press to change the audio language during DVD playback.

25 **RETURN button**
Press to display the PBC (playback control) menu during PBC playback.

26 **MENU button**
Press to display the DVD menu during DVD playback.

27 **TOP MENU (TOP.M) button**
Press to return to the top menu during DVD playback.

Using the remote control operation mode switch

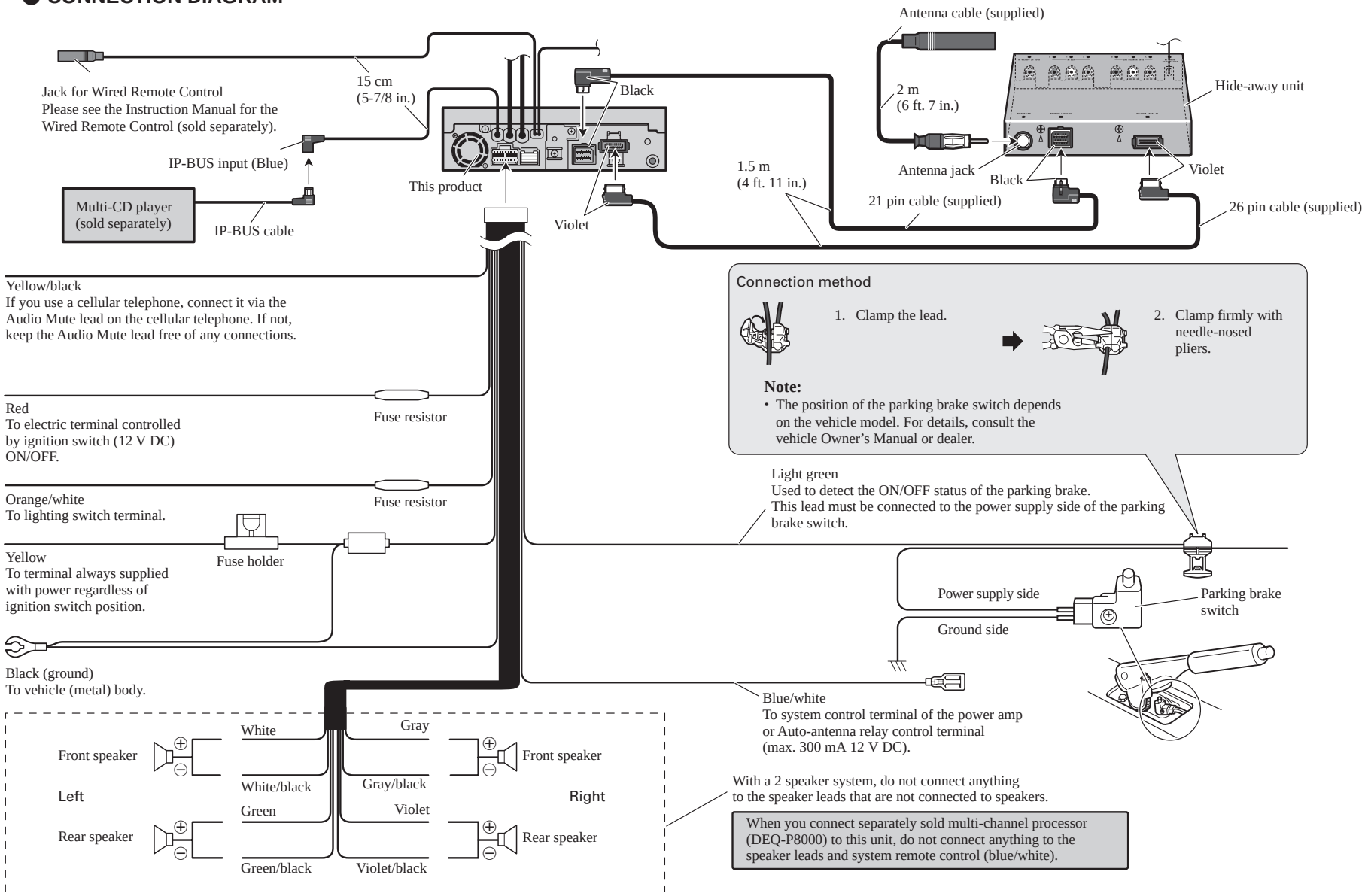
There are three remote control operation modes on the remote control.

AVH mode operation

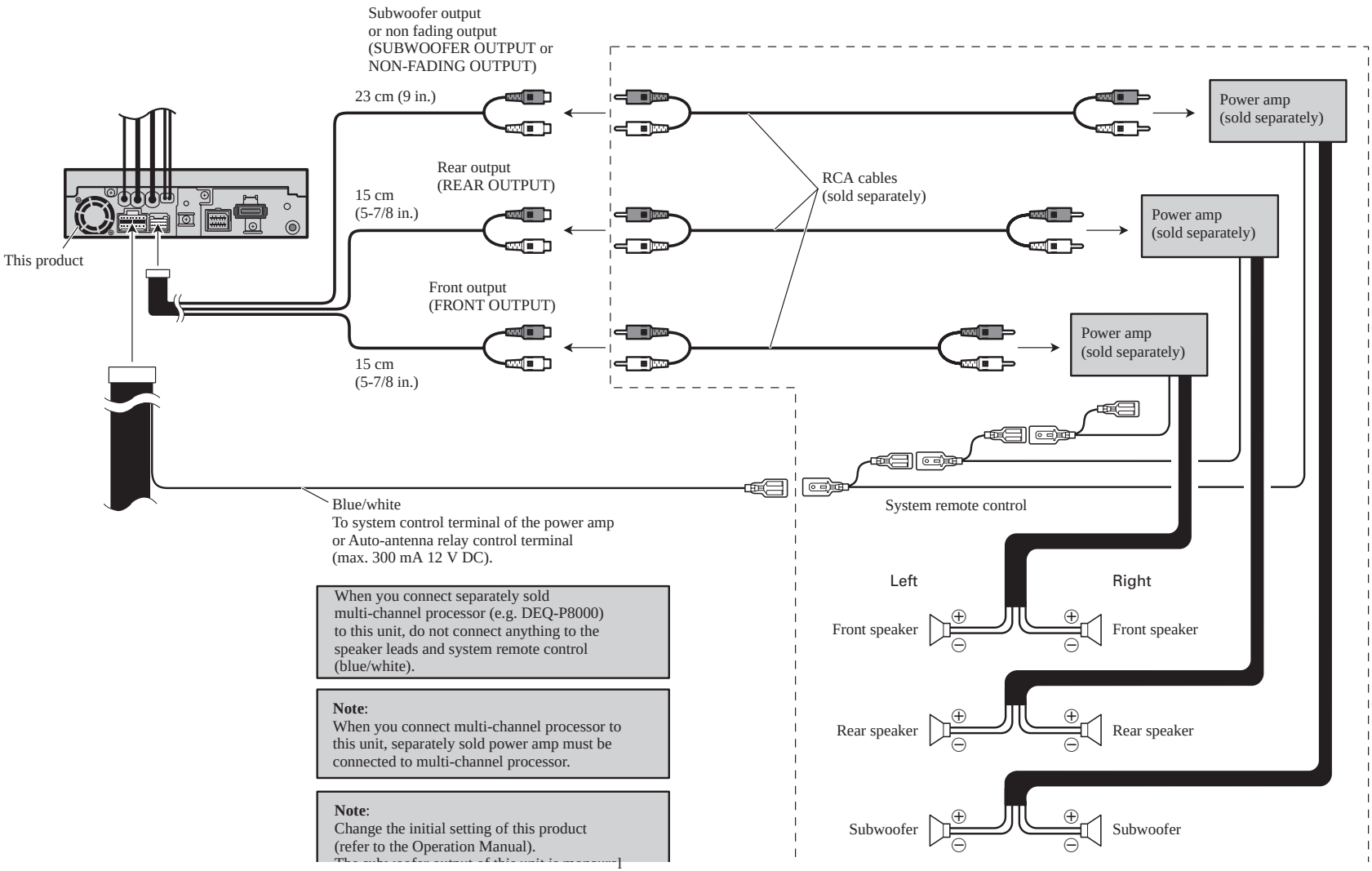
When operating this unit by remote control, the mode is normally switched to **AVH**.

- The joystick on the remote control can perform the same operations as the one on the head unit. Furthermore, the joystick can perform the same operations as the touch panel keys ▲, ▼, ◄ and ►.

CONNECTION DIAGRAM



● CONNECTION DIAGRAM



When you connect separately sold multi-channel processor (e.g. DEQ-P8000) to this unit, do not connect anything to the speaker leads and system remote control (blue/white).

Note:
When you connect multi-channel processor to this unit, separately sold power amp must be connected to multi-channel processor.

Note:
Change the initial setting of this product (refer to the Operation Manual).
The subwoofer output of this unit is monaural.

● Jigs list

Disc : GGV1018
Cleaning liquid : GEM1004
Cleaning paper : GED-008

Function Name		Jig No.
Mother PCB(CN501) <-> Main Unit(CN3801)	PCB	GGF1471
Mother PCB(CN501) <-> GGF1471	50P FFC	GGD1250
Mother PCB(CN502) <-> GGF1471	24P FFC	GGD1337
Mother PCB(CN501,CN502) <-> Monitor PCB(CN4461,CN4481)	PCB	GGF1472
Monitor PCB(CN4461) <-> GGF1472	33P FFC	GGD1262
Monitor PCB(CN4481) <-> GGF1472	24P FFC	GGD1337
Mother PCB(CN601) <-> Panel PCB(CN5901)	17PFFC	GGD1124