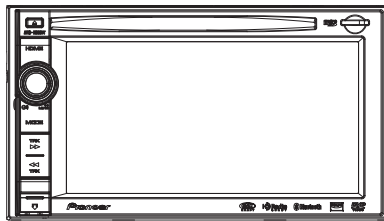


Pioneer

Service Manual



AVIC-X930BT/XNUC

ORDER NO.
CRT4695

MULTIMEDIA AV NAVIGATION RECEIVER

AVIC-X930BT /XNUC

AVIC-X9310BT /XNUC

NAVIGATION AV SYSTEM

AVIC-F930BT /XNAU

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

Model No.	Order No.	Mech. Module	Remarks
CX-3250	CRT4300	LS1	DVD Mech. Module : Circuit Descriptions, Mech. Descriptions, Disassembly



For details, refer to "Important Check Points for Good Servicing".

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SAFETY INFORMATION

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 may contain a chemical known to the State of California to cause cancer, or birth defects or other reproductive harm.
Health & Safety Code Section 25249.6 - Proposition 65

Where in a manufacturer's service documentation, for example in circuit diagrams or lists of components, a symbol is used to indicate that a specific component shall be replaced only by the component specified in that documentation for safety reasons, the following symbol shall be used:



● Safety Precautions for those who Service 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 13 cm from the focus lens must be kept.
2. During repair or tests, do not view laser beam for 10 seconds or longer.

CAUTION:
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

CAUTION

This product is a class 1 laser product classified under the Safety of laser products, IEC 60825-1:2007, and contains a class 1M laser module. 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.

CLASS 1 LASER PRODUCT

CAUTION—CLASS 1M INVISIBLE LASER RADIATION WHEN OPEN, DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.

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:660 nm to 670 nm

CD:780 nm to 800 nm

Focus lens on Maximum output:

CD:6.26 mW(Emitting period :9 sec.)

DVD:1.27 mW (Emitting period : unlimited)

Additional Laser Caution

Transistors Q1103 and Q1104 in PCB drive the laser diodes for DVD and CD respectively. When Q1103 or Q1104 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.

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol. Please be sure to confirm and follow these procedures.

1. Product safety



Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

- ① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

- ② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification (addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

- ③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris. Soldering should be finished with the proper quantity. (Refer to the example)

- ④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

- ⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

- ⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs. In addition, be sure that there are no pinched wires, etc.

- ⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

- ⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages. If you find a damaged power cord, please exchange it with a suitable one.

- ⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

- ⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries. Please pay attention to your surroundings and repair safely.

2. Adjustments



To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification. Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts



Use grease and adhesives that are equal to the specified substance. Make sure the proper amount is applied.

4. Cleaning



For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws



To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

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1. SERVICE PRECAUTIONS

1.1 SERVICE PRECAUTIONS



1. 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. Be careful in handling ICs. Some ICs such as MOS type are so fragile that they can be damaged by electrostatic induction.
3. Before disassembling the unit, be sure to turn off the power. Unplugging and plugging the connectors during power-on mode may damage the ICs inside the unit.
4. To protect the pickup unit from electrostatic discharge during servicing, take an appropriate treatment (shorting-solder) by referring to "the DISASSEMBLY" .
5. After replacing the pickup unit, be sure to skew adjustment.
6. During disassembly, be sure to turn the power off since an internal IC might be destroyed when a connector is plugged or unplugged.
7. Notes on the temperature protection

The temperature protection is set considering the use temperature range of eNAND.

If the temperature reaches the detection temperature shown below, the operation stops (ASENS is disabled).

Detection temperature on low temperature side: -25°C, return temperature: -20°C
 Detection temperature on high temperature side: 86.5°C, return temperature: 80°C

8. Control of FAN

There is the control of STOP, low rotation and high rotation.

The temperature (eNAND, DVD mechanism) are detected and controlled it.

9. Pay attention to the wiring of BT cable. (It affects the sensitivity of BT antenna)
10. Some parts which are different from the Circuit symbol are mounted on the AV unit and CC Monitor unit.

Unit Name	Circuit Symbol and No.	Mounted parts
AV unit	R2428, R2430	Capacitor
	R2443	Inductor
CC Monitor unit	L5695-L5715	Resistor
	R4143, R4291, R4299, R4303-R4304, R4317, R4320-R4329	Inductor
	R4824, R5738, R5740-R5745, R5747-R5757	(Ferrite beads)

11. The part listed below is difficult to replace as a discrete component part.
 When the part listed in the table is defective, replace whole Assy.

AV UNIT	DD Converter	IC1281	LT3505EDD	Heat pad
IF UNIT	GPS	IC151	GRF3I-0336S	Heat pad
CC MONITOR UNIT	DD Converter	IC4204, IC4205	LTC3412AEFE	Heat pad
	Prima	IC4001	TT4421	BGA
	CODEC	IC4654	WM1616LGEFL	Terminal is bent inside
	eNAND	IC4501	PEN002A	BGA
	T-CON	IC4901	TC90192XBG	BGA
	SRAM	IC4406	CY62147EV30LL45BVA	BGA
	FLASH ROM	IC4403	CXX3406	BGA
	B/L Controller	IC5508	OZ9990IRN	Land at the bottom of IC
	iPod Authentication IC	IC4701	341S2162	Terminal is bent inside
	VIDEO DECODER	IC5513	AK8859VN	Terminal is bent inside

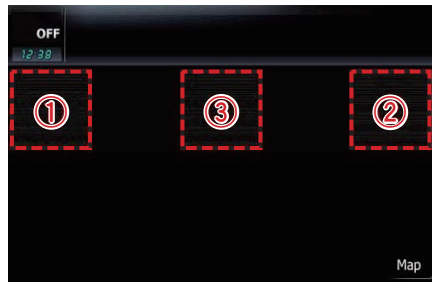
12. Attach the Detach Grill Assy (Front Panel) to the product to turn on the unit.

EJECT LOCK MODE for DVD mechanism

In order to change the EJECT LOCK/UNLOCK status of the mechanism, please perform following procedure.

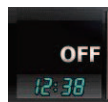
< Procedure >

Top Menu -> AV Source -> Source OFF

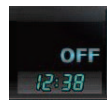


Short push area "①" -> Short push area "②" -> Long push area "③" on above screen.
(In order to change the status, follow the same operation.)

The current status can be confirmed by "OFF" character color.



Eject Lock: OFF
(White character)



Eject Lock: ON
(Blue character)

1.2 NOTES ON SOLDERING

- For environmental protection, lead-free solder is used on the printed circuit boards mounted in this unit.
Be sure to use lead-free solder and a soldering iron that can meet specifications for use with lead-free solders for repairs accompanied by reworking of soldering.
- Compared with conventional eutectic solders, lead-free solders have higher melting points, by approximately 40 °C.
Therefore, for lead-free soldering, the tip temperature of a soldering iron must be set to around 373 °C in general, although the temperature depends on the heat capacity of the PC board on which reworking is required and the weight of the tip of the soldering iron.

Compared with eutectic solders, lead-free solders have higher bond strengths but slower wetting times and higher melting temperatures (hard to melt/easy to harden).

The following lead-free solders are available as service parts:

- Parts numbers of lead-free solder:
GYP1006 1.0 in dia.
GYP1007 0.6 in dia.
GYP1008 0.3 in dia.

2. SPECIFICATIONS

2.1 SPECIFICATIONS

• AVIC-X930BT/XNUC, AVIC-X9310BT/XNUC

General

Rated power source 14.4 V DC
(allowable voltage range:
10.8 V to 15.1 V DC)

Grounding system Negative type

Maximum current consumption

..... 10.0 A

Backup current 3.0 mA or less

Dimensions (W × H × D):

Chassis 178 mm × 100 mm ×
165 mm
(7 in. × 3-7/8 in. × 6-1/2 in.)

Nose 170 mm × 96 mm × 12 mm
(6-3/4 in. × 3-3/4 in. ×
1/2 in.)

Weight: 1.98 kg (4.4 lbs)

NAND flash memory 4 GB

Navigation

GPS receiver:

System L1, C/Acode GPS
SPS (Standard Positioning
Service)

Reception system 32-channel multi-channel
reception system

Reception frequency 1 575.42 MHz

Sensitivity -140 dBm (typ)

Position update frequency
..... Approx. once per second

GPS antenna:

Antenna Micro strip flat antenna/
right-handed helical polari-
zation

Antenna cable 3.55 m (11 ft. 7 in.)

Dimensions (W × H × D)
..... 33 mm × 15 mm × 36 mm
(1-1/4 in. × 4/7 in. ×
1-3/8 in.)

Weight 73.7 g (0.2 lbs)

Display

Screen size/aspect ratio:
..... 6.1 inch wide/16:9

Effective display area:
..... 137 mm × 72 mm

Pixels 384 000 (800 × 480)

Display method TFT Active matrix driving

Backlight LED

Color system NTSC compatible

Tolerable temperature range:

Power on +14 °F to +140 °F

Power off -4 °F to +176 °F

Angle adjustment 0°

Audio

Maximum power output 50 W × 4
50 W × 2 ch/4 Ω + 70 W ×
1 ch/2 Ω (for subwoofer)

Continuous power output ... 22 W × 4 (50 Hz to 15 kHz,
5%THD, 4 Ω LOAD, Both
Channels Driven)

Load impedance 4 Ω (4 Ω to 8 Ω [2 Ω for 1 ch]
allowable)

Preout output level (max):
..... 2.2 V

Preout impedance:
..... 1 k Ω

Equalizer (8-Band Graphic Equalizer):

Frequency 40 Hz/80 Hz/200 Hz/400 Hz/
1 kHz/2.5 kHz/8 kHz/10 kHz

Gain ±12 dB

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)

HPF:

Frequency 50 Hz/63 Hz/80 Hz/100 Hz/
125 Hz

Slope -12 dB/oct

• AVIC-X930BT/XNUC, AVIC-X9310BT/XNUC

Subwoofer:

Frequency.....	50 Hz/63 Hz/80 Hz/100 Hz/ 125 Hz
Slope.....	-18 dB/oct
Gain.....	-24/+6 dB
Phase.....	Normal/Reverse

Bass boost:

Gain.....	0 dB to +12 dB
-----------	----------------

DVD Drive

System.....	DVD-Video, CD, MP3, WMA, AAC, DivX system
Usable discs.....	DVD-Video, DVD-R(DL), DVD-RW, CD-ROM, CD-DA, CD-R/RW
Region number.....	1
Signal format:	
Sampling frequency.....	44.1 kHz/48 kHz/96 kHz
Number of quantization bits	
.....	16 bit/20 bit/24 bit; linear
Frequency response.....	5 Hz to 44 000 Hz (with DVD, at sampling frequency 96 kHz)
Signal-to-noise ratio.....	97 dB (1 kHz) (IEC-A net- work) (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.9.0 L3
AAC decoding format.....	MPEG-4 AAC (only encoded by iTunes): .m4a
DivX decoding format.....	Home Theater Ver.3.11, Ver.4.X, Ver.5.X, Ver.6.X: .avi, .divx

USB

USB standard spec.....	USB 2.0 High Speed
Max current supply.....	1 A
File system.....	FAT16, FAT32
USB class.....	Mass storage class
Decoding format.....	MP3/WMA/AAC/WAVE/ H.264/MPEG4/WMV

SD

microSD card, microSDHC card	
Compatible physical format	
.....	Version 2.00
File system.....	FAT16, FAT32
Decoding format.....	MP3/WMA/AAC/WAVE/ H.264/MPEG4/WMV

Bluetooth

Version.....	Bluetooth 2.0+EDR
Output power.....	+4 dBm Max. (Power class 2)

FM tuner

Frequency range.....	87.9 MHz to 107.9 MHz
Usable sensitivity.....	9 dBf (0.8 μ V/75 Ω , mono, S/N: 30 dB)
Signal-to-noise ratio.....	72 dB (IEC-A network)
Distortion.....	0.3 % (at 65 dBf, 1 kHz, stereo) 0.1 % (at 65 dBf, 1 kHz, mono)
Frequency response.....	30 Hz to 15 000 Hz (± 3 dB)
Stereo separation.....	45 dB (at 65 dBf, 1 kHz)

AM tuner

Frequency range.....	530 kHz to 1 710 kHz (10 kHz)
Usable sensitivity.....	25 μ V (S/N: 20 dB)
Signal-to-noise ratio.....	62 dB (IEC-A network)

CEA2006 Specifications



Power output.....	14 W RMS \times 4 Channels (4 Ω and $\leq 1\%$ THD+N)
S/N ratio.....	91 dBA (reference: 1 W into 4 Ω)



Note

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

A

• AVIC-F930BT/XNAU

General

Rated power source 14.4 V DC
 (allowable voltage range:
 10.8 V to 15.1 V DC)

Earthing system Negative type

Maximum current consumption

..... 10.0 A

Backup current 3.0 mA or less

Dimensions (W × H × D):

D

Chassis 178 mm × 100 mm ×

165 mm

Nose 170 mm × 96 mm × 12 mm

Weight: 1.96 kg

NAND flash memory 4 GB

Navigation

GPS receiver:

System L1, C/Acode GPS

SPS (Standard Positioning
 Service)

Reception system 32-channel multi-channel
 reception system

Reception frequency... 1 575.42 MHz

Sensitivity -140 dBm (typ)

Position update frequency

..... Approx. once per second

GPS aerial:

Aerial Micro strip flat aerial/right-
 handed helical polarisation

Aerial cable 3.55 m

Dimensions (W × H × D)

..... 33 mm × 15 mm × 36 mm

Weight 73.7 g

Display

Screen size/aspect ratio:

..... 6.1 inch wide/16:9

Effective display area:

..... 137 mm × 72 mm

Pixels 384 000 (800 × 480)

Display method TFT Active matrix driving

Backlight LED

Colour system PAL/NTSC compatible

Tolerable temperature range:

Power on -10 °C to +60 °C

Power off -20 °C to +80 °C

Angle adjustment 0°

Audio

Maximum power output 50 W × 4

50 W × 2 ch/4 Ω + 70 W ×

1 ch/2 Ω (for subwoofer)

Continuous power output ... 22 W × 4 (50 Hz to 15 kHz,

5 %THD, 4 Ω LOAD, Both

Channels Driven)

Load impedance 4 Ω (4 Ω to 8 Ω [2 Ω for 1 ch]

allowable)

Preout output level (max):

..... 2.2 V

Preout impedance:

..... 1 k Ω

Equaliser (8-Band Graphic Equaliser):

Frequency 40 Hz/80 Hz/200 Hz/400 Hz/

1 kHz/2.5 kHz/8 kHz/10 kHz

Gain ±12 dB

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)

HPF:

Frequency 50 Hz/63 Hz/80 Hz/100 Hz/

125 Hz

Slope -12 dB/oct

Subwoofer:

Frequency 50 Hz/63 Hz/80 Hz/100 Hz/

125 Hz

Slope -18 dB/oct

Gain -24/+6 dB

Phase Normal/Reverse

Bass boost:

Gain 0 dB to +12 dB

DVD Drive

System DVD-Video, CD, MP3, WMA,
 AAC, DivX system

Usable discs DVD-Video, DVD-R(DL),
 DVD-RW, CD-ROM, CD-DA,
 CD-R/RW

E

F

• AVIC-F930BT/XNAU

Region number	4
Signal format:	
Sampling frequency	44.1 kHz/48 kHz/96 kHz
Number of quantisation bits	16 bit/20 bit/24 bit; linear
Frequency response.....	5 Hz to 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 V _{p-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.9.0 L3
AAC decoding format.....	MPEG-4 AAC (only encoded by iTunes): .m4a
DivX decoding format.....	Home Theater Ver.3.11, Ver.4.X, Ver.5.X, Ver.6.X: .avi, .divx

USB

USB standard spec	USB 2.0 High Speed
Max current supply	1 A
File system	FAT16, FAT32
USB class	Mass storage class
Decoding format	MP3/WMA/AAC/WAVE/ H.264/MPEG4/WMV

SD

microSD card, microSDHC card	
Compatible physical format	Version 2.00
File system.....	FAT16, FAT32
Decoding format	MP3/WMA/AAC/WAVE/ H.264/MPEG4/WMV

Bluetooth

Version	Bluetooth 2.0+EDR
---------------	-------------------

Output power	+4 dBm Max. (Power class 2)
--------------------	--------------------------------

FM tuner

Frequency range.....	87.5 MHz to 108.0 MHz
Usable sensitivity.....	9 dBf (0.8 μV/75 Ω, mono, S/N: 30 dB)
Signal-to-noise ratio.....	72 dB (IEC-A network)
Distortion	0.3 % (at 65 dBf, 1 kHz, stereo) 0.1 % (at 65 dBf, 1 kHz, mono)
Frequency response.....	30 Hz to 15 000 Hz (±3 dB)
Stereo separation.....	45 dB (at 65 dBf, 1 kHz)

AM tuner

Frequency range.....	531 kHz to 1 602 kHz (9 kHz)
Usable sensitivity.....	25 μV (S/N: 20 dB)
Signal-to-noise ratio.....	62 dB (IEC-A network)



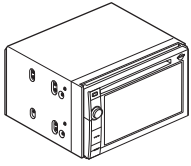
Note

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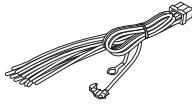
Parts supplied

AVIC-X930BT/XNUC, AVIC-X9310BT/XNUC

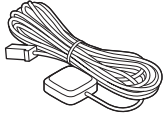
AVIC-F930BT/XNAU



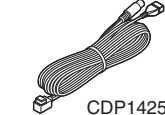
The navigation unit



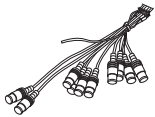
CDP1307
Power cord



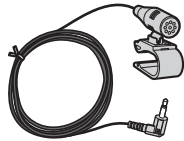
CXE3204
GPS antenna



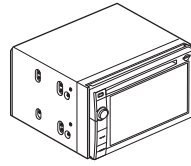
CDP1425
USB and mini-jack
connector



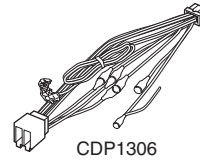
CDP1375
RCA connector



CPM1083
Microphone



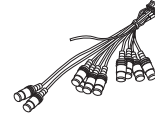
The navigation unit



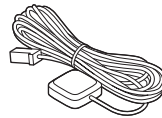
CDP1306
Power cord



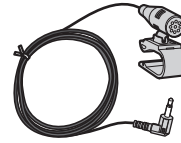
CDP1425
USB and mini-jack
connector



CDP1375
RCA connector



CXE3204
GPS aerial



CPM1083
Microphone

2.2 DISC/CONTENT FORMAT



The Bluetooth word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Pioneer Corporation is under license. Other trademarks and trade names are those of their respective owners.

HD Radio®
This HD Radio receiver enables:

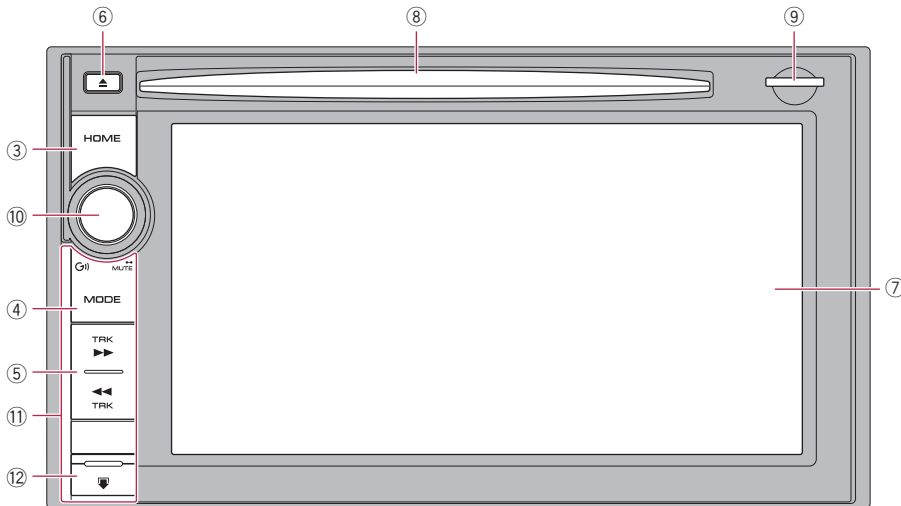
- PSD)
- HD2/HD3)
- Digital Sound)
- iTunes® Tagging)

Made for
 iPod iPhone



Checking part names and functions

This chapter gives information about the names of the parts and the main features using the buttons.



AVIC-X930BT, AVIC-X9310BT

- ① **VOICER button**
 - Press the button to activate voice operations.
 - Press and hold the button to switch the AV source to mute. To cancel the muting, press and hold it again.
- ② **VOL (+/-) button**

Press to adjust the AV (Audio and Video) source volume.
- ③ **HOME button**
 - Press the **HOME** button to display the “**Top Menu**” screen.
 - Press to switch between the Classic Menu and the Shortcut Menu while the “**Top Menu**” is displayed.
 - ➡ For details, refer to What you can do on each menu.
 - Press and hold to turn off the screen display.
- ④ **MODE button**
 - Press to switch between the map screen and the AV operation screen.
- ⑤ **TRK button**

Press to perform manual seek tuning, fast forward, reverse and track search controls.

 - ➡ For details, refer to the descriptions
- ⑥ **▲ button**
- ⑦ **LCD screen**
- ⑧ **Disc-loading slot**

Insert a disc to play.

 - ➡ For details, refer to Inserting and ejecting a disc.
- ⑨ **SD card slot**
 - ➡ For details, refer to Inserting and ejecting an SD memory card.

- ⑩ AVIC-X930BT, AVIC-X9310BT : **Multi-control (Volume knob/G) /MUTE**
 AVIC-F930BT : **Multi-control (Volume knob/√/MUTE)**

- Rotate to adjust the AV (Audio and Video) source volume.
- Press the center of Multi-control to hear the route guidance.
- Press and hold the center of Multi-control to mute the AV (Audio and Video) source. To cancel the muting, press and hold it again.

⑪ **Front panel**

⑫ **Detach button**

Press to remove the front panel from the navigation system.

- ➡ For details, refer to Removing the front panel on this page.

Protecting your product from theft

- ☐ This function is available for AVIC-X930BT, AVIC-X9310BT and AVIC-F930BT.

The front panel can be detached from the navigation system to discourage theft, as described below.

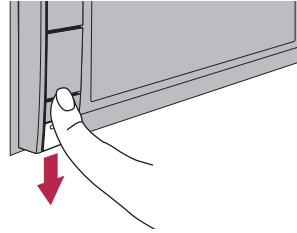
CAUTION

- Do not expose the front panel to excessive shock or disassemble it.
- Never grip the buttons tightly or use force when removing or attaching.
- Keep the front panel out of reach of small children to prevent them from putting it in their mouths.
- After removing the front panel, keep it in a safe place so it is not scratched or damaged.
- Keep the front panel out of direct sunlight and high temperatures.
- When removing or attaching the front panel, do so after turning the ignition switch off (ACC OFF).

Removing the front panel

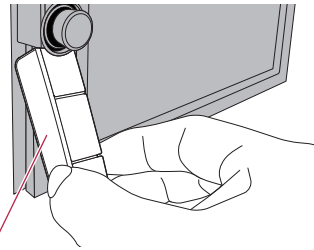
- ☐ The navigation system cannot be operated while the front panel is removed from the navigation system.

1 Press and hold the Detach button, and slide it down.



When you release your finger, the bottom of the front panel separates slightly from the navigation system.

2 Gently grip the bottom of the front panel and slowly pull it outward.



Front panel

Attaching the front panel

1 Slide the front panel all the way into the navigation system.

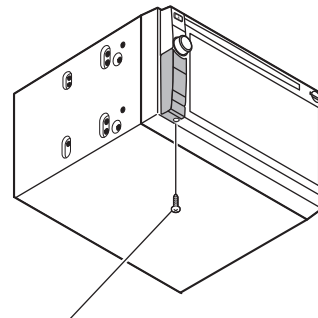
Make sure the front panel is securely connected to the mounting hooks of the navigation system.

2 Push the lower part of the front panel until you hear a click.

If you fail to successfully attach the front panel to the navigation system, try again but be careful not to force it as the panel could be damaged.☐

Fastening the front panel

If you do not plan to remove the front panel, the front panel can be fastened with supplied screw.

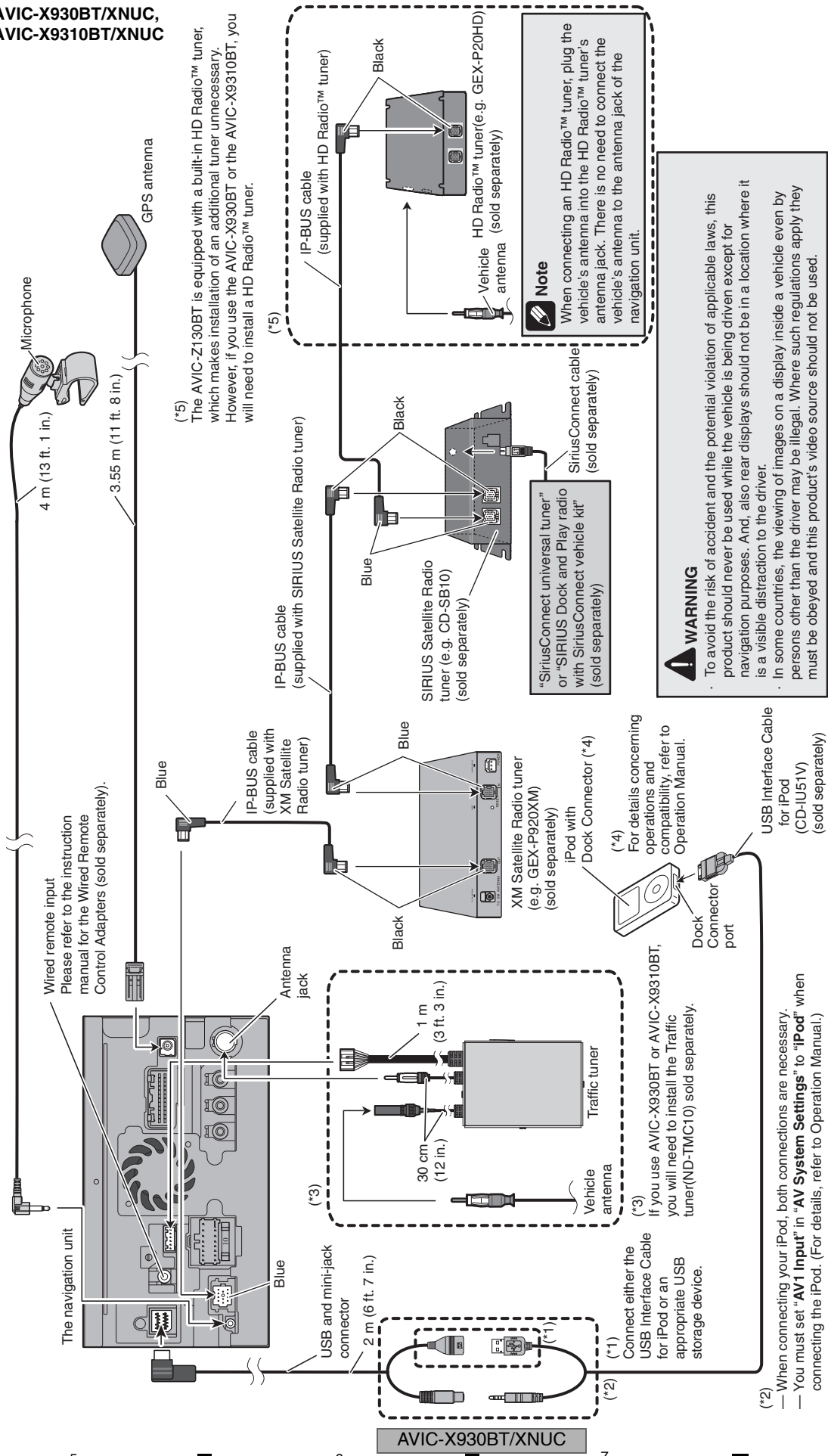


Screw : BPZ20P040FTC (2mm×4mm)(UC)

2.4 CONNECTION DIAGRAM

- AVIC-X930BT/XNUC, AVIC-X9310BT/XNUC

Connecting the system

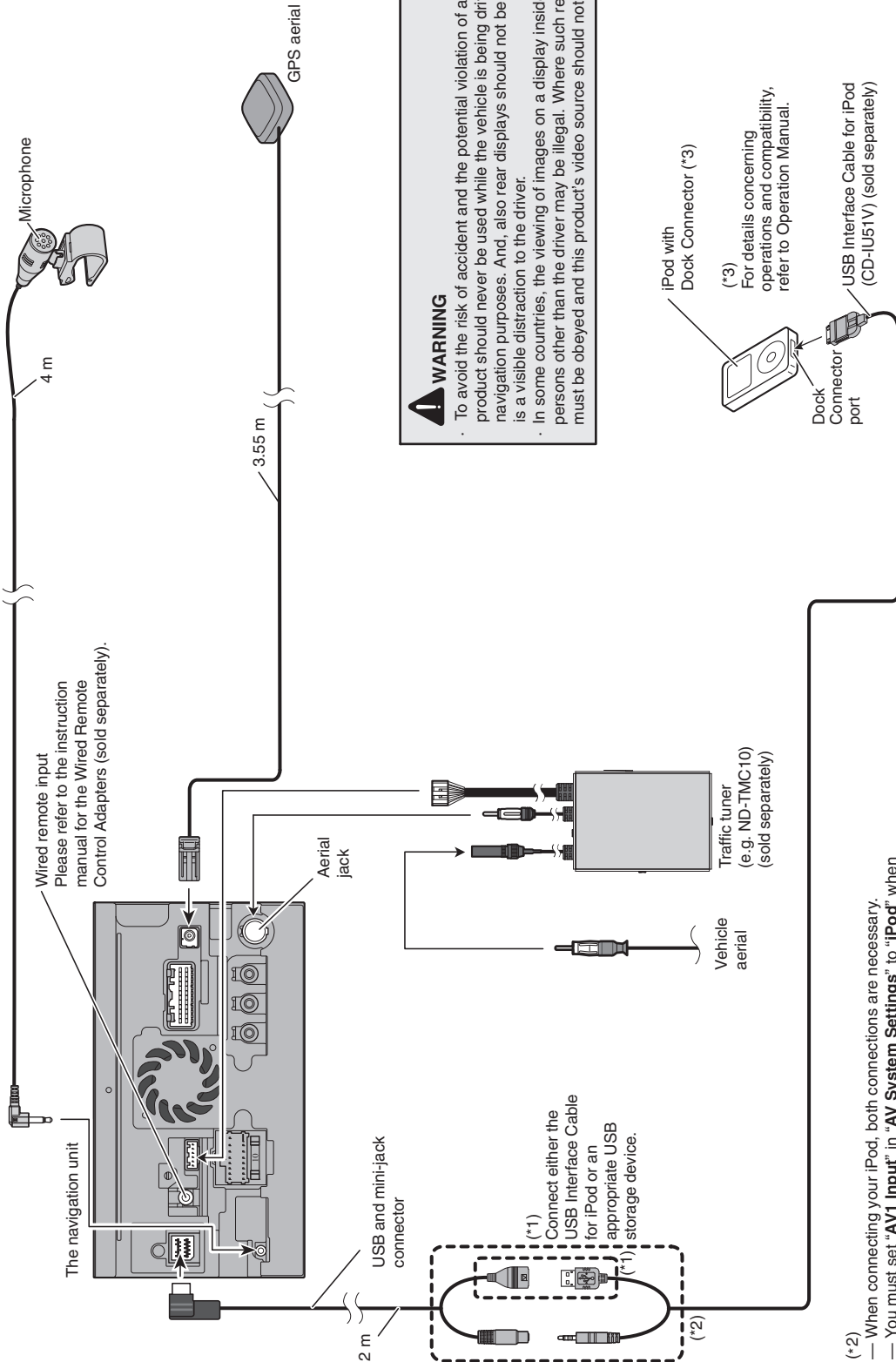


(*) When connecting your iPod, both connections are necessary. You must set "AV1 Input" in "AV System Settings" to "iPod" when connecting the iPod. (For details, refer to Operation Manual.)

A
B
C
D
E
F

• AVIC-F930BT/XNAU

Connecting the system



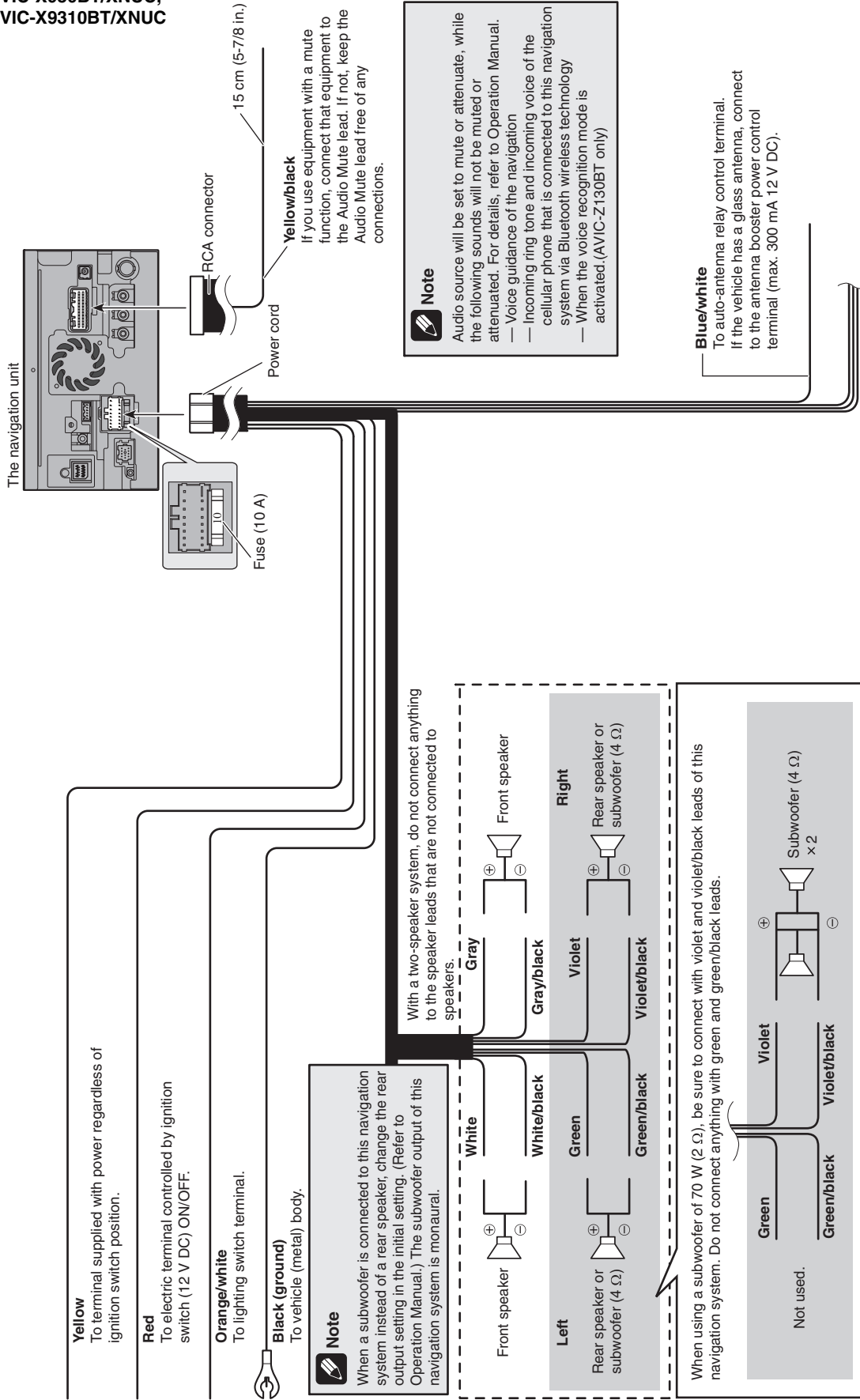
WARNING

- To avoid the risk of accident and the potential violation of applicable laws, this product should never be used while the vehicle is being driven except for navigation purposes. And, also rear displays should not be in a location where it is a visible distraction to the driver.
- In some countries, the viewing of images on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply they must be obeyed and this product's video source should not be used.

(*2) — When connecting your iPod, both connections are necessary.
 — You must set "AV1 Input" in "AV System Settings" to "iPod" when connecting the iPod. (For details, refer to Operation Manual.)

Connecting the power cord (1)

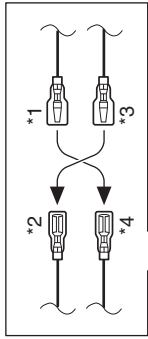
- AVIC-X930BT/XNUC, AVIC-X9310BT/XNUC



Connecting the power cord (1)

Note

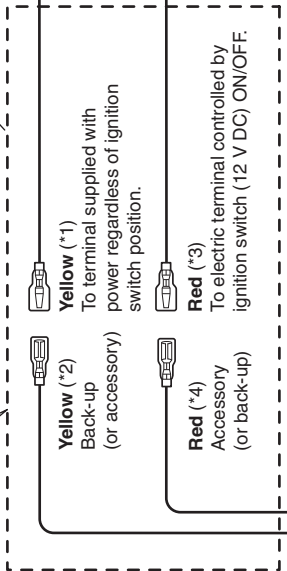
Depending on the types of vehicles, the function of *2 and *4 may be different. In this case, be sure to connect *1 to *4 and *3 to *2 as shown in the figure.



Notes

- When a subwoofer (*5) is connected to this navigation system instead of a rear speaker, change the rear output setting in the initial setting. (Refer to Operation Manual.) The subwoofer output of this navigation system is monaural.
- When using a subwoofer of 70 W (2 Ω), be sure to connect with violet and violet/black leads of this navigation system. Do not connect anything with green and green/black leads.

Connect leads of the same colour to each other.

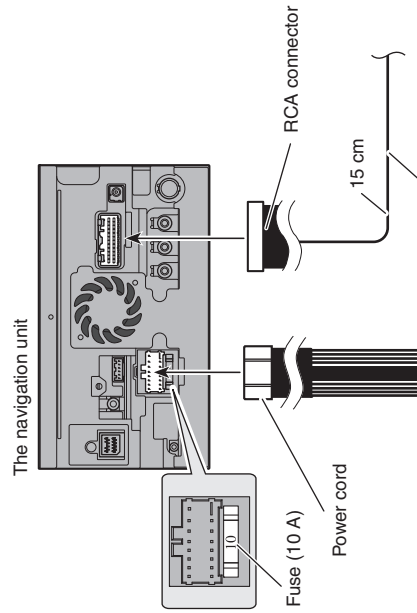


- Speaker leads
- White: Front left ⊕
 - White/black: Front left ⊖
 - Grey: Front right ⊕
 - Grey/black: Front right ⊖
 - Green: Rear left ⊕ or Subwoofer ⊕ (*5)
 - Green/black: Rear left ⊖ or Subwoofer ⊖ (*5)
 - Violet: Rear right ⊕ or Subwoofer ⊕ (*5)
 - Violet/black: Rear right ⊖ or Subwoofer ⊖ (*5)

Note

In some vehicles, the ISO connector may be divided into two. In this case, be sure to connect to both connectors.

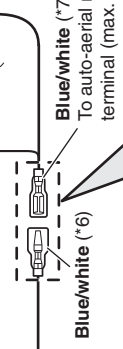
• AVIC-F930BT/XNAU



Yellow/black
If you use an equipment with mute function, connect that equipment to the Audio Mute lead. If not, keep this lead free of any connections.

Note

- Audio source will be set to mute or attenuate, while the following sounds will not be muted or attenuated. For details, refer to Operation Manual.
- Voice guidance of the navigation
 - Incoming ringtone and incoming voice of the mobile phone that is connected to this navigation system via Bluetooth wireless technology



Blue/white (*6)
Blue/white (*7)
To auto-aerial relay control terminal (max. 300 mA 12 V DC).

The pin position of the ISO connector will differ depending on the types of vehicles. Connect *6 and *7 when Pin 5 is an aerial control type. In other types of vehicles, never connect *6 and *7.

Connecting the power cord (2)

Pink (CAR SPEED SIGNAL INPUT)

The navigation system is connected here to detect the distance the vehicle travels. Always connect the vehicle's speed detection circuit. Failure to make this connection will increase errors in the vehicle's location display.



WARNING
IMPROPER CONNECTION MAY RESULT IN SERIOUS DAMAGE OR INJURY INCLUDING ELECTRICAL SHOCK, AND INTERFERENCE WITH THE OPERATION OF THE VEHICLE'S ANTILOCK BRAKING SYSTEM, AUTOMATIC TRANSMISSION AND SPEEDOMETER INDICATION.



CAUTION
 It is strongly suggested that the speed pulse wire be connected for accuracy of navigation and better performance.



Note
 The position of the speed detection circuit and the position of the parking brake switch vary depending on the vehicle model. For details, consult your authorized Pioneer dealer or an installation professional.

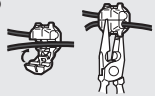
Light green (PARKING BRAKE)

Used to detect the ON/OFF status of the parking brake. This lead must be connected to the power supply side of the parking brake switch.
If this connection is made incorrectly or omitted, certain functions of your navigation system will be unusable.



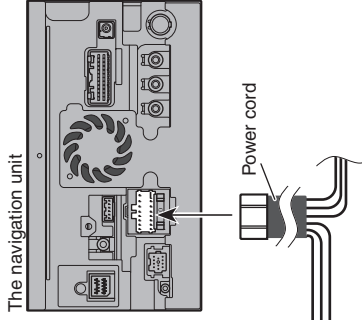
WARNING
LIGHT GREEN LEAD AT POWER CONNECTOR IS DESIGNED TO DETECT PARKED STATUS AND MUST BE CONNECTED TO THE POWER SUPPLY SIDE OF THE PARKING BRAKE SWITCH. IMPROPER CONNECTION OR USE OF THIS LEAD MAY VIOLATE APPLICABLE LAW AND MAY RESULT IN SERIOUS INJURY OR DAMAGE.

Connection method



Clamp the lead of the power supply side of the parking brake switch.

Clamp firmly with needle-nosed pliers.

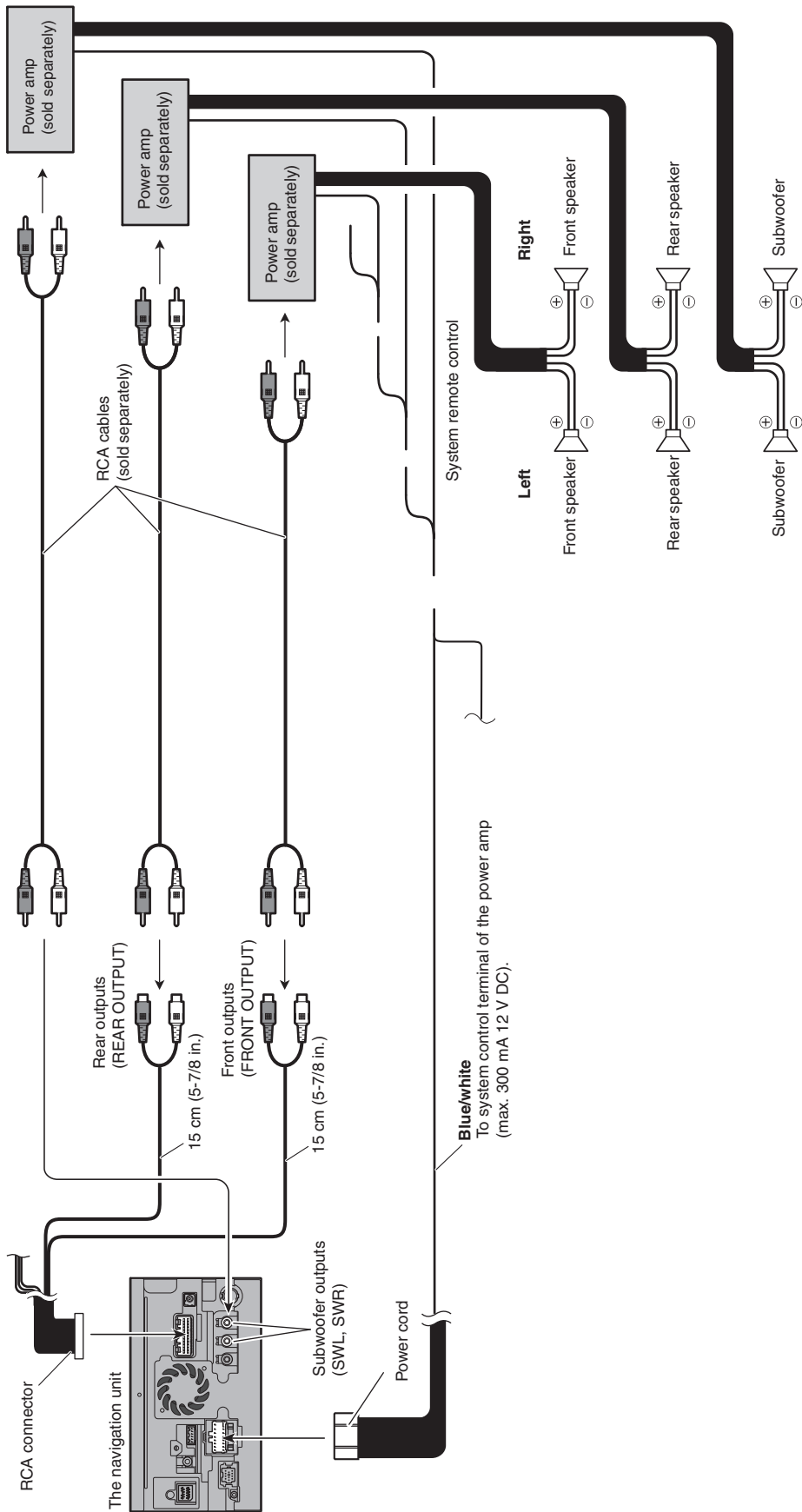


Violet/white (REVERSE GEAR SIGNAL INPUT)
 This is connected so that the navigation system can detect whether the vehicle is moving forwards or backwards. Connect the violet/white lead to the lead whose voltage changes when the shift lever is put in reverse. Unless connected, the sensor may not detect your vehicle traveling forward/backward properly, and thus the position of your vehicle detected by the sensor may be misaligned from the actual position.



Note
 When you use a rear view camera, please make sure to connect this lead. Otherwise you cannot switch to the rear view camera picture.

When connecting to separately sold power amp



Note

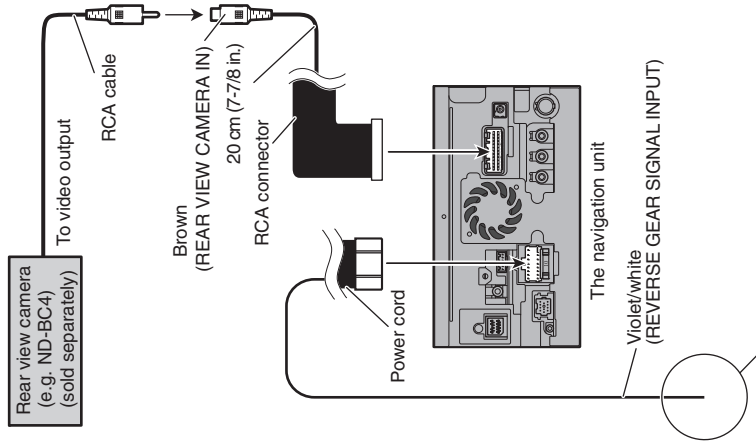
You can change the RCA output of the subwoofer depending on your subwoofer system. (Refer to Operation Manual.)

When connecting a rear view camera

When this product is used with a rear view camera, it is possible to automatically switch from the video to rear view image when the gear shift is moved to **REVERSE (R)**. **Rear View** mode also allows you to check what is behind you while driving.

WARNING
USE INPUT ONLY FOR REVERSE OR MIRROR IMAGE REAR VIEW CAMERA. OTHER USE MAY RESULT IN INJURY OR DAMAGE.

- CAUTION**
- The screen image may appear reversed.
 - The rear view camera is used as an aid to keep an eye on trailers, or backing into a tight parking spot. Do not use this function for entertainment purposes.
 - Objects in rear view may appear closer or more distant than in reality.
 - Please note that the image area shown by the rear view camera may differ slightly when full-screen images are displayed when backing and when checking the rear of the vehicle while moving forward.

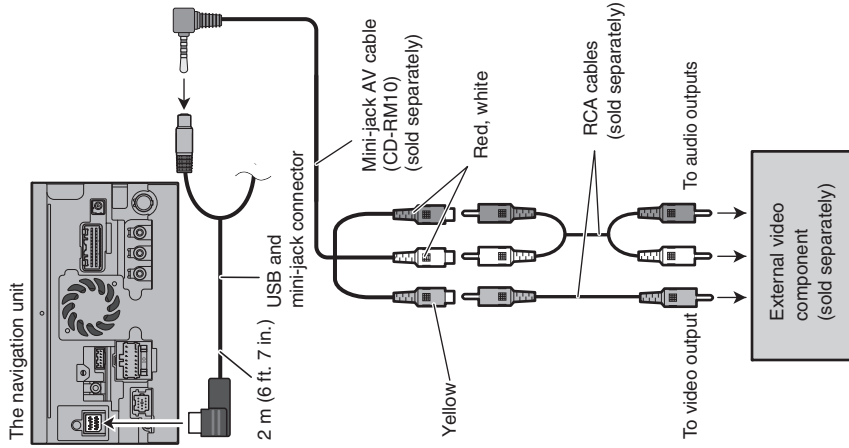


For more details about the wiring, refer to Connecting the power cord (2bn page 12).

Notes

- This mode is available when the rear view camera setting is set to "On". (For details, refer to Operation Manual.)
- Connect the navigation system to the rear view camera only. Do not connect to any other equipment.

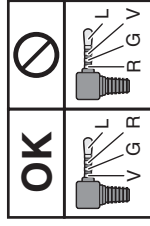
When connecting the external video component Using an AV input (AV1)



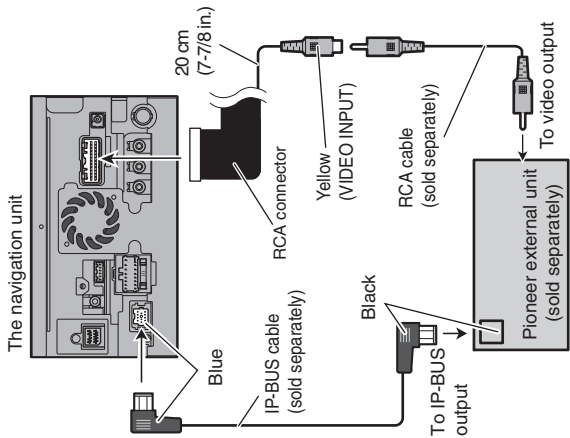
- You must set "AV1 Input" in "AV System Settings" to "Video" when connecting the external video component. (For details, refer to Operation Manual.)

CAUTION

Be sure to use a mini-jack AV cable (CD-RM10) (sold separately) for wiring. If you use other cables, the wiring position might differ resulting in disturbed images and sounds.

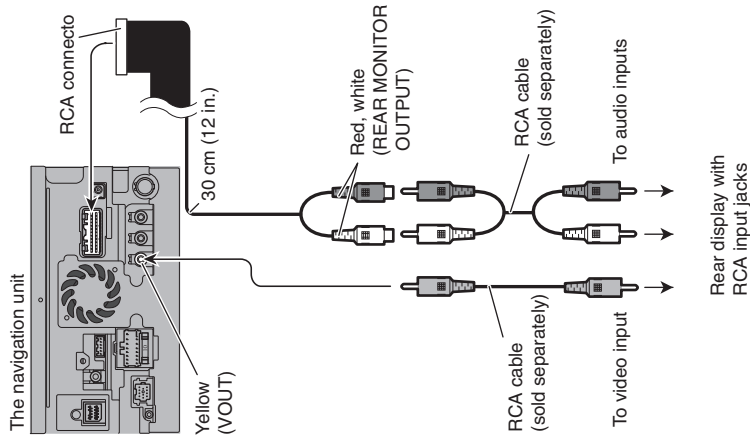


• **AVIC-X930BT/XNUC, AVIC-X9310BT/XNUC**
When connecting the external unit featuring video source



- You must set "AV2 Input" in "AV System Settings" to "EXT" when connecting the external unit. (For details, refer to Operation Manual.)

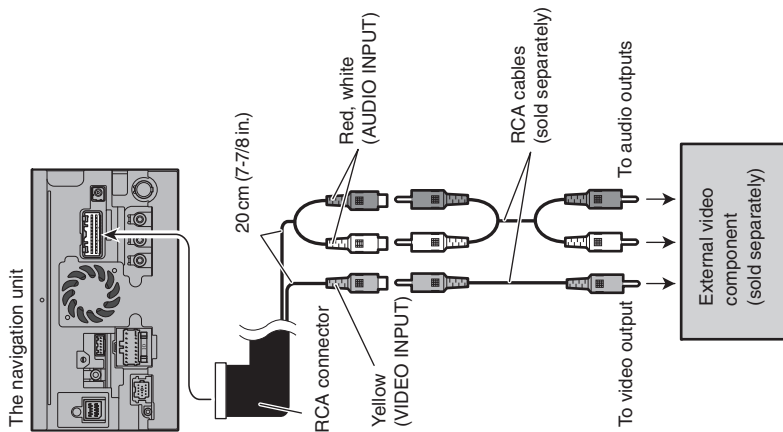
When connecting the rear display



When using a rear display connected to rear video output

WARNING
NEVER install the rear display in a location that enables the driver to watch the video source while driving.
 This navigation system's rear video output is for connection of a display to enable passengers in the rear seats to watch the video source.

Using an AV input (AV2)



- You must set "AV2 Input" in "AV System Settings" to "Video" when connecting the external video component. (For details, refer to Operation Manual.)

3. BASIC ITEMS FOR SERVICE

3.1 CHECK POINTS AFTER SERVICING

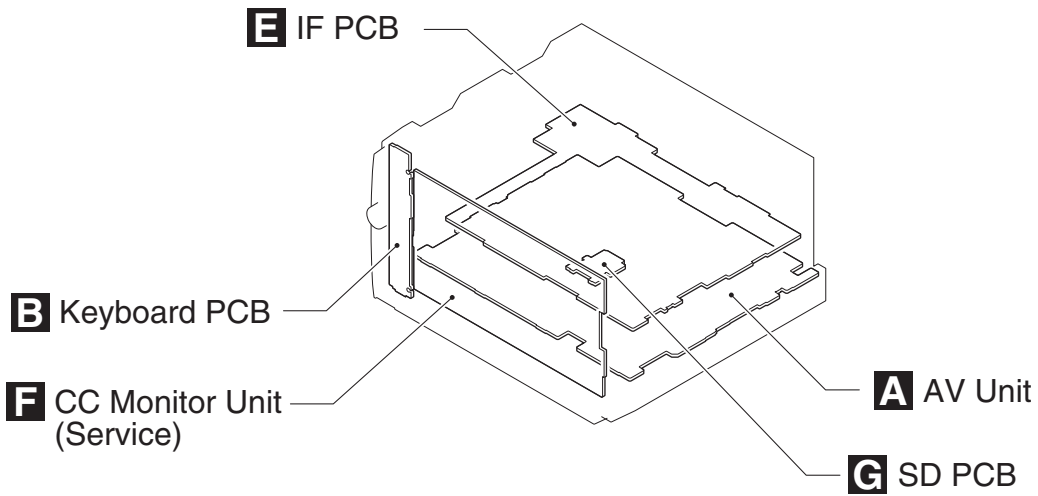
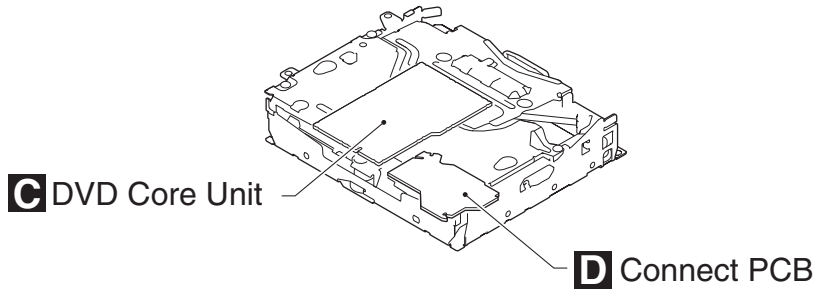
To keep the product quality after servicing, please confirm following check points.

No.		Procedures	Item to be confirmed
1		Confirm whether the customer complain has been solved. If the customer complain occurs with the specific media, use it for the operation check.	The customer complain must not be reappeared. Display, video, audio and operations must be normal.
2	DVD	Measure playback error rates at the innermost and outermost tracks by using the test mode with the following disc. DVD test disc (GGV1025)	Deterioration of mecha-drive can be checked. The error rate must be less than the threshold value. (Refer to the chapter of DIAGNOSIS for the threshold value.)
3	DVD	Play back a DVD. (Menu operation; Title/chapter search)	Display, video, audio and operations must be normal.
4	CD	Play back a CD. (Track search)	Display, audio and operations must be normal.
5	FM/AM tuner	Check FM/AM tuner action. (Seek, Preset) Switch band to check both FM and AM.	Display, audio and operations must be normal.
6	GPS positioning	Connect GPS antenna to the product, and check whether the current location is correct.	Current location must be correct. Display and operations must be normal.
7	Gyro action	On "3D Calibration Status", check whether the gyro sensor works well by moving the front face of the product from left to right and up and down.	Gyro-sensing, display and operations must be normal.
8	Map display Touch-panel operation Remote-control operation	Check functions of map scale change and map scroll.	Display and operations must be normal.
9		Delete data added during the operating check. Check whether no media (CD etc.) is inside the product.	Make sure to delete data added during the operating check. The media used for the operating check must be ejected.
10		Appearance check	No scratches or dirt on its appearance after receiving it for service.

See the table below for the items to be checked regarding video and audio:

Item to be checked regarding video	Item to be checked regarding audio
Block-noise	Distortion
Horizontal noise	Noise
Dot noise	Volume too low
Disturbed image (video jumpiness)	Volume too high
Too dark	Volume fluctuating
Too bright	Sound interrupted
Mottled color	

3.2 PCB LOCATIONS



Unit Number : CWN5681(UC)
 : CWN5684(AU)

Unit Name : AV Unit
 IF Unit

Consists of
 Keyboard PCB
 IF PCB
 SD PCB

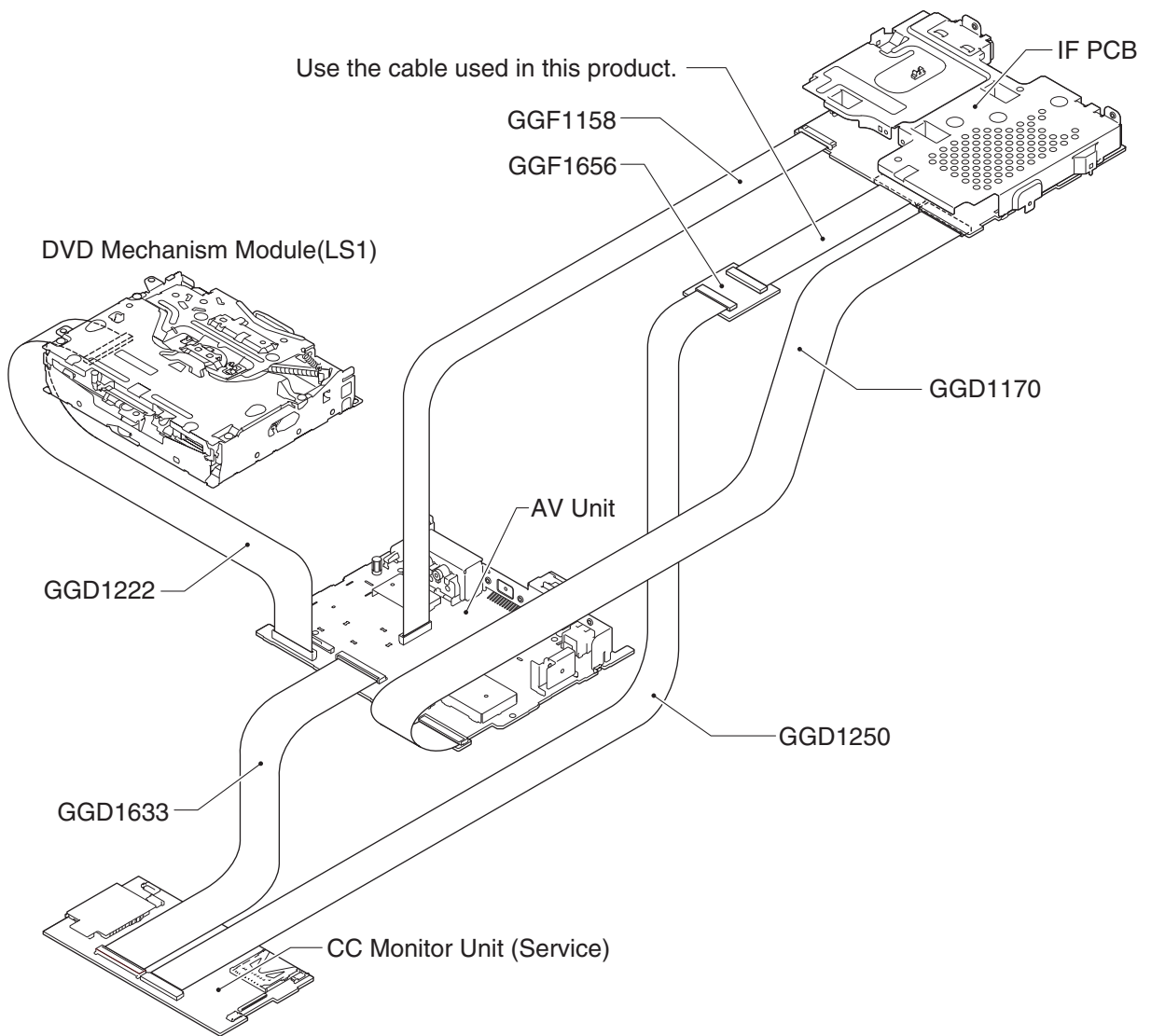
Unit Number : CWN5866(UC)
 : CWN5869(AU)

Unit Name : IF Unit
 Unit Number : YWX5025
 Unit Name : DVD Core Unit

Unit Number :
 Unit Name : Connect PCB
 Unit Number : CXX3400(UC)
 : CXX3403(AU)

Unit Name : CC Monitor Unit(Service)

3.3 JIGS LIST



Jigs List

Name	Jig No.	Remarks
DISC	GGV1025	Skew adjustment, Check points after servicing, Inspection method of Pickup Unit
DISC	TCD-782	Inspection method of Pickup Unit
20P FFC Extension Cable	GGF1158	AV UNIT <---> IF PCB
40P FFC Extension Cable	GGD1170	AV UNIT <---> IF PCB
30P FFC Extension Cable	GGD1222	AV UNIT <---> DVD CORE UNIT
50P Extension Board	GGF1656	IF PCB <---> CC MONITOR UNIT
50P FFC Extension Cable	GGD1250	IF PCB <---> CC MONITOR UNIT
80P FFC Extension Cable	GGD1633	AV UNIT <---> CC MONITOR UNIT
Test Mode File	GGG1098	Test Mode

Grease List

Name	Jig No.	Remarks
Grease	GEM1024	DVD Mechanism Module
Grease	GEM1038	DVD Mechanism Module
Grease	GEM1045	DVD Mechanism Module
Locking agents	1401M	Skew adjustment (1401M:produced by THREE BOND)
Bond	GEM1033	Skew adjustment
Bond	1530	Skew adjustment (1530:produced by THREE BOND)

3.4 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

A

B

C

D

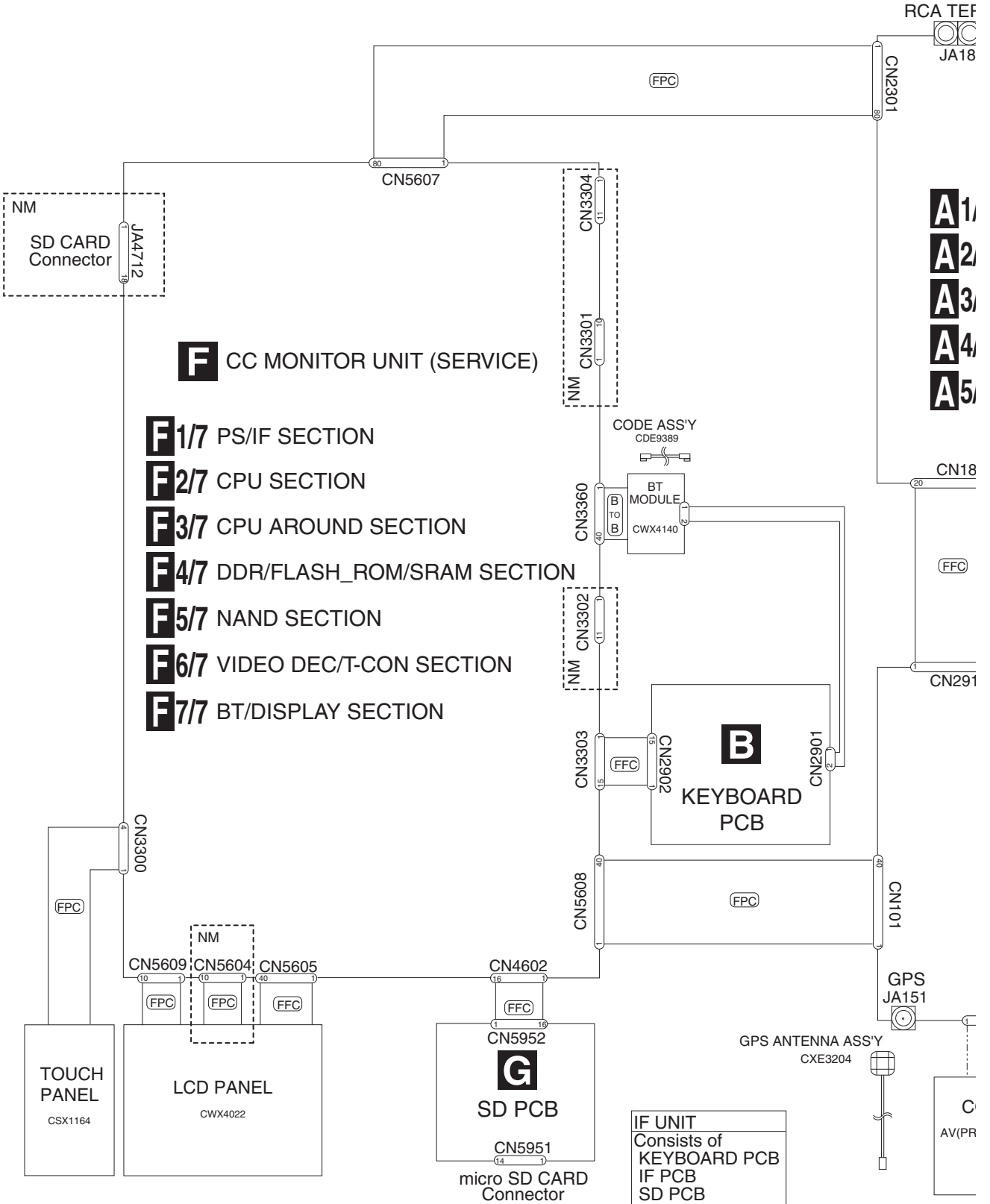
E

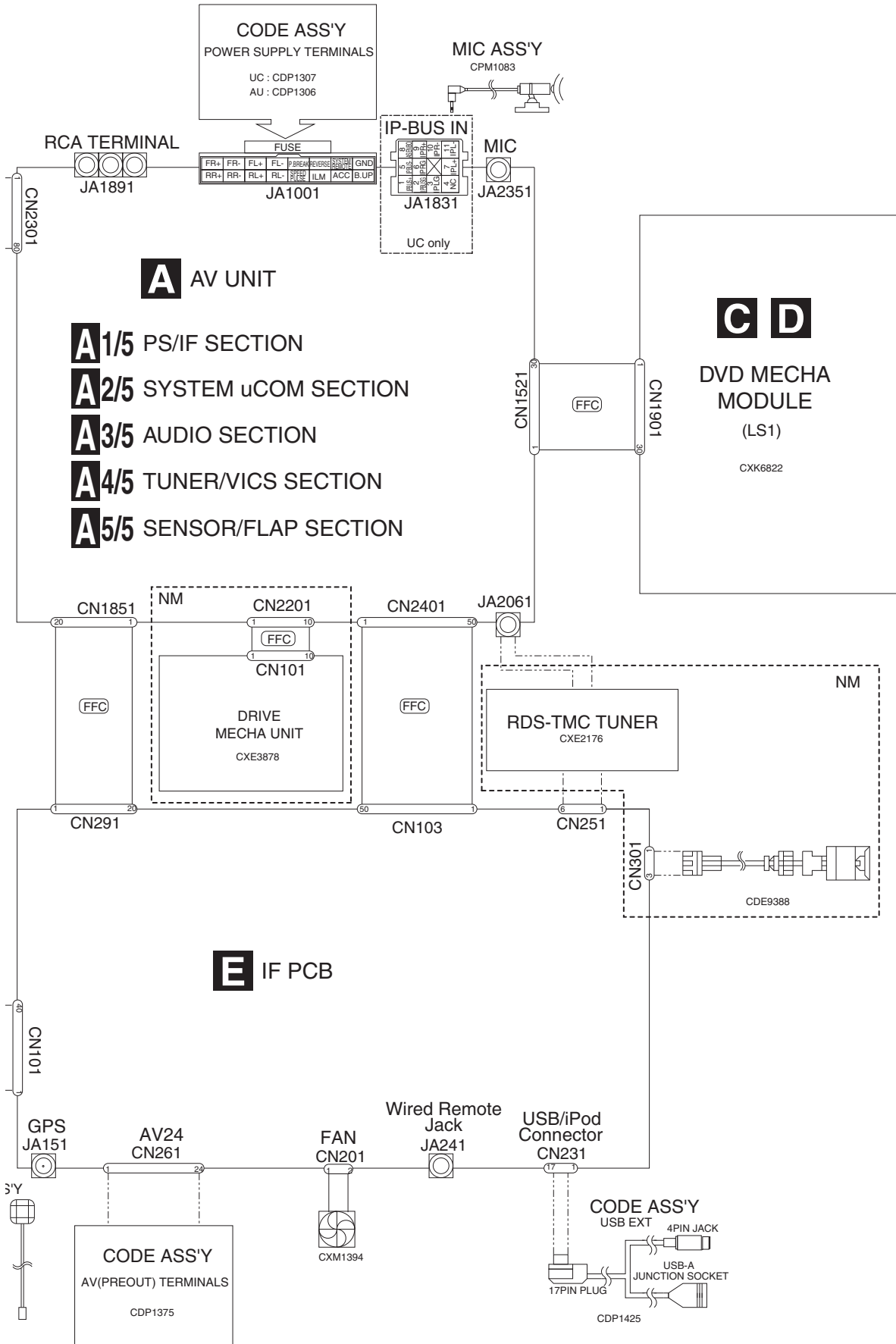
F

4. BLOCK DIAGRAM

4.1 OVERALL CONNECTION DIAGRAM

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

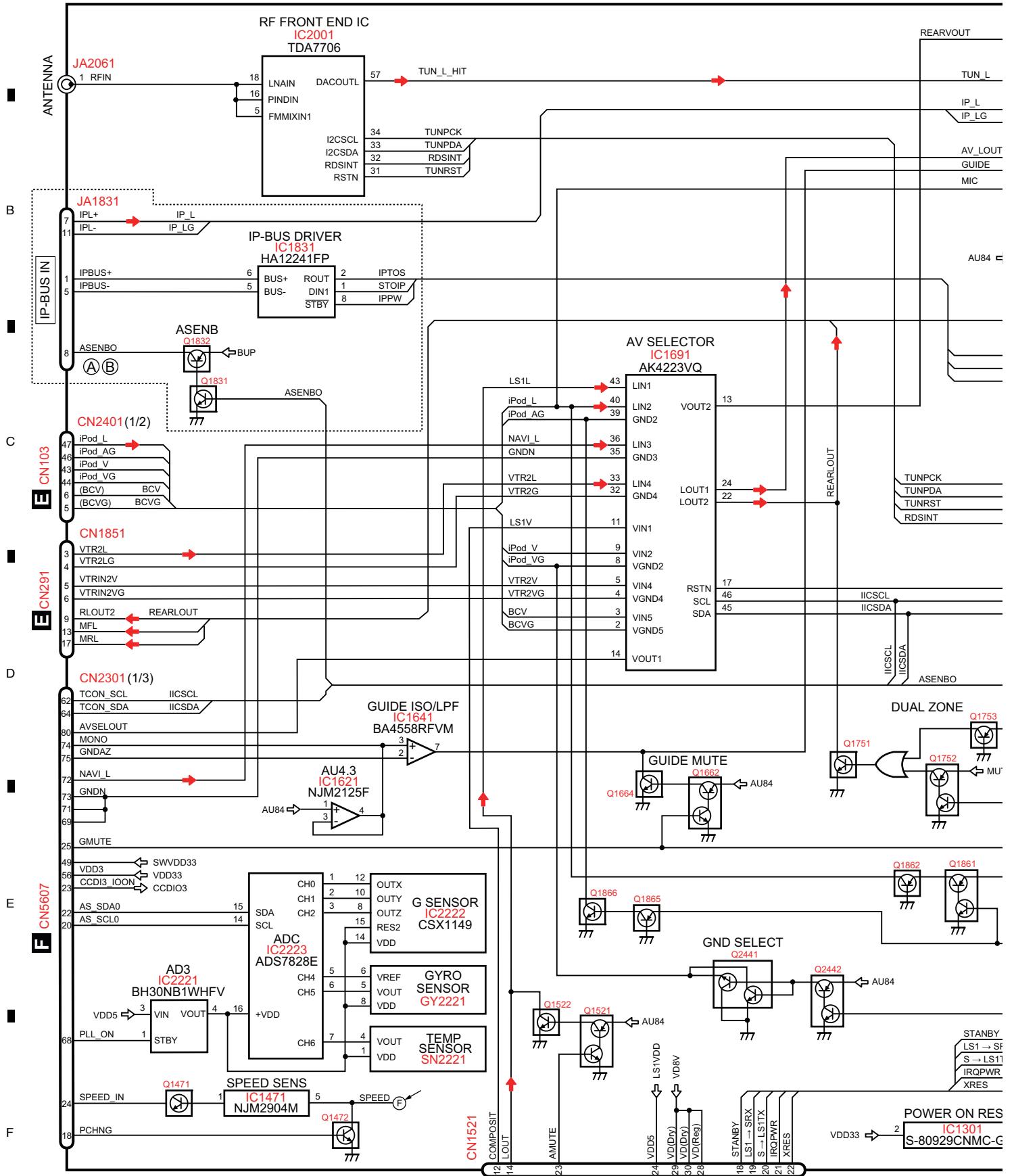




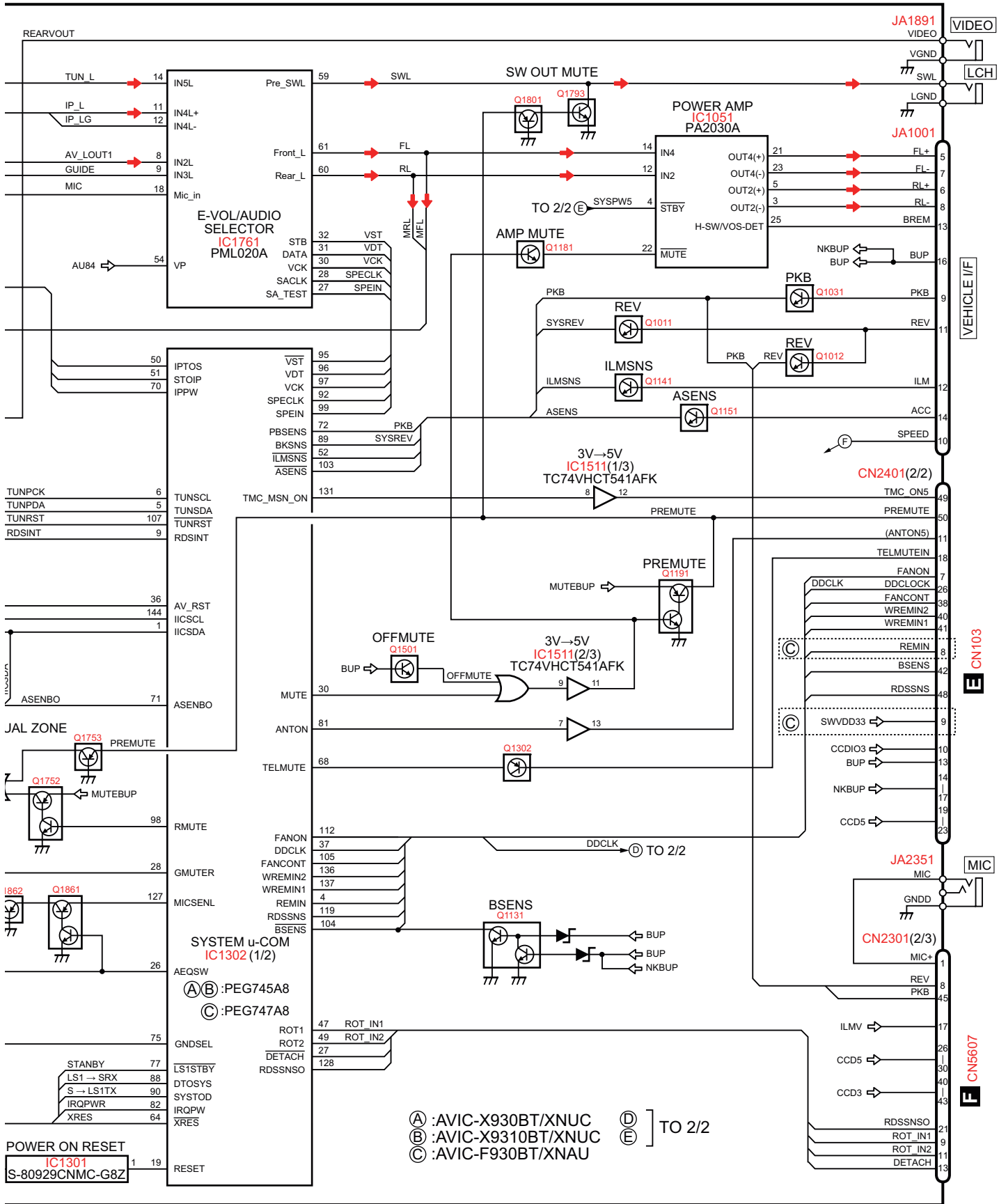
4.2 BLOCK DIAGRAM

A

AV UNIT(1/2)

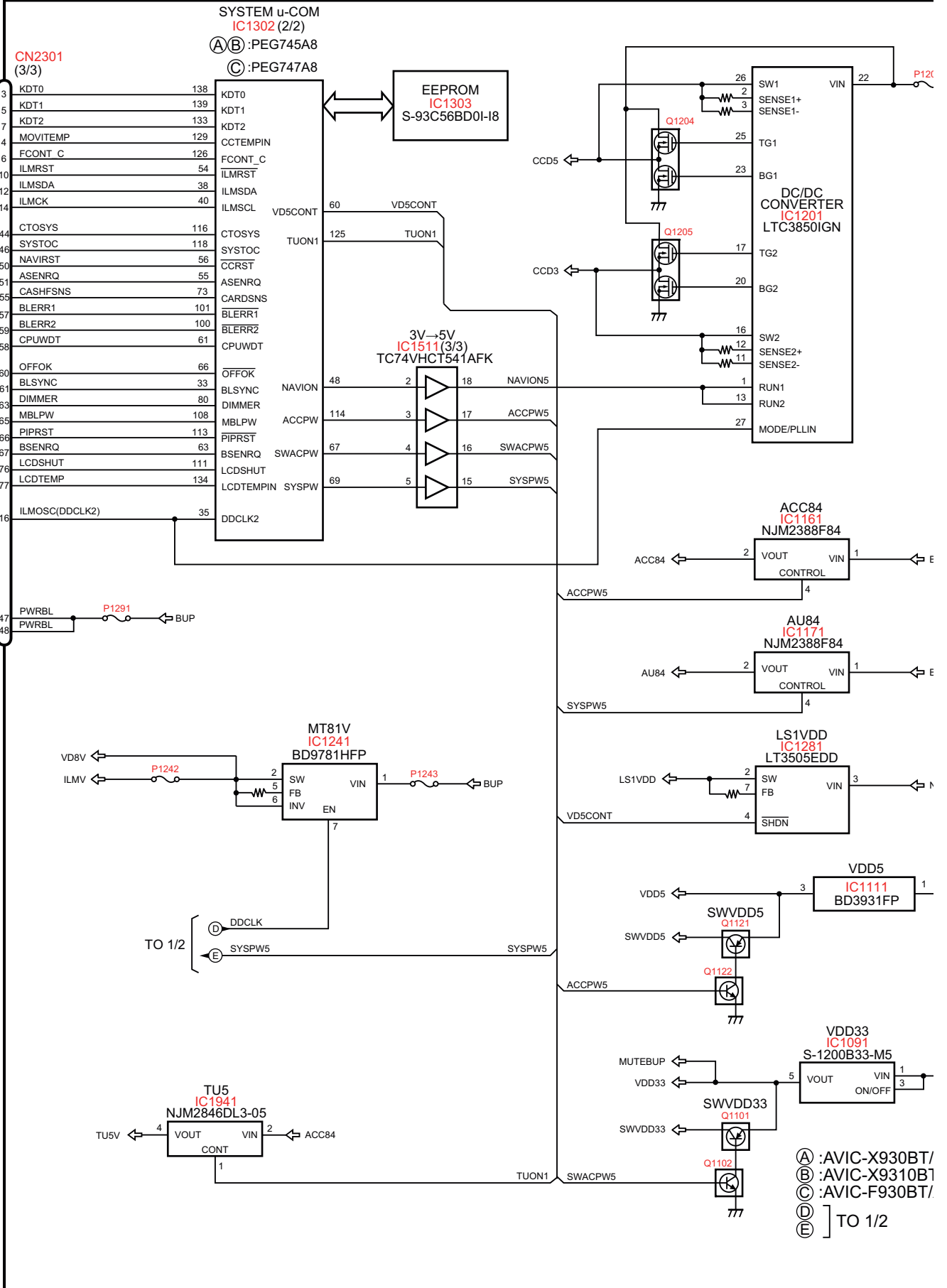


C CN1901

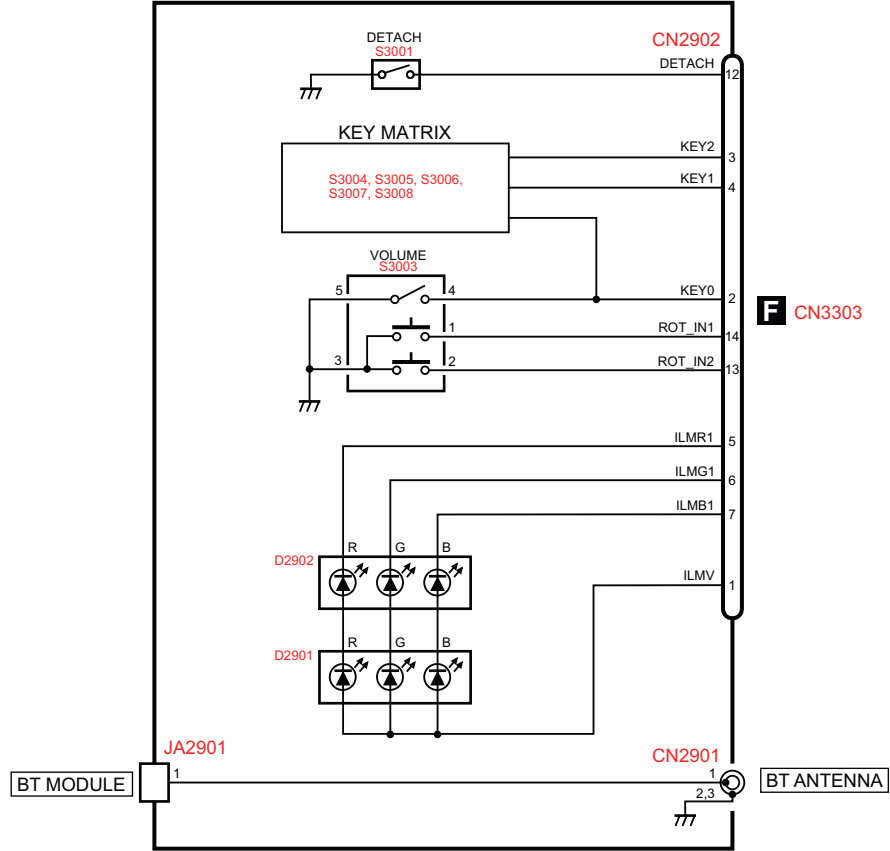
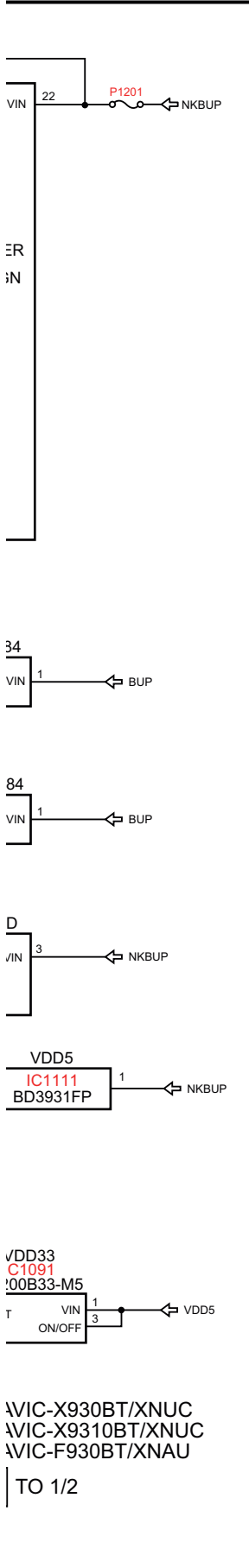


(A) :AVIC-X930BT/XNUC (D)] TO 2/2
 (B) :AVIC-X9310BT/XNUC (E)
 (C) :AVIC-F930BT/XNAU

A AV UNIT (2/2)



B KEYBOARD PCB



A

B

C

D

E

F

A

B

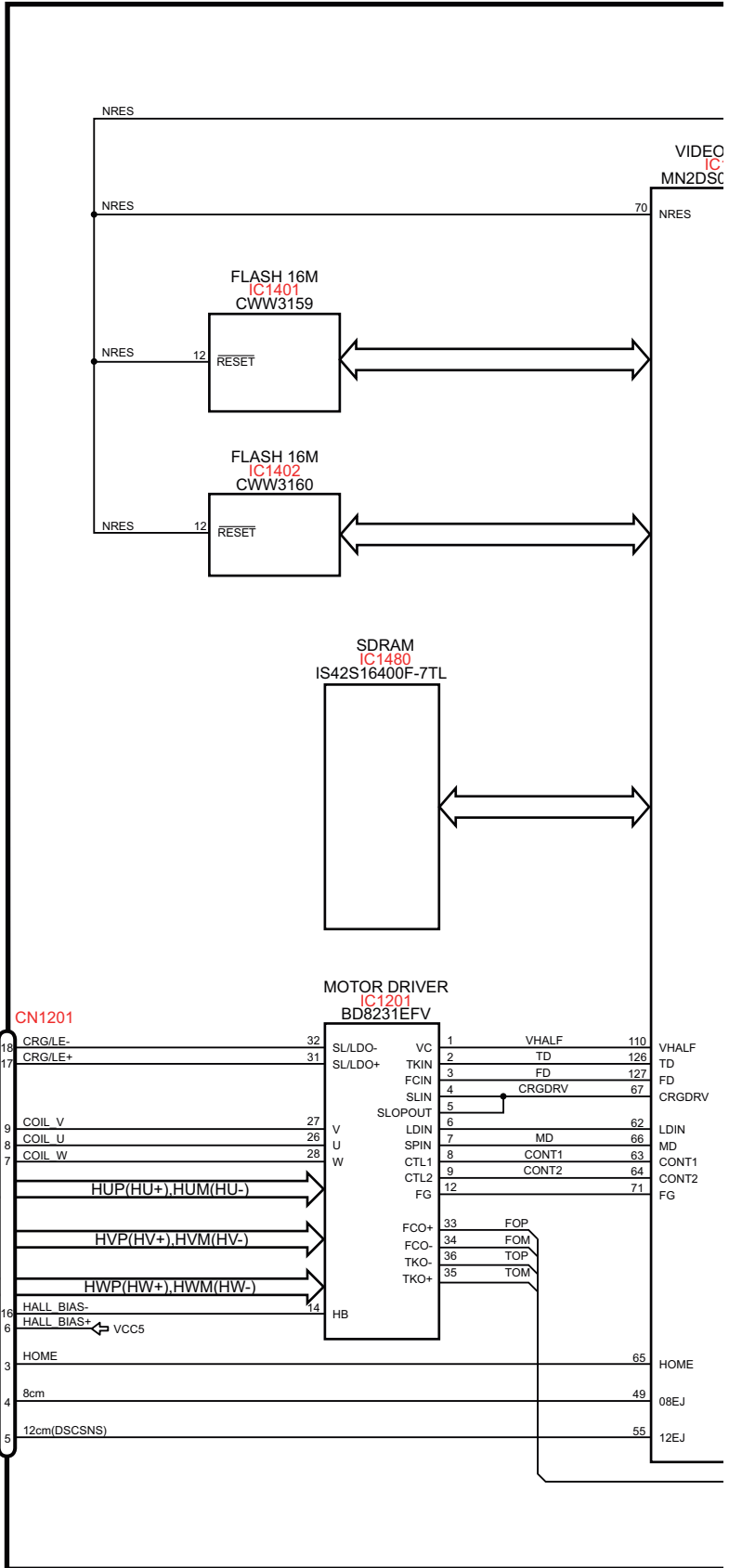
C

D

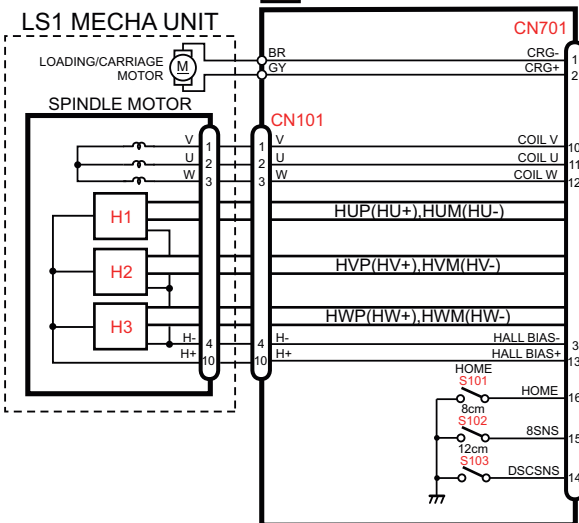
E

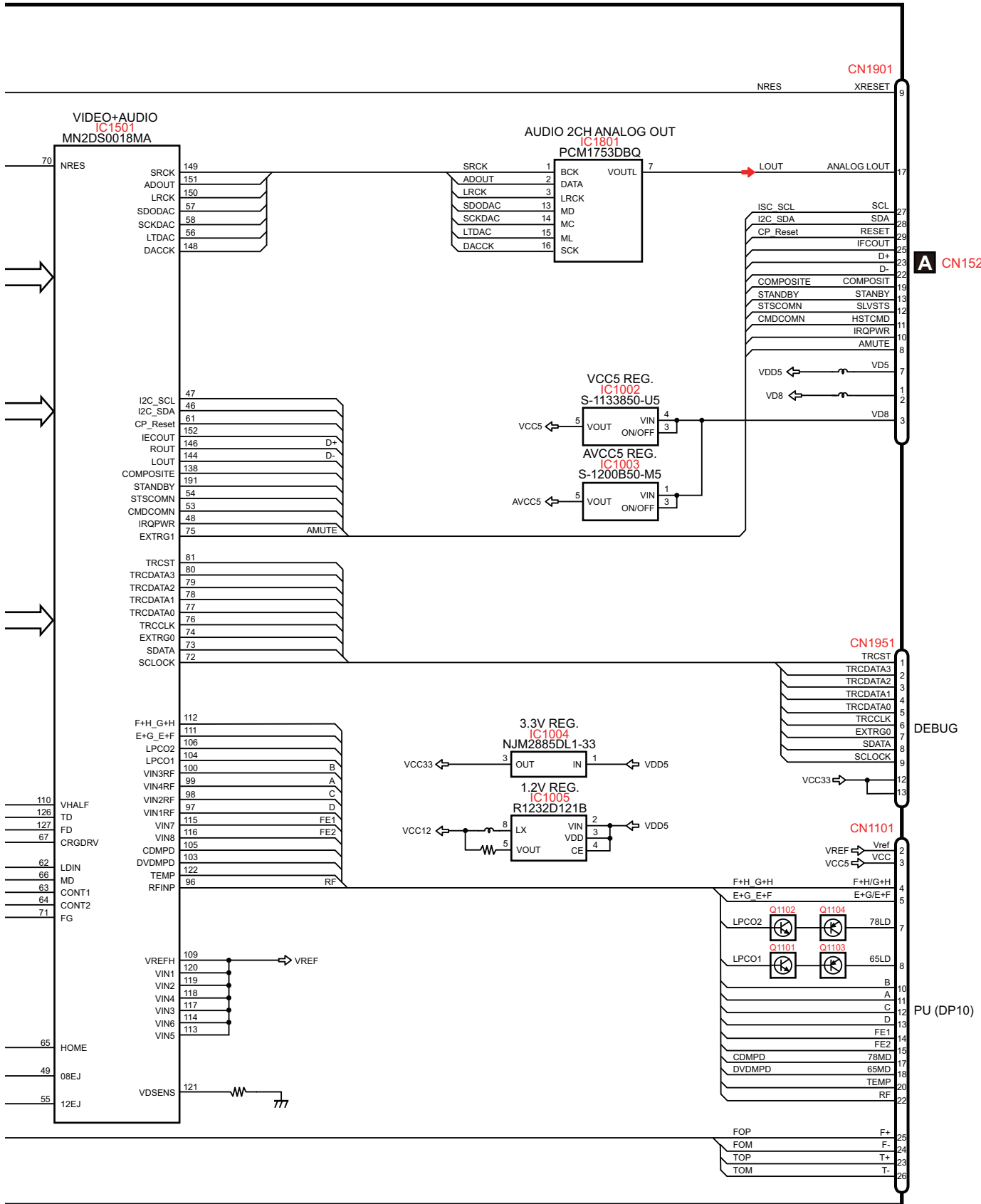
F

C DVD CORE UNIT



D CONNECT PCB





E IF PCB

A

B

C

D

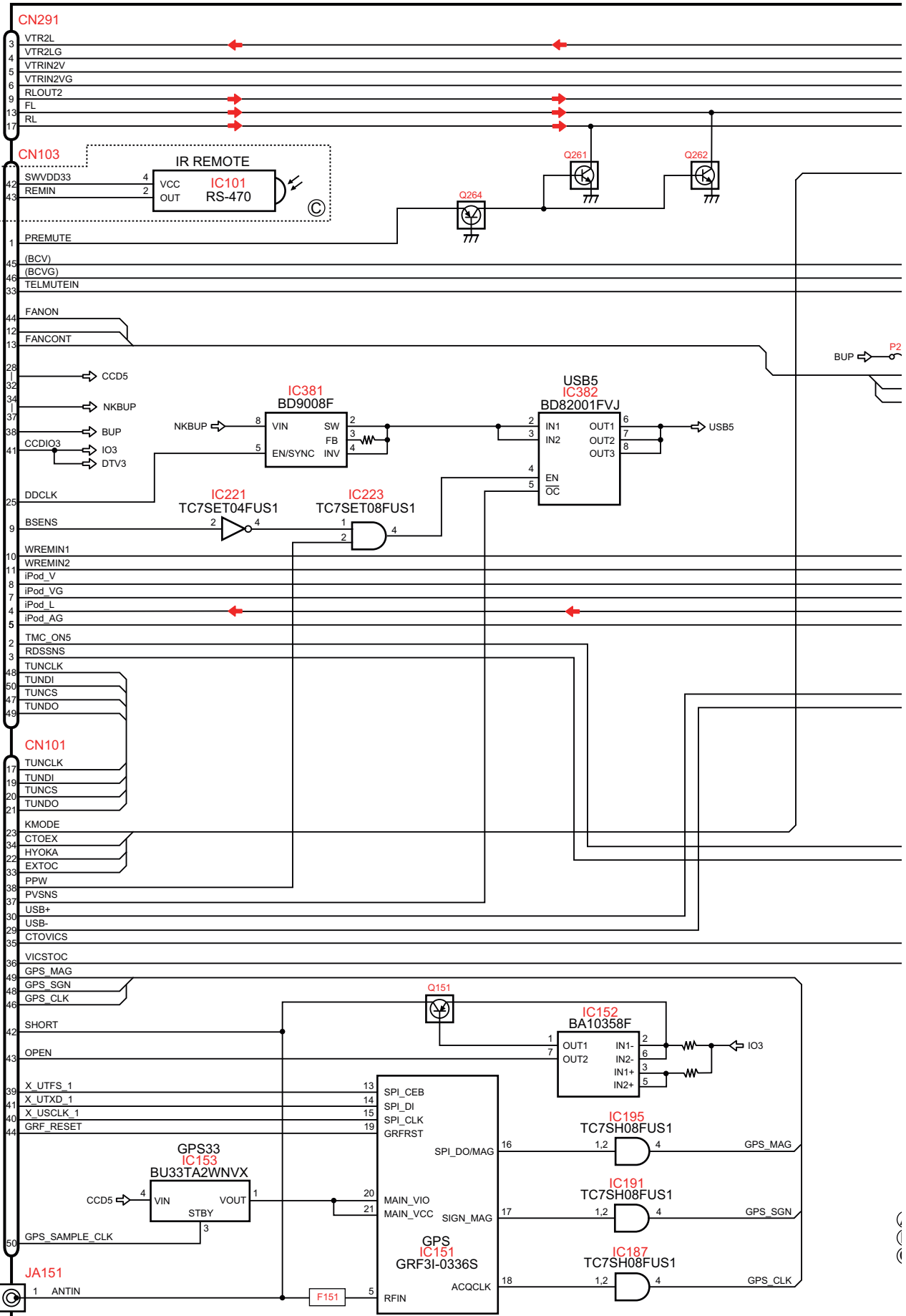
E

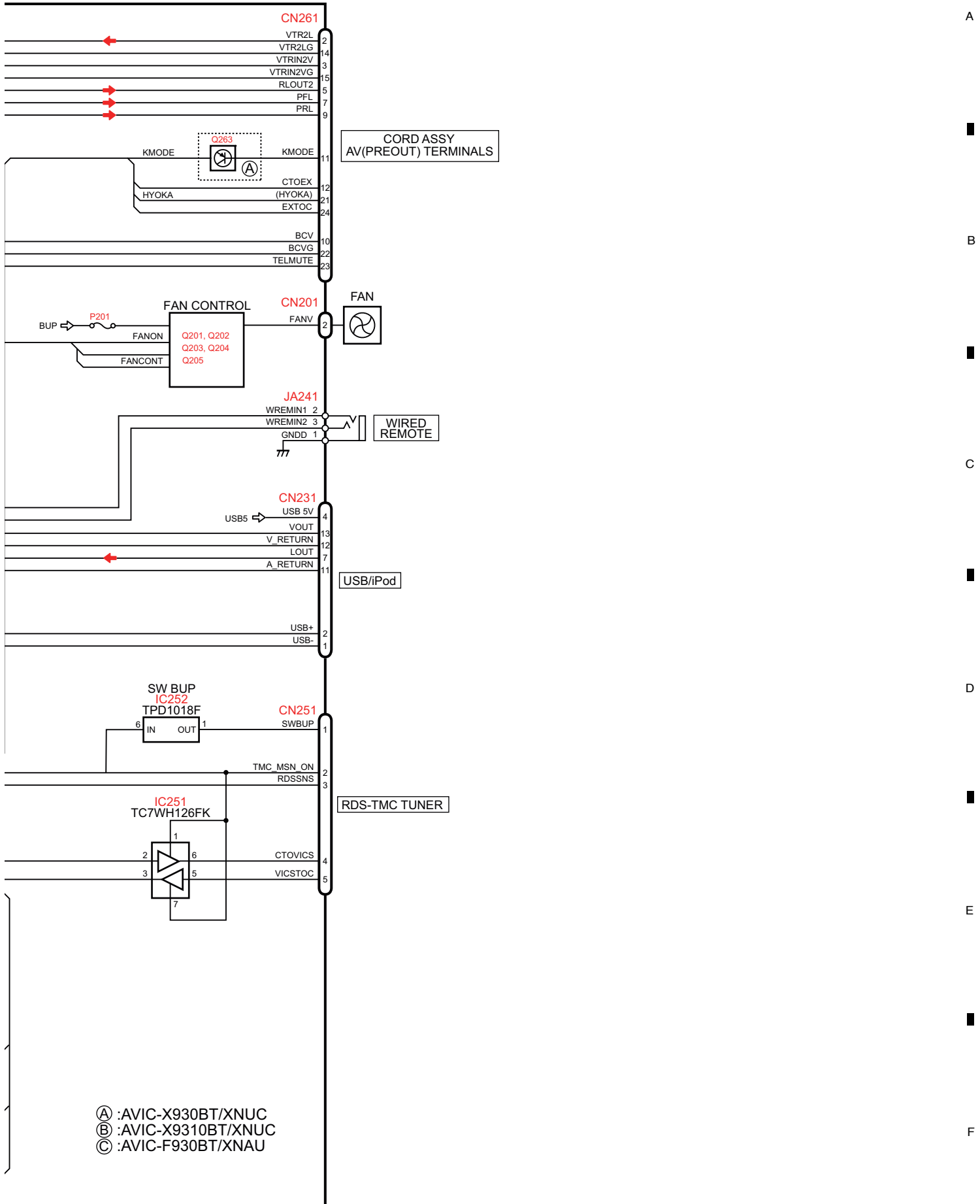
F

A CN1851

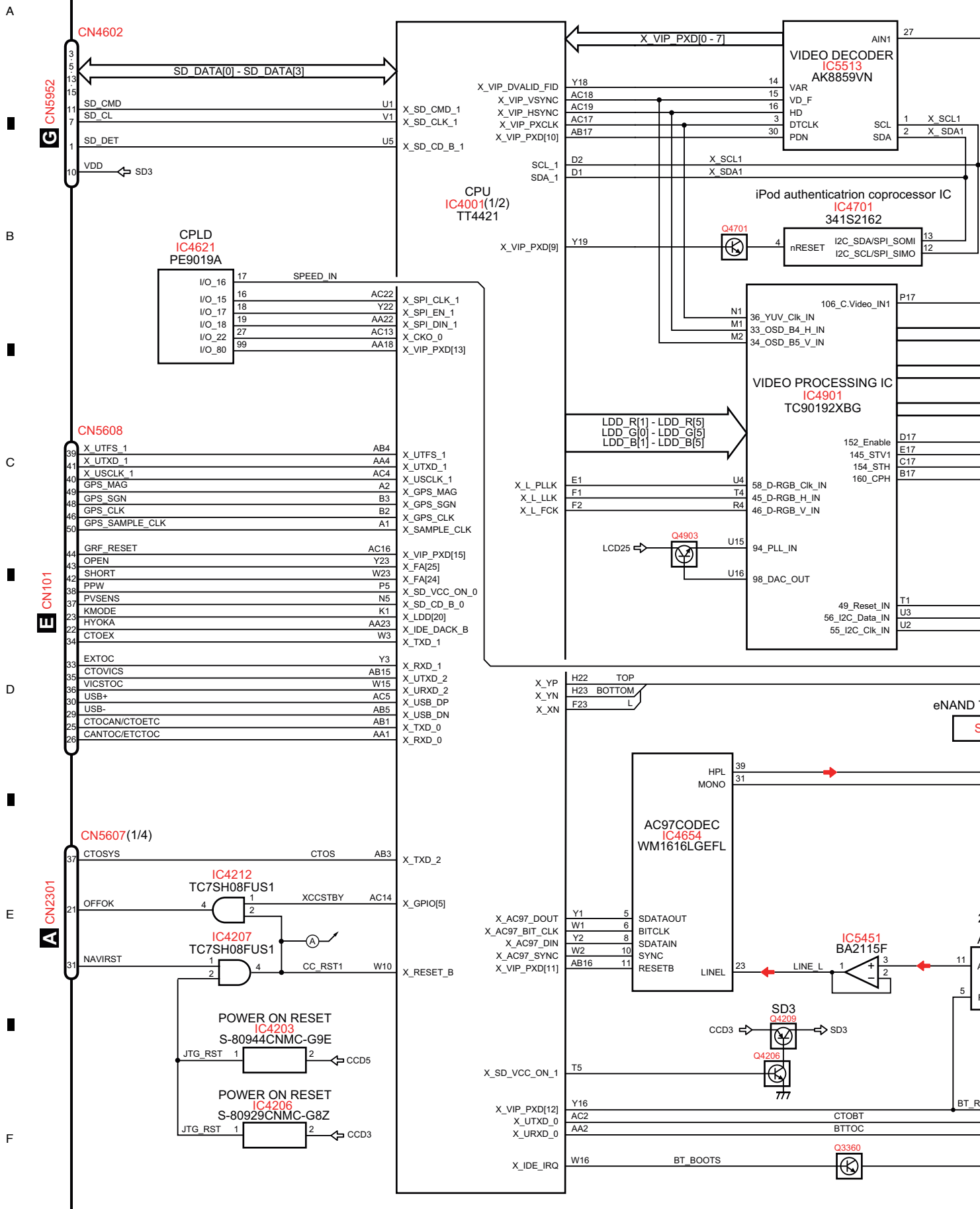
A CN2401

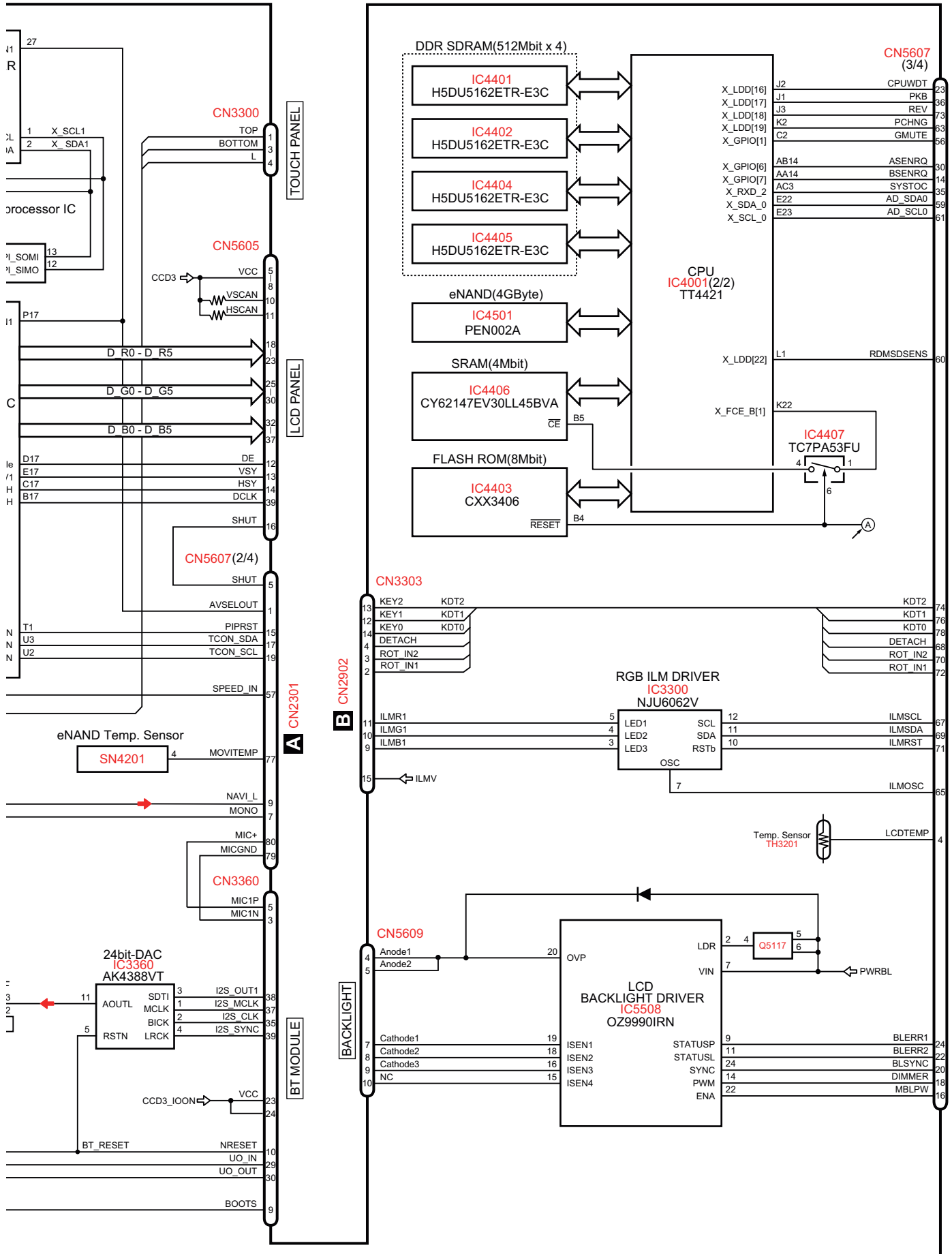
F CN5608



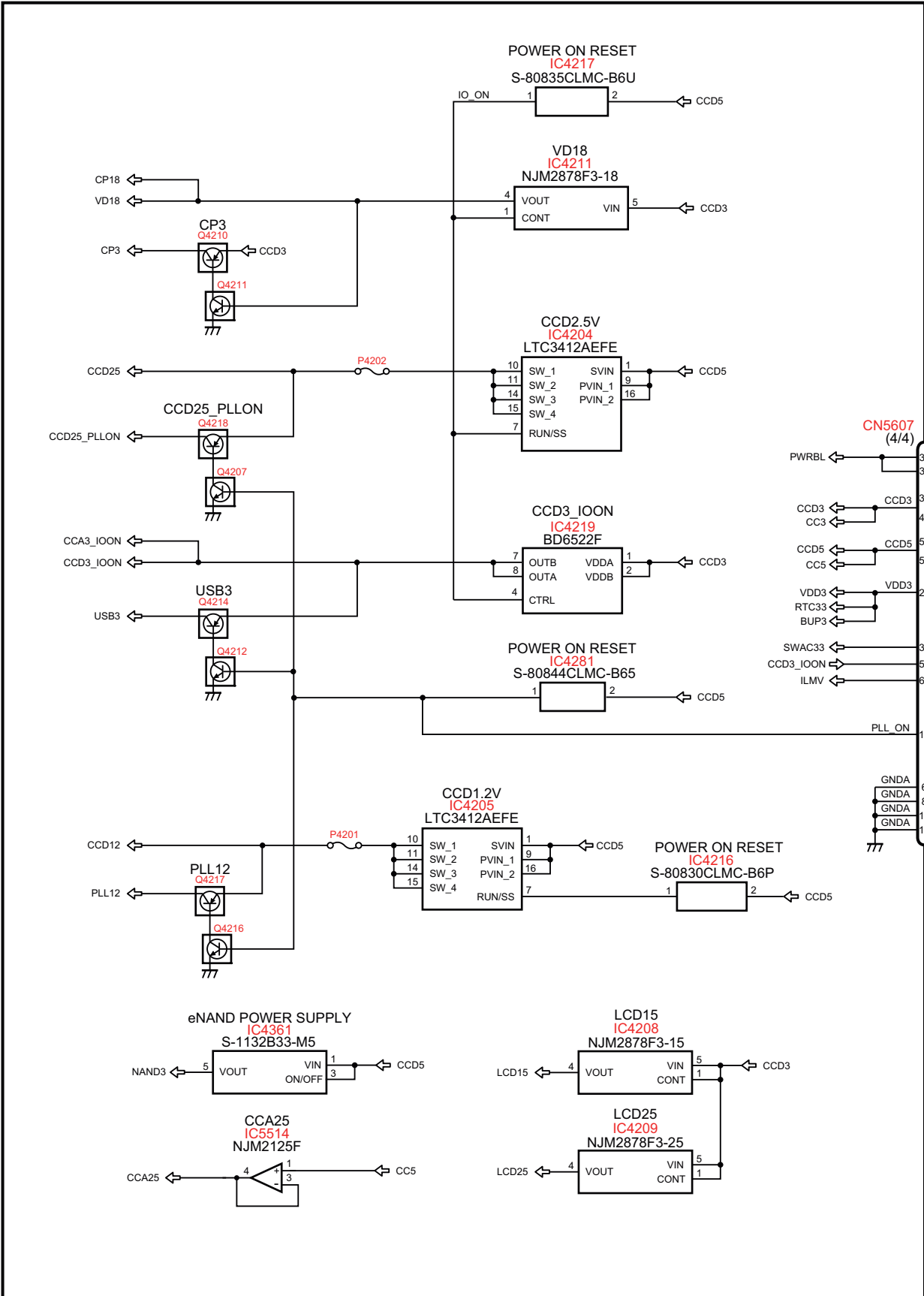


F CC MONITOR UNIT(SERVICE)(1/2)



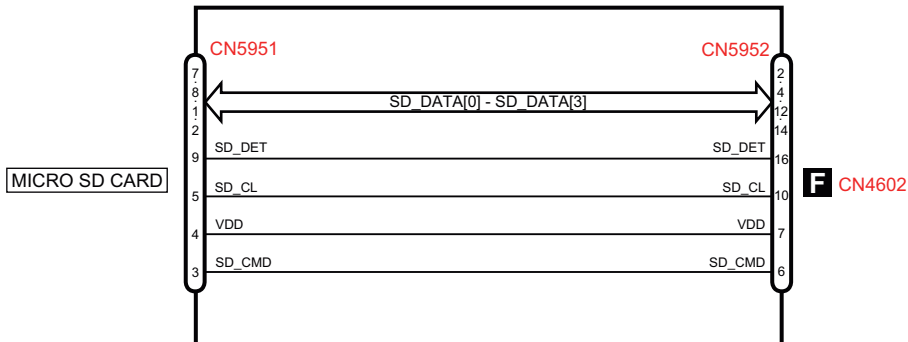


F CC MONITOR UNIT(SERVICE)(2/2)



A CN2301

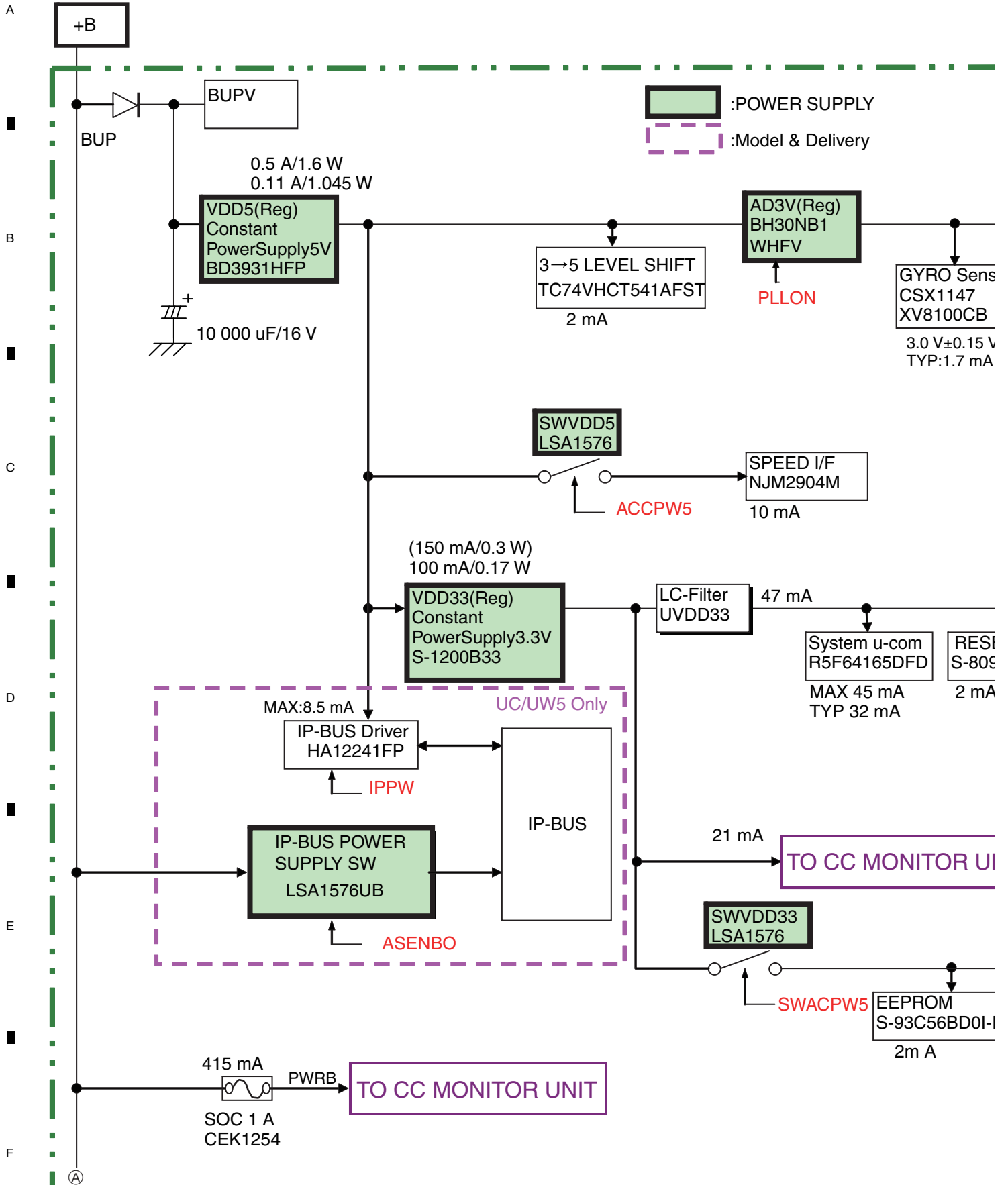
G SD PCB

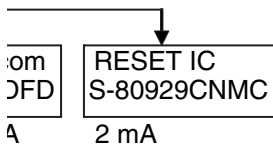
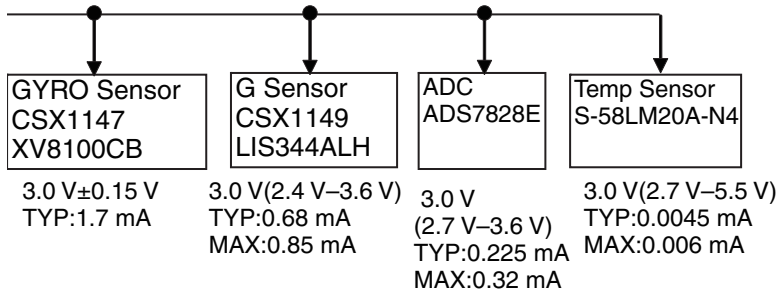


A CN2301

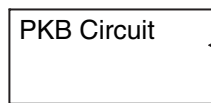
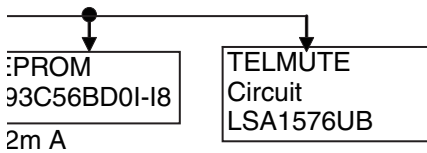
4.3 POWER SUPPLY SYSTEM FIGURE

AV UNIT

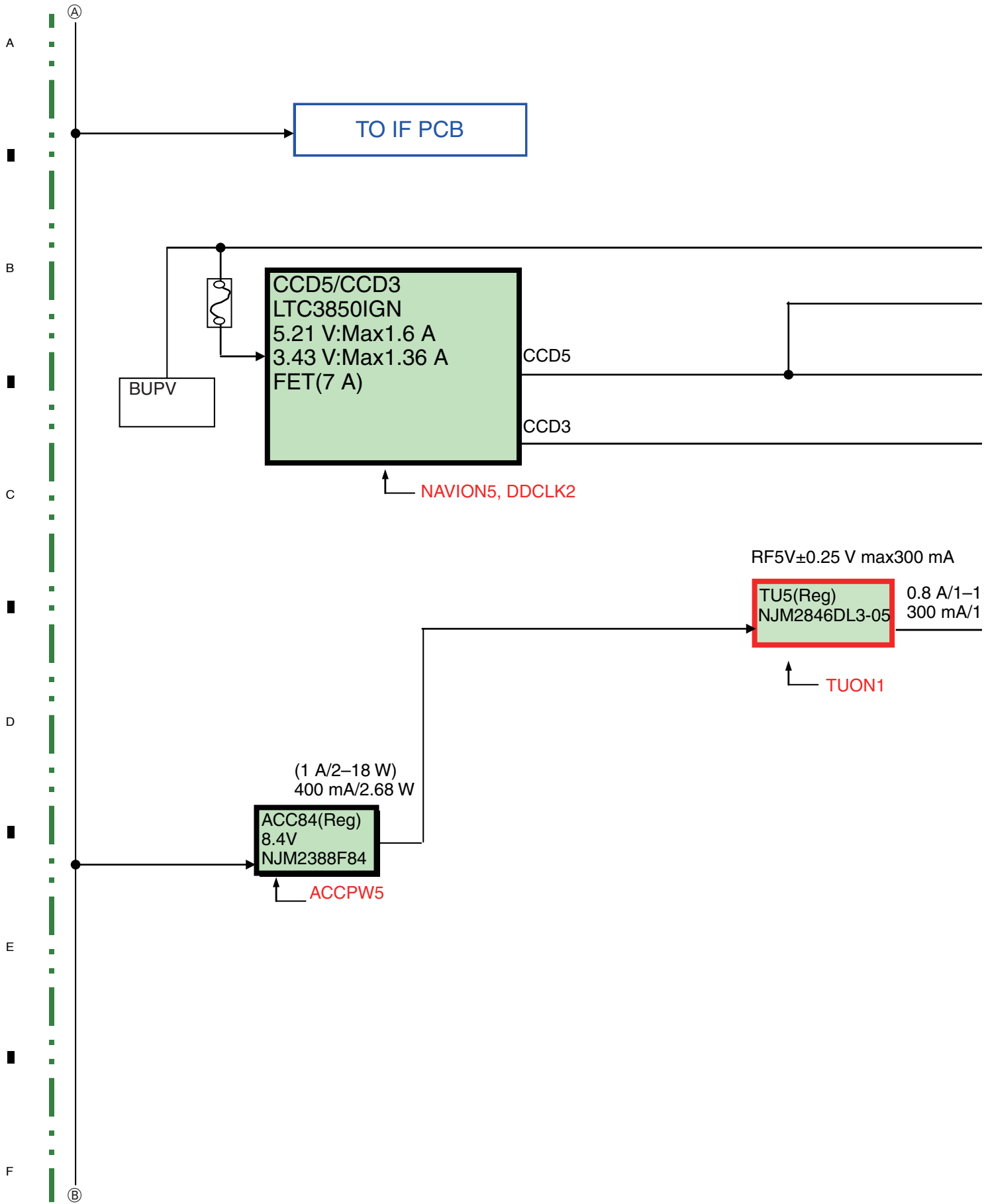


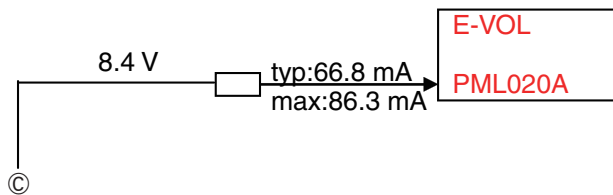
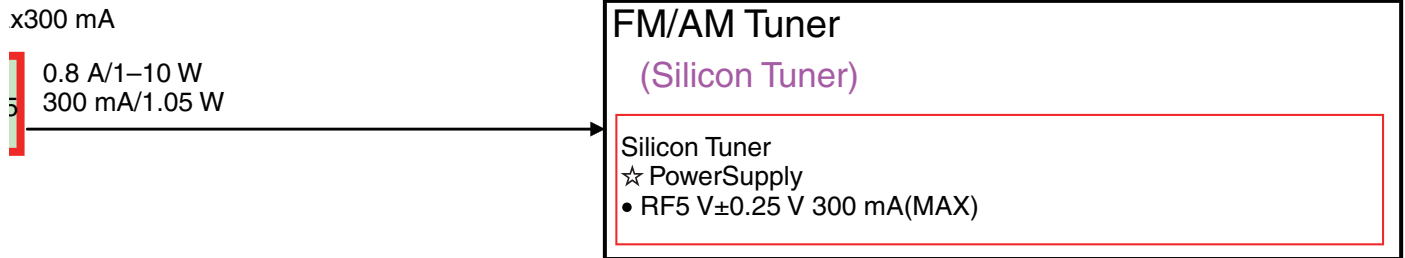
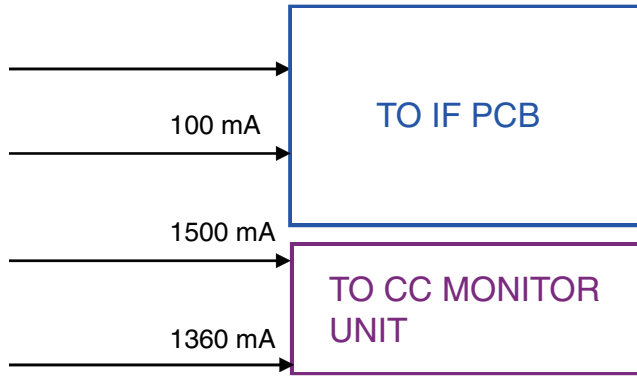


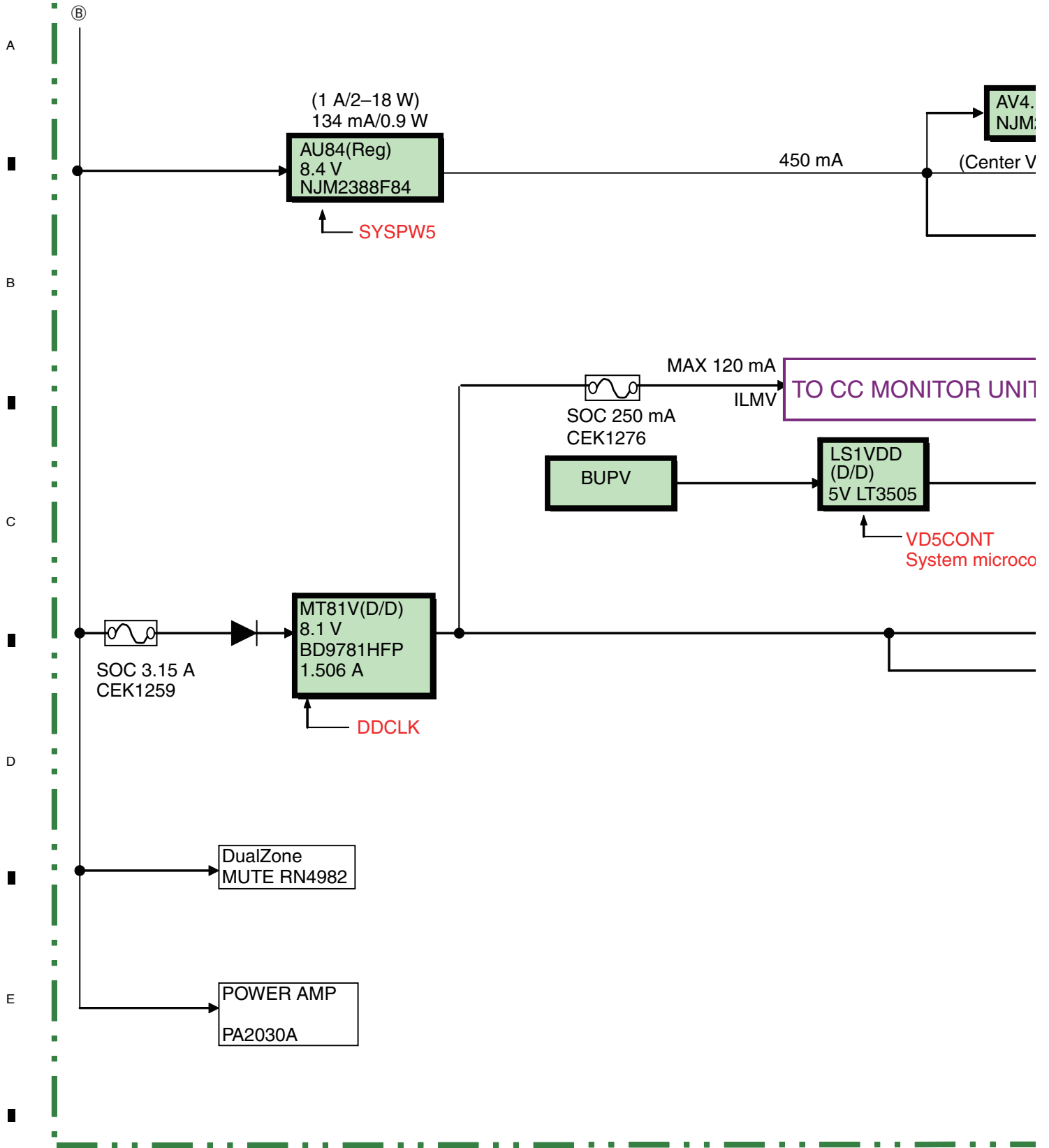
MONITOR UNIT

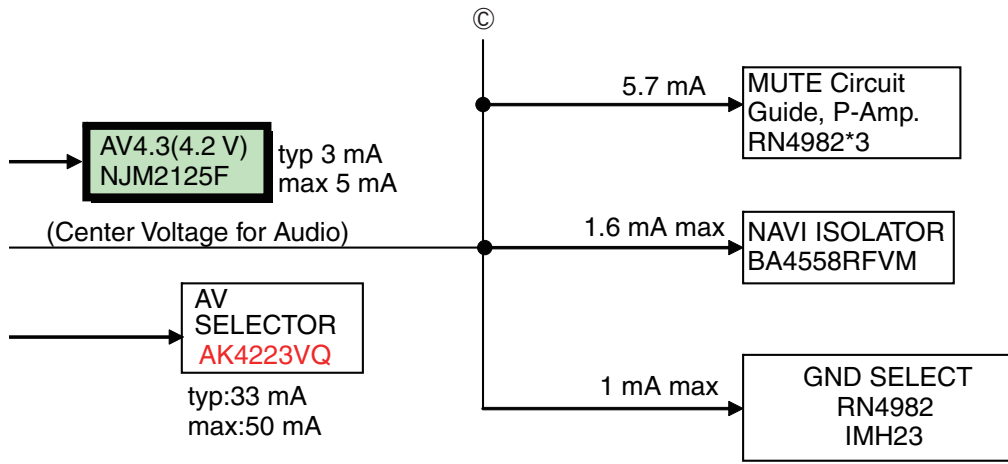


CCDIO3

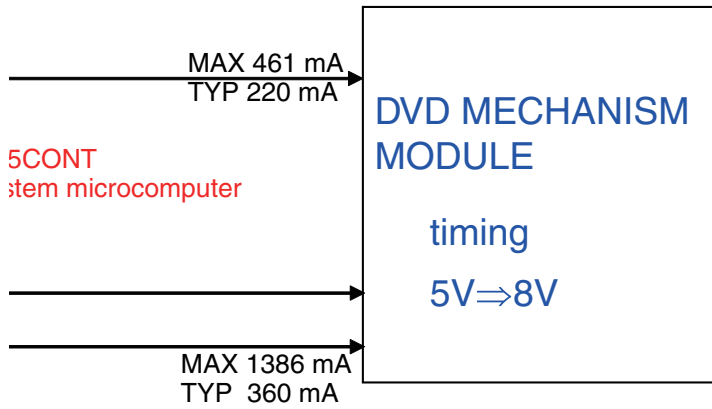








TOR UNIT



A

B

C

D

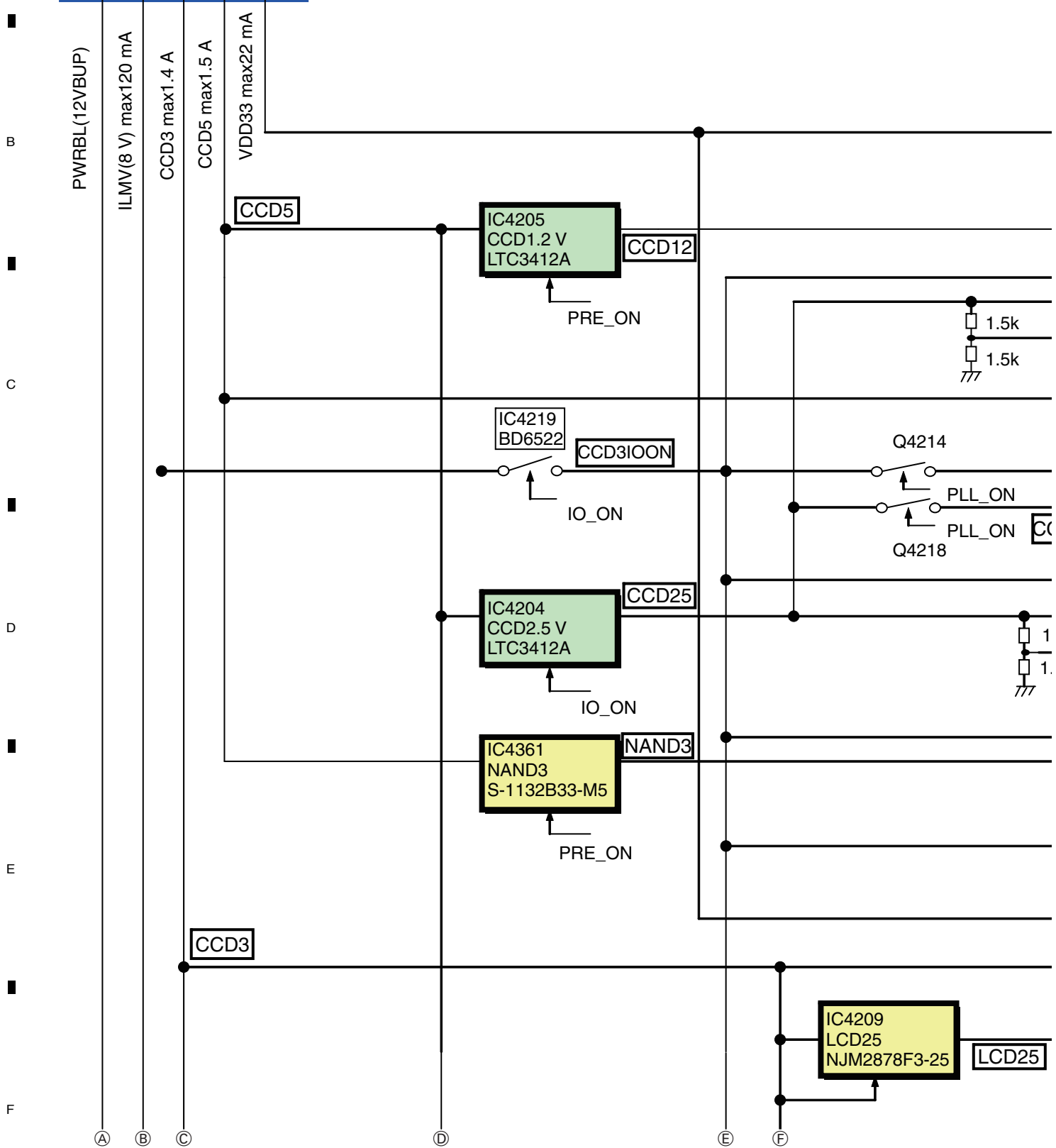
E

F

CC MONITOR UNIT

A

From AV UNIT



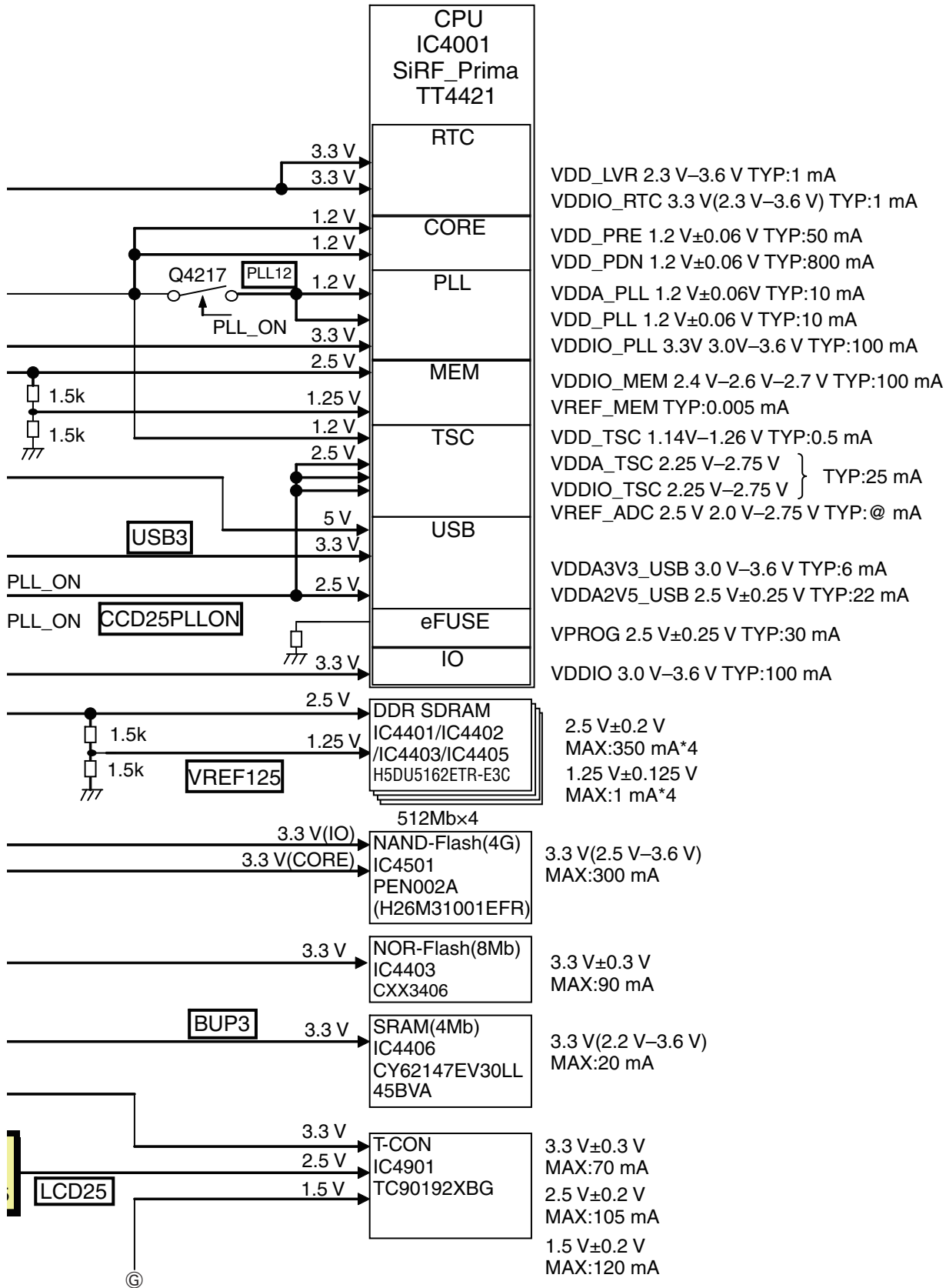
D

E

F

D/D

LDO



A

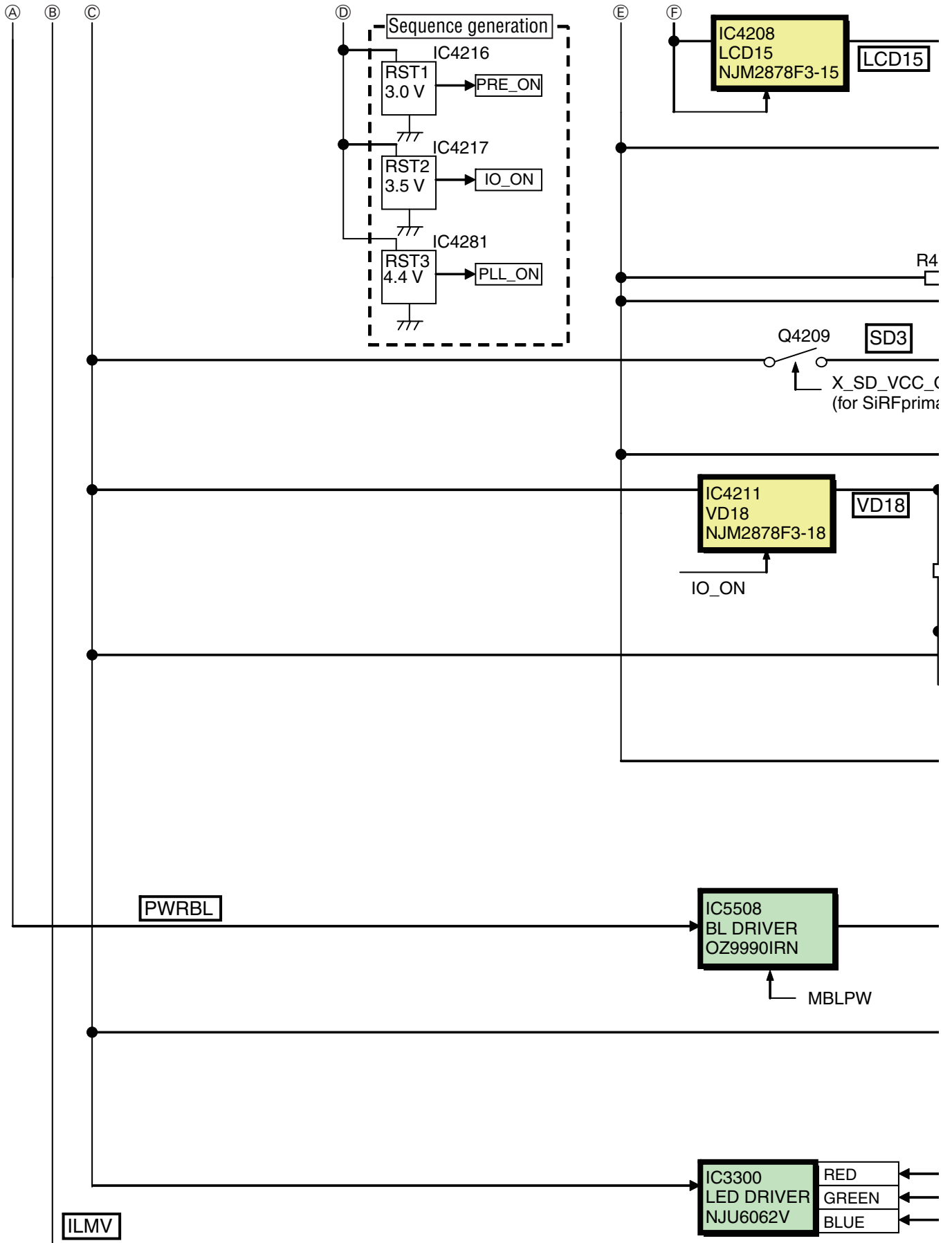
B

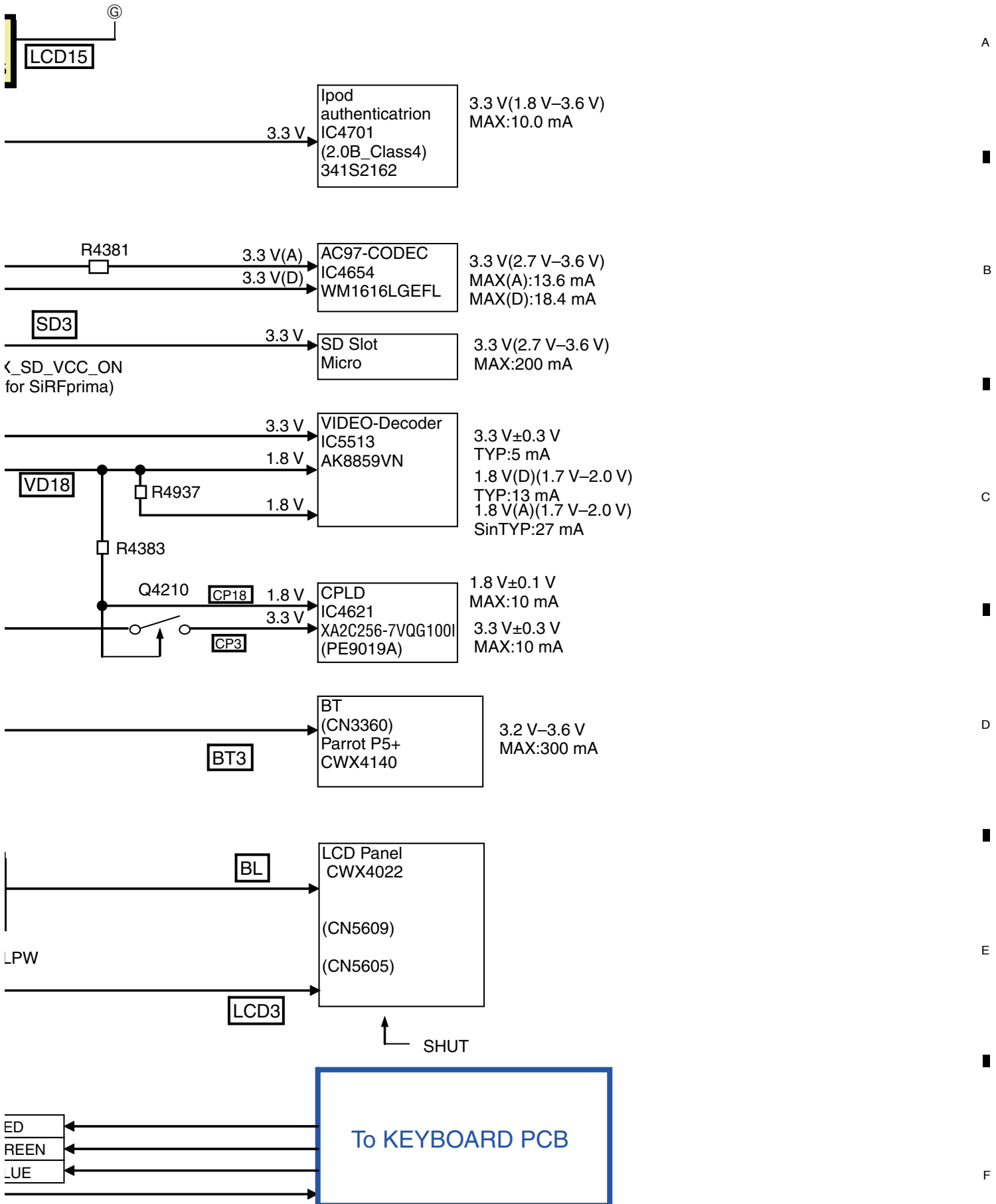
C

D

E

F





IF PCB

A

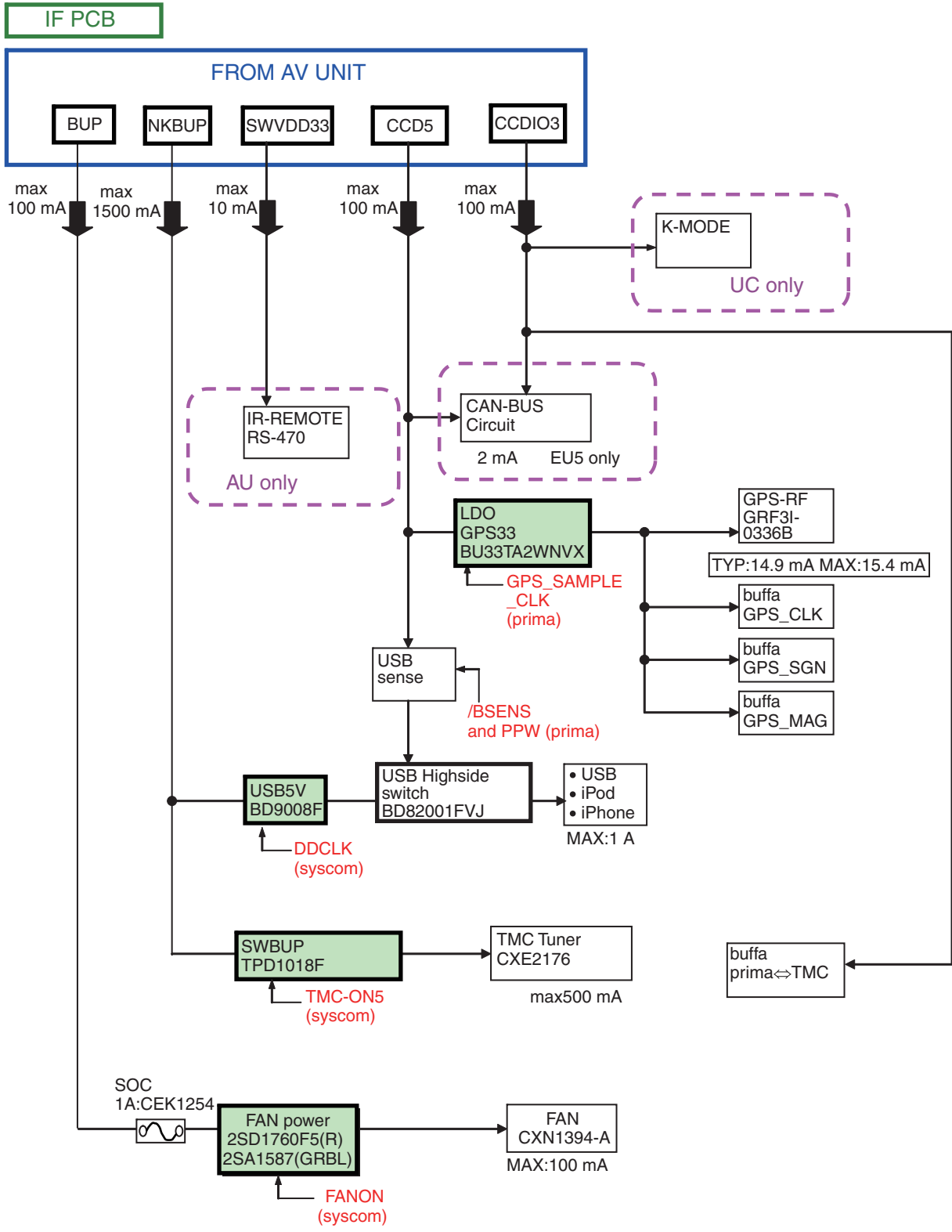
B

C

D

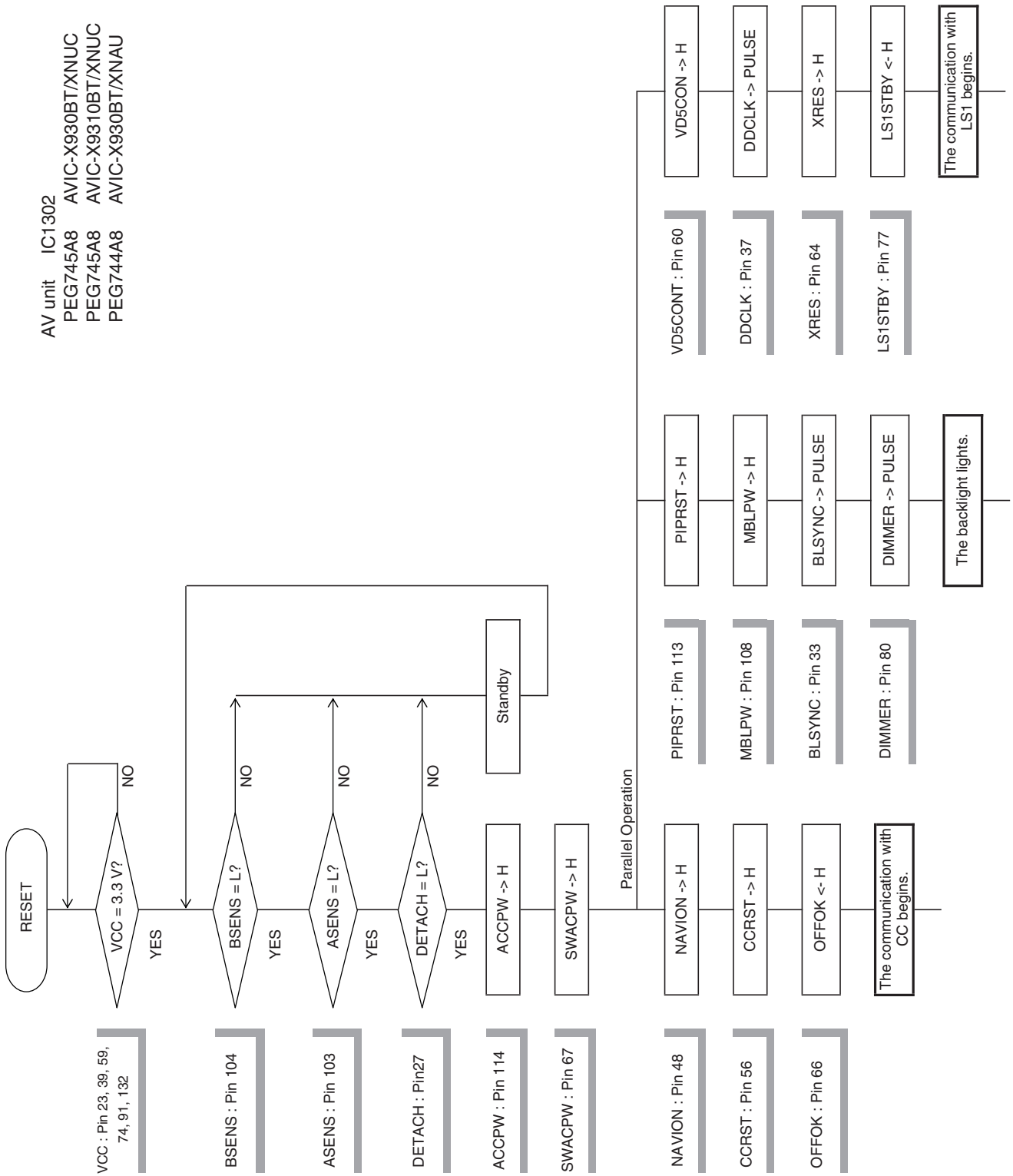
E

F



5. DIAGNOSIS

5.1 OPERATIONAL FLOWCHART



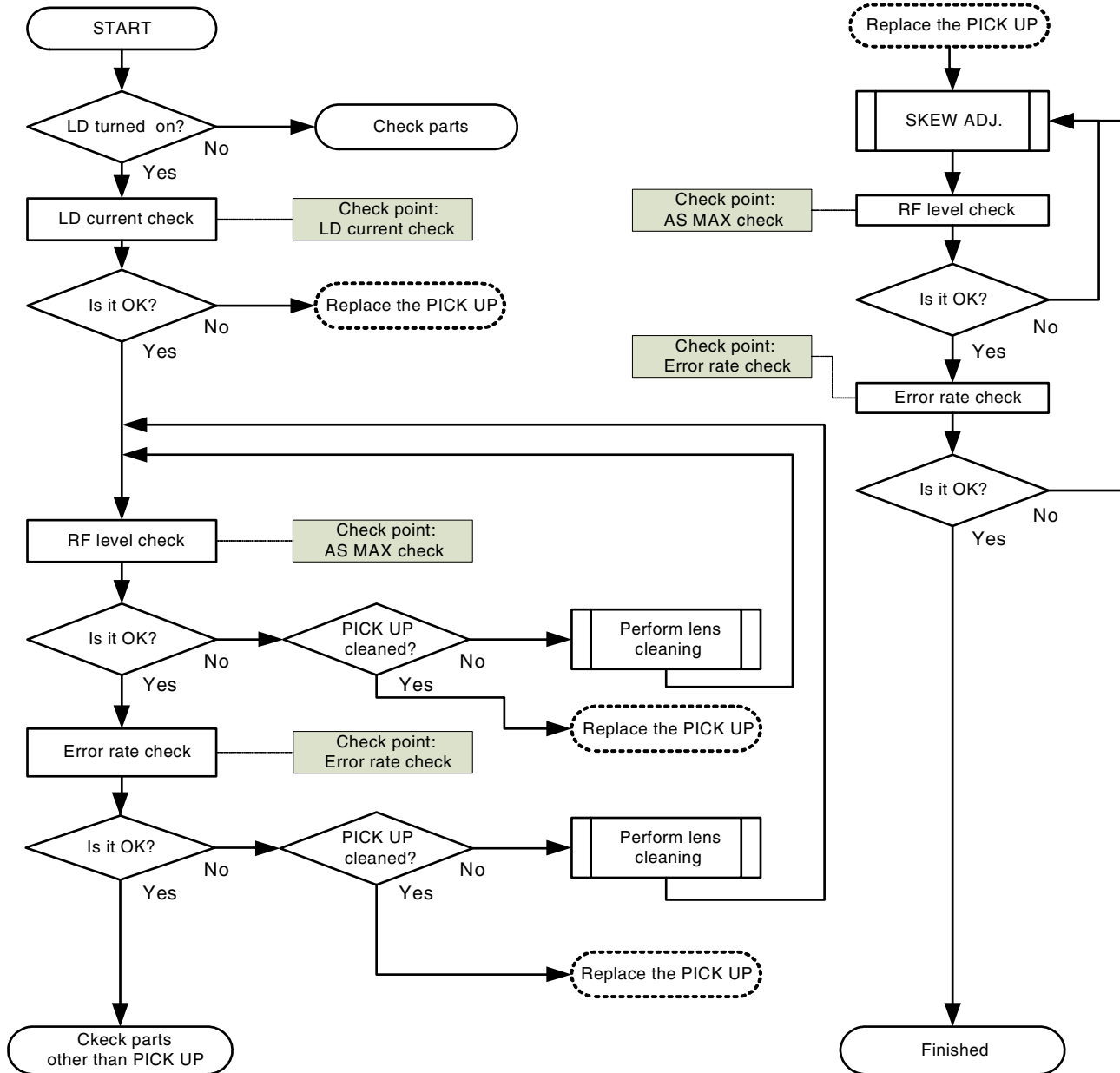
5.2 INSPECTION METHOD OF PICKUP UNIT

Disc to be used

CD-DA: TCD-782

DVD-Video: GGV1025

Execution method

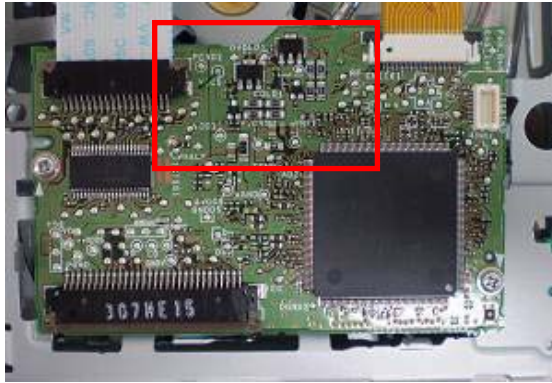


LD current check

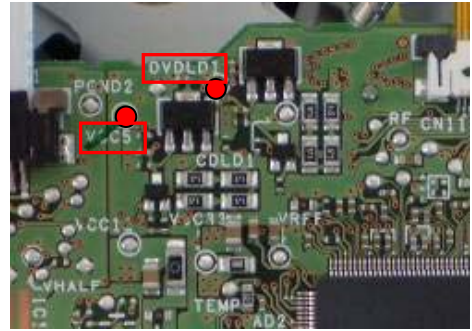
Check

Status: [Focus closed] of TEST MODE

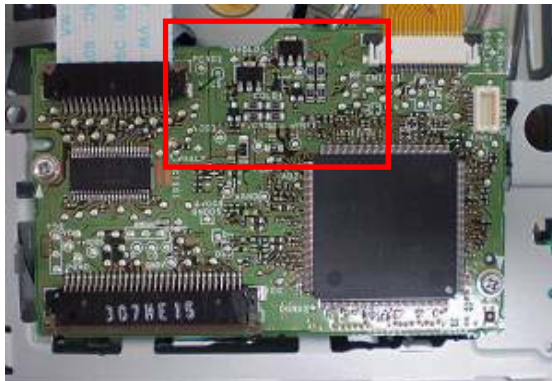
NO.	Disc	Check Point	Threshold	Remarks: LD current
1	GGV1025	DVDLD1-VCC5_3	60 - 390 (mV)	10 - 65 (mA)



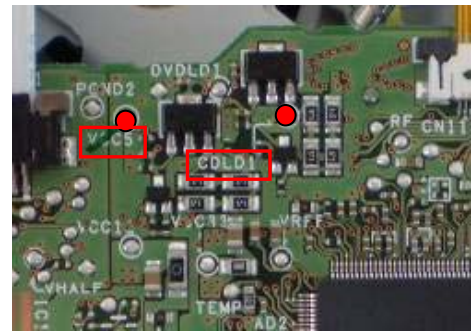
Expansion



NO.	Disc	Check Point	Threshold	Remarks: LD current
2	TCD-782	CDLD1-VCC5_3	150 - 900 (mV)	10 - 60 (mA)



Expansion



Notes: Please pay attention to the laser diode damage by static electricity.

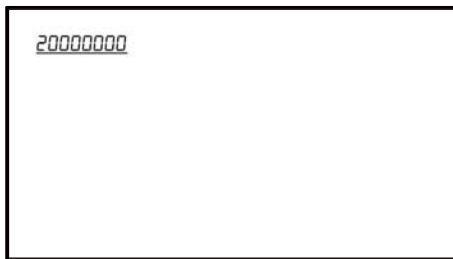
ASMAX check

ASMAX value shows the value of RF level.

Status: [Focus closed] of TEST MODE

No.	Disc	Check Point	Threshold	Remarks:
1	GGV1025	8 digits value of ASMAX on display	more than 0000 0B00	Only four last digits are displayed according to the product.
2	TCD-782	8 digits value of ASMAX on display	more than 0000 0C00	Only four last digits is displayed according to the product.

Test mode display will not appear on the display of this product. Connect the rear monitor output to a monitor.



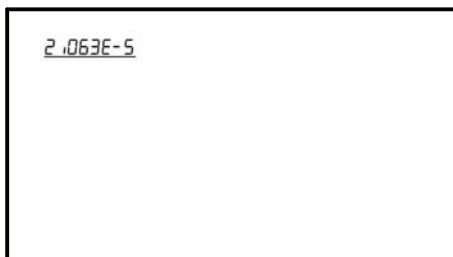
In this case, the value is displayed for a split second. When you tried to perform [FOCS CLOSE], the display will change automatically in the following order. [1FFF0000]->[FEMAX]->[FE MIN]->[AS MAX]->[ENV MAX]->[FE normal]->[Spindle gain]->[TEMAX]->[TEMIN] ->[20000000]
Watch carefully the value of ASMAX.

Error rate check

Status: [Tracking Closed] of TEST MODE

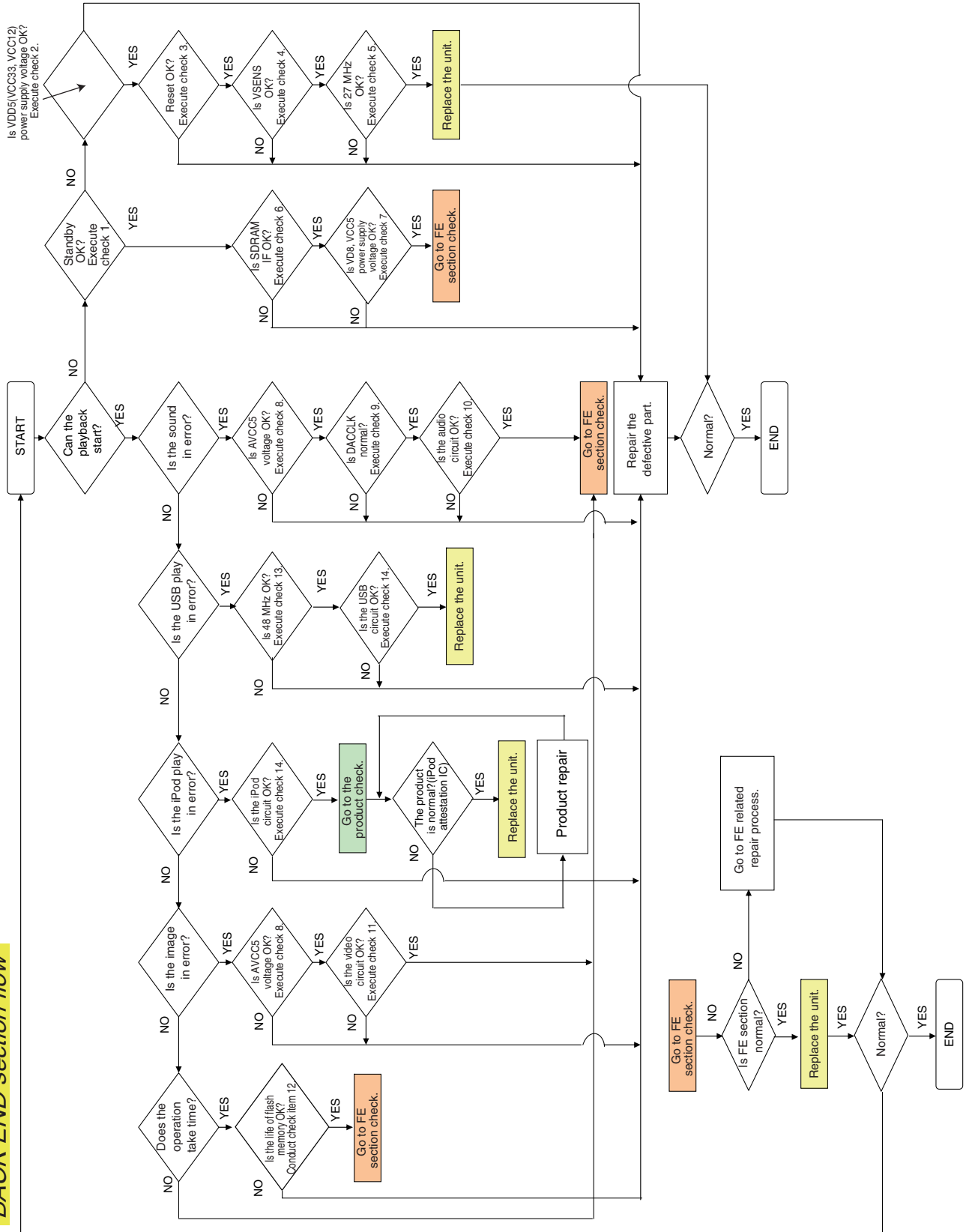
No.	Disc	Check Point	Threshold	Remarks:
1	GGV1025	ID: 40000	less than 1.000E-03	
2	GGV1025	ID: 200000	less than 1.000E-03	
3	TCD-782	ID: HOME Position	less than 2.500E-03	

Test mode display will not appear on the display of this product. Connect the rear monitor output to a monitor.



5.3 DIAGNOSIS FLOWCHART

BACK END section flow



A Check 1: Standby OK?

<Check> Check the voltage at the “STANBY” test point while the power is on.
Use the “DGND1” test point at the reference.

NO.	Check point	Module No.	Specification value	Unit
1	STANBY-DGND1	ALL	VCC33 V- 0.6 V or more	V

B Side A

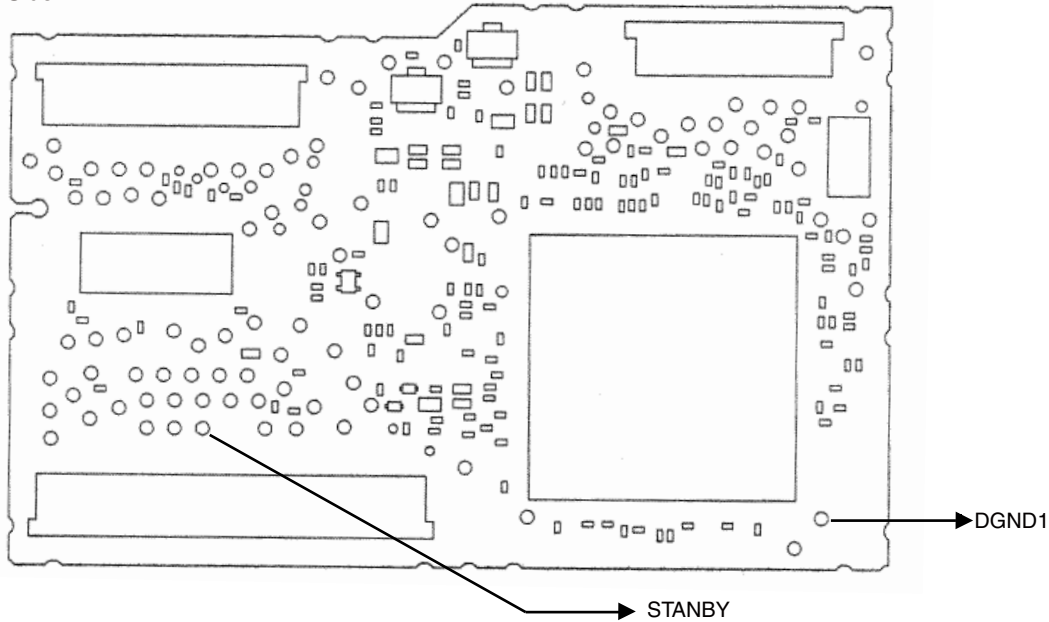


Fig 1.1: STANBY check point

D

E

F

Check 2: Is VDD5 (VCC33, VCC12) power supply voltage OK?

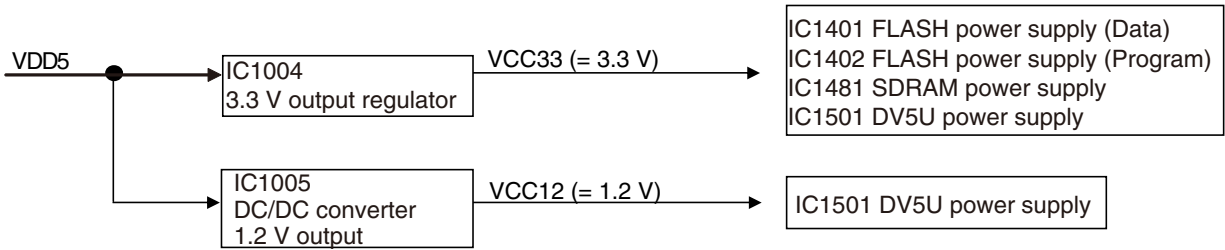


Fig 2.1: Power supply configuration

<Check> Check the voltage at the “VDD5_1, VCC33_1 and VCC12_1” test point while the power is on. Use the “DGND1” test point at the reference.

NO.	Check point	Module No.	Specification value	Unit
1	VDD5_1 - DGND1	ALL	5.0 ± 0.4	V
2	VCC33_1 - DGND1	ALL	3.3 ± 0.15	V
3	VCC12_1 - DGND1	ALL	1.2 ± 0.12	V

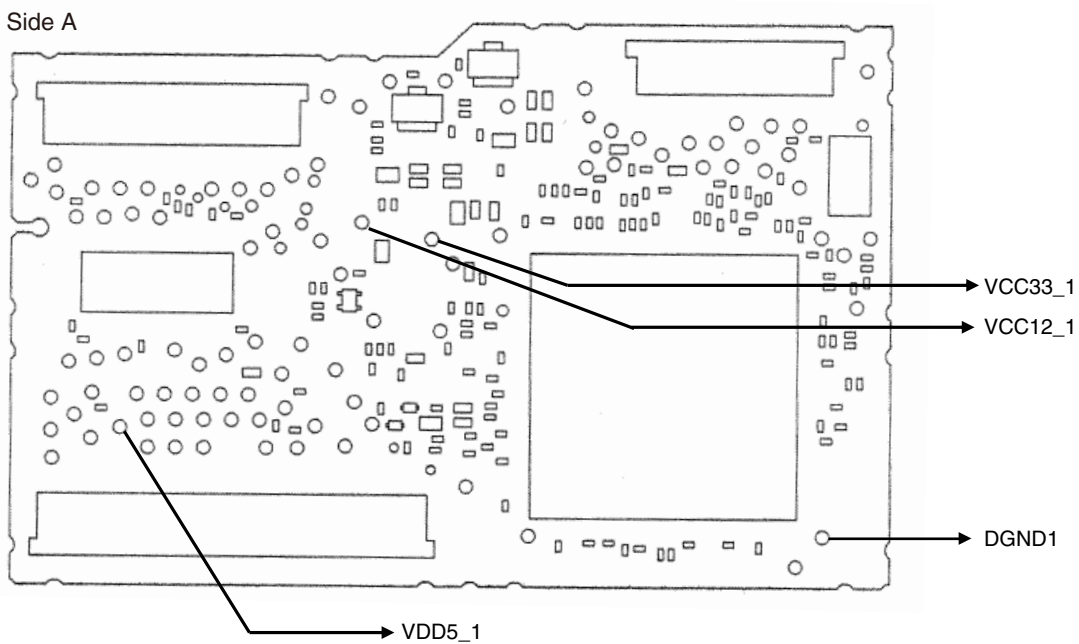


Fig 2.2: VDD5, VCC33, VCC12 voltage check points

A Check 3: Reset OK?

<Check> Check the voltage at the "XRES" test point while the power is on.
Use the "DGND1" test point at the reference.

NO.	Check point	Module No.	Specification value	Unit
1	XRES-DGND1	ALL	VCC33 × 0.7 or more	V

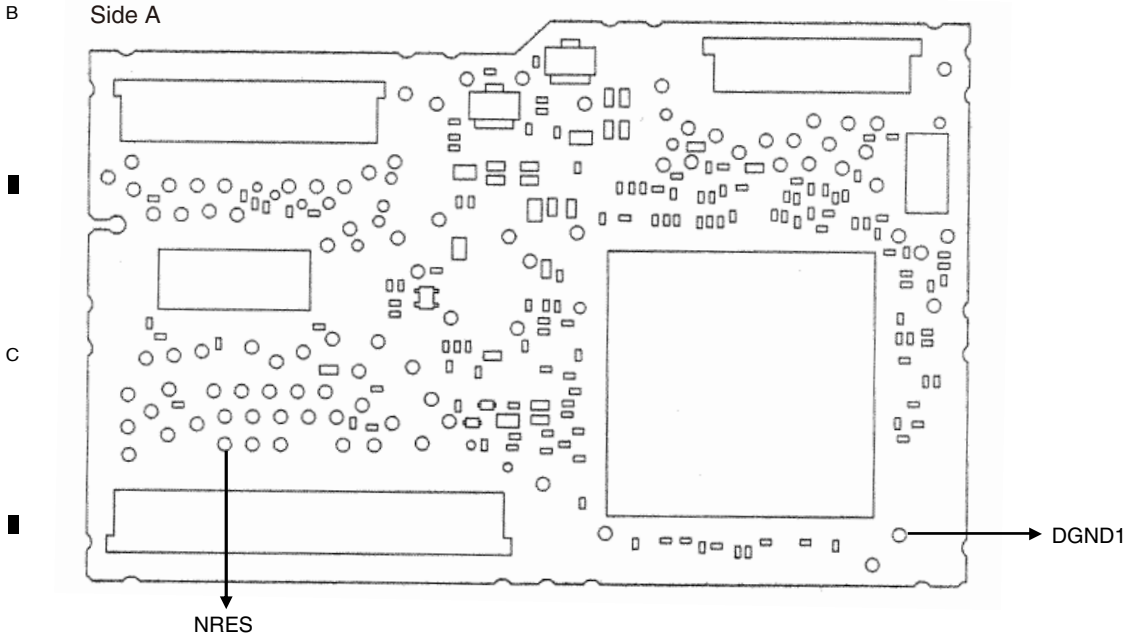


Fig 3.1: RESET check point

D

E

F

Check 4: Is VSENS OK?

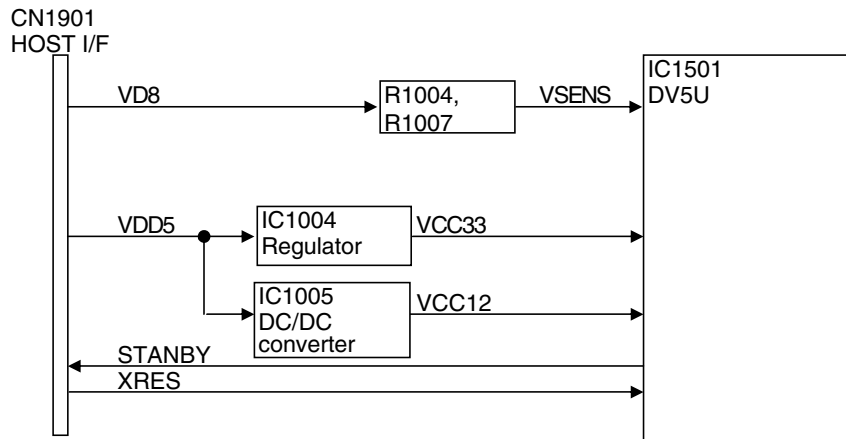


Fig 4.1: Power supply configuration and VSENS

<Check> Check the voltage at the “VSENS” test point while the power is on.
Use the “DGND1” test point at the reference.

NO.	Check point	Module No.	Specification value	Unit
1	VSENS - DGND1	ALL	0.95 - 1.07	V

VD8 = 8.0 ± 0.4 V

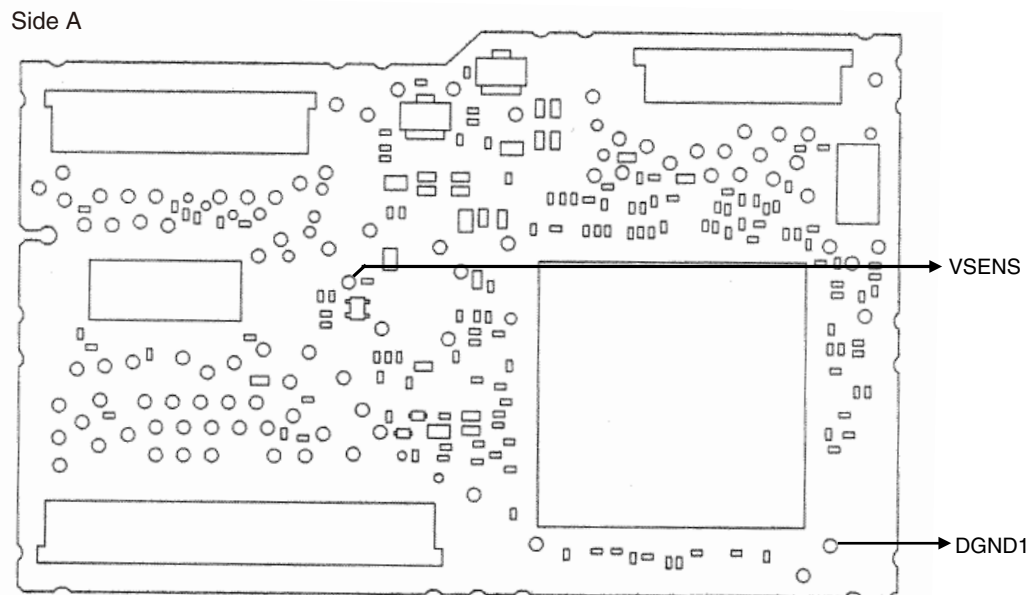


Fig 4.2: VSENS check point

A Check 5: 27 MHz Normal?

<Outline> Each clock is created inside the IC1501 using the 27 MHz master crystal oscillator (X1501).

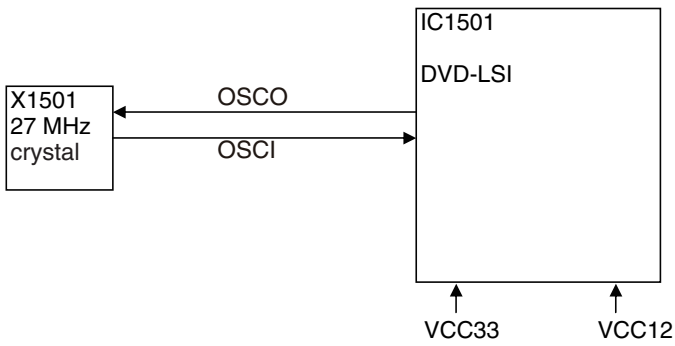
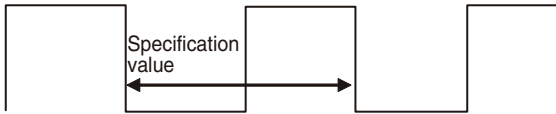


Fig 5.1: Clock configuration

<Check method> Turn the power on, and check with DGND being the reference.
In case of NG, check the applicable line, periphery of IC1501, soldering of the peripheral components and defective components.

NO.	Check point	Module No.	Specification value	Unit
2	IC1501 169pin	ALL	27 MHz ± 50 ppm	ppm



GND

Fig 5.2: Clock specification value

Side A

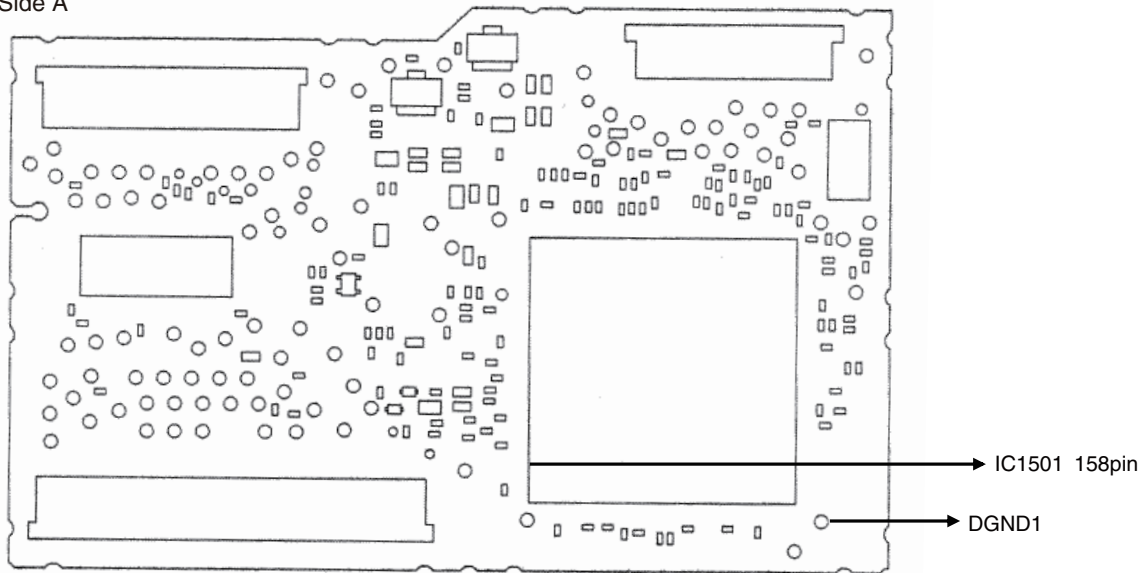


Fig 5.3: 27 MHz check point

Check 6: Is SDRAM I/F OK?

<Outline> In order to secure the MPEG stream data as the buffer, the capacity of communication I/F SDRAM between the LSI and the memory is 64Mbit. Be careful as XCSM, XWE, XCAS and XRAS of IC1480 are called differently in IC1501, namely NCSM, NWE, NCAS, NRAS.

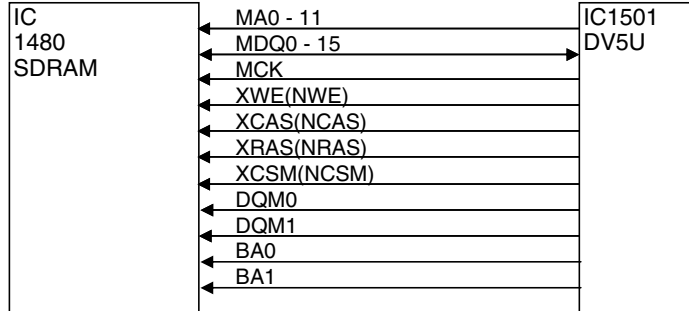
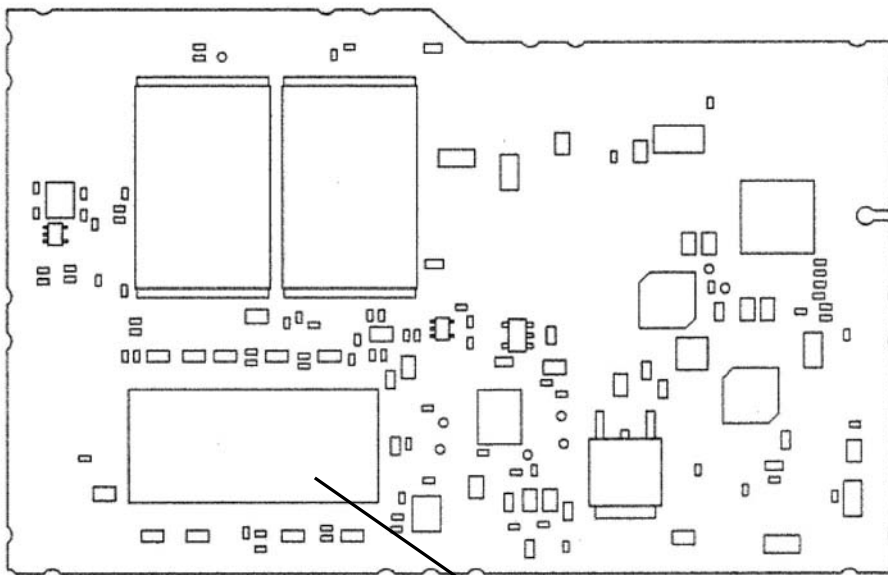


Fig 6.1: SDRAM I/F

A <Check> Check the conductivity at “check point 1” and “check point 2” without power.
In case of NG, check the soldering and defective components throughout the
“output → input” of the applicable section.

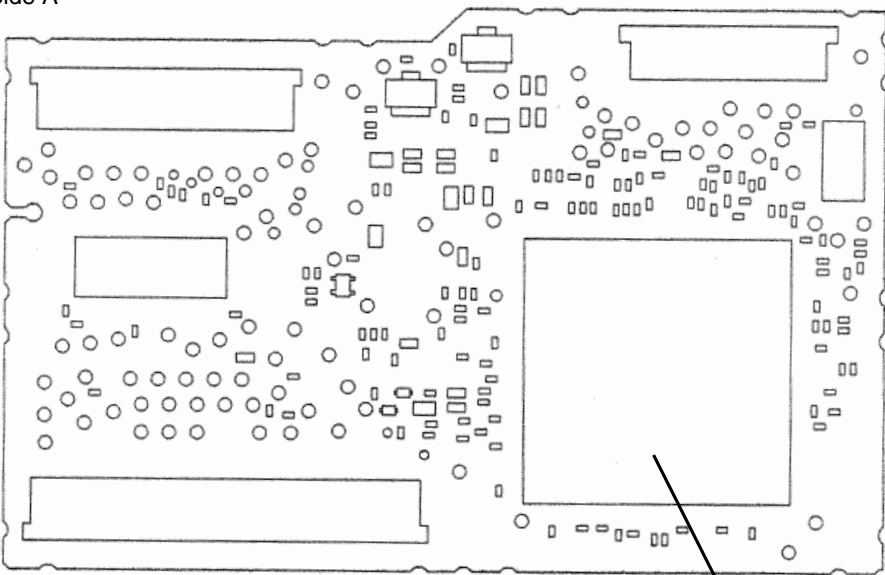
NO.	Signal name	Check point 1	Check point 2	Specification value
1	MA0	IC1480 23pin	IC1501 201pin	56 ohm ± 5 %
2	MA1	IC1480 24pin	IC1501 203pin	56 ohm ± 5 %
3	MA2	IC1480 25pin	IC1501 207pin	56 ohm ± 5 %
4	MA3	IC1480 29pin	IC1501 209pin	56 ohm ± 5 %
5	MA4	IC1480 30pin	IC1501 208pin	56 ohm ± 5 %
6	MA5	IC1480 31pin	IC1501 206pin	56 ohm ± 5 %
7	MA6	IC1480 32pin	IC1501 202pin	56 ohm ± 5 %
8	MA7	IC1480 33pin	IC1501 200pin	56 ohm ± 5 %
9	MA8	IC1480 34pin	IC1501 198pin	56 ohm ± 5 %
10	MA9	IC1480 33pin	IC1501 194pin	56 ohm ± 5 %
11	MA10	IC1480 22pin	IC1501 199pin	56 ohm ± 5 %
12	MA11	IC1480 35pin	IC1501 192pin	56 ohm ± 5 %
13	MDQ0	IC1480 2pin	IC1501 160pin	56 ohm ± 5 %
14	MDQ1	IC1480 4pin	IC1501 162pin	56 ohm ± 5 %
15	MDQ2	IC1480 5pin	IC1501 164pin	56 ohm ± 5 %
16	MDQ3	IC1480 7pin	IC1501 168pin	56 ohm ± 5 %
17	MDQ4	IC1480 8pin	IC1501 170pin	56 ohm ± 5 %
18	MDQ5	IC1480 10pin	IC1501 172pin	56 ohm ± 5 %
19	MDQ6	IC1480 11pin	IC1501 176pin	56 ohm ± 5 %
20	MDQ7	IC1480 13pin	IC1501 178pin	56 ohm ± 5 %
21	MDQ8	IC1480 42pin	IC1501 177pin	56 ohm ± 5 %
22	MDQ9	IC1480 44pin	IC1501 175pin	56 ohm ± 5 %
23	MDQ10	IC1480 45pin	IC1501 171pin	56 ohm ± 5 %
24	MDQ11	IC1480 47pin	IC1501 169pin	56 ohm ± 5 %
25	MDQ12	IC1480 48pin	IC1501 167pin	56 ohm ± 5 %
26	MDQ13	IC1480 50pin	IC1501 163pin	56 ohm ± 5 %
27	MDQ14	IC1480 51pin	IC1501 161pin	56 ohm ± 5 %
28	MDQ15	IC1480 53pin	IC1501 159pin	56 ohm ± 5 %
29	MCK	IC1480 38pin	IC1501 183pin	0.17 ohm or lower
30	XWE	IC1480 16pin	IC1501 181pin	56 ohm ± 5 %
31	XCAS	IC1480 17pin	IC1501 188pin	56 ohm ± 5 %
32	XRAS	IC1480 18pin	IC1501 189pin	56 ohm ± 5 %
33	XCSM	IC1480 19pin	IC1501 190pin	56 ohm ± 5 %
34	DQM0	IC1480 15pin	IC1501 179pin	56 ohm ± 5 %
35	DQM1	IC1480 39pin	IC1501 180pin	56 ohm ± 5 %
36	BA0	IC1480 20pin	IC1501 193pin	56 ohm ± 5 %
37	BA1	IC1480 21pin	IC1501 197pin	56 ohm ± 5 %

Side B



Check point 1 (IC1480)

Side A



Check point 2 (IC1501)

Fig 6.2: SDRAM I/F check point

A Check 7: Is VD8, VCC5 power supply voltage OK?

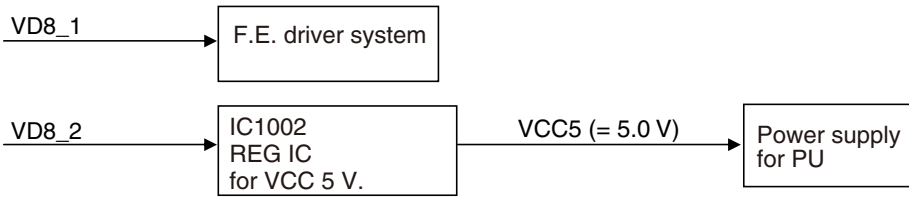


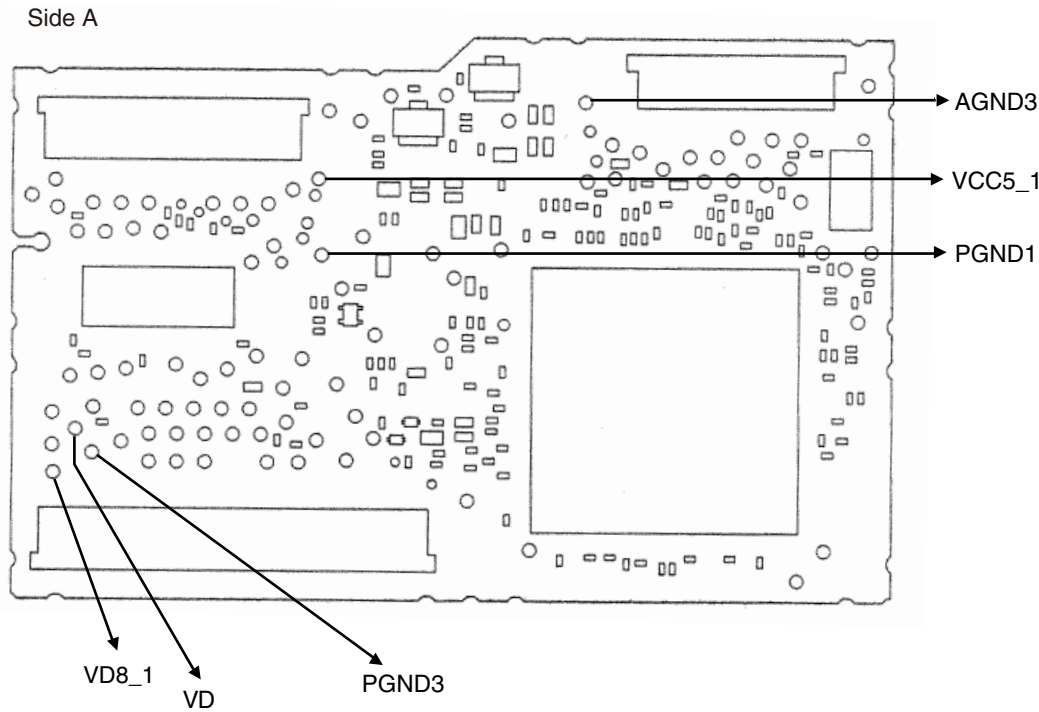
Fig 7.1: Power supply configuration

B

<Check> Check the voltage at the “VD8_1, VD and VCC5_1” test point while the power is on. Use the “PGND3 and AGND1” test point at the reference.

NO.	Check point	Module No.	Specification value	Unit
1	VD8_1 - PGND3	ALL	8.0 ± 0.4	V
2	VD - PGND3	ALL	8.0 ± 0.4	V
3	VCC5_1- AGND1	ALL	5.0 ± 0.1	V

C



D

E

Fig 7.2: VD8, VCC5 voltage check points

F

Check 8: Is AVCC5 voltage OK?

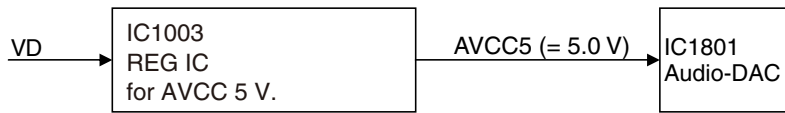


Fig 8.1: Power supply configuration

<Check> Playback DVD-REF-A1 TITLE 1 and check the voltage at the stylus.
Check with PGND and GND AU being the reference.

NO.	Check point	Module No.	Specification value	Unit
1	VD - PGND_3	ALL	8.0 ± 0.4	V
2	AVCC5 - GND AU1	ALL	5.0 ± 0.1	V

Side A

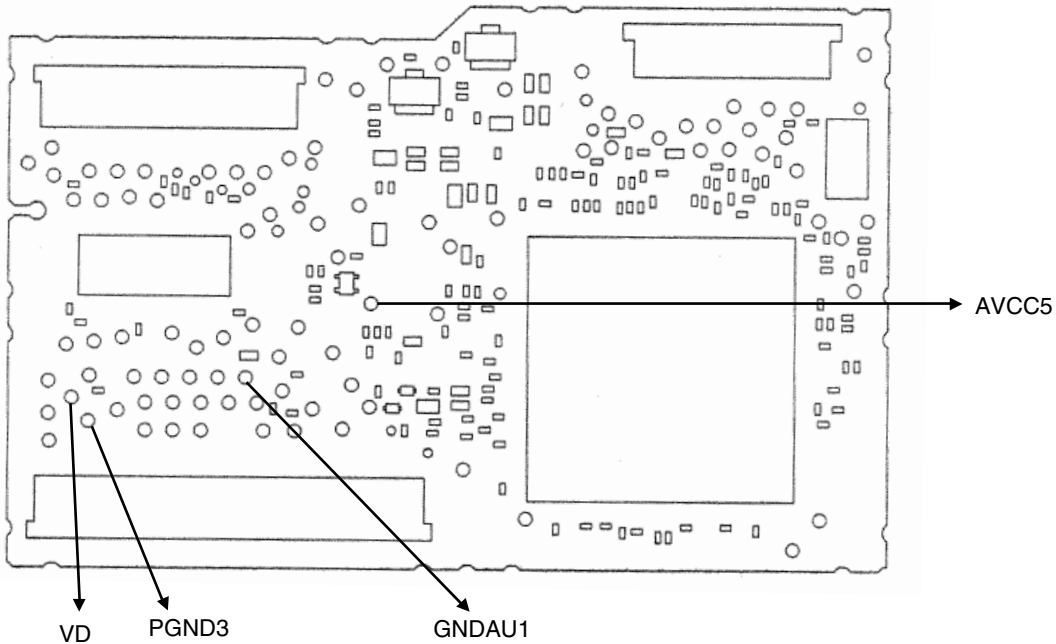
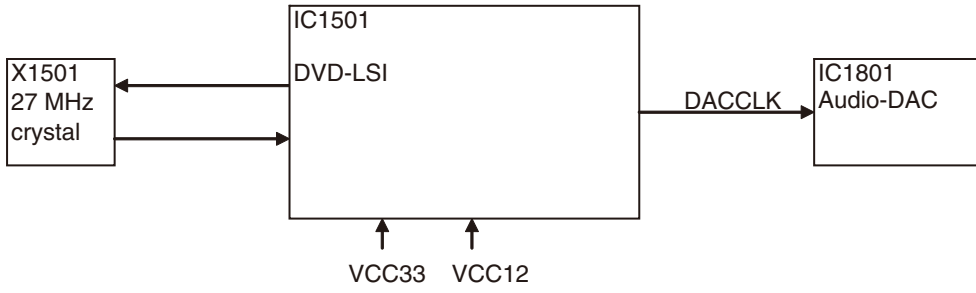


Fig 8.2: VD8, AVCC5 voltage check points

A Check 9: Is DACCLK normal?

<Outline> DACCLK for Audio-DAC is created by IC1501 using the 27 MHz master crystal oscillator (X1501).



B

Fig 9.1: Clock configuration

<Check method>

DVD: DVD-REF-A1 TITLE 1

CD: Playback a normal CDDA.

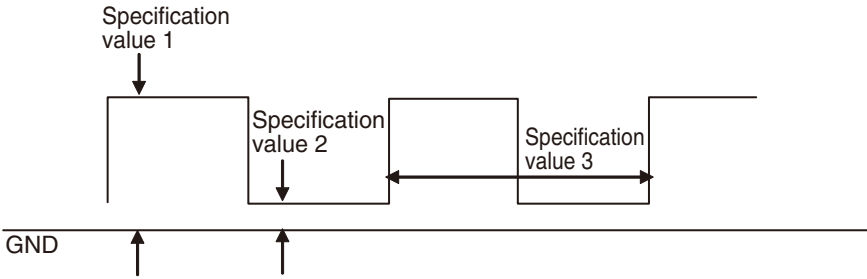
Common to all DVD-V compatible modules.

Check with DGND being the reference.

In case of NG, check the applicable line, the periphery of IC1501, soldering of the peripheral components and defective components.

C

NO.	Check point 1 (stylus)	Media	Specification value 1	Specification value 2	Specification value 3
1	DACCK	DVD	2.0 V~VCC33 V	DGND~0.8 V	36.864 0 MHz ± 300 ppm
2	DACCK	CD	2.0 V~VCC33 V	DGND~0.8 V	33.868 8 MHz ± 300 ppm



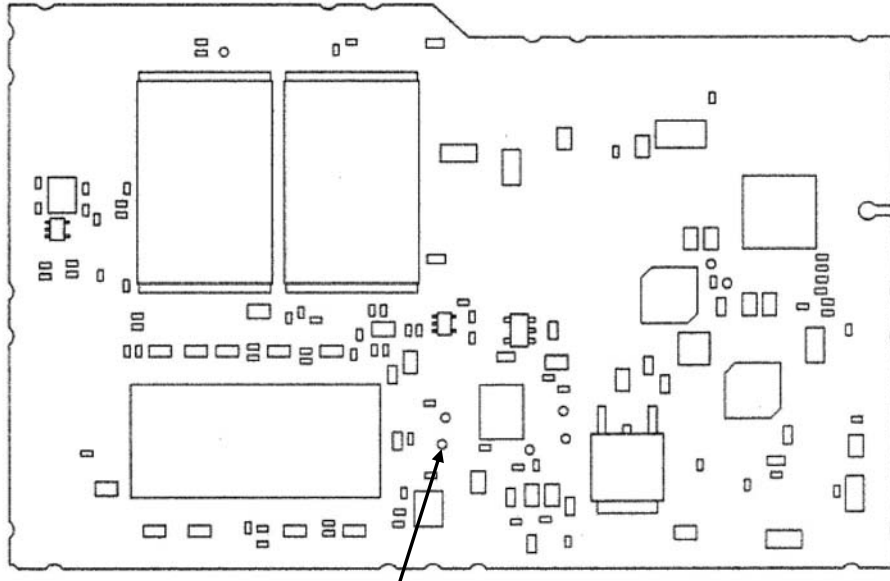
D

Fig 9.2: Clock specification value

E

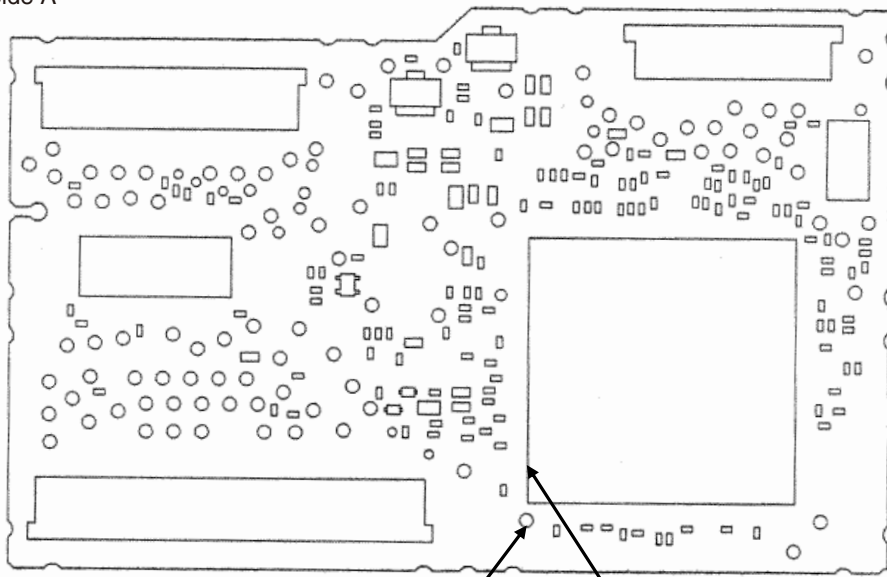
F

Side B



Check point 1 (DACCK stylus)

Side A



Check point 2 (IC1501 148 pin)

DGND2

Fig 9.3: 27 MHz, DACCLK check point

A Check 10: Is the audio circuit OK?

<Outline> The serial 3 lines digital output + DACCLK, output from DVD-LSI (IC1501), are converted to analog audio signal at Audio-DAC (IC1801) and are output from the HOST I/F (CN1901). Simultaneously, the analog MUTE signal is also output from DVD-LSI (IC1501) via the HOST I/F. The digital audio signal (IECOUT), output from DVD-LSI (IC1501).

B

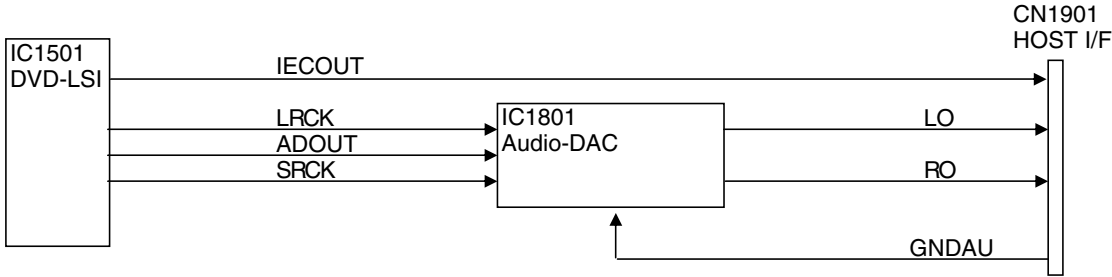


Fig 10.1: Audio circuit

<Check method> Playback DVD-REF-A1 TITLE 2 CHAPTER 1 (48 k/16 bit 1 kHz 0 dB), and check with DGND being the reference. In case of NG, check the applicable line, periphery of major components as described in the above drawing, soldering of the peripheral components and defective components.

C

NO.	Check point 1 (stylus)	Specification value 1	Specification value 2	Reference waveform
1	ADOUT3	VCC33 V-0.6 V or higher	0.4 V or lower	Waveform 1
2	SRCK	VCC33 V-0.6 V or higher	0.4 V or lower	Waveform 2
3	LRCK	VCC33 V-0.6 V or higher	0.4 V or lower	Waveform 3

D

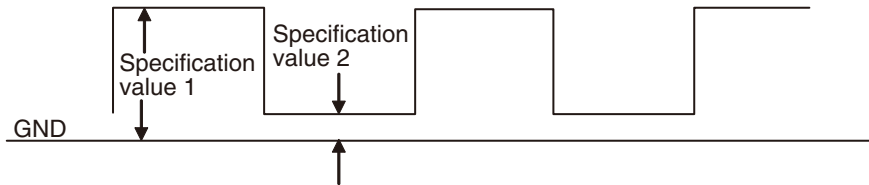
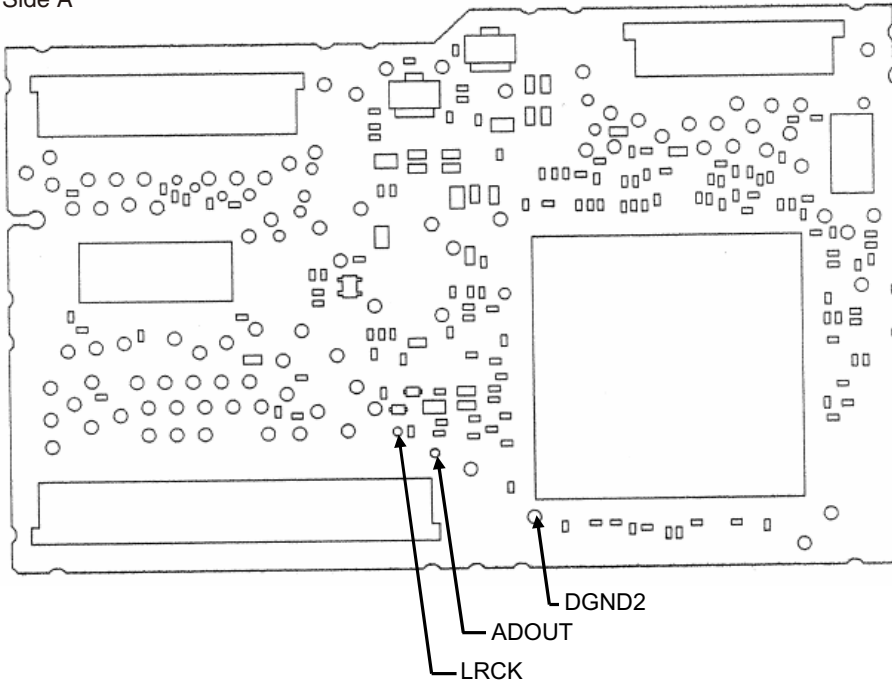


Fig 10.2: Serial 3 lines specification value

E

F

Side A



Side B

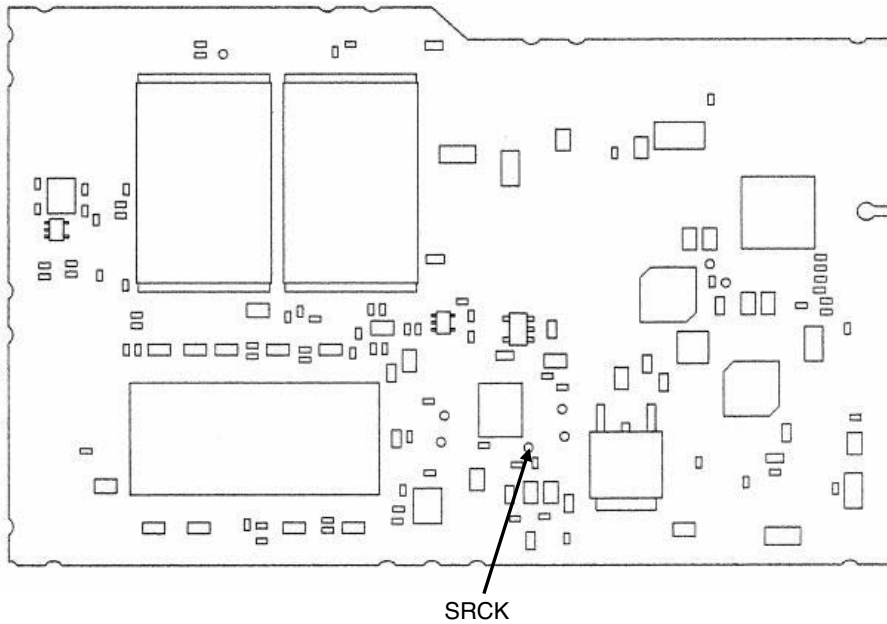
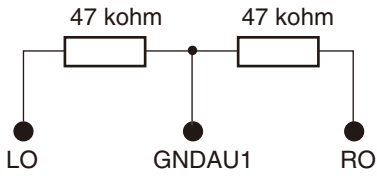


Fig 10.3: Serial 3 lines check points

A The following checks shall be conducted using the following measurement circuits with GNDAU1 being the reference.



NO.	Check point 1 (stylus)	Specification value (rms)	Reference waveform
4	LO	1 400 ± 150 mV	Waveform 4
5	RO	1 400 ± 150 mV	Waveform 4

B

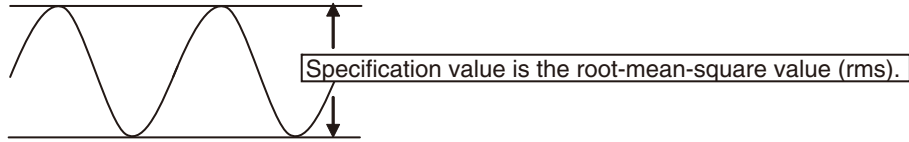


Fig 10.4: Analog audio out (LO, RO) specification value.

Side A

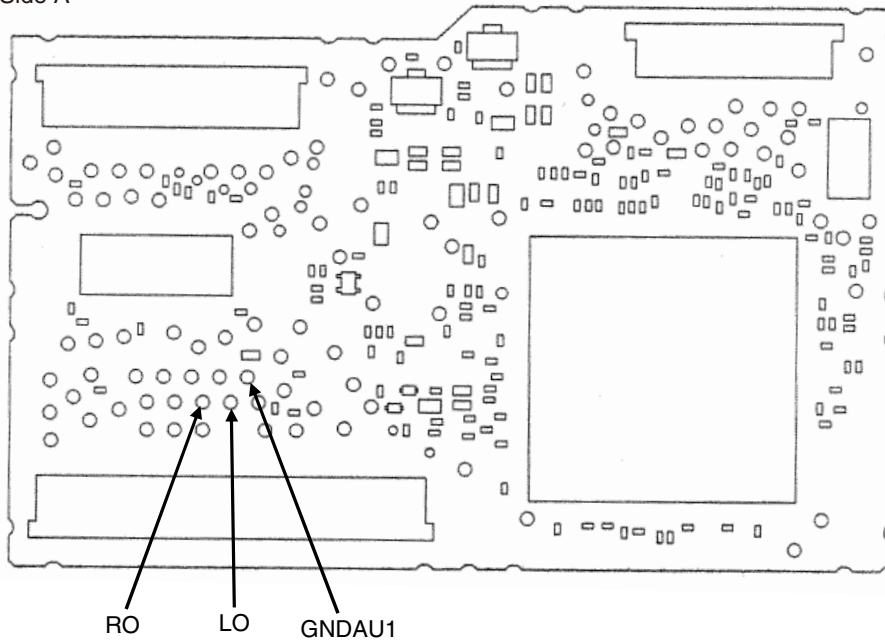


Fig 10.5: Analog audio out check point

E

Check with DGND being the reference.

NO.	Check point 1 (stylus)	Specification value 1	Specification value 2	Reference waveform
6	IEC	VCC33 V-0.6 V or higher	0.4 V or lower	Waveform 5

F

Side A

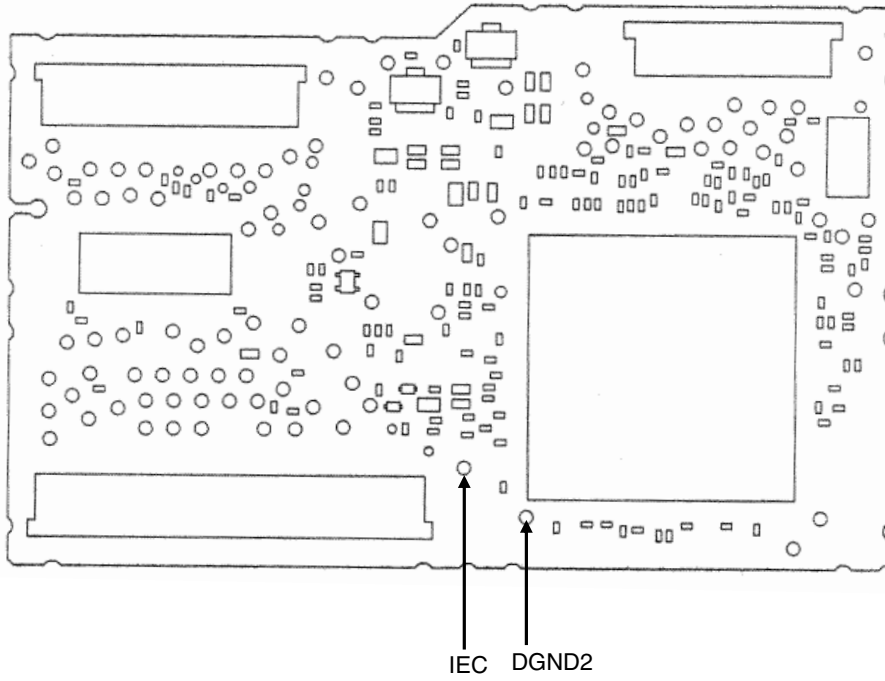


Fig 10.6: Digital audio signal (IECOUT) check point

A Check 11: Is the video circuit OK?

<Outline> Composite signal and component signal are output from DVD-LSI (IC1501), and are output from the HOST I/F (CN1901) via a buffer circuit.



Fig 11.1: Video circuit

<Checking method> Playback DVD-REF-A1 TITLE2 CHAPTER5 (WHITE 100%), and monitor COMPOSITE signal with an oscilloscope with GNDV1 (stylus) being the reference. Set the trigger mode to "TV trigger" and the trigger line to "150 line".

Check point 1 (stylus)

NO.		Specification value	Reference waveform
1	COMPOSITE	1 000 mVpp ± 5 %	Waveform 6

In case of NG, check the applicable line, the periphery of the major components in the drawing above, soldering of the peripheral components and defective components.

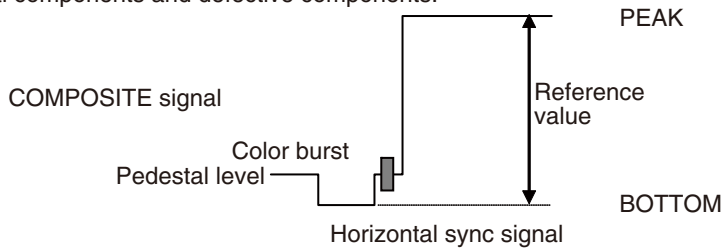


Fig 11.2: Waveform for the case of composite white 100% output

Side A

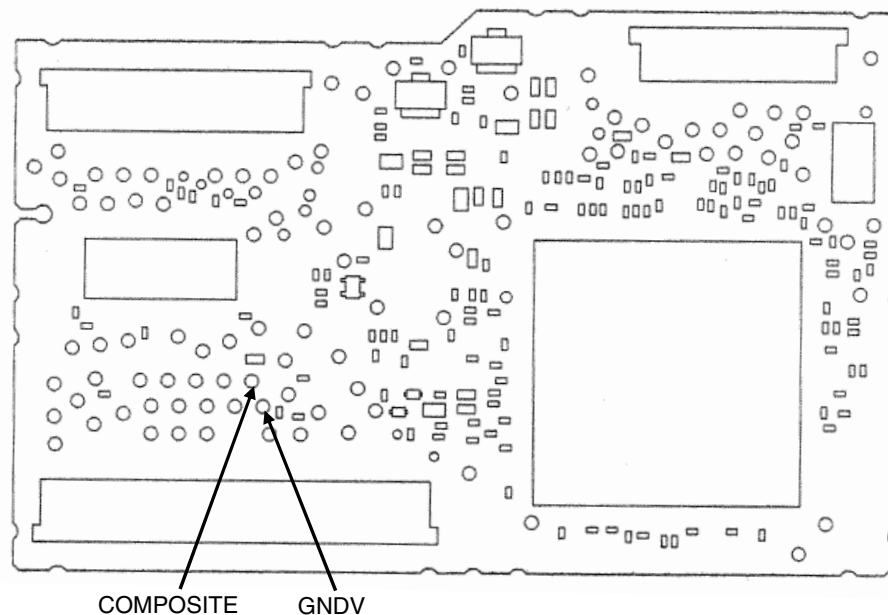


Fig 11.3: VIDEO signal check point

A

Check 12:How to judge whether the flash memory has reached its life or not.

If the reaction to user operation is slow or operation is slow in general, there is a possibility that the flash memory has reached its life.

Make judgment regarding the flash memory life by looking at the display of the LD energizing time.

■

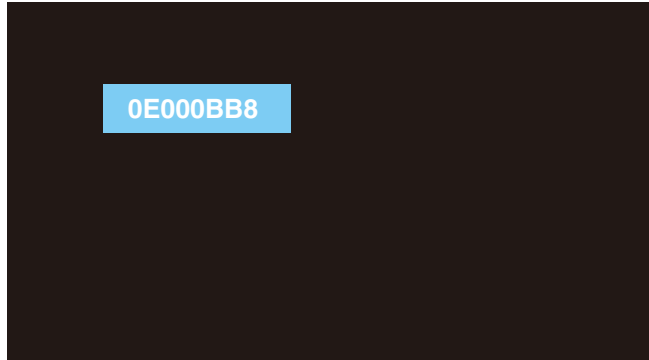
1.Let the LD energizing time displayed.

(Refer to the FE test mode for the method of displaying the LD energizing time.)

2.If the second digit from the left of the energizing time display is showing E, such as “*E * * * * *”, it means that the flash memory has reached its life.

B

Example:



C

D

E

F

Check 13: 48 MHz Normal?

<Outline> Each clock is created inside the IC1501 using the 48 MHz master crystal oscillator (X1501).

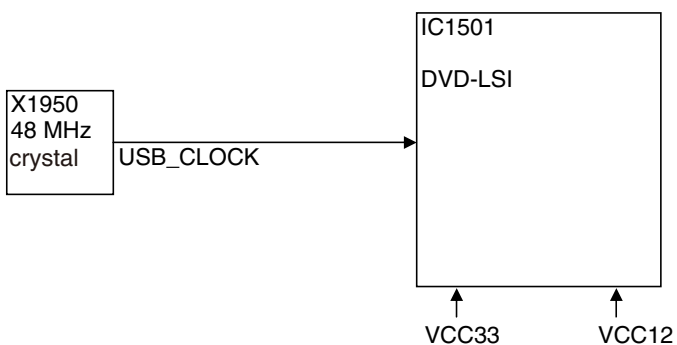


Fig 13.1: Clock configuration

<Check method> Turn the power on, and check with DGND1 being the reference.

In case of NG, check the applicable line, periphery of IC1501, soldering of the peripheral components and defective components.

NO.	Check point	Module No.	Specification value	Unit
2	IC1501 50pin-DGND1	ALL	48 MHz ± 50 ppm	ppm

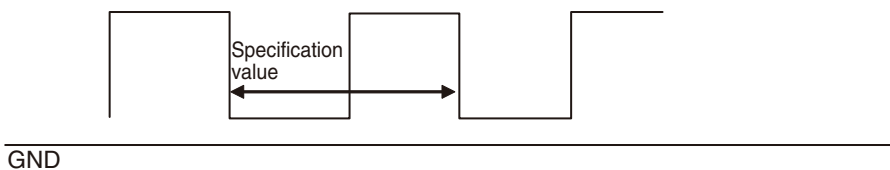


Fig 13.2: Clock specification value

Side A

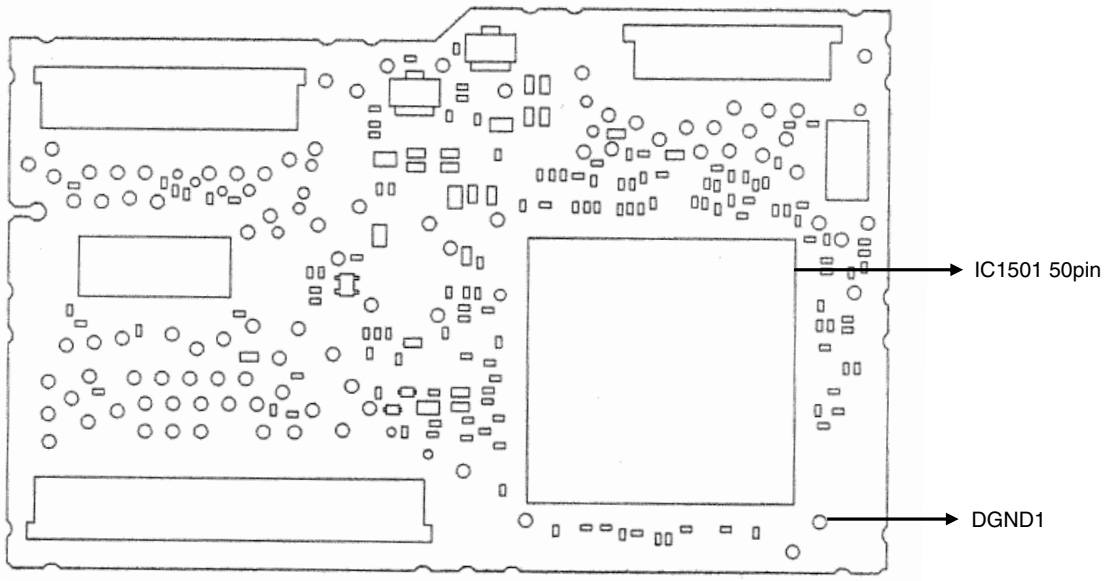


Fig 13.3: 48 MHz check point

Check 14: Is USB Circuit OK?

<Outline>

The data is transmitted through D+, D- and SDA of HOST I/F while playing USB/IPOD.
 USB memory uses only D+ and D-, but IPOD uses SDA (DATA) and SCL (CLOCK) in addition to D+ and D-.

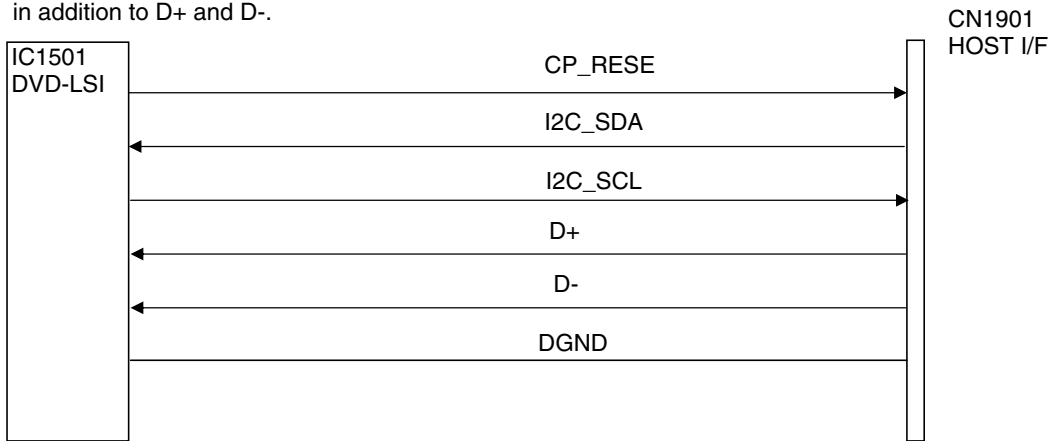


Fig. 14-1: USB Circuit

<Check Method>

1. USB Memory: Play a song from USB memory and check D+ and D- with the DGND standards.
 2. iPod: Connect iPod and check CP_RESET, SDA and SCL with the DGND standards until the pioneer log appears. Play a song from iPod and check D+/D- with the DGND standards.
- When it does not conform to the standards, check appropriate line, main parts shown in the above figure, soldering of peripheral parts and malfunctions in parts.

No.	Checking spot (stylus)	Standard value 1	Standard value 2
1	CP_RESET	VCC33*0.7or more	
2	SDATA	VCC33*0.7or more	VCC33*0.2 or less
3	SCLOCK	VCC33*0.7or more	VCC33*0.2 or less
4	D+	VCC33*0.7or more	VCC33*0.3 or less
5	D-	VCC33*0.7or more	VCC33*0.3 or less

*Until the pioneer log appears after connecting the iPod
 *Until the pioneer log appears after connecting the iPod

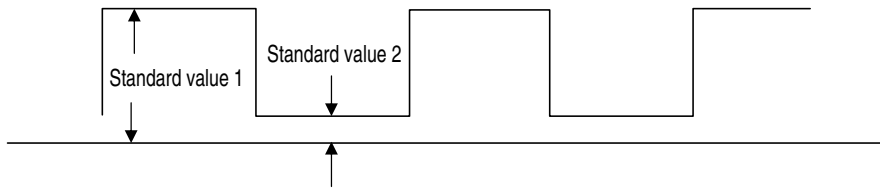
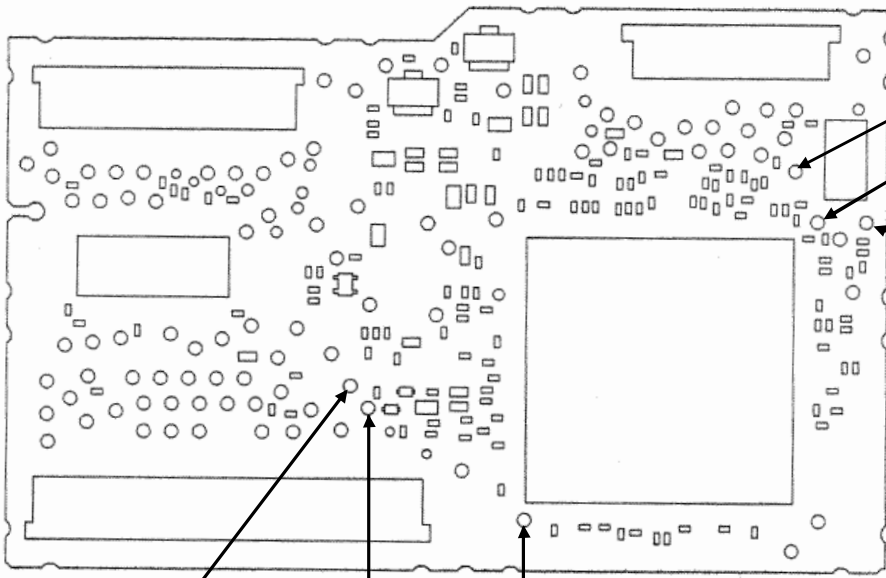


Fig. 14.2: USB Circuit Communication Wave

Side A



SDATA

CP_RESET

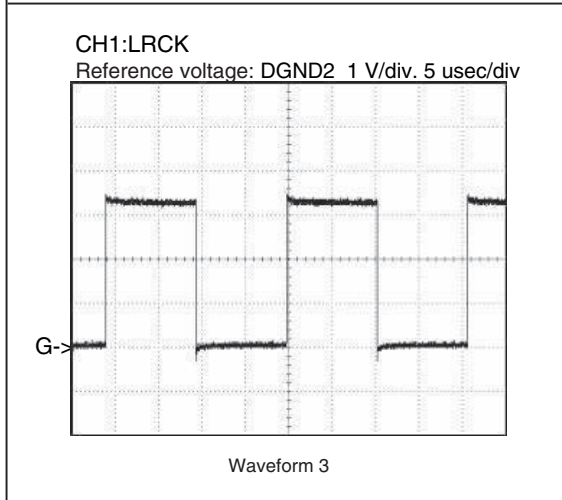
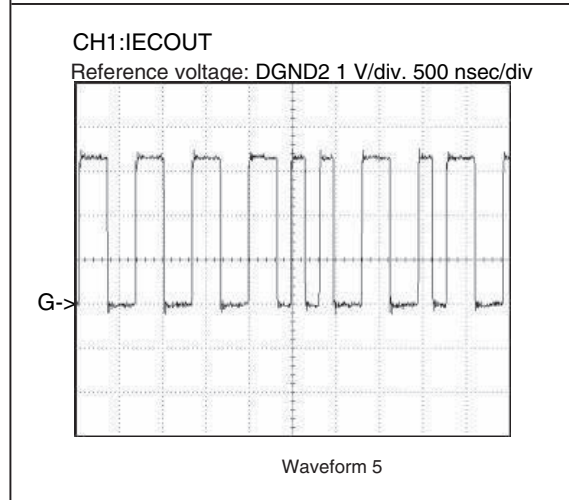
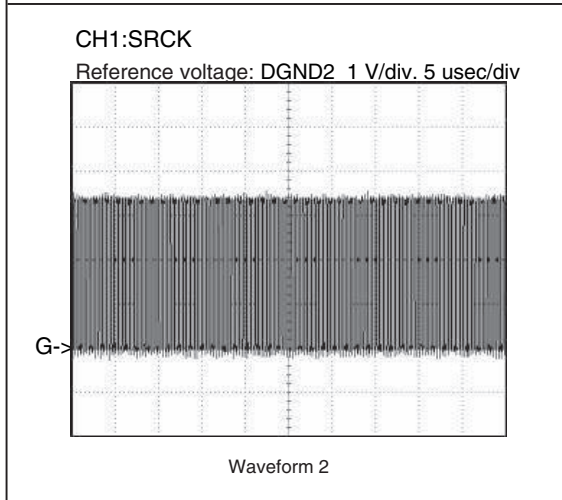
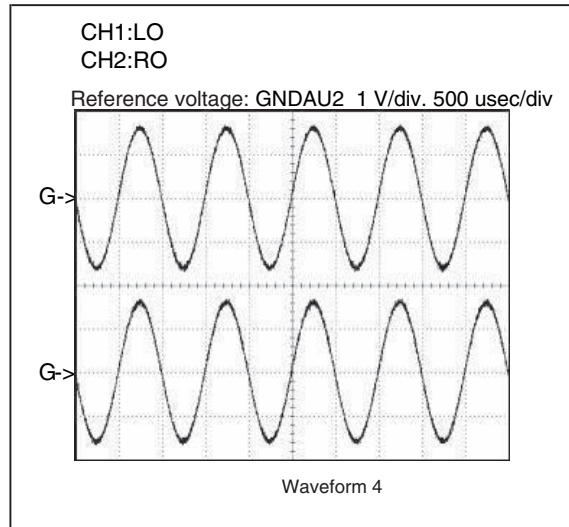
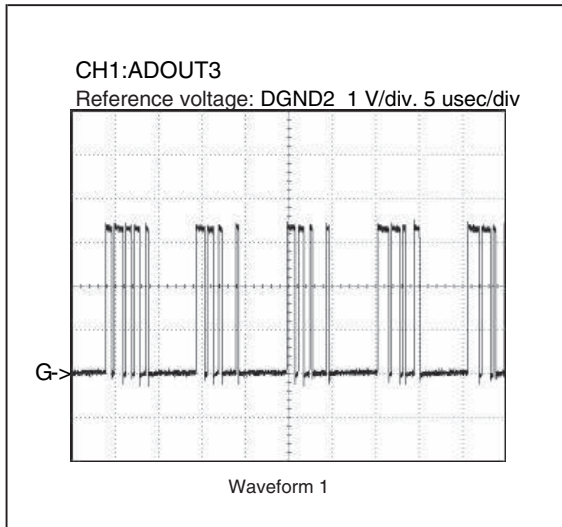
SCLOCK

D-

D+

DGND2

AUDIO



A

B

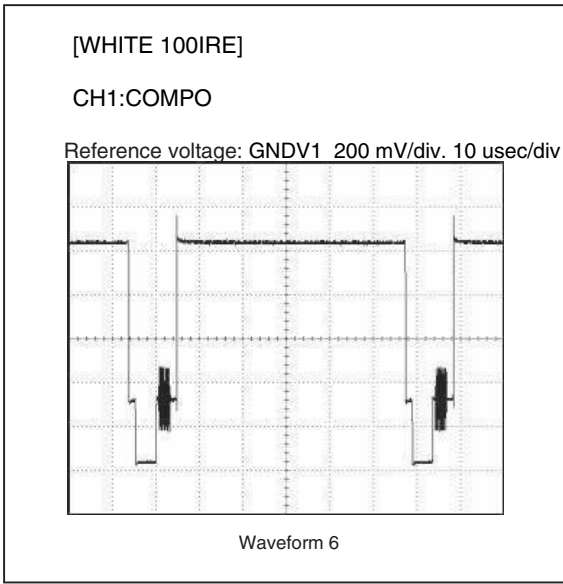
C

D

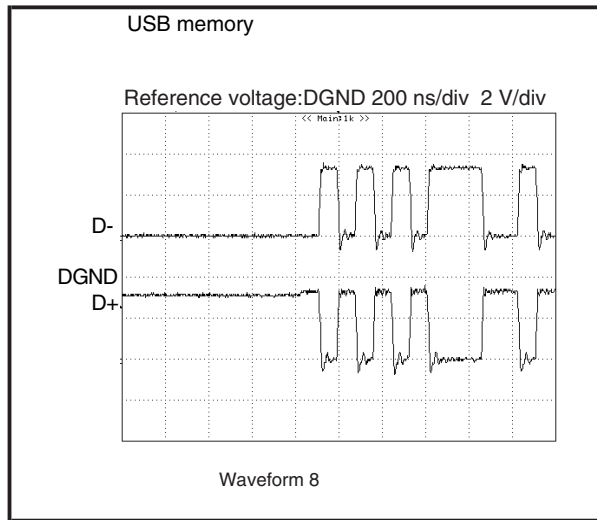
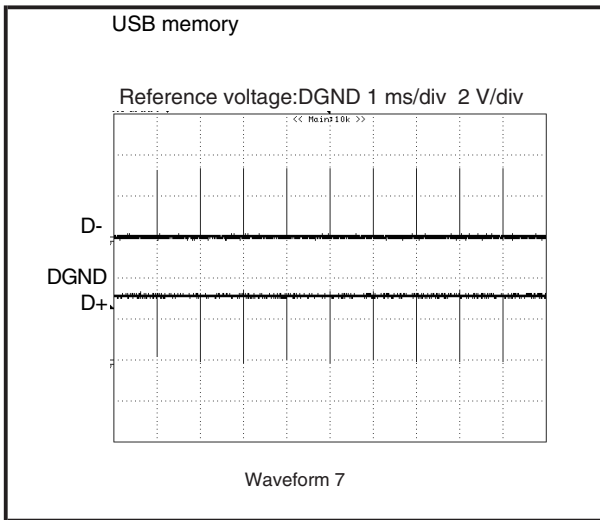
E

F

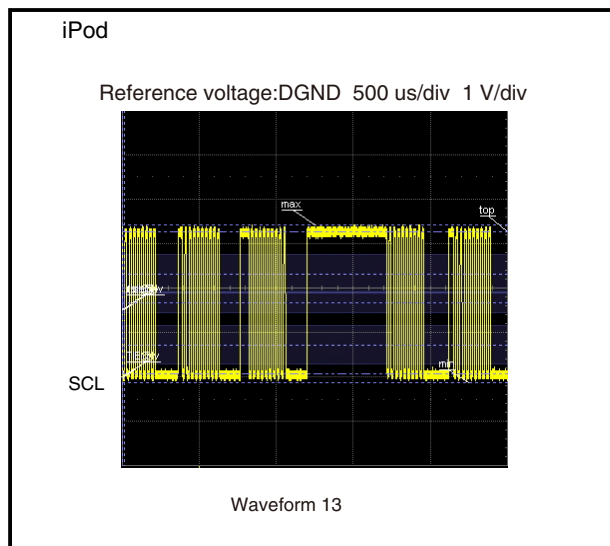
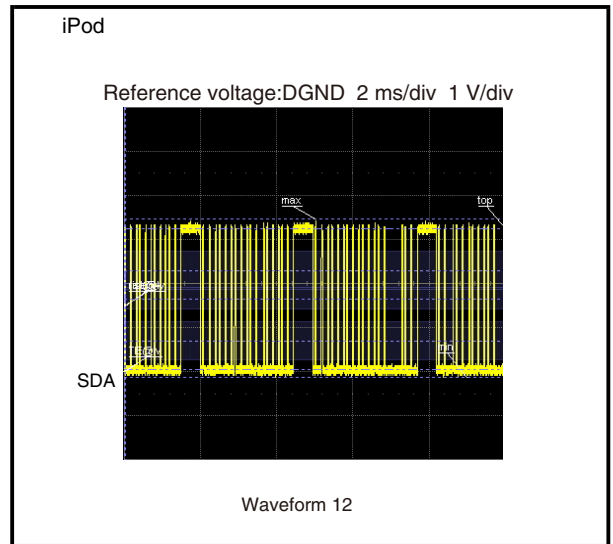
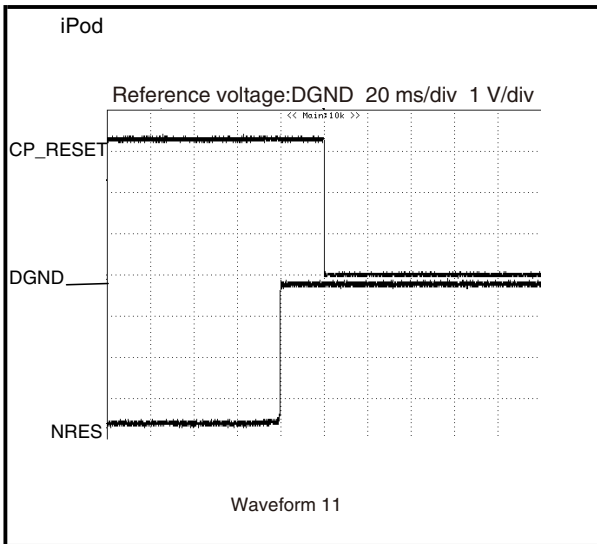
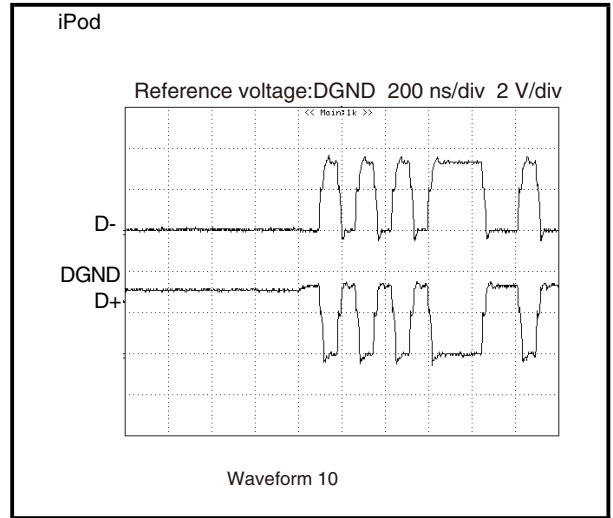
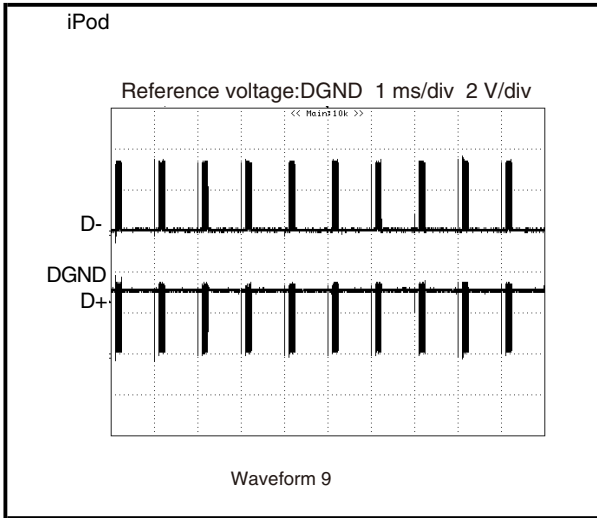
VIDEO



USB memory



iPod



A

B

C

D

E

F

5.4 ERROR CODE LIST

Error status	OSD *1	UART *2	Meaning	Generation source			Method of reset			
				Disc	USB (MSC)	USB (iPod)	ACC Off/On	Source Off/On	Eject	Play Key
Media Error	NON-PLAYABLE DISC	00h	A disc containing the unplayable Format only	X	-	-	X	X	X	-
	INCOMPATIBLE DEVICE	00h	USB device that doesn't correspond	-	X	X	X	X	-	-
	UNPLAYABLE FILE	00h	USB device of format alone that cannot be reproduced	-	X	-	X	X	-	-
Open	(No display)	10h	Door open error	X	-	-	*	*	*	*
Read Error	ERROR-02-99	20h	Transfer start error	X	-	-	X	X	X	X
Focus Error(Focus Error in mechanism set up)	ERROR-02-90	21h	Focus error	X	-	-	X	X	X	X
Surface Error	ERROR-02-9E	22h	Focus error during set up (A focus has never been achieved with that disc.)	X	-	-	X	X	X	X
Address not found(Invalid Track)	ERROR-02-80	23h	Address not found.	X	-	-	X	X	X	X
Spindle Lock	ERROR-02-91	24h	Spindle lock NG (the disc cannot rotate)	X	-	-	X	X	X	X
Carriage HOME	ERROR-02-92	25h	Carriage home NG (The pick up tries to return to carriage home, but it cannot go back and stopped.)	X	-	-	X	X	X	X
ID/SUBCODE Read Error	ERROR-02-94	26h	ID/SUBCODE Read Error (ID/SUBCODE cannot be read due to scratch or stain.)	X	-	-	X	X	X	X
AV CHIP decode Error	ERROR-02-9A	2Ah	AV CHIP decode NG (AV chip cannot be decoded.)	X	X	-	X	X	X	X
AV CHIP Recovery NG	ERROR-02-9B	2Bh	AV CHIP recovery NG	X	X	X	X	X	X	X
Error of PLAY BACK Mode Status	ERROR-02-9C	2Ch	Playback state error (An error due to software bug.)	X	X	-	X	X	X	X
Disc Data Error	ERROR-02-9D	2Dh	Disc Data NG	X	-	-	X	X	X	X
Temp Error (In Case of High Temperature)	THERMAL PROTECTION IN MOTION	30h	High temperature (Playback is stopped because the pick up temperature is 89.0C or higher.)	X	-	-	X	-	-	-
No Disc (including Disc loading and ejecting)	(No display)	40h	Disc has not been inserted. (Including Load in process or Eject in process.)	X	-	-	*	*	*	*
Loading_Mecha Error	(No display)	50h	Loading mechanism error (The disc cannot be clamped.)	X	X	X	X	-	X	-
Communication fault attesting iPod	ERROR-02-60	60h	Communication fault attesting iPod	X	-	X	-	-	X	-
iPod authentication data is abnormal	ERROR-02-61	61h	iPod authentication data is abnormal	X	-	X	-	-	X	-
iPod attestation retrying failure	ERROR-02-62	62h	iPod attestation retrying failure	X	-	X	-	-	X	-
iPod attestation time out	ERROR-02-63	63h	iPod attestation time out	X	-	X	-	-	X	-
Error when iPod is connected/ It is generated STALL by the USB communication	ERROR-02-64	64h	Error when iPod is connected/ It is generated STALL by the USB communication	-	-	X	-	-	X	-
Error setting iPod	ERROR-02-65	65h	Error setting iPod	-	-	X	-	-	X	-
Demand timeout when initial is communicated	ERROR-02-66	66h	Demand timeout when initial is communicated	-	-	X	-	-	X	-
Protocol version non-correspondence	ERROR-02-67	67h	Protocol version non-correspondence	-	-	X	-	-	X	-
Timeout when protocol version is judged	ERROR-02-68	68h	Timeout when protocol version is judged	-	-	X	-	-	X	-
No songs error	(No display)	69h	No songs error	-	-	X	-	-	X	-
iPod control forwarding/ Intarapta forwarding error	ERROR-02-6A	6Ah	iPod control forwarding/ Intarapta forwarding error	-	-	X	-	-	X	-
Demand timeout iPod's reproducing	ERROR-02-6B	6Bh	Demand timeout iPod's reproducing	-	-	X	-	-	X	-
Remote switch error	ERROR-02-6C	6Ch	Remote switch error	-	-	X	-	-	X	-
Remote switch demand timeout	ERROR-02-6D	6Dh	Remote switch demand timeout	-	-	X	-	-	X	-
DRM Error	PROTECTED DISC	70h	DRM error (All music cannot be played back due to DRM.)	X	-	-	-	-	X	-
	NO ACCESSIBLE DATA AVAILABL	70h	DRM error (All music cannot be played back due to DRM.)	-	X	-	-	-	-	-
Region code Error NG	DIFFERENT REGION DISC	90h	Region code NG (Unable to be played back due to incorrect mechanism region.)	X	-	-	-	-	X	-
CPRM*7 Key Error *8	NON-PLAYABLE DISC	93h	Key Error for playback	X	-	-	-	-	X	-
REQUEST error	ERROR-02-A0	A0h	REQUEST error	X	-	-	X	X	X	X
Failure in issuing read command (chip dependent)	ERROR-02-A1	A1h	Failure in issuing the read command	X	-	-	X	X	X	X
Adjustment of L0 is NG.	ERROR-02-A2	A2h	L0 adjustment is NG.	X	-	-	X	X	X	X
Adjustment of L1 is NG.	ERROR-02-A3	A3h	L1 adjustment is NG	X	-	-	X	X	X	X
LD system NG	ERROR-02-A4	A4h	LD system NG	X	-	-	X	X	X	X
Gain adjustment system NG.	ERROR-02-A5	A5h	Gain adjustment system NG.	X	-	-	X	X	X	X
Gain determining system NG.	ERROR-02-A6	A6h	Gain determining system NG.	X	-	-	X	X	X	X
Servo initial setting related items NG.	ERROR-02-A7	A7h	Servo initial setting related items NG.	X	-	-	X	X	X	X
Disc is not clamped yet.	ERROR-02-A8	A8h	Disc is not clamped yet.	X	-	-	X	X	X	X
Tracking system NG.	ERROR-02-A9	A9h	Tracking system NG	X	-	-	X	X	X	X
Media setting system NG.	ERROR-02-AA	AAh	Media setting system NG	X	-	-	X	X	X	X
Focus Error	ERROR-02-AB	ABh	JUMP over layers NG	X	-	-	X	X	X	X
Error of PLAY BACK Mode Status	ERROR-02-B0	B0h	Navigation command error	X	-	-	X	X	X	X
Error of PLAY BACK Mode Status	ERROR-02-B1	B1h	Retry over	X	-	-	X	X	X	X
Audio Property Timeout Error *9	ERROR-02-C0	C0h	Audio property timeout error	X	-	-	X	X	X	-
Error when MCS is connected/ It is generated STALL by the USB communication	ERROR-02-D0	D0h	Error when MCS is connected/ It is generated STALL by the USB communication	-	X	-	-	-	X	-
CBW and CSW forwarding error	ERROR-02-D1	D1h	CBW and CSW forwarding error	-	X	-	-	-	X	-
Audio class band securing failure	ERROR-02-D8	D8h	Audio class band securing failure	-	-	X	-	-	X	-
Audio class FS setting failure	ERROR-02-D9	D9h	Audio class FS setting failure	-	-	X	-	-	X	-
Undefined Error	ERROR-FF-FF	FFh	Undefined error	X	-	-	X	X	X	X

X: Cancel the error by operation. -: Error is not cancelled by operation. *: No setting

*1 A content displayed on OSD. As for the items having multiple display patterns, the upper row is for the Japanese version Full GUI, and the lower row is for the Touch Panel model and Full GUI (English version).

*2 A parameter of UART command, such as "receipt error notice", that the DVD mechanism transmits.

*3 CPPM(Content Protection for Prerecorded Media) : A copyright protection technique used in DVD-A. The protection is realized by using the keys recorded on the media and the device key held by the player.

*4 DVD-A compatible model only.

When an error has occurred, only the audio output will be muted but playback operation will continue. Furthermore, acceptance of the user operation will be the same as usual.

*5 AWM (Audio WaterMark): Electronic watermark. Information on the copyright owner or CCI (copy control information) are recorded so that illegally copied discs can be identified.

*6 Notice as an error status will not be given

*7 CPRM(Content Protection for Recordable Media) : A copyright protection technique for digital contents used for re-writable DVD or memory card.

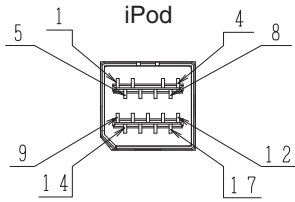
*8 Available only for the models compatible with DVD-VR

*9 This occurs when the audio property information notice is sent from the DVD mecha but no audio property activation notice is returned.

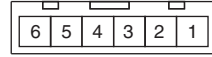
The time taken for occurrence should be specified in the latency time for the audio property notice set in the connection confirmation command.

5.5 CONNECTOR FUNCTION DESCRIPTION

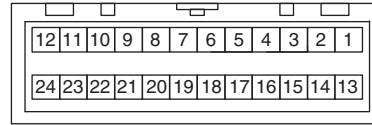
A



RDS-TMC TUNER



AV CONNECTOR



- 1 : USB-
- 2 : USB+
- 3 : ACCID
- 4 : USB 5V
- 5 : USB GND
- 6 : NC
- 7 : LOUT
- 8 : NC
- 9 : TXiPod
- 10 : ACCDET
- 11 : A_RETURN
- 12 : V_RETURN
- 13 : VOUT
- 14 : RXiPod
- 15 : iACCPW
- 16 : ROUT
- 17 : GNDD

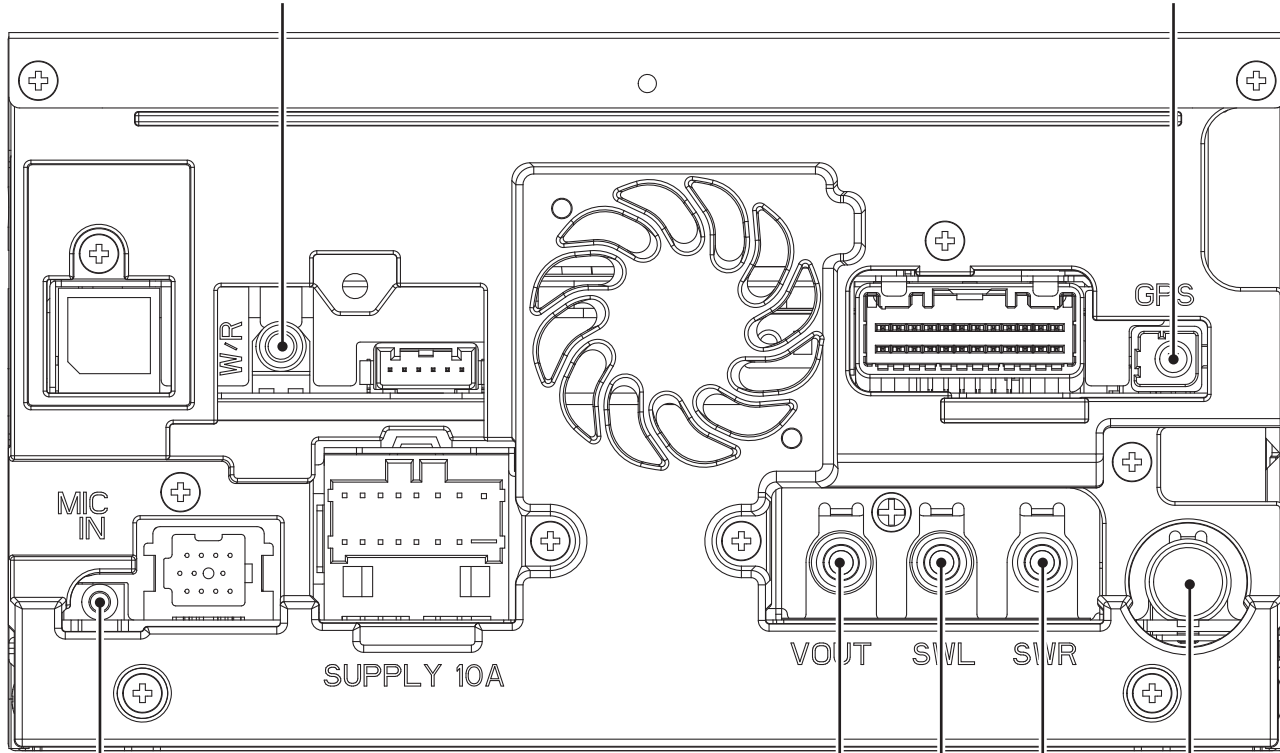
- 1 : SWBUP
- 2 : TMC_MSN_ON
- 3 : RDSSNS
- 4 : CTOVICS
- 5 : VICSTOC
- 6 : GND

- 1 : VTR2R
- 2 : VTR2L
- 3 : VTRIN2V
- 4 : RROUT2
- 5 : RLOUT2
- 6 : PFR
- 7 : PFL
- 8 : PRR
- 9 : PRL
- 10 : BCV
- 11 : KMODE
- 12 : CTOEX
- 13 : VTR2RG
- 14 : VTR2LG
- 15 : VTRIN2VG
- 16 : REARG
- 17 : REARG
- 18 : PREG
- 19 : NC
- 20 : PREG
- 21 : (HYOKA)
- 22 : BCVG
- 23 : TELMUTE
- 24 : EXTOC

B

WIRED REMOTE CONTROL

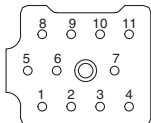
GPS ANTENNA



C

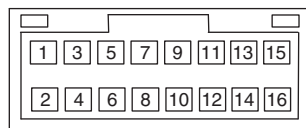
D

MIC INPUT
IP-BUS (AVIC-X930BT,
AVIC-X9310BT/XNUC)



- 1. IPBUS+
- 2. IPBUSG
- 3. IPLG
- 4. NC
- 5. IPBUS-
- 6. IPRG
- 7. IPL+
- 8. ASENBO
- 9. IPR+
- 10. IPR-
- 11. IPL-

POWER SUPPLY



- 1 : FR+
- 2 : RR+
- 3 : FR-
- 4 : RR-
- 5 : FL+
- 6 : RL+
- 7 : FL-
- 8 : RL-
- 9 : PKB
- 10 : SPEED
- 11 : REV
- 12 : ILM
- 13 : BREM
- 14 : ACC
- 15 : GND
- 16 : BUP

E

F

6. SERVICE MODE

6.1 TEST MODE

1. How to Select Test Mode Menu

Key operations used at the test mode are the following six keys;

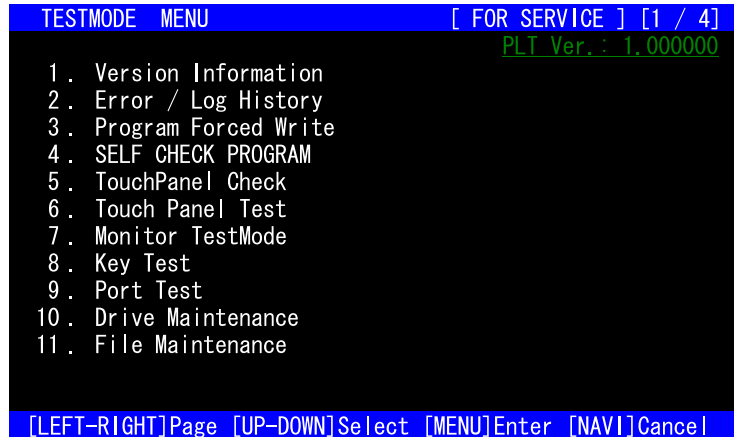
Key Operation	Key Allocation
Cursor Up	VOL UP
Cursor Down	VOL DOWN
Page Change (Previous)	LEFT
Page Change (Next)	RIGHT
Item Selection (Determination)	MODE
Cancel /Return to previous page	HOME

2. How to Start-up Test Mode

Start-up by SD card.

1. Download GGS1098 from the Service Site.
2. Decompress the file.
3. Copy the decompressed file to the SD card root.
4. Insert the SD card to the product and turn ACC on.

3. Test Mode Menu



	Name of Test Item	Overview of Test
1	Version Information	Display version information such as Navigation Software, Navigation Destination, Microcomputer Software, etc.
2	Error / Log History	Perform Error / Log View, File Copy and Clearing.
3	Program Forced Write	Writing of Navigation Program / Platform/Boot Loader / IPL / System Microcomputer / BT Firmware. Writing of Start-up Screen Data / APL Program. Writing / Reading Fixed Data. Writing / Reading / Clearing of BSP Backup Data.
4	SELF CHECK PROGRAM	Display connection status of System Microcomputer / Mechanical Microcomputer / BT Module / GPS_RF / iPod Authentication IC / One-Segment_RF.
5	TouchPanel Check	Coordinate Test of touch panel.
6	Touch Panel Test	Perform Line Touch Panel and Calibration Tests.
7	Monitor TestMode	Perform Flicker Adjustment, Initialization of E2PROM. Perform Service Test, E2PROM Test, Backlight Test and Illumination Test.
8	Key Test	Test of Hard Key.
9	Port Test	Status display of Input Port. Status display/changeover of Output Port.
10	Drive Maintenance	Display drive information, disc scanning (verification of volume).
11	File Maintenance	File operation and file deletion. Dumping display of file contents.

C

D

E

F


```

TESTMODE MENU [ FOR SERVICE ] [ 2 / 4 ]
PLT Ver. : 1.000000
12. GPS INFORMATION
13. GPS assessment
14. GPS backup data clear
15. GYRO SENSOR INFO data clear
16. SENSOR test
17. Bluetooth Unit
18. NAND Test
19. USER'S AREA OF FLASH CLEAR
20. Audio Play Test
21. Image Test

[LEFT-RIGHT]Page [UP-DOWN]Select [MENU]Enter [NAVI]Cancel

```

	Name of Test Item	Overview of Test
12	GPS INFORMATION	Display GPS positioning data, satellite information acquired and error information.
13	GPS assessment	Version display of GPS driver / sensor.
14	GPS backup data clear	Reset GPS driver and perform clearing of backup data.
15	GYRO SENSOR INFO data clear	Clear the gyro-sensor learned value.
16	SENSOR test	Display G-sensor, gyro value, power supply voltage, temperature and installation status.
17	Bluetooth Unit	Perform radio wave authentication test.
18	NAND Test	Data readout of NAND FLASH. Writing data or file into NAND FLASH.
19	USER'S AREA OF FLASH CLEAR	Execution of User Area clearing.
20	Audio Play Test	Guiding Audio Line confirmation by the replay of audio file.
21	Image Test	Display various test images.

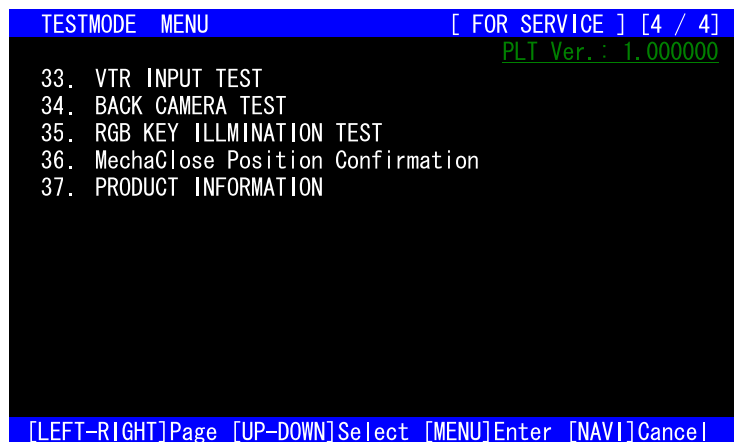
```

TESTMODE MENU [ FOR SERVICE ] [ 3 / 4 ]
PLT Ver. : 1.000000
22. EXT CONNECTION TEST
23. MIC LINE TEST
24. NAVI VOICELINE TEST
25. SUBWOOFER LINE TEST
26. FAN CONTROL
27. WIRED REMOCON TEST
28. RTC TEST
29. USB CHECK
30. SD TEST
31. DATA COMMUNICATION TEST [OPEN]
32. DATA COMMUNICATION TEST [SHORT]

[LEFT-RIGHT]Page [UP-DOWN]Select [MENU]Enter [NAVI]Cancel

```

	Name of Test Item	Overview of Tes
A	22 EXT CONNECTION TEST	Display G Sensor, gyro value, power supply voltage, temperature and variation, CAM_ON terminal and installation status.
	23 MIC LINE TEST	Confirmation of microphone input line for audio recognition.
	24 NAVI VOICELINE TEST	Confirmation of audio output line for SD / USB Audio.
	25 SUBWOOFER LINE TEST	Confirmation of output for subwoofer pre-out.
	26 FAN CONTROL	Execution of ON/OFF for Fan Revolution, controlling revolution speed.
B	27 WIRED REMOCON TEST	Receiving test of wired remote control key. Receiving test of manufacture code.
	28 RTC TEST	Setting of time
	29 USB CHECK	Confirm the normal operation of USB device by connecting USB device to the product.
	30 SD TEST	Confirmation of normal operation of SD card.
	31 DATA COMMUNICATION TEST [OPEN]	Open inspection of data communication terminal
	32 DATA COMMUNICATION TEST [SHOR	Short inspection of data communication terminal



D

	Name of Test Item	Overview of Test
E	33 VTR INPUT TEST	Display images from iPod / AUX, VTR, external terrestrial digital television.
	34 BACK CAMERA TEST	Display image of back camera on navigation screen.
	35 RGB KEY ILLMINATION TEST	Check wire connecting status of 3 color signals for RGB key illumination.
	36 MechaClose Position Confirmation	Confirming flap close and displaying RPS value.
	37 PRODUCT INFORMATION	Display product information.

1. Version Information

Obtain version information for assigned software and display the information on screen with list display.

1. Program Version [The first page]

```

Version Information [Program Version] [1 / 3]
PLATFORM [ 1.000000 ]
IPL [ 0.020900 ]
BOOTLOADER [ 0.050600 ]
MECHA VERSION [ 01.01.04.00 ]
APL PROGRAM [ 0.500000 ]
CPU CORE [ 0.500001 ]
SYSTEM uCOM [ 7.03 ]
SYSTEM uCOM BOOT PROGRAM [ 7.03 ]
HDRADIO FIRMWARE VERSION [ 1.05 ]
NAND CID [ 0123456789abcdef0123456789abcdef ]

[LEFT-RIGHT]:Page [NAVI]:Return

```

Item	Item Contents	Information Display
PLATFORM	version of system software OS part	[* *****]: Value of Version [NO_SET]: No information
IPL	Version of product startup program	[* *****]: Value of Version [NO_SET]: No information
BOOTLOADER	Version of boot loader	[* *****]: Value of Version [NO_SET]: No information
MECHA VERSION	Version of DVD mechanism	[* *****]: Value of Version [NO_SET]: No information
APL PROGRAM	Version of navigation application	[* *****]: Value of Version [NO_SET]: No information
CPU CORE	Version of CPU core	[* *****]: Value of Version
SYSTEM uCOM	Version of system microcomputer	[* *****]: Value of Version [NO_SET]: No information
SYSTEM uCOM BOOT PROGRAM	Version of startup program for system microcomputer	[* *****]: Value of Version [NO_SET]: No information
HDRADIO FIRMWARE VERSION	Version of HD-Radio F/W NO_SET if HD-Radio is not mounted	[* *****]: Value of Version [NO_SET]: No information
NAND CID	Firmware ID of NAND Flash	[* *****]: ID value [GET_NG]: Acquisition failed

2. Model Information [The second page]

VERSION Information [Model Information] [2 / 3]

```

PRODUCT NUMBER      [ AVIC-XXXXXXXX ]
NAVI INFORMATION    [   XX123   ]
NAND DATA PARTS CODE [ CWW1234- ]
NAND VERSION        [ PC5-2-c ]
VOLUME INFORMATION  [   1   ]
REGION CODE         [   6   ]

```

[LEFT-RIGHT]:Page [NAVI]:Return

Item	Item Contents	Information Display
PRODUCT NUMBER	Product Model Number	[AVIC-X930BT/XNUC]: North America LO Model (AVIC-X930BT/XNUC, AVIC-X9310BT/XNUC) [AVIC-F930BT/XNAU]: Australia LO Model [NO_SET]: No information
NAVI INFORMATION	Planning Model Number	[NX072/UC]: North America LO Model (AVIC-X930BT/XNUC, AVIC-X9310BT/XNUC) [NX072/AU]: Australia LO Model [NO_SET]: No information
NAND DATA PARTS CODE	Parts number of Data Set in NAND-FLASH	[CWW****-]: Value of Version [NO_SET]: No information
NAND VERSION	Data Set Version of NAND-FLASH	[PC5-*-*]: Value of Version [NO_SET]: No information
VOLUME INFORMATION	Volume information of NAND-FLASH	[Vol.*]: Value of Version [NO_SET]: No information
REGION CODE	Region Code of DVD	[2]: Europe / Normal Region Code [1]: North America / Normal Region Code [5]: Russia / Normal Region Code [4]: Australia / Normal region Code * Values other than above are abnormal values. [NO_SET]: No information

3. Bluetooth Firmware Information [The third page]

VERSION Information [BT Information] [3 / 3]

```

Bluetooth Firmware      [ XXXXXXXXXXX ]

```

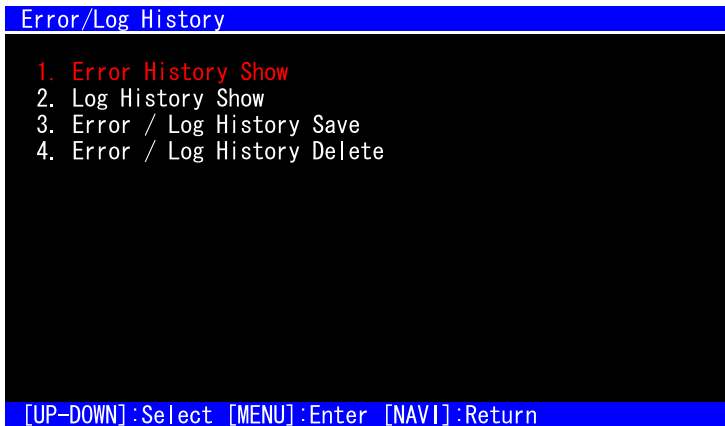
[LEFT-RIGHT]:Page [NAVI]:Return

Item	Item Contents	Information Display
Bluetooth Firmware	Bluetooth Firmware Version	[*****]: Value of Version [NO_SET]: No information

2. Error/Log History

Perform displaying each error history, saving the history into storage and clearing the history.

Menu Screen

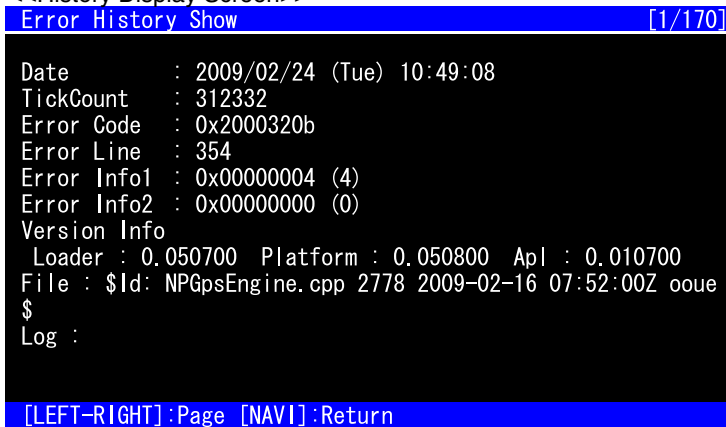


<<Item>>

1. Error History Show
Display error history currently saved.
2. Log History Show
Display execution log history currently saved.
3. Error / Log History Save
Save histories of error, log and exception files into storage.
4. Error / Log History Delete
Clearing of error, log and exception histories saved.

1. Error History Show

<<History Display Screen>>



- Date : Time of error recorded
- TickCount : Value of counter started counts at OS startup. 1 count is corresponding to 1 millisecond.
- Error Code : Error code
- Error Line : Number of lines on source code
- Error Info 1, 2 : Additional Information
- Version Info : Program version
Versions for boot loader, platform and application are displayed.
- File : Display file name where error happened.
- Log : Log information (The content is displayed only when saved)

2. Log History Show

The execution log is the execution history when specific operation is performed. (Not errors)

<<History Display Screen>>

```
Log History Show [1 /10]
Date       : 2009/02/24 (Tue) 10:49:08
TickCount  : 312332
Log        : uComUpdate Start
[LEFT-RIGHT]:Page [NAVI]:Return
```

Date : Time of error recorded
 TickCount : Value of counter started counts at OS startup. 1 count is corresponding to 1 millisecond.
 Log : Log information

3. Error / Log History Save

Histories of error, log and exception are saved in storage.

<< Selection Screen>>

```
Error / Log History Save
1. USB-Memory
2. SD-Card
[UP-DOWN]:Select [MENU]:Enter [NAVI]:Return
```

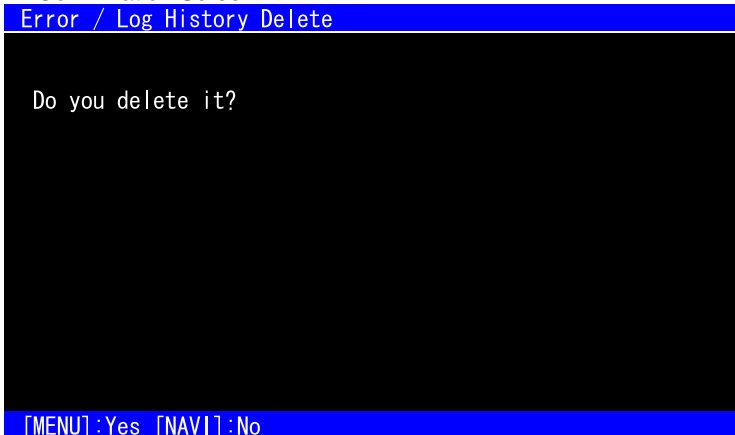
The history is saved in the following folder configuration;

```
SD or USB Memory
LOG
├─000
│  ├─error.txt  <- Error History
│  ├─log.txt    <- Log History
│  └─AstLog     <- Exception History Folder
│     └─DBMSG000.log
│     └─SYSER000.log
│     └─EMERG000.log
│     └─EMERG001.log
│        (Histories may be saved up to EMERG511.log)
```

4. Error / Log History Delete

Histories for error, log and exception are saved.

<<Confirmation Screen>>

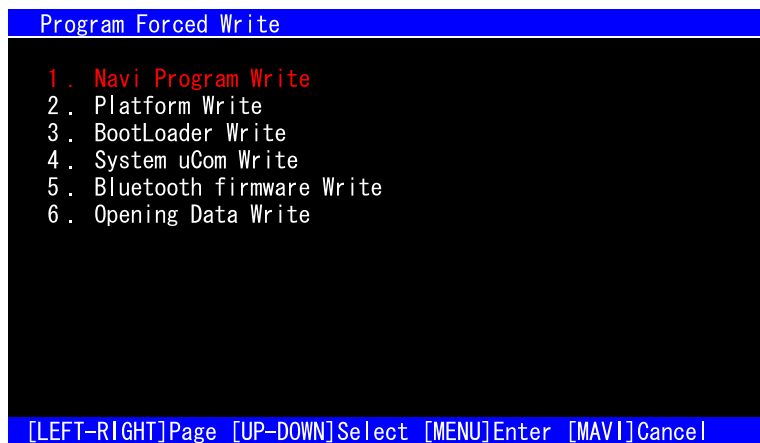


* If the copy processing results in failure, the fact it is failed is displayed on the screen.

* You can also continue other inspection without turning OFF the power supply when the deletion is completed. However, take note that the exception history is not saved in that case.

3. Program Forced Write

The written program is selected from the menu.



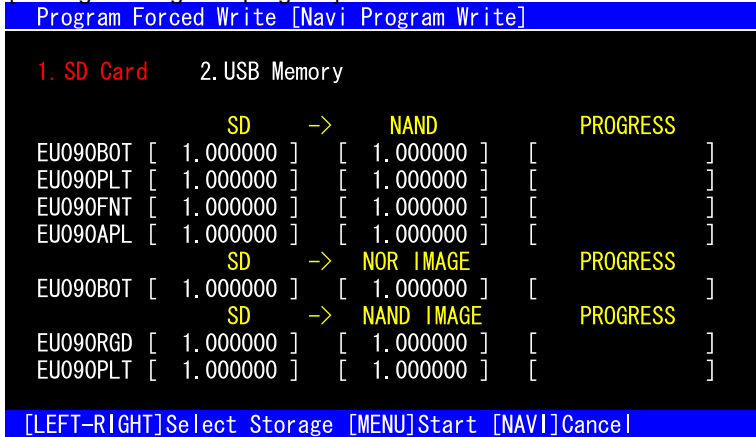
<<Item Description>>

- | | |
|-----------------------------|--|
| 1. Navi Program Write | ... Normally the following programs which perform automatic version up are all written; |
| | - Boot loader software |
| | - Platform software |
| | - Font data |
| | - Application software |
| 2. Platform Write | ... Only platform software is written. |
| 3. BootLoader Write | ... Only boot loader software is written. |
| 4. System uCom Write | ... System microcomputer software is written. |
| 5. Bluetooth Firmware Write | ... Firmware of Bluetooth chip is written. |
| | * Normal writing becomes unable if power is off during the writing. On this occasion, please retry firmware writing. |
| 6. Opening Data Write | ... Startup screen data is written. |

Select Storage Screen

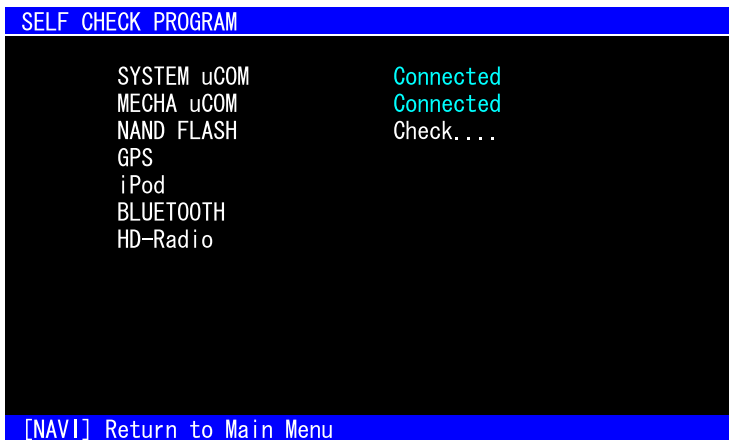
Select the program should be written from SD card or USB memory.
Instruct the start of program writing.

[Writing of navigation program]



4. SELF CHECK PROGRAM

The connection status of function module installed in the product is displayed.
In the case of non-connection, error is displayed and the target module is considered to be fault.



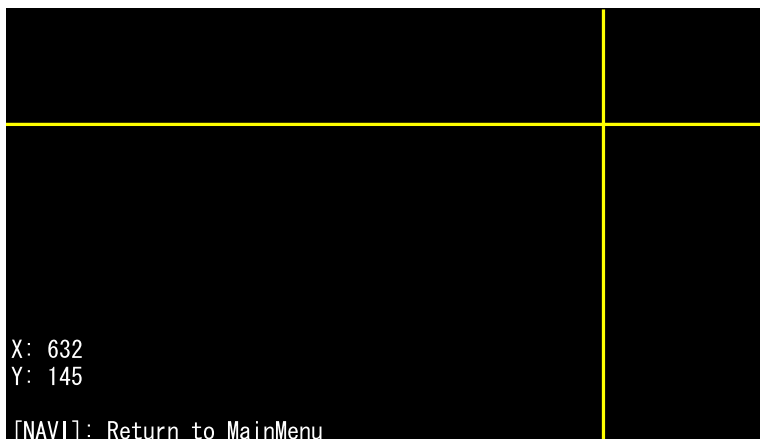
Diagnostic Target

	Target Unit	Check Content	Required Time for Diagnosis	Indication when OK	Indication when NG
1	System uCom	Confirm connection status	Less than 1 second	Connected	!!ERROR!!
2	Mecha uCom	Confirm connection status	Less than 1 second	Connected	!!ERROR!!
3	NAND Flash	Confirm connection status	Less than 1 second	Connected	!!ERROR!!
4	GPS RF Unit	Confirm connection status	Less than 1 second	Connected	!!ERROR!!
5	iPod Authentication Chip	Confirm connection status	Less than 1 second	Connected	!!ERROR!!
6	Bluetooth Unit	Confirm communication setup status	Approx. 60 seconds, max.	Connected	!!ERROR!!
7	HD-Radio	Confirm connection status	Less than 1 second	Connected	!!ERROR!!

* HD-Radio becomes always ERROR for the model on which is it not mounted.

5. Touch Panel Check

At the touch panel check, X, Y coordinates of location where touched are obtainable.



When touched, the coordination value where touched is displayed as well as vertical and horizontal lines are illustrated with the cross point at the touched location. The coordination value is set as the original point at upper-left and X coordinate to the right and Y coordinate to the down, and maximum value of X coordinate is 800 and of Y coordinate is 480.

6. Touch Panel Test

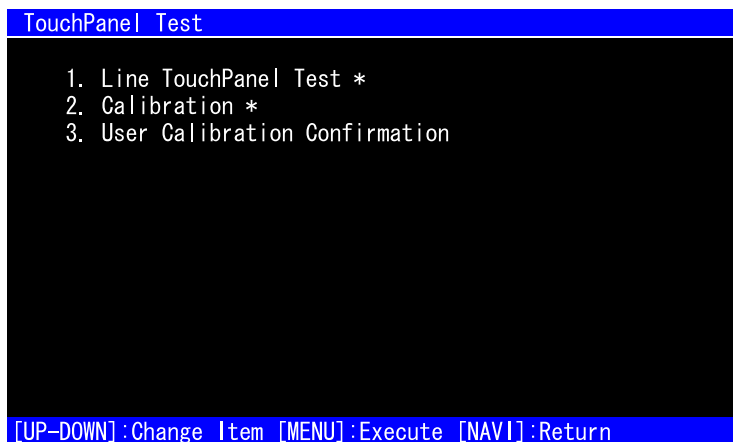
The following two items are performed at the touch panel test;

1. Line Touch Panel Test
2. Calibration Test
3. User Calibration Confirmation

The line touch panel test is the test for determining whether touch panel is out of alignment or not by depressing four points displayed on the screen.

At the calibration test, calibration adjustment is performed to compensate the misalignment of the touch panel. User touches displayed 17 points in order and correction is automatically performed after touching.

At the User Calibration Confirmation, it is displayed that whether the user has executed calibration adjustment or not.



1. Line Touch Panel Test

Touch the illustrated points in order.

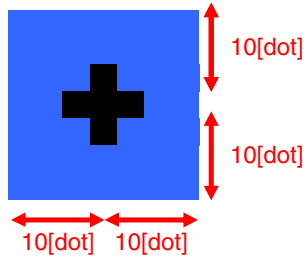
If touched incorrectly, + mark is displayed in red.

When the touching proceeded to the final point of four (4), [OK] is displayed and the test is completed.

When depressing [HOME] key, [NG] is displayed and return to the menu screen.

Key operation	Key assignment
Return to Main Menu	HOME

The condition to be OK (move to the next point) when illustrated point is touched is that the touched point should be within the following range;



If the touched point is within 10 dots from the center, the touch is determined as valid.

2. Calibration Test

Touch the illustrated points in order.

Unlike the line touch panel test, move to the next point after touching.

You are not able to exit from the test until all 17 points are touched.

When touching on 17 points is completed and calibration is successful, [FINISHED] is displayed and if the calibration is unsuccessful, [NG] is displayed.

Return to main menu with [HOME] key.

Key operation	Key assignment
Return to Main Menu	HOME

3. User Calibration Confirmation

The following is displayed when

User already performed calibration FINISHED

User not performed yet calibration NOT FINISHED

7. Monitor Test Mode

Adjustment or test related to monitor is able to be performed.

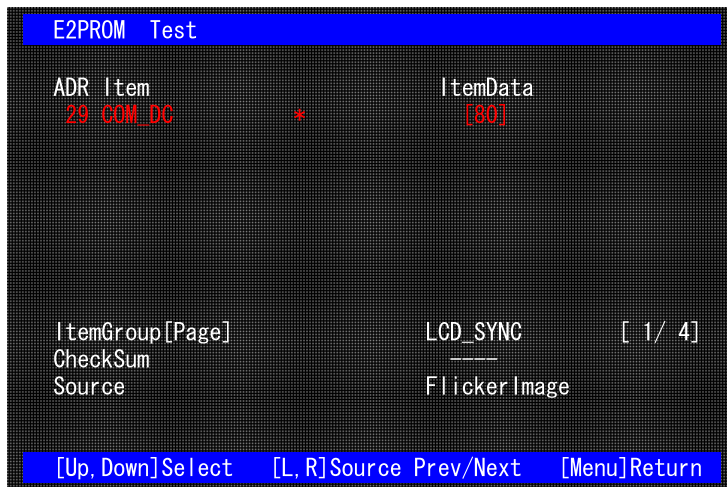
Menu Screen



<<Menu Items>>

Menu	Contents
1. E2PROM Test	Change the value of E2PROM related to monitor display.
2. Service Test	Flicker adjusting mode for service.
3. Backlight Test	Change backlight setting value.
4. Illumination RGB Test	Change illumination RGB setting values.
5. E2PROM Initialize	Perform initialization of E2PROM.

1. E2PROM Test



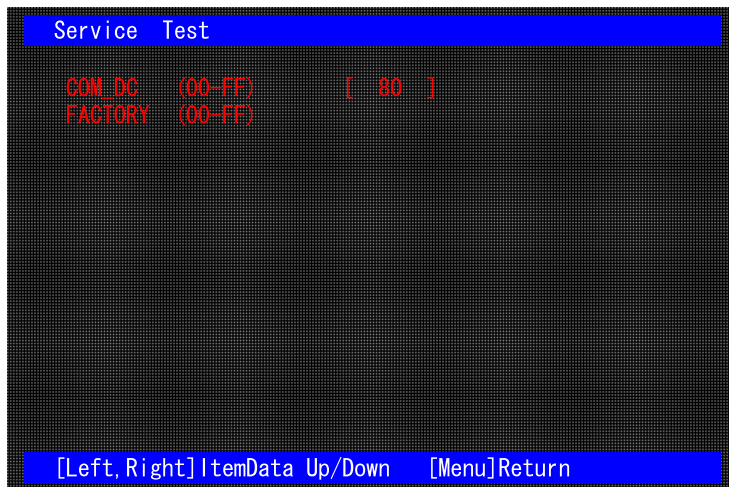
<<Items>>

Item	Item Contents
ADR	Display address of adjustment item in hexadecimal number.
Item	Display adjustment item name whose setting value is adjustable.
ItemData	Display the setting value of adjustment item which is indicated in the Item in hexadecimal number.
ItemGroup[Page]	Display group name and page number of adjustment item indicated on screen. The number of pages is indicated in decimal.
CheckSum	Display the checksum of adjustment item group displayed on screen in hexadecimal. In the case of group which does not have checksum, the value is indicated as -----.
Source	Display the source name of image indicated as background.

2. Service Test

No need to perform this 'Service Test'

Flicker adjustment is done in a LCD unit, because LCD specification is changed
It is possible to change the 'COM_DC' value on the screen, but it doesn't affect the flicker of the screen.



<<Items>>

Item Name	Contents
COM_DC	Display COM_DC value (center value of common inversed output) in hexadecimal. This is also adjustable.
FACTORY	Display the factory shipping out reference value of COM_DC value in hexadecimal. This is just the item for indication and not adjustable.

3. Backlight Test

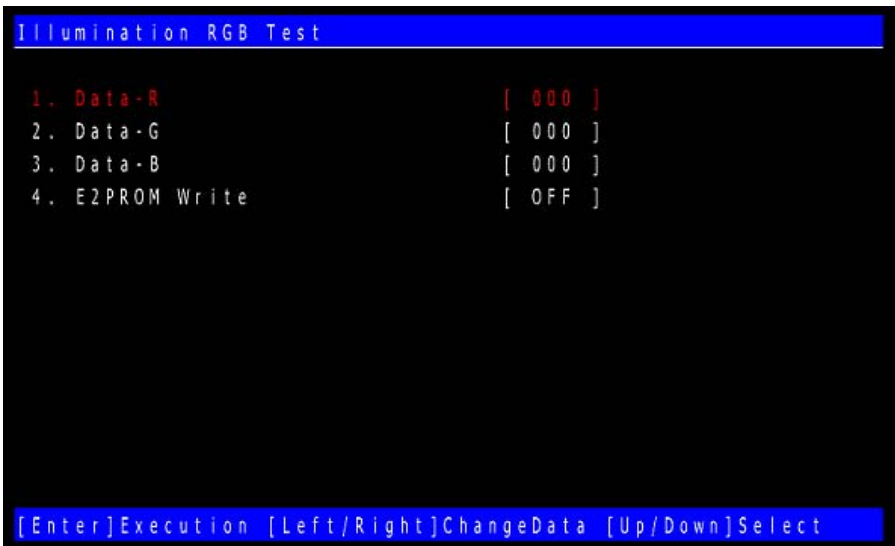


<<Items>>

Item Name	Contents
Backlight Brightness Data	Current backlight brightness (microcomputer saved value).
Backlight Brightness Chg	Backlight brightness is adjustable by the set value.

4. Illumination RGB Test

* This function does not operate for this model.



<<Items>>

Item Name	Contents
Data-R	R (Red) data value
Data-G	G (Green) data value
Data-B	B (Blue) data value
E2PROM Write	ON/OFF setting of writing to E2PROM

5. E2PROM Initialize

[Range Selection Screen]



<<Items>>

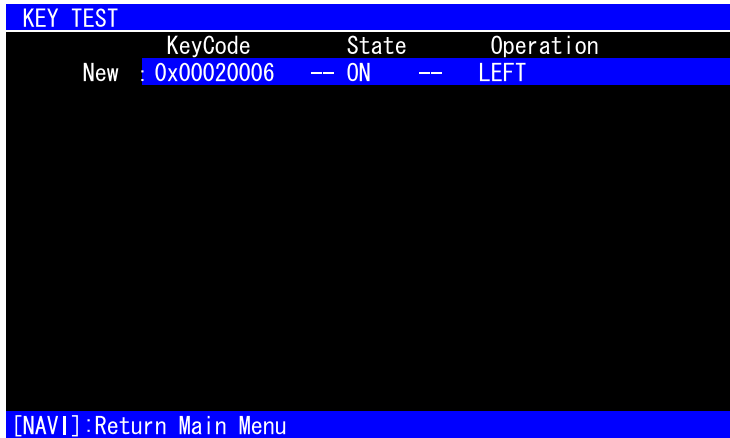
Item	Item Contents
All Initialize	Perform initialization of E2PROM entire region.
Part Initialize	Perform initialization of E2PROM specified region (Region assigned by the Design Division).

8. Key Test

At the key entry test, key code of the hard key depressed, depressed/released status and key description are displayed.

Retaining up to 12 histories is also possible.

Test Screen



The indication of each key allocated is shown below.
When [HOME] key is depressed, however, it returns to the main menu.

Key Name	Key Code	Operation Description
EJECT	0x00000001	DISC EJECT
MODE	0x20000013	NAVI/AV
VOL UP	0x20000008	VOL UP
VOL DOWN	0x20000009	VOL DOWN
LEFT	0x20000006	LEFT
RIGHT	0x20000007	RIGHT
VOICE UI	0x2000001a	VOICE RECOGNITION
HOME+LEFT	0x0002001b	MENU+LEFT
HOME+RIGHT	0x0002001c	MENU+RIGHT
LEFT+MODE	0x0002001d	LEFT+NAVI/AV
EJECT+MODE	0x0002001e	EJECT+NAVI/AV

9. Port Test

At this test, port status of each item is displayed as Hi/Low.

Port Test	
Port Name	State
1. External RDS/MSNDirect Connection Sense Port	: HI
2. GPS Antenna Open Sense Port	: LOW
3. GPS Antenna Short Sense Port	: LOW
4. For Develop Sense Port	: HI
5. USB OverCurrent Protection Sense Port	: HI

[NAVI] :Return

The following port status is able to be confirmed.
Each description for port is as follows;

1. Detection of External RDS/MSNDirect Connection:

At this port, the status of external RDS/MSNDirect connection detection port is displayed.
Hi: Connection detected Low: Connection not detected
2. Detection of GPS Antenna Open Sense:

At this port, the status of GPS antenna OPEN detection port is displayed.
Hi: GPS antenna open status is detected. Low: GPS antenna not-open status is detected.
3. Detection of GPS Antenna Short Sense:

At this port, the status of GPS antenna short-circuit detection port is displayed.
Hi: GPS antenna short-circuit status is detected. Low: GPS antenna not shorted-circuit status is detected.
4. Input for Development Purpose:

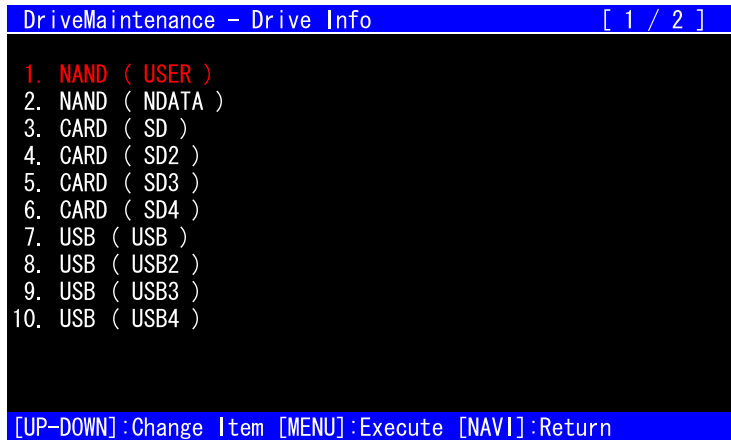
At this port, the input status of port prepared for development is displayed.
Hi: Detected Low: Not detected. (Normal Operation)
5. High side SW Overcurrent Detection Signal Input for USB Overcurrent Protection:

At this port, status is displayed as the detection of short-circuit of power supply for iPod (USB).
Hi: Normal operation Low: Short-circuit detected

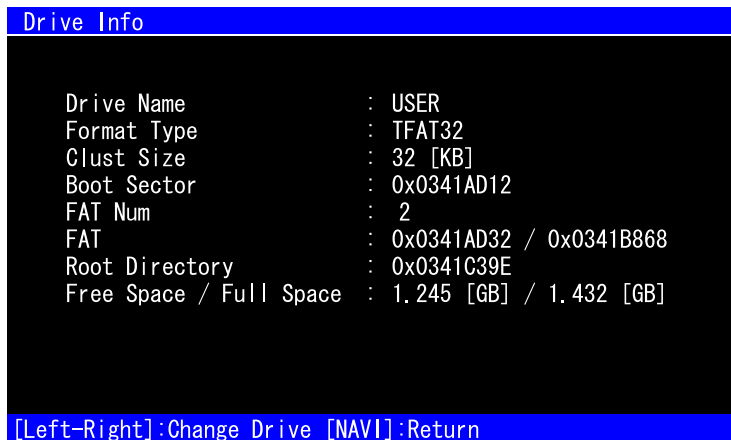
10. Drive Maintenance

In this test, each drive information is displayed and scan disc of NAND file is performed.

Drive Information



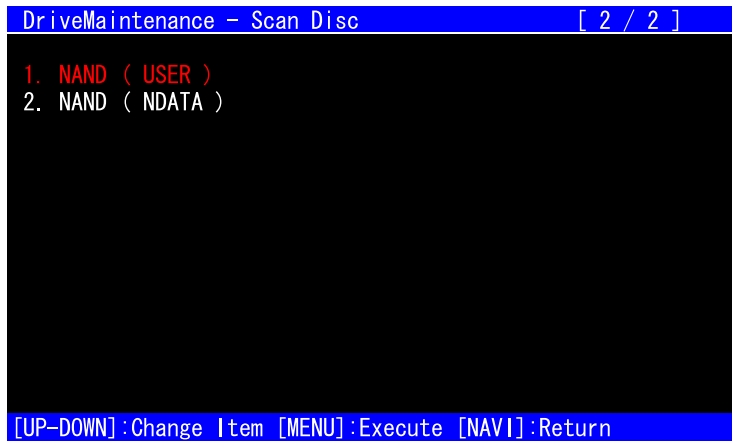
Drive Information Display Page



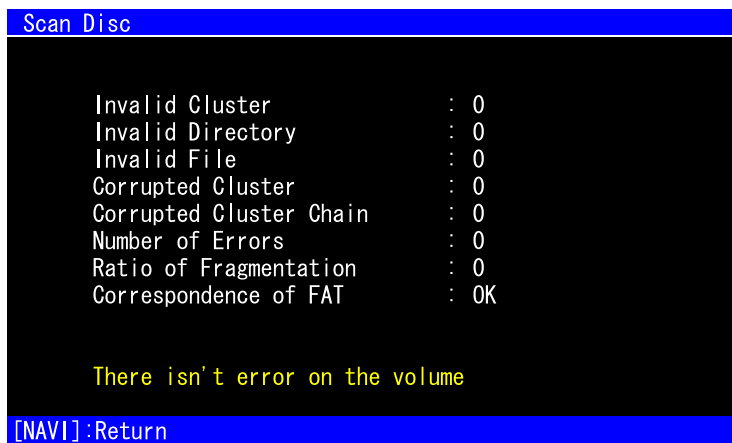
When drive information failed to be obtained, "Drive Information failed to be obtained" is displayed and an error number is displayed subsequently. Error numbers and cause of errors are as follows;

Error number	Cause of Error
20005700	Drive is not found
20005701	Device open failed
20005702	Formatting failed
20005703	Scan disc failed
20005704	Defragmentation failed
20005705	Mounting failed
20005706	Un-mount failed
20005707	Number of partition failed to be obtained
20005708	Read failed
20005709	Write failed
2000570a	Flash failed
2000570b	Partition Table incorrect
2000570c	Boot sector incorrect
2000570d	Not supported drive
2000570e	Drive information failed to be obtained
2000570f	No consecutive vacant region exists
20005710	Device connection failed to be released
20005711	Device connection start failed
20005712	Synchronous object generation failed
20005713	Incorrect parameters

Scan Disc



Screen for Executed Result of Scan Disc

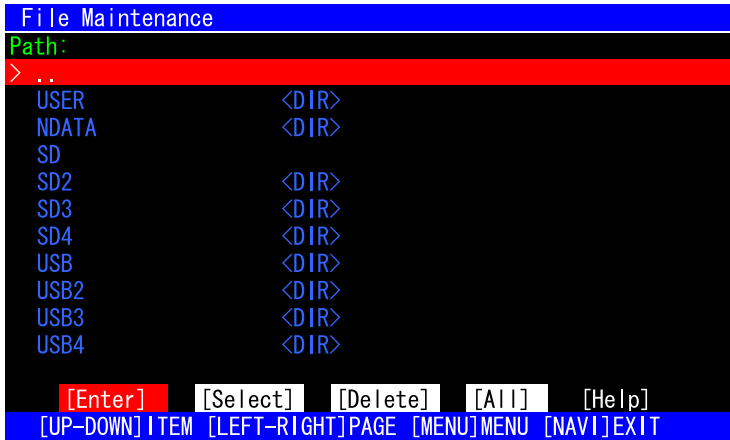


In the case of total error number being zero after the execution of scan disc, "There isn't error on the volume" is displayed.

11. File Maintenance

This test provides the capability to manage files in each directory. In concrete terms, deletion of directory and execution of dumping are possible.

Operation Screen for the First Phase



The following 10 directories are becoming as the most significant directories. USER/NDATA/SD/SD2/SD3/SD4/USB/USB2/USB3/USB4

The current file path is displayed on the first line. Also, the directory under selection is marked in red and ">" is displayed at the left side of directory name.

Operable items are five (5) items, [Enter], [Select], [Delete], [All] and [Help].

- [Enter] : Enter into the next phase in the directory selected.
The content of file is displayed during a file is under selection.
- [Select] : Multiple number of directory or file is selectable.
"+" is displayed at the left side of directory or file name under selection.
By depressing [MENU] during the selection of directory or file, selection status is released and "+" indication disappears.
- [Delete] : Delete the selected directory.
Collective deletion is possible during multiple numbers of directories are selected.
- [All] : Select all of directories or files at the current phase.
All are marked in red and "+" is indicated.
By depressing [MENU] during the selection of directory or file, selection status is released and "+" indication and red mark disappear.
- [Help] : "Help" is displayed.

When the operation item is marked in white, the operation is unable to be executed.

Regarding Display Method

SYSTEM	<DIR>			
gpspara0	.bin	AR	69K	05/01/02 01:30
①	②	③	④	⑤

- ① Name of Directory/File
- ② At the time of Directory: <DIR> Indication
At the time of File: Extension Indication
- ③ Displaying File Attribute (Only at the time of file)
W : Writing Approval Attribute
R : Writing Prohibition Attribute
H : Hidden Attribute
A : Archive Attribute
S : System Attribute
- ④ File Size (Only at the time of file)
- ⑤ Time of Update (Only at the time of file)

12. GPS Information

At this test item, various values or status which is receivable from GPS are displayed.

Screen Display

* The First Page [Position]

GPS Information						
3D	T8	H	5.2	V	1.7	2008/07/23/13:56:34
SV	16	29	30	31		Delay 0.6
Lat	N 35 55 40.3		Lon	E 139 25 33.4		Alt -15
Vel	Head	Climb	Laxis	Saxis	Angle	
0.0	155.8	0.1	12	9	78.8	
Position		Sv Stat		Diag		Err Info
[L-R]:Select Item		[NAVI]:Return to MainMenu				

3D	T8	H: 5.2	V: 1.7	2008/07/23/13:56:34
①	②	③	④	⑤

SV	16	29	30	31	Delay 0.6
⑥					⑦

- ① Positioning Status
- ② Number of Satellite where positioning is possible
- ③ Horizontal Accuracy for HDOP
- ④ Altitude Accuracy for VDOP
- ⑤ GPS Time
- ⑥ Satellite Vehicle Number in Acquisition
- ⑦ Delay Time

Lat	N 35 55 40.3		Lon	E 139 25 33.4		Alt -15
⑧			⑨			⑩

Vel	Head	Climb	Laxis	Saxis	Angle
0.0	155.8	0.1	12	9	78.8
⑪	⑫	⑬	⑭	⑮	⑯

- ⑧ Latitude
- ⑨ Longitude
- ⑩ Altitude
- ⑪ Velocity in Horizontal Direction
- ⑫ Azimuth of Velocity in Horizontal Direction
- ⑬ Velocity in Vertical Direction
- ⑭ Long Axis of Error Ellipsoid
- ⑮ Short Axis of Error Ellipsoid
- ⑯ Long Axis Inclination of Error Ellipsoid

* The Second Page [Sv Stat]

GPS Information

3D T8 H 5.2 V 1.7 2008/07/23/13:56:34

SV	Azi	Ev	SNR	Flag	Acc	SV	Azi	Ev	SNR	Flag	Acc
14	168	72	35.0	UY--	2	5	49	25	38.0	--C-	2
30	40	50	41.0	UY--	2	32	296	19	33.0	--C-	2
29	106	46	40.0	UY--	2	12	47	11	34.0	--C-	2
31	310	46	39.0	UY--	2	20	315	6	33.0	--C-	2
16	234	19	36.0	UY--	2						
22	198	10	35.0	UY--	2						

Position Sv Stat Diag Err Info
[L-R]:Select Item [NAVI]:Return to MainMenu

SV	Azi	Ev	SNR	Flag	Acc	SV	Azi	Ev	SNR	Flag	Acc
14	168	72	35.0	UY--	2	5	49	25	38.0	--C-	2

① ② ③ ④ ⑤ ⑥

- ① Satellite Vehicle Number in Acquisition
- ② Azimuth
- ③ Elevation Angle
- ④ Received Signal Level
- ⑤ Positioning Status
- ⑥ Accuracy

* The Third Page [Diag]

GPS Information

2008/07/23/13:56:34

Channel 12

Antenna Short OK

Antenna Open OK

Backup Error OK

Position Sv Stat Diag Err Info
[L-R]:Select Item [NAVI]:Return to MainMenu

- Channel : GPS Diagnostic Result
- Antenna Shot : Detection of Antenna Short Circuit
- Antenna Open : Detection of Antenna Open Circuit
- Backup Error : Detection of Backup Error

* The Fourth Page [Err Info]

GPS Information				
#	Count	Number	Week	Time
1	1	122	-1	8:59:59 (SUN)
2	1	121	-1	11:59:59 (SUN)
3	0	0	0	--:--:-- (---
4	0	0	0	--:--:-- (---
5	0	0	0	--:--:-- (---
6	0	0	0	--:--:-- (---
7	0	0	0	--:--:-- (---
8	0	0	0	--:--:-- (---
9	0	0	0	--:--:-- (---
10	0	0	0	--:--:-- (---

Position Sv Stat Diag Err Info
 [L-R]:Select Item [NAVI]: Return to MainMenu

#	Count	Number	Week	Time
1	1	122	-1	8:59:59 (SUN)

① ② ③ ④ ⑤

- ① Count
- ② Error Number
- ③ Week of Error
- ④ Time of Error Happened
- ⑤ Day of the Week Happened

13. GPS Assessment

Version information for GPS driver and sensor module are displayed on the screen.

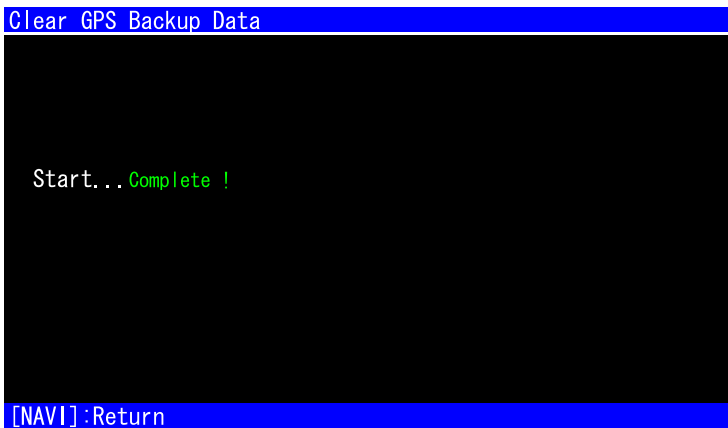
GPS assessment	
GPS DRIVER :	V6.0-BN0.0
SENSOR :	Ver. 20.00

[NAVI]:Return

14. Clear GPS Backup Data

Perform the resetting of GPS driver, clearing backup data and display the result on the screen.

[At the time when the clearing of GPS backup is successful]



[At the time when the clearing of GPS backup is unsuccessful]

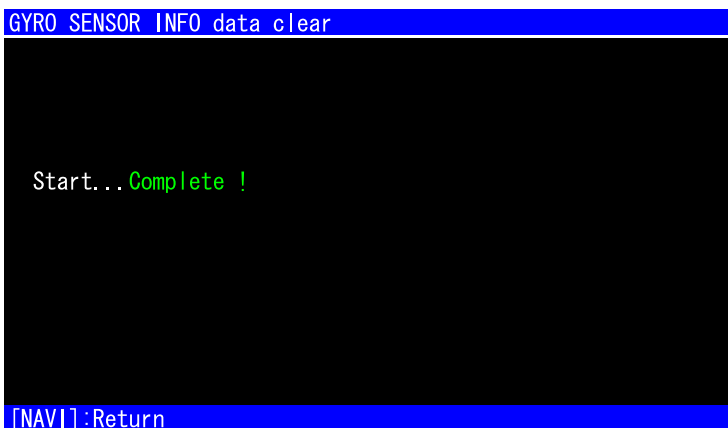
If GPS backup clearing results in failure, "ERROR!" is displayed.

15. GYRO SENSOR INFO Data Clear

Perform the clearing of learning degrees in gyro sensor and display the results on the screen.

At the same time, clear the learning data saved in FLASH and SRAM.

[At the time when the clearing of learning degree in Gyro Sensor is successful]

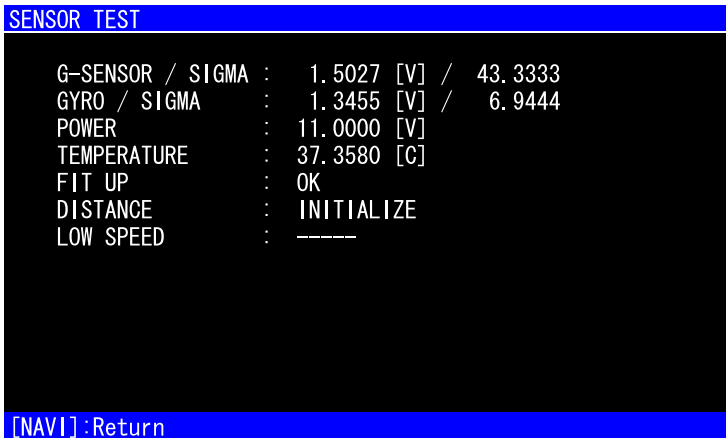


[At the time when the clearing of learning degree in Gyro Sensor is unsuccessful]

If the clearing of learning level in gyro sensor results in failure, "ERROR!" is displayed.

16. SENSOR Test

Sensor information (AD value, running status, installation status on main body and error at sensor learning) is displayed on the screen.



G SENSOR / SIGMA : Display of G-sensor voltage value
 GYRO / SIGMA : Display of GYRO voltage value
 POWER : Display of power supply voltage
 TEMPERATURE : Display of Temperature
 FIT UP : Display of installation status
 DISTANCE : Display of distance calculation status
 LOW SPEED : Display of the lowest output speed of low speed NG vehicle
 (Depending on the status of DISTANCE)

Display Content of FIT UP

Display	Status
NG	Installation Position, NG
OK	Installation Position, OK (The third-best)
OK(Better)	Installation Position, OK (The second-best)
OK(Best)	Installation Position, OK (The best)

Display Content of DISTANCE

Display	Status
INITIALIZE	Sensor under initial learning
GPS	GPS Distance (Pulse not connected at the model without G sensor)
G-SENSOR	G sensor distance (Simplified hybrid)
ND-PG1	ND-PG1 Distance
SPEED PULSE	Vehicle speed pulse distance

Display Content of LOW SPEED

DISTANCE	Status of SPEED PULSE	Display
SPEED PULSE	Low speed vehicle speed pulse under learning	CHECK
	Low speed vehicle speed pulse, OK	OK
	Low speed vehicle speed pulse, NG	NG
Others		-----

17. Bluetooth Test

A Emit radio wave for Bluetooth authentication.

Screen at the Time of Start

First, display the following screen.

Bluetooth Test - RF TestMode

BT OPEN...

B

Display sub menu screen after the completion of internal processing.

Screen in Case of Error

Bluetooth Test - RF TestMode

!!! BT OPEN ERROR !!!

D

[Cancel] : Return

Return to the main menu with [HOME] key.

This screen is also displayed when Bluetooth is internally used in other test.
Please execute Bluetooth Unit test again after depressing [HOME] key or resetting.

0. Sub Menu Screen

Bluetooth Test - RF TestMode

1. External Analyzer Test
2. Output Frequency Channel Test
3. Output Frequency Channel Extended Test

E

[UP-DOWN] : Select [MENU] : Enter [Cancel] : Return

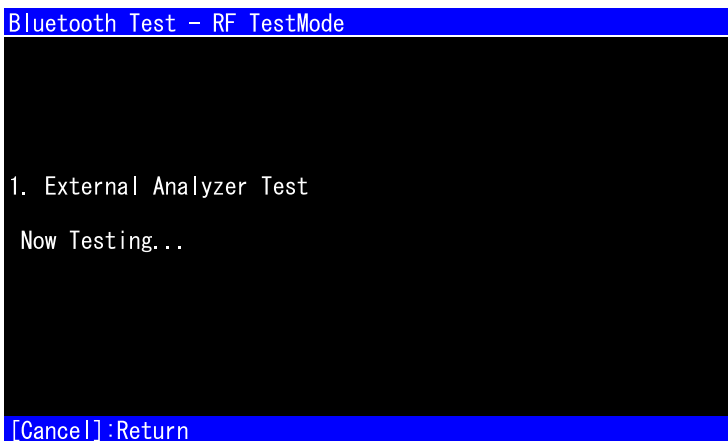
F

Select item with [↑], [↓] keys and determine with [MODE] key.
Return to the main menu with [HOME] key.

1. External Analyzer Test

Select [1. External Analyzer Test] from sub menu, the screen changes to the following by depressing [MODE] key and the radio wave is emitted.

Screen under Radio Wave Emission

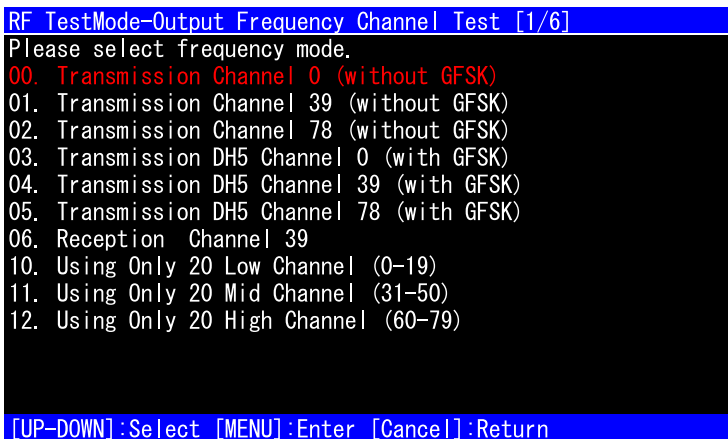


Please start the measurement.

Return to the sub menu with [HOME] key.

2. Output Frequency Channel Test

Select [2. Output Frequency Channel Test] from sub menu, the screen changes to the following by depressing [MODE] key, and then select a pattern.



Select a page with [←], [→] keys.

Select an item with [↑], [↓] keys.

Emit the radio wave of pattern selected with [MODE] key.

Return to the sub menu with [HOME] key.

There are six pages of selection patterns.

Items 10, 11, and 12 on page 1 cannot be used. "MODE SET ERROR!!!" is displayed.

Execute the test of these items on pages 4, 5, and 6 separately.

(The content of the test is 10, 11, and 12 of items 36 to 44)

<p>Page 1</p> <p>00. Transmission Channel 0 (without GFSK) 01. Transmission Channel 39 (without GFSK) 02. Transmission Channel 78 (without GFSK) 03. Transmission DH5 Channel 0 (with GFSK) 04. Transmission DH5 Channel 39 (with GFSK) 05. Transmission DH5 Channel 78 (with GFSK) 06. Reception Channel 39 10. Using Only 20 Low Channel (0-19) 11. Using Only 20 Mid Channel (31-50) 12. Using Only 20 High Channel (60-79)</p>
<p>Page 2</p> <p>15. transmission channel 19(without GFSK modulation) 16. transmission channel 19(with GFSK modulation) 17. reception channel 19 18. reception channel 0 19. reception channel 78 30. transmission DH1 channel 39 31. transmission DH3 channel 39 32. transmission DH1 channel 0 33. transmission DH3 channel 0 34. transmission DH1 channel 78 35. transmission DH3 channel 78</p>
<p>Page 3</p> <p>36: transmission DH1with AFH activated 37: transmission DH3 with AFH activated 38: transmission DH5 with AFH activated 39: transmission 2-DH1 with AFH activated 40: transmission 2-DH3 with AFH activated 41: transmission 2-DH5 with AFH activated 42: transmission 3-DH1 with AFH activated 43: transmission 3-DH3 with AFH activated 44: transmission 3-DH5 with AFH activated</p>
<p>Page 4</p> <p>36_10. Using Only 20 Low Channel (0-19) 37_10 38_10 39_10 40_10 41_10 42_10 43_10 44_10</p>
<p>Page 5</p> <p>36_11. Using Only 20 Mid Channel (31-50) 37_11 38_11 39_11 40_11 41_11 42_11 43_11 44_11</p>
<p>Page 6</p> <p>36_12. Using Only 20 High Channel (60-79) 37_12 38_12 39_12 40_12 41_12 42_12 43_12 44_12</p>

Screen during the Emission of Radio Wave

Bluetooth Test – RF TestMode

00. Transmission Channel 0 (without GFSK)

Now Testing...

[Cancel] :Return

Selected test item and [Now testing.....] are displayed.
Please start the measurement.

Return to the sub menu with [HOME] key.

3. Output Frequency Channel Extended Test

Radio wave in which 7 items are set in detail is emitted.

Bluetooth Test – RF TestMode

1. Parameter Setting
2. Execute

[UP-DOWN] :Select [MENU] :Enter [Cancel] :Return

Select item with [↑], [↓] keys and determine with [MODE] key.
Return to the sub menu with [HOME] key.

Flow of Process

After the detailed setting which was performed on [1. Parameter Setting], select [2. Execute] and emit the radio wave which was set by depressing [HOME] key.

3-1. Parameter Setting

Select [1. Parameter Setting] and depress [HOME] key, then the screen becomes the item selecting screen below.

```
Bluetooth Test - RF TestMode
Please select Parameters.
1. Test Scenario      [ 0. Switch Off ]
2. Packet Type       [ 4. DH1 ]
3. Bit Pattern       [ 1. All 0 Pattern ]
4. Single Frequency  [ 2402 + 0 MHz ]
5. TX Burst Period   [ 2 ]
6. Scrambler Mode    [ 0. OFF ]
7. Power Level       [ 0. Power Level 0 ]
```

```
[UP-DOWN]:Select [MENU]:Enter [Cancel]:Return
```

Select item desired to be changed with [↑], [↓] keys and determine it with [MODE] key.
Return to Output Frequency Channel Extended Test menu with [HOME] key.

Setting screen for the selected item is displayed.

```
Bluetooth Test - RF TestMode
Please select test scenarios below:
0. Switch Off
1. TX Burst Mode
2. RX Burst Mode
3. RX Burst Mode with Data transparently sent to host
4. RX Burst Mode with Bit & Packet Error Measurement Mode
```

```
[UP-DOWN]:Select [MENU]:Enter [Cancel]:Return
```

Select item desired to be changed with [↑], [↓] keys.
Value is set with [MODE] key and return to Output Frequency Channel Extended Test menu.
Return to Output Frequency Channel Extended Test menu with [HOME] key.

* Setting of [4. Single Frequency] and [5. TX Burst Period] are numerical entry so the display method becomes as follows;



Move the digit of numerical value desired to be set (cursor indicated with blue color) with [←], [→] keys. Change the numerical value with [↑], [↓] keys. Value is set with [MODE] key and return to Output Frequency Channel Extended Test menu. Return to Output Frequency Channel Extended Test menu with [HOME] key.

In Case of Error Exists in the Setting Value



Value is set with [MODE] key and return to Output Frequency Channel Extended Test menu.

Please retry by entering correct value.

3-2. Execute

After the necessary setting is completed, select [2. Execute] from Output Frequency Channel Extended Test menu, then the set radio wave is emitted by depressing [MODE] key.

*The set content is able to be confirmed on the screen by depressing [HOME] key after selecting [1. Parameter Setting].

Bluetooth Test - RF TestMode

Now Testing...

Please check it with a tester.

[Cancel] : Return

Please start the measurement.

Return to Output Frequency Channel Extended Test menu with [HOME] key.

Setting Value of Output Frequency Channel Extended Test

1. Test Scenario
0. Switch Off
1. TX Burst Mode
2. RX Burst Mode
3. RX Burst Mode with Data transparently sent to host
4. RX Burst Mode with Bit & Packet Error Measurement Mode
2. Packet Type
4. DH1
11. DH3
15. DH5
36. 2-DH1
40. 3-DH1
42. 2-DH3
43. 3-DH3
46. 2-DH5
47. 3-DH5
3. Bit Pattern
1. All 0 Pattern
2. All 1 Pattern
3. 1010 Pattern
4. PRBS-9 Sequence
9. 11110000 Pattern
10. 1100 Pattern
4. Single Frequency
2402 + (00-93) MHz Value in parenthesis is able to be set arbitrarily.
5. TX Burst Period
(002-254) Value in parenthesis is able to be set arbitrarily
6. Scrambler Mode
0. OFF
1. ON
7. Power Level
0. Power Level 0
1. Power Level 1
2. Power Level 2
3. Power Level 3
4. Power Level 4

18. NAND Test

Perform the test on the read-write of NAND Flash.

1. Read Test

Perform reading one sector by one sector from NAND Flash by assigning a starting sector number.

```

NAND Test - Read Test

Last Sector      : 0x003AC054
Start Sector     : 0x00000000

Read Sector     :

[LEFT-RIGHT]Digit [UP-DOWN]Value [MENU]Start [NAVI]Return
  
```

This screen displays the following contents when error happens before getting into read test.

- In the Case of a Device Opening not Successful
Fail to open device.
- In the Case of Obtaining Device Information not Successful
Fail to get device informations.
- In the Case of Internal Buffer Generation not Successful
Fail to create internal buffer.

2. File Write Test

Write a file into NAND Flash by using File System.

The written file is saved in the path below.

USER¥SYSTEM¥TM¥WRITETST.DAT

```

NAND Test - File Write Test

File Name       : USER¥SYSTEM¥TM¥WRITETST.DAT
Write Size      : 10.000[MB]

Write           : 20%
Verify         :

[NAVI]Return
  
```

This screen displays the following contents when error happens at the file writing test.

- In the Case of a Device Opening not Successful
Fail to open device.
- In the Case of Obtaining Device Information not Successful
Fail to get device informations.
- In the Case of Internal Buffer Generation not Successful
Fail to create internal buffer.
- In the Case of Writing a File not Successful
File write error.
- In the Case of Verify not Successful
Fail to verify data.

19. Clearing FLASH User Area

Perform initialization/deletion of file data or variable which is used by the software of each navigation function (AV, One-Segment, GPS, etc.).

A confirmation screen is displayed once before the clearing is executed.
If [MENU] key is pressed, clearing / initialization is started.

USER'S AREA OF FLASH CLEAR

With [MENU] key, the following items executed.

CLEAR USER DATA OF NAND FLASH
CLEAR BACKUP VARIABLE
CLEAR SRAM DATA OF SOME MODULES

Push [NAVI] Key to Return to Main Menu.

Target of Deletion

	Module	Remarks
1	NAND User Area	Application USER¥RW USER¥SETUP
2	Backup Variable	
3	SRAM	RDS/TMC, AV, Application

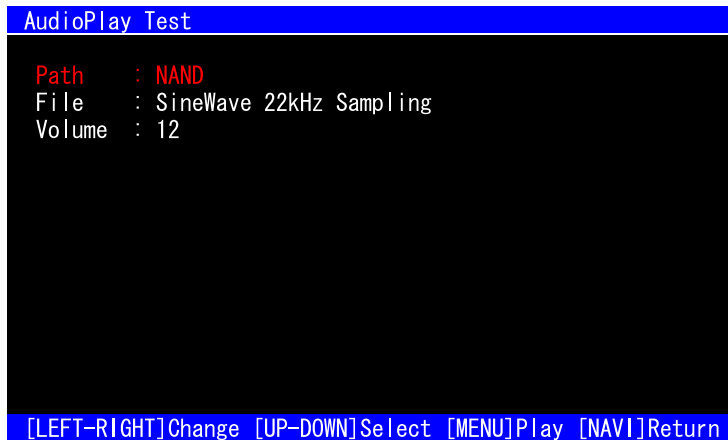
Error View

Displayed Error	Error Factor
No File to be Deleted	This is displayed when file or directory to be deleted is not found. In this case, the situation is not an error because file to be deleted does not exist on NAND-FLASH anymore.
CRC Error, Uncorrectable Error	This is displayed when data writing/reading is failed.
Device under Preparation	This is displayed when NAND-FLASH is under preparation (such as under mounting) and unusable.
Other Errors	Displayed when errors are other than above.

20. Audio Play Test

Perform the confirmation of guidance audio output line by playing audio file.
Audio is only played from the speaker in front.

File Selection Screen



<<Description of Screen>>

- Path : Media where audio play file is placed is selectable.
(NAND Flash/SD Card)
- File : File to be played is selectable.
Please refer to the following table for details of playing file.
- Volume : Audio volume is selectable from 0 to 31, in 32 steps.
Mute is applied when assigning 0.

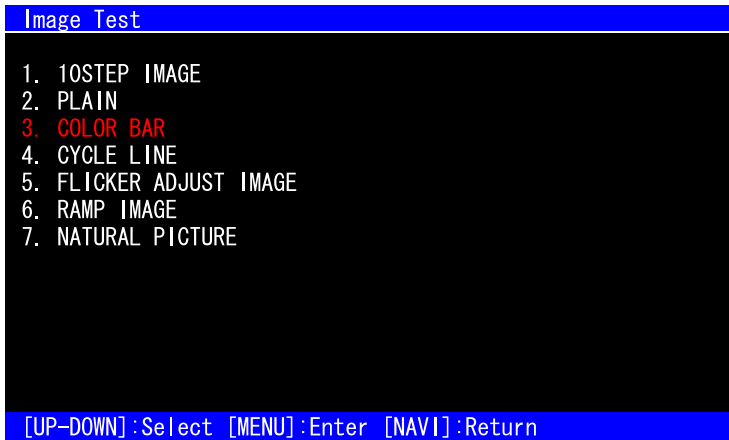
File Display	Description of File
SineWave 11kHz Sampling	Reproduce sinusoidal wave of 1KHz sampled with 11.025 KHz
SineWave 22kHz Sampling	Reproduce sinusoidal wave of 1KHz sampled with 22.05 KHz
Music 11kHz Sampling	Reproduce music file sampled with 11.025 KHz
Music 22kHz Sampling	Reproduce music file sampled with 22.05 KHz
Narration 11kHz Sampling	Reproduce narration sampled with 11.025 KHz
Narration 22kHz Sampling	Reproduce narration sampled with 22.05 KHz

Error information is displayed when error happened during test.

Display	Content of Error
File is not found.	This happens when play targeted file is not found.
Device open failed.	This happens when software setting for play is unsuccessful.
Fail to create internal buffer.	Securing memory required for play is unsuccessful.
Device Error.	Problem happens in software processing during audio playing.

21. Image Test

A Display a specified image.



B

1. 10STEP IMAGE

The grayscale bar of 10 step 11 tones is displayed.

2. PLAIN

The displayed colors are eight colors; blue, red, pink, green, pale blue, yellow, white, and black (the color that is displayed for the first time in this item is blue).

C

3. COLOR BAR

Eight colors; white, yellow, pale blue, green, pink, red, blue, and black of rectangles are drawn in this order from left.

4. CYCLE LINE

White and black belts drawn in 1pix to 8pix-cycle are displayed from above.

5. FLICKER ADJUST IMAGE

Gray and black with pixel value 128 are vertically drawn alternately one dot at once.

D

6. RAMP IMAGE

The grayscale bar of 32 tones is displayed horizontally.

7. NATURAL PICTURE

A Jpeg image for test in a directory in a predefined navigation is displayed.

If an image file with a name "Natural.jpg" is placed on the route or USB or SD, image files other than default image can be displayed.

E

F

22. External Connection Test

Display information regarding externally exposed terminals or sensors such as illumination terminals, vehicle speed pulse terminals, etc. Corresponding terminals are different depending on destination.

The status of item shown on the following figure is updated for every 0.5 second.

EXT CONNECTION TEST					
ILLUMINATION SIGNAL	OFF	PARKING BRAKE SIGNAL	ON		
REVERSE SIGNAL	ON	CAR SPEED SIGNAL	0		
TEMPERATURE SENSOR[CC]	1E2h				
TEMPERATURE SENSOR[LCD]	1E2h				
GYRO					

GYRO VOLTAGE	2.495V	OK	DELTA SIGMA	1.4	OK
GSENSOR					

GSENSOR VOLT	2.607V	OK	DELTA SIGMA	0.4	OK
KMODE	HI	TELMUTE			ON
RDS SENSE	ON				
[Push NAVI key to go to the menu]					

OK/NG Determination Condition

GYRO Test

OK/NG Determination of GYRO VOLTAGE

(Obtain the difference of gyro output value and offset standard value and perform OK/NG determination.)

Offset Standard Value : 1.35 [V]

- Within ± 0.025 [V] : Output Voltage OK (OK is displayed)
- Within $\pm 0.025 \sim \pm 0.05$ [V] : Within the allowable aging tolerance (USABLE is displayed)
- More than ± 0.05 [V] : Output Voltage NG (NG is displayed)

OK/NG Determination of DELTA SIGMA Value

(Perform variation determination from Gyro variance value)

- Less than 30.0 : Variation OK (OK is displayed)
- More than 30.0 : Variation NG (NG is displayed)

G SENSOR Test

OK/NG determination of G SENSOR VOLTAGE * Planned change of determination value.

(Obtain the difference of G Sensor output value and offset standard value and perform OK/NG determination.)

Offset Standard Value : 1.5 [V]

- Within ± 0.2 [V] : Output Voltage OK (OK is displayed)
- Within $\pm 0.2 \sim \pm 0.26$ [V] : Within the allowable aging tolerance (USABLE is displayed)
- More than ± 0.26 [V] : Output Voltage NG (NG is displayed)

OK/NG Determination of DELTA SIGMA Value

(Perform variation determination from G Sensor variance value)

- Less than 80.0 : Variation OK (OK is displayed)
- More than 80.0 : Variation NG (NG is displayed)

* USABLE Range is the OK range of parts in which aging change is taken into consideration.
(USABLE is displayed on the screen)

* OK Range is the value determined when shipping test.

* At the Service Quarter, please determine OK products as parts if it is in the range of USABLE.

Temperature Sensor Output Value

(Display temperature AD value of temperature sensor in hexadecimal expression)

- CC Part Temperature Sensor
2AB [- 30°C] ~ 10A [85°C] : Normal Operation Range (determination is not displayed)
Other than above: NG
- LCD Temperature Sensor
3F6 [- 25°C] ~ 015B [85°C] : Normal Operation Range (determination is not displayed)
Other than above: NG

A Conversion table of CC part temperature and LCD monitor part temperature

Monitor part

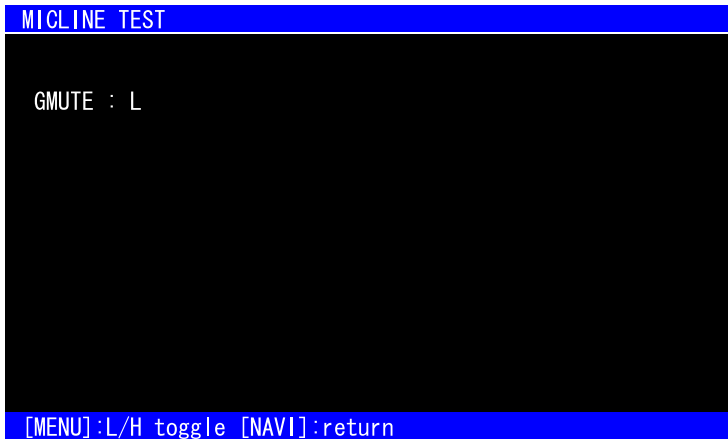
AD value (HEX value)	Temperature (°C)
03F6	-25.00
03F2	-20.00
03EC	-15.00
03E5	-10.00
03DC	-5.00
03D1	0.00
03C2	5.00
03B1	10.00
039B	15.00
0382	20.00
0365	25.00
0343	30.00
031E	35.00
02F4	40.00
02C8	45.00
0299	50.00
0269	55.00
0239	60.00
0209	65.00
01DA	70.00
01AD	75.00
0183	80.00
015B	85.00

CC part

AD value (HEX value)	Temperature (°C)
313	-60.0
302	-55.0
2F1	-50.0
2DF	-45.0
2CE	-40.0
2BD	-35.0
2AB	-30.0
29A	-25.0
288	-20.0
277	-15.0
265	-10.0
253	-5.0
241	0.0
22F	5.0
21E	10.0
20C	15.0
1FA	20.0
1E7	25.0
1D5	30.0
1C3	35.0
1B1	40.0
19E	45.0
18C	50.0
17A	55.0
167	60.0
155	65.0
142	70.0
12F	75.0
11C	80.0
10A	85.0
F7	90.0
E4	95.0
D1	100.0
BE	105.0
AB	110.0
97	115.0
84	120.0
71	125.0
5E	130.0
4A	135.0
37	140.0
23	145.0
F	150.0
0	154.0

23. Speech Microphone Line Test

Perform confirmation of speech microphone input line for audio recognition.
Input from the microphone is output from guidance audio line via AC97 Codec.
The confirmation of muting circuit on the guidance audio line is also confirmed by this test.



<<Screen Description>>

GMUTE : Mute setting on guidance audio line.

During "L" setting, microphone input is output from the front speaker.

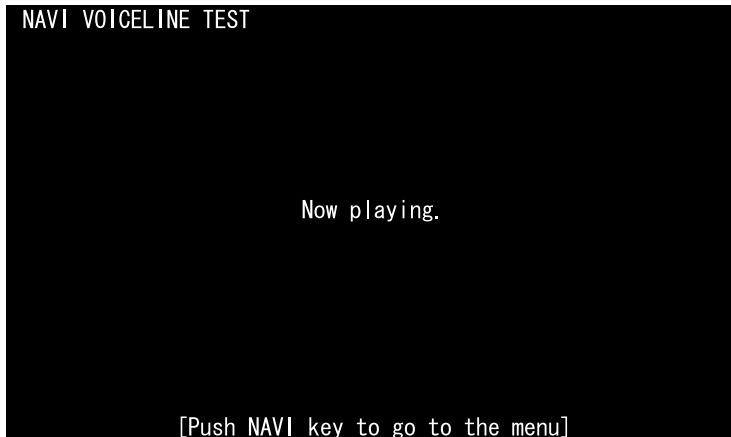
During "H" setting, muting status is set.

24. NAVI Audio Line Test

Perform the confirmation of audio line for SD/USB Audio.
Sinusoidal wave of 1 KHz, 0 dB, is used for audio data.
Audio is output from front/rear speakers.

* The speaker output is set to large since this test is prepared for production line.
Please be careful when you use it at service.

[Display of Test Screen]



Sinusoidal wave is output from the speakers as far as this screen is displayed.

The message display differs depending on error content.
Please refer to the following table for details;

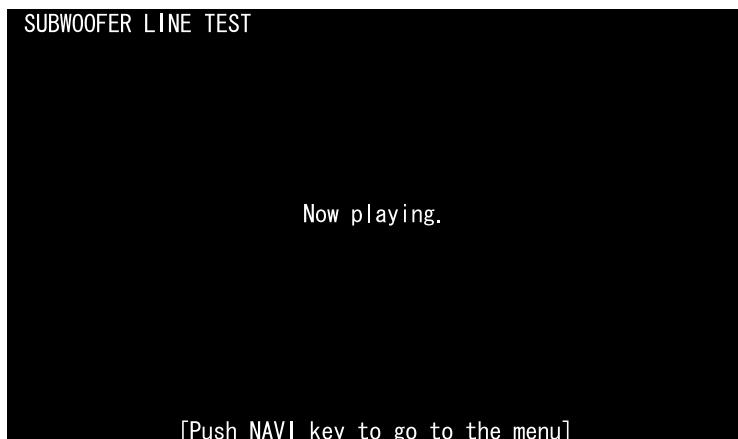
Message Displayed	Content
Failed to initial setting.	IC control on CC unit is unsuccessful. Possible hardware failure exists.
Failed to change volume.	Hard volume setting on AV unit is unsuccessful. Possible hardware failure exists.
Failed to change AV source.	Switchover to audio at navigation side is unsuccessful. Possible hardware failure exists.
Failed to mute off.	Mute releasing of AV source is unsuccessful. Possible hardware failure exists.
Device Open Error.	Software setting for playing sinusoidal wave is unsuccessful.
Device Error.	Problem happens in software processing during audio playing.

25. Subwoofer Line Test

This is the test for the pre-output line of subwoofer.
Sinusoidal wave of 100 Hz, 0 dB, is used for audio data.

- * Audio is also output from front/rear speakers during this test.
- * The speaker output is set to large since this test is prepared for production line.
Please be careful when you use it at service.

[Display of Test Screen]



Sinusoidal wave is output from the speakers as far as this screen is displayed.

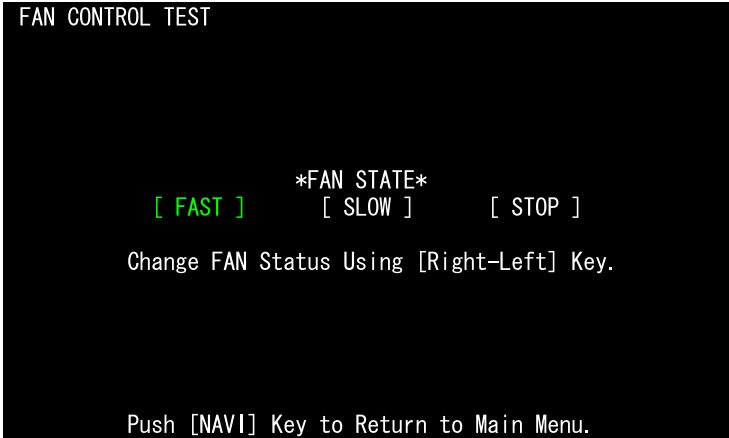
The message display differs depending on error content.
Please refer to the following table for details;

Message Displayed	Content
Failed to initial setting.	IC control on CC unit is unsuccessful. Possible hardware failure exists.
Failed to change volume.	Hard volume setting on AV unit is unsuccessful. Possible hardware failure exists.
Failed to change AV source.	Switchover to audio at navigation side is unsuccessful. Possible hardware failure exists.
Failed to mute off.	Mute releasing of AV source is unsuccessful. Possible hardware failure exists.
Device Open Error.	Software setting for playing sinusoidal wave is unsuccessful.
Device Error.	Problem happens in software processing during audio playing.

26. Fan Control Test

A

This is the item to test cooling fan installed at rear panel of product.
In a normal situation, revolution rate is automatically changed depending on the interior temperature of a fan however FAN revolution rate is able to be confirmed regardless of temperature during the test execution.



B

In the case of error happened at fan control while switchover fan speed, red screen shown below is displayed. The error contents are displayed at the bottom of screen. Please refer to [Error View] for the details of error factors.

C

Error View

Switchover	NG	Comment
STOP<=>SLOW	POWER CONTROL NG	This is displayed when fan power source control is unsuccessful.
STOP<=>FAST	POWER CONTROL NG	This is displayed when fan power source control is unsuccessful.
SLOW<=>FAST	SPEED CONTROL NG	This is displayed when fan speed control is unsuccessful.

D

E

F

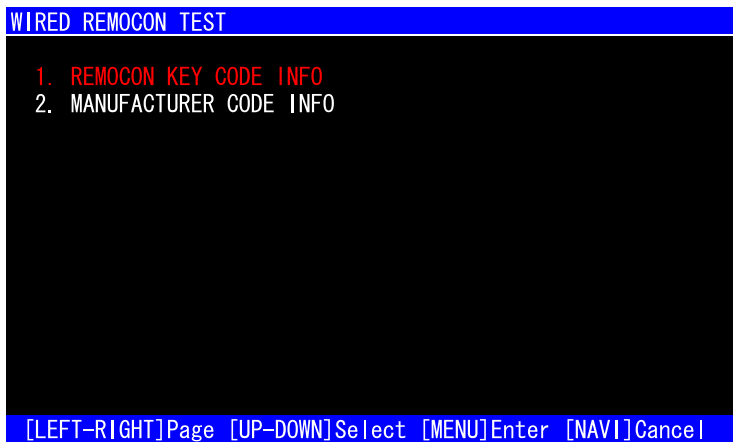
27. Wired Remote Control Test

Perform connection test for wired remote control.

1. Remote Control Key Code Input Information (REMOCON KEY CODE INFO)
When depressing the key of connected wired remote control, the depressed key is displayed on the screen.
2. Manufacturer Code Input Information (MANUFACTURER CODE INFO)
Manufacturer code of connected wired remote control is displayed on the screen.

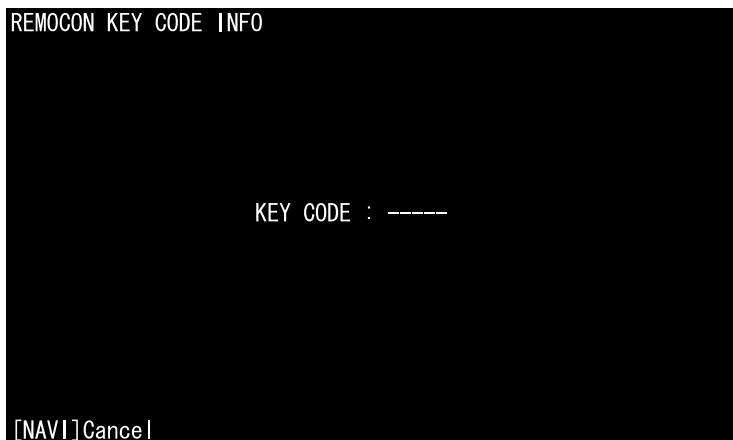
0. Wired Remote Control Test Menu

This is the menu screen for selecting items which configure this test.



1.1. Remote Control Key Code Obtainment (Key Code not obtained)

This is the case of key code not obtained.



1.2. Manufacturer Code Input Information

Key code is displayed by depressing connected wired remote control key or test jig key.
Update is not performed until another key is depressed.

REMOCON KEY CODE INFO

KEY CODE : *****

[NAVI]Cancel

Key Allocation	
SOURCE	0x00010002
ATT	0x00010003
UP	0x00010004
DOWN	0x00010005
LEFT	0x00010006
RIGHT	0x00010007
VOL UP	0x00010008
VOL DOWN	0x00010009
BAND	0x0001000A
PHONE	0x0001000B
ON HOOK	0x0001000C
OFF HOOK	0x0001000D
SAT TEXT	0x0001000E
Audio Recognition	0x0001001A

2.1. Manufacturer Code Input Information (Under Obtainment)

Obtain the manufacturer code for the connected wired remote control.

MANUFACTURER CODE INFO

Testing...Wait for a moment

[NAVI]Cancel

2.2. Manufacturer Code Input Information (Display)

Once the manufacturer code is obtained, the code is displayed.



[*] is replaced by the following value.

Manufacturer Code	Value
A: TOYOTA, DAIHATSU	0A
B: HONDA	0B
C: MATSUDA	0C
D: SUBARU	0D
E: MITSUBISHI	0E
F: SUZUKI	0F

* Manufacturer Code is obtainable only for Japanese Domestic model.
Value of [FF] is displayed this model.

2.3. Manufacturer Code Input Information (Obtainment Failed)

If the obtained code is abnormal value, this becomes NG and the screen below is displayed.



28. RTC Test

A

Perform the test of RTC (Real-Time Clock) function and of external circuit function used when obtaining RTC count.

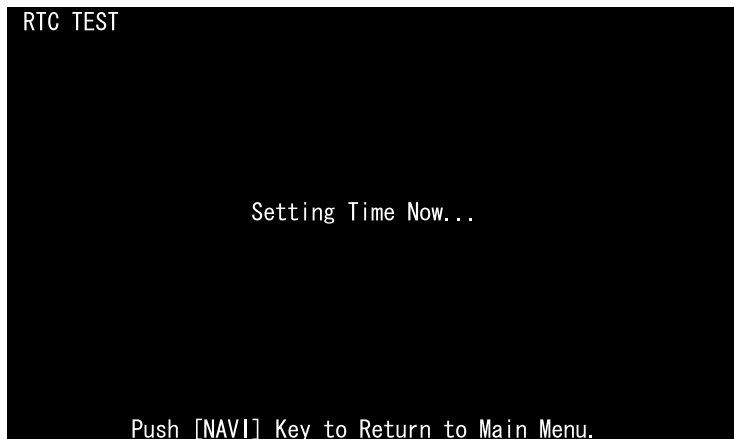
1. Time Setting Screen

* This is not displayed when GPS antenna is connected.

If this test is performed under the status of GPS antenna disconnected, [2008/10/01 12:00:00] is set as simulation time.

It takes approximately 6 seconds for the setting.

B



C

2. Time Display Screen

When the setting of simulation time is successful, the screen becomes as follows. In addition, current time is set under the condition of the GPS antenna connected.

If the time is counted at this time, the function of RTC is normal.

D



E

F

29. USB Check

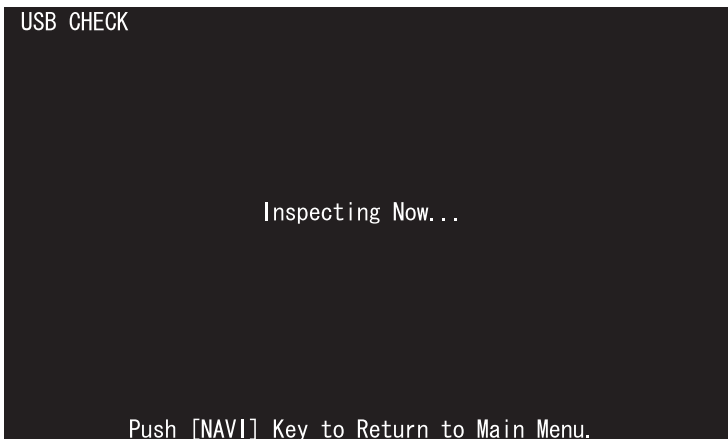
This is the item to check all of USB terminals. USB memory is used for the test. Check the performance by write -> read -> file comparison of 1 KB file automatically.

Perform the test after inserting USB memory.

The file to use for the test is automatically generated during the test so you do not have to prepare the file in advance.

Also the generated file will automatically be deleted after the completion of test.

The following screen is displayed during a series of processing.



Please refer to [Error View] for the details of error factors.

■ Error View

Displayed Error	Factor
CARD recognition failure	Recognition of USB device is unsuccessful.
Drive capacity shortage	Free space of USB memory is insufficient and the test was unable.
File creation failed	File preparation in USB memory was unable.
Internal buffer creation failed	Securing the memory for data comparison was unsuccessful.
Data write error	Data writing was unsuccessful.
Data seek error	File pointer operation was unsuccessful.
Data read error	Reading out of data was unsuccessful.
Data verify error	Data comparison was unsuccessful.

30. SD CARD Test

A Perform file accessing to SD card and confirm the SD card is usable without any problem.

The following screen is displayed during the test.

The test content generates file for the test on the SD card, reads data out after data writing and compares the read out data with written data.

After the test is completed, the screen is switched over automatically.



B

C

Please refer to the following table for displayed error information and details;

Displayed Error	Factor
CARD recognition failure	SD card recognition was unsuccessful.
Drive capacity shortage	Free space of SD card is insufficient and the test was unable.
File creation failed	File preparation in SD card was unable.
Internal buffer creation failed	Securing the memory for data comparison was unsuccessful.
Data write error	Data writing was unsuccessful.
Data seek error	File pointer operation was unsuccessful.
Data read error	Reading out of data was unsuccessful.
Data verify error	Data comparison was unsuccessful.

D

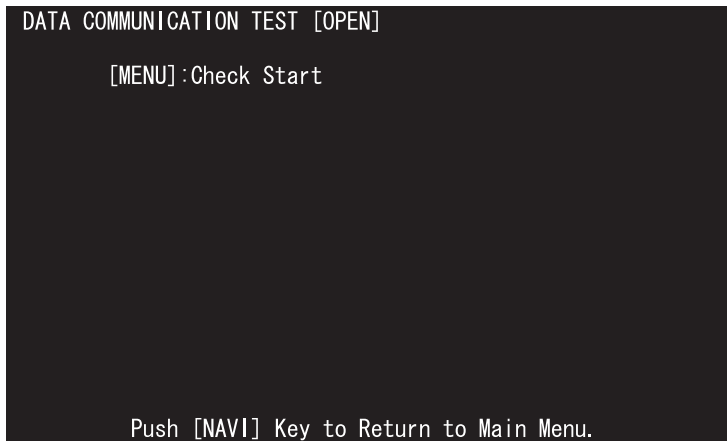
E

F

31. DATA COMMUNICATION TEST [OPEN]

It is the item for confirming that the data communication terminal is opened.
If the terminal is opened, the test result is OK.

It is displayed before the inspection is started.
The inspection is started by pressing the [MENU] key.



Statuses of all terminals are inspected and the results are displayed.
When all terminals are opened, the screen becomes blue.

The terminal to be inspected varies depending on the place of destination.

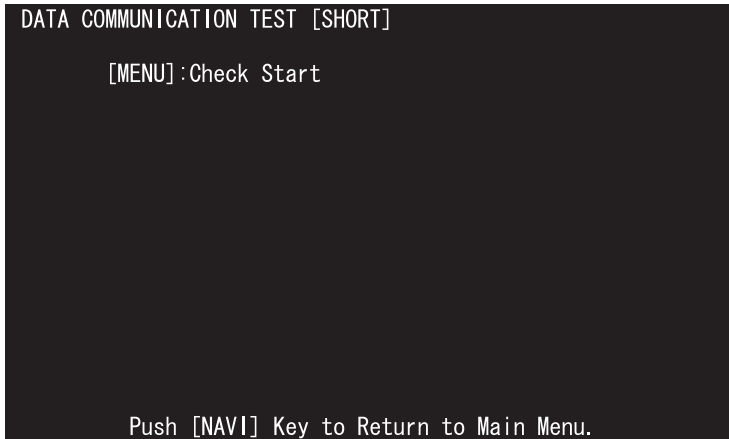
Place of destination	Inspection terminal
UC	RDS/TMC
EU5	RDS/TMC CAN-BUS
UW5	-
AU	RDS/TMC

32. DATA COMMUNICATION TEST [SHORT]

A

It is the item for confirming that the data communication terminal is short-circuited.
If the terminal is short-circuited, the test result is OK.

It is displayed before the inspection is started.
The inspection is started by pressing the [MENU] key.



B

Statuses of all terminals are inspected and the results are displayed.
When all terminals are short-circuited, the screen becomes blue.

C

The terminal to be inspected varies depending on the place of destination.

Place of destination	Inspection terminal
UC	RDS/TMC
EU5	RDS/TMC CAN-BUS
UW5	-
AU	RDS/TMC

D

E

F

33. External Input Test

Confirm the video input route or audio route is valid. The following three routes are targeted;

- I. iPod VIDEO [Video, Audio]
- II. External Input via RCA terminals (Video, Audio)

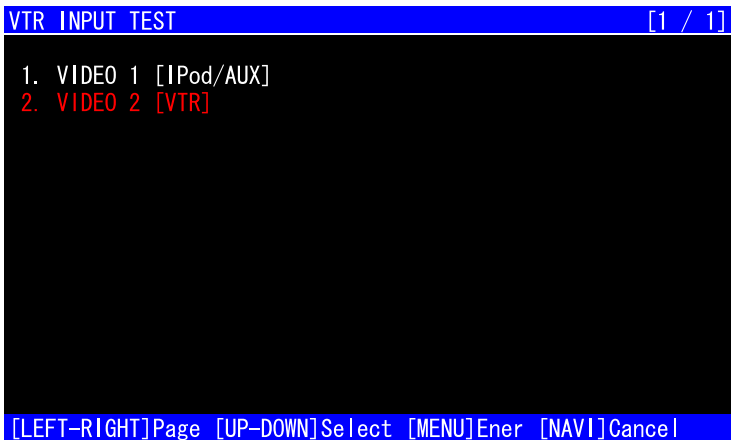
Input video and audio to NAVI via video/audio input terminals and confirm the result with NAVI screen and speaker.

In addition, confirm the rear monitor output.

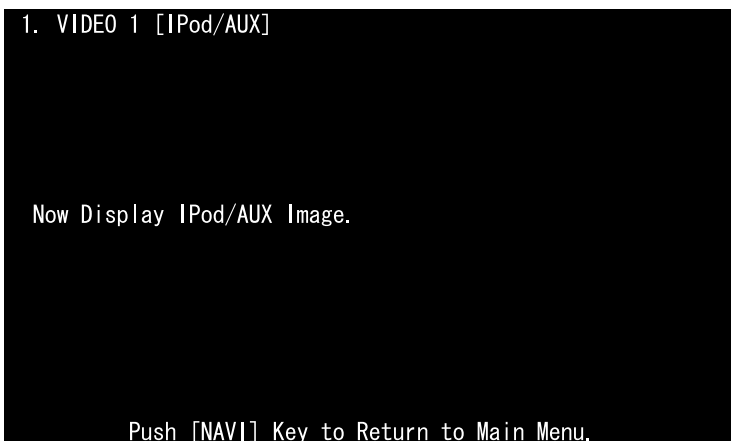
At the start of test, set the VTR1 Input to ON and switch source to VTR.

In addition, at the end of test, set the VTR1 Input to OFF and switch source to OFF.

During the test, please input the Parking Brake Signal (GND).



I. iPod VIDEO [Video, Audio]



When error happens, the following error message is displayed;

- Case 1. Failed to Setup iPod/AUX-ON.
Input ON setting for microcomputer was unsuccessful.
- Case 2. Failed to Change Source of iPod/AUX.
Source switchover for microcomputer was unsuccessful.
- Case 3. Failed to Setup iPod/AUX-OFF.
Input OFF setting for microcomputer was unsuccessful.
- Case 4. Failed to Attest iPod.
iPod authentication was unsuccessful at the start of test.

II. External Input via RCA Terminals [Video, Audio]

A 2. VIDEO 2 [VTR]

B Push [NAVI] Key to Return to Main Menu.

When error happens, the following error message is displayed;

Case 1. Failed to Setup VTR-ON.

Input ON setting for microcomputer was unsuccessful.

Case 2. Failed to Change Source of VTR.

Source switchover for microcomputer was unsuccessful.

Case 3. Failed to Setup VTR-OFF.

Input OFF setting for microcomputer was unsuccessful.

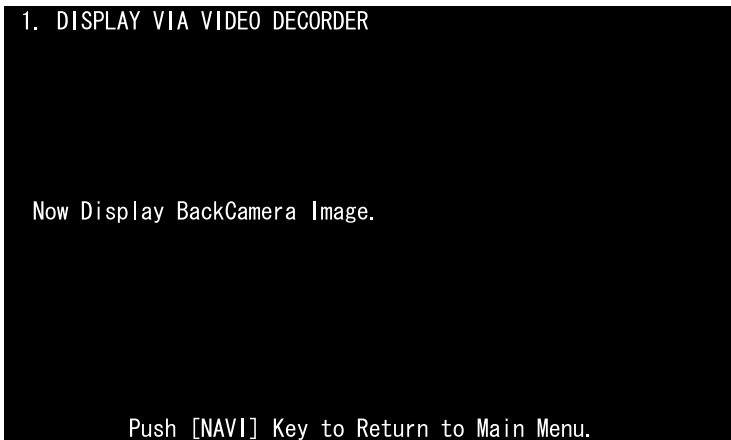
34. Back Camera Test

Confirm the signal line for back camera image is valid.

"Back Camera Image" which was input from Camera Image Input Terminals at rear panel of the product is displayed.



1. Display via DECORDER



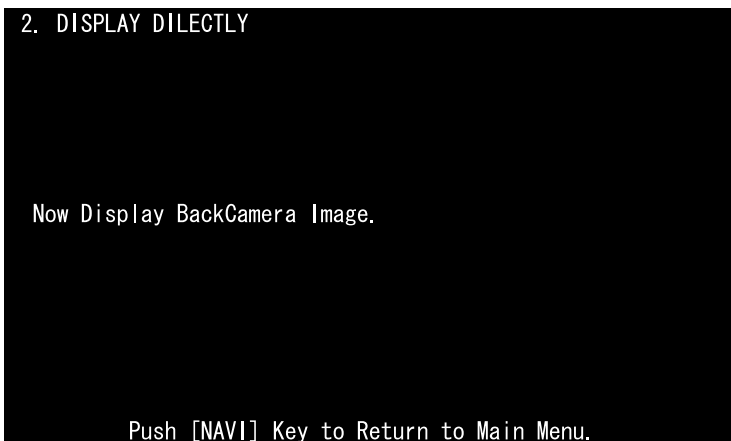
This is the screen when back camera image is under display.

The following error message is displayed when error happens;

Case: Back Camera ON setting was unsuccessful.

In the case microcomputer communication was unsuccessful.

2. Display Directly



This is the screen when back camera image is under displa

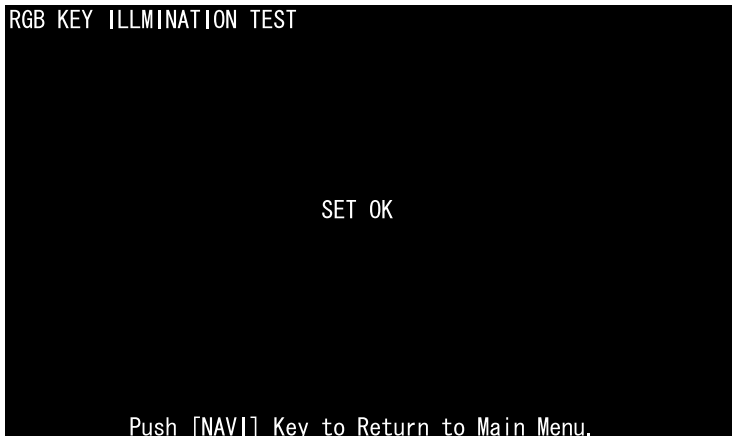
The following error message is displayed when error happens;

Case. Failed to Setup BackCamera.

In the case microcomputer communication was unsuccessful.

35. RGB Key Illumination Test

- A Test the three (3) wires which brighten RGB illumination of hard key.
It is OK when a white light is ON.



B

This is the screen for RGB Key Illumination Test.
RGB illumination for hard key glows white.

The following error message is displayed when error happens;

C

Case: Microcomputer Communication Error
Microcomputer communication was unsuccessful.

36. Confirmation of Drive Mechanism Close Position

This is the test item to confirm whether the closing of drive mechanism is performed correctly or not.

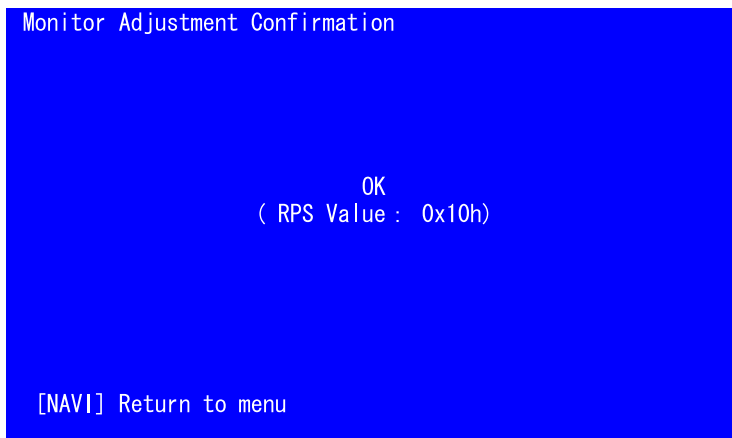
If the RPS value obtained at close status corresponds to
0x06h - 0x36h

D

Then the test is OK.
In other cases, the test is NG.

Test Screen

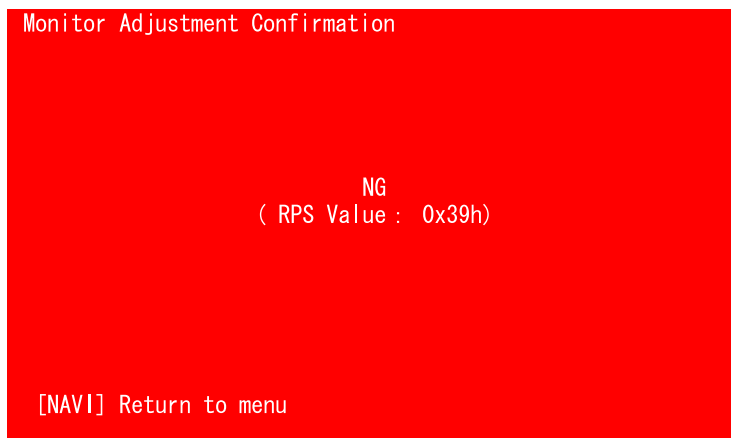
When Test is OK



E

F

When Test is NG



37. Product Information

The product information allocated to the product is displayed on the screen.



16 digit values sectioned into four (4) separated by a dot are displayed on the screen.
Example: 0000.1111.2222.3333

6.2 DVD TEST MODE

Before shifting to the test mode, please insert the "DISC (CD-DA)".
Operate the equipment by turning ON the parking.

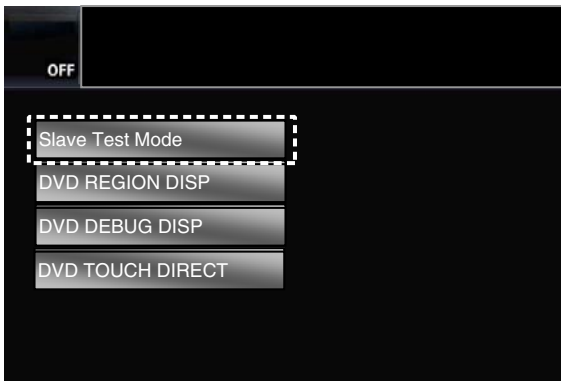


①, ② and ③ are invisible buttons.

Display the test mode screen by carrying out following operations on this screen.
Press areas of ①, ② and ③ long in order.

Detailed procedure

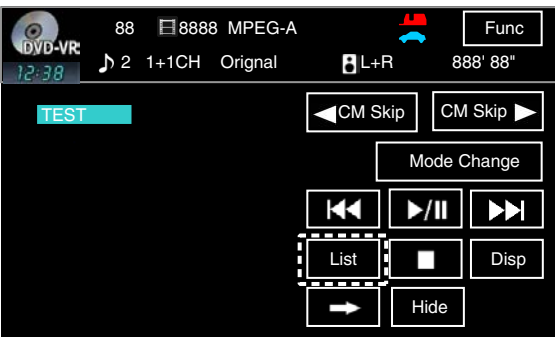
1. Display the source OFF screen.
2. Press the area of ① long.
3. Press the area of ② long.
4. Press the area of ③ long.



If the operations are completed successfully,
the screen shifts to the test mode screen after pressing ③ long.

The test mode is released by ACC-OFF operation.

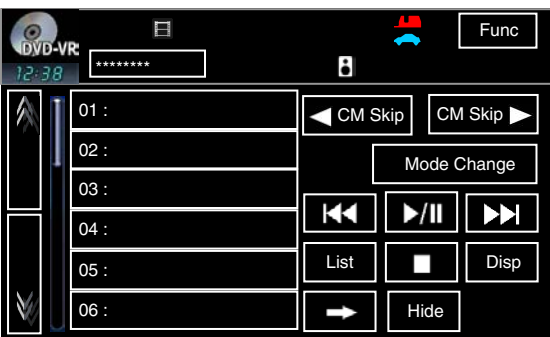
In order to enter the DVD mechanism module test mode,
select "Slave Test Mode".



Switch the source to "DISC".

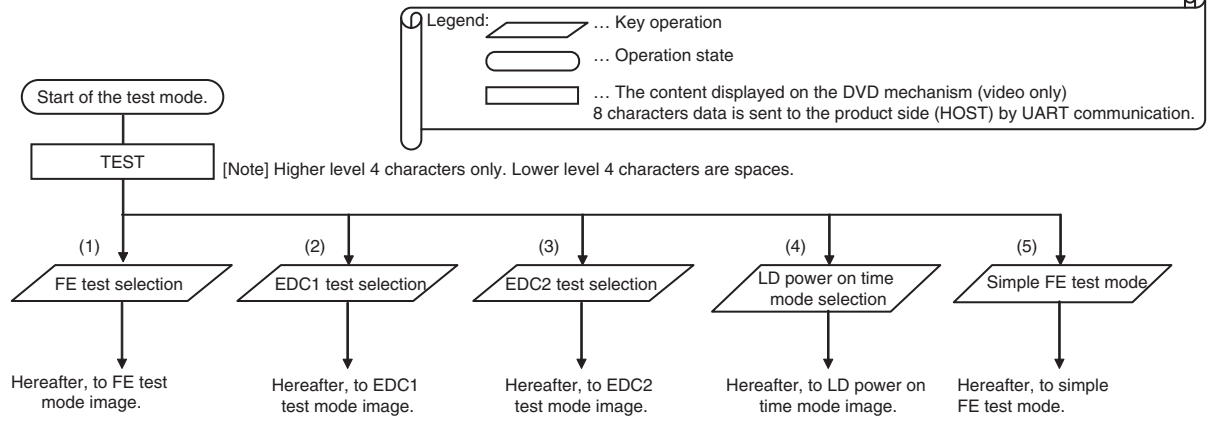
If you select the DVD source, the test mode screen
shown in the left figure is displayed.

Press "List" to display the list on the screen.



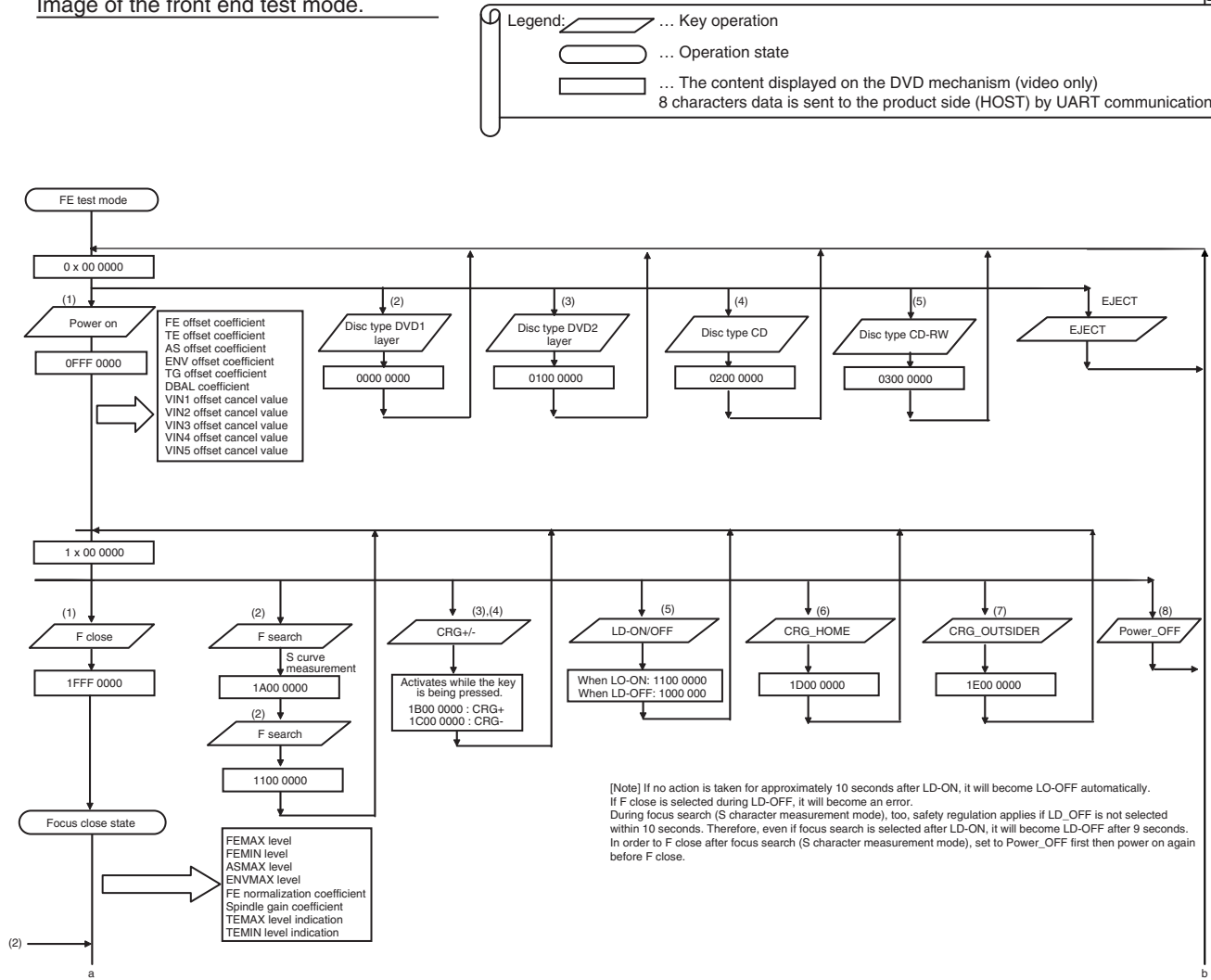
Operate the flow chart of the mechanism test mode
with buttons shown in the left screen.

Up to lists 01 to 08

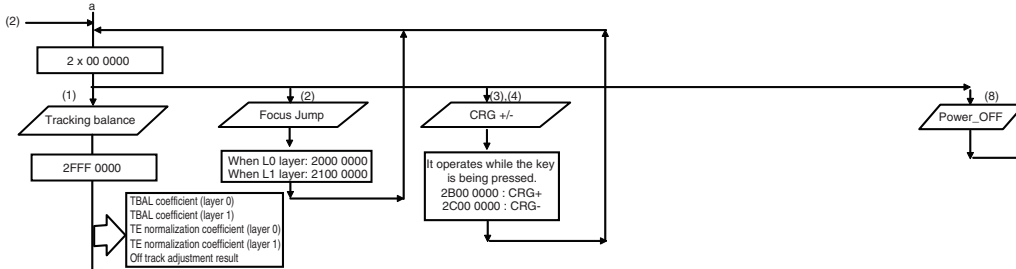


[Note] In order to move on to another test after selecting a test (FE/EDC1/EDC2), it is necessary to restart the DVD mechanism in the test mode.

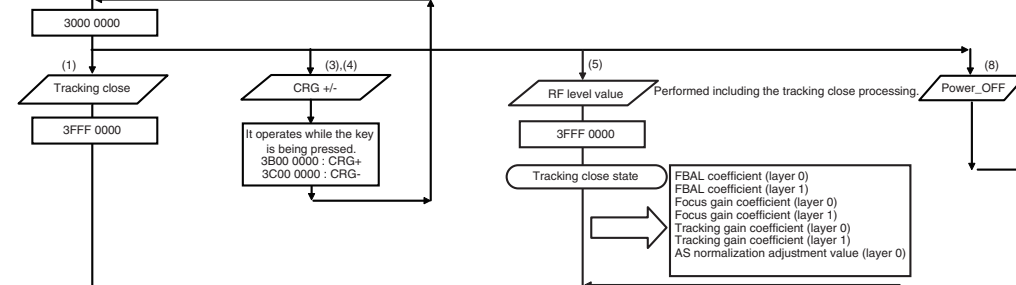
Image of the front end test mode.



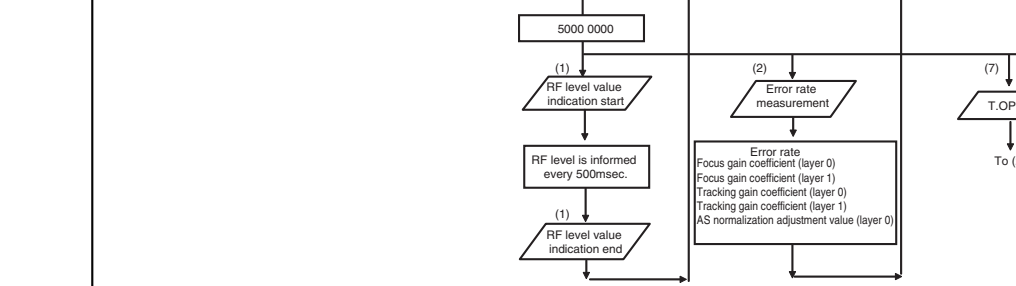
A



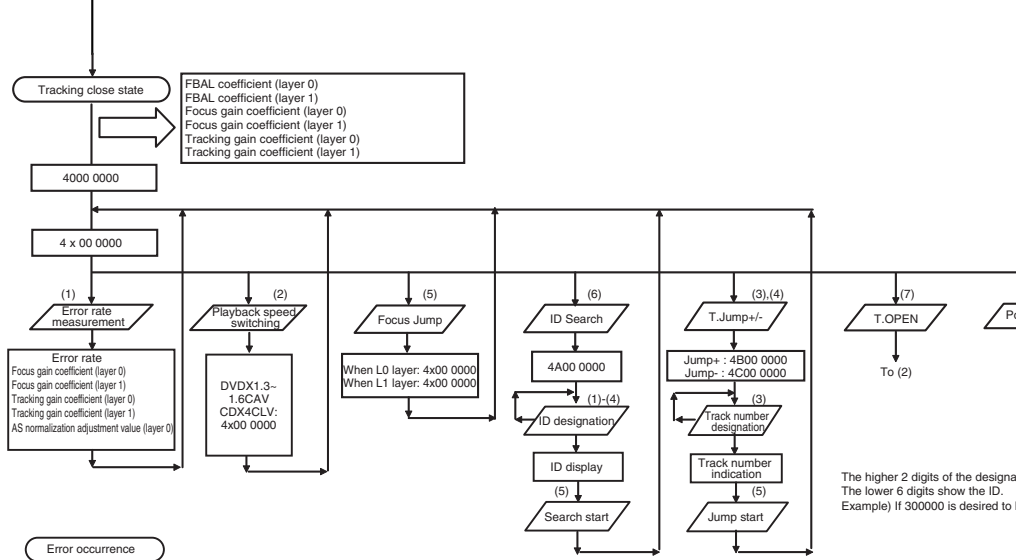
B



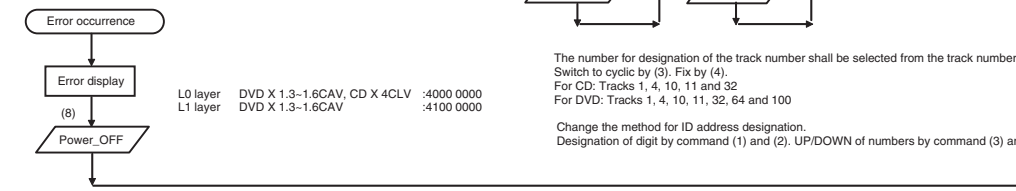
C



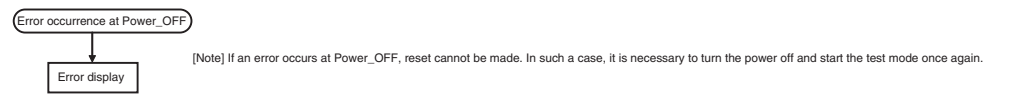
D



E



F



EDC. Image of the test mode

Legend:

- ▭ ... Key operation
- ▭ ... Operational state
- ▭ ... The content displayed on the DVD mechanism (video only)
8 characters data is sent to the product side (HOST) by UART communication.

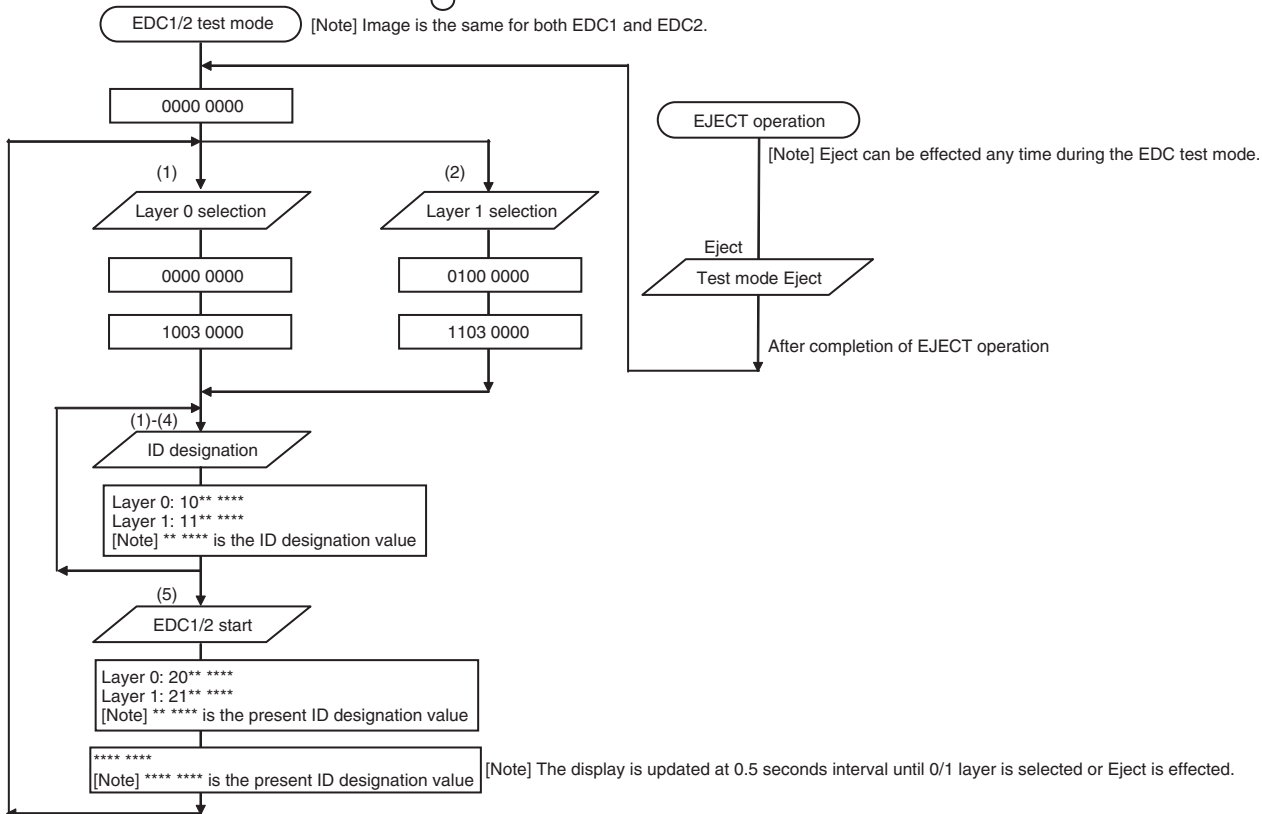
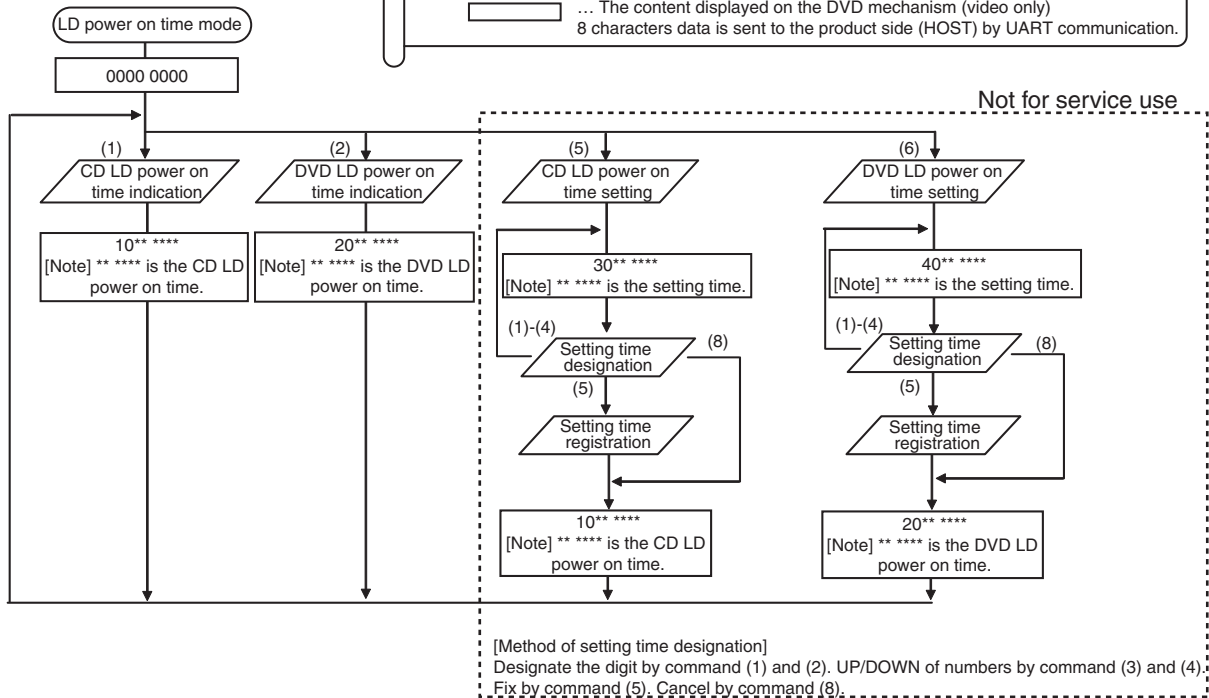


Image of the LD power on time mode.

Legend:

- ▭ ... Key operation
- ▭ ... Operational state
- ▭ ... The content displayed on the DVD mechanism (video only)
8 characters data is sent to the product side (HOST) by UART communication.



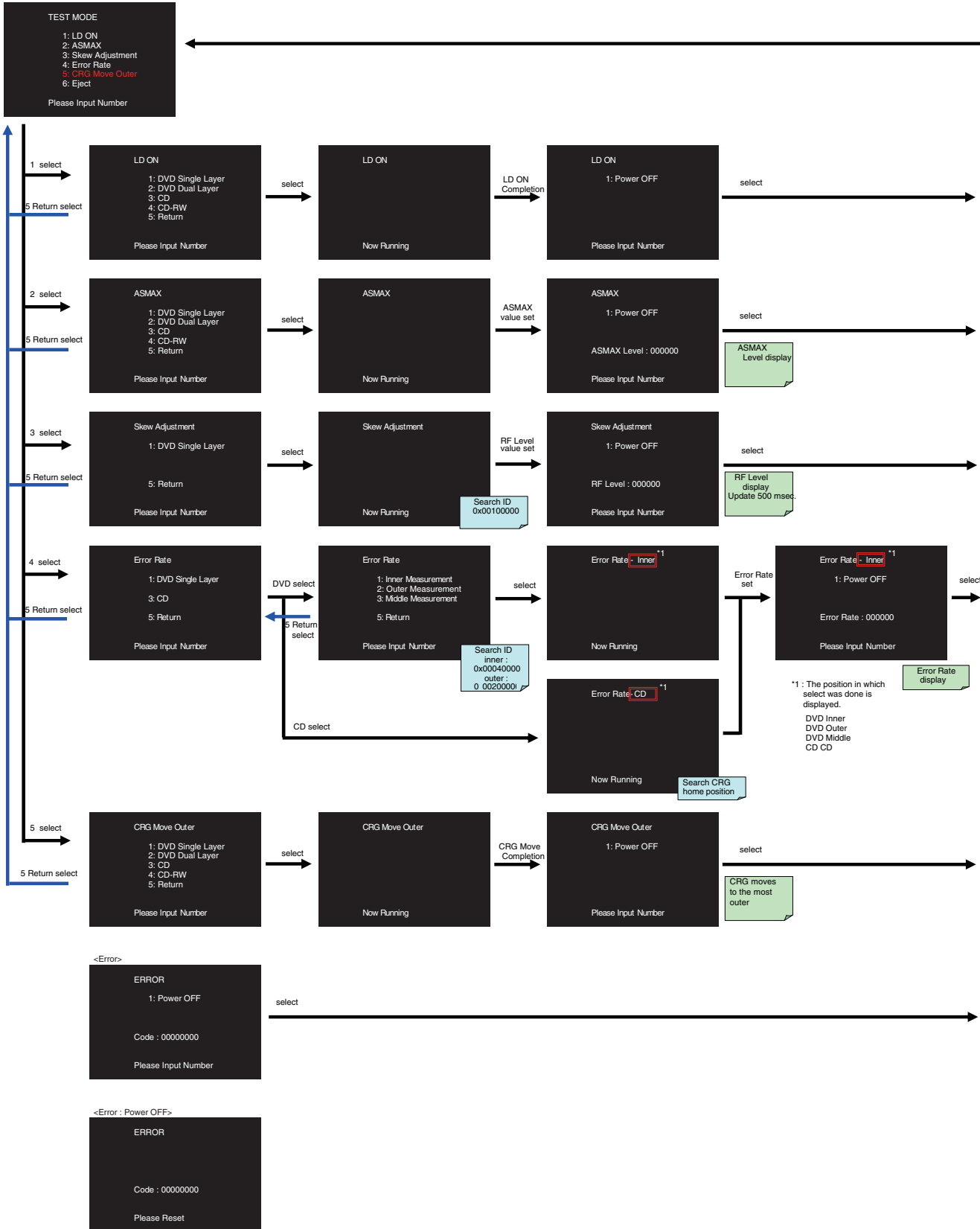
[Note] If the power on time is 999999 hours or more, it is always reported as 999999 hours.
[Note] If the power on time is "E*****", the value may not be correct due to the life of the flash memory.

Simple test mode

The selection of the figure of each screen can be selected by "Key command for the test".

A

<Flow chart>



E

F

7. DISASSEMBLY

While the photograph shown is slightly different from this model in shape, the disassembly procedure is the same.

● Removing the Monitor Assy (Fig.1, 2, 3)

➔ 1 Remove the four screws. (Fig.1)

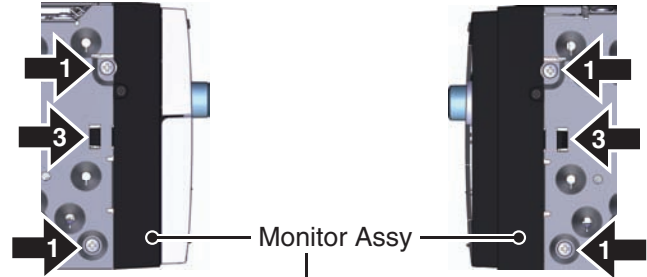


Fig.1

➔ 2 Remove the two hooks. (Fig.2)

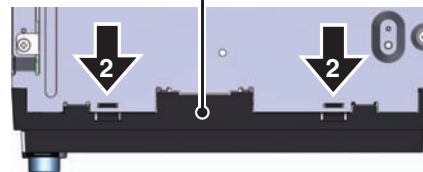


Fig.2

➔ 3 Remove the two hooks, and then lay the Monitor Assy on the front. (Fig.1)

➔ 4 Disconnect the two FPC and then remove the Monitor Assy.(Fig.3)

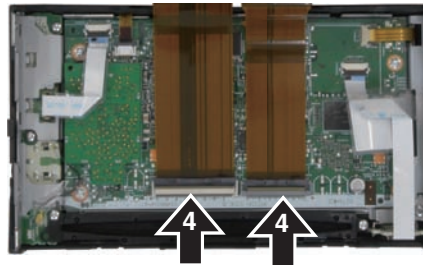


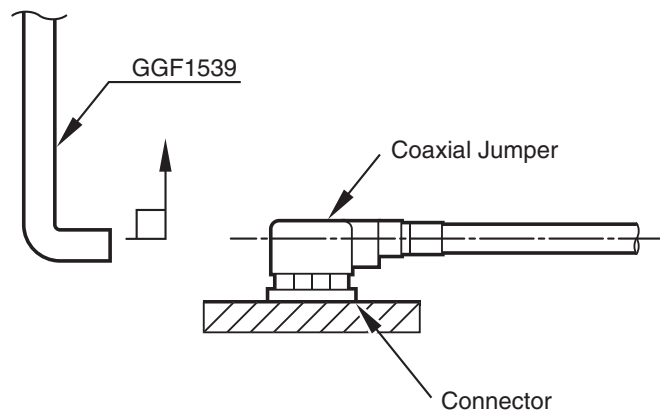
Fig.3

When unplugging the Coaxial Jumper, make sure to use jig GGF1539.

If the antenna cable is directly unplugged without using jig GGF1539, you might damage your fingertip or fingernail.

● How to Remove the Coaxial Jumper

When unplugging Coaxial Jumper, hook the point of jig GGF1539 on the lid of Coaxial Jumper and vertically draw out along with the engagement axis of connector.



● How to Attach the Coaxial Jumper

For inserting Coaxial Jumper, adjust cord assy with the engagement axis of connector and insert it as vertically as possible.

Do not insert the Coaxial Jumper in extreme slant, as the connector might suffer damage.

● Removing the CC Monitor Unit (Fig.4)

- 1** Remove the two screws and then remove the Holder and Cover.
- 2** Disconnect the FFC.
- 3** Remove the screw and then remove the SD Unit.

Attention at assembly)
When you attach Cord Assy, fix it with tape so that Cord Assy does not contact the edge of the plate.

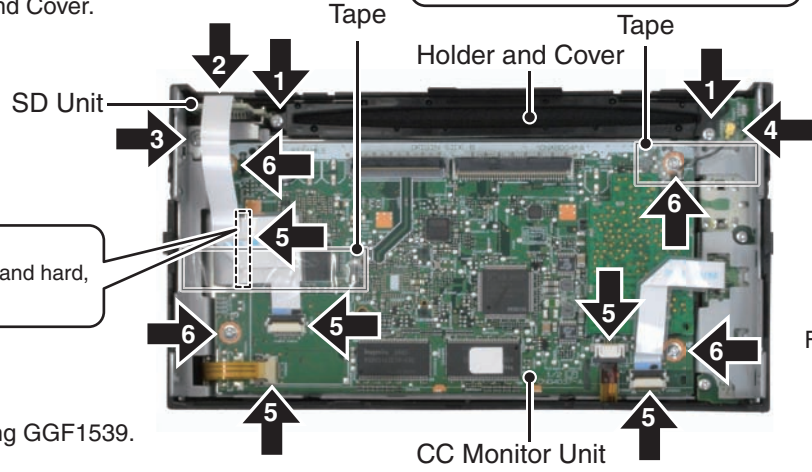


Fig.4

Attention at assembly)
The connector lever is small and hard, lock it surely.

Peeling the Tape.

- 4** Disconnect the Cord Assy using GGF1539.
Attention)
Remove Cord Assy from the connector on Keyboard PCB side. It cannot be removed from BT Unit side.

- 5** Disconnect the four cables.
- 6** Remove the four screws and then remove the CC Monitor Unit.

● Removing the Keyboard PCB (Fig.5)

- 1** Remove the ten hooks and then remove the Holder.

When you remove the Holder from the Grille, you can disassemble them easily by removing the hook in the order shown below.

- 1.Remove three hooks on the right side on the rear face
- 2.Remove four hooks on the lower surface
- 3.Remove three hooks on the left side on the rear face

Remove the LCD Panel and Touch Panel. (not shown)

Attention at assembly)
Lace FPC that connects LCD Panel and CC Monitor Unit into the hole of Holder.

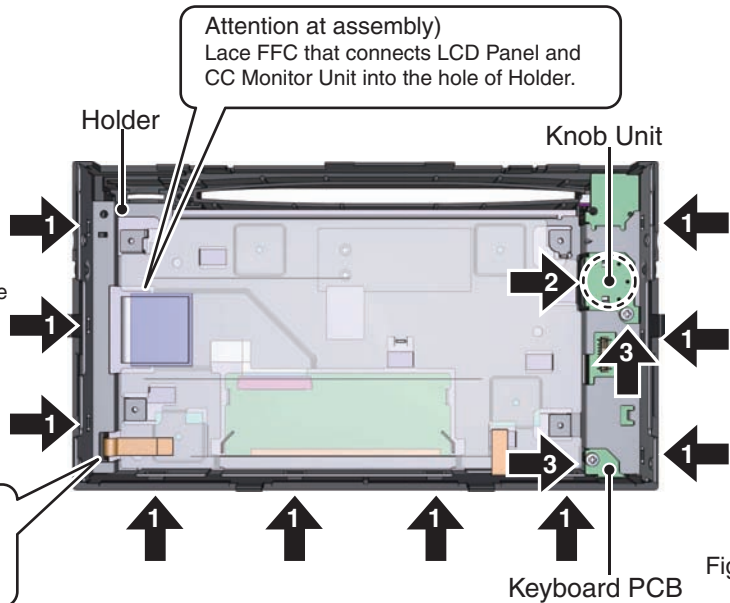


Fig.5

- 2** Remove the Knob Unit.
- 3** Remove the two screws and then remove the Keyboard PCB.

● Removing the DVD Mechanism Module (Fig.6, 7, 8)

➔ 1 Disconnect the FFC.(Fig.6)

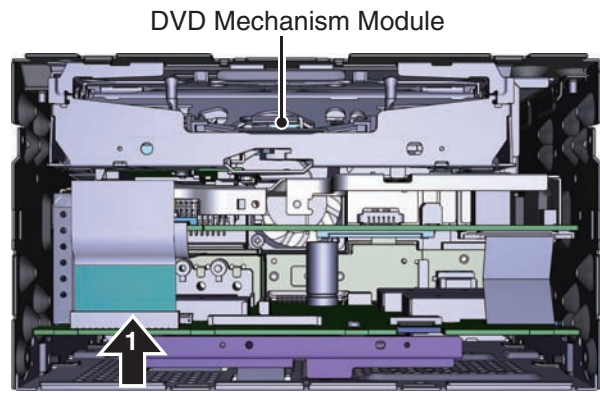


Fig.6

➔ 2 Remove the five screws and then remove the Case Assy.(Fig.7)

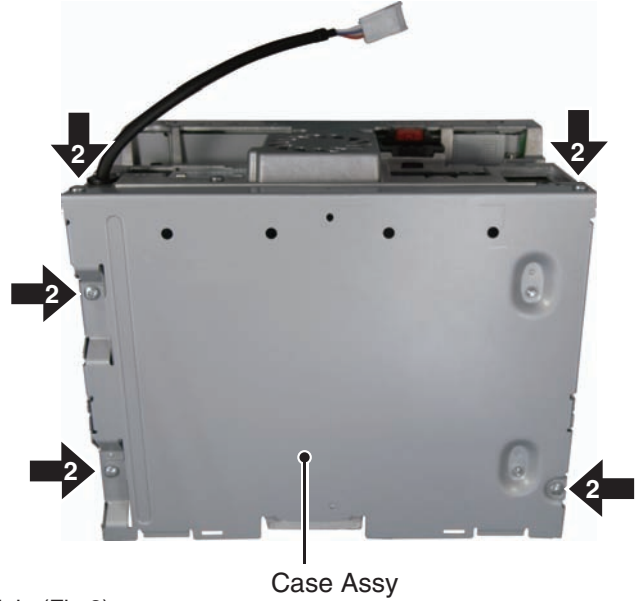


Fig.7

➔ 3 Remove the two screws and then remove the DVD Mechanism Module.(Fig.8)

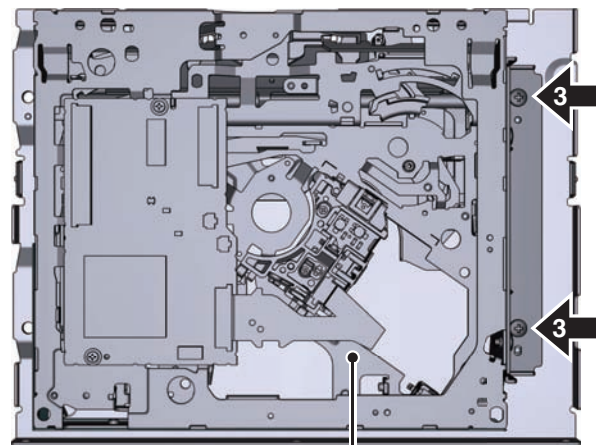
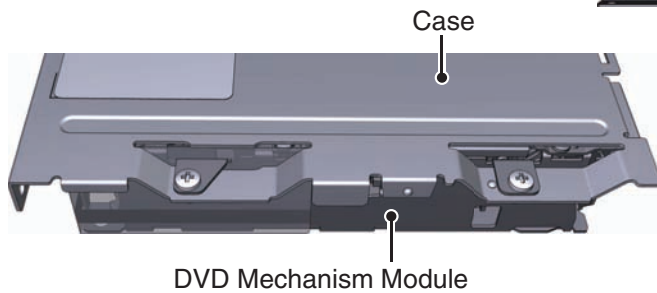


Fig.8

Attention at assembly)
The plate of the DVD Mechanism Module should come out from the Case.



● Removing the Heat Sink (Fig.9)

A

- ➔ 1 Disconnect the FAN Cable.
- ➔ 2 Remove the two screws.
- ➔ 3 Remove the six screws and then remove the Heat Sink.

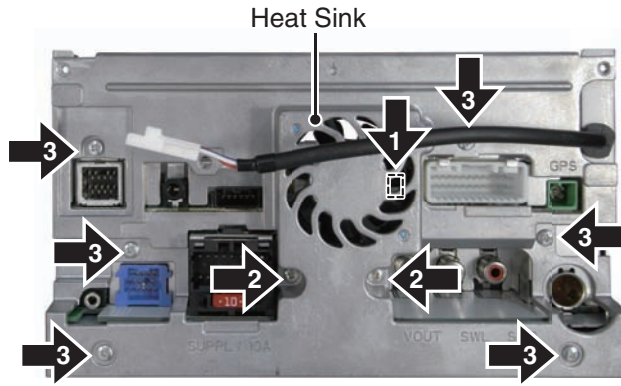


Fig.9

● Removing the IF PCB (Fig.10, 11)

C

- ➔ 1 Disconnect the two FFC.(Fig.10)

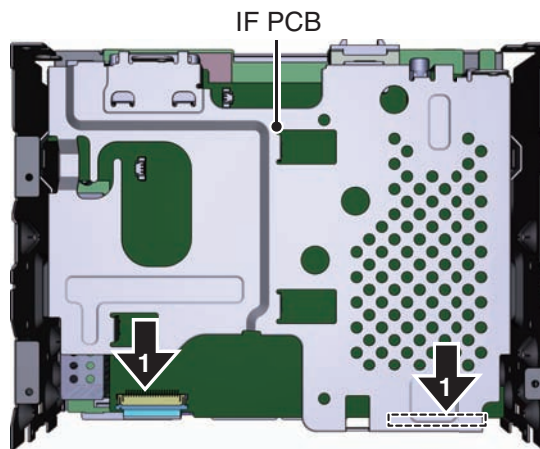


Fig.10

- ➔ 2 Remove the two screws and then remove the IF PCB.(Fig.11)

D

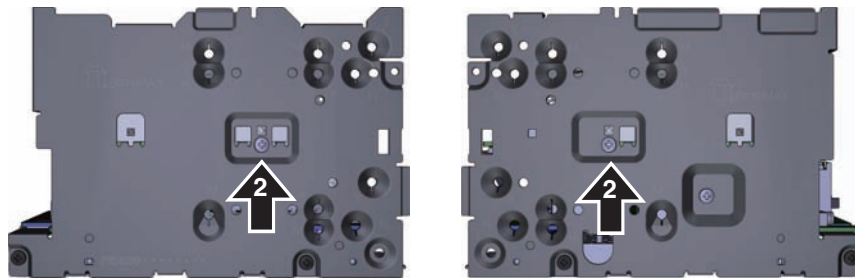


Fig.11

Attention at assembly)

E

When you assemble the IF PCB Holder and the Bracket, the Claw enters the hole. They are hardly separated, so pay attention to the deformation.



The IF PCB Holder should contact the Bracket.

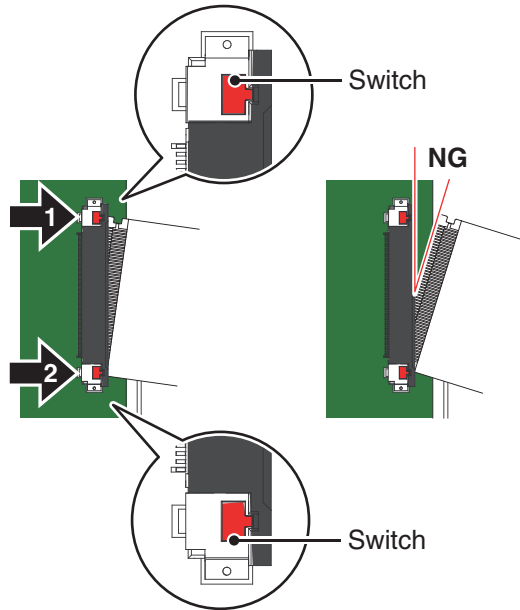
F

● Disconnect the FPC from IF PCB

Push two points on right and left sides with fingers at the same time.
However, if it is difficult to push the two points at the same time for the product, push one side at once. In that case, FPC is removed at a tilt, however, do not pull it at a tilt extremely.

1 While pushing the switch
Pull out the FPC as shown.

2 While pushing the switch
Remove the FPC.



● Removing the AV Unit (Fig.12)

1 Remove the screw.

2 Remove the five screws
and then remove the AV Unit.

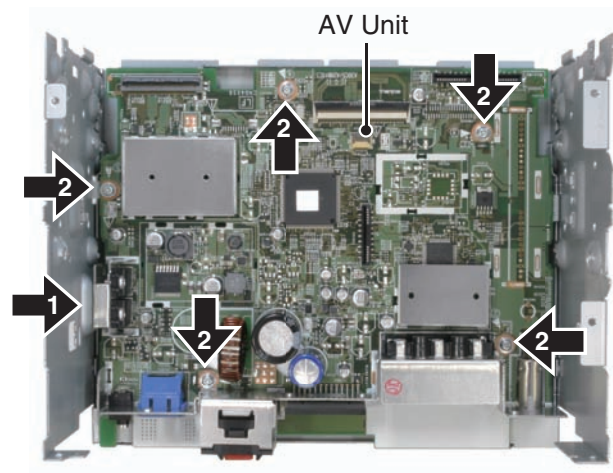
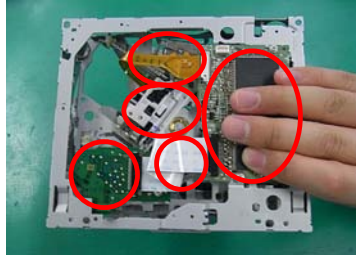


Fig.12

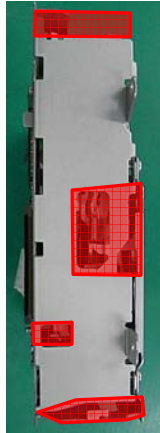
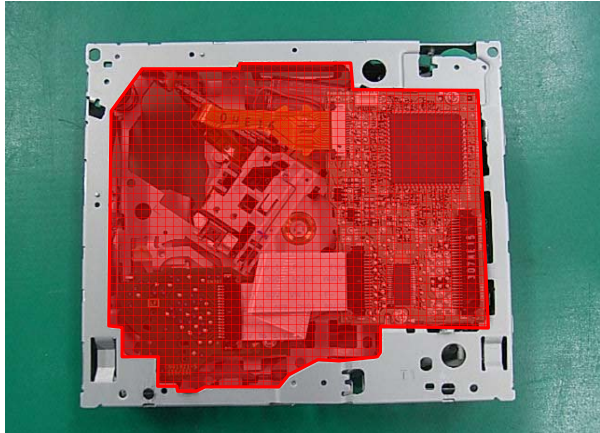
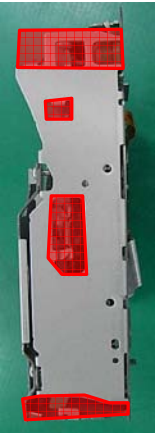
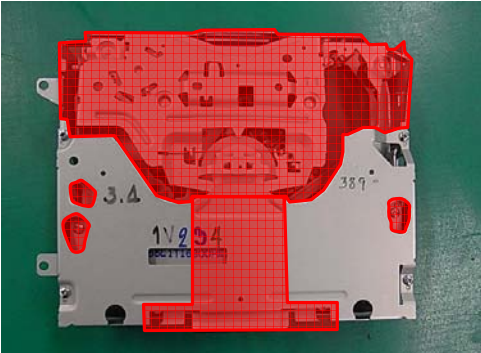
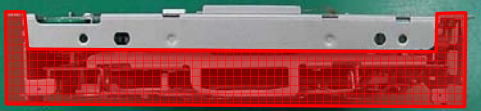
A **How to have it**

1. Have a specified part.

Handling OK

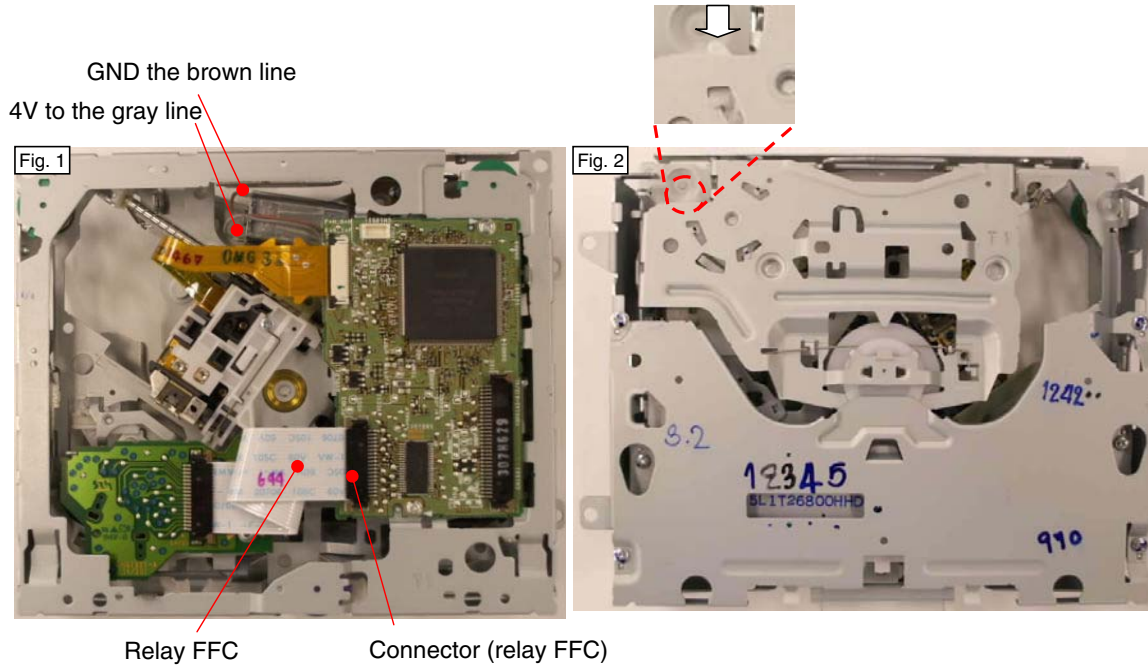


Handling NG



Mecha Module_Bringing into the Clamp State with No Disc Loaded

1. Remove the relay FFC from the connector on the module PCB side (Fig. 1).
(Precaution) When it is difficult to apply 4V to the motor in procedure 2 below, remove the connector on the relay PCB side, then remove the FFC, and remove the solder of the CRG motor lead and apply voltage to the lead.
2. Push the Disc detection arm while applying 4V to the CRG motor (Fig. 2)
By this action, the mecha moves to the clamp state and the PU moves to the outer periphery.
3. Stop the motor when the PU comes to the vicinity of the intermediate periphery.
(Precaution) If the PU goes to the outer most periphery, it idles.
It is not a problem, but please try not to let it idle as much as possible.

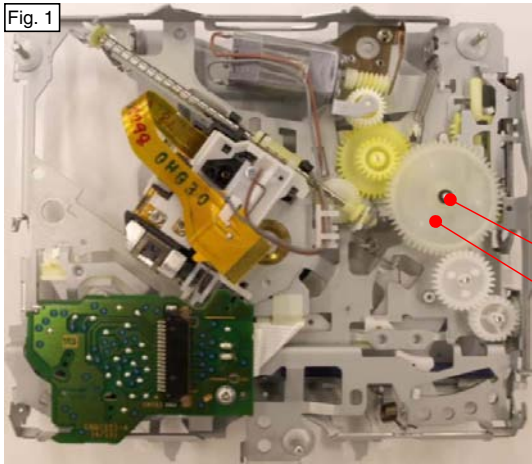


CRG Mecha_Bringing into the Clamp State with No Disc Loaded

- 1.Remove the T-case washer and then remove the drive gear. (Fig. 1)
- 2.Lift the clamp arm assy until it is in the state shown in Fig. 2_b (open-lock state).
- 3.Put your finger on the area A of Fig. 2_c and then slide it to the direction of the arrow (the direction of the playing state).
- 4.Push down the clamp arm.

(Precaution) When bringing the CRG mecha into the ejecting state again, install the drive gear after sliding the drive lever and bringing it to the ejecting state, in order to prevent the cog of the pinion in the drive gear from chipping at the time of its installation.

Fig. 1



T-case washer
Drive gear

Fig. 2

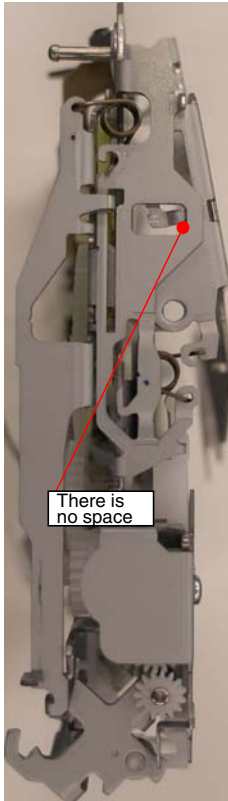
a.Ejecting state

b.Open-lock state

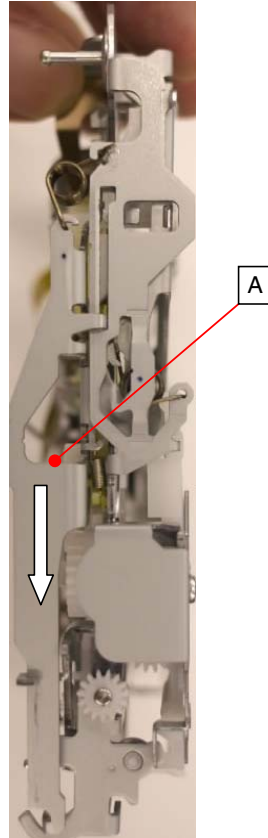
c.Clamp state with no disc loaded



There is a space



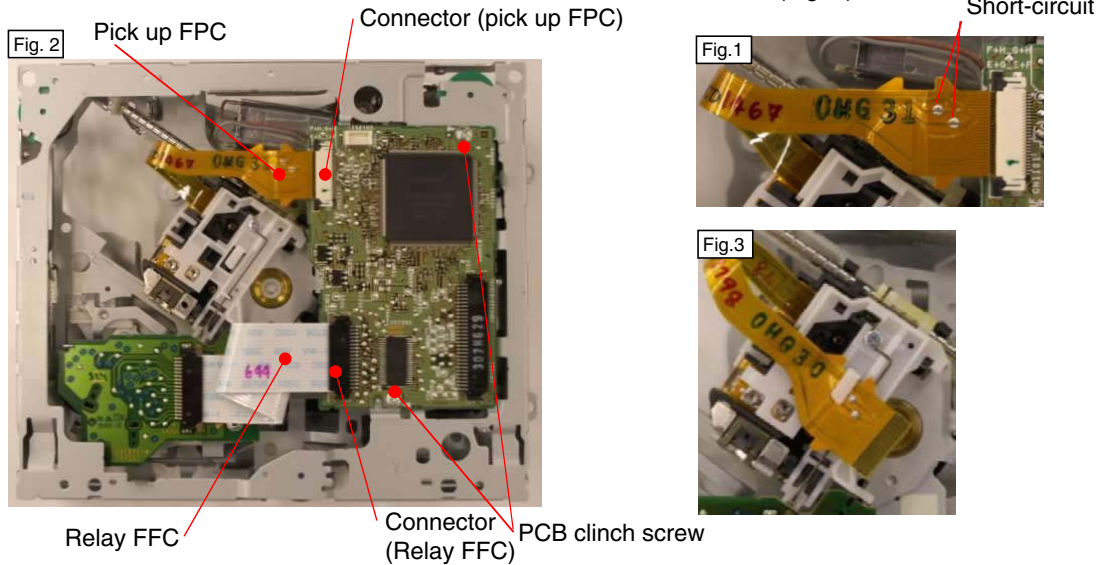
There is no space



A

Removing the Module PCB

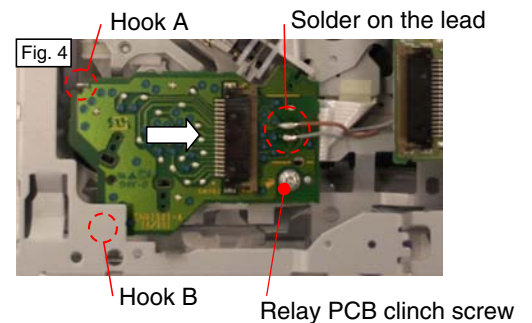
1. Short-circuit two spots on the land of the pick up FPC. (Fig. 1)
2. Remove the pick up FPC and the relay FFC from the connector. (Fig. 2)
3. Temporarily attach the pick up FPC to the pick up rack. (Fig. 3)
(in order to prevent the damage to the pick up FPC)
4. Remove the two PCB clinch screws and then remove the module PCB. (Fig. 2)



Removing/Installing the Relay PCB

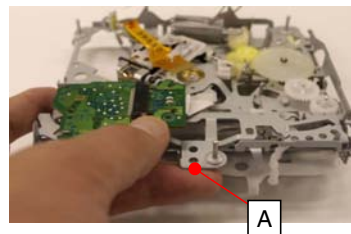
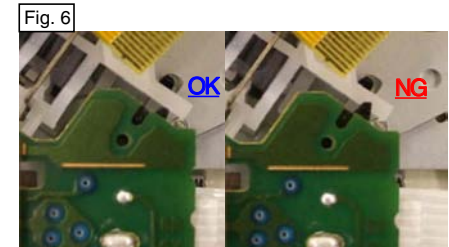
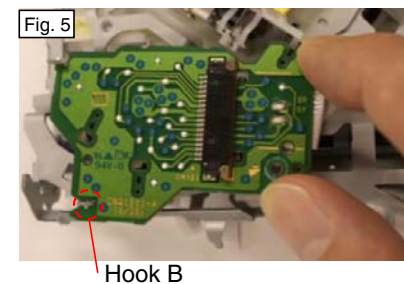
Removing)

1. Remove the relay FFC from the connector
(remove both sides so that the entire FFC will be removed). (Fig. 2)
2. Remove the solder on the lead for the CRG motor. (Fig. 4)
3. Remove the one relay PCB clinch screw. (Fig. 4)
4. Slide the relay PCB to the direction of the arrow and then remove the relay PCB from the hook A and the hook B. (Fig. 4)
5. Turn the relay PCB over and then remove the SPDL motor FFC from the connector.



Installing)

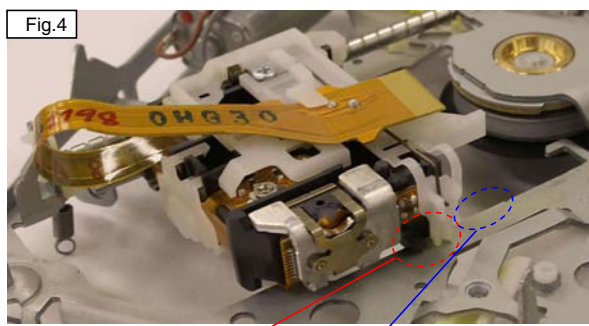
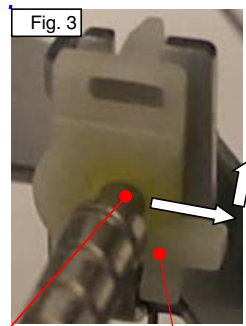
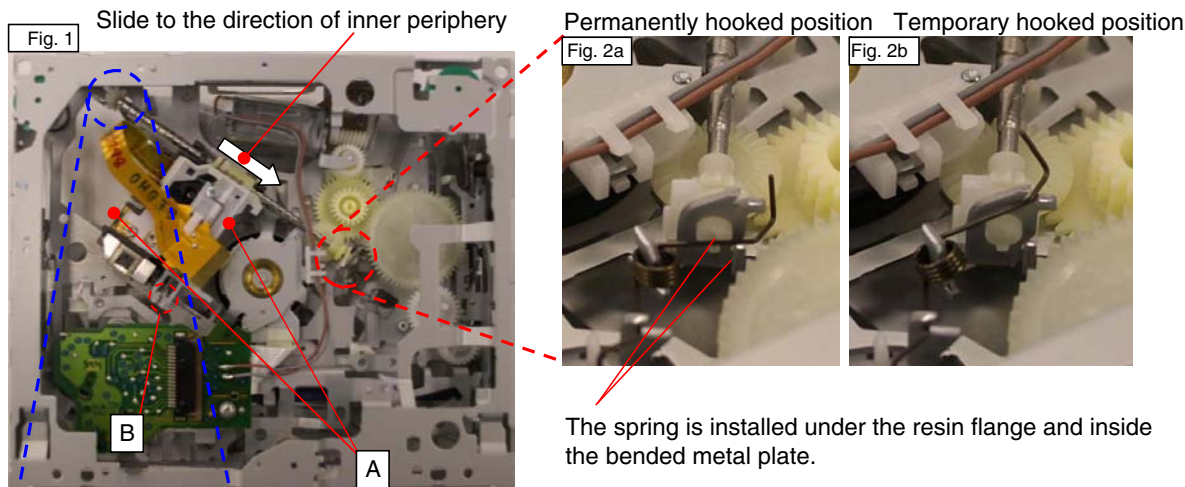
1. Check the mecha is in the ejecting state (disc-load suspended state).
When it is not in the ejecting state, apply 4V to the lead (motor) and then bring it to the ejecting state (4V to the brown line and GND the gray line).
2. Fit the SPDL motor FFC to the connector (back of the relay PCB).
3. Hold the relay PCB so that it does not touch the SW knob as in Fig. 5.
4. Insert it into the hook B as it is a little off to the clockwise direction.
(Precaution) This is to prevent the SW knob from getting into the NG position as in Fig. 6.
5. Push down the relay PCB lightly and then rotate it to the counterclockwise direction.
It sets the relay PCB in the hook A and the positioning dowel.
(Precaution) Pay attention so the SW knob will not get onto the PU rack. (Fig. 6)
6. As in the Figures, while supporting the location A with your fingers, screw the relay PCB. (Fig. 7 / Fig. 8)
7. Solder the lead for the CRG motor.
8. Fit the relay FFC to the connector.



Removing the PU Unit

1. Hook the feed screw biasing spring on the temporary hook (Fig. 2b). Be careful not to get injured by the tip of the spring.
2. Hold the PU at the location A in Fig. 1 and slide and scoot it to the direction of the inner periphery.
3. As in Fig. 3, shift the back end of the feed screw to the side and then to above and remove it from the outside holder.
4. Remove the tucking joint for the chassis at the location B and the PU unit by lifting them up without changing their position and then remove the PU unit.

(Precaution) When installing the PU again, make sure to tuck the chassis in B and the PU unit (Fig. 4) first. Moreover, do not forget to permanently hook the feed screw biasing spring (Fig. 2a). Adjustments to the PU after its installation should be made according to the service manual.



Back end of the feed screw Outside holder Regularly installed position Install avoiding the area with blue broken line (the connected metal plate part) [Installation NG] The chassis is not tucked between the PU case and the PU rack.

Sending the PU to the outer periphery

1. Bring to the clamp state with no disc loaded according to the "Mecha Module_Bringing into the Clamp State with No Disc Loaded" manual.

(Precaution) The relay FFC must be removed for certainty in order to prevent the IC damage.
2. Apply 1.5V to the CRG motor and then transfer the PU to the outer periphery.

(Precaution) Do not forget to reinstall the relay FFC after sending the PU to the outer periphery and take the necessary measures.

8. EACH SETTING AND ADJUSTMENT

8.1 DVD ADJUSTMENT



1) Precautions

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

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 diodes may be damaged, if the volume switch for the laser power adjustment of the pick up unit, is turned.

● SKEW adjustment

When one of the following replacements has taken place, SKEW adjustment for the pick up will be required.

- (1) Replacement of the pick up unit
- (2) Replacement of the spindle motor
- (3) Replacement of the carriage chassis
- (4) Replacement of the main shaft of the pick up unit

Measurement equipment and tools/jigs: Oscilloscope

Driver for SKEW adjustment -> Driver

Bond for fixing the SKEW -> GEM1033

Bond for resonance -> 1530 (1530 : produced by THREE BOND)

Bond for locking the screw -> 1401M (1401M : produced by THREE BOND)

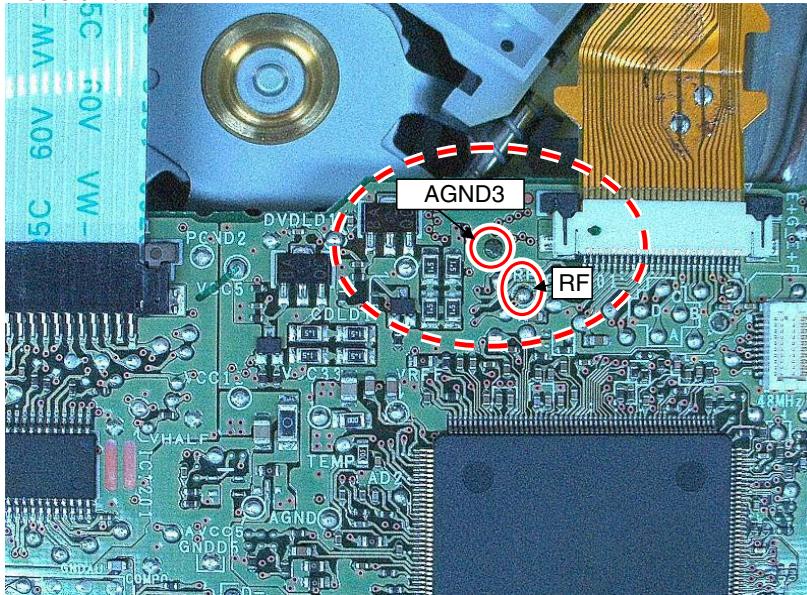
Disc used:GGV1025

Measurement reference: AGND3

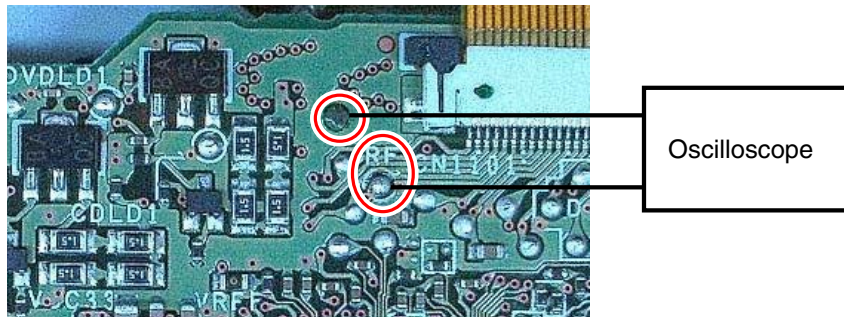
Measurement point: RF

Connection drawing

DVD core unit



Expansion



Symptom in case the adjustment is not adequate: Worsening of the error rate 10^{-3} (Normally 10^{-4} or less.)

- Large RF jitter
- RF waveform distortion

Tracking drawing/Unstable servo

* Caution: Do not look into the laser light during adjustment.

There are two methods of making adjustment: a method of making adjustment through monitoring RF waves by the oscilloscope (method 1) and a method of making adjustment through checking the numerical value of the RF level by OSD (method 2).

Adjusting procedure is shown below, but regarding how to start the test mode and the operating procedure, please refer to the clause on the service test mode.

Adjusting Procedure:

1. Install the pickup

(Refer to the removal of the pickup from the mecha unit.)

When handling the pickup, refer to the precautions on how to handle the PU listed below.

2. Method 1:

Connect the oscilloscope according to the AGND3 standards with reference to the connection diagram so that the RF signals can be monitored.

Method 2:

The device does not need to be set. Proceed to the procedure 3.

3. Turn ON the power of the product.

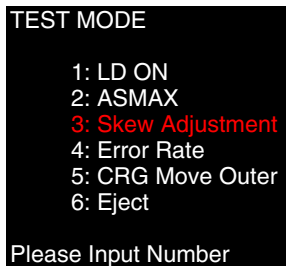
4. Start the simplified FE test mode.

(Regarding how to start the test mode and the operating procedure, refer to the clause on the service test mode.)

5. Load the disc for adjustment (GGV1025).

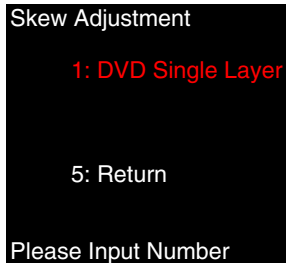
6. TEST MODE

Select "3: Skew Adjustment."



7. Skew Adjustment

Select "1: DVD Single Layer."



8. Adjust the Skew using a driver while checking the RF value.

Refer to the following pages concerning the locations to make SKEW adjustment.

Method 1:

Slightly turn the skew adjusting screw A while checking the RF wave level by the oscilloscope and make adjustment so the wave level would reach its maximum.

Next, slightly turn the skew adjusting screw B so the wave level would reach its maximum.

Slightly turn the skew adjusting screw A again so the wave level would reach its maximum.

(Make adjustment in the order of A->B->A and in the end complete adjustment by turning each screw in the clockwise direction.)

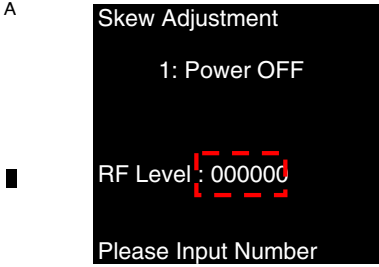
Method 2:

Slightly turn the skew adjusting screw A while checking the value of the RF level through the OSD display so the wave level would reach its maximum.

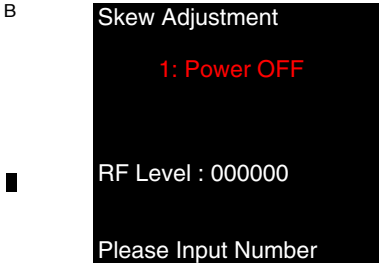
Next, slightly turn the skew adjusting screw B so the level would reach its maximum.

Slightly turn the skew adjusting screw A again so the level would reach its maximum.

(Make adjustment in the order of A->B->A and in the end complete adjustment by turning each screw in the clockwise direction.)

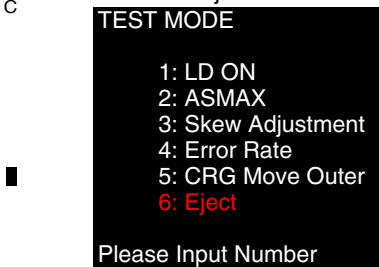


9. Skew Adjustment
Select "1: Power OFF."



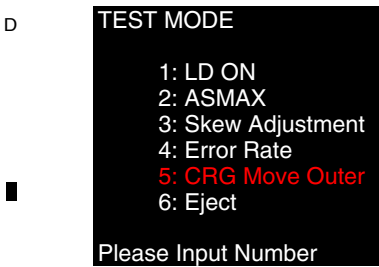
10. TEST MODE

Select "6: Eject."

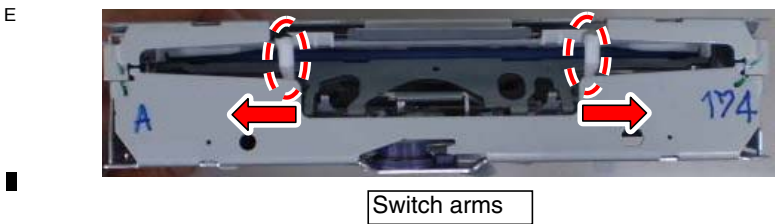


11. TEST MODE

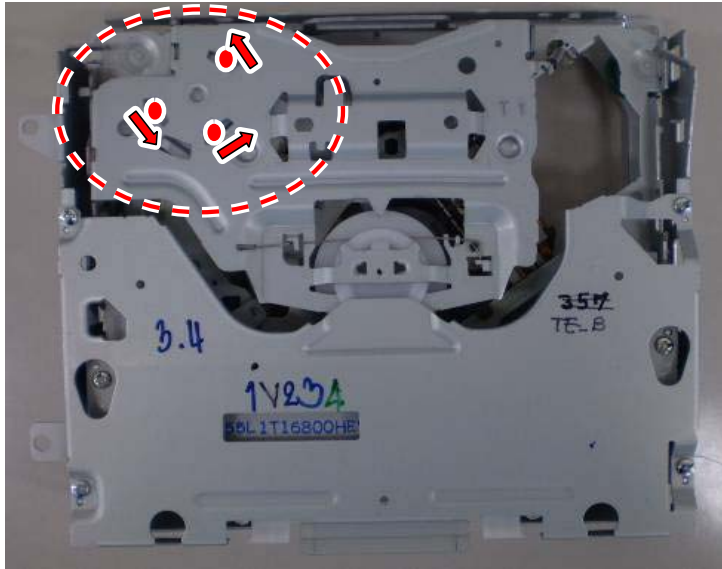
Select "5: CRG Move Outer."



12. In order to produce the clamping state with no disc loaded, slightly move the disc detection arm in the counterclockwise direction while moving the switch arms outward.



F



Disc Detection Arm

13. CRG Move Outer

Select "1: DVD Single Layer."

CRG Move Outer

- 1: DVD Single Layer
- 2: DVD Dual Layer
- 3: CD
- 4: CD-RW
- 5: Return

Please Input Number

The pickup moves to the outer periphery.

Apply the adhesive to fix the skew, the resonance adhesive and the screw lock.

Refer to the next page regarding the locations of adhesive joining.

14. CRG Move Outer

1: Power OFF

CRG Move Outer

- 1: Power OFF

Please Input Number

15. TEST MODE

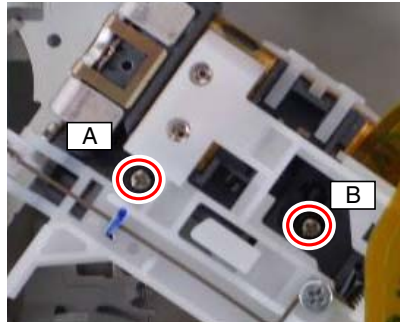
Select "6: Eject."

TEST MODE

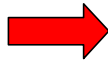
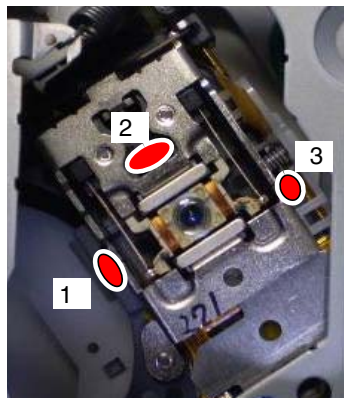
- 1: LD ON
- 2: ASMAX
- 3: Skew Adjustment
- 4: Error Rate
- 5: CRG Move Outer
- 6: Eject

Please Input Number

A Locations to make SKEW adjustment



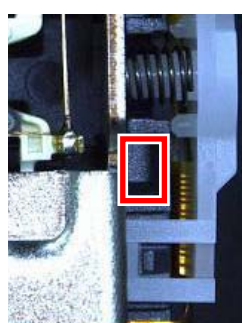
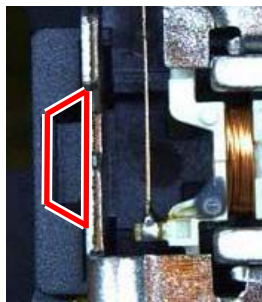
C Locations to adhere the SKEW 1,2,3: GEM1033



1

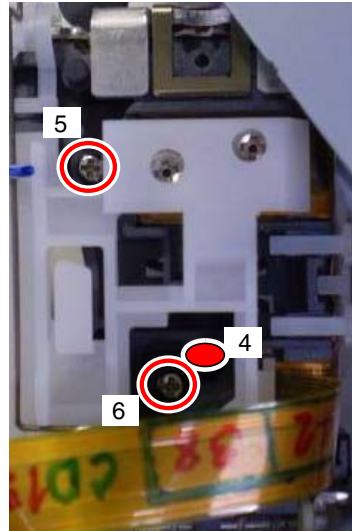
2

3

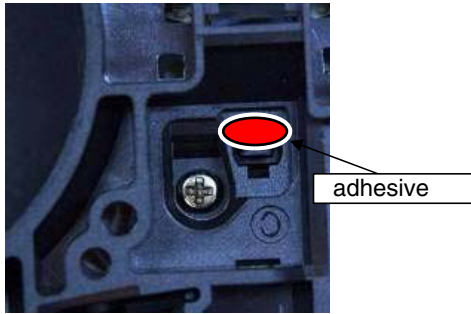


F

Bond for resonance 4:Three Bond 1530

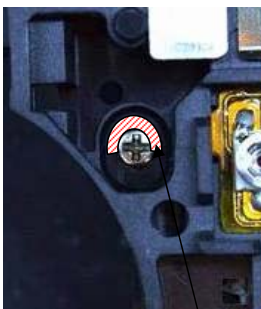


4



Bond for locking the screw 5,6 : Three Bond 1401M

5



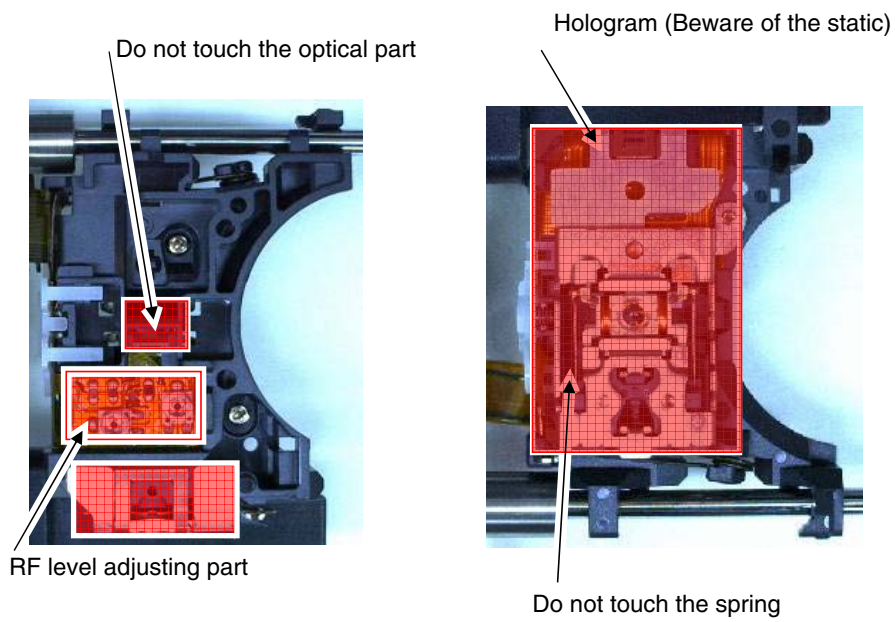
6



Bond for locking the screw

A Precautions on handling the PU

*Precaution: Do not touch those shaded areas in the following figures.



B

C

D

E

F

A

B

C



D

E

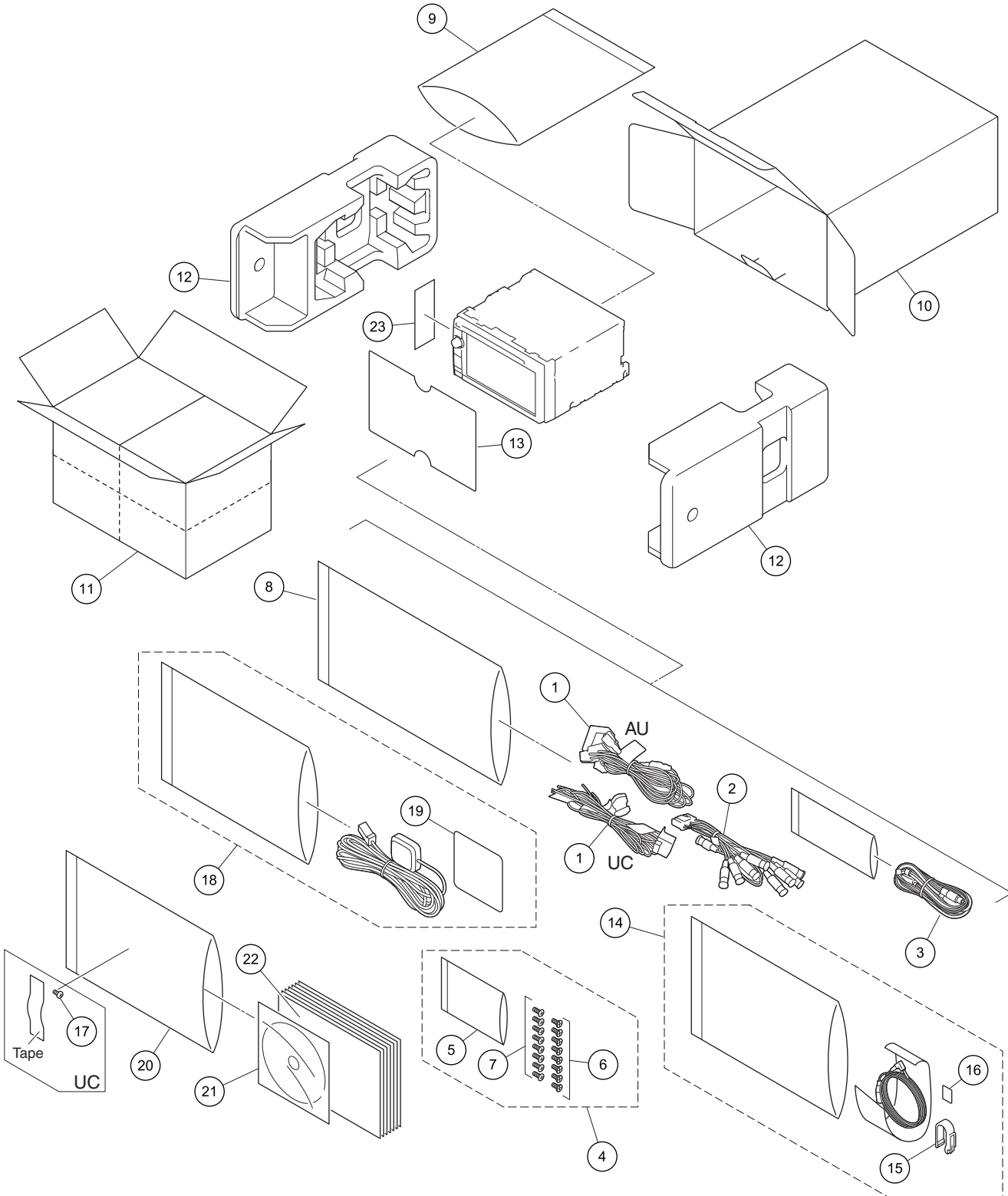
F

9. EXPLODED VIEWS AND PARTS LIST

NOTES : • Parts marked by " * " are generally unavailable because they are not in our Master Spare Parts List.

- 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.
- Screw adjacent to  mark on the product are used for disassembly.
- For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions, apply as you think it appropriate.)

9.1 PACKING



(1) PACKING SECTION PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
1	Cord Assy	See Contrast table (2)	16	Cushion	CZN7193
2	MBL CMPX CONN-CORD	CDP1375	17	Screw	See Contrast table (2)
3	USB CONN-Cable Assy	CDP1425	18	GPS Antenna Assy	CXE3204
4	Screw Assy	CEA3559	19	Sheet	CZN8510
* 5	Polyethylene Bag	CEG-127	20	Polyethylene Bag	CEG1116
6	Screw	CRZ50P090FTC	21	IM CD-ROM	CPJ1334
7	Screw	TRZ50P080FTC	22-1	Quick Start Guide	See Contrast table (2)
8	Polyethylene Bag	CEG1116	22-2	Quick Start Guide	See Contrast table (2)
9	Polyethylene Bag	See Contrast table (2)	22-3	Important Information	See Contrast table (2)
10	Unit Box	See Contrast table (2)	22-4	Installation Manual	See Contrast table (2)
11	Contain Box	See Contrast table (2)	22-5	Caution Card	CRP1310
12	Protector	CHP4122	* 22-6	Registration Card	See Contrast table (2)
* 13	Board	CHW2174	* 22-7	Warranty Card	See Contrast table (2)
14	Microphone Assy	CPM1083	23	Sheet	CNN3437
15	Holder	CZN7192			

(2) CONTRAST TABLE

AVIC-X930BT/XNUC, AVIC-X9310BT/XNUC and AVIC-F930BT/XNAU are constructed the same except for the following:

Mark	No.	Description	AVIC-X930BT/XNUC	AVIC-X9310BT/XNUC	AVIC-F930BT/XNAU
	1	Cord Assy	CDP1307	CDP1307	CDP1306
	9	Polyethylene Bag	CEG1402	CEG1402	CEG1401
	10	Unit Box	CHG7538	CHG7542	CHG7541
	11	Contain Box	CHL7538	CHL7542	CHL7541
	17	Screw	BPZ20P040FTC	BPZ20P040FTC	Not Used
	22-1	Quick Start Guide	CRB3628	CRB3628	CRB3632
	22-2	Quick Start Guide	CRB3629	CRB3629	Not Used
	22-3	Important Information	CRD4575	CRD4575	CRB3620
	22-4	Installation Manual	CRD4576	CRD4576	CRB3621
*	22-6	Registration Card	CRY1271	CRY1271	Not Used
*	22-7	Warranty Card	CRY1276	CRY1276	Not Used

Owner's Manual, Installation Manual

Part No.	Language
CRB3628	English
CRB3629	French
CRD4575	English, French
CRD4576	English, French
CRB3632	English
CRB3620	English
CRB3621	English

CONTENTS OF IM CD-ROM (Operation Manual), CPJ1334

Part No.	Language
* CRB3610	English
* CRB3611	French
* CRB3618	English

All operation manuals are supplied in PDF files by the CD-ROM.

Regarding the availability of paper manual, contact Pioneer Service representative in your region.

9.2 EXTERIOR (1)

1

2

3

4

A

UC

40

40

AU

B

(1/2)

B

D

A

8 18

7 37

5 5

19 5

26 27

10

5 9

16

C

29 30

36 31

34 33

32 35

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11 25

38 (2/2)

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14 **E**

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D 4

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F 4

H 4

E 4

F 4

E

G

15 24

H

B **C**

2 **J**

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F

20

1 1

J **I**

1 1

C

I

1 1

1

2

3

4

(1) EXTERIOR (1) SECTION PARTS LIST

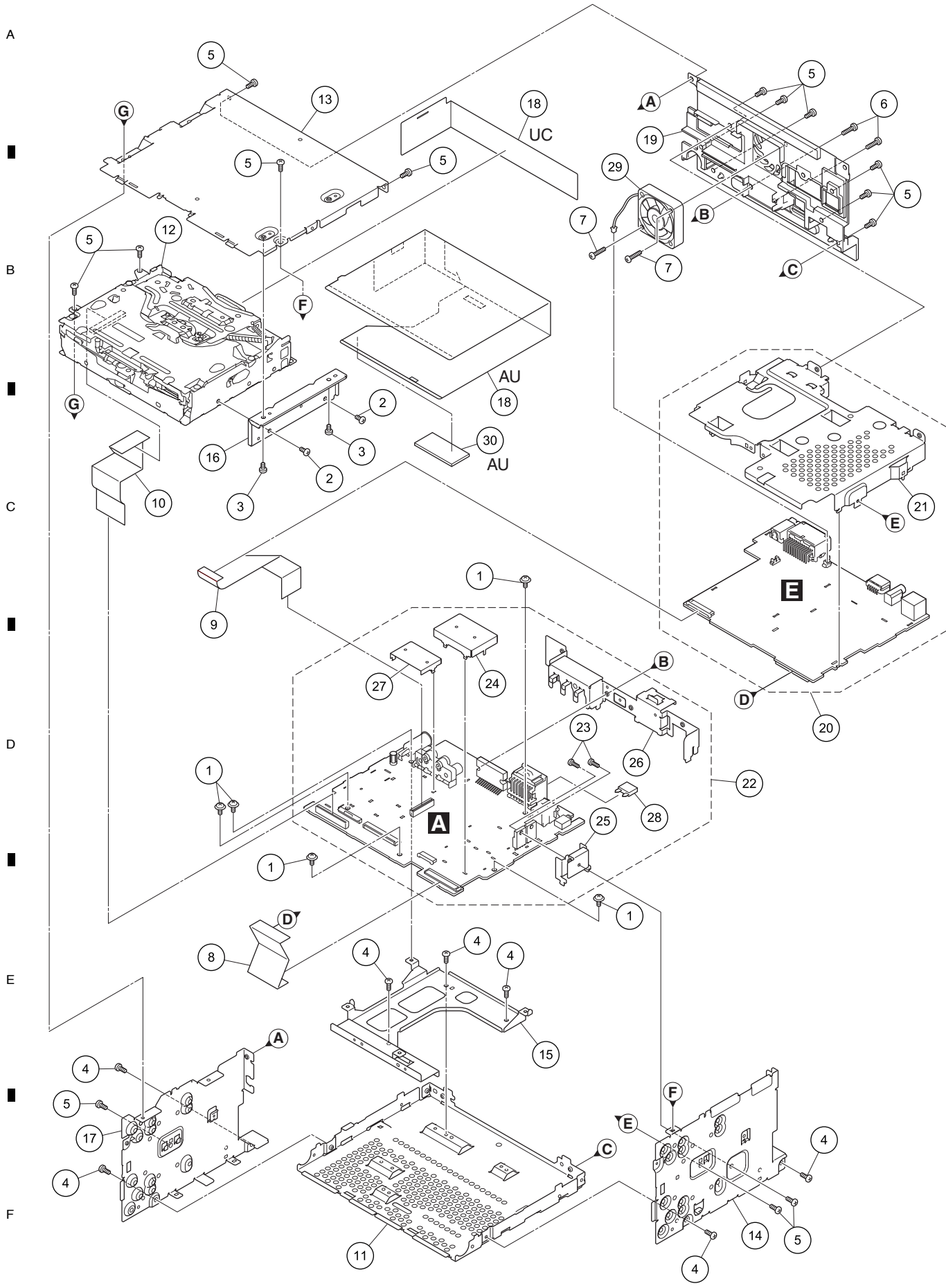
<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
1	Screw	BSZ26P060FTC	22	Cord Assy	CDE9389
2	FPC	CNQ4273	23	Bluetooth Module	CWX4140
3	FPC	CNQ4274	24	LCD Panel	CWX4022
4	Screw	AMZ20P040FTC	25	Grille Unit	See Contrast table (2)
5	Screw	BPZ20P080FTC			
6	Screw	BSZ26P060FTC	26	Knob Unit	CXE3932
7	Button(EJECT)	CAI3301	27	Spring	YBL5010
8	Button(HOME)	CAI3302	28	Detach Grille Assy	See Contrast table (2)
9	Button	CAI3304	29	Button(MUTE, MODE)	See Contrast table (2)
10	Screw(M2 x 3)	CBA1877	30	Button(TRK)	CAI3306
11	Plate Spring	CBL1823	31	Coil Spring	CBH3091
12	FFC	CDE9392	32	Cushion	CNN3549
13	FFC	CDE9394	33	Grille	CNU1519
14	FFC	CDE9395	34	Cover	CNU1520
15	Holder	CND5943	35	Lever	CNW2115
16	Cover	CNN3240	36	Plate Unit	CXE3997
17	Insulator	CNN3541	37	Lighting Conductor Unit	CXE4567
18	Cushion	CNN3548	38	IF Unit	See Contrast table (2)
19	Holder	CNW2114	39	Holder	CND5945
20	Touch Panel	CSX1164	40	Cord Assy	See Contrast table (2)
21	CC Monitor Unit(Service)	See Contrast table (2)	41	MBL CMPX CONN-CORD	CDP1375
			42	Cap	CNW1490

(2) CONTRAST TABLE

AVIC-X930BT/XNUC, AVIC-X9310BT/XNUC and AVIC-F930BT/XNAU are constructed the same except for the following:

Mark	No.	Description	AVIC-X930BT/XNUC	AVIC-X9310BT/XNUC	AVIC-F930BT/XNAU
	21	CC Monitor Unit(Service)	CXX3400	CXX3400	CXX3403
	25	Grille Unit	CXE3931	CXE3934	CXE4202
	28	Detach Grille Assy	CXE3996	CXE3996	CXE4275
	29	Button(MUTE, MODE)	CAI3305	CAI3305	CAI3307
	38	IF Unit	CWN5866	CWN5866	CWN5869
	40	Cord Assy	CDP1307	CDP1307	CDP1306

9.3 EXTERIOR (2)



AVIC-X930BT/XNUC

(1) EXTERIOR (2) SECTION PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
1	Screw	ASZ26P060FTC	16	Bracket	CND5933
2	Screw	BMZ25P040FTB	17	Bracket	CND6117
3	Screw	BMZ26P040FTC	18	Sheet	See Contrast table (2)
4	Screw	BSZ26P050FTB	19	Heat Sink	CNR2097
5	Screw	BSZ26P060FTC	20	IF Unit	See Contrast table (2)
6	Screw	BSZ26P160FTC	21	Holder	CND5939
7	Screw(M2.6 x 14)	CBA2103	22	AV Unit	See Contrast table (2)
8	FFC	CDE9384	23	Screw	BSZ26P060FTC
9	FFC	CDE9385	24	Shield	CND4926
10	FFC	CDE9401	25	Holder	CND5834
11	Chassis	CNA3210	26	Holder	See Contrast table (2)
12	DVD Mechanism Module(LS1)	CXK6822	27	Shield	CND5938
13	Case	CNB3721	28	Fuse(10 A)	YEK5001
14	Bracket	CND5925	29	Fan Motor	CXM1394
15	Bracket	CND5932	30	Cushion	See Contrast table (2)

(2) CONTRAST TABLE

AVIC-X930BT/XNUC, AVIC-X9310BT/XNUC and AVIC-F930BT/XNAU are constructed the same except for the following:

Mark	No.	Description	AVIC-X930BT/XNUC	AVIC-X9310BT/XNUC	AVIC-F930BT/XNAU
	18	Sheet	CNN3540	CNN3540	CNN3734
	20	IF Unit	CWN5866	CWN5866	CWN5869
	22	AV Unit	CWN5681	CWN5681	CWN5684
	26	Holder	CND5934	CND5934	CND5935
	30	Cushion	Not Used	Not Used	CNN3843

9.4 DVD MECHANISM MODULE

A

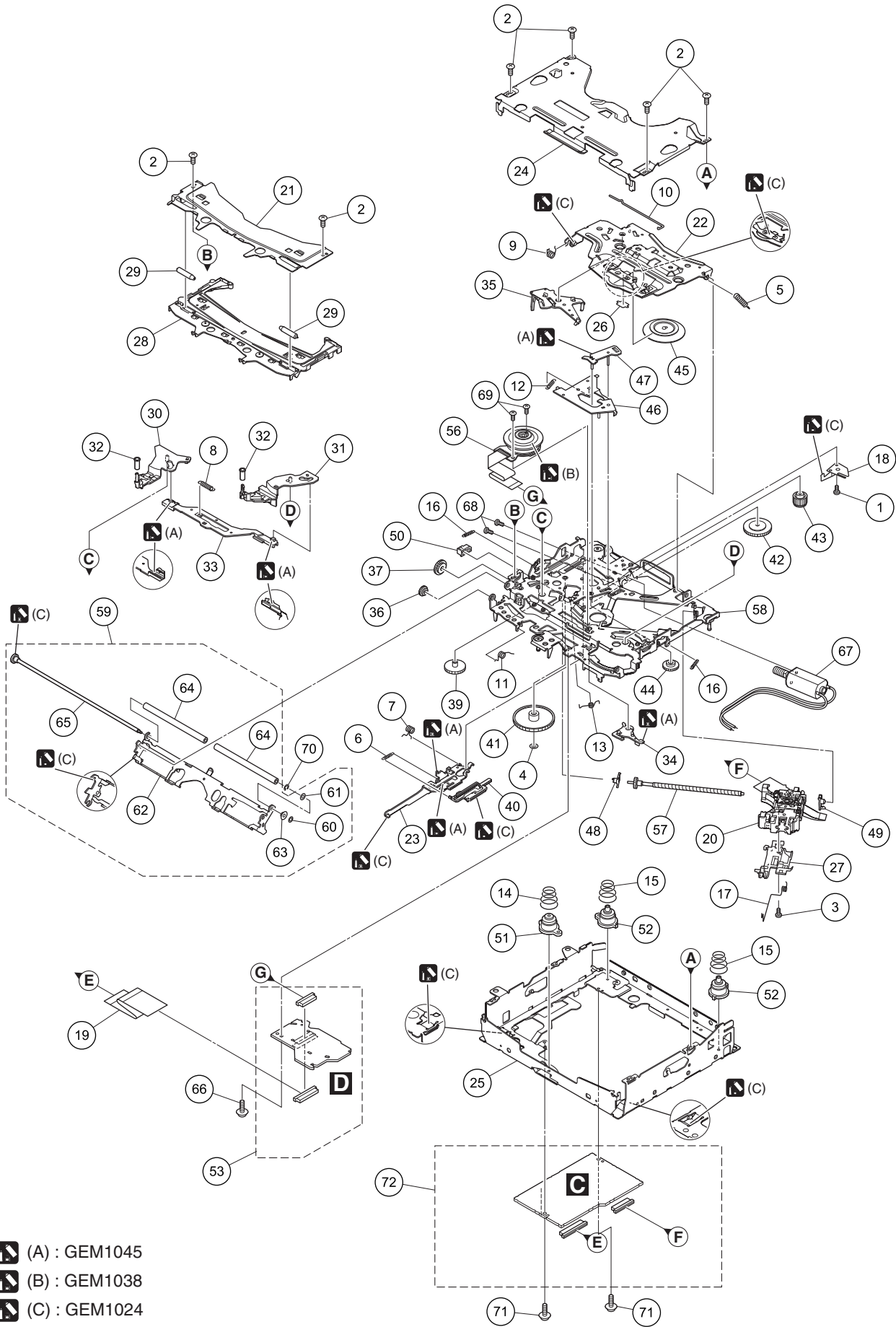
B

C

D

E

F



- (A) : GEM1045
- (B) : GEM1038
- (C) : GEM1024

5 6 7 8
DVD MECHANISM MODULE SECTION PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
1	Screw	BMZ20P020FTC	50	Holder	CNW1195
2	Screw	BSZ20P040FTC			
3	Screw(M2 x 4)	CBA1835	51	Damper	CNW1197
4	Washer	CBF1038	52	Damper	CNW1198
5	Spring	CBH2860	*	53 Connect PCB	CWX3618
			54	
			55	
6	Spring	CBH3010			
7	Spring	CBH3011			
8	Spring	CBH3012	56	Motor(SPINDLE)(M2)	EXM1050
9	Spring	CBH3013	57	Screw Unit	CXC8894
10	Spring	CBH3014	58	Chassis Unit	CXE4562
			59	Arm Assy	CXC8896
11	Spring	CBH3015	60	Washer	CBF1037
12	Spring	CBH3016			
13	Spring	CBH3017	61	Washer	CBF1038
14	Spring	CBH3018	62	Arm	CND4554
15	Spring	CBH3019	63	Collar	CNV6906
			64	Roller	CNW1196
16	Spring	CBH3020	65	Gear Unit	CXC8893
17	Spring	CBH3030			
18	Plate Spring	CBL1822	66	Screw	IMS20P030FTC
19	Cable	CDE8631	67	Motor Unit(LOAD/CRG)(M1)	CXC4026
20	Pickup Unit(Service)	CXX2398	68	Screw	JFZ20P025FTC
			69	Screw	JGZ17P022FTC
21	Bracket	CND4553	70	Washer	YE15FTC
22	Arm	CND4555			
23	Lever	CND5398	71	Screw	IMS20P030FTC
24	Frame	CND6203	72	DVD Core Unit	YWX5025
25	Frame	CND4558			
26	Sheet	CNN2280			
27	Rack	CNW1170			
28	Guide	CNW1171			
29	Roller	CNW1172			
30	Arm	CNW2157			
31	Arm	CNW1174			
32	Roller	CNW1175			
33	Lever	CNW1176			
34	Arm	CNW1177			
35	Arm	CNW1178			
36	Gear	CNW1180			
37	Gear	CNW1181			
38				
39	Gear	CNW1183			
40	Rack	CNW1184			
41	Gear	CNW1185			
42	Gear	CNW1186			
43	Gear	CNW1187			
44	Gear	CNW1188			
45	Clamper	CNW1190			
46	Arm	CNW1191			
47	Arm	CNW1192			
48	Holder	CNW1193			
49	Holder	CNW1194			

A

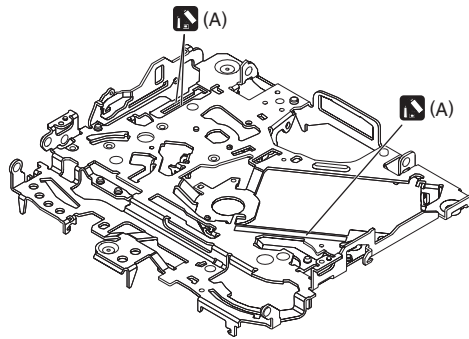
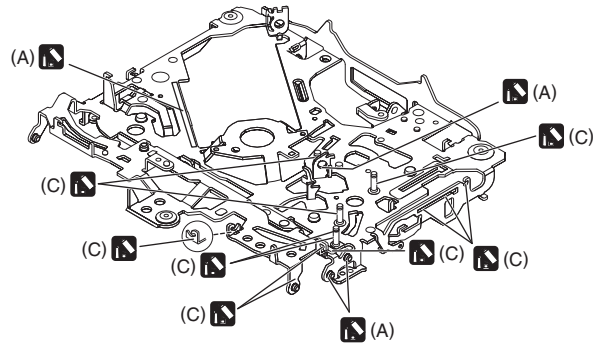
B

C

D

E

F



- (A) : GEM1045
- (B) : GEM1038
- (C) : GEM1024

A

B

C

D

E

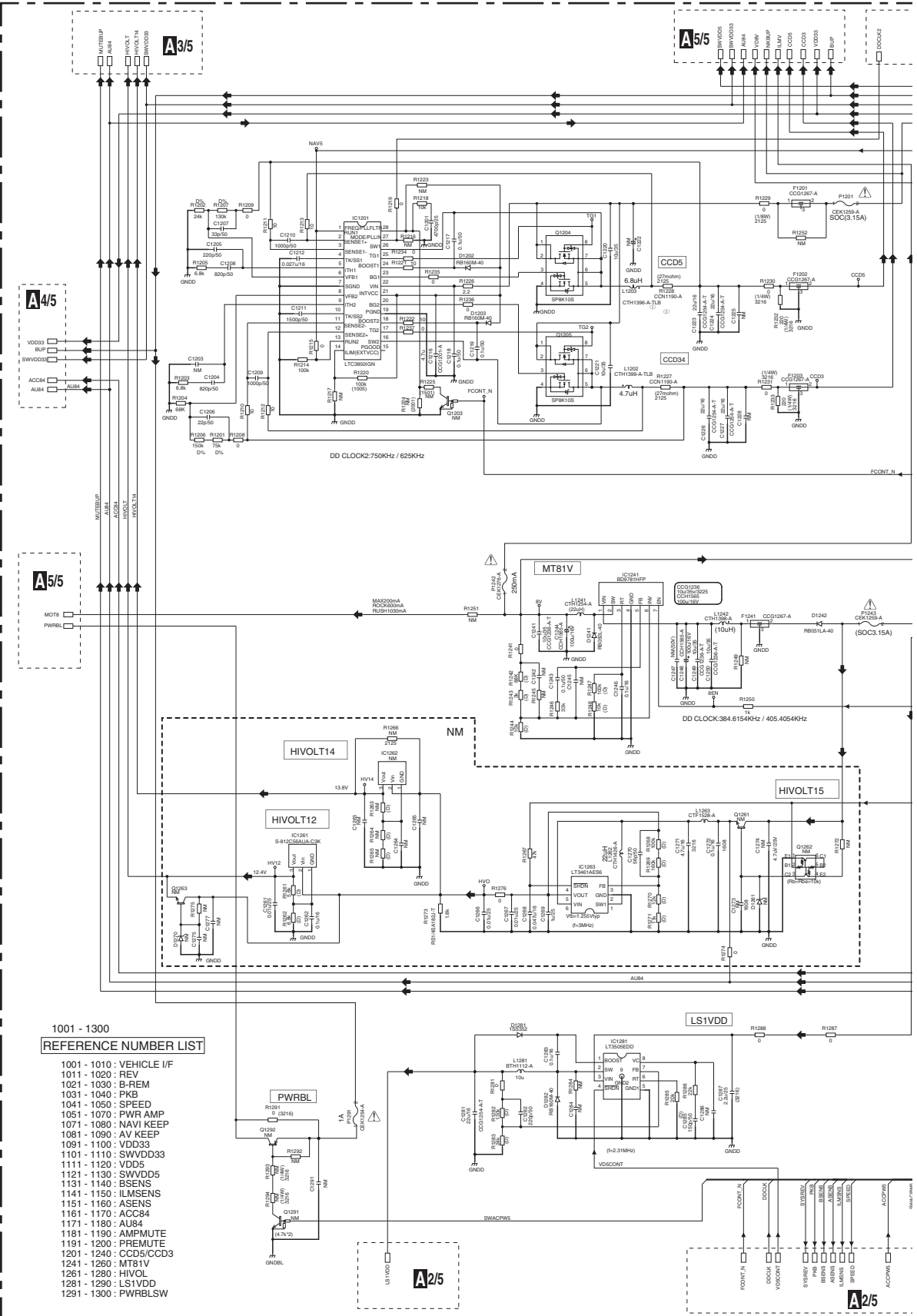
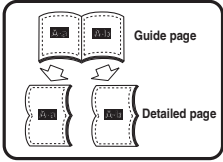
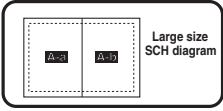
F

10. SCHEMATIC DIAGRAM

10.1 AV UNIT (PS/IF SECTION)(GUIDE PAGE)

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

A-a 1/5



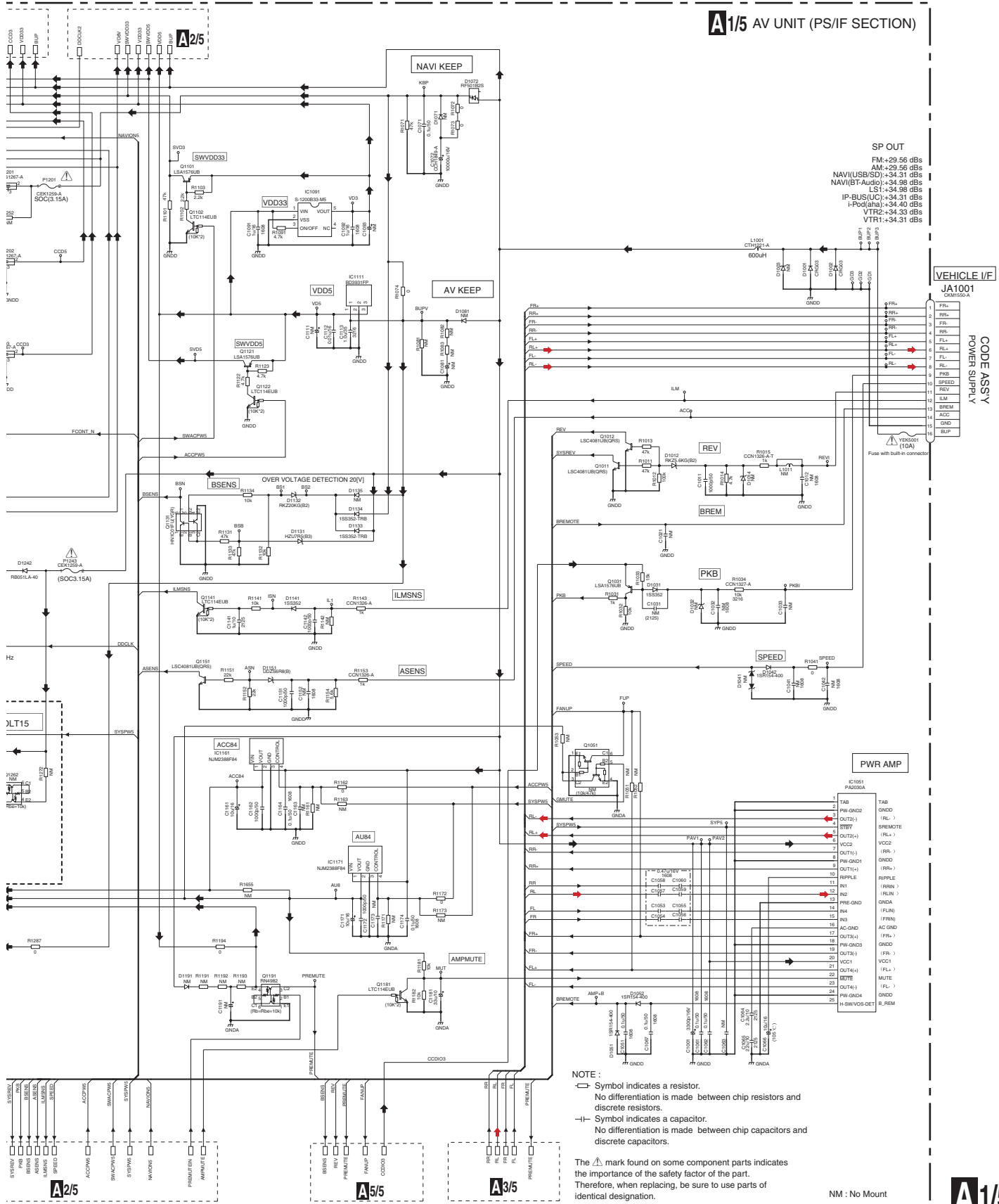
1001 - 1300
REFERENCE NUMBER LIST

- 1001 - 1010 : VEHICLE I/F
- 1011 - 1020 : REV
- 1021 - 1030 : B-REM
- 1031 - 1040 : PKB
- 1041 - 1050 : SPEED
- 1051 - 1070 : PWR AMP
- 1071 - 1080 : NAVI KEEP
- 1081 - 1090 : AV KEEP
- 1091 - 1100 : VDD33
- 1101 - 1110 : SWVDD33
- 1111 - 1120 : VDD5
- 1121 - 1130 : SWVDD5
- 1131 - 1140 : BSENS
- 1141 - 1150 : ILSSENS
- 1151 - 1160 : ASENS
- 1161 - 1170 : ACC84
- 1171 - 1180 : AUB4
- 1181 - 1190 : AMPMUTE
- 1191 - 1200 : PREMUTE
- 1201 - 1240 : CCD5/CCD3
- 1241 - 1260 : MT81V
- 1261 - 1280 : HIVOL
- 1281 - 1290 : LS1VDD
- 1291 - 1300 : PWRBLSW

A1/5

A-b 1/5

A1/5 AV UNIT (PS/IF SECTION)



A

B

C

D

E

F

A1/5 AV UNIT (PS/IF SECTION)

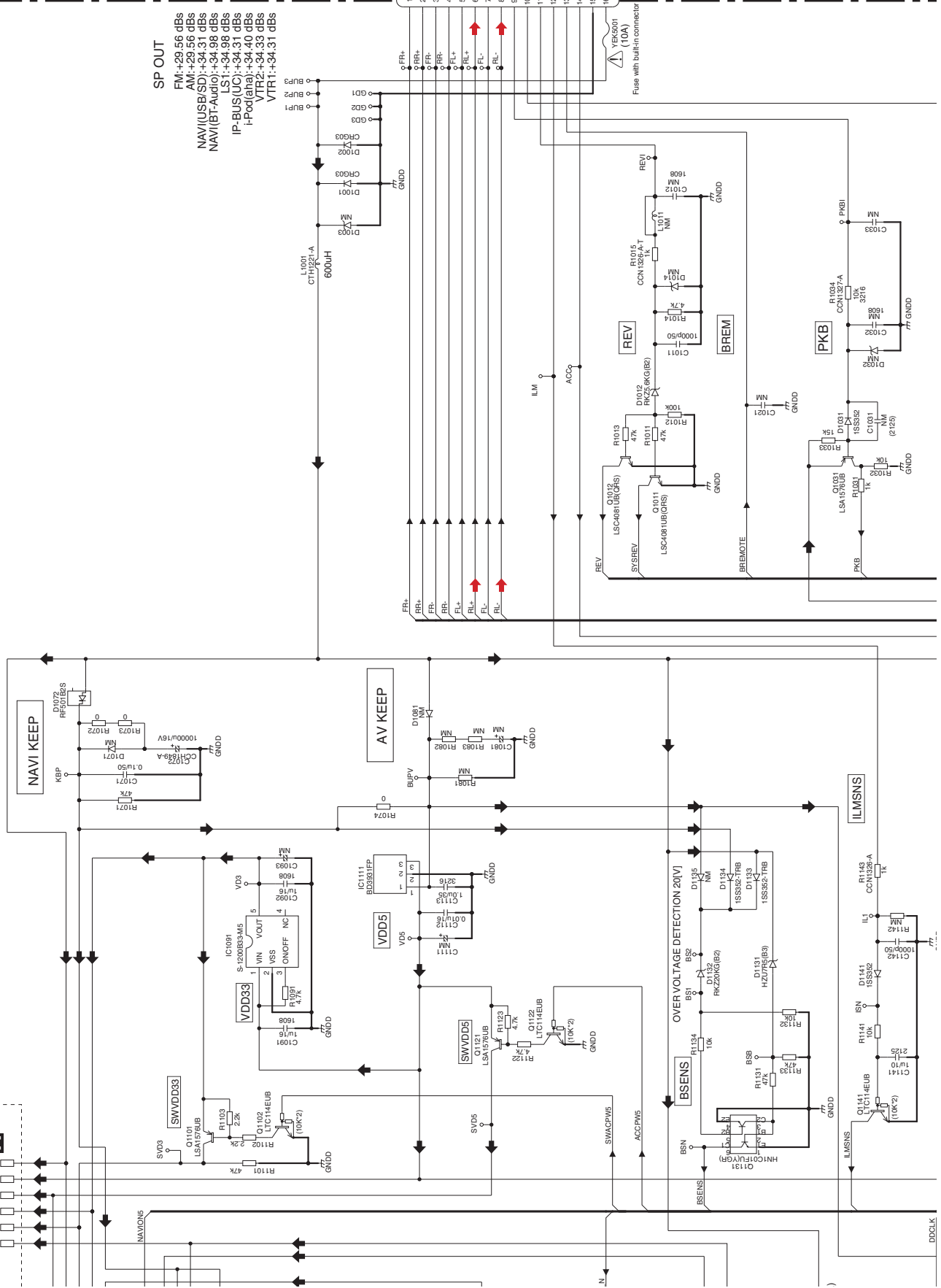
**CODE ASS'Y
POWER SUPPLY**

VEHICLE I/F
JA1001
CAN1850A

1	FR+
2	RR+
3	FR-
4	RR-
5	FL+
6	RL+
7	FL-
8	RL-
9	PKB
10	SPEED
11	REV
12	ILM
13	BREM
14	ACC
15	GND
16	BIP

Y2K001 (10A)
Fuse with built-in connector

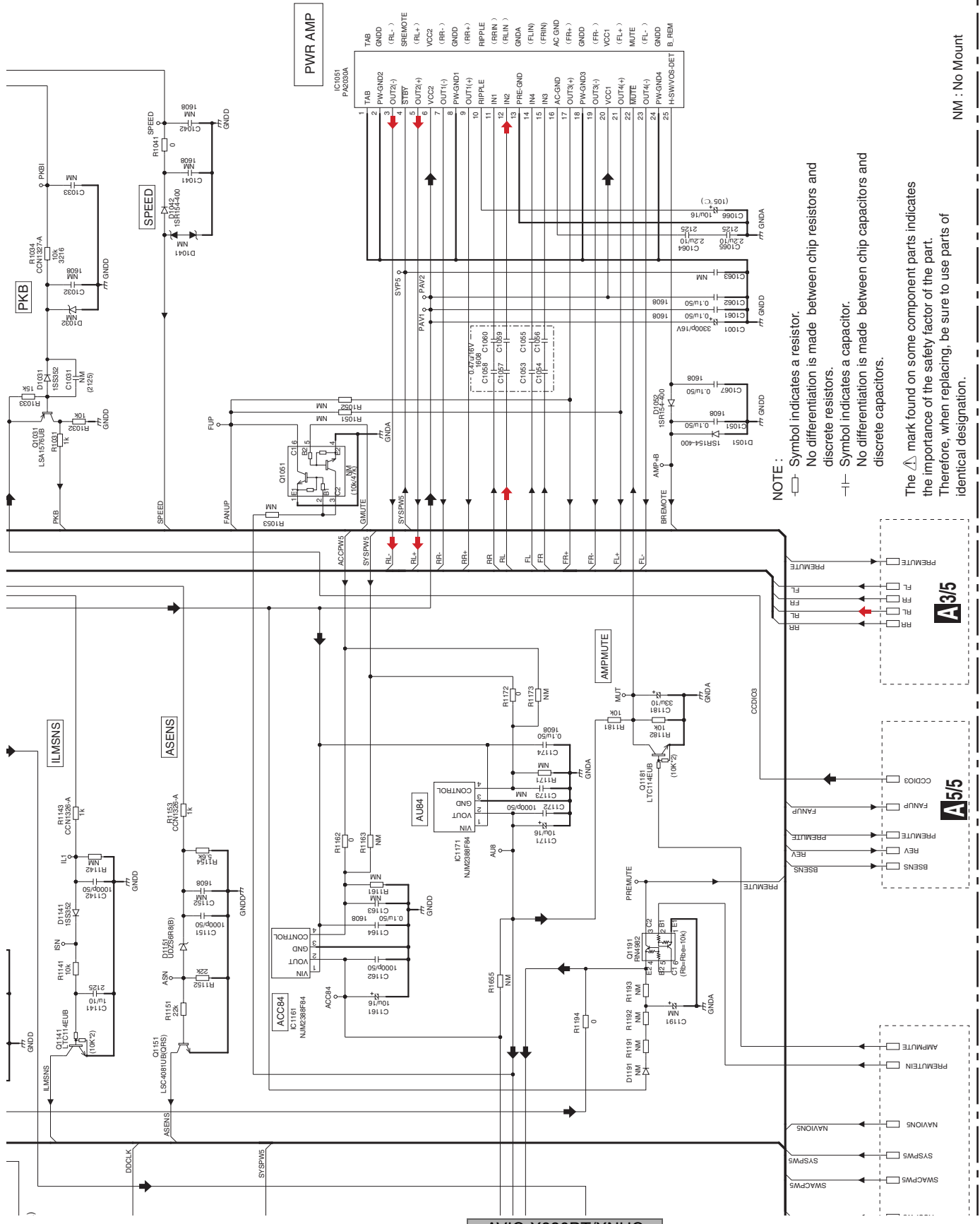
SP OUT
 FM: +29.56 dBs
 AM: +29.56 dBs
 NAVI(USB/SD): +34.31 dBs
 NAVI(BT-Audio): +34.98 dBs
 LS1: +34.98 dBs
 IP-BUS(UC): +34.31 dBs
 i-Pod(aha): +34.40 dBs
 VTR2: +34.33 dBs
 VTR1: +34.31 dBs



A-a A-b

A-b 1/5

AVIC-X930BT/XNUC



NM : No Mount

A-a A-b

D

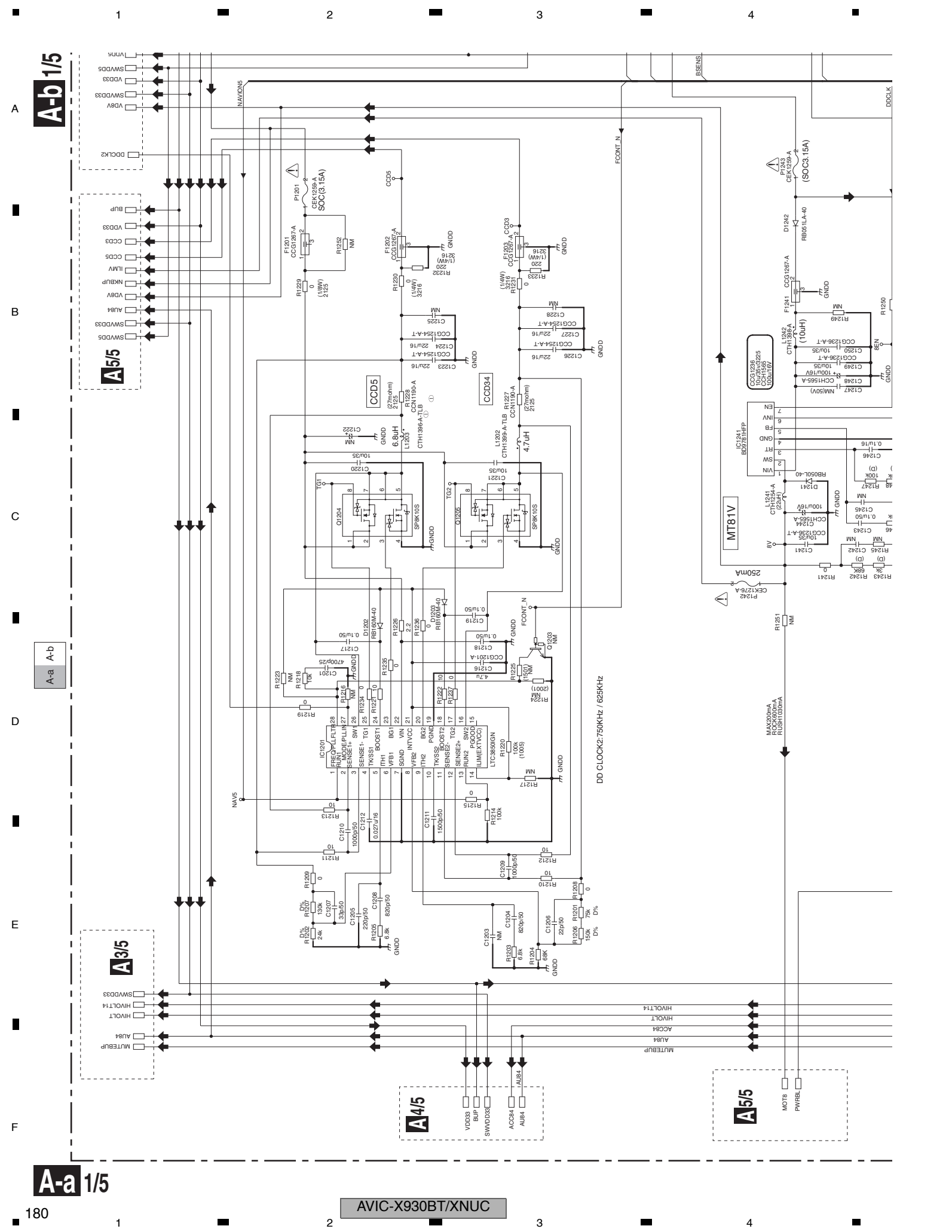
A5/5

E

A-b 1/5

F

A B C D E F



A-b 1/5

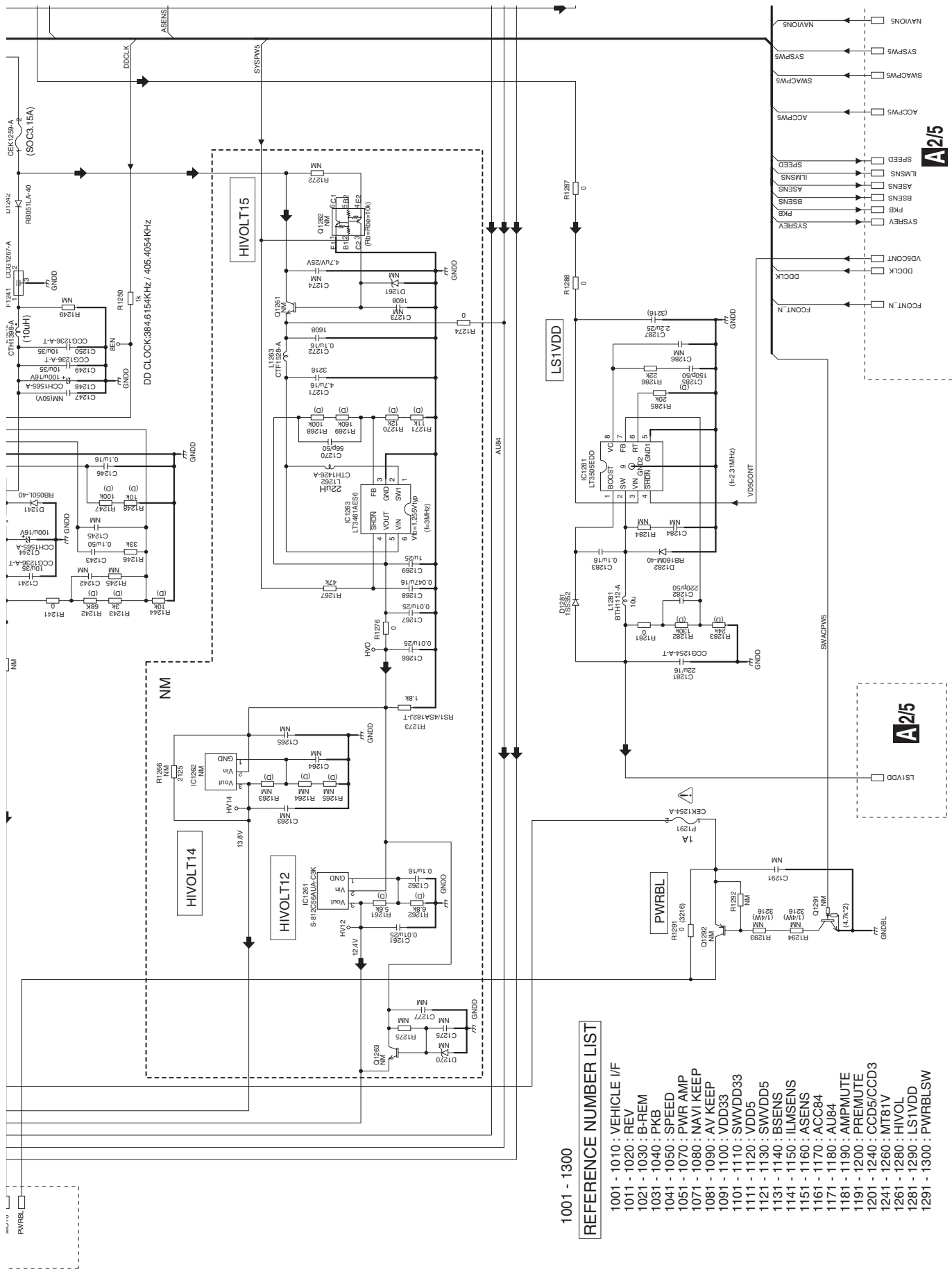
A/5/5

A-a A-b

A/3/5

A-a 1/5

AVIC-X930BT/XNUC



1001 - 1300
REFERENCE NUMBER LIST

- 1001 - 1010 : VEHICLE I/F
- 1011 - 1020 : REV
- 1021 - 1030 : B-REM
- 1031 - 1040 : PKB
- 1041 - 1050 : SPEED
- 1051 - 1070 : PWR AMP
- 1071 - 1080 : NAVI KEEP
- 1081 - 1090 : AV KEEP
- 1091 - 1100 : VDD33
- 1101 - 1110 : SWVDD33
- 1111 - 1120 : VDD5
- 1121 - 1130 : SWVDD5
- 1131 - 1140 : BSENS
- 1141 - 1150 : ILMSENS
- 1151 - 1160 : ASENS
- 1161 - 1170 : ACC84
- 1171 - 1180 : AU84
- 1181 - 1190 : AMPMUTE
- 1191 - 1200 : PREMUTE
- 1201 - 1240 : CCDS/CCD3
- 1241 - 1260 : MT81V
- 1261 - 1280 : HIVOL
- 1281 - 1290 : LS1VDD
- 1291 - 1300 : PWRBLSW

A-b 1/5

A2/5

A-a A-b

D

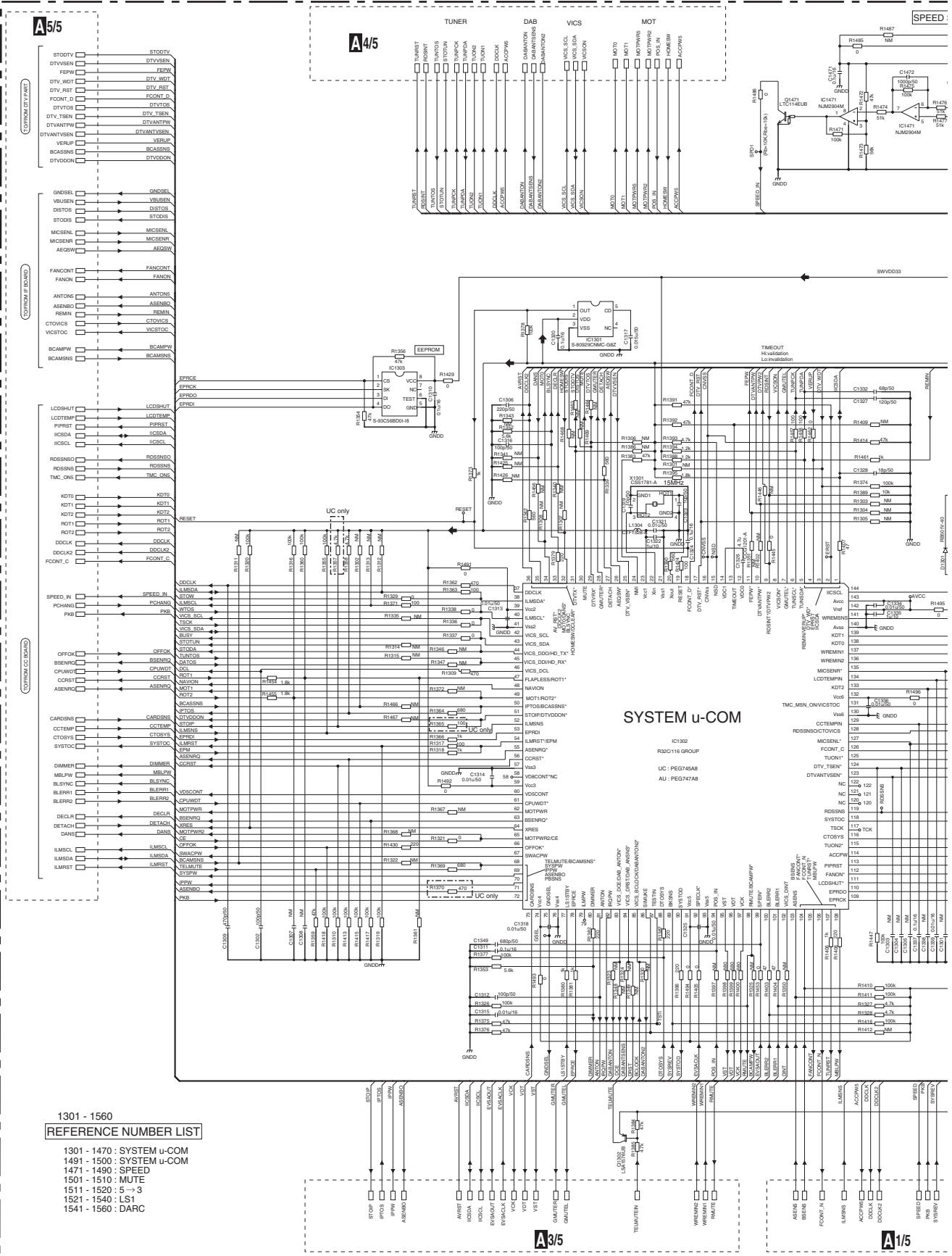
E

F

A-a 1/5

10.2 AV UNIT (SYSTEM uCOM SECTION)(GUIDE PAGE)

A-a 2/5



1301 - 1560
REFERENCE NUMBER LIST

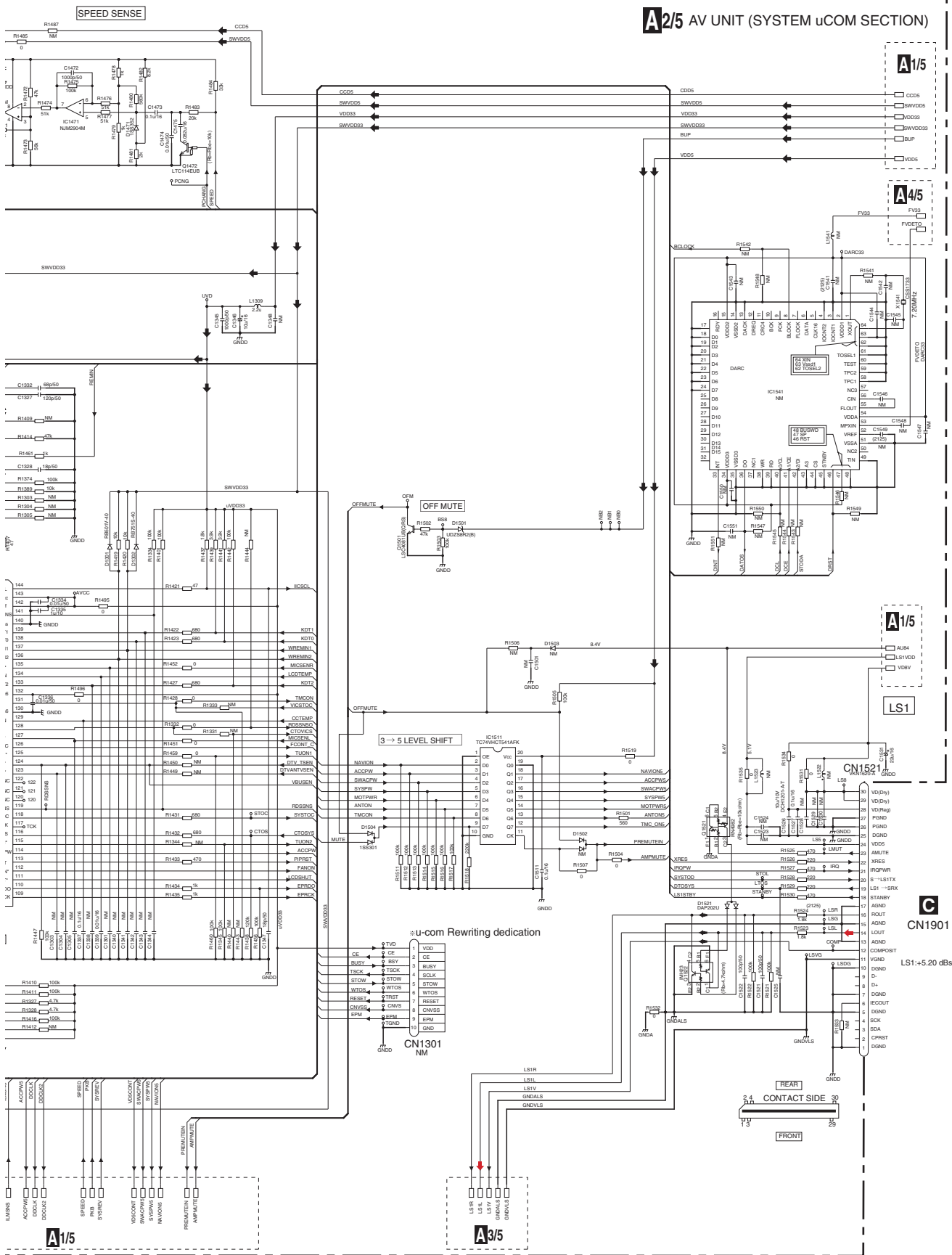
- 1301 - 1470 : SYSTEM u-COM
- 1491 - 1500 : SYSTEM u-COM
- 1471 - 1490 : SPEED
- 1501 - 1510 : MUTE
- 1511 - 1520 : 5 → 3
- 1521 - 1540 : LS1
- 1541 - 1560 : DARC

A
B
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D
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A2/5

A-b 2/5

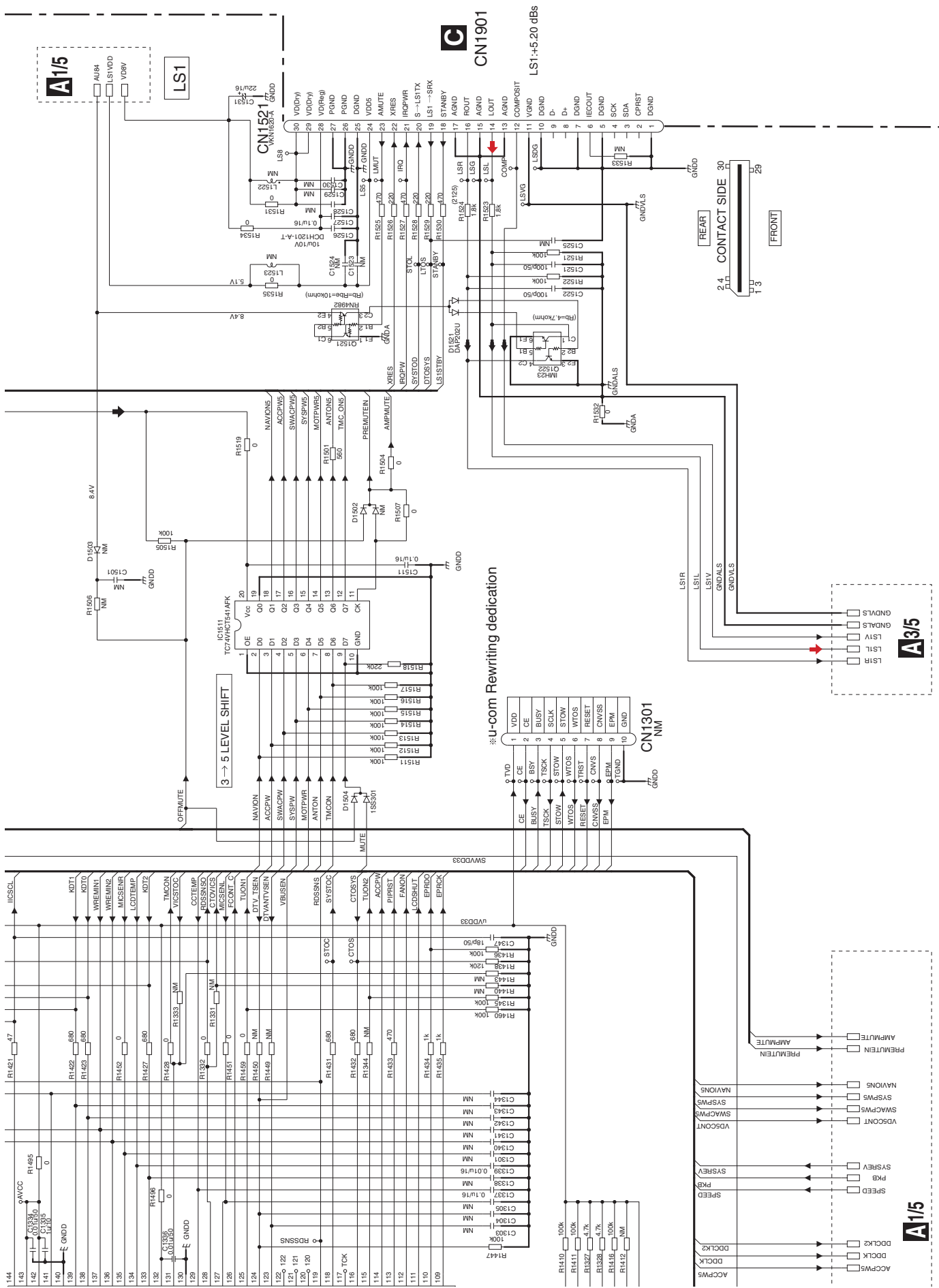
A/2/5 AV UNIT (SYSTEM uCOM SECTION)



A/1/5

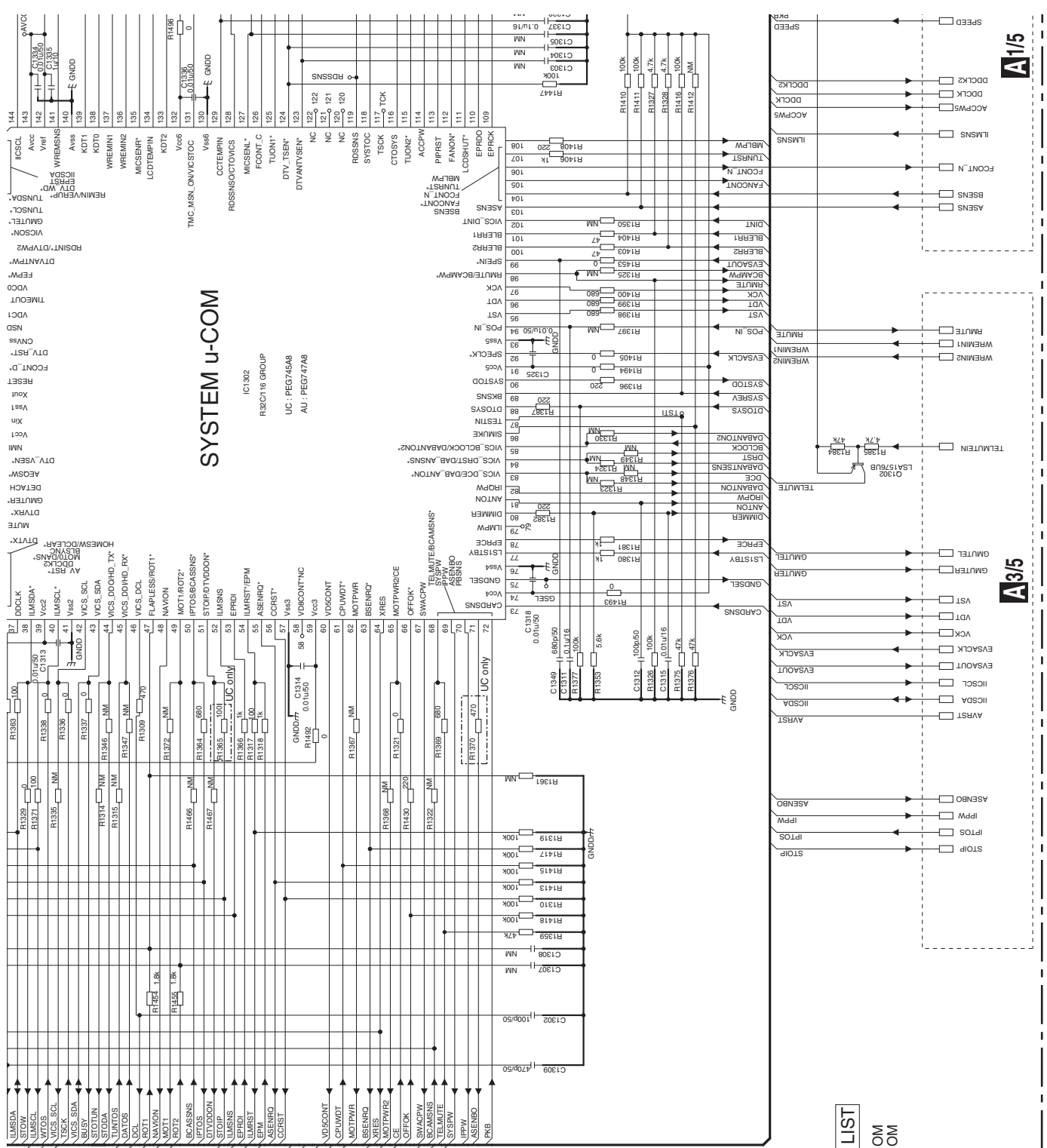
A/3/5

A/2/5



5 6 7 8

A B C D E F



SYSTEM u-COM

UC: PEG74548
 AU: PEG74748

- REFERENCE NUMBER LIST**
- 1301 - 1470 : SYSTEM u-COM
 - 1491 - 1500 : SYSTEM u-COM
 - 1471 - 1490 : SPEED
 - 1501 - 1510 : MUTE
 - 1511 - 1520 : 5→3
 - 1521 - 1540 : LS1
 - 1541 - 1560 : DARC

A1/5

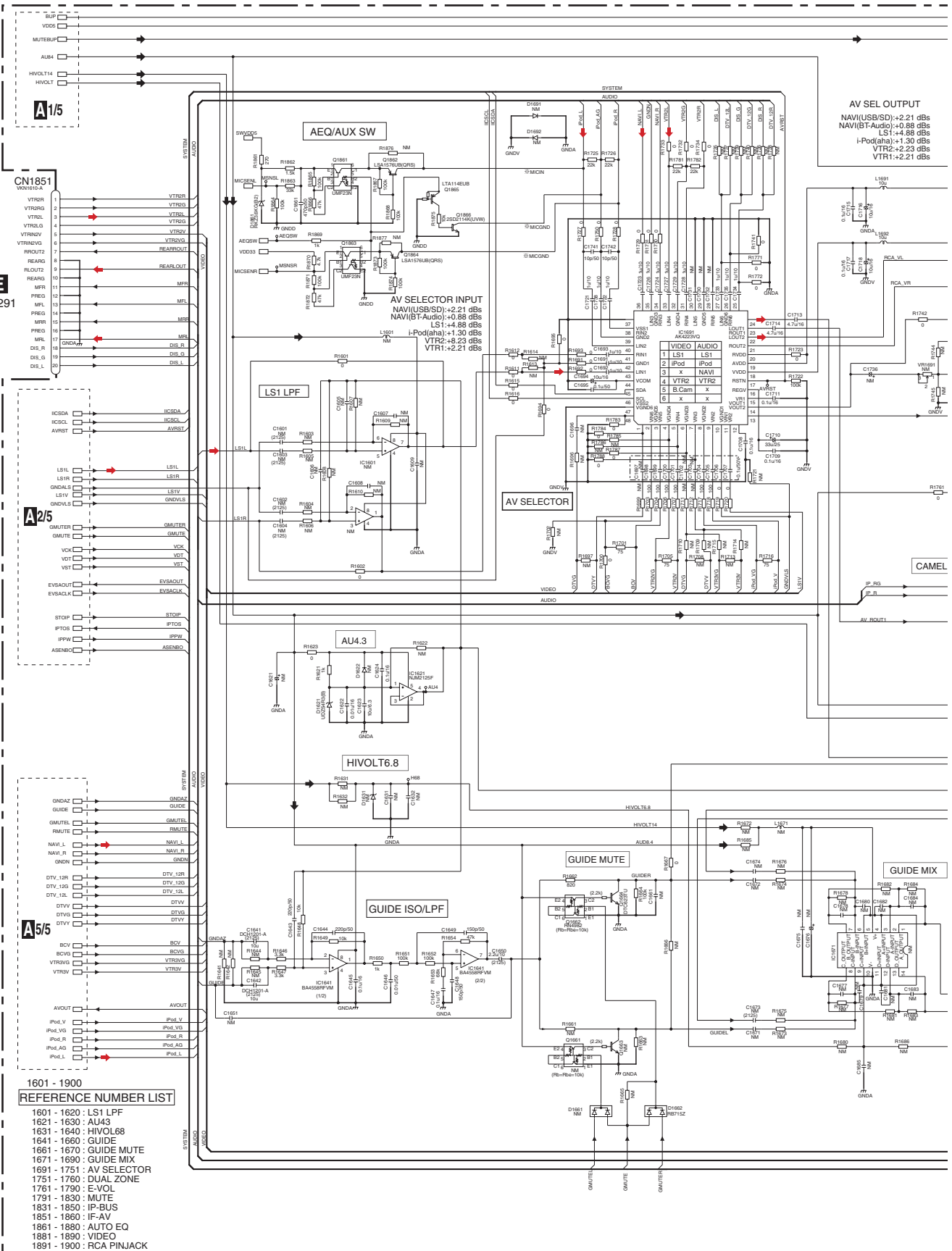
A3/5

A-a A-b

A-a 2/5

10.3 AV UNIT (AUDIO SECTION)(GUIDE PAGE)

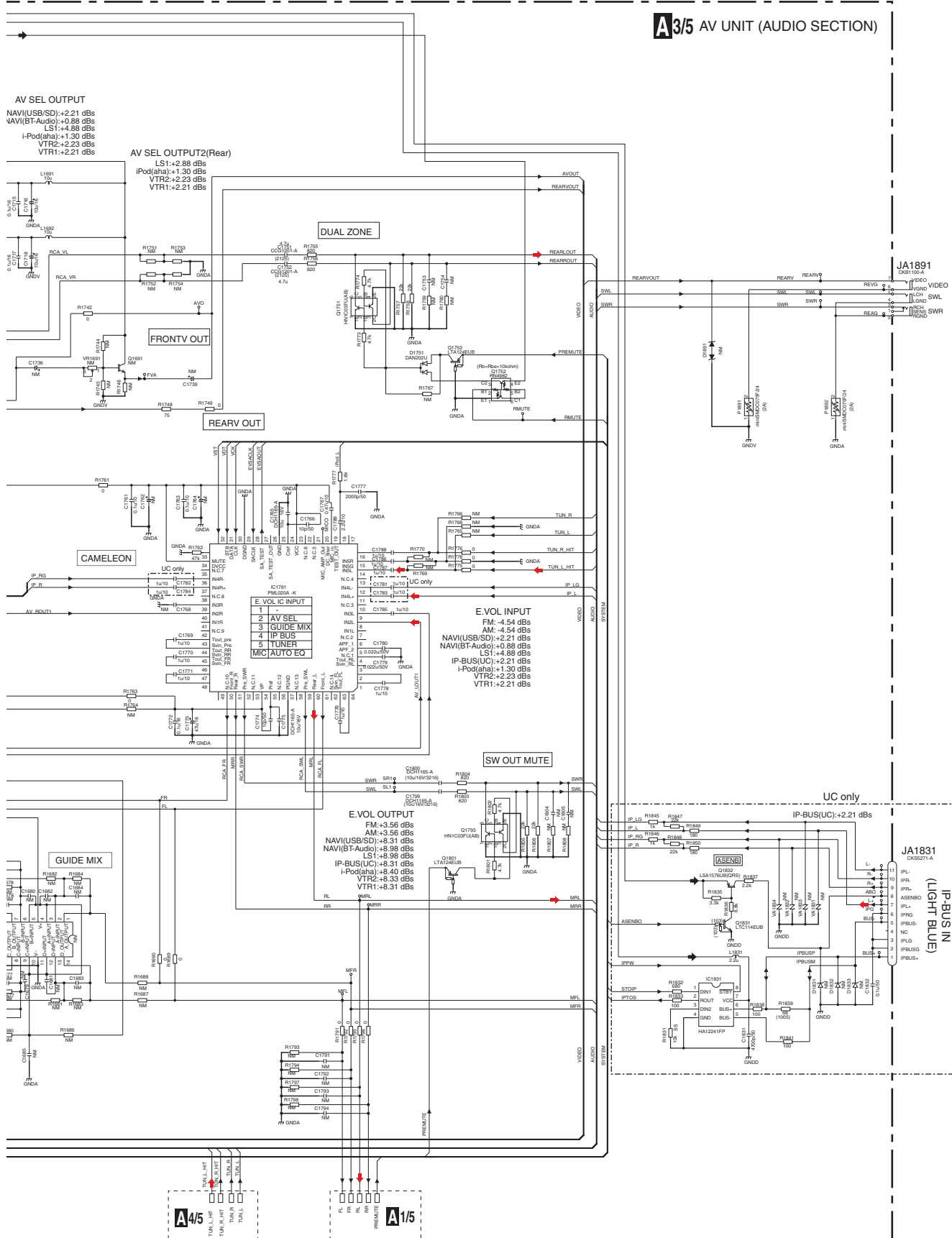
A-a 3/5



A3/5

A-b 3/5

A3/5 AV UNIT (AUDIO SECTION)



1

2

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4

A

B

C

D

E

F

A-b 3/5

A3/5 AV UNIT (AUDIO SECTION)

AV SEL OUTPUT

IAV(USB/SD):+2.21 dBs
 AV(IBT-Audio):+0.88 dBs
 AV(IBT-Audio):+1.30 dBs
 LSI1:+1.30 dBs
 I-Pod(a3):+1.30 dBs
 VTR2:+2.23 dBs
 VTR1:+2.21 dBs

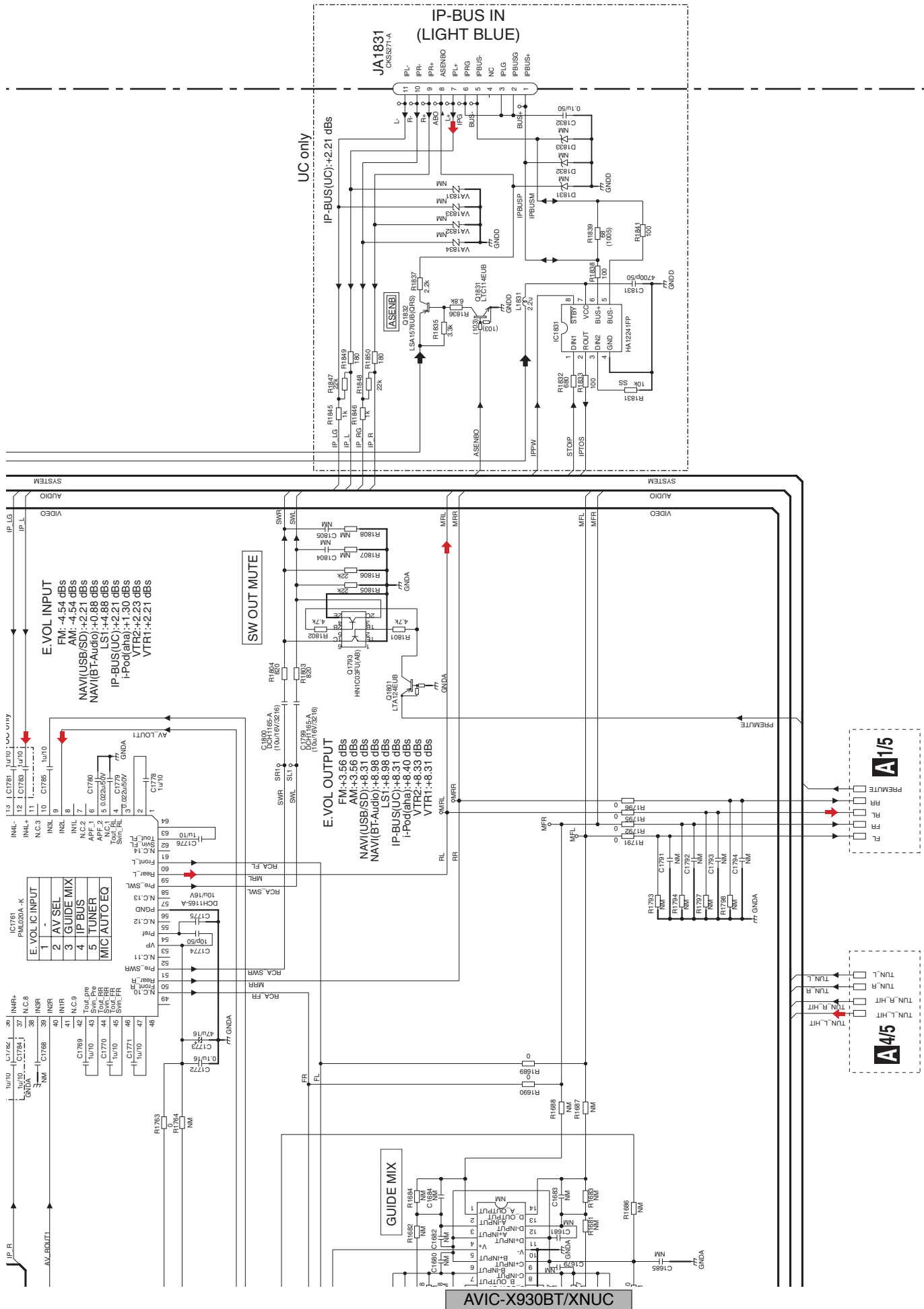
AV SEL OUTPUT2(Rear)

LS1:+2.88 dBs
 LSI2:+1.30 dBs
 VTR2:+2.23 dBs
 VTR1:+2.21 dBs

AVIC-X930BT/XNUC

E.VOL IC INPUT	
1	IP. RG
2	IP. PR
3	AV. BOUT1
4	IP. LG
5	IP. L
6	TUN. L-HIT
7	TUN. R-HIT
8	TUN. L
9	TUN. R
10	PREMUTE
11	RMUTE
12	VIDEO
13	VIDEO
14	VIDEO
15	VIDEO
16	VIDEO
17	VIDEO
18	VIDEO
19	VIDEO
20	VIDEO
21	VIDEO
22	VIDEO
23	VIDEO
24	VIDEO
25	VIDEO
26	VIDEO
27	VIDEO
28	VIDEO
29	VIDEO
30	VIDEO
31	VIDEO
32	VIDEO
33	VIDEO
34	VIDEO
35	VIDEO
36	VIDEO
37	VIDEO
38	VIDEO
39	VIDEO
40	VIDEO
41	VIDEO
42	VIDEO
43	VIDEO
44	VIDEO
45	VIDEO

190

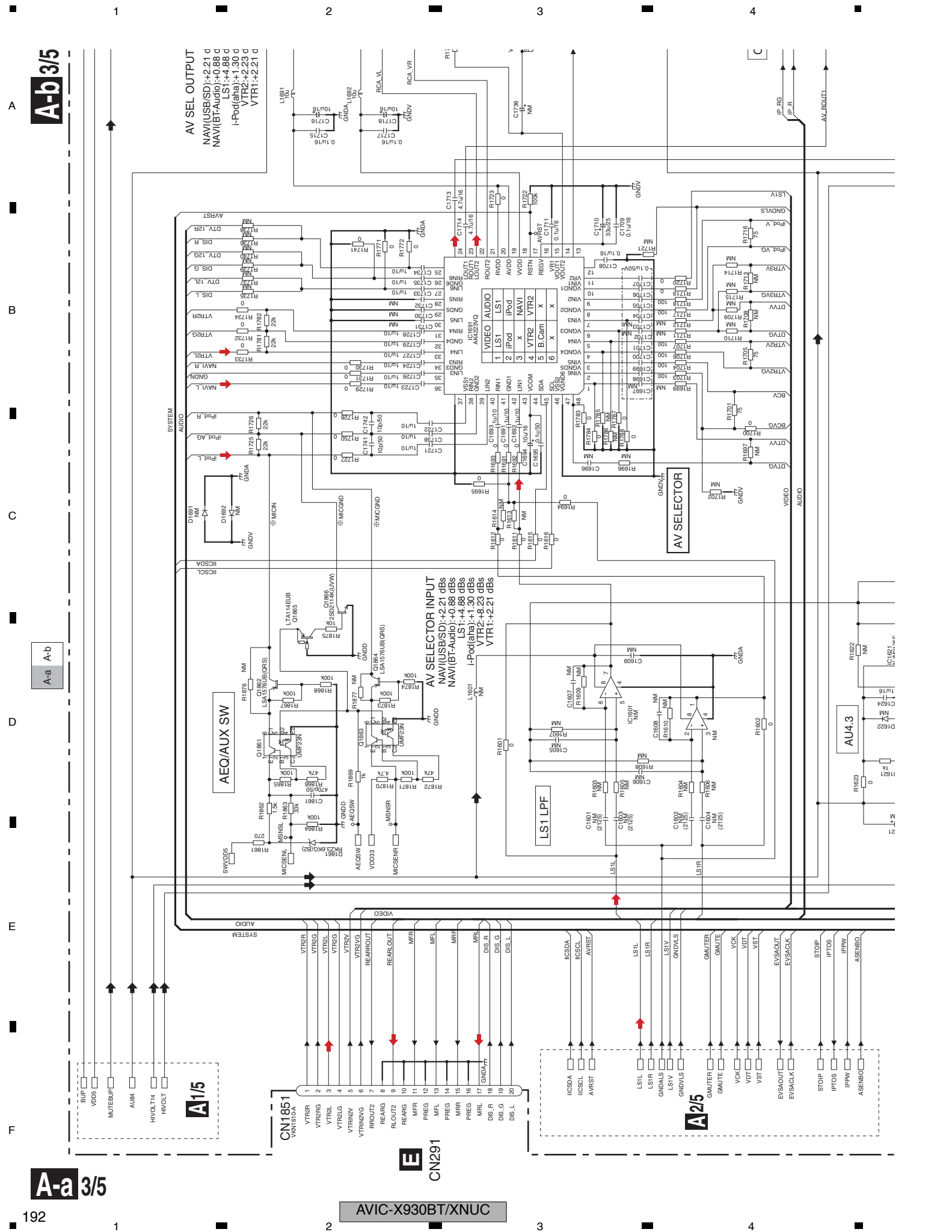


A-a A-b

A/5

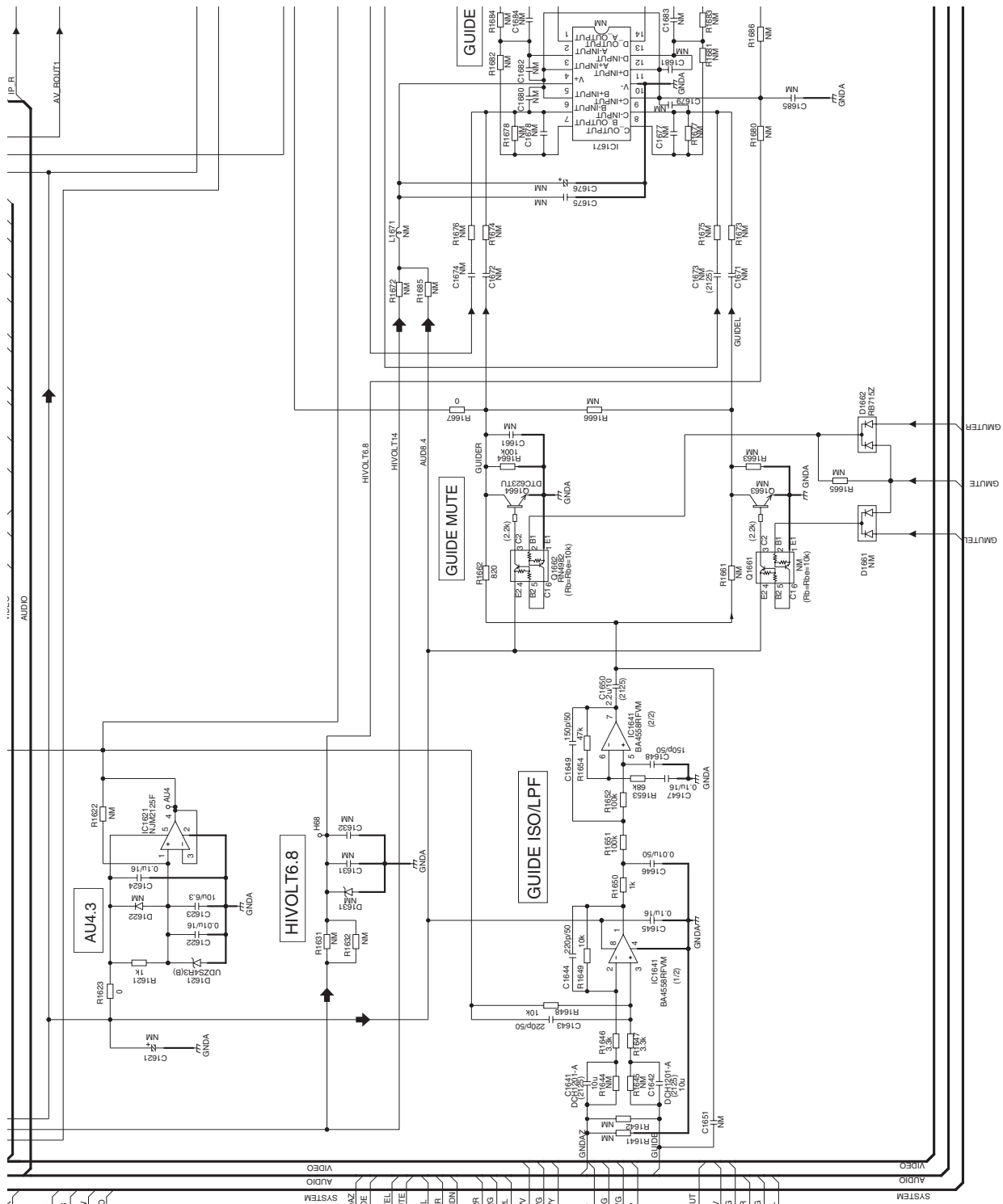
A/4/5

A-b 3/5



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- EV3ACK
- STOP
- IPTOS
- IPPW
- ASENEO

- AVOUT
- IPod_V
- IPod_VG
- IPod_R
- IPod_AG
- IPod_L
- BCV
- BCVG
- VTRSVG
- VTRSV
- AVOUT
- IPod_V
- IPod_VG
- IPod_R
- IPod_AG
- IPod_L

1601 - 1900
REFERENCE NUMBER LIST

- 1601 - 1620: LS1 LFP
- 1621 - 1630: AU43
- 1631 - 1640: H1VOLT6.8
- 1641 - 1660: GUIDE
- 1661 - 1670: GUIDE MUTE
- 1671 - 1690: GUIDE MIX
- 1691 - 1751: AV SELECTOR
- 1751 - 1760: DUAL ZONE
- 1761 - 1790: E-VOL
- 1791 - 1830: MUTE
- 1831 - 1850: IP-BUS
- 1851 - 1860: IF-AV
- 1861 - 1880: AUTO EQ
- 1881 - 1890: VIDEO
- 1891 - 1900: RCA PINJACK

A5/5

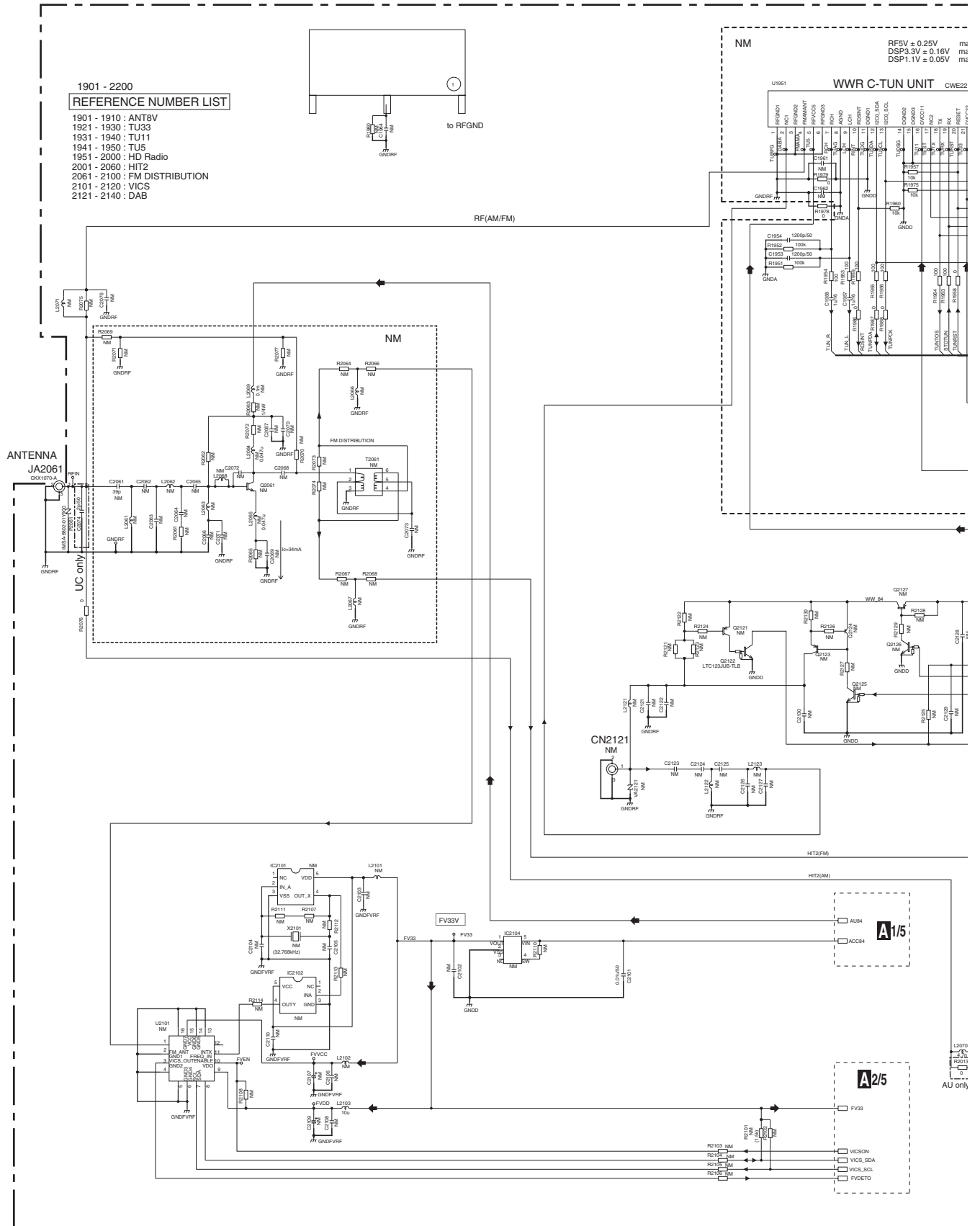
10.4 AV UNIT (TUNER/VICS SECTION)(GUIDE PAGE)

A-a 4/5

1901 - 2200

REFERENCE NUMBER LIST

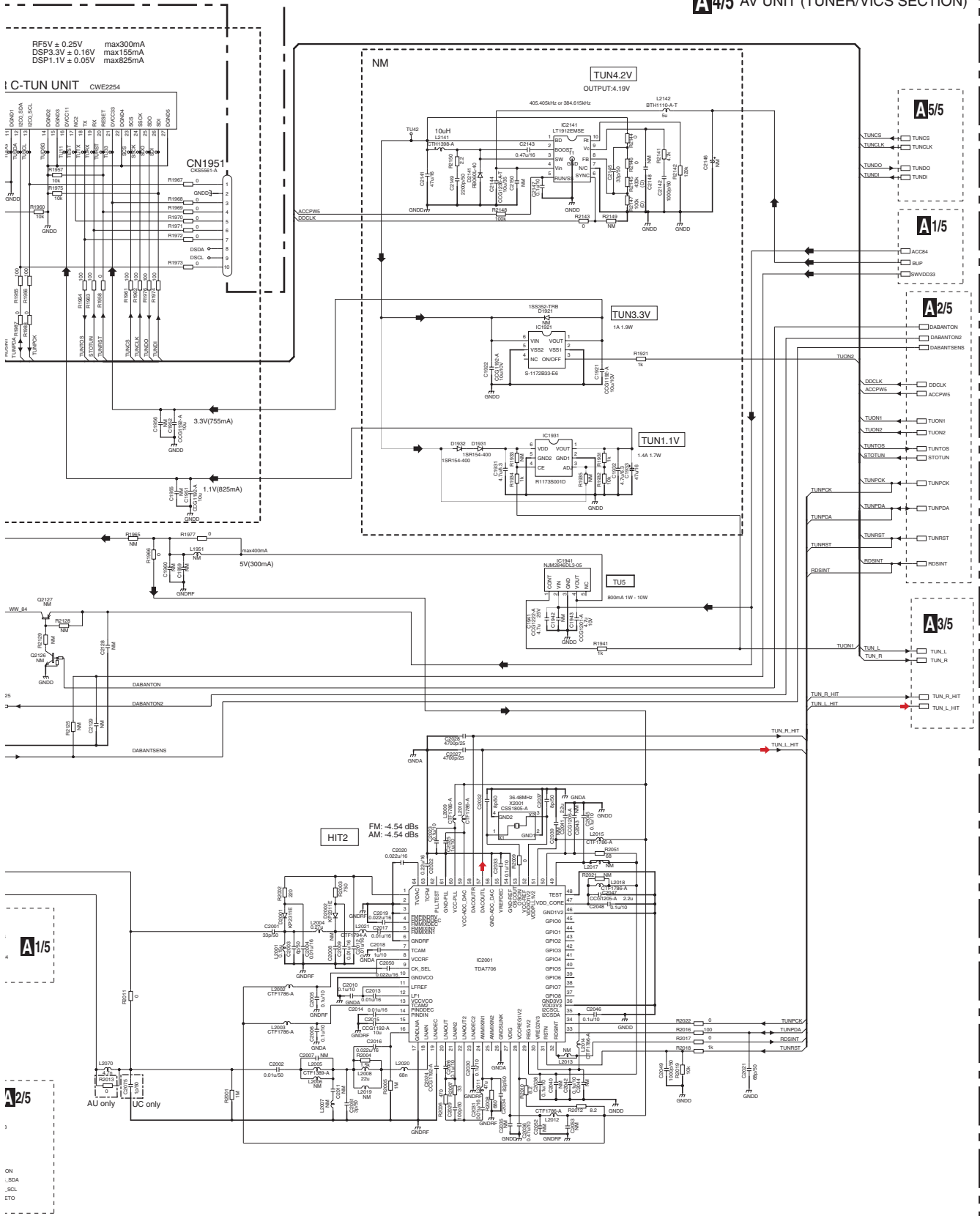
- 1901 - 1910 : ANT8V
- 1921 - 1930 : TUJ33
- 1931 - 1940 : TUJ11
- 1941 - 1950 : TUJ5
- 1951 - 2000 : HD Radio
- 2001 - 2060 : HIT2
- 2061 - 2100 : FM DISTRIBUTION
- 2101 - 2120 : VICS
- 2121 - 2140 : DAB



A4/5

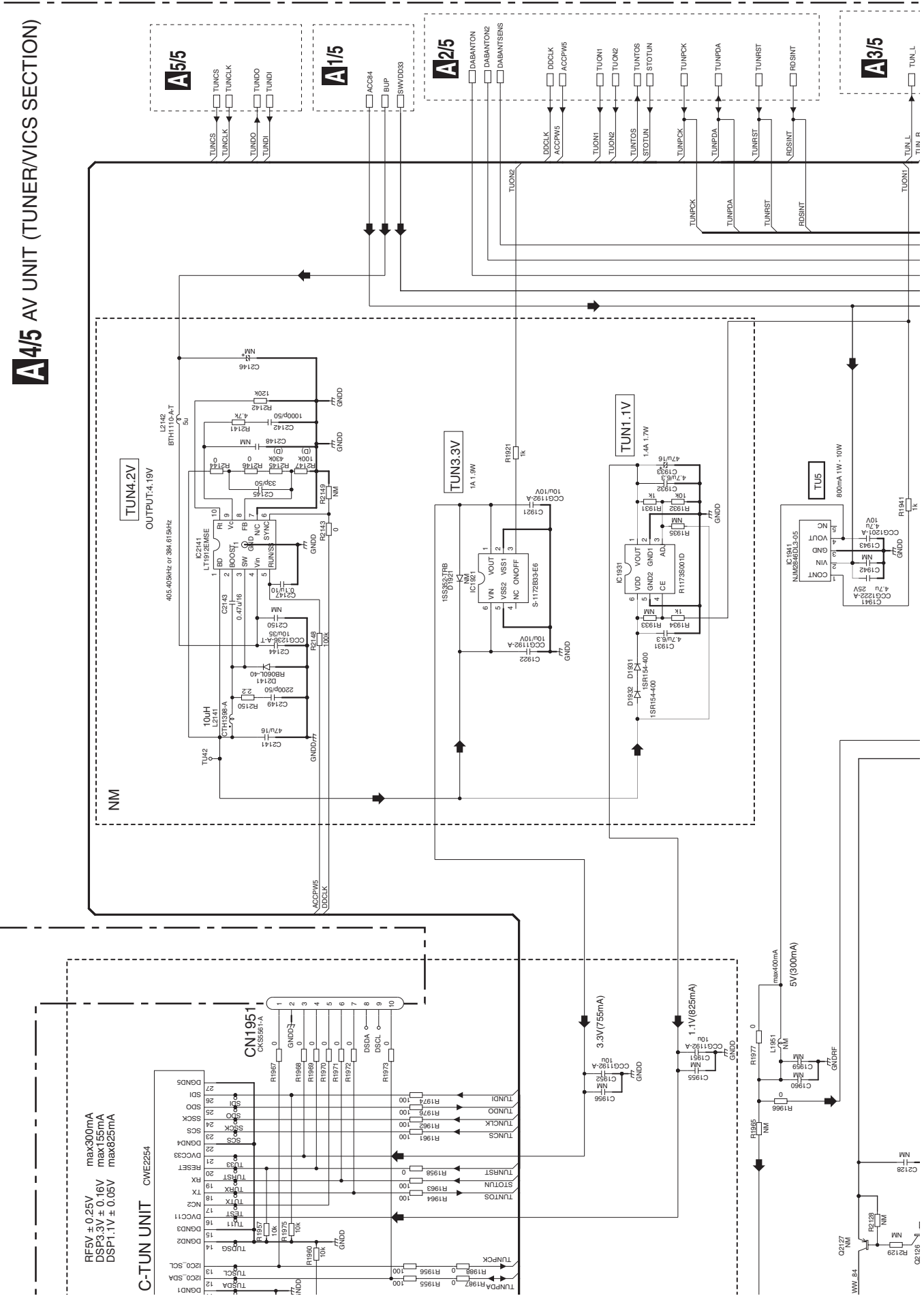
A-b 4/5

A/4/5 AV UNIT (TUNER/VICS SECTION)



ON
_SDA
_SCL
ETO

A4/5 AV UNIT (TUNER/MICS SECTION)



RFV ± 0.25V max300mA
 DSP3.3V ± 0.16V max155mA
 DSP1.1V ± 0.05V max825mA

C-TUN UNIT CWE2254

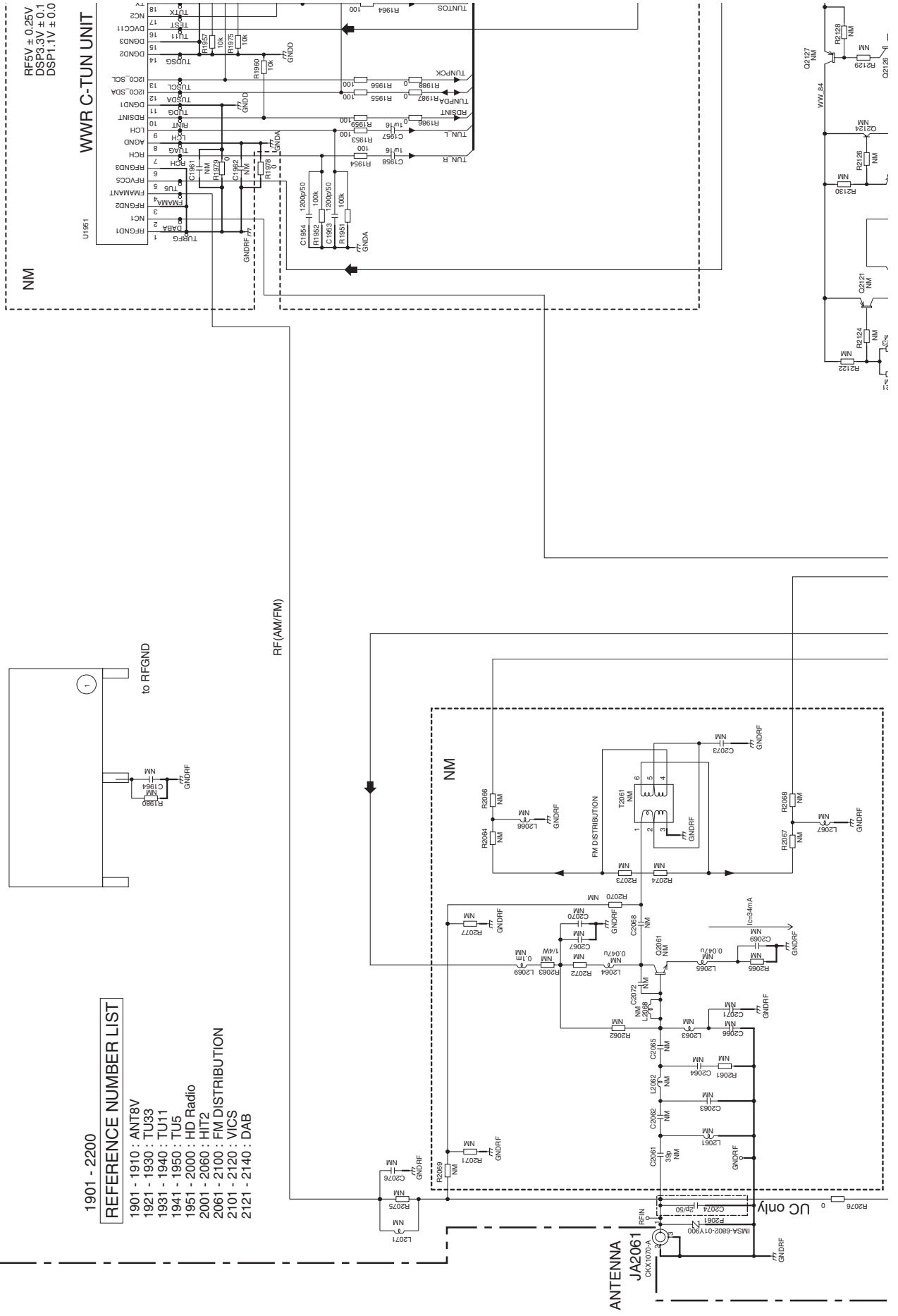
AVIC-X930BT/XNUC

A
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D
E
F

A-a A-b

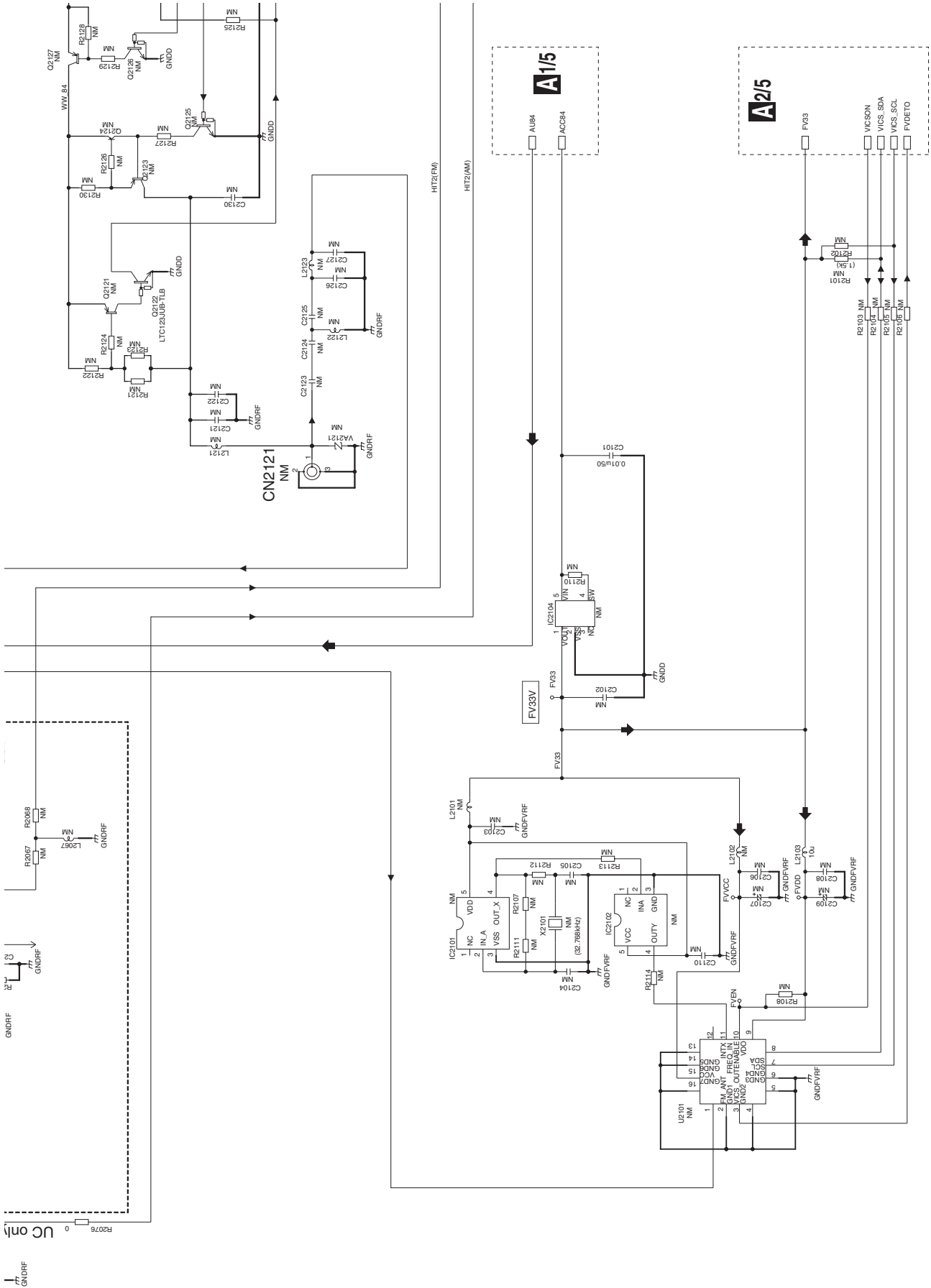
1 2 3 4

1 2 3 4



RFSV ± 0.25V
DSP3.3V ± 0.1
DSP1.1V ± 0.0

NM



UC only
R2076

A-a A-b

A-b 4/5

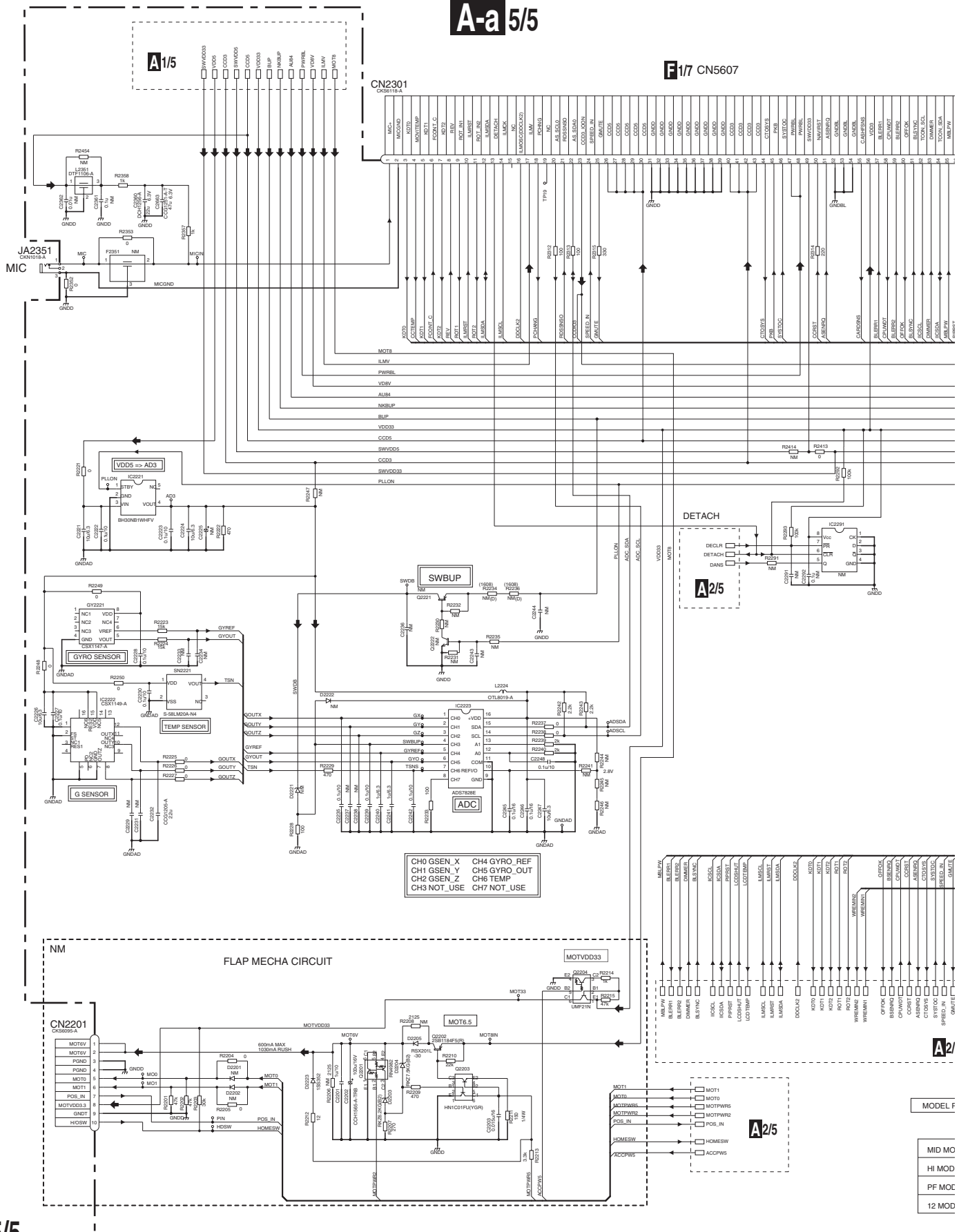
A B C D E F

10.5 AV UNIT (SENSOR/FLAP SECTION)(GUIDE PAGE)

A
B
C
D
E
F

A-a 5/5

F1/7 CN5607

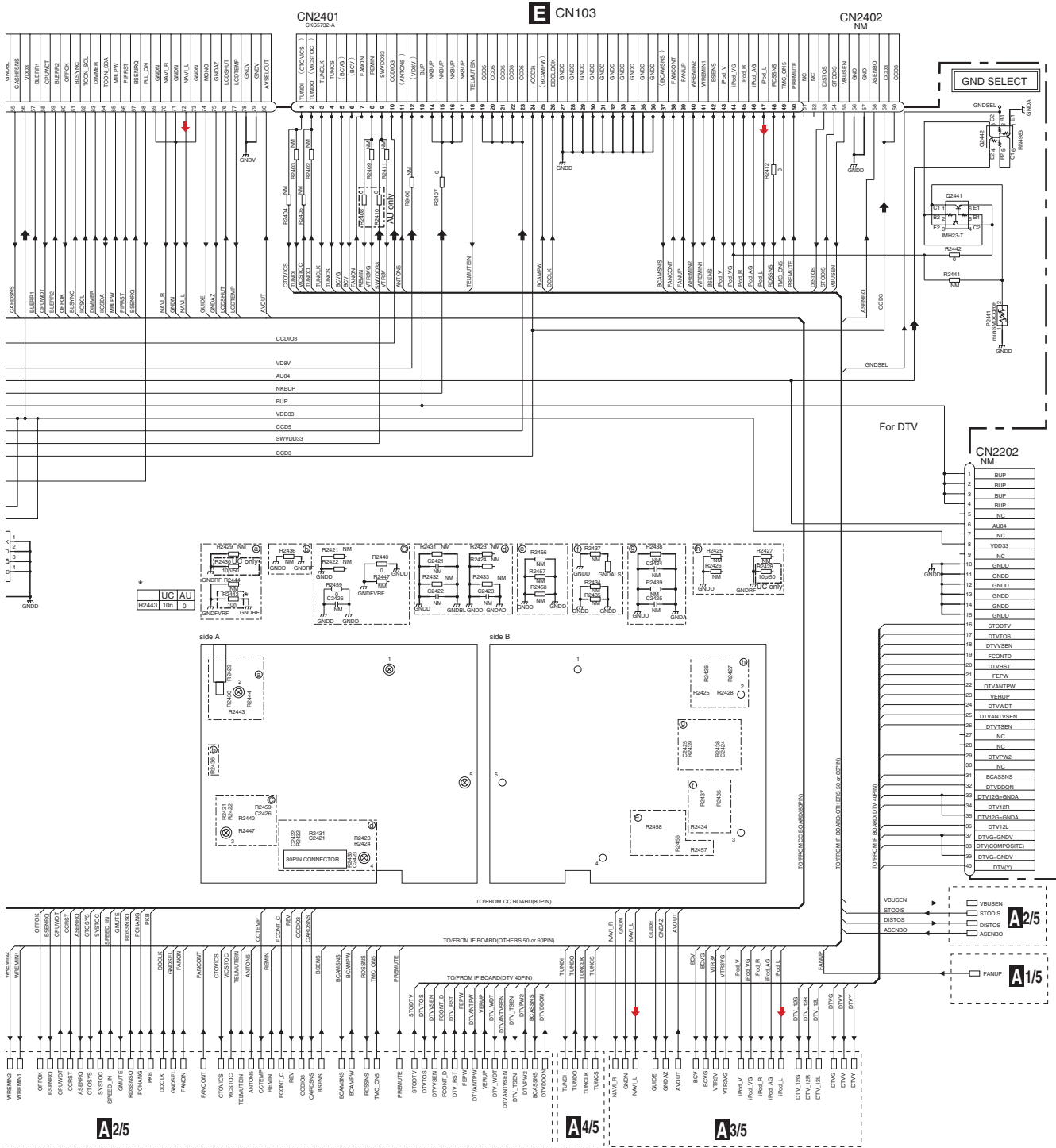


A 5/5

AVIC-X930BT/XNUC

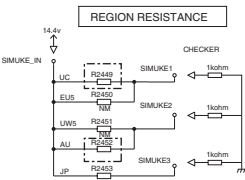
A-b 5/5

A/5/5 AV UNIT (SENSOR/FLAP SECTION)



MODEL RESISTANCE

MID MODEL	R2445
HI MODEL	R2446
PF MODEL	R2447
12 MODEL	R2448

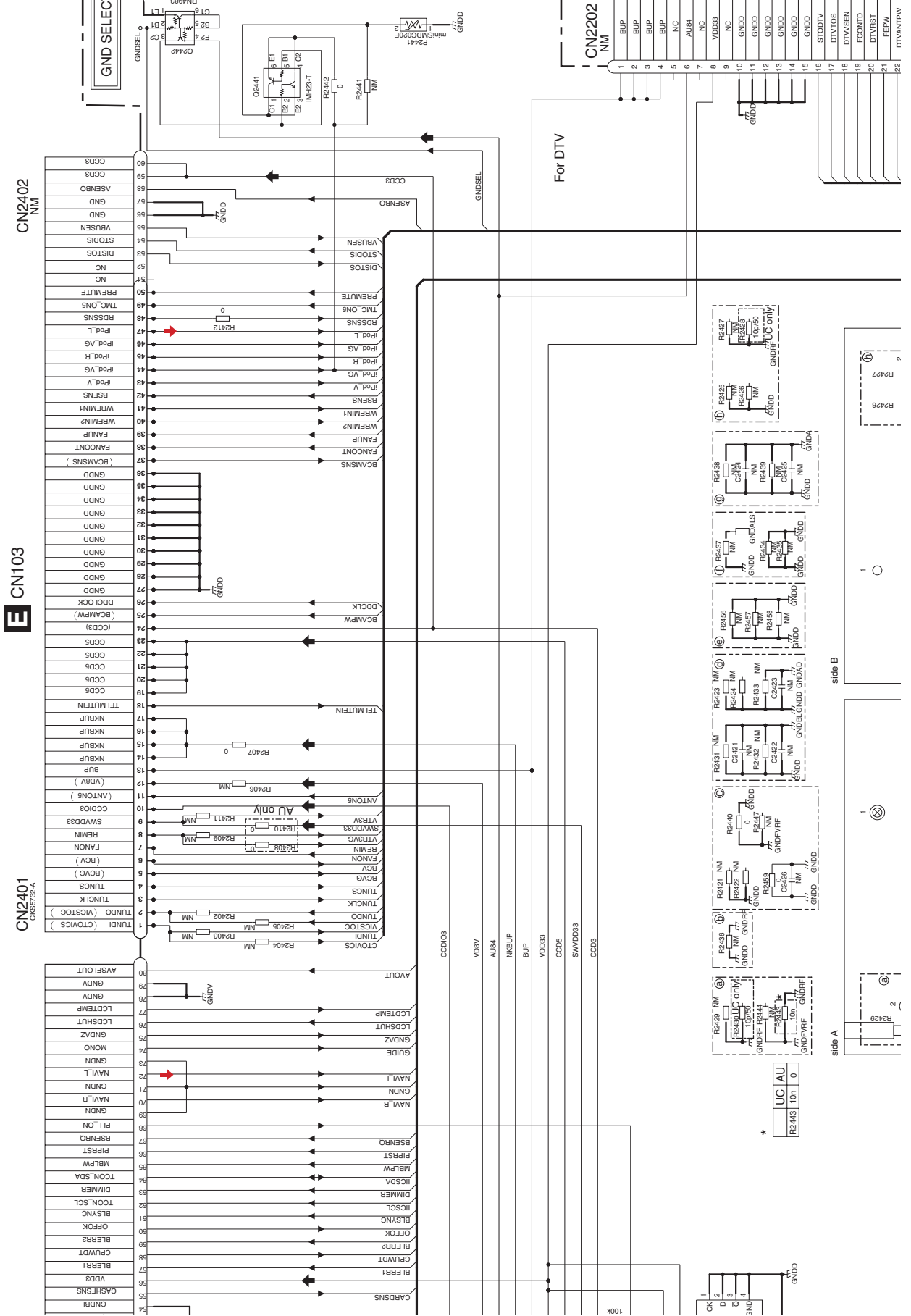


REFERENCE NUMBER LIST

UC	R2448	R2452	SIMUKE1	SIMUKE2	SIMUKE3
120	NM	12.9 ± 0.5	0.0 ± 0.5	0.0 ± 0.5	0.0 ± 0.5
470	NM	0.0 ± 0.5	9.8 ± 0.5	0.0 ± 0.5	0.0 ± 0.5

- 2201 - 2500
- REFERENCE NUMBER LIST**
- 2201 - 2220 : FLAP
 - 2221 - 2250 : SENSOR
 - 2251 - 2291 : MIC
 - 2291 - 2300 : DETACH
 - 2301 - 2350 : CC_IF
 - 2351 - 2400 : AUX/AEQ SW
 - 2401 - 2420 : IF_IF
 - 2421 - 2440 : READY PARTS
 - 2441 - 2450 : GNDSEL
 - 2451 - 2500 : DTV_IF

A5/5 AV UNIT (SENSOR/FLAP SECTION)



A B C D E F

A-a A-b

A-b 5/5

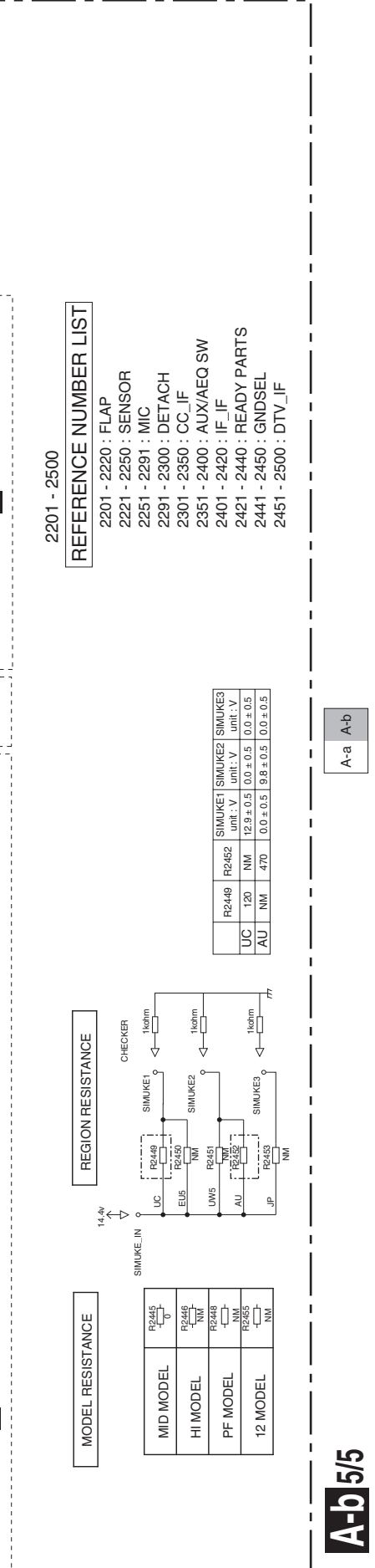
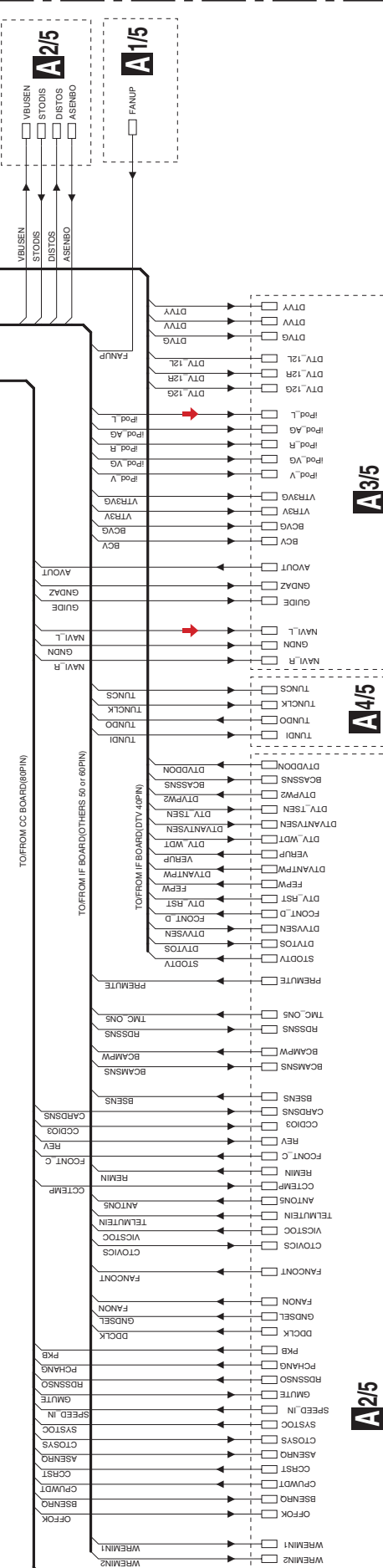
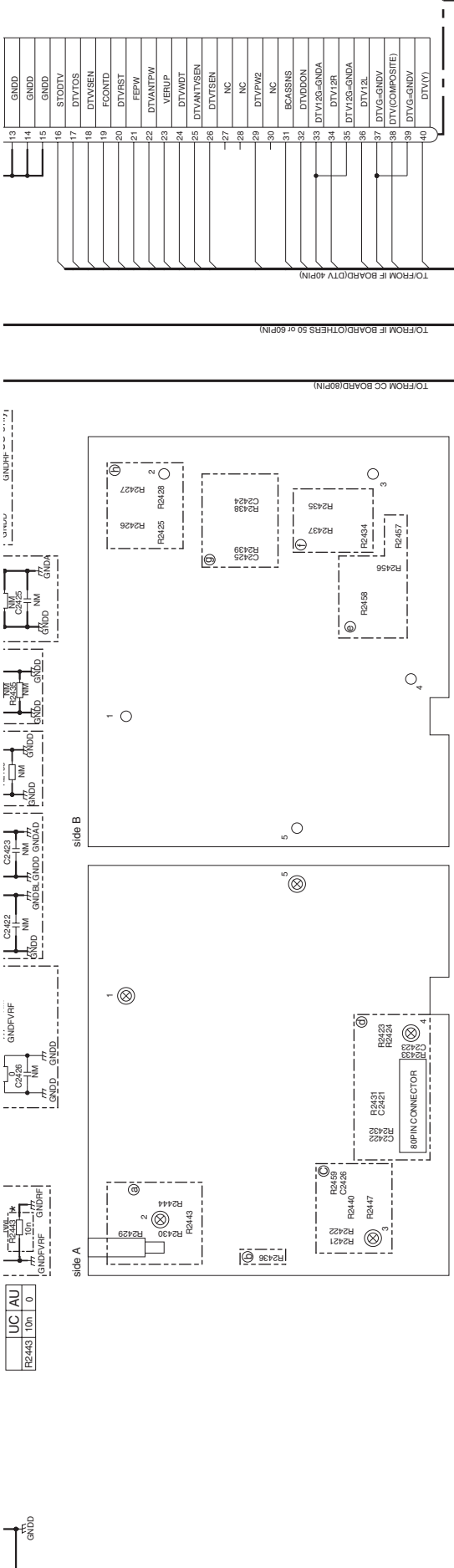
AVIC-X930BT/XNUC

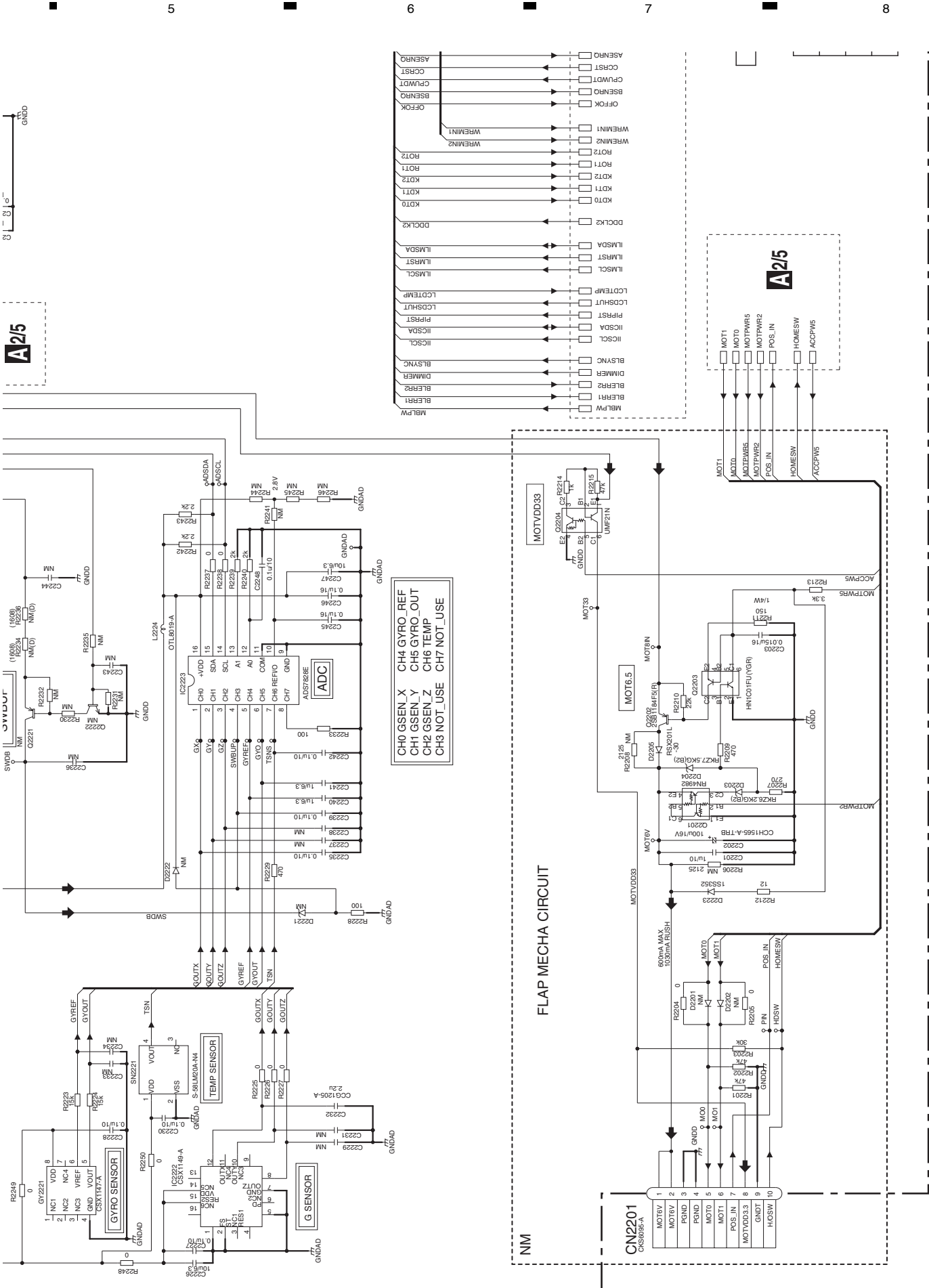
For DTV

side B

side A

* UC AU
R2443 10k 0





CH0 GSEN_X CH4 GYRO_REF
 CH1 GSEN_Y CH5 GYRO_OUT
 CH2 GSEN_Z CH6 TEMP
 CH3 NOT_USE CH7 NOT_USE

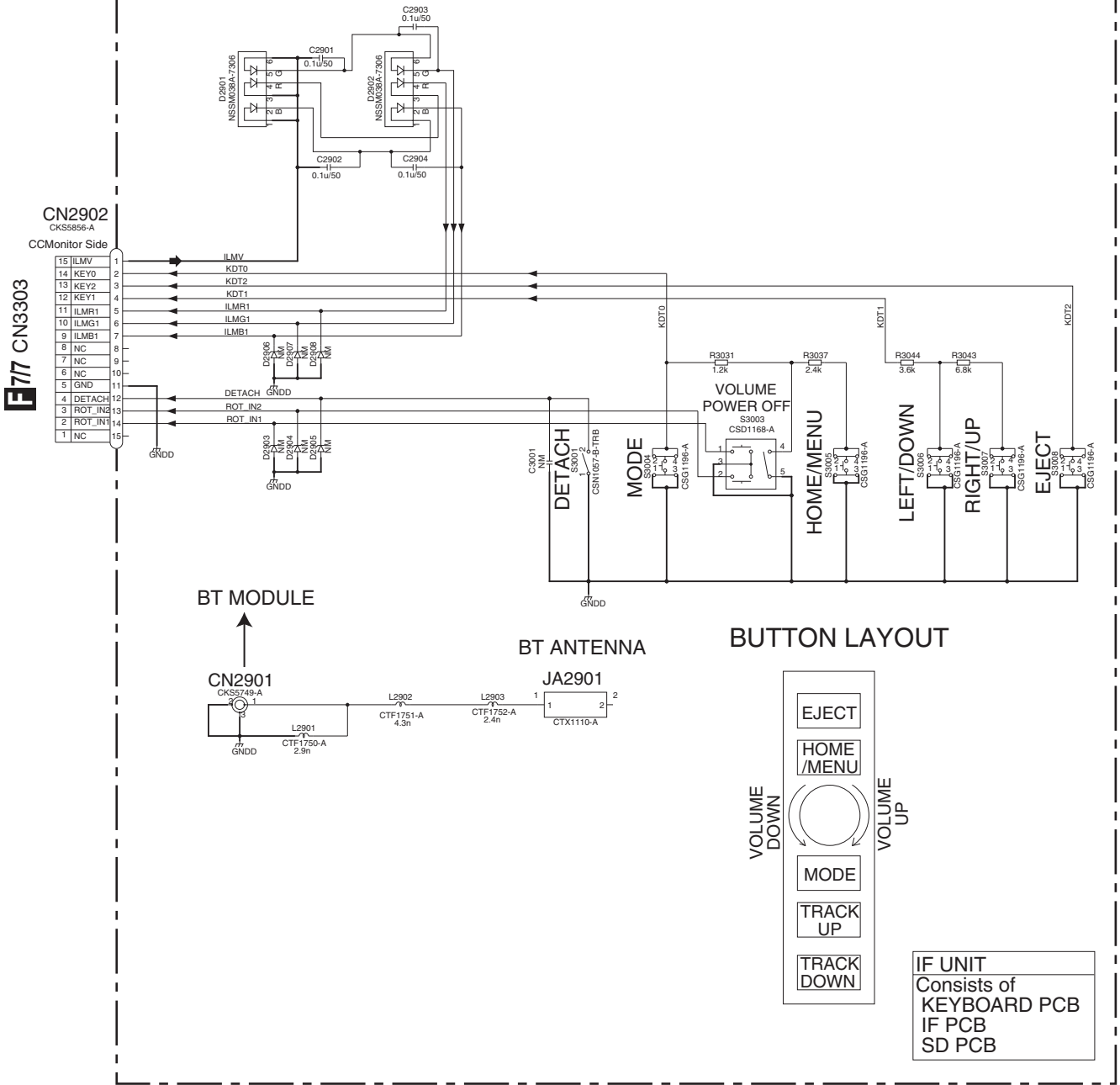
FLAP MECHA CIRCUIT

A-a A-b

A-b 5/5

10.6 KEYBOARD PCB

B KEYBOARD PCB



F77 CN3303

IF UNIT
Consists of
KEYBOARD PCB
IF PCB
SD PCB

B

A

B

C

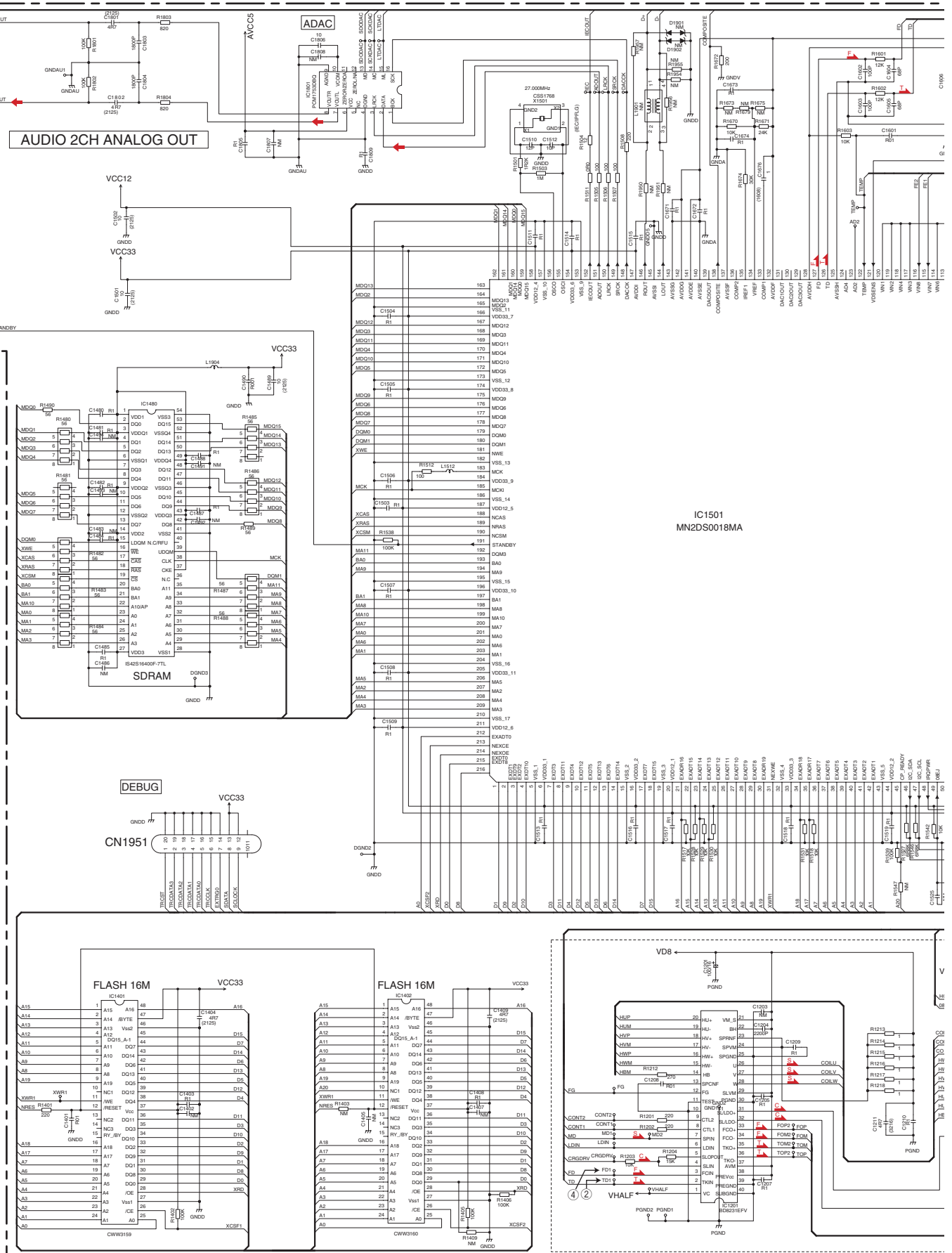
D

E

F

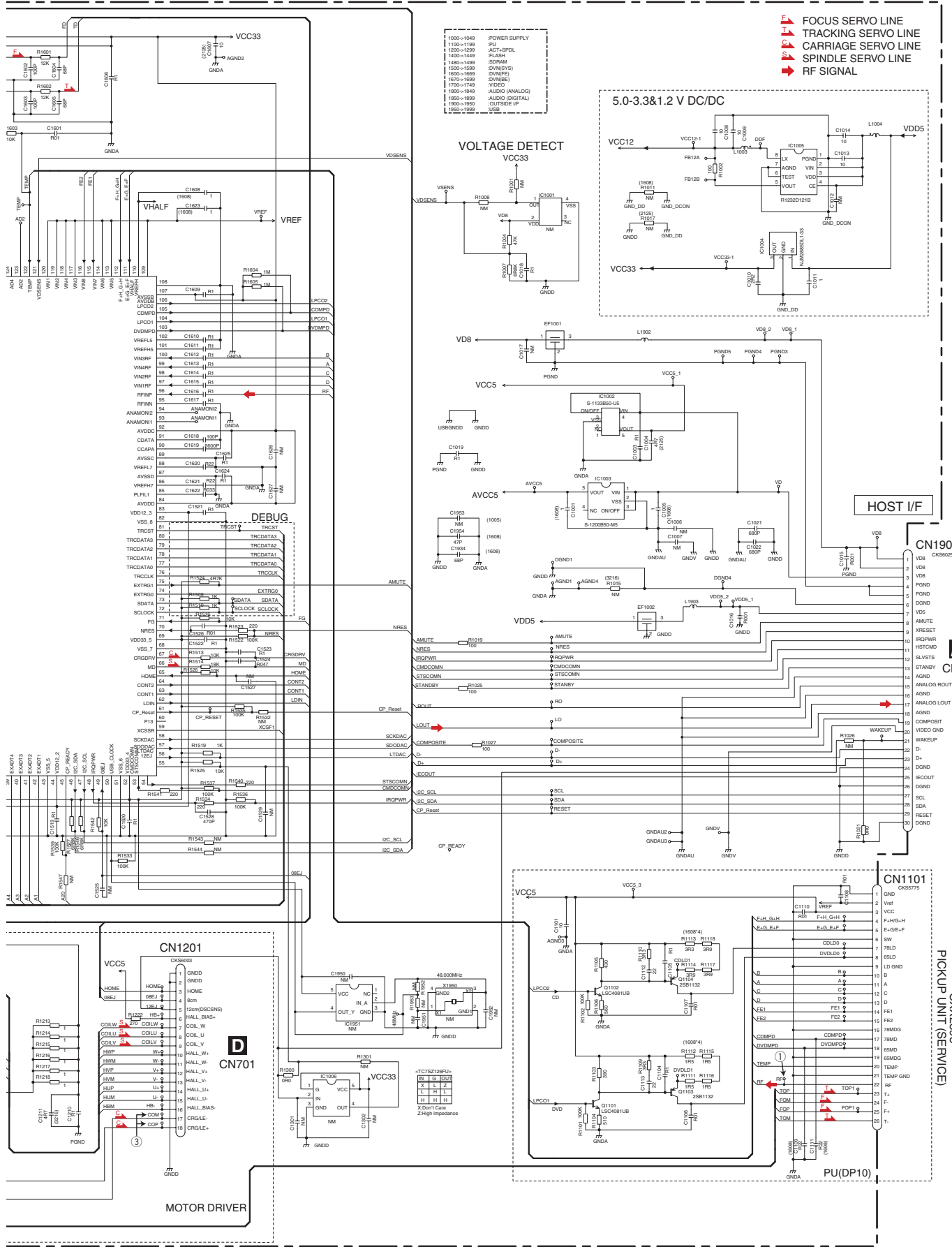
10.7 DVD CORE UNIT (GUIDE PAGE)

C-a



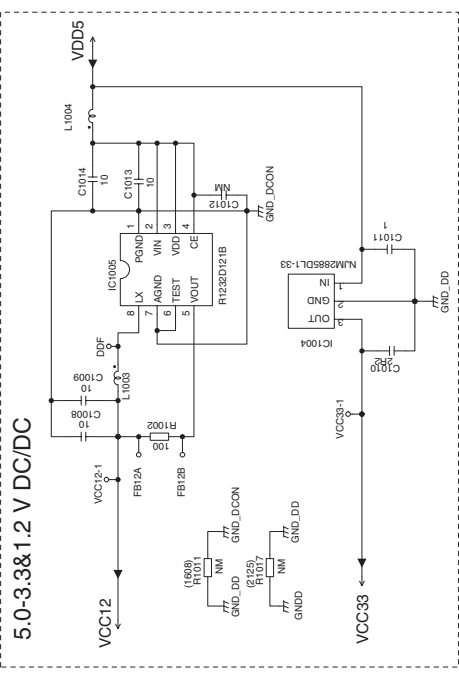
C-b

C DVD CORE UNIT



C DVD CORE UNIT

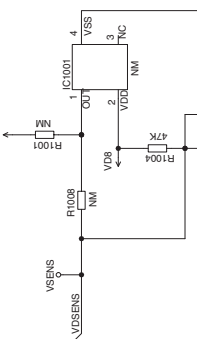
- FOCUS SERVO LINE
- TRACKING SERVO LINE
- CARRIAGE SERVO LINE
- SPINDLE SERVO LINE
- RF SIGNAL



5.0-3.3&1.2 V DC/DC

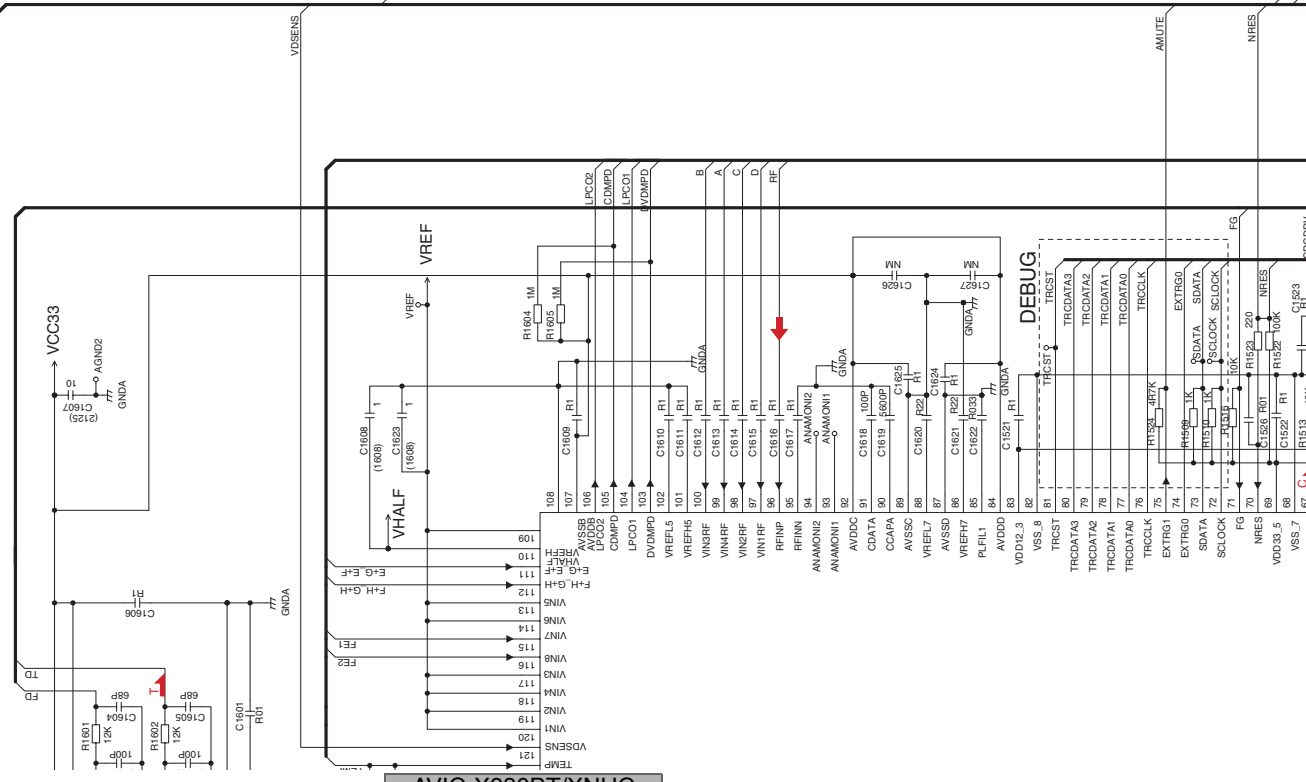
POWER SUPPLY	ACT.SPDL	FLASH	SDRAM	EEPROM	DVNB(E)	DVNB(BE)	VVIDEO (ANALOG)	AUDIO (DIGITAL)	OUTSIDE I/F	USBS
1000->1049	1000->1029	1400->1499	1400->1499	1600->1699	1600->1699	1670->1699	1700->1749	1800->1899	1900->1950	1950->1999

VOLTAGE DETECT VCC33



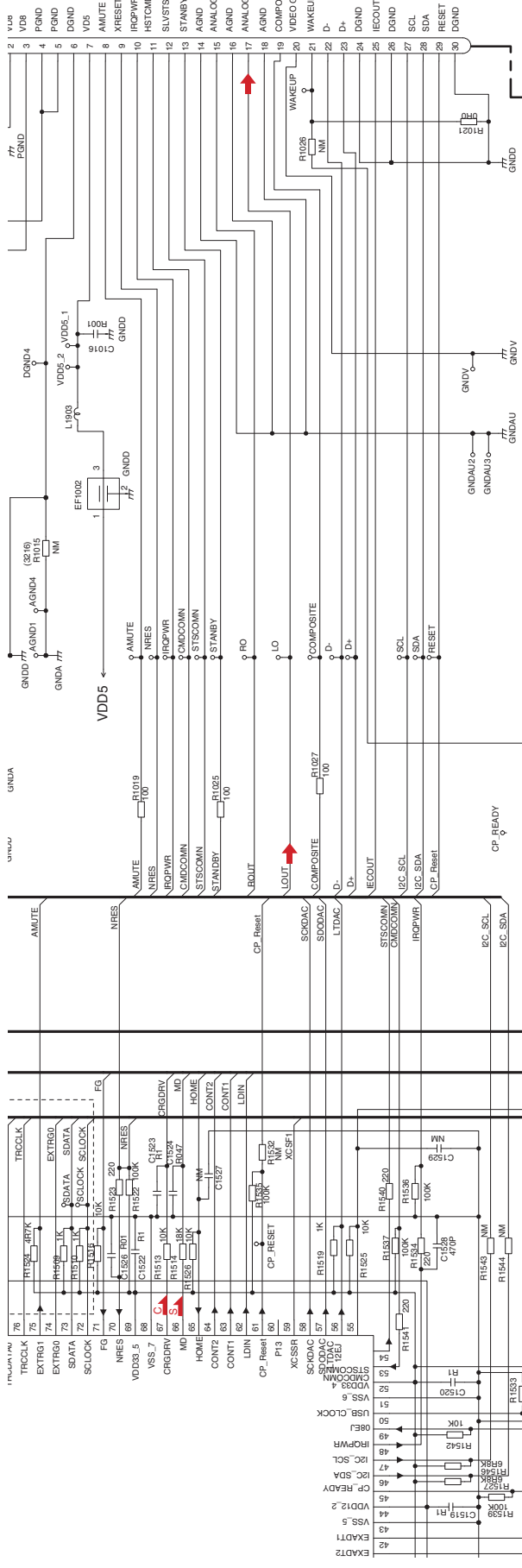
C-a C-b

C-b

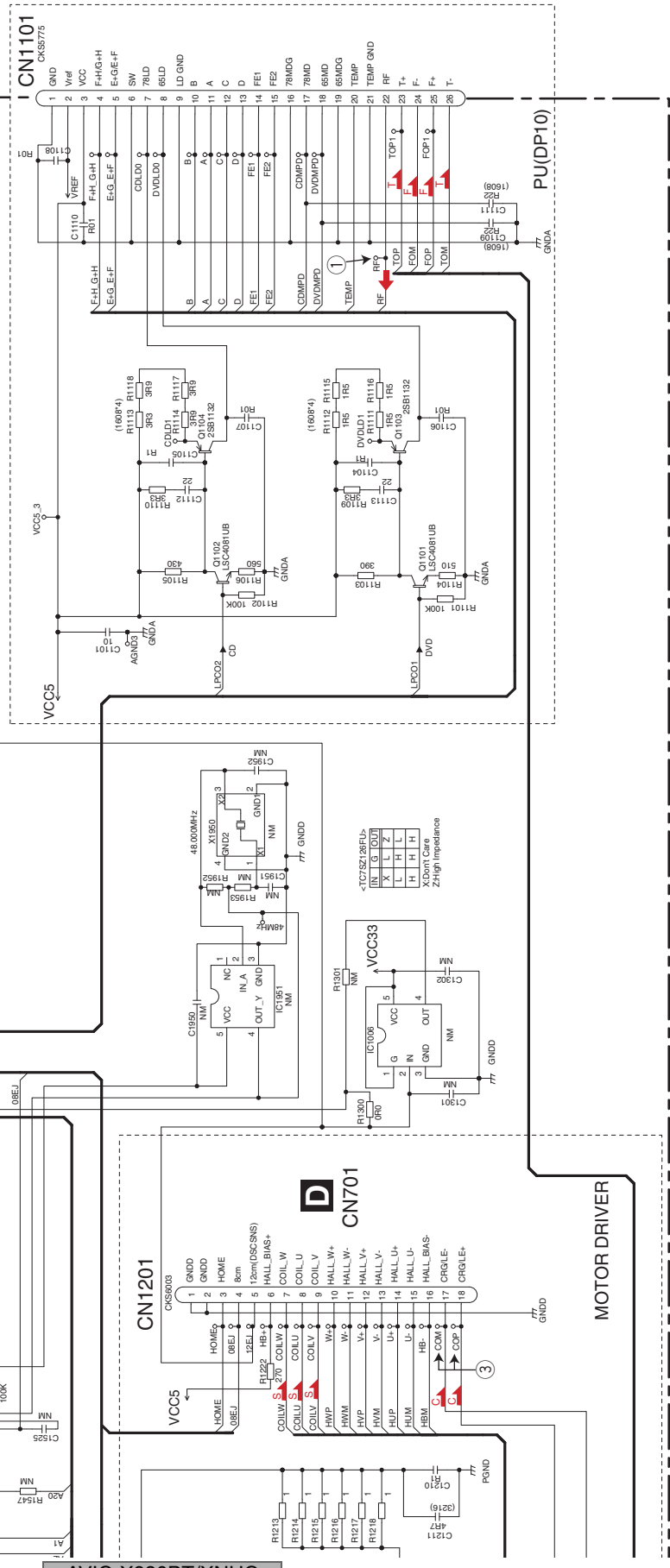


AVIC-X930BT/XNUC

A215
CN1521



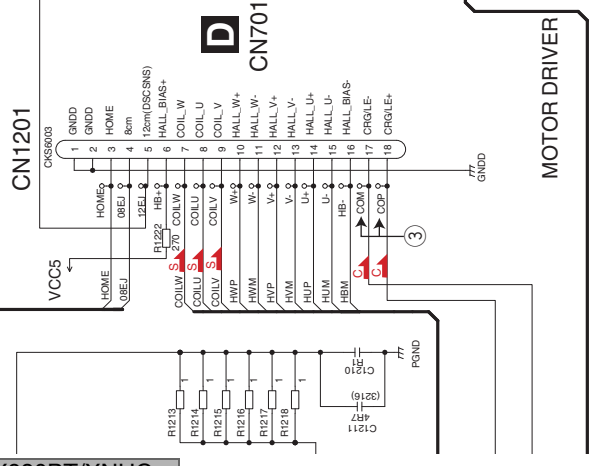
CXX2398
PICKUP UNIT (SERVICE)



C-a C-b

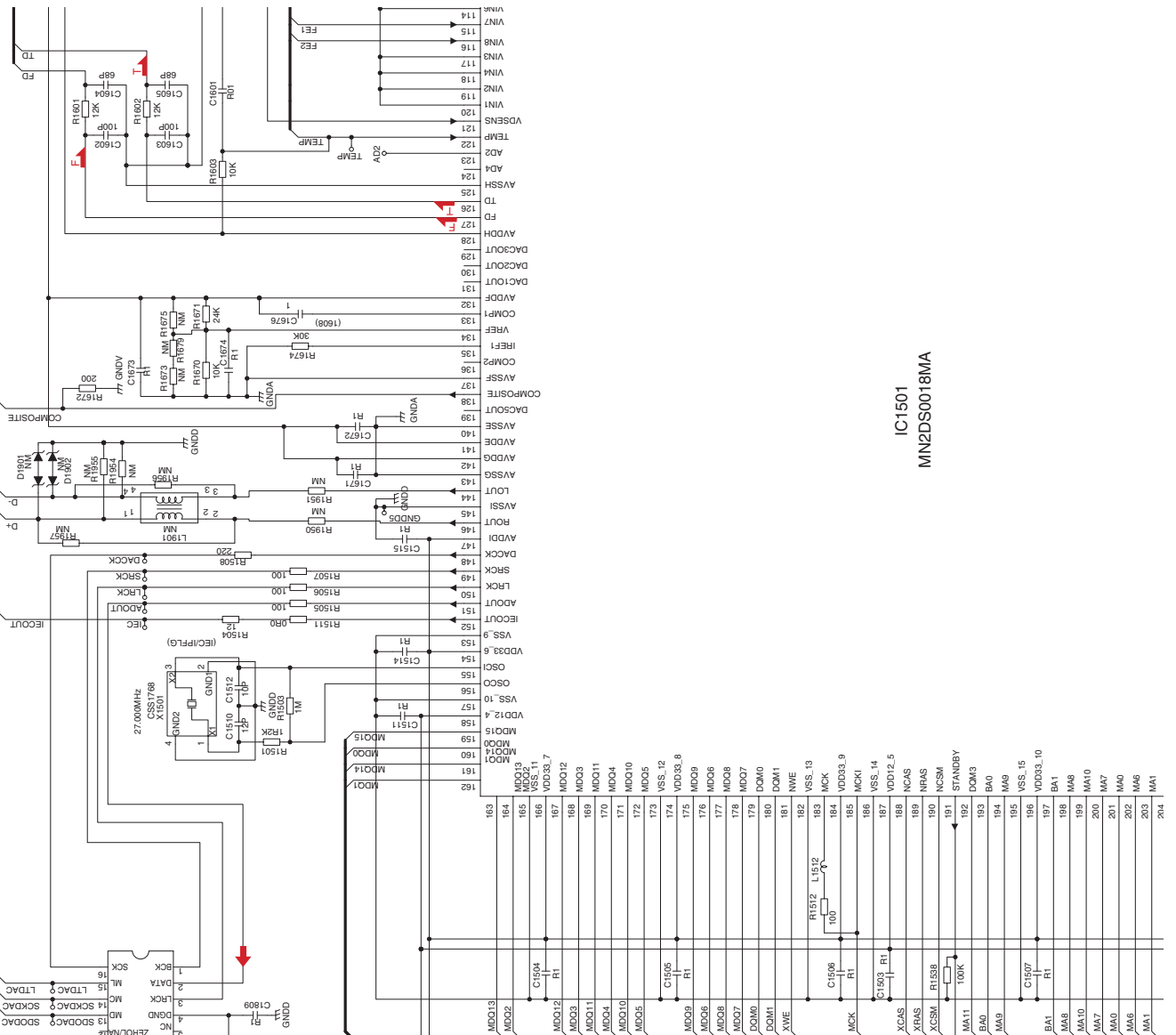
C-b

AVIC-X930BT/XNUC



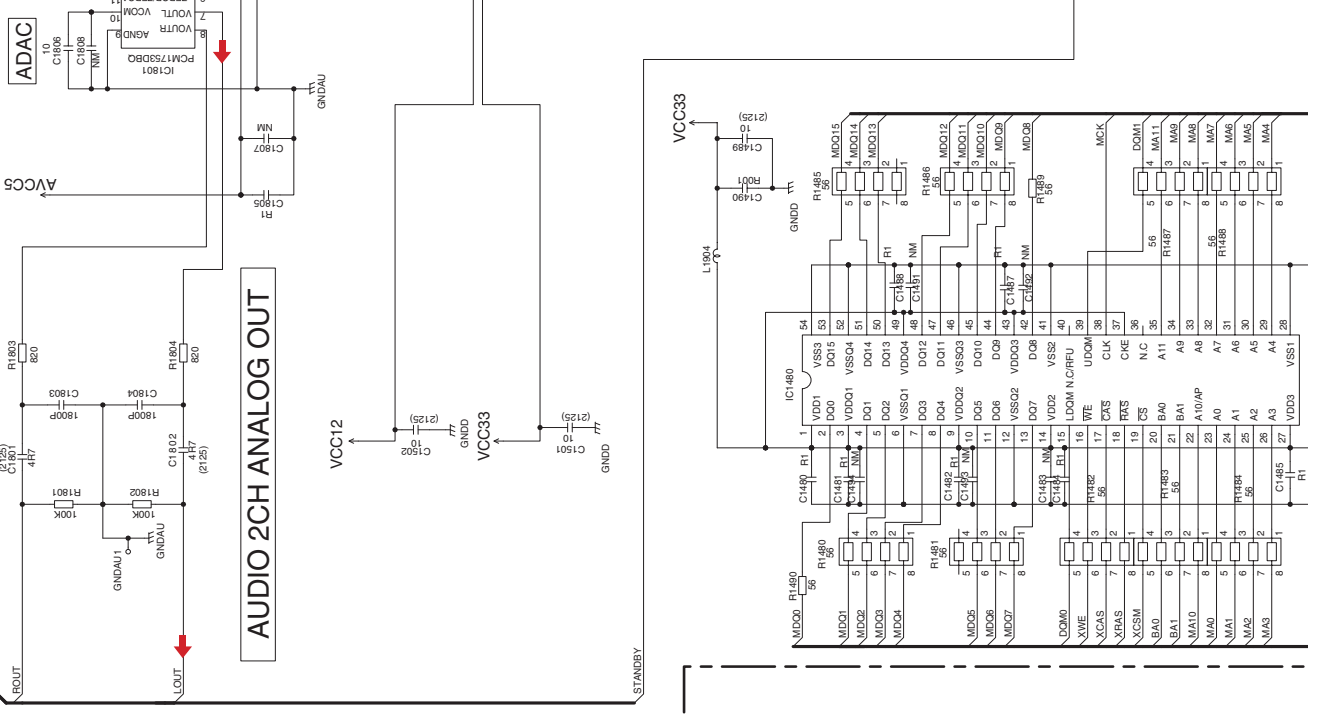
C-b

C-b



IC1501
MN2DS0018MA

C-a C-b



AUDIO 2CH ANALOG OUT

AVIC-X930BT/XNUC

C-a

A

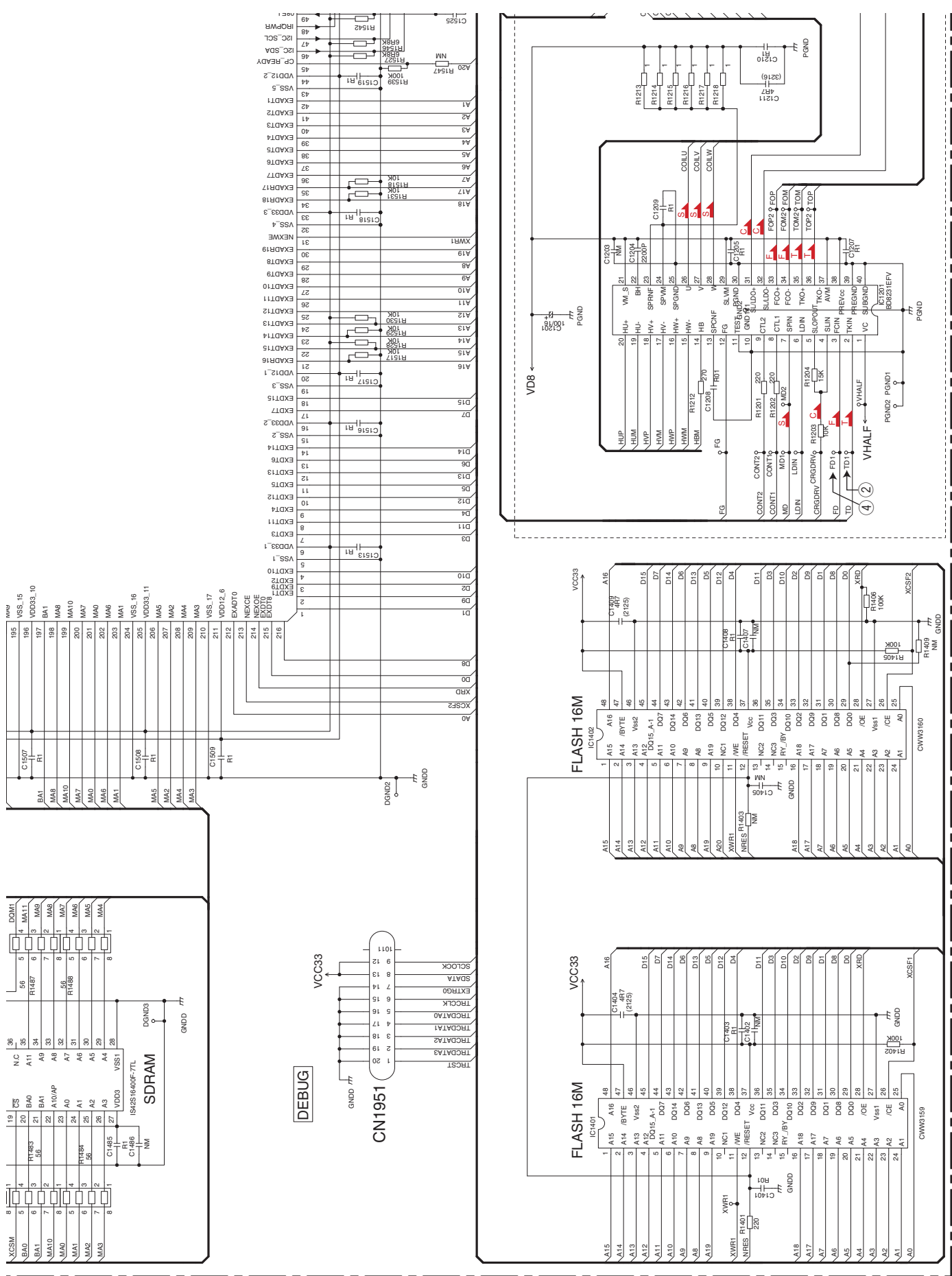
B

C

D

E

F



A

B

C

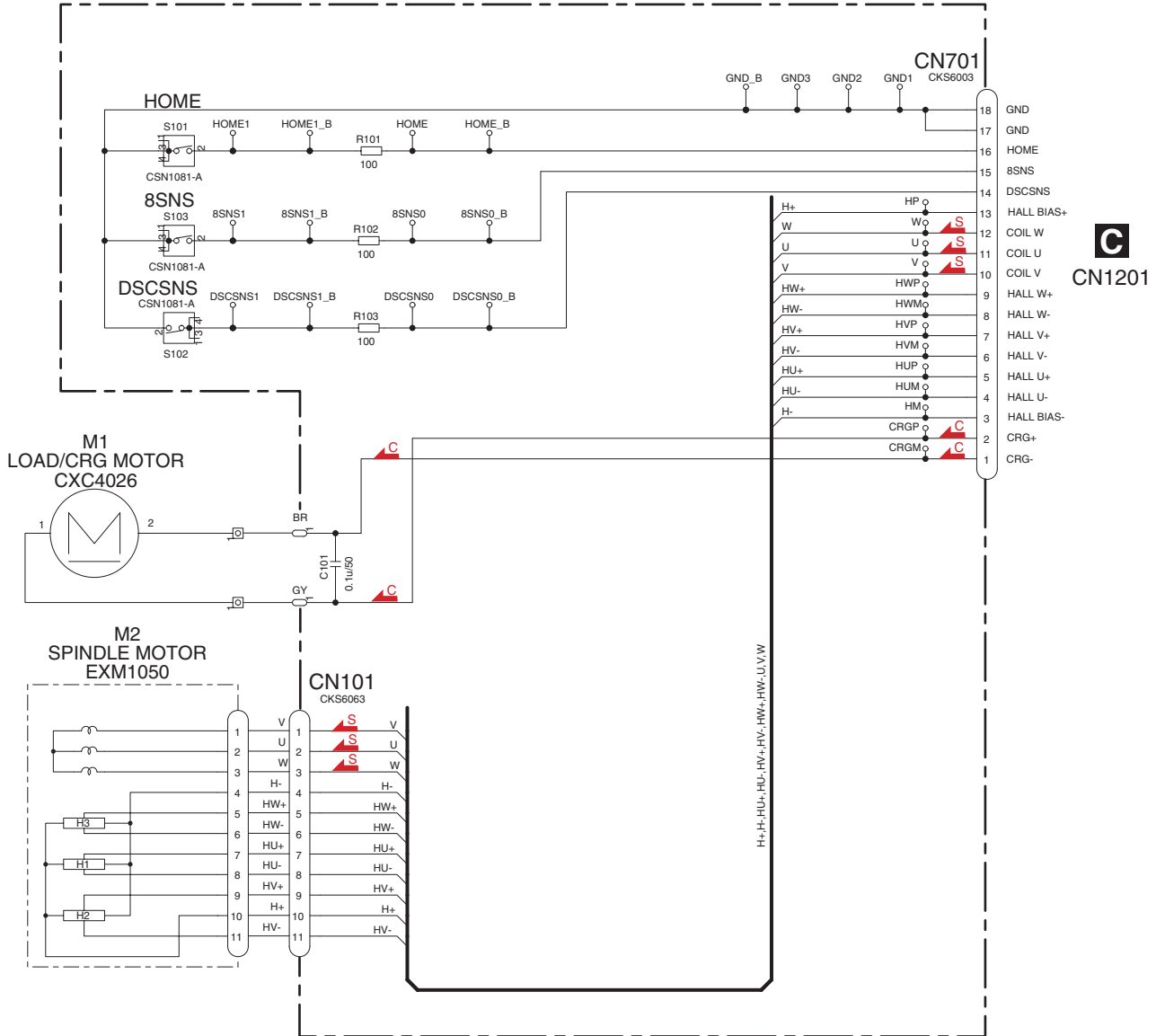
D

E

F

10.8 CONNECT PCB

D CONNECT PCB



A

B

C

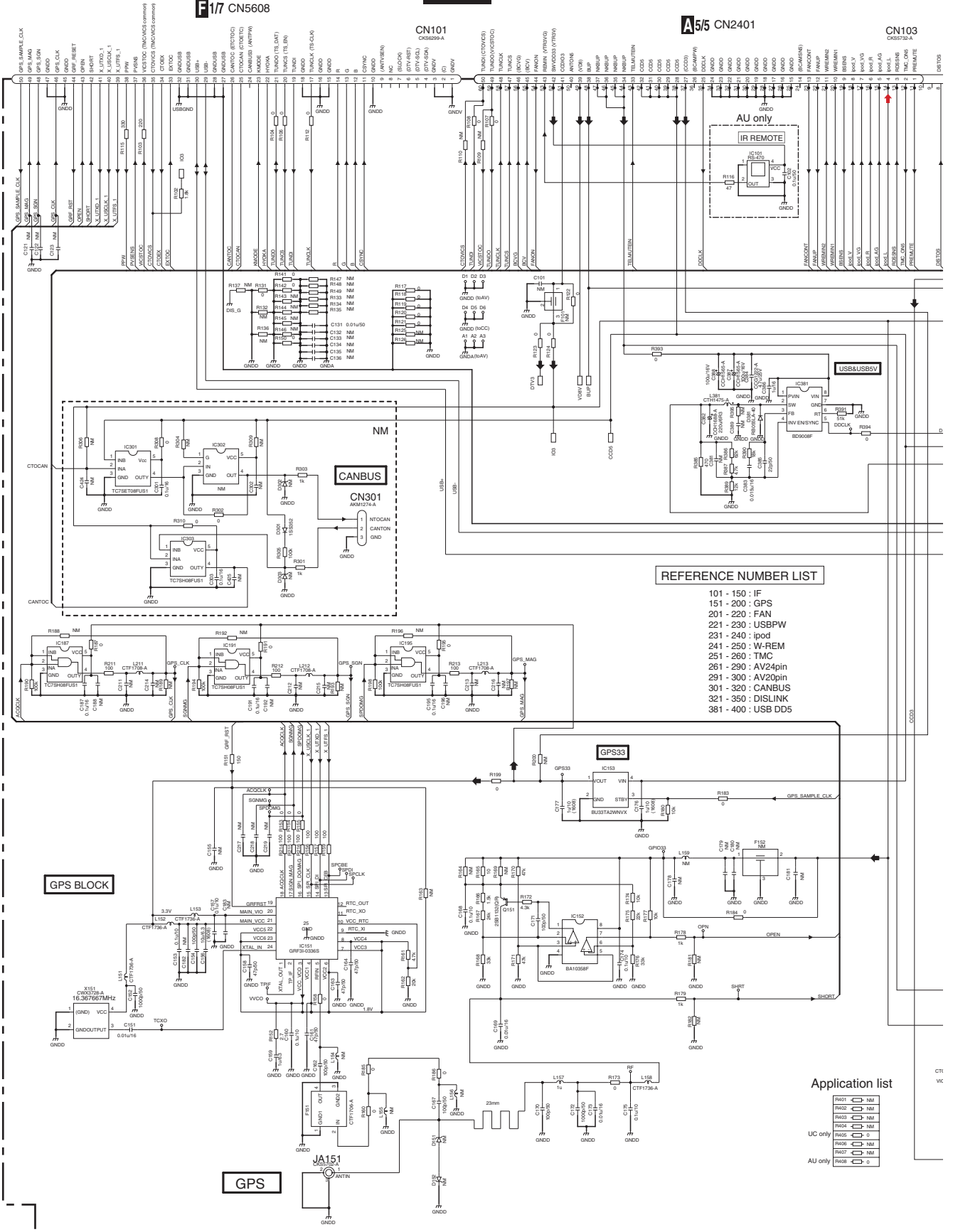
D

E

F

10.9 IF PCB (GUIDE PAGE)

E-a

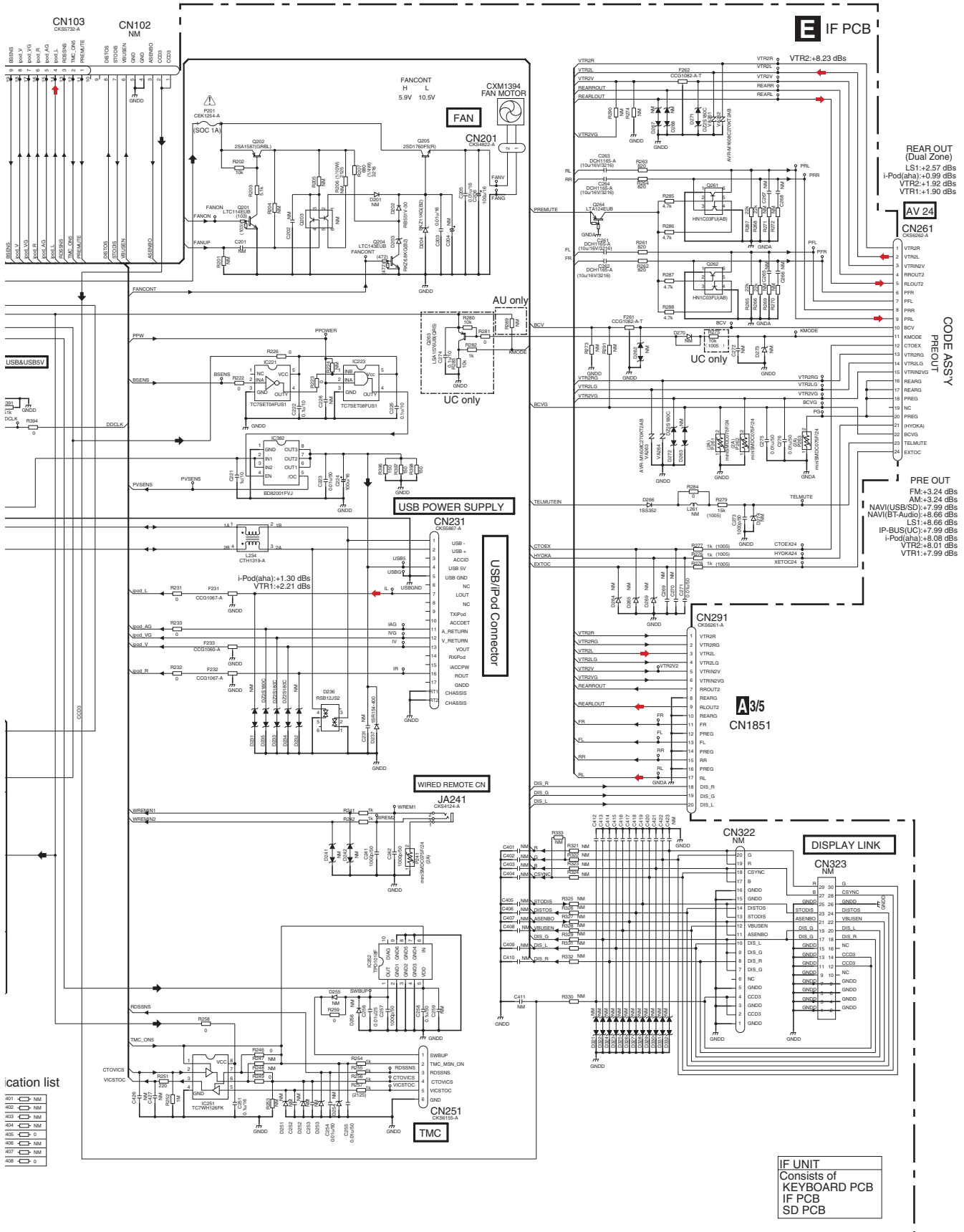


- REFERENCE NUMBER LIST**
- 101 - 150 : IF
 - 151 - 200 : GPS
 - 201 - 220 : FAN
 - 221 - 230 : USBPW
 - 231 - 240 : ipod
 - 241 - 250 : W-REM
 - 251 - 260 : TMC
 - 261 - 290 : AV24pin
 - 291 - 300 : AV20pin
 - 301 - 320 : CANBUS
 - 321 - 350 : DISLINK
 - 381 - 400 : USB DD5

- Application list**
- R401 NM
 - R402 NM
 - R403 NM
 - R404 NM
 - R405 NM
 - R406 NM
 - R407 NM
 - R408 NM
- UC only 0
- AU only 0

E-b

E IF PCB

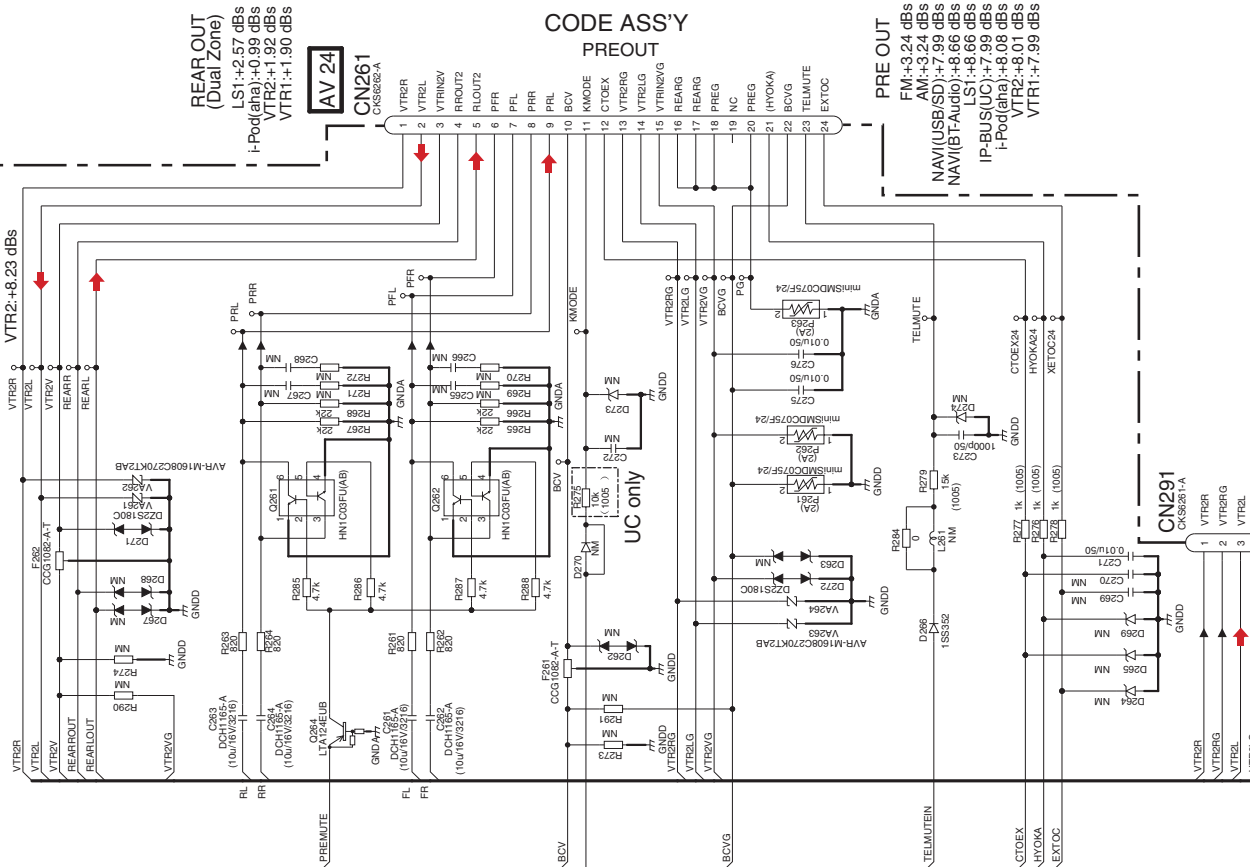


Component list

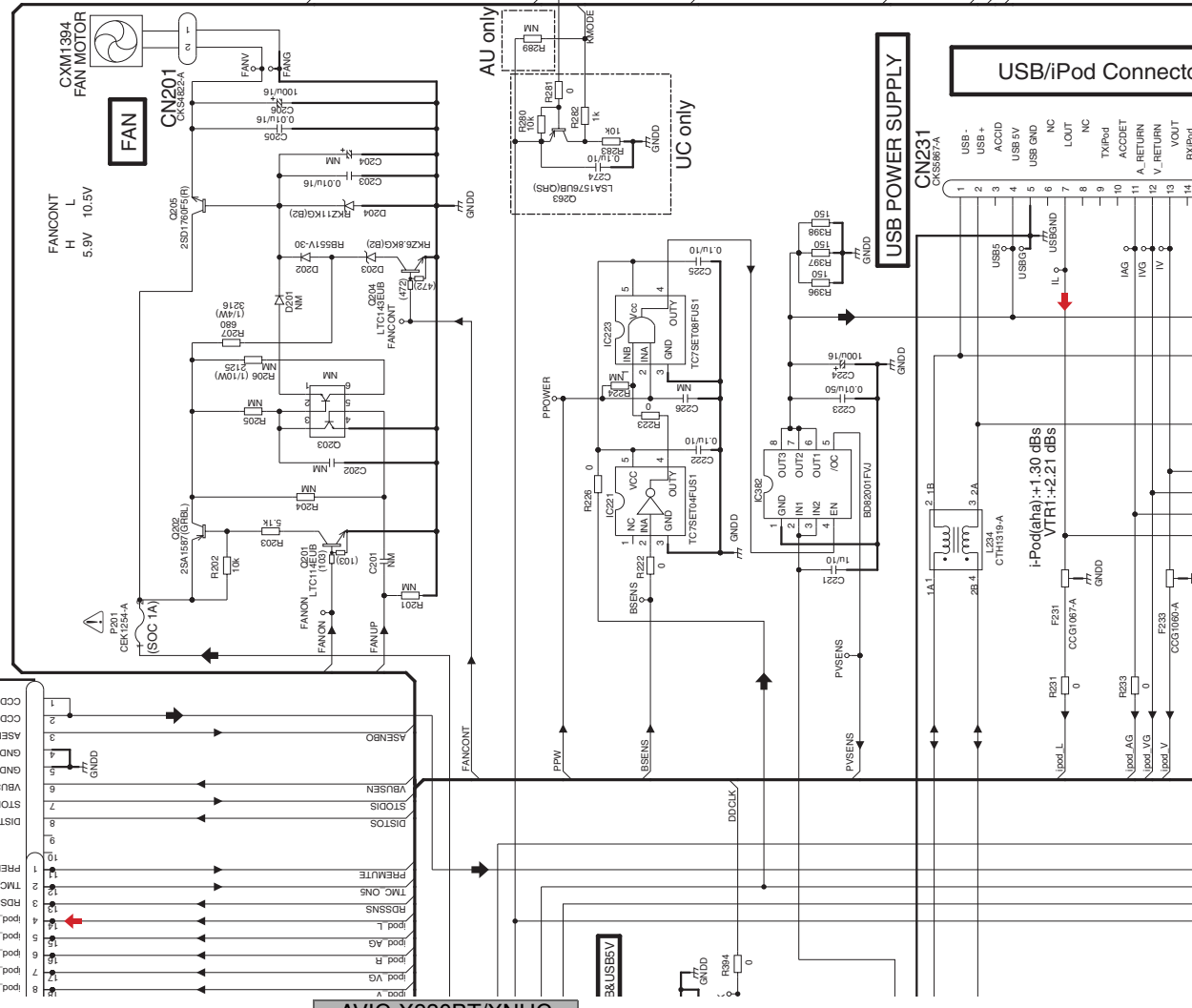
401	0	0
402	0	0
403	0	0
404	0	0
405	0	0
406	0	0
407	0	0
408	0	0

IF UNIT
Consists of
KEYBOARD PCB
IF PCB
SD PCB

E IF PCB



E-a E-b



A

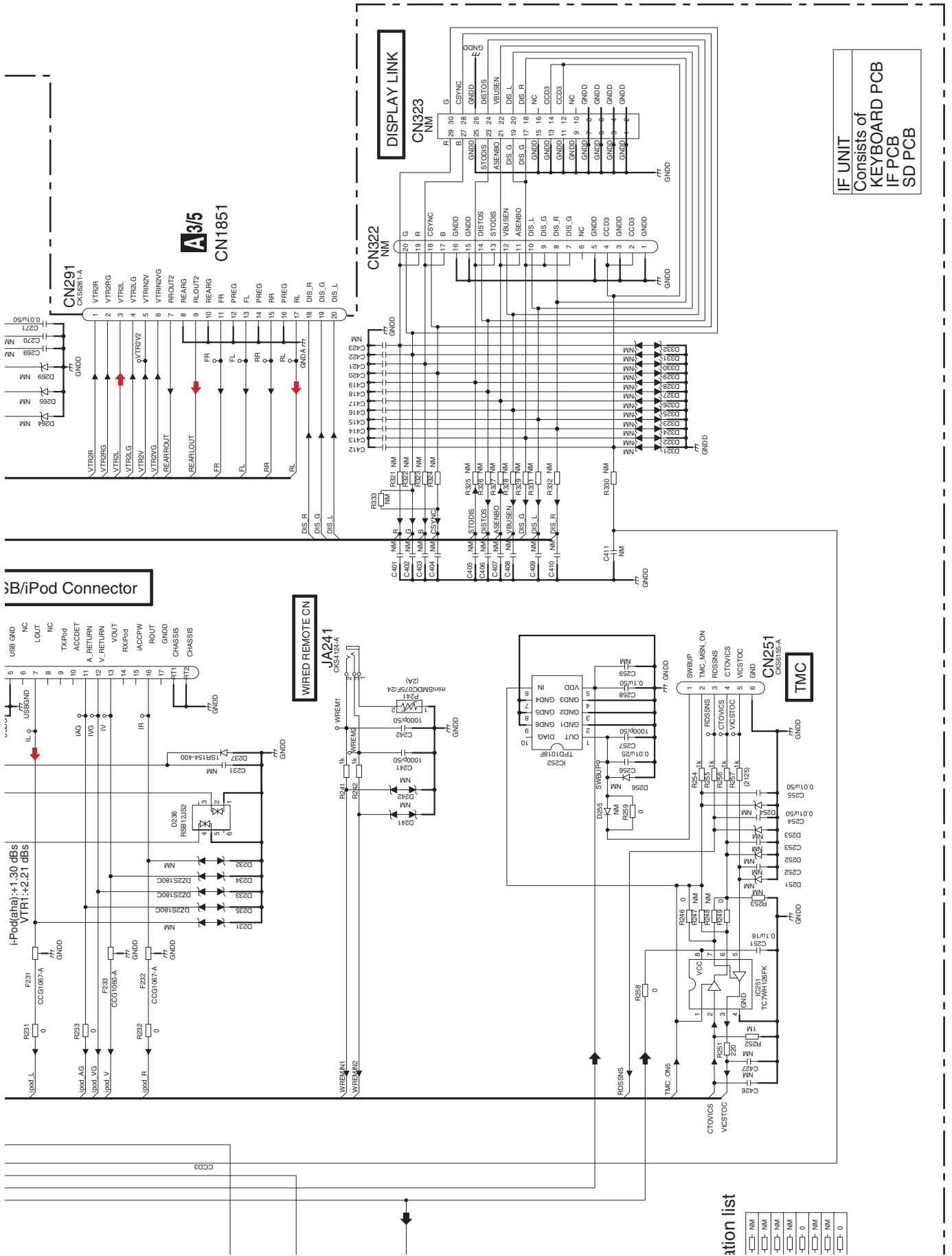
B

C

D

E

F



IF UNIT
Consists of
KEYBOARD PCB
IF PCB
SD PCB

USB/iPod Connector

WIRE REMOTE CN
JA241
CKS4124-A

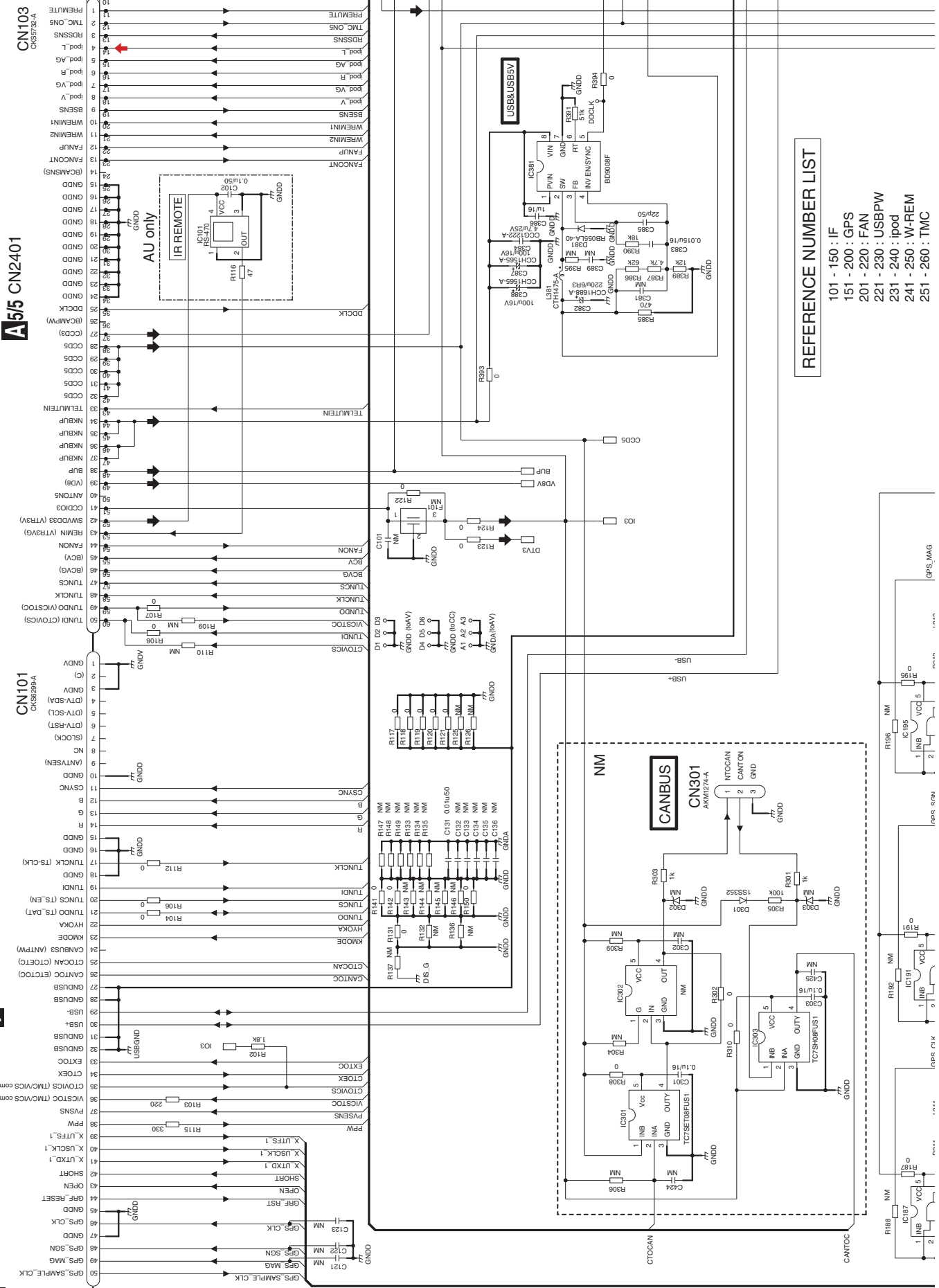
TMC
CN251
CKS8155-A

Part list

□	MM	0
□	NM	0
□	NM	0
□	NM	0
□	NM	0
□	NM	0
□	NM	0
□	NM	0
□	NM	0
□	NM	0

A
B
C
D
E
F

E-b

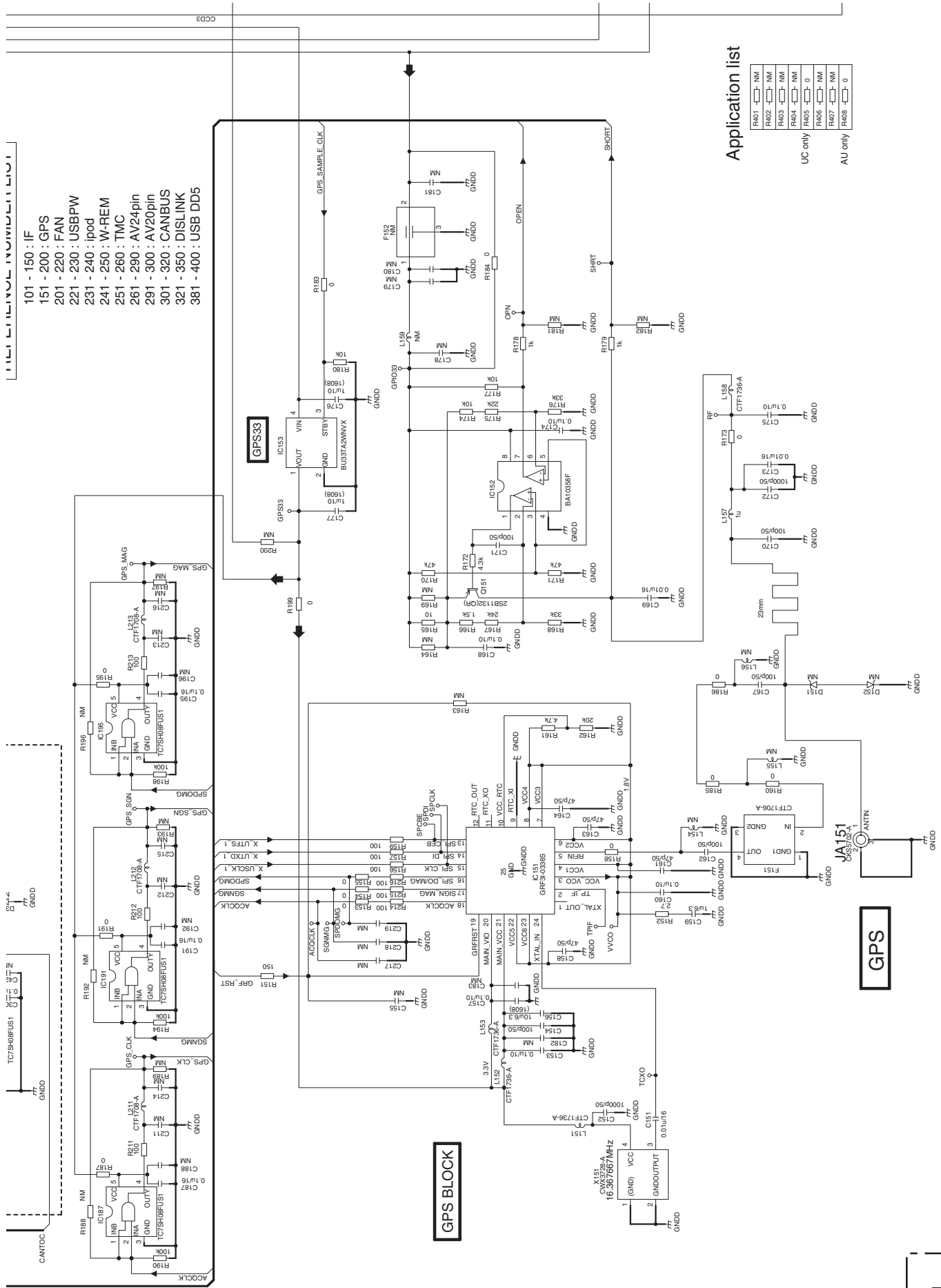


REFERENCE NUMBER LIST

- 101 - 150 : IF
- 151 - 200 : GPS
- 201 - 220 : FAN
- 221 - 230 : USBPW
- 231 - 240 : ipod
- 241 - 250 : W-REM
- 251 - 260 : TMC

E-a E-b

E-a



- 101 - 150 : IF
- 151 - 200 : GPS
- 201 - 220 : FAN
- 221 - 230 : USBPW
- 231 - 240 : ipod
- 241 - 250 : W-REM
- 251 - 260 : TMC
- 261 - 290 : AV24pin
- 291 - 300 : AV20pin
- 301 - 320 : CANBUS
- 321 - 350 : DISLINK
- 381 - 400 : USB DD5

Application list

R401	□	NM
R402	□	NM
R403	□	NM
R404	□	NM
R405	□	0
R406	□	NM
R407	□	NM
R408	□	0

UC only

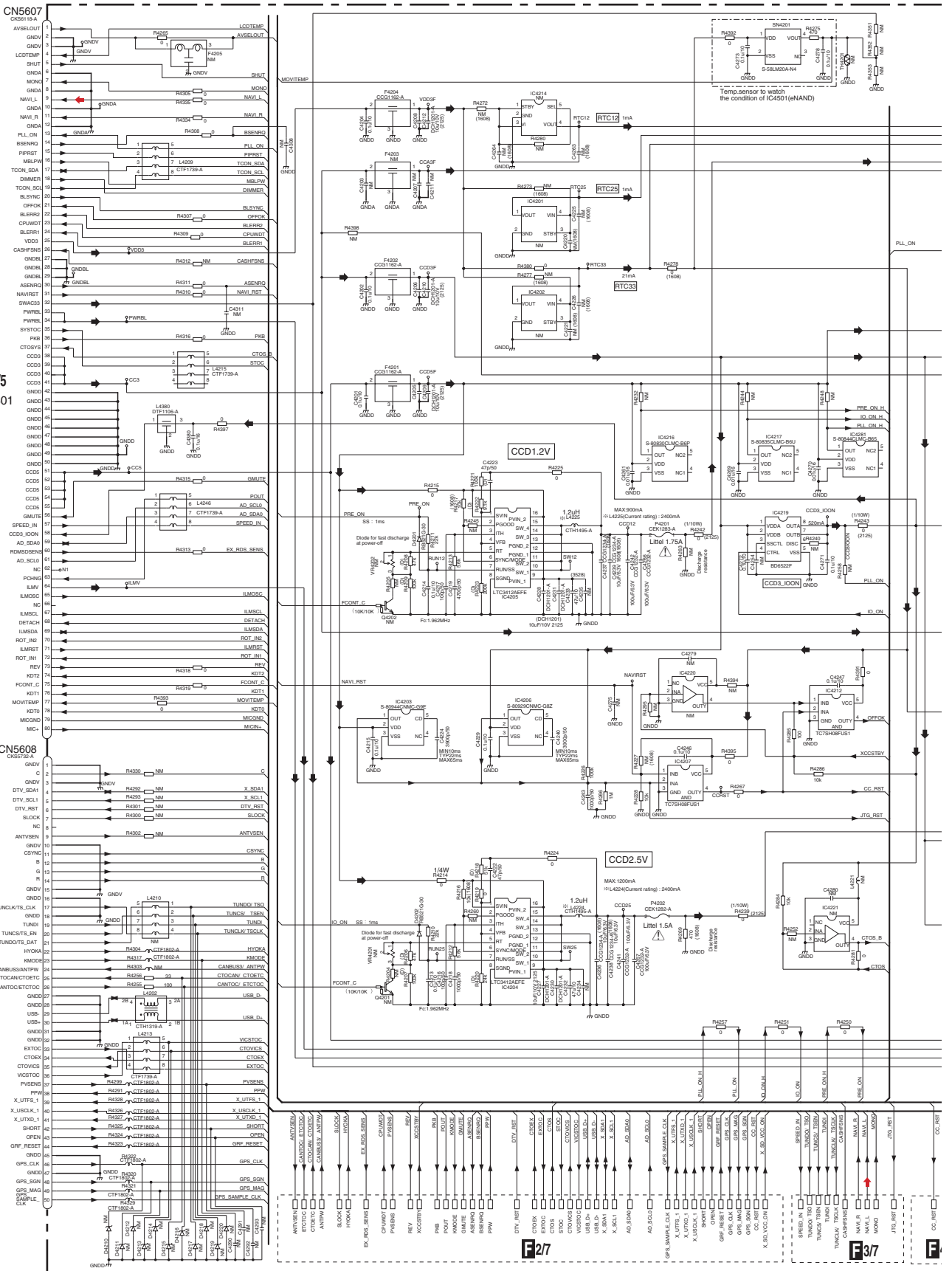
All only

10.10 CC MONITOR UNIT(SERVICE)(PS/IF SECTION)(GUIDE PAGE)

F-a 1/7

A5/5
CN2301

E
CN101

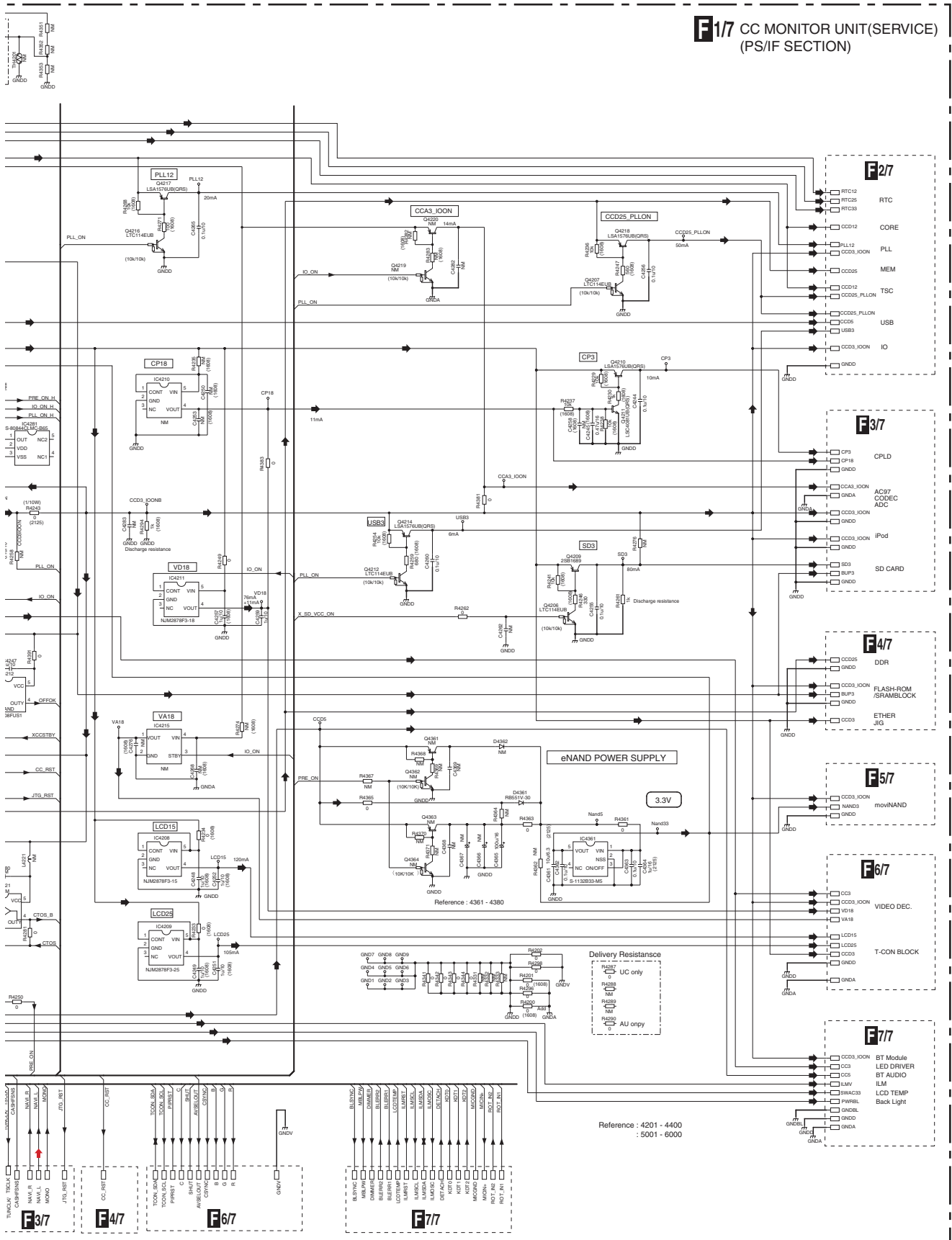


F1/7

AVIC-X930BT/XNUC

F-b 1/7

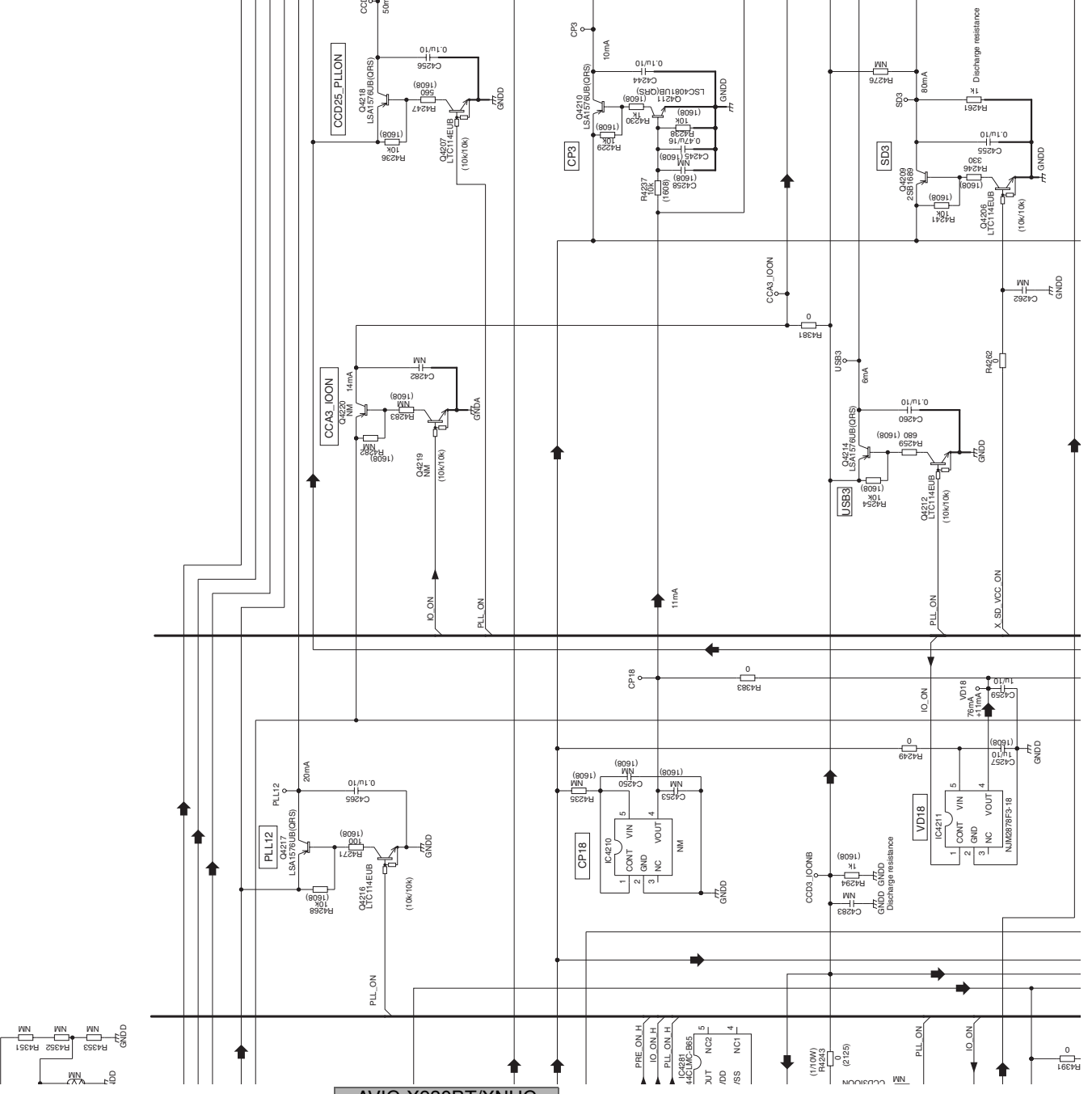
F17 CC MONITOR UNIT(SERVICE) (PS/IF SECTION)



Reference : 4201 - 4400
: 5001 - 6000



F117 CC MONITOR UNIT(SERVICE) (PS/IF SECTION)



A

B

C

D

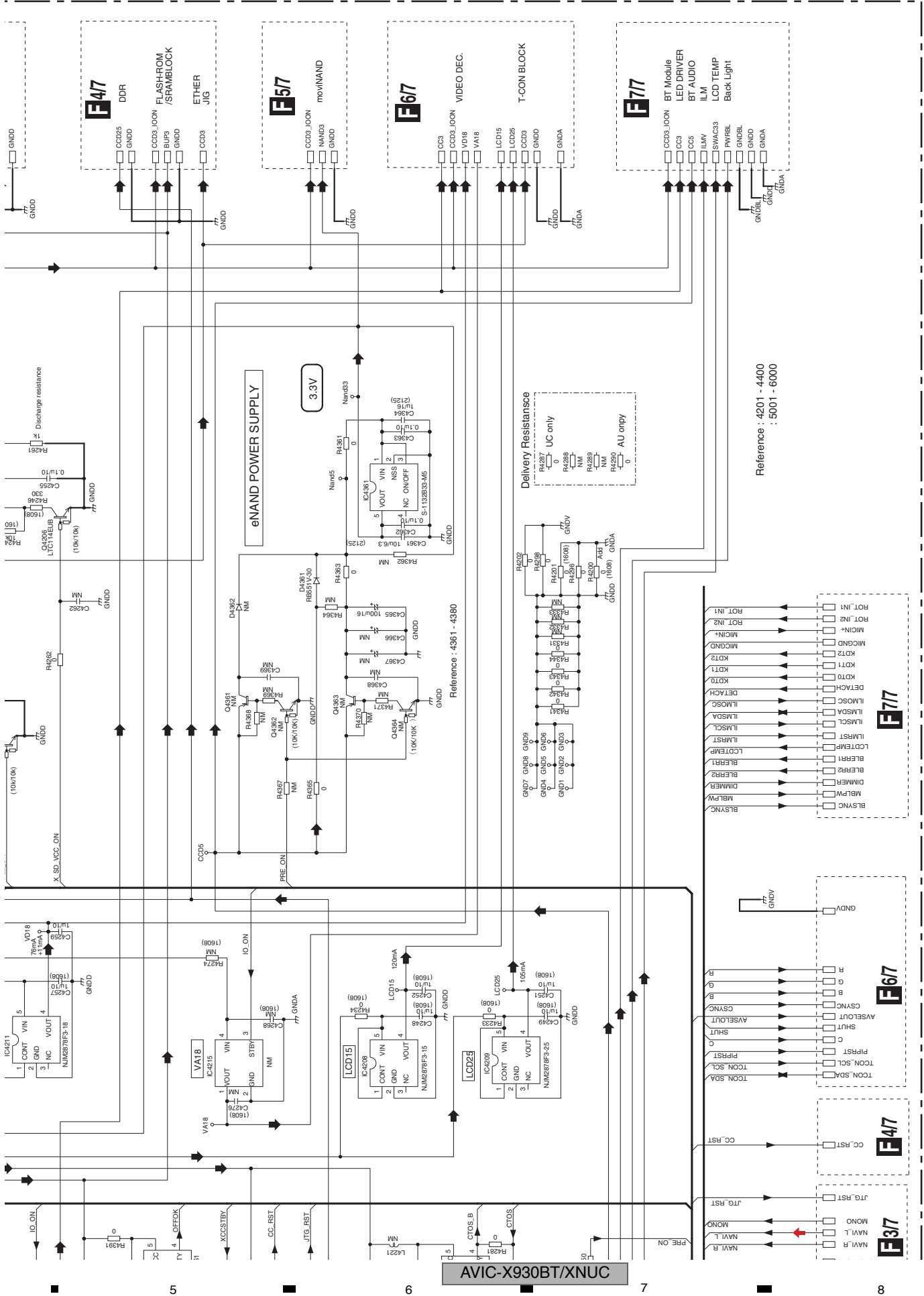
E

F

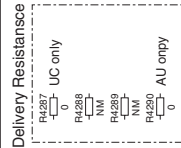
F-a F-b

F-b 117

AVIC-X930BT/XNUC

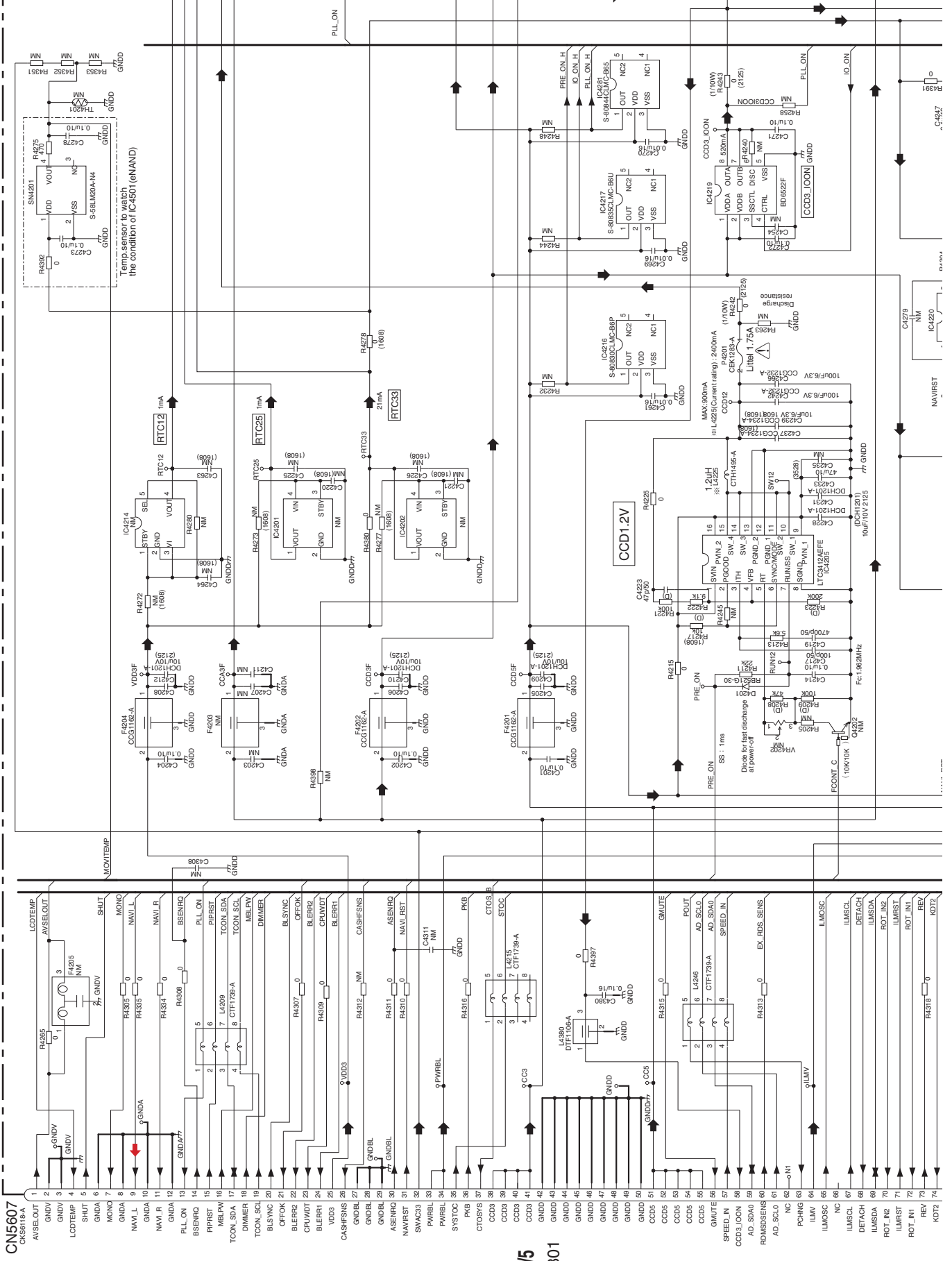


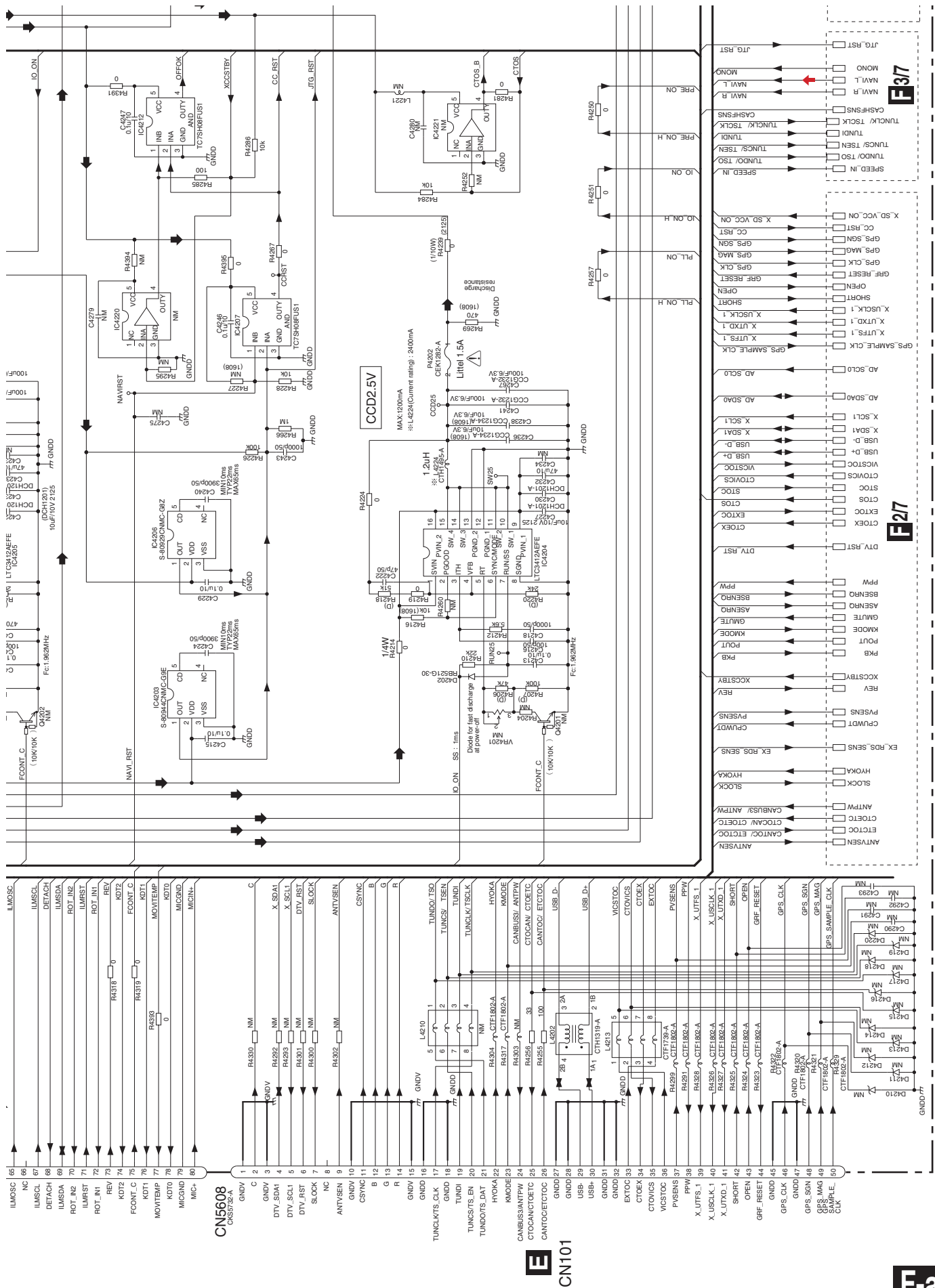
Reference : 4201 - 4400
: 5001 - 6000



F-a F-b

F-b 1/7





155	ILMOSC	
156	NC	
157	ILMSCL	
158	DETACH	
159	ILMSDA	
160	ROT_IN2	
161	ILMRST	
162	ROT_IN1	
163	REV	
164	KD72	
165	FCONT_C	
166	KD71	
167	MOVTEMP	
168	KD70	
169	MICGND	
170	MICIN	
171	C	
172	GNDV	
173	X_SD0A1	
174	X_SCL1	
175	DTV_RST	
176	SLOCK	
177	NC	
178	ANTVSEN	
179	GNDV	
180	CSYNC	
181	B	
182	G	
183	R	
184	GNDV	
185	TUNDO/TSEN	
186	TUNDO/TSD	
187	TUNDO/TSClk	
188	TUNDO/TSEN	
189	TUNDO/TSD	
190	TUNDO/TSClk	
191	TUNDO/TSEN	
192	TUNDO/TSD	
193	TUNDO/TSClk	
194	TUNDO/TSEN	
195	TUNDO/TSD	
196	TUNDO/TSClk	
197	TUNDO/TSEN	
198	TUNDO/TSD	
199	TUNDO/TSClk	
200	TUNDO/TSEN	
201	TUNDO/TSD	
202	TUNDO/TSClk	
203	TUNDO/TSEN	
204	TUNDO/TSD	
205	TUNDO/TSClk	
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303	TUNDO/TSD	
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344	TUNDO/TSEN	
345	TUNDO/TSD	
346	TUNDO/TSClk	
347	TUNDO/TSEN	
348	TUNDO/TSD	
349	TUNDO/TSClk	
350	TUNDO/TSEN	

F-a 1/7

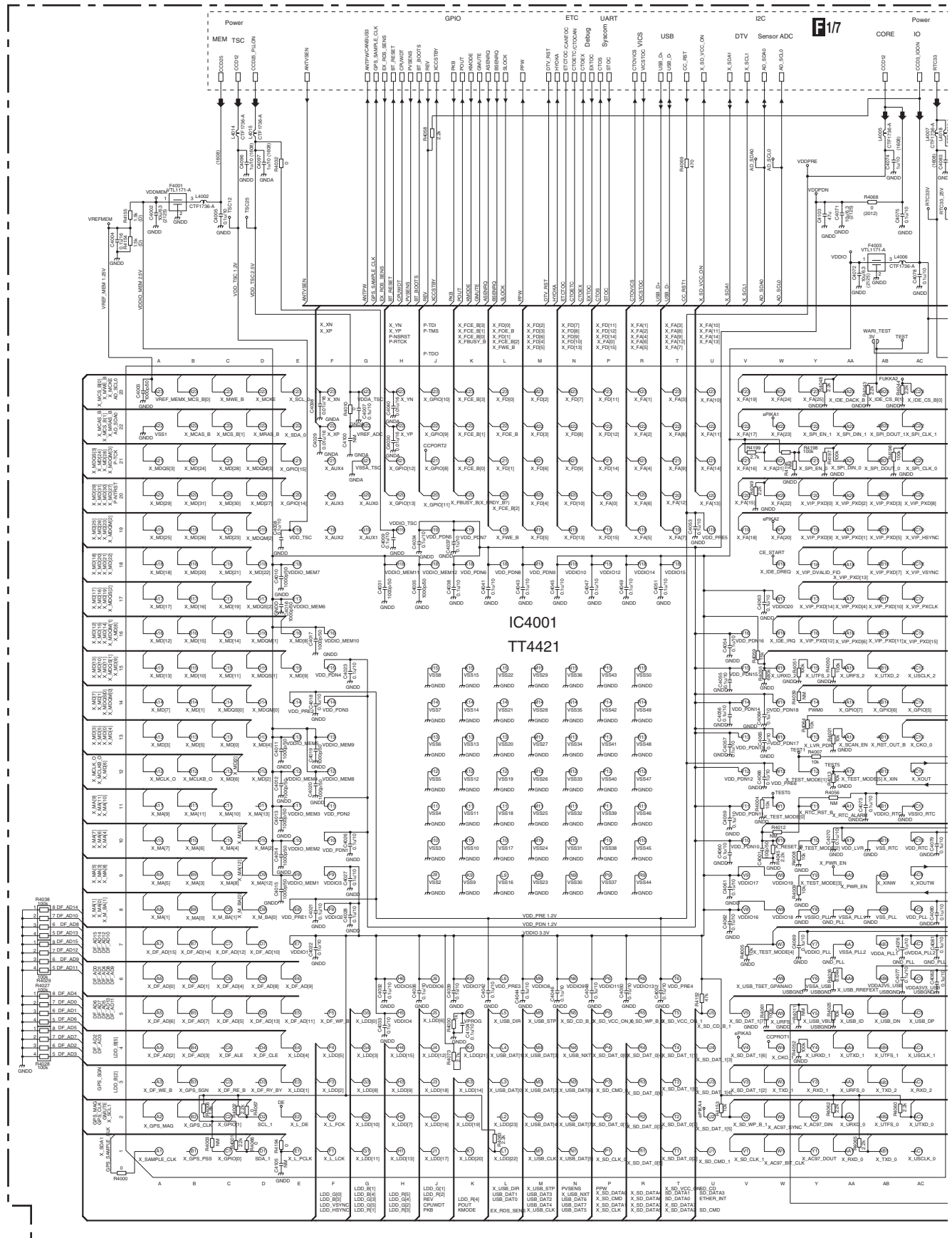
F-b 1/7

F-a 1/7

F-b 1/7

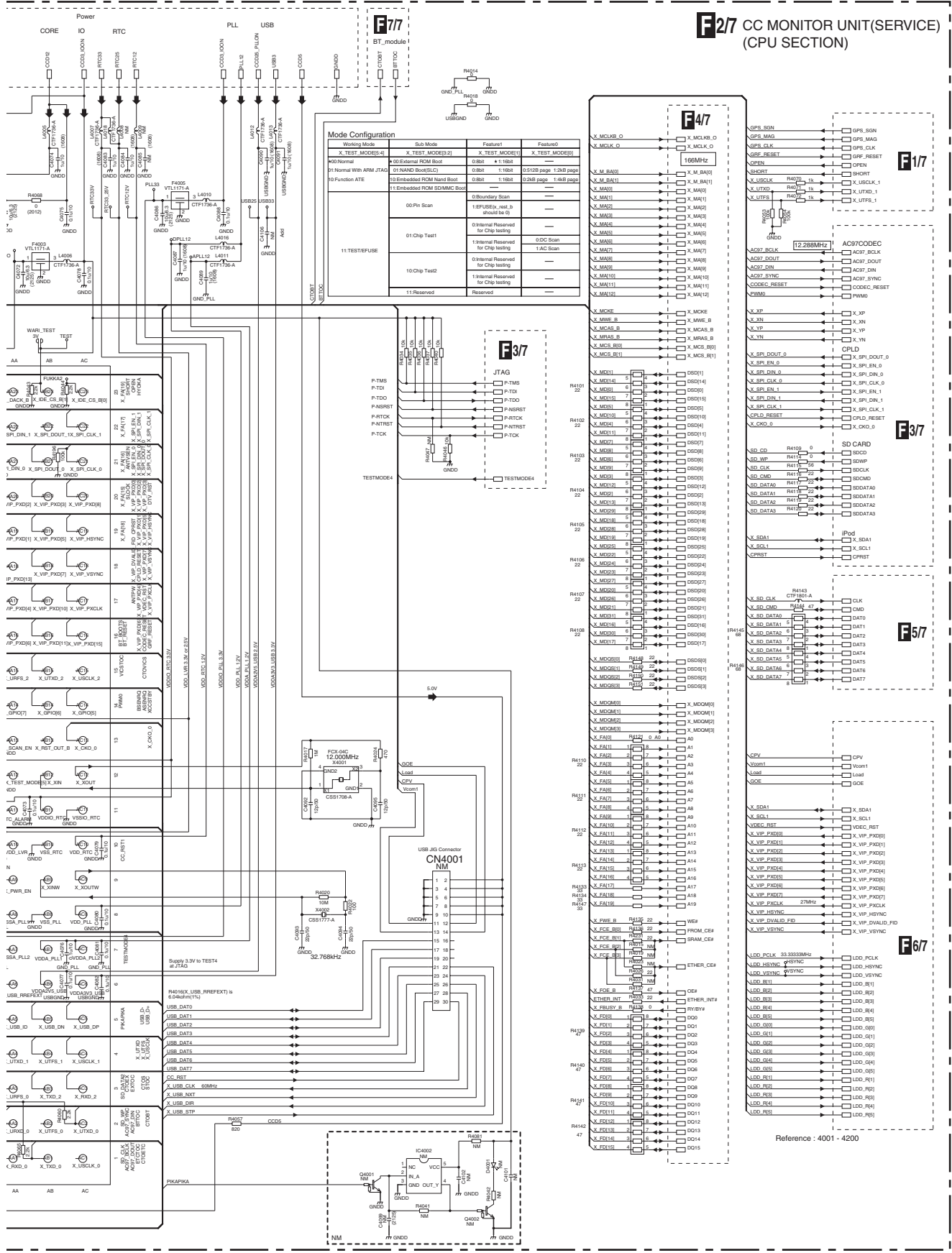
10.11 CC MONITOR UNIT(SERVICE)(CPU SECTION)(GUIDE PAGE)

F-a 2/7



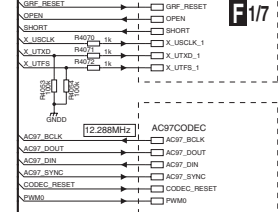
AVIC-X930BT/XNUC

F-b 217

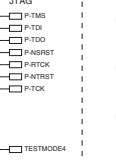


F27 CC MONITOR UNIT(SERVICE) (CPU SECTION)

F47



E37



F37

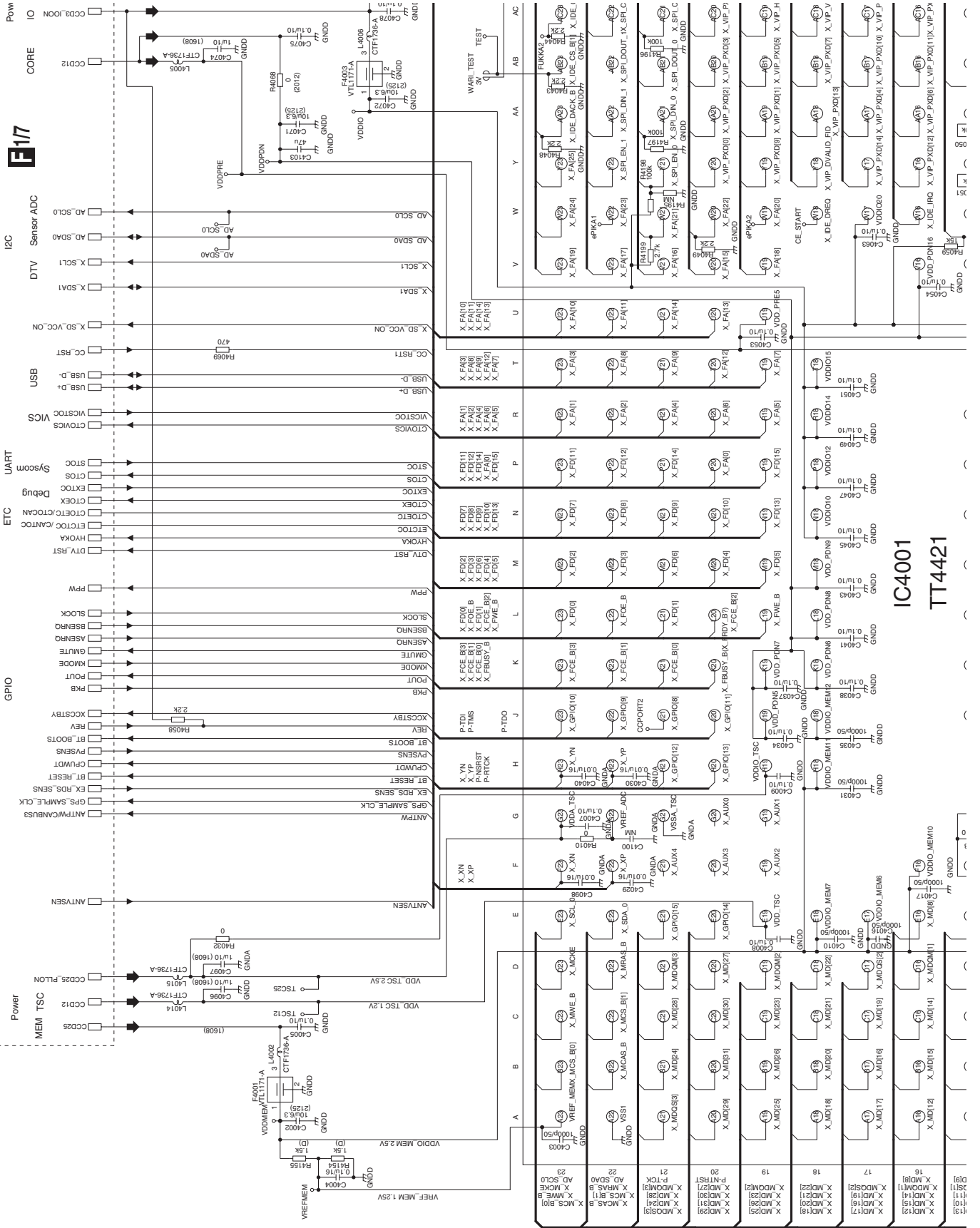


F57



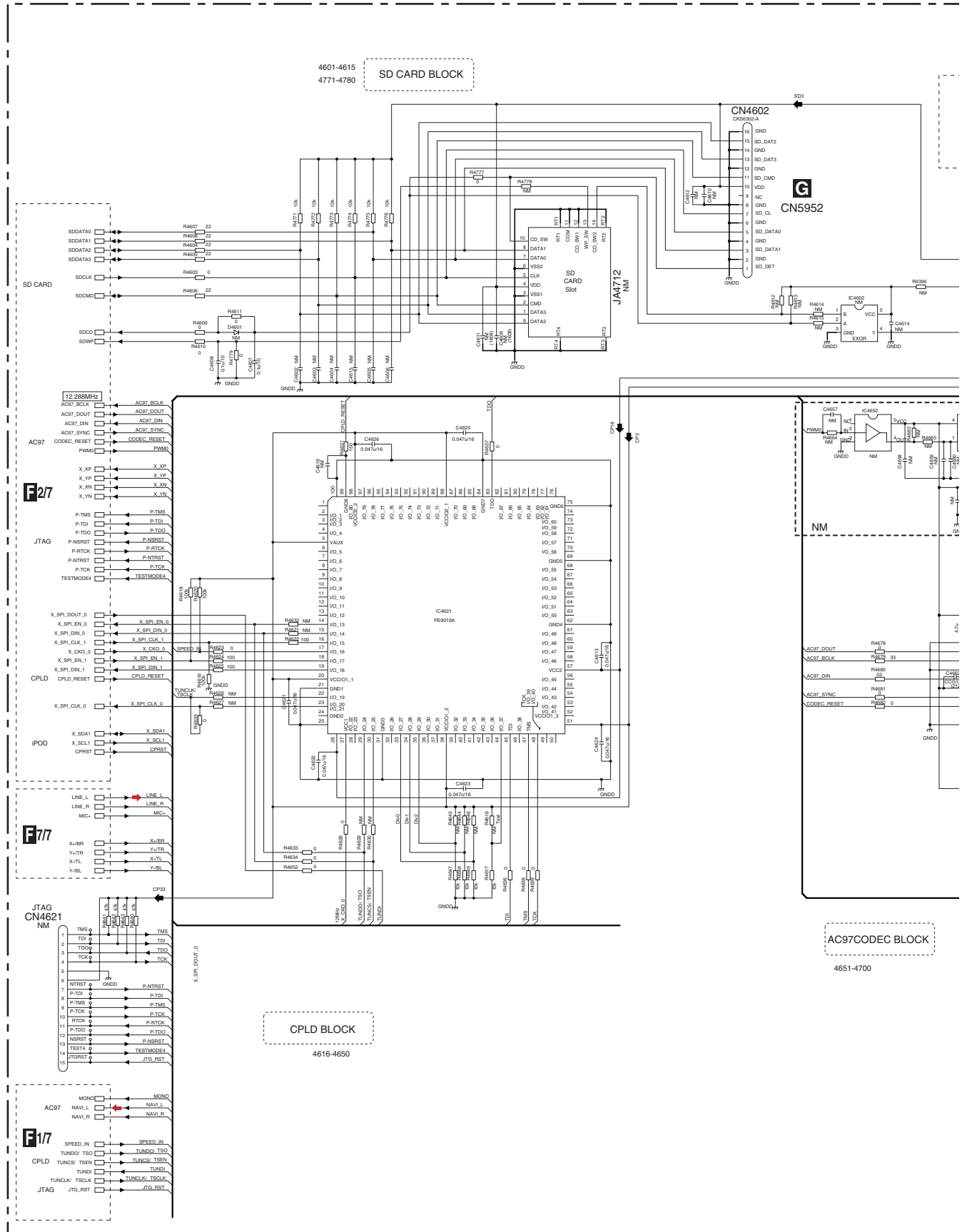
F67



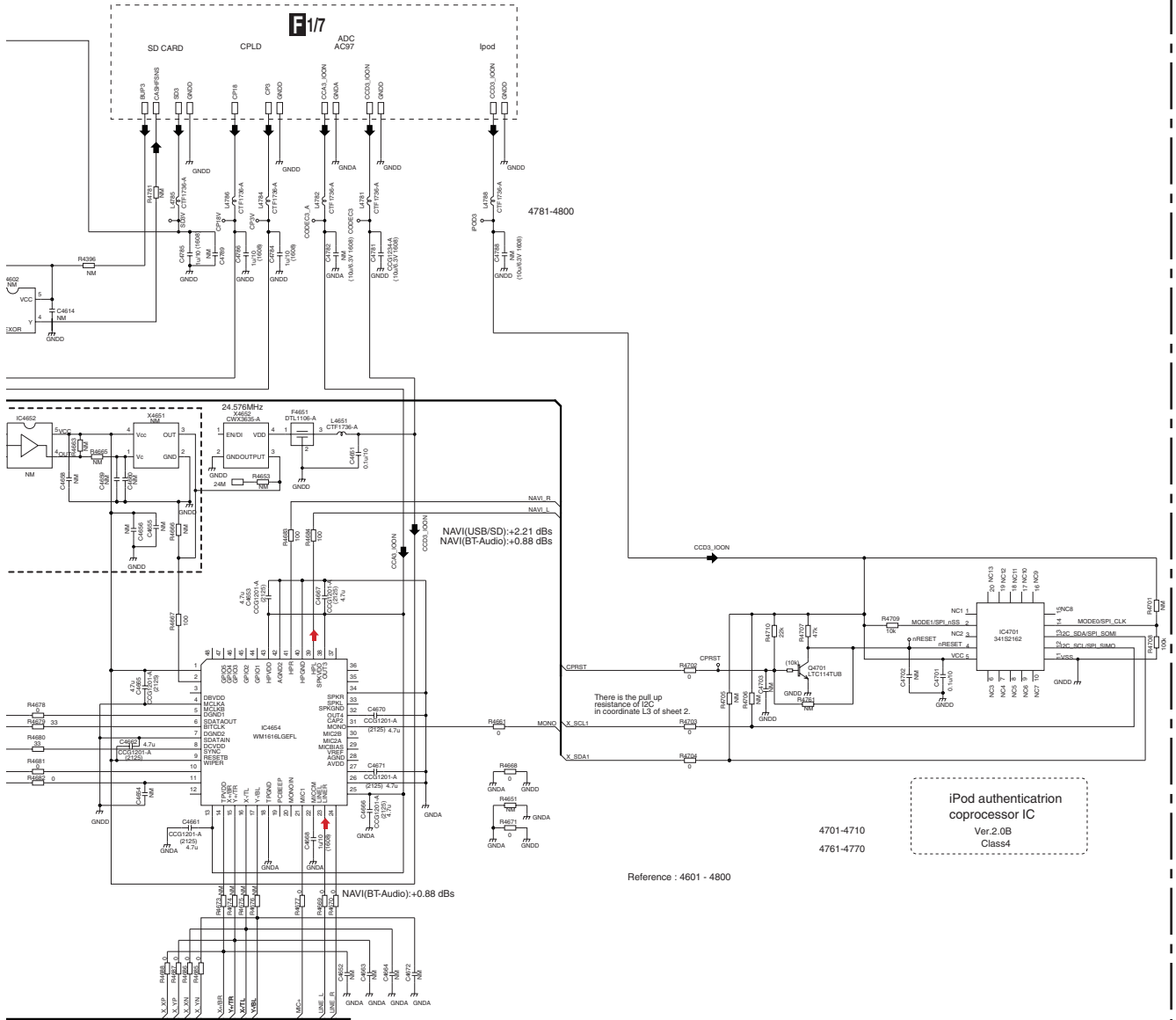


10.12 CC MONITOR UNIT(SERVICE)(CPU AROUND SECTION)(GUIDE PAGE)

F-a 3/7



F3/7 CC MONITOR UNIT(SERVICE)
(CPU AROUND SECTION)



CODEC BLOCK

4700

iPod authentication coprocessor IC
Ver.2.0B
Class4

Reference : 4601 - 4800

F3/7 CC MONITOR UNIT(SERVICE) (CPU AROUND SECTION)

A

B

C

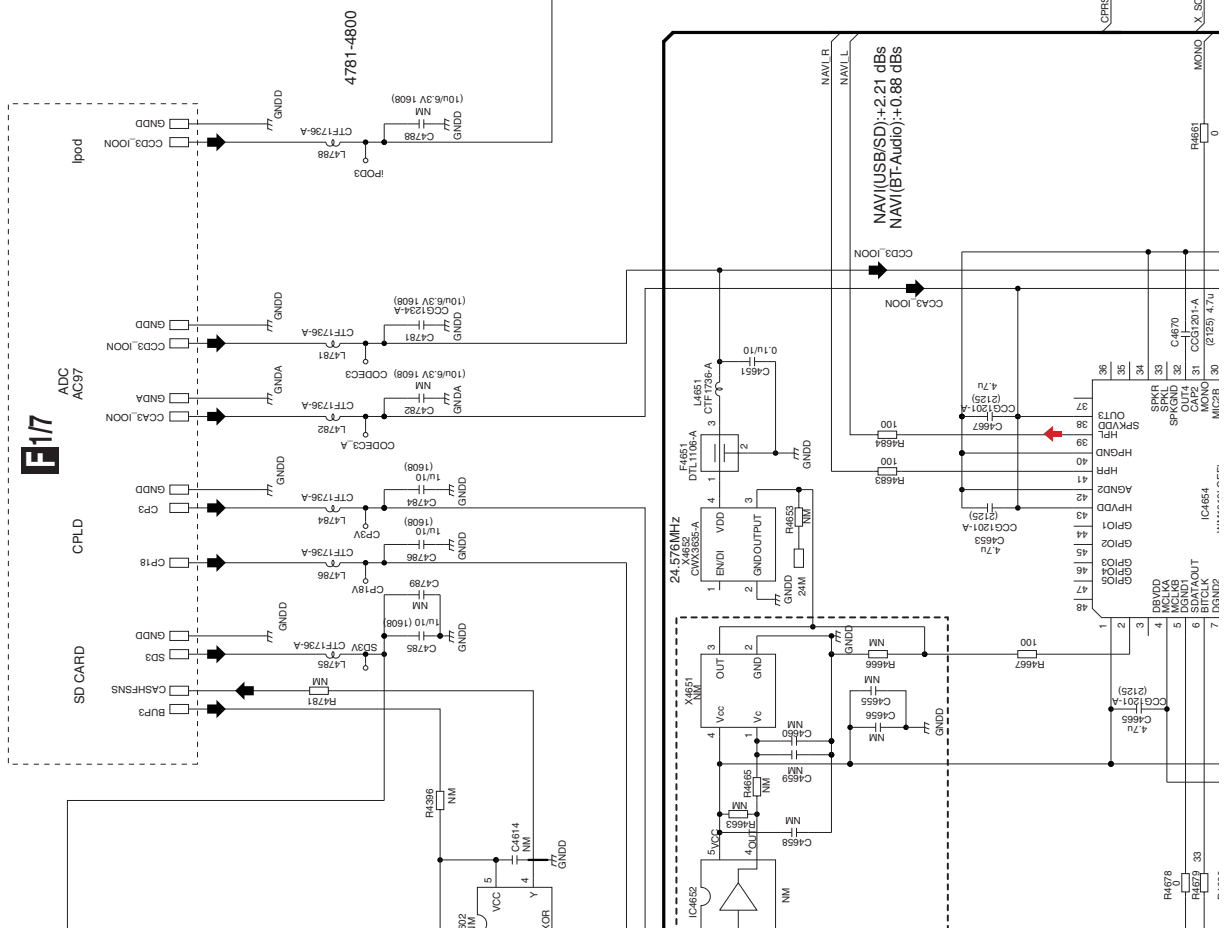
D

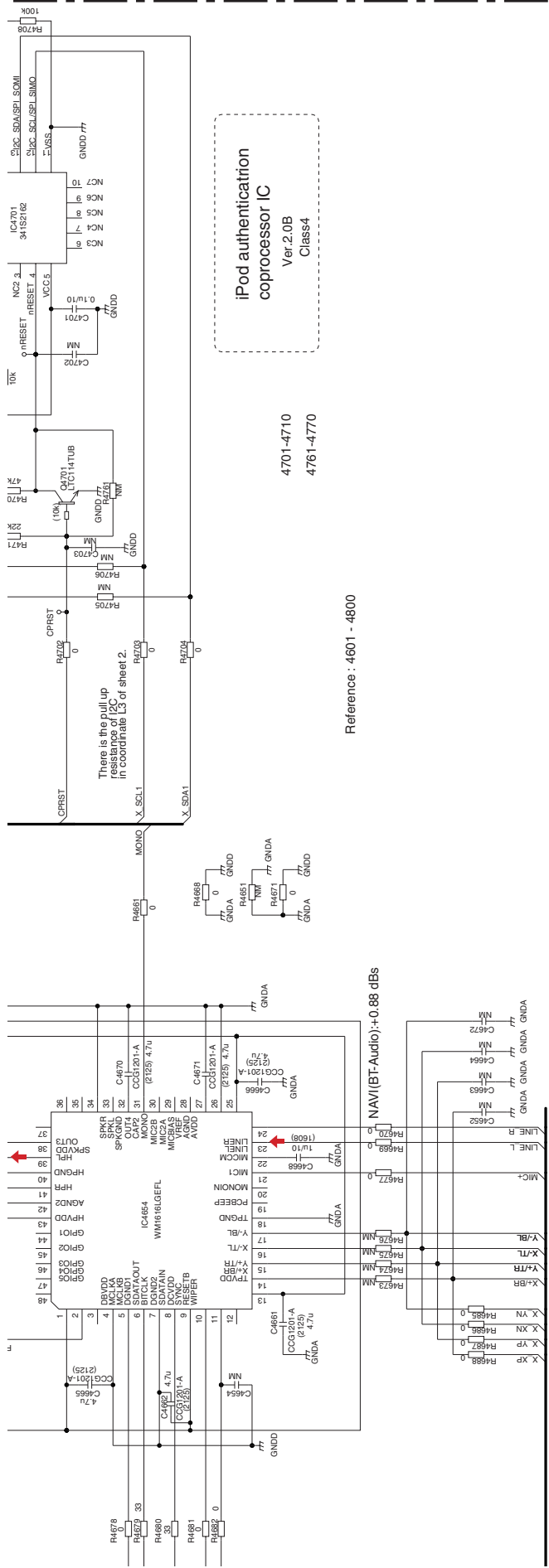
E

F

F-a F-b

F-b 3/7





CODEC BLOCK
1700
AVIC-X930BT/XNUC

iPod authentication
coprocessor IC
Ver.2.0B
Class4

4701-4710
4761-4770

Reference : 4601 - 4800

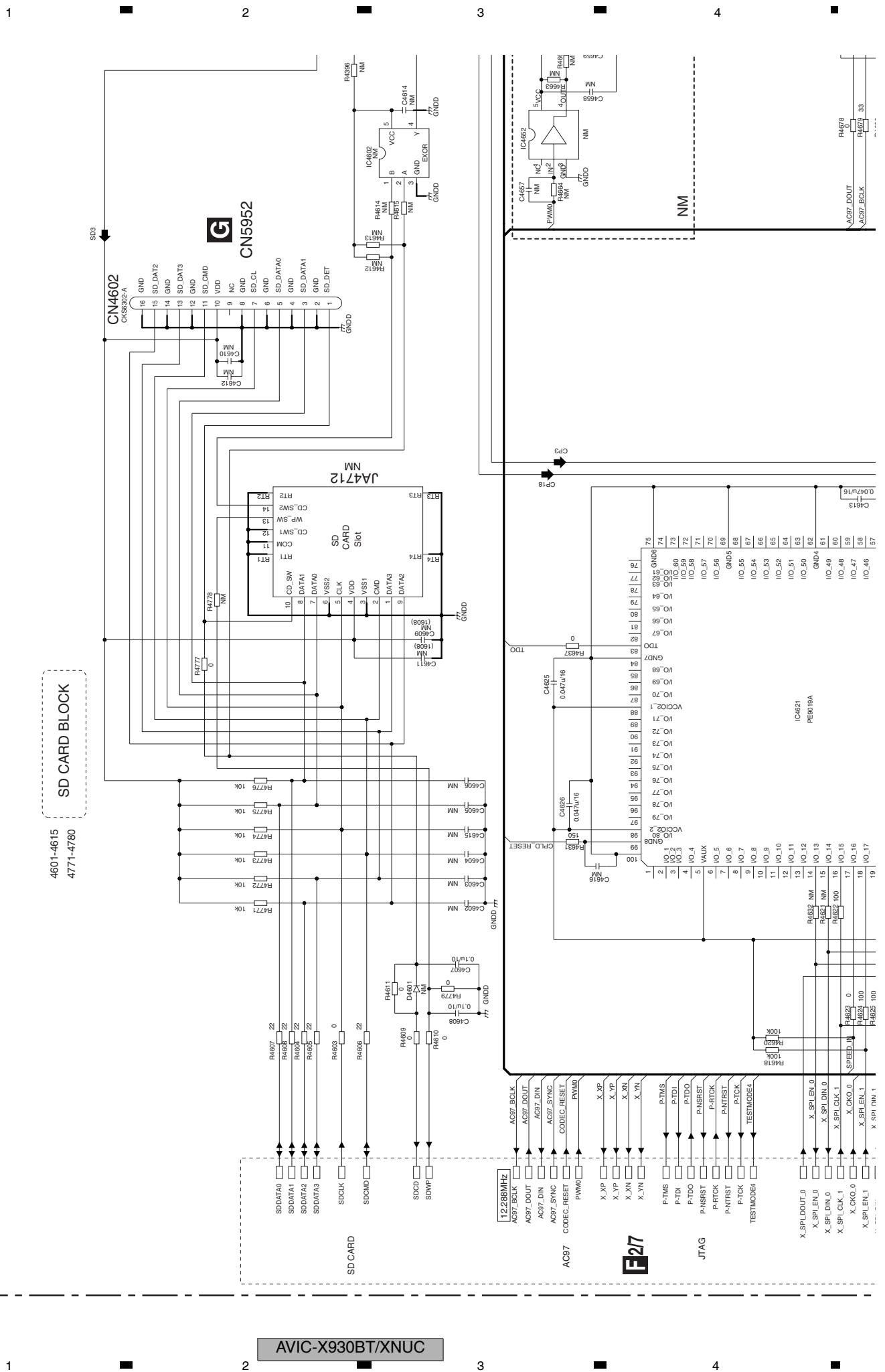
There is the pull up
of IC3
in coordinate B is of sheet 2.

5 6 7 8

F-a F-b

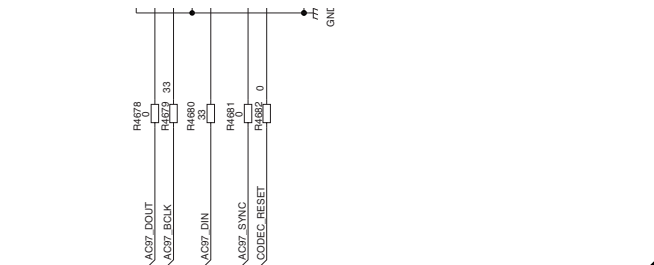
F-b 3/7

237

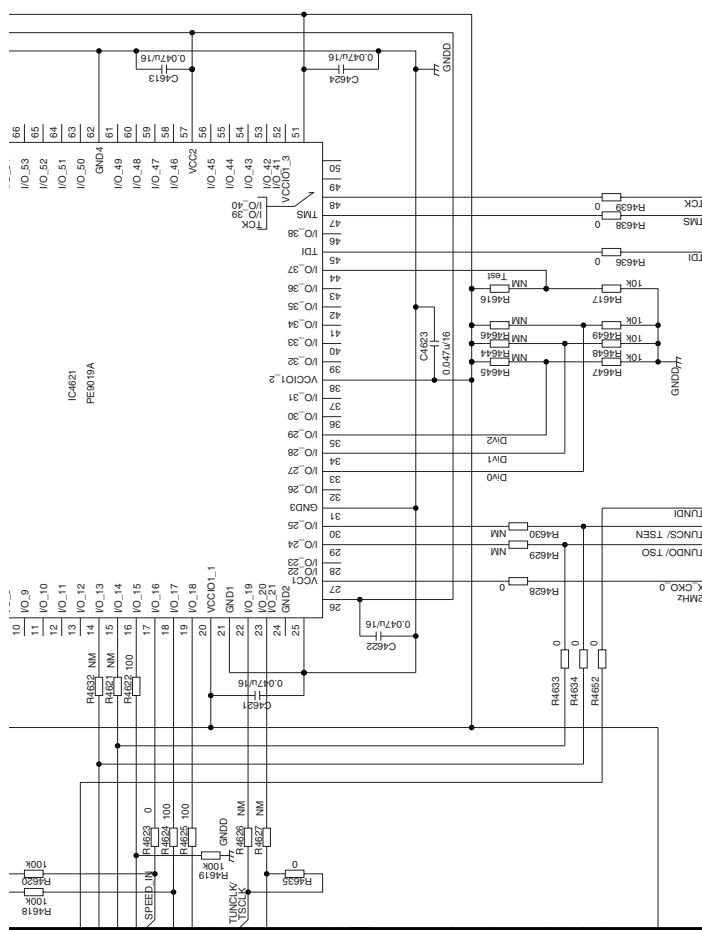


A B C D E F

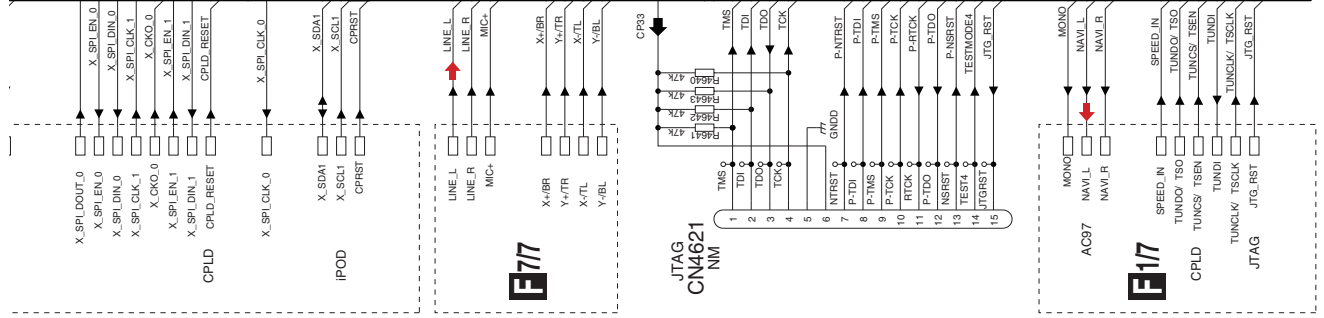
1 2 3 4



AC97 CODEC BLOCK
4651-4700



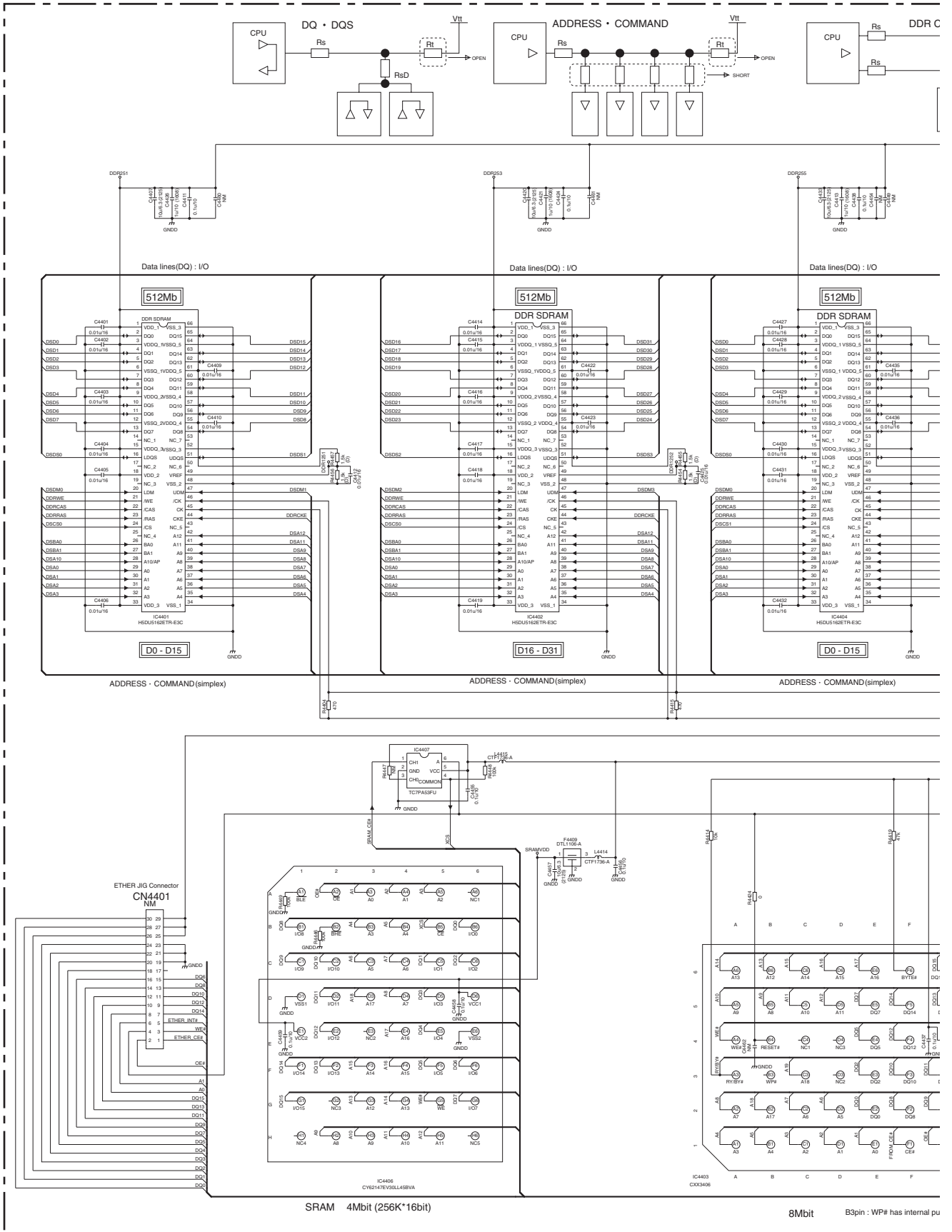
CPLD BLOCK
4616-4650



A
B
C
D
E
F

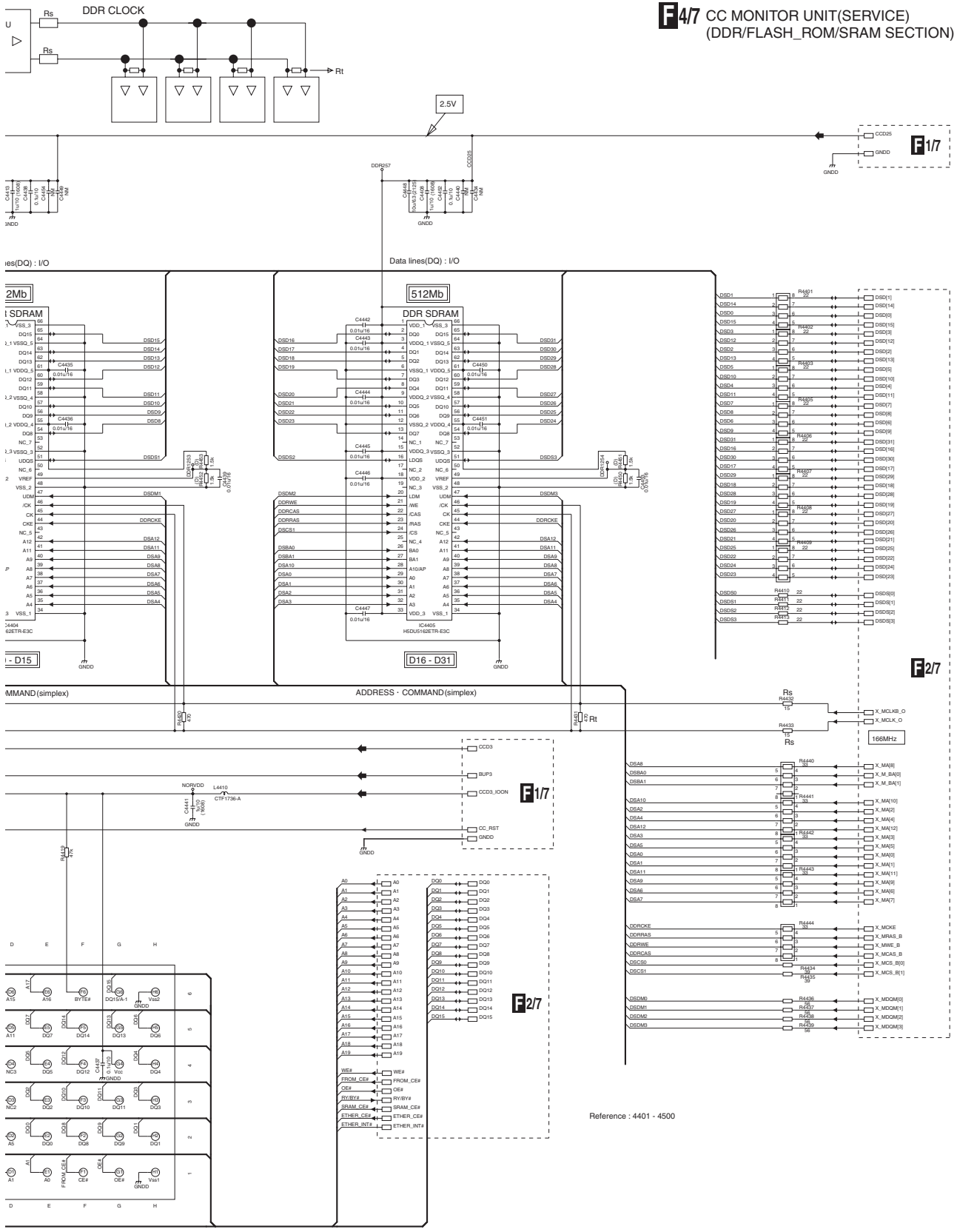
10.13 CC MONITOR UNIT(SERVICE)(DDR/FLASH_ROM/SRAM SECTION) (GUIDE PAGE)

F-a 4/7



F-b 4/7

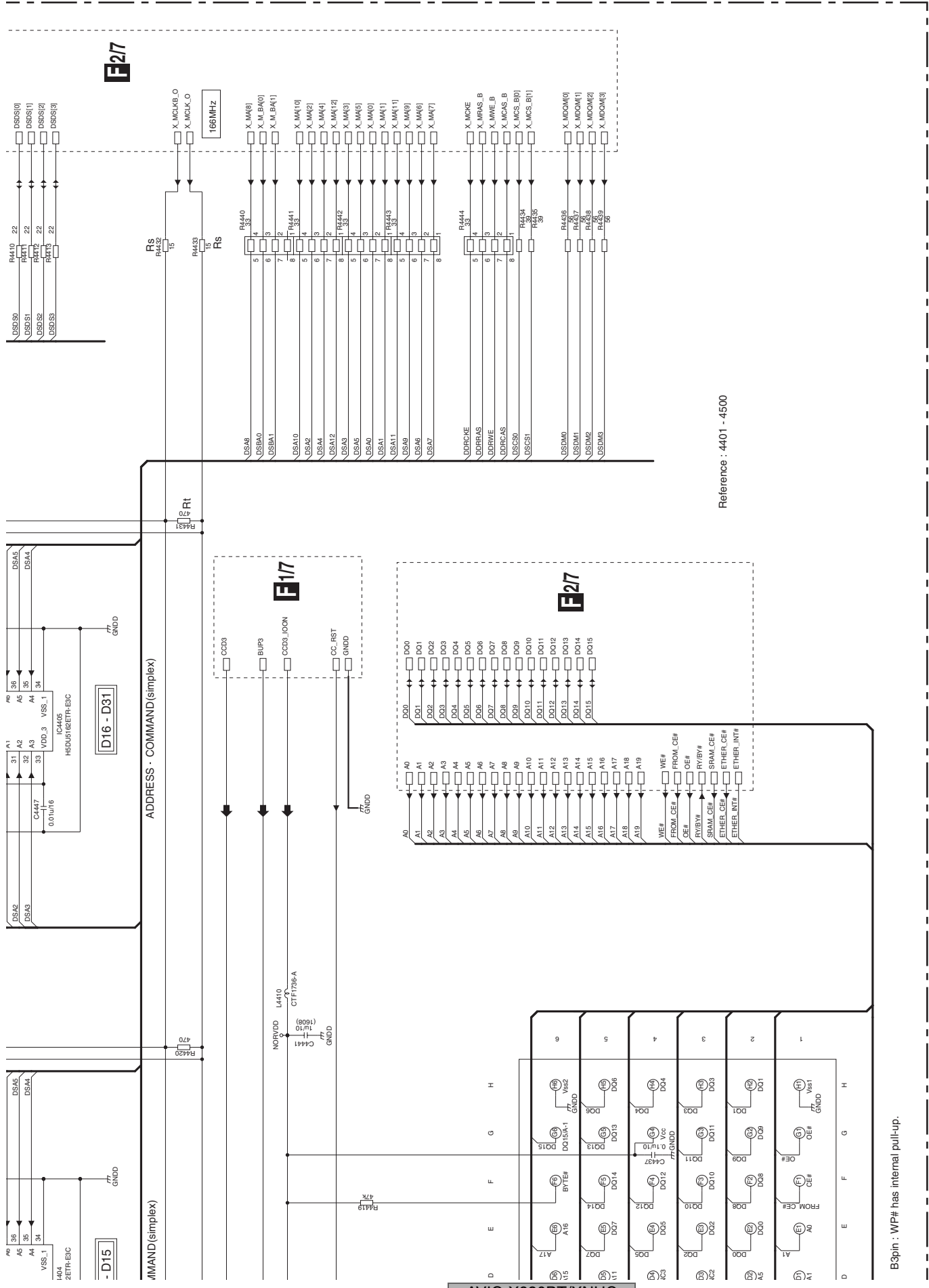
F4/7 CC MONITOR UNIT(SERVICE) (DDR/FLASH_ROM/SRAM SECTION)



BSpin : WP# has internal pull-up.

Reference : 4401 - 4500





F27

F17

F27

ADDRESS - COMMAND (simplex)

MMAND (simplex)

Reference : 4401 - 4500

AVIC-X930BT/XNUC

B3pin : WP# has internal pull-up.

F-b 4/7

F-a F-b

5

6

7

8

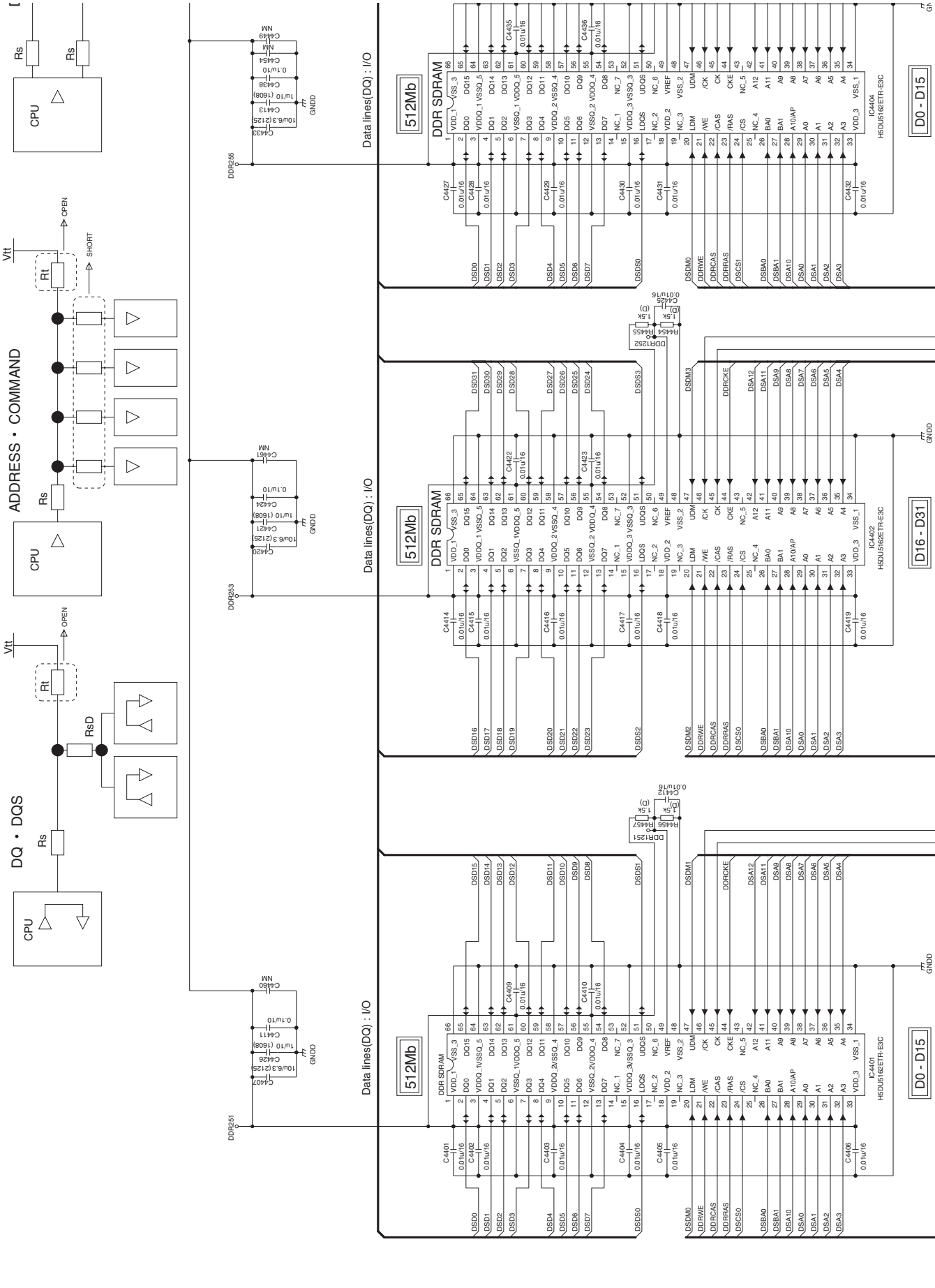
5

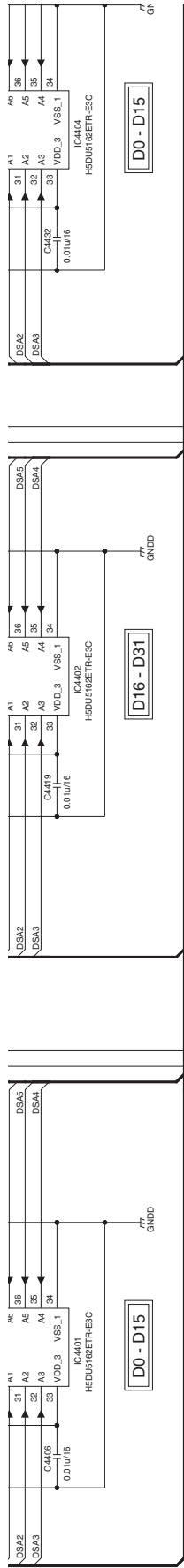
6

7

8

A B C D E F

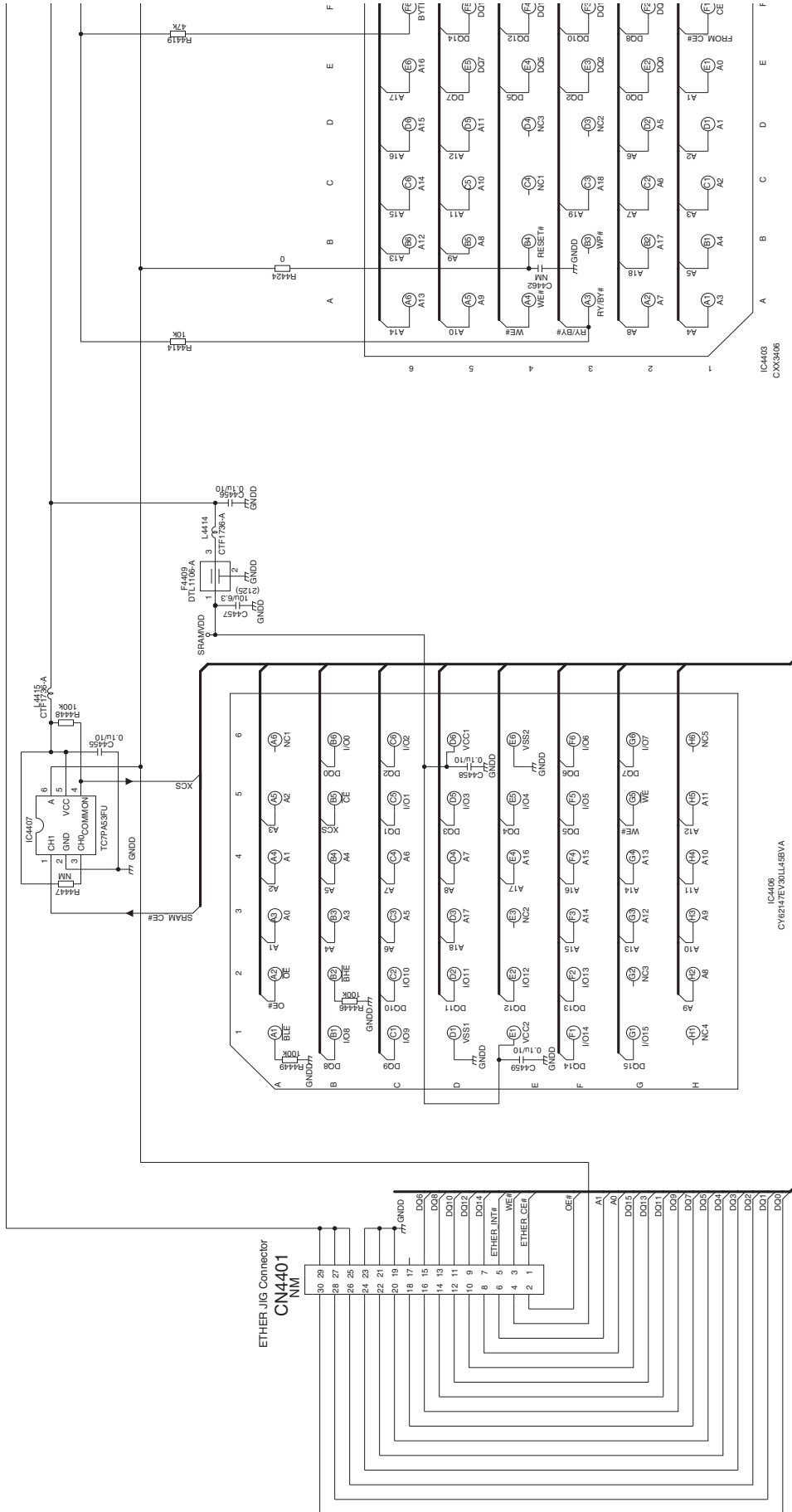




ADDRESS · COMMAND (simplex)

ADDRESS · COMMAND (simplex)

ADDRESS · COMMAND (simplex)

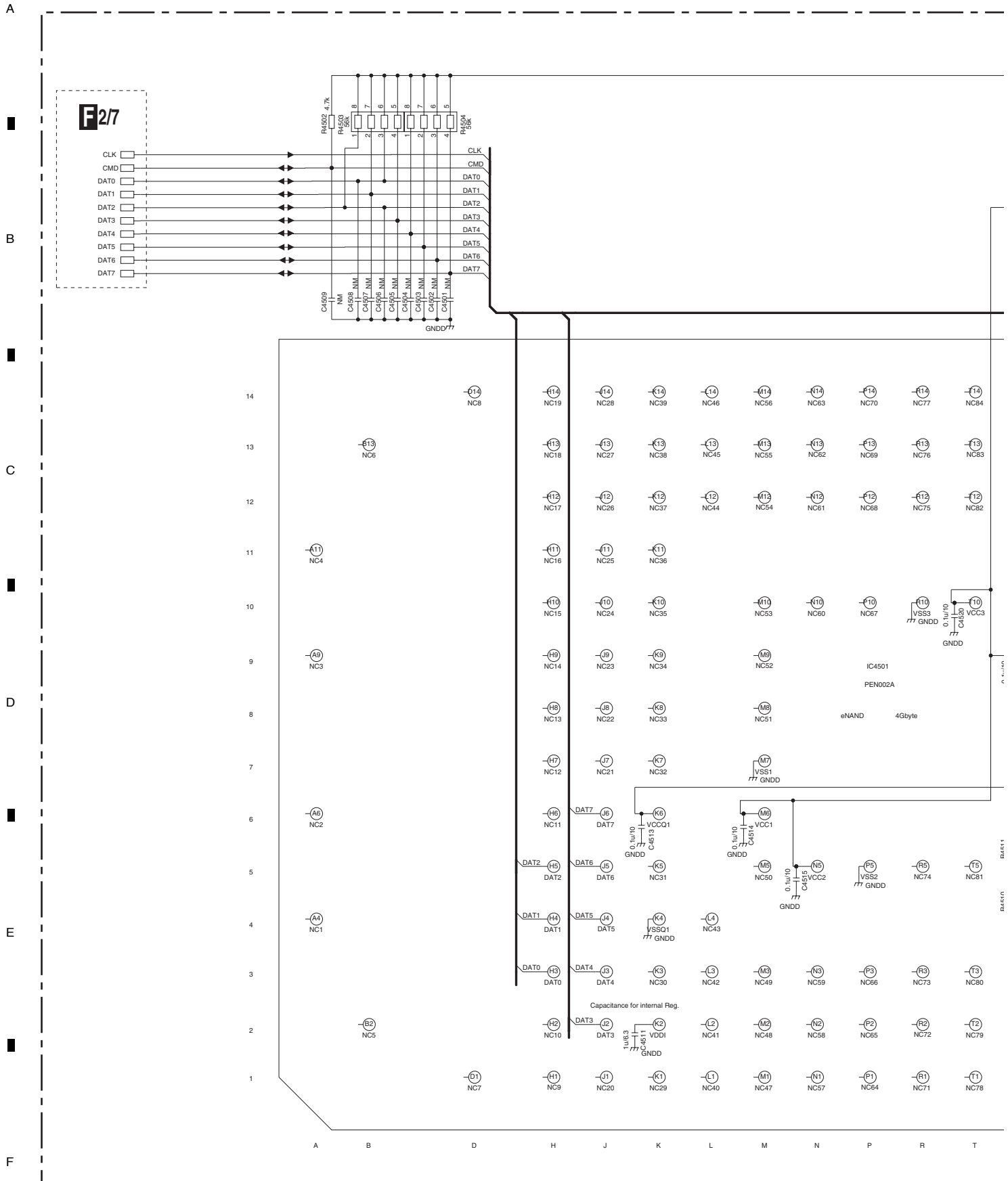


SRAM 4Mbit (256K*16bit)

SRAM 8Mbit

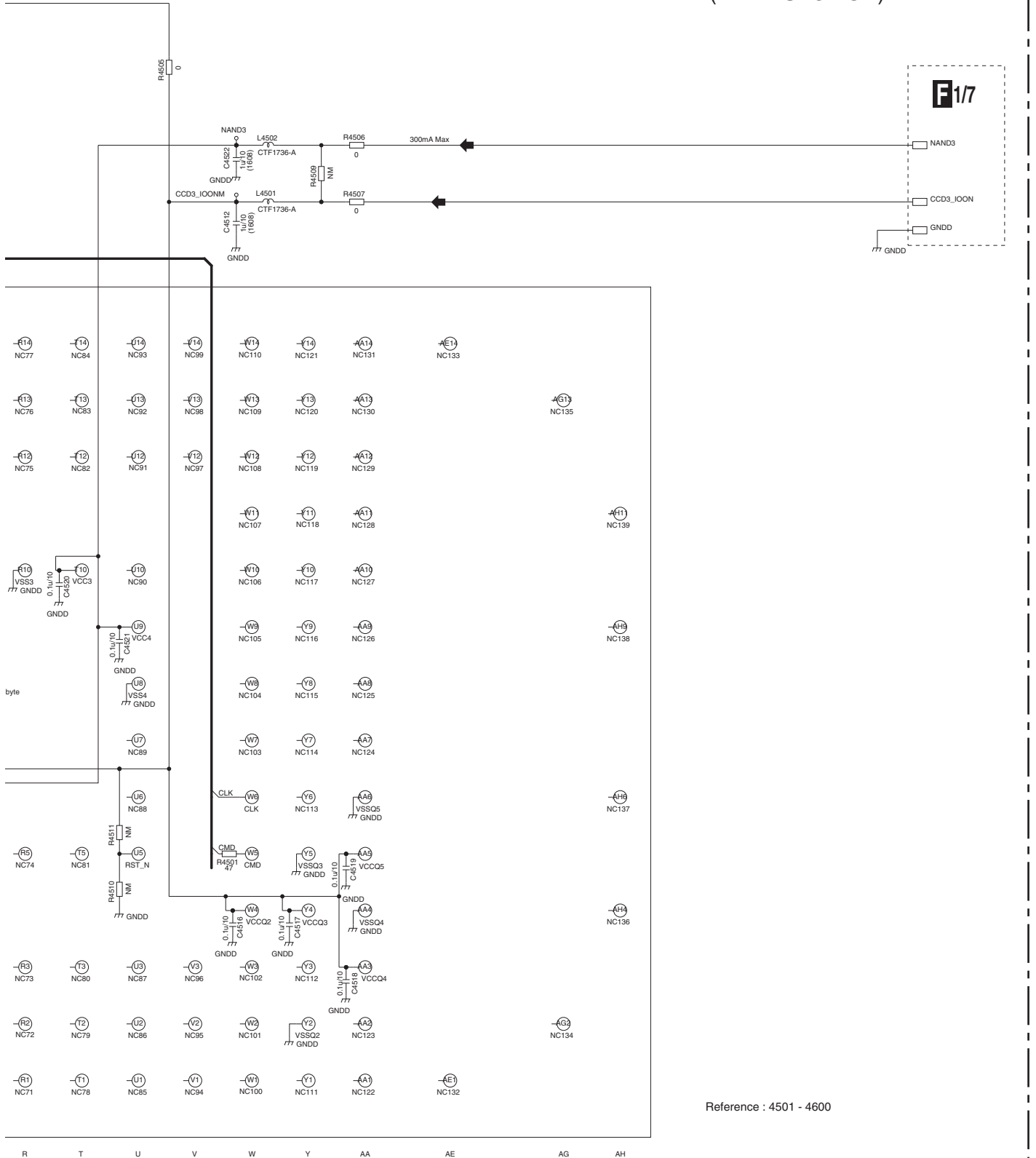
B3pin : WP# has int

10.14 CC MONITOR UNIT(SERVICE)(NAND SECTION)



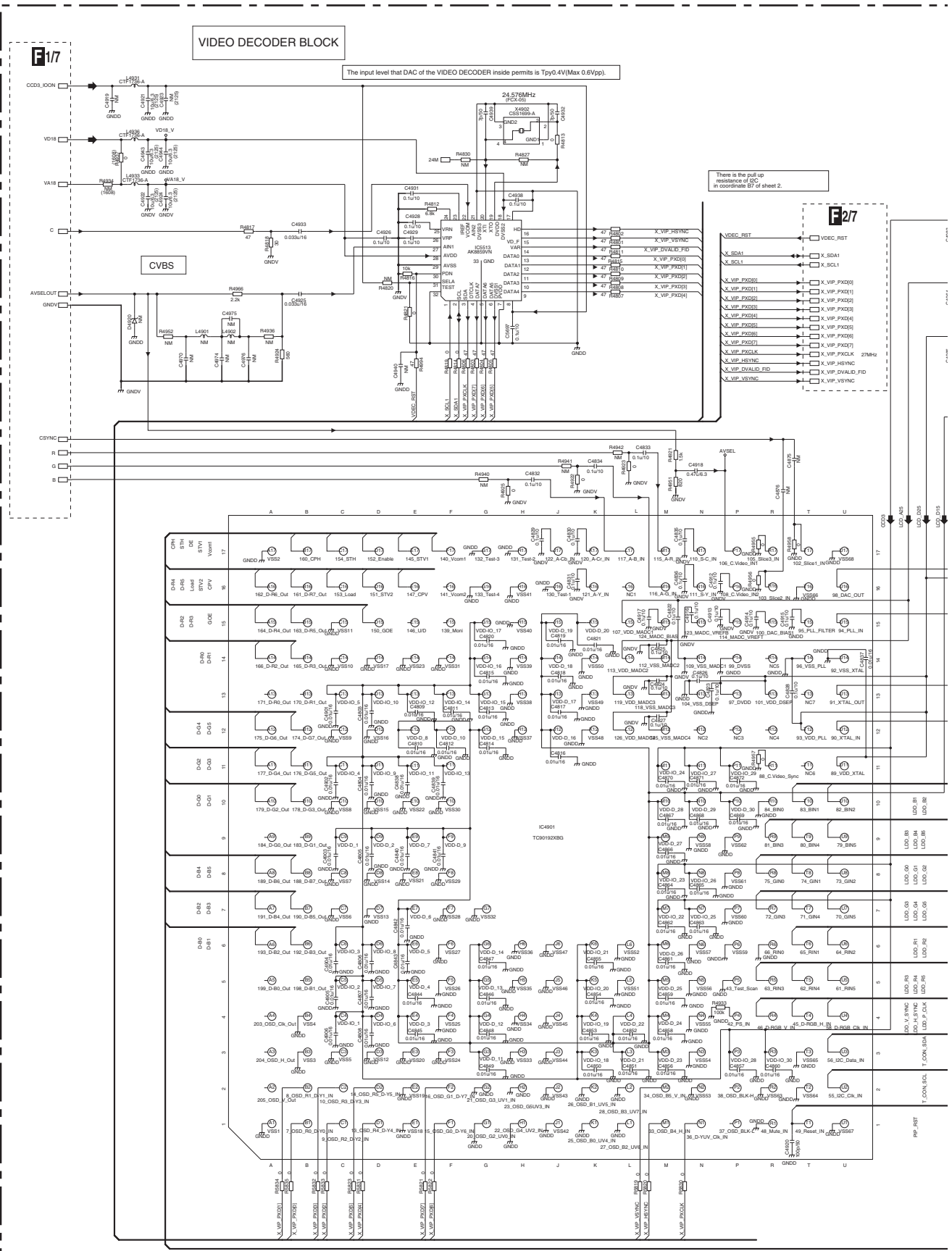
F5/7 CC MONITOR UNIT(SERVICE) (NAND SECTION)

F1/7



10.15 CC MONITOR UNIT(SERVICE)(VIDEO DEC/T-CON SECTION)(GUIDE PAGE)

F-a 6/7

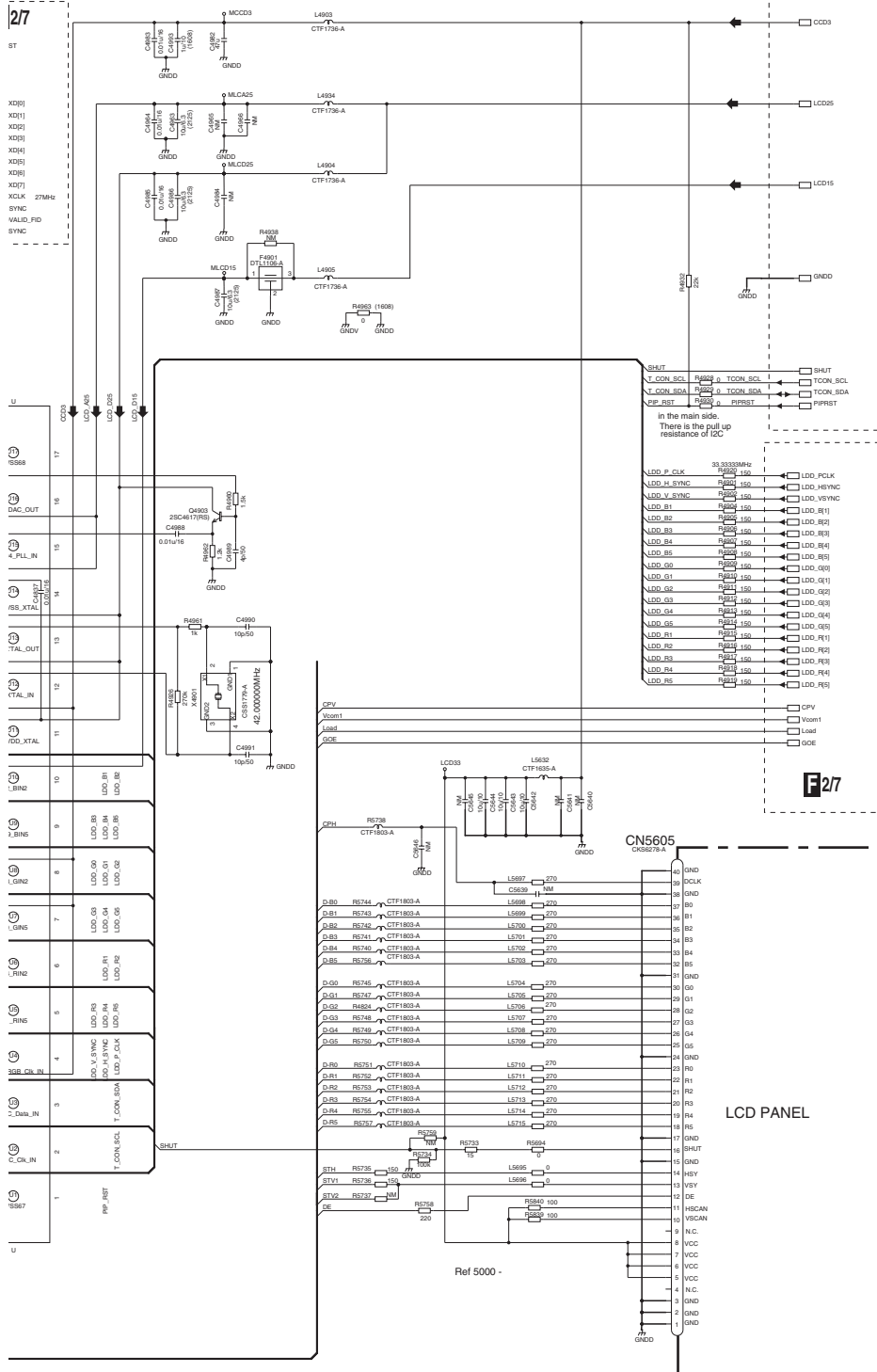


AVIC-X930BT/XNUC

F6/7

F-b 6/7

F6/7 CC MONITOR UNIT(SERVICE) (VIDEO DEC/T-CON SECTION)



Prima → T-CON connection

Prima terminal name	Signal name	T-CON input terminal name
X_L_PCK	LDD_PCLK	D-RGB_CLK_IN
X_L_LCK	LDD_HSYNC	D-RGB_H_IN
X_L_FCK	LDD_VSYNC	D-RGB_V_IN
X_LDD_0	LDD_B[1]	BIN1
X_LDD_1	LDD_B[2]	BIN2
X_LDD_2	LDD_B[3]	BIN3
X_LDD_3	LDD_B[4]	BIN4
X_LDD_4	LDD_B[5]	BIN5
X_LDD_5	LDD_G[0]	GIN0
X_LDD_6	LDD_G[1]	GIN1
X_LDD_7	LDD_G[2]	GIN2
X_LDD_8	LDD_G[3]	GIN3
X_LDD_9	LDD_G[4]	GIN4
X_LDD_10	LDD_G[5]	GIN5
X_LDD_11	LDD_R[1]	RIN1
X_LDD_12	LDD_R[2]	RIN2
X_LDD_13	LDD_R[3]	RIN3
X_LDD_14	LDD_R[4]	RIN4
X_LDD_15	LDD_R[5]	RIN5

T-CON → LCD connection

T-CON output terminal name	Signal name	LCD terminal name
CPH	CPH	DCLK
STH	STH	HSY
STV1	STV1	VSY
Vcom1	VCOM1	-
Vcom2	-	-
CPV	CPV	-
Load	LOAD	-
GOE	GOE	-
D-B2_Out	D-B0	B0
D-B3_Out	D-B1	B1
D-B4_Out	D-B2	B2
D-B5_Out	D-B3	B3
D-B6_Out	D-B4	B4
D-B7_Out	D-B5	B5
D-G2_Out	D-G0	G0
D-G3_Out	D-G1	G1
D-G4_Out	D-G2	G2
D-G5_Out	D-G3	G3
D-G6_Out	D-G4	G4
D-G7_Out	D-G5	G5
D-R2_Out	D-R0	R0
D-R3_Out	D-R1	R1
D-R4_Out	D-R2	R2
D-R5_Out	D-R3	R3
D-R6_Out	D-R4	R4
D-R7_Out	D-R5	R5

Reference : 4801 - 4999
: (5001 - 5999)

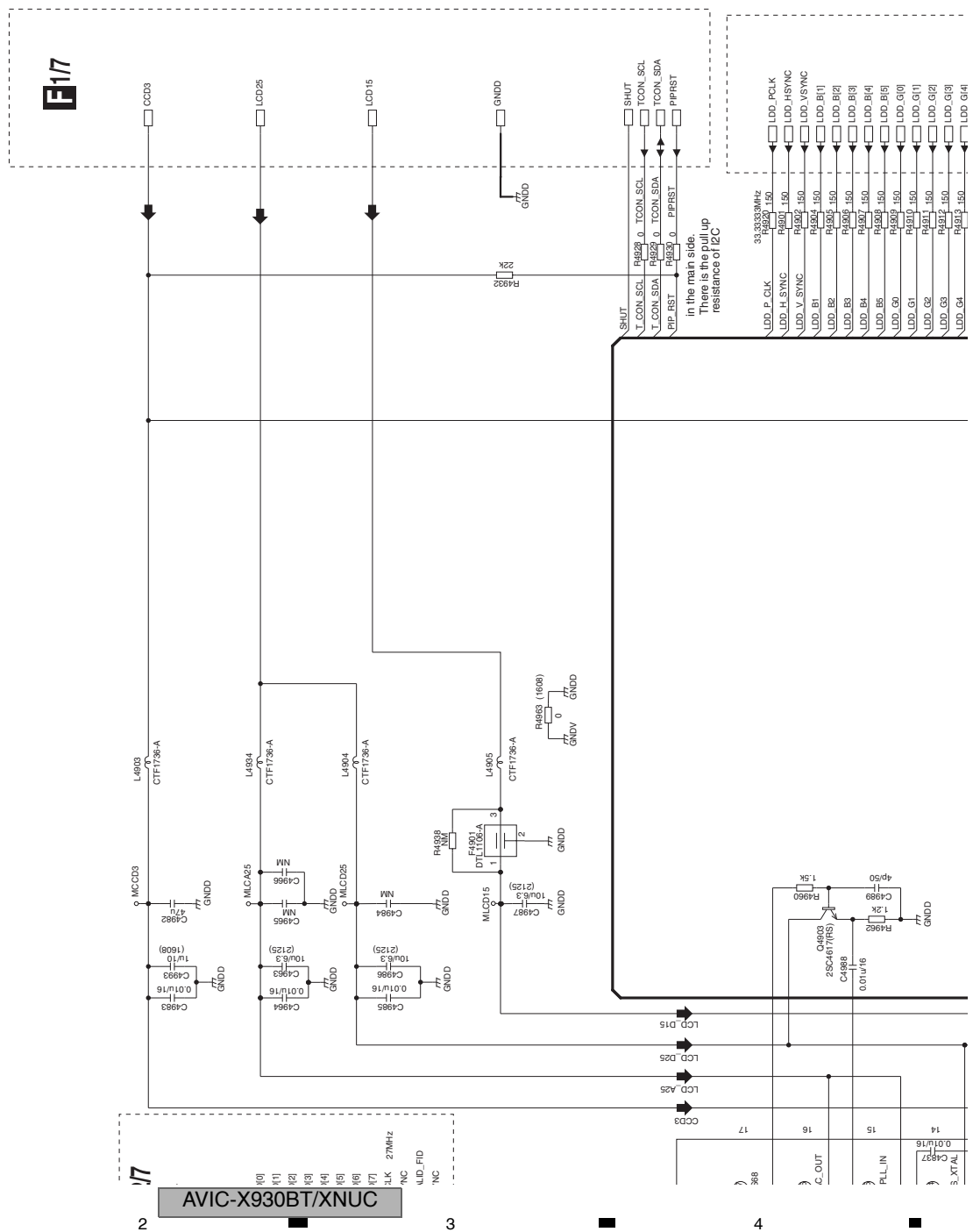


F617 CC MONITOR UNIT(SERVICE) (VIDEO DEC/T-CON SECTION)

A B C D E F

F-a F-b

F-b 6/7



F17

Prima terminal name	Signal name	T-CON input terminal name
X_L_PCK	LDD_PCLK	D-RGB_CLK_IN
X_L_LOCK	LDD_HSYNC	D-RGB_H_IN
X_L_FCK	LDD_VSYNC	D-RGB_V_IN
X_LDD_0	LDD_B[1]	BIN1
X_LDD_1	LDD_B[2]	BIN2
X_LDD_2	LDD_B[3]	BIN3
X_LDD_3	LDD_B[4]	BIN4
X_LDD_4	LDD_B[5]	BIN5
X_LDD_5	LDD_G[0]	GIN0
X_LDD_6	LDD_G[1]	GIN1
X_LDD_7	LDD_G[2]	GIN2
X_LDD_8	LDD_G[3]	GIN3
X_LDD_9	LDD_G[4]	GIN4
X_LDD_10	LDD_G[5]	GIN5
X_LDD_11	LDD_R[1]	RIN1
X_LDD_12	LDD_R[2]	RIN2
X_LDD_13	LDD_R[3]	RIN3
X_LDD_14	LDD_R[4]	RIN4
X_LDD_15	LDD_R[5]	RIN5

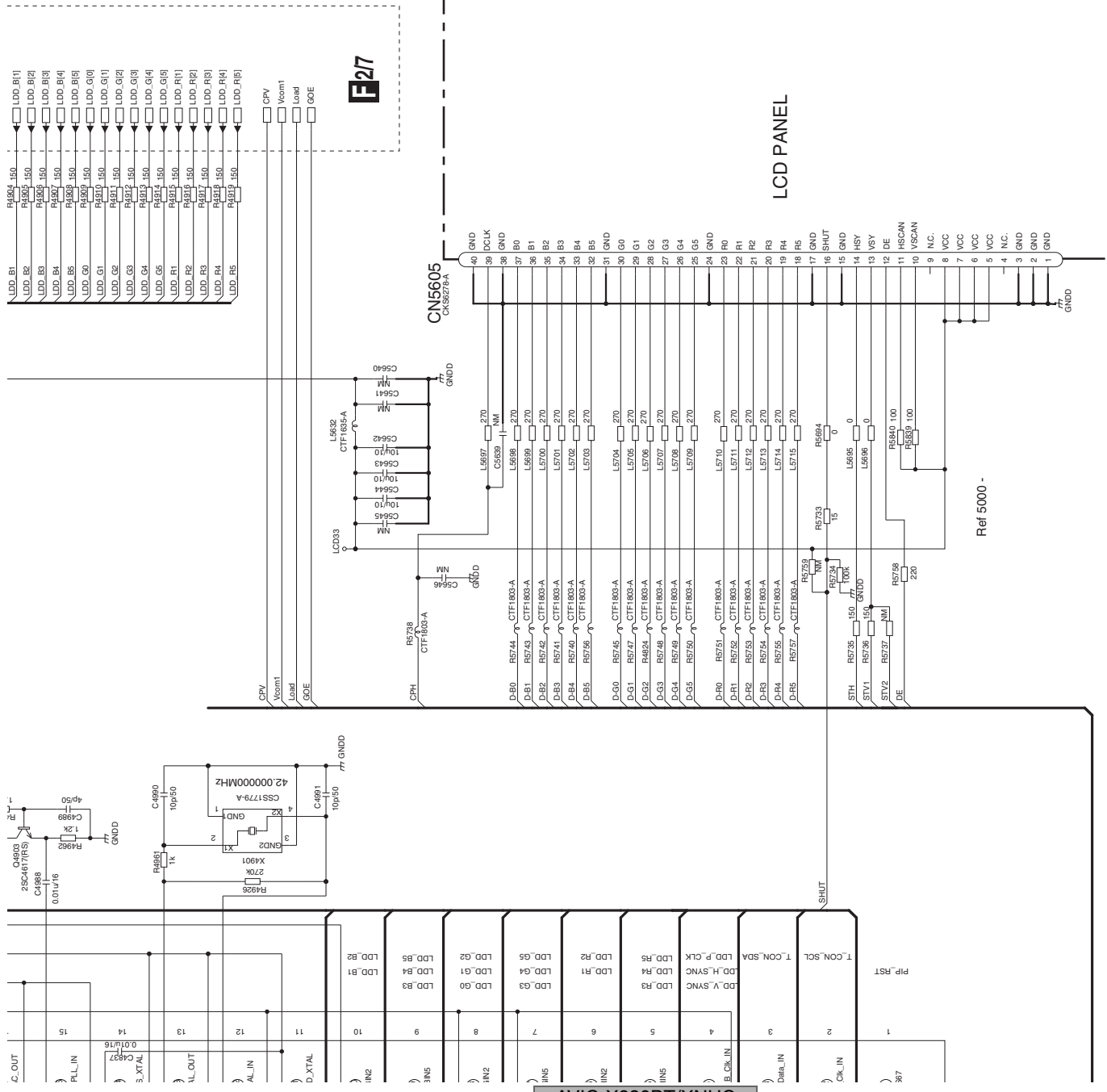
T-CON → LCD connection

T-CON output terminal name	Signal name	LCD terminal name
CPH	CPH	DCLK
STH	STH	HSY
STV1	STV1	VSY

AVIC-X930BT/XNUC

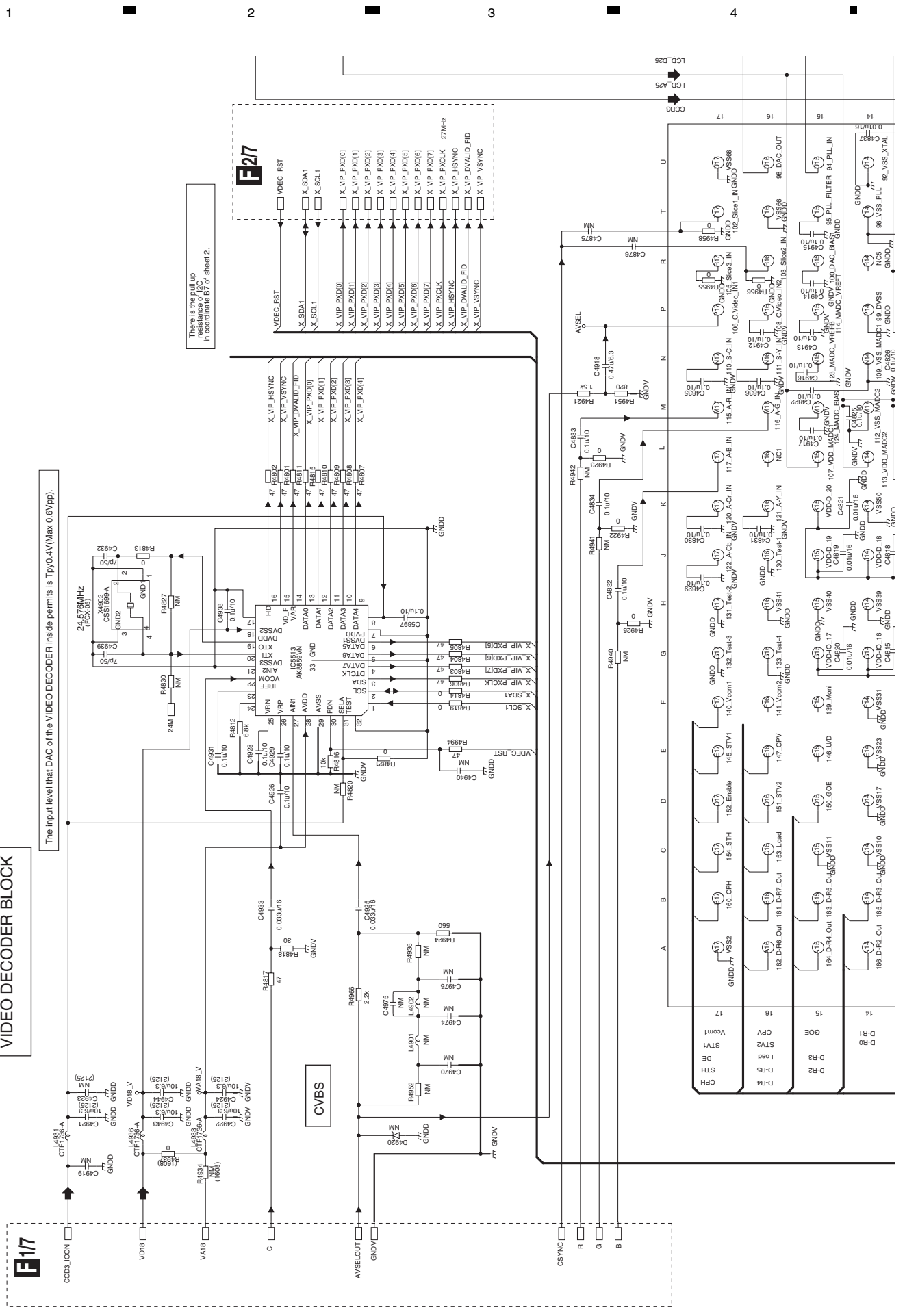
T-CON output terminal name	Signal name	LCD terminal name
CPH	CPH	DCLK
STH	STH	HSY
STV1	STV1	VSY
Vcom1	VCOM1	-
Vcom2	-	-
CPV	CPV	-
Load	LOAD	-
GOE	GOE	-
D-B2_Out	D-B0	B0
D-B3_Out	D-B1	B1
D-B4_Out	D-B2	B2
D-B5_Out	D-B3	B3
D-B6_Out	D-B4	B4
D-B7_Out	D-B5	B5
D-G2_Out	D-G0	G0
D-G3_Out	D-G1	G1
D-G4_Out	D-G2	G2
D-G5_Out	D-G3	G3
D-G6_Out	D-G4	G4
D-G7_Out	D-G5	G5
D-R2_Out	D-R0	R0
D-R3_Out	D-R1	R1
D-R4_Out	D-R2	R2
D-R5_Out	D-R3	R3
D-R6_Out	D-R4	R4
D-R7_Out	D-R5	R5

Reference : 4801 - 4999
: (5001 - 5999)



F-a F-b

F-b 6/7



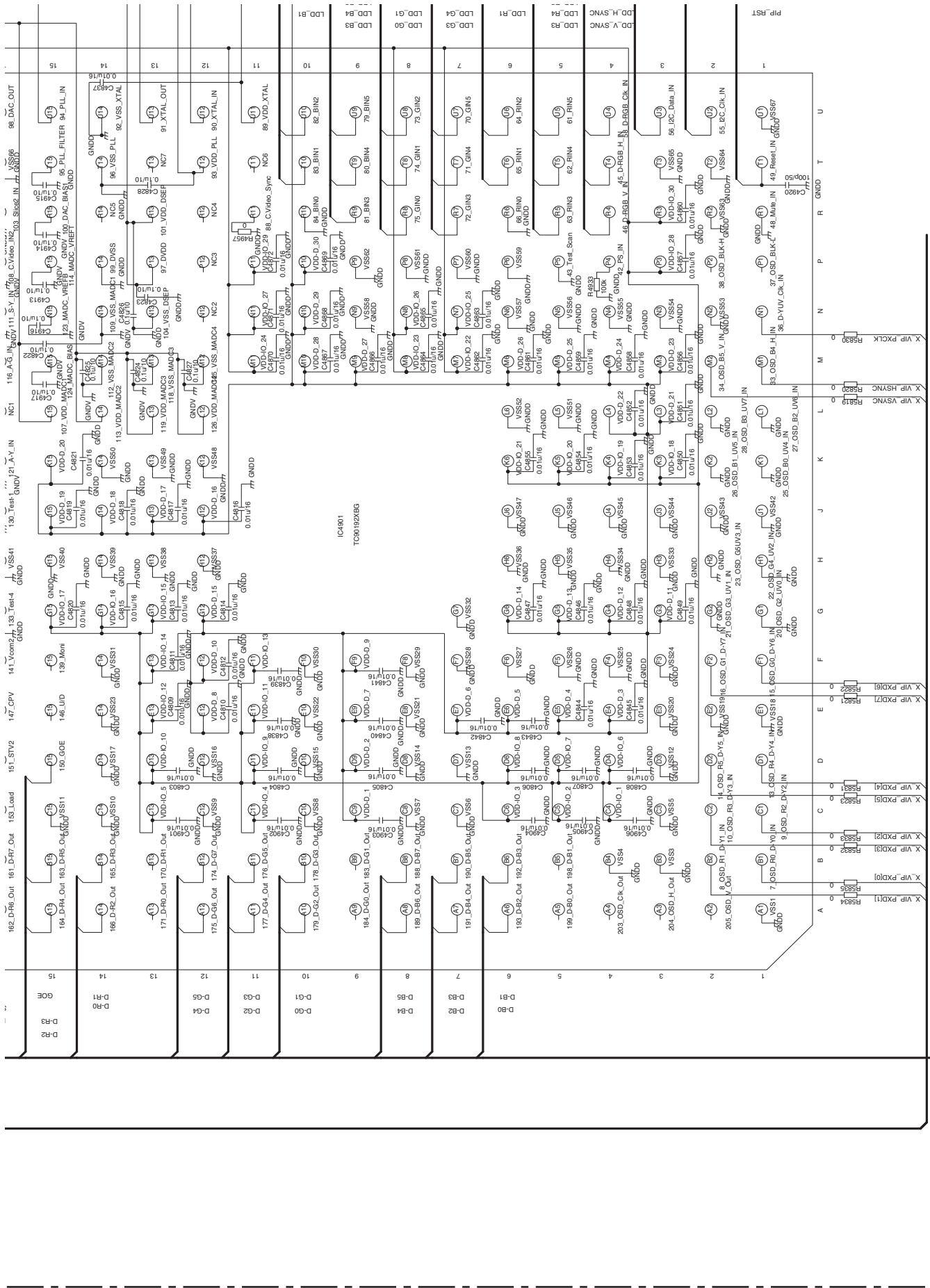
VIDEO DECODER BLOCK

The input level that DAC of the VIDEO DECODER inside permits is Typ0.4V(Max 0.6Vpp).

There is the pull up in coordinate B7 of sheet 2.

F27

F17



F-b 6/7

F-a F-b

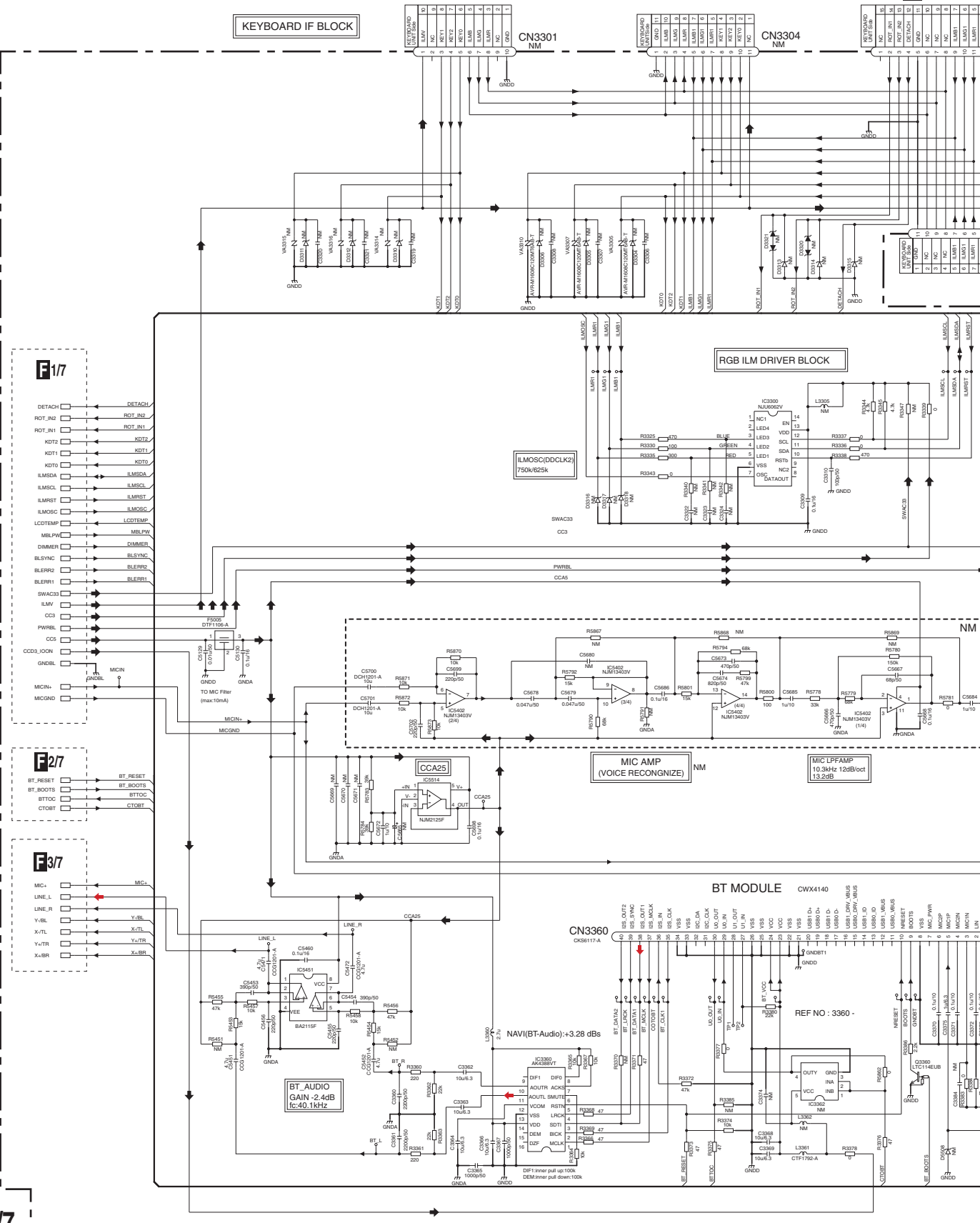
F-a 6/7

10.16 CC MONITOR UNIT(SERVICE)(BT/DISPLAY SECTION)(GUIDE PAGE)

A
B
C
D
E
F

F-a 7/7

B CN2902



AVIC-X930BT/XNUC

F-b 717

A

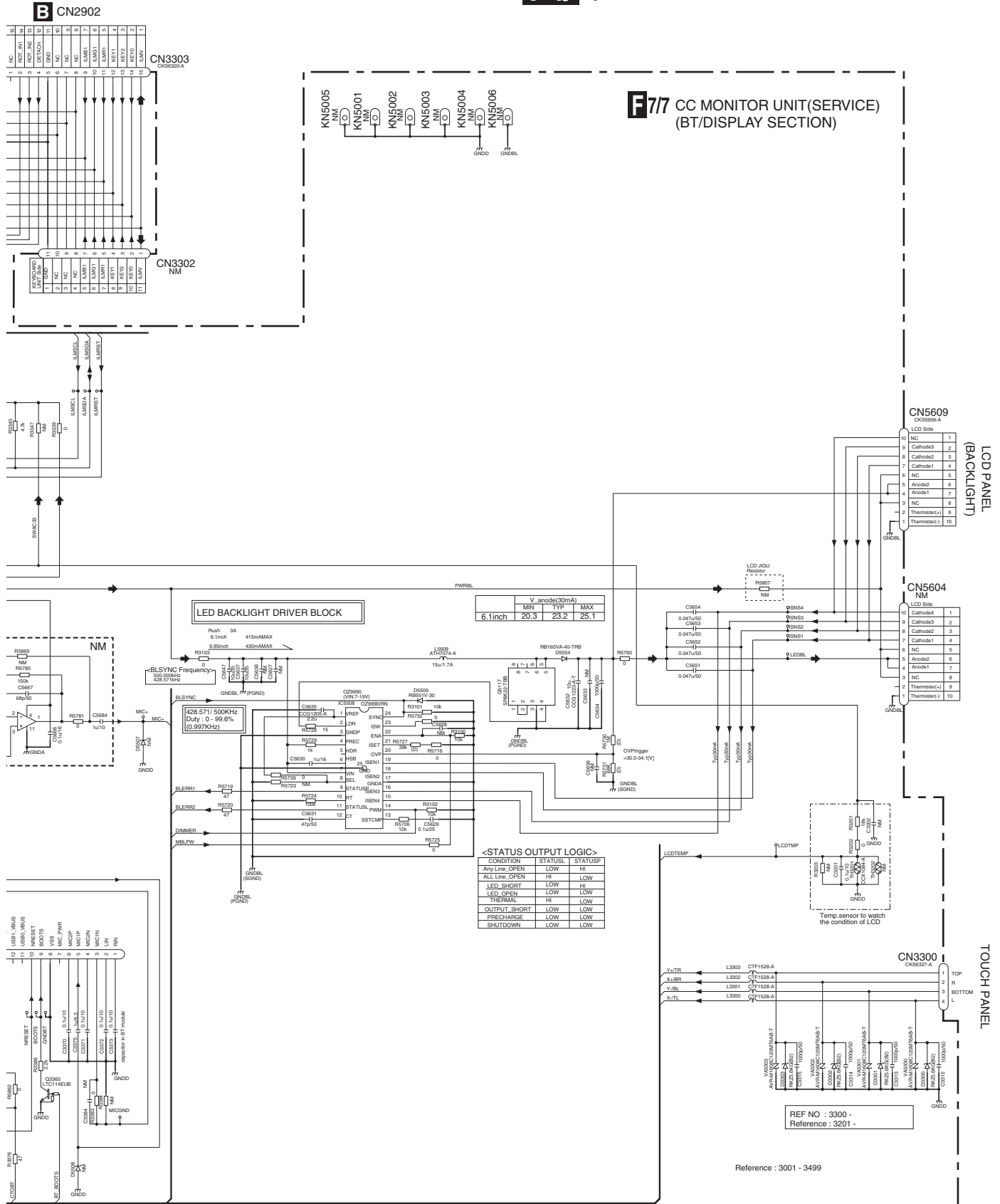
B

C

D

E

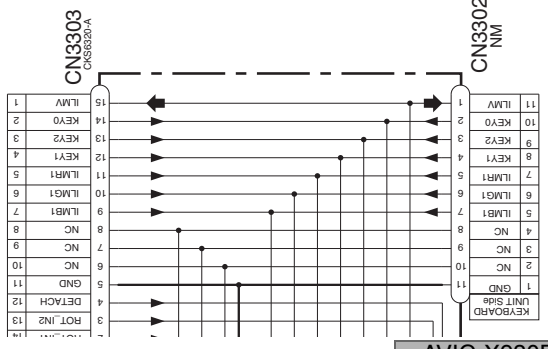
F



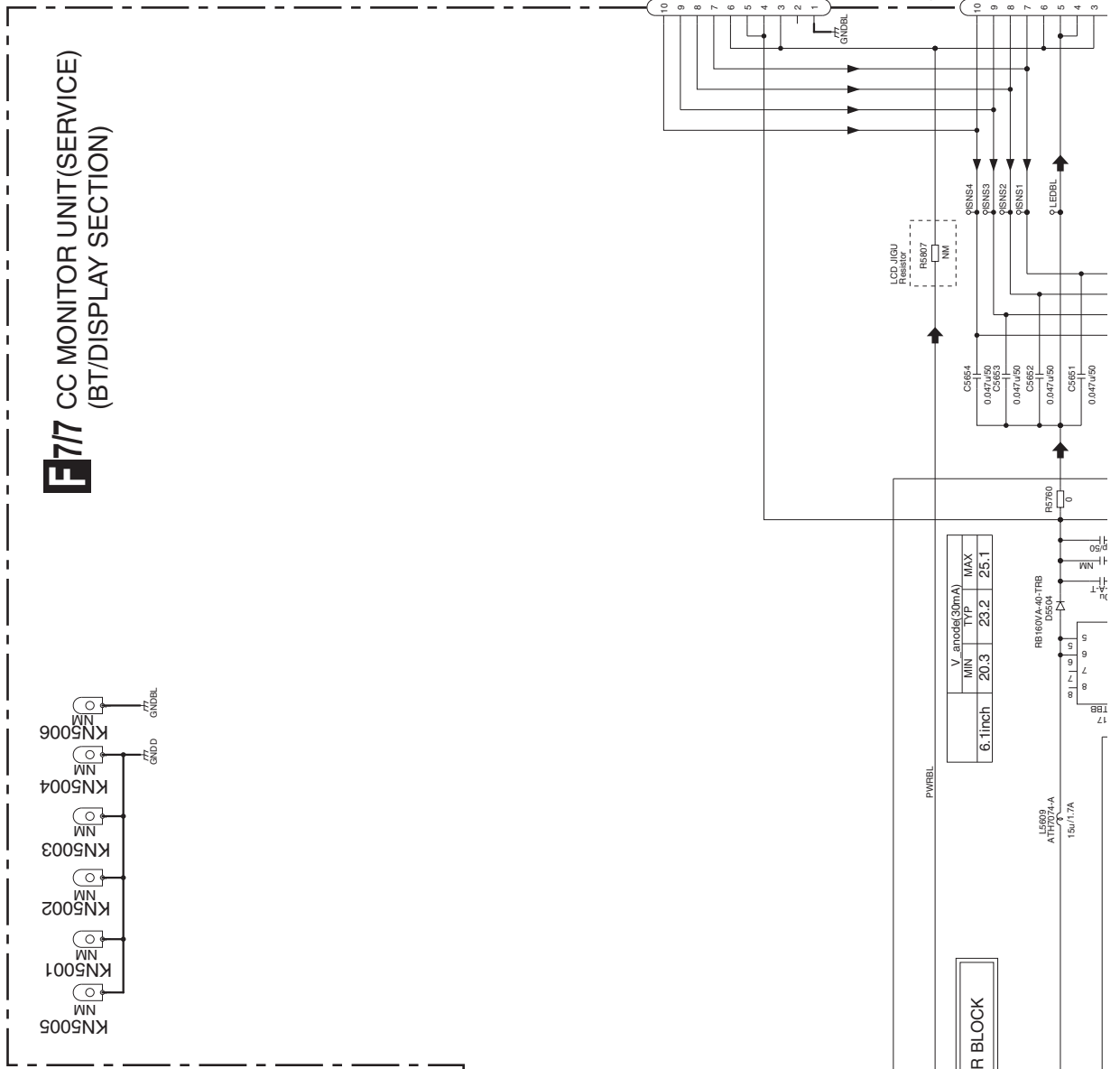
F-a F-b

F-b 7/7

B CN2902



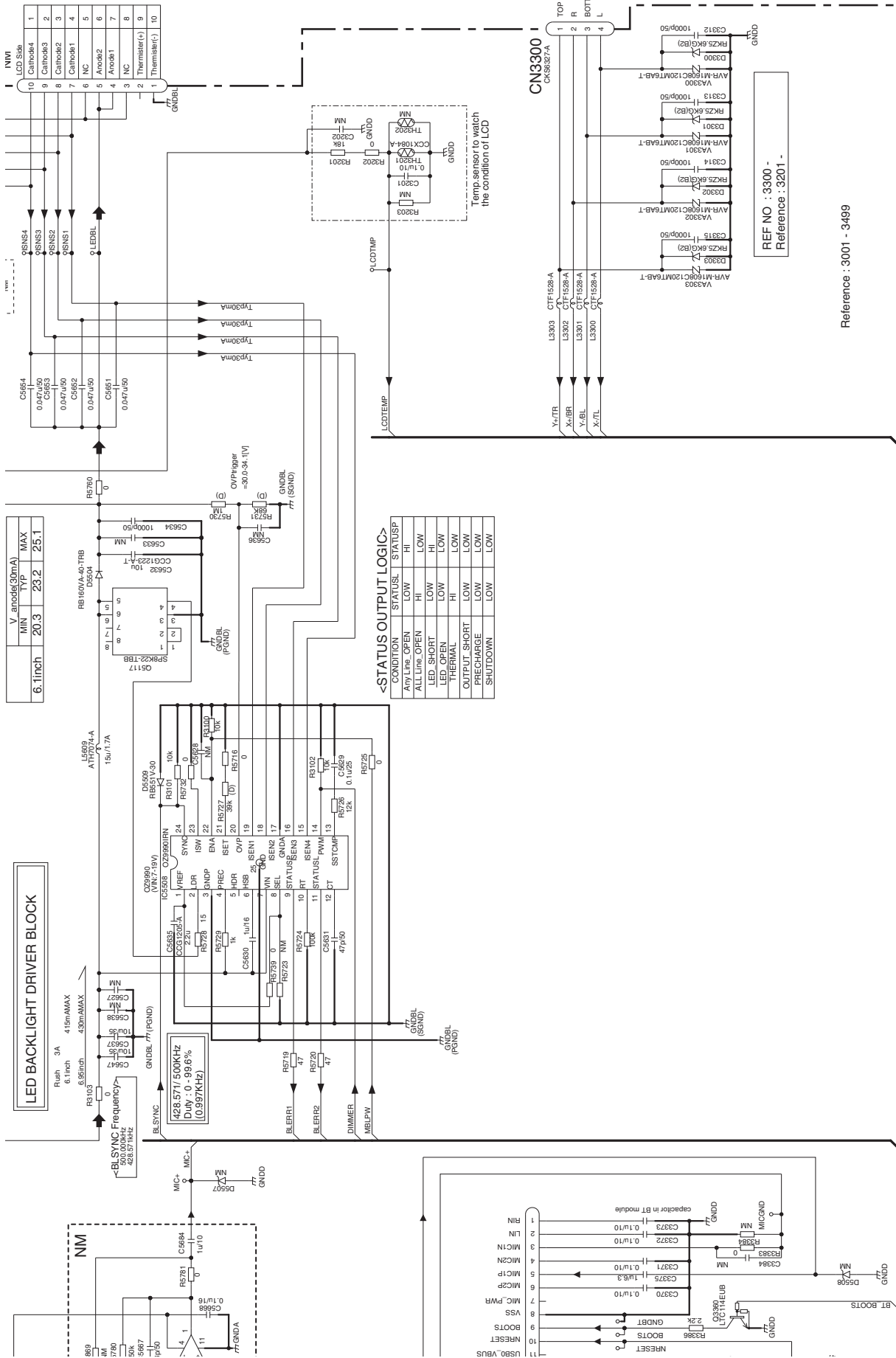
AVIC-X930BT/XNUC



F77 CC MONITOR UNIT (SERVICE)
(BT/DISPLAY SECTION)

LCD PANEL
(BACKLIGHT)

TOUCH PANEL



<STATUS OUTPUT LOGIC>

CONDITION	STATUS1	STATUS2	STATUS3	STATUS4	STATUS5
Any Line OPEN	LOW	HI	LOW	HI	LOW
All Line SHORT	HI	LOW	HI	LOW	HI
LED SHORT	LOW	LOW	LOW	LOW	LOW
LED OPEN	LOW	LOW	LOW	LOW	LOW
THERMAL	HI	LOW	LOW	LOW	LOW
OUTPUT SHORT	LOW	LOW	LOW	LOW	LOW
PRECHARGE	LOW	LOW	LOW	LOW	LOW
SHUTDOWN	LOW	LOW	LOW	LOW	LOW

F-a F-b

F-b 777

F-b 7/7

B CN2902

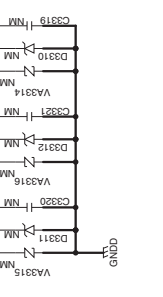
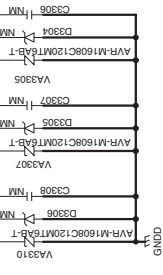
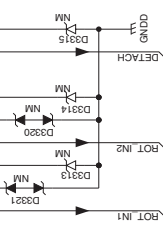
6	ILMG1
7	ILMB1
8	NC
9	NC
10	NC
11	NC
12	DETACH
13	ROT_IN2
14	ROT_IN1
15	NC
16	KEYBOARD UNIT SIDE

11	NC
10	KEY0
9	KEY2
8	KEY1
7	ILMR1
6	ILMG1
5	ILMR
4	ILMB
3	ILMG
2	ILMB
1	GND

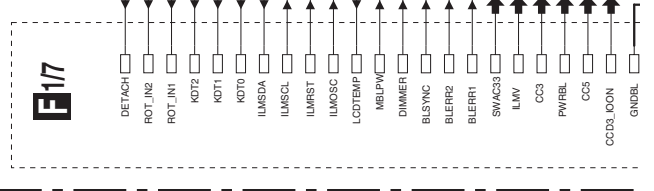
10	GND
9	NC
8	ILMR
7	ILMG
6	ILMB
5	KEY0
4	KEY2
3	KEY1
2	NC
1	ILMV

KEYBOARD IF BLOCK

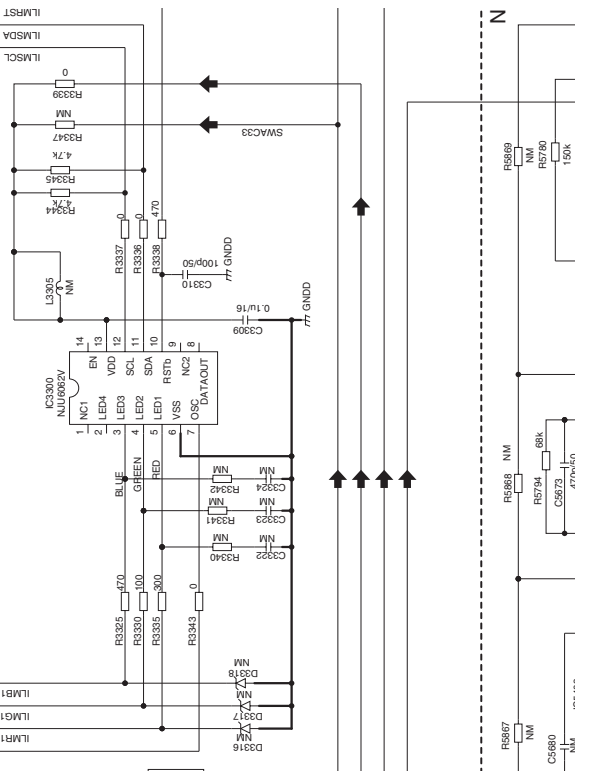
6	ILMG1
5	ILMB1
4	NC
3	NC
2	NC
1	GND



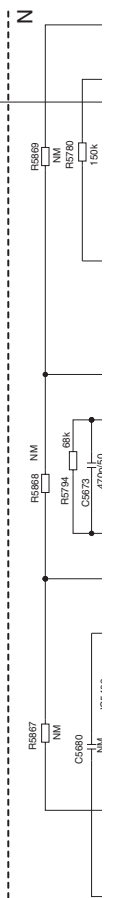
F17



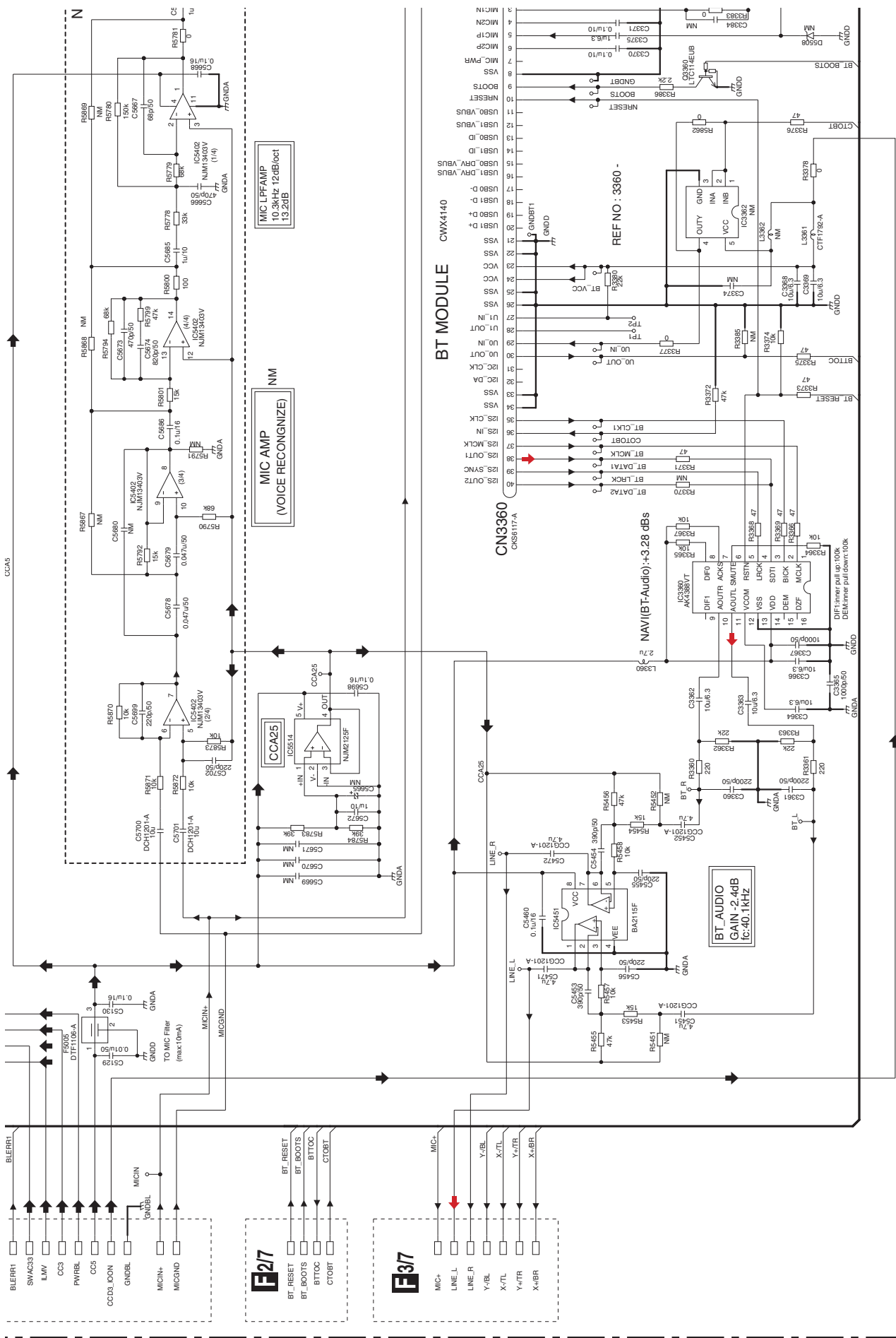
RGB ILM DRIVER BLOCK



ILMOSC(DDCLV2) 750K/625K



F-a 7/7



F-b 7/7

F-a F-b

F-a 7/7

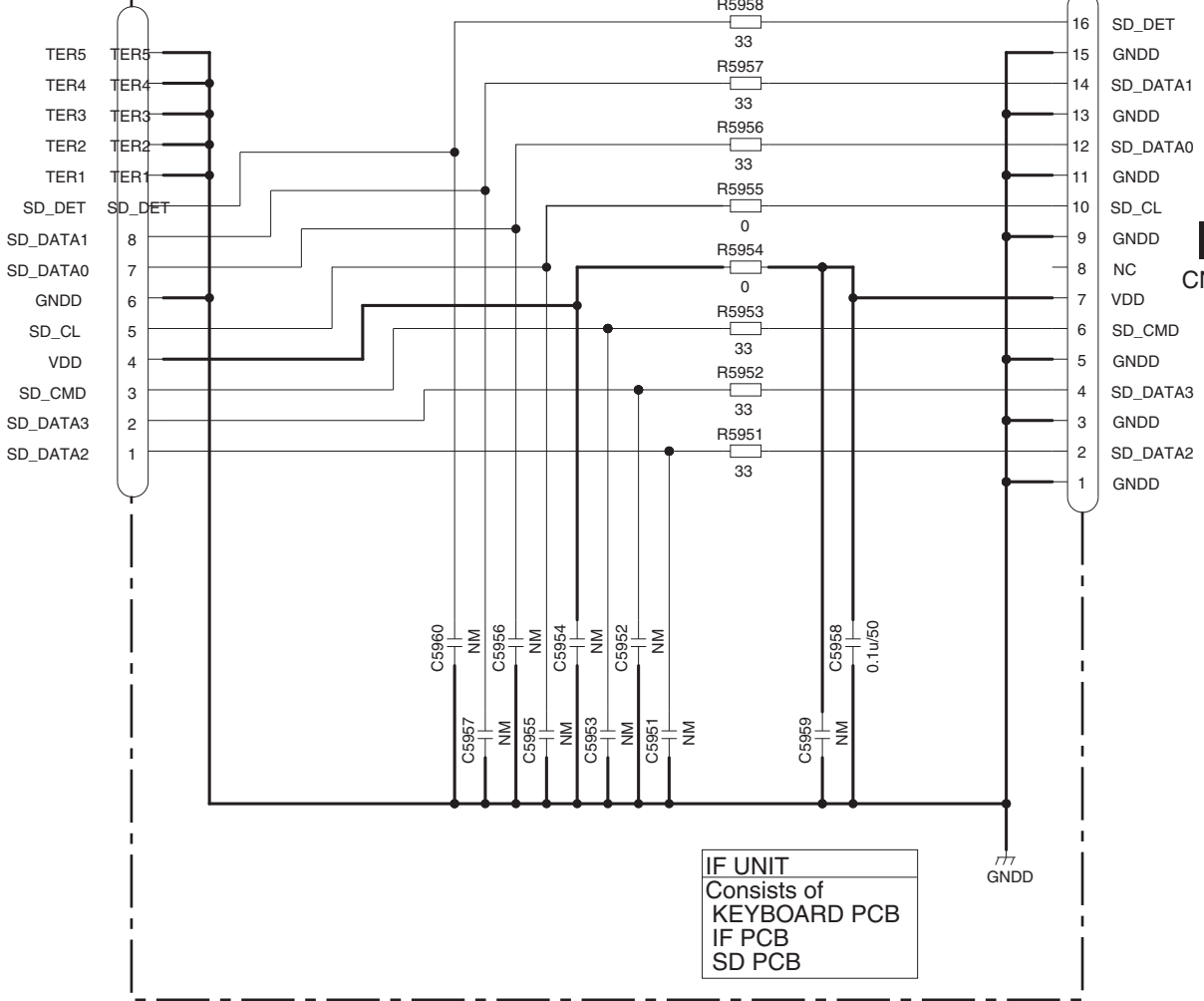
10.17 SD PCB

micro SD CARD Connector

G SD PCB

CN5951
CKS6195-A

CN5952
CKS6302-A



F3/7
CN4602

IF UNIT
Consists of
KEYBOARD PCB
IF PCB
SD PCB



5

6

7

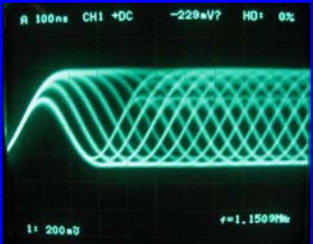
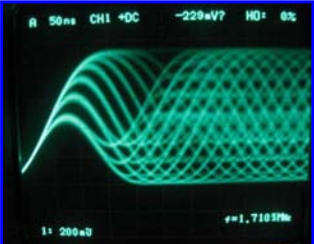
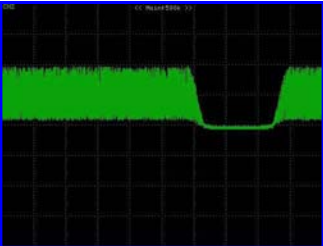
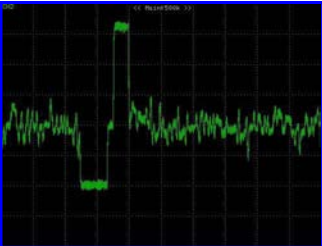
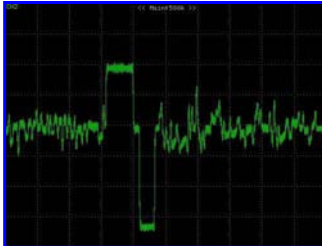
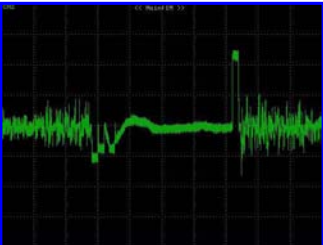
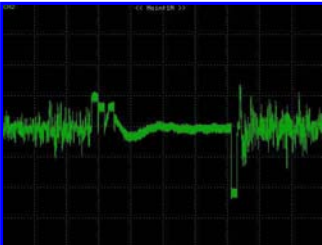
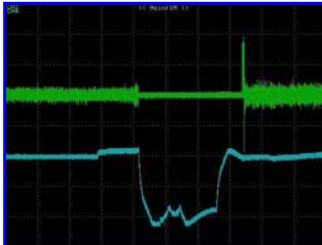
8

10.18 WAVEFORMS

● Waveforms

Note:1. The encircled number denote measuring points in the circuit diagram.
 2. Reference voltage: 1.65 V(TD1,FD1)(=VHALF)
 2.2 V(RF)(=VREF)

In the waveform, it is seeing on the GND standard.
 Offset of 1.65 V or 2.2 V is put in.

<p>① RF 0.2 V/div(AC) 100 ns/div CDRF(x4CLV)</p> 	<p>① RF 0.2 V/div(AC) 50 ns/div DVDRF(x1.3ZCAV)</p> 	
<p>① RF 0.5 V/div 100 us/div DVDRF(BD1mm)</p> <p>2.2 V-></p> 	<p>② TD1 0.2 V/div 100 us/div Interval FWD(DVD)</p> <p>VHALF</p> 	<p>② TD1 0.2 V/div 100 us/div Interval REV(DVD)</p> <p>VHALF</p> 
<p>② TD1 0.2 V/div 500 us/div Multi 32FWD(DVD)</p> <p>VHALF</p> 	<p>② TD1 0.2 V/div 500 us/div Multi 32REV(DVD)</p> <p>VHALF</p> 	<p>② CH1:TD1 0.5 V/div 10 ms/div ③ CH2:COP-COM 2.0 V/div 10 ms/div Traverse 1001FWD(short)(DVD)</p> <p>VHALF</p> <p>0-></p> 

AVIC-X930BT/XNUC

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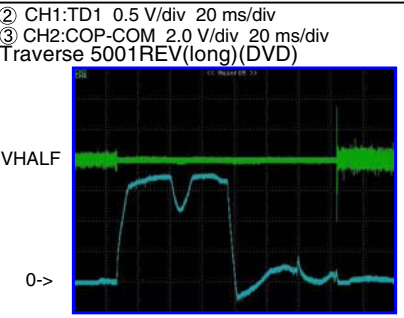
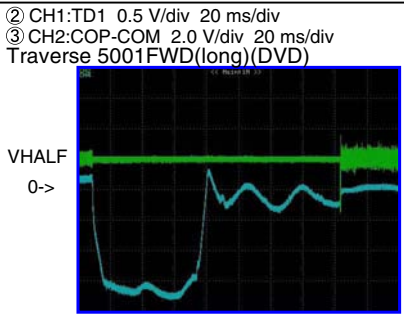
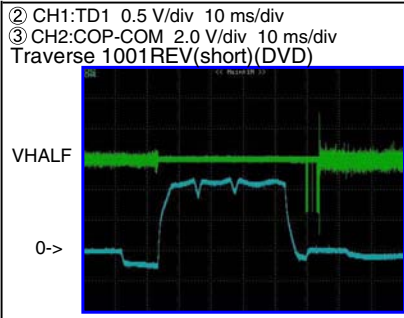
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7

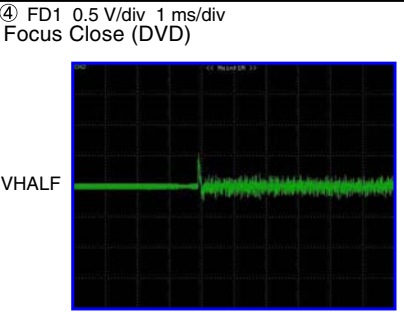
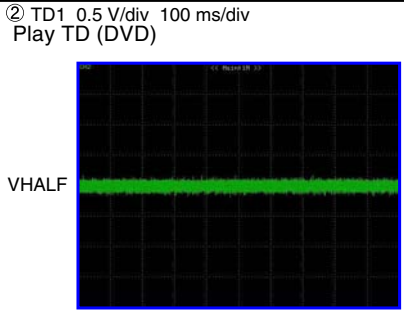
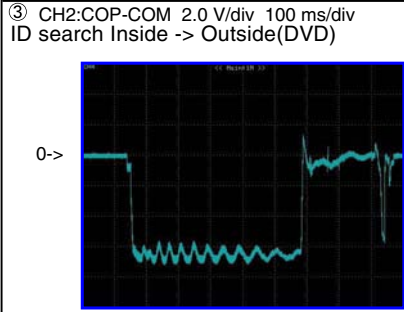
8

261

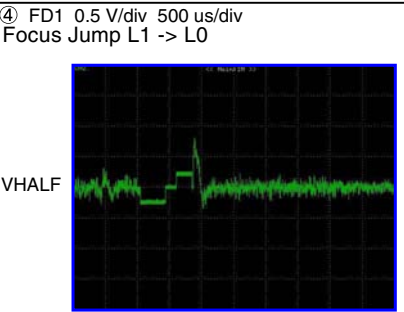
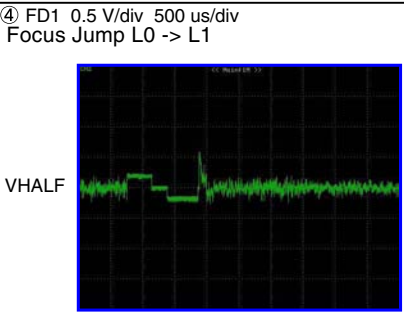
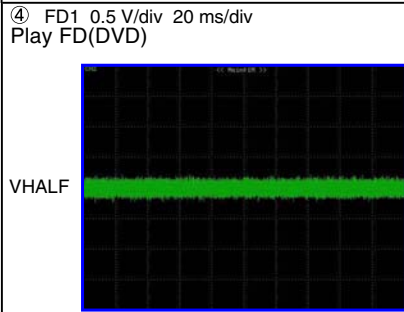
A



B



C



D

E

F

A

B

C

D

E

F

11. PCB CONNECTION DIAGRAM

11.1 AV UNIT

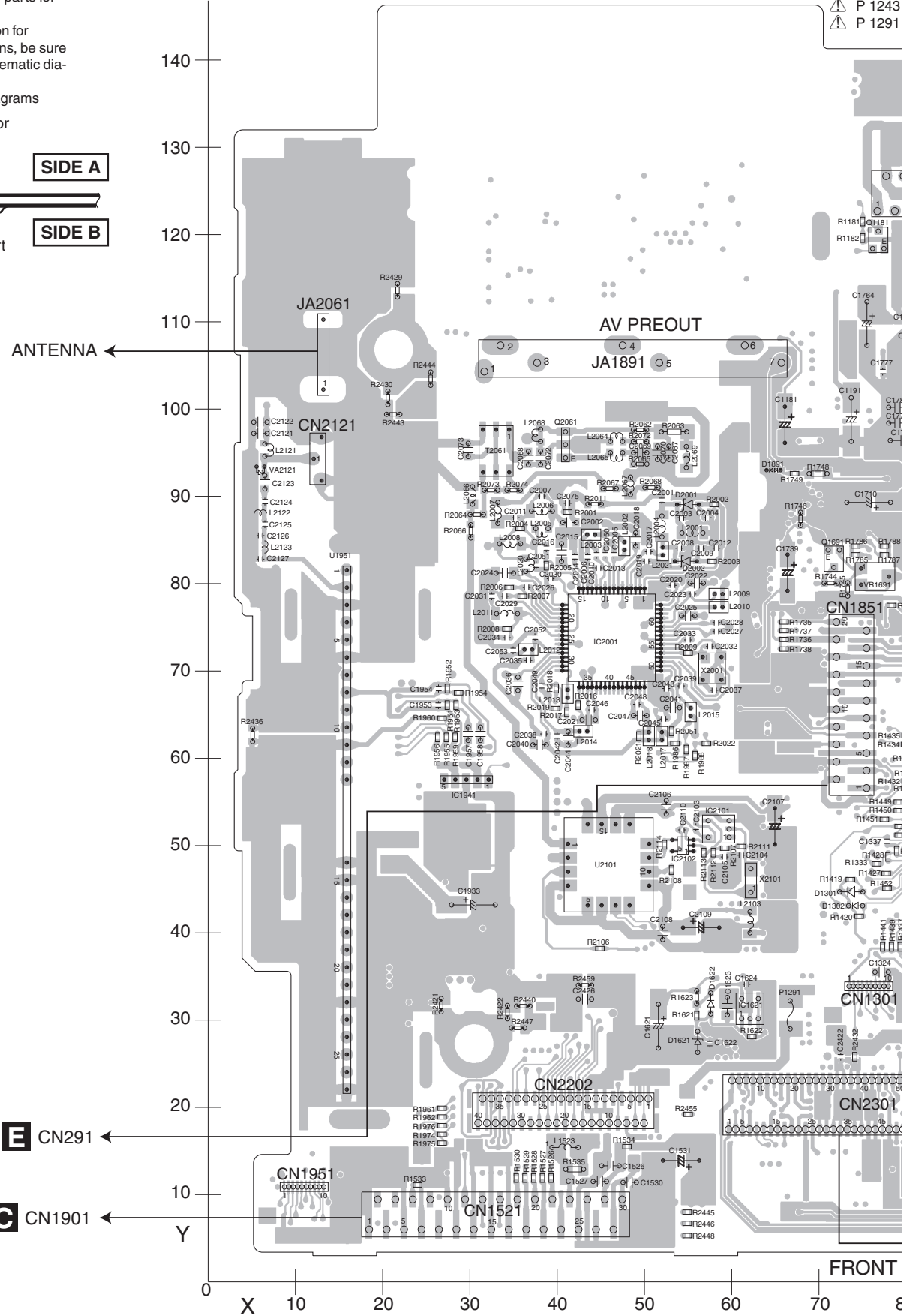
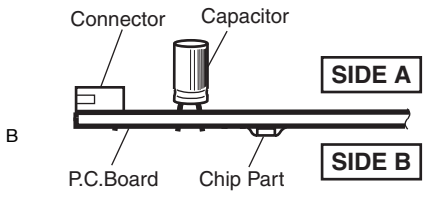
A NOTE FOR PCB DIAGRAMS

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

A AV UNIT

- △ P 1201
- △ P 1242
- △ P 1243
- △ P 1291



A

SIDE A

A

B

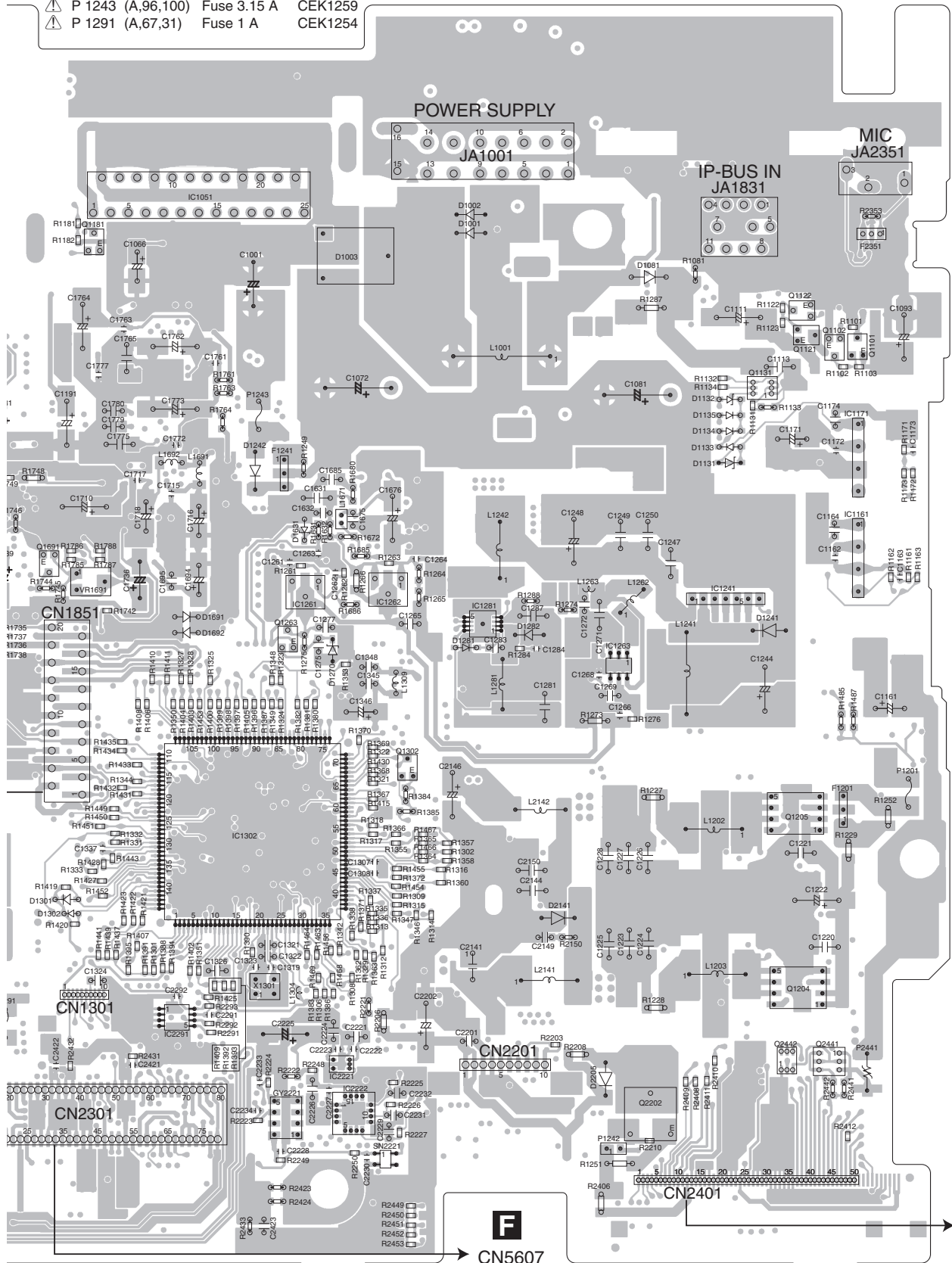
C

D

E

F

- ⚠ P 1201 (A,169,57) Fuse 3.15 A CEK1259
- ⚠ P 1242 (A,136,16) Fuse 250 mA CEK1276
- ⚠ P 1243 (A,96,100) Fuse 3.15 A CEK1259
- ⚠ P 1291 (A,67,31) Fuse 1 A CEK1254



F

E

CN5607

CN103

FRONT

70 80 90 100 110 120 130 140 150 160 170

AVIC-X930BT/XNUC

A

1

2

3

4

A

A AV UNIT

B

C

D

E

F

170 160 150 140 130 120 110 100 90 80

AVIC-X930BT/XNUC

A

266

1

2

3

4

SIDE B

A

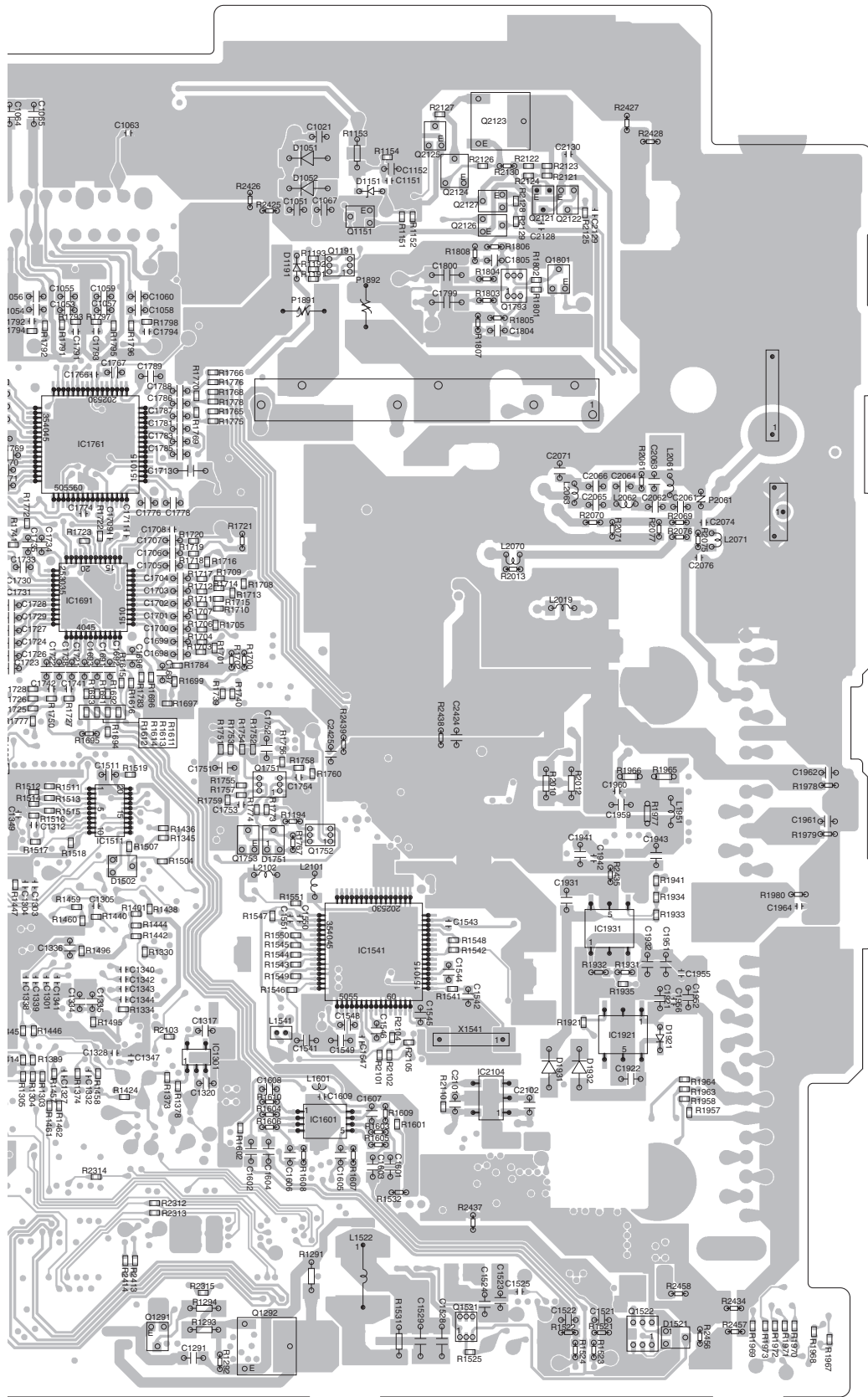
B

C

D

E

F



140
130
120
110
100
90
80
70
60
50
40
30
20
10
Y

90 80 70 60 50 40 30 20 10 X

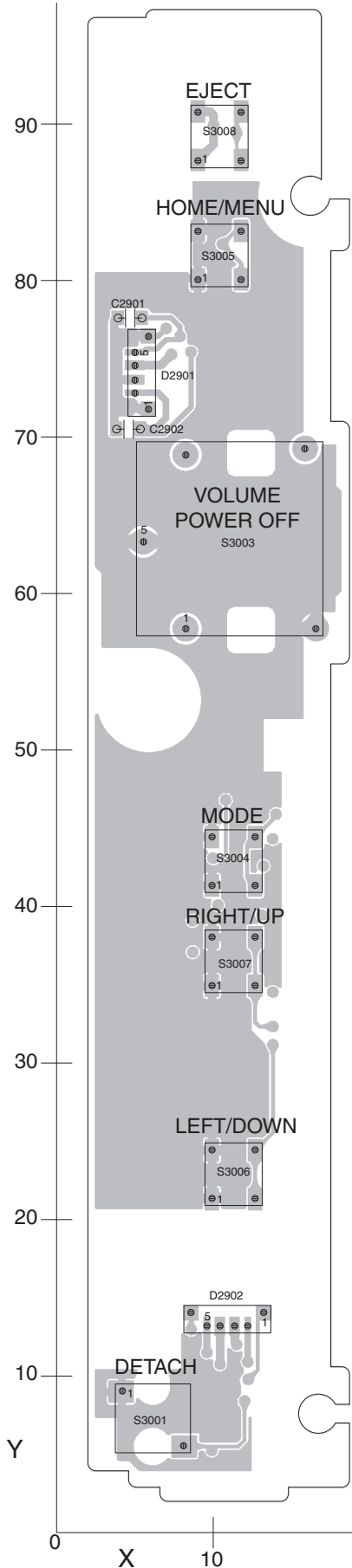
AVIC-X930BT/XNUC

A

11.2 KEYBOARD PCB

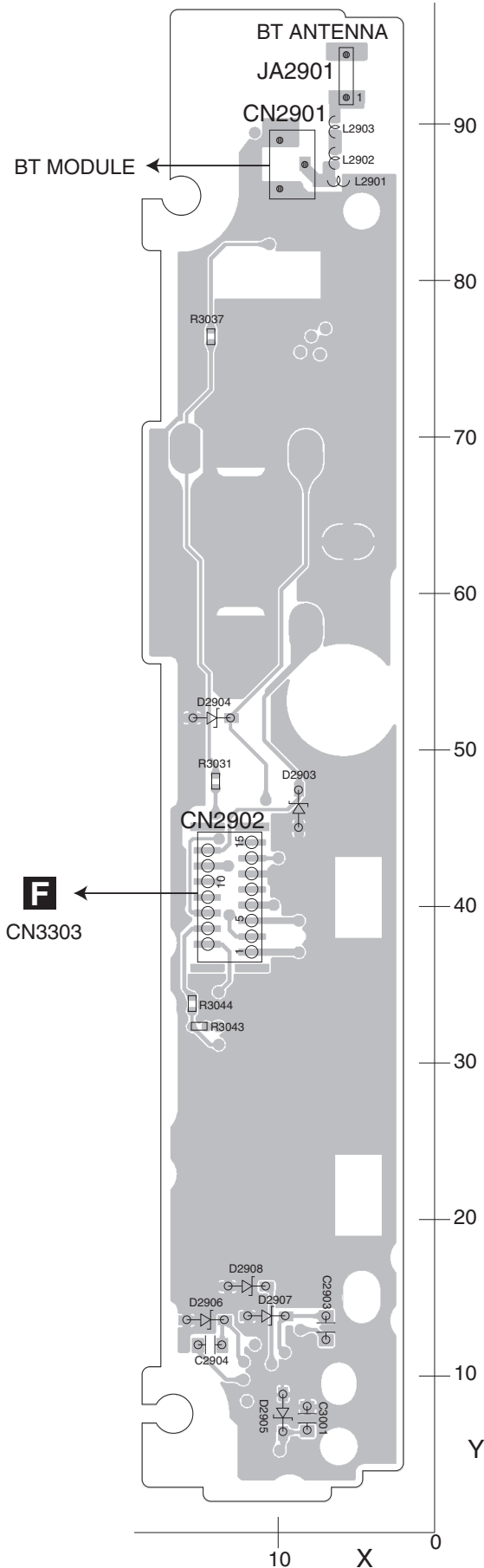
B KEYBOARD PCB

SIDE A



B KEYBOARD PCB

SIDE B



F ←
CN3303

B

A

B

C

D

E

F

11.3 DVD CORE UNIT

C DVD CORE UNIT

SIDE A

A

B

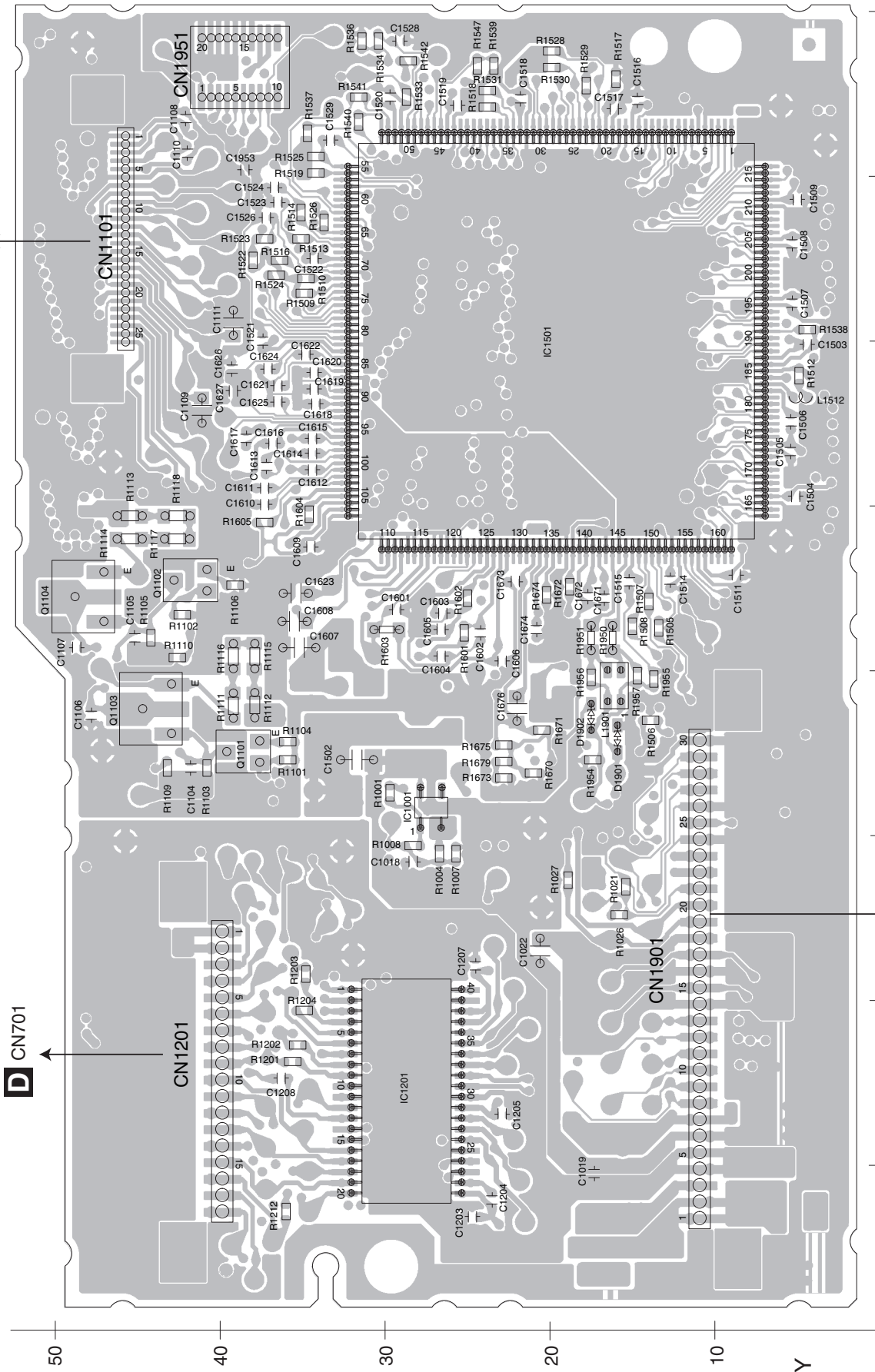
C

D

E

F

PICKUP UNIT (SERVICE)



D CN701

CN1201

CN1901

A CN1521

50

40

30

20

10

Y

X

80

70

60

50

40

30

20

10

0

11.4 CONNECT PCB

D CONNECT PCB

SIDE A

A

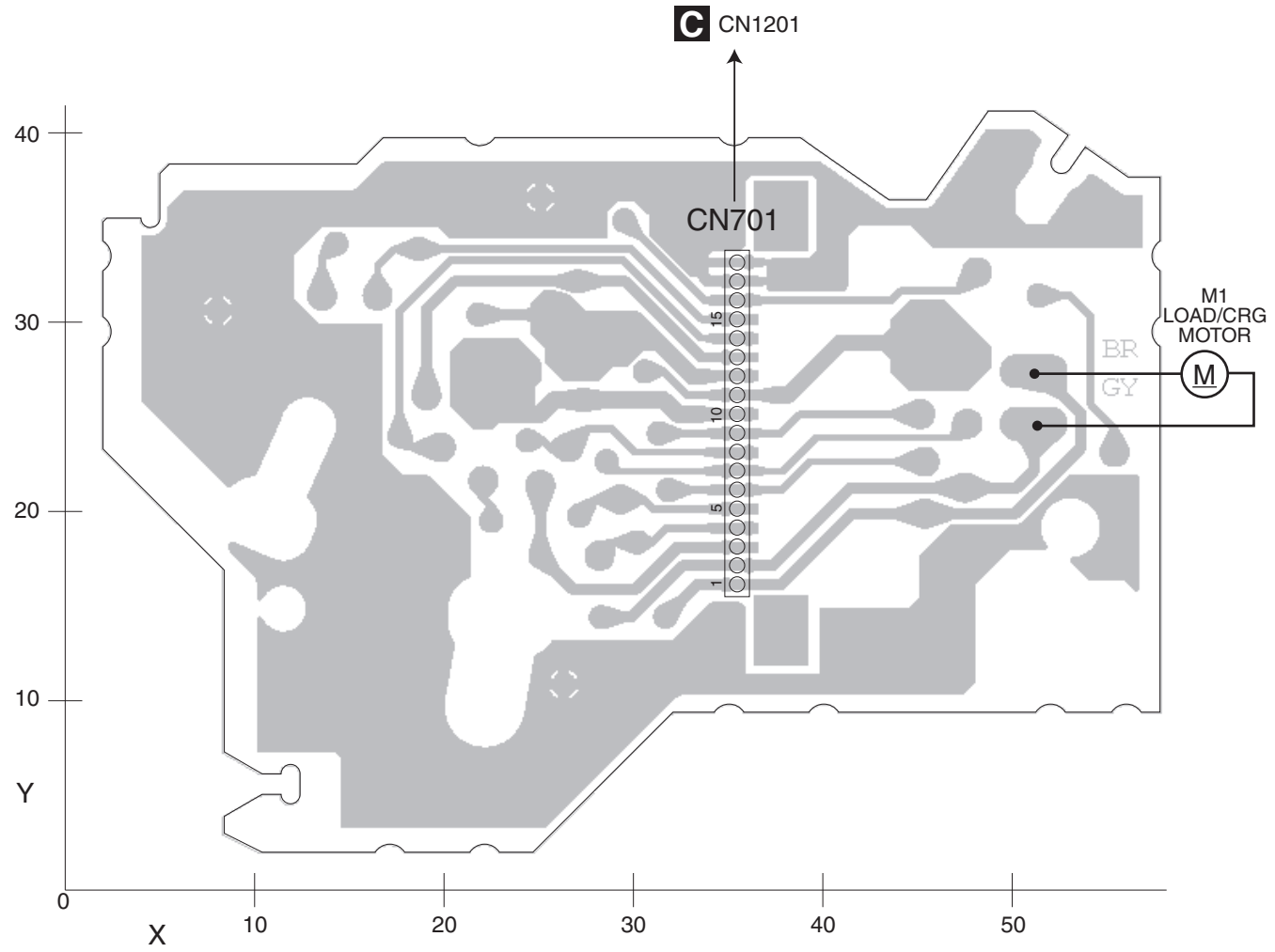
B

C

D

E

F



D

A

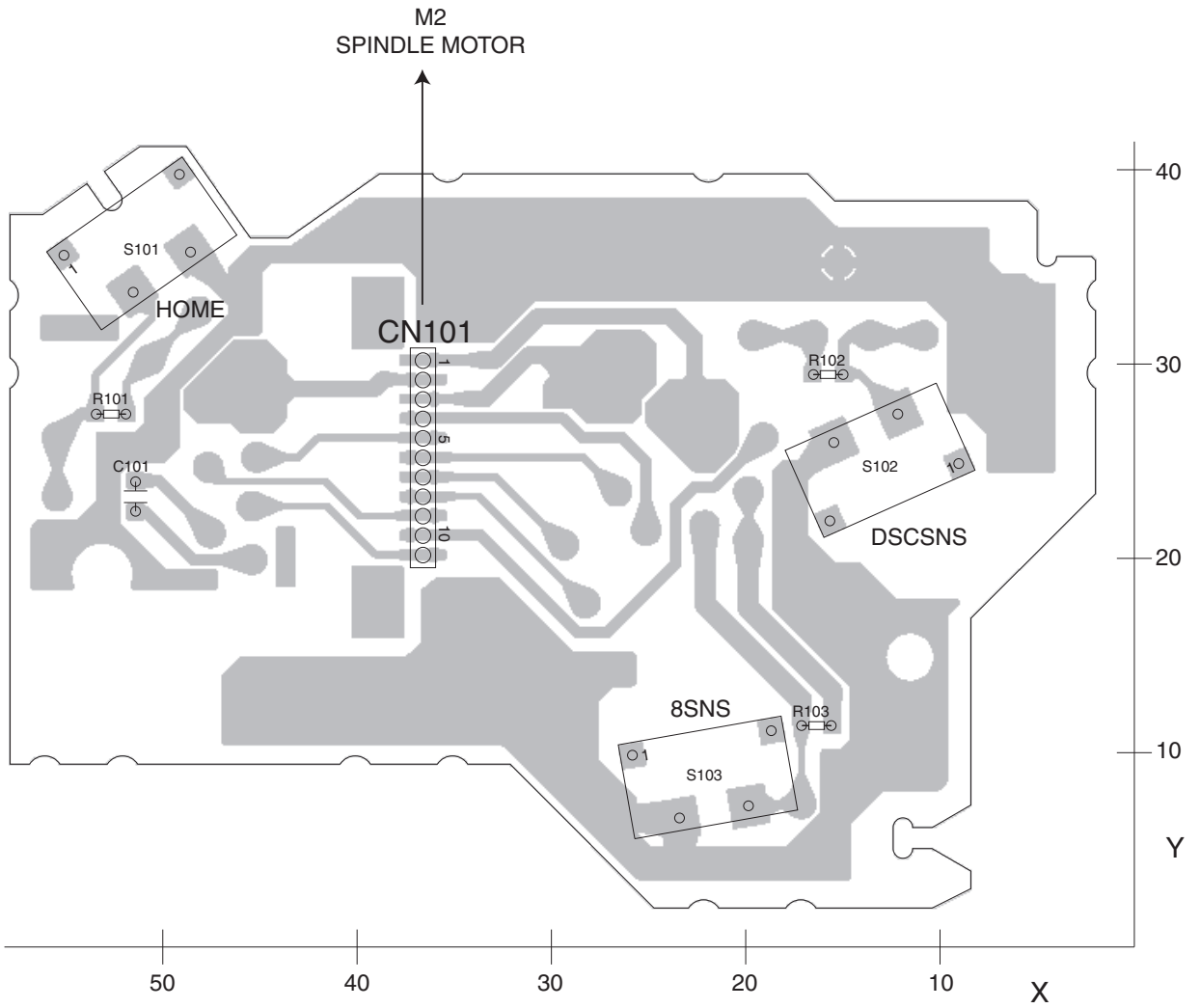
B

C

D

E

F



11.5 IF PCB

E IF PCB

A

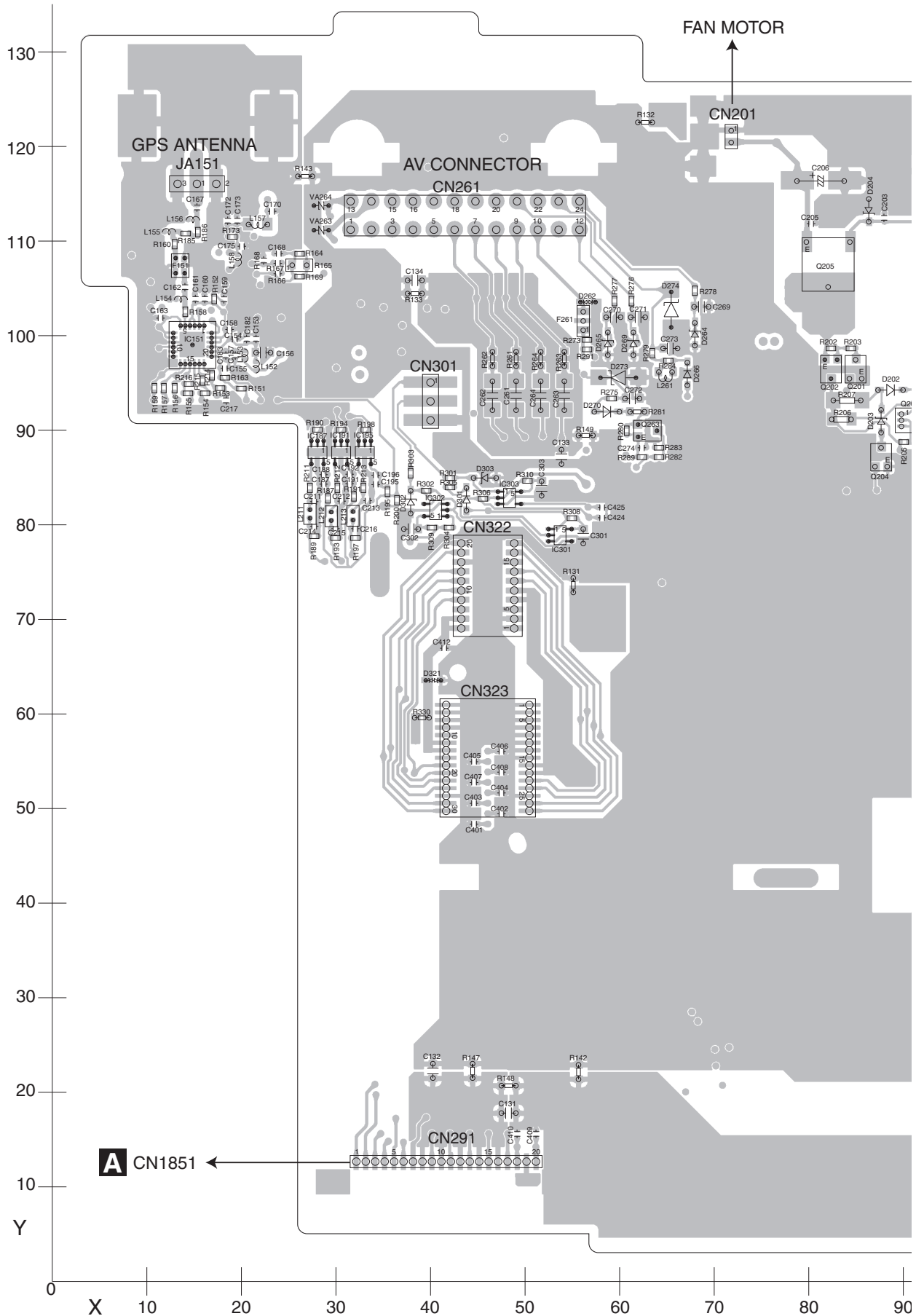
B

C

D

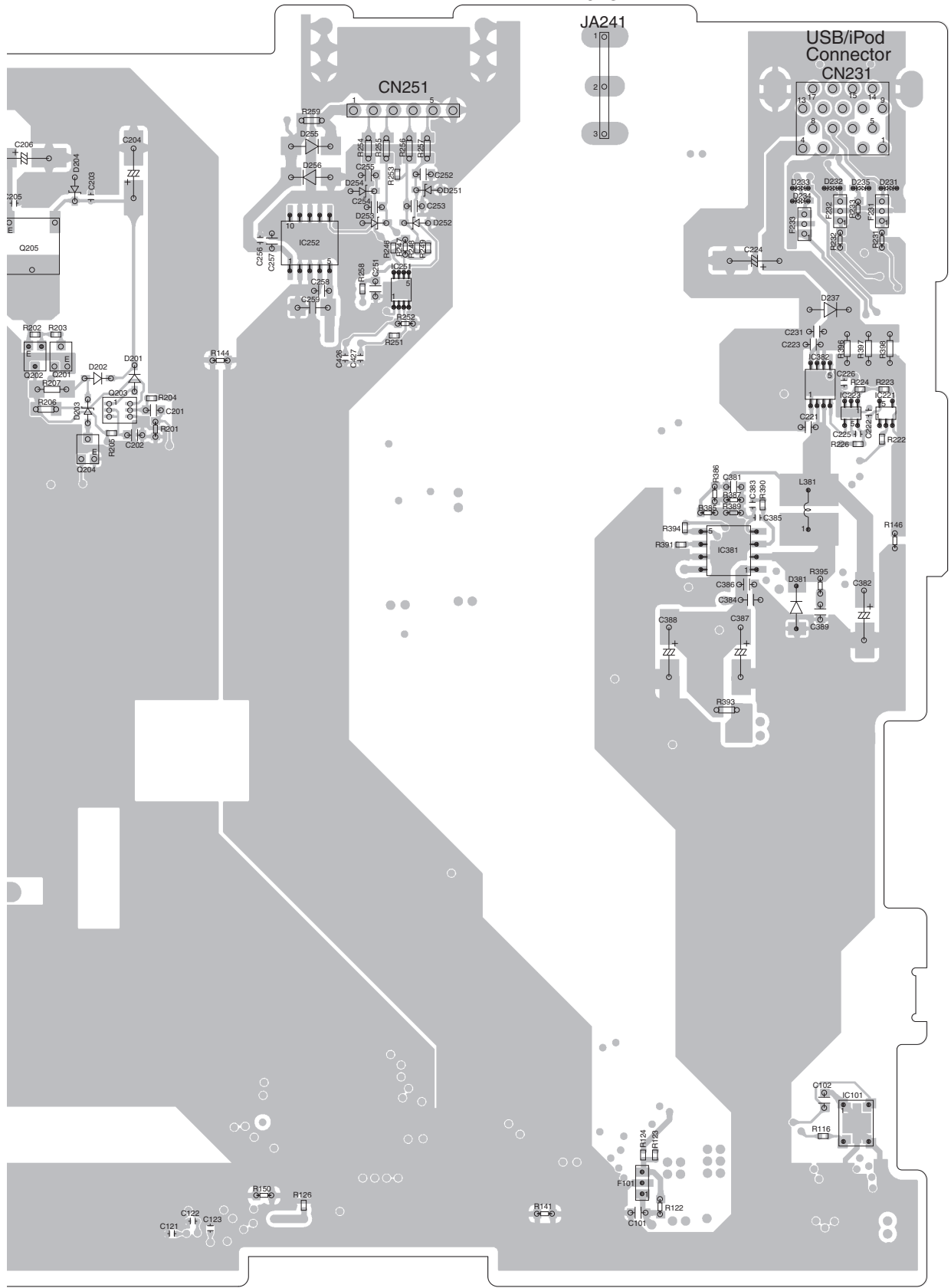
E

F



SIDE A

WIRED REMOTE JACK



30 90 100 110 120 130 140 150 160 170

AVIC-X930BT/XNUC

E

E IF PCB

A

B

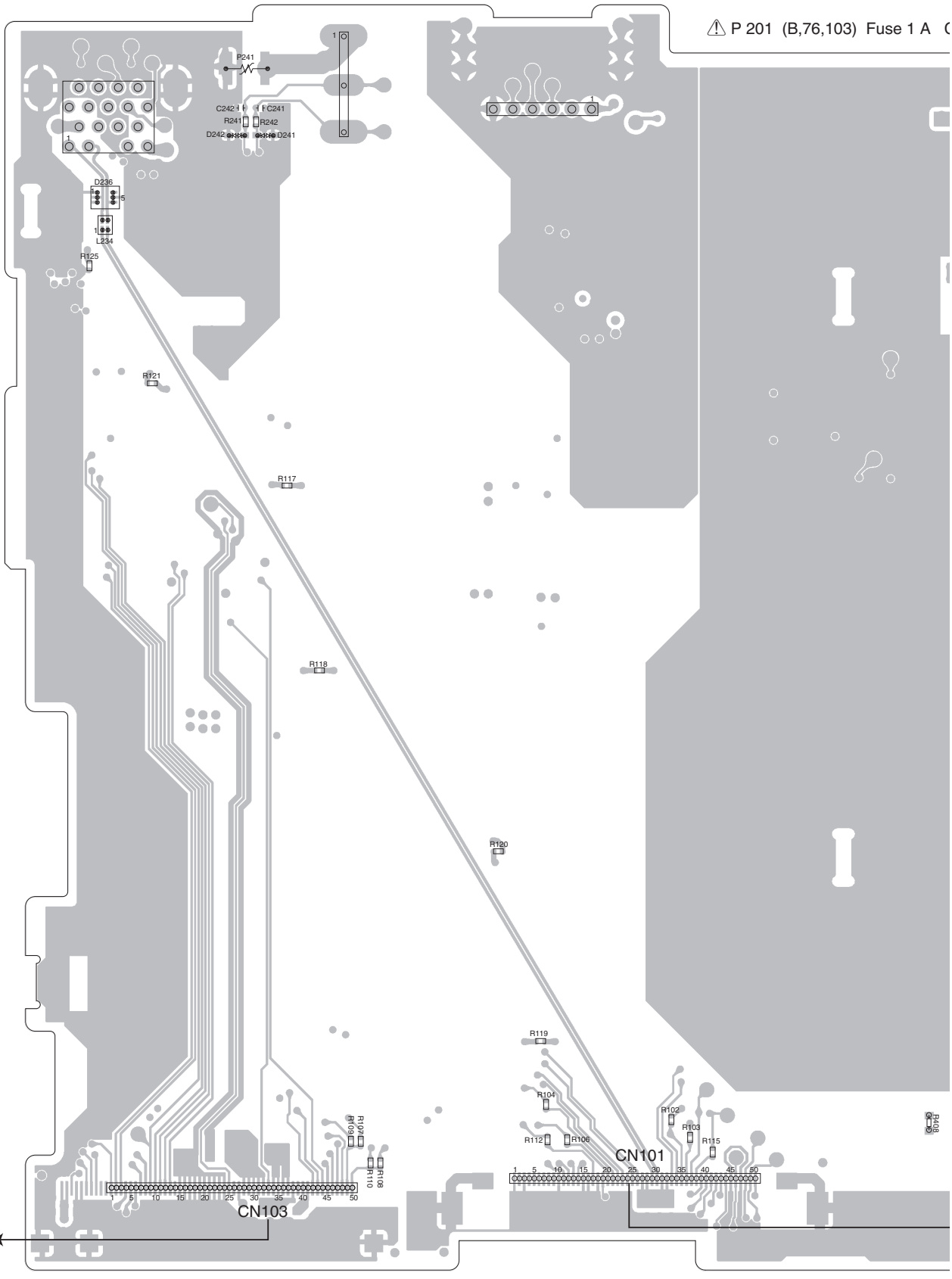
C

D

E

F

⚠ P 201 (B,76,103) Fuse 1 A C



A

CN2401

170

160

150

140

130

120

110

100

90

80

E

SIDE A

A

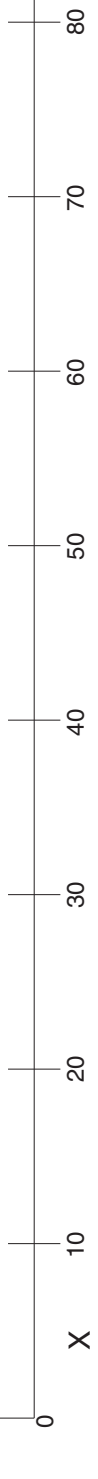
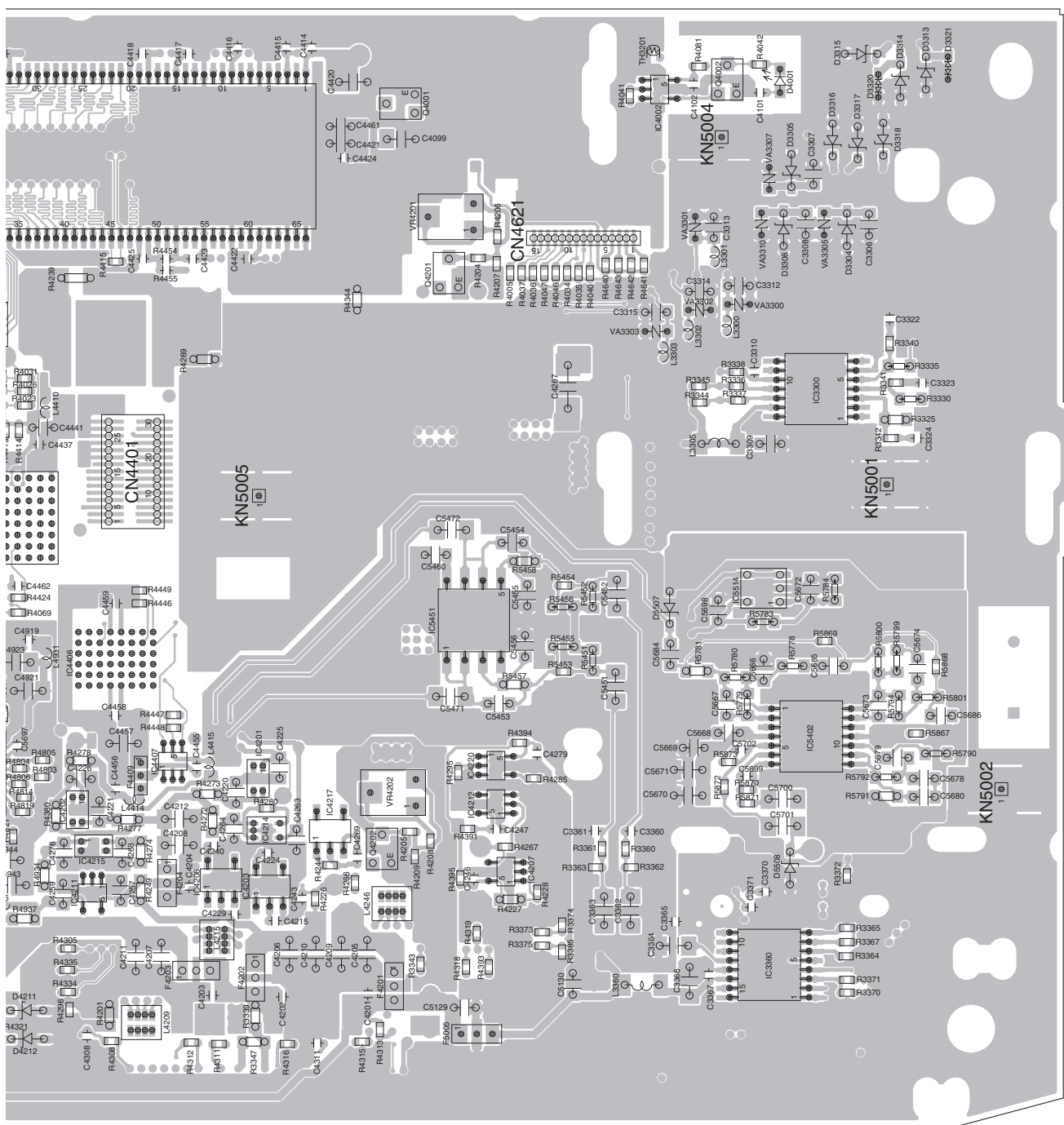
B

C

D

E

F



F CC MONITOR UNIT (SERVICE)

A

B

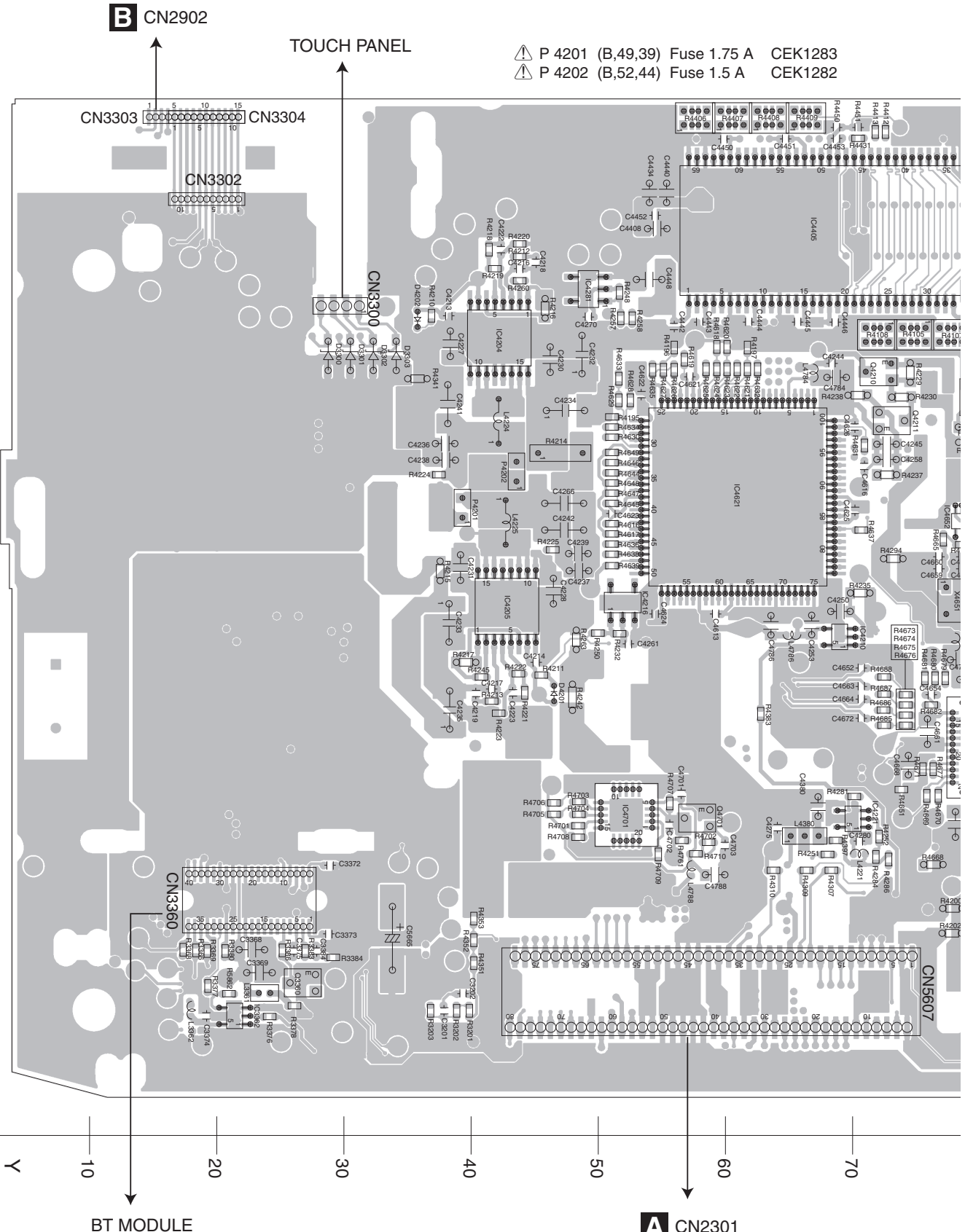
C

D

E

F

280



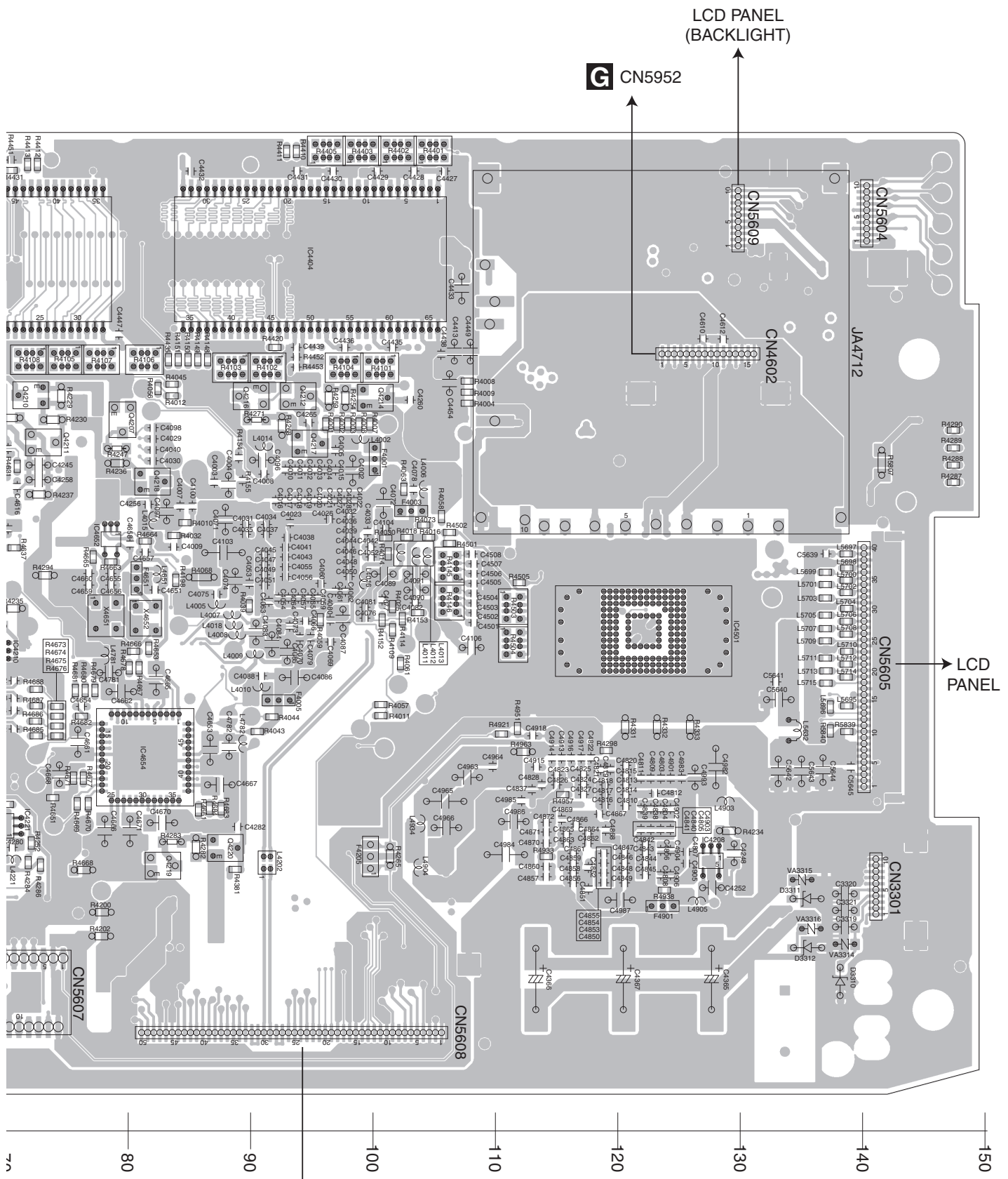
- ⚠ P 4201 (B,49,39) Fuse 1.75 A CEK1283
- ⚠ P 4202 (B,52,44) Fuse 1.5 A CEK1282

Y

BT MODULE

A CN2301

AVIC-X930BT/XNUC



LCD PANEL (BACKLIGHT)

G CN5952

LCD PANEL

E CN101

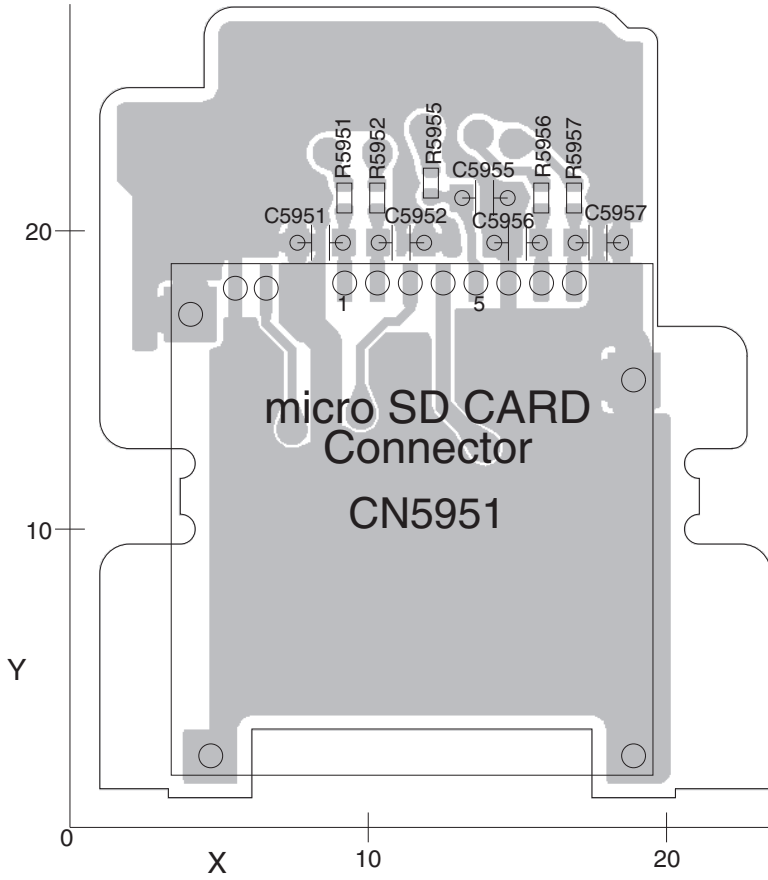
AVIC-X930BT/XNUC

F

11.7 SD PCB

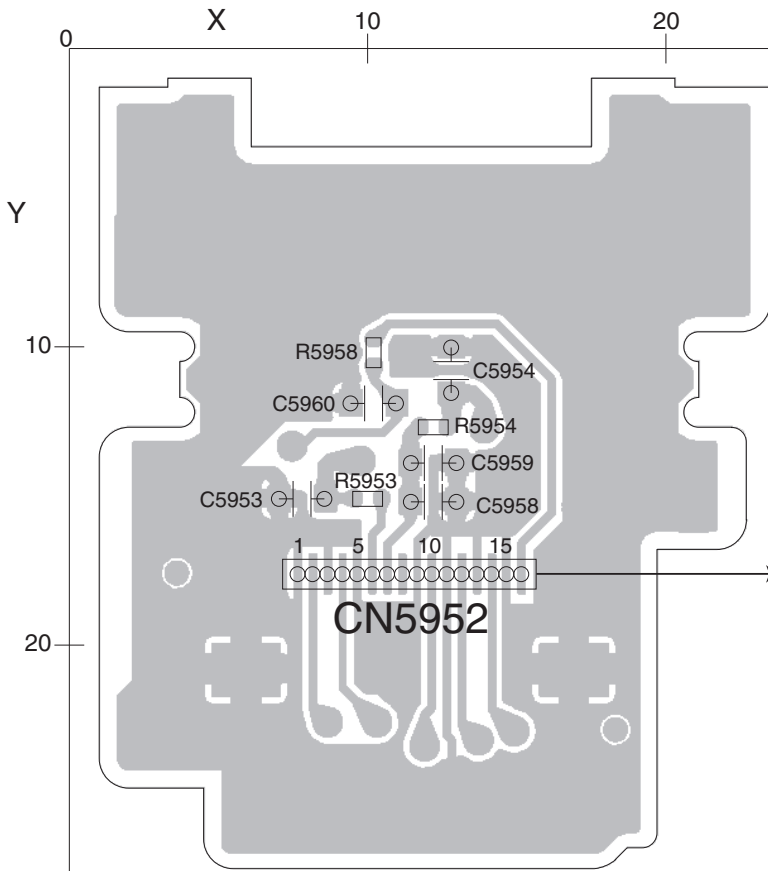
G SD PCB

SIDE A



G SD PCB

SIDE B



12. 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/OS○○○○J,RS1/○○S○○○○J

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

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

- The \triangle 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.
- Meaning of the figures and others in the parentheses in the parts list.

Example) IC 301 is on the point (face A, 91 of x-axis, and 111 of y-axis) of the corresponding PC board.

IC 301 (A, 91, 111) IC NJM2068V

<u>Circuit Symbol and No.</u>	<u>Part No.</u>	<u>Circuit Symbol and No.</u>	<u>Part No.</u>
Unit Number : CWN5681(UC)		IC 1511 (B,81,64) IC	TC74VHCT541AFK
: CWN5684(AU)		IC 1621 (A,62,31) IC	NJM2125F
Unit Name : AV Unit		IC 1641 (B,103,83) IC	BA4558RFVM
Unit Number : CWN5866(UC)		IC 1691 (B,83,86) IC	AK4223VQ
: CWN5869(AU)		IC 1761 (B,83,101) IC	PML020A
Unit Name : IF Unit		IC 1831 (B,152,110) IC(UC)	HA12241FP
Unit Number : YWX5025		IC 1941 (A,30,52) Regulator IC	NJM2846DL3-05
Unit Name : DVD Core Unit		IC 2001 (A,46,74) IC	TDA7706
Unit Number :		IC 2221 (A,105,26) IC	BH30NB1WHFV
Unit Name : Connect PCB		IC 2222 (A,106,20) Sensor	CSX1149
Unit Number : CXX3400(UC)		IC 2223 (B,107,22) IC	ADS7828E
: CXX3403(AU)		Q 1011 (B,118,143) Transistor	LSC4081UB
Unit Name : CC Monitor Unit(Service)		Q 1012 (B,121,143) Transistor	LSC4081UB
		Q 1031 (B,132,143) Transistor	LSA1576UB
		Q 1051 (B,125,121) Chip Transistor	RN1907
		Q 1101 (A,164,108) Transistor	LSA1576UB
		Q 1102 (A,161,107) Transistor	LTC114EUB
		Q 1121 (A,158,109) Transistor	LSA1576UB
		Q 1122 (A,157,112) Transistor	LTC114EUB
		Q 1131 (A,153,103) Chip Transistor	HN1C01FU
		Q 1141 (B,104,138) Transistor	LTC114EUB
		Q 1151 (B,56,125) Transistor	LSC4081UB
		Q 1181 (A,77,119) Transistor	LTC114EUB
		Q 1191 (B,58,120) Chip Transistor	RN4982
		Q 1204 (A,157,35) FET	SP8K10S
		Q 1205 (A,156,54) FET	SP8K10S
		Q 1302 (A,112,60) Transistor	LSA1576UB
		Q 1471 (B,161,70) Transistor	LTC114EUB
		Q 1472 (B,168,57) Transistor	LTC114EUB
		Q 1501 (B,118,53) Transistor	LSC4081UB
		Q 1521 (B,45,11) Chip Transistor	RN4982
		Q 1522 (B,27,10) Transistor	IMH23
		Q 1662 (B,111,85) Chip Transistor	RN4982
		Q 1664 (B,111,89) Transistor	DTC623TU
		Q 1751 (B,65,66) Chip Transistor	HN1C03FU
		Q 1752 (B,60,61) Chip Transistor	RN4982
		Q 1753 (B,67,61) Chip Digital Transistor	LTA124EUB
		Q 1793 (B,40,118) Chip Transistor	HN1C03FU
		Q 1801 (B,35,118) Chip Digital Transistor	LTA124EUB
		Q 1831 (B,141,124) Transistor(UC)	LTC114EUB
		Q 1832 (B,140,128) Transistor(UC)	LSA1576UB

A

Unit Number : CWN5681(UC)
: CWN5684(AU)
Unit Name : AV Unit

MISCELLANEOUS

IC 1051 (A,89,129) IC	PA2030A	Q 1472 (B,168,57) Transistor	LTC114EUB
IC 1091 (B,162,109) IC	S-1200B33-M5	Q 1501 (B,118,53) Transistor	LSC4081UB
IC 1111 (B,155,101) IC	BD3931FP	Q 1521 (B,45,11) Chip Transistor	RN4982
IC 1161 (A,164,87) IC	NJM2388F84	Q 1522 (B,27,10) Transistor	IMH23
IC 1171 (A,164,99) IC	NJM2388F84	Q 1662 (B,111,85) Chip Transistor	RN4982
IC 1201 (B,150,45) IC	LTC3850IGN	Q 1664 (B,111,89) Transistor	DTC623TU
IC 1241 (A,149,84) Regulator IC	BD9781HFP	Q 1751 (B,65,66) Chip Transistor	HN1C03FU
IC 1281 (A,121,76) IC	LT3505EDD	Q 1752 (B,60,61) Chip Transistor	RN4982
IC 1301 (B,72,38) IC	S-80929CNMC-G8Z	Q 1753 (B,67,61) Chip Digital Transistor	LTA124EUB
IC 1302 (A,95,52) IC(UC)	PEG745A8	Q 1793 (B,40,118) Chip Transistor	HN1C03FU
(A,95,52) IC(AU)	PEG747A8	Q 1801 (B,35,118) Chip Digital Transistor	LTA124EUB
IC 1303 (B,108,46) IC	S-93C56BD0I-I8	Q 1831 (B,141,124) Transistor(UC)	LTC114EUB
IC 1471 (B,165,67) IC	NJM2904M	Q 1832 (B,140,128) Transistor(UC)	LSA1576UB

	1		2		3		4	
	<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
	Q 1861	(B,161,8) Transistor	UMF23N		L 2012	(A,37,72) Inductor	CTF1786	
	Q 1862	(B,161,12) Transistor	LSA1576UB		L 2014	(A,43,63) Inductor	CTF1786	
A	Q 1863	(B,157,10) Transistor	UMF23N		L 2015	(A,55,65) Inductor	CTF1786	
	Q 1864	(B,161,14) Transistor	LSA1576UB		L 2018	(A,51,63) Inductor	CTF1786	
	Q 1865	(B,156,15) Transistor	LTA114EUB		L 2020	(A,36,82) Inductor	LCYB68NJ1608	
	Q 1866	(B,161,18) Transistor	2SD2114K		L 2021	(A,52,84) Inductor	CTF1794	
	Q 2441	(A,160,26) Transistor	IMH23		L 2070	(B,40,90) Inductor(UC)	LCYB4N7S1608	
	Q 2442	(A,156,26) Chip Transistor	RN4983		L 2224	(B,100,26) Chip Ferrite Bead	OTL8019	
	D 1001	(A,120,120) Diode	CRG03		L 2351	(B,160,115) Chip EMI Filter	DTF1106	
	D 1002	(A,120,123) Diode	CRG03		X 1301	(A,96,35) Oscillator 15 000 kHz	CSS1781	
	D 1012	(B,119,140) Diode	RKZ5.6KG(B2)		X 2001	(A,58,70) Oscillator 36.48 MHz	CSS1805	
	D 1031	(B,135,142) Diode	1SS352		F 1201	(A,162,55) EMI Filter	CCG1267	
B	D 1042	(B,127,140) Diode	1SR154-400		F 1202	(B,135,39) EMI Filter	CCG1267	
	D 1051	(B,61,131) Diode	1SR154-400		F 1203	(B,133,51) EMI Filter	CCG1267	
	D 1052	(B,61,128) Diode	1SR154-400		F 1241	(A,98,93) EMI Filter	CCG1267	
	D 1072	(B,118,117) Diode	RF501B2S	⚠ P1201	(A,169,57) Fuse 3.15 A	CEK1259		
	D 1131	(A,149,94) Diode	HZU7R5(B3)	⚠ P1242	(A,136,16) Fuse 250 mA	CEK1276		
	D 1132	(A,149,102) Diode	RKZ20KG(B2)	⚠ P1243	(A,96,100) Fuse 3.15 A	CEK1259		
	D 1133	(A,149,96) Diode	1SS352	⚠ P1291	(A,67,31) Fuse 1 A	CEK1254		
	D 1134	(A,149,98) Diode	1SS352	P 1891	(B,61,115) Poly Switch	MINISMDC075F/24		
	D 1141	(B,111,142) Diode	1SS352	P 1892	(B,55,115) Poly Switch	MINISMDC075F/24		
	D 1151	(B,54,127) Diode	UDZS6R8(B)	P 2061	(B,21,96) Surge Protector	IMSA-6802-01Y900		
	D 1202	(B,158,41) Diode	RB160M-40	P 2441	(A,165,25) Poly Switch	MINISMDC050F		
	D 1203	(B,158,51) Diode	RB160M-40	GY2221	(A,99,20) Sensor	CSX1147		
C	D 1241	(A,154,75) Diode	RB050L-40	CN1521	(A,33,8) Connector	VKN1620		
	D 1242	(A,95,93) Diode	RB051LA-40	CN1851	(A,74,66) Connector	VKN1610		
	D 1281	(A,119,73) Diode	1SS352	CN2301	(A,75,20) Connector	CKS6118		
	D 1282	(A,126,75) Diode	RB160M-40	CN2401	(A,151,10) Connector	CKS5732		
	D 1301	(A,74,45) Diode	RB501V-40	JA 1001	(A,121,136) Plug	CKM1550		
	D 1302	(A,74,43) Diode	RB751S-40	JA 1831	(A,150,125) Connector(UC)	CKS5271		
	D 1471	(B,172,66) Diode	1SS352	JA 1891	(A,48,106) Pin Jack	CKB1100		
	D 1501	(B,121,56) Diode	UDZS8R2(B)	JA2061	(A,13,117) Antenna Jack	CKX1070		
	D 1504	(B,99,58) Diode	1SS301	JA2351	(A,166,130) Jack	CKN1018		
	D 1521	(B,23,10) Diode	DAP202U	SN2221	(A,110,15) Sensor	S-58LM20A-N4		
	D 1621	(A,56,28) Diode	UDZS4R3(B)	⚠	Fuse(10 A)	YEK5001		
D	D 1662	(B,109,86) Diode	RB715Z					
	D 1751	(B,64,61) Diode	DAN202U					
	RESISTORS							
	D 1861	(B,167,9) Diode	RKZ3.6KG(B2)	R 1011	(B,118,141)	RS1/16SS473J		
	D 2001	(A,55,89) Diode	KP2311E	R 1012	(B,116,138)	RS1/16SS104J		
	D 2002	(A,55,83) Diode	KP2311E	R 1013	(B,120,141)	RS1/16SS473J		
	L 1001	(A,123,106) Choke Coil 600 uH	CTH1221	R 1014	(B,123,139)	RS1/16SS472J		
	L 1202	(A,147,53) Choke Coil 4.7 uH	CTH1399	R 1015	(B,119,138) 1 kohm	CCN1326		
	L 1203	(A,148,36) Choke Coil 6.8 uH	CTH1396	R 1031	(B,130,141)	RS1/16SS102J		
	L 1241	(A,144,70) Inductor	CTH1254	R 1032	(B,131,141)	RS1/16SS103J		
	L 1242	(A,123,84) Choke Coil 10 uH	CTH1398	R 1033	(B,133,141)	RS1/16SS153J		
E	L 1281	(A,123,69) Inductor	BTH1112	R 1034	(B,136,138) 10 kohm	CCN1327		
	L 1304	(A,100,34) Ferrite Bead	CTF1528	R 1041	(B,129,137)	RS1/10SR0R0J		
	L 1309	(A,111,69) Inductor	LCTAW2R2J2520	R 1071	(B,112,120)	RS1/10SR473J		
	L 1691	(A,89,93) Chip Coil	LCTAW100J2520	R 1072	(B,109,117)	RS1/4SOR0J		
	L 1692	(A,86,94) Chip Coil	LCTAW100J2520	R 1073	(B,109,112)	RS1/4SOR0J		
	L 1831	(B,148,114) Inductor(UC)	LCYC2R2K1608	R 1074	(B,144,95)	RS1/4SA0R0J		
	L 2001	(A,56,86) Chip Coil	LCTAWR15J2520	R 1091	(B,162,107)	RS1/16SS472J		
	L 2002	(A,48,84) Inductor	CTF1786	R 1101	(A,163,110)	RS1/16SS473J		
	L 2003	(A,44,86) Inductor	CTF1786	R 1102	(A,162,105)	RS1/16SS222J		
	L 2004	(A,52,87) Chip Coil	LCTAWR27J2520	R 1103	(A,164,105)	RS1/16SS222J		
	L 2005	(A,38,86) Inductor	CTF1389	R 1122	(A,155,112)	RS1/16SS472J		
F	L 2008	(A,35,85) Inductor	LCTAW220J2520	R 1123	(A,155,110)	RS1/16SS472J		
	L 2009	(A,59,79) Inductor	CTF1786	R 1131	(A,152,101)	RS1/16SS473J		
	L 2010	(A,59,77) Inductor	CTF1786	R 1132	(A,148,104)	RS1/16SS103J		
	L 2011	(A,34,77) Chip Coil	LCTAW470J2520					

5		6		7		8	
<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
R 1133	(A,153,101)	RS1/10SR473J		R 1291	(B,61,16)	RS1/4SA0R0J	
R 1134	(A,148,103)	RS1/16SS103J		R 1309	(A,111,45)	RS1/16SS471J	
R 1141	(B,110,142)	RS1/16SS103J		R 1310	(B,107,51)	RS1/16SS104J	
R 1143	(B,115,142) 1 kohm	CCN1326		R 1316	(A,116,48)	RS1/16SS104J	A
R 1151	(B,51,125)	RS1/16SS223J		R 1317	(A,109,52)	RS1/16SS101J	
R 1152	(B,50,125)	RS1/16SS223J		R 1318	(A,109,53)	RS1/16SS102J	
R 1153	(B,56,131) 1 kohm	CCN1326		R 1319	(B,109,51)	RS1/16SS104J	
R 1154	(B,53,131)	RS1/16SS562J		R 1320	(B,106,57)	RS1/16SS104J	
R 1162	(A,167,81)	RS1/16SS0R0J		R 1321	(A,109,58)	RS1/16SS0R0J	
R 1172	(A,170,93)	RS1/16SS0R0J		R 1326	(B,92,68)	RS1/16SS104J	
R 1181	(A,75,122)	RS1/16SS103J		R 1327	(A,87,70)	RS1/16SS472J	
R 1182	(A,75,120)	RS1/16SS103J		R 1328	(A,88,70)	RS1/16SS472J	
R 1194	(B,62,63)	RS1/10SR0R0J		R 1329	(A,108,38)	RS1/16SS0R0J	
R 1201	(B,144,50)	RS1/10SR7502D		R 1332	(A,79,52)	RS1/16SS0R0J	B
R 1202	(B,141,43)	RS1/10SR2402D		R 1334	(B,80,43)	RS1/16SS104J	
R 1203	(B,139,48)	RS1/10SR682J		R 1336	(A,108,42)	RS1/16SS0R0J	
R 1204	(B,141,46)	RS1/10SR6802D		R 1337	(A,108,45)	RS1/16SS0R0J	
R 1205	(B,139,41)	RS1/10SR682J		R 1338	(A,106,41)	RS1/16SS0R0J	
R 1206	(B,144,47)	RS1/10SR1503D		R 1339	(B,102,38)	RS1/16SS561J	
R 1207	(B,144,42)	RS1/10SR1303D		R 1342	(A,105,39)	RS1/16SS561J	
R 1208	(B,143,50)	RS1/10SR0R0J		R 1352	(B,104,40)	RS1/16SS562J	
R 1209	(B,143,40)	RS1/10SR0R0J		R 1353	(A,105,71)	RS1/16SS562J	
R 1210	(B,147,52)	RS1/16SS100J		R 1354	(B,108,45)	RS1/16SS473J	
R 1211	(B,147,37)	RS1/16SS100J		R 1355	(A,111,51)	RS1/16SS104J	
R 1212	(B,148,52)	RS1/16SS100J		R 1356	(B,108,48)	RS1/16SS473J	C
R 1213	(B,148,37)	RS1/16SS100J		R 1357	(A,117,51) (UC)	RS1/16SS472J	
R 1214	(B,150,51)	RS1/16SS104J		R 1358	(A,117,49)	RS1/16SS472J	
R 1215	(B,149,34)	RS1/16SS0R0J		R 1359	(B,113,60)	RS1/16SS473J	
R 1218	(B,164,38)	RS1/16SS103J		R 1360	(A,116,47)	RS1/16SS104J	
R 1219	(B,153,37)	RS1/16SS0R0J		R 1362	(A,107,38)	RS1/16SS471J	
R 1220	(B,161,41)	RS1/16SS104J		R 1363	(A,109,38)	RS1/16SS101J	
R 1221	(B,157,41)	RS1/10SR100J		R 1364	(A,114,49)	RS1/16SS681J	
R 1222	(B,156,51)	RS1/10SR100J		R 1365	(A,114,51) (UC)	RS1/16SS101J	
R 1226	(B,159,45)	RS1/10SR2R2J		R 1366	(A,111,52)	RS1/16SS102J	
R 1227	(A,140,56) 0.027 ohm	CCN1190		R 1369	(A,109,62)	RS1/16SS681J	
R 1228	(A,141,32) 0.027 ohm	CCN1190		R 1370	(A,107,63) (UC)	RS1/16SS471J	D
R 1229	(A,163,50)	RS1/8SQ0R0J		R 1371	(A,107,42)	RS1/16SS101J	
R 1230	(B,139,36)	RS1/4SA0R0J		R 1373	(B,75,36)	RS1/16SS102J	
R 1231	(B,137,51)	RS1/4SA0R0J		R 1374	(B,85,37)	RS1/16SS104J	
R 1232	(B,135,41)	RS1/4SA221J		R 1375	(B,97,66)	RS1/16SS473J	
R 1233	(B,135,47)	RS1/4SA221J		R 1376	(B,98,63)	RS1/16SS473J	
R 1234	(B,155,41)	RS1/10SR0R0J		R 1377	(B,96,68)	RS1/16SS104J	
R 1235	(B,160,39)	RS1/10SR0R0J		R 1378	(B,74,35)	RS1/16SS104J	
R 1236	(B,160,51)	RS1/10SR0R0J		R 1379	(B,102,43)	RS1/16SS221J	
R 1237	(B,155,51)	RS1/10SR0R0J		R 1380	(A,102,67)	RS1/16SS102J	
R 1241	(B,151,72)	RS1/10SR0R0J		R 1381	(A,101,67)	RS1/16SS102J	
R 1242	(B,153,72)	RS1/10SR6802D		R 1382	(A,100,67)	RS1/16SS221J	E
R 1243	(B,153,75)	RS1/10SR3001D		R 1383	(A,102,34)	RS1/16SS473J	
R 1244	(B,152,77)	RS1/10SR1002D		R 1384	(A,112,57)	RS1/10SR473J	
R 1246	(B,150,74)	RS1/10SR333J		R 1385	(A,112,55)	RS1/10SR472J	
R 1247	(B,147,80)	RS1/10SR1003D		R 1387	(A,96,67)	RS1/16SS221J	
R 1248	(B,149,80)	RS1/10SR1002D		R 1388	(A,85,37)	RS1/16SS122J	
R 1250	(B,155,76)	RS1/10SR102J		R 1389	(B,89,38)	RS1/16SS103J	
R 1281	(B,120,72)	RS1/16SS0R0J		R 1390	(A,95,39)	RS1/16SS561J	
R 1282	(B,120,74)	RS1/10SR1303D		R 1391	(A,83,37)	RS1/16SS473J	
R 1283	(B,120,76)	RS1/16SS2402D		R 1392	(A,92,35)	RS1/16SS473J	
R 1285	(B,119,77)	RS1/16SS2002D		R 1393	(A,93,35)	RS1/16SS472J	
R 1286	(B,119,72)	RS1/16SS223J		R 1394	(A,86,37)	RS1/16SS122J	F
R 1287	(A,140,112)	RS1/4SA0R0J		R 1395	(A,81,37)	RS1/16SS182J	
R 1288	(A,126,79)	RS1/10SR0R0J		R 1396	(A,95,67)	RS1/16SS221J	

1

2

3

4

Circuit Symbol and No.Part No.Circuit Symbol and No.Part No.

R 1398	(A,92,67)	RS1/16SS681J	R 1480	(B,169,64)	RS1/16SS564J
R 1399	(A,91,67)	RS1/16SS681J	R 1481	(B,170,70)	RS1/16SS202J
R 1400	(A,90,67)	RS1/16SS681J	R 1482	(B,170,68)	RS1/16SS822J
A R 1401	(B,79,53)	RS1/16SS104J	R 1483	(B,171,55)	RS1/16SS203J
R 1403	(A,88,67)	RS1/16SS470J	R 1484	(B,171,57)	RS1/16SS333J
R 1404	(A,87,67)	RS1/16SS470J	R 1485	(A,162,65)	RS1/10SR0R0J
R 1405	(A,94,67)	RS1/16SS0R0J	R 1486	(B,160,66)	RS1/10SR0R0J
R 1406	(A,83,67)	RS1/16SS102J	R 1491	(B,106,42)	RS1/16SS0R0J
R 1407	(A,82,39)	RS1/16SS470J	R 1492	(B,106,56)	RS1/16SS0R0J
R 1408	(A,82,67)	RS1/16SS221J	R 1493	(B,105,63)	RS1/16SS0R0J
R 1410	(A,83,70)	RS1/16SS104J	R 1494	(B,94,64)	RS1/16SS0R0J
R 1411	(A,85,70)	RS1/16SS104J	R 1495	(B,83,42)	RS1/16SS0R0J
R 1413	(B,106,51)	RS1/16SS104J	R 1496	(B,84,49)	RS1/16SS0R0J
B R 1414	(B,90,38)	RS1/16SS473J	R 1501	(B,93,56)	RS1/16SS561J
R 1415	(A,109,55)	RS1/16SS104J	R 1502	(B,118,56)	RS1/10SR473J
R 1416	(B,94,66)	RS1/16SS104J	R 1503	(B,119,56)	RS1/10SR104J
R 1417	(B,111,57)	RS1/16SS104J	R 1504	(B,76,58)	RS1/16SS0R0J
R 1418	(B,111,59)	RS1/16SS104J	R 1505	(B,101,56)	RS1/16SS104J
R 1419	(A,74,46)	RS1/16SS103J	R 1507	(B,79,60)	RS1/16SS0R0J
R 1420	(A,75,42)	RS1/16SS103J	R 1511	(B,87,66)	RS1/16SS104J
R 1421	(A,82,42)	RS1/16SS470J	R 1512	(B,89,66)	RS1/16SS104J
R 1422	(A,81,42)	RS1/16SS681J	R 1513	(B,87,65)	RS1/16SS104J
R 1423	(A,80,42)	RS1/16SS681J	R 1514	(B,89,64)	RS1/16SS104J
R 1424	(B,80,34)	RS1/16SS101J	R 1515	(B,87,64)	RS1/16SS104J
C R 1427	(A,78,47)	RS1/16SS681J	R 1516	(B,89,63)	RS1/16SS104J
R 1428	(A,78,49)	RS1/16SS0R0J	R 1517	(B,89,60)	RS1/16SS104J
R 1429	(B,111,47)	RS1/16SS0R0J	R 1518	(B,85,60)	RS1/16SS224J
R 1430	(A,109,60)	RS1/16SS221J	R 1519	(B,79,67)	RS1/16SS0R0J
R 1431	(A,82,57)	RS1/16SS681J	R 1521	(B,31,10)	RS1/10SR104J
R 1432	(A,80,57)	RS1/16SS681J	R 1522	(B,34,10)	RS1/10SR104J
R 1433	(A,82,60)	RS1/16SS471J	R 1523	(B,32,8)	RS1/10SR182J
R 1434	(A,80,62)	RS1/16SS102J	R 1524	(B,33,8)	RS1/10SR182J
R 1435	(A,80,63)	RS1/16SS102J	R 1525	(B,44,8)	RS1/16SS471J
R 1436	(B,76,62)	RS1/16SS104J	R 1526	(A,39,12)	RS1/16SS221J
R 1437	(A,79,38)	RS1/16SS182J	R 1527	(A,38,12)	RS1/16SS471J
D R 1438	(B,77,54)	RS1/16SS124J	R 1528	(A,37,12)	RS1/16SS221J
R 1439	(A,78,38)	RS1/16SS392J	R 1529	(A,36,12)	RS1/16SS221J
R 1441	(A,77,38)	RS1/16SS392J	R 1530	(A,35,12)	RS1/16SS471J
R 1442	(B,79,51)	RS1/16SS104J	R 1531	(B,52,9)	RS1/4SA0R0J
R 1445	(B,90,41)	RS1/16SS0R0J	R 1532	(B,52,24)	RS1/10SR0R0J
R 1451	(A,78,53)	RS1/16SS0R0J	R 1534	(A,48,16)	RS1/16SS0R0J
R 1452	(A,78,45)	RS1/16SS0R0J	R 1535	(A,42,13)	RS1/8SQOR0J
R 1453	(A,89,67)	RS1/16SS0R0J	R 1601	(B,52,31)	RS1/16SS0R0J
R 1454	(A,111,46)	RS1/16SS182J	R 1602	(B,68,31)	RS1/16SS0R0J
R 1455	(A,111,48)	RS1/16SS182J	R 1611	(B,80,74)	RS1/16SS0R0J
R 1457	(B,87,37)	RS1/16SS101J	R 1612	(B,84,74)	RS1/16SS0R0J
E R 1458	(B,82,37)	RS1/16SS101J	R 1615	(B,80,77)	RS1/16SS0R0J
R 1459	(B,85,54)	RS1/16SS0R0J	R 1616	(B,79,77)	RS1/16SS0R0J
R 1460	(B,84,52)	RS1/16SS104J	R 1621	(A,56,31)	RS1/16SS102J
R 1461	(B,87,33)	RS1/16SS102J	R 1623	(A,56,33)	RS1/10SR0R0J
R 1462	(B,86,33)	RS1/16SS0R0J	R 1646	(B,110,81)	RS1/10SR332J
R 1471	(B,164,72)	RS1/16SS104J	R 1647	(B,109,81)	RS1/10SR332J
R 1472	(B,169,70)	RS1/16SS473J	R 1648	(B,106,81)	RS1/10SR103J
R 1473	(B,168,70)	RS1/16SS563J	R 1649	(B,108,83)	RS1/10SR103J
R 1474	(B,168,68)	RS1/16SS513J	R 1650	(B,104,78)	RS1/10SR102J
R 1475	(B,169,68)	RS1/16SS104J	R 1651	(B,101,79)	RS1/10SR104J
F R 1476	(B,169,65)	RS1/16SS513J	R 1652	(B,101,81)	RS1/10SR104J
R 1477	(B,167,62)	RS1/16SS513J	R 1653	(B,99,81)	RS1/10SR683J
R 1478	(B,170,66)	RS1/16SS102J	R 1654	(B,99,83)	RS1/10SR473J
R 1479	(B,168,63)	RS1/16SS102J	R 1662	(B,106,89)	RS1/10SR821J

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<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
R 1664	(B,109,89)	RS1/16SS104J		R 1792	(B,88,113)	RS1/16SS0R0J	
R 1667	(B,102,87)	RS1/16SS0R0J		R 1795	(B,81,113)	RS1/16SS0R0J	
R 1689	(B,95,97)	RS1/16SS0R0J		R 1796	(B,79,113)	RS1/16SS0R0J	
R 1690	(B,95,98)	RS1/16SS0R0J		R 1801	(B,37,117)	RS1/16SS472J	A
R 1691	(B,83,76)	RS1/16SS0R0J		R 1802	(B,37,118)	RS1/16SS472J	
R 1692	(B,81,76)	RS1/16SS0R0J		R 1803	(B,43,116)	RS1/10SR821J	
R 1693	(B,84,76)	RS1/16SS0R0J		R 1804	(B,43,118)	RS1/10SR821J	
R 1694	(B,81,72)	RS1/16SS0R0J		R 1805	(B,41,114)	RS1/10SR223J	
R 1695	(B,83,72)	RS1/10SR0R0J		R 1806	(B,42,122)	RS1/10SR223J	
R 1700	(B,67,79)	RS1/10SR0R0J		R 1831	(B,157,109) (UC)	RS1/16SS103J	
R 1701	(B,70,80)	RS1/16SS750J		R 1832	(B,157,112) (UC)	RS1/16SS681J	
R 1703	(B,72,80)	RS1/16SS101J		R 1833	(B,157,111) (UC)	RS1/16SS101J	
R 1704	(B,72,81)	RS1/16SS101J		R 1835	(B,139,125) (UC)	RS1/10SR332J	
R 1705	(B,70,83)	RS1/16SS75R0F		R 1836	(B,141,128) (UC)	RS1/10SR682J	B
R 1706	(B,72,82)	RS1/16SS101J		R 1837	(B,137,126) (UC)	RS1/10SR222J	
R 1707	(B,72,84)	RS1/16SS101J		R 1838	(B,147,111) (UC)	RS1/10SR101J	
R 1716	(B,71,89)	RS1/16SS75R0F		R 1839	(B,145,110) (UC)	RS1/16SS680J	
R 1717	(B,72,87)	RS1/16SS101J		R 1841	(B,147,108) (UC)	RS1/10SR101J	
R 1718	(B,73,89)	RS1/16SS101J		R 1845	(B,142,118) (UC)	RS1/10SR102J	
R 1719	(B,73,90)	RS1/16SS0R0J		R 1846	(B,142,116) (UC)	RS1/10SR102J	
R 1720	(B,73,91)	RS1/16SS0R0J		R 1847	(B,142,119) (UC)	RS1/10SR223J	
R 1722	(B,82,92)	RS1/16SS104J		R 1848	(B,142,115) (UC)	RS1/10SR223J	
R 1723	(B,84,91)	RS1/16SS0R0J		R 1849	(B,142,121) (UC)	RS1/10SR181J	
R 1725	(B,89,74)	RS1/16SS223J		R 1850	(B,142,114) (UC)	RS1/10SR181J	
R 1726	(B,89,75)	RS1/16SS223J		R 1861	(B,166,7)	RS1/16SS271J	C
R 1727	(B,85,75)	RS1/16SS0R0J		R 1862	(B,165,7)	RS1/16SS152J	
R 1728	(B,89,76)	RS1/16SS0R0J		R 1863	(B,166,9)	RS1/16SS333J	
R 1729	(B,94,78)	RS1/16SS0R0J		R 1864	(B,165,10)	RS1/16SS104J	
R 1730	(B,94,80)	RS1/16SS0R0J		R 1865	(B,164,9)	RS1/16SS104J	
R 1731	(B,94,79)	RS1/16SS0R0J		R 1866	(B,164,7)	RS1/16SS473J	
R 1732	(B,94,83)	RS1/16SS0R0J		R 1867	(B,164,12)	RS1/16SS104J	
R 1733	(B,95,81)	RS1/16SS0R0J		R 1868	(B,165,13)	RS1/16SS104J	
R 1734	(B,95,84)	RS1/16SS0R0J		R 1869	(B,157,13)	RS1/16SS102J	
R 1741	(B,91,91)	RS1/16SS0R0J		R 1870	(B,156,7)	RS1/16SS472J	
R 1742	(A,78,78)	RS1/16SS0R0J		R 1871	(B,157,7)	RS1/16SS104J	
R 1748	(A,70,93)	RS1/8SQ75R0D		R 1872	(B,156,8)	RS1/16SS473J	D
R 1749	(A,67,93)	RS1/16SS0R0J		R 1873	(B,163,15)	RS1/16SS104J	
R 1750	(B,87,75)	RS1/16SS0R0J		R 1874	(B,163,17)	RS1/16SS104J	
R 1755	(B,68,66)	RS1/16SS821J		R 1875	(B,157,17)	RS1/16SS103J	
R 1756	(B,64,69)	RS1/16SS821J		R 1941	(B,25,56)	RS1/16SS102J	
R 1757	(B,68,65)	RS1/16SS223J		R 1966	(B,28,67)	RS1/8SQ0R0J	
R 1758	(B,62,68)	RS1/16SS223J		R 1977	(B,26,63)	RS1/8SQ0R0J	
R 1761	(A,92,104)	RS1/10SR0R0J		R 1978	(B,7,66)	RS1/10SR0R0J	
R 1762	(B,92,108)	RS1/16SS473J		R 2001	(A,41,88)	RS1/16SS105J	
R 1763	(A,92,102)	RS1/10SR0R0J		R 2002	(A,58,89)	RS1/16SS221J	
R 1771	(B,93,91)	RS1/16SS0R0J		R 2003	(A,58,83)	RS1/16SS751J	
R 1772	(B,90,93)	RS1/16SS0R0J		R 2004	(A,36,86)	RS1/16SS152J	E
R 1773	(B,65,64)	RS1/16SS472J		R 2005	(A,39,82)	RS1/16SS105J	
R 1774	(B,66,64)	RS1/16SS472J		R 2006	(A,35,80)	RS1/16SS471J	
R 1775	(B,71,104)	RS1/16SS0R0J		R 2007	(A,36,79)	RS1/16SS330J	
R 1776	(B,71,108)	RS1/16SS0R0J		R 2008	(A,34,75)	RS1/16SS681J	
R 1777	(B,89,73)	RS1/16SS182J		R 2009	(A,55,72)	RS1/16SS0R0J	
R 1778	(B,71,106)	RS1/16SS0R0J		R 2010	(B,36,66)	RS1/4SA8R2J	
R 1781	(B,94,81)	RS1/16SS223J		R 2011	(A,44,89)	RS1/10SR0R0J	
R 1782	(B,94,84)	RS1/16SS223J		R 2012	(B,34,66)	RS1/4SA8R2J	
R 1783	(B,78,77)	RS1/16SS0R0J		R 2013	(B,40,88) (AU)	RS1/10SR0R0J	
R 1784	(B,74,79)	RS1/16SS0R0J		R 2016	(A,42,66)	RS1/16SS101J	F
R 1787	(A,78,83)	RS1/16SS0R0J		R 2017	(A,41,65)	RS1/16SS0R0J	
R 1788	(A,78,84)	RS1/16SS0R0J		R 2018	(A,40,68)	RS1/16SS102J	
R 1791	(B,86,114)	RS1/16SS0R0J		R 2019	(A,40,66)	RS1/16SS103J	

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Circuit Symbol and No.**Part No.****Circuit Symbol and No.****Part No.**

R 2022	(A,57,62)	RS1/16SS0R0J	C 1062	(B,97,136)	CKSRYB104K50
R 2051	(A,53,63)	RS1/16SS680J	C 1064	(B,92,135)	CKSQYB225K10
R 2076	(B,23,92)	RS1/10SR0R0J	C 1065	(B,89,135)	CKSQYB225K10
R 2221	(A,108,33)	RS1/10SR0R0J			
R 2222	(A,99,25)	RS1/10SR471J	C 1066	(A,82,117) Capacitor	CEHVV100M16
R 2223	(A,95,20)	RS1/16SS153J	C 1067	(B,59,125)	CKSRYB104K50
R 2224	(A,97,24)	RS1/16SS153J	C 1071	(B,111,120)	CKSRYB104K50
R 2225	(A,111,24)	RS1/16SS0R0J	C 1072	(A,107,103) 10 000 uF/16 V	CCH1849(P35)
R 2226	(A,111,21)	RS1/16SS0R0J	C 1091	(B,159,109)	CKSRYB105K16
R 2227	(A,112,18)	RS1/16SS0R0J	C 1092	(B,164,110)	CKSRYB105K16
R 2228	(B,101,30)	RS1/10SR101J	C 1112	(B,158,108)	CKSSYB103K16
R 2229	(B,114,19)	RS1/16SS471J	C 1113	(A,155,105)	CKSYB105K35
R 2233	(B,112,19)	RS1/16SS101J	C 1141	(B,110,139)	CKSRYB105K10
R 2237	(B,102,24)	RS1/16SS0R0J	C 1142	(B,112,138)	CKSRYB102K50
R 2238	(B,102,23)	RS1/16SS0R0J	C 1151	(B,53,128)	CKSSYB102K50
R 2239	(B,102,22)	RS1/16SS202J	C 1161	(A,167,66)	CEVW100M16
R 2240	(B,102,21)	RS1/16SS202J	C 1162	(A,161,84)	CKSSYB102K50
R 2242	(B,97,26)	RS1/10SR222J	C 1164	(A,161,87)	CKSRYB104K50
R 2243	(B,98,26)	RS1/10SR222J	C 1171	(A,156,97)	CEVW100M16
R 2248	(A,102,25)	RS1/16SS0R0J	C 1172	(A,161,96)	CKSSYB102K50
R 2249	(A,98,15)	RS1/16SS0R0J	C 1174	(A,161,99)	CKSRYB104K50
R 2250	(A,106,16)	RS1/16SS0R0J	C 1181	(A,66,98) Capacitor	CEVW330M10
R 2292	(A,90,31)	RS1/16SS104J	C 1201	(B,164,39)	CKSSYB472K25
R 2312	(B,77,23)	RS1/16SS101J	C 1204	(B,141,49)	CCSRCH821J50
R 2313	(B,77,22)	RS1/16SS101J	C 1205	(B,141,42)	CCSRCH221J50
R 2314	(B,83,26)	RS1/16SS221J	C 1206	(B,143,47)	CCSRCH220J50
R 2315	(B,72,14)	RS1/16SS331J	C 1207	(B,143,42)	CCSRCH330J50
R 2352	(B,164,120)	RS1/10SR0R0J	C 1208	(B,141,40)	CCSRCH821J50
R 2353	(A,165,122)	RS1/10SR0R0J	C 1209	(B,147,51)	CCSRCH102J50
R 2357	(B,163,116)	RS1/10SR102J	C 1210	(B,147,39)	CCSRCH102J50
R 2358	(B,162,116)	RS1/10SR102J	C 1211	(B,144,52)	CKSRYB152K50
R 2407	(B,152,22)	RS1/8SQ0R0J	C 1212	(B,144,40)	CKSSYB273K16
R 2408	(A,145,24) (AU)	RS1/16SS0R0J	C 1216	(B,156,46) 4.7 uF	CCG1201
R 2410	(A,147,26) (AU)	RS1/16SS0R0J	C 1217	(B,155,38)	CKSRYB104K50
R 2412	(A,162,18)	RS1/16SS0R0J	C 1218	(B,156,44)	CKSRYB104K50
R 2413	(B,79,17)	RS1/16SS0R0J	C 1219	(B,153,51)	CKSRYB104K50
R 2428	(B,26,132) (UC)	CCSRCH100D50	C 1220	(A,160,39) 10 uF	CCG1236
R 2430	(A,21,101) (UC)	CCSRCH100D50	C 1221	(A,157,50) 10 uF	CCG1236
R 2440	(A,36,32)	RS1/10SR0R0J	C 1223	(A,138,40) 22 uF	CCG1254
R 2442	(A,161,23)	RS1/10SR0R0J	C 1224	(A,140,40) 22 uF	CCG1254
R 2443	(A,21,99) Inductor(UC)	LCYB10NJ1608	C 1226	(A,140,49) 22 uF	CCG1254
	(A,21,99) Resistor(AU)	RS1/10SR0R0J	C 1227	(A,138,49) 22 uF	CCG1254
R 2445	(A,55,8)	RS1/16SS0R0J	C 1241	(B,158,69) 10 uF	CCG1236
R 2449	(A,113,10) (UC)	RS1/16SS121J	C 1243	(B,148,75)	CKSRYB104K50
R 2452	(A,113,7) (AU)	RS1/16SS471J	C 1244	(A,153,69) 100 uF/16 V	CCH1565
R 2459	(A,43,34)	RS1/10SR0R0J	C 1246	(B,148,78)	CKSSYB104K16
			C 1248	(A,131,85) 100 uF/16 V	CCH1565
			C 1249	(A,137,86) 10 uF	CCG1236
			C 1250	(A,140,86) 10 uF	CCG1236

CAPACITORS

C 1001	(A,95,115)	CEAT332M16(P35)	C 1281	(A,128,67) 22 uF	CCG1254
C 1011	(B,123,140)	CKSSYB102K50	C 1282	(B,119,75)	CCSSCH221J50
C 1051	(B,62,125)	CKSRYB104K50	C 1283	(A,122,73)	CKSRYB104K16
C 1053	(B,86,115)	CKSRYB474K16	C 1285	(B,118,70)	CCSRCH151J50
C 1054	(B,89,115)	CKSRYB474K16	C 1287	(A,127,77)	CKSYB225K25
C 1055	(B,86,116)	CKSRYB474K16	C 1302	(B,111,45)	CCSSCH101J50
C 1056	(B,89,116)	CKSRYB474K16	C 1306	(B,107,40)	CCSSCH221J50
C 1057	(B,82,115)	CKSRYB474K16	C 1309	(B,106,36)	CCSSCH471J50
C 1058	(B,78,115)	CKSRYB474K16	C 1310	(B,110,47)	CKSRYB104K16
C 1059	(B,82,116)	CKSRYB474K16	C 1311	(B,93,67)	CKSSYB104K16
C 1060	(B,78,116)	CKSRYB474K16	C 1312	(B,89,62)	CCSSCH101J50
C 1061	(B,97,134)	CKSRYB104K50	C 1313	(B,106,44)	CKSRYB103K50

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<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
C 1314	(B,105,54)	CKSRYB103K50		C 1706	(B,75,90)	CKSRYB104K50	
C 1315	(B,99,68)	CKSSYB103K16		C 1707	(B,75,91)	CKSRYB104K50	
C 1316	(B,103,43)	CCSSCH101J50		C 1708	(B,75,93)	CKSSYB104K16	
C 1317	(B,71,41)	CKSRYB153K50		C 1709	(B,81,92)	CKSSYB104K16	A
C 1318	(B,103,63)	CKSRYB103K50		C 1710	(A,76,89) Capacitor	CEVW330M25	
C 1319	(A,97,37)	CCSSCH100D50		C 1711	(B,80,92)	CKSSYB104K16	
C 1320	(B,71,36)	CKSRYB104K16		C 1713	(B,73,99)	CKSYB475K16	
C 1321	(A,97,40)	CKSRYB103K50		C 1714	(B,93,102)	CKSYB475K16	
C 1322	(A,97,38)	CKSRYB105K10		C 1715	(A,86,91)	CKSSYB104K16	
C 1323	(A,95,37)	CCSSCH100D50		C 1716	(A,89,88)	CEVW100M16	
C 1324	(A,77,36)	CKSRYB104K16		C 1717	(A,82,92)	CKSSYB104K16	
C 1325	(B,94,62)	CKSRYB103K50		C 1718	(A,83,88)	CEVW100M16	
C 1326	(A,91,37) 4.7 uF	CCG1201		C 1721	(B,85,78)	CKSRYB105K10	
C 1327	(B,86,37)	CCSSCH121J50		C 1722	(B,88,78)	CKSRYB105K10	B
C 1328	(B,81,39)	CCSSCH180J50		C 1723	(B,91,78)	CKSRYB105K10	
C 1332	(B,83,37)	CCSSCH680J50		C 1724	(B,91,81)	CKSRYB105K10	
C 1334	(B,84,44)	CKSRYB103K50		C 1726	(B,91,80)	CKSRYB105K10	
C 1335	(B,83,44)	CKSRYB105K10		C 1727	(B,91,82)	CKSRYB105K10	
C 1336	(B,85,50)	CKSRYB103K50		C 1728	(B,91,85)	CKSRYB105K10	
C 1337	(A,78,51)	CKSSYB104K16		C 1729	(B,91,83)	CKSRYB105K10	
C 1339	(B,89,46)	CKSSYB103K16		C 1733	(B,90,89)	CKSRYB105K10	
C 1345	(A,108,69)	CKSRYB102K50		C 1734	(B,88,91)	CKSRYB105K10	
C 1346	(A,107,66)	CEVW100M16		C 1735	(B,90,91)	CKSRYB105K10	
C 1347	(B,79,38)	CCSSCH180J50		C 1738	(B,86,78)	CKSRYB105K10	
C 1349	(B,91,63)	CKSSYB681K50		C 1751	(B,69,68) 4.7 uF	CCG1201	C
C 1471	(B,164,62)	CKSRYB104K16		C 1752	(B,65,70) 4.7 uF	CCG1201	
C 1472	(B,169,66)	CKSSYB102K50		C 1761	(A,91,106)	CKSSYB104K10	
C 1473	(B,169,59)	CKSRYB104K16		C 1763	(A,80,110)	CKSSYB104K10	
C 1474	(B,165,53)	CKSRYB103K50		C 1765	(A,81,106) 10 uF	DCH1165	
C 1475	(B,169,55)	CKSRYB823K16		C 1766	(B,83,108)	CCSSCH100D50	
C 1511	(B,81,67)	CKSRYB104K16		C 1767	(B,81,109)	CKSRYB474K10	
C 1521	(B,31,11)	CCSRCH101J50		C 1769	(B,91,100)	CKSRYB105K10	
C 1522	(B,34,11)	CCSRCH101J50		C 1770	(B,92,99)	CKSRYB105K10	
C 1526	(A,46,13) 10 uF	DCH1201		C 1771	(B,92,97)	CKSRYB105K10	
C 1527	(A,45,12)	CKSRYB104K16		C 1772	(A,86,96)	CKSSYB104K16	
C 1531	(A,54,14) Capacitor	CEVW220M16		C 1773	(A,86,100) Capacitor	CEVW470M16	D
C 1622	(A,58,27)	CKSSYB103K16		C 1774	(B,84,94)	CCSSCH100D50	
C 1623	(A,60,32)	CKSQYB106K6R3		C 1775	(A,80,96) 10 uF	DCH1165	
C 1624	(A,62,34)	CKSSYB104K16		C 1776	(B,77,95)	CKSRYB105K10	
C 1641	(B,111,77) 10 uF	DCH1201		C 1777	(A,77,104)	CKSSYB222K50	
C 1642	(B,107,78) 10 uF	DCH1201		C 1778	(B,75,95)	CKSRYB105K10	
C 1643	(B,108,81)	CCSRCH221J50		C 1779	(A,79,98)	CCSQCH223J50	
C 1644	(B,106,83)	CCSRCH221J50		C 1780	(A,79,100)	CCSQCH223J50	
C 1645	(B,97,84)	CKSSYB104K16		C 1781	(B,74,103) (UC)	CKSRYB105K10	
C 1646	(B,104,79)	CKSRYB103K50		C 1782	(B,93,106) (UC)	CKSRYB105K10	
C 1647	(B,99,78)	CKSRYB104K16		C 1783	(B,74,102) (UC)	CKSRYB105K10	
C 1648	(B,104,81)	CCSRCH151J50		C 1784	(B,93,105) (UC)	CKSRYB105K10	E
C 1649	(B,98,82)	CCSRCH151J50		C 1785	(B,74,100)	CKSRYB105K10	
C 1650	(B,105,86)	CKSQYB225K10		C 1786	(B,74,105)	CKSRYB105K10	
C 1691	(B,83,78)	CKSRYB105K10		C 1787	(B,74,104)	CKSRYB105K10	
C 1692	(B,81,78)	CKSRYB105K10		C 1788	(B,74,107)	CKSRYB105K10	
C 1693	(B,84,78)	CKSRYB105K10		C 1789	(B,77,108)	CKSQYB225K10	
C 1694	(A,89,81)	CEVW100M16		C 1799	(B,47,116) 10 uF	DCH1165	
C 1695	(A,86,81)	CKSRYB104K50		C 1800	(B,47,119) 10 uF	DCH1165	
C 1698	(B,74,80)	CKSRYB104K50		C 1831	(B,150,114) (UC)	CKSSYB472K50	
C 1699	(B,74,81)	CKSRYB104K50		C 1832	(B,148,130) (UC)	CKSRYB104K50	
C 1700	(B,74,82)	CKSRYB104K50		C 1861	(B,165,9)	CCSSCH471J50	F
C 1701	(B,74,84)	CKSRYB104K50		C 1941	(B,33,59) 4.7 uF	CCG1222	
C 1704	(B,74,87)	CKSRYB104K50		C 1943	(B,25,59) 4.7 uF	CCG1201	
C 1705	(B,75,89)	CKSRYB104K50		C 2001	(A,52,90)	CCSSCH330J50	

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Circuit Symbol and No.**Part No.****Circuit Symbol and No.****Part No.**

C 2002 (A,41,87)
 C 2003 (A,54,88)
 C 2004 (A,57,88)

CKSRYB103K50
 CCSSCH6R0D50
 CKSSYB103K16

C 2246 (B,103,26)
 C 2247 (B,101,26)
 C 2248 (B,102,20)

CKSRYB104K16
 CKSQYB106K6R3
 CKSSYB104K10

A

C 2005 (A,47,83)
 C 2006 (A,44,83)
 C 2009 (A,57,84)
 C 2010 (A,45,83)
 C 2012 (A,58,84)

CKSSYB104K10
 CKSSYB104K10
 CKSSYB103K16
 CKSSYB104K10
 CKSSYB103K16

C 2360 (B,161,119) 22 uF
 C 2424 (B,46,71) (UC)
 C 2425 (B,59,69) (UC)
 C 2663 (B,160,121) 47 uF

DCH1256
 CCSRCH101J50
 CCSRCH101J50
 CCG1251

C 2013 (A,45,82)
 C 2014 (A,42,83)
 C 2015 (A,41,84) 10 uF
 C 2016 (A,39,84)
 C 2017 (A,51,84)

CKSSYB103K16
 CKSSYB103K16
 CCG1192
 CKSSYB223K16
 CKSSYB103K16

IF Unit**Consists of****Keyboard PCB****IF PCB****SD PCB**

B

C 2018 (A,49,85)
 C 2019 (A,50,83)
 C 2020 (A,53,80)
 C 2021 (A,44,64)
 C 2022 (A,56,80)

CKSRYB105K10
 CKSSYB223K16
 CKSSYB223K16
 CCSRCH680J50
 CKSRYB224K16

BEG

Unit Number : CWN5866(UC)
 : CWN5869(AU)

Unit Name : IF Unit

MISCELLANEOUS

C 2023 (A,56,79)
 C 2024 (A,34,81) 10 uF
 C 2025 (A,55,76)
 C 2026 (A,37,80)
 C 2027 (A,58,75)

CKSSYB104K10
 CCG1192
 CKSRYB105K10
 CKSSYB104K10
 CKSSYB472K25

IC 101 (A,165,19) IC(AU)
 IC 151 (A,15,99) IC
 IC 152 (B,14,108) IC
 IC 153 (B,25,94) IC
 IC 187 (A,28,88) IC
 IC 191 (A,31,88) IC

RS-470
 GRF3I-0336S
 BA10358F
 BU33TA2WNVX
 TC7SH08FUS1
 TC7SH08FUS1

C

C 2028 (A,58,76)
 C 2029 (A,34,79)
 C 2030 (A,39,81)
 C 2031 (A,33,79)
 C 2032 (A,58,73)

CKSSYB472K25
 CCSSCH101J50
 CKSSYB104K10
 CKSSYB103K16
 CCSSCH8R0D50

IC 195 (A,33,88) IC
 IC 221 (A,168,91) IC
 IC 223 (A,164,91) L-MOS And Gate
 IC 251 (A,119,103) Logic IC
 IC 252 (A,110,108) IC

TC7SH08FUS1
 TC7SET04FUS1
 TC7SET08FUS1
 TC7WH126FK
 TPD1018F

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C 2033 (A,55,74)
 C 2034 (A,34,74)
 C 2036 (A,36,69)
 C 2037 (A,58,68)
 C 2038 (A,39,63)

CKSSYB104K10
 CCSSCH820J50
 CKSRYB474K10
 CCSSCH8R0D50
 CKSSYB104K10

IC 381 (A,152,77) IC
 IC 382 (A,161,94) IC
 Q 151 (B,26,105) Transistor
 Q 201 (A,85,96) Transistor
 Q 202 (A,82,96) Transistor

BD9008F
 BD82001FVJ
 2SB1132
 LTC114EUB
 2SA1587

D

C 2041 (A,53,66) 2.2 uF
 C 2042 (A,40,63)
 C 2045 (A,52,65)
 C 2046 (A,44,66)
 C 2047 (A,50,65) 2.2 uF

CCG1205
 CKSSYB104K10
 CKSSYB104K10
 CKSSYB104K10
 CCG1205

Q 204 (A,88,87) Transistor
 Q 205 (A,82,105) Transistor
 Q 261 (B,50,97) Chip Transistor
 Q 262 (B,44,98) Chip Transistor
 Q 263 (A,63,90) Transistor(UC)

LTC143EUB
 2SD1760F5
 HN1C03FU
 HN1C03FU
 LSA1576UB

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C 2048 (A,49,66)
 C 2049 (A,38,68)
 C 2050 (A,46,83)
 C 2051 (A,38,82)
 C 2074 (B,20,93) (UC)

CKSSYB104K10
 CKSSYB102K50
 CKSSYB223K16
 CCSSCJ3R0C50
 CCSSCK2R0C50

Q 264 (B,43,92) Chip Digital Transistor
 D 202 (A,89,94) Diode
 D 203 (A,88,91) Diode
 D 204 (A,86,113) Diode
 D 233 (A,159,113) Diode

LTA124EUB
 RB551V-30
 RKZ6.8KG(B2)
 RKZ11KG(B2)
 DZ2S180C

E

C 2075 (A,41,89) (UC)
 C 2101 (B,46,33)
 C 2221 (A,107,29)
 C 2222 (A,106,28)
 C 2223 (A,105,28)

CCSSCK1R0C50
 CKSRYB103K50
 CKSQYB106K6R3
 CKSSYB104K10
 CKSSYB104K10

D 234 (A,159,112) Diode
 D 235 (A,165,113) Diode
 D 236 (B,164,112) Diode
 D 237 (A,162,101) Diode
 D 266 (A,67,96) Diode

DZ2S180C
 DZ2S180C
 RSB12JS2
 1SR154-400
 1SS352

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C 2224 (A,104,30)
 C 2226 (A,102,23)
 C 2227 (A,104,23)
 C 2228 (A,98,16)
 C 2230 (A,108,15)

CKSQYB106K6R3
 CKSQYB106K6R3
 CKSSYB104K10
 CKSSYB104K10
 CKSSYB104K10

D 271 (B,36,105) Diode
 D 272 (B,39,123) Diode
 D 381 (A,159,71) Diode
 D 2901 (A,6,74) Chip LED
 D 2902 (A,11,14) Chip LED

DZ2S180C
 DZ2S180C
 RB055LA-40
 NSSM038A-7306
 NSSM038A-7306

F

C 2232 (A,111,23) 2.2 uF
 C 2235 (B,112,26)
 C 2239 (B,116,23)
 C 2240 (B,115,21)
 C 2241 (B,116,19)

CCG1205
 CKSSYB104K10
 CKSSYB104K10
 CKSSYB105K6R3
 CKSSYB105K6R3

L 151 (B,20,99) Inductor
 L 152 (A,22,97) Inductor

CTF1736
 CTF1736

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5		6		7		8	
<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
L 153	(A,20,98) Inductor	CTF1736		R 116	(A,162,18) (AU)	RS1/16SS470J	
L 157	(A,22,112) Inductor	LCYC1R0K2125		R 117	(B,145,83)	RS1/16SS0R0J	
L 158	(A,20,108) Inductor	CTF1736		R 118	(B,142,64)	RS1/16SS0R0J	
L 211	(A,27,81) Inductor	CTF1708		R 119	(B,120,26)	RS1/16SS0R0J	A
L 212	(A,30,81) Inductor	CTF1708		R 120	(B,124,46)	RS1/16SS0R0J	
L 213	(A,32,81) Inductor	CTF1708		R 121	(B,159,93)	RS1/16SS0R0J	
L 234	(B,164,109) Choke Coil	CTH1319		R 122	(A,145,11)	RS1/10SR0R0J	
L 381	(A,160,81) Coil	CTH1475		R 123	(A,145,16)	RS1/16SS0R0J	
L 2901	(B,6,86) Inductor	CTF1750		R 124	(A,143,16)	RS1/16SS0R0J	
L 2902	(B,6,88) Inductor	CTF1751		R 131	(A,55,74)	RS1/10SR0R0J	
L 2903	(B,6,90) Inductor	CTF1752		R 141	(A,134,10)	RS1/10SR0R0J	
X 151	(B,17,96) TCXO 16.367 667 MHz	CWX3728		R 142	(A,56,22)	RS1/10SR0R0J	
F 151	(A,14,107) Filter	CTF1706		R 150	(A,105,12)	RS1/10SR0R0J	
F 231	(A,167,111) EMI Filter	CCG1067		R 151	(A,20,94)	RS1/16SS151J	B
F 232	(A,163,111) EMI Filter	CCG1067		R 152	(A,17,104)	RS1/16SS2R7J	
F 233	(A,160,110) EMI Filter	CCG1060		R 153	(A,18,94)	RS1/16SS0R0J	
F 261	(A,56,102) EMI Filter	CCG1082		R 154	(A,16,94)	RS1/16SS0R0J	
F 262	(B,37,103) EMI Filter	CCG1082		R 155	(A,14,94)	RS1/16SS0R0J	
S 3001	(A,6,8) Switch	CSN1057		R 156	(A,13,94)	RS1/16SS101J	
S 3003	(A,12,63) Encoder (VOLUME POWER OFF)	CSD1168		R 157	(A,12,94)	RS1/16SS101J	
S 3004	(A,11,43) Push Switch	CSG1196		R 158	(A,14,103)	RS1/16SS0R0J	
S 3005	(A,10,82) Push Switch	CSG1196		R 159	(A,11,94)	RS1/16SS101J	
S 3006	(A,11,23) Push Switch	CSG1196		R 160	(A,13,110)	RS1/16SS0R0J	
S 3007	(A,11,37) Push Switch	CSG1196		R 161	(B,13,99)	RS1/16SS472J	
S 3008	(A,10,89) Push Switch	CSG1196		R 162	(B,13,98)	RS1/16SS203J	C
△ P201	(B,76,103) Fuse 1 A	CEK1254		R 165	(A,26,107)	RN1/16SC10R0D	
P 241	(B,149,125) Poly Switch	MINISMDC075F/24		R 166	(A,24,107)	RN1/16SSE1501D	
P 261	(B,49,126) Poly Switch	MINISMDC075F/24		R 167	(A,24,108)	RN1/16SSE2402D	
P 262	(B,39,126) Poly Switch	MINISMDC075F/24		R 168	(A,22,108)	RN1/16SSE3302D	
P 263	(B,44,128) Poly Switch	MINISMDC075F/24		R 170	(B,14,103)	RN1/16SSE4702D	
VA261	(B,34,103) Varistor	AVR-M1608C270KT2AB		R 171	(B,10,110)	RN1/16SSE4702D	
VA262	(B,32,103) Varistor	AVR-M1608C270KT2AB		R 172	(B,18,104)	RS1/16SS432J	
VA263	(A,28,111) Varistor	AVR-M1608C270KT2AB		R 173	(A,19,110)	RS1/16SS0R0J	
VA264	(A,28,114) Varistor	AVR-M1608C270KT2AB		R 174	(B,10,106)	RN1/16SSE1002D	
CN101	(B,110,9) Connector	CKS6299		R 175	(B,10,107)	RN1/16SSE2202D	
CN103	(B,151,8) Connector	CKS5732		R 176	(B,10,108)	RN1/16SSE3302D	D
CN201	(A,70,121) Connector	CKS4822		R 177	(B,16,113)	RS1/16SS103J	
CN231	(A,164,123) Connector	CKS5867		R 178	(B,15,114)	RS1/16SS102J	
CN251	(A,119,128) Connector	CKS6155		R 179	(B,22,104)	RS1/16SS102J	
CN261	(A,44,126) Connector	CKS6262		R 180	(B,25,96)	RS1/16SS103J	
CN291	(A,42,9) Connector	CKS6261		R 183	(B,27,96)	RS1/16SS0R0J	
CN2901	(B,10,87) Connector	CKS5749		R 184	(B,31,100)	RS1/10SR0R0J	
CN2902	(B,13,41) Connector	CKS5856		R 185	(A,14,111)	RS1/16SS0R0J	
CN5951	(A,11,10) Connector	CKS6195		R 186	(A,15,111)	RS1/16SS0R0J	
CN5952	(B,11,21) Connector	CKS6302		R 187	(A,29,83)	RS1/16SS0R0J	
JA 151	(A,16,126) Connector	CKS5702		R 190	(A,28,90)	RS1/16SS104J	
JA 241	(A,140,124) Connector	CKS4124		R 191	(A,32,83)	RS1/16SS0R0J	E
JA 2901	(B,6,93) Antenna	CTX1110		R 194	(A,31,90)	RS1/16SS104J	
				R 195	(A,35,84)	RS1/16SS0R0J	
				R 198	(A,33,90)	RS1/16SS104J	
				R 199	(B,22,98)	RS1/16SS0R0J	
				R 202	(A,82,99)	RS1/16SS103J	
				R 203	(A,84,99)	RS1/16SS512J	
				R 207	(A,84,93)	RS1/4SA681J	
				R 211	(A,27,84)	RS1/16SS101J	
				R 212	(A,30,84)	RS1/16SS101J	
				R 213	(A,33,84)	RS1/16SS101J	
				R 214	(A,17,96)	RS1/16SS101J	F
				R 215	(A,16,95)	RS1/16SS101J	
				R 216	(A,14,95)	RS1/16SS101J	
<u>RESISTORS</u>							
R 102	(B,106,18)	RS1/16SS182J					
R 103	(B,104,17)	RS1/16SS221J					
R 104	(B,119,20)	RS1/16SS0R0J					
R 106	(B,117,16)	RS1/16SS0R0J					
R 107	(B,138,16)	RS1/16SS0R0J					
R 108	(B,136,14)	RS1/16SS0R0J					
R 112	(B,119,16)	RS1/16SS0R0J					
R 115	(B,102,15)	RS1/16SS331J					

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Circuit Symbol and No.**Part No.****Circuit Symbol and No.****Part No.**

R 222 (A,167,88) RS1/16SS0R0J
 R 223 (A,168,93) RS1/16SS0R0J
 R 226 (A,165,88) RS1/16SS0R0J

R 5953 (B,10,15)
 R 5954 (B,12,13)
 R 5955 (A,12,22)
 R 5956 (A,16,21)
 R 5957 (A,17,21)

RS1/16SS330J
 RS1/16SS0R0J
 RS1/16SS0R0J
 RS1/16SS330J
 RS1/16SS330J

A R 231 (A,167,108) RS1/10SR0R0J
 R 232 (A,163,108) RS1/10SR0R0J
 R 233 (A,165,111) RS1/10SR0R0J
 R 241 (B,150,120) RS1/16SS102J
 R 242 (B,149,120) RS1/16SS102J

R 5958 (B,10,10)

RS1/16SS330J

CAPACITORS

R 246 (A,118,107) RS1/16SS0R0J
 R 249 (A,122,107) RS1/16SS0R0J
 R 251 (A,118,99) RS1/16SS221J
 R 252 (A,120,100) RS1/10SR105J
 R 254 (A,116,117) RS1/8SQ102J

C 102 (A,162,22) (AU)
 C 131 (A,48,18)
 C 151 (B,17,98)
 C 152 (B,20,97)
 C 153 (A,22,100)
 C 154 (A,19,100)

CKSRYB104K50
 CKSRYB103K50
 CKSSYB103K16
 CKSSYB102K50
 CKSSYB104K10
 CCSSCH101J50

B R 255 (A,118,117) RS1/8SQ102J
 R 256 (A,120,117) RS1/8SQ102J
 R 257 (A,122,117) RS1/8SQ102J
 R 258 (A,115,103) RS1/16SS0R0J
 R 259 (A,110,120) RS1/8SQ0R0J

C 156 (A,22,98) 10 uF
 C 157 (A,19,98)
 C 158 (A,19,101)
 C 159 (A,18,104)
 C 160 (A,16,104)

CCG1244
 CKSSYB104K10
 CCSSCH470J50
 CKSSYB105K6R3
 CKSSYB104K10

R 261 (A,49,98) RS1/10SR821J
 R 262 (A,47,98) RS1/10SR821J
 R 263 (A,54,98) RS1/10SR821J
 R 264 (A,52,98) RS1/10SR821J
 R 265 (B,46,99) RS1/10SR223J

C 161 (A,15,104)
 C 162 (A,14,105)
 C 163 (A,11,102)
 C 164 (B,13,101)
 C 167 (A,15,114)

CCSSCH470J50
 CCSSCH101J50
 CCSSCH470J50
 CCSSCH470J50
 CCSSCH101J50

C R 266 (B,41,99) RS1/10SR223J
 R 267 (B,53,99) RS1/10SR223J
 R 268 (B,48,99) RS1/10SR223J
 R 275 (A,59,93) (UC) RS1/16SS103J
 R 276 (A,61,104) RS1/16SS102J

C 168 (A,24,109)
 C 169 (B,20,105)
 C 170 (A,23,113)
 C 171 (B,17,104)
 C 172 (A,19,112)

CKSSYB104K10
 CKSSYB103K16
 CCSSCH101J50
 CCSSCH101J50
 CKSSYB102K50

R 277 (A,59,104) RS1/16SS102J
 R 278 (A,68,105) RS1/16SS102J
 R 279 (A,63,98) RS1/16SS153J
 R 280 (A,61,90) (UC) RS1/16SS103J
 R 281 (A,62,92) (UC) RS1/10SR0R0J

C 173 (A,20,112)
 C 174 (B,18,107)
 C 175 (A,20,109)
 C 176 (B,28,94)
 C 177 (B,23,95)

CKSSYB103K16
 CKSSYB104K10
 CKSSYB104K10
 CKSRYB105K10
 CKSRYB105K10

D R 282 (A,64,87) (UC) RS1/16SS102J
 R 283 (A,64,88) (UC) RS1/16SS103J
 R 284 (A,65,97) RS1/16SS0R0J
 R 285 (B,50,93) RS1/10SR472J
 R 286 (B,51,93) RS1/10SR472J

C 187 (A,29,84)
 C 191 (A,31,84)
 C 195 (A,34,84)
 C 203 (A,88,112)
 C 205 (A,80,112)

CKSSYB104K16
 CKSSYB104K16
 CKSSYB104K16
 CKSSYB103K16
 CKSSYB103K16

R 287 (B,43,95) RS1/10SR472J
 R 288 (B,44,95) RS1/10SR472J
 R 289 (A,62,87) (AU) RS1/16SS104J
 R 385 (A,150,81) RS1/10SR471J
 R 386 (A,151,83) RS1/10SR6202D
 R 387 (A,153,82) RS1/10SR4701D

C 206 (A,81,116)
 C 221 (A,160,89)
 C 222 (A,166,91)
 C 223 (A,161,98)
 C 224 (A,155,106)

CEVW101M16
 CKSRYB105K10
 CKSSYB104K10
 CKSRYB103K50
 CEVW101M16

E R 389 (A,153,81) RS1/10SR1202D
 R 390 (A,155,82) RS1/16SS183J
 R 391 (A,147,78) RS1/16SS513J
 R 393 (A,152,61) RS1/8SQ0R0J
 R 394 (A,148,79) RS1/16SS0R0J

C 225 (A,165,89)
 C 241 (B,148,121)
 C 242 (B,150,121)
 C 251 (A,117,103)
 C 254 (A,116,111)

CKSSYB104K10
 CKSSYB102K50
 CKSSYB102K50
 CKSRYB104K16
 CKSRYB103K50

R 396 (A,164,97) RS1/4SA151J
 R 397 (A,166,97) RS1/4SA151J
 R 398 (A,168,97) RS1/4SA151J
 R 405 (B,71,18) (UC) RS1/10SR0R0J
 R 408 (B,80,18) (AU) RS1/10SR0R0J
 R 3031 (B,14,48) RS1/16SS122J

C 255 (A,116,115)
 C 256 (A,105,108)
 C 257 (A,106,108)
 C 258 (A,111,103)
 C 261 (A,49,94) 10 uF

CKSRYB103K50
 CKSSYB103K25
 CKSRYB102K50
 CKSRYB104K50
 DCH1165

F R 3037 (B,14,76) RS1/16SS242J
 R 3043 (B,15,32) RS1/16SS682J
 R 3044 (B,16,34) RS1/16SS362J
 R 5951 (A,9,21) RS1/16SS330J
 R 5952 (A,10,21) RS1/16SS330J

C 262 (A,47,94) 10 uF
 C 263 (A,54,94) 10 uF
 C 264 (A,52,94) 10 uF
 C 271 (A,62,102)
 C 273 (A,65,99)

DCH1165
 DCH1165
 DCH1165
 CKSRYB103K50
 CKSRYB102K50

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<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
C 274	(A,62,88) (UC)	CKSSYB104K10		R 1104	(A,36,36)	RS1/16SS511J	
C 275	(B,53,128)	CKSRYB103K50		R 1105	(A,42,44)	RS1/16SS4300F	
C 276	(B,37,129)	CKSRYB103K50		R 1106	(A,45,39)	RS1/16SS5600F	
C 382	(A,166,70) 220 uF/6.3 V	CCH1688		R 1109	(A,34,43)	RS1/16SS3R3J	A
C 383	(A,154,82)	CKSSYB153K16		R 1110	(A,41,43)	RS1/16SS3R3J	
C 384	(A,154,72) 4.7 uF	CCG1222					
C 385	(A,155,80)	CCSSCH220J50		R 1111	(A,38,39)	RS1/10SR1R5J	
C 386	(A,154,74)	CKSRYB105K16		R 1112	(A,38,38)	RS1/10SR1R5J	
C 387	(A,153,67) 100 uF/16 V	CCH1565		R 1113	(A,49,46)	RS1/10SR3R3J	
C 388	(A,146,67) 100 uF/16 V	CCH1565		R 1114	(A,48,46)	RS1/10SR3R9J	
				R 1115	(A,41,38)	RS1/10SR1R5J	
C 2901	(A,5,78)	CKSRYB104K50					
C 2902	(A,5,71)	CKSRYB104K50		R 1116	(A,41,39)	RS1/10SR1R5J	
C 2903	(B,7,13)	CKSRYB104K50		R 1117	(A,48,43)	RS1/10SR3R9J	
C 2904	(B,14,12)	CKSRYB104K50		R 1118	(A,49,43)	RS1/10SR3R9J	
C 5958	(B,12,15)	CKSRYB104K50		R 1201	(A,16,36)	RS1/10SR221J	B
				R 1202	(A,17,35)	RS1/16SS221J	

C

Unit Number : YWX5025

Unit Name : DVD Core Unit

MISCELLANEOUS

IC 1002	(B,21,41) Regulator IC	S-1133B50-U5		R 1215	(B,8,28)	RS1/16SS1R0J	
IC 1003	(B,35,23) IC	S-1200B50-M5		R 1216	(B,8,24)	RS1/16SS1R0J	
IC 1004	(B,25,11) IC	NJM2885DL1-33		R 1217	(B,8,25)	RS1/16SS1R0J	
IC 1005	(B,19,21) IC	R1232D121B		R 1218	(B,8,26)	RS1/16SS1R0J	
IC 1201	(A,15,29) IC	BD8231EFV		R 1222	(B,26,39)	RS1/16SS271J	C
*IC1401	(B,63,36) Flash ROM Unit	CWW3159		R 1300	(B,39,24)	RS1/16SS0R0J	
*IC1402	(B,50,36) Flash ROM Unit	CWW3160		R 1401	(B,63,49)	RS1/16SS221J	
IC 1480	(B,59,13) SDRAM(64M)	IS42S16400F-7TL		R 1402	(B,70,27)	RS1/16SS104J	
IC 1501	(A,60,20) IC	MN2DS0018MA		R 1405	(B,56,24)	RS1/16SS104J	
IC 1801	(B,37,16) D/A Converter	PCM1753DBQ		R 1406	(B,54,25)	RS1/16SS104J	
Q 1101	(A,35,39) Transistor	LSC4081UB		R 1480	(B,52,21)	RAB4CQ560J	
Q 1102	(A,46,42) Transistor	LSC4081UB		R 1481	(B,56,21)	RAB4CQ560J	
Q 1103	(A,38,45) Transistor	2SB1132		R 1482	(B,61,21)	RAB4CQ560J	
Q 1104	(A,45,49) Transistor	2SB1132		R 1483	(B,64,21)	RAB4CQ560J	
				R 1484	(B,67,21)	RAB4CQ560J	D
L 1003	(B,22,26) Inductor	CTF1677		R 1485	(B,50,5)	RAB4CQ560J	
L 1004	(B,14,17) Inductor	CTF1678		R 1486	(B,55,5)	RAB4CQ560J	
L 1512	(A,57,5) Inductor	CTF1743		R 1487	(B,64,5)	RAB4CQ560J	
L 1902	(B,5,8) Inductor	CTF1487		R 1488	(B,68,5)	RAB4CQ560J	
L 1903	(B,12,11) Inductor	CTF1558		R 1489	(B,59,5)	RS1/16SS560J	
L 1904	(B,46,19) Inductor	CTF1473		R 1490	(B,50,21)	RS1/16SS560J	
X 1501	(B,43,7) Oscillator 27.000 MHz	CSS1768		R 1501	(B,46,7)	RS1/16SS122J	
EF1001	(B,5,12) Chip EMI Filter	DTF1106		R 1503	(B,45,8)	RS1/16SS105J	
EF1002	(B,11,13) Chip EMI Filter	DTL1106		R 1504	(B,45,13)	RS1/16SS120J	
				R 1505	(A,43,13)	RS1/16SS101J	
CN1101	(A,66,49) Connector	CKS5775		R 1506	(A,37,14)	RS1/16SS101J	E
CN1201	(A,16,44) Connector	CKS6003		R 1507	(A,44,14)	RS1/16SS101J	
CN1901	(A,21,7) Connector	CKS6025		R 1508	(A,43,15)	RS1/16SS221J	
				R 1509	(A,63,35)	RS1/16SS102J	
				R 1510	(A,64,35)	RS1/16SS102J	

RESISTORS

R 1002	(B,18,27)	RS1/16SS101J		R 1511	(B,46,13)	RS1/16S0R0J	
R 1004	(A,29,27)	RS1/16SS4702D		R 1512	(A,58,5)	RS1/16SS101J	
R 1007	(A,29,26)	RS1/16SS6801D		R 1513	(A,66,35)	RS1/16SS103J	
R 1019	(B,15,9)	RS1/16SS101J		R 1514	(A,68,35)	RS1/16SS183J	
R 1021	(A,27,15)	RS1/16SS0R0J		R 1516	(A,65,36)	RS1/16SS103J	
R 1025	(B,19,11)	RS1/16SS101J		R 1517	(A,76,16)	RS1/16SS103J	F
R 1027	(A,27,19)	RS1/16SS101J		R 1518	(A,74,24)	RS1/16SS103J	
R 1101	(A,35,36)	RS1/16SS104J		R 1519	(A,70,34)	RS1/16SS102J	
R 1102	(A,43,42)	RS1/16SS104J		R 1522	(A,65,38)	RS1/16SS104J	
R 1103	(A,34,41)	RS1/16SS391J		R 1523	(A,66,37)	RS1/16SS221J	

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Circuit Symbol and No.Part No.Circuit Symbol and No.Part No.

R 1524 (A,64,37) RS1/16SS472J
 R 1525 (A,71,34) RS1/16SS103J
 R 1526 (A,67,34) RS1/16SS103J
 R 1527 (B,77,29) RS1/16SS682J
 R 1528 (A,78,20) RS1/16SS103J

R 1529 (A,76,18) RS1/16SS103J
 R 1530 (A,77,20) RS1/16SS103J
 R 1531 (A,75,24) RS1/16SS103J
 R 1533 (A,75,29) RS1/16SS104J
 R 1534 (A,78,30) RS1/16SS221J

R 1535 (B,70,34) RS1/16SS104J
 R 1536 (A,78,31) RS1/16SS104J
 R 1537 (A,73,35) RS1/16SS104J
 R 1538 (A,61,4) RS1/16SS104J
 R 1539 (A,77,23) RS1/16SS104J

R 1540 (A,73,32) RS1/16SS221J
 R 1541 (A,75,32) RS1/16SS221J
 R 1542 (A,77,29) RS1/16SS103J
 R 1544 (B,77,28) RS1/16SS181J

R 1546 (B,75,29) RS1/16SS682J
 R 1601 (A,42,25) RS1/16SS123J
 R 1602 (A,44,25) RS1/16SS123J
 R 1603 (A,43,30) RN1/16SE1002D
 R 1604 (A,50,35) RS1/16SS105J

R 1605 (A,49,37) RS1/16SS105J
 R 1670 (A,34,21) RS1/16SS1002D
 R 1671 (A,36,21) RS1/16SS2402D
 R 1672 (A,45,19) RS1/16SS2000D
 R 1674 (A,45,20) RS1/16SS3002D

R 1801 (B,35,6) RS1/16SS104J
 R 1802 (B,33,6) RS1/16SS104J
 R 1803 (B,35,11) RS1/16SS821J
 R 1804 (B,34,11) RS1/16SS821J

CAPACITORS

C 1001 (B,36,21) CKSRYB105K10
 C 1003 (B,18,44) CKSSYB104K16
 C 1004 (B,24,40) 4.7 uF CCG1201
 C 1005 (B,32,23) CKSRYB105K16
 C 1008 (B,20,31) 10 uF DCH1201

C 1009 (B,18,31) 10 uF DCH1201
 C 1010 (B,26,18) CKSQYB225K10
 C 1011 (B,22,18) CKSRYB105K10
 C 1013 (B,15,25) 10 uF DCH1201
 C 1014 (B,13,25) 10 uF DCH1201

C 1015 (B,7,8) CKSSYB102K50
 C 1016 (B,12,10) CKSSYB102K50
 C 1018 (A,28,28) CKSSYB104K10
 C 1019 (A,10,17) CKSSYB104K10
 C 1021 (B,34,4) CCSRCH681J50

C 1022 (A,23,21) CCSRCH681J50
 C 1101 (B,31,40) 10 uF CCG1192
 C 1104 (A,34,42) CKSSYB104K10
 C 1105 (A,42,45) CKSSYB104K10
 C 1106 (A,37,48) CKSSYB103K16

C 1107 (A,41,49) CKSSYB103K16
 C 1108 (A,74,42) CKSSYB103K16
 C 1109 (A,56,41) CKSRYB224K16
 C 1110 (A,71,42) CKSSYB103K16

C 1111 (A,61,39)
 C 1112 (B,40,39)
 C 1113 (B,36,38)
 C 1201 (B,12,34)
 C 1204 (A,8,24)
 C 1205 (A,13,23)

C 1207 (A,22,25)
 C 1208 (A,15,36)
 C 1209 (B,10,25)
 C 1210 (B,6,23)
 C 1211 (B,9,22)

C 1401 (B,63,48)
 C 1403 (B,69,23)
 C 1404 (B,58,25)
 C 1408 (B,47,25)
 C 1409 (B,47,23)

C 1480 (B,47,21)
 C 1481 (B,49,23)
 C 1482 (B,54,21)
 C 1484 (B,59,20)
 C 1485 (B,69,21)

C 1487 (B,58,4)
 C 1488 (B,52,5)
 C 1489 (B,45,20)
 C 1490 (B,45,23)
 C 1501 (B,72,9)

C 1502 (A,35,32)
 C 1503 (A,60,4)
 C 1504 (A,51,5)
 C 1505 (A,53,5)
 C 1506 (A,55,5)

C 1507 (A,62,5)
 C 1508 (A,66,5)
 C 1509 (A,69,5)
 C 1510 (B,46,5)
 C 1511 (A,46,9)

C 1512 (B,43,10)
 C 1513 (B,74,12)
 C 1514 (A,46,13)
 C 1515 (A,45,15)
 C 1516 (A,75,15)

C 1517 (A,74,16)
 C 1518 (A,75,22)
 C 1519 (A,74,26)
 C 1520 (A,75,30)
 C 1521 (A,60,37)

C 1522 (A,65,34)
 C 1523 (A,68,37)
 C 1524 (A,69,37)
 C 1526 (A,68,37)
 C 1528 (A,78,29)

C 1601 (A,44,29)
 C 1602 (A,42,24)
 C 1603 (A,44,27)
 C 1604 (A,41,27)
 C 1605 (A,43,27)

C 1606 (A,41,23)
 C 1607 (A,41,35)
 C 1608 (A,43,36)
 C 1609 (A,48,35)

CKSRYB224K16
 CKSYB226K6R3
 CKSYB226K6R3
 CEVW101M16
 CKSSYB222K50
 CKSSYB104K16

CKSSYB104K16
 CKSSYB103K16
 CKSSYB104K16
 CKSSYB104K16
 CKSSYB104K16
 CKSYB475K16

CKSSYB103K16
 CKSSYB104K10
 CKSQYB475K6R3
 CKSSYB104K10
 CKSQYB475K6R3

CKSSYB104K10
 CKSSYB104K10
 CKSSYB104K10
 CKSSYB104K10
 CKSSYB104K10

CKSSYB104K10
 CKSSYB104K10
 CKSQYB106K6R3
 CKSSYB102K50
 CKSQYB106K6R3

CKSQYB106K6R3
 CKSSYB104K10
 CKSSYB104K10
 CKSSYB104K10
 CKSSYB104K10

CKSSYB104K10
 CKSSYB104K10
 CKSSYB104K10
 CCSSCH120J50
 CKSSYB104K10

CCSSCH100D50
 CKSSYB104K10
 CKSSYB104K10
 CKSSYB104K10
 CKSSYB104K10

CKSSYB104K10
 CKSSYB104K10
 CKSSYB104K10
 CKSSYB104K10
 CKSSYB104K10

CKSSYB104K10
 CKSSYB104K10
 CKSSYB473K16
 CKSSYB103K16
 CCSSCH471J50

CKSSYB103K16
 CCSSCH101J50
 CCSSCH101J50
 CCSSCH680J50
 CCSSCH680J50

CKSSYB104K10
 CKSQYB106K6R3
 CKSRYB105K10
 CKSSYB104K10

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<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
C 1610	(A,50,37)	CKSSYB104K10		IC 3300	(A,55,21) IC	NJU6062V	
C 1611	(A,51,37)	CKSSYB104K10		IC 3360	(A,14,25) IC	AK4388VT	
C 1612	(A,52,34)	CKSSYB104K10		IC 4001	(A,47,95) IC	TT4421	
C 1613	(A,52,37)	CKSSYB104K10		IC 4203	(A,20,60) IC	S-80944CNMC-G9E	A
C 1614	(A,53,34)	CKSSYB104K10		IC 4204	(B,63,42) IC	LTC3412AEFE	
C 1615	(A,54,34)	CKSSYB104K10		IC 4205	(B,42,43) IC	LTC3412AEFE	
C 1616	(A,54,37)	CKSSYB104K10		IC 4206	(A,20,63) IC	S-80929CNMC-G8Z	
C 1617	(A,54,38)	CKSSYB104K10		IC 4207	(A,21,43) IC	TC7SH08FUS1	
C 1618	(A,56,34)	CCSSCH101J50		IC 4208	(B,22,128) Regulator IC	NJM2878F3-15	
C 1619	(A,57,34)	CKSSYB562K25		IC 4209	(A,20,104) Regulator IC	NJM2878F3-25	
C 1620	(A,58,34)	CKSSYB224K6R3		IC 4211	(A,19,72) Regulator IC	NJM2878F3-18	
C 1621	(A,57,37)	CKSSYB224K6R3		IC 4212	(A,26,44) IC	TC7SH08FUS1	
C 1622	(A,59,35)	CKSSYB333K16		IC 4216	(B,42,52) IC	S-80830CLMC-B6P	
C 1623	(A,45,35)	CKSRYB105K10		IC 4217	(A,24,55) IC	S-80835CLMC-B6U	
C 1624	(A,58,37)	CKSSYB104K10		IC 4219	(A,40,131) IC	BD6522F	B
C 1625	(A,56,37)	CKSSYB104K10		IC 4281	(B,67,49) IC	S-80844CLMC-B65	
C 1671	(A,44,17)	CKSSYB104K10		IC 4361	(A,26,137) IC	S-1132B33-M5	
C 1672	(A,45,18)	CKSSYB104K10		IC 4401	(A,71,95) IC	H5DU5162ETR-E3C	
C 1673	(A,45,22)	CKSSYB104K10		IC 4402	(A,71,68) IC	H5DU5162ETR-E3C	
C 1674	(A,43,21)	CKSSYB104K10		IC 4403	(A,46,77) Flash ROM Unit(Service)	CXX3406	
C 1676	(A,38,22)	CKSRYB105K10		IC 4404	(B,71,95) IC	H5DU5162ETR-E3C	
C 1801	(B,34,8)	CKSRYB105K10		IC 4405	(B,71,68) IC	H5DU5162ETR-E3C	
C 1802	(B,32,8)	CKSRYB105K10		IC 4406	(A,36,70) SRAM	CY62147EV30LL45BVA	
C 1803	(B,36,8)	CCSRCH182J50		IC 4407	(A,29,66) IC	TC7PA53FU	
C 1804	(B,31,7)	CCSRCH182J50		IC 4501	(B,41,122) IC	PEN002A	C
C 1805	(B,32,19)	CKSSYB104K10		IC 4621	(B,50,61) IC	PE9019A	
C 1806	(B,39,9) 10 uF	CCG1192		IC 4654	(B,31,81) IC	WM1616LGEFL	
C 1809	(B,43,16)	CKSSYB104K10		IC 4701	(B,25,52) IC	341S2162	
C 1934	(B,42,29)	CCSRCH680J50		IC 4901	(A,25,119) IC	TC90192XBG	
C 1954	(B,43,49)	CCSRCH470J50		IC 5451	(A,39,45) IC	BA2115F	
				IC 5508	(A,74,125) IC	OZ9990IRN	
				IC 5513	(A,28,81) IC	AK8859VN	
				IC 5514	(A,41,25) IC	NJM2125F	
				Q 3360	(B,12,27) Transistor	LTC114EUB	
				Q 4206	(A,42,140) Transistor	LTC114EUB	
				Q 4207	(B,58,80) Transistor	LTC114EUB	D
				Q 4209	(A,45,137) Transistor	2SB1689	
				Q 4210	(B,60,72) Transistor	LSA1576UB	
				Q 4211	(B,56,73) Transistor	LSC4081UB	
				Q 4212	(B,60,94) Transistor	LTC114EUB	
				Q 4214	(B,60,100) Transistor	LSA1576UB	
				Q 4216	(B,60,90) Transistor	LTC114EUB	
				Q 4217	(B,56,95) Transistor	LSA1576UB	
				Q 4218	(B,53,82) Transistor	LSA1576UB	
				Q 4701	(B,25,58) Transistor	LTC114TUB	
				Q 4903	(A,32,109) Transistor	2SC4617	
				Q 5117	(A,64,133) FET	SP8K22	E
				D 3300	(B,61,29) Diode	RKZ5.6KG(B2)	
				D 3301	(B,61,31) Diode	RKZ5.6KG(B2)	
				D 3302	(B,61,32) Diode	RKZ5.6KG(B2)	
				D 3303	(B,61,34) Diode	RKZ5.6KG(B2)	
				D 4201	(B,35,47) Diode	RB521G-30	
				D 4202	(B,64,36) Diode	RB521G-30	
				D 4361	(A,21,133) Diode	RB551V-30	
				D 5504	(A,67,134) Diode	RB160VA-40	
				D 5509	(A,70,132) Diode	RB551V-30	
				L 3300	(A,59,28) Ferrite Bead	CTF1528	F
				L 3301	(A,64,28) Ferrite Bead	CTF1528	
				L 3302	(A,59,30) Ferrite Bead	CTF1528	
				L 3303	(A,57,32) Ferrite Bead	CTF1528	

D

Unit Number :

Unit Name : **Connect PCB**

MISCELLANEOUS

S 101	(B,52,38) Spring Switch(HOME)	CSN1081
S 102	(B,12,23) Spring Switch(DSCSNS)	CSN1081
S 103	(B,22,10) Spring Switch(8SNS)	CSN1081
CN101	(B,41,25) Connector	CKS6063
CN701	(A,40,25) Connector	CKS6003

RESISTORS

R 101	(B,53,27)	RS1/16S101J
R 102	(B,16,29)	RS1/16S101J
R 103	(B,16,11)	RS1/16S101J

CAPACITORS

C 101	(B,51,23)	CKSRYB104K50
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F

Unit Number : **CXX3400(UC)**

: **CXX3403(AU)**

Unit Name : **CC Monitor Unit(Service)**

MISCELLANEOUS

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Circuit Symbol and No.**Part No.****Circuit Symbol and No.****Part No.**

L 3360 (A,13,34) Inductor LCTAW2R7J2520
 L 3361 (B,11,24) Inductor CTF1792
 L 4002 (B,56,99) Inductor CTF1736
 L 4005 (B,43,87) Inductor CTF1736
 L 4006 (B,52,104) Inductor CTF1736

L 5712 (B,38,139) Resistor RS1/16SS271J
 L 5713 (B,38,137) Resistor RS1/16SS271J
 L 5714 (B,37,139) Resistor RS1/16SS271J
 L 5715 (B,37,137) Resistor RS1/16SS271J
 TH3201 (A,78,33) Thermistor CCX1084

L 4007 (B,42,88) Inductor CTF1736
 L 4010 (B,36,91) Inductor CTF1736
 L 4011 (B,47,102) Inductor CTF1736
 L 4012 (B,47,104) Inductor CTF1736
 L 4013 (B,47,104) Inductor CTF1736

X 4001 (A,34,92) Oscillator 12.000 MHz CSS1708
 X 4002 (A,36,98) Oscillator 32.768 kHz CSS1777
 X 4652 (B,42,81) Oscillator 24.576 MHz CWX3635
 X 4901 (A,28,109) Oscillator 42.000 000 MHz CSS1779
 X 4902 (A,29,89) Oscillator 24.576 MHz CSS1699

L 4014 (B,56,91) Inductor CTF1736
 L 4015 (B,50,82) Inductor CTF1736
 L 4016 (B,45,99) Inductor CTF1736
 L 4018 (B,41,89) Inductor CTF1736
 L 4202 (B,22,91) Choke Coil CTH1319

F 4001 (B,55,100) Chip EMI Filter VTL1171
 F 4003 (B,51,103) Chip EMI Filter VTL1171
 F 4005 (B,35,92) Chip EMI Filter VTL1171
 F 4201 (A,13,51) EMI Filter CCG1162
 F 4202 (A,13,61) EMI Filter CCG1162

L 4209 (A,10,69) Inductor CTF1739
 L 4213 (A,12,89) Inductor CTF1739
 L 4215 (A,16,63) Inductor CTF1739
 L 4224 (B,56,42) Choke Coil 1.2 uH CTH1495
 L 4225 (B,48,43) Choke Coil 1.2 uH CTH1495

F 4204 (A,20,67) EMI Filter CCG1162
 F 4409 (A,28,69) Chip EMI Filter DTL1106
 F 4651 (B,45,81) Chip EMI Filter DTL1106
 F 4901 (B,18,124) Chip EMI Filter DTL1106
 F 5005 (A,10,45) Chip EMI Filter DTF1106

L 4246 (A,19,51) Inductor CTF1739
 L 4380 (B,24,66) Chip EMI Filter DTF1106
 L 4410 (A,54,75) Inductor CTF1736
 L 4414 (A,26,69) Inductor CTF1736
 L 4415 (A,28,64) Inductor CTF1736

⚠ P4201 (B,49,39) Fuse 1.75 A CEK1283
 ⚠ P4202 (B,52,44) Fuse 1.5 A CEK1282
 VA3300 (A,61,27) Varistor AVR-M1608C120MT6AB
 VA3301 (A,66,30) Varistor AVR-M1608C120MT6AB
 VA3302 (A,60,29) Varistor AVR-M1608C120MT6AB

L 4501 (A,47,121) Inductor CTF1736
 L 4502 (A,42,123) Inductor CTF1736
 L 4651 (B,45,82) Inductor CTF1736
 L 4781 (B,39,78) Inductor CTF1736
 L 4782 (B,32,89) Inductor CTF1736

VA3303 (A,59,33) Varistor AVR-M1608C120MT6AB
 CN3300 (B,69,30) Connector CKS6327
 CN3303 (B,77,18) Connector CKS6320
 CN3360 (B,19,23) Connector CKS6117
 CN4602 (B,60,127) Connector CKS6302

L 4784 (B,60,67) Inductor CTF1736
 L 4785 (A,48,137) Inductor CTF1736
 L 4786 (B,39,65) Inductor CTF1736
 L 4788 (B,21,57) Inductor CTF1736
 L 4903 (B,27,129) Inductor CTF1736

CN5605 (B,38,142) Connector CKS6278
 CN5607 (B,11,59) Connector CKS6118
 CN5608 (B,11,93) Connector CKS5732
 CN5609 (B,75,132) Connector CKS5659
 SN4201 (A,38,114) Sensor S-58LM20A-N4

L 4904 (B,22,104) Inductor CTF1736
 L 4905 (B,19,126) Inductor CTF1736
 L 4931 (A,36,75) Inductor CTF1736
 L 4933 (A,18,79) Inductor CTF1736
 L 4934 (B,25,104) Inductor CTF1736

RESISTORS

R 3100 (A,79,127) RS1/16SS103J
 R 3101 (A,79,124) RS1/16SS103J
 R 3102 (A,76,132) RS1/16SS103J
 R 3103 (A,58,119) RS1/8SQ0R0J
 R 3201 (B,10,40) RS1/16SS183J

L 4936 (A,19,79) Inductor CTF1736
 L 5609 (A,63,125) Inductor ATH7074
 L 5632 (B,33,134) Inductor CTF1635
 L 5695 (B,35,139) Resistor RS1/16SS0R0J
 L 5696 (B,35,137) Resistor RS1/16SS0R0J

R 3202 (B,10,39) RS1/16SS0R0J
 R 3325 (A,53,16) RS1/10SR471J
 R 3330 (A,54,15) RS1/10SR101J
 R 3335 (A,56,15) RS1/10SR301J
 R 3336 (A,55,27) RS1/16SS0R0J

L 5697 (B,47,139) Resistor RS1/16SS271J
 L 5698 (B,46,139) Resistor RS1/16SS271J
 L 5699 (B,46,137) Resistor RS1/16SS271J
 L 5700 (B,45,139) Resistor RS1/16SS271J
 L 5701 (B,45,137) Resistor RS1/16SS271J

R 3337 (A,54,27) RS1/16SS0R0J
 R 3338 (A,56,27) RS1/16SS471J
 R 3339 (A,11,61) RS1/10SR0R0J
 R 3343 (A,14,49) RS1/16SS0R0J
 R 3344 (A,54,29) RS1/16SS472J

L 5702 (B,44,139) Resistor RS1/16SS271J
 L 5703 (B,44,137) Resistor RS1/16SS271J
 L 5704 (B,43,139) Resistor RS1/16SS271J
 L 5705 (B,42,137) Resistor RS1/16SS271J
 L 5706 (B,42,139) Resistor RS1/16SS271J

R 3345 (A,55,30) RS1/16SS472J
 R 3360 (A,23,35) RS1/16SS221J
 R 3361 (A,23,36) RS1/16SS221J
 R 3362 (A,21,34) RS1/16SS223J
 R 3363 (A,21,37) RS1/16SS223J

L 5707 (B,41,137) Resistor RS1/16SS271J
 L 5708 (B,41,139) Resistor RS1/16SS271J
 L 5709 (B,40,137) Resistor RS1/16SS271J
 L 5710 (B,39,139) Resistor RS1/16SS271J
 L 5711 (B,39,137) Resistor RS1/16SS271J

R 3364 (A,15,19) RS1/16SS103J
 R 3365 (A,17,19) RS1/16SS103J

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5		6		7		8	
<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
R 3366	(B,15,18)	RS1/16SS470J		R 4057	(B,35,101)	RS1/16SS821J	
R 3367	(A,16,19)	RS1/16SS103J		R 4058	(B,50,106)	RS1/16SS222J	
R 3368	(B,15,17)	RS1/16SS470J		R 4059	(B,42,96)	RS1/16SS153J	
R 3369	(B,15,19)	RS1/16SS470J		R 4060	(A,33,103)	RS1/16SS222J	A
R 3371	(A,13,19)	RS1/16SS470J		R 4061	(B,38,102)	RS1/16SS104J	
R 3372	(A,21,19)	RS1/16SS473J		R 4062	(A,35,103)	RS1/16SS222J	
R 3373	(A,17,41)	RS1/16SS470J		R 4063	(B,52,102)	RS1/16SS222J	
R 3374	(A,17,39)	RS1/16SS103J		R 4064	(A,38,96)	RS1/16SS103J	
R 3375	(A,16,41)	RS1/16SS470J		R 4065	(A,34,104)	RS1/16SS222J	
R 3376	(B,9,24)	RS1/16SS470J		R 4066	(A,52,109)	RS1/16SS0R0J	
R 3377	(B,12,19)	RS1/16SS0R0J		R 4067	(A,51,109)	RS1/16SS0R0J	
R 3378	(B,10,26)	RS1/16SS0R0J		R 4068	(B,45,86)	RS1/8SQ0R0J	
R 3380	(B,15,21)	RS1/16SS223J		R 4069	(A,39,77)	RS1/16SS471J	
R 3383	(B,15,27)	RS1/16SS0R0J		R 4070	(A,31,101)	RS1/16SS102J	
R 3386	(B,15,25)	RS1/16SS222J		R 4071	(A,31,100)	RS1/16SS102J	B
R 4000	(A,56,109)	RS1/16SS0R0J		R 4072	(A,31,102)	RS1/16SS102J	
R 4001	(B,58,96)	RS1/16SS222J		R 4073	(B,49,104)	RS1/16SS272J	
R 4002	(B,58,97)	RS1/16SS222J		R 4101	(B,62,101)	RAB4CQ220J	
R 4004	(B,59,108)	RS1/16SS103J		R 4102	(B,62,91)	RAB4CQ220J	
R 4005	(A,63,43)	RS1/16SS103J		R 4103	(B,62,88)	RAB4CQ220J	
R 4006	(B,58,99)	RS1/16SS182J		R 4104	(B,62,98)	RAB4CQ220J	
R 4007	(B,58,100)	RS1/16SS103J		R 4105	(B,63,75)	RAB4CQ220J	
R 4008	(B,61,108)	RS1/16SS103J		R 4106	(B,63,81)	RAB4CQ220J	
R 4009	(B,60,108)	RS1/16SS103J		R 4107	(B,63,78)	RAB4CQ220J	
R 4010	(B,50,85)	RS1/16SS0R0J		R 4108	(B,63,72)	RAB4CQ220J	C
R 4013	(A,32,96)	RS1/16SS103J		R 4109	(B,41,102)	RS1/16SS0R0J	
R 4014	(B,47,101)	RS1/16SS0R0J		R 4110	(A,47,85)	RAB4CQ220J	
R 4016	(B,48,105)	RS1/16SS6041F		R 4111	(A,44,85)	RAB4CQ220J	
R 4017	(A,37,93)	RS1/16SS105J		R 4112	(A,45,82)	RAB4CQ220J	
R 4018	(B,48,103)	RS1/16SS0R0J		R 4113	(A,42,82)	RAB4CQ220J	
R 4020	(A,37,98)	RS1/16SS106J		R 4114	(B,42,102)	RS1/16SS0R0J	
R 4021	(A,33,96)	RS1/16SS103J		R 4115	(A,44,104)	RS1/16SS560J	
R 4022	(A,37,96)	RS1/16SS101J		R 4116	(A,46,107)	RS1/16SS220J	
R 4024	(A,36,94)	RS1/16SS471J		R 4117	(A,45,104)	RS1/16SS220J	
R 4025	(B,43,102)	RS1/16SS103J		R 4118	(A,45,104)	RS1/16SS220J	
R 4026	(A,55,77)	RS1/16SS220J		R 4119	(A,44,106)	RS1/16SS220J	D
R 4027	(A,62,101)	RAB4CQ104J		R 4120	(A,45,106)	RS1/16SS220J	
R 4028	(A,58,101)	RAB4CQ104J		R 4121	(A,39,80)	RS1/16SS0R0J	
R 4029	(A,61,107)	RAB4CQ104J		R 4133	(A,40,81)	RS1/16SS330J	
R 4030	(B,48,101)	RS1/16SS102J		R 4134	(A,39,81)	RS1/16SS330J	
R 4032	(B,49,84)	RS1/16SS0R0J		R 4135	(A,41,80)	RS1/16SS220J	
R 4033	(A,57,81)	RS1/16SS220J		R 4136	(A,52,80)	RS1/16SS220J	
R 4034	(A,63,39)	RS1/16SS103J		R 4137	(A,51,80)	RS1/16SS470J	
R 4035	(A,63,38)	RS1/16SS103J		R 4138	(A,40,80)	RS1/16SS0R0J	
R 4036	(A,63,41)	RS1/16SS103J		R 4139	(A,54,81)	RAB4CQ470J	
R 4037	(A,63,42)	RS1/16SS103J		R 4140	(A,51,82)	RAB4CQ470J	
R 4038	(A,61,104)	RAB4CQ104J		R 4141	(A,50,85)	RAB4CQ470J	E
R 4040	(A,63,37)	RS1/16SS103J		R 4142	(A,48,82)	RAB4CQ470J	
R 4043	(B,33,91)	RS1/16SS222J		R 4143	(A,46,105) Ferrite Bead	CTF1801	
R 4044	(B,34,92)	RS1/16SS222J		R 4144	(A,47,104)	RS1/16SS470J	
R 4045	(B,61,84)	RS1/16SS222J		R 4145	(B,46,106)	RAB4CQ680J	
R 4046	(A,63,40)	RS1/16SS103J		R 4146	(B,43,106)	RAB4CQ680J	
R 4048	(A,14,96)	RS1/16SS222J		R 4147	(A,38,81)	RS1/16SS330J	
R 4049	(A,14,101)	RS1/16SS222J		R 4148	(B,63,86)	RS1/16SS220J	
R 4050	(A,33,88)	RS1/16SS104J		R 4149	(B,63,86)	RS1/16SS220J	
R 4051	(A,33,87)	RS1/16SS104J		R 4150	(B,63,85)	RS1/16SS220J	
R 4052	(A,40,108)	RS1/16SS104J		R 4151	(B,63,84)	RS1/16SS220J	
R 4053	(A,31,99)	RS1/16SS104J		R 4152	(B,42,101)	RS1/16SS473J	F
R 4054	(A,31,103)	RS1/16SS104J		R 4153	(B,42,104)	RS1/16SS103J	
R 4055	(A,31,87)	RS1/16SS684J		R 4154	(B,55,89)	RN1/16SSE1501D	

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	<u>Circuit Symbol and No.</u>	<u>Part No.</u>	<u>Circuit Symbol and No.</u>	<u>Part No.</u>
	R 4155 (B,53,89)	RN1/16SSE1501D	R 4271 (B,58,90)	RS1/10SR101J
	R 4194 (A,52,105)	RS1/16SS0R0J	R 4275 (A,38,117)	RS1/16SS471J
	R 4196 (B,62,56)	RS1/16SS104J	R 4278 (A,29,73)	RS1/10SR0R0J
A	R 4197 (B,62,62)	RS1/16SS104J	R 4281 (B,27,70)	RS1/16SS0R0J
	R 4198 (B,45,84)	RS1/16SS104J	R 4284 (B,22,72)	RS1/16SS103J
	R 4199 (A,41,85)	RS1/16SS272J	R 4285 (A,27,41)	RS1/16SS101J
	R 4200 (B,18,78)	RS1/10SR0R0J	R 4286 (B,22,73)	RS1/16SS103J
	R 4201 (A,11,71)	RS1/10SR0R0J	R 4287 (B,53,147) (UC)	RS1/16SS0R0J
			R 4290 (B,57,147) (AU)	RS1/16SS0R0J
	R 4202 (B,16,78)	RS1/10SR0R0J	R 4291 (A,9,88) Ferrite Bead	CTF1802
	R 4206 (A,66,44)	RS1/16SS4702D	R 4294 (B,45,73)	RS1/10SR102J
	R 4207 (A,64,44)	RS1/16SS1003D	R 4296 (A,11,74)	RS1/16SS0R0J
	R 4208 (A,23,48)	RS1/16SS4702D	R 4298 (B,31,119)	RS1/16SS0R0J
	R 4209 (A,22,49)	RS1/16SS1003D	R 4299 (A,9,90) Ferrite Bead	CTF1802
B	R 4210 (B,64,37)	RS1/16SS223J	R 4304 (A,13,96) Ferrite Bead	CTF1802
	R 4211 (B,36,46)	RS1/16SS223J	R 4305 (A,16,74)	RS1/16SS0R0J
	R 4212 (B,69,44)	RS1/16SS562J	R 4307 (B,21,68)	RS1/16SS0R0J
	R 4213 (B,34,42)	RS1/16SS562J	R 4308 (A,9,71)	RS1/16SS0R0J
	R 4214 (B,54,47)	RS1/4S0R0J	R 4309 (B,21,66)	RS1/16SS0R0J
	R 4215 (B,44,38)	RS1/10SR0R0J	R 4310 (B,21,64)	RS1/16SS0R0J
	R 4216 (B,65,46)	RS1/10SR103J	R 4311 (A,9,63)	RS1/16SS0R0J
	R 4217 (B,37,40)	RS1/10SR103J	R 4313 (A,10,52)	RS1/16SS0R0J
	R 4218 (B,70,41)	RS1/16SS5102D	R 4315 (A,9,53)	RS1/16SS0R0J
	R 4219 (B,68,42)	RS1/16SS0R0J	R 4316 (A,9,58)	RS1/16SS0R0J
	R 4220 (B,70,44)	RS1/16SS2402D	R 4317 (A,13,95) Ferrite Bead	CTF1802
C	R 4221 (B,35,44)	RS1/16SS1003D	R 4318 (A,14,46)	RS1/16SS0R0J
	R 4222 (B,36,44)	RS1/16SS9101D	R 4319 (A,17,45)	RS1/16SS0R0J
	R 4223 (B,33,42)	RS1/16SS2003D	R 4320 (A,11,79) Ferrite Bead	CTF1802
	R 4224 (B,52,37)	RS1/16SS0R0J	R 4321 (A,10,79) Ferrite Bead	CTF1802
	R 4225 (B,46,46)	RS1/16SS0R0J	R 4322 (A,9,83) Ferrite Bead	CTF1802
	R 4226 (A,19,56)	RS1/16SS104J	R 4323 (A,9,84) Ferrite Bead	CTF1802
	R 4228 (A,19,41)	RS1/16SS103J	R 4324 (A,11,84) Ferrite Bead	CTF1802
	R 4229 (B,60,75)	RS1/10SR103J	R 4325 (A,9,86) Ferrite Bead	CTF1802
	R 4230 (B,58,74)	RS1/10SR102J	R 4326 (A,13,86) Ferrite Bead	CTF1802
	R 4231 (A,54,79)	RS1/16SS220J	R 4327 (A,13,85) Ferrite Bead	CTF1802
	R 4233 (A,18,105)	RS1/10SR0R0J	R 4328 (A,13,87) Ferrite Bead	CTF1802
D	R 4234 (B,25,129)	RS1/10SR0R0J	R 4329 (A,9,79) Ferrite Bead	CTF1802
	R 4236 (B,55,79)	RS1/10SR103J	R 4334 (A,12,74)	RS1/16SS0R0J
	R 4237 (B,52,73)	RS1/10SR103J	R 4335 (A,14,74)	RS1/16SS0R0J
	R 4238 (B,58,70)	RS1/10SR103J	R 4341 (B,60,36)	RS1/10SR0R0J
	R 4239 (A,63,73)	RS1/8SQ0R0J	R 4342 (A,79,108)	RS1/10SR0R0J
	R 4241 (A,43,137)	RS1/10SR103J	R 4343 (A,59,108)	RS1/10SR0R0J
	R 4242 (B,34,48)	RS1/8SQ0R0J	R 4344 (A,61,54)	RS1/10SR0R0J
	R 4243 (A,47,131)	RS1/8SQ0R0J	R 4361 (A,24,139)	RS1/10SR0R0J
	R 4246 (A,45,139)	RS1/10SR331J	R 4363 (A,21,135)	RS1/16SS0R0J
	R 4247 (B,56,79)	RS1/10SR561J	R 4365 (A,16,129)	RS1/10SR0R0J
	R 4249 (A,20,69)	RS1/10SR0R0J	R 4380 (A,25,75)	RS1/10SR0R0J
E	R 4250 (B,40,50)	RS1/16SS0R0J	R 4381 (B,21,89)	RS1/16SS0R0J
	R 4251 (B,22,68)	RS1/16SS0R0J	R 4383 (B,33,63)	RS1/16SS0R0J
	R 4254 (B,60,98)	RS1/10SR103J	R 4391 (A,24,46)	RS1/16SS0R0J
	R 4255 (A,12,93)	RS1/16SS101J	R 4392 (A,38,111)	RS1/16SS0R0J
	R 4256 (A,13,94)	RS1/16SS330J	R 4393 (A,14,44)	RS1/16SS0R0J
	R 4257 (B,64,52)	RS1/16SS0R0J	R 4395 (A,20,46)	RS1/16SS0R0J
	R 4259 (B,60,96)	RS1/10SR681J	R 4397 (B,23,69)	RS1/16SS0R0J
	R 4261 (A,47,139)	RS1/16SS102J	R 4401 (B,80,105)	RAB4CQ220J
	R 4262 (A,40,140)	RS1/16SS0R0J	R 4402 (B,80,102)	RAB4CQ220J
	R 4265 (B,22,101)	RS1/10SR0R0J	R 4403 (B,80,99)	RAB4CQ220J
F	R 4266 (A,20,54)	RS1/16SS105J	R 4404 (A,78,92)	RS1/16SS471J
	R 4267 (A,23,43)	RS1/16SS0R0J	R 4405 (B,80,96)	RAB4CQ220J
	R 4268 (B,58,93)	RS1/10SR103J	R 4406 (B,80,58)	RAB4CQ220J
	R 4269 (A,57,64)	RS1/10SR471J		

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<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
R 4407	(B,80,61)	RAB4CQ220J		R 4625	(B,60,58)	RS1/16SS101J	
R 4408	(B,80,63)	RAB4CQ220J		R 4628	(B,58,53)	RS1/16SS0R0J	
R 4409	(B,80,66)	RAB4CQ220J		R 4631	(B,54,71)	RS1/16SS151J	
R 4410	(B,80,94)	RS1/16SS220J		R 4633	(B,60,52)	RS1/16SS0R0J	A
R 4411	(B,80,93)	RS1/16SS220J		R 4634	(B,56,51)	RS1/16SS0R0J	
R 4412	(B,79,73)	RS1/16SS220J		R 4635	(B,60,54)	RS1/16SS0R0J	
R 4413	(B,79,72)	RS1/16SS220J		R 4636	(B,47,51)	RS1/16SS0R0J	
R 4414	(A,52,77)	RS1/16SS103J		R 4637	(B,48,71)	RS1/16SS0R0J	
R 4415	(A,64,70)	RS1/16SS471J		R 4638	(B,46,51)	RS1/16SS0R0J	
R 4419	(A,52,78)	RS1/16SS473J		R 4639	(B,45,51)	RS1/16SS0R0J	
R 4420	(B,64,92)	RS1/16SS471J		R 4640	(A,64,36)	RS1/16SS473J	
R 4424	(A,40,77)	RS1/16SS0R0J		R 4641	(A,64,33)	RS1/16SS473J	
R 4431	(B,78,70)	RS1/16SS471J		R 4642	(A,64,34)	RS1/16SS473J	
R 4432	(A,58,92)	RS1/16SS150J		R 4643	(A,64,35)	RS1/16SS473J	
R 4433	(A,58,92)	RS1/16SS150J		R 4647	(B,51,51)	RS1/16SS103J	B
R 4434	(A,61,79)	RS1/16SS390J		R 4648	(B,51,51)	RS1/16SS103J	
R 4435	(B,63,83)	RS1/16SS390J		R 4649	(B,54,51)	RS1/16SS103J	
R 4436	(A,64,90)	RS1/16SS560J		R 4652	(A,16,98)	RS1/16SS0R0J	
R 4437	(A,64,92)	RS1/16SS560J		R 4661	(B,26,86)	RS1/16SS0R0J	
R 4438	(A,63,80)	RS1/16SS560J		R 4667	(B,38,81)	RS1/16SS101J	
R 4439	(A,63,79)	RS1/16SS560J		R 4668	(B,21,76)	RS1/10SR0R0J	
R 4440	(A,62,98)	RAB4CQ330J		R 4669	(B,27,76)	RS1/16SS0R0J	
R 4441	(A,62,96)	RAB4CQ330J		R 4670	(B,27,77)	RS1/16SS0R0J	
R 4442	(A,58,97)	RAB4CQ330J		R 4671	(B,29,76)	RS1/16SS0R0J	
R 4443	(A,58,94)	RAB4CQ330J		R 4677	(B,29,76)	RS1/16SS0R0J	C
R 4444	(A,59,79)	RAB4CQ330J		R 4678	(B,38,80)	RS1/16SS0R0J	
R 4446	(A,40,69)	RS1/16SS104J		R 4679	(B,36,77)	RS1/16SS330J	
R 4448	(A,31,66)	RS1/16SS104J		R 4680	(B,36,76)	RS1/16SS330J	
R 4449	(A,41,69)	RS1/16SS104J		R 4681	(B,36,76)	RS1/16SS0R0J	
R 4450	(B,79,69)	RN1/16SSE1501D		R 4682	(B,34,76)	RS1/16SS0R0J	
R 4451	(B,79,70)	RN1/16SSE1501D		R 4683	(B,26,88)	RS1/16SS1000D	
R 4452	(B,63,94)	RN1/16SSE1501D		R 4684	(B,26,87)	RS1/16SS1000D	
R 4453	(B,62,94)	RN1/16SSE1501D		R 4685	(B,32,72)	RS1/16SS0R0J	
R 4454	(A,64,67)	RN1/16SSE1501D		R 4686	(B,33,72)	RS1/16SS0R0J	
R 4455	(A,63,67)	RN1/16SSE1501D		R 4687	(B,35,72)	RS1/16SS0R0J	
R 4456	(A,79,94)	RN1/16SSE1501D		R 4688	(B,36,72)	RS1/16SS0R0J	D
R 4457	(A,79,95)	RN1/16SSE1501D		R 4702	(B,23,59)	RS1/16SS0R0J	
R 4501	(B,48,106)	RS1/16SS470J		R 4703	(B,26,48)	RS1/16SS0R0J	
R 4502	(B,49,106)	RS1/16SS472J		R 4704	(B,25,48)	RS1/16SS0R0J	
R 4503	(B,43,111)	RAB4CQ563J		R 4707	(B,26,56)	RS1/16SS473J	
R 4504	(B,40,111)	RAB4CQ563J		R 4708	(B,23,48)	RS1/16SS104J	
R 4505	(B,45,112)	RS1/16SS0R0J		R 4709	(B,22,55)	RS1/16SS103J	
R 4506	(A,45,126)	RS1/10SR0R0J		R 4710	(B,22,58)	RS1/16SS223J	
R 4507	(A,47,127)	RS1/10SR0R0J		R 4771	(A,52,136)	RS1/16SS103J	
R 4603	(A,52,123)	RS1/16SS0R0J		R 4772	(A,52,133)	RS1/16SS103J	
R 4604	(A,52,135)	RS1/16SS220J		R 4773	(A,52,130)	RS1/16SS103J	
R 4605	(A,52,132)	RS1/16SS220J		R 4774	(A,52,122)	RS1/16SS103J	E
R 4606	(A,52,130)	RS1/16SS220J		R 4775	(A,52,118)	RS1/16SS103J	
R 4607	(A,52,119)	RS1/16SS220J		R 4776	(A,52,116)	RS1/16SS103J	
R 4608	(A,52,116)	RS1/16SS220J		R 4777	(A,54,111)	RS1/16SS0R0J	
R 4609	(A,54,113)	RS1/16SS0R0J		R 4779	(A,58,112)	RS1/16SS0R0J	
R 4610	(A,55,111)	RS1/16SS0R0J		R 4801	(A,32,83)	RS1/16SS470J	
R 4611	(A,54,112)	RS1/16SS0R0J		R 4802	(A,32,84)	RS1/16SS470J	
R 4617	(B,47,51)	RS1/16SS103J		R 4803	(A,28,76)	RS1/16SS470J	
R 4618	(B,62,59)	RS1/16SS104J		R 4804	(A,28,77)	RS1/16SS470J	
R 4619	(B,61,57)	RS1/16SS104J		R 4805	(A,29,76)	RS1/16SS470J	
R 4620	(B,62,60)	RS1/16SS104J		R 4806	(A,27,77)	RS1/16SS470J	
R 4622	(B,60,61)	RS1/16SS101J		R 4807	(A,32,78)	RS1/16SS470J	F
R 4623	(B,60,60)	RS1/16SS0R0J		R 4808	(A,32,79)	RS1/16SS470J	
R 4624	(B,60,59)	RS1/16SS101J		R 4809	(A,33,80)	RS1/16SS470J	

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Circuit Symbol and No.**Part No.****Circuit Symbol and No.****Part No.**

R 4810	(A,32,81)	RS1/16SS470J	R 5694	(A,36,140)	RS1/16SS0R0J
R 4811	(A,32,82)	RS1/16SS470J	R 5716	(A,72,132)	RS1/16SS0R0J
R 4812	(A,24,84)	RS1/16SS6801D	R 5719	(A,75,118)	RS1/16SS470J
R 4813	(A,30,86)	RS1/16SS0R0J	R 5720	(A,78,118)	RS1/16SS470J
R 4814	(A,26,77)	RS1/16SS0R0J	R 5724	(A,77,120)	RS1/16SS104J
R 4815	(A,33,81)	RS1/16SS470J	R 5725	(A,79,129)	RS1/16SS0R0J
R 4816	(A,23,80)	RS1/16SS103J	R 5726	(A,78,129)	RS1/16SS123J
R 4817	(A,25,88)	RS1/16SS470J	R 5727	(A,73,130)	RS1/16SS3902D
R 4818	(A,26,88)	RS1/16SS300J	R 5728	(A,63,137)	RS1/10SR150J
R 4819	(A,25,77)	RS1/16SS0R0J	R 5729	(A,72,118)	RS1/16SS102J
R 4821	(A,23,78)	RS1/16SS0R0J	R 5730	(A,72,137)	RS1/10SR1004D
R 4824	(A,26,130) Ferrite Bead	CTF1803	R 5731	(A,72,133)	RS1/10SR6802D
R 4901	(A,19,110)	RS1/16SS151J	R 5732	(A,71,129)	RS1/16SS0R0J
R 4902	(A,18,110)	RS1/16SS151J	R 5733	(A,34,141)	RS1/16SS150J
R 4904	(A,25,107)	RS1/16SS151J	R 5734	(A,33,142)	RS1/16SS104J
R 4905	(A,25,111)	RS1/16SS151J	R 5735	(A,34,126)	RS1/16SS151J
R 4906	(A,24,111)	RS1/16SS151J	R 5736	(A,34,123)	RS1/16SS151J
R 4907	(A,24,107)	RS1/16SS151J	R 5738	(A,33,128) Ferrite Bead	CTF1803
R 4908	(A,25,109)	RS1/16SS151J	R 5739	(A,76,120)	RS1/16SS0R0J
R 4909	(A,24,109)	RS1/16SS151J	R 5740	(A,24,130) Ferrite Bead	CTF1803
R 4910	(A,23,109)	RS1/16SS151J	R 5741	(A,24,128) Ferrite Bead	CTF1803
R 4911	(A,23,107)	RS1/16SS151J	R 5742	(A,23,130) Ferrite Bead	CTF1803
R 4912	(A,22,109)	RS1/16SS151J	R 5743	(A,23,128) Ferrite Bead	CTF1803
R 4913	(A,22,111)	RS1/16SS151J	R 5744	(A,22,130) Ferrite Bead	CTF1803
R 4914	(A,23,111)	RS1/16SS151J	R 5745	(A,25,130) Ferrite Bead	CTF1803
R 4915	(A,21,109)	RS1/16SS151J	R 5747	(A,26,128) Ferrite Bead	CTF1803
R 4916	(A,21,111)	RS1/16SS151J	R 5748	(A,27,128) Ferrite Bead	CTF1803
R 4917	(A,21,107)	RS1/16SS151J	R 5749	(A,27,130) Ferrite Bead	CTF1803
R 4918	(A,20,109)	RS1/16SS151J	R 5750	(A,28,128) Ferrite Bead	CTF1803
R 4919	(A,20,107)	RS1/16SS151J	R 5751	(A,28,130) Ferrite Bead	CTF1803
R 4920	(A,20,111)	RS1/16SS151J	R 5752	(A,29,128) Ferrite Bead	CTF1803
R 4921	(B,32,110)	RS1/16SS152J	R 5753	(A,29,130) Ferrite Bead	CTF1803
R 4922	(A,36,119)	RS1/16SS0R0J	R 5754	(A,30,128) Ferrite Bead	CTF1803
R 4923	(A,36,118)	RS1/16SS0R0J	R 5755	(A,30,130) Ferrite Bead	CTF1803
R 4924	(A,21,81)	RS1/16SS561J	R 5756	(A,25,128) Ferrite Bead	CTF1803
R 4925	(A,36,120)	RS1/16SS0R0J	R 5757	(A,31,128) Ferrite Bead	CTF1803
R 4926	(A,28,111)	RS1/16SS274J	R 5758	(A,34,125)	RS1/16SS221J
R 4928	(A,16,112)	RS1/16SS0R0J	R 5760	(A,73,139)	RS1/16SS0R0J
R 4929	(A,16,113)	RS1/16SS0R0J	R 5783	(A,38,25)	RS1/10SR393J
R 4930	(A,15,114)	RS1/16SS0R0J	R 5784	(A,41,20)	RS1/10SR393J
R 4932	(A,17,106)	RS1/16SS223J	R 5819	(A,29,97)	RS1/16SS0R0J
R 4933	(B,22,114)	RS1/16SS104J	R 5820	(A,29,99)	RS1/16SS0R0J
R 4937	(A,18,77)	RS1/10SR0R0J	R 5821	(A,28,101)	RS1/16SS0R0J
R 4951	(B,33,112)	RS1/16SS821J	R 5822	(A,28,99)	RS1/16SS0R0J
R 4955	(A,34,115)	RS1/16SS0R0J	R 5823	(A,27,97)	RS1/16SS0R0J
R 4956	(A,35,115)	RS1/16SS0R0J	R 5830	(A,29,101)	RS1/16SS0R0J
R 4957	(B,27,115)	RS1/16SS0R0J	R 5831	(A,27,101)	RS1/16SS0R0J
R 4958	(A,34,114)	RS1/16SS0R0J	R 5832	(A,26,95)	RS1/16SS0R0J
R 4960	(A,32,111)	RS1/16SS152J	R 5833	(A,26,97)	RS1/16SS0R0J
R 4961	(A,30,111)	RS1/16SS1001D	R 5834	(A,25,95)	RS1/16SS0R0J
R 4962	(A,31,109)	RS1/16SS1201F	R 5835	(A,24,95)	RS1/16SS0R0J
R 4963	(B,31,112)	RS1/10SR0R0J	R 5839	(B,33,139)	RS1/16SS101J
R 4966	(A,22,84)	RS1/16SS222J	R 5840	(B,33,137)	RS1/16SS101J
R 4994	(A,32,85)	RS1/16SS470J	R 5862	(B,11,21)	RS1/16SS0R0J
R 5453	(A,35,39)	RS1/16SS153J			
R 5454	(A,41,39)	RS1/16SS153J			
R 5455	(A,37,39)	RS1/10SR473J			
R 5456	(A,40,39)	RS1/10SR473J	C 3201	(B,10,38)	CKSSYB104K10
R 5457	(A,34,43)	RS1/10SR103J	C 3309	(A,51,24)	CKSRYB104K16
R 5458	(A,43,42)	RS1/10SR103J	C 3310	(A,56,26)	CCSSCH101J50

CAPACITORS

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<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
C 3312	(A,62,27)	CCSRCH102J50		C 4045	(B,47,91)	CKSSYB104K10	
C 3313	(A,66,28)	CCSRCH102J50		C 4046	(B,47,98)	CKSSYB104K10	
C 3314	(A,62,29)	CCSRCH102J50		C 4047	(B,46,91)	CKSSYB104K10	A
C 3315	(A,60,33)	CCSRCH102J50		C 4048	(B,46,98)	CKSSYB104K10	
C 3360	(A,24,34)	CKSSYB222K50		C 4049	(B,45,91)	CKSSYB104K10	
C 3361	(A,24,37)	CKSSYB222K50		C 4050	(B,45,98)	CKSSYB104K10	
C 3362	(A,18,34)	CKSQYB106K6R3		C 4051	(B,45,91)	CKSSYB104K10	
C 3363	(A,18,36)	CKSQYB106K6R3		C 4052	(B,47,100)	CKSSYB104K10	
C 3364	(A,16,31)	CKSQYB106K6R3		C 4053	(B,45,90)	CKSSYB104K10	
C 3365	(A,17,31)	CKSSYB102K50		C 4054	(B,44,92)	CKSSYB104K10	
C 3366	(A,13,30)	CKSQYB106K6R3		C 4055	(B,46,93)	CKSSYB104K10	
C 3367	(A,14,29)	CKSSYB102K50		C 4056	(B,45,93)	CKSSYB104K10	
C 3368	(B,15,23)	CKSQYB106K6R3		C 4057	(B,44,94)	CKSSYB104K10	
C 3369	(B,13,23)	CKSQYB106K6R3		C 4059	(B,44,95)	CKSSYB104K10	B
C 3370	(A,20,25)	CKSSYB104K10		C 4060	(B,45,96)	CKSSYB104K10	
C 3371	(A,18,26)	CKSSYB104K10		C 4061	(B,44,97)	CKSSYB104K10	
C 3372	(B,21,29)	CKSSYB104K10		C 4062	(B,44,98)	CKSSYB104K10	
C 3373	(B,16,29)	CKSSYB104K10		C 4063	(B,43,91)	CKSSYB104K10	
C 3375	(B,15,26)	CKSSYB105K6R3		C 4064	(B,44,93)	CKSSYB104K10	
C 4001	(A,38,99)	CCSSCH101J50		C 4065	(B,44,95)	CKSSYB104K10	
C 4002	(B,54,98)	CKSQYB106K6R3		C 4066	(B,42,94)	CKSSYB104K10	
C 4003	(B,53,87)	CKSSYB102K50		C 4069	(B,40,97)	CKSSYB104K10	
C 4004	(B,53,88)	CKSRYB104K16		C 4070	(B,40,94)	CKSSYB104K10	
C 4005	(B,56,97)	CKSSYB104K10		C 4071	(B,50,88)	CKSQYB106K6R3	
C 4007	(B,51,84)	CKSSYB104K10		C 4072	(B,51,101)	CKSQYB106K6R3	C
C 4008	(B,54,91)	CKSSYB104K10		C 4073	(B,41,93)	CKSSYB104K10	
C 4009	(B,48,84)	CKSSYB104K10		C 4074	(B,45,89)	CKSRYB105K10	
C 4010	(B,54,93)	CKSSYB102K50		C 4075	(B,44,87)	CKSSYB104K10	
C 4011	(B,54,94)	CKSSYB102K50		C 4076	(B,42,99)	CKSSYB104K10	
C 4012	(B,54,94)	CKSSYB102K50		C 4077	(B,43,101)	CKSSYB104K10	
C 4013	(B,54,95)	CKSSYB102K50		C 4078	(B,52,103)	CKSSYB104K10	
C 4014	(B,54,96)	CKSSYB102K50		C 4079	(B,40,95)	CKSSYB104K10	
C 4015	(B,54,97)	CKSSYB102K50		C 4080	(B,42,96)	CKSSYB104K10	
C 4016	(B,51,92)	CKSSYB102K50		C 4081	(B,43,99)	CKSSYB104K10	
C 4017	(B,51,93)	CKSSYB102K50		C 4082	(B,43,103)	CKSSYB104K10	
C 4018	(B,51,94)	CKSSYB104K10		C 4083	(B,41,90)	CKSRYB105K10	D
C 4019	(B,51,94)	CKSSYB102K50		C 4084	(B,40,92)	CKSRYB105K10	
C 4020	(B,51,95)	CKSSYB102K50		C 4086	(B,37,94)	CKSQYB106K6R3	
C 4021	(B,51,96)	CKSSYB104K10		C 4087	(B,42,98)	CKSRYB105K10	
C 4022	(B,51,98)	CKSSYB104K10		C 4088	(B,37,91)	CKSSYB104K10	
C 4023	(B,50,93)	CKSSYB104K10		C 4089	(B,45,101)	CKSRYB105K10	
C 4026	(B,50,96)	CKSSYB104K10		C 4090	(B,44,104)	CKSRYB105K10	
C 4027	(B,51,97)	CKSSYB104K10		C 4091	(B,45,104)	CKSRYB105K10	
C 4028	(B,51,98)	CKSSYB104K10		C 4092	(A,34,89)	CCSSCH120J50	
C 4029	(B,57,82)	CKSSYB103K16		C 4093	(A,35,100)	CCSSCH220J50	
C 4030	(B,55,82)	CKSSYB103K16		C 4094	(A,34,96)	CCSSCH220J50	
C 4031	(B,50,90)	CKSSYB102K50		C 4095	(A,34,94)	CCSSCH120J50	E
C 4032	(B,50,98)	CKSSYB104K10		C 4096	(B,55,91)	CKSRYB105K10	
C 4033	(B,49,100)	CKSSYB104K10		C 4097	(B,51,83)	CKSRYB105K10	
C 4034	(B,50,91)	CKSSYB104K10		C 4098	(B,57,82)	CKSSYB103K16	
C 4035	(B,49,90)	CKSSYB102K50		C 4103	(B,47,88) 47 uF	CCG1251	
C 4036	(B,49,98)	CKSSYB104K10		C 4104	(B,49,101)	CKSSYB104K10	
C 4037	(B,49,91)	CKSSYB104K10		C 4201	(A,12,53)	CKSSYB104K10	
C 4038	(B,48,93)	CKSSYB104K10		C 4202	(A,12,59)	CKSSYB104K10	
C 4039	(B,48,98)	CKSSYB104K10		C 4204	(A,20,65)	CKSSYB104K10	
C 4040	(B,56,82)	CKSSYB103K16		C 4205	(A,15,53) 10 uF	DCH1201	
C 4041	(B,48,93)	CKSSYB104K10		C 4206	(A,15,58) 10 uF	DCH1201	F
C 4042	(B,48,100)	CKSSYB104K10		C 4208	(A,23,66) 10 uF	DCH1201	
C 4043	(B,47,93)	CKSSYB104K10		C 4209	(A,15,55) 10 uF	DCH1201	
C 4044	(B,48,98)	CKSSYB104K10		C 4210	(A,15,56) 10 uF	DCH1201	

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Circuit Symbol and No.Part No.Circuit Symbol and No.Part No.

C 4212 (A,25,66) 10 uF
C 4213 (B,64,38)

DCH1201
CKSSYB104K10

C 4406 (A,64,85)
C 4407 (A,79,82)

CKSSYB103K16
CKSQYB106K6R3

A

C 4214 (B,37,45)
C 4215 (A,17,59)
C 4216 (B,68,44)
C 4217 (B,35,42)
C 4218 (B,69,45)

CKSSYB104K10
CKSSYB104K10
CCSSCH101J50
CCSSCH101J50
CCSSCH102J50

C 4408 (B,71,55)
C 4409 (A,78,102)
C 4410 (A,78,97)
C 4411 (A,74,81)
C 4412 (A,78,94)

CKSRYB105K10
CKSSYB103K16
CKSSYB103K16
CKSSYB104K10
CKSSYB103K16

C 4219 (B,35,40)
C 4222 (B,70,42)
C 4223 (B,35,43)
C 4224 (A,22,60)
C 4227 (B,62,38) 10 uF

CKSSYB472K50
CCSSCH470J50
CCSSCH470J50
CKSSYB392K50
DCH1201

C 4413 (B,64,107)
C 4414 (A,79,57)
C 4415 (A,79,59)
C 4416 (A,79,62)
C 4417 (A,78,65)

CKSRYB105K10
CKSSYB103K16
CKSSYB103K16
CKSSYB103K16
CKSSYB103K16

B

C 4228 (B,43,46) 10 uF
C 4229 (A,18,62)
C 4230 (B,61,46) 10 uF
C 4231 (B,45,39) 10 uF
C 4232 (B,61,49) 47 uF

DCH1201
CKSSYB104K10
DCH1201
DCH1201
CCG1233

C 4418 (A,78,69)
C 4419 (A,78,78)
C 4420 (A,76,54)
C 4421 (A,72,55)
C 4422 (A,64,61)

CKSSYB103K16
CKSSYB103K16
CKSQYB106K6R3
CKSRYB105K10
CKSSYB103K16

C 4233 (B,40,38) 47 uF
C 4236 (B,54,38) 10 uF
C 4237 (B,44,48) 10 uF
C 4238 (B,53,38) 10 uF
C 4239 (B,46,48) 10 uF

CCG1233
CCG1234
CCG1234
CCG1234
CCG1234

C 4423 (A,64,65)
C 4424 (A,71,54)
C 4425 (A,64,69)
C 4426 (A,75,82)
C 4427 (B,78,106)

CKSSYB103K16
CKSSYB104K10
CKSSYB103K16
CKSRYB105K10
CKSSYB103K16

C

C 4240 (A,23,64)
C 4241 (B,58,38) 100 uF
C 4242 (B,48,47) 100 uF
C 4243 (A,19,57)
C 4244 (B,61,68)

CKSSYB392K50
CCG1232
CCG1232
CKSSYB102K50
CKSSYB104K10

C 4428 (B,78,103)
C 4429 (B,78,100)
C 4430 (B,78,97)
C 4431 (B,78,94)
C 4432 (B,78,85)

CKSSYB103K16
CKSSYB103K16
CKSSYB103K16
CKSSYB103K16
CKSSYB103K16

C 4245 (B,54,73)
C 4246 (A,20,45)
C 4247 (A,24,44)
C 4248 (B,23,129)
C 4249 (A,18,102)

CKSRYB474K16
CKSSYB104K10
CKSSYB104K10
CKSRYB105K10
CKSRYB105K10

C 4433 (B,69,107)
C 4435 (B,64,102)
C 4436 (B,64,98)
C 4437 (A,51,76)
C 4438 (B,63,106)

CKSQYB106K6R3
CKSSYB103K16
CKSSYB103K16
CKSSYB104K10
CKSSYB104K10

D

C 4251 (A,22,102)
C 4252 (B,20,128)
C 4255 (A,47,138)
C 4256 (B,51,82)
C 4257 (A,20,70)

CKSRYB105K10
CKSRYB105K10
CKSSYB104K10
CKSSYB104K10
CKSRYB105K10

C 4439 (B,64,94)
C 4441 (A,52,76)
C 4442 (B,64,56)
C 4443 (B,64,58)
C 4444 (B,64,62)

CKSSYB103K16
CKSRYB105K10
CKSSYB103K16
CKSSYB103K16
CKSSYB103K16

C 4259 (A,19,74)
C 4260 (B,60,103)
C 4261 (B,39,52)
C 4265 (B,58,95)
C 4266 (B,50,47) 100 uF

CKSRYB105K10
CKSSYB104K10
CKSSYB103K16
CKSSYB104K10
CCG1232

C 4445 (B,64,66)
C 4446 (B,64,69)
C 4447 (B,65,79)
C 4448 (B,67,54)
C 4450 (B,78,60)

CKSSYB103K16
CKSSYB103K16
CKSSYB103K16
CKSQYB106K6R3
CKSSYB103K16

E

C 4267 (A,55,39) 100 uF
C 4269 (A,22,54)
C 4270 (B,64,49)
C 4271 (A,45,129)
C 4272 (A,36,133)

CCG1232
CKSSYB103K16
CKSSYB103K16
CKSSYB104K10
CKSSYB104K10

C 4451 (B,78,65)
C 4452 (B,72,54)
C 4453 (B,78,69)
C 4455 (A,28,65)
C 4456 (A,27,71)

CKSSYB103K16
CKSSYB104K10
CKSSYB103K16
CKSSYB104K10
CKSSYB104K10

C 4273 (A,38,112)
C 4278 (A,39,117)
C 4361 (A,32,137)
C 4362 (A,26,135)
C 4363 (A,27,140)

CKSSYB104K10
CKSSYB104K10
CKSQYB106K6R3
CKSSYB104K10
CKSSYB104K10

C 4457 (A,30,70)
C 4458 (A,32,71)
C 4459 (A,40,70)
C 4511 (A,43,124)
C 4512 (A,46,122)

CKSQYB106K6R3
CKSSYB104K10
CKSSYB104K10
CKSSYB105K6R3
CKSRYB105K10

F

C 4364 (A,24,142)
C 4365 (B,12,128)
C 4380 (B,26,67)
C 4401 (A,64,105)
C 4402 (A,64,104)

CKSQYB105K16
CEVW101M16
CKSRYB104K16
CKSSYB103K16
CKSSYB103K16

C 4513 (A,41,124)
C 4514 (A,42,123)
C 4515 (A,40,124)
C 4516 (A,42,121)
C 4517 (A,41,119)

CKSSYB104K10
CKSSYB104K10
CKSSYB104K10
CKSSYB104K10
CKSSYB104K10

C 4403 (A,64,101)
C 4404 (A,64,97)
C 4405 (A,64,94)

CKSSYB103K16
CKSSYB103K16
CKSSYB103K16

C 4518 (A,44,121)
C 4519 (A,43,121)
C 4520 (A,39,122)

CKSSYB104K10
CKSSYB104K10
CKSSYB104K10

1

2

3

4

5		6		7		8	
<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
C 4521	(A,40,121)	CKSSYB104K10		C 4837	(B,28,113)	CKSSYB103K16	
C 4522	(A,39,124)	CKSRYB105K10		C 4838	(B,26,123)	CKSSYB103K16	
C 4607	(A,56,113)	CKSSYB104K10		C 4839	(B,26,122)	CKSSYB103K16	A
C 4608	(A,57,111)	CKSSYB104K10		C 4840	(B,25,123)	CKSSYB103K16	
C 4613	(B,41,59)	CKSSYB473K16		C 4841	(B,25,122)	CKSSYB103K16	
C 4621	(B,60,57)	CKSSYB473K16		C 4842	(B,23,122)	CKSSYB103K16	
C 4622	(B,58,53)	CKSSYB473K16		C 4843	(B,23,122)	CKSSYB103K16	
C 4623	(B,49,51)	CKSSYB473K16		C 4844	(B,22,122)	CKSSYB103K16	
C 4624	(B,41,54)	CKSSYB473K16		C 4845	(B,21,122)	CKSSYB103K16	
C 4625	(B,49,70)	CKSSYB473K16		C 4846	(B,22,121)	CKSSYB103K16	
C 4626	(B,56,70)	CKSSYB473K16		C 4847	(B,23,121)	CKSSYB103K16	
C 4651	(B,44,82)	CKSSYB104K10		C 4848	(B,21,121)	CKSSYB103K16	
C 4653	(B,31,87) 4.7 uF	CCG1201		C 4849	(B,20,121)	CKSSYB103K16	
C 4661	(B,32,76) 4.7 uF	CCG1201		C 4850	(B,20,119)	CKSSYB103K16	B
C 4662	(B,36,79) 4.7 uF	CCG1201		C 4851	(B,20,118)	CKSSYB103K16	
C 4665	(B,37,82) 4.7 uF	CCG1201		C 4852	(B,22,118)	CKSSYB103K16	
C 4666	(B,24,78) 4.7 uF	CCG1201		C 4853	(B,21,119)	CKSSYB103K16	
C 4667	(B,28,87) 4.7 uF	CCG1201		C 4854	(B,22,119)	CKSSYB103K16	
C 4668	(B,29,74)	CKSRYB105K10		C 4855	(B,23,119)	CKSSYB103K16	
C 4670	(B,25,83) 4.7 uF	CCG1201		C 4856	(B,20,116)	CKSSYB103K16	
C 4671	(B,24,80) 4.7 uF	CCG1201		C 4857	(B,21,114)	CKSSYB103K16	
C 4701	(B,27,57)	CKSSYB104K10		C 4858	(B,21,116)	CKSSYB103K16	
C 4781	(B,37,78) 10 uF	CCG1234		C 4859	(B,22,116)	CKSSYB103K16	
C 4784	(B,60,69)	CKSRYB105K10		C 4860	(B,22,114)	CKSSYB103K16	
C 4785	(A,51,128)	CKSRYB105K10		C 4861	(B,23,116)	CKSSYB103K16	C
C 4786	(B,40,64)	CKSRYB105K10		C 4862	(B,23,118)	CKSSYB103K16	
C 4803	(B,29,123)	CKSSYB103K16		C 4863	(B,23,116)	CKSSYB103K16	
C 4804	(B,26,123)	CKSSYB103K16		C 4864	(B,24,118)	CKSSYB103K16	
C 4805	(B,25,123)	CKSSYB103K16		C 4865	(B,24,116)	CKSSYB103K16	
C 4806	(B,23,123)	CKSSYB103K16		C 4866	(B,25,117)	CKSSYB103K16	
C 4807	(B,23,126)	CKSSYB103K16		C 4867	(B,26,118)	CKSSYB103K16	
C 4808	(B,21,123)	CKSSYB103K16		C 4868	(B,25,119)	CKSSYB103K16	
C 4809	(B,29,123)	CKSSYB103K16		C 4869	(B,25,115)	CKSSYB103K16	
C 4810	(B,27,121)	CKSSYB103K16		C 4870	(B,24,114)	CKSSYB103K16	
C 4811	(B,29,122)	CKSSYB103K16		C 4871	(B,24,114)	CKSSYB103K16	
C 4812	(B,28,123)	CKSSYB103K16		C 4872	(B,25,114)	CKSSYB103K16	D
C 4813	(B,28,121)	CKSSYB103K16		C 4901	(B,29,124)	CKSSYB103K16	
C 4814	(B,27,121)	CKSSYB103K16		C 4902	(B,26,124)	CKSSYB103K16	
C 4815	(B,29,121)	CKSSYB103K16		C 4903	(B,25,124)	CKSSYB103K16	
C 4816	(B,27,119)	CKSSYB103K16		C 4904	(B,23,124)	CKSSYB103K16	
C 4817	(B,27,119)	CKSSYB103K16		C 4905	(B,22,126)	CKSSYB103K16	
C 4818	(B,28,119)	CKSSYB103K16		C 4906	(B,21,124)	CKSSYB103K16	
C 4819	(B,30,119)	CKSSYB103K16		C 4912	(A,35,117)	CKSSYB104K10	
C 4820	(B,30,121)	CKSSYB103K16		C 4913	(B,30,115)	CKSSYB104K10	
C 4821	(B,30,119)	CKSSYB103K16		C 4914	(B,30,115)	CKSSYB104K10	
C 4822	(B,30,118)	CKSSYB104K10		C 4915	(B,30,113)	CKSSYB104K10	
C 4823	(B,29,115)	CKSSYB104K10		C 4916	(B,30,116)	CKSSYB104K10	E
C 4824	(B,28,117)	CKSSYB104K10		C 4917	(B,30,117)	CKSSYB104K10	
C 4825	(B,29,117)	CKSSYB104K10		C 4918	(B,32,113)	CKSSYB474K6R3	
C 4826	(B,28,115)	CKSSYB104K10		C 4920	(A,17,115)	CCSSCH101J50	
C 4827	(B,27,117)	CKSSYB104K10		C 4921	(A,34,77)	CKSQYB106K6R3	
C 4828	(B,28,114)	CKSSYB104K10		C 4922	(A,16,83)	CKSQYB106K6R3	
C 4829	(A,34,122)	CKSSYB104K10		C 4924	(A,18,82)	CKSQYB106K6R3	
C 4830	(A,36,121)	CKSSYB104K10		C 4925	(A,23,82)	CKSSYB333K16	
C 4831	(A,34,121)	CKSSYB104K10		C 4926	(A,24,81)	CKSSYB104K10	
C 4832	(A,34,120)	CKSSYB104K10		C 4928	(A,24,83)	CKSSYB104K10	
C 4833	(A,34,118)	CKSSYB104K10		C 4929	(A,24,83)	CKSSYB104K10	F
C 4834	(A,34,119)	CKSSYB104K10		C 4931	(A,24,85)	CKSSYB104K10	
C 4835	(A,34,116)	CKSSYB104K10		C 4932	(A,29,88)	CCSSCH7R0D50	
C 4836	(A,34,117)	CKSSYB104K10		C 4933	(A,26,86)	CKSSYB333K16	

Circuit Symbol and No.**Part No.**

	C 4938	(A,30,85)	CKSSYB104K10
	C 4939	(A,28,88)	CCSSCH7R0D50
A	C 4943	(A,20,78)	CKSQYB106K6R3
	C 4944	(A,22,78)	CKSQYB106K6R3
	C 4963	(B,29,108)	CKSQYB106K6R3
	C 4964	(B,30,110)	CKSSYB103K16
	C 4982	(B,30,128) 47 uF	CCG1251
	C 4983	(B,29,125)	CKSSYB103K16
	C 4985	(B,27,112)	CKSSYB103K16
	C 4986	(B,25,111)	CKSQYB106K6R3
	C 4987	(B,19,120)	CKSQYB106K6R3
	C 4988	(A,31,111)	CKSSYB103K16
	C 4989	(A,34,111)	CCSSCH4R0C50
B	C 4990	(A,30,108)	CCSSCH100D50
	C 4991	(A,26,109)	CCSSCH100D50
	C 4993	(B,29,126)	CKSRYP105K10
	C 5129	(A,11,46)	CKSRYP103K50
	C 5130	(A,13,38)	CKSRYP104K16
	C 5451	(A,34,35) 4.7 uF	CCG1201
	C 5452	(A,40,35) 4.7 uF	CCG1201
	C 5453	(A,33,44)	CCSRCH391J50
	C 5454	(A,44,43)	CCSRCH391J50
	C 5455	(A,40,42)	CCSRCH221J50
	C 5456	(A,37,42)	CCSRCH221J50
C	C 5460	(A,43,48)	CKSRYP104K16
	C 5471	(A,33,47) 4.7 uF	CCG1201
	C 5472	(A,45,47) 4.7 uF	CCG1201
	C 5629	(A,78,132)	CKSQYB104K25
	C 5630	(A,73,119)	CKSRYP105K16
	C 5631	(A,78,120)	CCSSCH470J50
	C 5632	(A,70,141) 10 uF	CCG1223
	C 5634	(A,68,138)	CKSSYB102K50
	C 5635	(A,70,119) 2.2 uF	CCG1205
	C 5637	(A,61,118) 10 uF	CCG1236
	C 5642	(B,29,133) 10 uF	DCH1201
D	C 5643	(B,29,135) 10 uF	DCH1201
	C 5644	(B,29,137) 10 uF	DCH1201
	C 5647	(A,66,115) 10 uF	CCG1236
	C 5651	(A,74,141)	CKSRYP473K50
	C 5652	(A,74,139)	CKSRYP473K50
	C 5653	(A,74,138)	CKSRYP473K50
	C 5654	(A,74,137)	CKSRYP473K50
	C 5668	(A,31,27)	CKSRYP104K16
	C 5672	(A,41,22)	CKSRYP105K10
	C 5697	(A,30,77)	CKSSYB104K10
E	C 5698	(A,39,28)	CKSRYP104K16

Miscellaneous Parts List

	Pickup Unit(Service)	CXX2398
M 1	Motor Unit(LOAD/CRG)	CXC4026
M 2	Motor(SPINDLE)	EXM1050