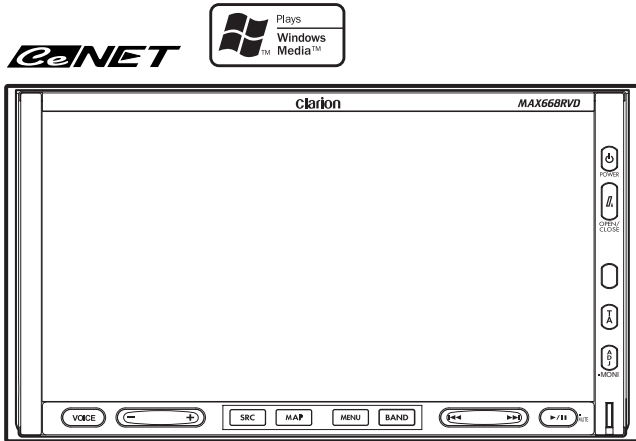


# Service Manual



## DVD Multimedia Station With Touch Panel Control

Model **MAX668RVD**  
 (QZ-6070E-B)

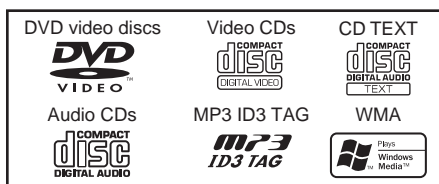


This product is a lead free model.  
 Lead free solder is used in PWB stamped LF mark.  
 Please keep the following conditions when you repair.

1. Use lead free solder.
  - \* Koki's lead free solder S3X-55M 0.6mm (CLARION Parts No.642-0231-01)
  - \* Koki's lead free solder S3X-55M 1.0mm (CLARION Parts No.642-0231-02)
2. Use a nitrogen solder system.
3. Do not use "General solder" and "Lead free solder" together.

## NOTES

- \* The tuner of this unit is DSP type. When you exchange the tuner pack(880-2091D), it is necessary to adjust for S-meter etc. The special JIG is used for an accurate adjustment.
- \* This DVD video player can play the following discs.



- \* Precautions when creating an MP3 disc  
 When writing an MP3/WMA file on a disc, please select "ISO9660 level 1 or level 2(without including expansion format)" as the writing software format. Normal playback may not be possible if the disc is recorded on another format.

In case of a track recorded at VBR (variable bit rate), the display for the play time of the track may be slightly different from the actual play time. Also, the recommended value of VBR ranges from 64 kbps to 320kbps.

- \* Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.
- \* "DTS" and "DTS Digital Out" are registered trademarks of Digital Theater Systems, Inc.
- \* This product includes technology owned by Microsoft Corporation and cannot be used or distributed without a license from MSLGP.
- \* Windows Media™ and Windows® logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.
- \* iPod® is for legal or rightholder-authorized copying only. Don't steal music. iPod is a trademark of Apple Computer, Inc., registered in the U.S. and other countries.
- \* This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.
- \* We cannot supply PWB with component parts in principle. When a circuit on PWB has failure, please repair it by component parts base. Parts which are not mentioned in service manual are not supplied.
- \* Specifications and design are subject to change without notice for further improvement.

## SPECIFICATIONS

### Tuner section

Frequency range: FM;87.5MHz to 108.0MHz  
MW;531kHz to 1629kHz  
LW;153kHz to 279kHz

FM Usable sensitivity: 9dBf  
FM 50dB quieting sensitivity: 15dBf  
FM Alternate channel selectivity: 70dB  
FM Stereo separation(1kHz): 32dB  
FM Frequency response(-3/+3dB): 30Hz to 15kHz

### DVD section

Usable discs: DVD video disc(Region 2),  
DVD+/- R/RW  
Frequency response: 20Hz to 20kHz(48kHz)(-1/+1dB)  
Distortion: 0.006%

### CD section

Wow flutter: Below measurable limit(WRMS)  
Signal to noise ratio(1kHz): 100dB  
Frequency response: 20Hz to 20kHz(-1/+1dB)  
Dynamic range(1kHz): 100dB  
Harmonic distortion: 0.006%

### Audio amplifier section

Maximum power output: 50Wx4  
DIN output power: 27Wx4(DIN45324,+B=14.4V)  
Speaker impedance: 4ohm(4 to 8ohm)

### Monitor section

Screen size(mm): 154.0(W)x87.0(H) (7-inch)  
Display type: Transparent-type TN liquid crystal display  
Drive principle: TFT(thin-film transistor) active matrix display  
Number of pixels: 336,960(480x3[RGB]x234)  
RAC video input: 1.0+/-0.2Vp-p(input impedance 75ohm)  
RCA audio input: 130+/-60mVrms(input impedance 10kohm or more)

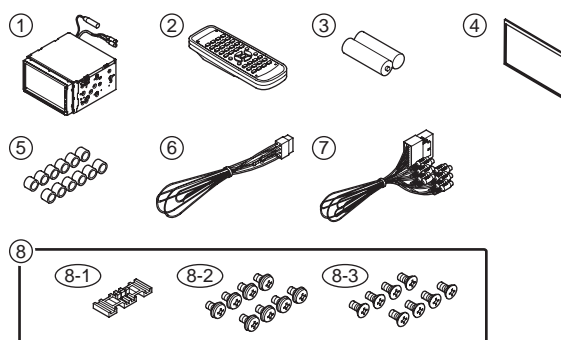
### General section

Power source voltage: 14.4V DC  
(10.8 to 15.6V allowable)  
Ground: Negative  
Current consumption: 4.0A(at 1W)  
Dimensions(mm):  
Main unit; 178(W)x100(H)x160.0(D)  
Remote Control Unit; 54(W)x28.8(H)x155(D)  
Weight:  
Main Unit; 2.4kg  
Remote Control Unit; 100g  
(including battery)

## COMPONENTS

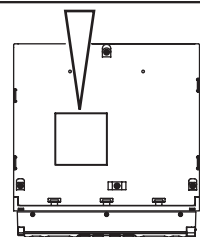
### QZ-6070E-B

1.	Main unit	-----	1
2.	Remote controller	RCB-177-300	1
3.	Battery(SUM-3)	-----	2
4.	Finisher	383-0591-00	1
5.	RCA cap	345-3799-20	12
6.	Extension lead (15A Fuse)	854-6432-01 120-0150-00	1 1)
7.	RCA pin cord	855-5543-50	1
8.	Parts bag	-----	1
8-1.	Electro tap	060-0018-00	1
8-2.	Hexagonal screw(M5x8)	716-0496-51	8
8-3.	Flat head screw(M5x8)	714-5008-4B	8



## CAUTION

This appliance contains a laser system and is classified as a "CLASS 1 LASER PRODUCT".To use this model properly,read this Owner's Manual carefully and keep this manual for your future reference.In case of any trouble with this player,please contact your nearest "AUTHORIZED service station".To prevent direct exposure to the laser beam,do not to open the enclosure.



Top view of the unit

## To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

1. Use specified parts.

The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them.

The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.

2. Place the parts and wiring back in their original positions after replacement or re-wiring.

For proper circuit construction, use of insulation tubes, bonding, gaps to PWB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection.

If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.

3. Check for safety after repair.

Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary problems around the repaired spots.

If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

4. Caution in removal and making wiring connection to the parts for the automobile.

Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur. If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

5. Cautions in soldering

Please do not spread liquid flux in soldering.

Please do not wash the soldering point after soldering.

6. Cautions in soldering for chip capacitors

Please solder the chip capacitors after pre-heating for replacement because they are very weak to heat.

Please do not heat the chip capacitors with a soldering iron directly.

7. Cautions in handling for chip parts.

Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc).

Please make an operation test after replacement.

8. Cautions in handling flexible PWB

Before working with a soldering iron, make sure that the iron tip temperature is around 270°C. Take care not to apply the iron tip repeatedly (more than three times) to the same patterns. Also take care not to apply the tip with force.

9. Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

10. Cautions in checking that the optical pickup lights up.

The laser is focused on the disc reflection surface through the lens of the optical pickup. When checking that the laser optical diode lights up, keep your eyes more than 30cms away from the lens. Prolonged viewing of the laser within 30cms may damage your eyesight.

11. Cautions in handling the optical pickup

The laser diode of the optical pickup can be damaged by electrostatic charge caused by your clothes and body. Make sure to avoid electrostatic charges on your clothes or body, or discharge static electricity before handling the optical pickup.

11-1. Laser diode

The laser diode terminals are shorted for transportation in order to prevent electrostatic damage. After replacement, open the shorted circuit. When removing the pickup from the mechanism, short the terminals by soldering them to prevent this damage.

11-2. Actuator

The actuator has a powerful magnetic circuit. If a magnetic material is put close to it. Its characteristics will change. Ensure that no foreign substances enter through the ventilation slots in the cover.

11-3. Cleaning the lens

Dust on the optical lens affects performance.

To clean the lens, apply a small amount of isopropyl alcohol to lens paper and wipe the lens gently.

## ADJUSTMENTS

- \* Refer to the printed wiring board (page 37) for the adjustment points and VRs.
- \* The NTSC composite output signal of the signal generators is performed with the following output. (Video input of visual mode)  
Video signal: 714 +/-17.5mV  
Synchronized signal: 286 +/-7.5mV

### Power supply voltage adjustment

Input signal: NTSC / COMP: 10-steps signal / Monochrome / DIMMER 100% / Measuring instrument: digital volt meter

1. Adjust VR600 so that the voltage of TP710 is 5.30+0.02/-0.02V.
2. Confirm the following voltages.  
TP709 : -17.0+0.8/-0.8V  
TP711 : 7.5V+0.5/-0.5V  
TP713 : 15.0V+0.8/-0.8V

### Free-run frequency adjustment

Measurement conditions: the same conditions as the adjustment of "Power supply voltage". / Measuring instrument: frequency counter and digital volt meter

1. Connect TP40 to GND, and adjust VR401 so that the frequency of TP42 will become 15.734kHz+50/-50Hz.
2. Confirm the following voltages.  
TP46 : 2.58V+0.15/-0.15V

### BRIGHT voltage adjustment

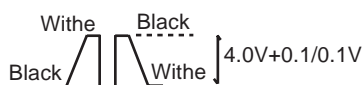
Measurement conditions: the same conditions as the adjustment of "Power supply voltage". / Measuring instrument: digital volt meter

1. Adjust VR705 so that the voltage of TP708 will become 2.00V+0.02/-0.02V.

### RGB-AMP adjustment (black-black)

Measurement conditions: the same conditions as the adjustment of "Power supply voltage". / Measuring instrument: oscilloscope

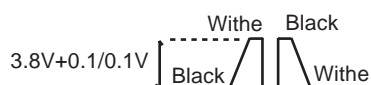
1. Adjust VR707 so that the black-black level of the waveform of TP716(G) will become 4.0V+0.1/-0.1V.



### Contrast adjustment (black-white)

Input signal: NTSC / COMP: 10-steps signal / Monochrome / APL 50% wave form / With composite screen display / BRT, COL, HUE: Initial setting of touch panel microcomputer / Measuring instrument: oscilloscope

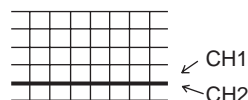
1. Adjust VR702 so that the black-white level of the waveform of TP716(G) will become 3.8V+0.1/-0.1V.



### White balance pre-adjustment

Measurement conditions: the same conditions as the adjustment of "Power supply voltage". / Measuring instrument: oscilloscope (DC range)

1. Set the range of CH1 and CH2 of an oscilloscope to 1V range.
2. Indicate CH1 and CH2 by GND, adjust GND as follows.



### White balance red adjustment

Measurement conditions: the same conditions as the adjustment of "Power supply voltage". / Measuring instrument: oscilloscope (DC range)

1. Display the waveform of TP716 on CH1, and display the waveform of TP715 on CH2.
2. Adjust VR703 so that the waveform of TP715 will become the same as TP716.

### White balance blue adjustment

Measurement conditions: the same conditions as the adjustment of "Power supply voltage". / Measuring instrument: oscilloscope (DC range)

1. Display the waveform of TP716 on CH1, and display the waveform of TP717 on CH2.
2. Adjust VR704 so that the waveform of TP717 will become the same as TP716.

### VCOM AC adjustment

Measurement conditions: the same conditions as the adjustment of "Power supply voltage". / Measuring instrument: oscilloscope

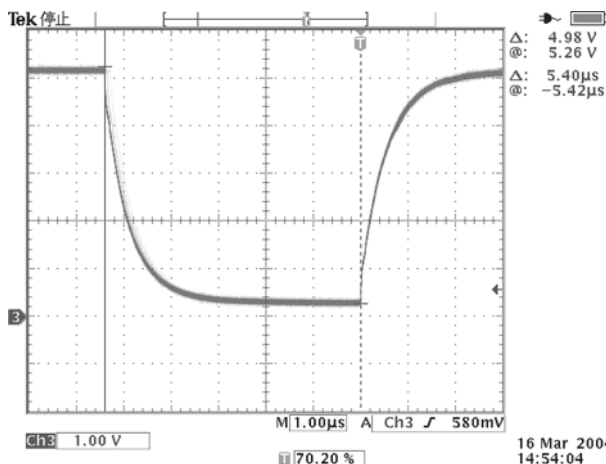
1. Adjust VR701 so that an amplitude of a waveform of TP705 is 8.0V+0.1/-0.1V, and confirm that there is no distortion in the waveform.



### Display position adjustment

Measurement conditions: the same conditions as the adjustment of "Power supply voltage". / Measuring instrument: oscilloscope

1. Adjust VR402 so that the pulse width of TP42 is "5.4+0.1/-0.1u sec.".



16 Mar 2004  
14:54:04

### PAL display adjustment

Input signal: PAL Color bar signal

1. Display the wave form of TP717 on CH1, and adjust L703 to focus.

### Voltage confirmation of J710

1. Confirm the following voltages.
  - Pin32(VGH) : 15.0V+0.8/-0.8V
  - Pin30(CS) : -5.5V+0.8/-0.8V
  - Pin24(VCC) : -11.9V+0.8/-0.8V
  - Pin18(VGL) : -10.0V+0.8/-0.8V
  - Pin1,3(VSH) : 5.3V+0.5/-0.5V
  - Pin21(VSS) : -17.0+0.8/-0.8V

### VCOM-DC adjustment

Measurement conditions: the same conditions as the adjustment of "Power supply voltage".

1. Adjust VR700 so that the flicker of monitor is minimum.

### NAVI display position adjustment

Measurement conditions: Navigation display.

1. Adjust VR402 so that the navigation display is center.

### Character focus adjustment

Measurement conditions: Navigation display.

1. Adjust VR706 so that the characters on the navigation display is in focus. (In this case, adjust so that non-display dot is not caused on right and left of the display.)

## ERROR DISPLAY

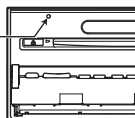
### DVD Player

Display	Cause	Measure
ERROR 2	A disc is caught inside the DVD deck and is not ejected.	This is a failure of DVD deck's mechanism.
ERROR 3	A disc cannot be played due to scratches, etc.	Replace with a non-scratched, non-warped disc.
ERROR 6	A disc is loaded up side-down inside the DVD deck and does not play.	Eject the disc then reload it properly.
PARENTAL VIOLATION	Parental level error	Set the correct Parental level.
WRONG REGION	Region code error	Eject the disc, and replace correct region code disc.
DRM	WMA files protected by DRM are played.	Perform the operation such as skipping a file. (Scan, repeat and random playback mode may be canceled.)
NOT SUPPORT	Files not supported by this unit are played.	

### CD Changer

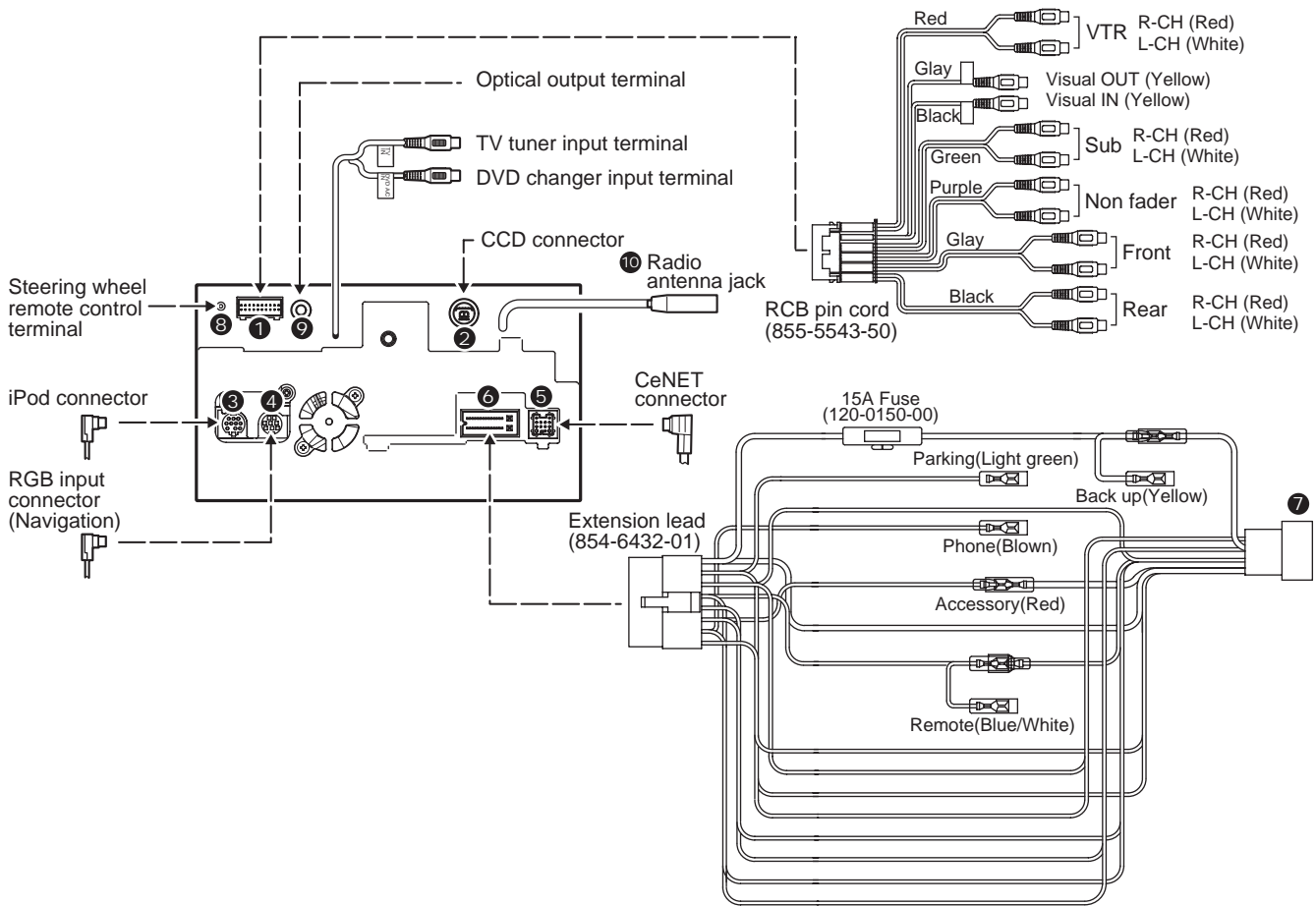
Display	Cause	Measure
ERROR 2	A disc inside the CD changer is not loaded.	This is a failure of CD changer's mechanism.
ERROR 3	A disc inside the CD changer cannot be played due to scratches, etc.	Replace with a non-scratched, non-warped disc.
ERROR 6	A disc inside the CD changer cannot be played because it is loaded upside-down.	Eject the disc then reload it properly.

RESET button

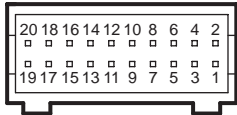


If an error display other than the ones described above appears, press the [RESET] button. When the [RESET] button is pressed, frequencies of TV/radio stations, titles, etc. stored in memory are cleared.

# WIRE CONNECTION

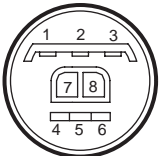


## 1 AV Connector



1	REAR(L)	11	SUB(L)
2	REAR(R)	12	SUB(R)
3	FRONT(L)	13	V-OUT-GND
4	FRONT(R)	14	V-GND
5	S-GND	15	V-OUT
6	S-GND	16	VTR-IN
7	NF(L)	17	VTR-SG
8	NF(R)	18	VTR-SG
9	S-GND	19	VTR(L)
10	S-GND	20	VTR(R)

## 2 CCD Connector



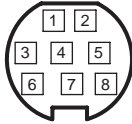
1	SEL2
2	N.C.
3	N.C.
4	V-IN
5	N.C.
6	N.C.
7	V-GND
8	N.C.

## 3 iPod Connector



1	AUDIO-L
2	AUDIO-R
3	A RETURN
4	ACC IDENT
5	ACC DET
6	IPOD-AV
7	AV-IPOD
8	D/FW GND
9	3.3V
10	F/W-PWR

## 4 RGB Connector



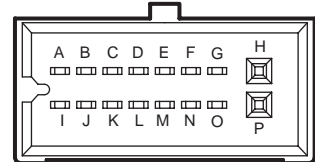
1	NAVI-B
2	NAVI-SYNC
3	NAVI-R
4	N.C.
5	N.C.
6	NAVI-G
7	N.C.
8	N.C.

## 5 CeNET Connector

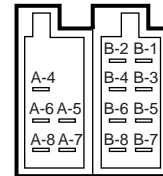


1	GND
2	BUS B/U
3	L-CH(+)
4	NAVI(-)
5	NAVI(+)
6	BUS(+)
7	R-CH(+)
8	R-CH(-)
9	SYS-ACC
10	BUS(-)
11	L-CH(-)
12	ILLUMI
13	N.C.

## 6 Main Connector



## 7 ISO connector



Main connector		ISO connector
A	REAR L-CH(+)	GRN B-7
B	FRONT L-CH(-)	WHT/BLK B-6
C	FRONT L-CH(+)	WHT B-5
D	FRONT R-CH(+)	GRY B-3
E	FRONT R-CH(-)	GRY/BLK B-4
F	REAR R-CH(+)	PUR B-1
G	REAR R-CH(-)	PUR/BLK B-2
H	BACK UP(15A)	YEL A-4
I	REAR L-CH(-)	GRN/BLK B-8
J	PHONE MUTE	BRN ---
K	ACC	RED A-7
L	N.C.	---
M	AMP-REM	BLU/WHT A-5
N	ILL	ORN/WHT A-6
O	PKB	L.GRN ---
P	GND	BLK A-8

# EXPLANATION OF IC

052-7084-00 uPD70F3339GJ-UEN-A System Controller

## TerminalDescription

pin 1: A Vref 0	: - : Reference voltage for the internal ADC.	pin 54: NU	: IN: Not in use.
pin 2: A VSS	: - : Negative voltage supply for analog section.	pin 55: NU	: IN: Not in use.
pin 3: SYS ACC	: O : ACC detect signal output.	pin 56: NU	: IN: Not in use.
pin 4: SYS MUTE	: O : System muting signal output.	pin 57: NU	: IN: Not in use.
pin 5: A Vref 1	: - : Reference voltage for the internal DAC.	pin 58: OSD RST	: O : The reset pulse output for the on screen display IC.
pin 6: RDS CLK	: IN: RDS clock pulse input.	pin 59: TP RX	: IN: The serial data input from the touch panel micro computer.
pin 7: AV ON	: O : The ON command output to the power supply section.	pin 60: TP TX	: O : The serial data output to the touch panel micro computer.
pin 8: FLASH	: IN: The signal input for the flash memory control.	pin 61: DVD TX	: O : The serial data output to the DVD mechanism.
pin 9: VDD	: - : Positive voltage supply.	pin 62: DVD RX	: IN: The serial data input from the DVD mechanism.
pin 10: REG C	: - : The capacitor connection.	pin 63: W REMCOM	: IN: Wired remote controller signal input.
pin 11: GND	: - : Ground.	pin 64: BLKO	: O : The blanking signal output.
pin 12: X in	: IN: Crystal connection.	pin 65: VID / RGB	: O : L = Video, H = RGB.
pin 13: X out	: O : Crystal connection.	pin 66: FL ON	: O : The fluorescent light of the LCD ON signal output.
pin 14: RESET	: IN: Reset signal input.	pin 67: BEEP	: O : Beep out.
pin 15: XT I	: IN: Oscillation terminal.	pin 68: OSD RX	: IN: Serial data input from on-screen-display IC.
pin 16: XT O	: O : Oscillation terminal.	pin 69: OSD TX	: O : Serial data output to on-screen-display IC.
pin 17: POWER KEY	: IN: Power key input.	pin 70: OSD SCK	: O : The clock pulse output to the on screen display IC.
pin 18: BU 9V DET	: IN: Backup 9V detection.	pin 71: OSD CE	: O : Chip enable output to on-screen-display IC.
pin 19: BU 6V DET	: IN: Backup 6V detection.	pin 72: OSD INH	: O : Inhibit pulse output to on-screen-display IC.
pin 20: NU	: IN: Not in use.	pin 73: Freq Sel	: O : Oscillation frequency selection signal output.
pin 21: OSD INT	: IN: The interrupt signal input for the on screen display.	pin 74: OPN/CL SW	: IN: Open/Close switch signal input.
pin 22: TUN SDA	: I/O: I2BUS serial data input/output for the tuner pack.	pin 75: EJECT SW	: IN: Eject switch signal input.
pin 23: TUN SCL	: O : I2BUS serial clock output for the tuner pack.	pin 76: CATS DET	: IN: The backup voltage detection for CATS.
pin 24: TP REQ	: IN: The request signal from the touch panel micro computer.	pin 77: ROM EN	: O : ROM enable signal output.
pin 25: ipod/FLASH O	: O : Serial data output to ipod or flash memory.	pin 78: INES ON	: O : Inner escutcheon illumination ON signal output.
pin 26: ipod/FLASH IN	: IN: Serial data input from ipod or flash memory.	pin 79: NU	: IN: Not in use.
pin 27: TP RST	: O : The reset pulse output to the touch panel micro computer.	pin 80: ipod PWR ON	: O : ipod power ON signal output.
pin 28: DIMMER	: O : PWM output.	pin 81: Panel ON	: O : LCD panel ON signal output.
pin 29: Motor Pulse	: IN: Motor pulse input.	pin 82: FAN ON	: O : The fan on signal output.
pin 30: NAVI ON	: O : NAVI ON signal output.	pin 83: TV/OTHER	: O : Horizontal sync select. H = TV.
pin 31: IE BUS TX	: O : IE Bus serial data output.	pin 84: FLASH READY	: IN: Ready signal input from flash memory.
pin 32: IE BUS RX	: IN: IE Bus serial data input.	pin 85: EEP DO	: O : The serial data output to the EEP-ROM.
pin 33: GND	: - : Ground.	pin 86: CLK out	: O : Clock pulse output.
pin 34: E VDD	: - : Positive voltage supply.	pin 87: EEP CK	: O : The clock pulse output to the EEP-ROM.
pin 35: DSP SDA	: I/O: The serial data input/output for the digital signal processor.	pin 88: EEP CEO	: O : The chip enable signal output to the EEP-ROM.
pin 36: DSP SCL	: O : SCL output to the digital signal processor.	pin 89: EEP DI	: IN: The serial data input from the EEP-ROM.
pin 37: MOTOR 1 F	: O : The forward command output to the slide motor.	pin 90: NU	: IN: Not in use.
pin 38: MOTOR 1 R	: O : The reverse command output to the slide motor.	pin 91: NU	: IN: Not in use.
pin 39: NU	: O : Not in use.	pin 92: NU	: IN: Not in use.
pin 40: NU	: O : Not in use.	pin 93: NU	: IN: Not in use.
pin 41: OFFSET DET	: IN: The emergency signal input from the power IC.	pin 94: NU	: IN: Not in use.
pin 42: Amp Standby	: O : Standby signal output to internal amplifier.	pin 95: OSD DOT 1	: O : Fine-tuning of the horizontal position.
pin 43: NU	: IN: Not in use.	pin 96: OSD DOT 2	: O : Fine-tuning of the horizontal position.
pin 44: NU	: IN: Not in use.	pin 97: CATS EEP CE	: O : Chip enable signal output to CATS-EEPROM.
pin 45: NU	: IN: Not in use.	pin 98: D IND	: O : H = Disk indicator ON.
pin 46: NU	: IN: Not in use.	pin 99: USA/3rd	: IN: L = Asia, H = North America.
pin 47: NU	: IN: Not in use.	pin100: Mechanism	: IN: H = Matsushita DVD mechanism.
pin 48: NU	: IN: Not in use.	pin101: NTSC/PAL	: IN: NTSC/PAL select signal input.
pin 49: NU	: IN: Not in use.	pin102: FLASH WR	: IN: The write flag input for the flash memory.
pin 50: NU	: IN: Not in use.	pin103: B VSS	: - : Ground for the bus interface section.
pin 51: NU	: IN: Not in use.	pin104: B VDD	: - : Positive voltage supply for the bus interface section.
pin 52: NU	: IN: Not in use.	pin105: ILL DET	: IN: Illumination ON signal input.
pin 53: IRI	: IN: The remote control signal input.	pin106: BUS ILL	: O : Illumination-ON signal output for Ce-NET.
		pin107: ILL ON	: O : The illumination ON signal output.
		pin108: BLINK LED	: O : Signal output for the LED.

# EXPLODED VIEW/PARTS LIST

## Main section

pin109: DVD ON 2	: O : DVD ON signal output.
pin110: NU	: IN: Not in use.
pin111: DVD RST	: O : The reset signal output to the DVD mechanism.
pin112: DSP RST	: O : Reset pulse output to the DSP IC.
pin113: DSP INIT	: IN: The initial finished signal input from the Radio-Audio-DSP.
pin114: SAMPLE	: IN: Not in use.
pin115: NU	: - : Not in use.
pin116: AM/FM 8V ON	: O : AM/FM 8V ON signal output.
pin117: RDS DATA	: IN: RDS serial data input.
pin118: AM/FM 5V ON	: O : AM/FM 5V ON signal output.
pin119: iPod DET	: IN: iPod connection detection.
pin120: Frnt V Sel 4	: O : Front image signal selection. Refer Table 1.
pin121: DAC RESET	: O : Reset pulse output to DAC. L = reset.
pin122: SUB MUTE	: O : Sub-zone audio mute signal output.
pin123: AMP MUTE	: O : Muting signal output to the Audio Power Amplifier.
pin124: NU	: IN: Not in use.
pin125: NU	: O : Not in use.
pin126: Photo Sens	: IN: Slide door open/close signal input.
pin127: Rear V Sel 4	: O : Rear image signal selection. Refer Table 2.
pin128: Rear V Sel 3	: O : Rear image signal selection. Refer Table 2.
pin129: NU	: IN: Not in use.
pin130: FAN TEMP	: IN: The input terminal of the internal ADC to detect the temperature.
pin131: Rear V Sel 2	: O : Rear image signal selection. Refer Table 2.
pin132: Rear V Sel 1	: O : Rear image signal selection. Refer Table 2.
pin133: Frnt V Sel 3	: O : Front image signal selection. Refer Table 1.
pin134: Frnt V Sel 2	: O : Front image signal selection. Refer Table 1.
pin135: Frnt V Sel 1	: O : Front image signal selection. Refer Table 1.
pin136: SEL 3	: IN: The selection signal input.
pin137: NU	: IN: Not in use.
pin138: PKB	: IN: The parking brake signal input.
pin139: PHONE INT	: IN: The telephone interrupt signal input.
pin140: NU	: - : Not in use.
pin141: AMP REM DT	: IN: Remote controller wire short detection.
pin142: AMP REM O	: O : ON signal output to the amplifier.
pin143: AUTO ANT	: O : Motor antenna control signal output.
pin144: ACC IN	: IN: ACC ON flag input.

Table 1. Front image signal selection

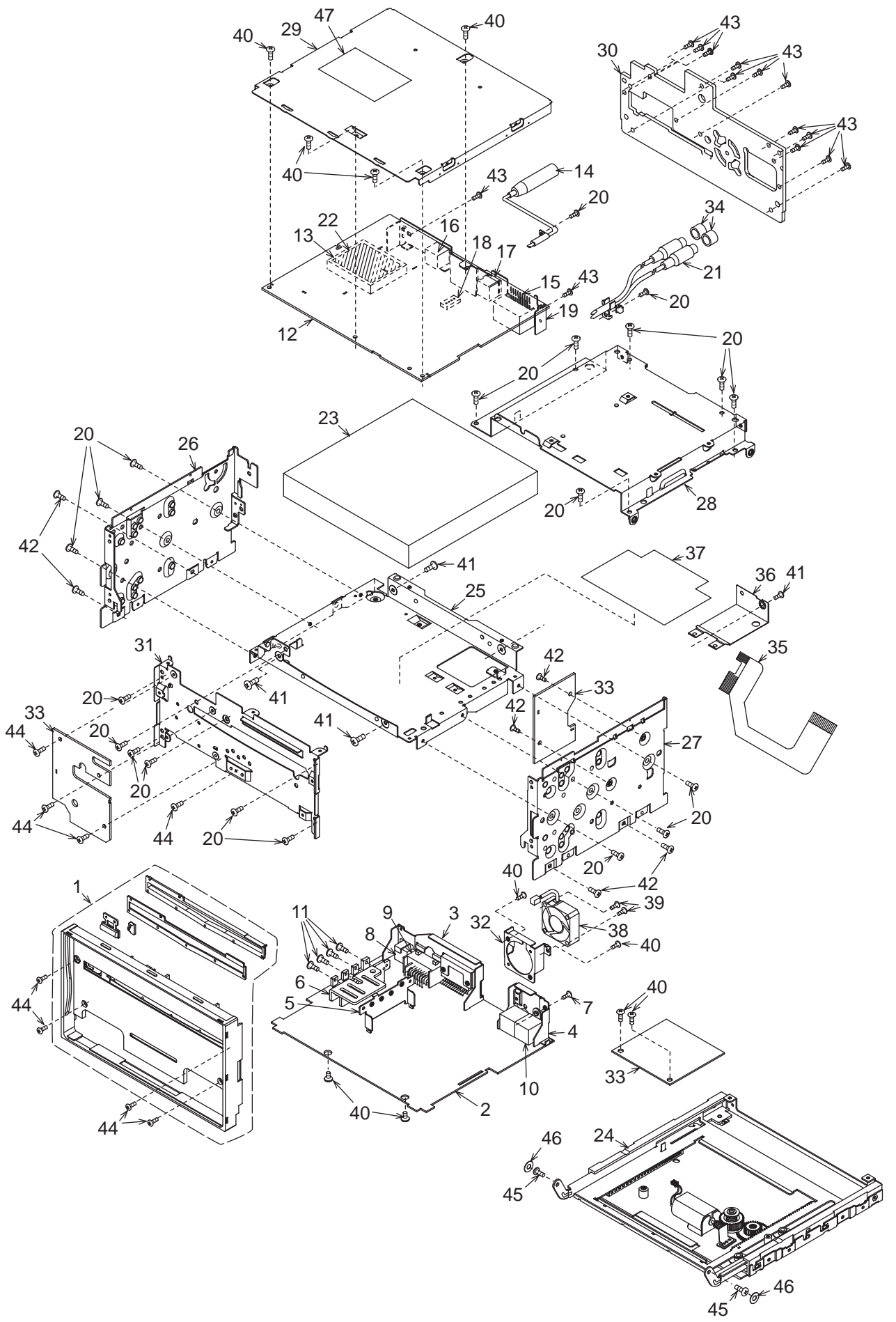
	Visual	TV	DVD	DVD A/C	CCD
Frnt V Sel 1 ( pin 135 )	L	H	L	L	L
Frnt V Sel 2 ( pin 134 )	L	L	H	L	L
Frnt V Sel 3 ( pin 133 )	H	H	H	L	L
Frnt V Sel 4 ( pin 120 )	H	H	H	L	H

Table 2. Rear image signal selection

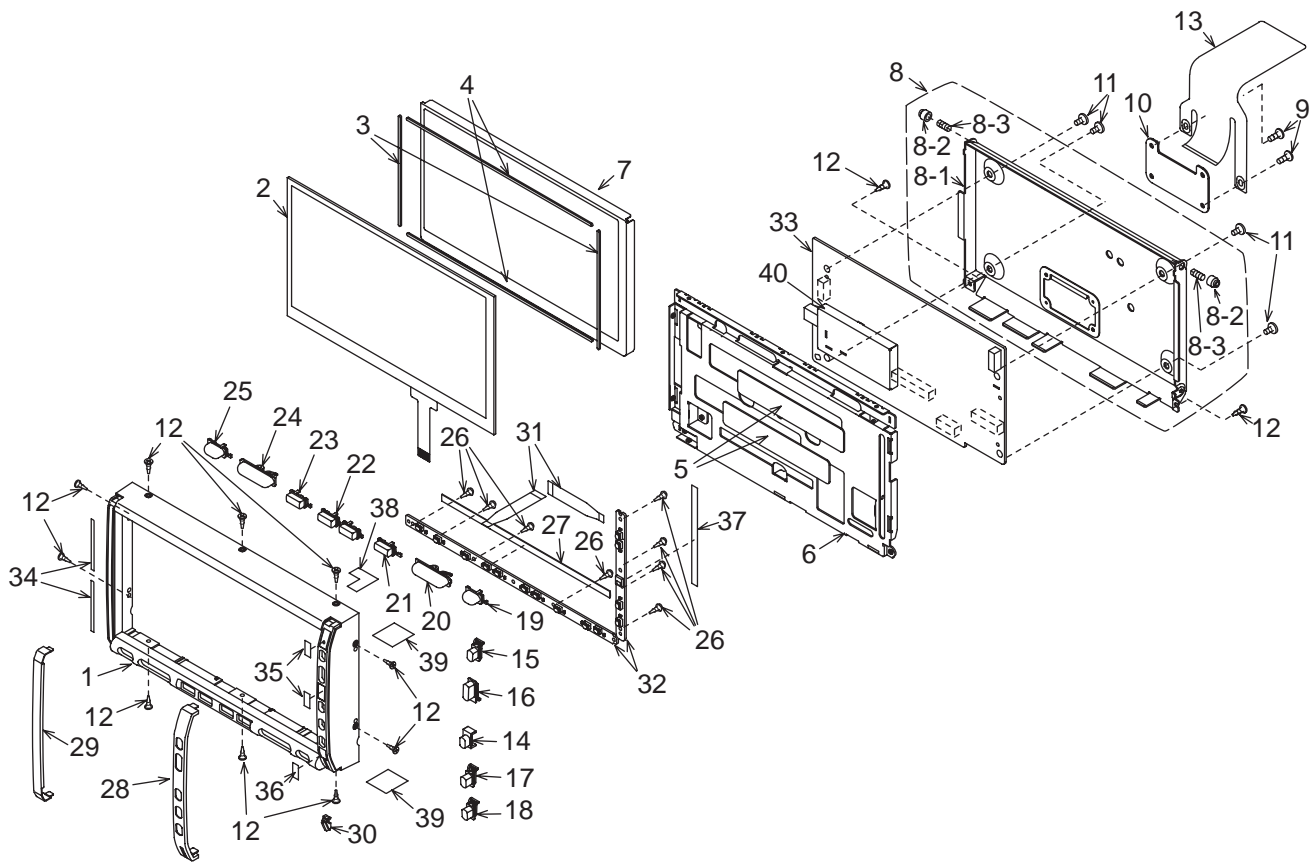
	Visual	TV	DVD	DVD A/C	Rear mute
Rear V Sel 1 ( pin 132 )	L	H	L	L	L
Rear V Sel 2 ( pin 131 )	L	L	H	L	L
Rear V Sel 3 ( pin 128 )	H	H	H	L	L
Rear V Sel 4 ( pin 127 )	L	L	L	L	H

NO.	PART NO.	DESCRIPTION	Q'TY
1	940-8142-10	INNER-ES-ASSY	1
2	-----	MAIN PWB	1
3	331-4202-00	CONNECT HOLDE	1
4	331-4203-00	CONNECT HOLDER	1
5	331-4205-00	TR-HOLDER	1
6	313-1973-00	HEAT SINK	1
7	714-3006-8B	MACHINE SCREW(M3x6)	1
8	074-1194-00	OUTLET SOCKET	1
9	074-1214-00	OUTLET SOCKET	1
10	074-1171-10	OUTLET SOCKET	1
11	714-2608-8B	MACHINE SCREW(M2.6x8)	4
12	-----	TUNER PWB	1
13	880-2091D	DSP TUNER	1
14	092-2208-00	ANT-RECEPT	1
15	076-0714-20	PLUG(20P)	1
16	074-1030-00	OUTLET SOCKET(8P)	1
17	075-0385-00	JACK(OPTICAL)	1
18	076-0312-04	PLUG(RCA)	1
19	331-4206-00	CONNECT HOLDER	1
20	714-2604-8B	MACHINE SCREW(M2.6x4)	20
21	855-5544-00	RCA PIN CORD	1
22	347-7283-00	FILM	1
23	929-2506-00	DVD MECH	1
24	948-0674-27	TV-SLIDE-MECH	1
25	312-0469-01	LOWER CHASSIS	1
26	312-0472-01	SIDE CHASSIS-L	1
27	312-0471-01	SIDE CHASSIS-R	1
28	312-0470-02	UPPER CHASSIS	1
29	310-1831-00	UPPER CASE	1
30	313-1972-00	HEAT SINK	1
31	309-0823-01	FRONT PLATE	1
32	331-4204-00	FAN HOLDER	1
33	-----	JOINT PWB	1
34	345-3799-20	RUBBER PART	2
35	039-2706-05	FPC	1
36	331-4106-00	SHIELD CVR	1
37	347-7062-10	LOWER SHEET	1
38	020-3052-00	DC-MOTOR	1
39	780-2614-50	SCREW(M2.6x14)	2
40	780-2604-50	IT SCREW(M2.6x4)	10
41	731-2608-8A	TAPTIGHT(M2.6x4)	4
42	716-3504-10	SCREW(M2.6x4)	6
43	714-2610-8B	MACHINE SCREW(M2.6x10)	14
44	716-3504-20	SCREW(M2.6x4)	8
45	716-1886-00	DECORATIVE SCREW(M2x3.4)	2
46	746-0935-00	WASHER	2
47	276-0111-00	SETPLATE	1





Escutcheon section



NO.	PART NO.	DESCRIPTION	Q'TY
1	370-6230-01	ESCUTCHEON	1
2	013-9711-00	T/P SWITCH	1
3	347-7038-20	SPACER	2
4	347-7423-00	SPACER	2
5	347-7042-20	DOUBLE FACE	2
6	331-4052-01	LCD-HOLDER	1
7	379-0467-00	TFT(LCD)	1
8	948-0767-00	REAR-CVR-ASSY	1
8-1	331-4051-02	REAR-CVR	1
8-2	335-7074-00	ROLLER	2
8-3	750-6746-00	ROLLER SPRING	2
9	716-1851-00	SCREW(M2x3)	2
10	039-1742-00	PWB	1
11	716-1611-50	SCREW(M2.6x4)	4
12	780-2003-03	SCREW(M2x3)	12
13	039-2808-05	FPC	1
14	335-7846-00	IR-FILTER	1
15	382-7966-00	BUTTON(PWR)	1
16	382-7967-00	BUTTON(OP/CL)	1
17	382-7968-01	BUTTON(TA)	1
18	382-7969-00	BUTTON(ADJ)	1
19	382-7970-00	BUTTON(PLAY)	1

NO.	PART NO.	DESCRIPTION	Q'TY
20	382-7971-00	BUTTON(SEARCH)	1
21	382-7972-01	BUTTON(BAND)	1
22	382-7973-01	BUTTON(MAP/MENU)	1
23	382-7974-01	BUTTON(SRC)	1
24	382-7975-00	BUTTON(-/+)	1
25	382-7976-01	BUTTON(VOICE)	1
26	778-2004-01	PAD SCREW(M1.7x5)	8
27	347-8071-00	FILM	1
28	371-5859-01	SIDE-TRIM(R)	1
29	371-5860-00	SIDE TRIM(L)	1
30	335-7847-00	ILLUMI PLATE	1
31	039-2809-05	FPC	2
32	-----	SWTCH PWB	1
33	-----	LCD PWB	1
34	347-8068-00	DOUBLE FACE	2
35	347-8069-00	DOUBLE FACE	2
36	347-8070-00	DOUBLE FACE	1
37	347-8072-00	FILM	1
38	347-8078-00	EARTH FILM	1
39	347-8084-00	FILM	2
40	331-3672-11	SHIELD CASE	1

# ELECTRICAL PARTS LIST

## Tuner PWB(B1) section

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
ANT101	092-2208-00	ANTENNA RECEPT	C169	168-3322-55	3300pF K	C259	166-2701-50	27pF CH
BL101	880-2091D	TUNER PACK	C170	168-2232-55	0.022uF K	C260	163-2263-15	6.3V 22uF
C100	163-4753-55	35V 4.7uF	C171	168-4712-55	470pF K	C262	043-0264-56	270pF
C101	166-2201-50	22pF CH	C173	168-2242-58	0.22uF B	C263	166-2701-50	27pF CH
C102	166-1511-50	150pF CH	C174	168-2232-55	0.022uF K	C265	163-2263-15	6.3V 22uF
C103	168-2232-55	0.022uF K	C175	168-2232-55	0.022uF K	C266	043-0264-56	270pF
C104	168-1032-55	0.01uF K	C178	168-2232-55	0.022uF K	C267	166-2701-50	27pF CH
C105	163-1073-35	16V 100uF	C181	166-1007-50	10pF CH	C268	163-2263-15	6.3V 22uF
C106	168-2232-55	0.022uF K	C182	166-1007-50	10pF CH	C269	043-0264-56	270pF
C107	166-1011-50	100pF CH	C184	168-1022-55	1000pF K	C270	166-2701-50	27pF CH
C108	168-1022-55	1000pF K	C185	168-1022-55	1000pF K	C272	163-2263-15	6.3V 22uF
C109	168-1042-78	16V 0.1uF	C186	168-1042-78	16V 0.1uF	C273	043-0264-56	270pF
C110	168-1042-78	16V 0.1uF	C187	166-1011-50	100pF CH	C274	166-2701-50	27pF CH
C111	163-4763-35	16V 47uF	C188	163-4753-55	35V 4.7uF	C275	163-2263-15	6.3V 22uF
C112	163-1063-35	16V 10uF	C189	168-1042-78	16V 0.1uF	C276	043-0264-56	270pF
C113	163-1063-35	16V 10uF	C190	168-1022-55	1000pF K	C277	166-2701-50	27pF CH
C114	163-1063-35	16V 10uF	C191	168-1022-55	1000pF K	C283	163-1063-35	16V 10uF
C115	163-1063-35	16V 10uF	C192	163-4753-55	35V 4.7uF	C284	163-1063-35	16V 10uF
C116	168-1042-78	16V 0.1uF	C193	168-1042-78	16V 0.1uF	C285	043-0541-00	6.3V 22uF
C117	163-1063-35	16V 10uF	C194	166-1811-50	180pF CH	C286	043-0541-00	6.3V 22uF
C118	163-1063-35	16V 10uF	C195	168-1042-78	16V 0.1uF	C287	043-0541-00	6.3V 22uF
C119	163-1063-35	16V 10uF	C196	163-4753-55	35V 4.7uF	C288	043-0541-00	6.3V 22uF
C120	166-1011-50	100pF CH	C197	042-0619-51	6.3V 56uF	C289	168-1042-78	16V 0.1uF
C121	166-1011-50	100pF CH	C198	168-1042-78	16V 0.1uF	C290	168-1042-78	16V 0.1uF
C122	178-1052-78	1uF	C199	178-3342-78	0.33uF	C291	168-1042-78	16V 0.1uF
C123	163-1063-35	16V 10uF	C201	168-1022-55	1000pF K	C292	168-1042-78	16V 0.1uF
C124	163-1063-35	16V 10uF	C202	043-0540-00	6.3V 10uF	C300	168-1042-78	16V 0.1uF
C125	163-1063-35	16V 10uF	C203	168-1022-55	1000pF K	C301	168-1042-78	16V 0.1uF
C126	168-1042-78	16V 0.1uF	C204	168-1022-55	1000pF K	C302	163-1063-35	16V 10uF
C127	163-1063-35	16V 10uF	C205	043-0540-00	6.3V 10uF	C303	163-4763-35	16V 47uF
C128	168-1042-78	16V 0.1uF	C206	043-0540-00	6.3V 10uF	C304	168-1042-78	16V 0.1uF
C129	163-1073-35	16V 100uF	C207	168-1022-55	1000pF K	C305	168-1042-78	16V 0.1uF
C130	168-1042-78	16V 0.1uF	C208	168-1022-55	1000pF K	C306	163-1063-35	16V 10uF
C131	163-4753-55	35V 4.7uF	C209	043-0540-00	6.3V 10uF	C307	178-1052-78	1uF
C132	166-4711-50	470pF CH	C210	163-2273-25	10V 220uF	C308	168-1042-78	16V 0.1uF
C133	166-4711-50	470pF CH	C211	043-0540-00	6.3V 10uF	C309	042-0643-51	16V 100uF LOW-ESR
C134	166-4711-50	470pF CH	C213	166-4711-50	470pF CH	C310	042-0643-51	16V 100uF LOW-ESR
C135	166-4711-50	470pF CH	C214	166-4711-50	470pF CH	C311	168-1042-78	16V 0.1uF
C136	168-1042-78	16V 0.1uF	C215	043-0540-00	6.3V 10uF	C312	178-1052-78	1uF
C137	168-1042-78	16V 0.1uF	C217	166-4711-50	470pF CH	C313	163-4763-35	16V 47uF
C138	163-1073-15	6.3V 100uF	C218	166-4711-50	470pF CH	C314	178-1052-78	1uF
C139	163-2263-35	16V 22uF	C219	043-0540-00	6.3V 10uF	C315	178-1052-78	1uF
C140	168-4732-78	0.047uF K	C221	166-4711-50	470pF CH	C316	178-1052-78	1uF
C141	043-0540-00	6.3V 10uF	C222	166-4711-50	470pF CH	C317	178-1052-78	1uF
C142	043-0540-00	6.3V 10uF	C223	043-0540-00	6.3V 10uF	C318	178-1052-78	1uF
C143	166-4701-50	47pF CH	C225	166-4711-50	470pF CH	C319	178-1052-78	1uF
C144	166-4701-50	47pF CH	C226	166-4711-50	470pF CH	C320	178-1052-78	1uF
C145	168-1042-78	16V 0.1uF	C227	043-0540-00	6.3V 10uF	C321	178-1052-78	1uF
C146	166-1011-50	100pF CH	C229	166-6811-50	680pF	C322	178-1052-78	1uF
C147	163-1063-35	16V 10uF	C230	166-6811-50	680pF	C323	168-1032-55	0.01uF K
C148	163-1063-35	16V 10uF	C231	043-0540-00	6.3V 10uF	C324	163-4763-15	6.3V 47uF
C149	163-1063-35	16V 10uF	C233	166-6811-50	680pF	C325	166-3096-50	3pF CJ
C150	166-1011-50	100pF CH	C234	166-6811-50	680pF	C326	042-0643-52	6.3V 1000uF
C151	178-2242-78	0.22uF	C235	043-0540-00	6.3V 10uF	C327	163-1073-35	16V 100uF
C152	166-4711-50	470pF CH	C237	166-6811-50	680pF	C328	168-1042-78	16V 0.1uF
C153	166-1011-50	100pF CH	C238	166-6811-50	680pF	C329	163-4763-15	6.3V 47uF
C154	178-1052-78	1uF	C239	043-0540-00	6.3V 10uF	C330	163-4763-15	6.3V 47uF
C155	168-1042-78	16V 0.1uF	C241	166-6811-50	680pF	C331	168-1042-78	16V 0.1uF
C156	166-1011-50	100pF CH	C242	166-6811-50	680pF	C332	168-1042-78	16V 0.1uF
C157	168-1042-78	16V 0.1uF	C243	163-1063-35	16V 10uF	C333	168-1042-78	16V 0.1uF
C158	163-4763-35	16V 47uF	C244	168-1042-78	16V 0.1uF	C334	168-1042-78	16V 0.1uF
C159	168-1042-78	16V 0.1uF	C245	163-1063-35	16V 10uF	C336	168-1022-55	1000pF K
C160	042-0619-51	6.3V 56uF	C246	168-1042-78	16V 0.1uF	C337	163-1063-35	16V 10uF
C161	168-1042-78	16V 0.1uF	C247	163-2263-15	6.3V 22uF	C338	163-1063-35	16V 10uF
C162	042-0423-20	10V 10uF	C249	043-0264-56	270pF	C339	163-4763-35	16V 47uF
C163	168-3332-78	0.033uF K	C250	166-2701-50	27pF CH	C340	168-1042-78	16V 0.1uF
C164	168-3322-55	3300pF K	C251	163-2263-15	6.3V 22uF	C341	168-1032-55	0.01uF K
C165	168-3322-55	3300pF K	C253	043-0264-56	270pF	C350	166-1021-50	1000pF CH
C166	168-1042-78	16V 0.1uF	C254	166-2701-50	27pF CH	C351	168-1042-78	16V 0.1uF
C167	163-1073-15	6.3V 100uF	C256	163-2263-15	6.3V 22uF			
C168	168-3322-55	3300pF K	C258	043-0264-56	270pF			

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C352	168-1042-78	16V 0.1uF	L202	010-3103-64	1.5k ohm/100MHz	R136	119-2231-15	1/10W 22k ohm
C353	178-1052-78	1uF	L203	010-3105-62	1k ohm/100MHz	R137	119-1031-15	1/10W 10k ohm
C354	042-0643-52	6.3V 1000uF	L204	010-3103-64	1.5k ohm/100MHz	R138	119-2231-15	1/10W 22k ohm
C355	042-0643-52	6.3V 1000uF	L205	010-3103-64	1.5k ohm/100MHz	R139	119-1031-15	1/10W 10k ohm
C356	168-2232-55	0.022uF K	L206	010-3105-62	1k ohm/100MHz	R140	119-1001-15	1/10W 10 ohm
C357	043-0510-51	25V 10uF	L207	010-3103-64	1.5k ohm/100MHz	R141	119-1041-15	1/10W 100k ohm
C358	042-0643-56	16V 470uF M	L208	010-3103-64	1.5k ohm/100MHz	R142	119-8231-15	1/10W 82k ohm
C359	178-1052-78	1uF	L209	010-3103-64	1.5k ohm/100MHz	R143	119-8231-15	1/10W 82k ohm
C360	178-1052-78	1uF	L210	010-3103-64	1.5k ohm/100MHz	R144	119-1041-15	1/10W 100k ohm
C361	042-0643-51	16V 100uF LOW-ESR	L211	010-3103-64	1.5k ohm/100MHz	R145	032-0140-89	1/10W 47k ohm F
C363	168-1045-56	0.1uF Z	L212	010-3103-64	1.5k ohm/100MHz	R146	032-0140-89	1/10W 47k ohm F
C364	168-4732-78	0.047uF K	L213	010-3103-64	1.5k ohm/100MHz	R147	032-0140-89	1/10W 47k ohm F
C365	168-1022-55	1000pF K	L214	010-3103-64	1.5k ohm/100MHz	R148	032-0140-89	1/10W 47k ohm F
C366	166-1511-50	150pF CH	L300	010-2279-50	4.7uH	R149	032-0140-89	1/10W 47k ohm F
C1100	168-2232-55	0.022uF K	L301	010-3406-66	NLV25 22uH J	R150	032-0140-89	1/10W 47k ohm F
C1101	168-1832-55	0.018uF K	L302	010-2279-50	4.7uH	R151	032-0140-89	1/10W 47k ohm F
D101	001-0517-90	1SS355	L350	010-3404-53	33uH	R152	032-0140-89	1/10W 47k ohm F
D102	001-0517-90	1SS355	L351	010-3041-90	10uH	R153	119-1031-15	1/10W 10k ohm
D103	001-0517-90	1SS355	P201	076-0714-20	OUTLET SOCKET	R154	119-8221-15	1/10W 8.2k ohm
D201	001-0529-29	MA8051-M	P300	076-3011-76	26P	R155	119-1011-15	1/10W 100 ohm
D300	001-0517-90	1SS355	P302	076-0312-04	4P	R156	119-1011-15	1/10W 100 ohm
D301	001-0517-90	1SS355	Q102	190-1298-00	2SA1298	R158	119-4721-15	1/10W 4.7k ohm
D302	001-1305-90	DAN217U-T106	Q103	125-2026-95	UN521N	R159	119-4721-15	1/10W 4.7k ohm
D303	001-1305-90	DAN217U-T106	Q104	190-1298-00	2SA1298	R160	119-1011-15	1/10W 100 ohm
D304	001-1305-90	DAN217U-T106	Q105	125-2026-95	UN521N	R161	119-1001-15	1/10W 10 ohm
D305	001-1305-90	DAN217U-T106	Q106	125-7005-90	PHK04P02T	R162	119-1011-15	1/10W 100 ohm
D306	001-1305-90	DAN217U-T106	Q201	193-1306-00	2SD1306	R163	119-4721-15	1/10W 4.7k ohm
D309	001-1305-90	DAN217U-T106	Q202	193-1306-00	2SD1306	R164	119-1011-15	1/10W 100 ohm
D310	001-1305-90	DAN217U-T106	Q203	193-1306-00	2SD1306	R165	119-1011-15	1/10W 100 ohm
D311	001-1305-90	DAN217U-T106	Q204	193-1306-00	2SD1306	R166	119-1031-15	1/10W 10k ohm
D312	001-1305-90	DAN217U-T106	Q205	193-1306-00	2SD1306	R167	119-1031-15	1/10W 10k ohm
D350	001-0507-90	DAP202K	Q206	193-1306-00	2SD1306	R168	119-1031-15	1/10W 10k ohm
D351	001-0608-90	D1F54	Q207	193-1306-00	2SD1306	R169	119-1011-15	1/10W 100 ohm
IC101	051-3049-90	HA17558AFEL	Q208	193-1306-00	2SD1306	R170	119-4721-15	1/10W 4.7k ohm
IC102	051-3049-90	HA17558AFEL	Q209	125-0021-95	DTA143ZUA-T106	R171	119-1031-15	1/10W 10k ohm
IC103	051-1905-91	AN77L05M	Q210	125-0021-95	DTA143ZUA-T106	R172	119-1011-15	1/10W 100 ohm
IC104	051-6706-10	SAF7730H/N116F	Q350	190-1586-00	2SA1586 O,Y,G	R173	119-1011-15	1/10W 100 ohm
IC105	051-3351-90	BA033CC0FP-E2	Q351	125-2026-92	UN5212	R174	119-1031-15	1/10W 10k ohm
IC201	051-6703-08	AK4384VT	Q352	125-2026-92	UN5212	R175	119-1011-15	1/10W 100 ohm
IC202	051-6703-08	AK4384VT	R101	119-1041-15	1/10W 100k ohm	R176	119-1011-15	1/10W 100 ohm
IC203	051-3026-90	NJM4580V	R102	119-1011-15	1/10W 100 ohm	R177	119-1031-15	1/10W 10k ohm
IC204	051-3026-90	NJM4580V	R104	119-0000-05	1/10W 0 ohm JW	R178	119-1021-15	1/10W 1k ohm
IC205	051-3026-90	NJM4580V	R105	119-0000-05	1/10W 0 ohm JW	R179	119-0000-05	1/10W 0 ohm JW
IC206	051-3026-90	NJM4580V	R106	119-1031-15	1/10W 10k ohm	R180	119-0000-05	1/10W 0 ohm JW
IC300	051-7243-48	SN74AHCT1G08 DCKR	R107	119-1031-15	1/10W 10k ohm	R181	119-0000-05	1/10W 0 ohm JW
IC301	051-3927-90	NJM2505F	R108	119-1031-15	1/10W 10k ohm	R182	119-0000-05	1/10W 0 ohm JW
IC302	051-5306-90	MM1117XF	R109	119-1021-15	1/10W 1k ohm	R183	119-0000-05	1/10W 0 ohm JW
IC303	051-5306-90	MM1117XF	R110	119-1031-15	1/10W 10k ohm	R201	119-1021-15	1/10W 1k ohm
IC304	051-5306-90	MM1117XF	R111	119-1021-15	1/10W 1k ohm	R202	119-1011-15	1/10W 100 ohm
IC305	051-5336-90	MM1227XFBE	R112	119-2231-15	1/10W 22k ohm	R203	119-2711-15	1/10W 270 ohm
IC306	051-5326-90	TK15420MTL	R113	119-2231-15	1/10W 22k ohm	R204	119-2711-15	1/10W 270 ohm
IC307	051-3927-90	NJM2505F	R114	119-1011-15	1/10W 100 ohm	R205	119-2711-15	1/10W 270 ohm
IC350	051-3924-90	MD1424R	R115	119-4731-15	1/10W 47k ohm	R206	119-1011-15	1/10W 100 ohm
J300	074-1030-00	MINI DIN 8P	R116	119-1831-15	1/10W 18k ohm	R207	119-2711-15	1/10W 270 ohm
J301	075-0385-00	JACK	R117	119-4731-15	1/10W 47k ohm	R208	119-2711-15	1/10W 270 ohm
J302	074-3014-82	SOCKET(32P)	R118	119-1831-15	1/10W 18k ohm	R209	119-2711-15	1/10W 270 ohm
J303	075-0339-00	JACK	R119	119-4731-15	1/10W 47k ohm	R210	116-6801-15	1/4W 68 ohm
L101	010-2003-04	30uH	R120	119-1831-15	1/10W 18k ohm	R211	119-1031-15	1/10W 10k ohm
L102	010-2279-50	4.7uH	R121	119-4731-15	1/10W 47k ohm	R212	119-1031-15	1/10W 10k ohm
L103	010-2279-50	4.7uH	R122	119-1831-15	1/10W 18k ohm	R213	119-4731-15	1/10W 47k ohm
L104	010-3105-62	1k ohm/100MHz	R123	119-1031-15	1/10W 10k ohm	R214	119-1831-15	1/10W 18k ohm
L105	010-3105-62	1k ohm/100MHz	R124	119-1031-15	1/10W 10k ohm	R215	119-1031-15	1/10W 10k ohm
L106	010-3105-62	1k ohm/100MHz	R125	119-1031-15	1/10W 10k ohm	R216	119-1031-15	1/10W 10k ohm
L107	010-3105-62	1k ohm/100MHz	R126	119-1031-15	1/10W 10k ohm	R217	119-1031-15	1/10W 10k ohm
L108	010-3109-63	1k ohm/100MHz	R127	119-1031-15	1/10W 10k ohm	R218	119-4731-15	1/10W 47k ohm
L109	010-3105-62	1k ohm/100MHz	R128	119-1021-15	1/10W 1k ohm	R219	119-1831-15	1/10W 18k ohm
L110	010-3105-62	1k ohm/100MHz	R129	119-1221-15	1/10W 1.2k ohm	R220	119-1031-15	1/10W 10k ohm
L111	010-3103-64	1.5k ohm/100MHz	R130	119-1041-15	1/10W 100k ohm	R221	119-1031-15	1/10W 10k ohm
L112	010-3105-62	1k ohm/100MHz	R131	119-1241-15	1/10W 120k ohm	R222	119-1031-15	1/10W 10k ohm
L113	010-3105-62	1k ohm/100MHz	R132	119-1031-15	1/10W 10k ohm	R223	119-4731-15	1/10W 47k ohm
L201	010-3103-64	1.5k ohm/100MHz	R133	119-2231-15	1/10W 22k ohm	R224	119-1831-15	1/10W 18k ohm
			R134	119-1031-15	1/10W 10k ohm	R225	119-1031-15	1/10W 10k ohm
			R135	119-2231-15	1/10W 22k ohm	R226	119-1031-15	1/10W 10k ohm

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
R227	119-1031-15	1/10W 10k ohm	R263	119-4731-15	1/10W 47k ohm	R309	119-4721-15	1/10W 4.7k ohm
R228	119-4731-15	1/10W 47k ohm	R264	119-3311-15	1/10W 330 ohm	R310	119-4731-15	1/10W 47k ohm
R229	119-1831-15	1/10W 18k ohm	R265	119-1021-15	1/10W 1k ohm	R311	119-1031-15	1/10W 10k ohm
R230	119-1031-15	1/10W 10k ohm	R266	119-1041-15	1/10W 100k ohm	R312	119-1011-15	1/10W 100 ohm
R231	119-1031-15	1/10W 10k ohm	R267	119-4731-15	1/10W 47k ohm	R313	119-7501-15	1/10W 75 ohm
R232	119-1031-15	1/10W 10k ohm	R268	119-3311-15	1/10W 330 ohm	R314	119-7501-15	1/10W 75 ohm
R233	119-4731-15	1/10W 47k ohm	R269	119-1021-15	1/10W 1k ohm	R315	119-7501-15	1/10W 75 ohm
R234	119-1231-15	1/10W 12k ohm	R270	119-1041-15	1/10W 100k ohm	R320	119-7501-15	1/10W 75 ohm
R235	119-1031-15	1/10W 10k ohm	R271	119-4731-15	1/10W 47k ohm	R329	119-2211-15	1/10W 220 ohm
R236	119-1031-15	1/10W 10k ohm	R272	119-3311-15	1/10W 330 ohm	R330	119-2211-15	1/10W 220 ohm
R237	119-1031-15	1/10W 10k ohm	R273	119-1021-15	1/10W 1k ohm	R331	119-2211-15	1/10W 220 ohm
R238	119-4731-15	1/10W 47k ohm	R274	119-1041-15	1/10W 100k ohm	R332	119-2211-15	1/10W 220 ohm
R239	119-1231-15	1/10W 12k ohm	R275	119-4731-15	1/10W 47k ohm	R350	119-1031-15	1/10W 10k ohm
R240	119-1031-15	1/10W 10k ohm	R276	119-3311-15	1/10W 330 ohm	R351	119-1041-15	1/10W 100k ohm
R241	119-1031-15	1/10W 10k ohm	R277	119-1021-15	1/10W 1k ohm	R352	032-0164-50	0.1ohm F
R242	119-1031-15	1/10W 10k ohm	R278	119-1041-15	1/10W 100k ohm	R353	032-0164-50	0.1ohm F
R243	119-4731-15	1/10W 47k ohm	R279	119-4731-15	1/10W 47k ohm	R354	119-1051-15	1/10W 1M ohm
R244	119-1231-15	1/10W 12k ohm	R280	119-3311-15	1/10W 330 ohm	R355	032-0164-50	0.1ohm F
R245	119-1031-15	1/10W 10k ohm	R281	119-1021-15	1/10W 1k ohm	R356	032-0164-50	0.1ohm F
R246	119-1031-15	1/10W 10k ohm	R282	119-1041-15	1/10W 100k ohm	R357	119-3301-15	1/10W 33 ohm
R247	119-1031-15	1/10W 10k ohm	R291	119-0000-05	1/10W 0 ohm JW	R358	032-0164-50	0.1ohm F
R248	119-4731-15	1/10W 47k ohm	R292	119-0000-05	1/10W 0 ohm JW	R359	032-0164-50	0.1ohm F
R249	119-1231-15	1/10W 12k ohm	R293	119-0000-05	1/10W 0 ohm JW	R360	119-1031-15	1/10W 10k ohm
R250	119-1031-15	1/10W 10k ohm	R294	119-0000-05	1/10W 0 ohm JW	R361	119-5631-15	1/10W 56k ohm
R251	119-4731-15	1/10W 47k ohm	R295	119-0000-05	1/10W 0 ohm JW	R362	119-1031-15	1/10W 10k ohm
R252	119-3311-15	1/10W 330 ohm	R296	119-0000-05	1/10W 0 ohm JW	R363	119-1031-15	1/10W 10k ohm
R253	119-1021-15	1/10W 1k ohm	R297	119-0000-05	1/10W 0 ohm JW	R364	032-0140-53	1/10W 2.2k ohm F
R254	119-1041-15	1/10W 100k ohm	R298	119-0000-05	1/10W 0 ohm JW	R365	032-0140-56	1/10W 12k ohm F
R255	119-4731-15	1/10W 47k ohm	R300	119-2211-15	1/10W 220 ohm	R366	119-1031-15	1/10W 10k ohm
R256	119-3311-15	1/10W 330 ohm	R302	032-0140-12	1/10W 75 ohm F	R367	119-1001-15	1/10W 10 ohm
R257	119-1021-15	1/10W 1k ohm	R303	119-4721-15	1/10W 4.7k ohm	SUP101	060-0122-20	DSP-141N-S00B
R258	119-1041-15	1/10W 100k ohm	R304	119-3901-15	1/10W 39 ohm	X101	061-3537-90	41.6MHz
R259	119-4731-15	1/10W 47k ohm	R305	119-2221-15	1/10W 2.2k ohm	PWB	039-2906-00	PWB(WITHOUT COMPONENTS)
R260	119-3311-15	1/10W 330 ohm	R306	119-1031-15	1/10W 10k ohm			
R261	119-1021-15	1/10W 1k ohm	R307	119-7501-15	1/10W 75 ohm			
R262	119-1041-15	1/10W 100k ohm	R308	119-2221-15	1/10W 2.2k ohm			

### Joint PWB(B2) section

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C1100	163-1073-35	16V 100uF	IC1101	051-5806-01	GP1S93	R1101	116-5611-15	1/4W 560 ohm
C1102	172-1041-11	0.1uF	IC1102	051-1014-08	TA7291F	R1102	119-3321-15	1/10W 3.3k ohm
C1103	168-1042-78	16V 0.1uF	J1100	074-3014-76	26P	R1103	119-1821-15	1/10W 1.8k ohm
C1104	168-1042-78	16V 0.1uF	J1101	074-3014-82	SOCKET(32P)	R1104	119-5611-15	1/10W 560 ohm
D1101	001-7038-92	CL-221HR-C-TS	P1100	076-3011-82	PLUG(32P)	R1105	119-2201-15	1/10W 22 ohm
D1102	001-7064-92	CL-170HR-CD-T	P1101	076-3019-10	PLUG(32)	S1100	013-6312-50	SKRP-ABE-010
D1103	001-0516-90	MA111	P1102	076-0478-52	2P	S1101	013-6312-50	SKRP-ABE-010
D1104	001-0516-90	MA111	P1103	076-3011-82	PLUG(32P)	PWB	039-2914-00	PWB(WITHOUT COMPONENTS)
D1105	001-4305-20	UDZSTE-17 5.6B	Q1100	125-2026-95	UN521N			
IC1100	051-5806-01	GP1S93	R1100	116-5611-15	1/4W 560 ohm			

### Main PWB(B3) section

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C400	178-2242-78	0.22uF	C417	178-1052-78	1uF	C434	163-3363-45	25V 33uF
C401	178-2242-78	0.22uF	C418	042-1447-00	16V 2200uF	C435	042-0643-56	16V 470uF M
C402	178-2242-78	0.22uF	C419	172-1041-11	0.1uF	C436	042-0643-56	16V 470uF M
C403	178-2242-78	0.22uF	C420	168-1022-55	1000pF K	C437	042-0643-51	16V 100uF LOW-ESR
C404	168-1022-55	1000pF K	C421	172-2241-11	0.22uF	C438	168-1042-78	16V 0.1uF
C405	168-1022-55	1000pF K	C422	042-1447-00	16V 2200uF	C439	042-0627-90	16V 100uF
C406	168-1022-55	1000pF K	C423	168-1042-78	16V 0.1uF	C440	042-0595-84	10V 100uF
C407	168-1022-55	1000pF K	C424	042-0635-51	16V 39uF	C441	168-1042-78	16V 0.1uF
C408	168-1022-55	1000pF K	C425	168-1042-78	16V 0.1uF	C442	163-2263-35	16V 22uF
C409	168-1022-55	1000pF K	C426	168-1042-78	16V 0.1uF	C443	168-4732-78	0.047uF K
C410	168-1022-55	1000pF K	C427	168-1032-55	0.01uF K	C444	043-0561-92	0.47uF
C411	168-1022-55	1000pF K	C428	168-1032-55	0.01uF K	C445	178-1052-78	1uF
C412	042-0627-90	16V 100uF	C429	043-0506-50	0.1uF	C446	166-1011-50	100pF CH
C413	042-0627-90	16V 100uF	C430	163-4763-35	16V 47uF	C447	166-1011-50	100pF CH
C414	042-0592-58	16V 10uF	C431	042-0472-91	16V 47uF	C448	168-1045-56	0.1uF Z
C415	163-1053-65	50V 1uF	C432	168-1042-78	16V 0.1uF	C449	166-1011-50	100pF CH
C416	178-4742-78	0.47uF	C433	178-3342-78	0.33uF			

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C450	168-1022-55	1000pF K	C621	168-1042-78	16V 0.1uF	D402	001-4311-00	ST70-27F-7072
C451	166-1011-50	100pF CH	C623	168-1042-78	16V 0.1uF	D403	001-0517-90	1SS355
C452	166-1011-50	100pF CH	C624	043-0540-00	6.3V 10uF	D404	001-0517-90	1SS355
C453	166-1011-50	100pF CH	C625	168-1042-78	16V 0.1uF	D405	001-0517-90	1SS355
C454	166-1011-50	100pF CH	C626	168-1042-78	16V 0.1uF	D406	001-0517-90	1SS355
C460	042-0643-51	16V 100uF LOW-ESR	C627	168-1042-78	16V 0.1uF	D407	001-2403-90	M1F60
C461	042-0423-97	16V 10uF	C628	168-1042-78	16V 0.1uF	D409	001-0517-90	1SS355
C462	168-1042-78	16V 0.1uF	C629	168-1042-78	16V 0.1uF	D410	001-2403-90	M1F60
C463	168-1042-78	16V 0.1uF	C630	043-0540-00	6.3V 10uF	D411	001-0517-90	1SS355
C464	042-0423-20	10V 10uF	C631	168-1042-78	16V 0.1uF	D412	001-0529-26	MA8047-M
C465	042-0423-20	10V 10uF	C632	043-0540-00	6.3V 10uF	D413	001-2403-90	M1F60
C466	168-1042-78	16V 0.1uF	C633	168-1042-78	16V 0.1uF	D414	001-0517-90	1SS355
C467	042-0423-20	10V 10uF	C634	168-1042-78	16V 0.1uF	D416	001-2403-90	M1F60
C468	168-1042-78	16V 0.1uF	C635	166-1011-50	100pF CH	D417	001-0517-90	1SS355
C469	168-1042-78	16V 0.1uF	C636	166-1011-50	100pF CH	D418	001-4310-01	RLZ TE-11 10B
C470	163-1073-35	16V 100uF	C637	168-1042-78	16V 0.1uF	D419	001-4313-51	HZU9B3L
C471	168-1042-78	16V 0.1uF	C640	043-0540-00	6.3V 10uF	D420	001-0517-90	1SS355
C472	168-1042-78	16V 0.1uF	C641	168-1042-78	16V 0.1uF	D421	001-2403-90	M1F60
C473	168-1042-78	16V 0.1uF	C649	166-3301-50	33pF CH	D422	001-0529-43	MA8082-L
C474	042-0630-50	16V 100uF	C650	166-1801-50	18pF CH	D423	001-0517-90	1SS355
C475	042-0630-50	16V 100uF	C670	168-1042-78	16V 0.1uF	D460	001-0517-90	1SS355
C476	168-1045-56	0.1uF Z	C671	168-1042-78	16V 0.1uF	D461	001-0517-90	1SS355
C477	168-1042-78	16V 0.1uF	C672	166-5601-50	56pF CH	D462	001-0517-90	1SS355
C478	168-1042-78	16V 0.1uF	C673	168-1042-78	16V 0.1uF	D463	001-0517-90	1SS355
C479	163-4763-15	6.3V 47uF	C674	168-1042-78	16V 0.1uF	D464	001-0529-44	MA8082-M
C480	163-4763-15	6.3V 47uF	C675	168-1042-78	16V 0.1uF	D500	001-0517-90	1SS355
C490	168-1022-55	1000pF K	C676	043-0540-00	6.3V 10uF	D501	001-0529-43	MA8082-L
C500	166-1011-50	100pF CH	C677	168-1042-78	16V 0.1uF	D570	001-4313-51	HZU6A2L
C501	043-0540-00	6.3V 10uF	C678	168-1042-78	16V 0.1uF	D670	001-0367-91	1SS226
C502	166-2201-50	22pF CH	C679	168-1042-78	16V 0.1uF	D671	001-0367-91	1SS226
C503	166-1801-50	18pF CH	C680	168-1042-78	16V 0.1uF	D672	001-0367-91	1SS226
C504	168-1042-78	16V 0.1uF	C681	168-1042-78	16V 0.1uF	D673	001-0367-91	1SS226
C505	168-1042-78	16V 0.1uF	C682	043-0532-50	10V 10uF	D674	001-0367-91	1SS226
C506	043-0540-00	6.3V 10uF	C683	043-0532-50	10V 10uF	F400	060-8066-90	4A
C507	168-1042-78	16V 0.1uF	C684	168-1042-78	16V 0.1uF	FIL451	060-3114-51	LFA20-2A1E223MT
C508	043-0551-90	6.3V 4.7uF M	C685	166-1201-50	12pF CH	FIL452	060-3114-51	LFA20-2A1E223MT
C509	168-1032-55	0.01uF K	C686	168-1042-78	16V 0.1uF	FIL453	060-3114-51	LFA20-2A1E223MT
C510	168-1032-55	0.01uF K	C687	178-1052-78	1uF	FIL454	060-3114-51	LFA20-2A1E223MT
C511	168-1022-55	1000pF K	C688	178-1052-78	1uF	FIL455	060-3114-51	LFA20-2A1E223MT
C512	166-1011-50	100pF CH	C689	178-1052-78	1uF	FIL460	060-3114-52	LFA20-2A1
C513	178-1052-78	1uF	C690	178-1052-78	1uF	FIL461	060-3114-52	LFA20-2A1
C514	168-1042-78	16V 0.1uF	C691	178-1052-78	1uF	FIL462	060-3114-52	LFA20-2A1
C516	168-1022-55	1000pF K	C692	178-1052-78	1uF	FIL463	060-3114-52	LFA20-2A1
C517	178-1052-78	1uF	C693	178-1052-78	1uF	FIL464	060-3114-52	LFA20-2A1
C518	178-1052-78	1uF	C698	178-1052-78	1uF	FIL465	060-3114-52	LFA20-2A1
C519	042-0650-01	5.5V 0.22F	C699	178-1052-78	1uF	FIL466	060-3114-52	LFA20-2A1
C520	042-0650-01	5.5V 0.22F	C700	168-1042-78	16V 0.1uF	FIL467	060-3114-52	LFA20-2A1
C521	163-4763-15	6.3V 47uF	C701	168-1042-78	16V 0.1uF	FIL468	060-3114-52	LFA20-2A1
C522	168-1042-78	16V 0.1uF	C702	168-1042-78	16V 0.1uF	FIL469	060-3114-52	LFA20-2A1
C570	163-2263-35	16V 22uF	C703	168-1042-78	16V 0.1uF	FIL470	060-3114-52	LFA20-2A1
C571	168-1045-56	0.1uF Z	C704	168-1042-78	16V 0.1uF	FIL471	060-3114-52	LFA20-2A1
C600	168-1042-78	16V 0.1uF	C705	168-1042-78	16V 0.1uF	FIL472	060-3114-52	LFA20-2A1
C601	168-1042-78	16V 0.1uF	C706	168-1042-78	16V 0.1uF	FIL473	060-3114-52	LFA20-2A1
C602	043-0540-00	6.3V 10uF	C707	178-1052-78	1uF	FIL474	060-3114-52	LFA20-2A1
C603	168-1042-78	16V 0.1uF	C710	176-1021-50	1000pF CH	FIL475	060-3114-52	LFA20-2A1
C604	043-0540-00	6.3V 10uF	CCT501	050-0140-52	1/32W 100 ohm x4J	FIL476	060-3114-52	LFA20-2A1
C605	168-1042-78	16V 0.1uF	CCT502	050-0140-52	1/32W 100 ohm x4J	FIL477	060-3114-52	LFA20-2A1
C606	168-4722-55	4700pF K	CCT600	050-0140-75	1/32W 330 ohm X4j	FIL478	060-3114-52	LFA20-2A1
C607	166-2211-50	220pF CH	CCT601	050-0140-75	1/32W 330 ohm X4j	FIL479	060-3114-52	LFA20-2A1
C608	168-1042-78	16V 0.1uF	CCT602	050-0140-75	1/32W 330 ohm X4j	FIL480	060-3114-52	LFA20-2A1
C609	043-0540-00	6.3V 10uF	CCT603	050-0140-75	1/32W 330 ohm X4j	IC400	051-2057-00	TB2906HQ
C610	168-1042-78	16V 0.1uF	CCT604	050-0140-75	1/32W 330 ohm X4j	IC401	051-3294-90	TA78DS10F
C611	166-1007-50	10pF CH	CCT605	050-0140-75	1/32W 330 ohm X4j	IC402	051-3335-90	AN77L04M
C612	166-1007-50	10pF CH	CCT606	050-0140-63	1/32W 47k ohm x4J	IC403	051-6600-58	HA12187FP
C613	166-1011-50	100pF CH	CCT607	050-0140-63	1/32W 47k ohm x4J	IC404	051-1855-08	TC7W14F
C614	168-1042-78	16V 0.1uF	CCT608	050-0140-75	1/32W 330 ohm X4j	IC460	051-3317-90	LM1086IS-ADJ
C615	168-1042-78	16V 0.1uF	CCT609	050-0140-75	1/32W 330 ohm X4j	IC461	051-3317-90	LM1086IS-ADJ
C616	168-2222-55	2200pF K	CCT610	050-0140-75	1/32W 330 ohm X4j	IC462	051-3289-00	BA09ST
C617	176-2221-50	2200pF CH	CCT611	050-0140-75	1/32W 330 ohm X4j	IC500	052-7084-00	uPD70F3339GJ-UEN-A
C618	168-1042-78	16V 0.1uF	CCT612	050-0140-63	1/32W 47k ohm x4J	IC501	051-5440-08	S-80931CNMC-G81
C619	168-1042-78	16V 0.1uF	CCT613	050-0140-63	1/32W 47k ohm x4J	IC502	051-3406-90	NJM2078M
C620	168-1042-78	16V 0.1uF	D400	001-0517-90	1SS355	IC503	051-5410-38	BU4820G-TR
			D401	001-0517-90	1SS355			

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
IC504	051-9402-68	BR93L56F-W	Q427	125-2026-93	UN5213	R451	119-1031-15	1/10W 10k ohm
IC505	051-9402-68	BR93L56F-W	Q428	190-1736-00	2SA1736	R452	116-6801-15	1/4W 68 ohm
IC600	051-6456-00	YGV629-VZ	Q429	125-2026-92	UN5212	R453	032-0178-00	1/2W 180ohm
IC601	051-7509-90	SN74LV123APWR	Q430	125-2017-97	RN1427	R454	119-1021-15	1/10W 1k ohm
IC602	052-7085-00	TC58FVM5B3	Q431	125-2026-92	UN5212	R455	119-1031-15	1/10W 10k ohm
		ATFG65	Q432	125-2026-92	UN5212	R456	119-1021-15	1/10W 1k ohm
IC603	051-7269-08	SN74AHC2G53	Q433	125-2026-92	UN5212	R457	032-0140-21	1/10W 549k ohm F
		HDCTR	Q460	190-1736-00	2SA1736	R458	119-1021-15	1/10W 1k ohm
IC604	051-7256-08	SN74AHCT1G32	Q461	125-2027-97	DTC114YUA	R460	119-1031-15	1/10W 10k ohm
		DCKR	Q462	190-1736-00	2SA1736	R461	116-1221-15	1/4W 1.2k ohm
IC607	051-7256-08	SN74AHCT1G32	Q463	190-1736-00	2SA1736	R462	116-1221-15	1/4W 1.2k ohm
		DCKR	Q464	125-2026-95	UN521N	R464	119-1031-15	1/10W 10k ohm
IC670	051-7221-08	TC7SH04F	Q465	125-2026-95	UN521N	R465	119-1031-15	1/10W 10k ohm
IC671	051-7221-08	TC7SH04F	Q466	125-0020-91	UN5111	R466	119-3311-15	1/10W 330 ohm
IC672	051-7275-08	TC7W32FU TE12L	Q467	125-2026-95	UN521N	R467	119-3311-15	1/10W 330 ohm
IC673	051-5336-90	MM1227XFBE	Q468	125-9003-92	IMD3	R468	119-3311-15	1/10W 330 ohm
IC674	051-7275-08	TC7W32FU TE12L	Q469	125-2026-95	UN521N	R469	119-3311-15	1/10W 330 ohm
IC675	051-7221-08	TC7SH04F	Q470	192-4081-00	2SC4081	R470	119-3311-15	1/10W 330 ohm
IC676	051-5342-90	NJM2524V	Q471	192-4081-00	2SC4081	R471	119-3311-15	1/10W 330 ohm
J400	074-1214-00	16P	Q472	125-9003-92	IMD3	R472	032-0140-66	1/10W 220 ohm F
J401	074-1194-00	13P CE-NET	Q500	192-4081-00	2SC4081	R473	032-0140-98	1/10W 330 ohm F
J402	074-1171-10	DIN 10P WHT	Q501	192-4081-00	2SC4081	R474	032-0140-68	1/10W 680 ohm F
J460	074-2225-92	SOCKET(42P)	Q502	192-4081-00	2SC4081	R475	116-2211-15	1/4W 220 ohm
J461	074-3014-82	SOCKET(32P)	Q503	125-2026-91	UN5211	R476	032-0140-11	1/10W 300 ohm F
J463	074-2241-90	SOCKET(40P)	Q504	190-1576-00	2SA1576A	R477	032-0140-13	1/10W 33 ohm F
J500	074-3019-60	10P SOCKET	Q505	125-2026-91	UN5211	R479	119-1031-15	1/10W 10k ohm
J670	074-1231-08	8P MIN	Q570	125-0020-91	UN5111	R480	119-1031-15	1/10W 10k ohm
L401	010-8026-00	210uH	Q571	192-4081-00	2SC4081	R481	119-4731-15	1/10W 47k ohm
L402	010-3103-64	1.5k ohm/100MHz	Q600	125-9025-90	HN1C01FU-TE85N	R482	119-4731-15	1/10W 47k ohm
L403	010-3103-64	1.5k ohm/100MHz	Q671	125-2026-93	UN5213	R483	119-1021-15	1/10W 1k ohm
L462	010-3104-50	30 ohm/100MHz	Q672	125-2026-93	UN5213	R484	119-1021-15	1/10W 1k ohm
L464	010-3104-50	30 ohm/100MHz	R400	119-1021-15	1/10W 1k ohm	R485	119-8221-15	1/10W 8.2k ohm
L465	010-3104-50	30 ohm/100MHz	R401	119-1021-15	1/10W 1k ohm	R486	119-8221-15	1/10W 8.2k ohm
L466	010-3104-50	30 ohm/100MHz	R402	119-1021-15	1/10W 1k ohm	R487	119-1021-15	1/10W 1k ohm
L467	010-3104-50	30 ohm/100MHz	R403	119-1021-15	1/10W 1k ohm	R488	119-1021-15	1/10W 1k ohm
L468	010-3104-50	30 ohm/100MHz	R404	119-1031-15	1/10W 10k ohm	R489	119-2231-15	1/10W 22k ohm
L469	010-3104-50	30 ohm/100MHz	R405	119-1001-15	1/10W 10 ohm	R490	119-2231-15	1/10W 22k ohm
L500	010-2279-50	4.7uH	R406	119-1031-15	1/10W 10k ohm	R491	119-1221-15	1/10W 1.2k ohm
L501	010-2279-50	4.7uH	R407	116-1221-15	1/4W 1.2k ohm	R492	119-1001-15	1/10W 10 ohm
L600	010-3104-50	30 ohm/100MHz	R408	116-1221-15	1/4W 1.2k ohm	R493	119-1001-15	1/10W 10 ohm
L601	010-2279-50	4.7uH	R409	116-1221-15	1/4W 1.2k ohm	R494	119-1001-15	1/10W 10 ohm
L602	010-3104-50	30 ohm/100MHz	R410	032-0140-50	1/10W 10k ohm F	R496	032-0178-00	1/2W 180ohm
L606	010-3104-50	30 ohm/100MHz	R411	119-1031-15	1/10W 10k ohm	R498	032-0178-00	1/2W 180ohm
L607	010-2279-50	4.7uH	R412	119-2731-15	1/10W 27k ohm	R500	119-1031-15	1/10W 10k ohm
L670	010-3104-50	30 ohm/100MHz	R413	119-1031-15	1/10W 10k ohm	R501	119-2231-15	1/10W 22k ohm
L671	010-3104-50	30 ohm/100MHz	R414	119-1031-15	1/10W 10k ohm	R502	119-1031-15	1/10W 10k ohm
P400	076-0349-02	2P	R415	032-0177-00	2W 0.82ohm	R503	119-1031-15	1/10W 10k ohm
P460	076-3011-82	PLUG(32P)	R417	119-1031-15	1/10W 10k ohm	R504	119-1031-15	1/10W 10k ohm
Q400	190-1298-00	2SA1298	R421	119-1031-15	1/10W 10k ohm	R507	119-1031-15	1/10W 10k ohm
Q401	101-1143-00	2SB1143	R422	119-1031-15	1/10W 10k ohm	R508	119-1031-15	1/10W 10k ohm
Q402	100-1428-00	2SA1428	R423	116-1521-15	1/4W 1.5k ohm	R509	119-1031-15	1/10W 10k ohm
Q403	125-0020-93	UN511300L	R424	116-1521-15	1/4W 1.5k ohm	R510	119-1011-15	1/10W 100 ohm
Q404	125-0020-93	UN511300L	R427	119-1531-15	1/10W 15k ohm	R511	119-4711-15	1/10W 470 ohm
Q405	125-2026-95	UN521N	R429	119-4721-15	1/10W 4.7k ohm	R512	119-1031-15	1/10W 10k ohm
Q406	125-2026-95	UN521N	R430	119-1031-15	1/10W 10k ohm	R513	119-1031-15	1/10W 10k ohm
Q407	190-1736-00	2SA1736	R431	119-2201-15	1/10W 22 ohm	R514	119-1021-15	1/10W 1k ohm
Q408	101-1143-00	2SB1143	R432	032-0178-00	1/2W 180ohm	R515	119-1031-15	1/10W 10k ohm
Q410	190-1298-00	2SA1298	R433	119-3321-15	1/10W 3.3k ohm	R516	032-0140-16	1/10W 180k ohm F
Q411	190-1736-00	2SA1736	R434	119-1031-15	1/10W 10k ohm	R517	032-0140-03	1/10W 220k ohm F
Q412	190-1298-00	2SA1298	R435	116-1521-15	1/4W 1.5k ohm	R518	119-4741-15	1/10W 470k ohm
Q413	125-2026-92	UN5212	R436	119-5611-15	1/10W 560 ohm	R520	119-1041-15	1/10W 100k ohm
Q414	125-2026-95	UN521N	R437	119-3321-15	1/10W 3.3k ohm	R521	119-1041-15	1/10W 100k ohm
Q415	190-1576-00	2SA1576A	R438	119-2231-15	1/10W 22k ohm	R522	119-1031-15	1/10W 10k ohm
Q417	125-2017-97	RN1427	R439	119-4731-15	1/10W 47k ohm	R523	119-1031-15	1/10W 10k ohm
Q418	192-4081-00	2SC4081	R440	119-1031-15	1/10W 10k ohm	R524	119-1041-15	1/10W 100k ohm
Q419	192-4081-00	2SC4081	R441	116-3311-15	1/4W 330 ohm	R525	119-1031-15	1/10W 10k ohm
Q420	125-2026-91	UN5211	R442	119-1031-15	1/10W 10k ohm	R526	119-1031-15	1/10W 10k ohm
Q421	131-1188-00	2SB1188	R443	116-1521-15	1/4W 1.5k ohm	R527	119-1031-15	1/10W 10k ohm
Q422	193-2118-00	2SD2118F5 Q,R,S	R444	119-1011-15	1/10W 100 ohm	R528	032-0140-03	1/10W 220k ohm F
Q423	102-3420-50	2SC3420 GR,BL	R445	119-4721-15	1/10W 4.7k ohm	R529	119-2231-15	1/10W 22k ohm
Q424	190-1576-00	2SA1576A	R448	119-3321-15	1/10W 3.3k ohm	R530	119-1041-15	1/10W 100k ohm
Q425	198-0302-50	2SK302 Y,GR	R449	119-1031-15	1/10W 10k ohm	R531	119-1051-15	1/10W 1M ohm
Q426	125-2026-95	UN521N	R450	119-4711-15	1/10W 470 ohm	R532	032-0140-67	1/10W 3.3k ohm F

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
R533	032-0140-52	1/10W 33k ohm F	R602	119-4731-15	1/10W 47k ohm	R658	119-0000-05	1/10W 0 ohm JW
R534	032-0140-66	1/10W 220 ohm F	R603	119-4731-15	1/10W 47k ohm	R659	119-0000-05	1/10W 0 ohm JW
R535	119-4731-15	1/10W 47k ohm	R608	119-4731-15	1/10W 47k ohm	R661	119-4731-15	1/10W 47k ohm
R536	032-0140-56	1/10W 12k ohm F	R609	119-2231-15	1/10W 22k ohm	R662	119-4731-15	1/10W 47k ohm
R537	119-1031-15	1/10W 10k ohm	R610	119-2231-15	1/10W 22k ohm	R670	119-0000-05	1/10W 0 ohm JW
R538	119-1031-15	1/10W 10k ohm	R611	119-2231-15	1/10W 22k ohm	R671	119-1011-15	1/10W 100 ohm
R540	119-1021-15	1/10W 1k ohm	R612	119-2231-15	1/10W 22k ohm	R672	119-1021-15	1/10W 1k ohm
R541	119-1041-15	1/10W 100k ohm	R615	119-3311-15	1/10W 330 ohm	R673	119-2221-15	1/10W 2.2k ohm
R545	119-1031-15	1/10W 10k ohm	R616	119-2721-15	1/10W 2.7k ohm	R674	119-0000-05	1/10W 0 ohm JW
R546	119-1021-15	1/10W 1k ohm	R621	119-1031-15	1/10W 10k ohm	R675	119-2211-15	1/10W 220 ohm
R547	119-1021-15	1/10W 1k ohm	R623	119-1051-15	1/10W 1M ohm	R676	119-1011-15	1/10W 100 ohm
R548	119-1031-15	1/10W 10k ohm	R624	119-0000-05	1/10W 0 ohm JW	R679	119-7501-15	1/10W 75 ohm
R549	119-1041-15	1/10W 100k ohm	R625	119-0000-05	1/10W 0 ohm JW	R680	119-7501-15	1/10W 75 ohm
R550	119-4721-15	1/10W 4.7k ohm	R626	119-1021-15	1/10W 1k ohm	R681	119-7501-15	1/10W 75 ohm
R552	119-1031-15	1/10W 10k ohm	R627	119-2021-15	1/10W 2k ohm	R682	119-7501-15	1/10W 75 ohm
R553	119-1031-15	1/10W 10k ohm	R628	119-2211-15	1/10W 220 ohm	R683	119-0000-05	1/10W 0 ohm JW
R554	119-1031-15	1/10W 10k ohm	R631	119-3311-15	1/10W 330 ohm	R684	032-0140-12	1/10W 75 ohm F
R555	119-1031-15	1/10W 10k ohm	R633	119-4731-15	1/10W 47k ohm	R685	032-0140-12	1/10W 75 ohm F
R556	119-1031-15	1/10W 10k ohm	R634	119-3311-15	1/10W 330 ohm	R686	032-0140-12	1/10W 75 ohm F
R557	119-1021-15	1/10W 1k ohm	R635	119-3311-15	1/10W 330 ohm	R688	119-1011-15	1/10W 100 ohm
R558	119-1041-15	1/10W 100k ohm	R636	032-0140-72	1/10W 470 ohm F	R689	119-1011-15	1/10W 100 ohm
R559	119-1031-15	1/10W 10k ohm	R637	119-4731-15	1/10W 47k ohm	R690	119-1011-15	1/10W 100 ohm
R560	119-1031-15	1/10W 10k ohm	R638	119-4731-15	1/10W 47k ohm	R691	119-0000-05	1/10W 0 ohm JW
R561	119-1031-15	1/10W 10k ohm	R639	119-2211-15	1/10W 220 ohm	TH500	002-0315-00	TN10-3U153JT
R562	119-1031-15	1/10W 10k ohm	R640	119-2211-15	1/10W 220 ohm	VR600	012-6009-53	2.2k ohm B VR
R563	119-1031-15	1/10W 10k ohm	R641	119-0000-05	1/10W 0 ohm JW	X500	060-1541-90	3.14MHz
R566	119-1011-15	1/10W 100 ohm	R642	119-4731-15	1/10W 47k ohm	X501	061-3522-90	32.768KHz
R568	119-1011-15	1/10W 100 ohm	R643	119-4731-15	1/10W 47k ohm	X502	060-8045-00	PKLCS1212E4001-R
R570	119-2241-15	1/10W 220k ohm	R645	032-0140-23	1/10W 68 ohm F	X600	061-3556-90	9.5192MHz
R571	119-4731-15	1/10W 47k ohm	R646	032-0140-23	1/10W 68 ohm F	PWB	039-2958-01	PWB(WITHOUT COMPONENTS)
R572	119-1531-15	1/10W 15k ohm	R648	119-1031-15	1/10W 10k ohm			
R600	119-4731-15	1/10W 47k ohm	R653	119-1031-15	1/10W 10k ohm			

#### LCD PWB(B4) section

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C7	166-5096-50	5pF CH	C735	168-1032-55	0.01uF K	C775	168-1042-78	16V 0.1uF
C700	178-1052-78	1uF	C736	166-8201-50	82pF CH	C776	168-1022-55	1000pF K
C701	178-1052-78	1uF	C737	168-1032-55	0.01uF K	C777	168-1042-78	16V 0.1uF
C702	163-1063-35	16V 10uF	C738	168-1032-55	0.01uF K	C778	166-1011-50	100pF CH
C703	168-1032-55	0.01uF K	C739	166-1021-50	1000pF CH	C779	168-1022-55	1000pF K
C704	168-1042-78	16V 0.1uF	C740	178-1052-78	1uF	C780	168-1042-78	16V 0.1uF
C705	168-1042-78	16V 0.1uF	C741	168-1032-55	0.01uF K	C781	178-1052-78	1uF
C706	168-1045-56	0.1uF Z	C742	178-1052-78	1uF	C782	178-2242-78	0.22uF
C707	042-0423-97	16V 10uF	C743	178-1052-78	1uF	C783	168-3912-55	390pF K
C708	163-3353-65	50V 3.3uF	C744	168-1032-55	0.01uF K	C784	168-1042-78	16V 0.1uF
C709	178-1052-78	1uF	C745	163-4763-35	16V 47uF	C785	166-8201-56	82pF U
C710	042-0643-57	16V 220uF	C746	166-1007-50	10pF CH	C786	042-0423-97	16V 10uF
C711	042-0423-97	16V 10uF	C747	178-1052-78	1uF	C787	166-2211-50	220pF CH
C712	168-1045-56	0.1uF Z	C748	168-1032-55	0.01uF K	C788	178-2242-78	0.22uF
C713	042-0654-52	16V 10uF	C749	163-4743-65	50V 0.47uF	C789	168-1042-78	16V 0.1uF
C714	168-2232-55	0.022uF K	C750	168-1042-78	16V 0.1uF	C790	178-2242-78	0.22uF
C715	178-1055-79	1uF	C751	168-1032-55	0.01uF K	C791	163-2263-55	35V 22uF
C716	178-1055-79	1uF	C752	178-1052-78	1uF	C792	163-1063-55	35V 10uF
C717	166-5601-50	56pF CH	C753	168-1032-55	0.01uF K	C793	168-1042-78	16V 0.1uF
C718	168-1032-55	0.01uF K	C754	166-2096-50	2pF CK	C794	168-1042-78	16V 0.1uF
C719	168-1032-55	0.01uF K	C755	166-2096-50	2pF CK	C795	168-1042-78	16V 0.1uF
C720	168-1032-55	0.01uF K	C756	168-1045-56	0.1uF Z	C796	168-1042-78	16V 0.1uF
C721	168-1032-55	0.01uF K	C759	168-1042-78	16V 0.1uF	C797	168-4732-78	0.047uF K
C722	168-1032-55	0.01uF K	C762	168-1042-78	16V 0.1uF	C798	168-1045-56	0.1uF Z
C723	168-1032-55	0.01uF K	C763	168-1042-78	16V 0.1uF	C799	163-1063-35	16V 10uF
C724	043-0504-50	10V 4.7uF	C764	168-1042-78	16V 0.1uF	C801	166-6801-50	68pF CH
C725	166-1201-50	12pF CH	C765	168-1042-78	16V 0.1uF	C805	168-1022-55	1000pF K
C726	166-2201-50	22pF CH	C766	178-1052-78	1uF	C806	168-1022-55	1000pF K
C727	166-8211-50	820pF	C767	042-0423-97	16V 10uF	C807	168-1022-55	1000pF K
C728	166-2001-50	20pF CH	C768	178-1052-78	1uF	C808	168-1022-55	1000pF K
C729	168-6812-55	680pF K	C769	166-5611-50	560pF CH	C809	166-4711-50	470pF CH
C730	166-5601-50	56pF CH	C770	168-1042-78	16V 0.1uF	C810	166-4711-50	470pF CH
C731	168-1042-78	16V 0.1uF	C771	168-1042-78	16V 0.1uF	C811	166-4711-50	470pF CH
C732	168-1032-55	0.01uF K	C772	166-3301-50	33pF CH	C812	166-4711-50	470pF CH
C733	168-1032-55	0.01uF K	C773	168-1042-78	16V 0.1uF	C814	166-4711-50	470pF CH
C734	168-4732-78	0.047uF K	C774	166-3301-50	33pF CH	C816	168-1042-78	16V 0.1uF



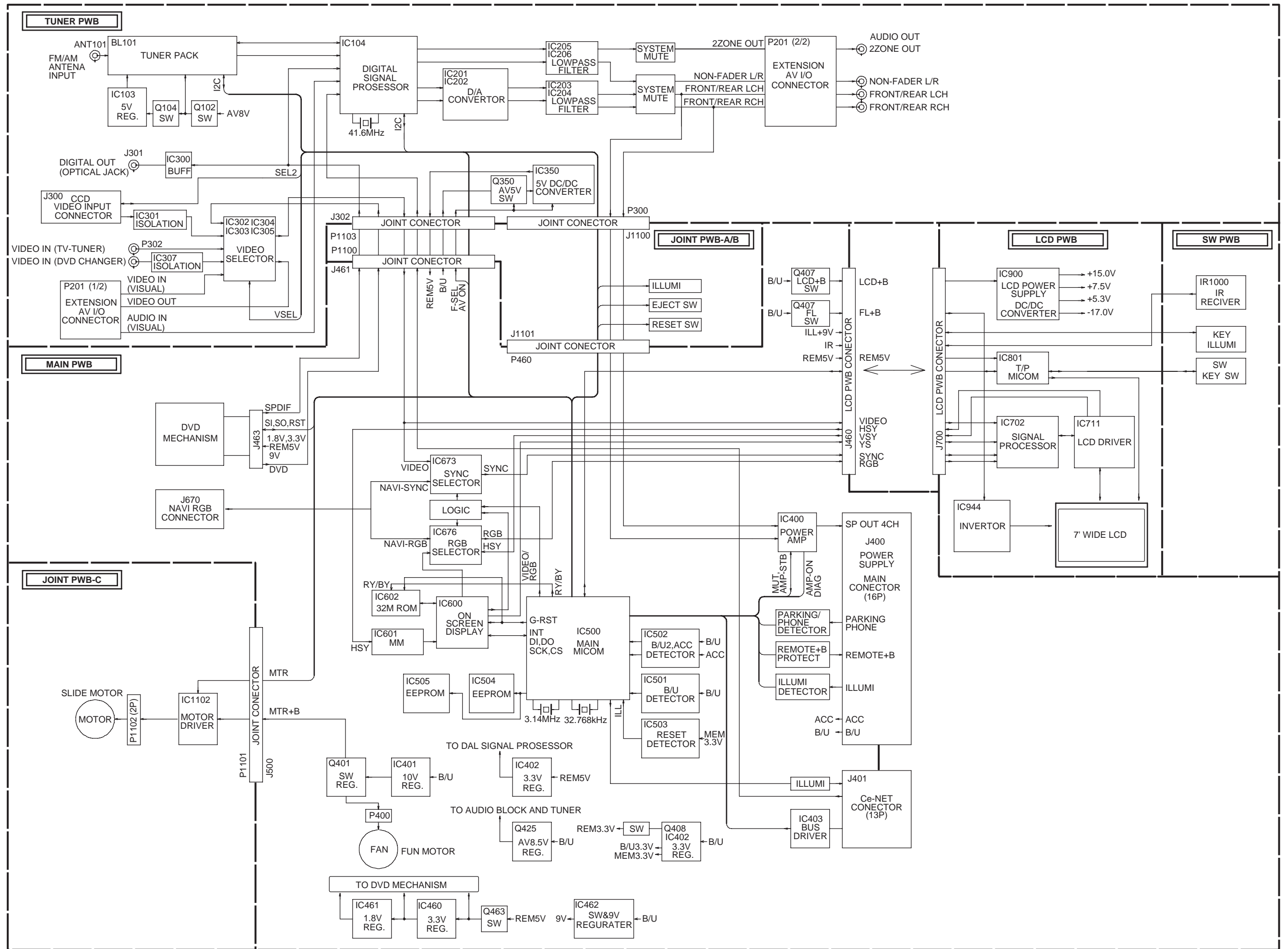
REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C817	168-1042-78	16V 0.1uF	D903	001-2606-90	M1FS4	R710	119-5621-15	1/10W 5.6k ohm
C818	168-1042-78	16V 0.1uF	D904	001-0517-90	1SS355	R711	119-1021-15	1/10W 1k ohm
C819	168-1042-78	16V 0.1uF	D946	001-1315-90	NSM123TL-E	R712	119-4721-15	1/10W 4.7k ohm
C820	163-1073-15	6.3V 100uF	D961	001-0529-29	MA8051-M	R713	119-2221-15	1/10W 2.2k ohm
C821	168-1042-78	16V 0.1uF	D964	001-1315-90	NSM123TL-E	R714	119-2221-15	1/10W 2.2k ohm
C822	168-1042-78	16V 0.1uF	D965	001-1315-90	NSM123TL-E	R715	032-0140-50	1/10W 10k ohm F
C900	042-0630-50	16V 100uF	F900	060-8058-90	ERBSEOR75U	R716	119-1021-15	1/10W 1k ohm
C901	168-1042-78	16V 0.1uF	IC700	051-3019-90	NJM2060V	R717	119-1031-15	1/10W 10k ohm
C902	163-1063-55	35V 10uF	IC701	051-7256-08	SN74AHCT1G32	R718	119-1011-15	1/10W 100 ohm
C903	163-4753-55	35V 4.7uF			DCR	R719	032-0140-99	1/10W 39k ohm F
C904	168-1022-55	1000pF K	IC702	051-5313-10	IR3Y29BM	R720	119-4731-15	1/10W 47k ohm
C905	168-2222-55	2200pF K	IC703	051-7269-08	SN74AHC2G53	R721	119-1031-15	1/10W 10k ohm
C906	163-3363-45	25V 33uF			HDCTR	R722	119-3341-15	1/10W 330k ohm
C907	042-0643-50	35V 22uF LOW-ESR	IC710	051-3025-90	NJM2107F	R723	119-3921-15	1/10W 3.9k ohm
C908	042-0528-50	35V 15uF	IC711	051-6086-00	LZ9FE30	R724	119-1031-15	1/10W 10k ohm
C909	163-2273-25	10V 220uF	IC712	051-7281-38	TC7SH14	R725	032-0140-89	1/10W 47k ohm F
C910	042-0528-50	35V 15uF			FUTE85L,F	R726	032-0140-54	1/10W 22k ohm F
C911	042-0643-50	35V 22uF LOW-ESR	IC713	051-7281-38	TC7SH14	R727	119-2221-15	1/10W 2.2k ohm
C912	163-1073-35	16V 100uF			FUTE85L,F	R728	119-2731-15	1/10W 27k ohm
C913	163-2273-25	10V 220uF	IC801	052-7066-01	M30102M2-561FP	R729	119-2731-15	1/10W 27k ohm
C914	163-3363-45	25V 33uF	IC900	051-3913-90	NJM2368E	R730	119-2231-15	1/10W 22k ohm
C933	178-2255-79	2.2uF	IC942	125-9023-90	TPCF8402TE85L,F	R731	032-0140-80	1/10W 18k ohm F
C934	168-1032-55	0.01uF K	IC943	125-9023-90	TPCF8402TE85L,F	R732	119-1521-15	1/10W 1.5k ohm
C935	166-1811-50	180pF CH	IC944	051-3925-90	OZ9910ISN-T2	R733	119-3341-15	1/10W 330k ohm
C936	168-4722-55	4700pF K	J700	074-2225-92	SOCKET(42P)	R734	119-2231-15	1/10W 22k ohm
C937	168-2232-55	0.022uF K	J710	074-2226-82	SOCKET	R735	119-2231-15	1/10W 22k ohm
C938	178-2255-79	2.2uF	J803	074-2219-54	SOCKET	R736	119-5611-15	1/10W 560 ohm
C939	168-2232-55	0.022uF K	J804	074-2225-66	SOCKET	R737	119-5641-15	1/10W 560k ohm
C940	178-1052-78	1uF	J805	074-2225-66	SOCKET	R738	119-1021-15	1/10W 1k ohm
C952	043-0567-90	25V 22uF	L700	010-3406-68	NLV25 33uH J	R739	119-3351-15	1/10W 3.3M ohm
C953	043-0549-50	3KV10PF	L701	010-3406-68	NLV25 33uH J	R740	119-2231-15	1/10W 22k ohm
C954	168-1032-55	0.01uF K	L702	010-3406-71	NLV25 56uH J	R741	119-3931-15	1/10W 39k ohm
C955	166-1221-50	1200pF CH	L703	010-4051-90	19.8uH	R742	119-2231-15	1/10W 22k ohm
C958	168-1022-55	1000pF K	L710	010-3406-62	NLV25 10uH J	R743	119-3931-15	1/10W 39k ohm
C959	178-1052-78	1uF	L711	010-3406-64	NLV25 15uH J	R744	119-1051-15	1/10W 1M ohm
C960	168-1032-55	0.01uF K	L712	010-3406-56	NLV25 3.3uH J	R745	119-3311-15	1/10W 330 ohm
C961	042-0636-51	16V 47uF	L713	010-3406-54	NLV25 2.2uH J	R746	119-6821-15	1/10W 6.8k ohm
C962	168-1045-56	0.1uF Z	L800	010-3406-59	NLV25 5.6uH J	R747	119-1521-15	1/10W 1.5k ohm
C963	042-0636-51	16V 47uF	L900	010-3010-50	100uH	R748	119-5621-15	1/10W 5.6k ohm
C964	168-1045-56	0.1uF Z	L901	010-3406-74	NLV25 100uH J	R749	119-2231-15	1/10W 22k ohm
C966	042-0416-55	16V 15uF M TAN	L902	010-3406-74	NLV25 100uH J	R750	119-3931-15	1/10W 39k ohm
CCT700	050-0145-60	1/16W 470 ohm x4	L903	010-3057-90	100uH	R751	119-1011-15	1/10W 100 ohm
CCT710	050-0145-59	1/16W 22 ohm x4	L904	010-3406-74	NLV25 100uH J	R752	119-2231-15	1/10W 22k ohm
CCT711	050-0145-60	1/16W 470 ohm x4	L961	010-3059-90	Choke	R753	119-4731-15	1/10W 47k ohm
CCT712	050-0145-59	1/16W 22 ohm x4	P950	076-0568-00	2P	R755	032-0140-52	1/10W 33k ohm F
CCT801	050-0145-52	1/16W 1k ohm x4	Q700	193-2114-00	2SD2114K	R756	032-0140-00	1/10W 56k ohm F
CCT802	050-0145-52	1/16W 1k ohm x4	Q701	125-2026-91	UN5211	R757	119-6811-15	1/10W 680 ohm
CCT803	050-0145-54	1/16W 47k ohm x4	Q702	125-0025-92	RN2302	R758	119-2221-15	1/10W 2.2k ohm
CCT804	050-0145-60	1/16W 470 ohm x4	Q703	125-2026-91	UN5211	R759	119-1011-15	1/10W 100 ohm
CCT805	050-0145-54	1/16W 47k ohm x4	Q704	192-4081-00	2SC4081	R760	119-1011-15	1/10W 100 ohm
D710	001-4305-19	UDZSTE-17 5.1B	Q705	125-2026-91	UN5211	R761	119-1011-15	1/10W 100 ohm
D711	001-0517-90	1SS355	Q706	190-1738-00	2SA1738	R762	119-8221-15	1/10W 8.2k ohm
D712	001-3211-90	MA335-TX	Q710	125-2027-94	DTC123JUA	R763	119-5621-15	1/10W 5.6k ohm
D713	001-2406-90	1PS226	Q711	125-2026-91	UN5211	R764	032-0140-52	1/10W 33k ohm F
D714	001-4305-19	UDZSTE-17 5.1B	Q712	192-4081-00	2SC4081	R765	032-0140-89	1/10W 47k ohm F
D801	001-0525-90	IMN10	Q803	125-2027-94	DTC123JUA	R766	119-1821-15	1/10W 1.8k ohm
D802	001-0517-90	1SS355	Q804	125-0021-94	DTA123JUA	R767	119-4731-15	1/10W 47k ohm
D810	001-2406-90	1PS226	Q805	125-0021-94	DTA123JUA	R768	119-4731-15	1/10W 47k ohm
D811	001-2406-90	1PS226	Q806	125-2027-94	DTC123JUA	R770	119-4711-15	1/10W 470 ohm
D812	001-2406-90	1PS226	Q900	192-2873-00	2SC2873	R771	119-4711-15	1/10W 470 ohm
D813	001-2406-90	1PS226	Q942	125-2032-92	RN1302	R772	119-4711-15	1/10W 470 ohm
D818	001-4305-20	UDZSTE-17 5.6B	Q943	190-1576-00	2SA1576A	R773	119-3301-15	1/10W 33 ohm
D819	001-4305-20	UDZSTE-17 5.6B	Q961	125-0025-92	RN2302	R774	119-3301-15	1/10W 33 ohm
D820	001-4305-20	UDZSTE-17 5.6B	R1	119-0000-05	1/10W 0 ohm JW	R775	032-0140-55	1/10W 4.7k ohm F
D821	001-4305-20	UDZSTE-17 5.6B	R700	032-0140-89	1/10W 47k ohm F	R776	032-0140-87	1/10W 3.6k ohm F
D822	001-4305-20	UDZSTE-17 5.6B	R701	032-0140-63	1/10W 27k ohm F	R777	119-4731-15	1/10W 47k ohm
D823	001-4305-20	UDZSTE-17 5.6B	R702	032-0140-00	1/10W 56k ohm F	R778	119-2731-15	1/10W 27k ohm
D824	001-4305-20	UDZSTE-17 5.6B	R703	032-0140-50	1/10W 10k ohm F	R779	119-6831-15	1/10W 68k ohm
D825	001-4305-20	UDZSTE-17 5.6B	R704	032-0140-79	1/10W 2.7k ohm F	R780	119-1051-15	1/10W 1M ohm
D826	001-4305-20	UDZSTE-17 5.6B	R705	119-2021-15	1/10W 2k ohm	R781	119-6831-15	1/10W 68k ohm
D900	001-0517-90	1SS355	R707	119-1001-15	1/10W 10 ohm	R782	119-1051-15	1/10W 1M ohm
D901	001-0517-90	1SS355	R708	119-1011-15	1/10W 100 ohm	R783	119-2711-15	1/10W 270 ohm
D902	001-0517-90	1SS355	R709	119-9121-15	1/10W 9.1k ohm	R784	119-2421-15	1/10W 2.4k ohm

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
R785	119-4721-15	1/10W 4.7k ohm	R819	119-2211-15	1/10W 220 ohm	R992	119-6841-15	1/10W 680k ohm
R786	119-1031-15	1/10W 10k ohm	R900	119-1001-15	1/10W 10 ohm	T900	007-1171-00	TRANS
R787	119-5641-15	1/10W 560k ohm	R901	119-1841-15	1/10W 180k ohm	T901	007-1178-00	OUTPUT-TRANS BLC4126
R788	119-5641-15	1/10W 560k ohm	R902	119-6841-15	1/10W 680k ohm	TM801	073-0762-90	TERMINAL
R789	119-3321-15	1/10W 3.3k ohm	R903	119-3931-15	1/10W 39k ohm	TM802	073-0762-90	TERMINAL
R790	119-2721-15	1/10W 2.7k ohm	R904	119-3311-15	1/10W 330 ohm	TM803	073-0762-90	TERMINAL
R791	119-2241-15	1/10W 220k ohm	R905	119-6841-15	1/10W 680k ohm	TM804	073-0762-90	TERMINAL
R792	119-3311-15	1/10W 330 ohm	R906	119-2221-15	1/10W 2.2k ohm	VR401	012-6009-56	10k ohm B VR
R793	119-1011-15	1/10W 100 ohm	R907	119-2231-15	1/10W 22k ohm	VR402	012-6009-54	4.7k ohm B VR
R794	119-3331-15	1/10W 33k ohm	R956	119-3931-15	1/10W 39k ohm	VR600	012-6009-52	1k ohm B VR
R795	119-2031-15	1/10W 20k ohm	R957	119-1031-15	1/10W 10k ohm	VR700	012-6009-53	2.2k ohm B VR
R796	119-3921-15	1/10W 3.9k ohm	R958	119-1541-15	1/10W 150k ohm	VR701	012-6009-57	22k ohm B VR
R797	119-8221-15	1/10W 8.2k ohm	R959	119-1041-15	1/10W 100k ohm	VR702	012-6009-58	33k ohm B VR
R798	119-1001-15	1/10W 10 ohm	R960	119-1051-15	1/10W 1M ohm	VR703	012-6009-58	33k ohm B VR
R799	119-1031-15	1/10W 10k ohm	R961	119-1021-15	1/10W 1k ohm	VR704	012-6009-58	33k ohm B VR
R800	119-2211-15	1/10W 220 ohm	R964	119-1021-15	1/10W 1k ohm	VR705	012-6009-58	33k ohm B VR
R801	119-2231-15	1/10W 22k ohm	R965	119-1021-15	1/10W 1k ohm	VR706	012-6009-54	4.7k ohm B VR
R802	119-4711-15	1/10W 470 ohm	R966	119-1021-15	1/10W 1k ohm	VR707	012-6009-58	33k ohm B VR
R803	119-4711-15	1/10W 470 ohm	R967	119-1021-15	1/10W 1k ohm	X700	061-3524-90	4.433618MHz
R809	119-1051-15	1/10W 1M ohm	R981	032-0140-51	1/10W 15k ohm F	X701	061-3520-95	3.57945MHz
R810	119-3321-15	1/10W 3.3k ohm	R982	116-6811-15	1/4W 680 ohm	X801	060-1531-90	CSTCR4M91G53- RO
R811	119-4731-15	1/10W 47k ohm	R983	032-0140-05	1/10W 82k ohm F	PWB	039-2901-00	PWB(WITHOUT COMPONENTS)
R812	119-1021-15	1/10W 1k ohm	R984	119-1031-15	1/10W 10k ohm			
R815	119-2231-15	1/10W 22k ohm	R985	119-3351-15	1/10W 3.3M ohm			
R816	119-2231-15	1/10W 22k ohm	R986	119-1041-15	1/10W 100k ohm			
R817	119-6811-15	1/10W 680 ohm	R987	119-1051-15	1/10W 1M ohm			
R818	119-2211-15	1/10W 220 ohm	R988	032-0140-90	1/10W 560 ohm F			

#### Switch PWB(B5) section

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C1000	168-1042-78	16V 0.1uF	D1015	001-7098-90	CL-190UB2C-X-T	R1011	119-1021-15	1/10W 1k ohm
C1001	168-1042-78	16V 0.1uF	D1016	001-7098-90	CL-190UB2C-X-T	S1000	013-6312-50	SKRP-ABE-010
D1000	001-4305-20	UDZSTE-17 5.6B	D1017	001-7098-90	CL-190UB2C-X-T	S1001	013-6312-50	SKRP-ABE-010
D1001	001-7043-91	CL-170UR U-RED	IR1000	060-4018-90	IR-RECEIVER/RS- 771	S1002	013-6312-50	SKRP-ABE-010
D1002	001-7098-90	CL-190UB2C-X-T	J1000	074-2236-65	SOCKET(15P)	S1003	013-6312-50	SKRP-ABE-010
D1003	001-7098-90	CL-190UB2C-X-T	J1001	074-2236-65	SOCKET(15P)	S1004	013-6312-50	SKRP-ABE-010
D1004	001-7098-90	CL-190UB2C-X-T	R1000	119-0000-05	1/10W 0 ohm JW	S1005	013-6312-50	SKRP-ABE-010
D1005	001-7098-90	CL-190UB2C-X-T	R1001	119-1021-15	1/10W 1k ohm	S1006	013-6312-50	SKRP-ABE-010
D1006	001-7098-90	CL-190UB2C-X-T	R1002	119-3311-15	1/10W 330 ohm	S1007	013-6312-50	SKRP-ABE-010
D1007	001-7098-90	CL-190UB2C-X-T	R1003	119-3311-15	1/10W 330 ohm	S1008	013-6312-50	SKRP-ABE-010
D1008	001-7098-90	CL-190UB2C-X-T	R1004	119-3311-15	1/10W 330 ohm	S1009	013-6312-50	SKRP-ABE-010
D1009	001-7098-90	CL-190UB2C-X-T	R1005	119-4711-15	1/10W 470 ohm	S1010	013-6312-50	SKRP-ABE-010
D1010	001-7098-90	CL-190UB2C-X-T	R1006	119-4711-15	1/10W 470 ohm	S1011	013-6312-50	SKRP-ABE-010
D1011	001-7098-90	CL-190UB2C-X-T	R1007	119-3311-15	1/10W 330 ohm	S1012	013-6312-50	SKRP-ABE-010
D1012	001-7098-90	CL-190UB2C-X-T	R1008	119-3311-15	1/10W 330 ohm	S1013	013-6312-50	SKRP-ABE-010
D1013	001-7098-90	CL-190UB2C-X-T	R1009	119-0000-05	1/10W 0 ohm JW	PWB	039-2902-00	PWB(WITHOUT COMPONENTS)
D1014	001-7098-90	CL-190UB2C-X-T						

# BLOCK DIAGRAM

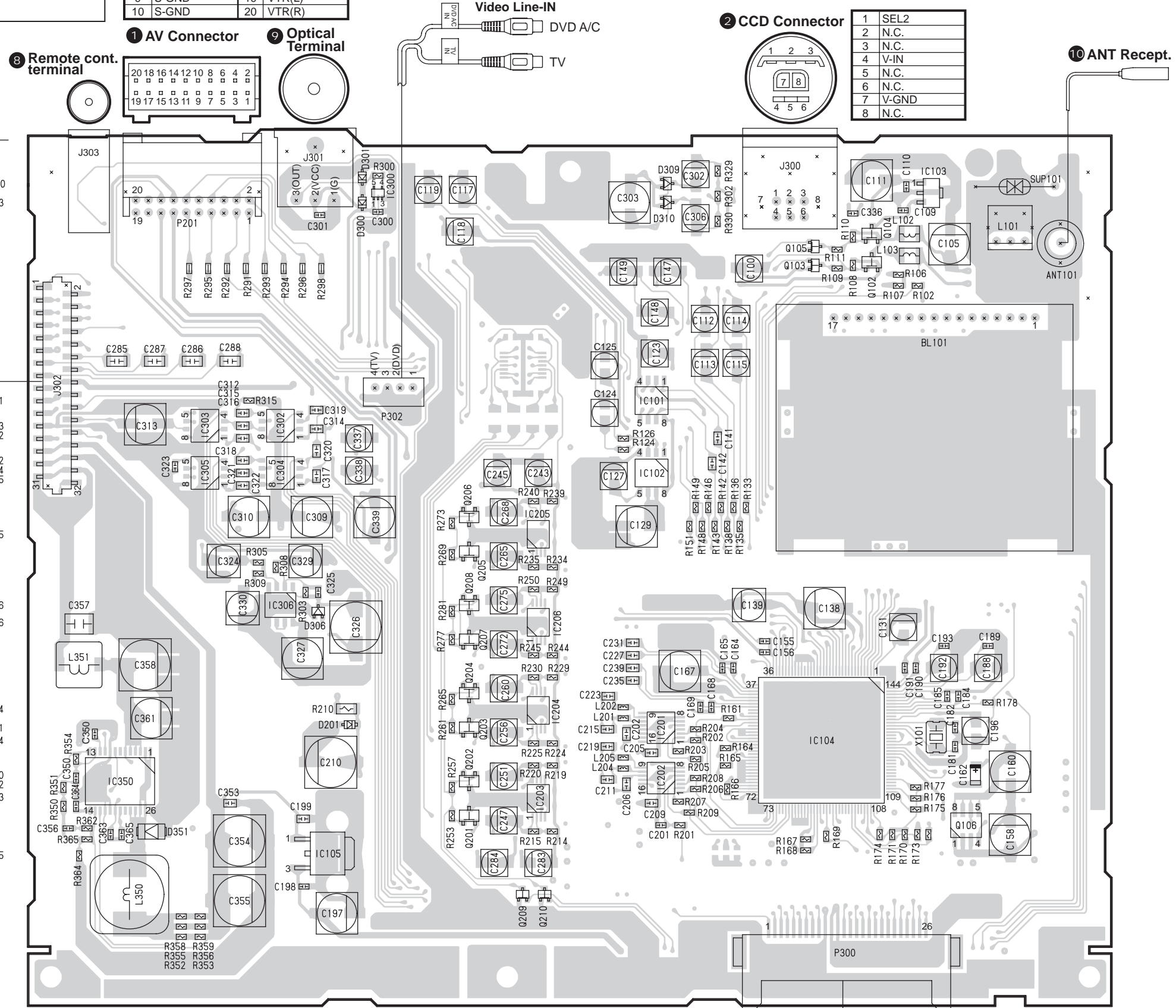


# PRINTED WIRING BOARD

Tuner PWB(B1) section 1/2

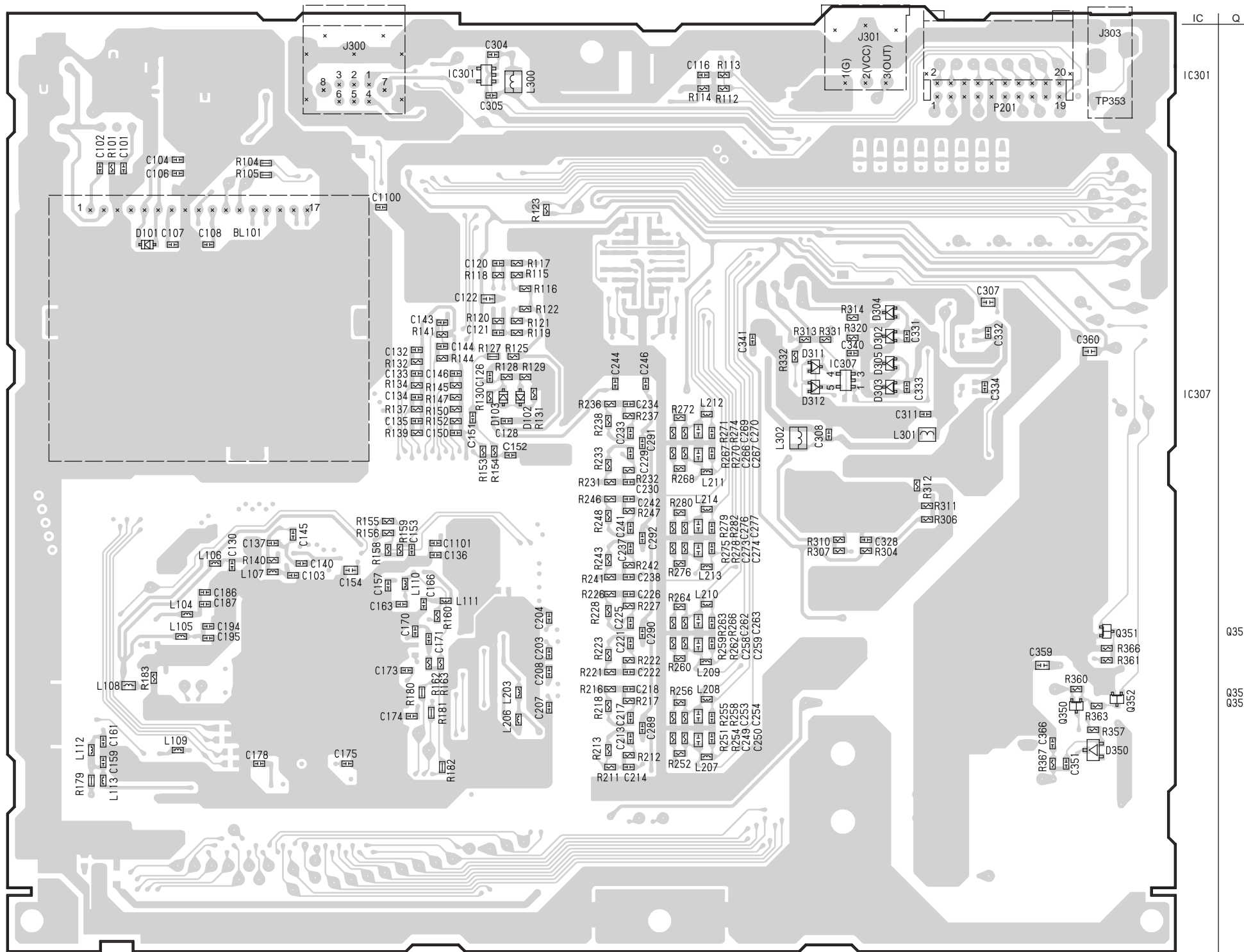
Caution:  
**COMPONENT SIDE:** Parts on the component side seen from the component side are indicated.  
**SOLDER SIDE:** Parts on the solder side seen from the solder side are indicated.

1	REAR(L)	11	SUB(L)
2	REAR(R)	12	SUB(R)
3	FRONT(L)	13	V-OUT-GND
4	FRONT(R)	14	V-GND
5	S-GND	15	V-OUT
6	S-GND	16	VTR-IN
7	NF(L)	17	VTR-SG
8	NF(R)	18	VTR-SG
9	S-GND	19	VTR(L)
10	S-GND	20	VTR(R)



(A) To P1103 of Joint PWB-A (Page 25)

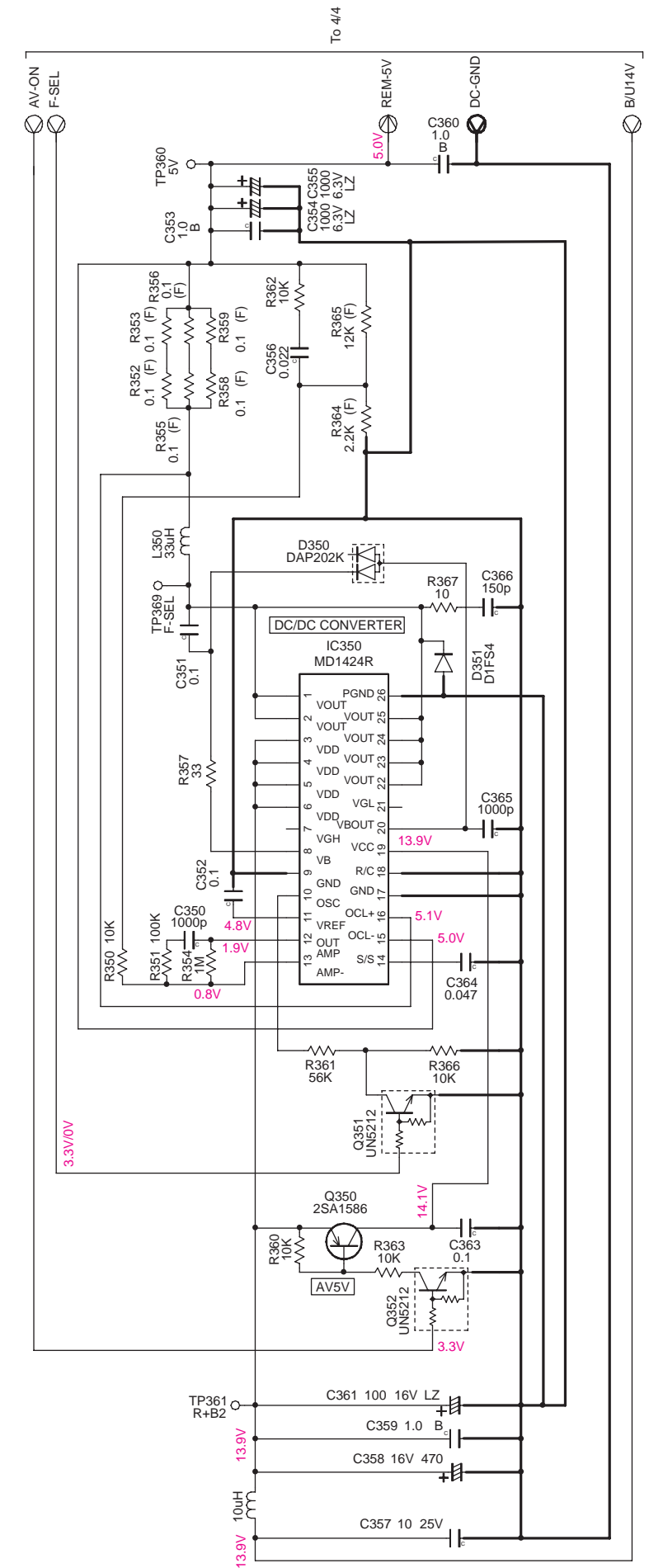
(B) To J1100 of Joint PWB-B (Page 25)



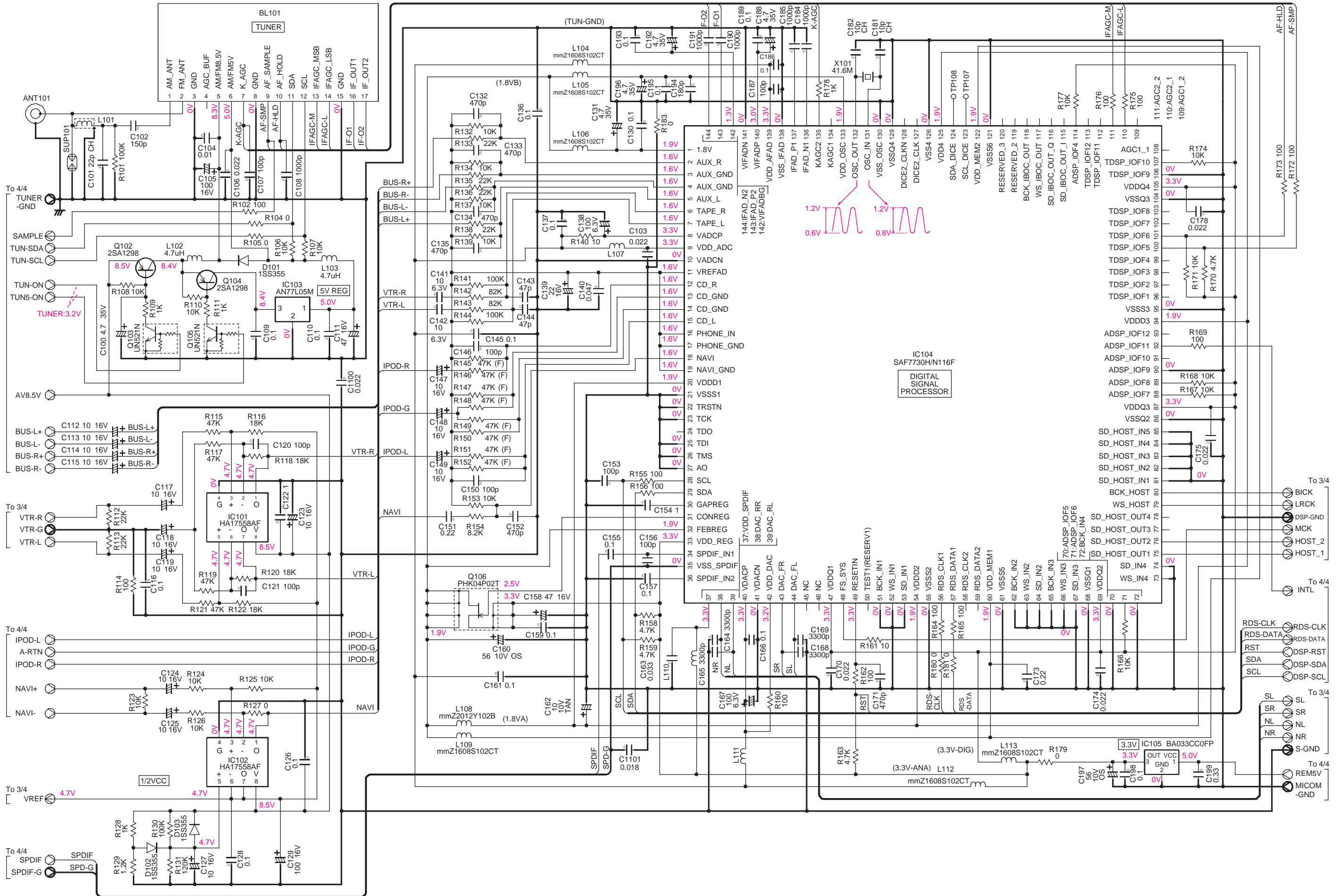
Tuner PWB (B1) \*Four layers  
SOLDER SIDE

CIRCUIT DIAGRAM

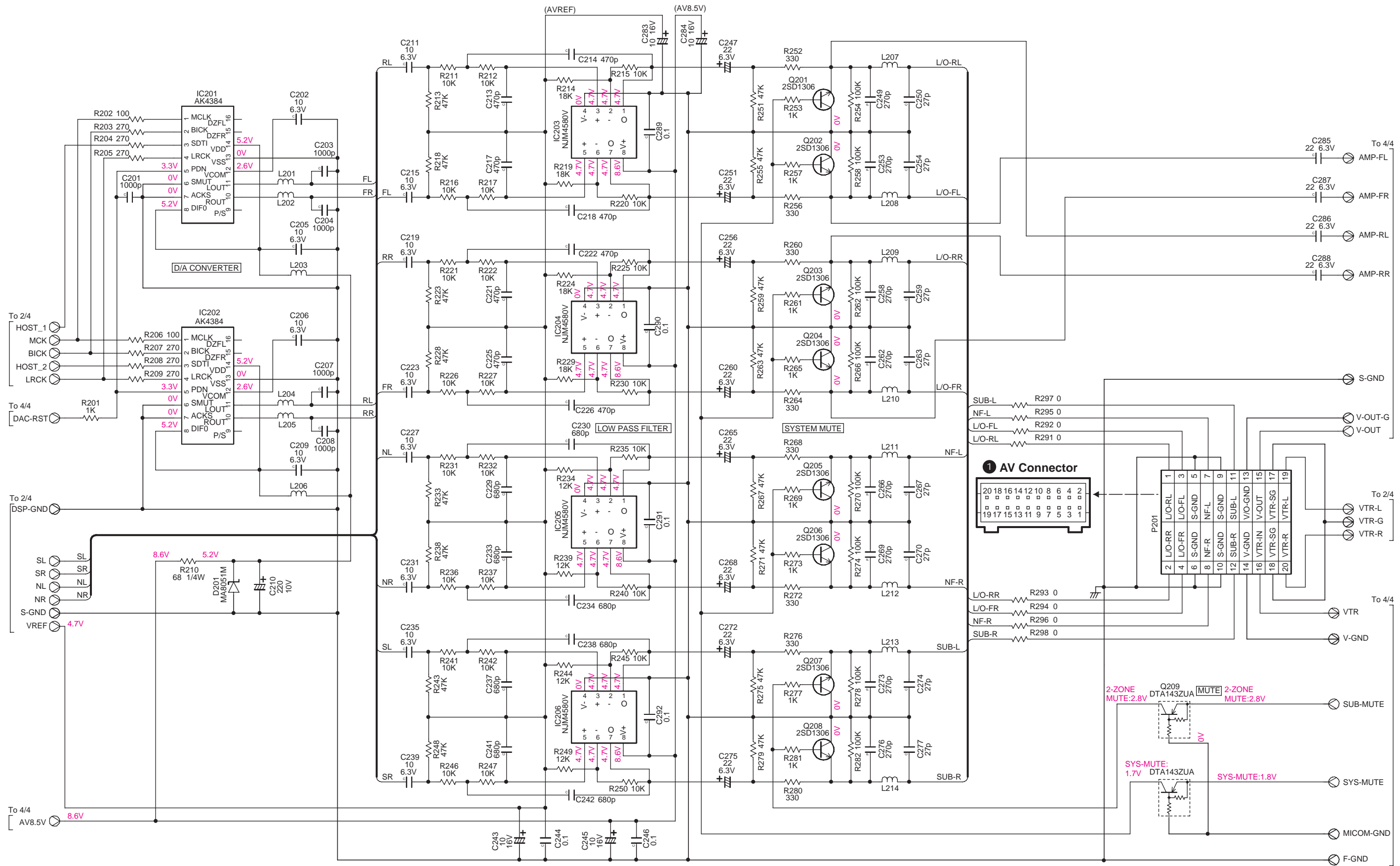
Tuner PWB(B1) section 1/4  
[ 5V DC-DC ]



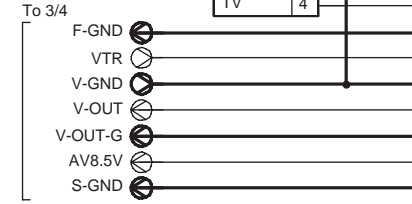
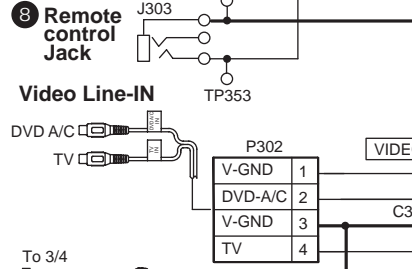
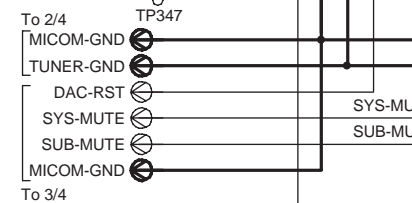
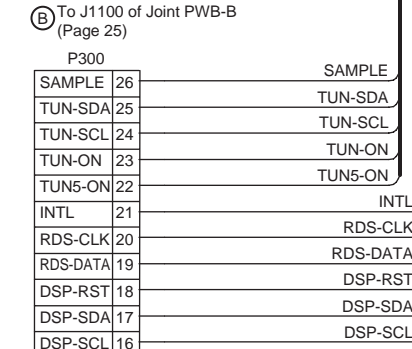
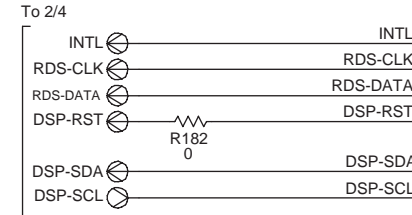
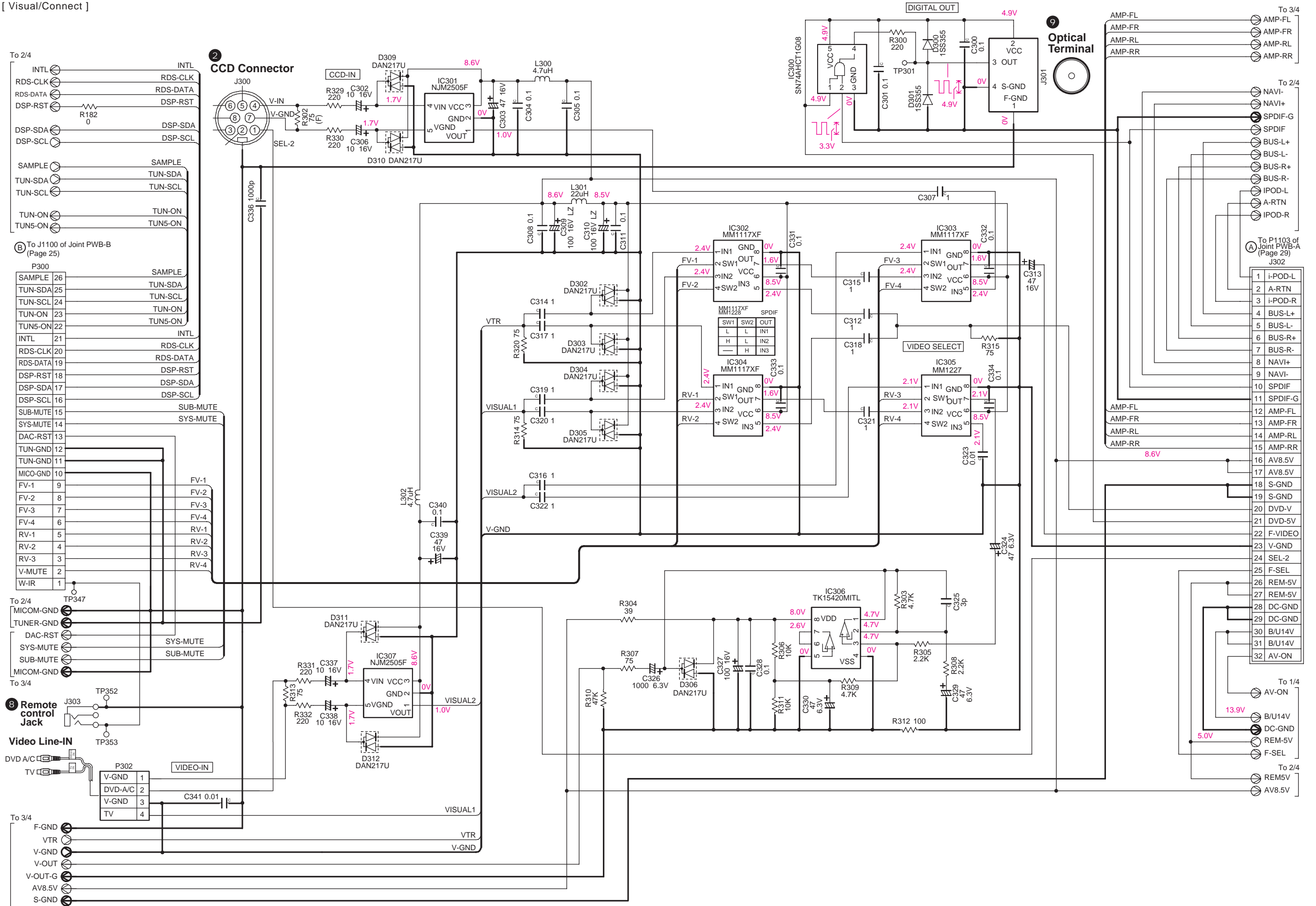
Tuner PWB(B1) section 2/4  
 [ Tuner/DSP ]



Tuner PWB(B1) section 3/4  
[ Audio ]



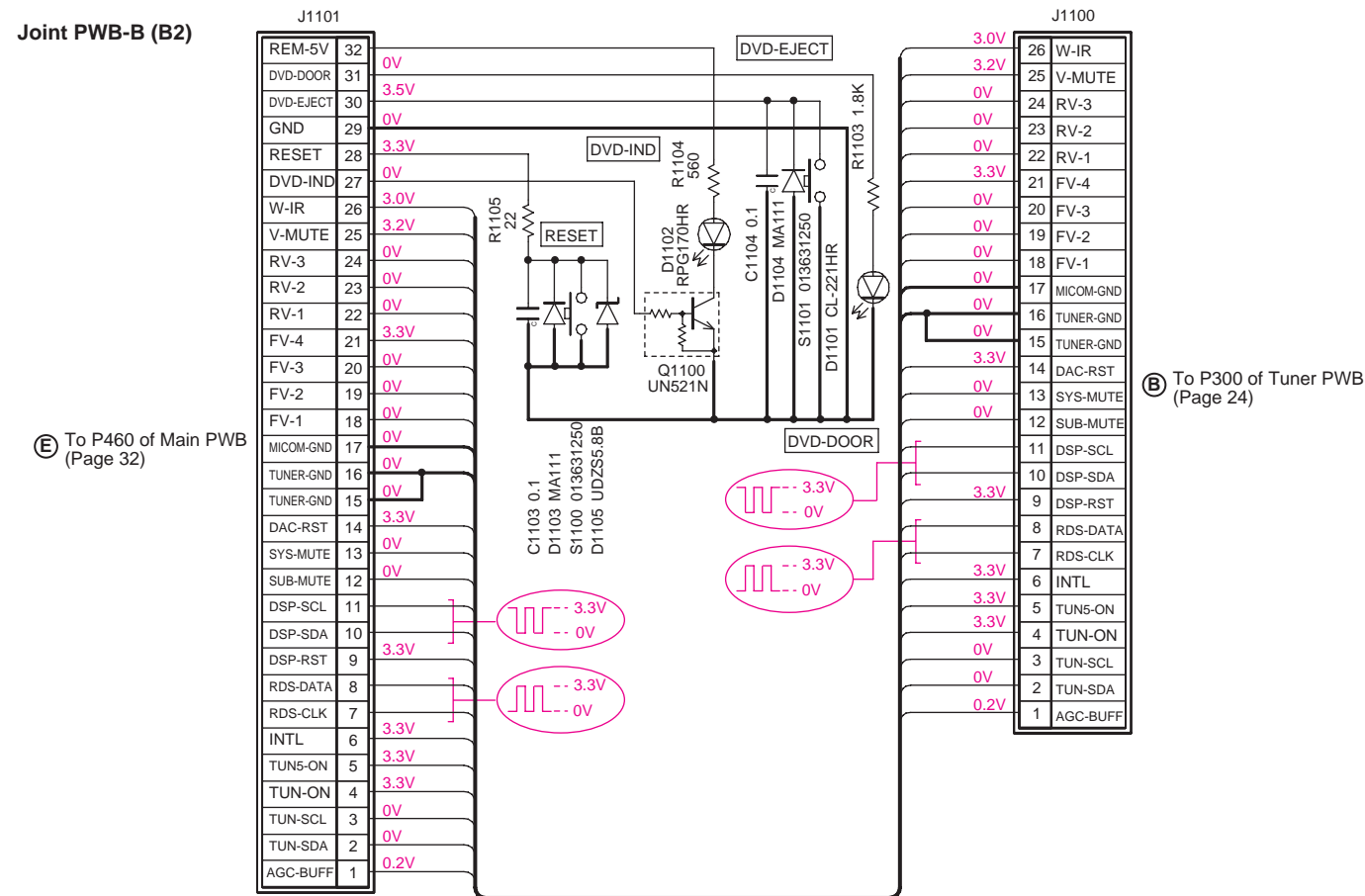
Tuner PWB(B1) section 4/4  
 [ Visual/Connect ]





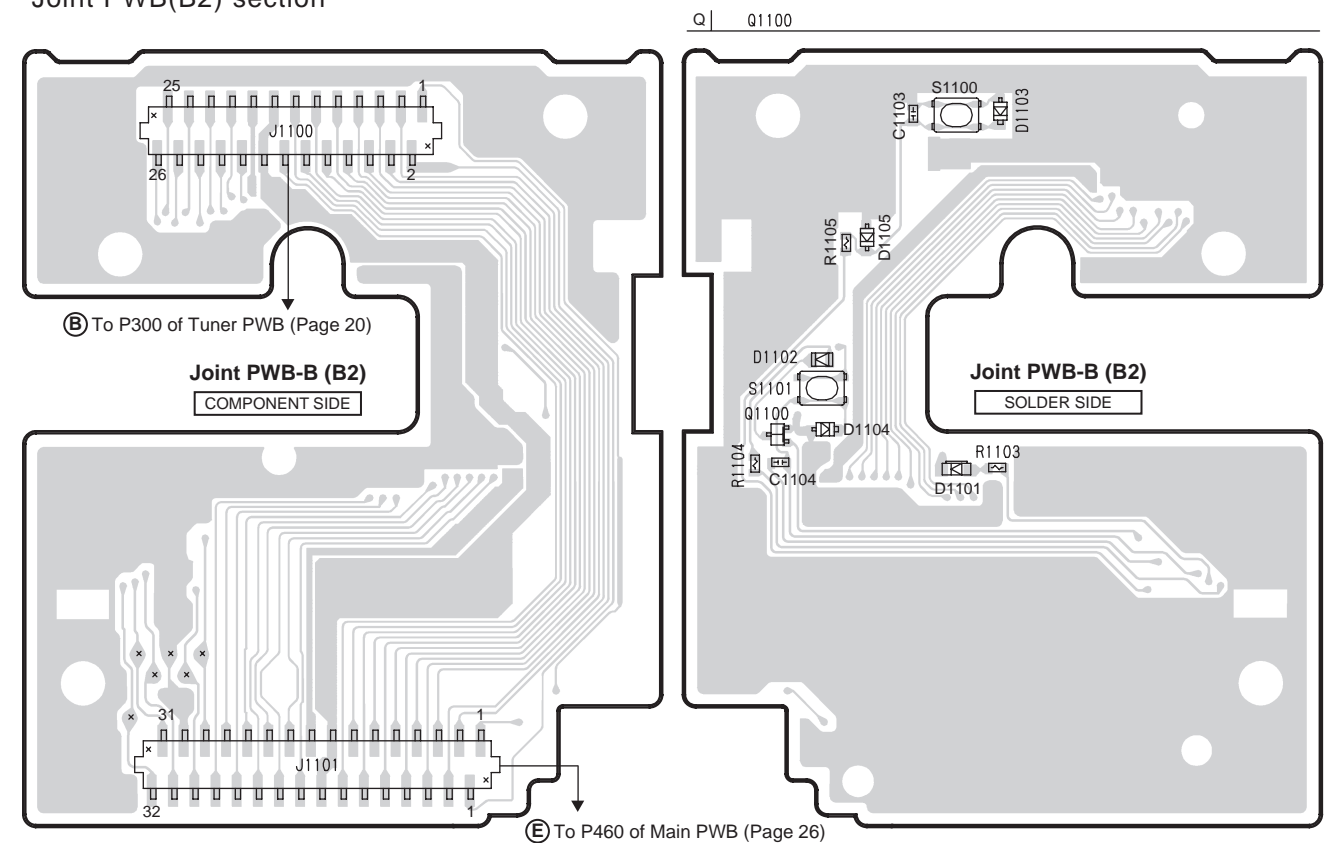
# CIRCUIT DIAGRAM

Joint PWB(B2) section



# PRINTED WIRING BOARD

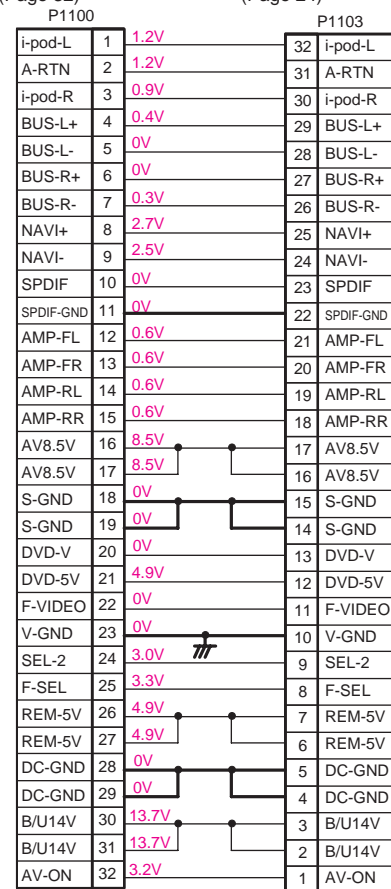
Joint PWB(B2) section



## Joint PWB-A (B2)

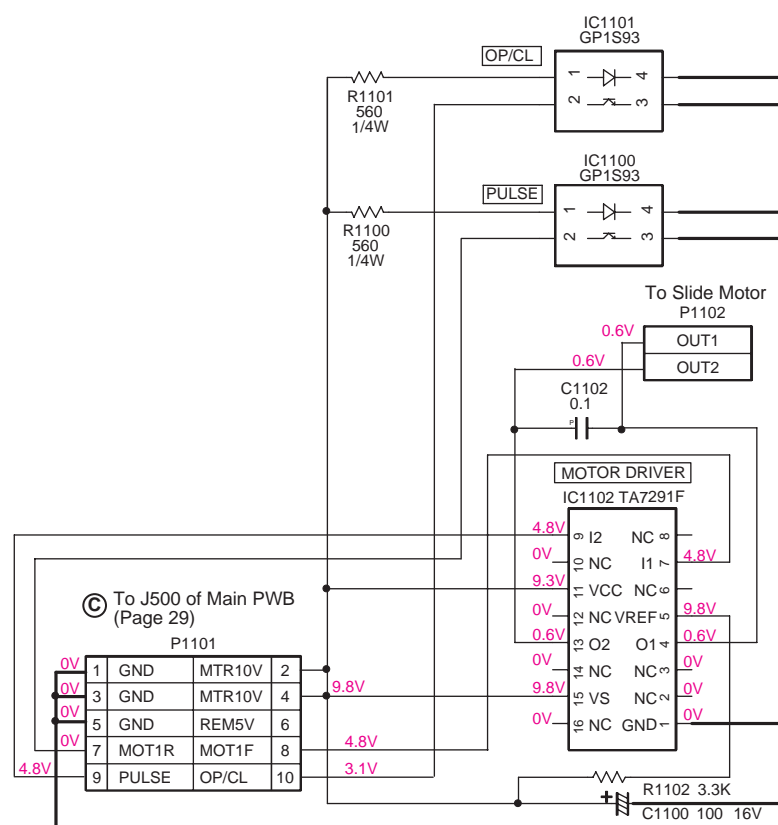
④ To J461 of Main PWB (Page 32)

① To J302 of Tuner PWB (Page 24)



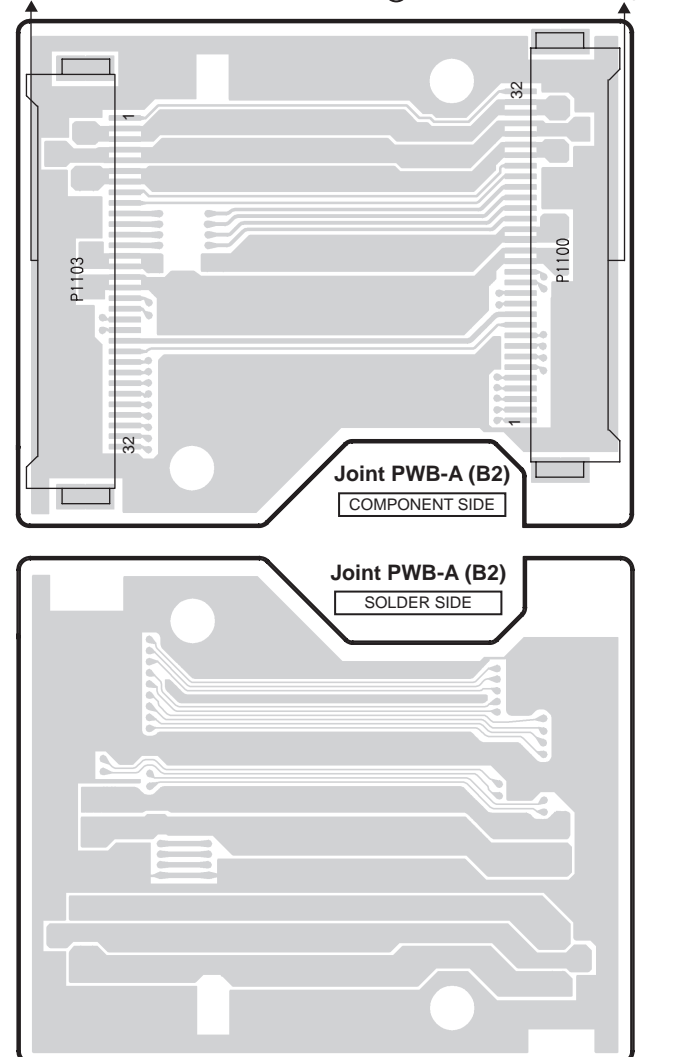
## Joint PWB-C (B2)

③ To J500 of Main PWB (Page 29)



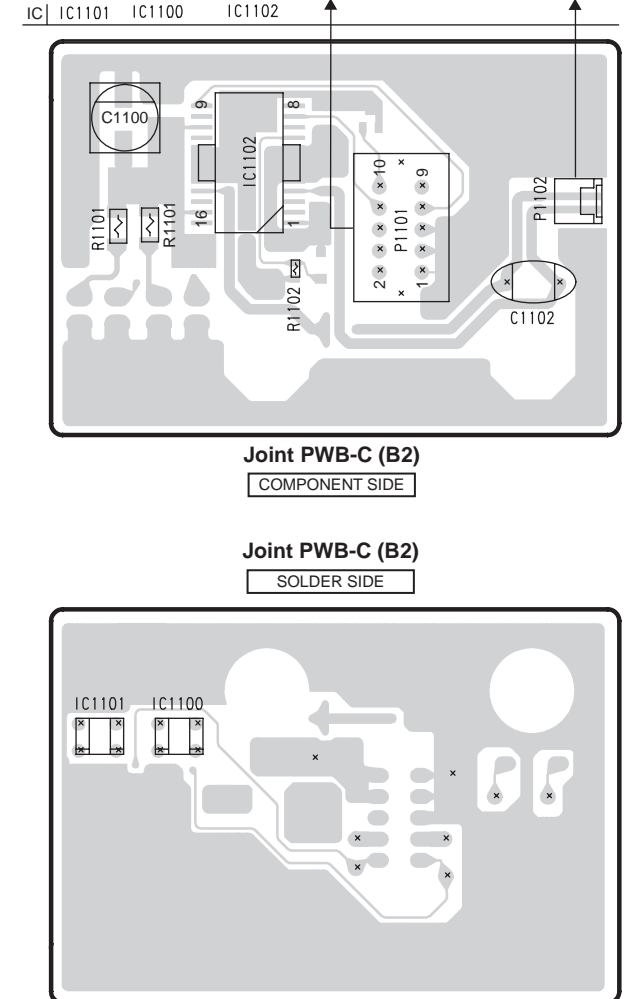
① To J302 of Tuner PWB (Page 20)

④ To J461 of Main PWB (Page 26)



③ To J500 of Main PWB (Page 27)

To Slide Motor



# PRINTED WIRING BOARD

Main PWB(B3) section 1/2

**5 CeNET Connector**

1	GND
2	B/U14V
3	L(+)
4	NAVI(-)
5	NAVI(+)
6	BUS(+)
7	R(+)
8	R(-)
9	SYS-ACC
10	BUS(-)
11	L(-)
12	ILL
13	N.C.

**6 Main Connector**

P	O	N	M	L	K	J	I
H	G	F	E	D	C	B	A

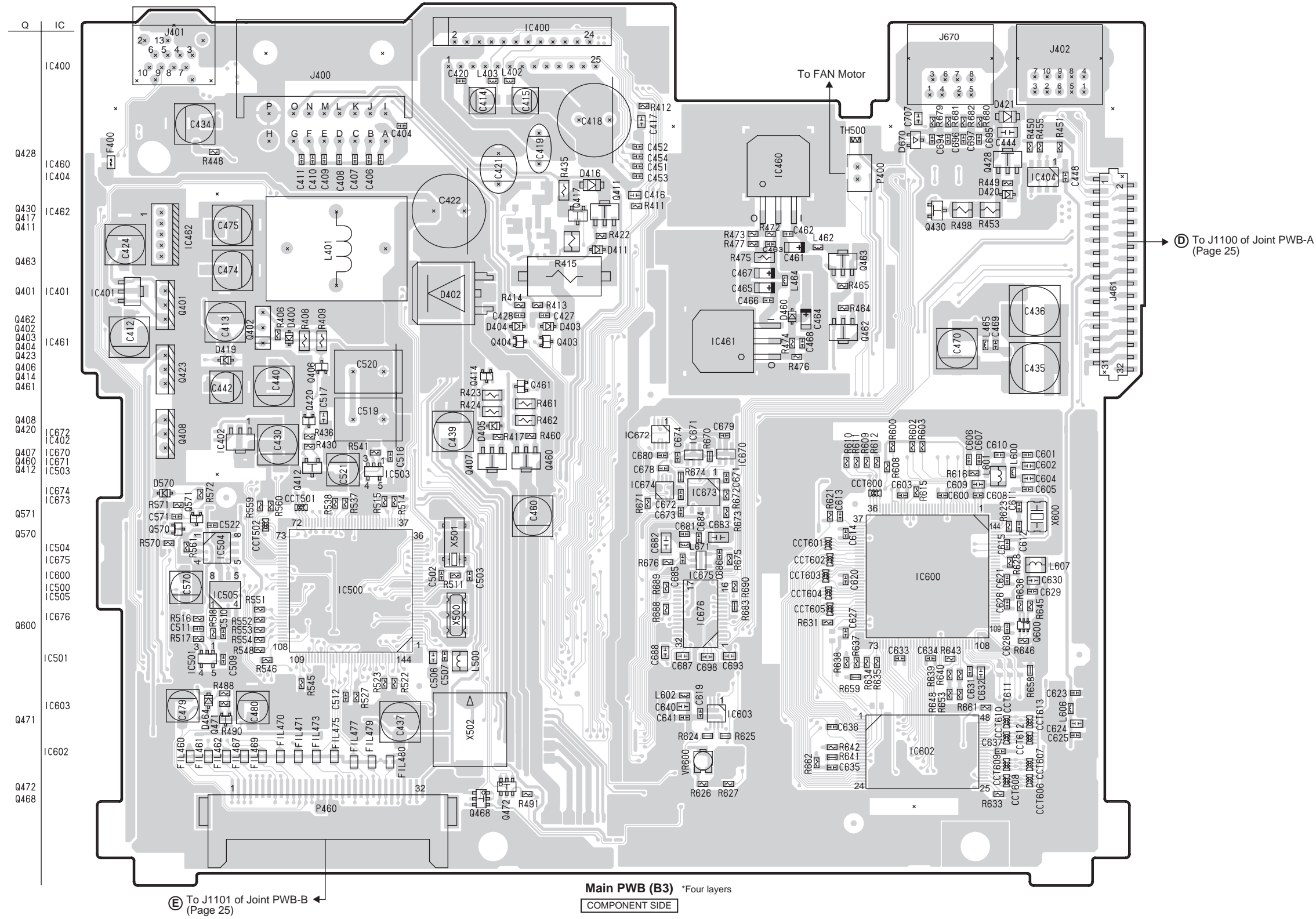
A	REAR-L(+)	I	REAR-L(-)
B	FRONT-L(-)	J	PHONE
C	FRONT-L(+)	K	ACC
D	FRONT-R(+)	L	N.C.
E	FRONT-R(-)	M	REM
F	REAR-R(+)	N	ILL
G	REAR-R(-)	O	PKB
H	B/U	P	GND

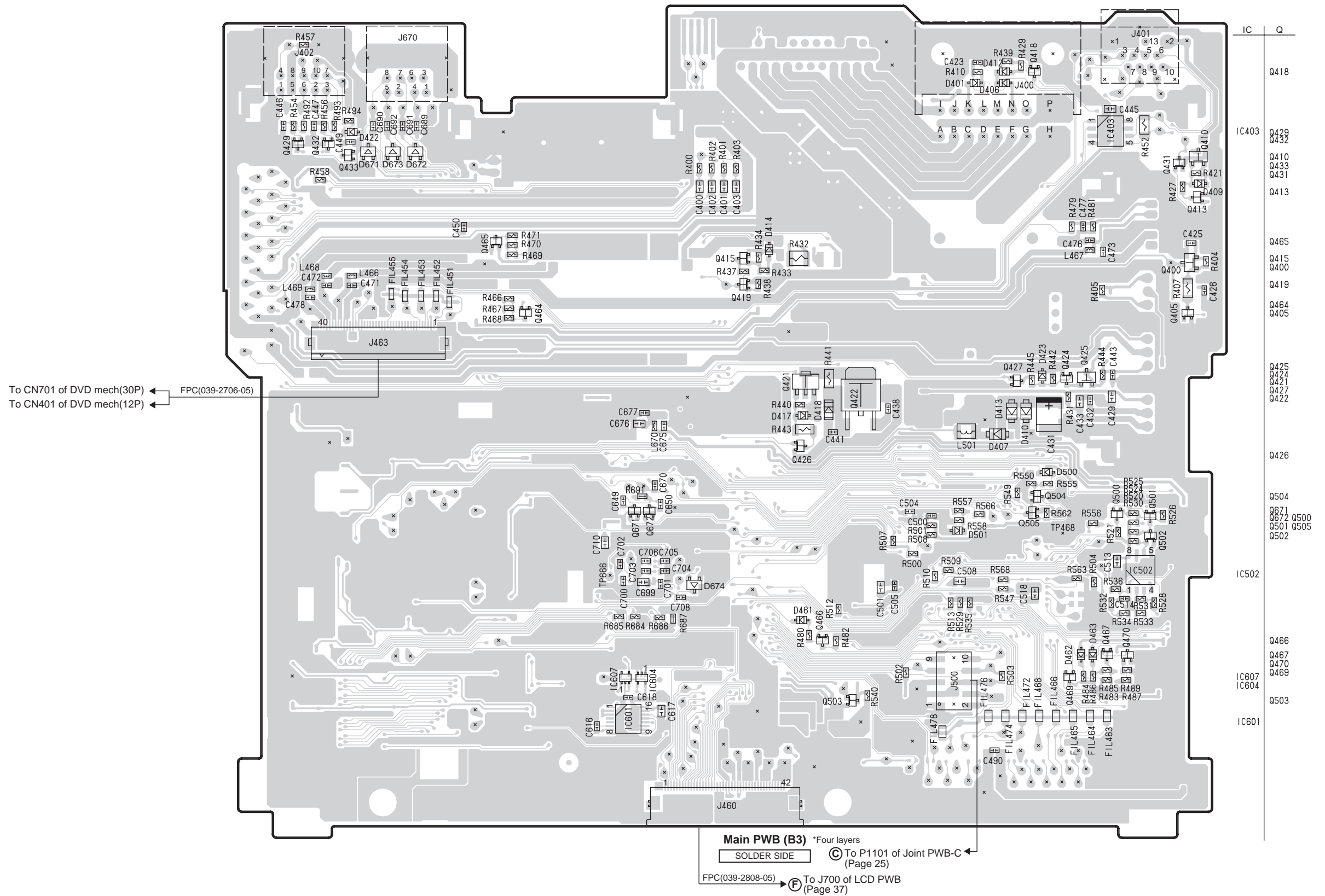
**4 RGB Connector**

1	NAVI-B
2	NAVI-SYNC
3	NAVI-R
4	N.C.
5	N.C.
6	NAVI-G
7	N.C.
8	N.C.

**3 iPod Connector**

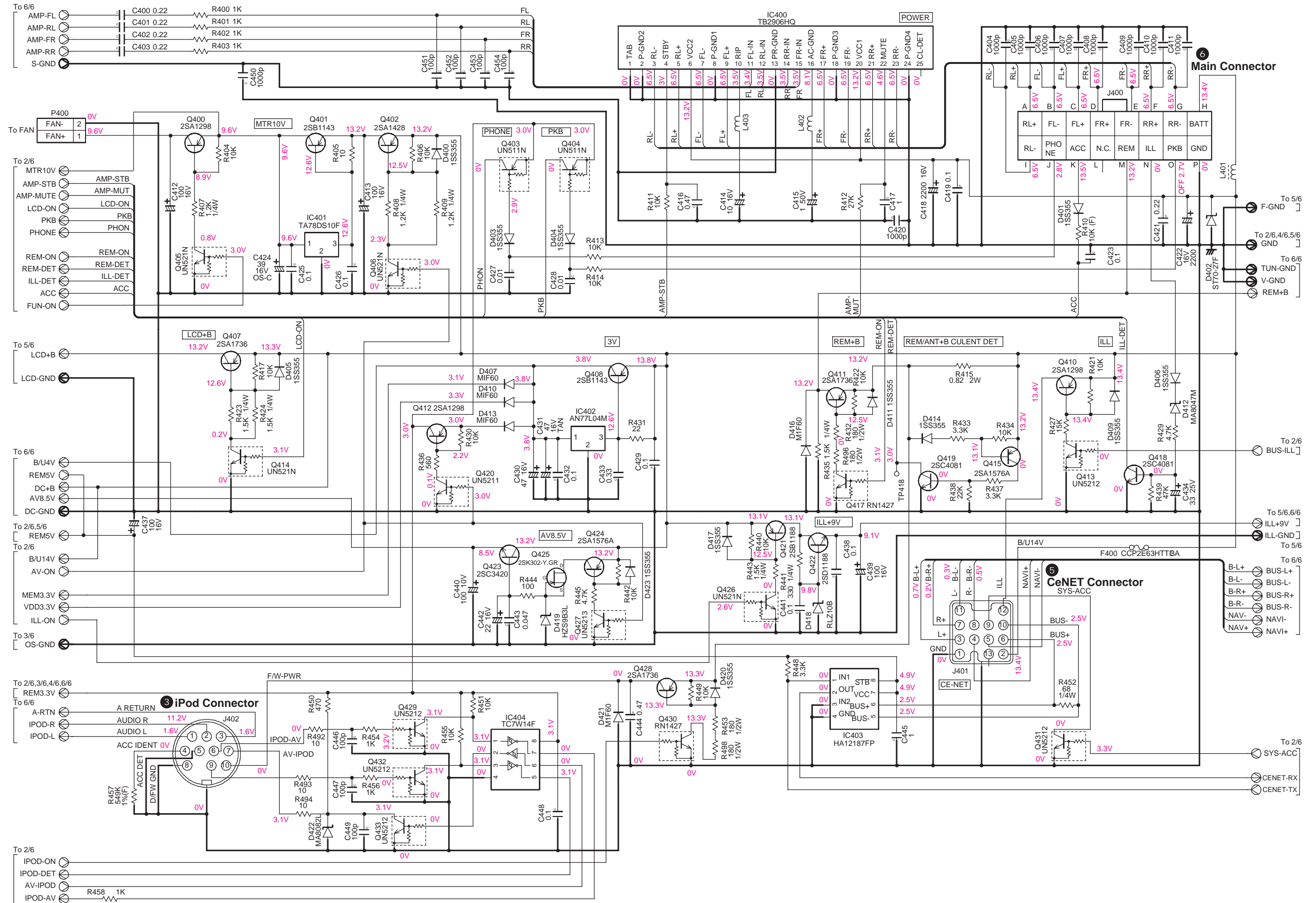
1	AUDIO-L
2	AUDIO-R
3	A RETURN
4	ACC IDENT
5	ACC DET
6	IPOD-AV
7	AV-IPOD
8	D/FW GND
9	3.3V
10	F/W-PWR





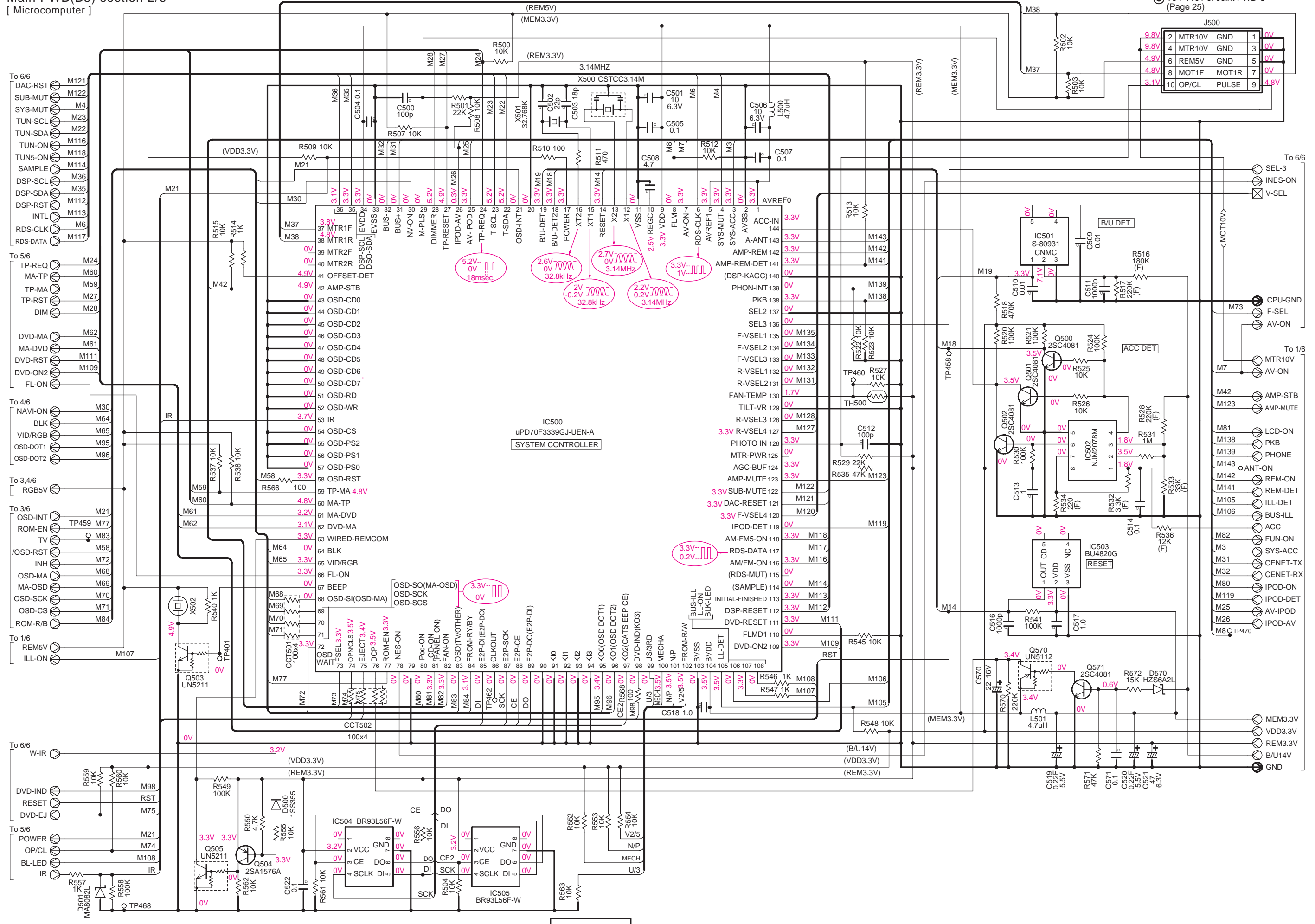
# CIRCUIT DIAGRAM

Main PWB(B3) section 1/6  
[ Power/Outlet ]



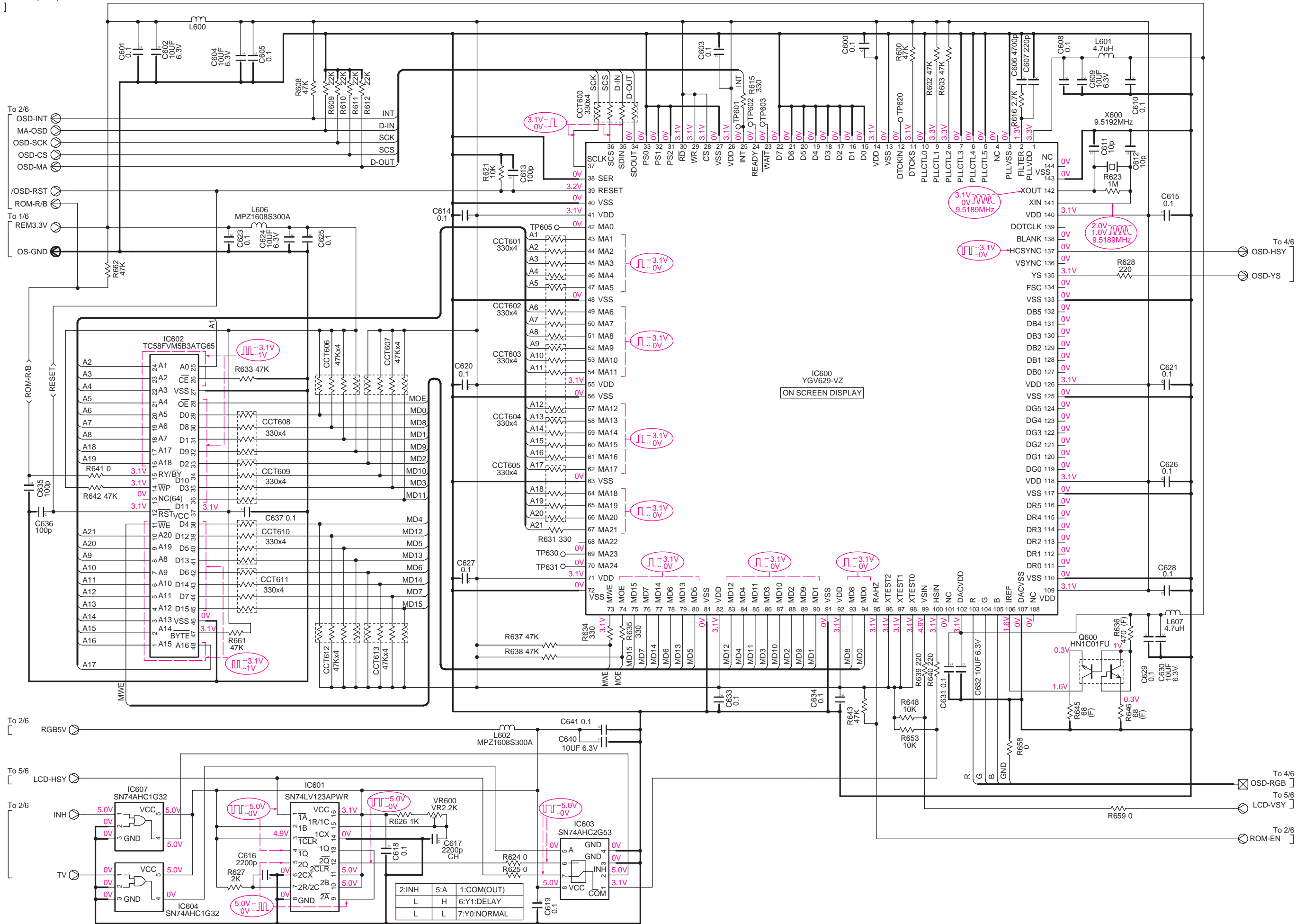
Main PWB(B3) section 2/6  
[ Microcomputer ]

© To P1101 of Joint PWB-C  
(Page 25)

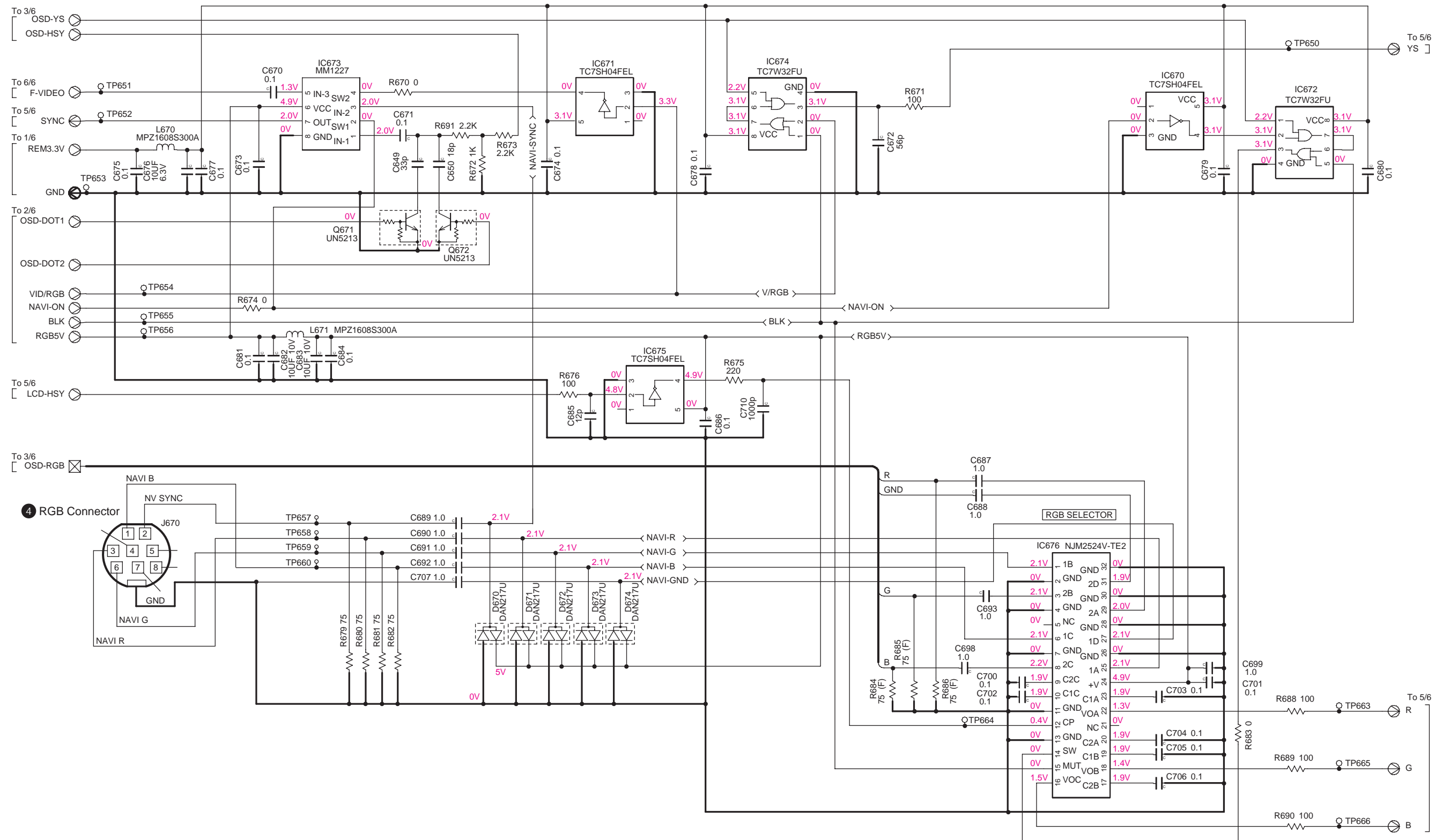


J500	Pin	Signal	Level
2	MTR10V	GND	0V
3	MTR10V	GND	0V
4	MTR10V	GND	0V
5	REM5V	GND	0V
6	REM5V	GND	0V
7	MOT1F	MOT1R	0V
8	MOT1F	MOT1R	0V
9	OP/CL	PULSE	4.8V
10	OP/CL	PULSE	4.8V

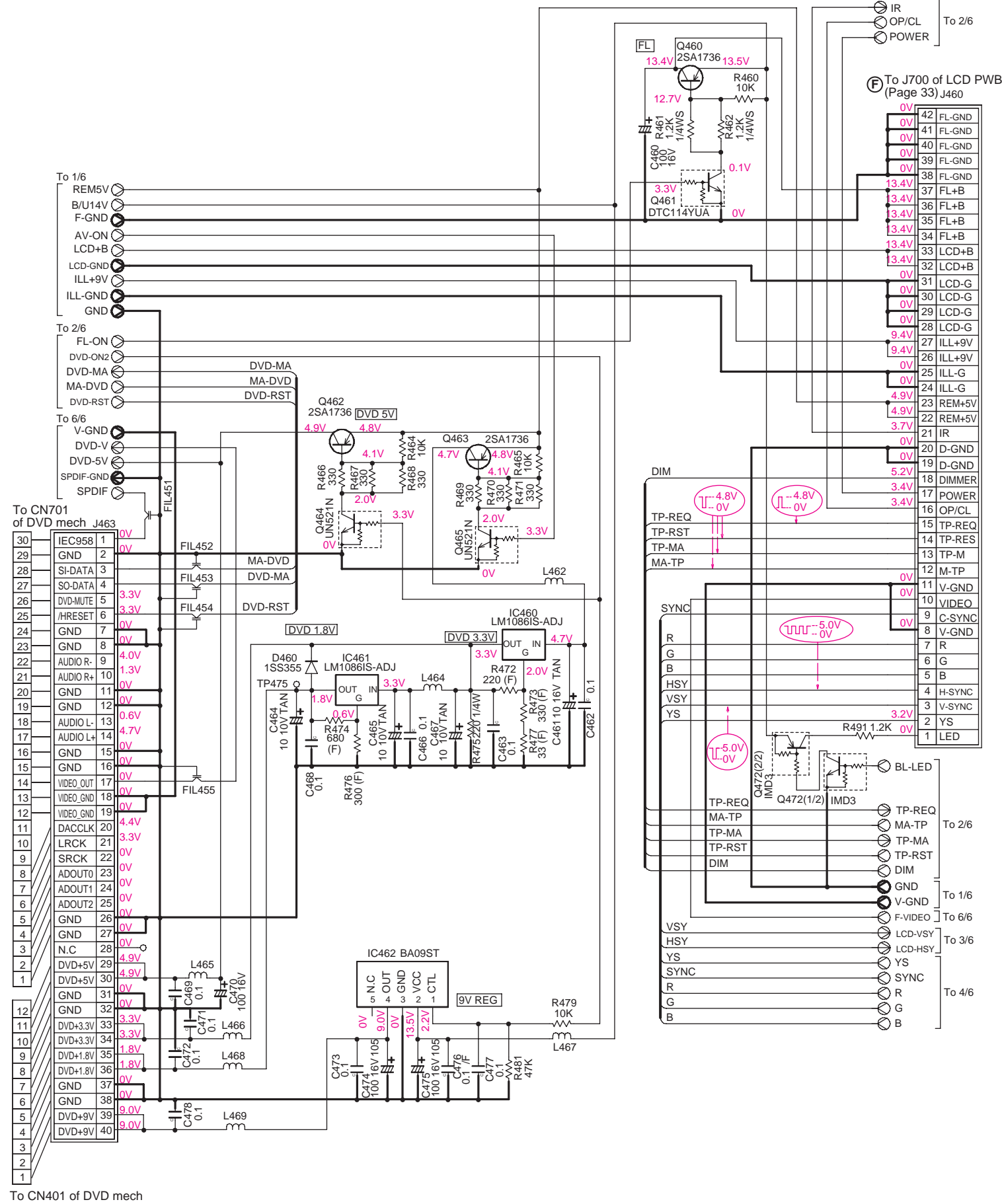
Main PWB(B3) section 3/6  
[ OSD ]



Main PWB(B3) section 4/6  
[ RGB SW ]

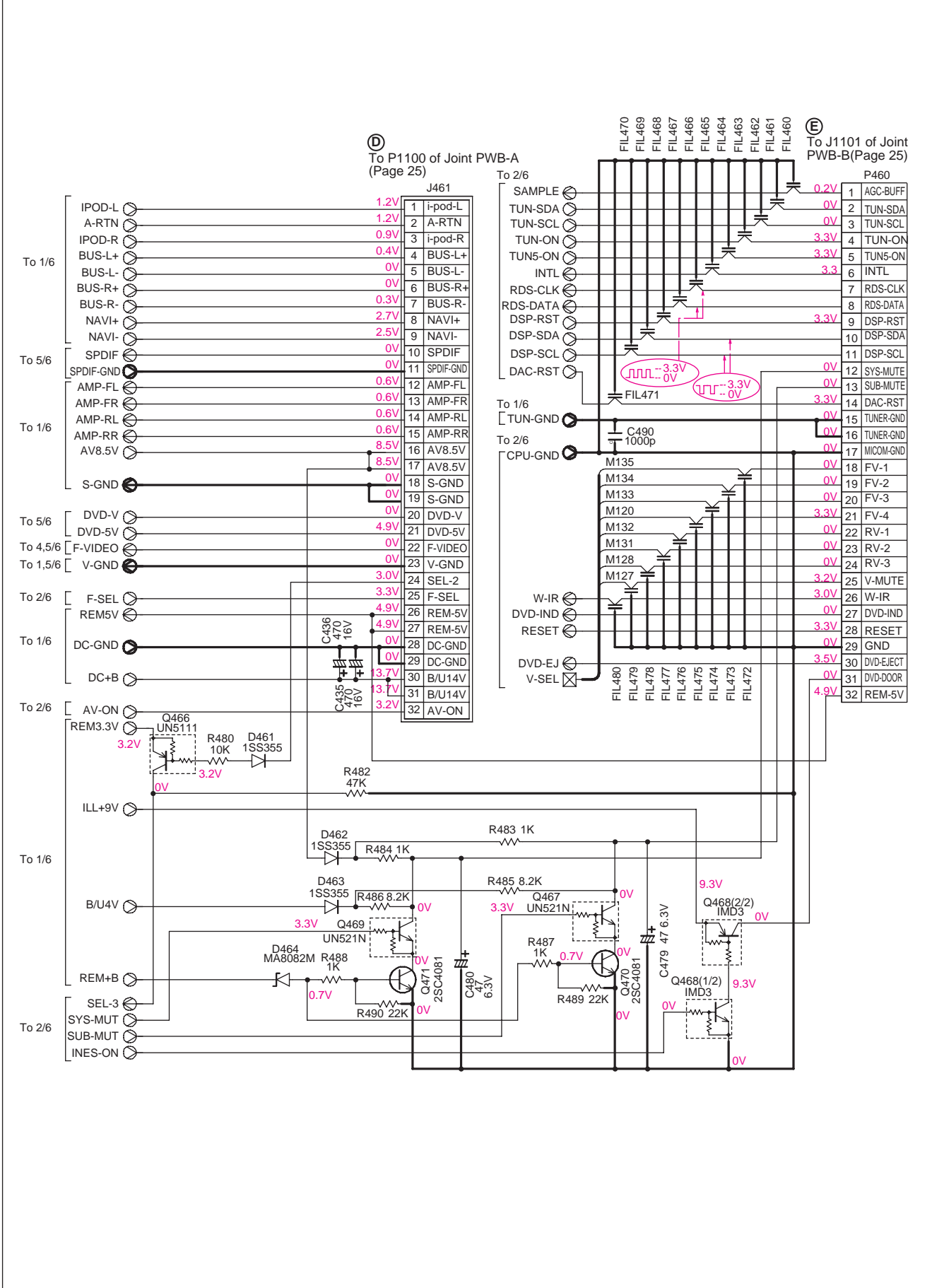


Main PWB(B3) section 5/6  
[ DVD power/Connect ]



To CN401 of DVD mech

Main PWB(B3) section 6/6  
[ Connect ]

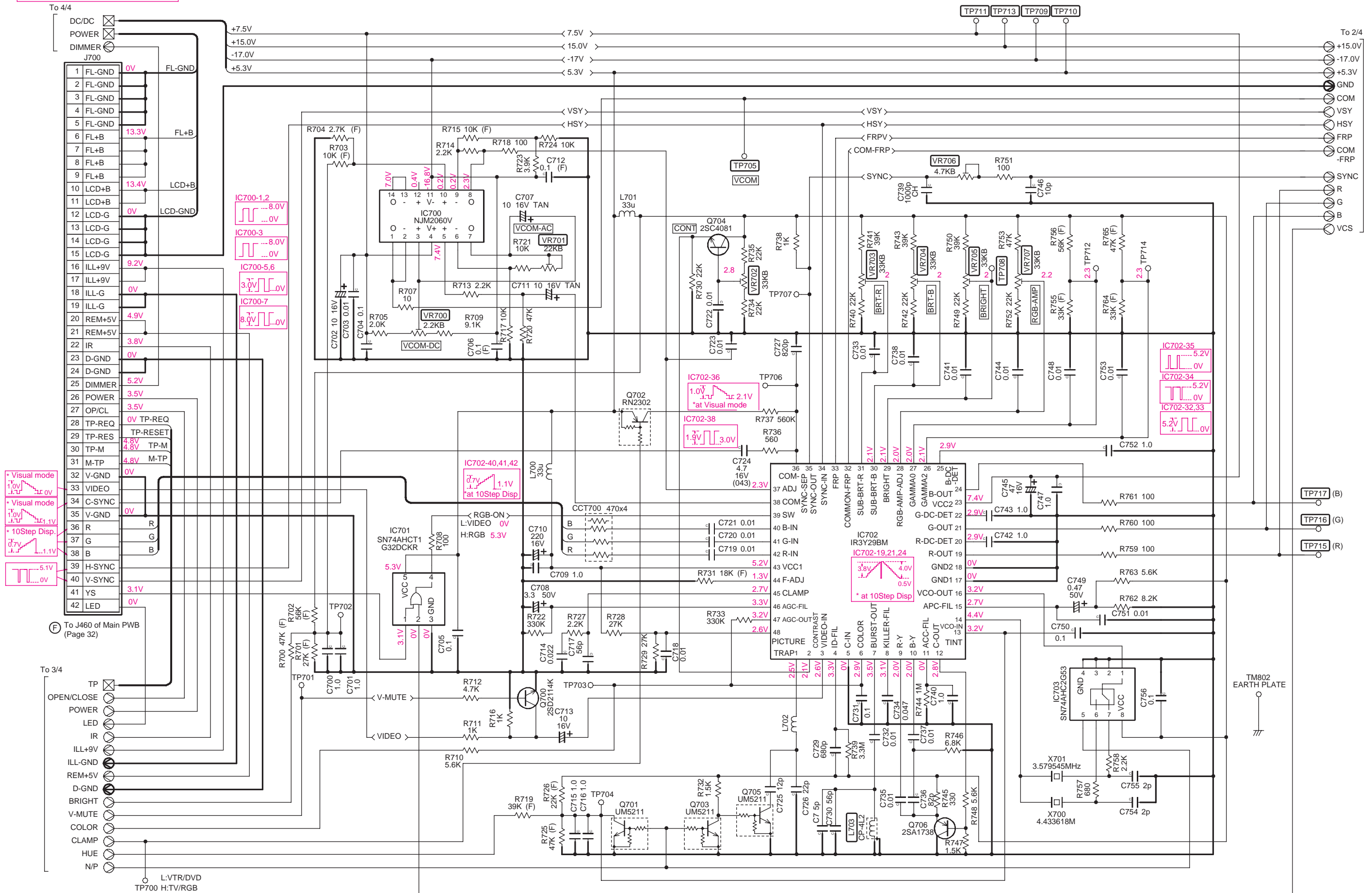




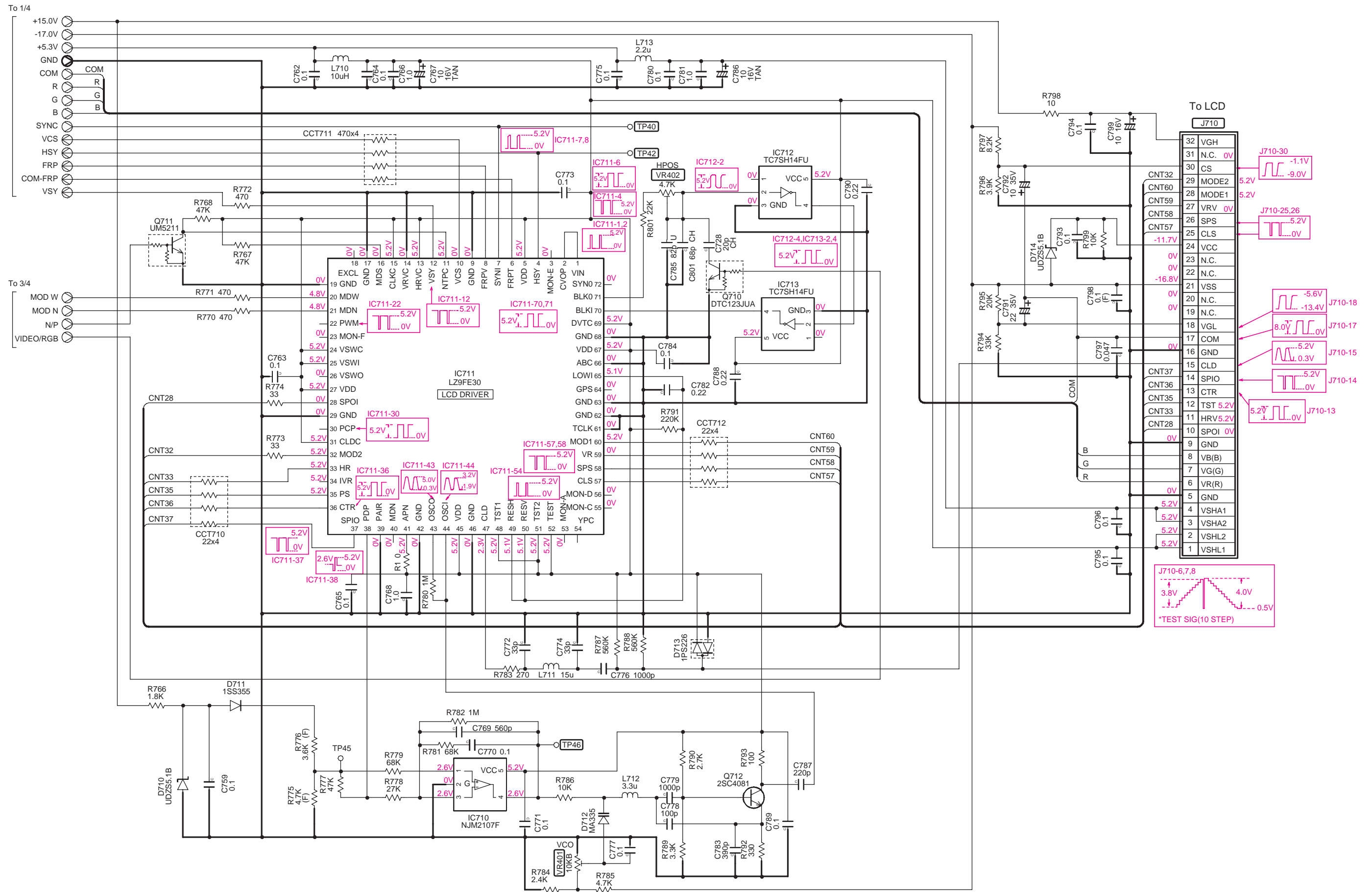
# CIRCUIT DIAGRAM

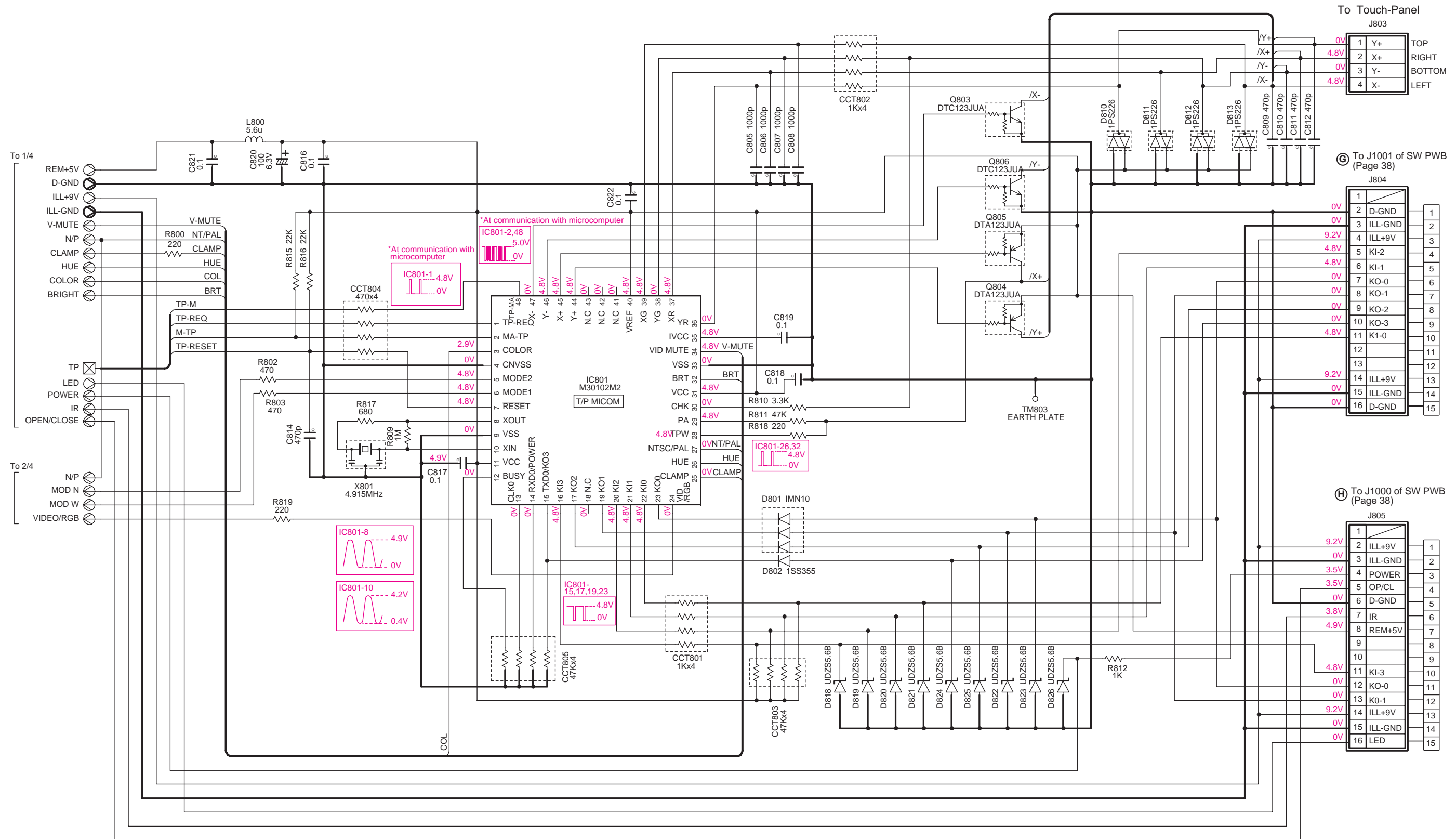
LCD PWB(B4) section 1/4  
[ Signal processor ]

\* Voltage measurement mode: TUNER

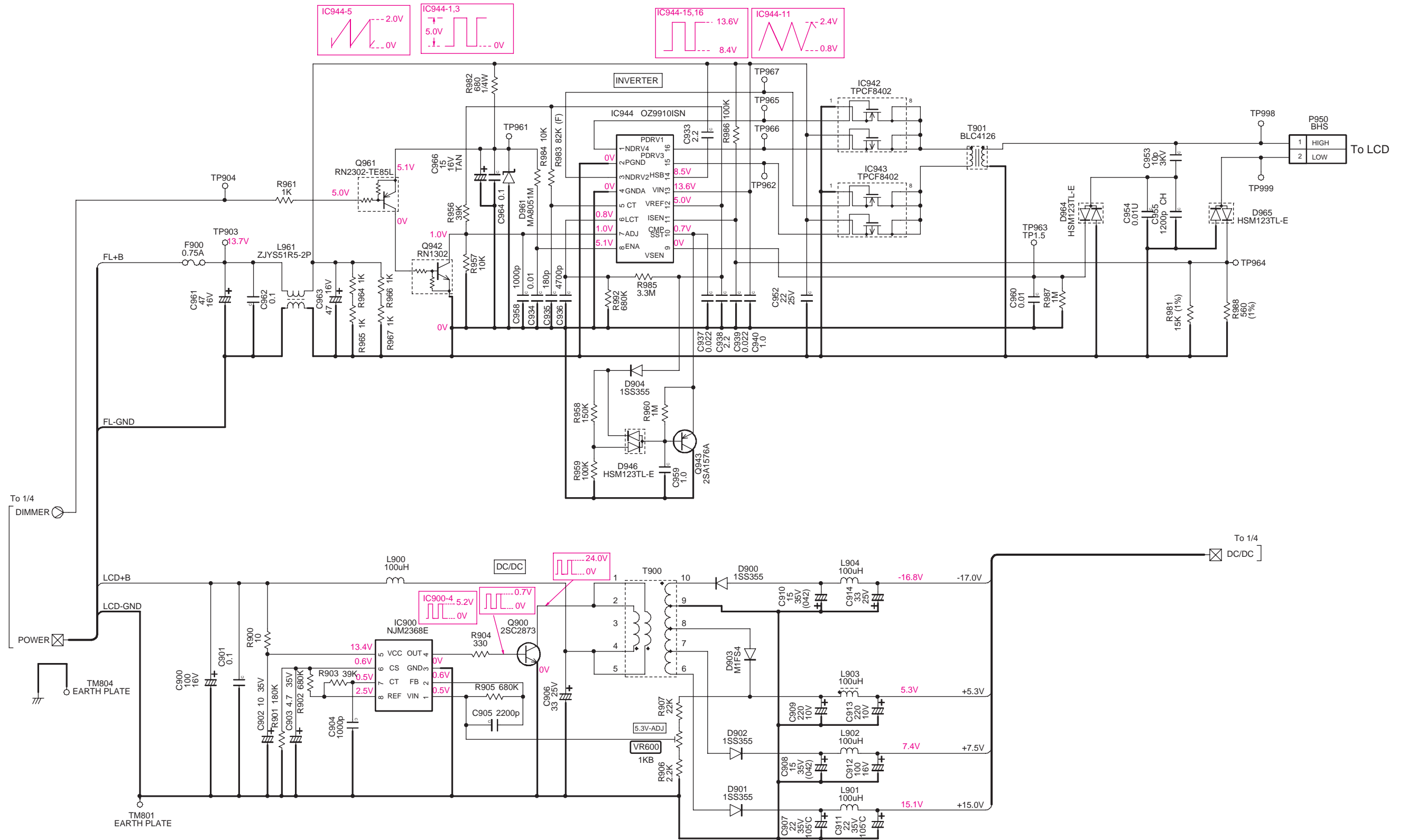


LCD PWB(B4) section 2/4  
 [ LCD connect ]

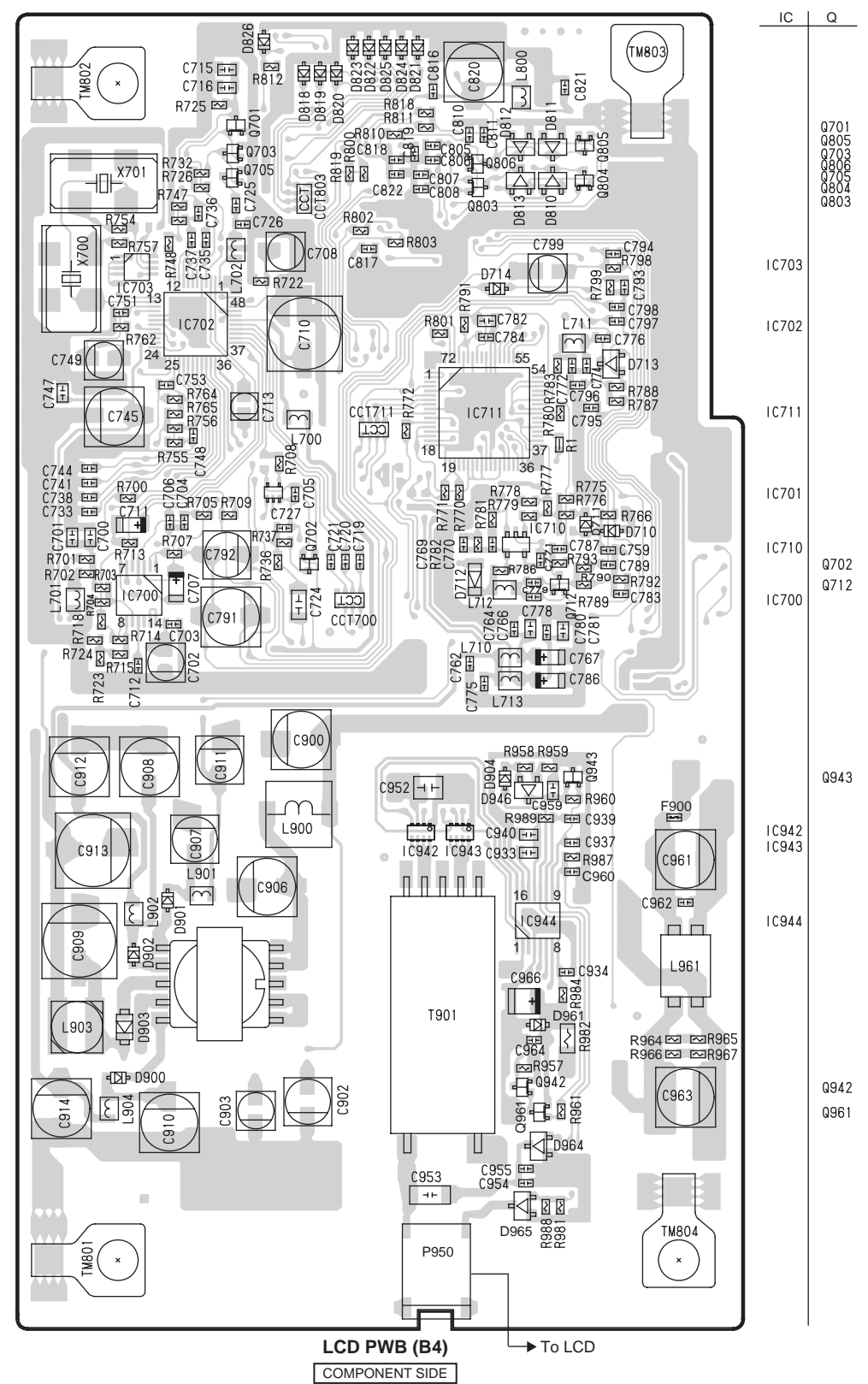
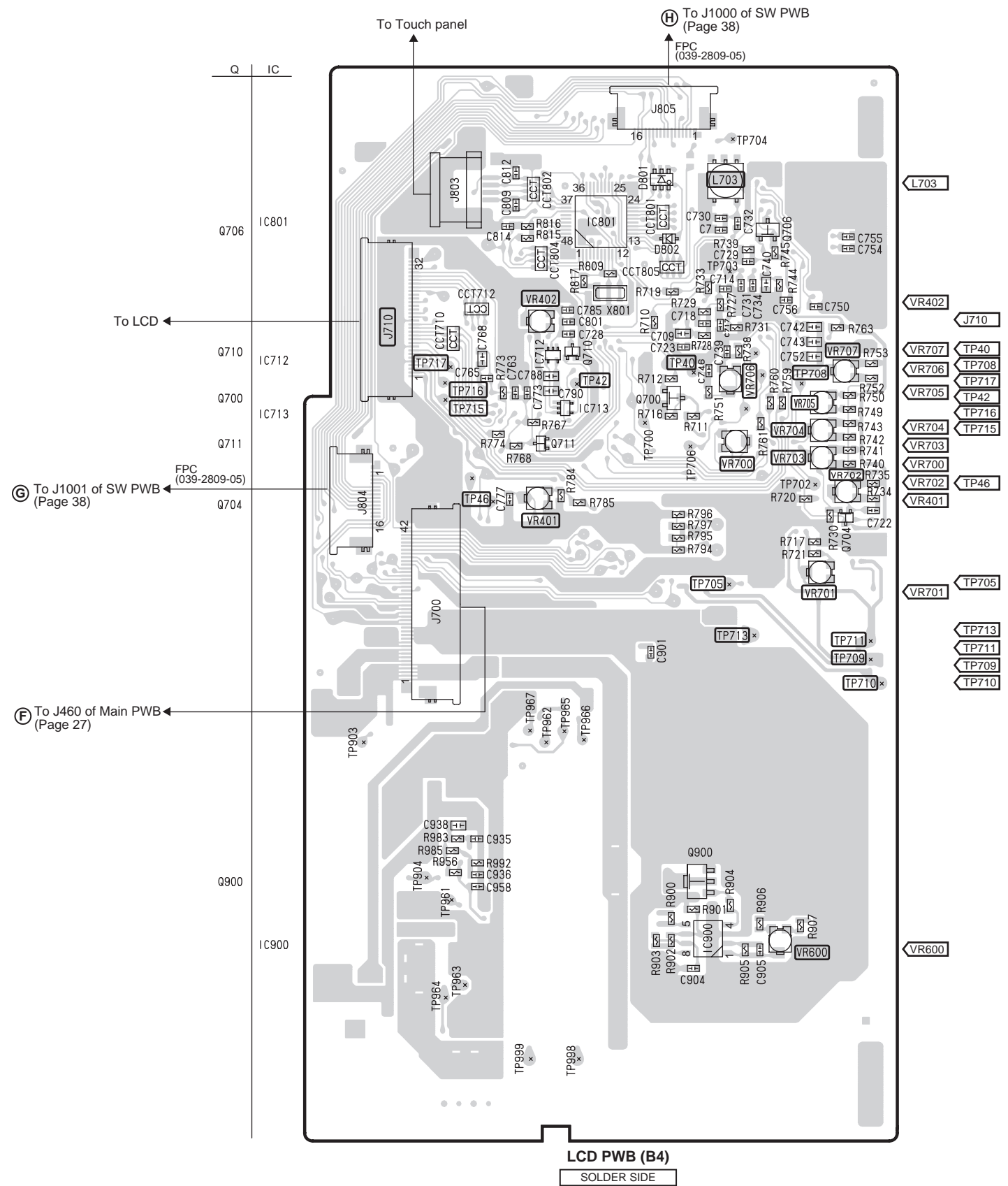




LCD PWB(B4) section 4/4  
 [ Inverter ]

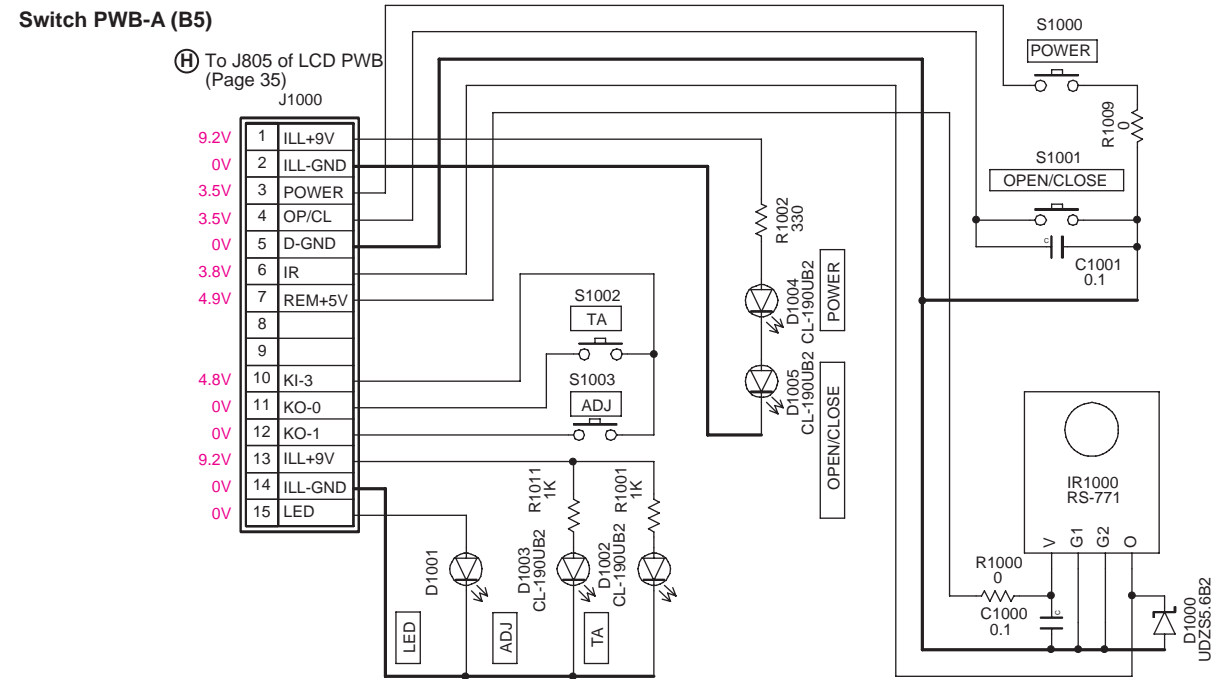


PRINTED WIRING BOARD  
LCD PWB(B4) section

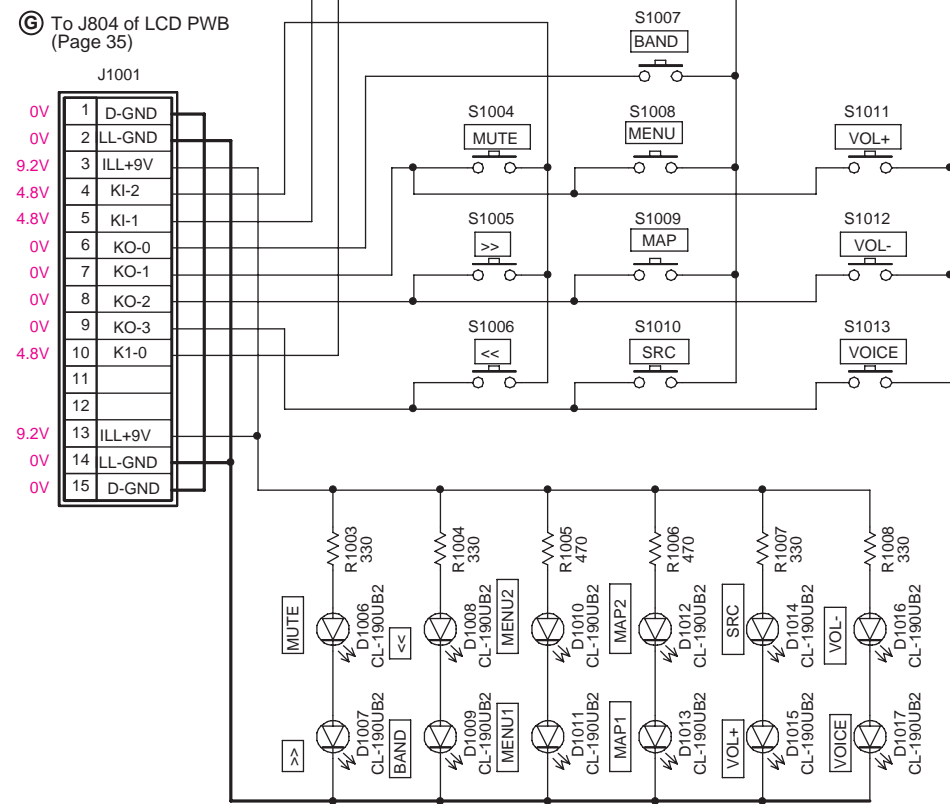


# CIRCUIT DIAGRAM

Switch PWB(B5) section

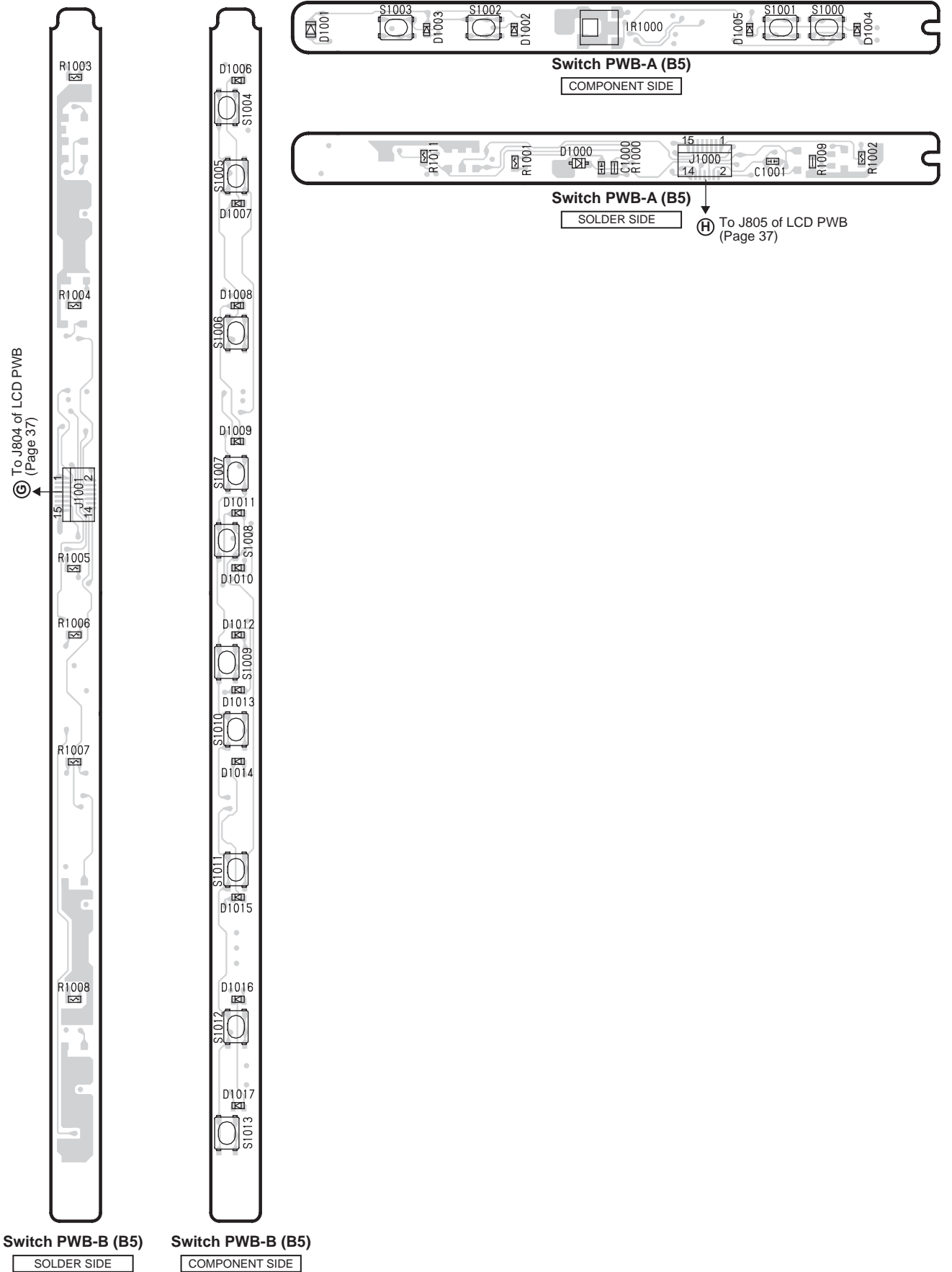


**Switch PWB-B (B5)**



# PRINTED WIRING BOARD

Switch PWB(B5) section



# Service Manual

DVD mechanism

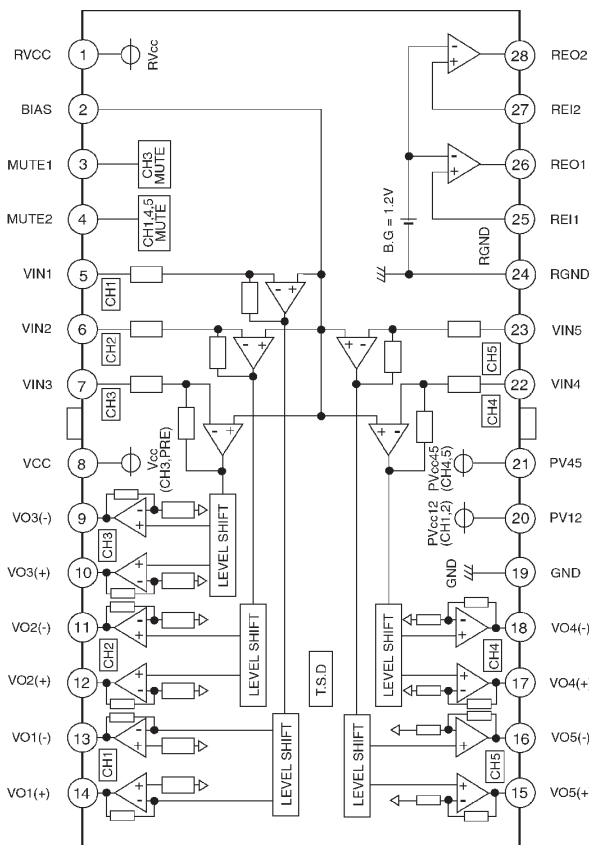
Model **929-2506-00**

## NOTES

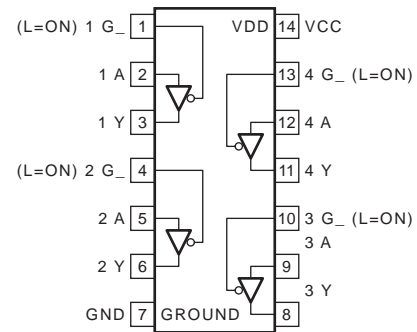
- \* The FPC pattern of a spare suspension assembly is short-circuited to prevent destruction with static electricity. Please open short-circuit after you connect it with Servo PWB.
- \* The application software is recorded in the flashmemory(IC621). Please install the application software of this model when you use a spare mechanism assembly. (The special disk is necessary to install it.)
- \* Specifications and design are subject to change without notice for further improvement.

## EXPLANATION OF IC

658-0237-08 C0GBY0000012 Coil & Motor Driver



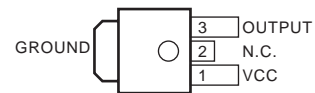
658-0244-01 C0JBAZ001014 Quad Buffer with 3-state control (MC74VHC125DTR2)



Truth Table

Output Y	G_	A
High impedance	H	don't care
L	L	L
H	L	H

658-0244-02 YEAM17805FP Positive Voltage Regulator 5.0V (BA17805FP)



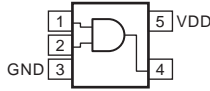
658-0245-02 C0FBBK000048 24-bit 2-ch DA Converter (AK4381)

Terminal Description

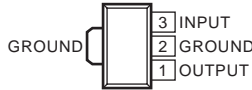
- pin 1: MASTER CLK :IN: Master clock input.
- pin 2: BICK :IN: Audio bit clock input.
- pin 3: S DATA IN :IN: Audio serial data input.
- pin 4: LR CK IN :IN: Left/Right clock input.
- pin 5: PDN :IN: Power down & reset signal input.
- pin 6: CSN :IN: Chip selection.
- pin 7: C CLK :IN: Control data clock input.
- pin 8: C DTI :IN: Control data input.
- pin 9: A out R- :O: Audio signal right channel negative output.

pin 10: A out R+ : O : Audio signal right channel positive output.  
pin 11: A out L- : O : Audio signal left channel negative output.  
pin 12: A out L+ : O : Audio signal left channel positive output.  
pin 13: VSS : - : Negative supply voltage.  
pin 14: VDD : - : Positive supply voltage.  
pin 15: DZF R : O : Zero detection flag output.  
pin 16: DZF L : O : Zero detection flag output.

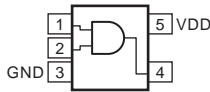
658-0246-03 C0JBAA000372 Single 2-inputs AND GATE (TC7SET08FU)



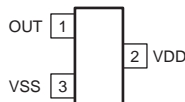
658-0246-05 C0CBADC00084 Positive Voltage Regulator 5.0V (uPC78L05T)



658-0246-06 C0JBAA000356 Single 2-inputs AND GATE (TC7SH08FU)



658-0246-07 MN13821JP Voltage-down detection IC (Nch open drain output)



658-0246-09 C3ABPJ000074 64Mb x 32 SDRAM (MT48LC2M32B2P-71T)

Terminal Description

pin 1: VDD : - : Positive supply voltage.  
pin 2: D 0 :I/O: Data input/output.  
pin 3: VDD : - : Positive supply voltage.  
pin 4: D 1 :I/O: Data input/output.  
pin 5: D 2 :I/O: Data input/output.  
pin 6: VSS : - : Negative supply voltage.  
pin 7: D 3 :I/O: Data input/output.  
pin 8: D 4 :I/O: Data input/output.  
pin 9: VDD : - : Positive supply voltage.  
pin 10: D 5 :I/O: Data input/output.  
pin 11: D 6 :I/O: Data input/output.  
pin 12: VSS : - : Negative supply voltage.  
pin 13: D 7 :I/O: Data input/output.  
pin 14: NU : - : Not in use.  
pin 15: VDD : - : Positive supply voltage.  
pin 16: DQM 0 :IN: When DQM is sampled HIGH, input data is masked during a WRITE cycle, and the

output buffers are placed in a High-Z state during a READ cycle. DQM 0 corresponds to D0-D7.  
pin 17: WE :IN: Write enable signal input.  
pin 18: CAS :IN: Column address strobe input.  
pin 19: RAS :IN: Row address strobe input.  
pin 20: CS :IN: The chip select command input.  
pin 21: NU : - : Not in use.  
pin 22: BA 0 :IN: Bank address input.  
pin 23: BA 1 :IN: Bank address input.  
pin 24: A 10 :IN: Address signal input.  
pin 25: A 0 :IN: Address signal input.  
pin 26: A 1 :IN: Address signal input.  
pin 27: A 2 :IN: Address signal input.  
pin 28: DQM 2 :IN: When DQM is sampled HIGH, input data is masked during a WRITE cycle, and the output buffers are placed in a High-Z state during a READ cycle. DQM 1 corresponds to D8-D15.  
pin 29: VDD : - : Positive supply voltage.  
pin 30: NU : - : Not in use.  
pin 31: D 16 :I/O: Data input/output.  
pin 32: VSS : - : Negative supply voltage.  
pin 33: D 17 :I/O: Data input/output.  
pin 34: D 18 :I/O: Data input/output.  
pin 35: VDD : - : Positive supply voltage.  
pin 36: D 19 :I/O: Data input/output.  
pin 37: D 20 :I/O: Data input/output.  
pin 38: VSS : - : Negative supply voltage.  
pin 39: D 21 :I/O: Data input/output.  
pin 40: D 22 :I/O: Data input/output.  
pin 41: VDD : - : Positive supply voltage.  
pin 42: D 23 :I/O: Data input/output.  
pin 43: VDD : - : Positive supply voltage.  
pin 44: VSS : - : Negative supply voltage.  
pin 45: D 24 :I/O: Data input/output.  
pin 46: VSS : - : Negative supply voltage.  
pin 47: D 25 :I/O: Data input/output.  
pin 48: D 26 :I/O: Data input/output.  
pin 49: VDD : - : Positive supply voltage.  
pin 50: D 27 :I/O: Data input/output.  
pin 51: D 28 :I/O: Data input/output.  
pin 52: VSS : - : Negative supply voltage.  
pin 53: D 29 :I/O: Data input/output.  
pin 54: D 30 :I/O: Data input/output.  
pin 55: VDD : - : Positive supply voltage.  
pin 56: D 31 :I/O: Data input/output.  
pin 57: NU : - : Not in use.  
pin 58: VSS : - : Negative supply voltage.  
pin 59: DQM 3 :IN: When DQM is sampled HIGH, input data is masked during a WRITE cycle, and the output buffers are placed in a High-Z state during a READ cycle. DQM 2 corresponds to D16-D23.  
pin 60: A 3 :IN: Address signal input.  
pin 61: A 4 :IN: Address signal input.  
pin 62: A 5 :IN: Address signal input.  
pin 63: A 6 :IN: Address signal input.  
pin 64: A 7 :IN: Address signal input.  
pin 65: A 8 :IN: Address signal input.  
pin 66: A 9 :IN: Address signal input.  
pin 67: CKE :IN: Clock enable signal input.  
pin 68: CLK :IN: The clock pulse input.  
pin 69: NU : - : Not in use.  
pin 70: NU : - : Not in use.  
pin 71: DQM 1 :IN: When DQM is sampled HIGH, input data is masked during a WRITE cycle, and the output buffers are placed in a High-Z state during a READ cycle. DQM 3 corresponds to D24-D31.  
pin 72: VSS : - : Negative supply voltage.  
pin 73: NU : - : Not in use.



pin 74: D 8	:I/O: Data input/output.
pin 75: VDD	: - : Positive supply voltage.
pin 76: D 9	:I/O: Data input/output.
pin 77: D 10	:I/O: Data input/output.
pin 78: VSS	: - : Negative supply voltage.
pin 79: D 11	:I/O: Data input/output.
pin 80: D 12	:I/O: Data input/output.
pin 81: VDD	: - : Positive supply voltage.
pin 82: D 13	:I/O: Data input/output.
pin 83: D 14	:I/O: Data input/output.
pin 84: VSS	: - : Negative supply voltage.
pin 85: D 15	:I/O: Data input/output.
pin 86: VSS	: - : Negative supply voltage.

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658-0246-10 C3FBMD000282 16M bit Flash Memory (S29AL016D90TFI02)

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Terminal Description

pin 1: A 15	:IN: Address signal input.
pin 2: A 14	:IN: Address signal input.
pin 3: A 13	:IN: Address signal input.
pin 4: A 12	:IN: Address signal input.
pin 5: A 11	:IN: Address signal input.
pin 6: A 10	:IN: Address signal input.
pin 7: A 9	:IN: Address signal input.
pin 8: A 8	:IN: Address signal input.
pin 9: A 19	:IN: Address signal input.
pin 10: NU	: - : Not in use.
pin 11: WE	:IN: Write enable signal input.
pin 12: RESET	:IN: Reset signal input.
pin 13: NU	: - : Not in use.
pin 14: NU	: - : Not in use.
pin 15: RY/BY	:O : The ready/busy signal output.
pin 16: A 18	:IN: Address signal input.
pin 17: A 17	:IN: Address signal input.
pin 18: A 7	:IN: Address signal input.
pin 19: A 6	:IN: Address signal input.
pin 20: A 5	:IN: Address signal input.
pin 21: A 4	:IN: Address signal input.
pin 22: A 3	:IN: Address signal input.
pin 23: A 2	:IN: Address signal input.
pin 24: A 1	:IN: Address signal input.
pin 25: A 0	:IN: Address signal input.
pin 26: CE	:IN: Chip enable signal input.
pin 27: VSS	: - : Negative voltage supply.
pin 28: OE	:IN: Output enable signal input.
pin 29: DQ 0	:I/O: Data signal input/output.
pin 30: DQ 8	:I/O: Data signal input/output.
pin 31: DQ 1	:I/O: Data signal input/output.
pin 32: DQ 9	:I/O: Data signal input/output.
pin 33: DQ 2	:I/O: Data signal input/output.
pin 34: DQ 10	:I/O: Data signal input/output.
pin 35: DQ 3	:I/O: Data signal input/output.
pin 36: DQ 11	:I/O: Data signal input/output.
pin 37: VCC	: - : Positive voltage supply.
pin 38: DQ 4	:I/O: Data signal input/output.
pin 39: DQ 12	:I/O: Data signal input/output.
pin 40: DQ 5	:I/O: Data signal input/output.
pin 41: DQ 13	:I/O: Data signal input/output.
pin 42: DQ 6	:I/O: Data signal input/output.
pin 43: DQ 14	:I/O: Data signal input/output.
pin 44: DQ 7	:I/O: Data signal input/output.
pin 45: DQ 15/A-1	:I/O: Data signal input/output. Address signal input.
pin 46: VSS	: - : Negative voltage supply.
pin 47: BYTE	:IN: The data length selection(8bit/16bit).
pin 48: A 16	:IN: Address signal input.

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658-0246-11 C3GBCA000001 16Kb FRAM (FM25C160-GTR)

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Terminal Description

pin 1: CS IN	:IN: The chip select command input.
pin 2: SO	:O : Serial data output.
pin 3: Write Protect	:IN: Write protect signal input.
pin 4: VSS	: - : Negative voltage supply.
pin 5: SI	:IN: Serial data input.
pin 6: SCK	:IN: The clock pulse input.
pin 7: HOLD	:IN: Taking the HOLD signal to a low state pauses the current operation.
pin 8: VDD	: - : Positive voltage supply.

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658-0247-05 C1AB00002402 MEDIAMATICS DVD (NDV8602VWA)

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Terminal Description

pin 1: VDDIO	: - : I/O pad power (3.3V)
pin 2: MD10	:I/O: SDRAM data bus (0V)
pin 3: MD11	:I/O: SDRAM data bus (0.6V)
pin 4: VDD	: - : Core power (1.8V)
pin 5: MD12	:I/O: SDRAM data bus (0V)
pin 6: VSSIO	: - : I/O pad ground (0V)
pin 7: MD13	:I/O: SDRAM data bus (0.7V)
pin 8: MD14	:I/O: SDRAM data bus (0.5V)
pin 9: MD15	:I/O: SDRAM data bus (0V)
pin 10: VDDIO	: - : I/O pad power (3.3V)
pin 11: /DQM1	:O : SDRAM data byte enable (0V)
pin 12: MA9	:O : SDRAM address bus (0V)
pin 13: MA8	:O : SDRAM address bus (0V)
pin 14: VSSIO	: - : I/O pad ground (0V)
pin 15: MA7	:O : SDRAM address bus (2.3V)
pin 16: MA6	:O : SDRAM address bus (1.8V)
pin 17: VSS	: - : Core ground (0V)
pin 18: MA5	:O : SDRAM address bus (1.1V)
pin 19: VDDIO	: - : I/O pad power (3.3V)
pin 20: MA4	:O : SDRAM address bus (2V)
pin 21: MA3	:O : SDRAM address bus (2.3V)
pin 22: MCLK	:O : SDRAM clock (1.7V)
pin 23: VSSIO	: - : I/O pad ground (0V)
pin 24: CKE	:O : SDRAM clock enable (3.3V)
pin 25: MA2	:O : SDRAM address bus (2.3V)
pin 26: MA1	:O : SDRAM address bus (1V)
pin 27: VDDIO	: - : I/O pad power (3.3V)
pin 28: MA0	:O : SDRAM address bus (1V)
pin 29: MA10	:O : SDRAM address bus (0V)
pin 30: MA11	: - : Not used
pin 31: VSSIO	: - : I/O pad ground (0V)
pin 32: MA12	:O : SDRAM address bus (2.1V)
pin 33: MA13	:O : SDRAM address bus (2.1V)
pin 34: VDD	: - : Core power (1.8V)
pin 35: /CS0	:O : SDRAM primary bank chip select (2.7V)
pin 36: VDDIO	: - : I/O pad power (3.3V)
pin 37: /RAS	:O : SDRAM command bit (3.1V)
pin 38: /CAS	:O : SDRAM command bit (2.9V)
pin 39: /WE	:O : SDRAM command bit (3.2V)
pin 40: VSSIO	: - : I/O pad ground (0V)
pin 41: /DQM0	:O : SDRAM data byte enable (0V)
pin 42: /DQM2	:O : SDRAM data byte enable (0V)
pin 43: MD16	:I/O: SDRAM data bus (0.5V)
pin 44: VDDIO	: - : I/O pad power (3.3V)
pin 45: MD17	:I/O: SDRAM data bus (0.5V)
pin 46: MD18	:I/O: SDRAM data bus (0.5V)
pin 47: VSS	: - : Core ground (0V)
pin 48: MD19	:I/O: SDRAM data bus (0.7V)
pin 49: VSSIO	: - : I/O pad ground (0V)
pin 50: MD20	:I/O: SDRAM data bus (0V)
pin 51: MD21	:I/O: SDRAM data bus (1.5V)

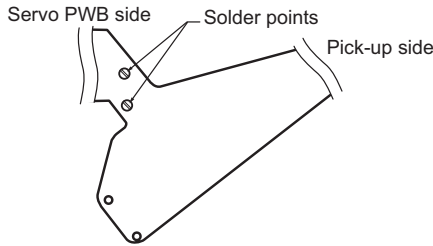
pin 52: MD22	:I/O: SDRAM data bus (1V)	pin118: CVBS/C	: O : Composite/S-Video Chrominance (0.5V)
pin 53: VDDIO	: - : I/O pad power (3.3V)	pin119: RSET	: O : Current setting resistor connection (1.4V)
pin 54: MD23	:I/O: SDRAM data bus (0V)	pin120: COMP	: O : Compensation capacitor connection (2V)
pin 55: MD24	:I/O: SDRAM data bus (0.5V)	pin121: VSS	: - : Core ground (0V)
pin 56: MD25	:I/O: SDRAM data bus (0.5V)	pin122: VCLK	: - : Not used
pin 57: VSSIO	: - : I/O pad ground (0V)	pin123: VSYNC	: - : Not used
pin 58: MD26	:I/O: SDRAM data bus (0.5V)	pin124: HSYNC	: - : Not used
pin 59: MD27	:I/O: SDRAM data bus (0.8V)	pin125: VDDIO	: - : I/O pad power (3.3V)
pin 60: MD28	:I/O: SDRAM data bus (0V)	pin126: VI07	: - : Not used
pin 61: MD29	:I/O: SDRAM data bus (1V)	pin127: VI06	: - : Not used
pin 62: VDDIO	: - : I/O pad power (3.3V)	pin128: VI05	: - : Not used
pin 63: MD30	:I/O: SDRAM data bus (0.7V)	pin129: VI04	: - : Not used
pin 64: MD31	:I/O: SDRAM data bus (0.5V)	pin130: VI03	: - : Not used
pin 65: /DQM3	: O : SDRAM data byte enable (0V)	pin131: VI02	: - : Not used
pin 66: /CS1	: O : Not used	pin132: VSSIO	: - : I/O pad ground (0V)
pin 67: VSSIO	: - : I/O pad ground (0V)	pin133: NU	: - : Not used
pin 68: SPDIF	: O : S/PDIF digital audio output (1.3V)	pin134: NU	: - : Not used
pin 69: VSS	: - : Core ground (0V)	pin135: VDD	: - : Core power (1.8V)
pin 70: AIN	:IN: Digital audio input for digital micro (3.3V)	pin136: AD31	: - : Not used
pin 71: AOUT3	: O : Serial audio data (Left/Right CH) (0V)	pin137: AD30	: - : Not used
pin 72: AOUT2	: O : Serial audio data (Center/LFE CH) (0V)	pin138: AD29	: - : Not used
pin 73: AOUT1	: O : Serial audio data (Sound Left/Right CH) (0V)	pin139: AD28	: - : Not used
pin 74: AOUT0	: O : Serial audio data (Left/Right CH) (0V)	pin140: VDDIO	: - : I/O pad power (3.3V)
pin 75: VDDIO	: - : I/O pad power (3.3V)	pin141: AD27	: - : Not used
pin 76: PCMCLK	: O : Audio DAC PCM sampling clock (1.8V)	pin142: AD26	: - : Not used
pin 77: VDD	: - : Core power (1.8V)	pin143: AD25	: - : Not used
pin 78: ACLK	: O : Audio interface serial data clock (1.7V)	pin144: AD24	: - : Not used
pin 79: LRCLK	: O : Left/Right channel clock (1.7V)	pin145: /PWE3	: - : Not used
pin 80: /SRST	: O : Reset signal (3.3V)	pin146: AD23	: - : Not used
pin 81: /RSTP	:IN: Power on reset (3.3V)	pin147: VSSIO	: - : I/O pad ground (0V)
pin 82: VSSIO	: - : I/O pad ground (0V)	pin148: AD22	: - : Not used
pin 83: RXD1	: - : Not used	pin149: AD21	: - : Not used
pin 84: SSPIN1	:I/O: SSP1 data in / UART1 16X clock	pin150: AD20	: - : Not used
pin 85: VSS	: - : Core ground (0V)	pin151: AD19	:I/O: Address/Data bus (0V)
pin 86: SSPOUT1	:I/O: SSP1 data out / UART1 DTR (0V)	pin152: AD18	:I/O: Address/Data bus (0V)
pin 87: SSPCLK1	:I/O: SSP1 clock / UART1 CTS (3.3V)	pin153: AD17	:I/O: Address/Data bus (0V)
pin 88: SSPCLK0	: - : Not used	pin154: VDDIO	: - : I/O pad power (3.3V)
pin 89: VDD	: - : Core power (1.8V)	pin155: AD16	:I/O: Address/Data bus (0V)
pin 90: SSIN0	: - : Not used	pin156: /PWE2	: - : Not used
pin 91: VDDIO	: - : I/O pad power (3.3V)	pin157: AD15	:I/O: Address/Data bus (0V)
pin 92: SSPOUT0	: - : Not used	pin158: AD14	:I/O: Address/Data bus (0V)
pin 93: TXD0	: O : UART0 serial data (3.2V)	pin159: VDD	: - : Core power (1.8V)
pin 94: RXD0	:IN: UART0 serial data (3V)	pin160: SCLK	: O : External bus clock (2.1V)
pin 95: /CTS0	: - : Not used	pin161: ACK	:IN: Programmable WAIT/ACK/RDY control (3.3V)
pin 96: /RTS0	: - : Not used	pin162: VSSIO	: - : I/O pad ground (0V)
pin 97: VSSIO	: - : I/O pad ground (0V)	pin163: AD13	:I/O: Address/Data bus (0V)
pin 98: CXI	:IN: Crystal Oscillator terminal (1.6V)	pin164: AD12	:I/O: Address/Data bus (0V)
pin 99: CXO	: - : Not used	pin165: AD11	:I/O: Address/Data bus (0V)
pin100: OSCVSS	: - : Oscillator ground (0V)	pin166: AD10	:I/O: Address/Data bus (0V)
pin101: OSCVDD	: - : Oscillator power (1.8V)	pin167: AD09	:I/O: Address/Data bus (0V)
pin102: MVCLVDD	: - : Main/Video clock PLL power (3.3V)	pin168: AD08	:I/O: Address/Data bus (0V)
pin103: SCEN	: - : Not used	pin169: VDDIO	: - : I/O pad power (3.3V)
pin104: MVCKVSS	: - : Main/Video clock PLL Ground (0V)	pin170: /PWE1	: - : Not used
pin105: ACLKVSS	: - : Audio clock PLL ground (0V)	pin171: VSS	: - : Core ground (0V)
pin106: SCMD	: - : Not used	pin172: AD07	:I/O: Address/Data bus (0V)
pin107: ACLKVDD	: - : Audio clock PLL power (3.3V)	pin173: AD06	:I/O: Address/Data bus (0V)
pin108: VDDDAC	: - : DAC digital power (1.8V)	pin174: AD05	:I/O: Address/Data bus (0V)
pin109: VSSDAC	: - : DAC digital ground (0V)	pin175: AD04	:I/O: Address/Data bus (0V)
pin110: CVBS2/CR/R	: O : Composite Cr/Component Cr/SCART Red (0.5V)	pin176: AD03	:I/O: Address/Data bus (0V)
pin111: IOM	: O : Cascaded DAC differential output (1V)	pin177: VSSIO	: - : I/O pad ground (0V)
pin112: C/CB/B	: O : Chrominance/Component Cb/SCART Cb (0.7V)	pin178: AD02	:I/O: Address/Data bus (0V)
pin113: VAA3	: - : DAC analog power (3.3V)	pin179: AD01	:I/O: Address/Data bus (0V)
pin114: Y/G	: O : Luminance/SCART G (0.4V)	pin180: AD00	:I/O: Address/Data bus (0V)
pin115: VSSA	: - : DAC analog ground (0V)	pin181: VDDIO	: - : I/O pad power (3.3V)
pin116: VREF	: - : Not used	pin182: /PWE0	: O : Byte write enable (0V)
pin117: VAA	: - : (1.8V)	pin183: ALE	: O : Address latch enable (0V)
		pin184: LA0	: O : Latch address (3.3V)
		pin185: LA1	: O : Latch address (3.3V)

pin186: LA2 : O : Latch address (3.3V)  
pin187: LA3 : O : Latch address (3.3V)  
pin188: VSSIO : - : I/O pad ground (0V)  
pin189: RD : O : Read signal (3.3V)  
pin190: LHLDA : - : Not used  
pin191: LHL D : - : Not used  
pin192: VDD : - : Core power (1.8V)  
pin193: /PCS0 : O : Peripheral chip select 0 (3.3V)  
pin194: XI01 : - : Not used  
pin195: DACCS2 : O : DAC output select 2 (3.3V)  
pin196: VDDIO : - : I/O pad power (3.3V)  
pin197: DACCS1 : O : DAC output select 1 (3.3V)  
pin198: NINTCPPM : - : Not used  
pin199: CPPMCS : - : Not used  
pin200: XI06 : - : Not used  
pin201: VSS : - : Core ground (0V)  
pin202: FRAMCS : O : FRAM chip selection (0V)  
pin203: DACRST : O : DAC reset (0V)  
pin204: VSSIO : - : I/O pad ground (0V)  
pin205: FEPCS : O : Front End Pro. LSI chip select (3.3V)  
pin206: FEPRST : O : Front End Pro. reset (3.3V)  
pin207: SODCCS : O : SODC LSI chip selection (3.3V)  
pin208: NINTHOST : IN: HOST interrupt (3.3V)  
pin209: NINTDDC : IN: DDC interrupt (3.2V)  
pin210: VDDIO : - : I/O pad power (3.3V)  
pin211: NINTDSC : IN: DSC interrupt (3.5V)  
pin212: VDD : - : Core power (1.8V)  
pin213: DSYNV : IN: DVD parallel mode sector SYNC (3.3V)  
pin214: DREQ : O : DVD parallel mode data request (3.3V)  
pin215: DCLK : IN: Data sampling clock (3.3V)  
pin216: DSTB : IN: Parallel mode data valid/Serial mode clock (0.7V)  
  
pin217: DVD0 : IN: DVD drive parallel data port (0V)  
pin218: VSSIO : - : I/O pad ground (0V)  
pin219: DVD1 : IN: DVD drive parallel data port (0V)  
pin220: DVD2 : IN: DVD drive parallel data port (0V)  
pin221: DVD3 : IN: DVD drive parallel data port (3.3V)  
pin222: DVD4 : IN: DVD drive parallel data port (0.8V)  
pin223: DVD5 : IN: DVD drive parallel data port (0.8V)  
pin224: VDDIO : - : I/O pad power (3.3V)  
pin225: DVD6 : IN: DVD drive parallel data port (3.3V)  
pin226: DVD7 : IN: DVD drive parallel data port (3.3V)  
pin227: MD0 : I/O: SDRAM data bus (0.5V)  
pin228: VSSIO : - : I/O pad ground (0V)  
pin229: MD1 : I/O: SDRAM data bus (0V)  
pin230: VSS : - : Core ground (0V)  
pin231: MD2 : I/O: SDRAM data bus (0.8V)  
pin232: MD3 : I/O: SDRAM data bus (0.8V)  
pin233: VDDIO : - : I/O pad power (3.3V)  
pin234: MD4 : I/O: SDRAM data bus (3.3V)  
pin235: MD5 : I/O: SDRAM data bus (0V)  
pin236: MD6 : I/O: SDRAM data bus (0.8V)  
pin237: VSSIO : - : I/O pad ground (0V)  
pin238: MD7 : I/O: SDRAM data bus (0V)  
pin239: MD8 : I/O: SDRAM data bus (0V)  
pin240: MD9 : I/O: SDRAM data bus (0V)

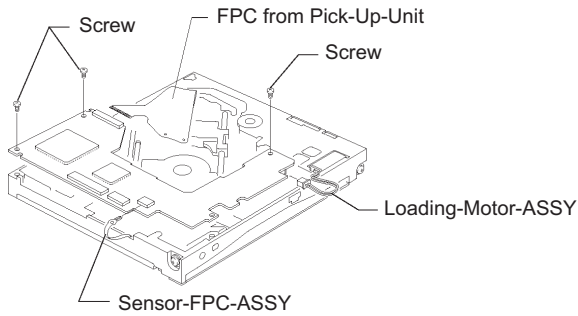
# DISASSEMBLY

## Remove Servo-PWB

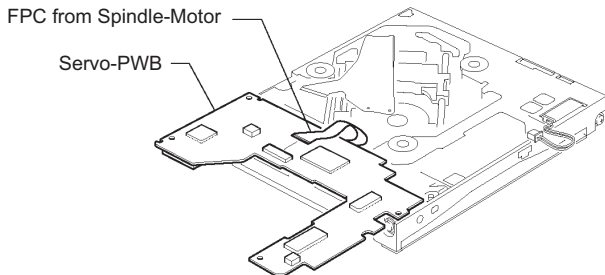
1. Solder two points of FPC to prevent destruction with static electricity.



2. Remove FCPs from PICK-UP-UNIT and SENSOR-FPC-ASSY.
3. Remove three SCREWS.
4. Remove the connector of LOADING-MOTOR-ASSY.

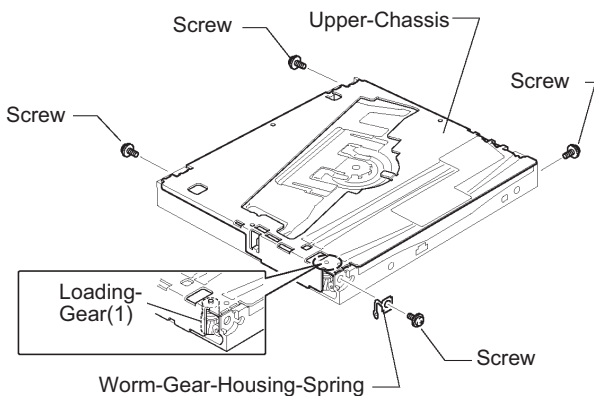


5. Remove FPC of SPINDLE-MOTOR-ASSY.



## Remove UPPER-CHASSIS

1. Remove four SCREWS and WORM-GEAR-HOUSING-SPRINGS.

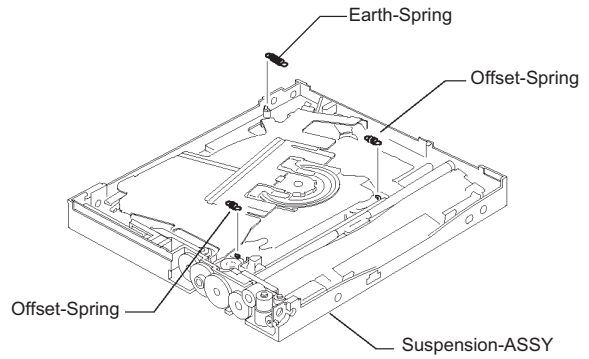


### [NOTE]

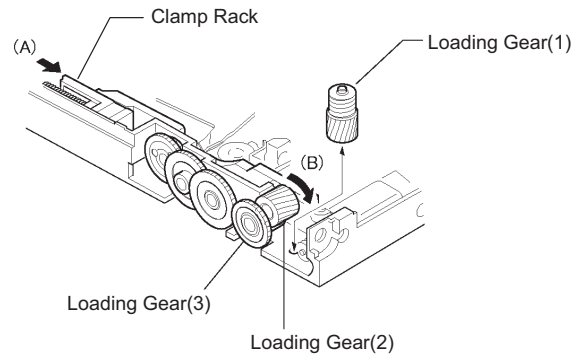
When assembling, insert the shaft of LOADING-GEAR to the hole of UPPER-CHASSIS.

## Remove SUSPENSION-ASSY

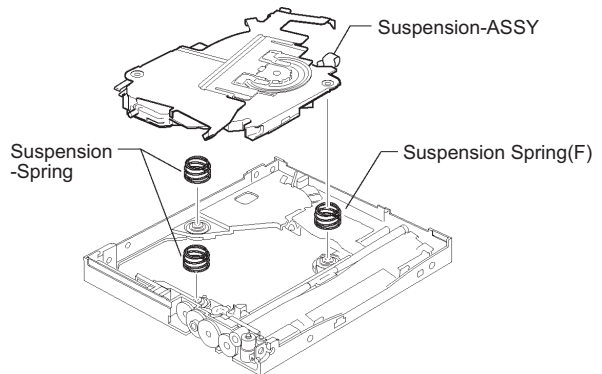
1. Remove EARTH-SPRING and OFFSET-SPRINGS.



2. Remove LOADING-GEAR(1).
3. Move CLAMP-RACK to GEAR side(Point "A"). Pull LOADING-GEAR(3) up, and rotate it until the lock is released(Point "B").
4. Return LOADING-GEAR(1) to the original position.

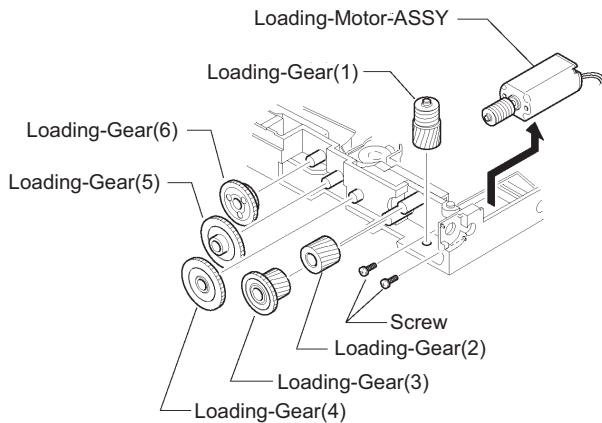


5. Remove SUSPENSION-ASSY, SUSPENSION-SPRINGS and SUSPENSION-SPRING(F).



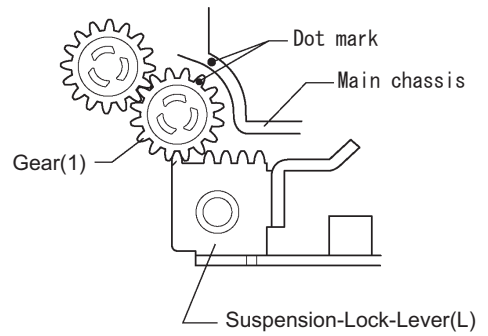
## Remove LOADING-GEAR/LOADING-MOTOR

1. Remove six LOADING-GEARS in the following order.  
(1) > (4) > (3) > (2) > (5) > (6)
2. Remove two SCREWS, and remove LOADING-MOTOR-ASSY.

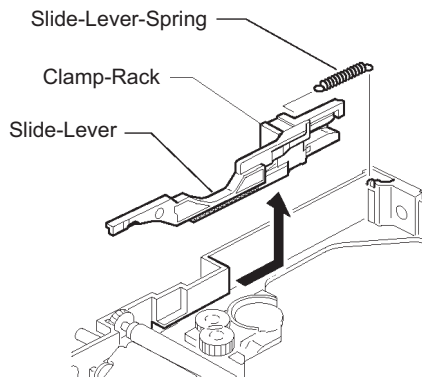


## [NOTE]

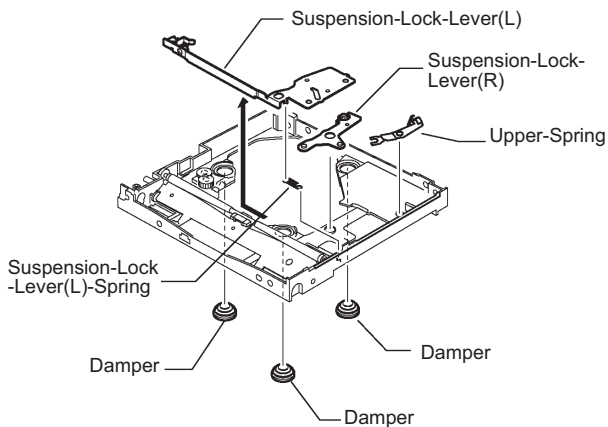
When assembling, set the dot marks of LOCK-GEAR(1) and MAIN-CHASSIS.



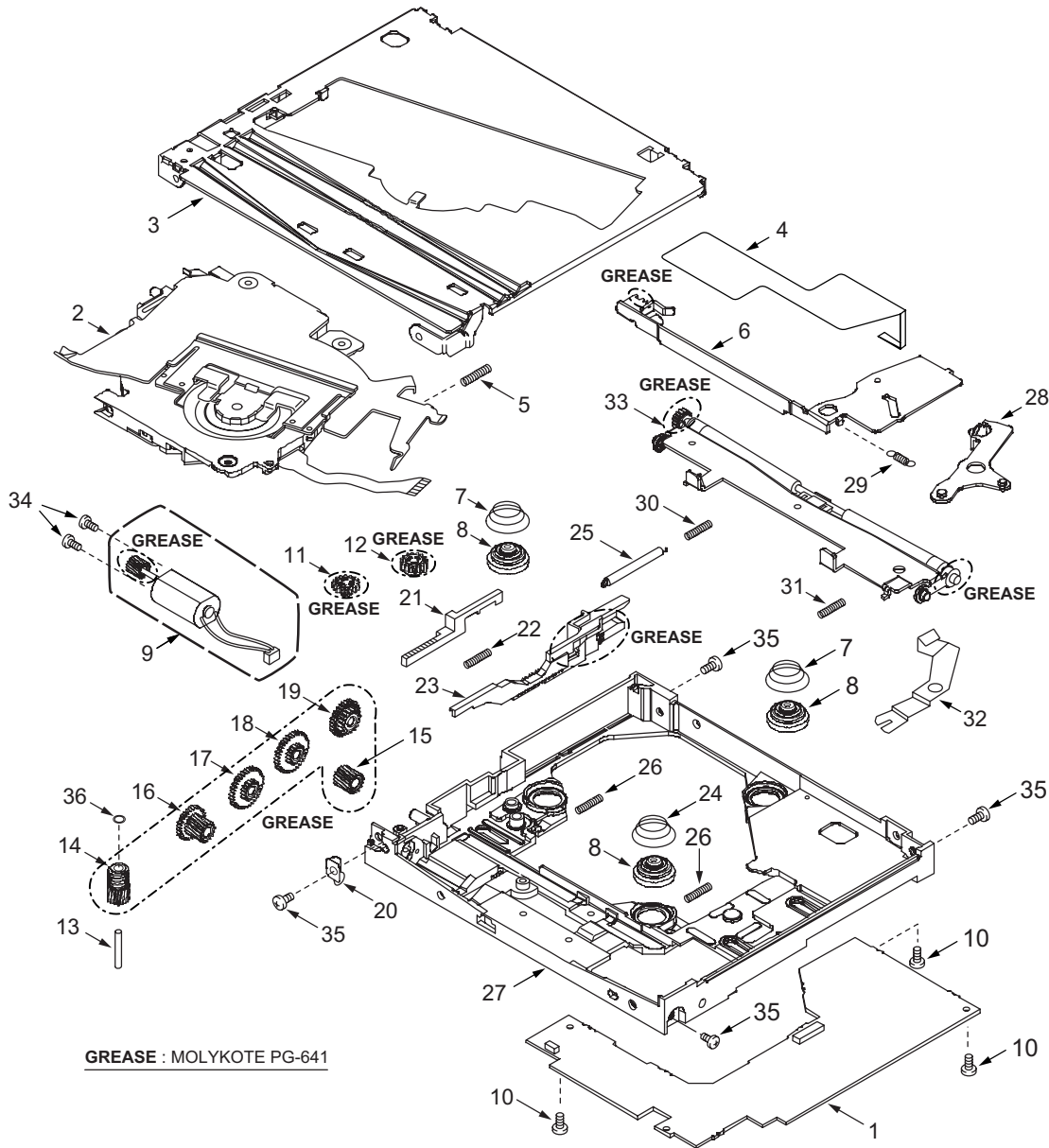
3. Remove SLIDE-LEVER-SPRING, and remove SLIDE-LEVER and CLAMP-RACK



4. Remove SUSPENSION-LOCK-LEVER(L)-SPRING and SUSPENSION-LOCK-LEVER(L)
5. Remove SUSPENSION-LOCK-LEVER(R) and UPPER-SPRING.
6. Remove three DAMPERS.



# EXPLODED VIEW / PARTS LIST



NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
1	-----	Servo PWB	1	19	658-0238-03	Laoding Gear (6)	1
2	658-0247-01	Suspension Assy	1	20	658-0238-04	Worm Gear Housing Spring	1
3	658-0244-16	Upper Chassis	1	21	658-0238-05	Clamp Rack	1
4	658-0247-02	Sensor FPC Assy	1	22	658-0238-06	Clamp Rack Spring	1
5	658-0237-88	Earth Spring	1	23	658-0238-07	Slide Lever	1
6	658-0239-06	Suspension Lock Lever (L)	1	24	658-0238-08	Suspension Spring (F)	1
7	658-0237-90	Suspension Spring	2	25	658-0238-09	Slide Lever Spring	1
8	658-0239-07	Damper	3	26	658-0238-10	Offset Spring	2
9	658-0247-03	Loading Motor Assy	1	27	658-0238-11	Main Chassis	1
10	658-0238-23	Screw	3	28	658-0238-12	Suspension Lock Lever (R)	1
11	658-0237-94	Lock Gear (1)	1	29	658-0238-13	Suspension Lock Lever L Spring	1
12	658-0237-95	Lock Gear (2)	1	30	658-0238-15	Feeder Spring (L)	1
13	658-0246-01	Loading Gear Shaft	1	31	658-0238-16	Feeder Spring (R)	1
14	658-0246-02	Laoding Gear (1)	1	32	658-0238-17	Upper Spring	1
15	658-0237-98	Laoding Gear (2)	1	33	658-0244-19	Feeder Arm Assy	1
16	658-0237-99	Laoding Gear (3)	1	34	658-0238-21	Screw	2
17	658-0238-01	Laoding Gear (4)	1	35	658-0244-20	Screw	4
18	658-0238-02	Laoding Gear (5)	1	36	658-0247-04	Load Gear 1 Collar	1

# ELECTRICAL PARTS LIST

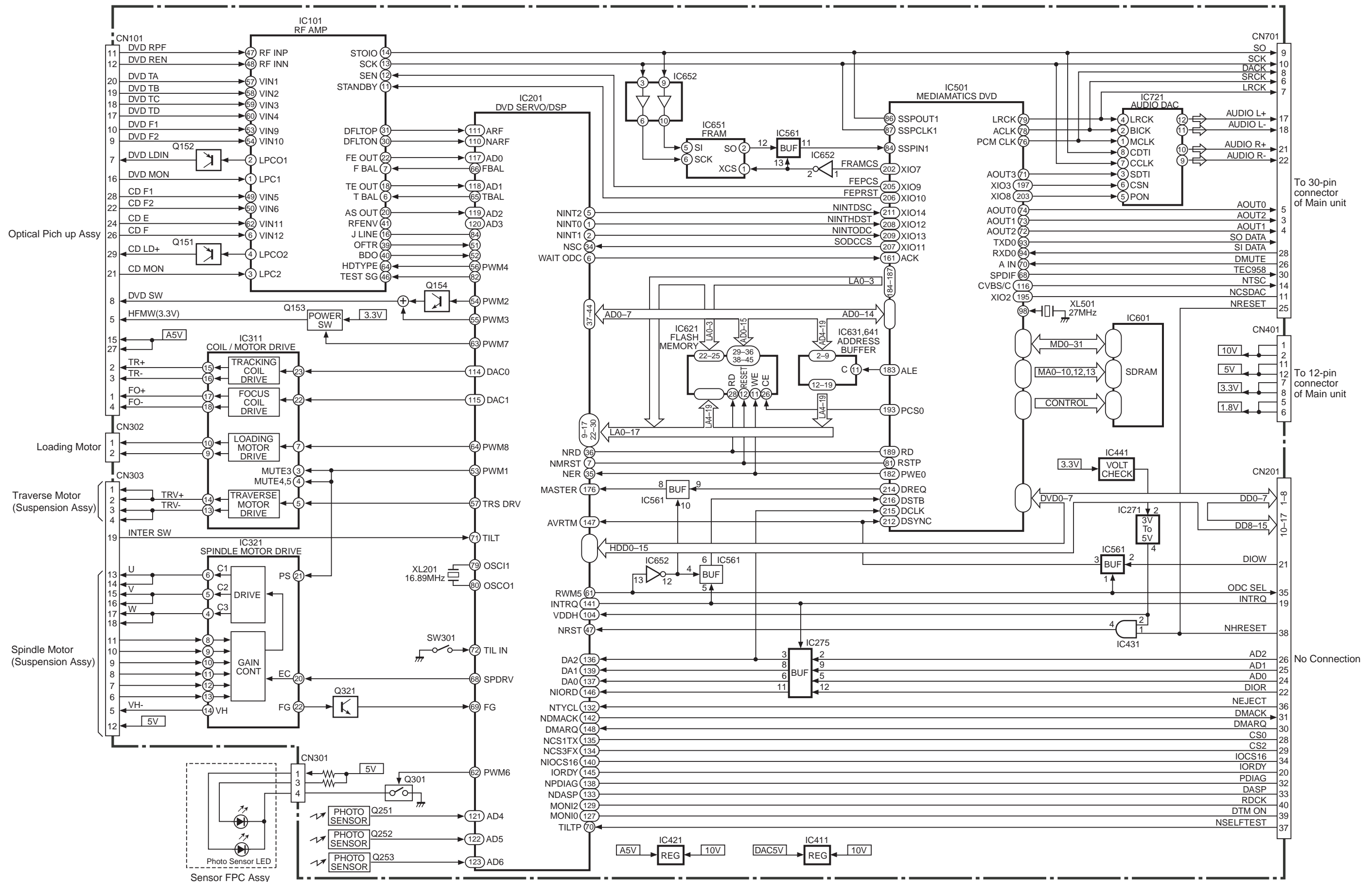
## Servo PWB(BM1) section

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C101	658-0246-12	50V560pF	C253	658-0240-12	0.1uF 10WV	C544	658-0240-12	0.1uF 10WV
C102	658-0240-12	0.1uF 10WV	C261	658-0240-12	0.1uF 10WV	C545	658-0240-12	0.1uF 10WV
C103	658-0246-13	50V0.001uF	C262	658-0240-12	0.1uF 10WV	C546	658-0240-12	0.1uF 10WV
C104	658-0246-13	50V0.001uF	C263	658-0240-12	0.1uF 10WV	C547	658-0240-12	0.1uF 10WV
C113	658-0240-12	0.1uF 10WV	C264	658-0240-12	0.1uF 10WV	C548	658-0240-12	0.1uF 10WV
C114	658-0240-13	10uF 6.3WV	C265	658-0240-12	0.1uF 10WV	C551	658-0240-12	0.1uF 10WV
C115	658-0240-13	10uF 6.3WV	C266	658-0240-12	0.1uF 10WV	C552	658-0240-12	0.1uF 10WV
C116	658-0246-13	50V0.001uF	C271	658-0240-12	0.1uF 10WV	C553	658-0240-12	0.1uF 10WV
C117	658-0240-13	10uF 6.3WV	C272	658-0240-12	0.1uF 10WV	C554	658-0240-12	0.1uF 10WV
C121	658-0246-14	50V6pF	C275	658-0240-12	0.1uF 10WV	C555	658-0240-12	0.1uF 10WV
C122	658-0240-13	10uF 6.3WV	C311	658-0240-12	0.1uF 10WV	C556	658-0240-12	0.1uF 10WV
C124	658-0240-12	0.1uF 10WV	C312	658-0244-07	Ceramic,50WV0.1uF	C557	658-0246-22	50V100pF
C125	658-0240-12	0.1uF 10WV	C313	658-0240-12	0.1uF 10WV	C561	658-0240-12	0.1uF 10WV
C126	658-0237-28	25V0.027uF	C314	658-0244-07	Ceramic,50WV0.1uF	C601	658-0240-42	1uF 6.3WV
C127	658-0237-27	16V0.047uF	C315	658-0240-12	0.1uF 10WV	C602	658-0246-22	50V100pF
C128	658-0240-12	0.1uF 10WV	C316	658-0240-12	0.1uF 10WV	C603	658-0246-22	50V100pF
C129	658-0246-22	50V100pF	C321	658-0240-12	0.1uF 10WV	C604	658-0246-22	50V100pF
C131	658-0246-12	50V560pF	C322	658-0244-07	Ceramic,50WV0.1uF	C605	658-0246-22	50V100pF
C132	658-0246-12	50V560pF	C323	658-0240-12	0.1uF 10WV	C606	658-0246-22	50V100pF
C133	658-0240-12	0.1uF 10WV	C324	658-0240-12	0.1uF 10WV	C607	658-0246-22	50V100pF
C134	658-0240-12	0.1uF 10WV	C325	658-0240-12	0.1uF 10WV	C608	658-0246-22	50V100pF
C136	658-0240-12	0.1uF 10WV	C401	658-0246-13	50V0.001uF	C609	658-0246-22	50V100pF
C137	658-0240-13	10uF 6.3WV	C402	658-0246-13	50V0.001uF	C611	658-0240-42	1uF 6.3WV
C141	658-0247-06	16V0.01uF	C403	658-0246-13	50V0.001uF	C612	658-0246-22	50V100pF
C142	658-0240-12	0.1uF 10WV	C404	658-0246-13	50V0.001uF	C613	658-0246-22	50V100pF
C143	658-0240-12	0.1uF 10WV	C405	658-0240-12	0.1uF 10WV	C614	658-0246-22	50V100pF
C144	658-0240-12	0.1uF 10WV	C406	658-0240-14	47uF 6.3WV	C616	658-0246-22	50V100pF
C145	658-0240-12	0.1uF 10WV	C411	658-0244-07	Ceramic,50WV0.1uF	C621	658-0240-12	0.1uF 10WV
C151	658-0240-12	0.1uF 10WV	C412	658-0240-43	10uF 16WV	C622	658-0246-22	50V100pF
C152	658-0237-21	6.3V47uF Tan	C413	658-0240-42	1uF 6.3WV	C623	658-0240-12	0.1uF 10WV
C153	658-0240-12	0.1uF 10WV	C414	658-0240-14	47uF 6.3WV	C631	658-0240-12	0.1uF 10WV
C154	658-0237-21	6.3V47uF Tan	C421	658-0244-07	Ceramic,50WV0.1uF	C641	658-0240-12	0.1uF 10WV
C201	658-0240-12	0.1uF 10WV	C422	658-0240-14	47uF 6.3WV	C651	658-0240-12	0.1uF 10WV
C202	658-0240-12	0.1uF 10WV	C423	658-0240-12	0.1uF 10WV	C652	658-0240-13	10uF 6.3WV
C203	658-0240-12	0.1uF 10WV	C431	658-0240-12	0.1uF 10WV	C653	658-0240-12	0.1uF 10WV
C204	658-0240-12	0.1uF 10WV	C432	658-0240-12	0.1uF 10WV	C701	658-0240-44	330PF 50WV
C205	658-0240-12	0.1uF 10WV	C433	658-0240-12	0.1uF 10WV	C702	658-0240-44	330PF 50WV
C206	658-0246-22	50V100pF	C441	658-0240-12	0.1uF 10WV	C703	658-0246-23	50WV120PF
C207	658-0240-13	10uF 6.3WV	C501	658-0246-22	50V100pF	C722	658-0240-13	10uF 6.3WV
C208	658-0240-13	10uF 6.3WV	C502	658-0246-22	50V100pF	C723	658-0240-12	0.1uF 10WV
C211	658-0240-12	0.1uF 10WV	C503	658-0246-22	50V100pF	CN101	658-0247-09	Connector 30P
C213	658-0246-22	50V100pF	C504	658-0246-22	50V100pF	CN201	658-0247-10	Connector 40P
C214	658-0246-22	50V100pF	C505	658-0246-22	50V100pF	CN301	658-0247-11	Connector 4P
C215	658-0247-06	16V0.01uF	C506	658-0246-22	50V100pF	CN302	658-0246-27	Connector 2P
C216	658-0247-06	16V0.01uF	C507	658-0246-22	50V100pF	CN303	658-0247-12	Connector 20P
C221	658-0246-17	Ceramic,50WV22PF	C508	658-0246-22	50V100pF	CN401	658-0247-13	Connector 12P
C222	658-0246-17	Ceramic,50WV22PF	C509	658-0246-22	50V100pF	CN701	658-0247-09	Connector 30P
C223	658-0240-12	0.1uF 10WV	C511	658-0240-13	10uF 6.3WV	D311	658-0237-19	MA721TX
C224	658-0240-12	0.1uF 10WV	C512	658-0240-13	10uF 6.3WV	IC101	658-0237-01	AN8703FH-V
C225	658-0240-12	0.1uF 10WV	C513	658-0246-22	50V100pF	IC201	658-0240-01	MNZZS26EDCUB
C226	658-0240-12	0.1uF 10WV	C514	658-0240-12	0.1uF 10WV	IC271	658-0246-03	COJBAA000372
C231	658-0247-06	16V0.01uF	C515	658-0246-22	50V100pF	IC275	658-0244-01	COJBAZ001014
C232	658-0240-12	0.1uF 10WV	C516	658-0240-12	0.1uF 10WV	IC311	658-0237-08	COGBY0000012
C234	658-0247-06	16V0.01uF	C517	658-0246-22	50V100pF	IC321	658-0237-09	COGBH0000006
C235	658-0240-13	10uF 6.3WV	C518	658-0240-12	0.1uF 10WV	IC411	658-0246-05	COCBADC000084
C236	658-0240-12	0.1uF 10WV	C521	658-0240-12	0.1uF 10WV	IC421	658-0244-02	YEAM17805FP
C237	658-0247-07	16V0.022uF	C522	658-0240-13	10uF 6.3WV	IC431	658-0246-06	COJBAA000356
C239	658-0247-08	50V47pF	C523	658-0240-13	10uF 6.3WV	IC441	658-0246-07	MN13821SJJP
C240	658-0240-12	0.1uF 10WV	C524	658-0240-12	0.1uF 10WV	IC501	658-0247-05	C1AB00002402
C241	658-0240-12	0.1uF 10WV	C525	658-0240-12	0.1uF 10WV	IC561	658-0244-01	COJBAZ001014
C242	658-0246-13	50V0.001uF	C526	658-0240-13	10uF 6.3WV	IC601	658-0246-09	C3ABPJ0000074
C243	658-0240-12	0.1uF 10WV	C527	658-0240-12	0.1uF 10WV	IC621	658-0246-10	C3FBMD0000282
C244	658-0237-34	50V0.0056uF	C528	658-0240-12	0.1uF 10WV	IC631	658-0240-37	COJBAH0000082
C245	658-0246-13	50V0.001uF	C529	658-0240-12	0.1uF 10WV	IC641	658-0240-37	COJBAH0000082
C246	658-0246-13	50V0.001uF	C530	658-0240-13	10uF 6.3WV	IC651	658-0246-11	C3GBCA0000001
C247	658-0246-13	50V0.001uF	C531	658-0240-13	10uF 6.3WV	IC652	658-0240-39	COJBAB0000255
C248	658-0246-12	50V560pF	C532	658-0240-12	0.1uF 10WV	IC721	658-0245-02	COFBFK0000048
C249	658-0246-12	50V560pF	C534	658-0240-12	0.1uF 10WV	L101	658-0240-30	JOJCC0000152
C250	658-0240-12	0.1uF 10WV	C541	658-0240-13	10uF 6.3WV	L102	658-0240-30	JOJCC0000152
C251	658-0246-20	50V0.0022uF	C542	658-0240-13	10uF 6.3WV	L201	658-0240-30	JOJCC0000152
C252	658-0246-21	50V470pF	C543	658-0240-12	0.1uF 10WV	L401	658-0240-32	YELTBMHS800T

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
L403	658-0240-32	YELTBMHS800T	R223	033-3931-15	1/16W 39k ohm	R431	658-0240-23	100k ohm 1/16W
L404	658-0240-32	YELTBMHS800T	R227	033-0000-05	1/16W 0 ohm	R441	033-4731-15	1/16W 47k ohm
L406	658-0240-32	YELTBMHS800T	R231	033-1021-15	1/16W 1k ohm	R501	033-1011-15	1/16W 100 ohm
L511	658-0240-52	JOJCC0000042	R232	033-1531-15	1/16W 15k ohm	R511	658-0240-47	33 ohm 1/16W
L512	658-0240-56	JOMAB0000134	R234	033-1051-15	1/16W 1M ohm	R512	033-1011-15	1/16W 100 ohm
L513	658-0240-30	JOJCC0000152	R235	033-5621-15	1/16W 5.6k ohm	R513	033-1011-15	1/16W 100 ohm
L514	658-0240-30	JOJCC0000152	R236	033-5621-15	1/16W 5.6k ohm	R514	658-0240-18	150 ohm 1/16W
L515	658-0240-30	JOJCC0000152	R251	033-1031-15	1/16W 10k ohm	R515	033-3931-15	1/16W 39k ohm
L516	658-0240-30	JOJCC0000152	R252	033-4731-15	1/16W 47k ohm	R516	033-4731-15	1/16W 47k ohm
L541	658-0240-30	JOJCC0000152	R253	033-1531-15	1/16W 15k ohm	R517	033-4731-15	1/16W 47k ohm
L701	658-0240-46	470PF 50WV	R254	033-1531-15	1/16W 15k ohm	R518	033-2201-15	1/16W 22 ohm
L702	658-0240-46	470PF 50WV	R255	033-1531-15	1/16W 15k ohm	R519	033-2201-15	1/16W 22 ohm
L703	658-0240-57	JOMAB0000015	R261	658-0237-56	Resistor Network	R521	033-1011-15	1/16W 100 ohm
L704	658-0240-57	JOMAB0000015	R262	658-0244-14	NetworkResistor	R522	658-0240-47	33 ohm 1/16W
L705	658-0246-31	G1C2R2K00013	R263	658-0244-09	Chip,1/16W27 ohm	R523	116-1001-10	1/8W 10 ohm
L721	658-0246-32	JOJCC0000159	R264	033-2201-15	1/16W 22 ohm	R524	658-0240-47	33 ohm 1/16W
L722	658-0246-32	JOJCC0000159	R265	033-2201-15	1/16W 22 ohm	R525	658-0240-47	33 ohm 1/16W
L723	658-0246-32	JOJCC0000159	R266	033-0000-05	1/16W 0 ohm	R526	658-0240-18	150 ohm 1/16W
L724	658-0246-32	JOJCC0000159	R267	033-1031-15	1/16W 10k ohm	R527	658-0244-11	Chip,1/16W1k ohm
Q151	658-0237-14	TR 2SB766ATX	R268	033-1021-15	1/16W 1k ohm	R528	658-0240-48	75 ohm 1/10W
Q152	658-0237-14	TR 2SB766ATX	R269	033-1031-15	1/16W 10k ohm	R541	033-3321-15	1/16W 3.3k ohm
Q153	658-0240-10	B1GDGFNN0007	R270	033-3931-15	1/16W 39k ohm	R543	033-4711-15	1/16W 470 ohm
Q154	658-0240-11	B1GBCFNN0009	R271	658-0237-56	Resistor Network	R552	033-1031-15	1/16W 10k ohm
Q251	658-0244-04	Transistor	R272	658-0237-58	Resistor Network	R553	033-1031-15	1/16W 10k ohm
		B3HB00000023	R273	658-0237-58	Resistor Network	R554	033-2021-15	1/16W 2k ohm
Q252	658-0244-04	Transistor	R274	658-0244-14	NetworkResistor	R555	033-3931-15	1/16W 39k ohm
		B3HB00000023	R275	033-2201-15	1/16W 22 ohm	R556	033-3931-15	1/16W 39k ohm
Q253	658-0244-04	Transistor	R276	033-2201-15	1/16W 22 ohm	R557	033-3931-15	1/16W 39k ohm
		B3HB00000023	R277	033-2201-15	1/16W 22 ohm	R570	033-4711-15	1/16W 470 ohm
Q301	658-0237-18	TR B1GBGEEA0001	R278	033-2201-15	1/16W 22 ohm	R571	033-4711-15	1/16W 470 ohm
Q321	658-0244-05	Transistor	R279	033-2201-15	1/16W 22 ohm	R572	033-4711-15	1/16W 470 ohm
		B1GBGFGG0001	R280	033-2201-15	1/16W 22 ohm	R573	033-4711-15	1/16W 470 ohm
R101	033-1231-15	1/16W 12k ohm	R281	033-2201-15	1/16W 22 ohm	R574	033-4711-15	1/16W 470 ohm
R102	033-1231-15	1/16W 12k ohm	R282	033-2201-15	1/16W 22 ohm	R575	033-4711-15	1/16W 470 ohm
R103	658-0237-41	1/16W 24k ohm	R283	033-2201-15	1/16W 22 ohm	R576	033-4711-15	1/16W 470 ohm
R104	658-0237-42	1/16W 3.9k ohm	R284	033-2201-15	1/16W 22 ohm	R577	033-4711-15	1/16W 470 ohm
		Metal	R285	033-2201-15	1/16W 22 ohm	R621	658-0240-18	150 ohm 1/16W
R106	658-0237-43	1/16W 18k ohm	R286	033-2201-15	1/16W 22 ohm	R623	033-1031-15	1/16W 10k ohm
		Metal	R287	033-2201-15	1/16W 22 ohm	R631	658-0240-50	75 ohm 1/16W
R107	033-4721-15	1/16W 4.7k ohm	R288	033-2201-15	1/16W 22 ohm	R651	033-2021-15	1/16W 2k ohm
R110	033-2021-15	1/16W 2k ohm	R289	033-2201-15	1/16W 22 ohm	R701	033-1011-15	1/16W 100 ohm
R121	033-1221-15	1/16W 1.2k ohm	R290	033-2201-15	1/16W 22 ohm	R702	033-1011-15	1/16W 100 ohm
R131	033-1051-15	1/16W 1M ohm	R291	033-3931-15	1/16W 39k ohm	R703	033-1011-15	1/16W 100 ohm
R132	033-1051-15	1/16W 1M ohm	R292	033-3931-15	1/16W 39k ohm	R704	033-0000-05	1/16W 0 ohm
R141	033-1031-15	1/16W 10k ohm	R293	033-3931-15	1/16W 39k ohm	R705	033-0000-05	1/16W 0 ohm
R142	033-1031-15	1/16W 10k ohm	R294	033-3931-15	1/16W 39k ohm	R706	033-0000-05	1/16W 0 ohm
R151	033-2291-15	1/16W 2.2 ohm	R295	033-3931-15	1/16W 39k ohm	R707	033-1011-15	1/16W 100 ohm
R152	658-0237-40	1/2W 20 ohm	R296	033-3931-15	1/16W 39k ohm	R708	033-1011-15	1/16W 100 ohm
R153	033-2291-15	1/16W 2.2 ohm	R297	033-3931-15	1/16W 39k ohm	R709	033-2211-15	1/16W 220 ohm
R154	658-0237-40	1/2W 20 ohm	R298	033-3931-15	1/16W 39k ohm	R711	118-0000-10	0 ohm
R155	033-1021-15	1/16W 1k ohm	R301	033-1811-15	1/16W 180 ohm	R712	118-0000-10	0 ohm
R156	033-3331-15	1/16W 33k ohm	R302	033-1811-15	1/16W 180 ohm	R713	033-2211-15	1/16W 220 ohm
R157	033-2231-15	1/16W 22k ohm	R303	033-1811-15	1/16W 180 ohm	R714	033-2211-15	1/16W 220 ohm
R201	033-4711-15	1/16W 470 ohm	R311	033-4731-15	1/16W 47k ohm	R715	033-2211-15	1/16W 220 ohm
R202	033-1031-15	1/16W 10k ohm	R312	033-1811-15	1/16W 180 ohm	R716	033-2211-15	1/16W 220 ohm
R203	033-1031-15	1/16W 10k ohm	R313	033-6821-15	1/16W 6.8k ohm	R717	033-1011-15	1/16W 100 ohm
R212	658-0240-18	150 ohm 1/16W	R314	033-5621-15	1/16W 5.6k ohm	R718	033-1011-15	1/16W 100 ohm
R214	033-4721-15	1/16W 4.7k ohm	R315	033-5621-15	1/16W 5.6k ohm	R721	033-1011-15	1/16W 100 ohm
R215	033-4721-15	1/16W 4.7k ohm	R316	033-1031-15	1/16W 10k ohm	R722	033-1011-15	1/16W 100 ohm
R216	033-2731-15	1/16W 27k ohm	R317	033-5621-15	1/16W 5.6k ohm	R723	033-1011-15	1/16W 100 ohm
R217	033-2731-15	1/16W 27k ohm	R321	033-4721-15	1/16W 4.7k ohm	R724	033-1011-15	1/16W 100 ohm
R218	033-1031-15	1/16W 10k ohm	R322	033-4731-15	1/16W 47k ohm	R725	033-1011-15	1/16W 100 ohm
R219	033-3321-15	1/16W 3.3k ohm	R323	658-0244-10	Chip,1/8W0.51 ohm	SW301	658-0244-13	Switch
R220	033-3321-15	1/16W 3.3k ohm	R324	033-1011-15	1/16W 100 ohm			KOL1BA000104
R221	033-1051-15	1/16W 1M ohm	R325	033-1011-15	1/16W 100 ohm	XL201	658-0237-52	H0J168500003
R222	033-4711-15	1/16W 470 ohm	R327	117-0000-10	0 ohm	XL501	658-0239-02	Crystal Oscillator

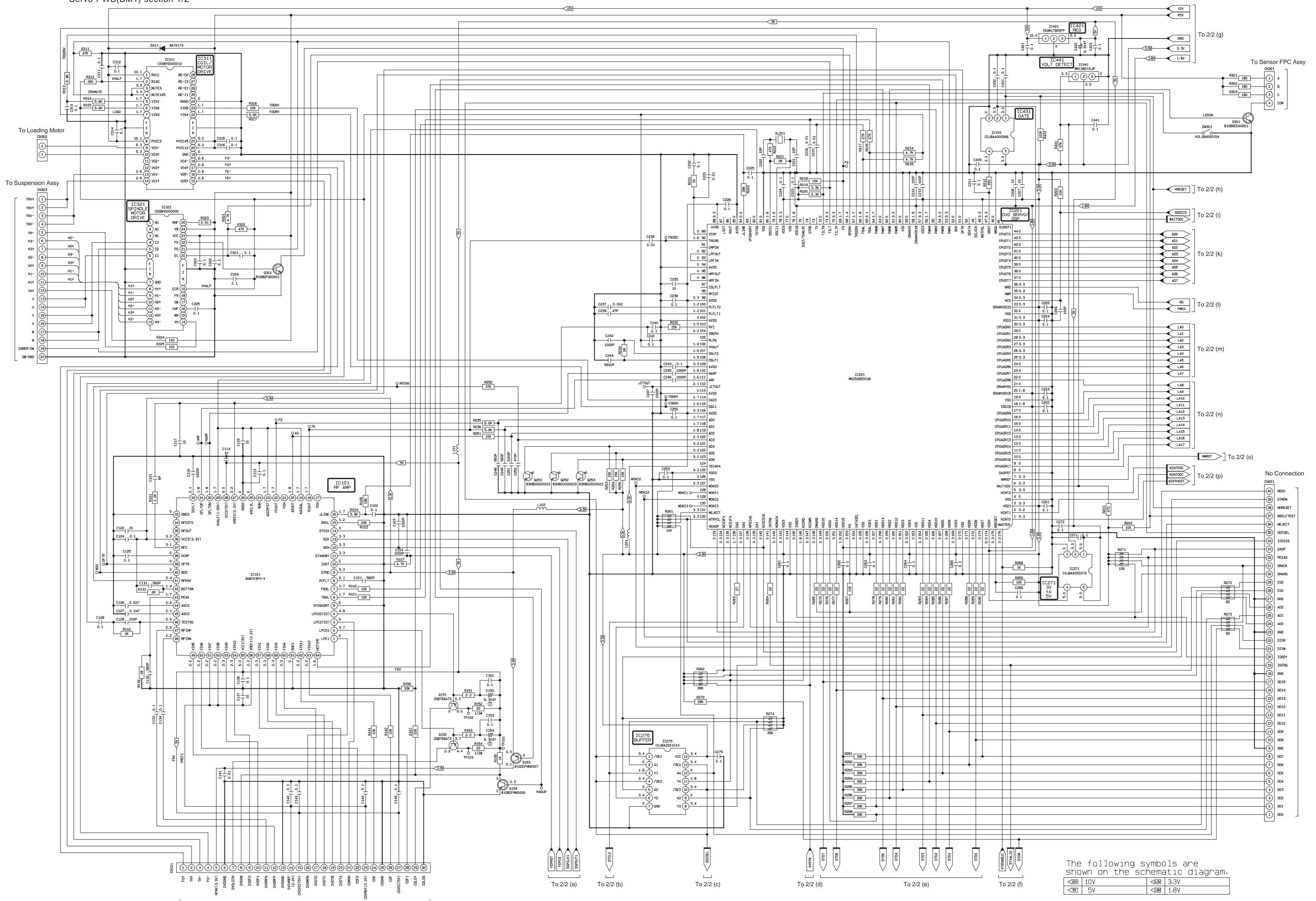


# BLOCK DIAGRAM





CIRCUIT DIAGRAM  
Servo PWB(BM1) section 1/2



The following symbols are shown on the schematic diagram.

	10V		3.3V
	5V		1.8V

Servo PWB(BM1) section 2/2

