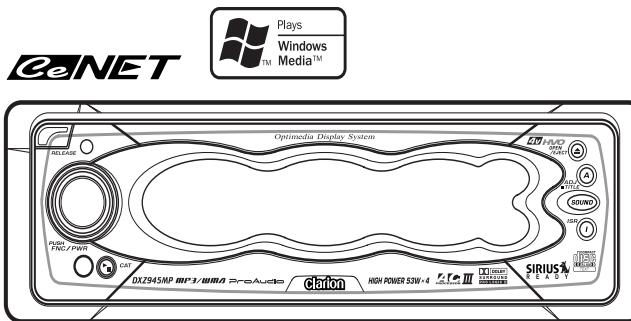


# Service Manual



AM/FM CD/MP3/WMA Player  
Built-in DSP/EQ With Touchpanel

**Model DXZ945MP**  
(PE-2635B-A / For U.S.A.)

**Model DXZ946MP**  
(PE-2635K-A / For other countries)  
(PE-2635K-B / For other countries)

## SPECIFICATIONS

### FM tuner section

Frequency range:	87.9MHz to 107.9MHz(U.S.A.) 87.0MHz to 108.0MHz(OTHERS)
Usable sensitivity:	9dBf
50dB quieting sensitivity:	15dBf
Alternate channel selectivity:	70dB
Stereo separation:	35dB (1kHz)
Frequency response:	30Hz to 15kHz (+/-3dB)

### AM tuner section

Frequency range:	530kHz to 1710kHz(U.S.A.) 531kHz to 1629kHz(OTHERS)
Usable sensitivity:	25uV

### CD player section

System:	Compact disc digital audio system
Usable discs:	Compact disc
Frequency response:	5Hz to 20kHz (+/-1dB)
S/N ratio:	100dB (1kHz)
Dynamic range:	96dB (1kHz)
Distortion:	0.01%

### MP3/WMA mode

MP3 sampling rate:	11.025kHz to 48kHz
MP3 bit rate:	8kbps to 320kbps/VBR
WMA bit rate:	48kbps to 192kbps
Logical format:	ISO9660 level1,2 JOLIET or Romeo

### Audio section

Maximum power output:	53Wx4
Continous average power output:	18Wx4, into 4ohm, 20Hz to 20kHz, 1%THD
Line output level:	4V/F 2ch+4V/R 2ch (CD 1kHz) 4V/NON-FADER 2ch (CD 1kHz) 0.5V/2-ZONE 2ch (CD 1kHz)

Bass control action: +/-12dB (50Hz)  
Treble control action: +/-12dB (12.5kHz)

### General

Power supply voltage:	14.4V DC(10.8V to 15.6V allow- able) negative ground
Current consumption:	Less than 15A,3A
Speaker impedance:	4ohm(4ohm to 8ohm allowable)
Dimensions(mm):	
Source unit;	178(W)x50(H)x155(D)
Remote control unit;	32(W)x56(H)x24(D)
Weight:	
Source unit;	1.7kg
Remote control unit;	80g(including battery)

## NOTES

- \* Use only compact discs bearing the or mark.
- \* Some CDs recorded in CD-R/CD-RW mode may not be usable.
- \* WMA is the abbreviation of Windows Media Audio, an audio file format developed by Microsoft Corporation.
- \* Windows Media™, and the Windows ® logo are trademarks, or registered trademarks of Microsoft Corporation in the United States and/or other countries.
- \* This product includes technology owned by Microsoft Corporation and cannot be used or distributed without a license from MSLGP.
- \* This product is manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.
- \* 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.

# COMPONENTS

## PE-2635B-A, PE-2635K-A, PE-2635K-B

1. Main unit	-----	1
2. Remote controller	RCB-164-600	1
3. Battery(SUM-3)	-----	2
4. Mounting bracket	300-4976-00	1
5. Universal MTG-bracket	300-7742-00	1
6. DCP case	335-5734-30	1
7. Outer escutcheon(*B-A)	370-6089-00	1
8. Outer escutcheon(*K-A/B)	370-6089-01	1
9. Extension lead	854-6349-50	1
10. Parts bag	-----	
10-1. Removal key	331-2497-00	2
10-2. Screw(M5x8)	716-0496-01	1
10-3. Pad screw(M1.7x6)(*B-A)	716-0872-11	1

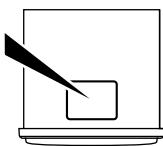
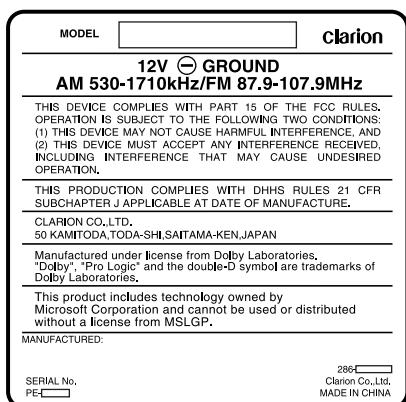
\*B-A: For DXZ945MP (PE-2635B-A)

\*K-A/B: For DXZ946MP (PE-2635K-A/B)

## CAUTIONS

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

The COMPACT DISC player should not be adjusted or repaired by anyone except properly qualified service personnel.



Bottom view  
of DXZ945MP

## 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 con-

nexion 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 regarding chips.

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). The negative pole of tantalum capacitors is highly susceptible to heat, so use special care when replacing them and check the operation afterwards.

### 6. 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.

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

### 8. 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.

### 9. 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.

#### 9-1. 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.

#### 9-2. 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.

#### 9-3. 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.

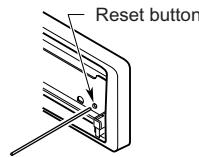
## ERROR DISPLAYS

	Error Display	Cause	Measure
CD/MP3/WMA	ERROR 2	A DISC is caught inside the CD deck and is not ejected.	This is a failure of CD 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 upside-down inside the CD deck and does not play.	Eject the disc then reload it properly.
General	AMP GUARD	The speaker protection circuit is operating.During this operation, if any volume operation is performed, the display shows "AMP GUARD". "AMP GUARD" sometimes functions when special test signals are used.	Turn down sound volume. Function can also be restored by turning the power off and on again. (Speaker volume is reduced automatically when the speaker protection circuit operates).
CD changer	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.
DVD changer	ERROR 2	A DISC inside the DVD changer cannot be played.	This is a failure of DVD mechanism.
	ERROR 3	A DISC cannot be played due to scratches,etc.	Retry or replace with a non-scratched, non-warped-disc.
	ERROR 6	A DISC inside the DVD changer cannot be played because it is loaded upside-down.	Eject the disc then reload it properly.
	ERROR P	Parental level error	Set the correct Parental level.
	ERROR R	Region code error	Eject the disc and replace correct region code disc.

\*When an optional CD/DVD changer is connected through the CeNET cable, this unit can control CD/DVD changer operations.

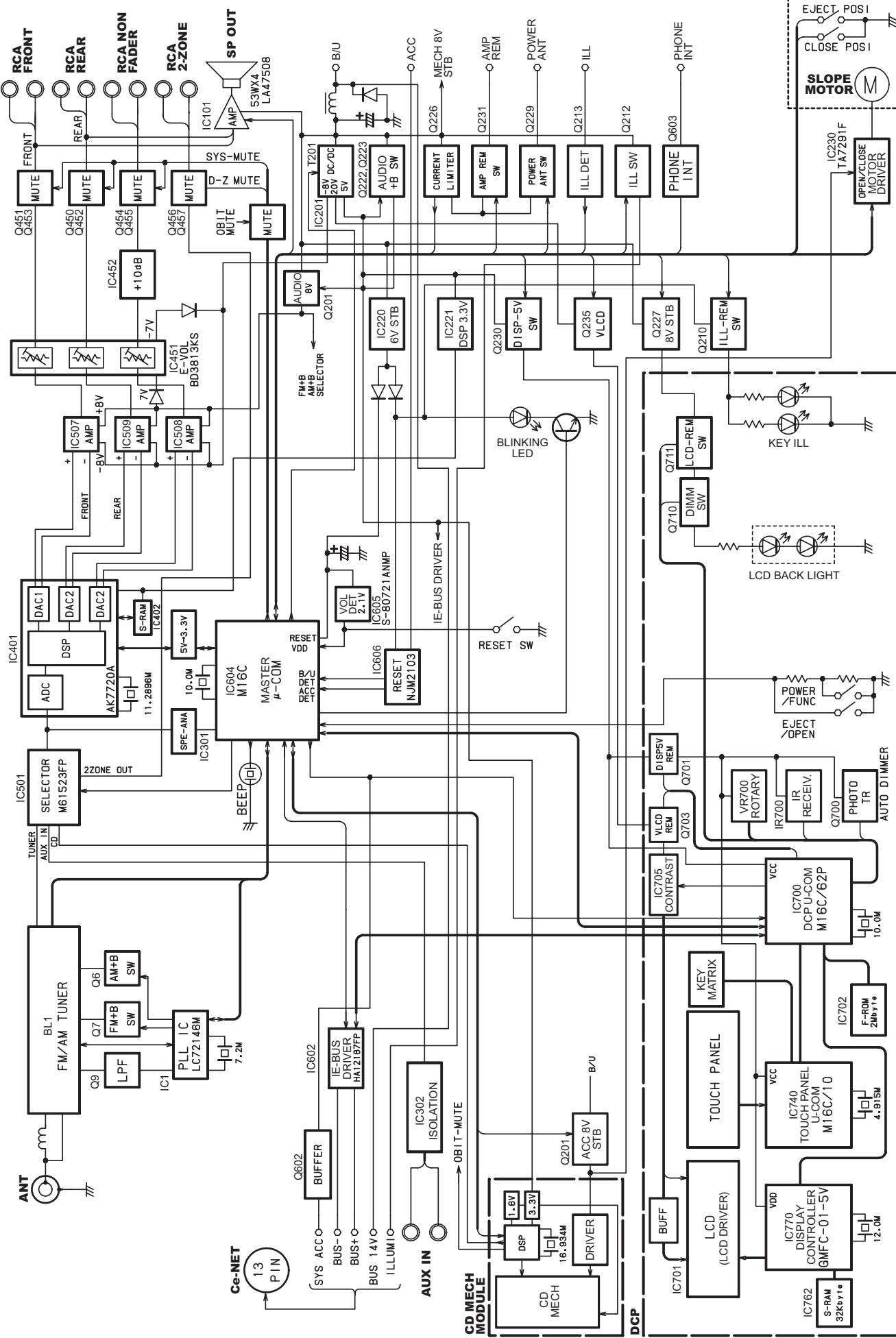
\*If an error display other than the ones described above appears, press the reset button.

## TROUBLESHOOTING

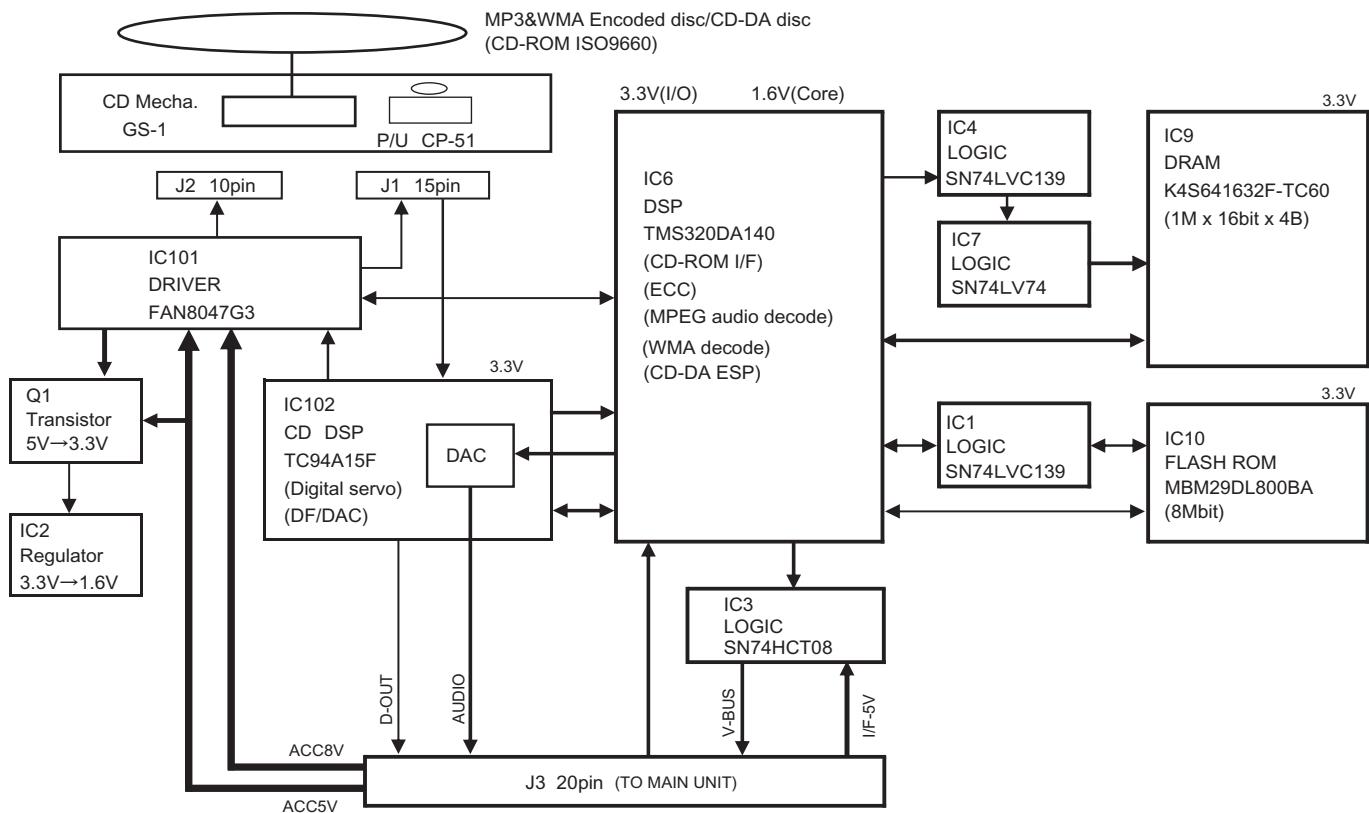
	Problem	Cause	Measure
General	Power does not turn on. (No sound is produced.)	Fuse is blown.	Replace with a fuse of the same amperage.
		Incorrect wiring.	Wire properly.
	No sound output when operating the unit with amplifiers or power antenna attached.	Power antenna lead is shorted to ground or excessive current is required for remote-on the amplifiers or power antenna.	1. Turn the unit off. 2. Remove all wires attached to the power antenna lead. Check each wire for a possible short to ground using an ohm meter. 3. Turn the unit back on. 4. Reconnect each amplifier remote wire to the turn off before power antenna lead one by one. If the amplifiers all wires are attached, use an external relay to provide remote-on voltage(excessive current required).
CD/MP3/WMA	Nothing happens when buttons are pressed. Display is not accurate.	The microprocessor has malfunctioned due to noise,etc.	Turn off the power, then press the [RELEASE] button and remove the DCP. Press the reset button with a thin rod.
		DCP or main unit connectors are dirty.	 Wipe the dirt off with a soft cloth moistened with cleaning alcohol.
	No sound heard.	There is a disc other than a compact disc or foreign matter already in place.	With the sloping console open, press and hold the [▲] button for 3 seconds or longer. The foreign matter is forcibly ejected.
	Sound skips or is noisy.	MP3/WMA files are absent in a disc.	Write MP3/WMA files onto the disc properly.
		Files are not recognized as an MP3/WMA file.	Use MP3/WMA files encoded properly.
	File system is not correct.		Use ISO9660 level 1, 2 or JOLIET or Romeo file system.
	Sound is cut or skipped. Noise is generated or noise is mixed with sound.	Disc is dirty.	Clean the disc with a soft cloth.
		Disc is heavily scratched or warped.	Replace with a disc with no scratches.
	MP3/WMA files are not encoded properly.		Use MP3/WMA files encoded properly.
CD/MP3/WMA	Sound is bad directly after power is turned on.	Water droplets may form on the internal lens when the car is parked in a humid place.	Let dry for about 1 hour with the power on.
	Wrong filename	File system is not correct.	Use ISO9660 level 1, 2 or JOLIET or Romeo file system.
	Play list play is not performed.	File name or extension is not correct.	Use alphanumeric/ASCII characters for MP3/WMA file name. Use ".M3U" for the file extension of a play list.

## BLOCK DIAGRAM

## Main section



## CD mechanism section



## SYSTEM CHECK

The first time that this unit is turned on after wire connections are completed, this unit checks which equipment is connected. (This is called the "system check.") When the power is turned ON, and "System Check" is displayed, follow the procedure below to perform the system check.

- When "System Check" appears on the display, press the [ROTARY] knob.  
The system check starts.  
When the system check is complete, "Completed" appears on the display.
- Press the [ROTARY] knob again.  
The main display for the radio mode appears.

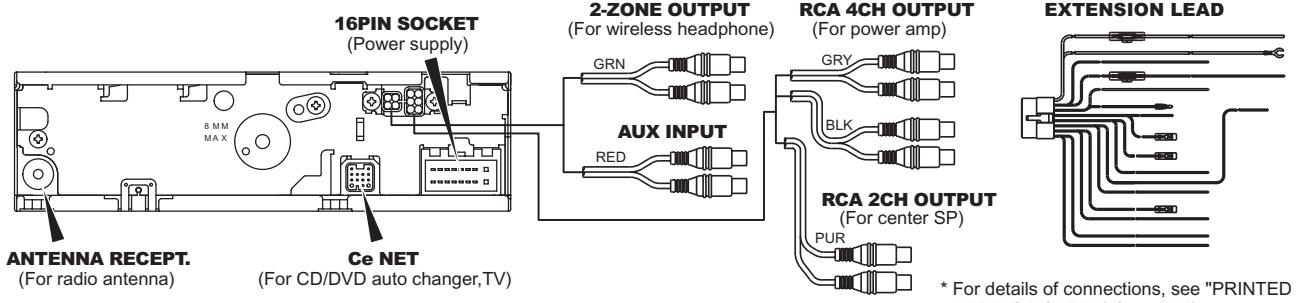
## CODEMATIC

This function prevents persons who do not know the touch sequence from easily operating this unit. The Touch Code display appears when DCP is attached and the power is turned ON with "CODEMATIC" set to "ON".



If you touch the display in this screen in the preset order, "SUCCESSFUL" is displayed and the power is turned OFF. When the power is next turned ON, the Touch Code display does not appear, and the main display in the radio mode or CD mode is displayed.

## CONNECTIONS



# EXPLANATION OF IC

052-3390-00 M30622MEP-126GP CD/MP3 Master Controller

## 1.Terminl Description

pin 1: DISP Reset	: O : Reset pulse output to Display controller.
pin 2: TIME BASE	: IN: Time base pulse input.
pin 3: DISP 5V REM	: O : Not in use.
pin 4: EXT AMP REM	: O : ON signal output to the power supply section.
pin 5: SPEED PULSE	: IN: The speed pulse input.
pin 6: BYTE	: IN: The data length selection(8bit/16bit).
pin 7: CN VSS	: IN: Connect to VSS.
pin 8: DISC/CATS	: O : DISC/CATS LED control signal output.
pin 9: NU	: IN: Not in use.
pin 10: RESET	: IN: Reset signal input.
pin 11: X OUT	: O : Crystal connection.
pin 12: VSS	: - : Negative supply voltage.
pin 13: X IN	: IN: Crystal connection.
pin 14: VCC	: - : Positive supply voltage.
pin 15: NU	: IN: Not in use.
pin 16: ACC DET	: IN: ACC detection signal input.
pin 17: BU DET	: IN: Backup detection signal input.
pin 18: KEY INT	: IN: Key interrupting signal input.
pin 19: 27pin connect	: IN: Connect to 27pin.
pin 20: DSP INIT RST	: O : The reset signal output to DSP IC.
pin 21: NU	: - : Not in use.
pin 22: BEEP	: O : Beep out.
pin 23: DSP RST	: O : Reset pulse output to the DSP IC.
pin 24: NU	: O : Not in use.
pin 25: DD F SW	: O : The frequency control signal output for DC_DC_Converter.
pin 26: NU	: IN: Not in use.
pin 27: IE BUS RX	: IN: IE Bus serial data input.
pin 28: IE BUS TX	: O : IE Bus serial data output.
pin 29: NU	: O : Not in use.
pin 30: NU	: IN: Not in use.
pin 31: NU	: IN: Not in use.
pin 32: NU	: O : Not in use.
pin 33: DSP SO	: O : Serial data output to the DSP IC.
pin 34: DSP SI	: IN: Serial data input from the DSP IC.
pin 35: DSP CLK	: O : The clock pulse output to DSP.
pin 36: DSP RDY	: IN: Ready signal input from the DSP IC.
pin 37: DSP RQ	: O : Request signal output to the DSP IC.
pin 38: NU	: IN: Not in use.
pin 39: NU	: IN: Not in use.
pin 40: MP3 SRQ	: IN: MP3 request signal input.
pin 41: MP3 CS	: O : MP3 chip selection signal output.
pin 42: MP3 WP	: O : MP3 wakeup signal output.
pin 43: MP3 RESET	: O : MP3 reset signal output.
pin 44: NU	: IN: Not in use.
pin 45: PLL SI	: IN: Serial data input from the PLL IC.
pin 46: PLL SO	: O : Serial data output to the PLL IC.
pin 47: PLL SCK	: O : The clock pulse output to the PLL IC.
pin 48: PLL CE	: O : The chip enable signal output to the PLL IC.
pin 49: NU	: IN: Not in use.
pin 50: RDS TEST	: IN: For test.
pin 51: INIT 2	: IN: The initial setting input.
pin 52: INIT 1	: IN: The initial setting input.
pin 53: ILL DET	: IN: Illumination ON signal input.
pin 54: NU	: O : Not in use.
pin 55: OPEN POSI	: IN: The open position detect signal input.
pin 56: CLOSE POSI	: IN: The close position detect signal input.
pin 57: NU	: O : Not in use.
pin 58: MOTOR+	: O : The control signal output to the motor.
pin 59: MOTOR-	: O : The control signal output to the motor.
pin 60: VCC	: - : Positive supply voltage.
pin 61: SUB 0 MUTE	: O : 2-zone CD muting selection.
pin 62: VSS	: - : Negative supply voltage.
pin 63: MAIN 0 MUTE	: O : 2-zone CD muting selection.
pin 64: KEY ILL REM	: O : Key illumination ON signal output.

pin 65: ST SD	: IN: At receiving the FM station, this port detects the stereo signal. At seeking or scanning, this port detects the station detection signal.
pin 66: NOISE DCHG	: O : RDS noise discharge signal output.
pin 67: MUTE SPD UP	: O : Station detection speed up command output for RDS.
pin 68: RDS TEST ST	: O : For the test mode.
pin 69: RDS MUTE	: O : RDS mute signal output.
pin 70: RDS DATA	: IN: RDS serial data input.
pin 71: Spect RST	: O : Reset pulse output to spectrum analyzer.
pin 72: Spect RD	: IN: Read pulse input from spectrum analyzer.
pin 73: RDS CLK	: IN: RDS clock pulse input.
pin 74: E VOL CLK	: O : The clock pulse output to the volume IC.
pin 75: E VOL DATA	: O : The serial data output to the volume IC.
pin 76: SUB E VOL CK	: O : The clock pulse output to Sub volume IC.
pin 77: SUB E VOL DT	: O : The serial data output to Sub volume IC.
pin 78: INT AMP REM	: O : Internal audio amplifier control.
pin 79: AMP MUTE	: O : Muting signal output to the Audio Power Amplifier.
pin 80: AMP REM DT	: IN: Remote controller wire short detection.
pin 81: NAVI MUTE	: O : Muting signal output to suppress the noise without Navigation sound interrupting.
pin 82: LINE SYS MU	: O : The system muting command output.
pin 83: NU	: O : Not in use.
pin 84: PHONE INT	: IN: The telephone interrupt signal input.
pin 85: AUTO ANT	: O : Motor antenna control signal output.
pin 86: 5V REM	: O : ON signal output to the 5V power supply.
pin 87: NOISE	: IN: The noise level for RDS.
pin 88: S METER	: IN: The input terminal of internal A/D converter to monitor the radio field strength.
pin 89: KEY A/D	: IN: The input terminal of the internal ADC for key judgement.
pin 90: 2-zone Mute	: O : 2-zone muting control.
pin 91: SPAN DATA	: IN: The serial data input from the spectrum analyzer.
pin 92: NU	: IN: Not in use.
pin 93: SYS ACC	: O : ACC detect signal output.
pin 94: A VSS	: - : Analog ground.
pin 95: OFFSET DET	: IN: The emergency signal input from the power IC.
pin 96: VREFI	: IN: The reference voltage input.
pin 97: A VCC	: - : Positive supply voltage for the internal analog section.
pin 98: MP3 SI	: IN: MP3 serial data input.
pin 99: MP3 SO	: O : MP3 serial data output.
pin100: MP3 SCK	: O : MP3 clock output.

051-6700-00 TMS320DA140PGE160 Digital Signal Processor

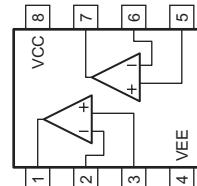
## 1.Terminl Description

pin 1: VSS	: - : Negative supply voltage.
pin 2: Memo Addrss 22	: O : Control signal output for Memory IC.
pin 3: VSS	: - : Negative supply voltage.
pin 4: VDD	: - : Positive supply voltage.
pin 5: Memo Addrss 10	: O : Address output to Memory IC.
pin 6: C RESET	: O : Reset pulse output to CD IC.
pin 7: Memo Addrss 11	: O : Address output to Memory IC.
pin 8: Memo Addrss 12	: O : Address output to Memory IC.
pin 9: Memo Addrss 13	: O : Address output to Memory IC.
pin 10: Memo Addrss 14	: O : Address output to Memory IC.
pin 11: Memo Addrss 15	: O : Address output to Memory IC.
pin 12: VDD	: - : Positive supply voltage.
pin 13: NU	: IN: Not in use.
pin 14: VSS	: - : Negative supply voltage.
pin 15: VSS	: - : Negative supply voltage.
pin 16: VDD	: - : Positive supply voltage.
pin 17: NU	: IN: Not in use.
pin 18: NU	: IN: Not in use.
pin 19: READY	: IN: The ready signal input.
pin 20: PS	: O : Control signal output for Memory IC.

pin 21: NU	: O : Not in use.	pin 84: NU	: O : Not in use.
pin 22: NU	: O : Not in use.	pin 85: NU	: O : Not in use.
pin 23: WRITE ENBL	: O : The write enable signal output.	pin 86: NU	: IN: Not in use.
pin 24: M STRB	: O : Control signal output for Memory IC.	pin 87: NU	: IN: Not in use.
pin 25: NU	: O : Not in use.	pin 88: NU	: IN: Not in use.
pin 26: NU	: O : Not in use.	pin 89: NU	: IN: Not in use.
pin 27: LD CONT	: O : The loading control signal output.	pin 90: VSS	: - : Negative supply voltage.
pin 28: NU	: O : Not in use.	pin 91: VDD	: - : Positive supply voltage.
pin 29: NU	: O : Not in use.	pin 92: NU	: IN: Not in use.
pin 30: NU	: IN: Not in use.	pin 93: VSS	: - : Negative supply voltage.
pin 31: CS	: IN: The chip select command input.	pin 94: CLK OUT	: O : Clock pulse output.
pin 32: NU	: - : Not in use.	pin 95: C BUS 3	: I/O: Data bus for CD IC.
pin 33: VDD	: - : Positive supply voltage.	pin 96: NU	: O : Not in use.
pin 34: VSS	: - : Negative supply voltage.	pin 97: SYS CLK	: IN: 16.92MHz
pin 35: V BUS WUP	: IN: V BUS WUP input.	pin 98: RESET	: IN: Reset signal input.
pin 36: C BUS CE/TRB	: I/O: Data bus chip enable signal output to CD IC. Or mechanism sensor signal input.	pin 99: Memo Data 0	: I/O: Parallel data input/output for Memory IC.
pin 37: VSS	: - : Negative supply voltage.	pin100: Memo Data 1	: I/O: Parallel data input/output for Memory IC.
pin 38: C BUS CK/TRA	: I/O: Data bus clock pulse output to CD IC. Or mechanism sensor signal input.	pin101: Memo Data 2	: I/O: Parallel data input/output for Memory IC.
pin 39: NU	: IN: Not in use.	pin102: Memo Data 3	: I/O: Parallel data input/output for Memory IC.
pin 40: VSS	: - : Negative supply voltage.	pin103: Memo Data 4	: I/O: Parallel data input/output for Memory IC.
pin 41: C BCK	: IN: Bit clock pulse input from CD IC.	pin104: Memo Data 5	: I/O: Parallel data input/output for Memory IC.
pin 42: NU	: O : Not in use.	pin105: Memo Addrss 16: O : Address output to Memory IC.	
pin 43: C LRCK	: IN: LR clock pulse input from CD IC.	pin106: VSS	: - : Negative supply voltage.
pin 44: NU	: O : Not in use.	pin107: Memo Addrss 17: O : Address output to Memory IC.	
pin 45: C SD	: IN: Serial data input from CD IC.	pin108: Memo Addrss 18: O : Address output to Memory IC.	
pin 46: NU	: IN: Not in use.	pin109: Memo Addrss 19: O : Address output to Memory IC.	
pin 47: MS SI	: IN: Serial data input from Master Computer.	pin110: Memo Addrss 20: O : Address output to Memory IC.	
pin 48: C DAC BCK	: O : Bit clock output for the internal DAC of CD IC.	pin111: VSS	: - : Negative supply voltage.
pin 49: MS SCK	: IN: Serial clock input from Master Computer.	pin112: VDD	: - : Positive supply voltage.
pin 50: VSS	: - : Negative supply voltage.	pin113: Memo Data 6	: I/O: Parallel data input/output for Memory IC.
pin 51: NU	: O : Not in use.	pin114: Memo Data 7	: I/O: Parallel data input/output for Memory IC.
pin 52: VDD	: - : Positive supply voltage.	pin115: Memo Data 8	: I/O: Parallel data input/output for Memory IC.
pin 53: C DAC LRCK	: O : LR clock output for the internal DAC of CD IC.	pin116: Memo Data 9	: I/O: Parallel data input/output for Memory IC.
pin 54: MS CS	: IN: Chip select input from Master Computer.	pin117: Memo Data 10	: I/O: Parallel data input/output for Memory IC.
pin 55: NU	: O : Not in use.	pin118: Memo Data 11	: I/O: Parallel data input/output for Memory IC.
pin 56: VDD	: - : Positive supply voltage.	pin119: Memo Data 12	: I/O: Parallel data input/output for Memory IC.
pin 57: VSS	: - : Negative supply voltage.	pin120: CN VCC	: IN: Connect to VCC.
pin 58: C BUS 0	: I/O: Data bus for CD IC.	pin121: Memo Data 13	: I/O: Parallel data input/output for Memory IC.
pin 59: C DAC SD	: O : Serial data output for the internal DAC of CD IC.	pin122: Memo Data 14	: I/O: Parallel data input/output for Memory IC.
pin 60: MS SO	: O : Serial data output to Master Computer.	pin123: Memo Data 15	: I/O: Parallel data input/output for Memory IC.
pin 61: NU	: O : Not in use.	pin124: SRQ	: O : V BUS SRQ output.
pin 62: NU	: IN: Not in use.	pin125: VDD	: - : Positive supply voltage.
pin 63: NU	: IN: Not in use.	pin126: VSS	: - : Negative supply voltage.
pin 64: WUP	: IN: V BUS WUP.	pin127: NU	: IN: Not in use.
pin 65: SBSY	: IN: Sub code block synchronous signal detection input.	pin128: VSS	: - : Negative supply voltage.
pin 66: C BMOVF	: IN: Buffer memory over flag input from CD IC.	pin129: NU	: IN: Not in use.
pin 67: SCK	: IN: The clock pulse input.	pin130: VDD	: - : Positive supply voltage.
pin 68: VDD	: - : Positive supply voltage.	pin131: Memo Addrss 0: O : Address output to Memory IC.	
pin 69: C BUS 1	: I/O: Data bus for CD IC.	pin132: Memo Addrss 1: O : Address output to Memory IC.	
pin 70: VSS	: - : Negative supply voltage.	pin133: Memo Addrss 2: O : Address output to Memory IC.	
pin 71: LIMIT	: IN: Inside limit switch signal input for the pick-up.	pin134: Memo Addrss 3: O : Address output to Memory IC.	
pin 72: VSS	: - : Negative supply voltage.	pin135: SYS POWER	: O : System power supply control signal output.
pin 73: C PF/ CHUCK	: IN: C2 correction data input from CD IC. Or chucking signal input from the mechanism.	pin136: Memo Addrss 4: O : Address output to Memory IC.	
pin 74: LD MUTE	: O : Muting signal output to the CD mechanism.	pin137: Memo Addrss 5: O : Address output to Memory IC.	
pin 75: VDD	: - : Positive supply voltage.	pin138: Memo Addrss 6: O : Address output to Memory IC.	
pin 76: VSS	: - : Negative supply voltage.	pin139: Memo Addrss 7: O : Address output to Memory IC.	
pin 77: Clock Mode 1	: IN: Clock mode selection.	pin140: Memo Addrss 8: O : Address output to Memory IC.	
pin 78: Clock Mode 2	: IN: Clock mode selection.	pin141: Memo Addrss 9: O : Address output to Memory IC.	
pin 79: Clock Mode 3	: IN: Clock mode selection.	pin142: VDD	: - : Positive supply voltage.
pin 80: NU	: IN: Not in use.	pin143: Memo Addrss 21: O : Control signal output for Memory IC.	
pin 81: C BUS 2	: I/O: Data bus for CD IC.	pin144: VSS	: - : Negative supply voltage.
pin 82: NU	: O : Not in use.		
pin 83: NU	: IN: Not in use.		

## 1.Terminal Description

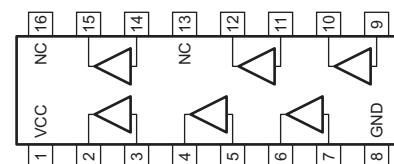
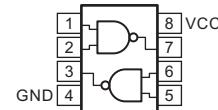
pin 1: IPF OUT	: O : IP flag output.	pin 60: FOO	: O : Focus equalizer output.
pin 2: SB OK O	: O : Sub code Q data CRCC OK signal output.	pin 61: TRO	: O : Tracking equalizer output.
pin 3: CLOCKIO	: I/O: The clock pulse input/output for the sub code reading.	pin 62: Vref	: O : Reference voltage output.
pin 4: VDD	: - : Positive supply voltage.	pin 63: FMO	: O : Field equalizer output / Speed error output.
pin 5: VSS	: - : Negative supply voltage.	pin 64: DMO	: O : Disk equalizer output.
pin 6: DATA	: O : DATA	pin 65: IO2A	: I/O: General input/output.
pin 7: SF SY O	: O : Playback frame synchronous signal output.	pin 66: IO3A	: I/O: General input/output.
pin 8: SB SY O	: O : Sub code block synchronous signal output.	pin 67: MONIT	: O : Internal DSP signal monitor.
pin 9: HSO	: O : The play speed flag output.	pin 68: FG IN	: IN: FG input for the spindle CAV servo.
pin 10: UHSO	: O : The play speed flag output.	pin 69: VSS	: - : Negative supply voltage.
pin 11: AR SEL IN	: IN: Fix to the high level.	pin 70: VDD	: - : Positive supply voltage.
pin 12: AWRC	: O : The control signal output for the active wide range VCO.	pin 71: TESIN	: IN: For test.
pin 13: P VDD	: - : PLL positive supply voltage.	pin 72: X VSS	: - : Master clock analog ground.
pin 14: PDO	: O : Phase difference signal output of EFM-PLCK.	pin 73: X IN	: IN: Crystal connection.
pin 15: TMAX S	: O : T max judgment output.	pin 74: X O	: O : Crystal connection.
pin 16: TMAX	: O : T max judgment output.	pin 75: X VDD	: - : Clock power supply.
pin 17: LPF N	: IN: Inverted input of LPF for PLL.	pin 76: D VSS	: - : Digital ground.
pin 18: LPF OUT	: O : The output terminal for the Low Pass Filter.	pin 77: RO	: O : Right channel data output for 1-bit DAC.
pin 19: P Vref	: - : PLL reference voltage.	pin 78: D VDD	: - : Positive supply voltage for the digital section.
pin 20: VCO FILTER	: O : Loop filter for VCO.	pin 79: D Vref	: O : Digital reference voltage.
pin 21: VCO Ref	: IN: VCO reference voltage input.	pin 80: LO	: O : Left channel data output for 1-bit DAC.
pin 22: DTC N	: O : For the analog slicer.	pin 81: D VSS	: - : Digital ground.
pin 23: DTC P	: O : For the analog slicer.	pin 82: Z DET O	: O : 1bit DAC zero flag output.
pin 24: PLL VSS	: - : PLL ground.	pin 83: VSS	: - : Negative supply voltage.
pin 25: SLCO	: O : Output of internal DAC for data slice level generation.	pin 84: BUS 0	: I/O: CD IC Data input / output.
pin 26: RF IN	: IN: RF signal input.	pin 85: BUS 1	: I/O: CD IC Data input / output.
pin 27: RF RP	: IN: RF ripple input.	pin 86: BUS 2	: I/O: CD IC Data input / output.
pin 28: RF EQ OUT	: O : The output of the RF equalizer.	pin 87: BUS 3	: I/O: CD IC Data input / output.
pin 29: A VDD	: - : Positive supply voltage for the Analog section.	pin 88: BU CK IN	: IN: CD IC Data clock input.
pin 30: RES IN	: - : For reference current setting.	pin 89: CCEI	: IN: Chip enable input.
pin 31: Vref OUT	: O : The reference voltage output.	pin 90: RSTI	: IN: Reset signal input.
pin 32: VMDIR	: O : The reference voltage output.	pin 91: VDD	: - : Positive supply voltage.
pin 33: TESTR	: O : The compensation terminal for RFEQO offset.	pin 92: EMPHI/FAO	: I/O: Emphasis input for 1-bit DAC / Flag A output.
pin 34: INVSEL	: IN: MDI polarity selection.	pin 93: BCKI/FBO	: I/O: Bit clock input for 1-bit DAC / Flag B output.
pin 35: AGCI	: IN: The input terminal of RF AGC amplifier.	pin 94: AIN/FCO	: I/O: Audio input for 1-bit DAC / Flag C output.
pin 36: RF DCI	: IN: The input terminal for RF peak detection.	pin 95: LRCKI/FDO	: I/O: LR clock input for 1-bit DAC / Flag D output.
pin 37: RF OUT	: O : RF signal output.	pin 96: EMPHO	: O : Emphasis flag output. H=Emphasis ON.
pin 38: PN SEL	: IN: The transistor type selection input for laser diode driver. L=NPN, H=PNP.	pin 97: B CK O	: O : Bit clock output.
pin 39: EQ SET	: O : The equalizer setting terminal.	pin 98: A OUT	: O : Audio signal output.
pin 40: RF VDD	: - : RF power supply.	pin 99: LR CK O	: O : LR clock output.
pin 41: LDO	: O : The laser diode drive output.	pin 100: D OUT	: O : Serial data output.
pin 42: MDI	: IN: Monitor photo diode signal input.		
pin 43: RF VSS	: - : RF ground.		
pin 44: FNI 2	: IN: Main beam signal input.		
pin 45: FNI 1	: IN: Main beam signal input.		
pin 46: FPI 2	: IN: Main beam signal input.		
pin 47: FPI 1	: IN: Main beam signal input.		
pin 48: TPI	: IN: Sub beam signal input.		
pin 49: TNI	: IN: Sub beam signal input.		
pin 50: FTEO	: O : For test.		
pin 51: RF ZI	: IN: RF ripple zero cross signal input.		
pin 52: A VSS	: - : Analog ground.		
pin 53: RF RP	: O : RF ripple signal output.		
pin 54: RF DC	: O : RF peak detection signal output. (hologram suitable)		
pin 55: FEI	: O : Focus error signal output.		
pin 56: SBAD	: O : Sub beam add signal output.		
pin 57: TEI	: O : Tracking error signal output.		
pin 58: TE Z IN	: IN: Tracking error signal input for zero cross.		
pin 59: A VDD	: - : Positive supply voltage for the Analog section.		



## 1.Terminal Description

pin 1: NU :IN: Not in use.  
 pin 2: CONT CONT :O : LCD contrast control voltage output.  
 pin 3: DISP 5V REM :O : The power supply circuit control signal output.  
 pin 4: LCD REM :O : On signal output for LCD power supply.  
 pin 5: REMOCON :IN: Remote controller signal input terminal.  
 pin 6: BYTE :IN: The data length selection(8bit/16bit).  
 pin 7: CN VSS :IN: Connect to VSS.  
 pin 8: NU :IN: Not in use.  
 pin 9: NU :IN: Not in use.  
 pin 10: RESET :IN: Reset signal input.  
 pin 11: X OUT :O : Crystal connection.  
 pin 12: VSS : - : Negative supply voltage.  
 pin 13: X IN :IN: Crystal connection.  
 pin 14: VCC : - : Positive supply voltage.  
 pin 15: NU :IN: Not in use.  
 pin 16: ACC DET :IN: ACC detection signal input.  
 pin 17: NU :IN: Not in use.  
 pin 18: ILL DET :IN: Illumination ON signal input.  
 pin 19: 27pin connect :IN: Connect to 27pin.  
 pin 20: LCD RESET :O : Reset pulse output to LCD.  
 pin 21: JOG CW :IN: Jog key signal input.  
 pin 22: JOG CCW :IN: Jog key signal input.  
 pin 23: NU :O : Not in use.  
 pin 24: PULSE DIMM :O : Dimmer pulse output for LCD back light.  
 pin 25: NU :IN: Not in use.  
 pin 26: NU :IN: Not in use.  
 pin 27: IE BUS RX :IN: IE Bus serial data input.  
 pin 28: IE BUS TX :O : IE Bus serial data output.  
 pin 29: NU :O : Not in use.  
 pin 30: NU :IN: Not in use.  
 pin 31: NU :IN: Not in use.  
 pin 32: NU :O : Not in use.  
 pin 33: TP TX :O : Touch Panel Controller communication line.  
 pin 34: TP RX :O : Touch Panel Controller communication line.  
 pin 35: TP REQ :IN: The request signal from the touch panel micro computer.  
 pin 36: DATA/COMMAND :O : Data/Command flag output to the LCD driver.  
 pin 37: NU : - : Not in use.  
 pin 38: NU :IN: Not in use.  
 pin 39: NU :IN: Not in use.  
 pin 40: NU :IN: Not in use.  
 pin 41: NU :IN: Not in use.  
 pin 42: LCD RD :O : Read command output to LCD.  
 pin 43: NU :IN: Not in use.  
 pin 44: LCD WR :O : Write command output to LCD.  
 pin 45: NU :O : Not in use.  
 pin 46: A20 LCD CS1 :O : The chip select signal output.  
 pin 47: F ROM Add 19: O : F ROM Address output.  
 pin 48: F ROM CE :O : Fixed to the low level in the normal condition.  
 pin 49: F ROM Add 18: O : F ROM Address output.  
 pin 50: NU :O : Not in use.  
 pin 51: F ROM Add 17: O : F ROM Address output.  
 pin 52: F ROM Add 16: O : F ROM Address output.  
 pin 53: F ROM Add 15: O : F ROM Address output.  
 pin 54: F ROM Add 14: O : F ROM Address output.  
 pin 55: F ROM Add 13: O : F ROM Address output.  
 pin 56: F ROM Add 12: O : F ROM Address output.  
 pin 57: F ROM Add 11: O : F ROM Address output.  
 pin 58: F ROM Add 10: O : F ROM Address output.  
 pin 59: F ROM Add 9: O : F ROM Address output.  
 pin 60: VCC : - : Positive supply voltage.  
 pin 61: F ROM Add 8: O : F ROM Address output.  
 pin 62: VSS : - : Negative supply voltage.  
 pin 63: F ROM Add 7: O : F ROM Address output.  
 pin 64: F ROM Add 6: O : F ROM Address output.

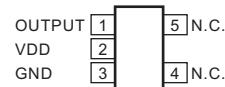
pin 65: F ROM Add 5: O : F ROM Address output.  
 pin 66: F ROM Add 4: O : F ROM Address output.  
 pin 67: F ROM Add 3: O : F ROM Address output.  
 pin 68: F ROM Add 2: O : F ROM Address output.  
 pin 69: F ROM Add 1: O : F ROM Address output.  
 pin 70: F ROM Add 0: O : F ROM Address output.  
 pin 71: NU :IN: Not in use.  
 pin 72: NU :IN: Not in use.  
 pin 73: NU :IN: Not in use.  
 pin 74: NU :IN: Not in use.  
 pin 75: NU :IN: Not in use.  
 pin 76: NU :IN: Not in use.  
 pin 77: NU :IN: Not in use.  
 pin 78: NU :IN: Not in use.  
 pin 79: F ROM Data 7 :I/O: F ROM Data input/output.  
 pin 80: F ROM Data 6 :I/O: F ROM Data input/output.  
 pin 81: F ROM Data 5 :I/O: F ROM Data input/output.  
 pin 82: F ROM Data 4 :I/O: F ROM Data input/output.  
 pin 83: F ROM Data 3 :I/O: F ROM Data input/output.  
 pin 84: F ROM Data 2 :I/O: F ROM Data input/output.  
 pin 85: F ROM Data 1 :I/O: F ROM Data input/output.  
 pin 86: F ROM Data 0 :I/O: F ROM Data input/output.  
 pin 87: NU :IN: Not in use.  
 pin 88: NU :IN: Not in use.  
 pin 89: NU :IN: Not in use.  
 pin 90: NU :IN: Not in use.  
 pin 91: NU :IN: Not in use.  
 pin 92: DISP OFF :O : The display OFF signal output.  
 pin 93: NU :IN: Not in use.  
 pin 94: A VSS : - : Analog ground.  
 pin 95: AUT DIMM :IN: The automatic dimmer signal input.  
 pin 96: VREFI :IN: The reference voltage input.  
 pin 97: A VCC : - : Positive supply voltage for the internal analog section.  
 pin 98: NU :IN: Not in use.  
 pin 99: NU :IN: Not in use.  
 pin 100: NU :IN: Not in use.



## 1.Terminal Description

pin 1: VDD : - : Positive supply voltage.  
 pin 2: NU : - : Not in use.  
 pin 3: NU : - : Not in use.  
 pin 4: 68\_80X : IN: MPU interface setting.  
 pin 5: ECKL : IN: The clock selection.  
 pin 6: DIV 0 : IN: Clock dividing setting.  
 pin 7: DIV 1 : IN: Clock dividing setting.  
 pin 8: CKL IN : IN: External clock pulse input.  
 pin 9: NU : - : Not in use.  
 pin 10: VDD : - : Positive supply voltage.  
 pin 11: GND : - : Ground.  
 pin 12: X OUT : O : Crystal connection.  
 pin 13: X IN : IN: Crystal connection.  
 pin 14: VDD : - : Positive supply voltage.  
 pin 15: GND : - : Ground.  
 pin 16: NU : - : Not in use.  
 pin 17: NU : - : Not in use.  
 pin 18: NU : - : Not in use.  
 pin 19: NU : - : Not in use.  
 pin 20: NU : - : Not in use.  
 pin 21: NU : - : Not in use.  
 pin 22: NU : - : Not in use.  
 pin 23: NU : - : Not in use.  
 pin 24: NU : - : Not in use.  
 pin 25: VDD : - : Positive supply voltage.  
 pin 26: GND : - : Ground.  
 pin 27: CHIP SEL : O : The chip select signal output.  
 pin 28: CEO : O : Chip enable output.  
 pin 29: WRITE ENBL : O : The write enable signal output.  
 pin 30: GND : - : Ground.  
 pin 31: I/O 1 : I/O: Data input/output.  
 pin 32: I/O 2 : I/O: Data input/output.  
 pin 33: I/O 3 : I/O: Data input/output.  
 pin 34: I/O 4 : I/O: Data input/output.  
 pin 35: I/O 5 : I/O: Data input/output.  
 pin 36: I/O 6 : I/O: Data input/output.  
 pin 37: I/O 7 : I/O: Data input/output.  
 pin 38: I/O 8 : I/O: Data input/output.  
 pin 39: VDD : - : Positive supply voltage.  
 pin 40: HA 0 : O : Host address bus.  
 pin 41: HA 1 : O : Host address bus.  
 pin 42: HA 2 : O : Host address bus.  
 pin 43: HA 3 : O : Host address bus.  
 pin 44: HA 4 : O : Host address bus.  
 pin 45: HA 5 : O : Host address bus.  
 pin 46: HA 6 : O : Host address bus.  
 pin 47: HA 7 : O : Host address bus.  
 pin 48: HA 8 : O : Host address bus.  
 pin 49: NU : - : Not in use.  
 pin 50: GND : - : Ground.  
 pin 51: VDD : - : Positive supply voltage.  
 pin 52: VA 0 : O : Address bus.  
 pin 53: VA 1 : O : Address bus.  
 pin 54: VA 2 : O : Address bus.  
 pin 55: VA 3 : O : Address bus.  
 pin 56: VA 4 : O : Address bus.  
 pin 57: VA 5 : O : Address bus.  
 pin 58: VA 6 : O : Address bus.  
 pin 59: VA 7 : O : Address bus.  
 pin 60: VA 8 : O : Address bus.  
 pin 61: VA 9 : O : Address bus.  
 pin 62: GND : - : Ground.  
 pin 63: M4 : O : The pulse output to change drive-signal to AC.  
 pin 64: VDD : - : Positive supply voltage.  
 pin 65: M16 : O : The pulse output to change drive-signal to AC.

pin 66: FLM : O : Start pulse output for the common.  
 pin 67: M : O : The pulse output to change drive-signal to AC.  
 pin 68: CL 1 C : O : Shift clock output for the common.  
 pin 69: CL 1 S : O : Shift clock output for the segment.  
 pin 70: CL 2 : O : Data clock output for the segment.  
 pin 71: LCD 0 : O : Data pulse output for the segment.  
 pin 72: LCD 1 : O : Data pulse output for the segment.  
 pin 73: LCD 2 : O : Data pulse output for the segment.  
 pin 74: LCD 3 : O : Data pulse output for the segment.  
 pin 75: VDD : - : Positive supply voltage.  
 pin 76: GND : - : Ground.  
 pin 77: NU : - : Not in use.  
 pin 78: NU : - : Not in use.  
 pin 79: NU : - : Not in use.  
 pin 80: NU : - : Not in use.  
 pin 81: NU : - : Not in use.  
 pin 82: NU : - : Not in use.  
 pin 83: NU : - : Not in use.  
 pin 84: NU : - : Not in use.  
 pin 85: CS 1 : IN: The chip select command input.  
 pin 86: VDD : - : Positive supply voltage.  
 pin 87: RESET : IN: Reset signal input.  
 pin 88: RDI(E) : IN: Read command input.(Enable clock input.)  
 pin 89: WRITE(W/R) : IN: Write control signal input.(Read control signal input.)  
 pin 90: A 0 : IN: The data flag input.  
 pin 91: GND : - : Ground.  
 pin 92: D 0 : I/O: The data signal input/output.  
 pin 93: D 1 : I/O: The data signal input/output.  
 pin 94: D 2 : I/O: The data signal input/output.  
 pin 95: D 3 : I/O: The data signal input/output.  
 pin 96: D 4 : I/O: The data signal input/output.  
 pin 97: D 5 : I/O: The data signal input/output.  
 pin 98: D 6 : I/O: The data signal input/output.  
 pin 99: D 7 : I/O: The data signal input/output.  
 pin 100: GND : - : Ground.



## Terminal description

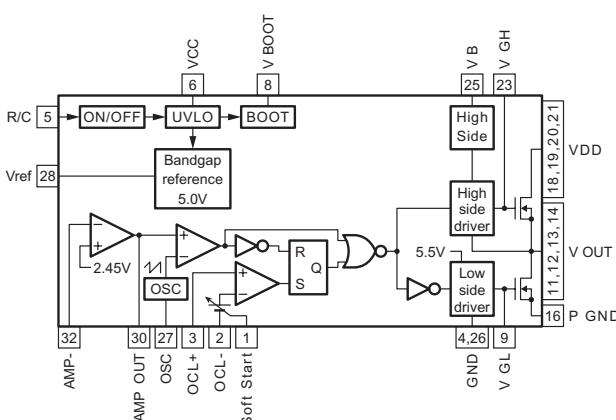
pin 1: OUTPUT : N channel open drain output, positive logic.  
 pin 2: VDD : Positive supply voltage.  
 pin 3: GND : Ground.  
 pin 4: NC : Not in use.  
 pin 5: NC : Not in use.

## 1.Terminal Description

pin 1: OSC 1 : External resistor connection.  
 pin 2: OSC 2 : External resistor connection or External clock pulse input.  
 pin 3: RST\_/CKO : Reset signal input and 2/3 clock pulse output.  
 pin 4: RD : Trigger pulse output for reading-out the VOUT of each band.  
 pin 5: VSS : Ground.  
 pin 6: V OUT : Peak voltage of each band output.  
 pin 7: A IN : Audio signal input.  
 pin 8: VDD : Positive power supply.

## 1.Terminal Description

pin 1: LFLT	:IN: The capacitor and the resistor connection terminal for PLL.	pin 60: I/O 2	:I/O: Data input/output.
pin 2: A VSS	: - : Analog ground.	pin 61: I/O 3	:I/O: Data input/output.
pin 3: A VDD	: - : Positive supply voltage for the Analog section.	pin 62: I/O 4	:I/O: Data input/output.
pin 4: INIT RESET	:IN: The initial reset input.	pin 63: I/O 5	:I/O: Data input/output.
pin 5: CODEC RESET	:IN: The CODEC reset input.	pin 64: I/O 6	:I/O: Data input/output.
pin 6: DSP RESET	:IN: DSP reset input.	pin 65: I/O 7	:I/O: Data input/output.
pin 7: S MUTE	:IN: The soft muting command input.	pin 66: D VDD	: - : Positive supply voltage for the digital section.
pin 8: B VSS	: - : Ground for the bus interface section.	pin 67: D VSS	: - : Digital ground.
pin 9: PLL	:IN: Open or Connect to DVSS usually.	pin 68: TEST	: - : For the Test.
pin 10: CKS	:IN: The clock pulse selection.	pin 69: TEST	: - : For the Test.
pin 11: S Data in A	:IN: DSP serial data input. Open or connect to DVSS usually.	pin 70: B VSS	: - : Ground.
pin 12: S Data in 1	:IN: DSP serial data input.	pin 71: A OUT 3 R-	:O: Inverted Right channel audio signal output of DAC-3.
pin 13: S Data in 2	:IN: DSP serial data input.	pin 72: A OUT 3 R+	:O: Non-inverted Right channel audio signal output of DAC-3.
pin 14: S Data out 1	:O: DSP serial data output.	pin 73: NU	: - : Not in use.
pin 15: S Data out 2	:O: DSP serial data output.	pin 74: A OUT 3 L-	:O: Inverted Left channel audio signal output of DAC-3.
pin 16: S Data out 3/AD: O	:O: DSP/ADC serial data output.	pin 75: A OUT 3 L+	:O: Non-inverted Left channel audio signal output of DAC-3.
pin 17: S D OUT	:O: The serial data output.	pin 76: A OUT 2 R-	:O: Inverted Right channel audio signal output of DAC-2.
pin 18: LR CK I/O	:I/O: SMODE(pin20) = L : 1fs clock input. SMODE(pin20) = H : 1fs clock output.	pin 77: A OUT 2 R+	:O: Non-inverted Right channel audio signal output of DAC-2.
pin 19: BIT CLK	:I/O: SMODE(pin20) = L : 64fs clock input. SMODE(pin20) = H : 64fs clock output.	pin 78: NU	: - : Not in use.
pin 20: S MODE	:IN: Slave master selection.	pin 79: A OUT 2 L-	:O: Inverted Left channel audio signal output of DAC-2.
pin 21: Clock Out	:O: Clock Out.	pin 80: A OUT 2 L+	:O: Non-inverted Left channel audio signal output of DAC-2.
pin 22: D VSS	: - : Digital ground.	pin 81: NU	: - : Not in use.
pin 23: D VDD	: - : Positive supply voltage for the digital section.	pin 82: A OUT 1 R-	:O: Inverted Right channel audio signal output of DAC-1.
pin 24: XT I	:IN: Oscillation terminal.	pin 83: A OUT 1 R+	:O: Non-inverted Right channel audio signal output of DAC-1.
pin 25: XT O	:O: Oscillation terminal.	pin 84: NU	: - : Not in use.
pin 26: JX	:IN: External jumping signal input.	pin 85: A OUT 1 L-	:O: Inverted Left channel audio signal output of DAC-1.
pin 27: RQ	:IN: The request signal input from the master side.	pin 86: A OUT 1 L+	:O: Non-inverted Left channel audio signal output of DAC-1.
pin 28: S CLK	:IN: Sift clock input.	pin 87: Vr DAC Low	:IN: The reference voltage input.
pin 29: SI	:IN: Serial data input.	pin 88: A VSS	: - : Analog ground.
pin 30: SO	:O: Serial data output.	pin 89: A VSS	: - : Analog ground.
pin 31: Write Ready	:O: Write ready flag output.	pin 90: A VDD	: - : Positive supply voltage for the Analog section.
pin 32: Data Ready	:O: Data output ready flag output.	pin 91: Vr DAC High	:IN: The reference voltage input.
pin 33: CAS	:O: The column address strobe output to DRAM.	pin 92: NU	: - : Not in use.
pin 34: RAS	:O: The row address strobe output to DRAM.	pin 93: Vr ADC Low	:IN: The reference voltage input.
pin 35: WRITE ENBL	:O: The write enable signal output.	pin 94: A VSS	: - : Analog ground.
pin 36: D VDD	: - : Positive supply voltage for the digital section.	pin 95: A VDD	: - : Positive supply voltage for the Analog section.
pin 37: D VSS	: - : Digital ground.	pin 96: Vr ADC High	:IN: The reference voltage input.
pin 38: A 0	:O: Address signal output.	pin 97: A IN R-	:IN: Inverted Right channel audio signal input.
pin 39: A 1	:O: Address signal output.	pin 98: A IN R+	:IN: Non-inverted Right channel audio signal input.
pin 40: A 2	:O: Address signal output.	pin 99: A IN L-	:IN: Inverted Left channel audio signal input.
pin 41: A 3	:O: Address signal output.	pin100: A IN L+	:IN: Non-inverted Left channel audio signal input.
pin 42: A 4	:O: Address signal output.		
pin 43: A 5	:O: Address signal output.		
pin 44: A 6	:O: Address signal output.		
pin 45: A 7	:O: Address signal output.		
pin 46: A 8	:O: Address signal output.		
pin 47: A 9	:O: Address signal output.		
pin 48: A 10	:O: Address output to the external DRAM.		
pin 49: A 11	:O: Address output to the external DRAM.		
pin 50: A 12	:O: Address signal output.		
pin 51: A 13	:O: Address signal output.		
pin 52: A 14	:O: Address signal output.		
pin 53: A 15	:O: Address signal output.		
pin 54: A 16	:O: Address signal output.		
pin 55: D VDD	: - : Positive supply voltage for the digital section.		
pin 56: D VSS	: - : Digital ground.		
pin 57: OUT ENABLE	:O: The output enable command output.		
pin 58: I/O 0	:I/O: Data input/output.		
pin 59: I/O 1	:I/O: Data input/output.		



## Terminal Description

pin 1: SS	: - : Connect a capacitor for soft start.
pin 2: OCL-	: IN: Over current detection.
pin 3: OCL+	: IN: Over current detection.
pin 4: GND	: - : Signal ground.
pin 5: R/C	: IN: Remote control signal input.
pin 6: VCC	: - : Power supply terminal for control section.
pin 7: N.C.	: - : No connection.
pin 8: V BOOT	: - : High side drive supply for main MOS-FET.
pin 9: V GL	: - : The gate terminal of the low side MOS-FET.
pin 10: N.C.	: - : No connection.
pin 11: V OUT	: O : Power stage output terminal.
pin 12: V OUT	: O : Power stage output terminal.
pin 13: V OUT	: O : Power stage output terminal.
pin 14: V OUT	: O : Power stage output terminal.
pin 15: N.C.	: - : No connection.
pin 16: P GND	: - : Power ground.
pin 17: N.C.	: - : No connection.
pin 18: VDD	: - : Power supply for the power stage.
pin 19: VDD	: - : Power supply for the power stage.
pin 20: VDD	: - : Power supply for the power stage.
pin 21: VDD	: - : Power supply for the power stage.
pin 22: N.C.	: - : No connection.
pin 23: V GH	: - : The gate terminal of the high side MOS-FET.
pin 24: N.C.	: - : No connection.
pin 25: V B	: - : Terminal for bootstrap. Bootstrap capacitor between VB and VOUT. Supply for high side circuit.
pin 26: GND	: - : Signal ground.
pin 27: OSC	: - : The resistor connection to set the frequency of oscillation.
pin 28: Vref	: - : The reference voltage output terminal.
pin 29: N.C.	: - : No connection.
pin 30: AMP OUT	: O : The output terminal of the internal OP amp.
pin 31: N.C.	: - : No connection.
pin 32: AMP -	: IN: The inverted input terminal of the internal OP amp.

## 1.Terminology

pin 1: REQUEST	: O : The request signal output.
pin 2: S DATA IN	: IN: The serial data input.
pin 3: NU	: O : Not in use.
pin 4: CN VSS	: IN: Connect to VSS.
pin 5: NU	: O : Not in use.
pin 6: NU	: O : Not in use.
pin 7: RESET	: IN: Reset signal input.
pin 8: X OUT	: O : Crystal connection.
pin 9: VSS	: - : Negative supply voltage.
pin 10: X IN	: IN: Crystal connection.
pin 11: VCC	: - : Positive supply voltage.
pin 12: NU	: O : Not in use.
pin 13: NU	: IN: Not in use.
pin 14: NU	: IN: Not in use.
pin 15: NU	: O : Not in use.
pin 16: Key I 3	: IN: Key scan signal input.
pin 17: Key O 2	: O : Key scan output terminal.
pin 18: NU	: - : Not in use.
pin 19: Key O 1	: O : Key scan output terminal.
pin 20: Key I 2	: IN: Key scan signal input.
pin 21: Key I 1	: IN: Key scan signal input.
pin 22: Key I 0	: IN: Key scan signal input.
pin 23: Key O 0	: O : Key scan output terminal.
pin 24: NU	: O : Not in use.
pin 25: NU	: O : Not in use.
pin 26: NU	: O : Not in use.
pin 27: NU	: O : Not in use.
pin 28: TPW	: IN: Touch panel wake input.
pin 29: PA	: O : Connect to pin 28 by a resistor.
pin 30: CHK	: O : The touch panel control output.
pin 31: VCC	: - : Positive supply voltage.
pin 32: NU	: O : Not in use.
pin 33: VSS	: - : Negative supply voltage.
pin 34: NU	: O : Not in use.
pin 35: IVCC	: - : Smoothing capacitor connection.
pin 36: Y R IN	: IN: Touch panel co-ordinates input.
pin 37: X R IN	: IN: Touch panel co-ordinates input.
pin 38: Y G IN	: IN: Touch panel co-ordinates input.
pin 39: X G IN	: IN: Touch panel co-ordinates input.
pin 40: VREFI	: IN: The reference voltage input.
pin 41: NU	: - : Not in use.
pin 42: NU	: - : Not in use.
pin 43: NU	: - : Not in use.
pin 44: Y+	: O : Touch panel co-ordinates output.
pin 45: X+	: O : Touch panel co-ordinates output.
pin 46: Y-	: O : Touch panel co-ordinates output.
pin 47: X-	: O : Touch panel co-ordinates output.
pin 48: S DATA O	: O : The serial data output.

## 1. Terminal Description

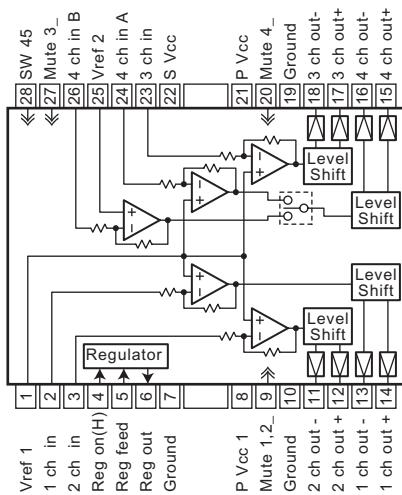
pin 1: Address 15 :IN: Address signal input.  
 pin 2: Address 14 :IN: Address signal input.  
 pin 3: Address 13 :IN: Address signal input.  
 pin 4: Address 12 :IN: Address signal input.  
 pin 5: Address 11 :IN: Address signal input.  
 pin 6: Address 10 :IN: Address signal input.  
 pin 7: Address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

## 1.Terminal Description

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

## 1.Terminal Description

pin 1: OE : IN: Output enable signal input.  
 pin 2: A 11 : IN: Address signal input.  
 pin 3: A 9 : IN: Address signal input.  
 pin 4: A 8 : IN: Address signal input.  
 pin 5: A 13 : IN: Address signal input.  
 pin 6: WE : IN: Write enable signal input.  
 pin 7: VCC : - : Positive supply voltage.  
 pin 8: A 14 : IN: Address signal input.  
 pin 9: A 12 : IN: Address signal input.  
 pin 10: A 7 : IN: Address signal input.  
 pin 11: A 6 : IN: Address signal input.  
 pin 12: A 5 : IN: Address signal input.  
 pin 13: A 4 : IN: Address signal input.  
 pin 14: A 3 : IN: Address signal input.  
 pin 15: A 2 : IN: Address signal input.  
 pin 16: A 1 : IN: Address signal input.  
 pin 17: A 0 : IN: Address signal input.  
 pin 18: DQ 0 : I/O: Data signal input/output.  
 pin 19: DQ 1 : I/O: Data signal input/output.  
 pin 20: DQ 2 : I/O: Data signal input/output.  
 pin 21: GND : - : Ground.  
 pin 22: DQ 3 : I/O: Data signal input/output.  
 pin 23: DQ 4 : I/O: Data signal input/output.  
 pin 24: DQ 5 : I/O: Data signal input/output.  
 pin 25: DQ 6 : I/O: Data signal input/output.  
 pin 26: DQ 7 : I/O: Data signal input/output.  
 pin 27: CE : IN: Chip enable signal input.  
 pin 28: A 10 : IN: Address signal input.

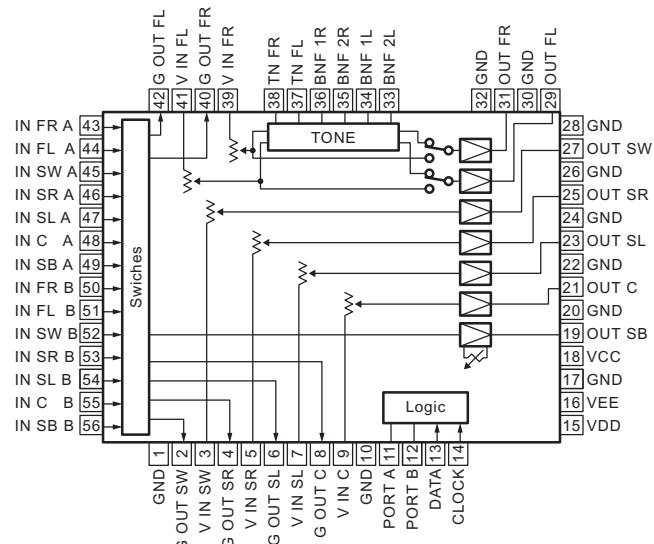


## Function Table

SW45 in (pin 28)	Mute1,2_ in (pin 9)	Mute 3_ in (pin 27)	Mute 4_ out (pin 20)	1 ch out (pin13,14)	2 ch out (pin11,12)	3 ch out (pin17,18)	4 ch (pin15,16)
H	H	H	x	ON	ON	ON	ON A
H	H	L	x	ON	ON	OFF	ON A
H	L	H	x	OFF	OFF	ON	OFF
H	L	L	x	OFF	OFF	OFF	OFF
L	x	x	H	OFF	OFF	OFF	ON B
L	x	x	L	OFF	OFF	OFF	OFF

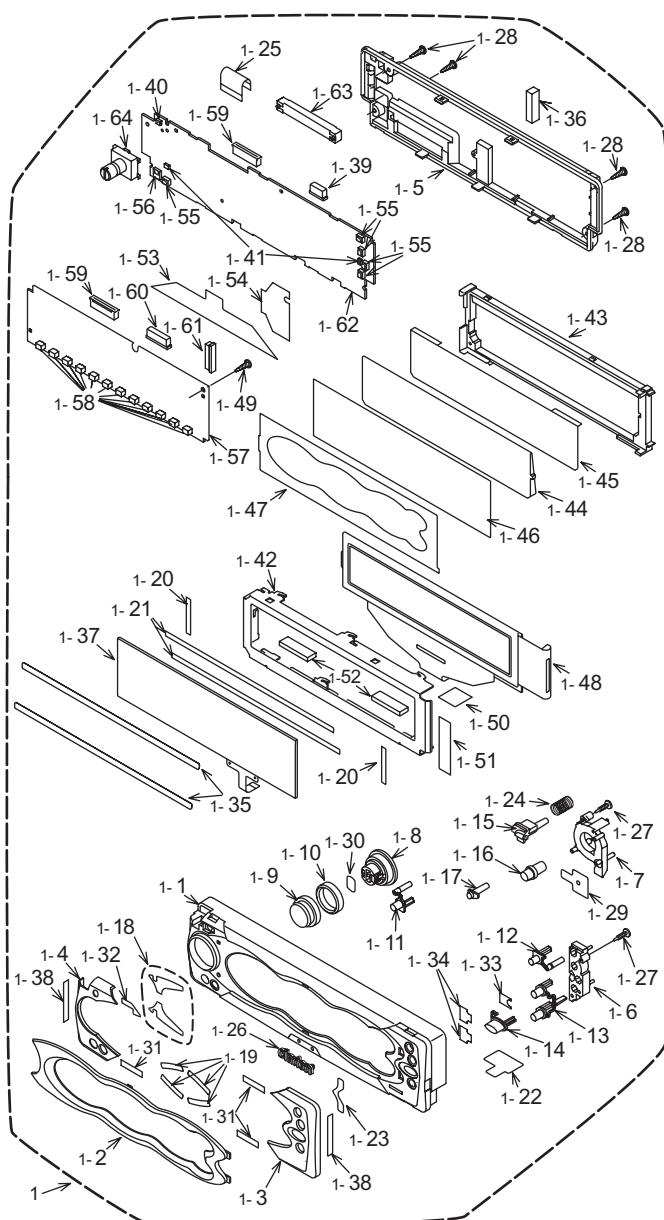
## 1.Terminal Description

pin 1 : NU : Not in use.  
 pin 2 : PWR GND 2 : Power ground terminal 2.  
 pin 3 : OUT 2- : Inverted power output terminal 2.  
 pin 4 : STANDBY : Standby signal input terminal.  
 pin 5 : OUT 2+ : Non inverted power output terminal 2.  
 pin 6 : VCC : Positive supply voltage.  
 pin 7 : OUT 1- : Inverted power output terminal 1.  
 pin 8 : PWR GND 1 : Power ground terminal 1.  
 pin 9 : OUT 1+ : Non inverted power output terminal 1.  
 pin 10: R.Fil. : Connect the capacitor.  
 pin 11: IN 1 : Audio signal input terminal 1.  
 pin 12: IN 2 : Audio signal input terminal 2.  
 pin 13: Pre GND : Pre-Ground.  
 pin 14: IN 4 : Audio signal input terminal 4.  
 pin 15: IN 3 : Audio signal input terminal 3.  
 pin 16: On Time Mute : On Time Mute control.  
 pin 17: OUT 3+ : Non inverted power output terminal 3.  
 pin 18: PWR GND 3 : Power ground terminal 3.  
 pin 19: OUT 3- : Inverted power output terminal 3.  
 pin 20: VCC : Positive supply voltage.  
 pin 21: OUT 4+ : Non inverted power output terminal 4.  
 pin 22: MUTE : Mute signal input terminal.  
 pin 23: OUT 4- : Inverted power output terminal 4.  
 pin 24: PWR GND 4 : Power ground terminal 4.  
 pin 25: CLIP DET : Clip detection.



# EXPLODED VIEW • PARTS LIST

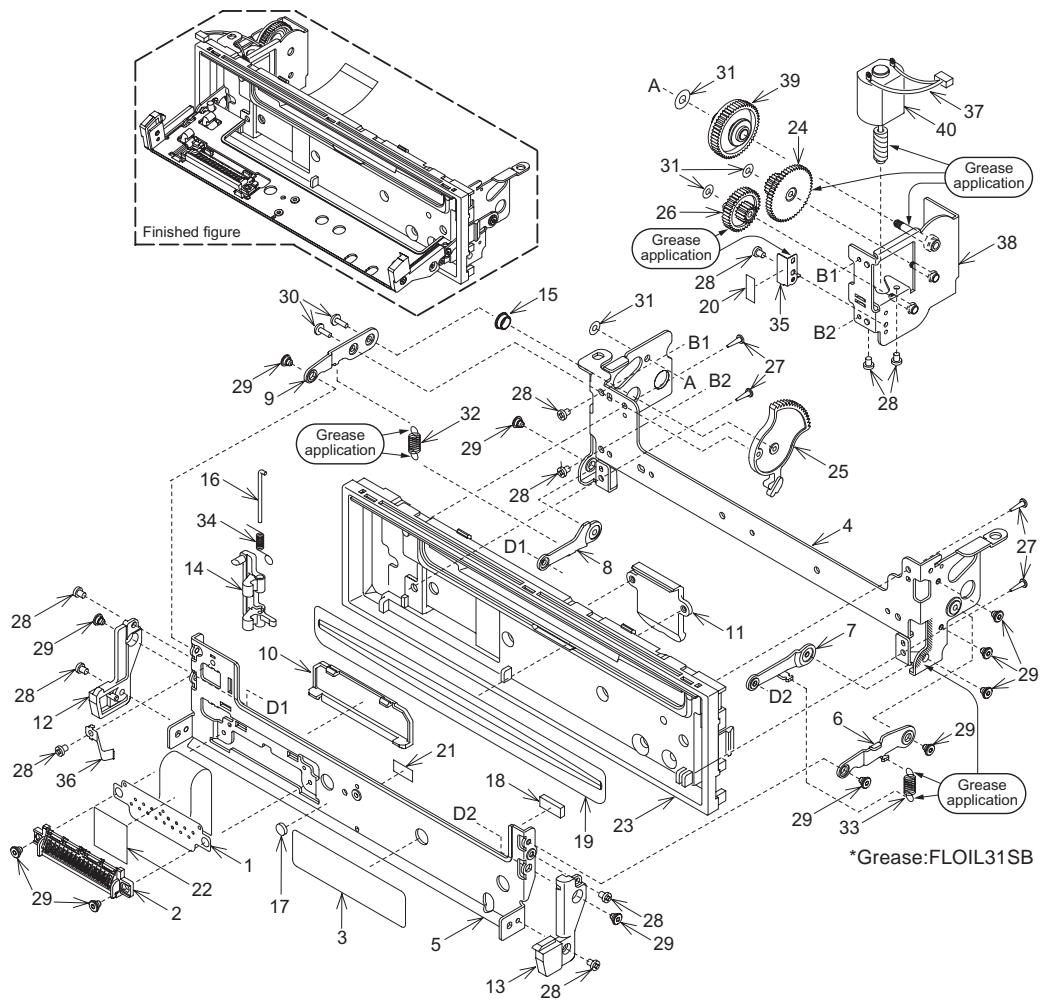
## DCP section



NO.	PART NO.	DESCRIPTION	Q'TY
1	DCP-492-600 DCP-490-800	DCP ASSY (PE2635BA) DCP ASSY (PE2635KA/B)	1
1-1	370-6074-00 370-6074-03	ESCUOTCHEON(PE2635BA) ESCUOTCHEON(PE2635KA/B)	1
1-2	371-5777-00	TRIM PLATE	1
1-3	371-5758-00 371-5758-02	FACE PANEL-R(PE2635BA) FACE PANEL-R(PE2635KA/B)	1
1-4	371-5759-00 371-5759-02	FACE PANEL-L(PE2635BA) FACE PANEL-L(PE2635KA/B)	1
1-5	335-7059-00	REAR-CVR	1
1-6	335-7060-00	ILLUMI PLATE(R)	1
1-7	335-7061-00	ILLUMI PLATE(L)	1
1-8	380-5574-00	INNER KNOB	1
1-9	380-5575-00	KNOB	1
1-10	345-5355-00	RUBBER RING	1
1-11	382-6789-00	BUTTON(ENT)	1
1-12	382-6790-00	BUTTON(EJECT)	1
1-13	382-6791-00	BUTTON(ADJ/ISR)	1

NO.	PART NO.	DESCRIPTION	Q'TY
1-14	382-6792-00	BUTTON(SOUND)	1
1-15	382-6793-00 382-6793-01	BUTTON(REL)(PE2635BA) BUTTON(REL)(PE2635KA/B)	1
1-16	335-7063-00	IR-FILTER	1
1-17	335-7064-00	LENS	1
1-18	347-7189-00	DOUBLE FACE(TRIM/L)	1
1-19	347-7190-00	DOUBLE FACE(TRIM/C)	4
1-20	347-7193-00	DOUBLE FACE(T/P)	2
1-21	347-7194-00	SPACER(T/P)	2
1-22	347-7195-00	SURGE FILM(R)	1
1-23	347-7188-00	DOUBLE FACE(TRIM/R)	1
1-24	750-6720-00	SPRING (REL)	1
1-25	816-2641-50	FLAT WIRE(LCD/SW)	1
1-26	378-0537-00	BADGE	1
1-27	716-0872-01	PAD SCREW(M1.7x6)	2
1-28	716-0872-12	PAD SCREW(M1.7x8)	4
1-29	347-7196-00	SURGE FILM(L)	1
1-30	347-7200-00	DOUBLE FACE(KNOB)	1
1-31	347-7191-00	DOUBLE FACE	3
1-32	347-7192-00	DOUBLE FACE	1
1-33	347-7198-00	SHADE(ILLUMI R)	1
1-34	347-7199-00	SHADE(ES)	2
1-35	347-7197-00	SPACER(ES)	2
1-36	345-8647-00	CUSHION	1
1-37	013-9709-00	SWITCH ASSY(T/P)	1
1-38	347-7215-00	DOUBLE FACE(FACE SIDE)	2
1-39	074-1158-54	OUTLET SOCKET(4P)	1
1-40	060-4011-80	PHOTO-TR	1
1-41	001-7040-91	DIODE	2
1-42	331-3698-00	LCD-CVR	1
1-43	335-7065-00	LCD HOLDER	1
1-44	335-7066-00	ILLUMI PLATE	1
1-45	347-7201-00	REFLECTOR	1
1-46	347-7202-00	LCD FILM	1
1-47	347-7203-00	BLACK FILM	1
1-48	379-1299-81	LCD	1
1-49	716-0872-20	PAD SCREW(M1.7x4)	1
1-50	347-7204-00	PROTECT SHEET(T/P FPC)	1
1-51	347-7205-00	PROTECT SHEET(COM FPC)	1
1-52	345-5430-00	CUSHION(SEG FPC)	2
1-53	347-7206-00	SPACER(SEG FPC)	1
1-54	347-7207-00	SPACER(COM FPC)	1
1-55	013-6312-50	SWITCH	5
1-56	060-4017-90	IR-RECIEVER	1
1-57	-----	LCD PWB	1
1-58	001-7078-90	DIODE	12
1-59	074-1239-75	OUTLET SOCKET(25P)	2
1-60	074-1239-80	OUTLET SOCKET(30P)	1
1-61	074-1205-85	OUTLET SOCKET(35P)	1
1-62	-----	SWITCH PWB	1
1-63	076-0647-00	PLUG(16P)	1
1-64	016-6000-00	VR W/SHAFT	1

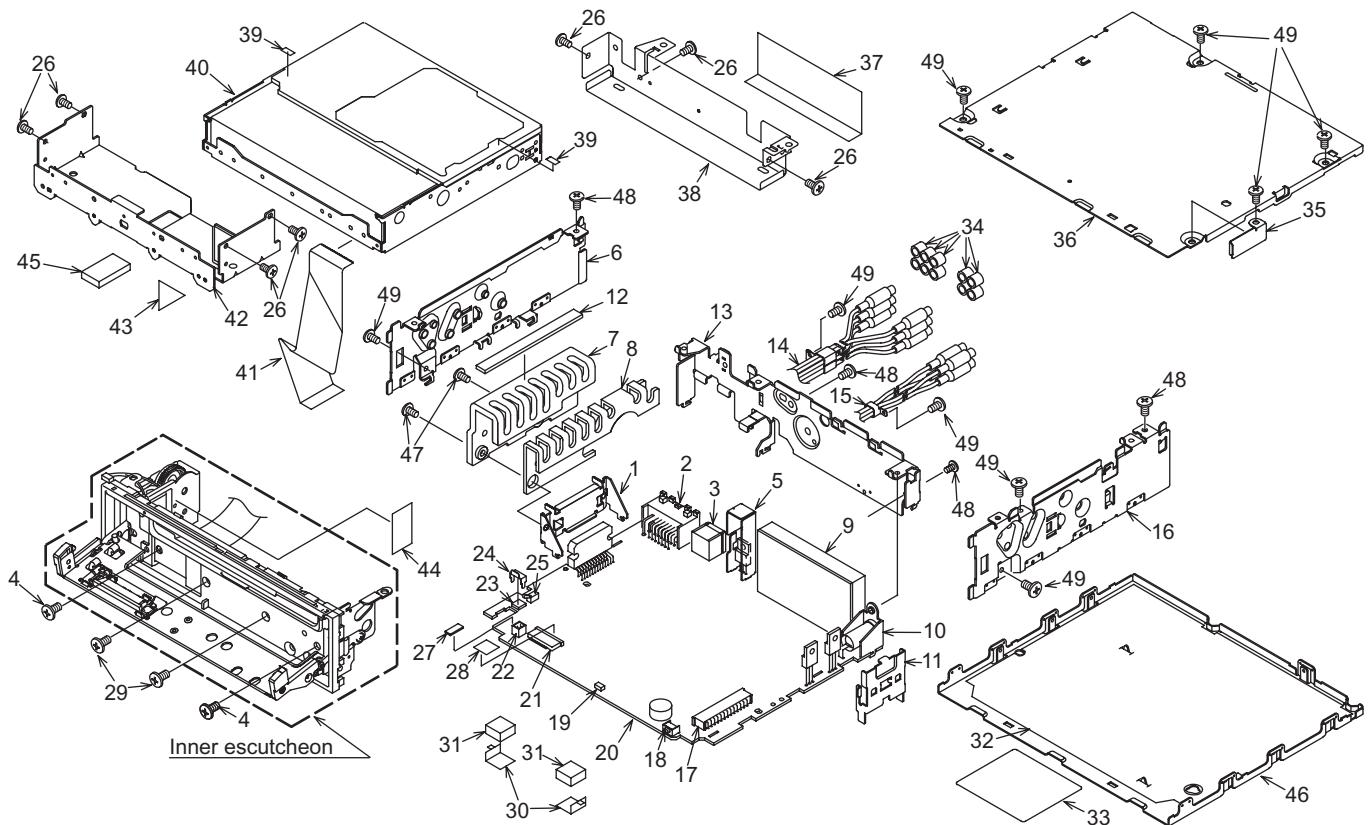
## Inner escutcheon section



NO.	PART NO.	DESCRIPTION	Q'TY
1	039-2409-00	INNER ES FPC (WITHOUT COMPONENT)	1
2	074-1278-01	OUTLET SOKET	1
3	291-0102-00	STICKER	1
4	309-0772-02	FRONT PLATE	1
5	331-3115-01	DCP HOLDER	1
6	331-3117-01	LEVER-UP(R)	1
7	331-3118-01	LEVER-LO(R)	1
8	331-3119-00	LEVER-LO(L)	1
9	331-3120-00	LEVER-UP(L)	1
10	335-6499-00	CN-CVR	1
11	335-6505-00	ILLUMI PLATE	1
12	335-6903-00	ARM-CVR(L)	1
13	335-6904-00	ARM-CVR(R)	1
14	335-7176-00	HOOK	1
15	341-1740-00	ROLLER(ARM)	1
16	341-1802-00	SHAFT	1
17	345-8265-00	CUSHION	1
18	345-8627-00	CUSHION	1
19	346-0150-02	LEATHER SHEET	1
20	347-6275-00	FILM	1
21	347-6527-00	CUSHION	1
22	347-6528-00	INSULATOR	1
23	370-5935-07	ESCUTCHEON	1
24	613-0717-00	INPUT GEAR	1

DXZ945MP  
DXZ946MP

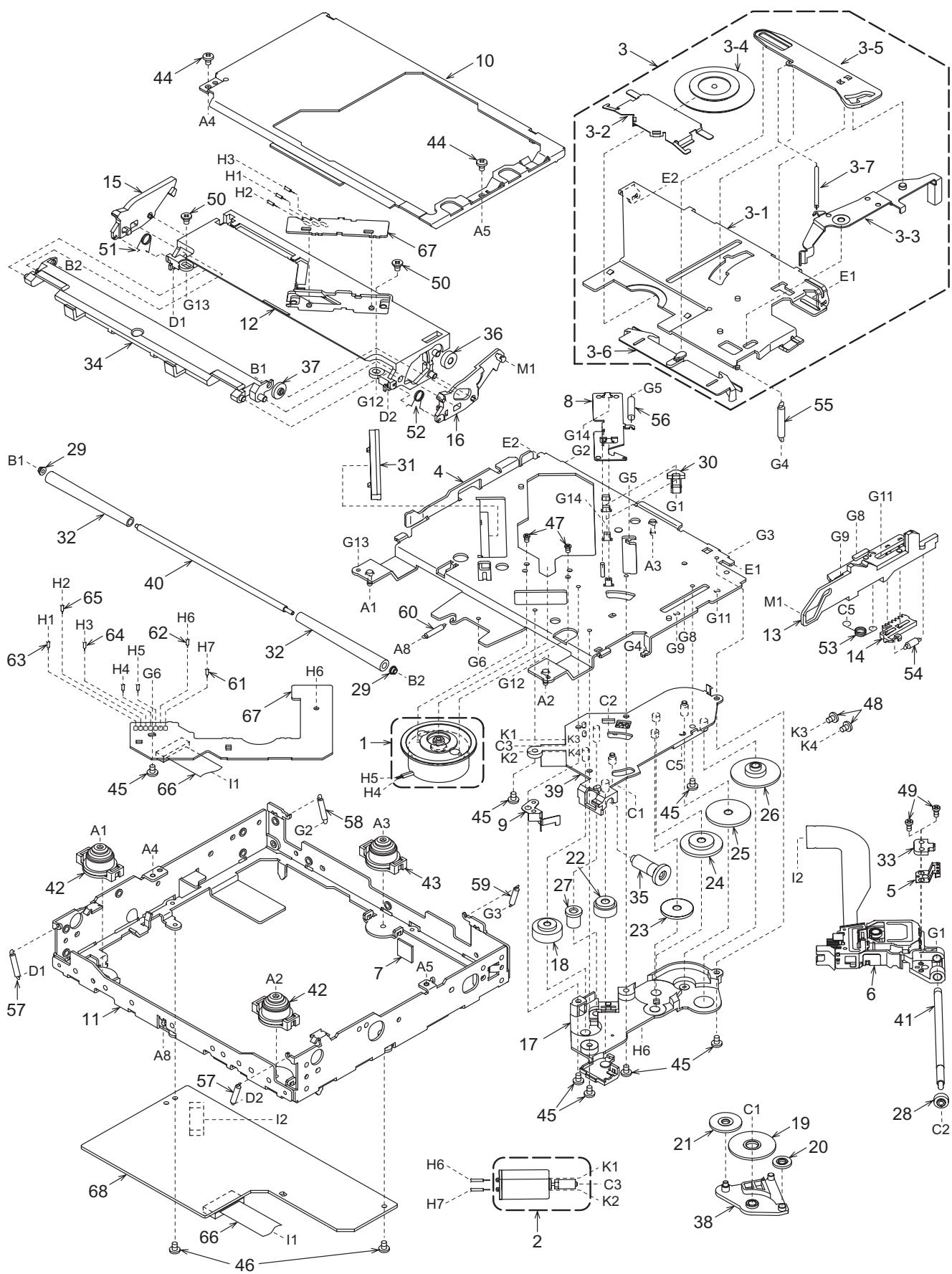
Main section



NO.	PART NO.	DESCRIPTION	Q'TY
1	331-2255-20	IC-HOLDER	1
2	074-1214-00	OUTLET SOCKET(PWR)	1
3	074-1194-00	OUTLET SOCKET(CeNET)	1
4	716-0717-10	STEEL SCREW(M2.3x3)	2
5	313-1781-00	HEAT SINK(TR)	1
6	305-0274-01	SIDE-CVR(L)	1
7	313-1844-01	HEAT SINK	1
8	313-1845-00	HEAT SINK	1
9	880-2090B	TUNER PACK	1
10	092-4000-51	ANT-RECEPT	1
11	313-1651-21	HEAT SINK(TR)	1
12	345-5441-00	HEAT RUBBER	1
13	307-0699-00	REAR-CVR	1
14	855-5424-50	RCA PIN CORD(6CH)	1
15	855-5493-50	RCA PIN CORD(4CH)	1
16	305-0275-00	SIDE-CVR(R)	1
17	074-1138-70	OUTLET SOCKET(CD)	1
18	013-6103-00	TACT SWITCH(RESET)	1
19	001-7011-94	DIODE	1
20	-----	MAIN PWB	1
21	074-1198-68	OUTLET SOCKET(SW)	1
22	076-0312-02	PLUG(MOTOR)	1
23	013-7206-50	DETECTOR SWITCH	1
24	331-3378-00	SW-HOLDER(OPEN-SW)	1
25	013-7106-00	DETECTOR SWITCH	1

NO.	PART NO.	DESCRIPTION	Q'TY
26	714-2603-80	MACHINE SCREW(M2.6x3)	7
27	345-8701-00	CUSHION	1
28	347-6215-00	SPACER-FILM	1
29	780-2005-00	SPECIAL SCREW	2
30	347-7210-00	E-SHEET	2
31	347-7211-00	CUSHION	2
32	347-7209-00	INSULATOR	1
33	286-6361-00 286-6414-00 286-6415-00	SETPLATE(PE2635BA) SETPLATE(PE2635KA) SETPLATE(PE2635KB)	1
34	345-3799-20	RUBBER CAP	10
35	331-2744-00	STOPPER	1
36	303-0472-05	UPPER-CVR	1
37	347-6705-00	INSULATOR(R)	1
38	331-3324-00	CD-SUB-BRKT(REA)	1
39	347-6821-00	SPACER FILM	2
40	929-0300-80	CD-MECH-MODULE	1
41	816-2643-50	FLAT WIRE(MECH/MAIN)	1
42	331-3581-00	MECH-BRKT(F)	1
43	347-7017-00	DOUBLE FACE	1
44	347-6536-00	PROTECT SHEET	1
45	345-5318-00	CUSHION(MECH-BRKT)	1
46	304-0460-01	LOWER-CVR	1
47	731-3008-87	TAPTRIGHT(M3x8)	2
48	714-3006-81	MACHINE SCREW(M3x6)	4
49	731-3006-80	TAPTRIGHT(M3x6)	9

## CD mechanism section



NO.	PART NO.	DESCRIPTION	Q'TY
1	SMA-182-100	SPD-MOTOR-ASSY	1
2	SMA-183-100	POW-MOTOR-ASSY	1
3	HBS-524-100	CLAMP-SUB-ASSY	1
3-1	620-1022-25	CLAMPER LINK	1
3-2	620-1023-23	CLAMPER PLATE	1
3-3	620-1024-23	SENSOR ARM	1
3-4	621-0626-21	STOPPER LINK	1
3-5	621-0627-21	DISC STOPPER	1
3-6	621-0708-20	CLAMPER RING	1
3-7	750-3471-20	SENSOR SPRING	1
4	966-0595-25	DRIVE-PLT-ASSY	1
5	966-0638-20	SH-RACK-ASSY	1
6	969-0065-31	PICK UP-ASSY	1
7	345-8704-20	CUSHION RUBBER	1
8	620-1025-22	ID-LOCK PLATE	1
9	620-1026-21	SPRING PLATE	1
10	620-1028-23	UPPER CHASSIS	1
11	620-1585-21	LOWER SHASSIS-W	1
12	621-0598-27	UPPER GUIDE	1
13	621-0600-26	SHIFT LEVER	1
14	621-0601-21	RACK	1
15	621-0602-22	LOCK ARM L	1
16	621-0603-25	LOCK ARM R	1
17	621-0605-22	GEAR COVER	1
18	621-0608-21	SECOND GEAR	1
19	621-0609-20	BASE GEAR	1
20	621-0610-20	IDLE GEAR A	1
21	621-0611-20	IDLE GEAR B	1
22	621-0612-21	ROLLER GEAR A	1
23	621-0616-20	POWER GEAR A	1
24	621-0617-20	POWER GEAR B	1
25	621-0618-20	POWER GEAR C	1
26	621-0619-20	POWER GEAR D	1
27	621-0620-20	THREAD GEAR A	1
28	621-0621-20	THREAD GEAR B	1
29	621-0622-21	ROLLER SLEEVE	2
30	621-0623-23	LS-HOLDER	1
31	621-0624-22	GUIDE RAIL	1
32	621-0629-20	LOADING ROLLER	2
33	621-0709-20	SH-BASE	1
34	621-0718-21	ROLLER GUIDE	1
35	621-0719-20	ROLLER GEAR	1
36	621-0720-20	ROLLER GEAR C	1
37	621-0721-20	ROLLER GEAR D	1
38	621-0723-20	IDLE CASE	1
39	621-0724-21	GEAR BASE	1
40	622-1660-20	ROLLER SHAFT	1
41	624-0018-01	LEAD SCREW	1
42	629-0086-20	DAMPER F	2
43	629-0087-20	DAMPER R	1
44	714-2003-81	MACHINE SCREW(M2x3)	2

NO.	PART NO.	DESCRIPTION	Q'TY
45	716-1507-00	SCREW(M2x3)	7
46	716-1670-00	SCREW(M2x4)	2
47	716-1733-00	SCREW(M1.7x2.3)	2
48	716-3446-00	SCREW(M4.1x2.5)	2
49	716-3469-00	SCREW(phi1.7x4)	2
50	716-3473-00	SCREW(M2x3)	2
51	750-3465-21	ROLLER SPRING L	1
52	750-3466-20	ROLLER SPRING R	1
53	750-3467-21	SHIFT SPRING	1
54	750-3468-20	RACK SPRING	1
55	750-3469-20	CLAMPER SPRING	1
56	750-3470-20	ID-LOCK SPRING	1
57	750-3472-21	DR-SPRING F	2
58	750-3473-20	DR-SPRING RA	1
59	750-3474-20	DR-SPRING RB	1
60	750-3475-21	DR-SPRING C	1
61	803-4906-60	VINYL-COAT-WIRE(ORANGE)	1
62	816-2590-00	EXTENSION LEAD(GREEN)	1
63	816-2591-00	EXTENSION LEAD(YELLOW)	1
64	816-2592-00	EXTENSION LEAD(BLUE)	1
65	816-2593-00	EXTENSION LEAD(PURPLE)	1
66	816-2624-50	FLAT WIRE	1
67	-----	LED PWB	1
68	-----	CD PWB	1

# ELECTRICAL PARTS LIST

## Main PWB(B1) section

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
ANT1	092-4000-51	ANT-RECEPT	C223	168-2232-55	0.022uF	C423	168-1042-78	16V 0.1uF
BL1	880-2090B	TUNER PACK	C224	172-4731-15	0.047uF	C424	168-1042-78	16V 0.1uF
C1	168-2232-55	0.022uF	C230	042-1631-50	10V100uF	C427	168-1042-78	16V 0.1uF
C4	043-0540-02	16V1uF	C240	187-4763-35	16V47uF	C428	168-1042-78	16V 0.1uF
C5	168-2732-55	16V 0.027uF	C241	163-1063-35	16V10uF	C430	168-6822-55	6800pF
C6	168-2732-55	16V 0.027uF	C242	163-1063-35	16V10uF	C431	042-0423-20	10V10uF
C7	187-4763-35	16V47uF	C243	042-1631-50	10V100uF	C435	168-1042-78	16V 0.1uF
C8	168-2232-55	0.022uF	C244	188-2263-37	16V22uF	C436	168-1042-78	16V 0.1uF
C9	168-2232-55	0.022uF	C245	168-1042-78	16V 0.1uF	C448	043-0541-00	6.3V22uF
C10	168-6822-55	6800pF	C246	188-2263-37	16V22uF	C449	043-0541-00	6.3V22uF
C11	042-1631-50	10V100uF	C247	042-1563-71	16V100uF	C450	043-0541-00	6.3V22uF
C12	042-1631-50	10V100uF	C248	042-1631-50	10V100uF	C451	043-0541-00	6.3V22uF
C14	166-2096-50	2pF CK	C249	168-1022-55	1000pF	C452	043-0541-00	6.3V22uF
C15	166-2201-50	22pF CH	C250	187-4763-45	25V47uF	C453	043-0541-00	6.3V22uF
C16	168-1042-78	16V 0.1uF	C251	168-1042-78	16V 0.1uF	C454	043-0541-00	6.3V22uF
C18	043-0540-02	16V1uF	C252	168-4732-78	0.047uF	C455	043-0541-00	6.3V22uF
C20	163-4763-15	6.3V47uF	C253	168-1042-78	16V 0.1uF	C470	043-0540-00	6.3V10uF
C22	166-1011-50	100pF CH	C254	168-1022-55	1000pF	C471	043-0540-00	6.3V10uF
C23	166-1011-50	100pF CH	C255	166-1511-50	150pF CH	C474	043-0540-00	6.3V10uF
C24	166-3311-50	330pF CH	C256	168-2232-55	0.022uF	C475	043-0540-00	6.3V10uF
C25	166-1501-50	15pF CH	C257	168-1042-78	16V 0.1uF	C476	043-0540-00	6.3V10uF
C26	166-1801-50	18pF CH	C258	168-1042-78	16V 0.1uF	C477	043-0540-00	6.3V10uF
C28	168-1832-55	0.018uF	C259	189-4773-32	16V470uF	C478	042-0560-84	16V470uF
C29	168-2232-55	0.022uF	C260	187-4763-45	25V47uF	C479	042-0560-84	16V470uF
C55	166-2201-50	22pF CH	C262	168-1032-55	0.01uF	C490	166-1201-50	12pF CH
C67	168-1032-55	0.01uF	C263	043-0510-51	25V 10uF	C491	166-1201-50	12pF CH
C68	168-2232-55	0.022uF	C288	042-1452-81	10V220uF	C500	043-0540-00	6.3V10uF
C69	042-0671-02	10V22uF	C301	043-0540-01	10V2.2uF	C501	043-0540-00	6.3V10uF
C70	172-3341-15	0.33uF	C302	043-0540-01	10V2.2uF	C502	043-0540-00	6.3V10uF
C101	178-4742-78	0.47uF	C303	043-0540-01	10V2.2uF	C503	043-0540-00	6.3V10uF
C102	178-4742-78	0.47uF	C304	166-2211-50	220pF CH	C504	043-0540-00	6.3V10uF
C103	178-4742-78	0.47uF	C310	163-1063-35	16V10uF	C505	043-0540-00	6.3V10uF
C104	178-4742-78	0.47uF	C313	168-4732-78	0.047uF	C506	043-0540-00	6.3V10uF
C106	042-0560-84	16V470uF	C314	168-4732-78	0.047uF	C507	043-0540-00	6.3V10uF
C107	042-0560-56	50V3.3uF	C317	043-0540-01	10V2.2uF	C508	163-1063-35	16V10uF
C108	042-0560-63	16V22uF	C322	043-0540-01	10V2.2uF	C509	166-5611-50	560pF CH
C109	043-0506-50	0.1uF	C325	168-1042-78	16V 0.1uF	C510	166-5611-50	560pF CH
C110	043-0506-50	0.1uF	C326	043-0540-00	6.3V10uF	C511	043-0264-63	0.01uF
C111	043-0506-50	0.1uF	C327	043-0540-00	6.3V10uF	C512	043-0264-63	0.01uF
C112	043-0506-50	0.1uF	C328	043-0540-00	6.3V10uF	C513	166-5611-50	560pF CH
C113	043-0506-50	0.1uF	C329	043-0540-00	6.3V10uF	C514	166-5611-50	560pF CH
C114	043-0506-50	0.1uF	C330	043-0540-00	6.3V10uF	C515	043-0264-63	0.01uF
C115	043-0506-50	0.1uF	C331	043-0540-00	6.3V10uF	C516	043-0540-00	6.3V10uF
C116	043-0506-50	0.1uF	C332	043-0540-00	6.3V10uF	C517	043-0540-00	6.3V10uF
C121	163-1063-35	16V10uF	C333	043-0540-00	6.3V10uF	C518	166-5611-50	560pF CH
C122	163-1063-35	16V10uF	C334	043-0540-00	6.3V10uF	C519	166-5611-50	560pF CH
C123	163-1063-35	16V10uF	C335	043-0540-00	6.3V10uF	C520	166-5611-50	560pF CH
C124	163-1063-35	16V10uF	C337	043-0540-01	10V2.2uF	C521	166-5611-50	560pF CH
C125	166-4711-50	470pF CH	C338	043-0540-01	10V2.2uF	C522	043-0264-63	0.01uF
C126	166-4711-50	470pF CH	C339	166-1007-50	10pF CH	C523	043-0264-63	0.01uF
C127	166-4711-50	470pF CH	C340	166-1007-50	10pF CH	C524	043-0264-63	0.01uF
C128	166-4711-50	470pF CH	C341	166-1007-50	10pF CH	C525	043-0264-63	0.01uF
C129	166-4711-50	470pF CH	C342	166-1007-50	10pF CH	C526	043-0540-00	6.3V10uF
C130	166-4711-50	470pF CH	C401	168-1022-55	1000pF	C527	043-0540-00	6.3V10uF
C131	166-4711-50	470pF CH	C402	168-1022-55	1000pF	C528	043-0540-00	6.3V10uF
C132	166-4711-50	470pF CH	C403	042-0423-20	10V10uF	C529	043-0540-00	6.3V10uF
C133	168-1032-55	0.01uF	C404	168-1042-78	16V 0.1uF	C530	043-0540-00	6.3V10uF
C141	166-1011-50	100pF CH	C405	042-0423-20	10V10uF	C531	043-0540-00	6.3V10uF
C142	166-1011-50	100pF CH	C406	042-0423-20	10V10uF	C532	043-0264-63	0.01uF
C143	166-1011-50	100pF CH	C407	042-0423-20	10V10uF	C533	043-0264-63	0.01uF
C144	166-1011-50	100pF CH	C408	168-1042-78	16V 0.1uF	C534	166-5611-50	560pF CH
C145	168-1032-55	0.01uF	C409	168-1042-78	16V 0.1uF	C535	166-5611-50	560pF CH
C146	168-1032-55	0.01uF	C412	042-0423-20	10V10uF	C536	043-0264-63	0.01uF
C201	042-1545-00	16V2200uF	C413	042-0423-21	10V22uF	C537	166-5611-50	560pF CH
C202	172-2231-15	0.022uF	C414	043-0540-00	6.3V10uF	C538	166-5611-50	560pF CH
C203	042-1563-71	16V100uF	C415	043-0540-00	6.3V10uF	C539	043-0264-63	0.01uF
C204	042-0560-63	16V22uF	C417	042-0423-20	10V10uF	C540	043-0264-63	0.01uF
C205	168-4732-78	0.047uF	C418	168-1042-78	16V 0.1uF	C541	043-0540-00	6.3V10uF
C206	168-1042-78	16V 0.1uF	C419	168-1042-78	16V 0.1uF	C542	043-0540-00	6.3V10uF
C210	187-4763-35	16V47uF	C420	042-0423-20	10V10uF	C543	166-1007-50	10pF CH
C211	042-0560-63	16V22uF	C421	166-2201-50	22pF CH	C544	166-1007-50	10pF CH
C222	042-0560-84	16V470uF	C422	166-2201-50	22pF CH	C606	168-4732-78	0.047uF

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C613	042-0650-00	5.5V 0.1F	IC451	051-5034-90	BD3813KS	Q225	125-3004-90	KTA1504S
C614	168-1032-55	0.01uF	IC452	051-3026-90	NJM4580V	Q226	125-4010-90	KTC3875S
C615	042-1577-00	6.3V100uF	IC501	051-5030-90	M61523FP-D60T	Q227	125-4015-90	KTC2026
C616	163-1063-35	16V10uF	IC507	051-3026-90	NJM4580V	Q228	125-2199-93	KRC103S
C617	168-1022-55	1000pF	IC508	051-3026-90	NJM4580V	Q229	190-1416-00	2SA1416
C619	168-4732-78	0.047uF	IC509	051-3026-90	NJM4580V	Q230	125-3007-90	KTA1298
C620	178-2242-78	0.22uF	IC602	051-6600-58	HA12187FP	Q231	190-1416-00	2SA1416
C630	166-1011-50	100pF CH	IC604	052-3390-00	M30622MEP-126GP	Q232	125-0199-92	KRA102S
C636	166-1011-50	100pF CH	IC605	051-5437-08	S-80821ANMP-EDJ-E2	Q233	125-2199-93	KRC103S
C637	166-1011-50	100pF CH	IC606	051-0869-58	NJM2103M	Q235	125-3007-90	KTA1298
C643	166-1011-50	100pF CH	J201	074-1214-00	16P	Q236	125-2199-93	KRC103S
CCT401	010-3042-54	BLA3216A601SG4	J601	074-1194-00	13P CE-NET	Q240	125-2199-93	KRC103S
CCT402	010-3042-54	BLA3216A601SG4	J602	074-1198-68	18P	Q242	125-0199-92	KRA102S
CCT403	010-3042-54	BLA3216A601SG4	J603	074-1138-70	20P	Q244	125-2199-96	KRC106S
CCT404	010-3042-54	BLA3216A601SG4	J604	076-0312-02	2P	Q248	125-2199-93	KRC103S
CCT405	010-3042-54	BLA3216A601SG4	L1	010-2275-53	220uH	Q250	125-4015-90	KTC2026
CCT406	010-3042-54	BLA3216A601SG4	L2	010-3103-64	MMZ1608Y1	Q253	125-3010-90	KTA1666-RTF
D101	001-2403-90	M1F60	L3	010-3103-64	MMZ1608Y1	Q254	125-3004-90	KTA1504S
D102	001-2403-90	M1F60	L51	010-4046-00	30uH	Q255	125-2199-93	KRC103S
D103	001-2403-90	M1F60	L101	010-8026-00	HKS-10D100-2110ZRPS	Q256	125-2199-93	KRC103S
D104	001-2403-90	M1F60	L201	010-2275-50	33uH	Q400	125-4010-90	KTC3875S
D105	001-2403-90	M1F60	L250	010-3600-90	ACM0706	Q450	125-4012-90	KTD1304
D106	001-2403-90	M1F60	L251	010-6003-02	10uH	Q451	125-4012-90	KTD1304
D107	001-2403-90	M1F60	L252	010-3108-53	MPZ2012S331A	Q452	125-4012-90	KTD1304
D108	001-2403-90	M1F60	L253	010-3109-65	MMZ2012Y202B	Q453	125-4012-90	KTD1304
D201	001-0592-61	1N5404	L301	010-3103-64	MMZ1608Y1	Q454	125-4012-90	KTD1304
D203	001-0504-46	HZS9B2L	L401	010-3103-64	MMZ1608Y1	Q455	125-4012-90	KTD1304
D204	001-0529-45	MA8082-H	L403	010-3103-64	MMZ1608Y1	Q456	125-4012-90	KTD1304
D205	001-0608-90	D1FS4	L411	010-3103-64	MMZ1608Y1	Q457	125-4012-90	KTD1304
D206	001-2411-00	M1FL20U	L412	010-3103-64	MMZ1608Y1	Q502	125-4010-90	KTC3875S
D207	001-0507-90	DAP202K	L413	010-3103-64	MMZ1608Y1	Q503	125-2199-93	KRC103S
D208	001-0608-90	D1FS4	L414	010-3103-64	MMZ1608Y1	Q506	125-0199-96	KRA106S
D209	001-4305-32	UDZSTE-17 18B	L415	010-3103-64	MMZ1608Y1	Q508	125-2199-93	KRC103S
D211	001-1310-00	KDS160-RTK	L416	010-3103-64	MMZ1608Y1	Q509	125-2199-96	KRC106S
D212	001-1310-00	KDS160-RTK	L417	010-3103-64	MMZ1608Y1	Q510	125-2199-96	KRC106S
D221	001-0627-90	U1BC44	L418	010-3103-64	MMZ1608Y1	Q511	125-2199-96	KRC106S
D222	001-0627-90	U1BC44	L421	010-3103-64	MMZ1608Y1	Q512	125-0199-96	KRA106S
D223	001-1310-00	KDS160-RTK	L422	010-3103-64	MMZ1608Y1	Q601	125-2199-92	KRC102S
D224	001-0466-91	S5688G	L423	010-3103-64	MMZ1608Y1	Q602	125-2199-93	KRC103S
D225	001-0466-91	S5688G	L424	010-3103-64	MMZ1608Y1	Q603	125-3004-90	KTA1504S
D229	001-0466-90	S5688B	L425	010-3103-64	MMZ1608Y1	Q617	125-2199-93	KRC103S
D230	001-0466-90	S5688B	L426	010-3103-64	MMZ1608Y1	R1	119-1021-15	1/10W 1k ohm
D231	001-0466-90	S5688B	L427	010-3103-64	MMZ1608Y1	R7	119-1231-15	1/10W 12k ohm
D241	001-0504-45	HZS9B1L	L428	010-3103-64	MMZ1608Y1	R8	119-1031-15	1/10W 10k ohm
D242	001-0504-46	HZS9B2L	L429	010-3103-64	MMZ1608Y1	R9	119-4741-15	1/10W 470k ohm
D301	001-0535-90	MA729	L430	010-3103-64	MMZ1608Y1	R10	119-2221-15	1/10W 2.2k ohm
D401	001-0627-90	U1BC44	L431	010-3103-64	MMZ1608Y1	R14	119-5631-15	1/10W 56k ohm
D402	001-0627-90	U1BC44	L432	010-3103-64	MMZ1608Y1	R15	119-1031-15	1/10W 10k ohm
D501	001-1310-00	KDS160-RTK	L433	010-3103-64	MMZ1608Y1	R16	119-2221-15	1/10W 2.2k ohm
D502	001-1310-00	KDS160-RTK	L434	010-3103-64	MMZ1608Y1	R18	119-1031-15	1/10W 10k ohm
D503	001-1310-00	KDS160-RTK	L435	010-3103-64	MMZ1608Y1	R19	119-1031-15	1/10W 10k ohm
D504	001-0529-43	MA8082-L	L436	010-3103-64	MMZ1608Y1	R21	119-1021-15	1/10W 1k ohm
D505	001-1310-00	KDS160-RTK	L437	010-3103-64	MMZ1608Y1	R24	119-1521-15	1/10W 1.5k ohm
D603	001-1310-00	KDS160-RTK	L440	010-3103-64	MMZ1608Y1	R25	119-1521-15	1/10W 1.5k ohm
D610	001-1310-00	KDS160-RTK	L441	010-3103-64	MMZ1608Y1	R26	119-1031-15	1/10W 10k ohm
D611	001-1310-00	KDS160-RTK	L442	010-3103-64	MMZ1608Y1	R27	119-1021-15	1/10W 1k ohm
D651	001-7011-94	CL-150HR-CD	L443	010-3103-64	MMZ1608Y1	R28	119-1021-15	1/10W 1k ohm
FIL201	060-3116-55	CKD510JB1H102ST	L444	010-3103-64	MMZ1608Y1	R29	119-1021-15	1/10W 1k ohm
FIL202	060-3116-55	CKD510JB1H102ST	L601	010-3103-68	MMZ1608A252BT	R30	119-1041-15	1/10W 100k ohm
FIL203	060-3115-52	CKD310JB1C474ST	L602	010-3103-68	MMZ1608A252BT	R83	119-2221-15	1/10W 2.2k ohm
FIL401	060-3115-51	CKD310JB1C224ST	L603	010-2275-57	10UH	R84	119-0000-05	1/10W 0 ohm JW
FIL404	060-3115-51	CKD310JB1C224ST	Q6	125-3004-90	KTA1504S	R101	119-1231-15	1/10W 12k ohm
IC1	051-6201-90	LC72146M	Q7	125-3004-90	KTA1504S	R102	119-1031-15	1/10W 10k ohm
IC101	051-2053-00	LA47508	Q8	125-2199-93	KRC103S	R106	119-0000-05	1/10W 0 ohm JW
IC201	051-3921-90	MD1423N	Q201	125-4015-90	KTC2026	R109	119-2291-15	1/10W 2.2 ohm
IC220	051-1905-93	AN77L06M	Q202	198-0302-00	2SK302	R110	119-2291-15	1/10W 2.2 ohm
IC221	051-3246-90	BA033FP	Q210	125-3007-90	KTA1298	R111	119-2291-15	1/10W 2.2 ohm
IC230	051-1014-08	TA7291F	Q211	125-2199-96	KRC106S	R112	119-2291-15	1/10W 2.2 ohm
IC301	051-5836-90	NJU7507	Q212	125-3004-90	KTA1504S	R113	119-2291-15	1/10W 2.2 ohm
IC302	051-3034-90	NJM4558V	Q213	125-4010-90	KTC3875S	R114	119-2291-15	1/10W 2.2 ohm
IC401	051-6705-00	AK7720A	Q214	192-3648-00	2SC3648R,S,T	R115	119-2291-15	1/10W 2.2 ohm
IC402	051-9109-40	BS62LV256TI-70	Q222	125-3004-90	KTA1504S	R116	119-2291-15	1/10W 2.2 ohm
IC403	051-7285-08	CD74HC4050PWR	Q223	125-2199-93	KRC103S	R121	119-4711-15	1/10W 470 ohm
IC404	051-7243-48	SN74AHCT1G08	Q224	190-1416-00	2SA1416	R122	119-4711-15	1/10W 470 ohm
		DCKR				R123	119-4711-15	1/10W 470 ohm

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
R124	119-4711-15	1/10W 470 ohm	R403	119-1041-15	1/10W 100k ohm	R514	032-0140-98	1/8W 330 ohm F
R201	117-0000-05	1/8W 0 ohm JW	R404	119-3311-15	1/10W 330 ohm	R515	032-0140-98	1/8W 330 ohm F
R209	119-1021-15	1/10W 1k ohm	R405	119-1221-15	1/10W 1.2k ohm	R516	032-0140-98	1/8W 330 ohm F
R210	119-2221-15	1/10W 2.2k ohm	R406	119-1521-15	1/10W 1.5k ohm	R517	032-0140-98	1/8W 330 ohm F
R211	119-4731-15	1/10W 47k ohm	R408	119-0000-05	1/10W 0 ohm JW	R518	032-0140-98	1/8W 330 ohm F
R212	119-1531-15	1/10W 15k ohm	R409	119-0000-05	1/10W 0 ohm JW	R519	032-0140-07	1/4W 11k ohm F
R213	119-1031-15	1/10W 10k ohm	R410	119-0000-05	1/10W 0 ohm JW	R520	032-0140-98	1/8W 330 ohm F
R214	119-4731-15	1/10W 47k ohm	R411	119-1041-15	1/10W 100k ohm	R521	032-0140-07	1/4W 11k ohm F
R215	119-2221-15	1/10W 2.2k ohm	R412	119-1041-15	1/10W 100k ohm	R522	032-0140-98	1/8W 330 ohm F
R219	119-1031-15	1/10W 10k ohm	R413	119-0000-05	1/10W 0 ohm JW	R523	119-8221-15	1/10W 8.2k ohm
R220	119-1031-15	1/10W 10k ohm	R415	119-0000-05	1/10W 0 ohm JW	R524	032-0140-07	1/4W 11k ohm F
R221	119-3921-15	1/10W 3.9k ohm	R416	119-0000-05	1/10W 0 ohm JW	R525	032-0140-50	1/10W 10k ohm F
R222	119-1801-15	1/10W 18 ohm	R417	119-0000-05	1/10W 0 ohm JW	R526	032-0140-50	1/10W 10k ohm F
R223	119-1031-15	1/10W 10k ohm	R418	119-0000-05	1/10W 0 ohm JW	R527	032-0140-50	1/10W 10k ohm F
R224	116-1591-15	1/4W 1.5 ohm	R419	119-1231-15	1/10W 12k ohm	R528	032-0140-07	1/4W 11k ohm F
R225	116-1591-15	1/4W 1.5 ohm	R420	119-1231-15	1/10W 12k ohm	R529	032-0140-07	1/4W 11k ohm F
R226	119-4731-15	1/10W 47k ohm	R421	119-2731-15	1/10W 27k ohm	R530	032-0140-50	1/10W 10k ohm F
R227	119-3321-15	1/10W 3.3k ohm	R422	119-2731-15	1/10W 27k ohm	R531	119-4721-15	1/10W 4.7k ohm
R228	119-3321-15	1/10W 3.3k ohm	R430	119-5621-15	1/10W 5.6k ohm	R532	119-4721-15	1/10W 4.7k ohm
R229	116-1591-15	1/4W 1.5 ohm	R434	119-3311-15	1/10W 330 ohm	R533	032-0140-98	1/8W 330 ohm F
R230	119-2231-15	1/10W 22k ohm	R435	119-3311-15	1/10W 330 ohm	R534	032-0140-98	1/8W 330 ohm F
R231	116-1591-15	1/4W 1.5 ohm	R438	119-0000-05	1/10W 0 ohm JW	R536	032-0140-98	1/8W 330 ohm F
R234	119-1031-15	1/10W 10k ohm	R439	119-0000-05	1/10W 0 ohm JW	R537	032-0140-07	1/4W 11k ohm F
R235	119-1031-15	1/10W 10k ohm	R440	119-0000-05	1/10W 0 ohm JW	R538	119-1021-15	1/10W 1k ohm
R236	119-1031-15	1/10W 10k ohm	R441	119-8211-15	1/10W 820 ohm	R539	032-0140-07	1/4W 11k ohm F
R238	119-1031-15	1/10W 10k ohm	R442	119-8211-15	1/10W 820 ohm	R540	119-2231-15	1/10W 22k ohm
R239	119-1221-15	1/10W 1.2k ohm	R443	119-8211-15	1/10W 820 ohm	R541	119-1021-15	1/10W 1k ohm
R240	116-4711-15	1/4W 470 ohm	R444	119-8211-15	1/10W 820 ohm	R542	119-1021-15	1/10W 1k ohm
R242	116-4711-15	1/4W 470 ohm	R445	119-0000-05	1/10W 0 ohm JW	R543	119-8221-15	1/10W 8.2k ohm
R243	119-1031-15	1/10W 10k ohm	R446	119-0000-05	1/10W 0 ohm JW	R544	032-0140-50	1/10W 10k ohm F
R244	116-4711-15	1/4W 470 ohm	R447	119-0000-05	1/10W 0 ohm JW	R545	032-0140-98	1/8W 330 ohm F
R247	119-1011-15	1/10W 100 ohm	R448	119-0000-05	1/10W 0 ohm JW	R546	032-0140-07	1/4W 11k ohm F
R248	119-1031-15	1/10W 10k ohm	R449	119-0000-05	1/10W 0 ohm JW	R547	119-3921-15	1/10W 3.9k ohm
R249	116-1221-15	1/4W 1.2k ohm	R450	119-2231-15	1/10W 22k ohm	R548	119-3921-15	1/10W 3.9k ohm
R250	119-1031-15	1/10W 10k ohm	R451	119-2231-15	1/10W 22k ohm	R602	116-1221-15	1/4W 1.2k ohm
R251	116-1221-15	1/4W 1.2k ohm	R452	119-2231-15	1/10W 22k ohm	R603	116-6801-15	1/4W 68 ohm
R252	116-1521-15	1/4W 1.5k ohm	R453	119-2231-15	1/10W 22k ohm	R604	119-3321-15	1/10W 3.3k ohm
R253	119-1011-15	1/10W 100 ohm	R454	119-2231-15	1/10W 22k ohm	R605	119-3321-15	1/10W 3.3k ohm
R254	119-1031-15	1/10W 10k ohm	R455	119-2231-15	1/10W 22k ohm	R607	119-2231-15	1/10W 22k ohm
R255	032-0140-85	2.4k ohm (F)	R456	119-2231-15	1/10W 22k ohm	R608	119-1031-15	1/10W 10k ohm
R256	032-0140-53	1/10W 2.2k ohm F	R457	119-2231-15	1/10W 22k ohm	R609	119-4731-15	1/10W 47k ohm
R257	119-1001-15	1/10W 10 ohm	R458	119-3311-15	1/10W 330 ohm	R610	119-4721-15	1/10W 4.7k ohm
R258	032-0164-50	0.1ohm (F)	R459	119-3311-15	1/10W 330 ohm	R611	119-1031-15	1/10W 10k ohm
R260	032-0164-50	0.1ohm (F)	R460	119-3311-15	1/10W 330 ohm	R612	119-0000-05	1/10W 0 ohm JW
R261	119-3301-15	1/10W 33 ohm	R461	119-3311-15	1/10W 330 ohm	R637	119-1041-15	1/10W 100k ohm
R262	119-1051-15	1/10W 1M ohm	R462	119-3311-15	1/10W 330 ohm	R638	119-4731-15	1/10W 47k ohm
R263	119-1041-15	1/10W 100k ohm	R463	119-3311-15	1/10W 330 ohm	R639	119-4721-15	1/10W 4.7k ohm
R265	119-1031-15	1/10W 10k ohm	R464	119-3311-15	1/10W 330 ohm	R640	119-3331-15	1/10W 33k ohm
R266	119-1031-15	1/10W 10k ohm	R465	119-3311-15	1/10W 330 ohm	R641	119-1831-15	1/10W 18k ohm
R269	119-2221-15	1/10W 2.2k ohm	R466	119-1021-15	1/10W 1k ohm	R642	119-1031-15	1/10W 10k ohm
R270	119-1031-15	1/10W 10k ohm	R467	119-1021-15	1/10W 1k ohm	R643	119-5621-15	1/10W 5.6k ohm
R271	119-1031-15	1/10W 10k ohm	R468	119-1021-15	1/10W 1k ohm	R644	119-1541-15	1/10W 150k ohm
R272	119-5631-15	1/10W 56k ohm	R469	119-1021-15	1/10W 1k ohm	R645	119-8221-15	1/10W 8.2k ohm
R273	119-1511-15	1/10W 150 ohm	R480	119-4721-15	1/10W 4.7k ohm	R646	119-4321-15	1/10W 4.3k ohm
R283	119-1041-15	1/10W 100k ohm	R481	119-4721-15	1/10W 4.7k ohm	R666	119-0000-05	1/10W 0 ohm JW
R301	119-1041-15	1/10W 100k ohm	R490	119-3311-15	1/10W 330 ohm	R667	119-0000-05	1/10W 0 ohm JW
R302	119-1041-15	1/10W 100k ohm	R493	119-4731-15	1/10W 47k ohm	R668	119-0000-05	1/10W 0 ohm JW
R303	032-0140-08	1/4W 13k ohm F	R494	119-4731-15	1/10W 47k ohm	R674	119-2711-15	1/10W 270 ohm
R310	119-6831-15	1/10W 68k ohm	R495	119-4731-15	1/10W 47k ohm	R677	119-1031-15	1/10W 10k ohm
R311	119-6831-15	1/10W 68k ohm	R496	119-4731-15	1/10W 47k ohm	R678	119-1031-15	1/10W 10k ohm
R312	119-6831-15	1/10W 68k ohm	R497	119-4731-15	1/10W 47k ohm	R680	119-0000-05	1/10W 0 ohm JW
R313	119-6831-15	1/10W 68k ohm	R498	119-4731-15	1/10W 47k ohm	R681	119-0000-05	1/10W 0 ohm JW
R316	119-1021-15	1/10W 1k ohm	R500	032-0140-50	1/10W 10k ohm F	R682	119-0000-05	1/10W 0 ohm JW
R317	119-1021-15	1/10W 1k ohm	R501	032-0140-50	1/10W 10k ohm F	R683	119-0000-05	1/10W 0 ohm JW
R325	032-0140-51	1/10W 15k ohm F	R502	032-0140-07	1/4W 11k ohm F	R685	119-1031-15	1/10W 10k ohm
R326	032-0140-51	1/10W 15k ohm F	R503	032-0140-07	1/4W 11k ohm F	R686	119-1031-15	1/10W 10k ohm (For PE2635BA)
R327	032-0140-51	1/10W 15k ohm F	R504	032-0140-50	1/10W 10k ohm F	R688	119-1031-15	1/10W 10k ohm (For PE2635KA,KB)
R328	032-0140-51	1/10W 15k ohm F	R505	119-4721-15	1/10W 4.7k ohm	R690	119-1031-15	1/10W 10k ohm
R329	032-0140-89	1/4W 47k ohm F	R506	032-0140-50	1/10W 10k ohm F	R697	119-0000-05	1/10W 0 ohm JW
R330	032-0140-89	1/4W 47k ohm F	R507	032-0140-50	1/10W 10k ohm F	S601	013-6103-00	SWITCH
R341	032-0140-89	1/4W 47k ohm F	R508	032-0140-07	1/4W 11k ohm F	S602	013-7106-00	TKR00120670MM
R342	119-1041-15	1/10W 100k ohm	R509	032-0140-07	1/4W 11k ohm F	S603	013-7206-50	SPPB530701
R343	032-0140-89	1/4W 47k ohm F	R510	032-0140-50	1/10W 10k ohm F	SUP1	060-0122-91	DSP-141N-S00B
R345	119-1041-15	1/10W 100k ohm	R511	032-0140-50	1/10W 10k ohm F	T201	007-1170-00	SRW13EPC
R401	119-1041-15	1/10W 100k ohm	R512	119-4721-15	1/10W 4.7k ohm			
R402	119-3311-15	1/10W 330 ohm	R513	032-0140-98	1/8W 330 ohm F			

REF No.	PART No.	DESCRIPTION
X1	061-1066-00	7.2MHz
X401	061-3536-90	11.2896MHz

REF No.	PART No.	DESCRIPTION
X601	060-1533-90	CSTCE10M0G52-R0
X602	060-0100-51	BUZZER

REF No.	PART No.	DESCRIPTION
PWB	039-2482-00	PWB(WITHOUT COMPONENT)

REF No.	PART No.	DESCRIPTION
R787	119-4701-15	1/10W 47 ohm
R788	119-4701-15	1/10W 47 ohm
R789	119-4701-15	1/10W 47 ohm

REF No.	PART No.	DESCRIPTION
R790	119-4701-15	1/10W 47 ohm
X770	060-1540-90	CSTCE12MOG52

REF No.	PART No.	DESCRIPTION
PWB	039-2484-00	PWB(WITHOUT COMPONENT)

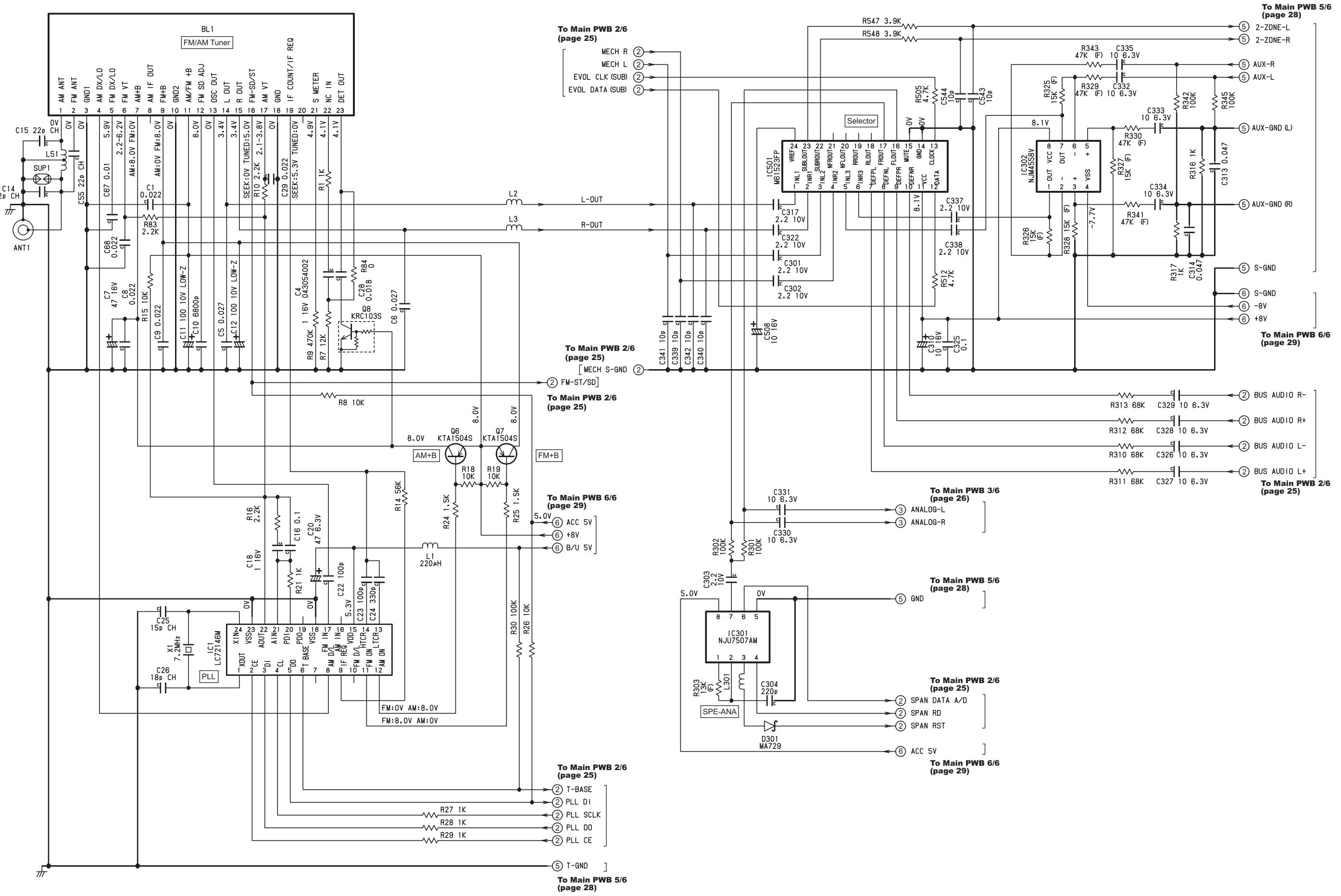
### Switch PWB(B2) section

REF No.	PART No.	DESCRIPTION
C700	043-0540-00	6.3V10uF
C702	168-1042-78	16V 0.1uF
C703	043-0540-00	6.3V10uF
C704	168-1032-55	0.01uF
C705	168-1042-78	16V 0.1uF
C706	168-1042-78	16V 0.1uF
C707	043-0540-00	6.3V10uF
C708	168-1032-55	0.01uF
C709	168-1032-55	0.01uF
C710	043-0542-00	25V4.7uF
C711	043-0540-01	10V2.2uF
C712	043-0540-01	10V2.2uF
C713	168-1022-55	1000pF
C715	043-0540-01	10V2.2uF
C716	166-1011-50	100pF CH
C717	166-1011-50	100pF CH
C740	168-1042-78	16V 0.1uF
C741	168-1022-55	1000pF
C742	168-1022-55	1000pF
C743	168-1022-55	1000pF
C744	168-1022-55	1000pF
C745	168-1042-78	16V 0.1uF
C746	168-1042-78	16V 0.1uF
C747	043-0540-00	6.3V10uF
C748	043-0541-00	6.3V22uF
C749	043-0541-00	6.3V22uF
CCT705	010-3042-54	BLA3216A601SG4
CCT706	010-3042-54	BLA3216A601SG4
CCT707	010-3042-54	BLA3216A601SG4
CCT708	010-3042-54	BLA3216A601SG4
CCT709	010-3042-54	BLA3216A601SG4
CCT710	010-3042-54	BLA3216A601SG4
CCT711	010-3042-54	BLA3216A601SG4
CCT712	010-3042-54	BLA3216A601SG4
CCT713	010-3042-54	BLA3216A601SG4
D700	001-0529-41	MA8075-M
D701	001-0529-41	MA8075-M
D702	001-0529-41	MA8075-M
D703	001-0529-41	MA8075-M
D704	001-0529-41	MA8075-M
D705	001-0529-41	MA8075-M
D706	001-1310-00	KDS160-RTK
D707	001-7040-91	NSCW100
D708	001-7040-91	NSCW100
D709	001-1310-00	KDS160-RTK
D710	001-1310-00	KDS160-RTK
D740	001-0367-91	ISS226
D741	001-0367-91	ISS226
D742	001-0367-91	ISS226
D743	001-0367-91	ISS226
D744	001-1310-00	KDS160-RTK
D745	001-1310-00	KDS160-RTK
IC700	052-7068-00	M3026MHP-142GP
IC701	051-0350-91	NJM2904M
IC702	052-7067-00	MBM29F016A-90PFTN
IC703	051-7201-08	TC7W00F
IC705	051-0350-91	NJM2904M
IC740	052-7066-00	M30102M2-557FP
J701	076-0647-00	SOCKET 16P
J702	074-1239-75	SOCKET 25P
J740	074-1158-54	SOCKET 4P
L701	010-2275-57	10UH
L703	010-3103-64	MMZ1608Y1
L704	010-3103-64	MMZ1608Y1
L705	010-3103-64	MMZ1608Y1
L706	010-3103-64	MMZ1608Y1
L707	010-3103-64	MMZ1608Y1
L708	010-3103-64	MMZ1608Y1
L709	010-3103-64	MMZ1608Y1
L710	010-3103-64	MMZ1608Y1
L711	010-3103-64	MMZ1608Y1
L712	010-3103-64	MMZ1608Y1
L713	010-3103-64	MMZ1608Y1
L716	010-3103-64	MMZ1608Y1
L717	010-3103-64	MMZ1608Y1
L740	010-2275-50	33uH
L741	010-2275-50	33uH
Q700	060-4011-80	CPT-182S-C
Q701	125-3007-90	KTA1298
Q702	125-2199-96	KRC106S
Q703	125-3004-90	KTA1504S
Q704	125-2199-96	KRC106S
Q705	125-4010-90	KTC3875S
Q706	125-2199-93	KTC103S
Q707	125-4010-90	KTC3875S
Q710	125-3007-90	KTA1298
Q711	125-3007-90	KTA1298
VR700	016-6000-00	VR
Q712	125-2199-96	KRC106S
Q740	125-0199-95	KRA105S-RTK
Q741	125-0199-95	KRA105S-RTK
Q742	125-2199-95	KRC105S-RTK
Q743	125-2199-95	KRC105S-RTK
PWB	039-2483-00	PWB(WITHOUT COMPONENT)
Q743	125-2199-95	KRC105S-RTK

REF No.	PART No.	DESCRIPTION
R700	119-1011-15	1/10W 100 ohm
R701	119-3921-15	1/10W 3.9k ohm
R702	119-1041-15	1/10W 100k ohm
R703	119-1811-15	1/10W 180 ohm
R704	119-1811-15	1/10W 180 ohm
R705	119-1011-15	1/10W 100 ohm
R707	119-8211-15	1/10W 820 ohm
R708	119-1031-15	1/10W 10k ohm
R709	119-1041-15	1/10W 100k ohm
R715	119-1031-15	1/10W 10k ohm
R717	119-1031-15	1/10W 10k ohm
R719	119-8221-15	1/10W 8.2k ohm
R720	119-4721-15	1/10W 4.7k ohm
R721	119-4721-15	1/10W 4.7k ohm
R722	119-3331-15	1/10W 33k ohm
R723	119-1031-15	1/10W 10k ohm
R724	119-1011-15	1/10W 100 ohm
R727	119-1031-15	1/10W 10k ohm
R728	119-8221-15	1/10W 8.2k ohm
R729	032-0140-14	1/10W 1.2k ohm
R730	032-0140-14	1/10W 1.2k ohm
R737	119-1031-15	1/10W 10k ohm
R738	119-1521-15	1/10W 1.5k ohm
R740	119-1021-15	1/10W 1k ohm
R741	119-1021-15	1/10W 1k ohm
R742	119-1021-15	1/10W 1k ohm
R743	119-1021-15	1/10W 1k ohm
R744	119-1021-15	1/10W 1k ohm
R745	119-4731-15	1/10W 47k ohm
R746	119-2211-15	1/10W 220 ohm
R748	119-4731-15	1/10W 47k ohm
R749	119-4731-15	1/10W 47k ohm
R750	060-4011-80	CPT-182S-C
R750	125-3007-90	KTA1298
R751	119-4731-15	1/10W 47k ohm
R782	119-1051-15	1/10W 1M ohm
R783	119-6811-15	1/10W 680 ohm
S704	013-6312-50	SKRP-ABE-01

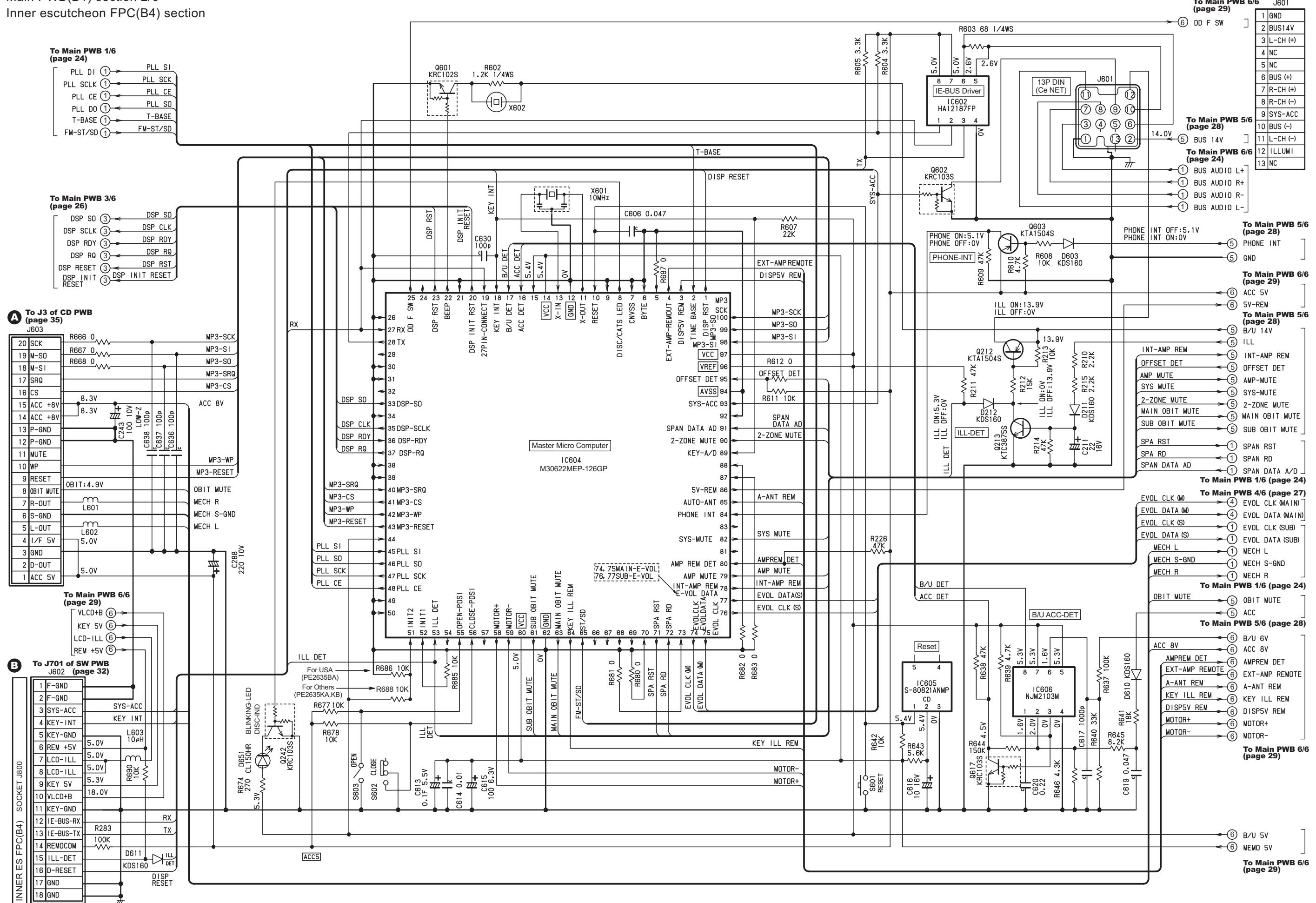
## CIRCUIT DIAGRAM

Main PWB(B1) section 1/6

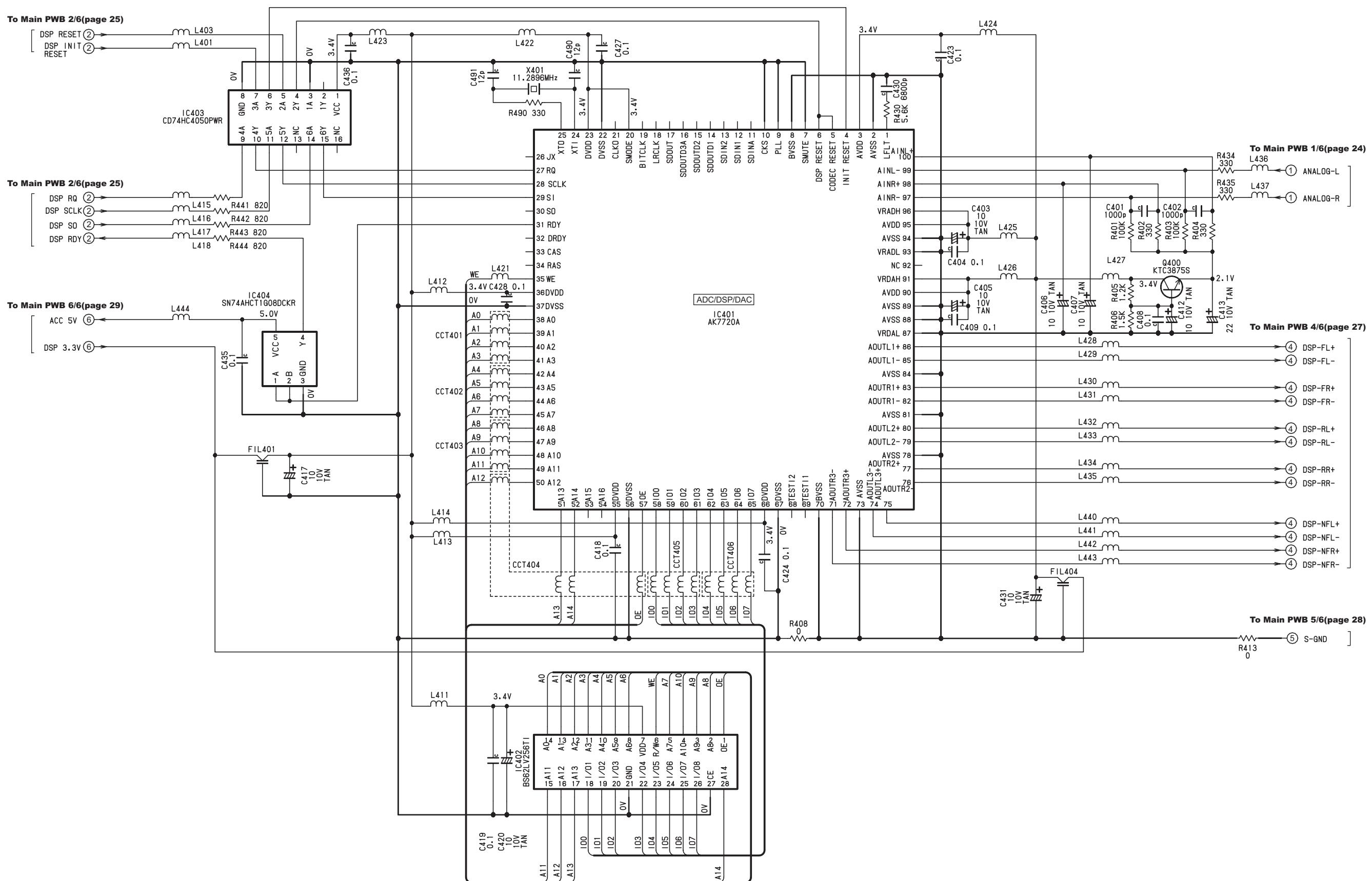


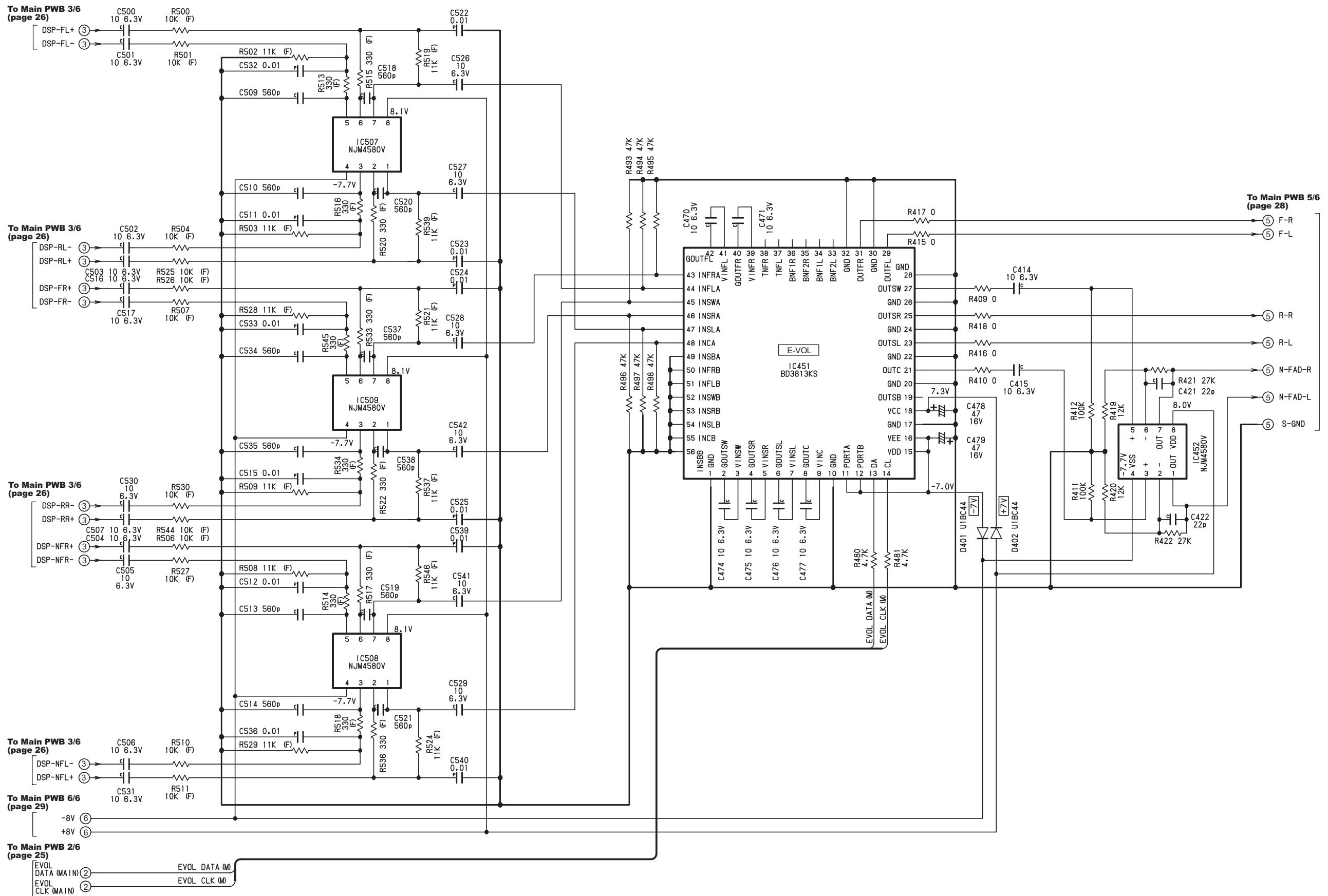
Main PWB(B1) section 2/6

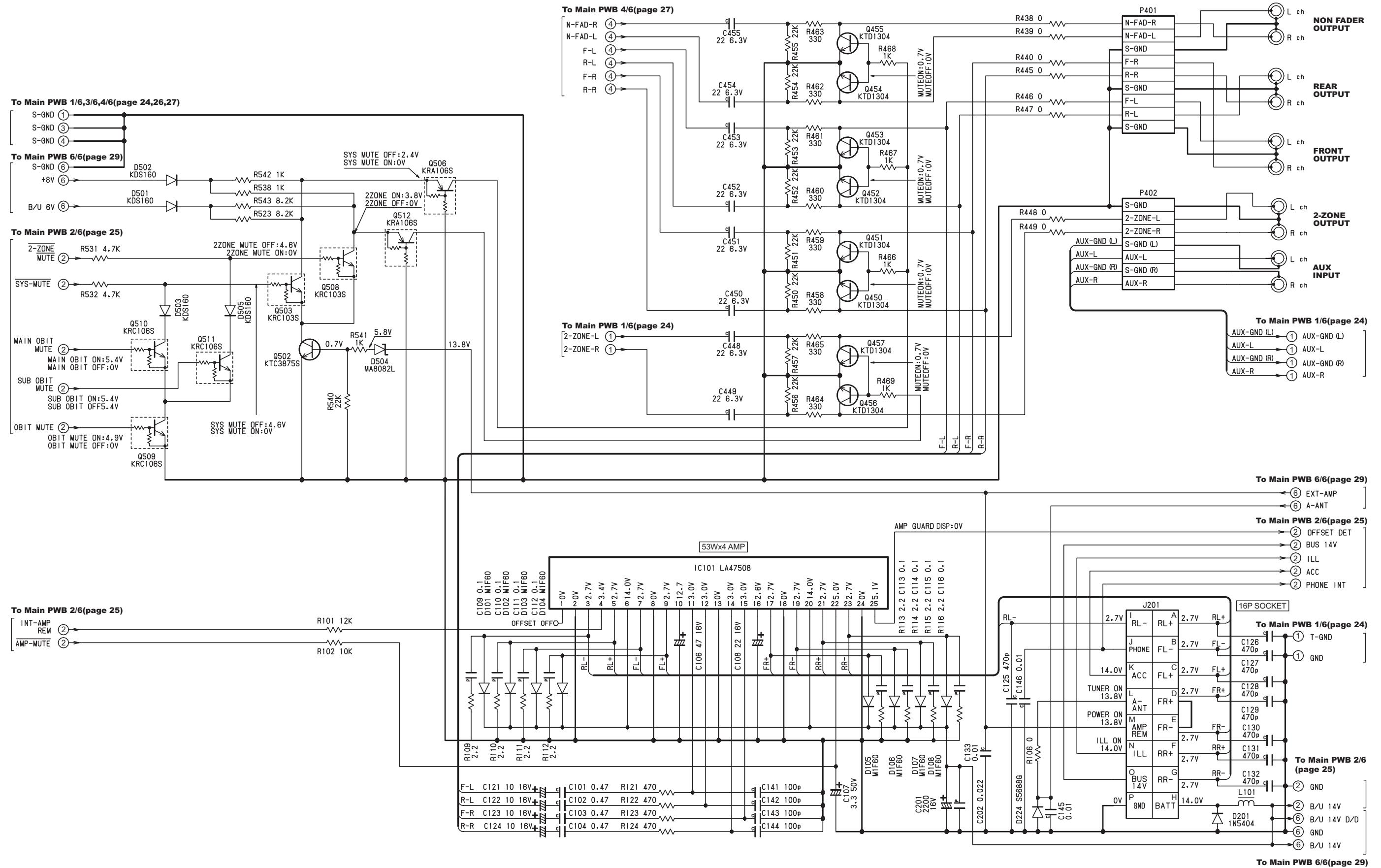
## Inner escutcheon FPC(B4) section



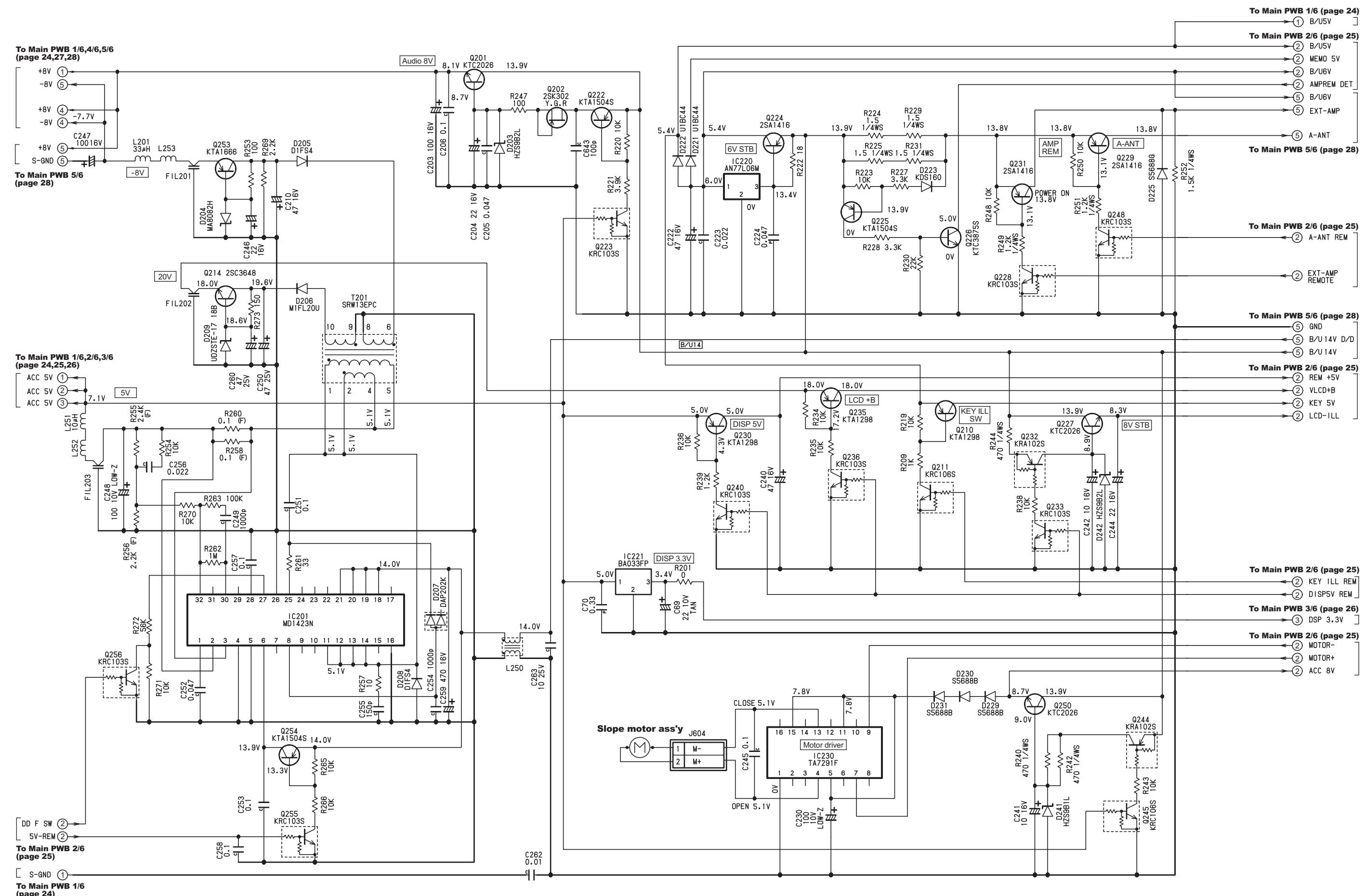
Main PWB(B1) section 3/6







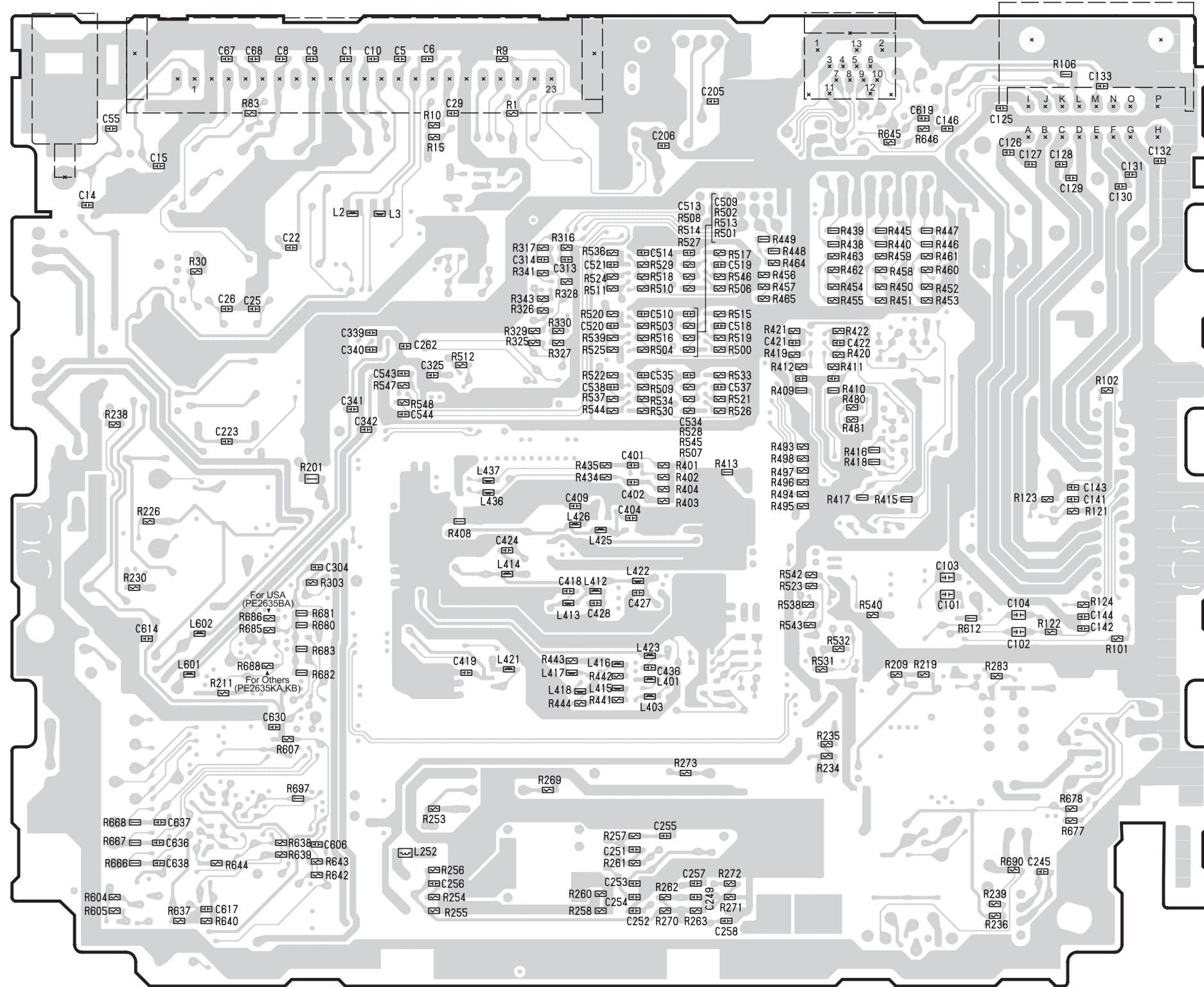
Main PWB(B1) section 6/6



# PRINTED WIRING BOARD

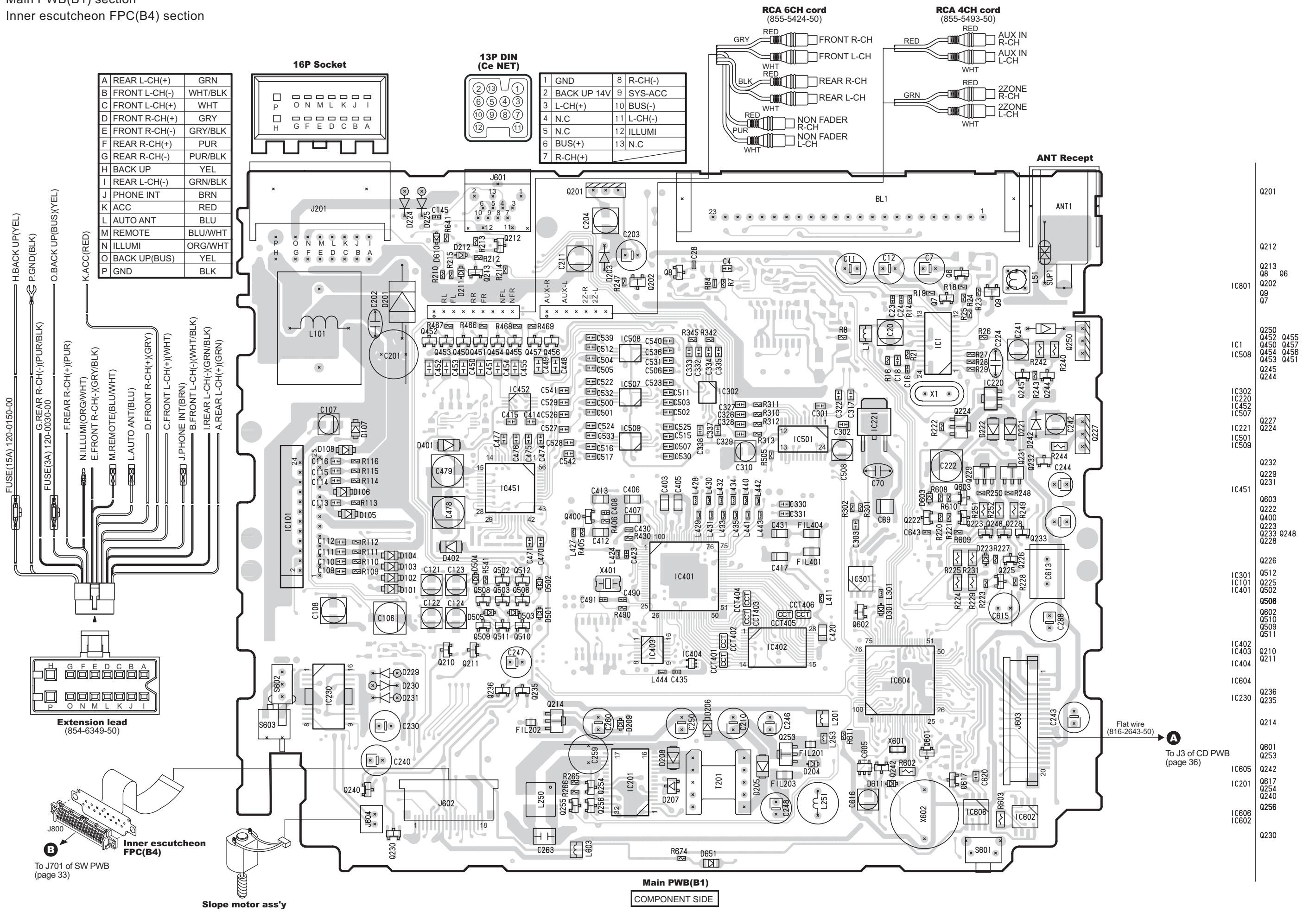
## Main PWB(B1) section

**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.



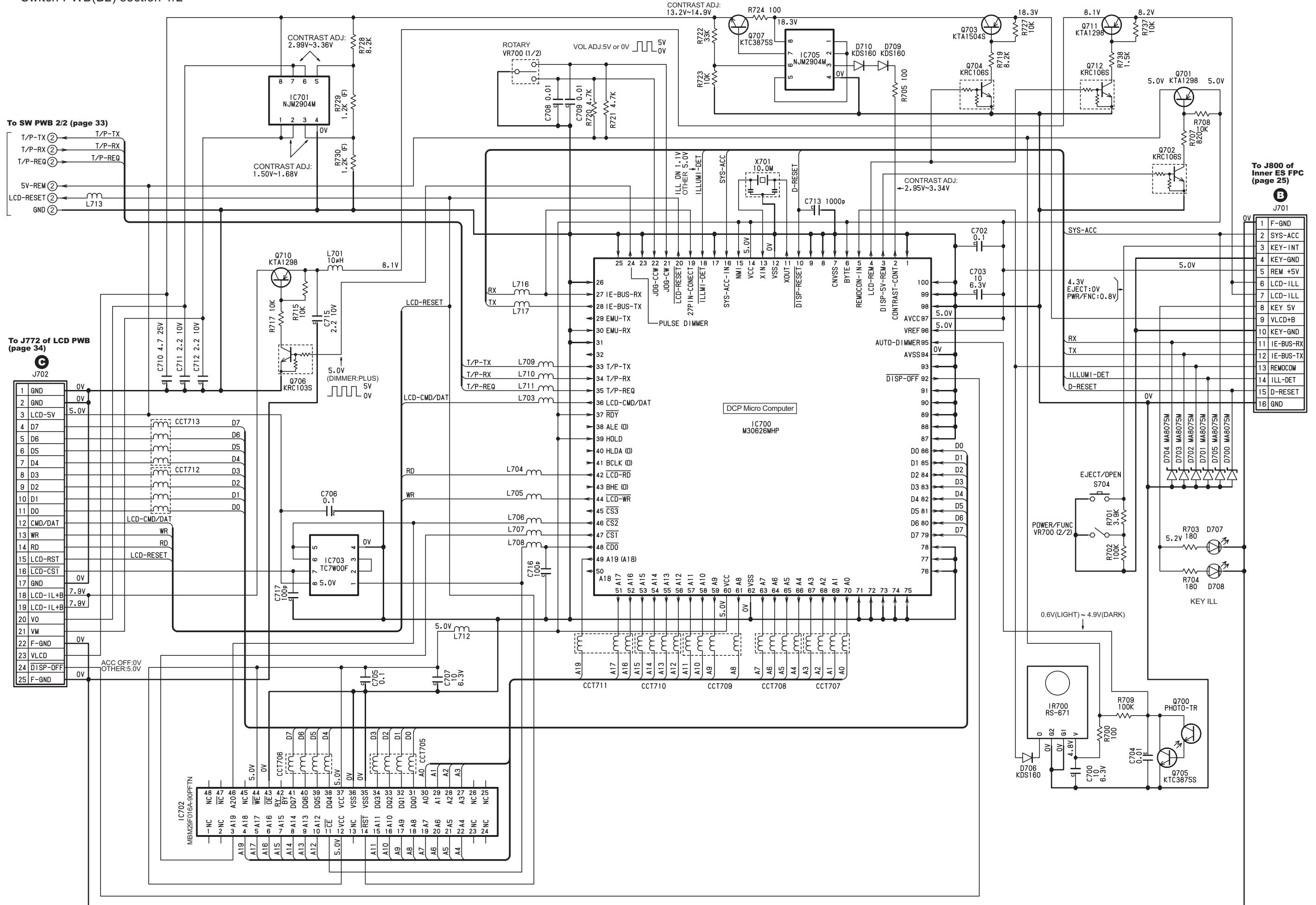
**Main PWB(B)**

Main PWB(B1) section  
Inner escutcheon FPC(B4) section

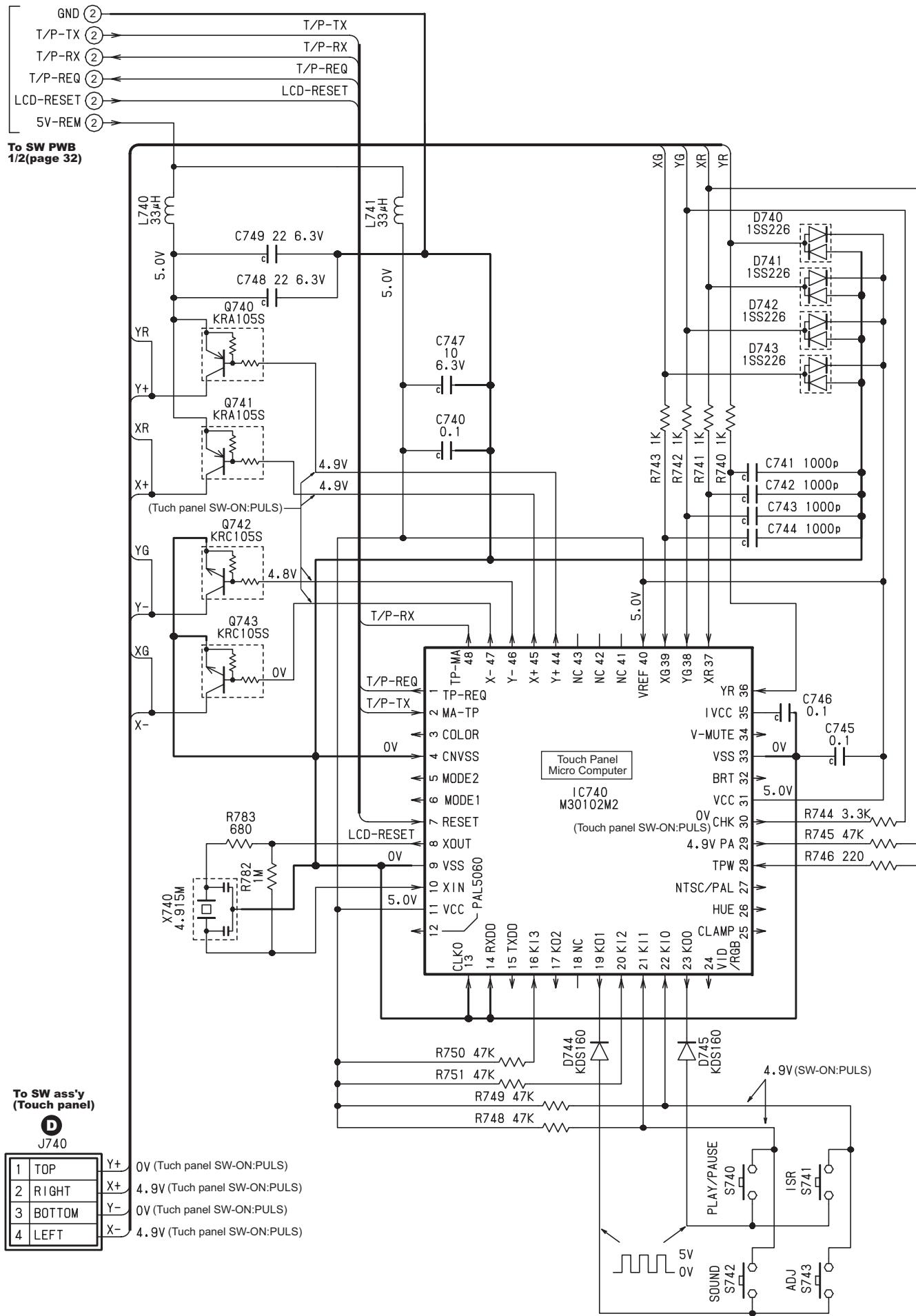


## CIRCUIT DIAGRAM

Switch PWB(B2) section 1/2



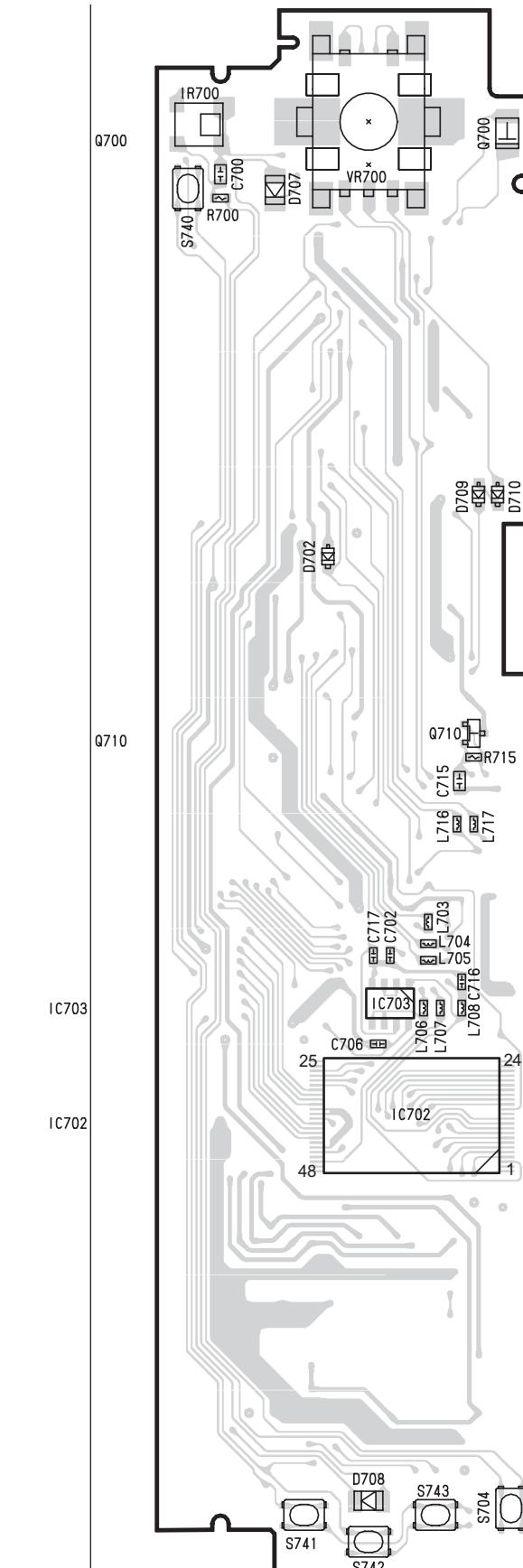
Switch PWB(B2) section 2/2



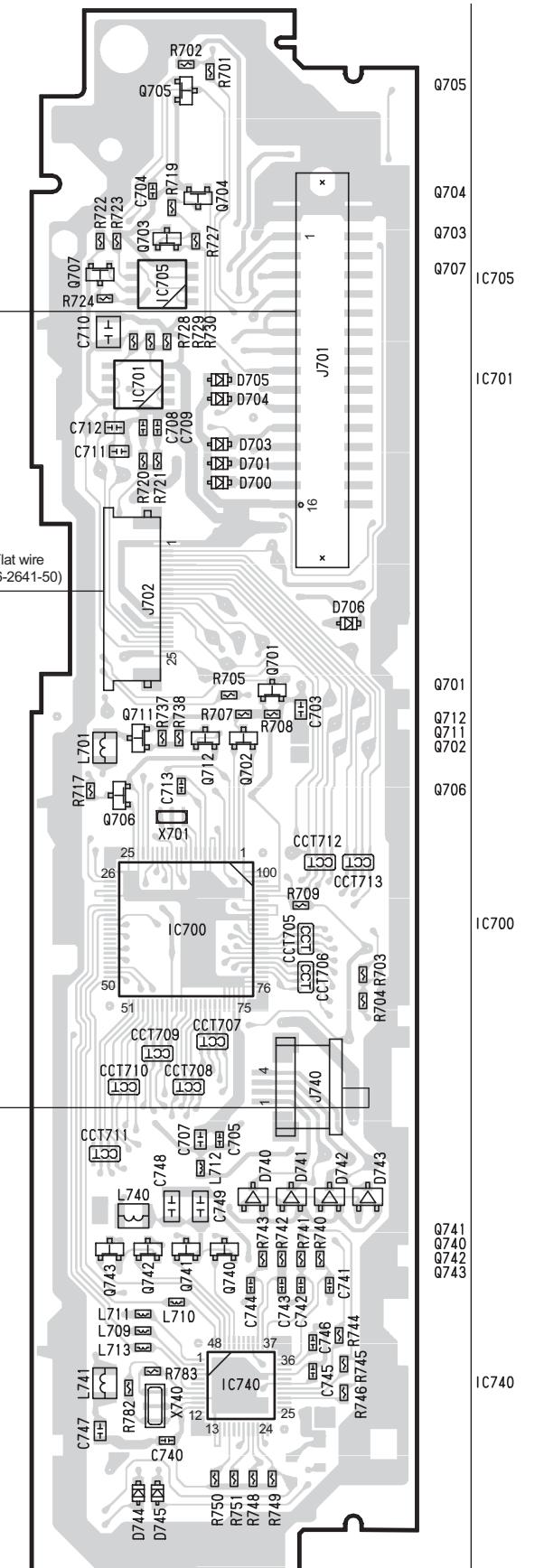
## PRINTED WIRING BOARD

## Switch PWB(B2) section

**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.



COMPONENT SIDE

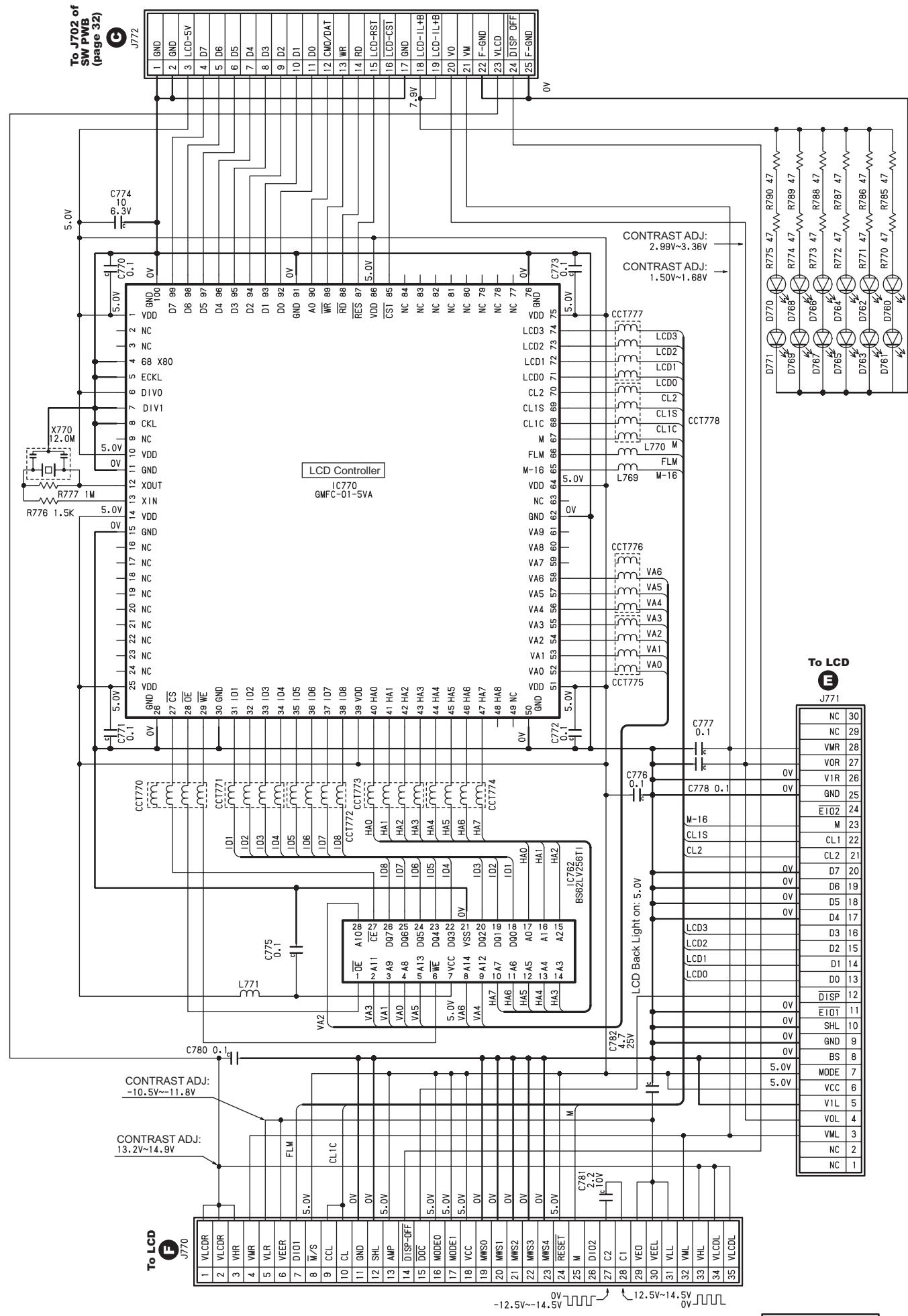


SOLDER SIDE

**DXZ945MP  
DXZ946MP**

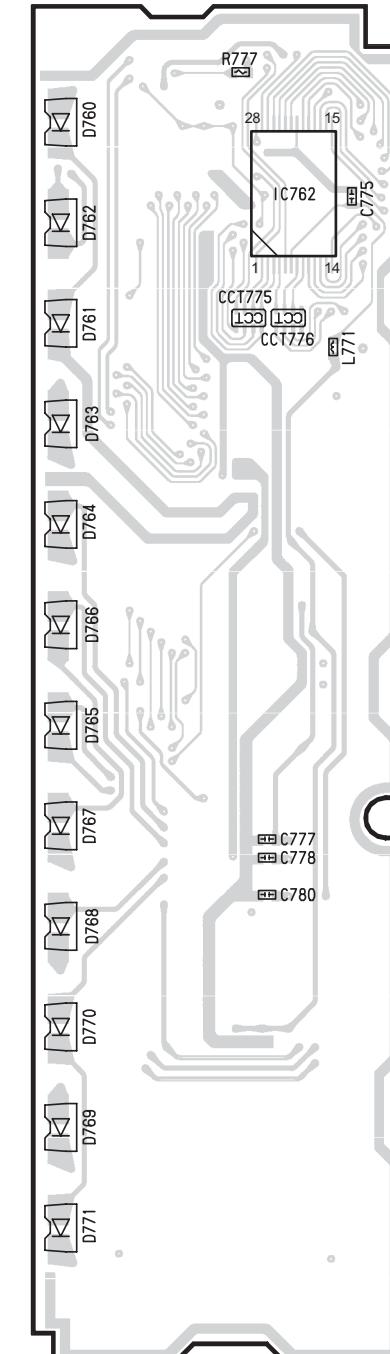
## CIRCUIT DIAGRAM

### LCD PWB(B3) section

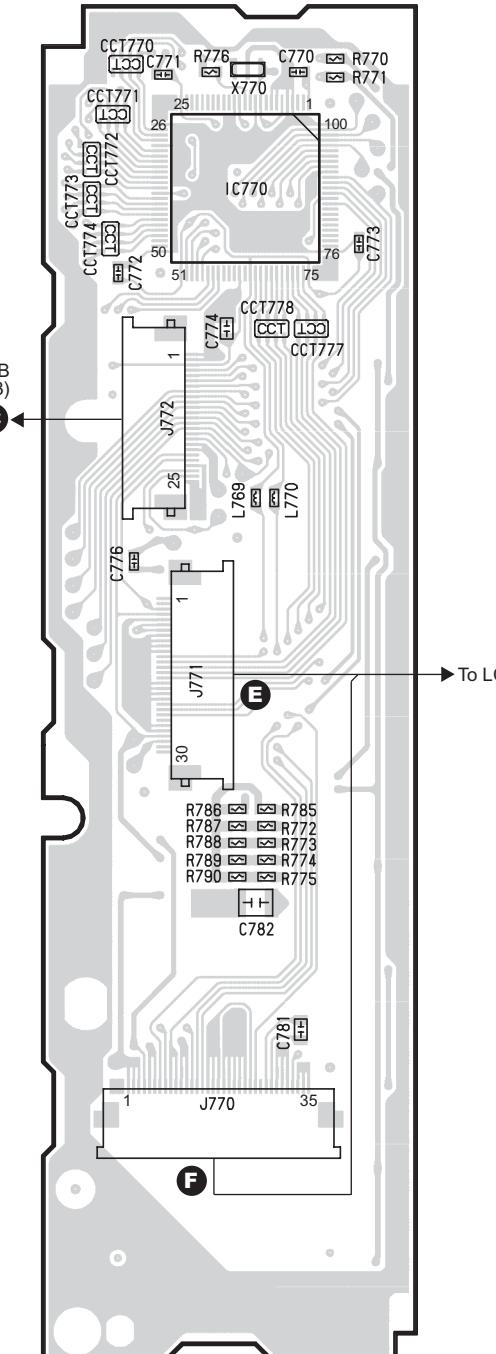


# PRINTED WIRING BOARD

## LCD PWB(B3) section



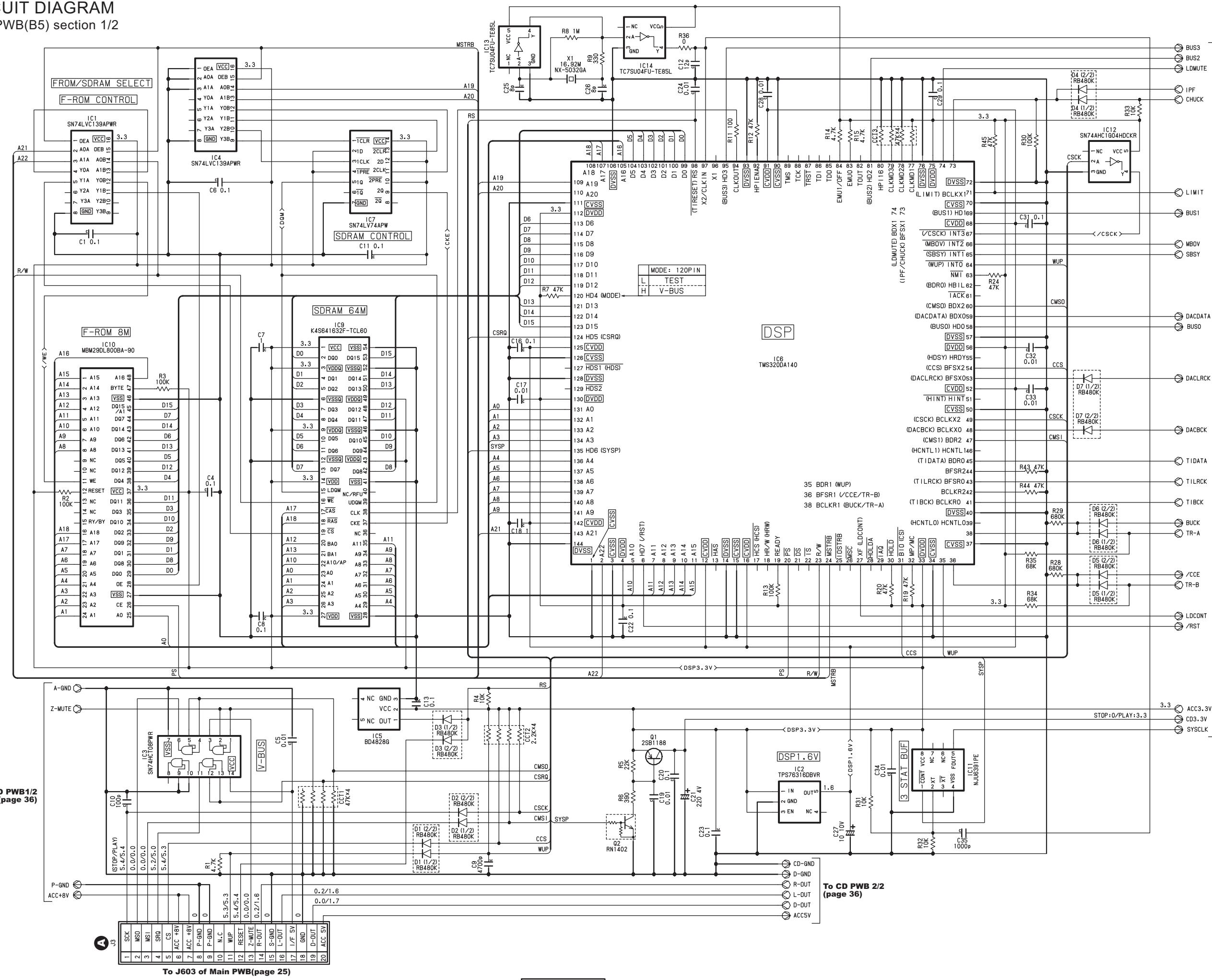
LCD FWB(BS)



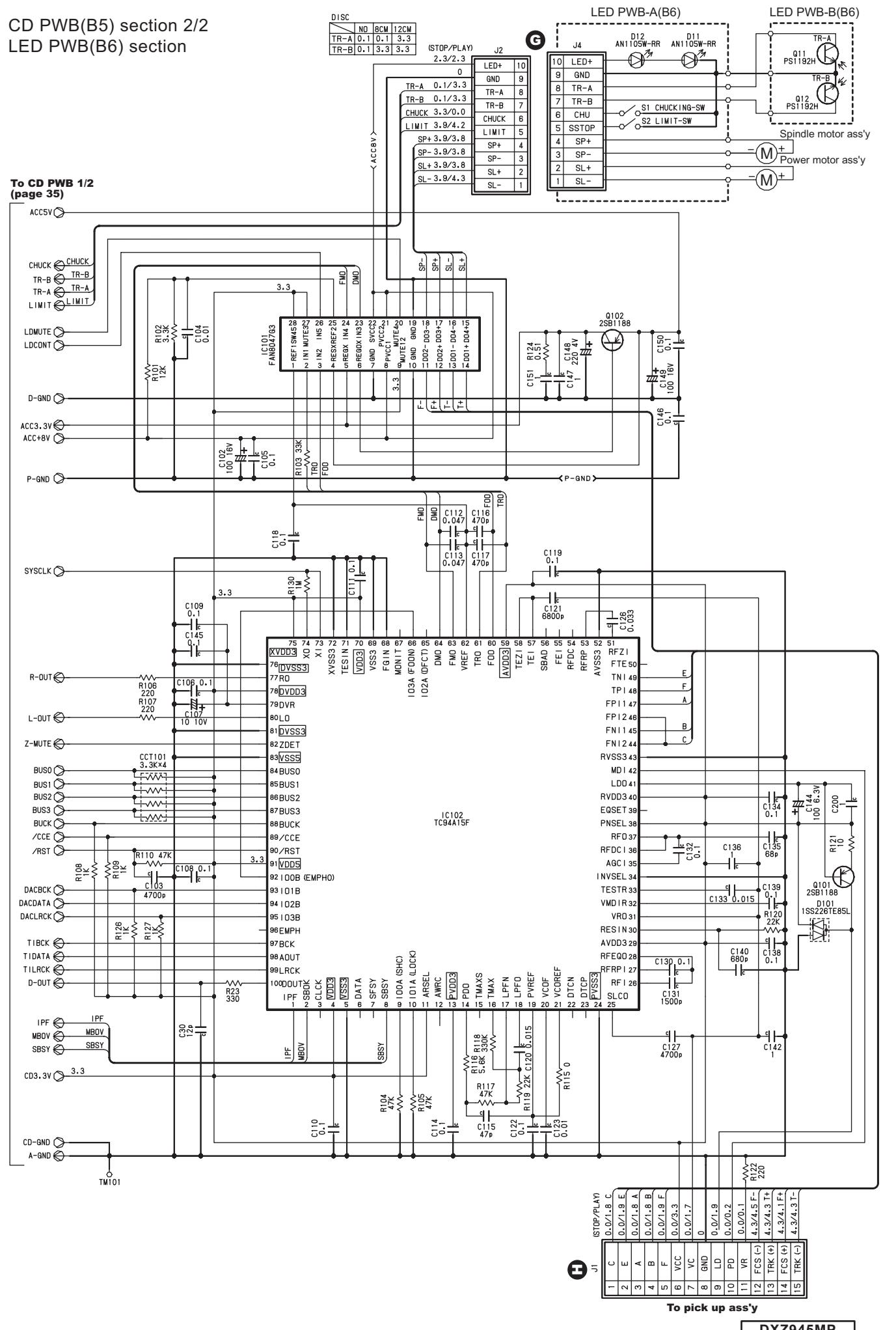
LCD PWB(B3)  
SOL/DR. SIDE

**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.

**CIRCUIT DIAGRAM**  
CD PWB(B5) section 1/2



CD PWB(B5) section 2/2  
LED PWB(B6) section



## PRINTED WIRING BOARD

CD PWB(B5) section  
LED PWB(B6) section

