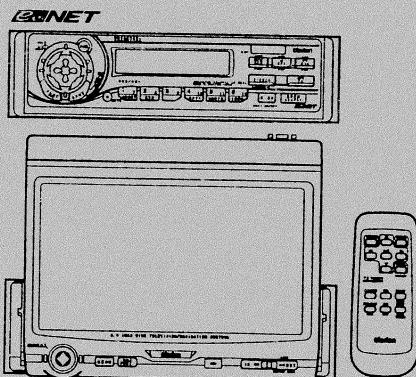


# Service Manual



6.5" Monitor & RDS-EON FM/MW/LW Radio With CD/MD Changer Control

Model **VRX6570Rz**  
(QC-6700E)

## ■ SPECIFICATIONS

### Radio section

Frequency range: FM 87.5MHz to 108MHz  
MW 531kHz to 1602kHz  
LW 153kHz to 279kHz

### Audio section

Rated power output: 17W×4  
(20Hz to 20kHz, 1%, 4Ω)  
Maximum power output:  
40W×4  
Speaker impedance: 4Ω(4 to 8Ω)

### Input section

RGB input: Video  
0.7±0.2Vp-p  
(Input impedance 75Ω)  
Synchronize  
0.3V+0.9V-0.1Vp-p  
(Input impedance 75Ω)  
Video input: 1.0±0.2Vp-p(Mini DIN 8P)  
(Input impedance 75Ω)

### LCD monitor section

Screen size: 6.5-inch wide type  
(142mm Width×78mm Height)  
Display method: Transmission type TN liquid crystal display  
Drive method: TFT(thin-film transistor) active matrix driving  
Pixels: 280,800(1200×234)

### General

Power supply voltage: 14.4V DC  
(10.8 to 15.6V allowable)  
Ground: Negative  
Current consumption: 4.0A(1W)

Auto antenna rated current:

500mA less  
Dimensions(mm): Main unit  
178(W)×50(H)×157(D)  
Remote control unit  
44(W)×110(H)×27(D)  
Weight: Main unit 1.7kg  
Remote control unit 30g  
(including battery)

## ■ NOTES

- \* 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

### QC-6700E-A

Main unit	-----	1
Remote control unit	RCB-130-310	1
Battery cover	653-0387-01	1
Label	653-0387-02	1
Battery(SUM-3,IECR-6/1.5V)	-----	2
Universal mounting bracket	300-9035-01	1
DCP case	335-6035-41	1
Power supply lead	854-6357-00	1
Outer escutcheon	940-7715-01	1
Parts bag(No.1)	-----	
Flat head screw(M5×8)	714-5008-41	4
Sems hexagonal bolt(M5×8)	716-0496-01	5
Parts bag(No.2)	-----	
Hook plate	330-8216-01	2
Cord clamp	335-0833-01	1
Spacer	345-3653-01	1
Special screw	716-0726-01	1

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

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

### 1. Use specified parts.

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

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

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

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

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

### 3. Check for safety after repair.

Check that the screws, parts and wires are put back se-

curely 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.

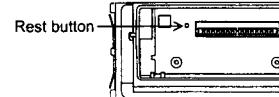
## ERROR DISPLAYS

If an error occurs, one of the following displays is displayed.

Take the measures described below to eliminate the problem.

	Error display	Cause	Measure
CD	ERROR 2	A CD is caught inside the CD deck and is not ejected.	This is a failure of CD deck's mechanism.
	ERROR 3	A CD cannot be played due to scratches,etc.	Replace with a non-scratched,non-warped disc.
	ERROR 6	A CD is loaded upside-down inside the CD deck and does not play.	Eject the disc then reload it properly.
CD changer	ERROR 2	A CD inside the CD changer is not loaded.	This is a failure of CD changer's mechanism.
	ERROR 3	A CD inside the CD changer cannot be played due to scratches,etc.	Replace with a non-scratched,non-warped disc.
	ERROR 6	A CD inside the CD changer cannot be played because it is loaded upside-down.	Eject the disc then reload it properly.
MD changer	ERROR H	Displayed when the temperature in the MD changer is too high and playback has been stopped automatically.	Lower the surrounding temperature and wait for a while to cool off MD changer.
	ERROR 2	An MD inside the MD changer is not loaded.	This is a failure of MD changer's mechanism.
	ERROR 3	An MD inside the MD changer cannot be played due to scratches,etc.	Replace with a non-scratched,non-warped disc.
	ERROR 6	A MD inside the MD changer cannot be played because it is loaded upside-down.	Eject the disc then reload it properly.
		Displayed when a non-recorded MD is loaded in the MD changer.	Load a pre-recorded MD in the MD changer.

Note: If an error display other than the ones described above appears, press the reset button for 2 seconds with a thin rod.



## WIRING AND OPERATIONS

### Caution on wiring

- Use a CeNET extension cable that is less than 20m in length.(including the Y-adapter CCA-519)

### CD changer operations

- When an optional CD changer is connected through the CeNET cable, this unit controls all CD changer functions. This unit can control a total of 2 changers(MD and/or CD).
- CD-ROM discs cannot be played in the CD changer.
- This unit can display title data for CD-text CDs and user titles input with this unit.

### MD changer operations

- When an optional MD changer is connected through the CeNET cable, this unit controls all MD changer functions.
- This unit can display disc title and track titles already entered on MDs.
- Titles cannot be entered for MDs with this unit.

### TV operations

- When an optional TV tuner is connected through the CeNET cable, this unit controls all TV tuner functions.
- This unit has a safety function which turns off the picture when the car is moving, so only the audio can be heard. The picture can only be watched when the car is stopped and the parking break is applied.

## ADJUSTMENTS

Note: Please refer to the adjustment points of the circuit diagram and the printed wiring board.

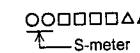
### Dot clock adjustment(at Digital PWB)

- Turn the screen on, and connect TP601(TEST) to GND.
- Adjust TC601 so that the reading of the frequency counter at TP602(VSYNC) is  $12\text{MHz} \pm 0.02\text{MHz}$ .

### S-meter adjustment(at Tuner pack)

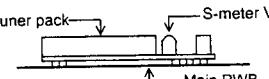
- Input the 98.1MHz/30dB μ(400Hz 30% MOD) signal.
- To make a test mode, press the Preset button 6 more than 1 second while holding the PLAY/PAUSE button.
- Adjust S-meter VR of the tuner pack so that the reading of the display is "28".

### Test mode display



—Figure 1—

### Side view of the main PWB

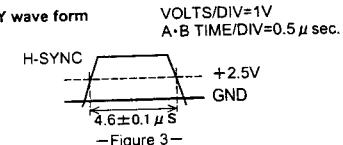


—Figure 2—

### H-sync adjustment(at LCD and LCD PWB)

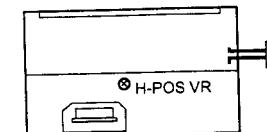
- Adjust H-POS VR of the LCD module so that the width of H-SYNC pulse at 2.5V is  $4.6 \pm 0.1 \mu\text{sec}$ .

### HSY wave form



—Figure 3—

### Reverse side view of LCD



—Figure 4—

### DC-DC converter output voltage adjustment (at LCD PWB)

- Adjust VR701 so that the voltage of TP703 is  $5.3 \pm 0.02\text{V}$ .
- Make sure the voltage has become the following value at each test point.  
TP702 :  $7.5 \pm 0.5\text{V}$   
TP704 :  $13.0 \pm 0.5\text{V}$   
TP701 :  $-16.0 \pm 0.5\text{V}$

### Frequency of IC706 adjustment(at LCD PWB)

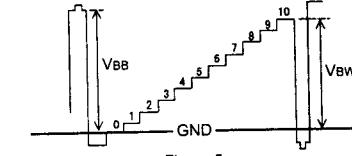
- Adjust VR708 so that the frequency of TP712 is  $144\text{kHz}$ .

### VIDEO signal adjustment(at LCD PWB)

- (1~7:NTSC, 8:PAL)  
Input the visual signal(10step wave, monochrome, APL=50%, 1.0Vp-p) to the VIDEO input.

### 10step wave

VOLTS/DIV=0.1V(10:1PROVE)  
A-B TIME/DIV=10 μ sec.



—Figure 5—

### BRIGHT voltage confirmation

Make sure the voltage of TP706 is  $2.0 \pm 0.1\text{V}$ .

### γ 0 voltage confirmation

Make sure the voltage of TP707 is  $1.95 \pm 0.1\text{V}$ .

### γ 2 voltage confirmation

Make sure the voltage of TP708 is  $2.15 \pm 0.1\text{V}$ .

### RGB-AMP/CONT-G adjustment

Adjust VR707(RBG AMP) so that VBB voltage of TP710 is  $4.0 \pm 0.05\text{V}$ .  
Adjust VR703(CONT) so that VBW voltage of TP710 is  $3.8 \pm 0.05\text{V}$ .

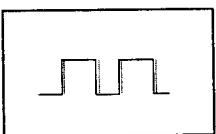
### BRT-R Adjustment

Adjust VR705(BRT-R) so that VBB voltage of TP711 is  $4.0 \pm 0.05\text{V}$ .

### BRT-B Adjustment

Adjust VR706(BRT-B) so that VBB voltage of TP709 is  $4.0 \pm 0.05\text{V}$ .

7. COM-AMP adjustment  
Adjust VR704(COM-AMP) so that the amplitude of TP705 is  $8.0 \pm 0.1$ Vp-p.
8. Burst cleaning adjustment  
Input a color bar signal.  
Adjust L709 so that the wave form of TP709 is in focus.
- Burst cleaning



—Figure 6—

### VCOM DC bias adjustment

Adjust VR702(VCOM DC) to obtain the optimum contrast.

## ■EXPLANATION OF IC

■M30624MG-D07GP 052-6043-00 AV Center System Controller (Tuner, LCD panel, Ce-NET, RDS, Volume IC)

### 1. Terminal Description

pin 1 : LCD COLOR	: O : Color control signal output to LCD panel.
pin 2 : LCD HUE	: O : Hue control signal output to LCD panel.
pin 3 : IR IN	: IN : Signal input from Remote controller.
pin 4 : AMP REM OUT	: O : Amplifier ON signal output terminal.
pin 5 : RDS CLOCK	: IN : RDS clock input from RDS decoder.
pin 6 : BYTE	: IN : Connect to ground.
pin 7 : CNVSS	: IN : Connect to ground.
pin 8 : SUB CLK I	: IN : Crystal connection for sub clock.
pin 9 : SUB CLK O	: O : Crystal connection for sub clock.
pin 10 : RESET	: IN : Reset signal input. Negative logic.
pin 11 : X OUT	: O : Crystal connection for main clock(10MHz).
pin 12 : VSS	: - : Ground.
pin 13 : X IN	: IN : Crystal connection for main clock(10MHz).
pin 14 : VCC	: - : Positive supply voltage.
pin 15 : NMI	: IN : Not in use.
pin 16 : ACC DET	: IN : ACC ON signal input.
pin 17 : B/U DET	: IN : Backup voltage ON signal input. "L"=Backup OFF.
pin 18 : OPEN/CLOSE	: IN : Open/close key input.
pin 19 : 27pinCONNECT	: IN : IE bus data detect.
pin 20 : ACC +B ON	: O : LCD back light ON signal output.
pin 21 : AV 5V ON	: O : 5V power supply ON signal output.
pin 22 : NU	: IN : Not in use.
pin 23 : PANEL ON	: O : LCD panel power on signal output.
pin 24 : BRT	: O : LCD panel brightness control signal output.
pin 25 : NU	: IN : Not in use.
pin 26 : IR OUT	: O : Signal output to Remote controller.
pin 27 : IE BUS RX	: IN : IE Bus communication line.
pin 28 : IE BUS TX	: O : IE Bus communication line.
pin 29 : OSD DO	: O : Serial data output to OSD IC.
pin 30 : OSD STB	: O : Serial strobe output to OSD IC.
pin 31 : OSD SCK	: O : Clock pulse output to OSD IC.
pin 32 : PLL CE	: O : PLL chip enable signal output.
pin 33 : PLL DO	: O : PLL serial data output.
pin 34 : PLL DI	: IN : PLL serial data input.
pin 35 : PLL SCK	: O : PLL serial clock output.
pin 36 : FM STEREO	: IN : FM stereo detection signal input. "L"=Stereo.
pin 37 : NU	: IN : Not in use.
pin 38 : NU	: IN : Not in use.
pin 39 : AV ON	: O : Power supply control signal output.
pin 40 : OSD TSC	: O : OSD external memory control signal output.
pin 41 : NU	: IN : Not in use.
pin 42 : VOL/DO	: O : Serial data output to electric volume IC.
pin 43 : VOL/DO	: O : Serial data output to electric volume IC.
pin 44 : OPEN	: IN : Panel open detection signal input.
pin 45 : CLOSE	: IN : Panel close detection signal input.
pin 46 : NU	: O : Not in use.
pin 47 : PAL/_NTSC	: O : "L"=PAL, "H"=NTSC.

Table 1. AUX IN select signal input

	Se3(pin50)	Se2(pin49)
No connection	L	L
No connection	L	H
Image signal interrupt	H	L
Image sound signal interrupt	H	H

Table 2. Image source select signal output.

	Vsel 2(pin56)	Vsel 1(pin55)
Video mute	L	L
Navigation	L	H
Black box tuner	H	L
Black box tuner	H	H

■IR3Y29BM 051-5313-10 Image Signal Processing for TFT Liquid Crystal.

### 1. Terminal Description

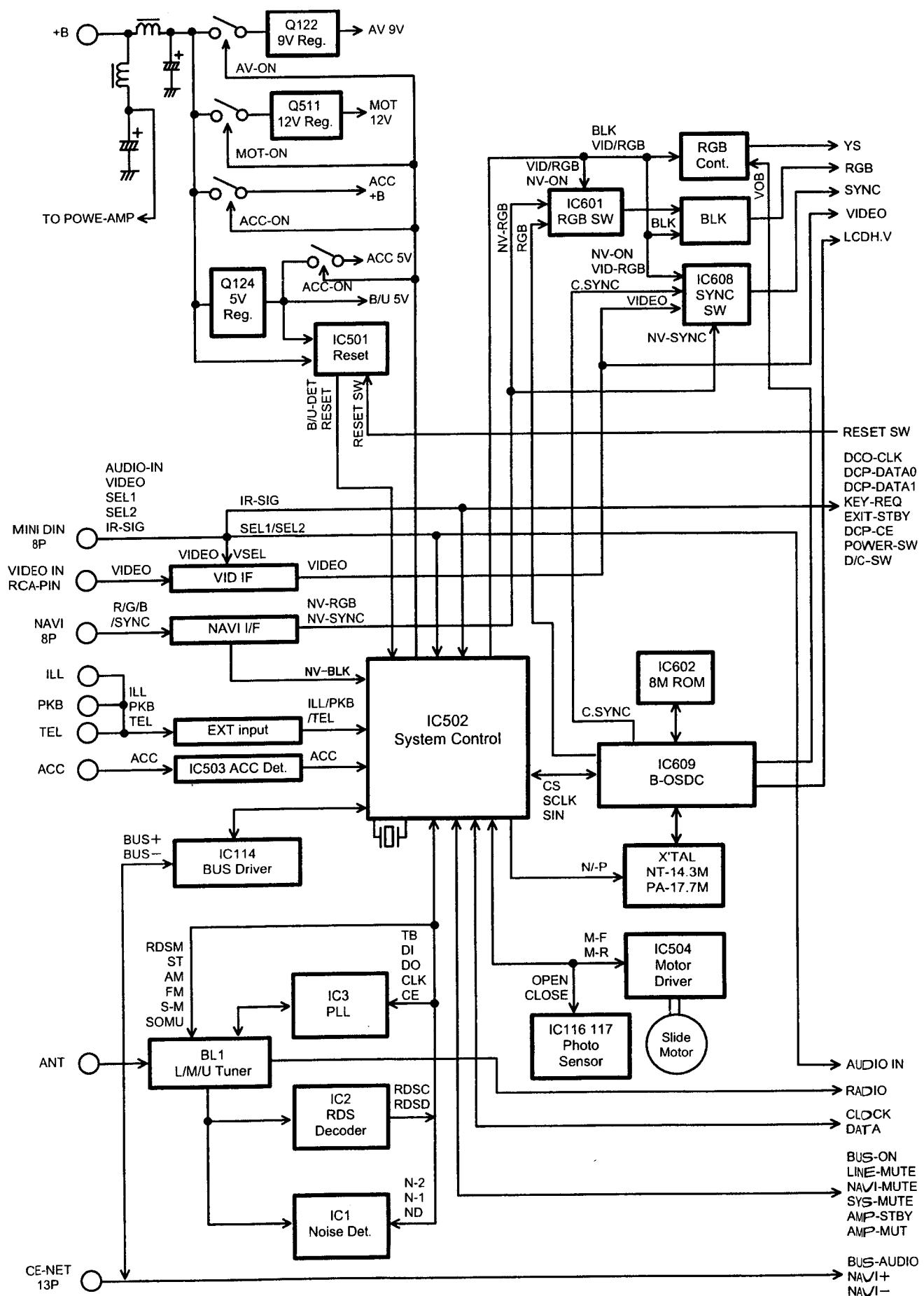
pin 1 : TRAP	: TRAP connection terminal
pin 2 : CONTRAST	: CONTRAST adjustment terminal.
pin 3 : VIDEO IN	: Composite video signal input terminal.
pin 4 : INDEN FIL	: Filter connection terminal for INDENT detection.
pin 5 : CIN	: Chroma signal input terminal.
pin 6 : COLOR	: COLOR adjustment terminal.
pin 7 : BURST OUT	: Burst cleaning coil connection terminal when PAL is selected.
pin 8 : KILLE FIL	: Filter connection terminal for KILLER detection.
pin 9 : R-Y	: Input terminal for color differential demodulation circuit.
pin 10 : B-Y	: Input terminal of color differential demodulation circuit.
pin 11 : ACC FIL	: Filter connection terminal for ACC detection.
pin 12 : CHROM OUT	: Output terminal of chroma signal without burst after color adjustment.
pin 13 : TINT	: Terminal for tint adjustment.
pin 14 : VCO IN	: VCO input terminal.
pin 15 : APC FIL	: Filter connection terminal for APC detection.
pin 16 : VCO OUT	: VCO output terminal.
pin 17 : GND1	: GND1
pin 18 : GND2	: GND2
pin 19 : R OUT	: RED primary color output terminal.
pin 20 : R DC DET	: Smoothing capacitor connection terminal of feed-back circuit for RED output DC level control.
pin 21 : G OUT	: GREEN primary color output terminal.
pin 22 : G DC DET	: Smoothing capacitor connection terminal of feed-back circuit for GREEN output DC level control.
pin 23 : VCC2	: Power terminal for RGB output.
pin 24 : B OUT	: BLUE primary color output terminal.
pin 25 : R DC DET	: Smoothing capacitor connection terminal of feed-back circuit for BLUE output DC level control.
pin 26 : GAMMA2	: Gamma 2 adjustment terminal.
pin 27 : GAMMA0	: Gamma 0 adjustment terminal.
pin 28 : RGB AMP	: Oscillation adjustment terminal for RGB output signal.
pin 29 : BRIGHT	: Adjustment of gamma correction curve and oscillation adjustment for common output.
pin 30 : SUB BR-B	: Conduct BLUE brightness minor adjustment in connection with gamma correction curve.
pin 31 : SUB BR-R	: Conduct RED brightness minor adjustment in connection with gamma correction curve.
pin 32 : COMM FRP	: Timing pulse input terminal for common output level switching.
pin 33 : FRP	: Timing pulse input terminal for RGB output polarity inversion.
pin 34 : SYNC IN	: Level synchronism signal input terminal (Low active.)
pin 35 : SYNC OUT	: Complex synchronism signal output.
pin 36 : SYNC SEP	: Synchronism separation circuit input terminal.
pin 37 : COMM AMP	: Common signal oscillation adjustment terminal.
pin 38 : COMM OUT	: Common signal output.
pin 39 : SW IN	: "H"=RGB input, "L"=Video input
pin 40 : B in	: BLUE signal input
pin 41 : G in	: GREEN signal input
pin 42 : R in	: RED signal input
pin 43 : VCC1	: Power terminal
pin 44 : FADJ	: Internal filter characteristic adjustment terminal.
pin 45 : CLAMP	: Connect capacitor for pedestal clamp of brightness signal.
pin 46 : AGC FIL	: Connection terminal for AGC adjustment of brightness signal.
pin 47 : AGC OUT	: Output terminal for DC voltage which is made from brightness signal by detecting at AGC detecting circuit.
pin 48 : PICTURE	: Frequency characteristic adjustment terminal for brightness signal.

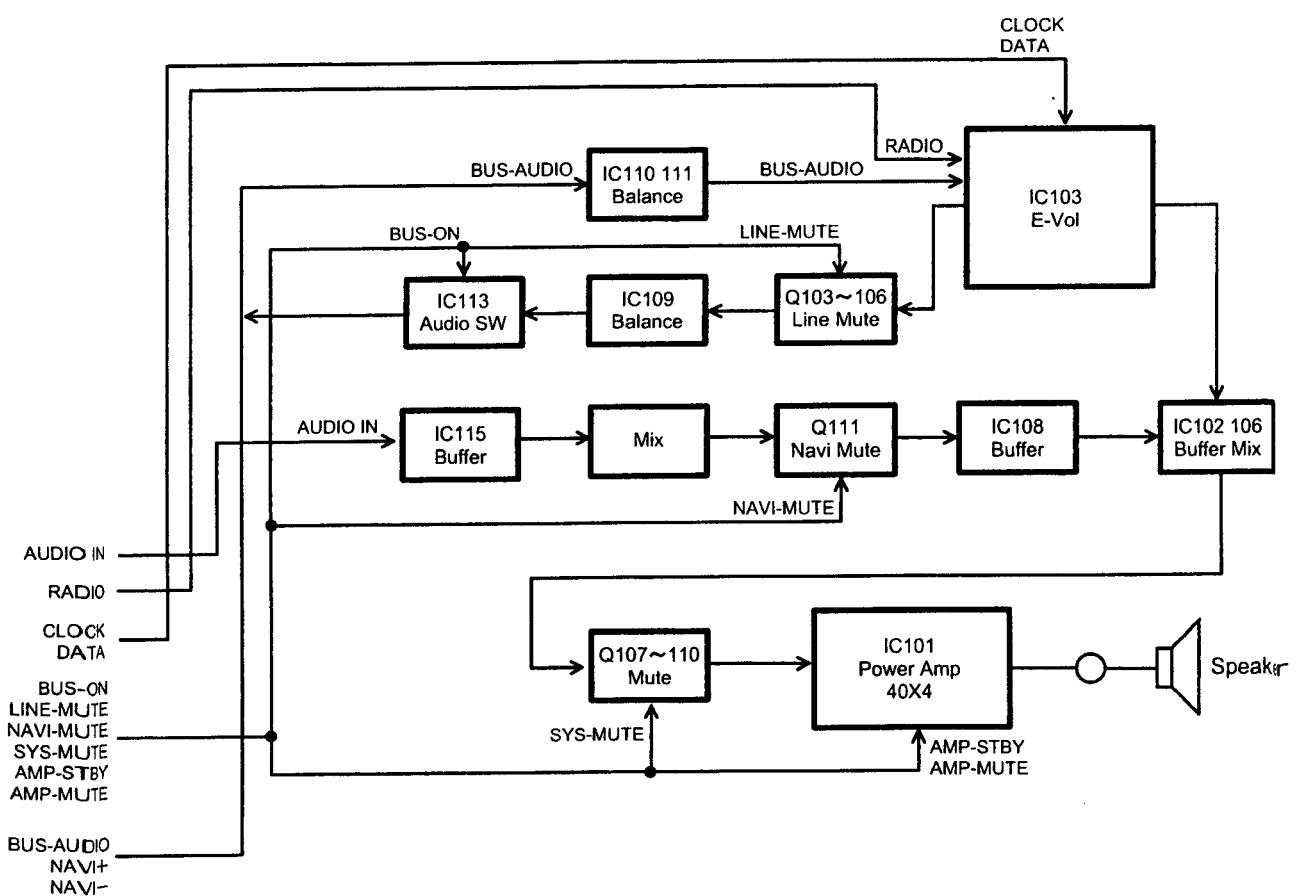
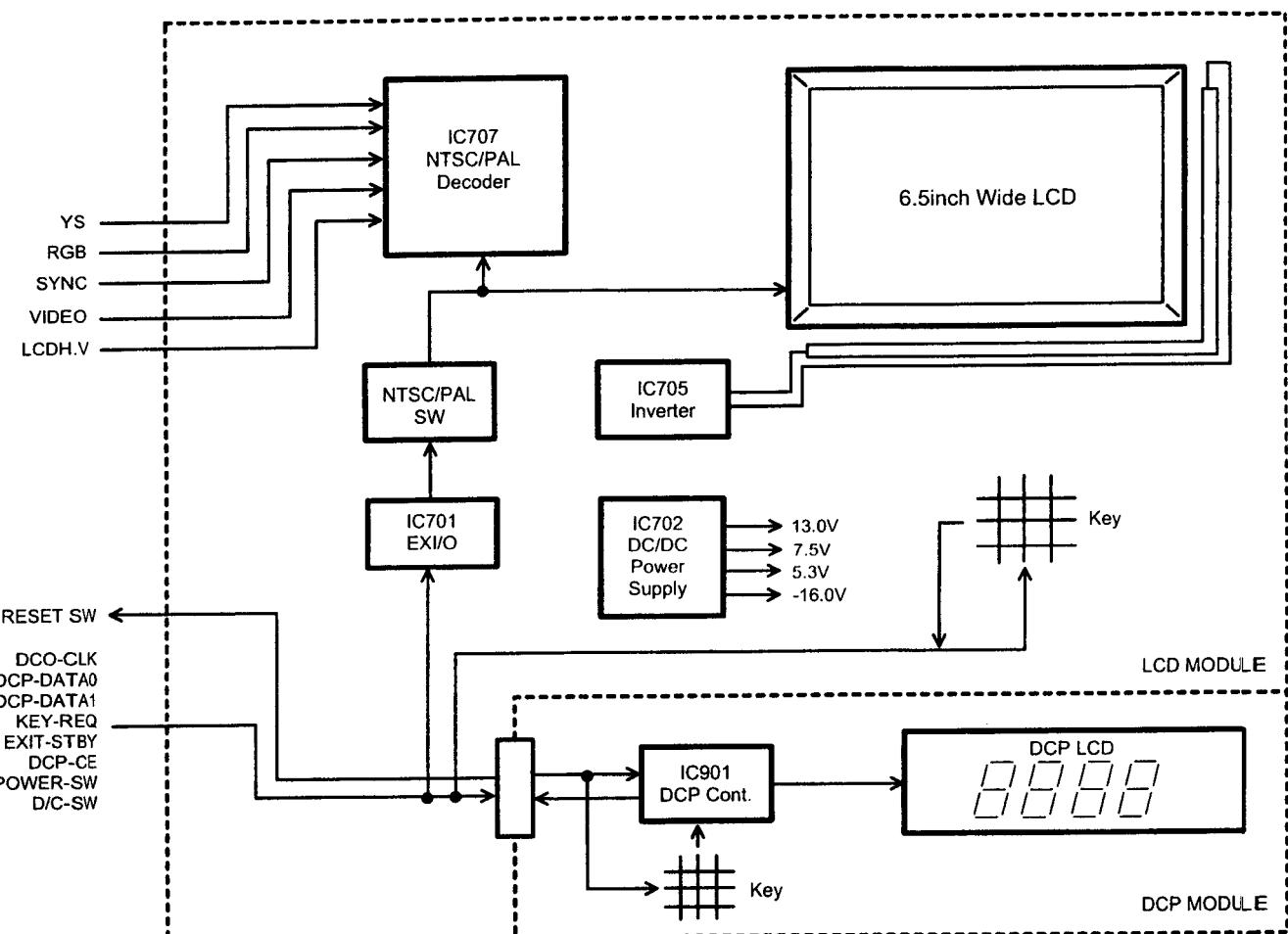
■MB90092PF-G-BND 051-6412-00 ON Screen Display Controller

### 1. Terminal Description

pin 1 : IC	: IN : Not in use. Connect to VDD.
pin 2 : VOC	: O : Character signal output flag.
pin 3 : VOB	: O : Character and background output flag.
pin 4 : VSS	: - : Ground.
pin 5 : BLUE	: O : Blue output.
pin 6 : RED	: O : Red output.
pin 7 : GREEN	: O : Green output.
pin 8 : CS_	: IN : Chip select signal input. Negative logic.
pin 9 : S CLK IN	: IN : Serial data clock pulse input.
pin 10 : S IN	: IN : Serial data input.
pin 11 : VCC	: - : Positive supply voltage.
pin 12 : EX H SYNC_	: IN : External horizontal synchronizing signal input. Negative logic.
pin 13 : EX V SYNC_	: IN : External vertical synchronizing signal input. Negative logic.
pin 14 : H SYNC O_	: O : Horizontal synchronizing signal output. Negative logic.
pin 15 : V SYNC O_	: O : Vertical synchronizing signal output. Negative logic.
pin 16 : V BLNK_	: O : Vertical blanking flag output. Negative logic.
pin 17 : EXS	: IN : Crystal connection for the color burst.
pin 18 : XS	: O : Crystal connection for the color burst.
pin 19 : NU	: - : Not in use.
pin 20 : FSCO	: O : Internal color burst clock output.
pin 21 : CB CK	: IN : External color burst clock input.
pin 22 : PDS	: O : Output of the color burst phase comparator.
pin 23 : VSS	: - : Ground.
pin 24 : A VSS	: - : Analog ground.
pin 25 : NU	: - : Not in use.
pin 26 : NU	: - : Not in use.
pin 27 : NU	: - : Not in use.
pin 28 : NU	: - : Not in use.
pin 29 : A VSS	: - : Analog ground.
pin 30 : A VSS	: - : Analog ground.
pin 31 : Y OUT	: O : Brightness signal output.
pin 32 : Y IN	: IN : Brightness signal input of superimpose.
pin 33 : A VCC 2	: - : Positive supply voltage for the brightness signal and chromatic signal.
pin 34 : C OUT	: O : Chromatic signal output.
pin 35 : C IN	: IN : Chromatic signal input of superimpose.
pin 36 : A VSS	: - : Analog ground.
pin 37 : V OUT	: O : Composite video signal output.
pin 38 : VK IN	: IN : Background tone adjust input.
pin 39 : VK OUT	: O : Background tone adjust output.
pin 40 : V IN	: IN : Composite video signal input at superimpose.
pin 41 : A VCC 1	: - : Positive supply voltage for the composite video signal.
pin 42 : VCC	: - : Positive supply voltage.
pin 43 : READ	: O : Read signal output to the font memory.
pin 44 : DA 0	: IN : Data input from the font memory.
pin 45 : DA 1	: IN : Data input from the font memory.
pin 46 : DA 2	: IN : Data input from the font memory.
pin 47 : DA 3	: IN : Data input from the font memory.
pin 48 : DA 4	: IN : Data input from the font memory.
pin 49 : DA 5	: IN : Data input from the font memory.
pin 50 : DA 6	: IN : Data input from the font memory.
pin 51 : DA 7	: IN : Data input from the font memory.
pin 52 : VSS	: - : Ground.
pin 53 : ADR 0	: O : Address output to the font memory.
pin 54 : ADR 1	: O : Address output to the font memory.
pin 55 : ADR 2	: O : Address output to the font memory.
pin 56 : ADR 3	: O : Address output to the font memory.
pin 57 : ADR 4	: O : Address output to the font memory.
pin 58 : ADR 5	: O : Address output to the font memory.
pin 59 : ADR 6	: O : Address output to the font memory.
pin 60 : ADR 7	: O : Address output to the font memory.
pin 61 : ADR 8	: O : Address output to the font memory.
pin 62 : VCC	: - : Positive supply voltage.
pin 63 : ADR 9	: O : Address output to the font memory.
pin 64 : ADR 10	: O : Address output to the font memory.
pin 65 : VSS	: - : Ground.
pin 66 : ADR 11	: O : Address output to the font memory.
pin 67 : ADR 12	: O : Address output to the font memory.
pin 68 : ADR 13	: O : Address output to the font memory.
pin 69 : ADR 14	: O : Address output to the font memory.
pin 70 : ADR 15	: O : Address output to the font memory.
pin 71 : ADR 16	: O : Address output to the font memory.
pin 72 : ADR 17	: O : Address output to the font memory.
pin 73 : ADR 18	: O : Address output to the font memory.
pin 74 : ADR 19	: O : Address output to the font memory.
pin 75 : ADR 20	: O : Address output to the font memory.
pin 76 : VCC	: - : Positive supply voltage.
pin 77 : TSC_	: IN : Tri state control signal input.
pin 78 : TEST	: IN : Not in use.
pin 79 : EXD	: IN : LC connection for the dot clock generator.
pin 80 : XD	: O : LC connection for the dot clock generator.

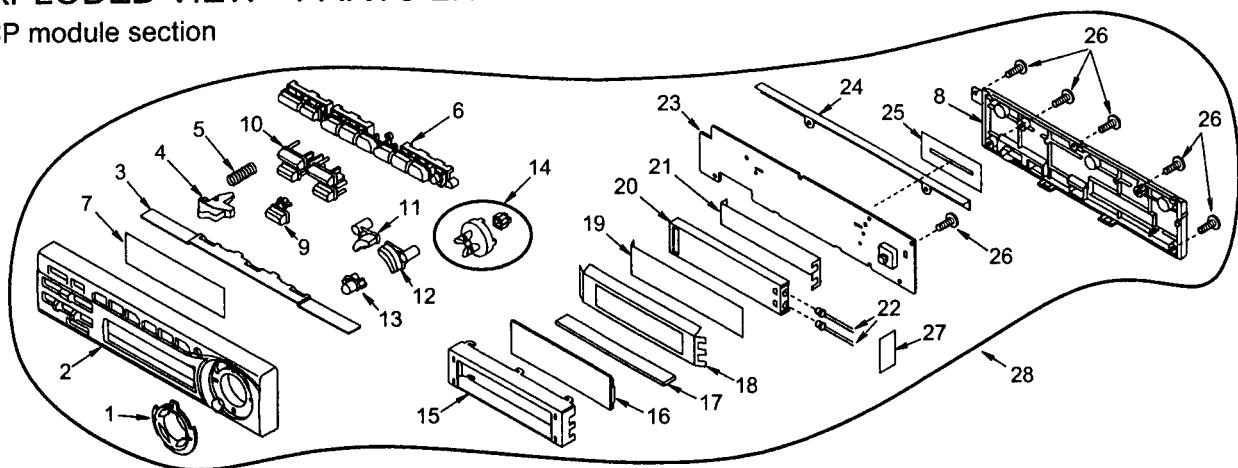
## ■ BLOCK DIAGRAM





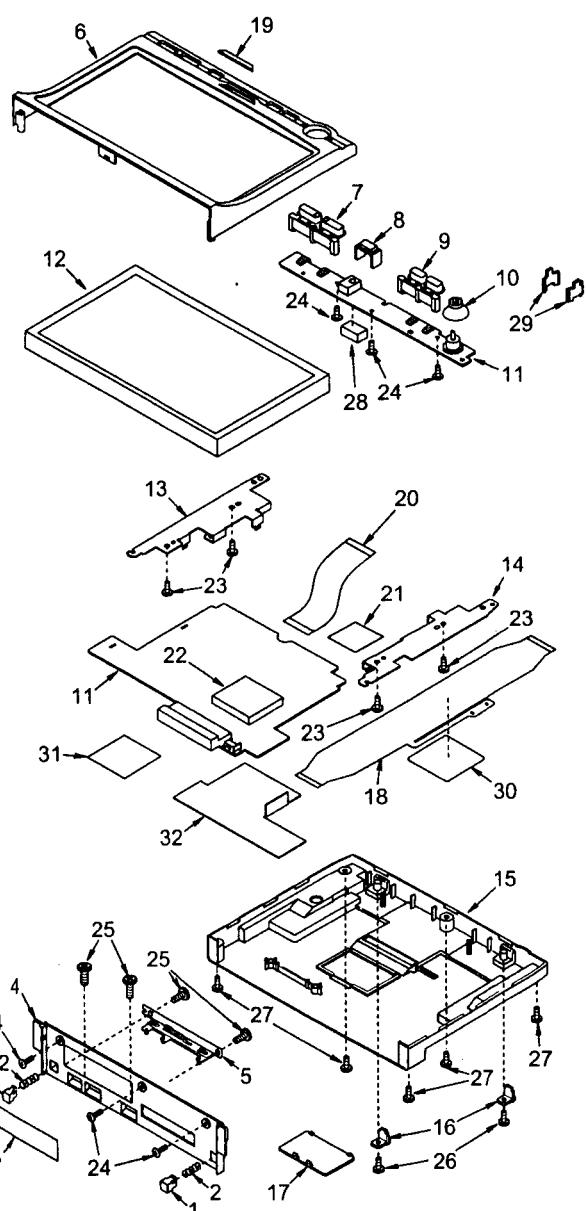
■ EXPLODED VIEW • PARTS LIST

## DCP module section

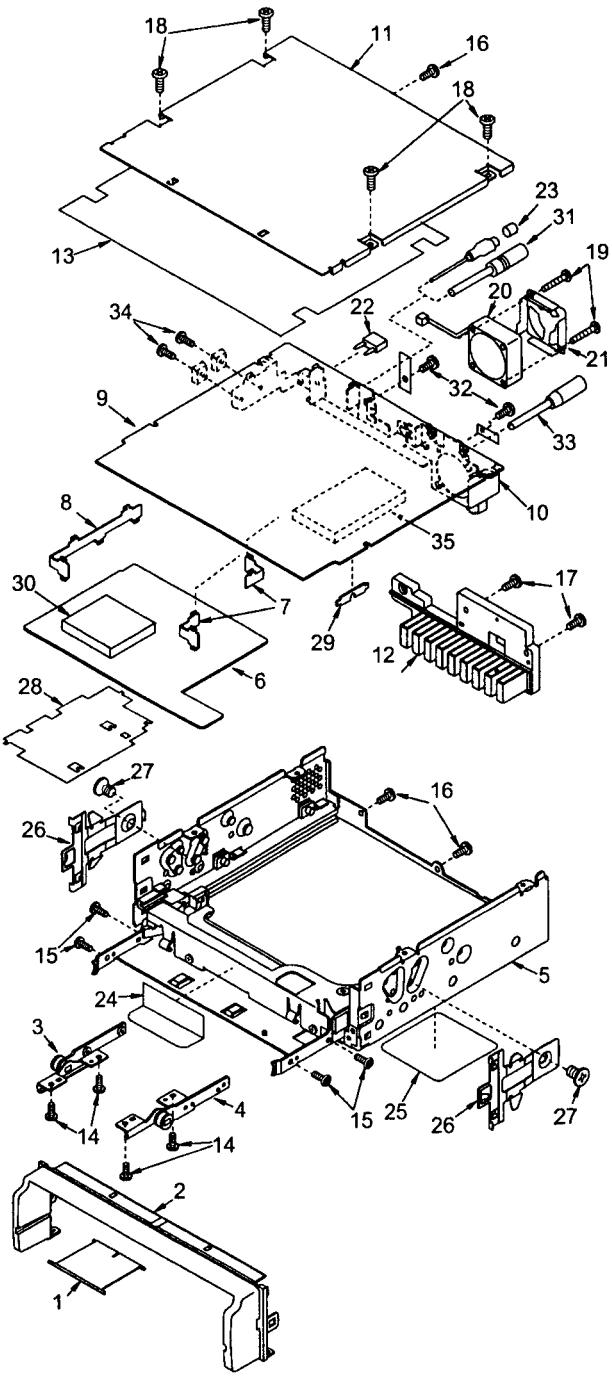


#### LCD module section

**Note:** Please refer to page 10 when you release the LCD module from the main unit.



## Main section



DCP module section

NO.	PART NO.	DESCRIPTION	Q'TY
1	335-6084-00	ILLUMI PART	1
2	370-5828-00	ECSUTCHEON	1
3	331-2770-00	SPACER	1
4	335-6082-00	LEVER(Release)	1
5	750-6696-00	SPRING	1
6	947-0495-00	BUTTON ASSY	1
7	371-3912-00	TRIM PLATE	1
8	335-6081-00	BACK PLATE	1
9	382-5455-00	BUTTON(RPT)	1
10	382-5470-00	BUTTON(SCN/RDM/Z-E/TA)	1
11	382-5468-00	BUTTON(BAND)	1
12	382-5467-00	BUTTON(FUNC)	1
13	382-5466-00	BUTTON(PLAY/PAUSE)	1
14	948-0498-00	KNOB ASSY	1
15	331-2771-00	LCD COVER	1

NO.	PART NO.	DESCRIPTION	Q'TY
16	379-1162-41	INDICATOR(FOR DCP)	1
17	345-8389-00	RUBBER CONNECTOR	1
18	347-5336-00	FILM	1
19	347-5337-00	CCS FILM	1
20	335-5138-00	ILLUMI PLATE	1
21	347-5335-00	REFLECTOR	1
22	001-7030-00	DIODE	1
23	039-1528-00	DCP PWB (WITHOUT COMPONENT)	1
24	347-6155-00	INSULATOR	1
25	347-6115-00	SHADE	1
26	716-0872-11	PAD SCREW	6
27	347-2061-00	LABEL	1
28	DCP-177-700	DCP ASSY	1

LCD module section

NO.	PART NO.	DESCRIPTION	Q'TY
1	335-5147-00	EJECTOR	2
2	750-6697-00	SPRING	2
3	347-5187-01	GUIDE LABEL	1
4	335-6078-00	DCP COVER	1
5	948-0539-00	HOOK-P-ASSY	1
6	373-0909-00	DIAL COVER	1
7	382-5456-00	BUTTON(IN/OUT)	1
8	335-6077-00	IR FILTER	1
9	382-5457-00	BUTTON(MENU/VIEW)	1
10	380-5452-00	KNOB(JOG)	1
11	039-1545-00	LCD PWB (WITHOUT COMPONENT)	1
12	379-4025-00	INDICATOR(6.5inch)	1
13	331-2710-00	LCD BRACKET A	1
14	331-2711-00	LCD BRACKET B	1
15	377-2613-00	DIAL SUPPORT	1
16	335-5161-00	LOCK	2

NO.	PART NO.	DESCRIPTION	Q'TY
17	335-6089-00	CONNECT COVER	1
18	039-1512-00	FLEXIBLE PWB	1
19	379-0515-00	BADGE(Clariion)	1
20	816-2439-00	FLAT WIRE	1
21	347-6110-00	INSULATOR	1
22	331-2789-00	SHIELD CASE	1
23	702-2605-80	TAP SCREW	4
24	716-0872-02	PAD SCREW	6
25	702-2606-87	TAP SCREW	4
26	702-2006-89	TAP SCREW	2
27	702-2010-87	TAP SCREW	5
28	345-8378-00	SPACER	1
29	335-6076-00	ILLUMI PART	2
30	347-6114-00	SHADE	1
31	347-5422-00	SHIELD SHEET	1
32	347-6154-00	SHIELD SHEET	1

Main section

NO.	PART NO.	DESCRIPTION	Q'TY
1	335-6075-00	FLEXIBLE PWB COVER	1
2	370-5829-00	ESCUTCHEN	1
3	948-0523-00	TORQUE BUSH L	1
4	948-0523-10	TORQUE BUSH R	1
5	948-0530-00	SLIDE MECH ASSY(cf.p10-11)	1
6	039-1520-01	DIGITAL PWB (WITHOUT COMPONENT)	1
7	331-2712-00	PWB HOLDER A	2
8	331-2713-00	PWB HOLDER B	1
9	039-1519-00	MAIN PWB (WITHOUT COMPONENT)	1
10	331-2714-00	CONNECTOR PLATE	1
11	311-1778-00	LOWER CASE	1
12	313-1761-00	HEAT SINK	1
13	347-6111-00	INSULATOR	1

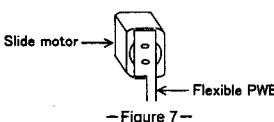
NO.	PART NO.	DESCRIPTION	Q'TY
14	780-2606-03	IT SCREW	4
15	780-2605-02	MACHINE SCREW	4
16	731-2605-80	TAP SCREW	.3
17	714-2610-80	MACHINE SCREW	2
18	716-1494-00	IT SCREW	4
19	780-6215-00	MACHINE SCREW	2
20	020-3038-00	FAN	1
21	331-2727-00	FAN COVER	1
22	060-8021-07	AUTO FUSE(15A)	1
23	345-3799-00	CAP	1
24	347-6136-00	FLEXIBLE PWB GUIDE	1
25	286-9262-00	SETPLATE	1
26	750-2796-02	SPRING	2
27	714-5008-41	MACHINE SCREW	2

NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
28	347-6153-00	SHIELD SHEET	1	32	714-3005-80	MACHINE SCREW	2
29	347-6113-00	SHIELD SHEET	1	33	092-0701-01	ANTENNA RECEPTACLE	1
30	331-2790-00	SHIELD CASE	1	34	714-2606-80	MACHINE SCREW	2
31	855-1428-00	8P-DIN/RCA CORD	1	35	880-2084C	F/M/L TUNER PACK	1

### ■ How to release LCD module

Refer to the exploded view of the main section on page 8.  
1. Remove the machine screws(NO.27x2) and the springs(NO.26x2).

2. Remove the IT screws(NO.18x4) and the tap screw(NO.16x3) in order to release the lower case(NO.11).
3. Remove the escutchen(NO.2) and the main PWB assembly(NO.9).
4. Pull out the LCD module, and release the flexible PWB of the LCD module from the motor of the slide mechanism assembly(NO.5). (Figure 7)



—Figure 7—

### ■ EXPLODED VIEW • PARTS LIST

Slide mechanism section : 948-0530-00

NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
1	354-8388-00	CUSHION	1	18	341-1705-00	PIN	1
2	744-0041-00	E-RING	1	19	331-2703-00	LOCK LEVER	1
3	702-2006-80	TAP SCREW	3	20	335-6073-00	LOCK BASE	1
4	345-8357-00	SPACER	1	21	341-1709-00	PIN	1
5	345-8358-00	SPACER	2	22	702-2606-87	TAP SCREW	1
6	612-0402-00	SHAFT	1	23	743-2000-10	E-RING	1
7	310-1683-00	UPPER CASE	1	24	750-3399-00	SPRING	1
8	331-2702-00	RACK HOLDER	1	25	341-1708-00	PIN	1
9	335-6080-00	SLIDE HOLDER	1	26	341-1707-00	PIN	1
10	335-6074-00	RACK	1	27	341-1706-00	PIN	1
11	716-0872-00	PAD SCREW	6	28	714-2003-81	MACHINE SCREW	2
12	331-2704-00	SENSOR PLATE	1	29	634-0017-00	MOTOR ASSY	1
13	331-2700-00	SLIDE PLATE	1	30	743-1500-01	E-RING	3
14	623-1034-00	HOLDER	1	31	613-0682-00	GEAR	1
15	335-6079-00	SLIDER	1	32	613-0300-00	GEAR	1
16	780-2606-03	IT SCREW	5	33	331-2701-00	GEAR PLATE	1
17	716-0878-01	IT SCREW	3	34	634-0016-00	GEAR ASSY	1

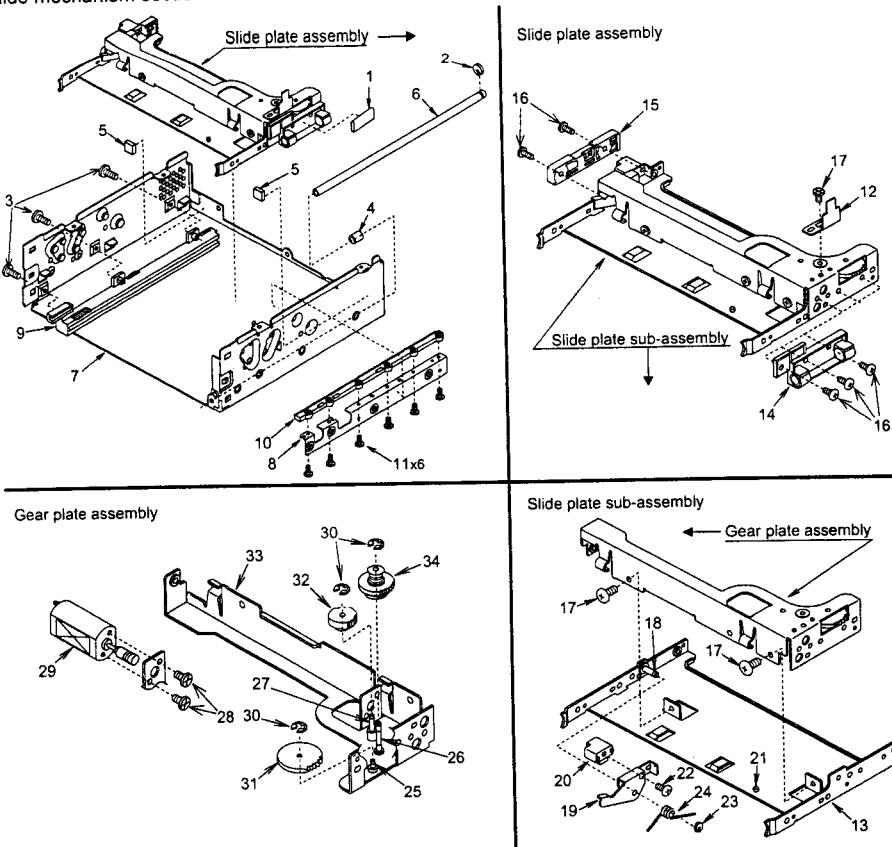
Caution for the replacement of the motor assembly

After you replaced the motor assembly with new one, please make sure that the current of the motor assembly is 50mA or less when you input 8V as the power voltage.

If the current is over 50mA, loosen the screws, and adjust the position of the motor assembly.

Then tighten the screws, and check the current again.

Slide mechanism section : 948-0530-00



### ■ ELECTRICAL PARTS LIST

Main PWB section(B1)

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
BL1	880-2084C	F/M/L-TUNER	C24	178-3312-78	330pF	C57	176-1011-00	100pF CH
C1	178-1032-78	0.01 μF	C25	176-1011-00	100pF CH	C58	176-1011-00	100pF CH
C2	042-0595-80	50V2.2 μF	C26	176-1011-00	100pF CH	C101	178-1032-78	0.01 μF
C3	042-0595-80	50V2.2 μF	C27	176-1011-00	100pF CH	C102	176-4701-00	47pF CH
C4	176-1801-00	18pF CH	C29	042-0595-65	16V47 μF	C103	178-1045-79	0.1 μF
C5	178-2232-78	0.022 μF	C30	178-4732-78	0.047 μF	C104	042-0592-58	16V 10 μF
C6	163-2263-30	16V22 μF	C32	042-0595-65	16V47 μF	C105	042-0592-58	16V 10 μF
C7	178-3322-78	3300pF	C33	178-1042-78	0.1 μF	C106	042-0592-58	16V 10 μF
C8	178-4732-78	0.047 μF	C34	042-0595-79	50V1 μF	C107	042-0592-73	50V1 μF
C9	178-2232-78	0.022 μF	C35	178-1042-78	0.1 μF	C108	042-0592-74	50V 2.2 μF
C10	178-2232-78	0.022 μF	C36	178-2212-78	220pF	C109	178-6822-78	6800pF
C11	178-3932-78	0.039 μF	C37	178-8222-78	8200pF	C110	176-2201-00	22pF CH
C12	178-6822-78	6800pF	C38	176-1011-00	100pF CH	C111	042-0595-62	16V10 μF
C13	178-2222-78	2200pF	C40	178-1222-78	1200pF	C112	178-6835-79	0.068 μF
C14	178-1022-78	1000pF	C41	176-1501-00	15pF CH	C113	178-1022-78	1000pF
C15	178-2232-78	0.022 μF	C42	176-1801-00	18pF CH	C114	178-2212-78	220pF
C16	178-1022-78	1000pF	C43	042-0595-79	50V1 μF	C115	178-1032-78	0.01 μF
C17	178-2232-78	0.022 μF	C44	042-0595-79	50V1 μF	C116	178-1055-79	1 μF
C18	178-2232-78	0.022 μF	C46	178-1022-78	1000pF	C118	042-0592-66	35V 4.7 μF
C19	178-2232-78	0.022 μF	C47	178-1022-78	1000pF	C119	042-0592-59	16V22 μF
C20	178-2212-78	220pF	C48	178-1022-78	1000pF	C120	042-0592-58	16V 10 μF
C21	176-8201-00	82pF CH	C49	176-1011-00	100pF CH	C121	042-0595-62	16V10 μF
C22	042-0595-80	50V2.2 μF	C50	176-1011-00	100pF CH	C122	042-0592-70	50V0.22 μF
C23	176-4701-00	47pF CH	C51	176-1011-00	100pF CH	C123	042-0592-70	50V0.22 μF

Note) Several different parts of the same reference number are alternative parts. One of those parts is used in the set.

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C124	042-0592-70	50V0.22 $\mu$ F	C208	042-0592-58	16V 10 $\mu$ F	D124	001-4300-48	HZU 9.1B3	Q115	100-1162-00	ZSA1162	R102	117-2231-10	1/10W 22k $\Omega$
C125	042-0592-70	50V0.22 $\mu$ F	C209	176-2201-00	22pF CH	D124	001-0528-00	MA8091-H	Q115	100-1037-00	ZSA1037	R103	117-1031-10	1/10W 10k $\Omega$
C126	178-1042-78	0.1 $\mu$ F	C210	042-0595-62	16V10 $\mu$ F	D150	001-0528-25	MA8047-L	Q116	100-1162-00	ZSA1162	R104	117-3321-10	1/10W 3.3k $\Omega$
C127	178-1042-78	0.1 $\mu$ F	C211	178-1032-78	0.01 $\mu$ F	D150	001-4300-25	HZU4.7B1	Q116	100-1037-00	ZSA1037	R105	117-6831-10	1/10W 68k $\Omega$
C128	042-0592-58	16V 10 $\mu$ F	C212	042-0592-58	16V 10 $\mu$ F	IC1	051-0350-55	NJM4558M	Q117	125-2020-03	DTC124EK	R106	117-1531-10	1/10W 15k $\Omega$
C129	176-4701-00	47pF CH	C213	042-0592-66	35V 4.7 $\mu$ F	IC2	051-1819-50	TDA7479D	Q117	125-2004-03	RN1403	R107	117-3331-10	1/10W 33k $\Omega$
C130	042-0592-58	16V 10 $\mu$ F	C214	176-2201-00	22pF CH	IC3	051-6201-00	LC72146M	Q118	125-2020-03	DTC124EK	R108	117-2231-10	1/10W 22k $\Omega$
C132	042-0595-80	50V2.2 $\mu$ F	C215	042-0592-66	35V 4.7 $\mu$ F	IC101	051-2023-01	TA8260AH	Q118	125-2004-03	RN1403	R109	117-2221-10	1/10W 2.2k $\Omega$
C134	184-2283-32	16V200 $\mu$ F	C216	176-2201-00	22pF CH	IC102	051-3015-00	NJM4580M	Q119	125-2020-03	DTC124EK	R110	117-2721-10	1/10W 2.7k $\Omega$
C135	042-0595-79	50V1 $\mu$ F	C217	042-0592-66	35V 4.7 $\mu$ F	IC103	051-5008-00	M62419FP	Q119	125-2004-03	RN1403	R111	117-4731-10	1/10W 47k $\Omega$
C136	178-1032-78	0.01 $\mu$ F	C218	178-1032-78	0.01 $\mu$ F	IC104	051-0350-55	NJM4558M	Q120	103-0601-00	2SD601A	R112	117-4721-10	1/10W 4.7k $\Omega$
C137	178-1032-78	0.01 $\mu$ F	C219	163-1073-31	16V100 $\mu$ F	IC105	051-3015-00	NJM4580M	Q120	102-2412-00	ZSC2412	R113	117-6831-10	1/10W 68k $\Omega$
C138	042-0595-62	16V10 $\mu$ F	C220	178-1032-78	0.01 $\mu$ F	IC106	051-3015-00	NJM4580M	Q120	102-2712-00	ZSC2712	R114	117-8221-10	1/10W 8.2k $\Omega$
C139	042-0595-62	16V10 $\mu$ F	C221	163-1073-31	16V100 $\mu$ F	IC108	051-0350-55	NJM4558M	Q121	100-1313-00	SA13130,Y	R115	117-3331-10	1/10W 33k $\Omega$
C140	042-0592-58	16V 10 $\mu$ F	C222	178-1032-78	0.01 $\mu$ F	IC109	051-3015-00	NJM4580M	Q122	103-1683-00	2SD1683	R116	117-1021-10	1/10W 1k $\Omega$
C141	176-4701-00	47pF CH	C223	163-1073-31	16V100 $\mu$ F	IC110	051-3015-00	NJM4580M	Q123	100-1431-00	ZSA1431	R117	117-1031-10	1/10W 10k $\Omega$
C142	042-0592-58	16V 10 $\mu$ F	C224	163-1073-31	16V100 $\mu$ F	IC111	051-3015-00	NJM4580M	Q124	101-1143-00	ZSB1143	R118	117-1231-10	1/10W 12k $\Omega$
C143	042-0592-58	16V22 $\mu$ F	C225	178-2232-78	0.022 $\mu$ F	IC112	051-3201-00	AN77L06	Q125	100-1431-00	ZSA1431	R119	117-8221-10	1/10W 8.2k $\Omega$
C144	042-0592-66	35V 4.7 $\mu$ F	C226	178-1042-78	0.1 $\mu$ F	IC113	051-7232-08	T4VHC4066M	Q126	100-1431-00	ZSA1431	R120	117-2231-10	1/10W 22k $\Omega$
C145	042-0595-66	25V4.7 $\mu$ F	C227	172-1041-11	0.1 $\mu$ F	IC114	051-6600-38	CA0008AM	Q127	101-1213-00	SA2123	R121	117-1531-10	1/10W 15k $\Omega$
C146	042-0592-58	16V 10 $\mu$ F	C228	172-1041-11	0.1 $\mu$ F	IC115	051-0350-55	NJM4558M	Q128	101-1123-00	ZSB1123	R122	117-3321-10	1/10W 3.3k $\Omega$
C147	042-0592-74	50V 2.2 $\mu$ F	C229	178-2212-78	220pF	IC116	051-5801-00	GP1S53V	Q129	100-1797-00	ZSA1797	R123	117-1031-10	1/10W 10k $\Omega$
C148	178-2212-78	220pF	C230	042-0595-62	16V10 $\mu$ F	IC117	051-5801-00	GP1S53V	Q130	125-2020-03	DTC124EK	R124	117-1031-10	1/10W 15k $\Omega$
C149	178-1055-79	1 $\mu$ F	C231	042-0592-66	35V 4.7 $\mu$ F	J101	074-1238-00	16P(POWER)	Q131	125-2004-03	RN1403	R125	117-2731-10	1/10W 27k $\Omega$
C150	176-2201-00	22pF CH	C232	042-0592-66	35V 4.7 $\mu$ F	J102	074-1194-00	13P CE-NET	Q132	125-0002-03	RN2403	R126	117-1021-10	1/10W 1k $\Omega$
C151	042-0595-62	16V10 $\mu$ F	C233	042-0595-62	16V10 $\mu$ F	J103	074-1030-00	MINI DIN 8P	Q132	125-0014-03	DTA124EK	R127	117-2731-10	1/10W 27k $\Omega$
C152	178-6832-78	0.068 $\mu$ F	C234	042-0595-62	16V10 $\mu$ F	L1	010-2003-04	COIL	Q133	125-2004-07	RN1407	R128	117-3331-10	1/10W 33k $\Omega$
C153	178-1022-78	1000pF	C235	178-1032-78	0.01 $\mu$ F	L2	010-2199-54	0.22 $\mu$ H J	Q133	125-2004-07	RN1403	R130	117-2231-10	1/10W 22k $\Omega$
C154	042-0595-62	16V10 $\mu$ F	C236	042-0595-62	16V10 $\mu$ F	L3	010-2174-28	220 $\mu$ H	Q134	125-2020-03	DTC124EK	R131	117-3331-10	1/10W 33k $\Omega$
C155	178-6822-78	6800pF	C237	178-2212-78	220pF	L4	010-2174-36	1mH	Q134	125-2004-03	RN1401	R132	117-1031-10	1/10W 10k $\Omega$
C156	042-0592-59	16V22 $\mu$ F	C238	178-1042-78	0.1 $\mu$ F	L5	010-2199-66	2.2 $\mu$ H J	Q134	125-2020-03	DTC124EK	R133	117-6831-10	1/10W 68k $\Omega$
C157	042-0592-58	16V 10 $\mu$ F	C239	042-0595-62	16V10 $\mu$ F	L6	010-2199-66	2.2 $\mu$ H J	Q134	125-2004-03	RN1403	R134	117-3331-10	1/10W 33k $\Omega$
C158	178-1042-78	0.1 $\mu$ F	C240	178-1032-78	0.01 $\mu$ F	P1	074-0977-14	SOCKET-14P	Q135	125-2004-03	ZTC14YK	R135	117-3331-10	1/10W 10k $\Omega$
C159	042-0592-73	50V1 $\mu$ F	C241	042-0595-62	16V10 $\mu$ F	P101	074-0977-19	SOCKET-19P	Q135	125-2004-03	RN1403	R137	117-2231-10	1/10W 22k $\Omega$
C160	176-4701-00	47pF CH	C242	042-0595-64	16V33 $\mu$ F	P102	076-0349-02	2P	Q136	125-2020-03	DTC124EK	R138	117-3311-10	1/10W 330 $\Omega$
C161	042-0592-58	16V 10 $\mu$ F	C244	042-0595-62	16V10 $\mu$ F	P103	074-0977-17	SOCKET-17P	Q136	125-2004-01	ZTC143EK	R138	117-1041-10	1/10W 100 $\Omega$
C162	042-0592-58	16V 10 $\mu$ F	C251	178-1022-78	1000pF	Q1	125-2004-02	RN1402	Q137	125-2004-01	RN1403	R139	117-1041-10	1/10W 100 $\Omega$
C163	042-0592-58	16V 10 $\mu$ F	C252	178-1022-78	1000pF	Q1	125-2020-02	DTC114EK	Q137	125-2020-03	ZSC2873	R140	117-1031-10	1/10W 10k $\Omega$
C165	178-1032-78	0.01 $\mu$ F	C253	178-1022-78	1000pF	Q2	125-2020-06	DTC143ZK	Q136	100-1162-00	ZSA1162	R141	117-2231-10	1/10W 22k $\Omega$
C171	178-1032-78	0.01 $\mu$ F	C254	178-1022-78	1000pF	Q2	125-2004-06	RN1406	Q137	125-2004-03	RN1403	R142	117-3311-10	1/10W 330 $\Omega$
C172	178-4722-78	4700pF	D1	001-0541-00	MA157	Q3	125-0014-03	DTC124EK	Q137	125-2020-03	DTC124EK	R143	117-1041-10	1/10W 100 $\Omega$
C173	178-1032-78	0.01 $\mu$ F	D2	001-4300-31	HZU 5.6B1	Q3	125-0002-03	RN2403	R144	117-8221-10	1/10W 8.2k $\Omega$			
C174	178-1055-79	1 $\mu$ F	D2	001-0528-31	MA8056-L	Q4	102-3326-00	ZSC3326	R145	117-3311-10	1/10W 330 $\Omega$			
C175	042-0595-84	10V100 $\mu$ F	D101	001-0580-00	ISS352	Q4	103-1306-00	2SD1306	R145	117-1531-10	1/10W 15k $\Omega$			
C176	042-0595-84	10V100 $\mu$ F	D101	001-0516-00	MA111	Q5	100-1162-00	ZSA1162	R146	117-3311-10	1/10W 33k $\Omega$			
C177	178-1032-78	0.01 $\mu$ F	D102	001-0580-00	ISS352	Q5	100-1037-00	ZSA1037	R146	117-3311-10	1/10W 33k $\Omega$			
C178	042-0595-79	50V1 $\mu$ F	D102	001-0516-00	MA111	Q6	100-1298-00	ZSA1298	R147	117-2231-10	1/10W 22k $\Omega$			
C179	178-4722-78	4700pF	D103	001-2606-90	M1FS4	Q8	108-0669-00	2SK669	R147	117-2231-10	1/10W 22k $\Omega$			
C180	042-0595-62	16V10 $\mu$ F	D104	001-2606-90	M1FS4	Q101	100-1037-00	ZSA1037	R148	117-2231-10	1/10W 22k $\Omega$			
C181	184-2283-32	16V2200 $\mu$ F	D105	001-2606-90	M1FS4	Q101	100-1162-00	ZSA1162	R149	117-3311-10	1/10W 330 $\Omega$			
C182	176-2201-00	22pF CH	D106	001-2606-90	M1FS4	Q102	100-1037-00	ZSA1037	R150	117-1031-10	1/10W 10k $\Omega$			
C183	172-1041-11	0.1 $\mu$ F	D111	001-0580-00	ISS352	Q102	100-1162-00	ZSA1162	R150	117-1031-10	1/10W 10k $\Omega$			
C184	042-0595-62	16V 10 $\mu$ F	D111	001-0516-00	MA111	Q103	102-3326-00	ZSC3326	R151	117-2231-10	1/10W 22k $\Omega$			
C185	042-0592-58	16V 10 $\mu$ F	D112	001-0580-00	ISS352	Q103	103-1306-00	2SD1306	R151	117-2311-10	1/10W 22k $\Omega$			
C186	042-0592-58	16V 10 $\mu$ F	D112	001-0516-00	MA111	Q104	102-3326-00	ZSC3326	R152	117-3311-10	1/10W 330 $\Omega$			
C187	042-0592-58	16V 10 $\mu$ F	D113	001-0580-00	ISS352	Q104	103-1306-00	2SD1306	R152	117-1031-10	1/10W 15k $\Omega$			
C188	042-0592-58	16V 10 $\mu$ F	D113	001-0516-00	MA111	Q105	103-1306-00	2SD1306	R153	117-1531-10	1/10W 15k $\Omega$			
C189	176-2201-00	22pF CH	D114	001-0592-00	RM4Z	Q105	102-3326-00	ZSC3326	R154	117-6831-10	1/10W 68k $\Omega$			
C190	042-0595-62	16V10 $\mu$ F	D115	001-0580-00	ISS352	Q106	103							

REF No.	PART No.	DESCRIPTION
R265	117-2721-10	1/10W 2.7kΩ
SUP1	060-0122-10	DSP-201M-S00B

REF No.	PART No.	DESCRIPTION
T101	009-0659-01	0.35mH
X1	061-3013-00	4.33MHz

REF No.	PART No.	DESCRIPTION
X2	061-1066-00	7.2MHz

Digital PWB section(B2)

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C501	168-1022-05	100pF	CCT607	050-0122-00	10kΩ X4 J	Q504	125-0021-07	DTA113ZU
C502	042-0595-62	16V 10 μF	CCT608	050-0122-64	330Ω X4	Q504	125-0020-07	UN5119
C503	168-1501-00	15pF CH	CCT609	050-0122-64	330Ω X4	Q505	125-0020-07	UN5119
C504	168-1501-00	15pF CH	CCT610	050-0122-64	330Ω X4	Q505	125-0021-07	DTA113ZU
C505	168-1022-05	1000pF	D501	001-0516-00	MA111	Q506	125-2004-03	RN1403
C507	168-1032-05	0.01 μF	D501	001-0517-00	ISS355	Q506	125-2020-03	DTC124EK
C508	042-0595-56	6.3V 47 μF	D504	001-0516-00	MA111	Q507	102-2712-00	2SC2712
C509	168-1022-05	1000pF	D504	001-0517-00	ISS355	Q507	102-2412-00	2SC2412
C510	043-0296-00	0.1 μF	D505	001-0517-00	ISS355	Q507	103-0601-00	2SD601A Q.R.S
C511	168-1032-05	0.01 μF	D505	001-0516-00	MA111	Q508	101-0709-00	2SB709A-Q.R.S
C512	168-4735-06	0.047 μF	D506	001-0537-00	SFPM-62	Q508	100-1037-00	2SA1037
C513	168-1022-05	1000pF	D508	001-0537-00	SFPM-62	Q508	100-1162-00	2SA1162
C514	178-2242-78	0.22 μF	D511	001-0584-23	MA8075	Q511	102-2873-00	2SC2873
C515	168-1045-06	0.1 μF	D511	001-4302-23	UDZTE-17 7.5B	Q512	100-1797-00	2SA1797
C516	168-1032-05	0.01 μF	D512	001-4302-32	UDZTE-17 18B	Q512	101-1123-00	2SB1123
C517	042-0595-65	16V 47 μF	D512	001-0584-32	MA8180	Q512	100-1213-00	2SA1213
C518	042-0559-00	5.5V 0.1 μF	D513	001-0528-57	MA8120-H	Q514	125-0020-91	UN5111
C519	168-1032-05	0.01 μF	D513	001-4300-57	HZU 1283	Q514	125-0021-91	DTA114EU
C520	168-1032-05	0.01 μF	D517	001-0517-00	1SS355	Q515	102-2412-00	2SC2412
C521	042-0595-65	16V 47 μF	D517	001-0516-00	MA111	Q515	102-2712-00	2SC2712
C522	168-1022-05	1000pF	D601	001-0541-00	MA157	Q515	103-0601-00	2SD601A Q.R.S
C523	168-1022-05	1000pF	D601	001-0367-00	1SS226	Q516	125-2020-03	DTC124EK
C524	168-1022-05	1000pF	D602	001-0541-00	MA157	Q516	125-2004-03	RN1403
C525	168-1022-05	1000pF	D602	001-0367-00	1SS226	Q517	125-0014-02	DTA114EK
C526	166-1011-00	100pF CH	D603	001-0541-00	MA157	Q517	125-0002-02	RN2402
C527	166-1011-00	100pF CH	D603	001-0367-00	1SS226	Q518	125-2004-01	RN1401
C601	042-0595-53	4V 220 μF	D604	001-0541-00	MA157	Q518	125-2020-01	DTC143EK
C602	178-1055-79	1 μF	D604	001-0367-00	1SS226	Q522	125-0021-07	DTA113ZU
C603	042-0595-53	4V 220 μF	D605	001-0367-00	1SS226	Q522	125-0020-07	UN5119
C604	178-1055-79	1 μF	D605	001-0541-00	MA157	Q601	125-2004-03	RN1403
C605	042-0595-53	4V 220 μF	D606	001-0541-00	MA157	Q601	125-2020-03	DTC124EK
C606	178-1055-79	1 μF	D606	001-0367-00	1SS226	R501	119-1031-10	1/16W 10kΩ
C607	042-0595-53	4V 220 μF	D607	001-0517-00	1SS355	R502	119-1231-10	1/16W 12kΩ
C608	178-1055-79	1 μF	D607	001-0516-00	MA111	R503	119-4721-10	1/16W 4.7kΩ
C609	178-1055-79	1 μF	IC501	051-1822-05	S-80732AN-DW-X	R504	119-4721-10	1/16W 4.7kΩ
C610	042-0472-00	10V 47 μF	IC502	052-6043-00	M30624MG-D07GP	R505	119-4741-10	1/16W 470kΩ
C611	168-1045-06	0.1 μF	IC503	051-0869-55	NJM2103M	R506	119-4741-10	1/16W 470kΩ
C612	168-1045-06	0.1 μF	IC504	051-1014-05	TA7291F	R507	119-1021-10	1/16W 1kΩ
C613	166-1007-00	10pF CH	IC505	051-1527-05	TC4W53F	R508	119-1021-10	1/16W 1kΩ
C614	042-0472-00	10V 47 μF	IC601	051-1478-05	TC74HC4053AF	R509	119-1011-10	1/16W 100Ω
C615	168-1032-05	0.01 μF	IC602	052-6044-01	MSM538002E-S8TS	R510	119-5621-10	1/16W 5.6kΩ
C616	166-1007-00	10pF CH			AKF9	R511	119-1021-10	1/16W 1kΩ
C617	168-1045-06	0.1 μF	IC603	051-1250-00	TC4S66F	R512	119-4721-10	1/16W 4.7kΩ
C618	168-1045-06	0.1 μF	IC603	051-1250-30	SC14S66F	R513	119-4731-10	1/16W 47kΩ
C619	168-1045-06	0.1 μF	IC604	051-1250-00	TC4S66F	R514	119-1021-10	1/16W 1kΩ
C620	168-1045-06	0.1 μF	IC606	051-1250-30	SC14S66F	R515	119-1021-10	1/16W 1kΩ
C621	178-1055-79	1 μF	IC607	051-1549-05	TC7W32F	R516	119-1031-10	1/16W 10kΩ
C622	168-1045-06	0.1 μF	IC608	051-5306-90	MM1117XF	R517	119-4721-10	1/16W 4.7kΩ
C623	166-4701-00	47pF CH	IC609	051-6412-00	MB90092PF-G-BND	R518	119-4721-10	1/16W 4.7kΩ
C624	166-4701-00	47pF CH	IC610	051-5306-90	MM1117XF	R519	119-1021-10	1/16W 1kΩ
C625	042-0595-66	25V 4.7 μF	IC611	051-7229-08	TC7W74FU	R520	119-4731-10	1/16W 47kΩ
C626	168-1045-06	0.1 μF	IC612	051-1855-05	TC7W14F	R521	119-1011-10	1/16W 100Ω
C627	178-1055-79	1 μF	IC613	051-0616-35	MC14538BF	R522	119-4731-10	1/16W 47kΩ
C628	168-1032-05	0.01 μF	J501	074-1205-38	38P	R523	119-4731-10	1/16W 47kΩ
C629	168-1022-05	1000pF	L501	010-2199-62	1 μH	R524	119-1541-10	1/16W 150kΩ
C630	168-1022-05	1000pF	L601	010-2279-00	4.7 μH	R526	119-1241-10	1/16W 120kΩ
C631	178-1055-79	1 μF	L602	010-2279-00	4.7 μH	R527	119-1831-10	1/16W 18kΩ
C632	178-1055-79	1 μF	L603	010-2329-00	5.6 μH	R528	119-8221-10	1/16W 8.2kΩ
C633	168-1022-05	1000pF	P1	076-0621-14	PLUG-14P	R529	117-4321-10	1/10W 4.3kΩ
C634	168-1022-05	1000pF	P101	076-0621-19	PLUG-19P	R530	119-1031-10	1/16W 10kΩ
C635	168-1022-05	1000pF	P103	076-0621-17	PLUG-17P	R531	119-4711-10	1/16W 470Ω
C636	168-1022-05	1000pF	P601	076-0313-07	PLUG-7P	R532	119-4711-10	1/16W 470Ω
C637	168-3312-05	330pF	O504	102-2712-00	2SC2712	R533	119-4731-10	1/16W 47kΩ
CCT502	050-0122-58	470Ω X4	Q501	102-2412-00	2SC2412	R535	119-2231-10	1/16W 22kΩ
CCT601	050-0122-64	330Ω X4	Q501	103-0601-00	2SD601A Q.R.S	R536	119-1021-10	1/16W 1kΩ
CCT602	050-0122-64	330Ω X4	Q502	102-2712-00	2SC2712	R537	119-2231-10	1/16W 22kΩ
CCT603	050-0122-01	47kΩ X4 X4	Q502	102-2412-00	2SC2412	R540	119-4731-10	1/16W 47kΩ
CCT604	050-0122-01	47kΩ X4 X4	Q502	103-0601-00	2SD601A Q.R.S	R541	119-3311-10	1/16W 330Ω
CCT605	050-0122-64	330Ω X4	P503	125-2004-02	RN1402	R542	119-5621-10	1/16W 5.6kΩ
CCT606	050-0122-64	330Ω X4	P503	125-2020-02	DTC114EK	R543	032-0104-03	1/4W 1kΩ

REF No.	PART No.	DESCRIPTION
R544	119-1031-10	1/16W 10kΩ
R545	119-4721-10	1/16W 4.7kΩ
R546	119-4711-10	1/16W 470Ω
R547	119-2231-10	1/16W 22kΩ
R548	119-2231-10	1/16W 22kΩ
R549	119-1041-10	1/16W 100kΩ
R550	119-1021-10	1/16W 1kΩ
R551	119-4731-10	1/16W 47kΩ
R553	119-4731-10	1/16W 47kΩ
R601	111-7501-91	1/4WS 75Ω
R602	111-7501-91	1/4WS 75Ω
R603	111-7501-91	1/4WS 75Ω
R604	111-7501-91	1/4WS 75Ω
R605	119-1531-10	1/16W 15kΩ
R606	119-1531-10	1/16W 15kΩ
R607	119-1531-10	1/16W 15kΩ
R608	119-5631-10	1/16W 56kΩ
R609	119-5631-10	1/16W 56kΩ

REF No.	PART No.	DESCRIPTION
R610	119-5631-10	1/16W 56kΩ
R611	119-1011-10	1/16W 100Ω
R612	119-1011-10	1/16W 100Ω
R613	119-1011-10	1/16W 100Ω
R614	119-4711-10	1/16W 47Ω
R615	119-1511-10	1/16W 150Ω
R616	119-3921-10	1/16W 3.9kΩ
R617	119-2211-10	1/16W 220Ω
R618	119-0000-00	1/16W 0Ω JW
R619	119-1031-10	1/16W 10kΩ
R620	119-5611-10	1/16W 560Ω
R621	119-4731-10	1/16W 47kΩ
R622	119-4731-10	1/16W 47kΩ
TC601	004-1583-12	20PF RED
X501	060-1505-50	10MHz
X502	061-1056-00	32.768kHz
X601	061-1086-50	14.31818MHz
X602	061-3042-00	17.734475MHz
R627	119-4731-10	1/16W 47kΩ

REF No.	PART No.	DESCRIPTION
R628	119-1011-10	1/16W 100Ω
R629	119-2211-10	1/16W 220Ω
R630	119-1021-10	1/16W 1kΩ
R631	119-2221-10	1/16W 2.2kΩ
R632	111-7501-91	1/4WS 75Ω
R633	119-2021-10	1/16W 2kΩ
R634	119-2021-10	1/16W 2kΩ
R635	119-2021-10	1/16W 2kΩ
R637	119-4741-10	1/16W 470kΩ
R638	119-4741-10	1/16W 470kΩ
R639	119-4741-10	1/16W 470kΩ
R640	119-6821-15	1/16W 6.8kΩ
TC601	004-1583-12	20PF RED
X501	060-1505-50	10MHz
X502	061-1056-00	32.768kHz
X601	061-1086-50	14.31818MHz
X602	061-3042-00	17.734475MHz
R627	119-4731-10	1/16W 47kΩ

### LCD PWB section(B3)

REF No.	PART No.	DESCRIPTION
C701	163-1063-50	35V10 μF
C702	168-1045-06	0.1 μF
C703	166-1011-00	100pF CH
C704	176-2221-00	2200pF CH
C705	163-4753-50	35V4.7 μF
C706	176-1021-00	1000pF CH
C707	166-1011-00	100pF CH
C708	168-1022-05	1000pF
C709	042-0595-65	16V47 μF
C710	042-0528-00	35V15 μF
C711	163-2273-25	10V 220 μF
C712	042-0528-00	35V15 μF
C713	042-0595-65	16V47 μF
C714	042-0528-00	35V15 μF
C715	168-1045-06	0.1 μF
C716	042-0452-00	6.3V330 μF
C717	163-3363-40	25V33 μF
C718	168-1045-06	0.1 μF
C719	042-0595-62	16V10 μF
C720	168-1045-06	0.1 μF
C721	168-1045-06	0.1 μF
C722	042-0595-62	16V10 μF
C723	168-1045-06	0.1 μF
C724	178-1055-79	1 μF
C725	178-3332-78	0.033 μF
C726	168-1022-05	1000pF
C728	042-0595-62	16V10 μF
C729	163-1073-31	16V100 μF
C730	168-1032-05	0.01 μF
C731	176-1521-00	1500pF CH
C732	178-1055-79	1 μF
C733	042-0595-81	50V3.3 μF
C734	042-0452-00	6.3V330 μF
C735	178-2242-73	0.22 μF
C736	168-2232-05	0.022 μF
C737	168-2222-05	2200pF
C738	042-0595-62	16V10 μF
C740	166-5601-00	55pF CH
C741	168-2222-05	2200pF
C742	168-1045-06	0.1 μF
C743	168-1032-05	0.01 μF
C744	168-1032-05	0.01 μF
C745	178-4742-78	0.47 μF
C746	178-4742-78	0.47 μF
C747	178-4742-78	0.47 μF
C748	168-1032-05	0.01 μF
C749	042-0595-79	50V1 μF
C750	166-1201-00	12pF CH
C751	166-1201-00	12pF CH
C752	166-2201-00	22pF CH
C753	043-0499-02	0.082 μF
C754	168-6812-05	680pF
C755	042-0397-00	16V1 μF TAN

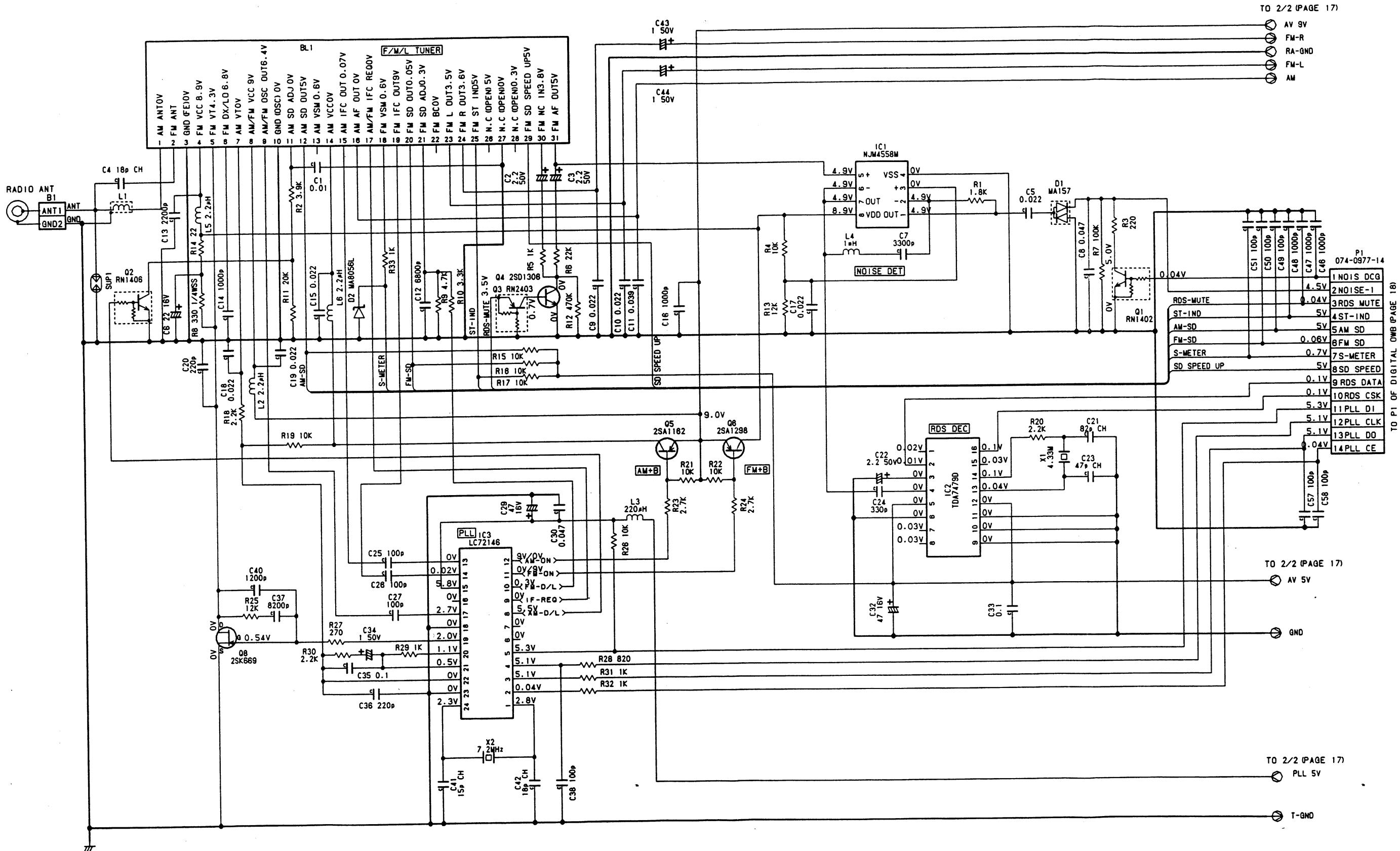
REF No.	PART No.	DESCRIPTION
R610	119-5631-10	1/16W 56kΩ
R611	119-1011-10	1/16W 100Ω
R612	119-1011-10	1/16W 100Ω
R613	119-1011-10	1/16W 100Ω
R614	119-4711-10	1/16W 47Ω
R615	119-1511-10	1/16W 150Ω
R616	119-3921-10	1/16W 3.9kΩ
R617	119-2211-10	1/16W 220Ω
R618	119-0000-00	1/16W 0Ω JW
R619	119-1031-10	1/16W 10kΩ
R620	119-5611-10	1/16W 560Ω
R621	119-4731-10	1/16W 47kΩ
R622	119-4731-10	1/16W 47kΩ
TC601	004-1583-12	20PF RED
X501	060-1505-50	10MHz
X502	061-1056-00	32.768kHz
X601	061-1086-50	14.31818MHz
X602	061-3042-00	17.734475MHz
R627	119-4731-10	1/16W 47kΩ
R628	119-1011-10	1/16W 100Ω
R629	119-2211-10	1/16W 220Ω
R630	119-1021-10	1/16W 1kΩ
R631	119-2221-10	1/16W 2.2kΩ
R632	111-7501-91	1/4WS 75Ω
R633	119-2021-10	1/16W 2kΩ
R634	119-2021-10	1/16W 2kΩ
R635	119-2021-10	1/16W 2kΩ
R637	119-4741-10	1/16W 470kΩ
R638	119-4741-10	1/16W 470kΩ
R639	119-4741-10	1/16W 470kΩ
R640	119-6821-15	1/16W 6.8kΩ
TC601	004-1583-12	20PF RED
X501	060-1505-50	10MHz
X502	061-1056-00	32.768kHz
X601	061-1086-50	14.31818MHz
X602	061-3042-00	17.734475MHz
R627	119-4731-10	1/16W 47kΩ

REF No.	PART No.	DESCRIPTION
R703	119-1001-10	1/16W 10Ω
R704	119-6841-10	1/16W 680kΩ
R705	119-3931-10	1/16W 39kΩ
R706	119-6841-10	1/16W 680kΩ
R707	119-2231-10	1/16W 22kΩ
R708	119-1841-10	1/16W 180kΩ
R709	119-3311-10	1/16W 330Ω
R710	119-1031-10	1/16W 10kΩ
R711	119-2231-10	1/16W 22kΩ
R712	119-2211-10	1/16W 220Ω
R713	119-4731-10	1/16W 47kΩ
R714	119-4711-10	1/16W 470Ω
R715	119-1031-10	1/16W 10kΩ
R716	119-2231-10	1/16W 22kΩ
R717	119-4701-10	1/16W 47Ω
R718	119-1031-10	1/16W 10kΩ
R719	119-1531-10	1/16W 15kΩ
R720	119-1031-10	1/16W 10kΩ
R721	119-2221-10	1/16W 2.2kΩ
R722	119-4721-10	1/16W 47kΩ
R723	119-2731-10	1/16W 27kΩ
R724	119-2231-10	1/16W 22kΩ
R725	119-2231-10	1/16W 22kΩ
R726	119-1041-10	1/16W 100kΩ
R727	119-4731-10	1/16W 47kΩ
R728	119-2231-10	1/16W 22kΩ
R729	119-2231-10	1/16W 22kΩ
R730	119-4743-10	1/16W 47kΩ
R731	119-1021-10	1/16W 1kΩ
R732	119-3301-10	1/16W 33Ω
R733	119-3321-10	1/16W 3.3kΩ
R734	119-1021-10	1/16W 1kΩ
R735	119-1031-10	1/16W 10kΩ
R736	119-4721-10	1/16W 4.7kΩ
R737	119-2221-10	1/16W 2.2kΩ
R738	119-5621-10	1/16W 5.6kΩ
R739	119-5621-10	1/16W 5.6kΩ
R740	119-1021-10	1/16W 1kΩ
R741	119-1021-10	1/16W 1kΩ
R742	119-3321-10	1/16W 3.3kΩ
R743	119-1831-10	1/16W 18kΩ
R744	119-6821-15	1/16W 6.8kΩ
R745	119-3341-10	1/16W 330kΩ
R746	119-5621-10	1/16W 5.6kΩ
R747	119-5621-10	1/16W 5.6kΩ
R748	119-4721-10	1/16W 4.7kΩ
R749	119-3021-15	1/16W 3kΩ
R750	119-2021-10	1/16W 2kΩ
R751	119-1521-10	1/16W 1.5kΩ
R752	119-2221-10	1/16W 2.2kΩ
R753	119-1041-10	1/16W 100kΩ
R754	119-4741-10	1/16W 470Ω
R755	119-4741-10	1/16W 4.7kΩ J
R756	119-2431-10	1/16W 24kΩ
R757	119-4711-10	1/16W 470Ω
R758	119-4711-10	1/16W 470Ω
R759	119-4711-10	1/16W 470Ω
R760	119-4711-10	1/16W 470Ω
R761	119-3341-10	1/16W 330kΩ
R762	119-2231-10	1/16W 22kΩ
R763	119-2231-10	1/16W 22kΩ
R764	119-2231-10	1/16W 22kΩ
R765	119-2731-10	1/16W 27kΩ
R766	032-0098-03	1/10W 18kΩ ±2%
R767	119-5631-10	1/16W 56kΩ
R768	119-3931-10	1/16W 39kΩ
R769	119-5611-10	1/16W 560Ω
R770	119-1021-10	1/16W 1kΩ
R771	117-3351-15	1/10W 3.3MΩ
R772	119-1011-10	1/16W 100Ω
R773	119-1011-10	1/16W 100Ω
R774	119-1011-10	1/16W 100Ω
R775	032-0104-03	1/4W 1kΩ
R776	119-3931-10	1/16W 39kΩ
R777	119-2231-10	1/16W 22kΩ
R778	032-0104-03	1/4W 1kΩ
R779	119-3931-10	1/16W 39kΩ
R780	119-2231-10	1/16W 22kΩ
R781	119-6821-15	1/16W 6.8kΩ
R782	119-4731-10	1/16W 47kΩ
R783	119-2231-10	1/16W 22kΩ
R784	119-1051-10	1/16W 1MΩ
R785	032-0092-09	1/10W 47kΩ ±1%
R786	119-0000-00	1/10W

## CIRCUIT DIAGRAM

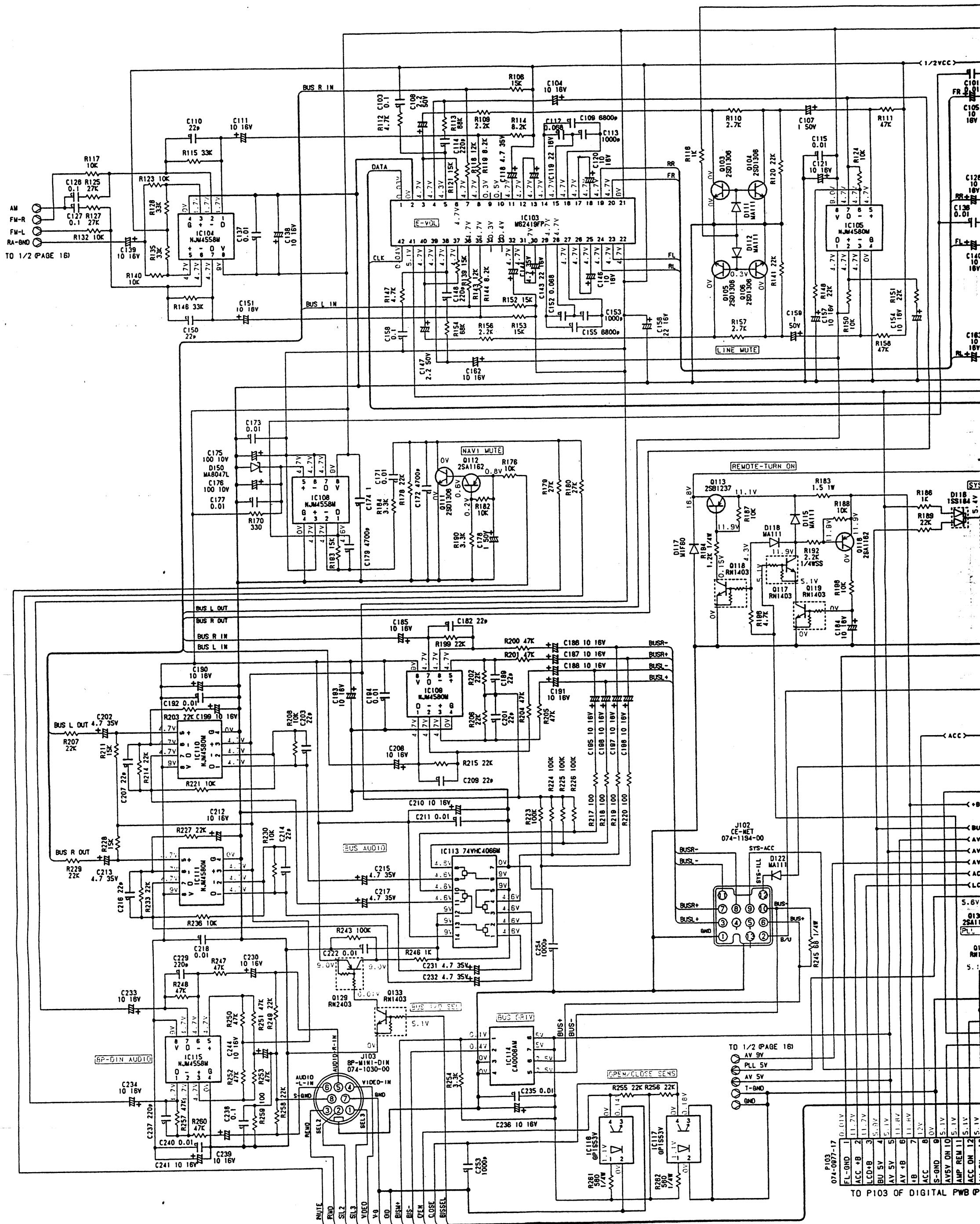
## Main PWB section(B1) 1/2

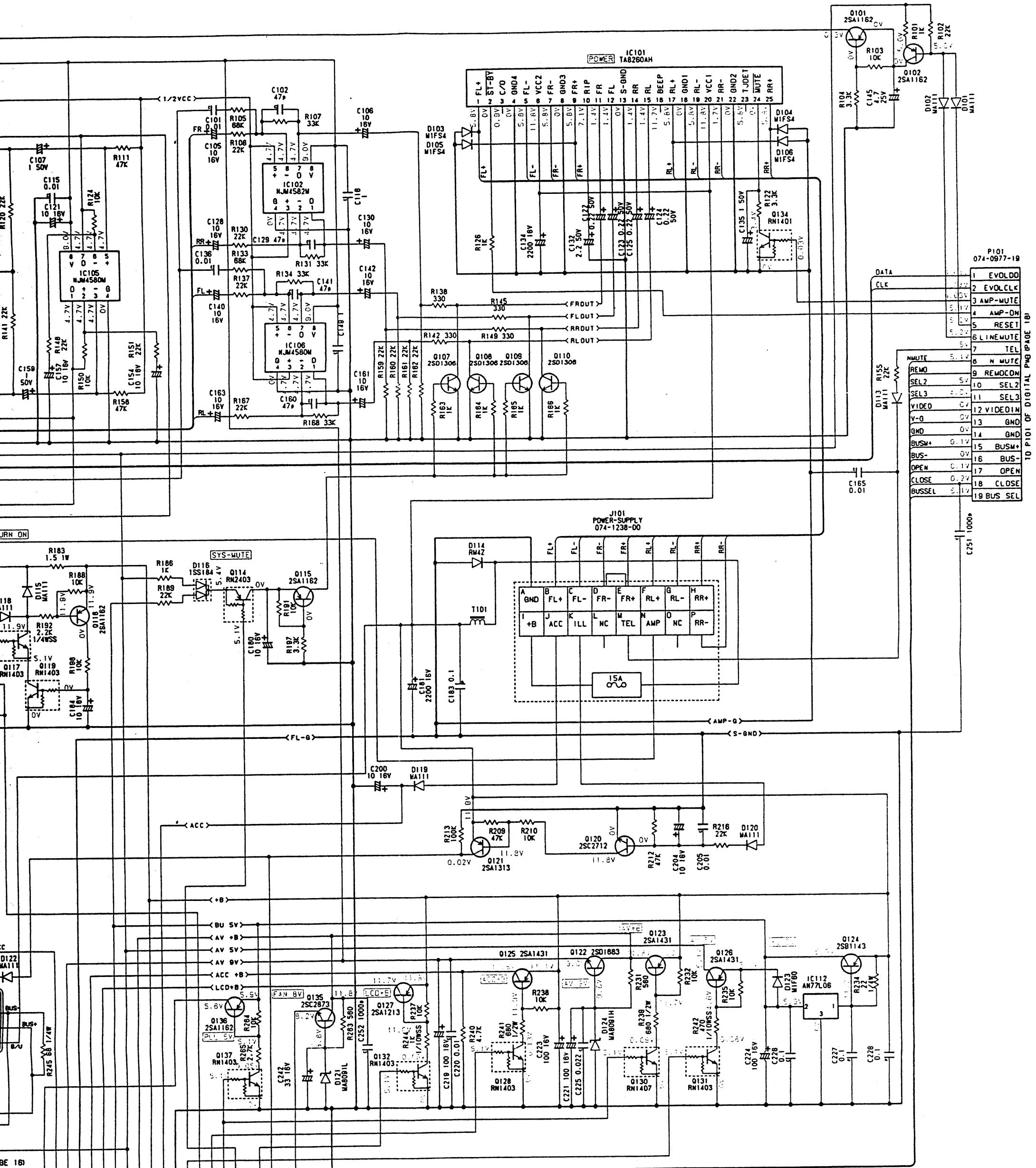
(Radio/RDS block)



## Main PWB section(B1) 2/2

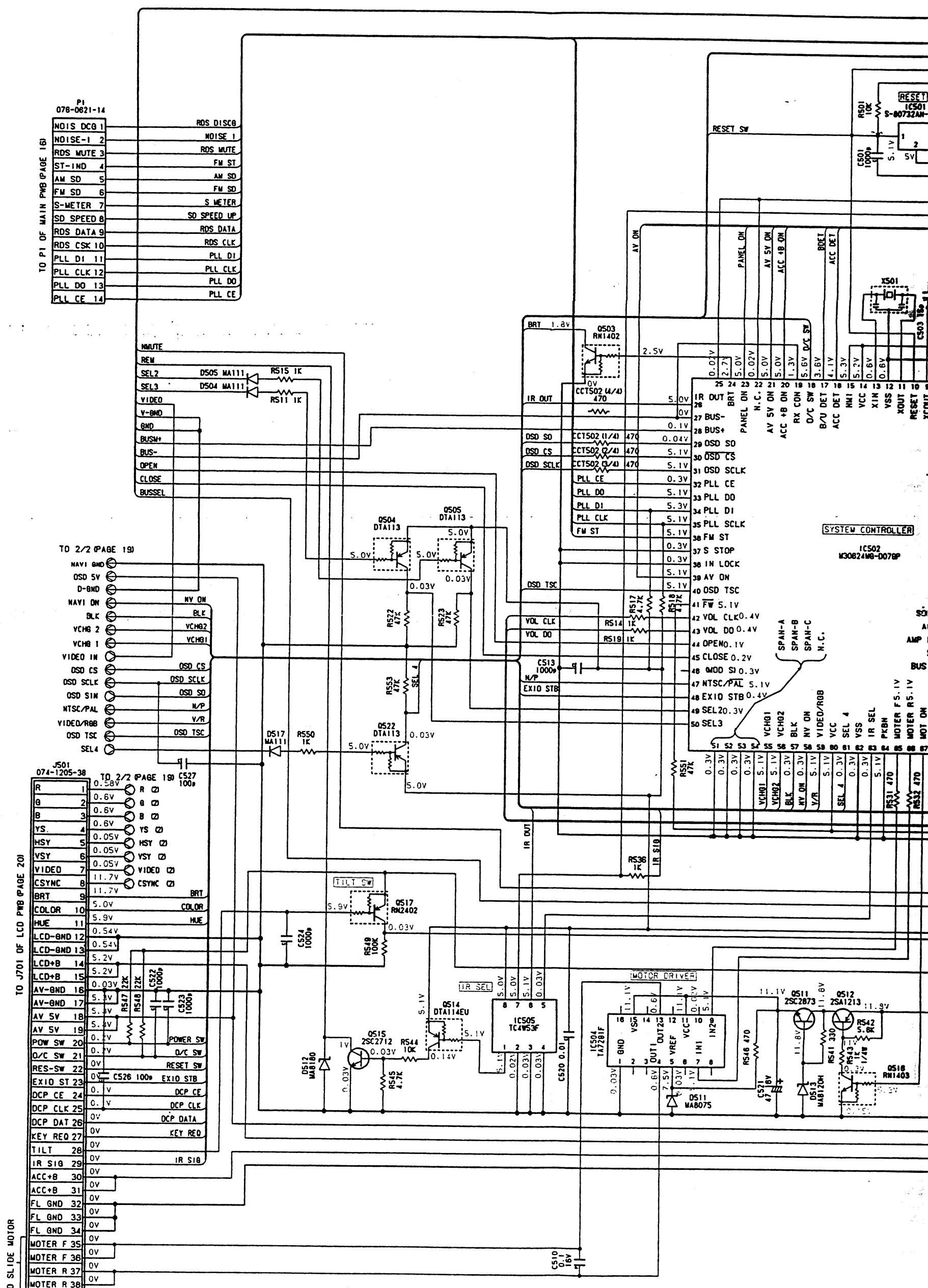
(Audio/Power block)

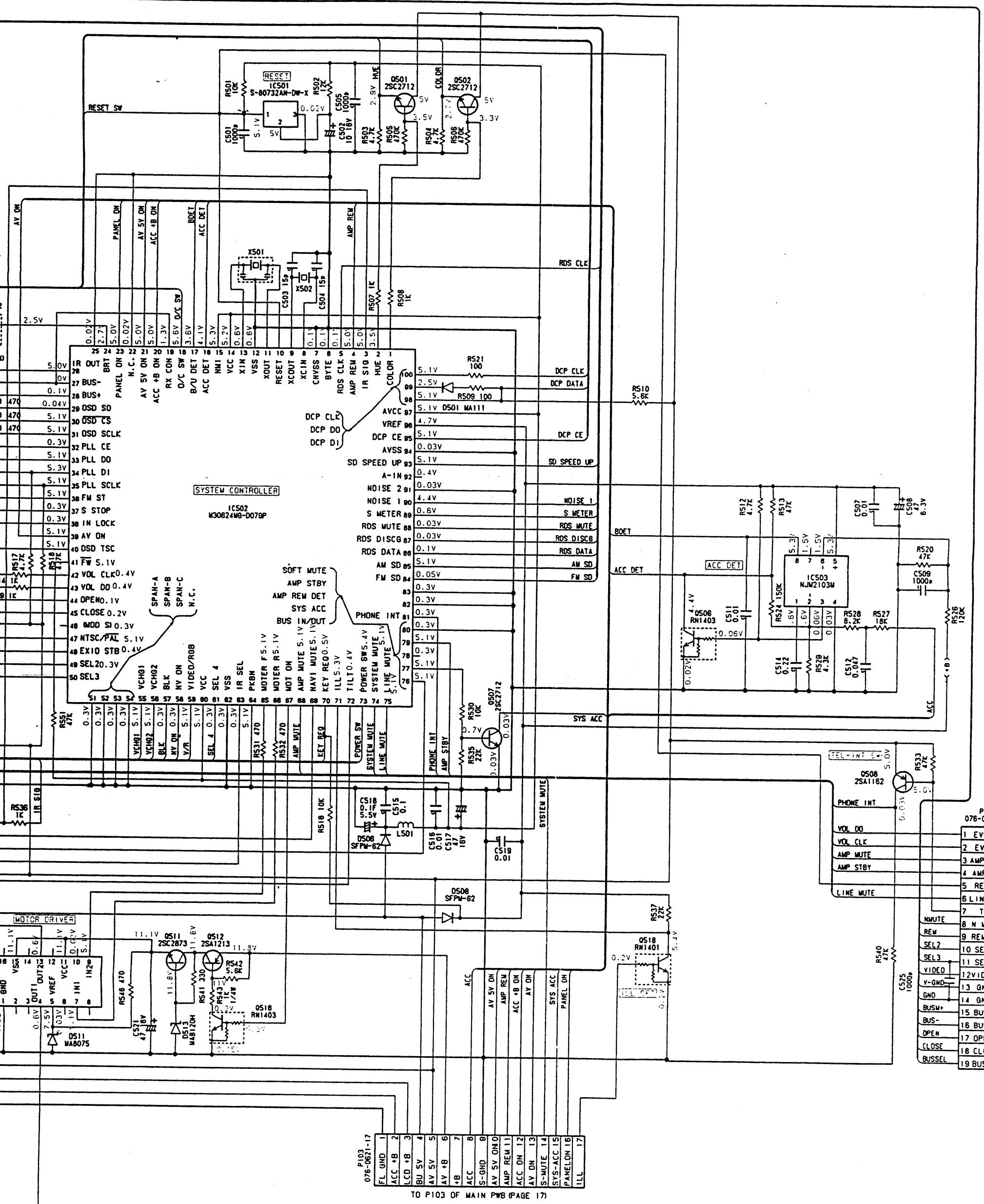




P103-087-17  
 074-LQND 1 C-  
 FL C-  
 ACC +B 2 C-  
 LCC+B 3 C-  
 BU SV 4 C-  
 AV SV 5 C-  
 AV +B 6 C-  
 +B 7 C-  
 ACC B C-  
 S-GND 9 C-  
 AVSV ON 10 C-  
 AMP REM 11 C-  
 ACC ON 12 C-  
 AV ON 13 C-  
 S-MUTE 14 C-  
 S-AACC 15 C-  
 PANEL ON 16 C-  
 ILL 17 C-  
 TO P103 OF DIGITAL PWB (PAGE 18)

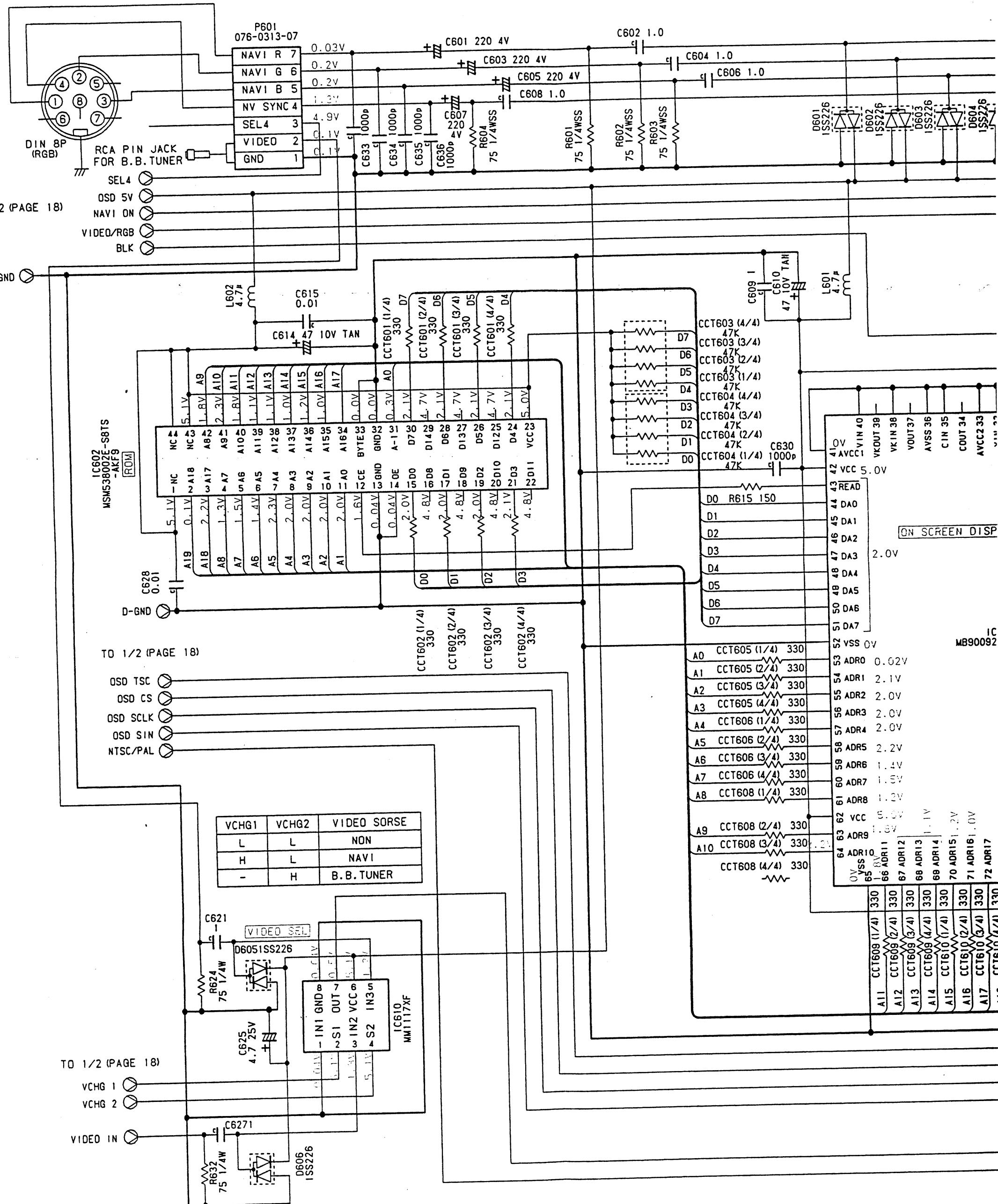
TO FAN

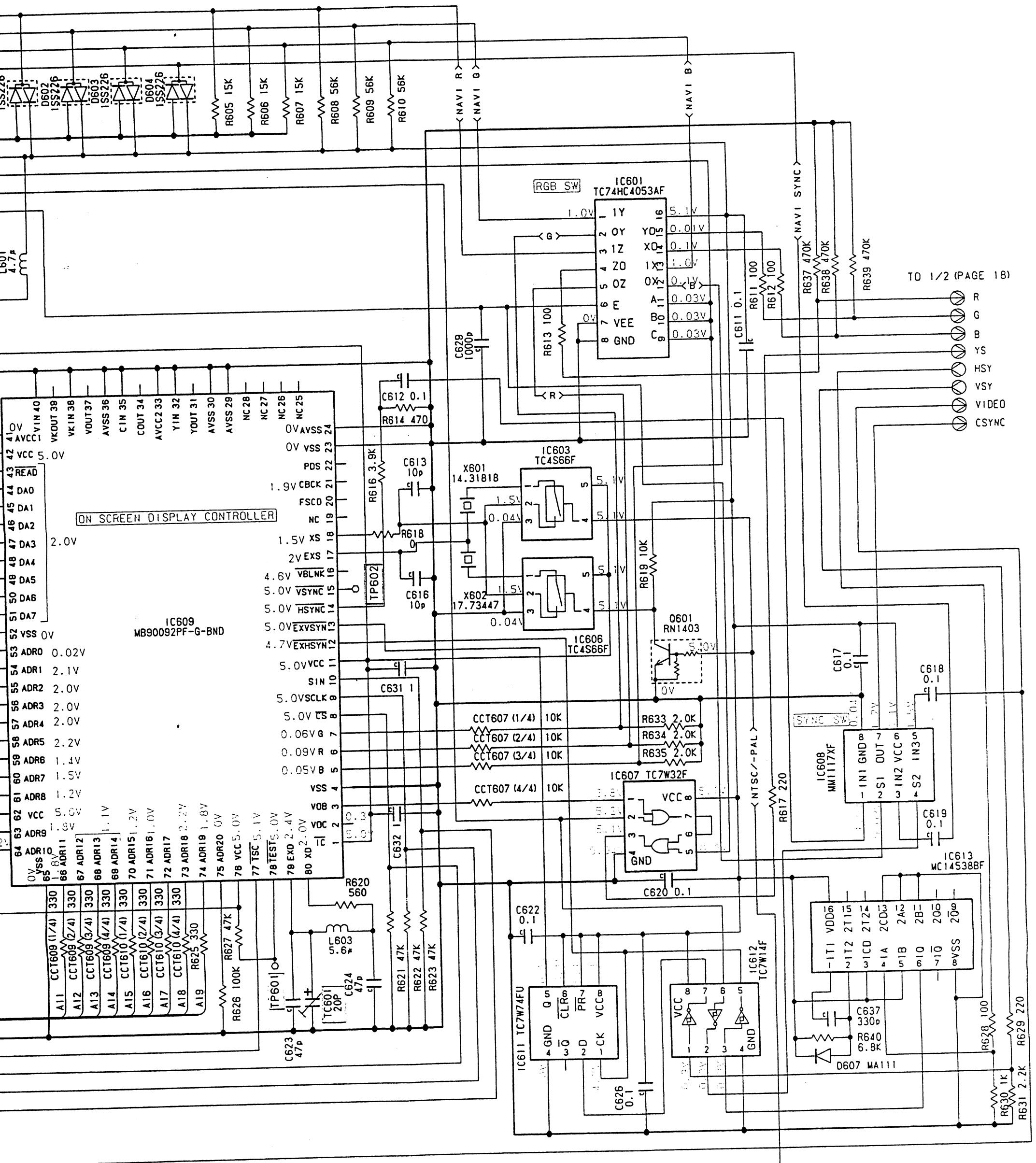




Digital PWB section(B2) 2/2

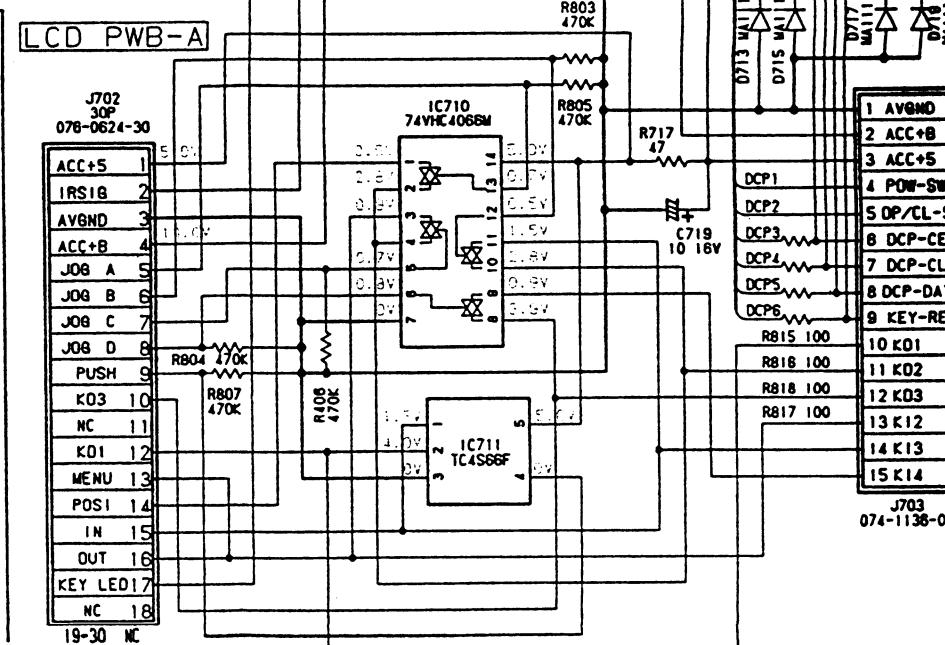
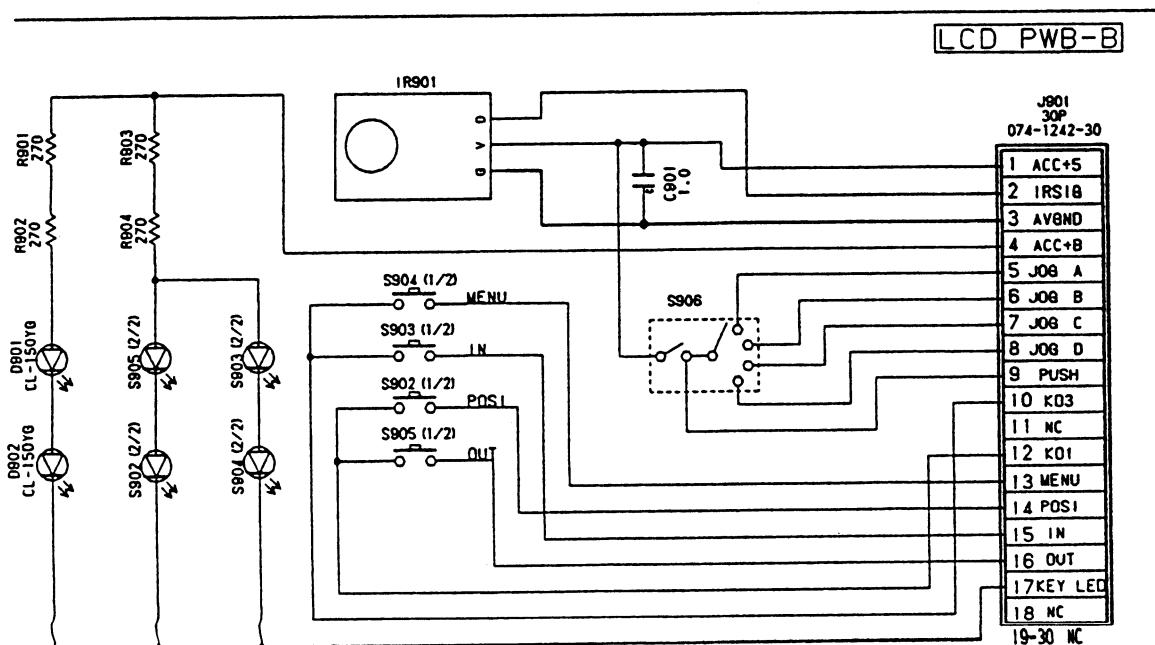
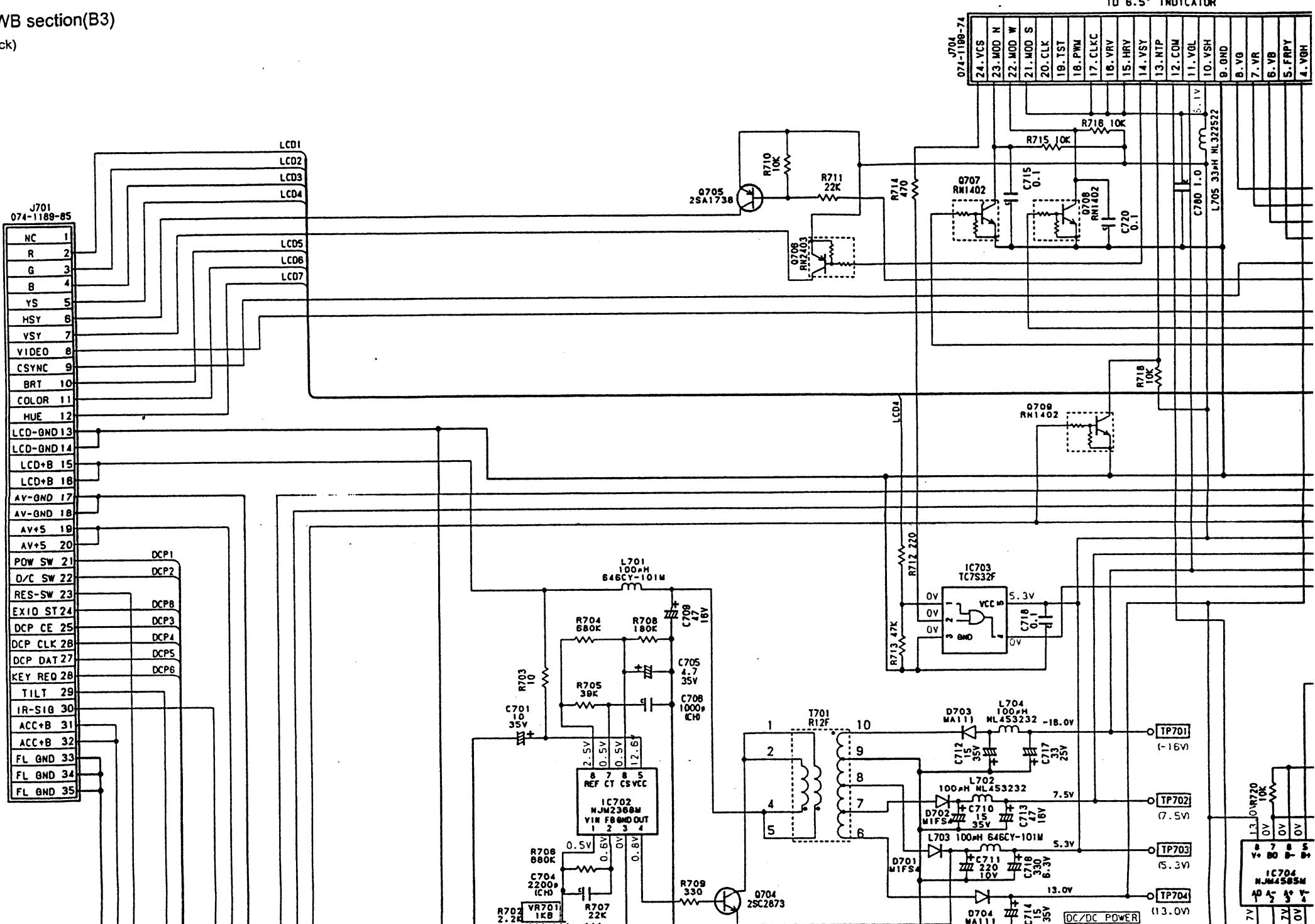
(OSD block)





LCD PWB section(B3)  
(LCD block)

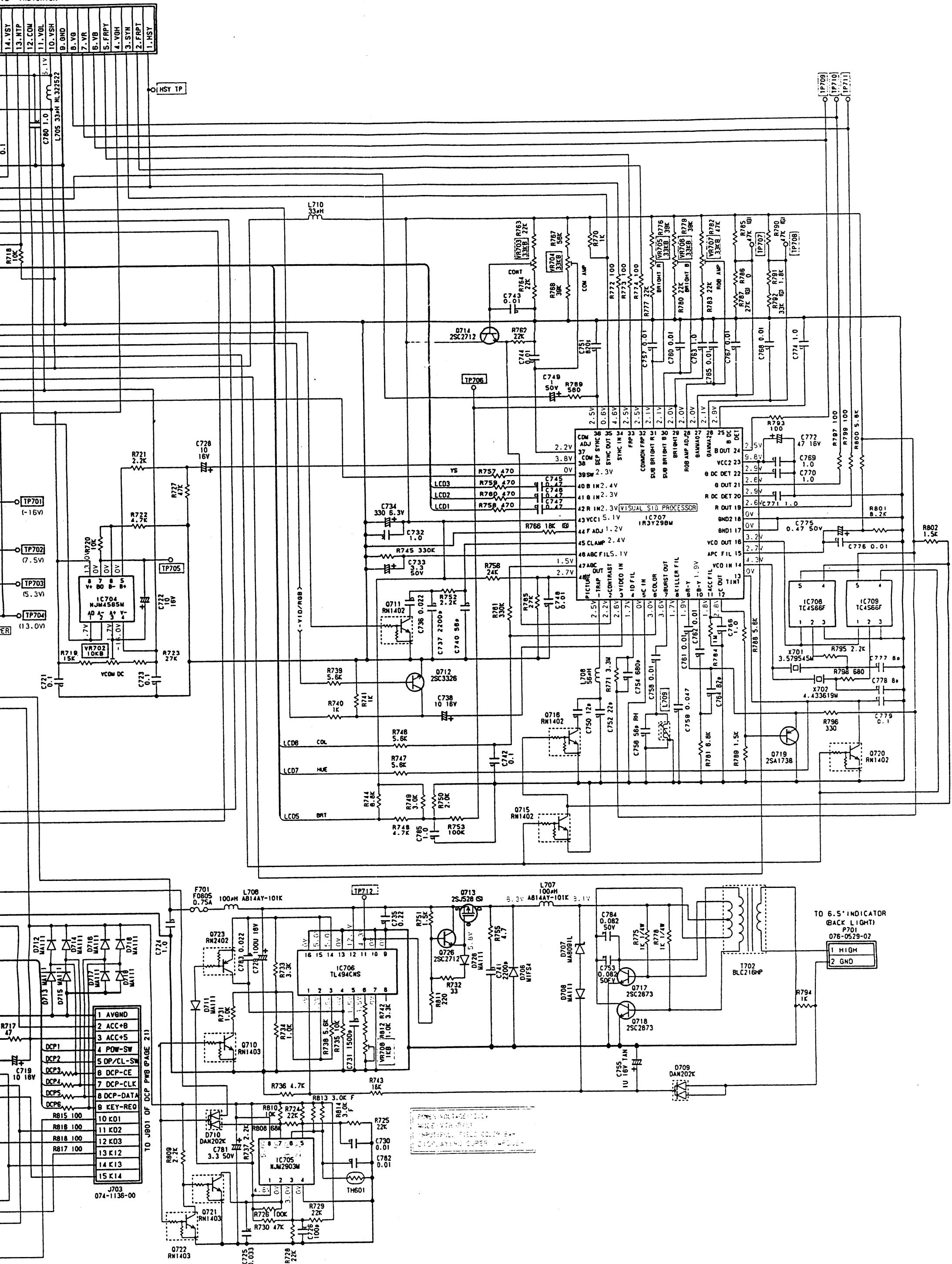
10 J501 OF DIGITAL PWB PAGE 169



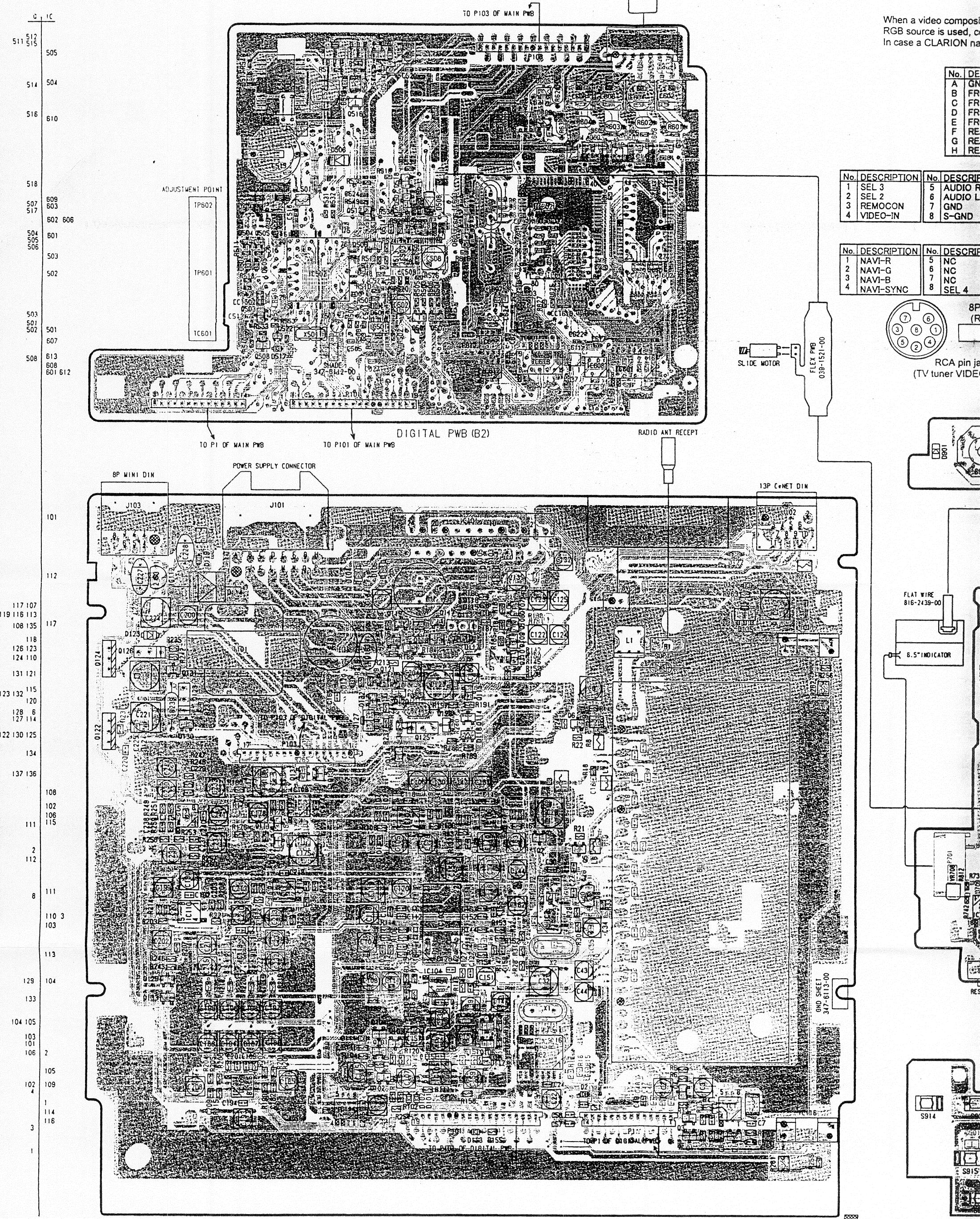
1	AVGND
2	ACC+B
3	ACC+B
4	POW-SW
5	DP/CL-S
6	DP-CE
7	DP-CL
8	DP-DA
9	KEY-RE
10	K01
11	K02
12	K03
13	K12
14	K13
15	K14

J703

074-1136-0



#### ■ PRINTED WIRING BOARD



When a video composite source is used, connect it to the 8-pin Mini-DIN video jack. When a RGB source is used, connect it to the 8-pin DIN RGB jack.  
In case a CLARION navigation system is used, connect it to both input.

