

COLOR MONITOR SERVICE MANUAL

CHASSIS NO.: CL-81

MODEL: FLATRON M1721A (M1721A-BMF.A**NLF)
FLATRON M1921A (M1921A-BMF.A**NLF)

*() **Same model for Service

CAUTION

BEFORE SERVICING THE UNIT,
READ THE **SAFETY PRECAUTIONS** IN THIS MANUAL.



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SPECIFICATIONS

1. LCD CHARACTERISTICS

Type : TFT Color LCD Module Active Video Area : 17.0 inch-**M1721A**

: 19.0 inch-M1921A

Size : 358.5(V) x 296.5(H) x 17(D)-M1721A

: 396.0(V) x 324.0(H) x 16.5(D)-M1921A

Pixel Pitch : 0.264mm x 0.264mm x RGB-**M1721A**

: 0.098mm x RGBmm x 0.294-**M1921A**Color Depth : 6Bits with FRC, 16,777,216 colors

Surface Treatment: Anti Glare, Hard Coating(3H)

Operating Mode : Normally white

Backlight Unit : 4CCFL Electrical Interface : LVDS

2. OPTICAL CHARACTERISTICS

2-1. Viewing Angle by Contrast Ratio ≥ 10

M1721A

Left: -60° min., -70° typ
Top: +60° min., +75° typ
Bottom: -50° min., -65° typ

M1921A

Left: -70° min., -80° typ
Top: +60° min., +70° typ
Bottom: -50° min., -85° typ

2-2. Luminance : 160(min.), 250(typ.)

2-3 Contrast Ratio : 300(min.), 550(max.)-M1721A

: 350(min.), 650(max.)-M1921A

3. SIGNAL (Refer to the Timing Chart)

3-1. Analog Video Input

1) Video Input Range: 0~0.7V ± 5%

2) Video Termination Impedance : 75 Ω ± 5%

3) Sync Type: Separate Sync.

4) Sync Level: TTL Low \leq 0.8V, High \geq 2.0V

3-2. Operating Frequency

Horizontal : 30 ~ 70kHz Vertical : 56 ~ 75Hz

4. RESOLUTION

Analog Max : 1280 x 1024@60Hz

5. POWER SUPPLY

5-1. Power

AC 100-240Vac, 50/60Hz

5-2. Power Consumption

MODE	H/V SYNC	VIDEO	POWER CONSUMPTION	LED COLOR
POWER ON (NORMAL)	ON/ON	ACTIVE	less than 40 W-M1721A	BLUE
			less than 45 W-M1921A	
	OFF/ON			
SLEEP MODE	ON/OFF	OFF	less than 1 W	RED
	OFF/OFF			
POWER S/W OFF	-	OFF	less than 1 W	OFF

6. ENVIRONMENT

5-1. Operating Temperature : $10^{\circ}\text{C} \sim 35^{\circ}\text{C}$ 5-2. Operating Humidity : $20\% \sim 80\%$ 5-3. MTBF : 50,000 Hours (Min)

7. DIMENSIONS (with TILT/SWIVEL)

M1721A

Width : 394.4 mm (15.53") Depth : 243 mm (9.57") Height : 404 mm (15.91")

M1921A

Width : 445 mm (17.52")
Depth : 243 mm (9.57")
Height : 457 mm (17.99")

8. WEIGHT (with TILT/SWIVEL)

M1721A

Net. Weight : 4.5 kg (9.92 lbs) Gross Weight : 6.2 kg (14.33 lbs)

M1921A

Net. Weight : 5.5 kg (12.13 lbs) Gross Weight : 7.1 kg (15.66 lbs)

PRECAUTION

WARNING FOR THE SAFETY-RELATED COMPONENT.

- There are some special components used in LCD monitor that are important for safety. These parts are marked on the schematic diagram and the replacement parts list. It is essential that these critical parts should be replaced with the manufacturer's specified parts to prevent electric shock, fire or other hazard.
- Do not modify original design without obtaining written permission from manufacturer or you will void the original parts and labor guarantee.

TAKE CARE DURING HANDLING THE LCD MODULE WITH BACKLIGHT UNIT.

- Must mount the module using mounting holes arranged in four corners.
- Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
- Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
- Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
- Make certain that treatment person's body are grounded through wrist band.
- Do not leave the module in high temperature and in areas of high humidity for a long time.
- The module not be exposed to the direct sunlight.
- Avoid contact with water as it may a short circuit within the module.
- If the surface of panel become dirty, please wipe it off with a softmaterial. (Cleaning with a dirty or rough cloth may damage the panel.)

↑ CAUTION

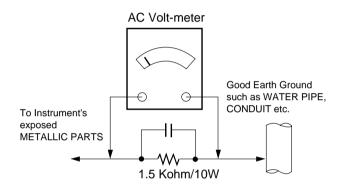
Please use only a plastic screwdriver to protect yourself from shock hazard during service operation.

△ WARNING

BE CAREFUL ELECTRIC SHOCK!

- If you want to replace with the new backlight (CCFL) or inverter circuit, must disconnect the AC adapter because high voltage appears at inverter circuit about 650Vrms.
- Handle with care wires or connectors of the inverter circuit. If the wires are pressed cause short and may burn or take fire.

Leakage Current Hot Check Circuit



SERVICING PRECAUTIONS

CAUTION: Before servicing receivers covered by this service manual and its supplements and addenda, read and follow the **SAFETY PRECAUTIONS** on page 3 of this publication.

NOTE: If unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions on page 3 of this publication, always follow the safety precautions. Remember: Safety First.

General Servicing Precautions

- Always unplug the receiver AC power cord from the AC power source before:
 - a. Removing or reinstalling any component, circuit board module or any other receiver assembly.
 - b. Disconnecting or reconnecting any receiver electrical plug or other electrical connection.
 - c. Connecting a test substitute in parallel with an electrolytic capacitor in the receiver.
 - **CAUTION:** A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.
 - d. Discharging the picture tube anode.
- 2. Test high voltage only by measuring it with an appropriate high voltage meter or other voltage measuring device (DVM, FETVOM, etc) equipped with a suitable high voltage probe.
 - Do not test high voltage by "drawing an arc".
- 3. Discharge the picture tube anode only by (a) first connecting one end of an insulated clip lead to the degaussing or kine aquadag grounding system shield at the point where the picture tube socket ground lead is connected, and then (b) touch the other end of the insulated clip lead to the picture tube anode button, using an insulating handle to avoid personal contact with high voltage.
- 4. Do not spray chemicals on or near this receiver or any of its assemblies.
- 5. Unless specified otherwise in this service manual, clean electrical contacts only by applying the following mixture to the contacts with a pipe cleaner, cotton-tipped stick or comparable non-abrasive applicator; 10% (by volume) Acetone and 90% (by volume) isopropyl alcohol (90%-99% strength)

CAUTION: This is a flammable mixture.

Unless specified otherwise in this service manual, lubrication of contacts in not required.

- 6. Do not defeat any plug/socket B+ voltage interlocks with which receivers covered by this service manual might be equipped.
- 7. Do not apply AC power to this instrument and/or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.
- 8. Always connect the test receiver ground lead to the receiver chassis ground before connecting the test receiver positive lead.

Always remove the test receiver ground lead last.

Use with this receiver only the test fixtures specified in this service manual.

CAUTION: Do not connect the test fixture ground strap to any heat sink in this receiver.

Electrostatically Sensitive (ES) Devices

Some semiconductor (solid-state) devices can be damaged easily by static electricity. Such components commonly are called *Electrostatically Sensitive (ES) Devices*. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static by static electricity.

- 1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed to prevent potential shock reasons prior to applying power to the unit under test.
- After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
- Use only a grounded-tip soldering iron to solder or unsolder ES devices.
- Use only an anti-static type solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
- Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
- 6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
- Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
 - **CAUTION:** Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
- 8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

General Soldering Guidelines

- 1. Use a grounded-tip, low-wattage soldering iron and appropriate tip size and shape that will maintain tip temperature within the range or 500° F to 600° F.
- 2. Use an appropriate gauge of RMA resin-core solder composed of 60 parts tin/40 parts lead.
- 3. Keep the soldering iron tip clean and well tinned.
- 4. Thoroughly clean the surfaces to be soldered. Use a mall wire-bristle (0.5 inch, or 1.25cm) brush with a metal handle.
 - Do not use freon-propelled spray-on cleaners.
- 5. Use the following unsoldering technique
 - a. Allow the soldering iron tip to reach normal temperature.
 - (500° F to 600° F)
 - b. Heat the component lead until the solder melts.
 - Quickly draw the melted solder with an anti-static, suction-type solder removal device or with solder braid.
 - **CAUTION:** Work quickly to avoid overheating the circuitboard printed foil.
- 6. Use the following soldering technique.
 - a. Allow the soldering iron tip to reach a normal temperature (500° F to 600° F)
 - b. First, hold the soldering iron tip and solder the strand against the component lead until the solder melts.
 - c. Quickly move the soldering iron tip to the junction of the component lead and the printed circuit foil, and hold it there only until the solder flows onto and around both the component lead and the foil.
 - **CAUTION:** Work quickly to avoid overheating the circuit board printed foil.
 - d. Closely inspect the solder area and remove any excess or splashed solder with a small wire-bristle brush.

IC Remove/Replacement

Some chassis circuit boards have slotted holes (oblong) through which the IC leads are inserted and then bent flat against the circuit foil. When holes are the slotted type, the following technique should be used to remove and replace the IC. When working with boards using the familiar round hole, use the standard technique as outlined in paragraphs 5 and 6 above.

Removal

- Desolder and straighten each IC lead in one operation by gently prying up on the lead with the soldering iron tip as the solder melts.
- 2. Draw away the melted solder with an anti-static suction-type solder removal device (or with solder braid) before removing the IC.

Replacement

- 1. Carefully insert the replacement IC in the circuit board.
- Carefully bend each IC lead against the circuit foil pad and solder it.
- 3. Clean the soldered areas with a small wire-bristle brush. (It is not necessary to reapply acrylic coating to the areas).

"Small-Signal" Discrete Transistor Removal/Replacement

- 1. Remove the defective transistor by clipping its leads as close as possible to the component body.
- 2. Bend into a "U" shape the end of each of three leads remaining on the circuit board.
- 3. Bend into a "U" shape the replacement transistor leads.
- 4. Connect the replacement transistor leads to the corresponding leads extending from the circuit board and crimp the "U" with long nose pliers to insure metal to metal contact then solder each connection.

Power Output, Transistor Device Removal/Replacement

- Heat and remove all solder from around the transistor leads.
- Remove the heat sink mounting screw (if so equipped).
- Carefully remove the transistor from the heat sink of the circuit board.
- 4. Insert new transistor in the circuit board.
- 5. Solder each transistor lead, and clip off excess lead.
- 6. Replace heat sink.

Diode Removal/Replacement

- 1. Remove defective diode by clipping its leads as close as possible to diode body.
- 2. Bend the two remaining leads perpendicular y to the circuit board.
- Observing diode polarity, wrap each lead of the new diode around the corresponding lead on the circuit board.
- 4. Securely crimp each connection and solder it.
- Inspect (on the circuit board copper side) the solder joints of the two "original" leads. If they are not shiny, reheat them and if necessary, apply additional solder.

Fuse and Conventional Resistor Removal/Replacement

- Clip each fuse or resistor lead at top of the circuit board hollow stake.
- 2. Securely crimp the leads of replacement component around notch at stake top.
- 3. Solder the connections.
 - **CAUTION:** Maintain original spacing between the replaced component and adjacent components and the circuit board to prevent excessive component temperatures.

Circuit Board Foil Repair

Excessive heat applied to the copper foil of any printed circuit board will weaken the adhesive that bonds the foil to the circuit board causing the foil to separate from or "lift-off" the board. The following guidelines and procedures should be followed whenever this condition is encountered.

At IC Connections

To repair a defective copper pattern at IC connections use the following procedure to install a jumper wire on the copper pattern side of the circuit board. (Use this technique only on IC connections).

- 1. Carefully remove the damaged copper pattern with a sharp knife. (Remove only as much copper as absolutely necessary).
- carefully scratch away the solder resist and acrylic coating (if used) from the end of the remaining copper pattern.
- Bend a small "U" in one end of a small gauge jumper wire and carefully crimp it around the IC pin. Solder the IC connection.
- 4. Route the jumper wire along the path of the out-away copper pattern and let it overlap the previously scraped end of the good copper pattern. Solder the overlapped area and clip off any excess jumper wire.

At Other Connections

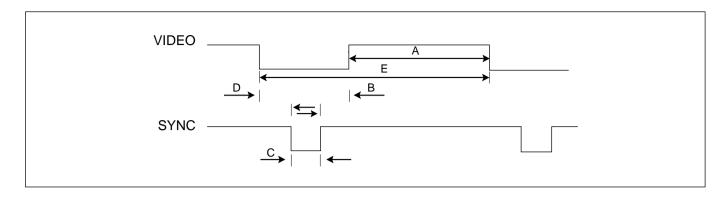
Use the following technique to repair the defective copper pattern at connections other than IC Pins. This technique involves the installation of a jumper wire on the component side of the circuit board.

- Remove the defective copper pattern with a sharp knife.
 - Remove at least 1/4 inch of copper, to ensure that a hazardous condition will not exist if the jumper wire opens.
- 2. Trace along the copper pattern from both sides of the pattern break and locate the nearest component that is directly connected to the affected copper pattern.
- Connect insulated 20-gauge jumper wire from the lead of the nearest component on one side of the pattern break to the lead of the nearest component on the other side.

Carefully crimp and solder the connections.

CAUTION: Be sure the insulated jumper wire is dressed so the it does not touch components or sharp edges.

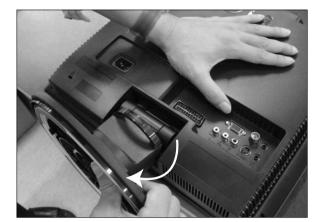
TIMING CHART



MODE	H/V	Sync Polarity	Dot Clock	Frequency	Total Period (E)	Video Active Time (A)	Sync Duration (D)	Front Porch (C)	Blanking Time (B)	Resolution
1	H(Pixels)	+	25.175	31.469	800	640	16	96	48	640 x 350
	V(Lines)	-		70.09	449	350	37	2	60	
2	H(Pixels)	-	28.321	31.468	900	720	18	108	54	720 X 400
	V(Lines)	+		70.08	449	400	12	2	35	
3	H(Pixels)	-	25.175	31.469	800	640	16	96	48	640 x 480
	V(Lines)	-		59.94	525	480	10	2	33	
4	H(Pixels)	-	31.5	37.5	840	640	16	64	120	640 x 480
	V(Lines)	-		75	500	480	1	3	16	
5	H(Pixels)	+	40.0	37.879	1056	800	40	128	88	800 x 600
	V(Lines)	+		60.317	628	600	1	4	23	
6	H(Pixels)	+	49.5	46.875	1056	800	16	80	160	800 x 600
	V(Lines)	+		75.0	625	600	1	3	21	
7	H(Pixels)	+/-	57.283	49.725	1152	832	32	64	224	832 x 624
	V(Lines)	+/-		74.55	667	624	1	3	39	
8	H(Pixels)	-	65.0	48.363	1344	1024	24	136	160	1024 x 768
	V(Lines)	-		60.0	806	768	3	6	29	
9	H(Pixels)	-	78.75	60.123	1312	1024	16	96	176	1024 x 768
	V(Lines)	-		75.029	800	768	1	3	28	
10	H(Pixels)	+	108.0	63.981	1688	1280	48	112	248	1280 x 1024
	V(Lines)	+		60.02	1066	1024	1	3	38	

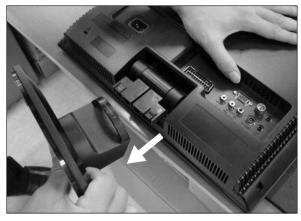
DISASSEMBLY

1



Hold the stand body & stand base.

2



Separate body & stand base.

#3



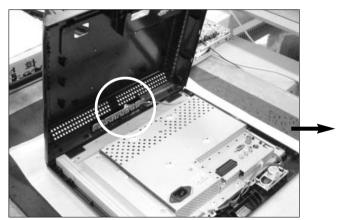
Remove the screws.

4

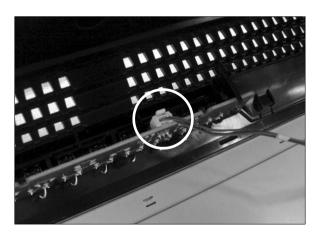


- 1. Let the all latches are separated
- 2. Disassemble back cover.

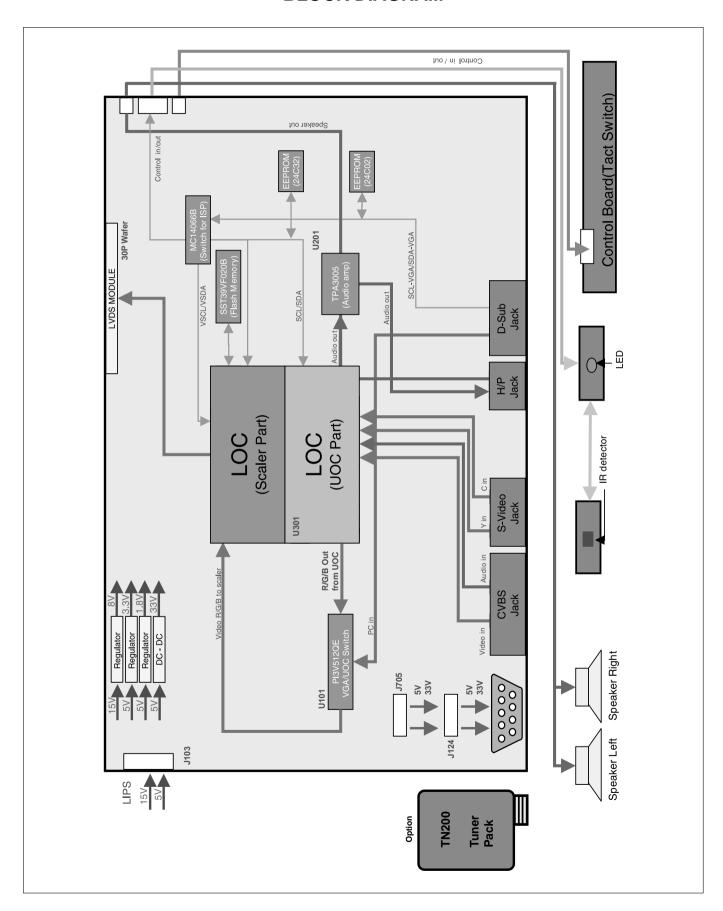
5



Disassemble Connector.



BLOCK DIAGRAM



DESCRIPTION OF BLOCK DIAGRAM

1. Power Supply Block (LIPS)

This Block Generates DC Voltage (5V,15V) to Main Control system from AC Power (100-240V, 50/60Hz, 1.0A) Also it has the inverter function converts input voltage to AC Rms value for the LCD lamp.

2. DC/DC Converter Block

DC/DC Converter convert the input 5V, 15V to proper 3.3V, 5V, 8V, 12V for Main control system.

For shooting heat trouble, we use the DC/DC converting IC

3. Audio Amplifier

This block is composed of TPA3005D2 and peripheral device.

The function of the audio amplifier is that to amplify audio L / R signal transmitted from audio decoder.

The audio signal is amplified according to pre-defined DC volume control curve.

4. Audio / Video / IF Decoder / Scaler

This block is composed of LOC1 and peripheral devices.

1) Video Decoder

This Block Selects input Video signals (like CVBS, Y/C) and output RGB signal.

On decoding, We can control signal like Contrast, Brightness, Sharpness, Color, Tint signals including Adaptive Comb Filter.

2) Audio Decoder

This Block analyzes audio input signal through A/V Jack and PC audio and Tuner IF.

The analyzed signals transmitted to audio amplifier.

On decoding, We can control signal like Bass, Treble.

3) IF Decoder

This block can change IF signal to audio and video signal that transmitted to Video/Audio decoder.

4) Scaler

This IC includes A/D Converter and LVDS Transmitter.

This IC is directly inputted Analog signal and transmits it to LCD Module.

5) Micom

This block controls each IC through IIC communication line.

5. Switch IC (PI3V512QE)

It is composed of PI3V512Q.

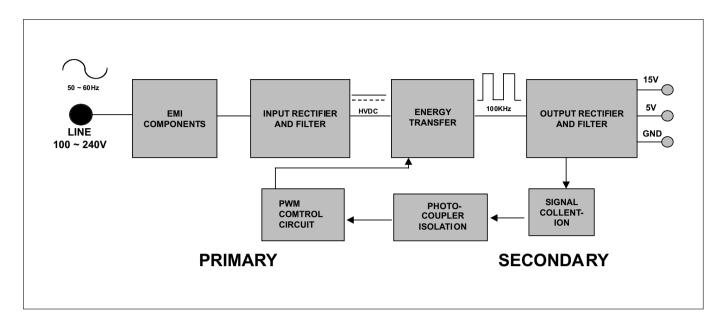
This IC selects between D-sub RGB signal and LOC1 RGB signal, and it transmits the selected signal to video signal processor.

6. Tuner (included Tuner Pack (TN200))

Micom controls this through IIC Line.

Tuner makes IF and transmits IF signal to LOC1.

LIPS Board Block Diagram



Operation description_LIPS

1. EMI components.

This part contains of EMI components to comply with global marketing EMI standards like FCC, VCCI, CISPR, the circuit included a line-filter, across line capacitor and of course the primary protection fuse.

2. Input rectifier and filter.

This part function is for transfer the input AC voltage to a DC voltage through a bridge rectifier and a bulk capacitor.

3. Energy Transfer.

This part function is for transfer the primary energy to secondary through a power transformer.

4. Output rectifier and filter.

This part function is to make a pulse with modulation control and to provide the driver signal to power switch, to adjust the duty cycle during different AC input and output loading condition to achieve the DC output stabilized, and also the over power protection is also monitor by this part.

5. Photo-Coupler isolation.

This part function is to feed back the DC output changing status through a photo transistor to primary controller to achieve the stabilized DC output voltage.

6. Signal collection.

This part function is to collect the any change from the DC output and feed back to the primary through photo transistor.

EDID ADJUSTMENT

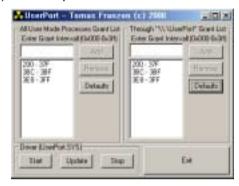
Windows EDID V1.0 User Manual

Operating System: MS Windows 98, 2000, XP Port Setup: Windows 98 => Don't need setup

Windows 2000, XP => Need to Port Setup.

This program is available to LCD Monitor only.

- 1. Port Setup
 - a) Copy "UserPort.sys" file to "c:\WINNT\system32\drivers" folder
 - b) Run Userport.exe



- c) Remove all default number
- d) Add 300-3FF

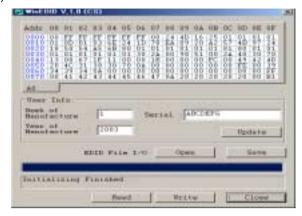


- e) Click Start button.
- f) Click Exit button.

* If you don't write EDID, check below

- 1. Enter "SVC Menu" (refer 14page)
 - Enter "Etc"
 - Enter "Write Protect
 - 1 : EDID protection (No write)
 - 0: EDID wirte
 - Write EDID
- 2. Escape "SVC Menu" and push "In-stop" Button on SVC-Remote controller.

- 2. EDID Read & Write
 - 1) Run WinEDID.exe



- 2) Edit Week of Manufacture, Year of Manufacture, Serial Number
 - a) Input User Info Data
 - b) Click "Update" button
 - c) Click "Write" button



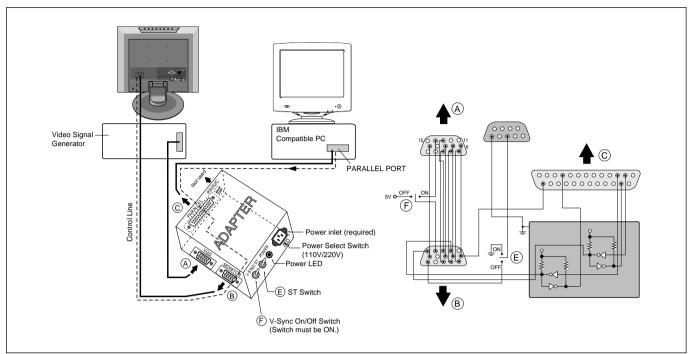


Figure 1. Cable Connection

ADC ADJUSTMENT

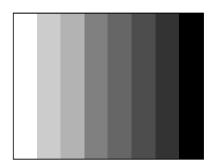
- 1. DCXO setting in Video (AV2)
 - Convert to AV2 in Input-source
 - Signal equipment display Output Voltage: 700 mVp-p

Impress Resolution: NTSC J (Model No.207 at MSPG925L)

Pattern: Color Bar (Pattern No.33 ant MSPG925L)

- 1) IN-START selection of Service Remote Controller
- 2) OPTION4 Selection
- 3) Right button selection in DCXO-AUTO(AV2).
 Then, DCXO-AUTO may change from 0 to 1.
- 4) DCXO value confirmation

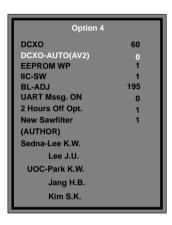
(Exit and Enter again Option4 _ Menu+Option4 selection)



DCXO Adjustment Pattern (No.33)



Service Main Menu



Option 4 Menu

2. Video (AV2) input ADC

Signal equipment display
 Output Voltage: 700 mVp-p

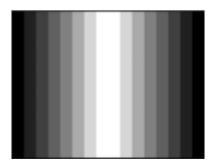
Impress Resolution: NTSC J (Model No.207 at MSPG925L)

Pattern: Gray pattern that left & right is black and center is white signal.

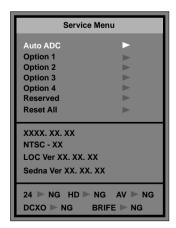
(Pattern No.29 ant MSPG925L)

- 1) IN-START selection of Service Remote Controller
- 2) AUTOADC Selection
- 3) Right button selection in Auto Gain.

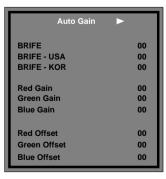
Then, Value of Offset and Gain may change.



(700mVp-p) ADC Adjustment Pattern (No.29)



Service Main Menu



Auto Gain

3. RGB-PC input ADC

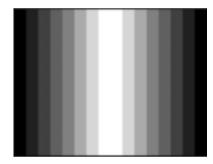
 Signal equipment display Output Voltage: 730 mVp-p

Impress Resolution: SXGA (Model No.45 at MSPG925L)

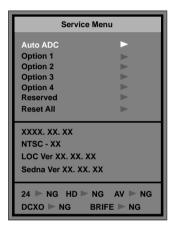
Pattern: Gray pattern that left & right is black and center is white signal

(Pattern No.28 ant MSPG925L)

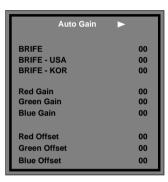
- 1) If Source change from AV2 to RGB-PC, Monitor executes auto intelligent. Do not ADC In this condition.
- 2) Execute ADC after AC power off/on.
- 3) IN-START selection of Service Remote Controller
- 4) AUTOADC Selection
- 5) Right button selection in Auto Gain Then, Value of Offset and Gain may change.



(730mVp-p) ADC Adjustment Pattern (No.28)

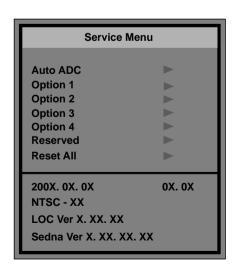


Service Main Menu



Auto Gain

SERVICE OSD



■ Description of operation

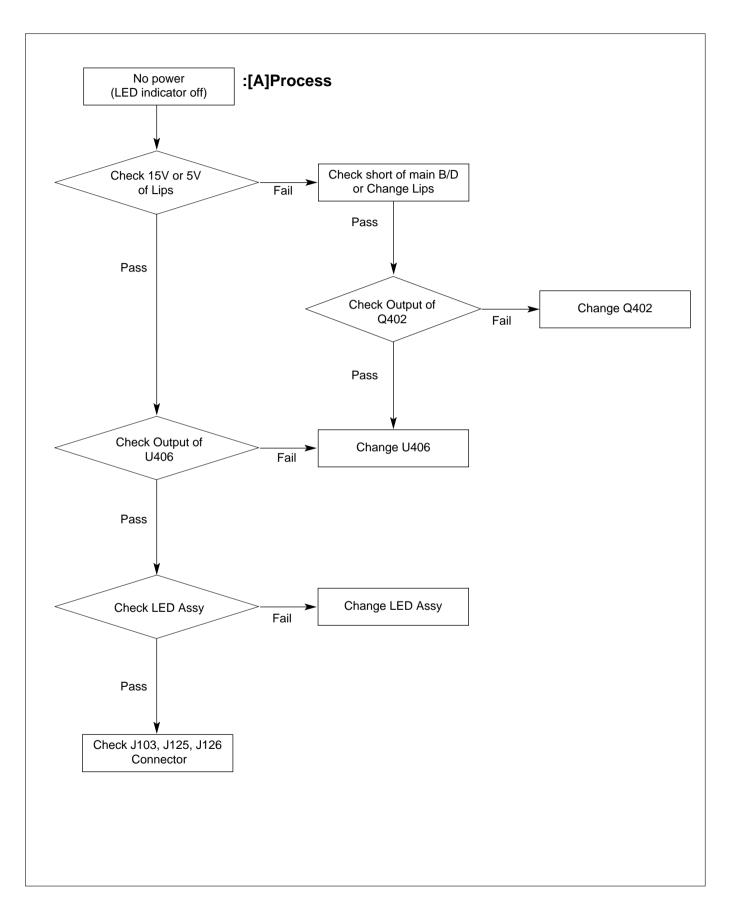
- Auto ADC: Adjust Auto ADC and Adjust RGB Gain/Offset

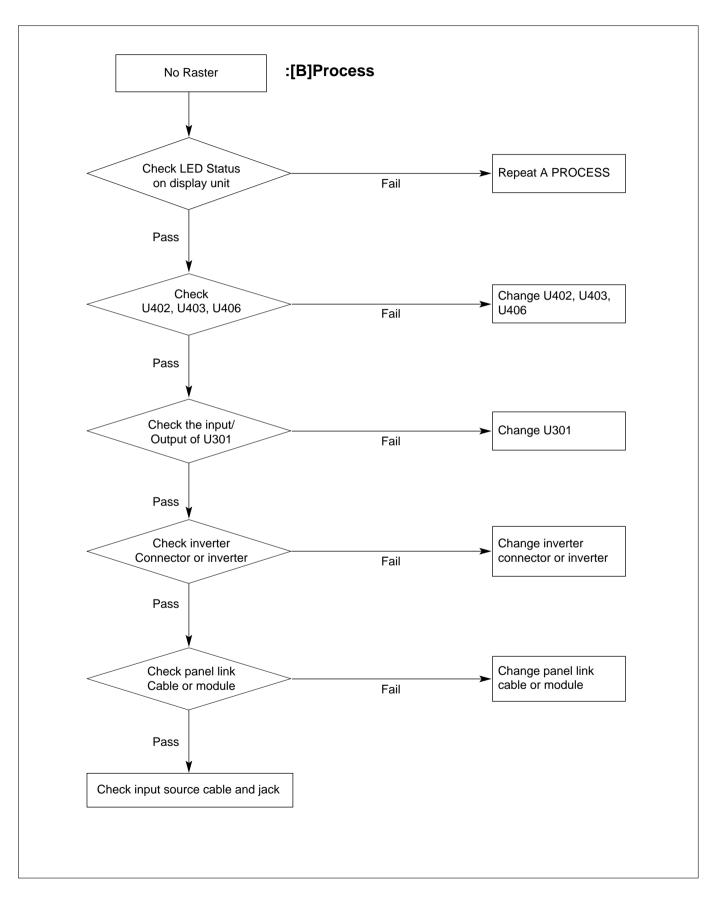
- Option 1 : Adjust Tuning - Option 2 : Adjust Sound

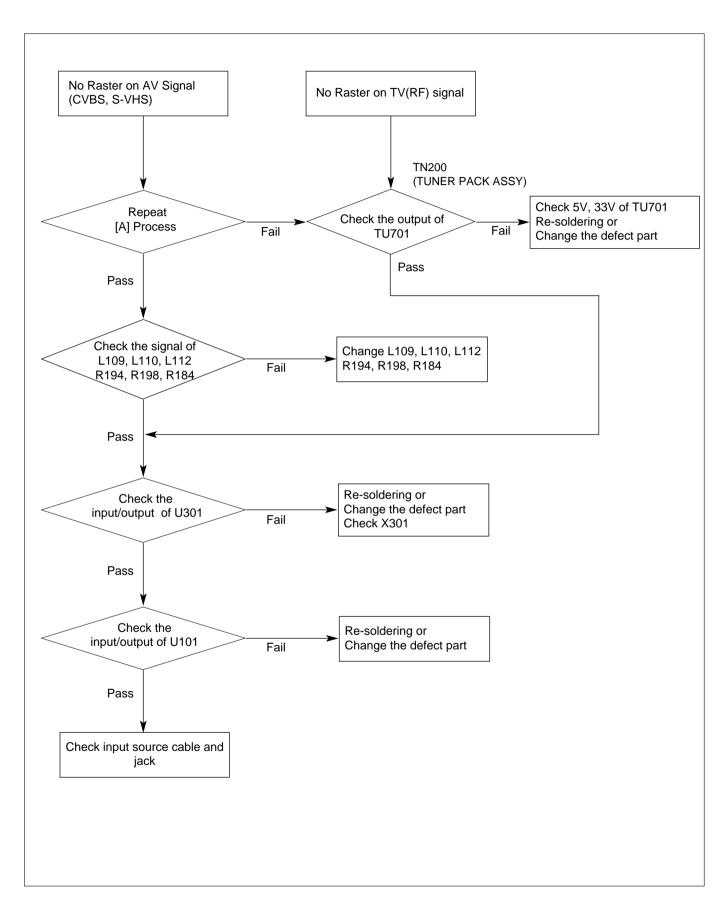
- Option 3 : Adjust Country, Language

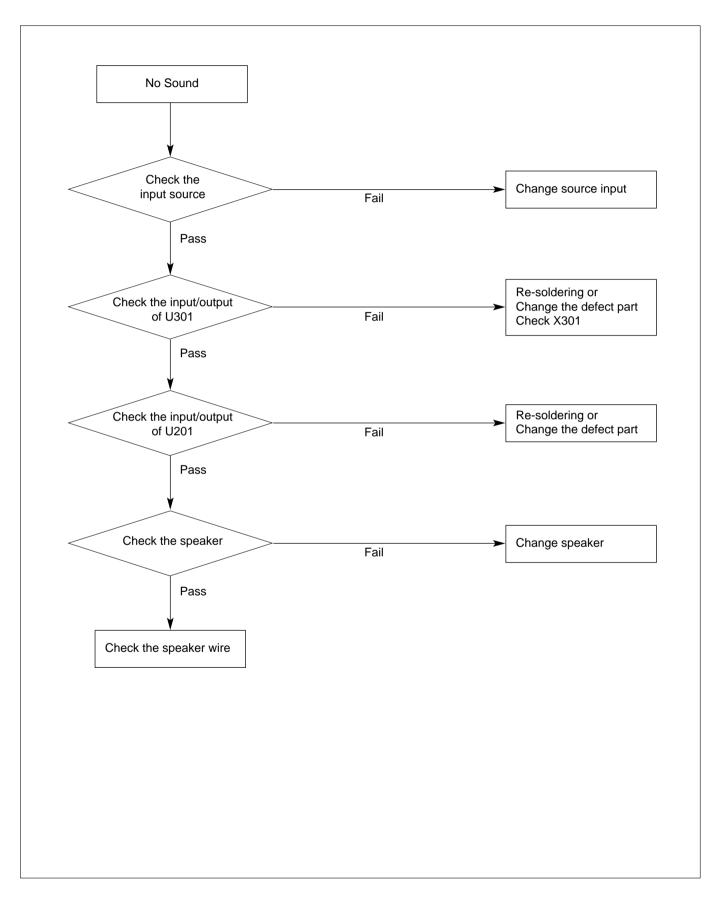
Option 4 : Adjust etc..Reset All : Default setting

TROUBLESHOOTING GUIDE

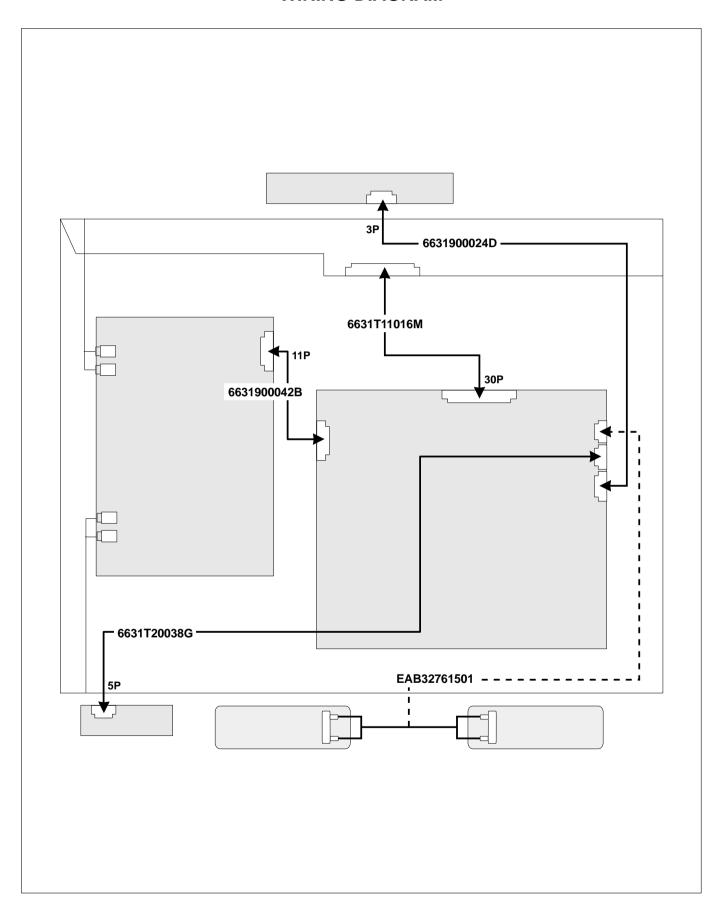




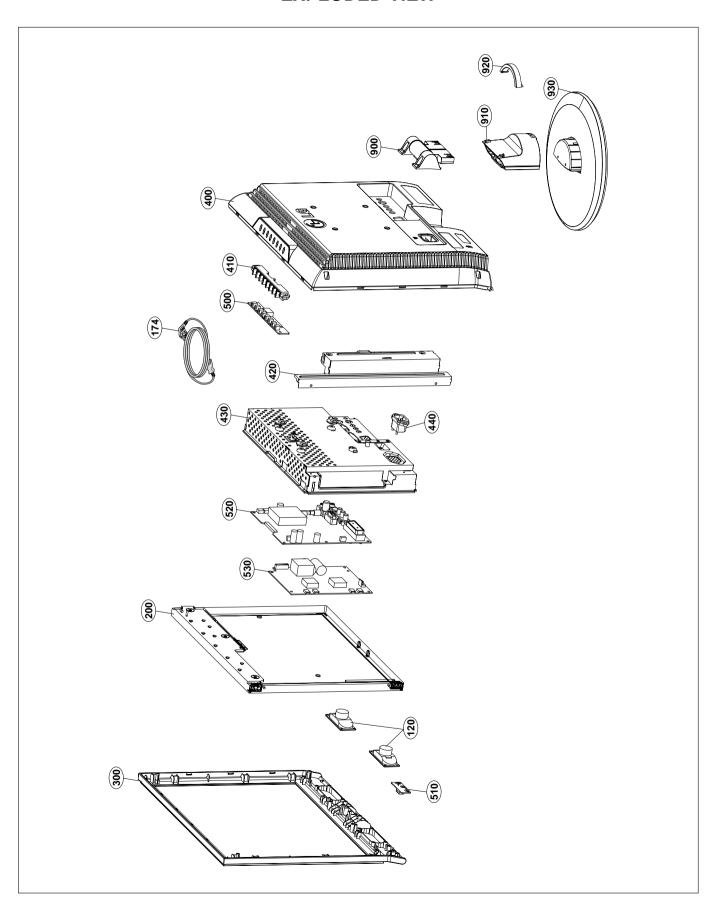




WIRING DIAGRAM



EXPLODED VIEW



EXPLODED VIEW PARTS LIST

* Note: Safety mark 🛕

Ref. No.		Part No.	Description
120		EAB32761501	Speaker,Fullrange, L07030A-027 ND35 3W 16OHM 85DB 300HZ 30 X 70 X 22 SOLDER SUNLINK COMPANY
174		6410TMW004A	Power Cord, UC,LP-45 & H05VV-F 0.75_3C, LS-60_1.87M_BLK LP-45 LS-60 1.87M - 250V 10A H05VV-F 3X0.75MM2 BLACK INMETRO N LONGWELL COMPANY
200	Δ	EAJ32188801	LCD,Module-TFT, LM170E03-TLB3 DRIVER 17.0INCH 1280X1024 300CD COLOR 72% 5/4 800 VS 1 5MS, 160/160, 4LAMP, 2CH-LVDS
		EAJ32189001	LCD,Module-TFT, LM190E08-TLB2 DRIVER 19.0INCH 1280X1024 300CD COLOR 72% 5/4 800:1 P7 FACTORY 5MS, 160/160, 2CH-LVDS, 4LAMP
300	Δ	ABJ31008204	Cabinet Assembly, M1721 CL-81 17" CABINET ASSY, RAVEN BLACK, MFT, NTSC(BMF), C/SKD
		ABJ31008104	Cabinet Assembly, M1921 CL-81 19" CABINET ASSY, RAVEN BLACK, MFT, NTSC(BMF),C/SKD
400	Δ	ACQ31008404	Cover Assembly, Rear, M1721 CL-81 17" BACK COVER ASSY, RAVEN BLACK, BB2, MFT, Ext. TUNNER, C/SKD
		ACQ31008306	Cover Assembly,Rear, M1921 CL-81 19" BACK COVER ASSY, RAVEN BLACK, BB2, MFT, Ext TUNNER, LPL,C/SKD
410		MEY32043301	Knob, MOLD ABS HF-350 SUB 7 KEY M1921 / M1721 ABS, BLACK
420		MGJ32111402	Plate,Shield, PRESS SBHG 0.6T METAL EGI M1721 INVERTER SHIELD (C/SKD)
		MGJ32111104	Plate, Shield, PRESS SBHG 0.6T METAL EGI M1921 INVERTER SHIELD FOR LPL MODULE (C/SKD)
430		ADV31008007	Frame Assembly, M1721 CL-81 ETC METAL FRAME ASSY BB2 MFT EXT. TUNNER, C/SKD
		ADV31008008	Frame Assembly, M1921 CL-81 ETC METAL FRAME ASSY BB2 MFT EXT. TUNNER, C/SKD
440		6620K00017B	Socket,Power, DAC-11S L2 3P STRAIGHT WIRE BK AC - 10.0A 250.0V -
500		EBR31651206	PCB Assembly, SUB T.T CL81 Mx21A Brazil CKD control
510		EBR32541802	PCB Assembly, SUB T.T CL81 Mx21A BMF CKD LED+IR
520		33139L7001H	Main Total Assembly, M1721A-BMF(LPL 5), Brazil CKD BRAND CL-81
		EBU30247806	Main Total Assembly, BB2 Brazil,MFT,Ext-Tuner,LPL 5 CKD BRAND CL-81-M1921A
530	Δ	6871TPT318A	PCB Assembly,Power, MFT 4-LAMP POWER T.T ETC MFT 4-LAMP BRAND - LGE TV SBU
900	Δ	ACQ31008503	Cover Assembly, M1721/ M1921 CL-81 ETC HINGE COVER ASSY, RAVEN BLACK, C/SKD
910	Δ	MCK32045602	Cover, MOLD ABS HF-350 M1921 / M1721 ABS STAND BODY, BLACK (CKD)
920		MCK32045701	Cover, MOLD ABS HF-350 M1921 / M1721 ABS STAND HOLDER_CABLE ARRANGEMENT, BLACK
930	Δ	ACQ31009202	Cover Assembly, M1921 / M1721 CL-81 ETC STAND BASE COVER, RAVEN BLACK , C/SKD

REPLACEMENT PARTS LIST

CAUTION: BEFORE REPLACING ANY OF THESE COMPONENTS, READ CAREFULLY THE **SAFETY PRECAUTIONS** IN THIS MANUAL.

* NOTE : S SAFETY Mark AL ALTERNATIVE PARTS

_			DATE: 2006. 10. 27
	*AL LOC. NO	. PART NO.	DESCRIPTION / SPECIFICATION
	MAIN BO	ARD	
	CAPACITO	ORS	
	0404	00540714/5050	MV//CO OTD40//O400M 400 F 000// 4
	C101	0CE107WF6DC	MVK6.3TP16VC100M 100uF 20% 1
	C102	0CH3104K566	0805B104K500CT 100nF 10% 50V
	C111	0CK105DH56A	C2012X7R105KFT 1uF 10% 25V X
	C112	0CK105DH56A	C2012X7R105KFT 1uF 10% 25V X
	C113	0CH5220K416	0805N220J500LT 22pF 5% 50V C
	C114	0CH5470K416	0805N470J500LT 47pF 5% 50V C
	C115	0CH5470K416	0805N470J500LT 47pF 5% 50V C
	C116	0CH5101K416	C2012C0G1H101JT 100pF 5% 50V
	C117	0CK105DH56A	C2012X7R105KFT 1uF 10% 25V X
	C118	0CK105DH56A	C2012X7R105KFT 1uF 10% 25V X
	C126	0CC101CK41A	C1608C0G1H101JT 100pF 5% 50V
	C127	0CC101CK41A	C1608C0G1H101JT 100pF 5% 50V
	C129	0CK104CK56A	0603B104K500CT 100nF 10% 50V
	C130	0CK104CK56A	0603B104K500CT 100nF 10% 50V
	C131	0CK104CK56A	0603B104K500CT 100nF 10% 50V
	C132	0CH3104K566	0805B104K500CT 100nF 10% 50V
	C134	0CE228ED618	KMG5.0TP10VB2200M 2200uF 20%
	C144	0CK105DH56A	C2012X7R105KFT 1uF 10% 25V X
	C145	0CK103CK51A	0603B103K500CT 10nF 10% 50V
	C146	0CE108EH618	KMG5.0TP25VB1000M 1000uF 20%
	C153	0CC101CK41A	C1608C0G1H101JT 100pF 5% 50V
	C154	0CC101CK41A	C1608C0G1H101JT 100pF 5% 50V
	C155	0CC470CK41A	C1608C0G1H470JT 47pF 5% 50V
	C156	0CH6680K416	C2012C0G1H680JT 68pF 5% 50V
	C157	0CC470CK41A	C1608C0G1H470JT 47pF 5% 50V
	C174	0CH3104K566	0805B104K500CT 100nF 10% 50V
	C175	0CE107WF6DC	MVK6.3TP16VC100M 100uF 20% 1
	C176	0CH3104K566	0805B104K500CT 100nF 10% 50V
	C177	0CH3104K566	0805B104K500CT 100nF 10% 50V
	C178	0CH3104K566	0805B104K500CT 100nF 10% 50V
	C180	0CK475DD57A	C2012X5R1A475KT 4.7uF 10% 10
	C181	0CK475DD57A	C2012X5R1A475KT 4.7uF 10% 10
	C187	0CH3104K566	0805B104K500CT 100nF 10% 50V
	C188	0CH3104K566	0805B104K500CT 100nF 10% 50V
	C189	0CC271CK41A	C1608C0G1H271JT 270pF 5% 50V
	C190	0CH3104K566	0805B104K500CT 100nF 10% 50V
	C191	0CH5331K416	0805N331J500LT 330pF 5% 50V
	C192	0CH3104K566	0805B104K500CT 100nF 10% 50V
	C194	0CH8106F691	MVK4.0TP16VC10M 10uF 20% 16V
	C195	0CH8106F691	MVK4.0TP16VC10M 10uF 20% 16V
	C196	0CH8106F691	MVK4.0TP16VC10M 10uF 20% 16V
	C197	0CH3104K566	0805B104K500CT 100nF 10% 50V
	C198	0CC271CK41A	C1608C0G1H271JT 270pF 5% 50V
	C199	0CC271CK41A	C1608C0G1H271JT 270pF 5% 50V
	C201	0CH8476H691	MVK8.0TP25VC47M 47uF 20% 25V
	C202	0CK104CK56A	0603B104K500CT 100nF 10% 50V
	C203	0CK104CK56A	0603B104K500CT 100nF 10% 50V
	C204	0CC221CK41A	C1608C0G1H221JT 220pF 5% 50V
	C205	0CH3474H946	C2012Y5V1E474ZT 470nF -20TO+
	C206	0CK224CF56A	0603B224K160CT 220nF 10% 16V
- 1	I	0CK105CF94A	0603F105Z160CT 1uF -20TO+80%
	C207	UCK 103CF94A	00031 1032 100C1 1u1 -2010+0076

				DATE: 2006. 10. 27.
s	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
_	7 (12	200.110.	174(1140.	Decertification of Edition (Tiers
		C209	0CH3474H946	C2012Y5V1E474ZT 470nF -20TO+
		C210	0CK224CF56A	0603B224K160CT 220nF 10% 16V
		C211	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C212	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C213	0CH3474H946	C2012Y5V1E474ZT 470nF -20TO+
		C214	0CK224CF56A	0603B224K160CT 220nF 10% 16V
		C215	0CH3474H946	C2012Y5V1E474ZT 470nF -20TO+
		C216	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C217	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C218	0CK224CF56A	0603B224K160CT 220nF 10% 16V
		C220	0CE107WF6DC	MVK6.3TP16VC100M 100uF 20% 1
		C221	0CK474CH94A	0603F474Z250CT 470nF -20TO+8
		C222	0CK474CH94A	0603F474Z250CT 470nF -20TO+8
		C223	0CK105CF94A	0603F105Z160CT 1uF -20TO+80%
		C224	0CK474CH94A	0603F474Z250CT 470nF -20TO+8
		C225	0CK474CH94A	0603F474Z250CT 470nF -20TO+8
		C226	0CE477EH618	KMG5.0TP25VB470M 470uF 20% 2
		C227	0CE477EH618	KMG5.0TP25VB470M 470uF 20% 2
		C232	0CC470CK41A	C1608C0G1H470JT 47pF 5% 50V
		C233	0CC470CK41A	C1608C0G1H470JT 47pF 5% 50V
		C236	0CH5102K416	0805N102J500LT 1nF 5% 50V C0
		C237	0CH5102K416	0805N102J500LT 1nF 5% 50V C0
		C238	0CH5102K416	0805N102J500LT 1nF 5% 50V C0
		C239	0CH5102K416	0805N102J500LT 1nF 5% 50V C0
		C3001	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C3002	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C3004	0CH8106F691	MVK4.0TP16VC10M 10uF 20% 16V
		C301	0CH3224K946	C2012Y5V1H224ZT 220nF -20TO+
		C3011	0CH3103K516	C2012Y5P1H103KT 10nF 10% 50V
		C3012	0CH5470K416	0805N470J500LT 47pF 5% 50V C
		C3013	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C3014	0CH5470K416	0805N470J500LT 47pF 5% 50V C
		C3015	0CK474CH94A	0603F474Z250CT 470nF -20TO+8
		C3017	0CK474CH94A	0603F474Z250CT 470nF -20TO+8
		C3019	0CK104CK56A	0603B104K500CT 100nF 10% 50V
		C302	0CK104CK56A	0603B104K500CT 100nF 10% 50V
		C3022	0CH3474H946	C2012Y5V1E474ZT 470nF -20TO+
		C3024	0CH5470K416	0805N470J500LT 47pF 5% 50V C
		C3026	0CH3474H946	C2012Y5V1E474ZT 470nF -20TO+
		C3028	0CH5470K416	0805N470J500LT 47pF 5% 50V C
		C303	0CK104CK56A	0603B104K500CT 100nF 10% 50V
		C3030	0CC470CK41A	C1608C0G1H470JT 47pF 5% 50V
		C3031	0CK474CH94A	0603F474Z250CT 470nF -20TO+8
		C3032	0CK474CH94A	0603F474Z250CT 470nF -20TO+8
		C3033	0CH5470K416	0805N470J500LT 47pF 5% 50V C
		C3035	0CK225DK94A	CL21F225ZBFNNNE 2.2uF -20TO+
		C3036	0CK333CK56A	C1608X7R1H333KT 33nF 10% 50V
		C3037	0CC220CK41A	C1608C0G1H220JT 22pF 5% 50V
		C304	0CK224CF56A	0603B224K160CT 220nF 10% 16V
		C3040	0CK224CF36A 0CK225DK94A	CL21F225ZBFNNNE 2.2uF -20TO+
		C3040	0CK223DK94A 0CK104CK56A	0603B104K500CT 100nF 10% 50V
		C3042	0CK104CK56A 0CH5470K416	0805N470J500LT 47pF 5% 50V C
		C3043	0CH5470K416 0CK333CK56A	C1608X7R1H333KT 33nF 10% 50V
		C3045	0CC470CK41A	C1608C0G1H470JT 47pF 5% 50V

		ı		DATE: 2006. 10. 27.
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		00040	005 47514 1000	NAME AND STREET OF THE ART IS NOW O
		C3046 C3047	0CE475WJ6DC 0CK474CH94A	MVK4.0TP35VC4.7M 4.7uF 20% 3 0603F474Z250CT 470nF -20TO+8
		C3047	0CC474CH94A 0CC470CK41A	C1608C0G1H470JT 47pF 5% 50V
		C3048	0CC220CK41A	C1608C0G1H220JT 22pF 5% 50V
		C305	0CH5151K416	0805N151J500LT 150pF 5% 50V
		C3050	0CK333CK56A	C1608X7R1H333KT 33nF 10% 50V
		C3051	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C3060	0CH2392K516	0805B392K500CT 3.9nF 10% 50V
		C3061	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C3062	0CH5470K416	0805N470J500LT 47pF 5% 50V C
		C3064	0CK474CH94A	0603F474Z250CT 470nF -20TO+8
		C3066	0CK104CK56A	0603B104K500CT 100nF 10% 50V
		C3068	0CK333CK56A	C1608X7R1H333KT 33nF 10% 50V
		C3069	0CK333CK56A	C1608X7R1H333KT 33nF 10% 50V
		C307	0CH3224K946	C2012Y5V1H224ZT 220nF -20TO+
		C3070 C3071	0CK333CK56A 0CE107WF6DC	C1608X7R1H333KT 33nF 10% 50V MVK6.3TP16VC100M 100uF 20% 1
		C3071	0CC220CK41A	C1608C0G1H220JT 22pF 5% 50V
	1	C3073	0CC220CK41A	C1608C0G1H22031 22pF 5% 50V C1608C0G1H150JT 15pF 5% 50V
	1	C3080	0CC470CK41A	C1608C0G1H470JT 47pF 5% 50V
		C3081	0CC470CK41A	C1608C0G1H470JT 47pF 5% 50V
		C3082	0CK225DK94A	CL21F225ZBFNNNE 2.2uF -20TO+
		C3083	0CK225DK94A	CL21F225ZBFNNNE 2.2uF -20TO+
		C3084	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C3085	0CK225DK94A	CL21F225ZBFNNNE 2.2uF -20TO+
		C3086	0CK225DK94A	CL21F225ZBFNNNE 2.2uF -20TO+
		C309	0CC150CK41A	C1608C0G1H150JT 15pF 5% 50V
		C3090	0CK104CK56A	0603B104K500CT 100nF 10% 50V
		C3091 C3092	0CK474CH94A 0CH3224K946	0603F474Z250CT 470nF -20TO+8 C2012Y5V1H224ZT 220nF -20TO+
		C3092	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C3094	0CE107WF6DC	MVK6.3TP16VC100M 100uF 20% 1
		C3100	0CC101CK41A	C1608C0G1H101JT 100pF 5% 50V
		C3101	0CC270CK41A	C1608C0G1H270JT 27pF 5% 50V
		C3102	0CK475DD57A	C2012X5R1A475KT 4.7uF 10% 10
		C311	0CE107WF6DC	MVK6.3TP16VC100M 100uF 20% 1
		C312	0CK104CK56A	0603B104K500CT 100nF 10% 50V
		C313	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C316	0CH3224K946	C2012Y5V1H224ZT 220nF -20TO+
		C317	0CH2472K516	0805B472K500CT 4.7nF 10% 50V
		C318	0CE105WK6DC	MVK4.0TP50VC1M 1uF 20% 50V 5
		C319 C320	0CH3224K946 0CK104CK56A	C2012Y5V1H224ZT 220nF -20TO+ 0603B104K500CT 100nF 10% 50V
	1	C320	0CE107WF6DC	MVK6.3TP16VC100M 100uF 20% 1
	1	C322	0CH3224K946	C2012Y5V1H224ZT 220nF -20TO+
		C323	0CH8106F691	MVK4.0TP16VC10M 10uF 20% 16V
		C327	0CH3224K946	C2012Y5V1H224ZT 220nF -20TO+
	1	C329	0CH2334F566	0805B334K160CT 330nF 10% 16V
	1	C330	0CH3224K946	C2012Y5V1H224ZT 220nF -20TO+
	1	C331	0CH3103K516	C2012Y5P1H103KT 10nF 10% 50V
		C332	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C334	0CH3104K566	0805B104K500CT 100nF 10% 50V
	1	C335	0CH3104K566	0805B104K500CT 100nF 10% 50V
	1	C336	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C337	0CH3104K566 0CH3104K566	0805B104K500CT 100nF 10% 50V 0805B104K500CT 100nF 10% 50V
		C338 C339	0CH3104K566	0805B104K500CT 100HF 10% 50V
	1	C339	0CH3104K566	0805B104K500CT 100NF 10% 50V
	1	C341	0CH3104K566	0805B104K500CT 100nF 10% 50V
	1	C342	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C343	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C345	0CK224CF56A	0603B224K160CT 220nF 10% 16V
1	1	1		

9	*^1	LOC NO	DAPT NO	DATE: 2006. 10. 27.
<u>S_</u>	AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C347	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C348	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C350	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C352	0CK224CF56A	0603B224K160CT 220nF 10% 16V
		C354	0CK104CK56A	0603B104K500CT 100nF 10% 50V
		C355	0CK104CK56A	0603B104K500CT 100nF 10% 50V
		C356	0CK104CK56A	0603B104K500CT 100nF 10% 50V
		C357	0CK104CK56A	0603B104K500CT 100nF 10% 50V
		C358	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C359	0CE107WF6DC	MVK6.3TP16VC100M 100uF 20% 1
		C360	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C361	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C362	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C363	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C364	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C365	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C366	0CH3104K566 0CH3224K946	0805B104K500CT 100nF 10% 50V C2012Y5V1H224ZT 220nF -20TO+
		C367 C369	0CH3224K946 0CK224CF56A	C2012Y5V1H224Z1 220nF -201O+ 0603B224K160CT 220nF 10% 16V
		C369 C370	0CK224CF56A 0CH3223K516	C2012Y5P1H223KT 22nF 10% 50V
		C370	0CH3223K316	MVK6.3TP16VC100M 100uF 20% 1
		C372	0CK104CK56A	0603B104K500CT 100nF 10% 50V
		C373	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C374	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C375	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C376	0CC470CK41A	C1608C0G1H470JT 47pF 5% 50V
		C377	0CC470CK41A	C1608C0G1H470JT 47pF 5% 50V
		C378	0CC470CK41A	C1608C0G1H470JT 47pF 5% 50V
		C379	0CH5102K416	0805N102J500LT 1nF 5% 50V C0
		C380	0CK104CK56A	0603B104K500CT 100nF 10% 50V
		C381	0CK104CK56A	0603B104K500CT 100nF 10% 50V
		C382	0CK104CK56A	0603B104K500CT 100nF 10% 50V
		C383	0CH2222K516	0805B222K500CT 2.2nF 10% 50V
		C384	0CH8106F691	MVK4.0TP16VC10M 10uF 20% 16V
		C385	0CH8106F691	MVK4.0TP16VC10M 10uF 20% 16V
		C386	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C387	0CK104CK56A	0603B104K500CT 100nF 10% 50V 0805B104K500CT 100nF 10% 50V
		C388 C389	0CH3104K566 0CH3104K566	0805B104K500CT 100NF 10% 50V
		C390	0CH3104K566	0805B104K500CT 100NF 10% 50V
		C390	0CH3104K566	0805B104K500CT 100HF 10% 50V
		C392	0CK104CK56A	0603B104K500CT 100nF 10% 50V
		C393	0CC100CK41A	C1608C0G1H100JT 10pF 5% 50V
		C394	0CH3224K946	C2012Y5V1H224ZT 220nF -20TO+
		C395	0CH3224K946	C2012Y5V1H224ZT 220nF -20TO+
		C396	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C403	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C404	0CE107WF6DC	MVK6.3TP16VC100M 100uF 20% 1
		C405	0CE477ED610	KMG10VB470M 470uF 20% 10V 28
		C408	0CE107WF6DC	MVK6.3TP16VC100M 100uF 20% 1
		C409	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C410	0CE226WF6DC	MVK5.0TP16VC22M 22uF 20% 16V
		C411	0CK475DD57A	C2012X5R1A475KT 4.7uF 10% 10
		C412	0CC102CK41A	C1608C0G1H102JT 1nF 5% 50V C
		C413	0CH3103K516	C2012Y5P1H103KT 10nF 10% 50V
		C414	0CE107WF6DC	MVK6.3TP16VC100M 100uF 20% 1
		C415	0CK105DH56A	C2012X7R105KFT 1uF 10% 25V X
		C416	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C420	0CE107WF6DC 0CH3104K566	MVK6.3TP16VC100M 100uF 20% 1 0805B104K500CT 100nF 10% 50V
		C421 C422	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C422 C423	0CH3104K566 0CE107WF6DC	MVK6.3TP16VC100M 100uF 20% 1
	1	J-20	20F 101 AM 0DC	171 V 100 0 10 0 10 0 10 0 10 0 10 0 10

				DATE 2002 40 25
*0	*^1	LOC NO	DARTNO	DATE: 2006. 10. 27.
*S	"AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C425	0CH3105H946	C2012Y5V1E105ZT 1uF -20TO+80
		C704	0CH3103H946 0CH3104K566	0805B104K500CT 100nF 10% 50V
		C705	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C708	0CH3104K566	0805B104K500CT 100nF 10% 50V
		C744	0CH3104K566	0805B104K500CT 100ff 10% 50V
		C748	0CE226EK610	KMG50VB22M 22uF 20% 50V 79MA
		C750	0CE107WF6DC	MVK6.3TP16VC100M 100uF 20% 1
		0.00	002107W1 020	WV16.611 16V6 166W 166W 2676 1
	D	IODEs		
		D101	0D6336000	KDS226 1.2V 85V 300MA 2A 4NS
		D101 D102	0DS226009AA 0DS226009AA	KDS226 1.2V 85V 300MA 2A 4NS
		D102	0DS226009AA	KDS226 1.2V 85V 300MA 2A 4NS
		D105	0DD184009AA	KDS184 KDS184 TP KEC - 85V -
		D110	0DSON00138A	MMBD301LT1G 600MV 30V 1.
		D701	0DS226009AA	KDS226 1.2V 85V 300MA 2A 4NS
		D701	0DSKE00248A	KDS114 850MV 35V 100MA 0A 0S
		D702	0DSON00138A	MMBD301LT1G 600MV 30V 1.
		ZD102	0DZ560009DA	UDZ\$5.6B 5.6V 5.49TO5.73V 60
		ZD102	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD105	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD106	0DZ560009DA	UDZ\$5.6B 5.6V 5.49TO5.73V 60
		ZD108	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD109	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD110	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD111	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD112	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD113	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD114	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD115	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD130	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD131	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD132	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD133	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD134	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD135	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD136	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD137	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD138	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD146	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD147	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD150	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD151	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD153	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD154	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD155	0DZ560009DA	UDZS5.6B 5.6V 5.49TO5.73V 60
		ZD201	0DZ120009CF	UDZ 12B 12V 11.74TO12.24V 30
		ZD703	0DZRM00448A	UDZS33B 33V 32.15TO33.79V 25
		ZD704	0DZRM00448A	UDZS33B 33V 32.15TO33.79V 25
	IC	Cs .		
		U101	0IPRP00639A	PI3V512QE 3TO3.6V 500MW
		U106	0IMMR00014A	M24C02-RMN6TP 2KBIT 256X8BIT
		U112	0ISTL00031A	MC74HC4066ADR2G MC74HC4066AD
		U201	0IPRP00007A	TPA3005D2PHPRG4 8.5TO18V - 0
		U301	0IPRP00641C	"TDA15511E 4.7VTO5.3V,3.0VTO3"
		U302	0IMMRSG036D	M24C32-WMN6P 32KBIT 4096X8BI
		U401	0IKE780800J	KIA7808API 10.5TO23V 8V 2W T
		U402	0IRH033200A	BA033FP-E2 4.3TO25V 3.3V 1W
		U402	0IPMGSG018D	LD1086DT18TR-LF 30V 1.8V - D
		U403	0IRH033200A	BA033FP-E2 4.3TO25V 3.3V 1W
		J-0-4	011111000200A	D/100011 -LZ 7.01020V 3.0V 1VV

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*S	*AL LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
	11400	010070050011	KAZOMOEDTM ZTOSOVEV DDAK
	U409 U704	0ISS780500H 0ISS780500H	KA78M05RTM 7TO20V 5V - DPAK KA78M05RTM 7TO20V 5V - DPAK
		0.007000011	10 (7 GWOSIK 1101 7 TO 20 V 3 V 12 17 KK
	COILs & F	LTERs & INDU(CTORs
	1.004	C4 400D0000A	DDE 40204 20::11 0 54 40 0V4
	L201 L202	61409B0002A 61409B0002A	DBF-1030A 30uH - 2.5A 10.8X1 DBF-1030A 30uH - 2.5A 10.8X1
	L202	61409B0002A 61409B0002A	DBF-1030A 30uH - 2.5A 10.8X1
	L204	61409B0002A	DBF-1030A 30uH - 2.5A 10.8X1
	L712	150-985B	CB221 24mH 11X16MM LEAD
	L101	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L115	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L205	6210TCE0014	HB-1M2012-221JT 220OHM 2X1.2
	L206	6210TCE0014	HB-1M2012-221JT 220OHM 2X1.2
	L207	6210TCE0014	HB-1M2012-221JT 220OHM 2X1.2
	L208	6210TCE0014	HB-1M2012-221JT 220OHM 2X1.2
	L301	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L302	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L304 L305	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2 HH-1M2012-601JT 600OHM 2X1.2
	L305	6200J00005E 6200J00005E	HH-1M2012-601JT 600OHM 2X1.2 HH-1M2012-601JT 600OHM 2X1.2
	L306	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L308	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L310	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L312	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L313	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L314	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L317	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L318	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L321	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L323	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L324	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L325 L327	6200J00005E 6200J00005E	HH-1M2012-601JT 600OHM 2X1.2 HH-1M2012-601JT 600OHM 2X1.2
	L328	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L329	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L330	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L333	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L334	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	L335	6200J00005E	HH-1M2012-601JT 600OHM 2X1.2
	U701	6200VQS001F	M3960M 38.9MHZ 17X3.9X8.7MM
	U702	6200QL3003C	K9362M 38.9MHZ 17.3X3.9X8.7M
	L116	0LCML00020C	MLI-201212-100K 10UH 10% - 1
	L117	0LCML00020C	MLI-201212-100K 10UH 10% - 1
	L704	0LC0562001A	FI-A2012-561KJT 560NH 10% -
	TRANSIST	OR	
	0404	0TB200400AF	VST2004 NIDNI 6\/ 60\/ 40\/ 200844
	Q101 Q102	0TR390409AE 0TR390409AE	KST3904 NPN 6V 60V 40V 200MA KST3904 NPN 6V 60V 40V 200MA
	Q102 Q103	0TR390409AE	KST3904 NPN 6V 60V 40V 200MA
	Q105	0TR390409AE	KST3904 NPN 6V 60V 40V 200MA
	Q106	0TR390409AE	KST3904 NPN 6V 60V 40V 200MA
	Q107	0TR162309CA	KSC1623-Y(MTF) NPN 5V 60V 50
	Q109	0TR390609FA	KST3906-MTF PNP -5V -40V -40
	Q110	0TR162309CA	KSC1623-Y(MTF) NPN 5V 60V 50
	Q111	0TR162309CA	KSC1623-Y(MTF) NPN 5V 60V 50
	Q112	0TR162309CA	KSC1623-Y(MTF) NPN 5V 60V 50
	Q116	0TR390409AE	KST3904 NPN 6V 60V 40V 200MA
	Q117	0TR390409AE	KST3904 NPN 6V 60V 40V 200MA
	Q201	0TR390409AE	KST3904 NPN 6V 60V 40V 200MA
	Q301	0TR127009AA	KTA1270-Y(KTA562TM) PNP -5V

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*S	^AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		Q302	0TR127009AA	KTA1270-Y(KTA562TM) PNP -5V
		Q303	0TR390409AE	KST3904 NPN 6V 60V 40V 200MA
		Q304	0TR390409AE	KST3904 NPN 6V 60V 40V 200MA
		Q305	0TR390409AE	KST3904 NPN 6V 60V 40V 200MA
		Q402	0TR390409AE	KST3904 NPN 6V 60V 40V 200MA
		Q701	0TR390409AE	KST3904 NPN 6V 60V 40V 200MA
		Q704	0TR162309CA	KSC1623-Y(MTF) NPN 5V 60V 50
		Q715	0TR387500AA	2SC3875S(ALY) NPN 5V 60V 50V
	LR	ESISTOR	Rs	
			-	
		C740	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R1001	0RH4701D622	MCR10EZHJ472 4.7KOHM 5% 1/8W
		R1002	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
		R1003	0RJ1300D477	MCR03EZPF1300 130OHM 1% 1/10
		R1004	0RJ0752D477	MCR03EZPF750 75OHM 1% 1/10W
		R1005	0RH4701D622	MCR10EZHJ472 4.7KOHM 5% 1/8W
		R1006 R1007	0RH1002D622 0RJ1300D477	MCR10EZHJ103 10KOHM 5% 1/8W MCR03EZPF1300 130OHM 1% 1/10
		R1007	0RJ1300D477 0RJ0752D477	MCR03EZPF13001300HM 1% 1/10 MCR03EZPF750 750HM 1% 1/10W
		R1009	0RH4701D622	MCR10EZHJ472 4.7KOHM 5% 1/8W
		R1010	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
		R1011	0RJ1300D477	MCR03EZPF1300 130OHM 1% 1/10
		R1012	0RJ0752D477	MCR03EZPF750 75OHM 1% 1/10W
		R1013	0RH4701D622	MCR10EZHJ472 4.7KOHM 5% 1/8W
		R1014	0RH4701D622	MCR10EZHJ472 4.7KOHM 5% 1/8W
		R1017	0RH4701D622	MCR10EZHJ472 4.7KOHM 5% 1/8W
		R1018	0RH1001D622	MCR10EZHJ102 1KOHM 5% 1/8W 2
		R102	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10
		R1023	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R1026	0RH3300D622	MCR10EZHJ331 330OHM 5% 1/8W
		R1027	0RH3300D622	MCR10EZHJ331 330OHM 5% 1/8W
		R1028	0RH3300D622	MCR10EZHJ331 330OHM 5% 1/8W
		R1029	0RH3300D622	MCR10EZHJ331 3300HM 5% 1/8W
		R103 R104	0RJ4701D677 0RJ0332D677	MCR03EZPJ472 4.7KOHM 5% 1/10 MCR03EZPJ330 33OHM 5% 1/10W
		R1043	0RH1003D622	MCR10EZHJ104 100KOHM 5% 1/8W
		R1043	0RH1003D622	MCR10EZHJ104 100KCHM 5% 1/8W
		R1048	0RH1801D622	MCR10EZHJ182 1.8KOHM 5% 1/8W
		R105	0RJ0332D677	MCR03EZPJ330 33OHM 5% 1/10W
		R107	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R1070	0RH3302D622	MCR10EZHJ333 33KOHM 5% 1/8W
		R1071	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
		R1072	0RH4701D622	MCR10EZHJ472 4.7KOHM 5% 1/8W
		R1073	0RH4701D622	MCR10EZHJ472 4.7KOHM 5% 1/8W
		R1074	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
		R1075	0RH4701D622	MCR10EZHJ472 4.7KOHM 5% 1/8W
		R1076	0RJ1000D677	MCR03EZPJ101 100OHM 5% 1/10W
		R1077	0RJ0222D677	MCR03EZPJ220 22OHM 5% 1/10W
		R112	0RJ0752D677	MCR03EZPJ750 75OHM 5% 1/10W
		R114	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10
		R115 R116	0RH0222D622 0RH4701D622	MCR10EZHJ220 22OHM 5% 1/8W 2 MCR10EZHJ472 4.7KOHM 5% 1/8W
		R117	0RH1002D622	MCR10EZHJ472 4.7KOHW 5% 1/8W
		R121	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
		R122	0RH1501D622	MCR10EZHJ152 1.5KOHM 5% 1/8W
		R126	0RH1502D622	MCR10EZHJ153 15KOHM 5% 1/8W
		R130	0RH1001D622	MCR10EZHJ102 1KOHM 5% 1/8W 2
		R131	0RH1001D622	MCR10EZHJ102 1KOHM 5% 1/8W 2
		R132	0RJ0752D677	MCR03EZPJ750 75OHM 5% 1/10W
		R133	0RJ0752D677	MCR03EZPJ750 75OHM 5% 1/10W
		R134	0RJ1102D677	MCR03EZPJ113 11KOHM 5% 1/10W

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R135	0RJ1102D677	MCR03EZPJ113 11KOHM 5% 1/10W
		R136	0RH4701D622	MCR10EZHJ472 4.7KOHM 5% 1/8W
		R137	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10
		R138	0RH1000D622	MCR10EZHJ101 100OHM 5% 1/8W
		R139	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
		R140	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R141	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R145	0RH4701D622	MCR10EZHJ472 4.7KOHM 5% 1/8W
		R146	0RH0472D622	MCR10EZHJ470 47OHM 5% 1/8W 2
		R149	0RH4701D622	MCR10EZHJ472 4.7KOHM 5% 1/8W
		R150	0RJ2001D677	MCR03EZPJ202 2KOHM 5% 1/10W
		R151	0RH1001D622	MCR10EZHJ102 1KOHM 5% 1/8W 2
		R152	0RJ1001D677	MCR03EZPJ102 1KOHM 5% 1/10W
		R153	0RJ0000D677	MCR03EZPJ000 0OHM 5% 1/10W 1
		R155	0RJ8201D677	MCR03EZPJ822 8.2KOHM 5% 1/10
		R156	0RJ8201D677	MCR03EZPJ822 8.2KOHM 5% 1/10
		R159	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10
		R161	0RJ0000D677	MCR03EZPJ000 0OHM 5% 1/10W 1
		R162	0RJ0000D677	MCR03EZPJ000 0OHM 5% 1/10W 1
		R163	0RJ0000D677	MCR03EZPJ000 0OHM 5% 1/10W 1
		R164	0RJ0000D677	MCR03EZPJ000 0OHM 5% 1/10W 1
		R165	0RJ0000D677	MCR03EZPJ000 0OHM 5% 1/10W 1
		R166	0RJ0000D677	MCR03EZPJ000 0OHM 5% 1/10W 1
		R167	0RH3300D622	MCR10EZHJ331 330OHM 5% 1/8W
		R168	0RH3300D622	MCR10EZHJ331 330OHM 5% 1/8W
		R169	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R170	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R172	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
		R174	0RH1000D622	MCR10EZHJ101 100OHM 5% 1/8W
		R177	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R178	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R179	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20 MCR10EZHJ750 75OHM 5% 1/8W 2
		R184 R191	0RH0752D622 0RH0752D622	MCR10EZHJ750 750HM 5% 1/8W 2 MCR10EZHJ750 750HM 5% 1/8W 2
		R194	0RH0222D622	MCR10EZHJ220 22OHM 5% 1/8W 2
		R195	0RH0222D622	MCR10EZHJ220 22OHM 5% 1/8W 2
		R196	0RH0222D622	MCR10EZHJ220 22OHM 5% 1/8W 2
		R197	0RH0752D622	MCR10EZHJ750 75OHM 5% 1/8W 2
		R198	0RH0472D622	MCR10EZHJ470 470HM 5% 1/8W 2
		R199	0RH0752D622	MCR10EZHJ750 75OHM 5% 1/8W 2
		R202	0RJ3602D677	MCR03EZPJ363 36KOHM 5% 1/10W
		R203	0RJ1502D677	MCR03EZPJ153 15KOHM 5% 1/10W
		R204	0RJ1002D677	MCR03EZPJ103 10KOHM 5% 1/10W
		R206	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R207	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R208	0RJ1203D677	MCR03EZPJ124 120KOHM 5% 1/10
		R215	0RJ1802D677	MCR03EZPJ183 18KOHM 5% 1/10W
		R217	0RH1502D622	MCR10EZHJ153 15KOHM 5% 1/8W
		R218	0RH4702D622	MCR10EZHJ473 47KOHM 5% 1/8W
		R221	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R222	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R223	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R224	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R225	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R226	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R227	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R234	0RJ0000D677	MCR03EZPJ000 0OHM 5% 1/10W 1
		R248	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
		R250	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10
		R251	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R252	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
		R253	0RJ1001D677	MCR03EZPJ102 1KOHM 5% 1/10W

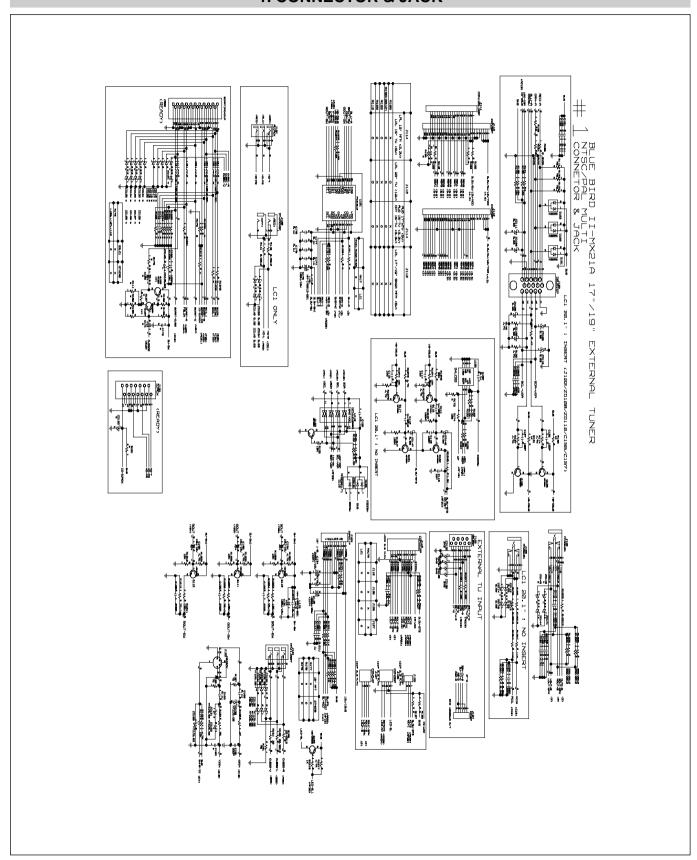
*0	+ 4.1	100 110	DARTAIO	DATE: 2006. 10. 27.
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R254	0RJ1001D677	MCR03EZPJ102 1KOHM 5% 1/10W
		R260	0RH3302D622	MCR10EZHJ333 33KOHM 5% 1/8W
		R3001	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
		R3002	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
		R3003	0RH1000D622	MCR10EZHJ101 100OHM 5% 1/8W
		R3006	0RH0331D622	MCR10EZHJ3R3 3.3OHM 5% 1/8W
		R3007	0RH0331D622	MCR10EZHJ3R3 3.3OHM 5% 1/8W
		R3008	0RH0331D622	MCR10EZHJ3R3 3.3OHM 5% 1/8W
		R3009	0RH0331D622	MCR10EZHJ3R3 3.3OHM 5% 1/8W
		R301	0RJ1000D677	MCR03EZPJ101 100OHM 5% 1/10W
		R3010	0RJ1000D677	MCR03EZPJ101 100OHM 5% 1/10W
		R3015	0RJ1502D677	MCR03EZPJ153 15KOHM 5% 1/10W
		R3016	0RJ1502D677	MCR03EZPJ153 15KOHM 5% 1/10W
		R3017	0RH1502D622	MCR10EZHJ153 15KOHM 5% 1/8W
		R3018	0RH1502D622	MCR10EZHJ153 15KOHM 5% 1/8W
		R302 R3020	0RJ1000D677 0RJ0222D677	MCR03EZPJ101 100OHM 5% 1/10W MCR03EZPJ220 22OHM 5% 1/10W
		R3020	0RJ0222D677	MCR03EZPJ220 22OHM 5% 1/10W MCR03EZPJ220 22OHM 5% 1/10W
		R303	0RJ1000D677	MCR03EZPJ101 100OHM 5% 1/10W
		R3031	0RH4701D622	MCR10EZHJ472 4.7KOHM 5% 1/8W
		R304	0RH1000D622	MCR10EZHJ101 100OHM 5% 1/8W
		R305	0RH1000D622	MCR10EZHJ101 100OHM 5% 1/8W
		R306	0RH1001D622	MCR10EZHJ102 1KOHM 5% 1/8W 2
		R307	0RH1000D622	MCR10EZHJ101 100OHM 5% 1/8W
		R308	0RH1502D622	MCR10EZHJ153 15KOHM 5% 1/8W
		R309	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R310	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R312	0RJ0000D677	MCR03EZPJ000 0OHM 5% 1/10W 1
		R313	0RJ1000D677	MCR03EZPJ101 100OHM 5% 1/10W
		R315	0RH1000D622	MCR10EZHJ101 100OHM 5% 1/8W
		R316 R317	0RJ1001D677 0RJ1000D677	MCR03EZPJ102 1KOHM 5% 1/10W MCR03EZPJ101 100OHM 5% 1/10W
		R318	0RJ1000D677	MCR03EZPJ101 100OHM 5% 1/10W
		R319	0RJ2002D677	MCR03EZPJ203. 20KOHM 5% 1/10
		R320	0RJ0332D677	MCR03EZPJ330 33OHM 5% 1/10W
		R321	0RH0102D622	MCR10EZHJ100 10OHM 5% 1/8W 2
		R322	0RH0102D622	MCR10EZHJ100 10OHM 5% 1/8W 2
		R323	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
		R325	0RH4702D622	MCR10EZHJ473 47KOHM 5% 1/8W
		R326	0RJ1000D677	MCR03EZPJ101 100OHM 5% 1/10W
		R327	0RH0102D622	MCR10EZHJ100 10OHM 5% 1/8W 2
		R328	0RH1000D622	MCR10EZHJ101 100OHM 5% 1/8W
		R329	0RH2203D622	MCR10EZHJ224 220KOHM 5% 1/8W
		R330	0RH1000D622	MCR10EZHJ101 100OHM 5% 1/8W MCR03EZPJ472 4.7KOHM 5% 1/10
		R331 R332	0RJ4701D677 0RJ0222D677	MCR03EZPJ472 4.7KOHM 5% 1/10 MCR03EZPJ220 22OHM 5% 1/10W
		R333	0RH4701D622	MCR10EZHJ472 4.7KOHM 5% 1/10W
		R334	0RH1004D422	MCR10EZHF105 1MOHM 1% 1/8W 2
		R335	0RH3902D422	MCR10EZHF393 39KOHM 1% 1/8W
		R336	0RJ1000D677	MCR03EZPJ101 100OHM 5% 1/10W
		R337	0RH1000D622	MCR10EZHJ101 100OHM 5% 1/8W
		R338	0RH1000D622	MCR10EZHJ101 100OHM 5% 1/8W
		R339	0RH1000D622	MCR10EZHJ101 100OHM 5% 1/8W
		R341	0RH1003D622	MCR10EZHJ104 100KOHM 5% 1/8W
		R342	0RJ1000D677	MCR03EZPJ101 100OHM 5% 1/10W
		R343	0RJ1000D677	MCR03EZPJ101 100OHM 5% 1/10W
		R344	0RJ1000D677	MCR03EZPJ101 100OHM 5% 1/10W
		R347	0RH8202D622	MCR10EZHJ823 82KOHM 5% 1/8W
		R348 R349	0RH1201D622 0RH0102D622	MCR10EZHJ122 1.2KOHM 5% 1/8W MCR10EZHJ100 10OHM 5% 1/8W 2
		R350	0RH1002D622	MCR10EZHJ100 10OHW 5% 1/8W 2 MCR10EZHJ103 10KOHM 5% 1/8W
		R351	0RJ1000D677	MCR03EZPJ101 100OHM 5% 1/10W
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3	*AL LOC. NO.	PART NO.	DATE: 2006. 10. 27. DESCRIPTION / SPECIFICATION
	R352	0RH1000D622	MCR10EZHJ101 100OHM 5% 1/8W
	R355	0RJ1000D677	MCR03EZPJ101 100OHM 5% 1/10W
	R356	0RJ1000D677	MCR03EZPJ101 100OHM 5% 1/10W
	R367	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
1	R369	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
	R370	0RJ1002D677	MCR03EZPJ103 10KOHM 5% 1/10W
	R371	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10
	R372	0RJ1002D677	MCR03EZPJ103 10KOHM 5% 1/10W
	R374	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10
	R375	0RJ0472D677	MCR03EZPJ470 47OHM 5% 1/10W
	R376	0RJ3900D677	MCR03EZPJ391 390OHM 5% 1/10W
	R377	0RJ0472D677	MCR03EZPJ470 47OHM 5% 1/10W
	R378	0RJ1202D677	MCR03EZPJ123 12KOHM 5% 1/10W
	R380	0RJ0332D677	MCR03EZPJ330 33OHM 5% 1/10W
	R382	0RJ1002D677	MCR03EZPJ103 10KOHM 5% 1/10W
	R383	0RJ1502D677	MCR03EZPJ153 15KOHM 5% 1/10W
	R384	0RJ0472D677	MCR03EZPJ470 47OHM 5% 1/10W
	R385	0RJ1002D677	MCR03EZPJ103 10KOHM 5% 1/10W
	R386	0RJ1502D677	MCR03EZPJ153 15KOHM 5% 1/10W
	R387	0RJ0332D677	MCR03EZPJ330 33OHM 5% 1/10W
	R388	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
	R389	0RH4701D622	MCR10EZHJ472 4.7KOHM 5% 1/8W
	R391	0RH0331D622	MCR10EZHJ3R3 3.3OHM 5% 1/8W
	R392	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
	R393	0RH4300D622	MCR10EZHJ431 430OHM 5% 1/8W
	R394	0RH0331D622	MCR10EZHJ3R3 3.3OHM 5% 1/8W
	R395	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
	R396	0RH2201D622	MCR10EZHJ222 2.2KOHM 5% 1/8W
1	R397	0RH2201D622	MCR10EZHJ222 2.2KOHM 5% 1/8W
1	R398	0RH1000D622	MCR10EZHJ101 100OHM 5% 1/8W
	R399	0RJ0332D677	MCR03EZPJ330 33OHM 5% 1/10W
1	R401	0RH4701D622	MCR10EZHJ472 4.7KOHM 5% 1/8W
	R409	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
	R410	0RJ2202D677	MCR03EZPJ223 22KOHM 5% 1/10W
	R411	0RJ5600D677	MCR03EZPJ561 560OHM 5% 1/10W
1	R413	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
	R414	0RH4702D622	MCR10EZHJ473 47KOHM 5% 1/8W
	R417	0RJ0000D677	MCR03EZPJ000 0OHM 5% 1/10W 1
	R418	0RJ0000D677	MCR03EZPJ000 0OHM 5% 1/10W 1
	R425	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
	R426	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
	R434	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
	R533	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10
	R534	0RJ4701D677	MCR03EZPJ472 4.7KOHM 5% 1/10
	R702	0RH4700D622	MCR10EZHJ471 470OHM 5% 1/8W
	R710	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
	R714	0RJ1002D677	MCR03EZPJ103 10KOHM 5% 1/10W
	R715	0RH0000D622	MCR10EZHJ000 0OHM 5% 1/8W 20
	R720	0RJ1201D677	MCR03EZPJ122 1.2KOHM 5% 1/10
	R728	0RH1501D622	MCR10EZHJ152 1.5KOHM 5% 1/8W
	R729	0RJ4702D677	MCR03EZPJ473 47KOHM 5% 1/10W
	R740	0RH4702D622	MCR10EZHJ473 47KOHM 5% 1/8W
	R741	0RH4700D622	MCR10EZHJ471 470OHM 5% 1/8W
	R742	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
	R750	0RH4702D622	MCR10EZHJ473 47KOHM 5% 1/8W
	R751	0RH3902D422	MCR10EZHF393 39KOHM 1% 1/8W
	R753	0RH1002D622	MCR10EZHJ103 10KOHM 5% 1/8W
	R760	0RH1000D622	MCR10EZHJ101 100OHM 5% 1/8W
	R761	0RH1000D622	MCR10EZHJ101 100OHM 5% 1/8W
	R762	0RH4701D622	MCR10EZHJ472 4.7KOHM 5% 1/8W
	R775	0RH1000D622	MCR10EZHJ101 100OHM 5% 1/8W
	R776	0RX0202K665	RSD02F4J20R0 20OHM 5% 2W 12.
- 1	11/10	UNIVOZUZINOUS	TODOZI TOZONO ZOOI IIVI O /0 ZVV 1Z.

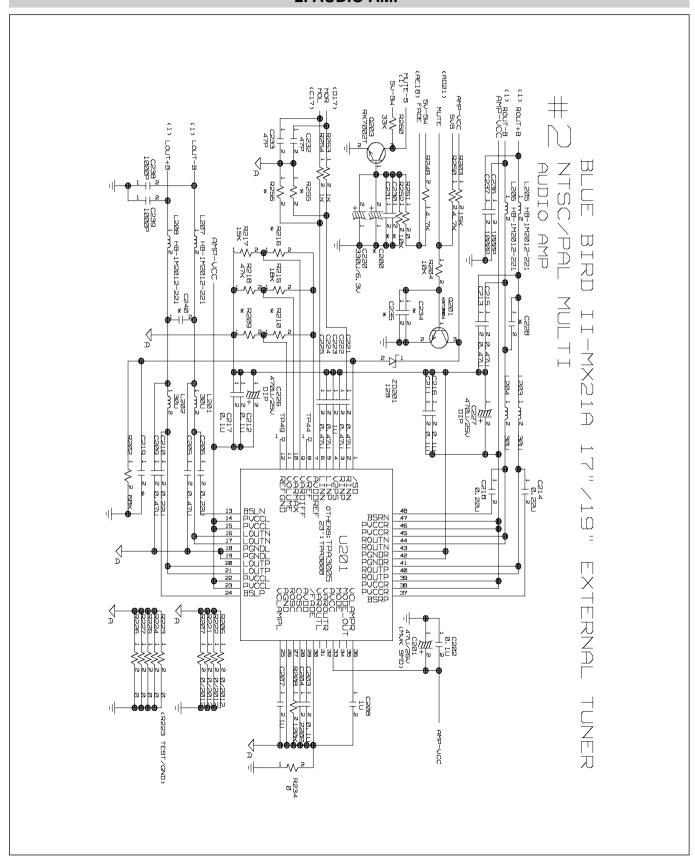
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				DATE: 2006. 10. 27.	-			
*S		LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	-			
	_ C	THERs						
			oTED! 1000044	DIGEOGRAPH OLIVANISH MOOFET				
		Q203	0TFRH80001A	RK7002T116 N-CHANNEL MOSFET				
		U303	6620F00017A	CCSD-32T-SM 32P 1.27MM SMD T				
		U405	0TFVI80067A	SI3865BDV(E3) N-CHANNEL MOSF				
		U406	0TF492509AA	SI4925DY P-CHANNEL -30V +-20				
		X301	6202TST003G	HC-49/SM5H 24.576MHZ 30PPM 2				
		ONTROL	BOARD					
			BOARD					
		00000	0001404014040	OLLUBOSO 54047 D D 7400-5				
		C6000	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -				
		C6001	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -				
		R6000 R6001	0RN8200F409 0RN8200F409	RN-96T1F820R 820OHM 1% 1/6W RN-96T1F820R 820OHM 1% 1/6W				
		R6001	0RN1501F409	RN-96T1F1K50 1.5KOHM 1% 1/6W				
		R6003 R6004	0RN1501F409 0RN2201F409	RN-96T1F1K50 1.5KOHM 1% 1/6W RN-96T1F2K20 2.2KOHM 1% 1/6W				
		R6004	0RN2201F409 0RN2201F409	RN-96T1F2K20 2.2KOHM 1% 1/6W RN-96T1F2K20 2.2KOHM 1% 1/6W				
		SW6000	140-058B	EVQPB205K 1C1P 15VDC 0.02A V				
		SW6000	140-058B 140-058B	EVQPB205K 1C1P 15VDC 0.02A V EVQPB205K 1C1P 15VDC 0.02A V				
		SW6001	140-058B	EVQPB205K 1C1P 15VDC 0.02A V EVQPB205K 1C1P 15VDC 0.02A V				
		SW6002	140-058B	EVQPB205K 1C1P 15VDC 0.02A V EVQPB205K 1C1P 15VDC 0.02A V				
		SW6004	140-058B	EVQPB205K 1C1P 15VDC 0.02A V				
		SW6005	140-058B	EVQPB205K 1C1P 15VDC 0.02A V				
		SW6006	140-058B	EVQPB205K 1C1P 15VDC 0.02A V				
		SW6007	140-058B	EVQPB205K 1C1P 15VDC 0.02A V				
		ZD6000	0DZ560009CF	MTZJ5.6B 5.6V 5.45TO5.73V 40				
		ZD6001	0DZ560009CF	MTZJ5.6B 5.6V 5.45TO5.73V 40				
		20001	0D200000001	W1200.0D 0.0V 0.40100.70V 40				
	L	ED & IR E	BOARD					
		LED500	0DLBE0138AA	BL-BUBGE301 ROUND 3MM SUPER				
		PA5000	6712SCA232A	TSOP34838SO1 2.7TO5.5V 1.5MA				
		C5000	0CH5101K416	C2012C0G1H101JT 100pF 5% 50V				
		C5001	0CH5101K416	C2012C0G1H101JT 100pF 5% 50V				
		C5002	0CH5470K416	0805N470J500LT 47pF 5% 50V C				
		C5003	0CH3104K566	0805B104K500CT 100nF 10% 50V				
		Q5001	0TR387500AA	2SC3875S(ALY) NPN 5V 60V 50V				
		Q5002	0TR387500AA	2SC3875S(ALY) NPN 5V 60V 50V				
		R5001	0RH1501D622	MCR10EZHJ152 1.5KOHM 5% 1/8W				
		R5002	0RH1001D622	MCR10EZHJ102 1KOHM 5% 1/8W 2				
		R5003	0RH1001D622	MCR10EZHJ102 1KOHM 5% 1/8W 2				
		R5004	0RH1001D622	MCR10EZHJ102 1KOHM 5% 1/8W 2				
		R5005	0RH2001D622	MCR10EZHJ202 2KOHM 5% 1/8W 2				
		ZD5000	0DZRM00178A	UDZS5.1B 5.1V 4.98TO5.2V 80O				

SCHEMATIC DIAGRAM

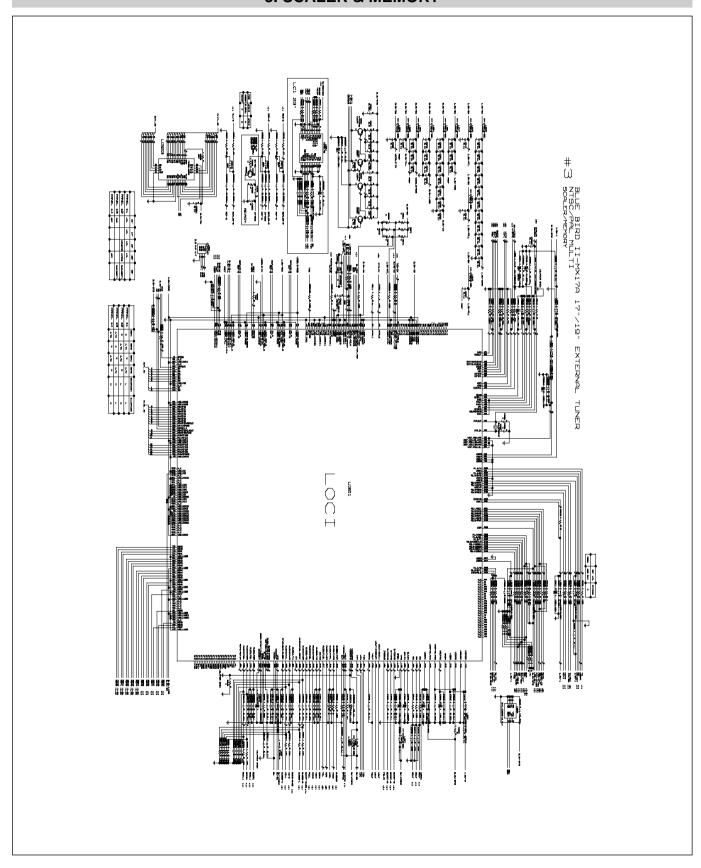
1. CONNECTOR & JACK



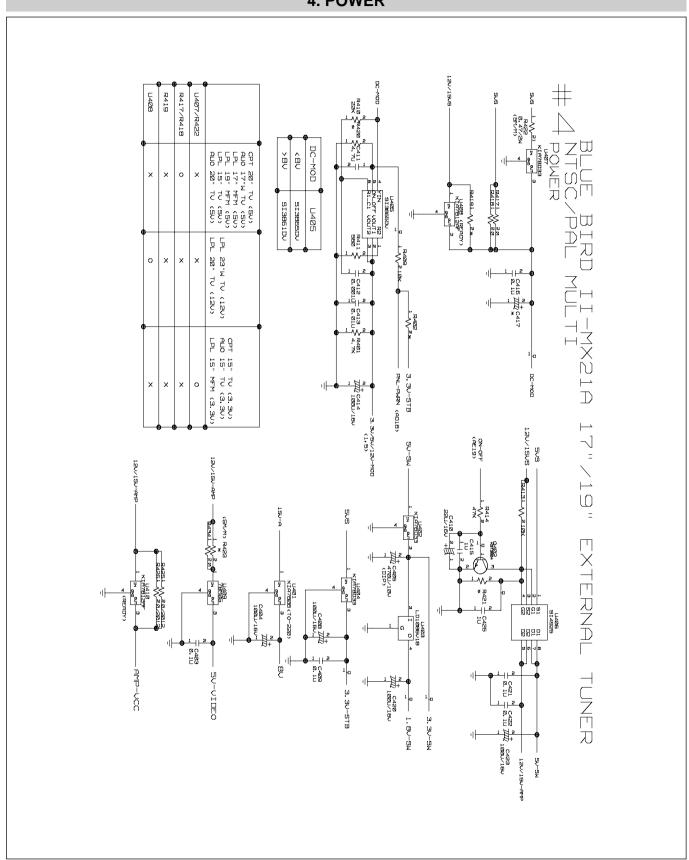
2. AUDIO AMP



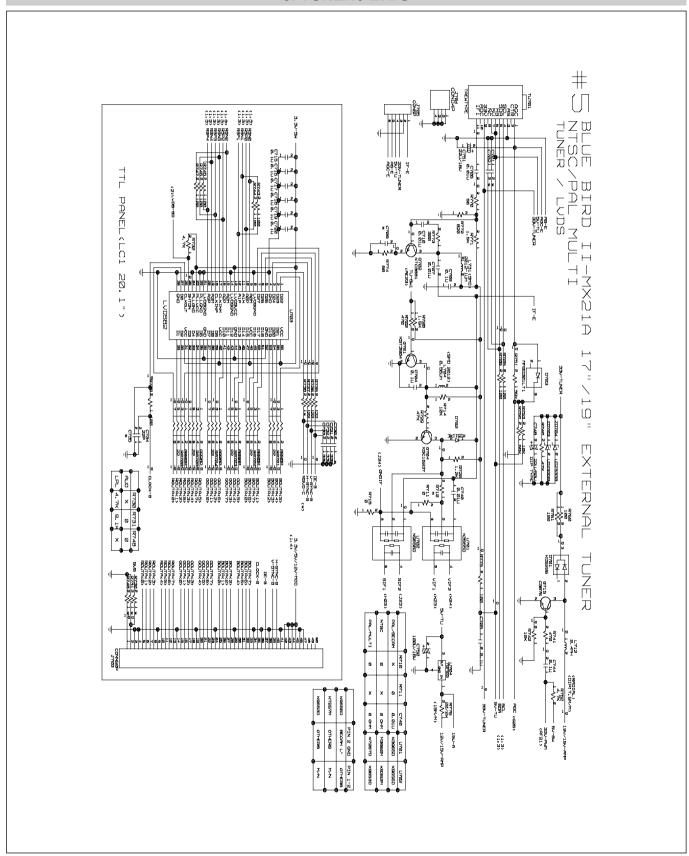
3. SCALER & MEMORY



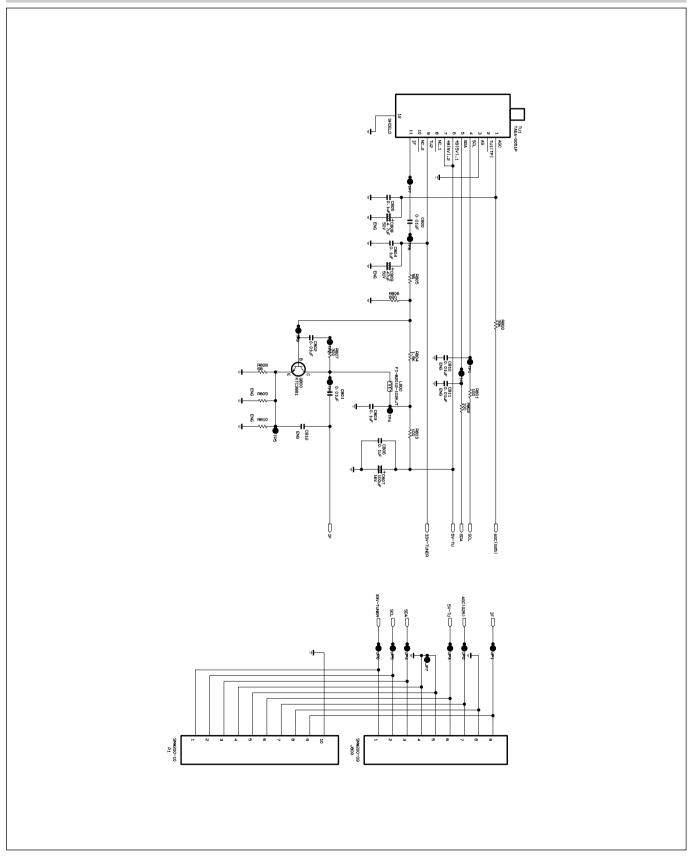
4. POWER



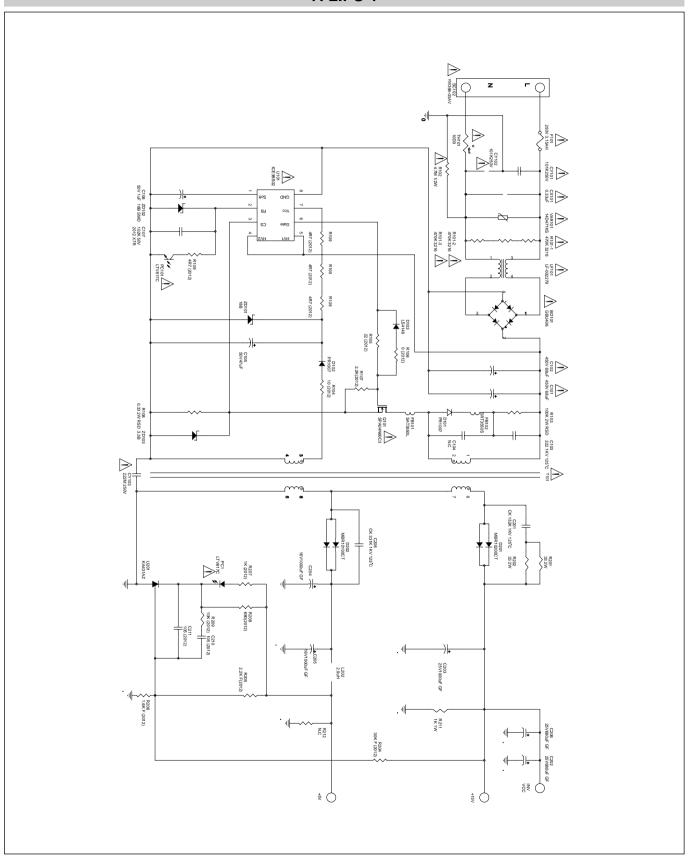
5. TUNER / LVDS



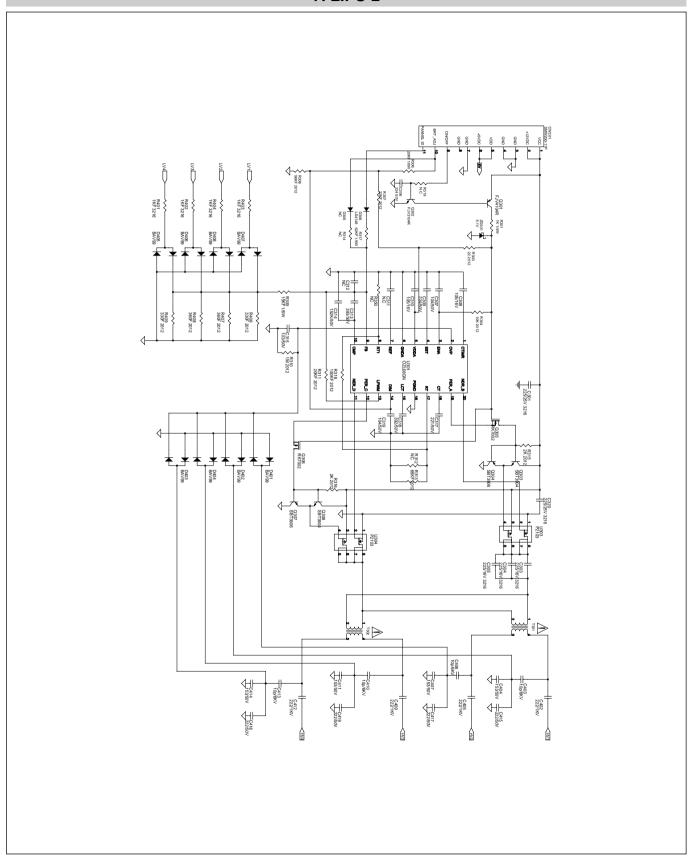
6. TN200 TUNER PACK



7. LIPS-1

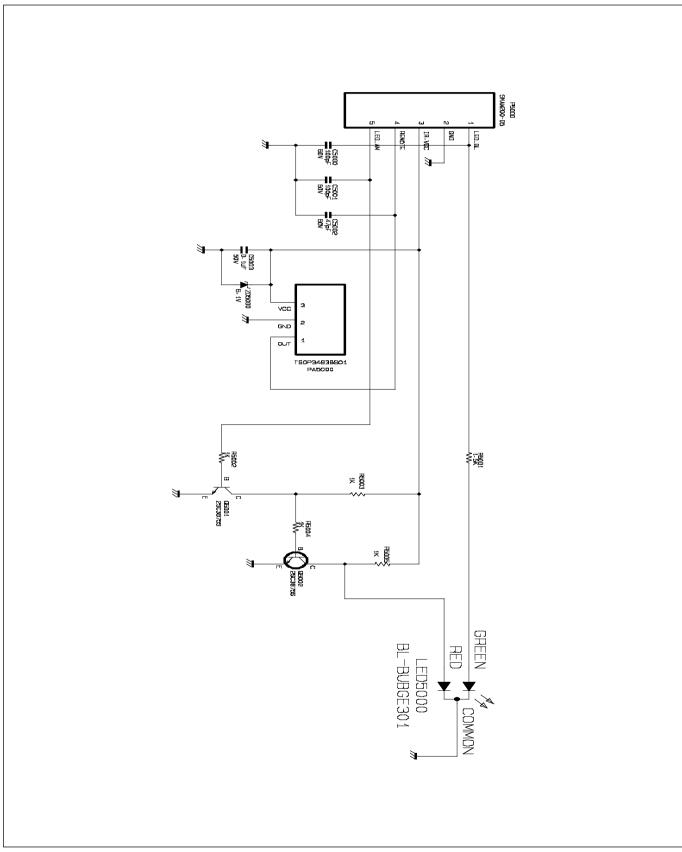


7. LIPS-2



8. CONTROL PCB PEODO SMAWZOO-03 **∖**⊢ ZDEGDO 5. 6V ZD6001 0: 1LF 5gV 50V SWBOO1 (MENU) \$6001 10001 #500g SWEOO3 SWEDDZ | ISET/AUTO! ¥1.₩ ₩ ₩ ₩ 1. Eggs SWGDQ5 5W6D04 ₩ ₩ ₩ ₩ ₩ \Box SWEADE SWEGOO7

9. LED-IR





Oct. 2006 P/NO : MFL30105585 Printed in Korea