

DSC-F828

SERVICE MANUAL

LEVEL 3

Ver 1.0 2003. 12

Revision History

**How to use
Acrobat Reader**



*US Model
Canadian Model
AEP Model
UK Model
E Model
Hong Kong Model
Australian Model
Korea Model
Tourist Model
Chinese Model
Japanese Model*

Link

SCHEMATIC DIAGRAMS

PRINTED WIRING BOARDS

REPAIR PARTS LIST

- For ADJUSTMENTS (SECTION 6), refer to SERVICE MANUAL, ADJ (987627951.pdf).
- For INSTRUCTION MANUAL, refer to SERVICE MANUAL, LEVEL 1 (987627941.pdf).
- **Reference No. search on printed wiring boards is available.**

The information that is not described in this Service Manual is described in the LEVEL 2 Service Manual.

When repairing, use this manual together with LEVEL 2 Service Manual.

Contents of LEVEL 2 Service Manual

1. SERVICE NOTE	
2. DISASSEMBLY	
3. BLOCK DIAGRAMS	OVERALL POWER
4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS	DD-204, LR-018, ST-088, LS-067, MT-067, SI-037, UA-003, LB-091, CF-097, SW-410, AJ-007 BOARD
	AS-050 BOARD, FP-756 FLEXIBLE, CONTROL SWITCH BLOCK (TOP)/(MID)/(UNDER) (SCHEMATIC DIAGRAM ONLY)
	FP-748 BOARD (PRINTED WIRING BOARD ONLY)
5. REPAIR PARTS LIST	EXPLODED VIEWS
	ELECTRICAL PARTS LIST

DIGITAL STILL CAMERA

SONY®

**CAUTION**

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

CAUTION :

Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK OR DOTTED LINE WITH MARK ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer.

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, through functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.
6. Flexible Circuit Board Repairing
 - Keep the temperature of the soldering iron around 270°C during repairing.
 - Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
 - Be careful not to apply force on the conductor when soldering or unsoldering.

Unleaded solder

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

**: LEAD FREE MARK**

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40°C higher than ordinary solder.
Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
Soldering irons using a temperature regulator should be set to about 350°C.
Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

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	• SY-096 (CAMERA DSP, CAMERA SYSTEM CONTROL, CF DRIVE I/F, USB I/F, MODE CONTROL, AUDIO AMP, LCD DRIVER, EVF, LCD DRIVER, CONNECTOR, POWER SUPPLY)	
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4-2. SCHEMATIC DIAGRAMS

Link

• SY-096 BOARD (1/10) (CAMERA DSP)	• SY-096 BOARD (7/10) (LCD DRIVER)
• SY-096 BOARD (2/10) (CAMERA SYSTEM CONTROL)	• SY-096 BOARD (8/10) (EVF, LCD DRIVER)
• SY-096 BOARD (3/10) (CF DRIVE I/F)	• SY-096 BOARD (9/10) (CONNECTOR)
• SY-096 BOARD (4/10) (USB I/F)	• FP-749 FLEXIBLE BOARD
• SY-096 BOARD (5/10) (MODE CONTROL)	• SY-096 BOARD (10/10) (POWER SUPPLY)
• SY-096 BOARD (6/10) (AUDIO AMP)	

• COMMON NOTE FOR SCHEMATIC DIAGRAMS

4-2. SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR SCHEMATIC DIAGRAMS

(In addition to this, the necessary note is printed in each block)

(For schematic diagrams)

- All capacitors are in μF unless otherwise noted. pF : μF . 50 V or less are not indicated except for electrolytics and tantalums.
- Chip resistors are 1/10 W unless otherwise noted. $\text{k}\Omega=1000 \Omega$, $\text{M}\Omega=1000 \text{k}\Omega$.
- Caution when replacing chip parts.
New parts must be attached after removal of chip.
Be careful not to heat the minus side of tantalum capacitor, Because it is damaged by the heat.
- Some chip part will be indicated as follows.

Example	C541	L452
	22U	10UH
	TA A	2520
Kinds of capacitor		
Temperature characteristics		
External dimensions (mm)		

- Constants of resistors, capacitors, ICs and etc with XX indicate that they are not used.
In such cases, the unused circuits may be indicated.
- Parts with * differ according to the model/destination.
Refer to the mount table for each function.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Signal name
XEDIT $\rightarrow$ EDIT PB/XREC $\rightarrow$ PB/REC
- : non flammable resistor
- : fusible resistor
- : panel designation
- : B+ Line
- : B- Line
- : IN/OUT direction of (+,-) B LINE.
- : adjustment for repair.
- : VIDEO SIGNAL (ANALOG)
- : AUDIO SIGNAL (ANALOG)
- : VIDEO/AUDIO SIGNAL (ANALOG)
- : VIDEO/AUDIO/SERVO SIGNAL (ANALOG)
- : SERVO SIGNAL
- Circled numbers refer to waveforms.

(Measuring conditions voltage and waveform)

- Voltages and waveforms are measured between the measurement points and ground when camera shoots color bar chart of pattern box. They are reference values and reference waveforms.
(VOM of DC 10 $\text{M}\Omega$ input impedance is used)
- Voltage values change depending upon input impedance of VOM used.)

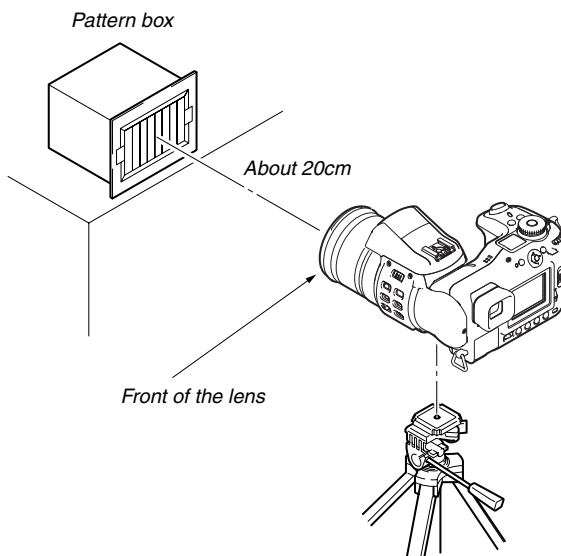
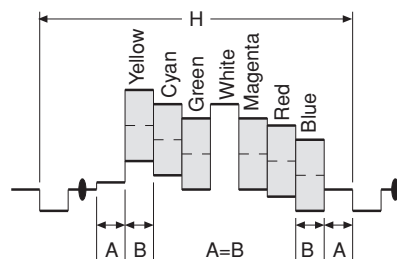
1. Connection**2. Adjust the distance so that the output waveform of Fig. a and the Fig. b can be obtain.**

Fig. a (Video output terminal output waveform)

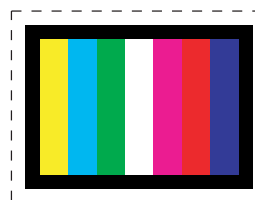


Fig.b (Picture on monitor TV)

When indicating parts by reference number, please include the board name.

Note :

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

Note :

Les composants identifiés par une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
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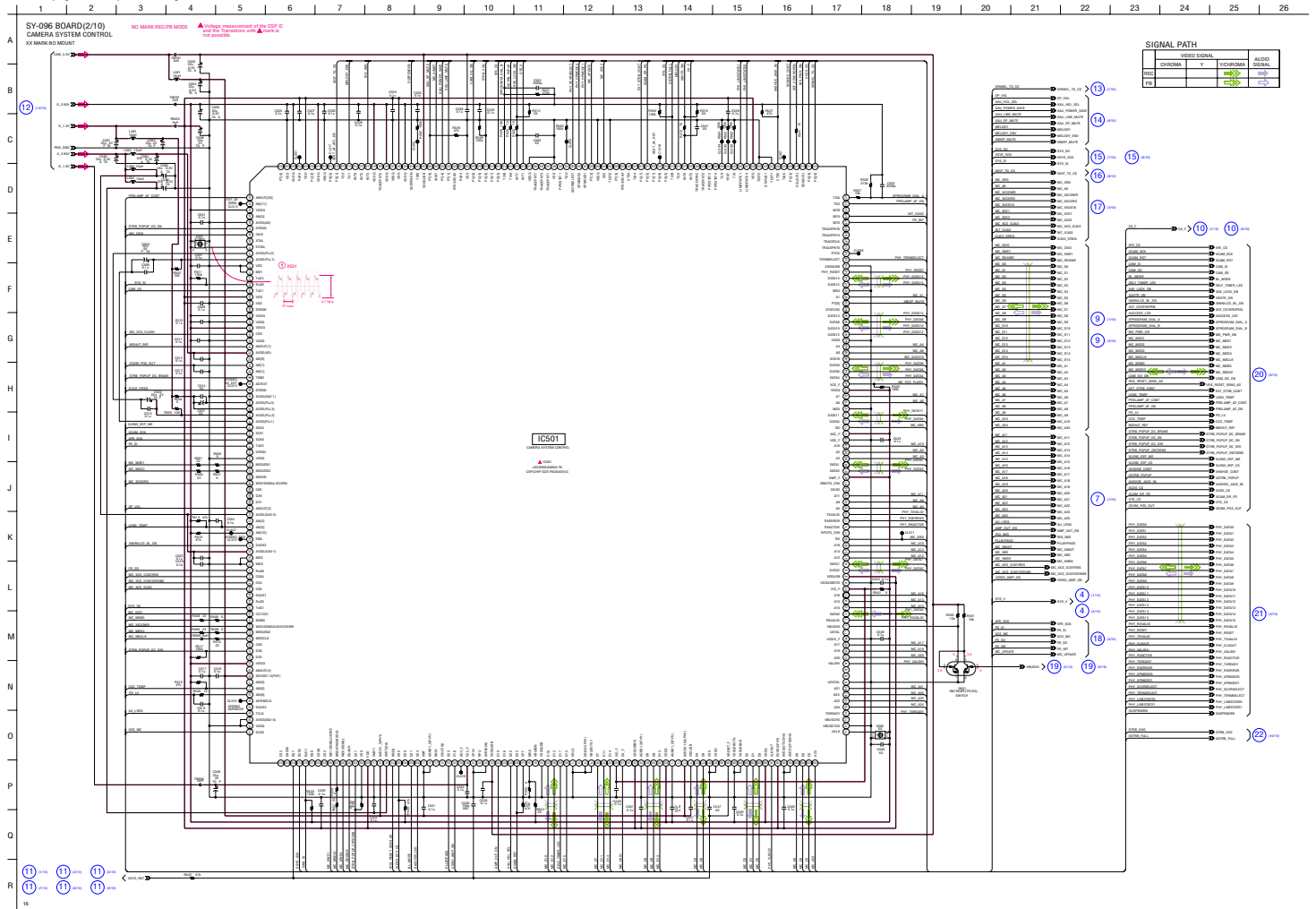
4-2. SCHEMATIC DIAGRAMS

SY-096 BOARD SIDE A

SY-096 BOARD SIDE B

For Schematic Diagram

• Refer to page 4-59 for printed wiring board.



TO
FP-756 FLEXIBLE
(PAGE 4-17
of LEVEL 2)

SY-096 BOARD(4/10)
 USB I/F
 XX MARK:NO MOUNT
 NO MARK:REC/PB MODE

SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
REC			→	→
PB			→	→

COMPONENT LIST

REF	VALUE	UNIT	MARK
R251	0uH		
R252	0uH		
L251	10uH		
L252	10uH		
C253	10u	6.3V	
C254	10u	6.3V	
C251	1u	6.3V	
C252	10u	6.3V	
R257			
C260	0.1u		
C255	7p		
R258	0.1u		
X251	12MHz		
C257	0.1u		
R256	0.5		
R255	0		
R254	12k ±0.5%		
R253	100 ±0.5%		
C250	0.1u		
C261	0.1u		
C262	0.1u		
C263	0.1u		
C264	0.1u		
C265	0.1u		
C266	0.1u		
C267	0.1u		
C268	0.1u		
C269	0.1u		
C270	0.1u		
C271	0.1u		
C272	0.1u		
C273	0.1u		
C274	0.1u		
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C276	0.1u		
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C340	0.1u		
C341	0.1u		
C342	0.1u		
C343	0.1u		
C344	0.1u		

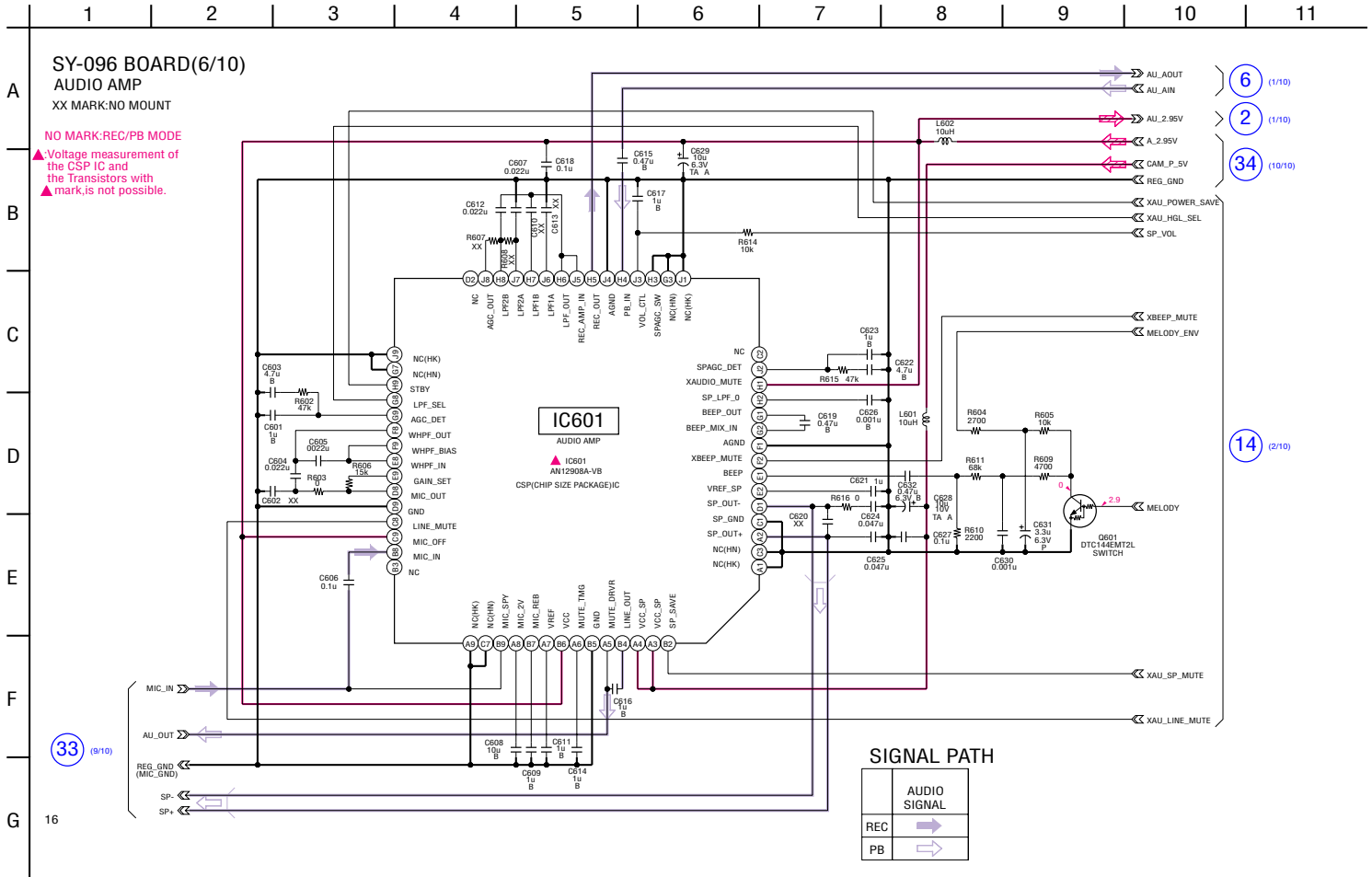
4-34

4-2. SCHEMATIC DIAGRAMS

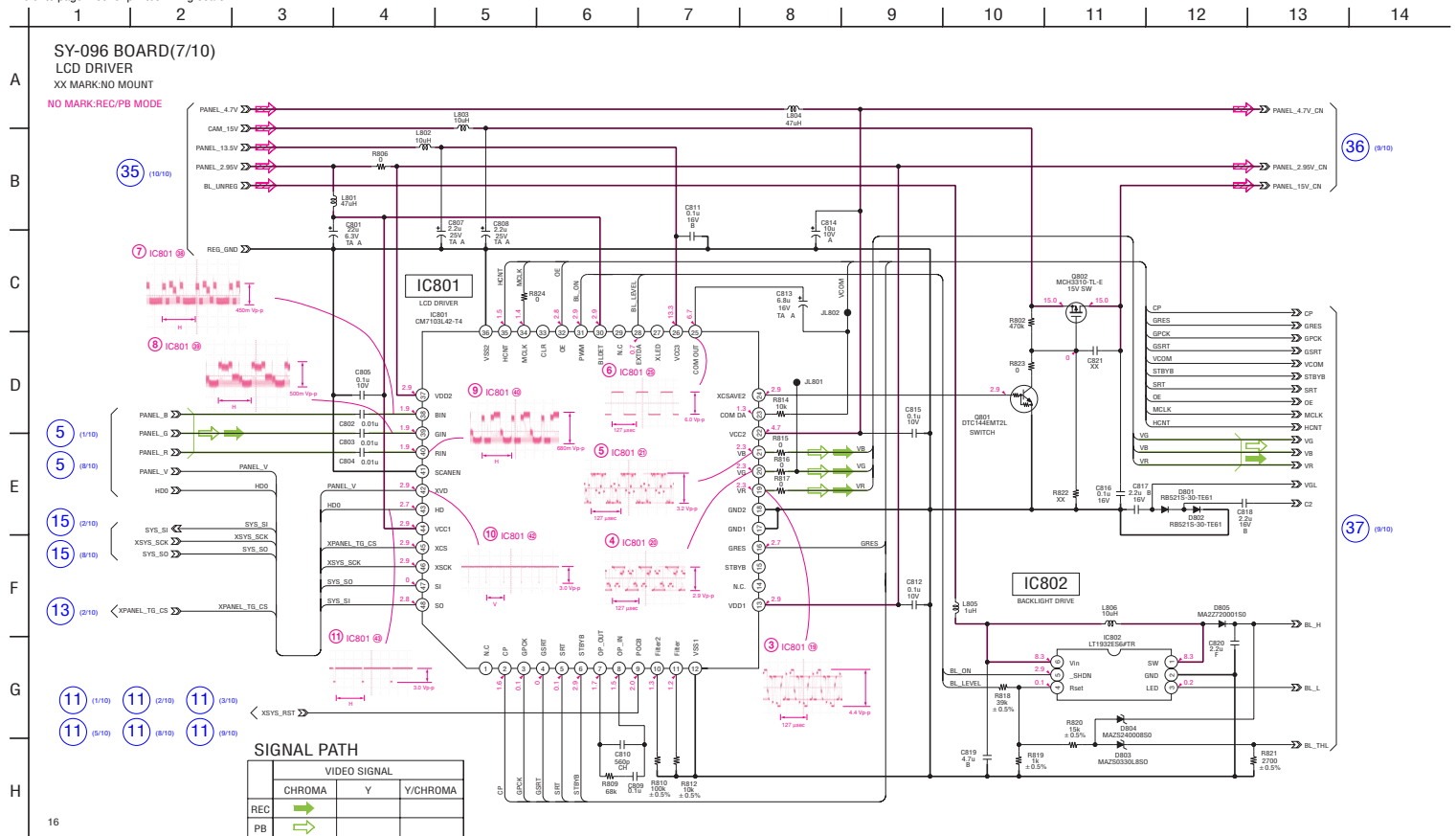
SY-096 BOARD SIDE A

SY-096 BOARD SIDE B

For Schematic Diagram
• Refer to page 4-59 for printed wiring board.



For Schematic Diagram
• Refer to page 4-59 for printed wiring board.



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
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4-3. PRINTED WIRING BOARDS

Link

[• SY-096 BOARD \(SIDE A\)](#)[• SY-096 BOARD \(SIDE B\)](#)[• COMMON NOTE FOR SCHEMATIC DIAGRAMS](#)[• MOUNTED PARTS LOCATION](#)

Board Name	Function
SY-096	CAMERA DSP, CAMERA SYSTEM CONTROL, CF DRIVE I/F, USB I/F, MODE CONTROL, AUDIO AMP, LCD DRIVER, EVF, LCD DRIVER, CONNECTOR, POWER SUPPLY

4-3. PRINTED WIRING BOARDS

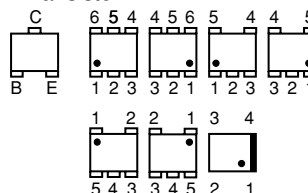
THIS NOTE IS COMMON FOR WIRING BOARDS
(In addition to this, the necessary note is printed in each block)

(For printed wiring boards)

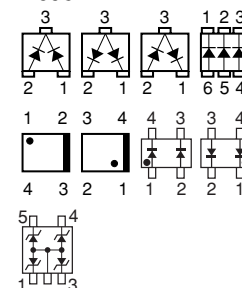
-  : Uses unleaded solder.
-  : Pattern from the side which enables seeing.
 (The other layers' patterns are not indicated)
- Through hole is omitted.
- Circled numbers refer to waveforms.
- There are a few cases that the part printed on diagram isn't mounted in this model.
-  : panel designation

• Chip parts.

Transistor



Diode



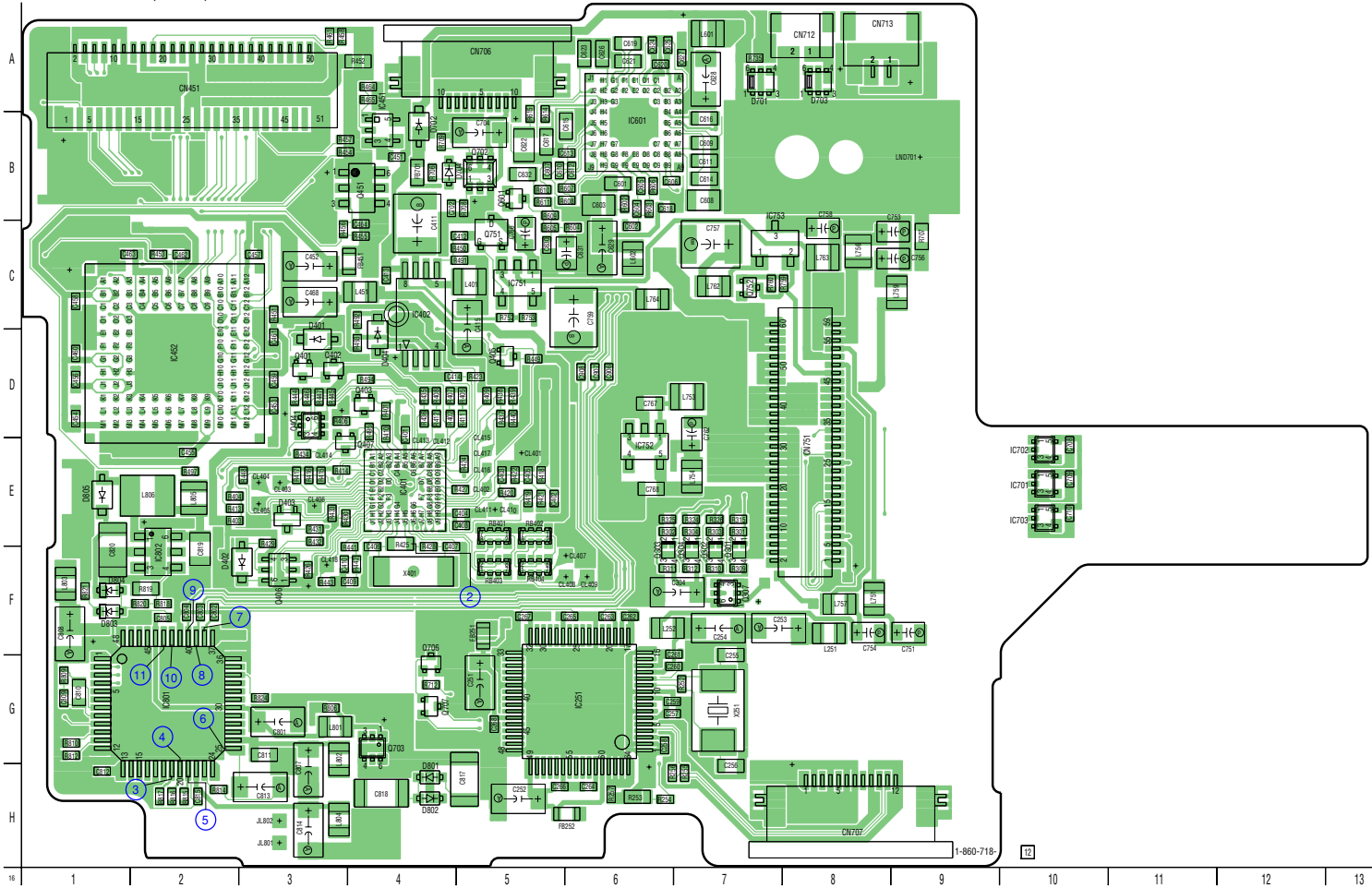
BOARD INFORMATION

board name	parts location (shown on page)	pattern		CSP IC
		number of layers	layers not shown	
DD-204	4-63	6	2 to 5	—
LR-018	—	1	—	—
ST-088	4-63	6	2 to 5	—
MT-067	—	1	—	—
LS-067	—	1	—	—
SI-037	—	1	—	—
LB-091	—	1	—	—
UA-003	4-63	1	—	—
CF-097	4-63	2	—	—
AJ-007	4-63	2	—	—
SW-410	4-63	2	—	—
FP-748	—	1	—	—
SY-096	4-65	8	2 to 7	IC301, 302, 401, 452, 501, 601

• Refer to page 4-47 for common note for printed wiring board.

•  : Uses unleaded solder.

SY-096 BOARD(SIDE A)



- : Uses unleaded solder.

[illegible]

DSC-F828

4-3. PRINTED WIRING BOARDS

4-4. MOUNTED PARTS LOCATION

no mark : side A
* mark : side B

SY-096 BOARD

* C201	B-3	C410	F-3	C604	B-6	* CN201	A-4	* L583	B-2	* R327	D-8	* R506	C-5	R809	G-1
C251	G-5	C411	C-4	C605	B-6	CN451	A-2	* L584	B-2	* R331	F-8	* R507	C-5	R810	G-1
C252	H-5	C412	C-5	C606	B-6	* CN701	C-8	L601	A-7	* R332	E-8	* R508	D-5	R812	G-1
C253	F-7	C413	C-4	C607	B-5	* CN702	E-9	L602	C-6	* R334	E-8	* R509	C-5	R814	H-2
C254	F-7	C414	D-4	C608	B-7	* CN703	F-3	L751	F-8	* R342	C-7	* R510	C-4	R815	H-2
C255	F-7	C415	C-5	C609	B-7	CN706	A-5	L753	D-7	* R344	C-6	* R511	C-5	R816	H-2
C256	G-7	C451	B-4	C610	B-5	CN707	H-8	L754	E-7	* R345	C-6	* R512	D-2	R817	H-2
C257	G-6	C452	C-3	C611	B-7	* CN709	A-2	L756	C-8	* R346	C-6	* R513	D-2	R818	F-2
C258	G-6	C453	D-3	C612	B-6	* CN711	A-9	L757	F-8	* R356	E-6	R514	F-5	R819	F-2
C259	G-6	C454	D-1	C613	B-5	CN712	A-8	L759	C-9	* R357	C-7	* R515	E-5	R820	F-2
C260	G-6	C455	E-2	C614	B-7	CN713	A-8	* L760	E-8	* R358	G-9	* R516	D-2	R821	F-1
C261	F-6	C456	D-1	C615	B-5	CN751	E-8	* L761	E-9	R401	D-4	* R517	C-4	* R823	G-2
C262	F-6	C457	C-3	C616	B-7	* CN901	A-7	L762	C-7	R402	D-4	* R518	C-2	R824	G-3
C263	F-6	C458	C-1	C617	B-5			L763	C-8	R403	E-2	* R519	F-5	* R903	C-7
C264	H-6	C459	D-3	C618	B-6	D401	D-3	L764	C-6	R404	E-2	* R520	F-5	* R908	C-5
C265	F-6	C460	D-1	C619	A-6	D402	F-2	L801	G-3	R405	D-5	* R521	D-2	* R909	C-5
C266	H-5	C461	D-3	C620	A-6	D403	E-3	L802	G-3	R406	D-3	* R522	D-5	* R911	B-5
C267	F-5	C462	C-2	C621	A-6	D404	D-4	L803	F-1	R407	D-4	* R523	C-5	* R912	B-5
C268	G-5	C463	C-1	C622	B-5	D701	A-7	L804	H-3	R408	D-4	* R524	C-5	* R913	B-5
* C301	E-8	C464	C-4	C623	A-6	D702	B-4	L805	E-2	R409	D-5	* R525	C-4	* R915	B-7
* C302	F-7	C468	C-3	C624	A-6	D703	A-8	L806	E-2	R410	D-4	* R526	D-2	* R916	A-6
* C303	C-5	* C501	E-5	C625	A-6	D704	B-4	* L901	C-7	R411	D-5	* R527	D-2	* R917	A-6
C304	F-6	* C502	D-2	C626	A-6	D801	H-4	* L902	A-8	R412	D-4	* R528	D-2	* R918	A-6
* C305	E-8	* C503	C-1	C627	A-7	D802	H-4	R413	E-2	* R529	D-2	* R529	D-2	* R922	B-7
* C308	E-8	* C504	B-1	C628	A-7	D803	F-1	R414	E-3	* R530	F-2	* R530	F-2	* R923	B-7
* C309	D-8	* C505	B-1	C629	C-6	D804	F-1	R415	E-3	* R531	F-2	* R531	F-2	* R924	B-7
* C310	E-8	* C506	C-2	C630	C-5	D805	E-1	R416	E-3	* R532	E-2	* R532	E-2	* R925	B-7
* C312	D-8	* C507	E-5	C631	C-5			R417	F-3	* R533	C-3				
* C313	D-8	* C508	D-4	C632	B-5	E-10	E-8	R418	E-5	* R537	C-2			RB401	E-5
* C314	D-8	* C509	D-4	C702	B-4	* E-11	E-9	R419	E-5	* R539	C-4			RB402	E-5
* C315	D-8	* C510	D-5	C704	B-5			R420	E-5	* R540	C-5			RB403	F-5
* C316	D-8	* C511	C-5	* C705	B-9	* FB201	B-3	R421	E-5	* R541	E-2			RB404	F-5
* C317	E-8	* C512	F-4	* C706	G-9	FB251	F-5	R422	E-5	* R543	C-3				
* C318	E-8	* C513	F-5	* C707	B-1	FB252	H-5	R423	D-5	* R552	F-2			X251	G-7
* C319	E-8	* C514	F-5	C708	E-8	* FB301	F-8	R424	E-5	* R553	D-2			X401	F-4
* C319	E-8	* C515	E-5	C709	E-8	* FB302	C-5	R425	E-4	* R554	F-4			* X501	E-5
* C320	D-8	* C516	E-5	C710	E-8	* FB303	F-8	* R426	F-3	* R555	F-4			* X502	F-3
* C321	D-8	* C517	C-4	C751	F-9	* FB304	C-7	R427	E-5	* R557	C-5				
* C323	C-7	* C518	F-4	FB451	C-3	* FB451	C-3	* C501	F-2	* R558	D-5				
* C324	C-8	* C519	F-5	C754	F-8	* FB501	C-1	R429	E-3	* R559	C-5				
* C326	C-7	* C520	D-5	C756	C-9	* FB502	B-1	* C701	G-3	R430	E-3	* R560	C-5		
C327	E-7	* C521	D-5	C757	C-7	* FB503	C-2	R431	E-3	R431	E-3	* R561	C-5		
* C328	C-7	* C522	D-5	C758	C-8	* FB504	C-5	R432	E-3	* R562	E-2				
* C329	E-7	* C523	F-4	C759	C-6	* FB505	C-4	* C704	B-2	R433	E-3	* R563	F-2		
* C330	E-7	* C524	F-5	* C761	E-8	FB701	B-4	* C705	G-5	R434	E-3	* R564	F-2		
* C331	C-7	* C525	D-2	C762	D-7	* FB901	C-7	R435	D-4	* R565	F-2				
* C334	E-7	* C526	D-5	* C763	E-9			R436	D-4	R602	B-6				
* C335	C-6	* C527	D-2	C766	C-5	* FL301	C-7	R437	D-5	R603	B-6				
* C336	C-6	* C528	D-2	C767	D-6			R438	D-5	R604	C-6				
* C337	C-6	* C529	C-4	C768	E-6	* IC201	B-3	R439	D-5	R605	C-5				
* C340	C-6	* C530	E-2	C801	G-3	IC251	G-6	* C802	G-2	R440	D-5	R606	B-6		
* C341	C-6	* C531	F-4	C802	F-2	* IC301	D-6	* C801	B-7	R441	E-4	R607	B-5		
* C342	C-6	* C532	E-2	C803	F-2	* IC302	F-6	* C802	B-7	R442	F-4	R608	B-5		
* C343	E-6	* C533	F-4	C804	F-2	* IC303	F-8	* C803	B-7	R443	F-3	R609	B-5		
* C345	C-6	* C534	E-2	C805	F-2	* IC304	G-9			R444	D-3	R610	B-5		
* C346	E-6	* C535	E-2	C807	H-3	IC401	E-4	* R202	C-3	R445	D-3	R611	B-5		
* C347	E-5	* C536	F-4	C808	F-1	IC402	C-4	* R203	B-3	R446	D-3	R614	A-5		
* C348	C-6	* C537	C-3	C809	G-1	IC451	B-4	R204	B-3	R447	D-3	R615	A-5		
* C349	E-5	* C538	C-2	C810	G-1	IC452	D-2	R252	G-7	R448	E-3	* R701	G-4		
* C350	E-6	* C539	C-3	C811	G-3	* IC501	D-3	R253	H-6	R449	D-5	* R702	G-3		
* C351	D-6	* C540	F-3	C812	H-1	IC501	B-6	R254	H-6	R450	C-5	* R703	G-5		
* C352	D-6	* C541	D-2	C813	H-3	IC701	E-8	R255	H-7	R451	C-3	* R704	G-4		
* C353	D-6	* C542	C-3	C814	H-3	IC702	E-8	R256	H-6	R452	A-4	* R705	G-4		
* C354	D-6	* C543	F-3	C815	H-2	IC703	E-8	R257	H-6	R453	C-2	R706	B-4		
* C355	F-5	* C544	C-4	* C816	F-2	IC751	C-5	R301	E-7	R454	B-3	R707	C-9		
* C356	F-7	* C545	C-3	C817	H-5	IC752	E-6	R302	E-6	R455	C-4	R708	B-5		
* C357	F-7	* C546	C-3	C818	H-4	IC753	C-7	R303	E-7	R456	C-3	R709	B-4		
* C358	G-6	* C547	F-3	C819	F-2	IC801	G-2	R304	E-7	R457	B-3	* R710	G-9		
* C359	G-7	* C548	E-2	C820	F-1	IC802	F-2	* R305	E-8	R458	A-3	* R711	G-9		
* C360	F-8	* C549	C-5	* C821	G-2	* IC902	B-6	* R306	E-7	R461	A-3	R712	G-4		
* C361	F-8	* C550	F-3	* C903	B-8			* R308	G-9	R464	A-4	* R713	A-1		
* C362	G-9	* C551	F-3	* C904	C-6	L251	F-8	R309	F-7	R465	A-4	* R714	F-3		
* C363	G-9	* C552	D-2	* C905	C-7	L252	F-6	R310	F-7	R491	C-5	* R715	A-2		
* C364	E-8	* C553	D-2	C906	D-6	* L301	E-8	R311	F-6	R492	C-4	* R716	G-3		
* C365	E-8	* C557	F-4	C907	D-6	* L302	D-8	R312	F-7	R493	D-4	* R720	B-8		
C401	D-4	* C581	D-5	C908	D-6	* L303	C-8	* R313	F-9	R494	D-4	R725	A-7		
C402	E-5	* C582	B-2	* C909	B-7	* L304	C-7	R315	E-7	R495	D-4	* R736	B-2		
C403	E-5	* C583	D-5	* C911	B-7	* L305	C-8	* R316	E-8	* R496	G-4	* R737	A-3		
C404	E-5	* C584	B-2	* C912	B-5	* L306	F-8	* R317	E-8	R497	E-2	R752	C-5		
C405	E-5	* C585	B-2	* C913	B-5	L401	C-5	* R318	D-7	* R501	E-5	R753	C-5		
C406	E-4	* C586	B-2	* C914	B-5	L451	C-4	* R319	E-8	* R502	D-2	R759	C-7		
C407	E-4	C601	B-6	* C915	A-8	* L501	B-1	R324	E-7	* R503	D-5	R760	C-7		
C408	E-5	C602	B-6	C916	C-7	* L581	D-5	* R325	E-6	* R504	D-5	* R802	E-2		
C409	F-3	C603	B-6	* C917	B-7	* L582	B-2	R326	E-7	* R505	D-5	R806	G-3		

SY-096

SECTION 5

REPAIR PARTS LIST

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- CAPACITORS:
uF: μ F
- COILS
uH: μ H
- RESISTORS
All resistors are in ohms.
METAL: metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA..., μ PA...,
uPB..., μ PB..., uPC..., μ PC...,
uPD..., μ PD...
- Abbreviation
CND : Canadian model
AUS : Australian model
HK : Hong Kong model
KR : Korea model
JE : Tourist model
J : Japanese model

When indicating parts by reference number, please include the board name.

The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque $\triangle$ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

5-2. ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description					Ref. No.	Part No.	Description				
	A-7079-008-A	SY-096 BOARD, COMPLETE (SERVICE)					C346	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
		*****					C347	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
		(Including IC301 (KI (5M SA) BOARD))					C348	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
		< CAPACITOR >					C349	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
							C350	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C201	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C351	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C251	1-135-259-11	TANTAL. CHIP	10uF	20.00%	6.3V		C352	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C252	1-135-259-11	TANTAL. CHIP	10uF	20.00%	6.3V		C353	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C253	1-135-259-11	TANTAL. CHIP	10uF	20.00%	6.3V		C354	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C254	1-135-259-11	TANTAL. CHIP	10uF	20.00%	6.3V		C355	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C255	1-162-912-11	CERAMIC CHIP	7PF	0.5PF	50V		C356	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C256	1-162-912-11	CERAMIC CHIP	7PF	0.5PF	50V		C357	1-119-750-11	TANTAL. CHIP	22uF	20.00%	6.3V	
C257	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C358	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C258	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C359	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C259	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C360	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V	
C260	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C361	1-128-964-91	TANTAL. CHIP	100uF	20%	6.3V	
C261	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C362	1-100-786-91	TANTAL. CHIP	22uF	20%	6.3V	
C262	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C364	1-164-943-11	CERAMIC CHIP	0.01uF	10.00%	16V	
C263	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C365	1-107-819-11	CERAMIC CHIP	0.022uF	10.00%	16V	
C264	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C401	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C265	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C402	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C266	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C403	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C267	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C404	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C268	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C405	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C301	1-135-259-11	TANTAL. CHIP	10uF	20.00%	6.3V		C406	1-164-850-11	CERAMIC CHIP	10PF	0.50PF	50V	
C302	1-135-259-11	TANTAL. CHIP	10uF	20.00%	6.3V		C407	1-164-852-11	CERAMIC CHIP	12PF	5.00%	50V	
C303	1-104-847-11	TANTAL. CHIP	22uF	20.00%	2.5V		C408	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C304	1-135-259-11	TANTAL. CHIP	10uF	20.00%	6.3V		C409	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C305	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C410	1-164-943-11	CERAMIC CHIP	0.01uF	10.00%	16V	
C308	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C411	1-119-751-11	TANTAL. CHIP	22uF	20.00%	16V	
C309	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C412	1-164-941-11	CERAMIC CHIP	0.0047uF	10.00%	16V	
C310	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C413	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C311	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C414	1-164-939-11	CERAMIC CHIP	0.0022uF	10.00%	50V	
C312	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C415	1-119-750-11	TANTAL. CHIP	22uF	20.00%	6.3V	
C313	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C451	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C314	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C452	1-135-259-11	TANTAL. CHIP	10uF	20.00%	6.3V	
C315	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V		C453	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C316	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C454	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C317	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C455	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C318	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C456	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C319	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C457	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C320	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V		C458	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C321	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C459	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C323	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V		C460	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C324	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V		C461	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C326	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C462	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C327	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C463	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C328	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C464	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C329	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C468	1-135-259-11	TANTAL. CHIP	10uF	20.00%	6.3V	
C330	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C501	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C331	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C503	1-119-750-11	TANTAL. CHIP	22uF	20.00%	6.3V	
C334	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C504	1-119-750-11	TANTAL. CHIP	22uF	20.00%	6.3V	
C335	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C505	1-119-750-11	TANTAL. CHIP	22uF	20.00%	6.3V	
C336	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C506	1-127-895-91	TANTAL. CHIP	22uF	20%	4V	
C337	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C507	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C340	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C508	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C341	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C509	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C342	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C510	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C343	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C511	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	
C345	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V		C512	1-125-777-11	CERAMIC CHIP	0.1uF	10.00%	10V	

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Ref. No.	Part No.	Description			
C915	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C916	1-115-566-11	CERAMIC CHIP	4.7uF	10.00%	10V
C917	1-164-943-11	CERAMIC CHIP	0.01uF	10.00%	16V
< CONNECTOR >					
CN201	1-766-687-21	CONNECTOR, FFC/FPC 26P			
CN451	1-794-505-21	CONNECTOR, FPC (ZIF) 51P			
CN701	1-794-505-21	CONNECTOR, FPC (ZIF) 51P			
CN702	1-794-505-21	CONNECTOR, FPC (ZIF) 51P			
CN703	1-778-592-21	CONNECTOR, BOARD TO BOARD 50P			
CN706	1-766-340-21	CONNECTOR, FFC/FPC 10P			
CN707	1-766-342-21	CONNECTOR, FFC/FPC 12P			
CN709	1-817-706-11	CONNECTOR, FPC 12P			
CN711	1-815-098-11	CONNECTOR, FPC (ZIF) 21P			
CN712	1-794-375-21	PIN, CONNECTOR 2P			
CN713	1-778-506-21	PIN, CONNECTOR (PC BOARD) 2P			
CN751	1-778-593-21	CONNECTOR, BOARD TO BOARD 60P			
CN901	1-766-352-21	CONNECTOR, FFC/FPC 22P			
< DIODE >					
D401	8-719-073-01	DIODE MA111-(K8).S0			
D402	8-719-073-01	DIODE MA111-(K8).S0			
D404	8-719-027-76	DIODE 1SS357-TPH3			
D702	8-719-073-01	DIODE MA111-(K8).S0			
D704	6-500-186-01	DIODE MA2SD24008S0			
D801	8-719-071-34	DIODE RB521S-30-TE61			
D802	8-719-071-34	DIODE RB521S-30-TE61			
D803	8-719-056-51	DIODE MAZS0330L8S0			
D804	6-500-346-01	DIODE MAZS240008S0			
D805	8-719-076-88	DIODE MA2Z720001S0			
< FERRITE BEAD >					
FB201	1-414-921-11	FERRITE	0uH		
FB251	1-414-760-21	FERRITE	0uH		
FB252	1-414-760-21	FERRITE	0uH		
FB301	1-414-921-11	FERRITE	0uH		
FB302	1-414-921-11	FERRITE	0uH		
FB303	1-414-921-11	FERRITE	0uH		
FB304	1-469-580-11	FERRITE	0uH		
FB451	1-414-921-11	FERRITE	0uH		
FB501	1-414-921-11	FERRITE	0uH		
FB502	1-414-921-11	FERRITE	0uH		
FB503	1-414-921-11	FERRITE	0uH		
FB504	1-414-921-11	FERRITE	0uH		
FB505	1-469-836-21	FERRITE	0uH		
FB701	1-216-864-11	METAL CHIP	0	5%	1/16W
FB901	1-469-082-21	FERRITE	0uH		(Note)
< IC >					
IC201	8-759-465-98	IC BU9728AKV-E2			
IC251	6-704-875-01	IC GT3200-JV			
IC301	A-7078-917-A	IC KI (5M SA) BOARD, COMPLETE			
IC302	6-704-335-01	IC K4M563233D-EE1HT			
IC303	6-704-365-01	IC NJM2578KJ1(Te3)			
IC401	6-803-184-01	IC MB89083LGA-G-105-ERE1			
IC402	6-702-096-01	IC S-8425AAAF-TB-G			
IC451	8-759-058-64	IC TC7S32FU(Te85R)			
IC452	6-705-178-01	IC uPD65341F1-Y02-DN3-E2-A			
IC501	8-753-209-98	IC JSCIS002AF00GA-T6			

Ref. No.	Part No.	Description	
IC601	6-703-734-01	IC AN12908A-VB	
IC701	6-703-011-01	IC TC7SZ126AFE	
IC702	6-703-011-01	IC TC7SZ126AFE	
IC703	6-703-011-01	IC TC7SZ126AFE	
IC751	8-759-580-26	IC NJM2130F(Te2)	
IC752	6-705-356-01	IC R1114N331D-TR-FA	
IC753	6-704-873-01	IC XC6202S06XMR	
IC801	6-704-882-01	IC CM7103L42-T4	
IC802	6-701-385-01	IC LT1932ES6#TR	
IC902	8-752-109-93	IC CXM3008R-T4	
< COIL >			
L251	1-469-570-11	INDUCTOR	10uH
L252	1-469-570-11	INDUCTOR	10uH
L301	1-469-570-11	INDUCTOR	10uH
L302	1-469-570-11	INDUCTOR	10uH
L303	1-469-570-11	INDUCTOR	10uH
L304	1-469-570-11	INDUCTOR	10uH
L305	1-469-570-11	INDUCTOR	10uH
L306	1-469-570-11	INDUCTOR	10uH
L401	1-469-559-21	INDUCTOR	47uH
L451	1-469-570-11	INDUCTOR	10uH
L501	1-469-757-21	INDUCTOR	10uH
L581	1-469-757-21	INDUCTOR	10uH
L582	1-469-570-11	INDUCTOR	10uH
L583	1-469-570-11	INDUCTOR	10uH
L584	1-469-570-11	INDUCTOR	10uH
L601	1-469-555-21	INDUCTOR	10uH
L602	1-469-570-11	INDUCTOR	10uH
L751	1-400-336-21	INDUCTOR	1uH
L753	1-469-549-21	INDUCTOR	1uH
L754	1-400-336-21	INDUCTOR	1uH
L756	1-469-549-21	INDUCTOR	1uH
L757	1-400-336-21	INDUCTOR	1uH
L759	1-469-757-21	INDUCTOR	10uH
L760	1-469-549-21	INDUCTOR	1uH
L761	1-469-549-21	INDUCTOR	1uH
L762	1-400-336-21	INDUCTOR	1uH
L763	1-469-549-21	INDUCTOR	1uH
L764	1-400-336-21	INDUCTOR	1uH
L801	1-469-846-11	INDUCTOR	47uH
L802	1-469-570-11	INDUCTOR	10uH
L803	1-469-570-11	INDUCTOR	10uH
L804	1-469-846-11	INDUCTOR	47uH
L805	1-469-549-21	INDUCTOR	1uH
L806	1-414-410-21	INDUCTOR	10uH
L901	1-469-846-11	INDUCTOR	47uH
L902	1-469-570-11	INDUCTOR	10uH
< TRANSISTOR >			
Q302	8-729-050-74	TRANSISTOR	2SB1462L0AS0
Q303	8-729-050-74	TRANSISTOR	2SB1462L0AS0
Q304	8-729-050-74	TRANSISTOR	2SB1462L0AS0
Q307	6-550-179-01	TRANSISTOR	RN4904FE(TPLR3)
Q401	6-550-243-01	TRANSISTOR	DTC144TMT2L
Q402	6-550-241-01	TRANSISTOR	DTA144TMT2L
Q403	6-550-566-01	TRANSISTOR	DTC115TMT2L
Q404	8-729-054-52	TRANSISTOR	RN1910FE(TPLR3)
Q405	6-550-566-01	TRANSISTOR	DTC115TMT2L
Q406	8-729-041-43	TRANSISTOR	HN1L02FU(Te85R)

Note :

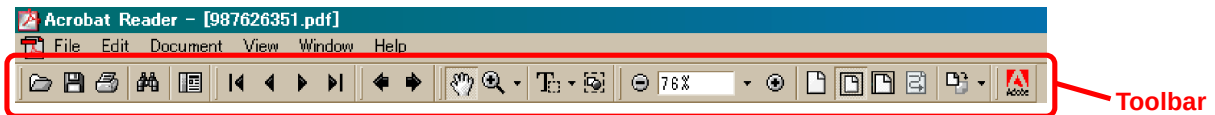
Resistor is mounted to the location where FB701 is printed.

Ref. No.	Part No.	Description					Ref. No.	Part No.	Description				
Q451	6-550-354-01	TRANSISTOR	RTQ035P02TR				R410	1-218-985-11	RES-CHIP	470K	5%	1/16W	
Q501	8-729-053-58	TRANSISTOR	RN1904FE(TPLR3)				R411	1-218-953-11	RES-CHIP	1K	5%	1/16W	
Q601	6-550-119-01	TRANSISTOR	DTC144EMT2L				R412	1-218-953-11	RES-CHIP	1K	5%	1/16W	
Q701	6-550-239-01	TRANSISTOR	DTA144EMT2L				R413	1-218-953-11	RES-CHIP	1K	5%	1/16W	
Q702	6-550-576-01	TRANSISTOR	SSM6E01TU				R418	1-218-953-11	RES-CHIP	1K	5%	1/16W	
Q703	6-550-179-01	TRANSISTOR	RN4904FE(TPLR3)				R419	1-218-985-11	METAL CHIP	470K	0.5%	1/16W	
Q704	6-550-150-01	TRANSISTOR	SSM3J09FU(TE85L)				R420	1-208-943-11	METAL CHIP	220K	0.5%	1/16W	
Q705	6-550-566-01	TRANSISTOR	DTC115TMT2L				R421	1-218-985-11	METAL CHIP	470K	0.5%	1/16W	
Q706	6-550-237-01	TRANSISTOR	2SC584600LS0				R422	1-208-943-11	METAL CHIP	220K	0.5%	1/16W	
Q707	6-550-239-01	TRANSISTOR	DTA144EMT2L				R423	1-218-973-11	RES-CHIP	47K	5%	1/16W	
Q751	6-550-171-01	TRANSISTOR	MCH3317-TL-E				R424	1-218-985-11	RES-CHIP	470K	5%	1/16W	
Q752	6-550-102-01	TRANSISTOR	2SC5663T2L				R425	1-219-570-11	METAL CHIP	10M	5%	1/10W	
Q801	6-550-119-01	TRANSISTOR	DTC144EMT2L				R426	1-218-977-11	RES-CHIP	100K	5%	1/16W	
Q802	8-729-056-00	TRANSISTOR	MCH3310-TL-E				R427	1-218-985-11	RES-CHIP	470K	5%	1/16W	
Q901	8-729-037-52	TRANSISTOR	2SD2216J-QR(K8).SO				R428	1-218-975-11	RES-CHIP	68K	5%	1/16W	
Q902	6-550-239-01	TRANSISTOR	DTA144EMT2L				R429	1-218-977-11	RES-CHIP	100K	5%	1/16W	
Q903	8-729-042-26	TRANSISTOR	2SB1462J-QR(K8).SO				R432	1-218-990-11	SHORT CHIP	0			
< RESISTOR >													
R202	1-218-987-11	RES-CHIP	680K	5%	1/16W		R441	1-208-908-11	METAL CHIP	7.5K	0.5%	1/16W	
R203	1-218-981-11	RES-CHIP	220K	5%	1/16W		R442	1-208-689-11	METAL CHIP	1.8K	0.5%	1/16W	
R204	1-218-985-11	RES-CHIP	470K	5%	1/16W		R443	1-218-990-11	SHORT CHIP	0			
R252	1-218-989-11	RES-CHIP	1M	5%	1/16W		R444	1-218-985-11	RES-CHIP	470K	5%	1/16W	
R253	1-218-823-11	METAL CHIP	100	0.5%	1/10W		R449	1-218-985-11	RES-CHIP	470K	5%	1/16W	
R254	1-208-709-11	METAL CHIP	12K	0.5%	1/16W		R450	1-218-953-11	RES-CHIP	1K	5%	1/16W	
R255	1-218-990-11	SHORT CHIP	0				R451	1-218-977-11	RES-CHIP	100K	5%	1/16W	
R256	1-218-990-11	SHORT CHIP	0				R452	1-216-864-11	METAL CHIP	0	5%	1/16W	
R257	1-218-990-11	SHORT CHIP	0				R453	1-218-953-11	RES-CHIP	1K	5%	1/16W	
R301	1-218-990-11	SHORT CHIP	0				R454	1-218-955-11	RES-CHIP	1.5K	5%	1/16W	
R306	1-218-990-11	SHORT CHIP	0				R455	1-218-977-11	RES-CHIP	100K	5%	1/16W	
R308	1-218-965-11	RES-CHIP	10K	5%	1/16W		R456	1-218-977-11	RES-CHIP	100K	5%	1/16W	
R310	1-208-691-11	METAL CHIP	2.2K	0.5%	1/16W		R457	1-218-977-11	RES-CHIP	100K	5%	1/16W	
R311	1-208-691-11	METAL CHIP	2.2K	0.5%	1/16W		R458	1-218-977-11	RES-CHIP	100K	5%	1/16W	
R312	1-208-691-11	METAL CHIP	2.2K	0.5%	1/16W		R461	1-218-977-11	RES-CHIP	100K	5%	1/16W	
R313	1-218-965-11	RES-CHIP	10K	5%	1/16W		R464	1-218-985-11	RES-CHIP	470K	5%	1/16W	
R315	1-208-663-11	METAL CHIP	150	0.5%	1/16W		R465	1-218-985-11	RES-CHIP	470K	5%	1/16W	
R316	1-218-958-11	METAL CHIP	2.7K	0.5%	1/16W		R491	1-218-973-11	RES-CHIP	47K	5%	1/16W	
R317	1-218-968-11	RES-CHIP	18K	5%	1/16W		R492	1-218-946-11	RES-CHIP	270	5%	1/16W	
R318	1-218-953-11	RES-CHIP	1K	5%	1/16W		R493	1-218-935-11	RES-CHIP	33	5%	1/16W	
R319	1-218-970-11	METAL CHIP	27K	0.5%	1/16W		R494	1-218-965-11	RES-CHIP	10K	5%	1/16W	
R324	1-208-663-11	METAL CHIP	150	0.5%	1/16W		R495	1-218-990-11	SHORT CHIP	0			
R325	1-208-663-11	METAL CHIP	150	0.5%	1/16W		R496	1-218-990-11	SHORT CHIP	0			
R326	1-208-663-11	METAL CHIP	150	0.5%	1/16W		R497	1-218-985-11	RES-CHIP	470K	5%	1/16W	
R327	1-218-990-11	SHORT CHIP	0				R502	1-218-953-11	RES-CHIP	1K	5%	1/16W	
R331	1-208-713-11	METAL CHIP	18K	0.5%	1/16W		R503	1-218-941-81	RES-CHIP	100	5%	1/16W	
R332	1-218-958-11	METAL CHIP	2.7K	0.5%	1/16W		R504	1-218-990-11	SHORT CHIP	0			
R334	1-218-970-11	METAL CHIP	27K	0.5%	1/16W		R505	1-218-941-81	RES-CHIP	100	5%	1/16W	
R342	1-218-990-11	SHORT CHIP	0				R506	1-218-990-11	SHORT CHIP	0			
R344	1-208-707-11	METAL CHIP	10K	0.5%	1/16W		R507	1-218-990-11	SHORT CHIP	0			
R345	1-208-701-11	METAL CHIP	5.6K	0.5%	1/16W		R508	1-218-990-11	SHORT CHIP	0			
R346	1-208-707-11	METAL CHIP	10K	0.5%	1/16W		R509	1-218-990-11	SHORT CHIP	0			
R356	1-218-977-11	RES-CHIP	100K	5%	1/16W		R510	1-218-933-11	RES-CHIP	22	5%	1/16W	
R357	1-218-933-11	RES-CHIP	22	5%	1/16W		R511	1-218-977-11	RES-CHIP	100K	5%	1/16W	
R358	1-218-939-11	RES-CHIP	68	5%	1/16W		R512	1-218-953-11	RES-CHIP	1K	5%	1/16W	
R401	1-218-989-11	RES-CHIP	1M	5%	1/16W		R514	1-218-973-11	RES-CHIP	47K	5%	1/16W	
R402	1-218-977-11	RES-CHIP	100K	5%	1/16W		R515	1-218-973-11	RES-CHIP	47K	5%	1/16W	
R404	1-218-985-11	RES-CHIP	470K	5%	1/16W		R517	1-218-977-11	RES-CHIP	100K	5%	1/16W	
R406	1-218-985-11	RES-CHIP	470K	5%	1/16W		R518	1-218-973-11	RES-CHIP	47K	5%	1/16W	
R407	1-218-961-11	RES-CHIP	4.7K	5%	1/16W		R519	1-218-973-11	RES-CHIP	47K	5%	1/16W	
							R520	1-218-953-11	RES-CHIP	1K	5%	1/16W	
							R521	1-218-985-11	RES-CHIP	470K	5%	1/16W	
							R522	1-218-973-11	RES-CHIP	47K	5%	1/16W	

Ref. No.	Part No.	Description			
R523	1-218-977-11	RES-CHIP	100K	5%	1/16W
R524	1-218-990-11	SHORT CHIP	0		
R525	1-218-985-11	RES-CHIP	470K	5%	1/16W
R526	1-218-965-11	RES-CHIP	10K	5%	1/16W
R527	1-218-965-11	RES-CHIP	10K	5%	1/16W
R528	1-218-985-11	RES-CHIP	470K	5%	1/16W
R529	1-218-977-11	RES-CHIP	100K	5%	1/16W
R530	1-218-965-11	RES-CHIP	10K	5%	1/16W
R531	1-218-965-11	RES-CHIP	10K	5%	1/16W
R532	1-218-953-11	RES-CHIP	1K	5%	1/16W
R533	1-218-985-11	RES-CHIP	470K	5%	1/16W
R537	1-218-973-11	RES-CHIP	47K	5%	1/16W
R539	1-218-973-11	RES-CHIP	47K	5%	1/16W
R540	1-218-977-11	RES-CHIP	100K	5%	1/16W
R541	1-218-953-11	RES-CHIP	1K	5%	1/16W
R543	1-218-990-11	SHORT CHIP	0		
R552	1-218-977-11	RES-CHIP	100K	5%	1/16W
R553	1-218-977-11	RES-CHIP	100K	5%	1/16W
R555	1-218-990-11	SHORT CHIP	0		
R557	1-218-933-11	RES-CHIP	22	5%	1/16W
R558	1-218-933-11	RES-CHIP	22	5%	1/16W
R559	1-218-933-11	RES-CHIP	22	5%	1/16W
R560	1-218-933-11	RES-CHIP	22	5%	1/16W
R561	1-218-933-11	RES-CHIP	22	5%	1/16W
R562	1-218-977-11	RES-CHIP	100K	5%	1/16W
R563	1-218-977-11	RES-CHIP	100K	5%	1/16W
R564	1-218-977-11	RES-CHIP	100K	5%	1/16W
R565	1-218-977-11	RES-CHIP	100K	5%	1/16W
R602	1-218-973-11	RES-CHIP	47K	5%	1/16W
R603	1-218-990-11	SHORT CHIP	0		
R604	1-218-958-11	RES-CHIP	2.7K	5%	1/16W
R605	1-218-965-11	RES-CHIP	10K	5%	1/16W
R606	1-218-967-11	RES-CHIP	15K	5%	1/16W
R609	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R610	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R611	1-218-975-11	RES-CHIP	68K	5%	1/16W
R614	1-218-965-11	RES-CHIP	10K	5%	1/16W
R615	1-218-973-11	RES-CHIP	47K	5%	1/16W
R701	1-218-947-11	RES-CHIP	330	5%	1/16W
R702	1-218-947-11	RES-CHIP	330	5%	1/16W
R703	1-218-989-11	RES-CHIP	1M	5%	1/16W
R704	1-218-954-11	RES-CHIP	1.2K	5%	1/16W
R705	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R706	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R707	1-216-864-11	METAL CHIP	0	5%	1/16W
R708	1-218-981-11	RES-CHIP	220K	5%	1/16W
R709	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R710	1-218-985-11	RES-CHIP	470K	5%	1/16W
R711	1-218-977-11	RES-CHIP	100K	5%	1/16W
R712	1-218-985-11	RES-CHIP	470K	5%	1/16W
R713	1-218-946-11	RES-CHIP	270	5%	1/16W
R714	1-218-981-11	RES-CHIP	220K	5%	1/16W
R715	1-220-176-11	RES-CHIP	300	5%	1/16W
R716	1-218-971-11	RES-CHIP	33K	5%	1/16W
R720	1-218-937-11	RES-CHIP	47	5%	1/16W
R735	1-218-990-11	SHORT CHIP	0		
R736	1-218-973-11	RES-CHIP	47K	5%	1/16W
R737	1-218-973-11	RES-CHIP	47K	5%	1/16W
R752	1-208-947-11	METAL CHIP	330K	0.5%	1/16W
R753	1-208-943-11	METAL CHIP	220K	0.5%	1/16W

Ref. No.	Part No.	Description			
R759	1-208-909-11	METAL CHIP	8.2K	0.5%	1/16W
R760	1-208-933-11	METAL CHIP	82K	0.5%	1/16W
R802	1-218-985-11	RES-CHIP	470K	5%	1/16W
R806	1-218-990-11	SHORT CHIP	0		
R809	1-218-975-11	RES-CHIP	68K	5%	1/16W
R810	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R812	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R814	1-218-965-11	RES-CHIP	10K	5%	1/16W
R815	1-218-990-11	SHORT CHIP	0		
R816	1-218-990-11	SHORT CHIP	0		
R817	1-218-990-11	SHORT CHIP	0		
R818	1-208-721-11	METAL CHIP	39K	0.5%	1/16W
R819	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R820	1-208-711-11	METAL CHIP	15K	0.5%	1/16W
R821	1-218-958-11	METAL CHIP	2.7K	0.5%	1/16W
R823	1-218-990-11	SHORT CHIP	0		
R824	1-218-990-11	SHORT CHIP	0		
R903	1-218-990-11	SHORT CHIP	0		
R908	1-218-990-11	SHORT CHIP	0		
R909	1-218-990-11	SHORT CHIP	0		
R911	1-218-975-11	RES-CHIP	68K	5%	1/16W
R912	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R913	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R915	1-208-647-11	METAL CHIP	33	0.5%	1/16W
R916	1-208-635-11	RES-CHIP	10	5%	1/16W
R917	1-208-635-11	RES-CHIP	10	5%	1/16W
R918	1-208-635-11	RES-CHIP	10	5%	1/16W
R922	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R924	1-218-953-11	RES-CHIP	1K	5%	1/16W
R925	1-218-977-11	RES-CHIP	100K	5%	1/16W
< COMPOSITION CIRCUIT BLOCK >					
RB401	1-234-378-21	RES, NETWORK 10KX4	(1005)		
RB402	1-234-378-21	RES, NETWORK 10KX4	(1005)		
RB403	1-234-375-21	RES, NETWORK 1KX4	(1005)		
RB404	1-234-375-21	RES, NETWORK 1KX4	(1005)		
< VIBRATOR >					
X251	1-813-090-11	VIBRATOR, CRYSTAL (12MHz)			
X401	1-795-029-11	VIBRATOR, CRYSTAL (32.768kHz)			
X501	1-795-172-11	OSCILLATOR, CRYSTAL (27MHz)			

[Description of main button functions on toolbar of the Adobe Acrobat Reader Ver5.0 (for Windows)]



Printing a text

1. Click the Print button .
2. Specify a printer, print range, number of copies, and other options, and then click [OK].

Application of printing:

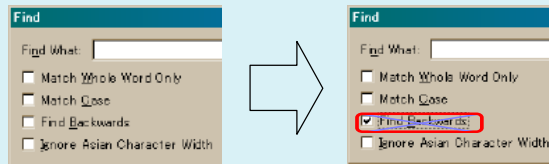
To set a range to be printed within a page, select the graphic selection tool  and drag on the page to enclose a range to be printed, and then click the Print button.

Finding a text

1. Click the Find button .
2. Enter a character string to be found into a text box, and click the [Find]. (Specify the find options as necessary)

Application to the Service Manual:

To execute "find" from current page toward the previous pages, select the check box "Find Backward" and then click the "Find".



3. Open the find dialog box again, and click the [Find Again] and you can find the matched character strings displayed next. (Character strings entered previously are displayed as they are in the text box.)

Application to the Service Manual:

The parts on the drawing pages (block diagrams, circuit diagrams, printed circuit boards) and parts list pages in a text can be found using this find function. For example, find a Ref. No. of IC on the block diagram, and click the [Find Again] continuously, so that you can move to the Ref. No. of IC on the circuit diagram or printed circuit board diagram successively.

Note: The find function may not be applied to the Service Manual depending on the date of issue.

Switching a page

- To move to the first page, click the .
- To move to the last page, click the .
- To move to the previous page, click the .
- To move to the next page, click the .

Reversing the screens displayed once

- To reverse the previous screens (operation) one by one, click the .
- To advance the reversed screens (operation) one by one, click the .

Application to the Service Manual:

This function allows you to go and back between circuit diagram and printed circuit board diagram, and accordingly it will be convenient for the voltage check.

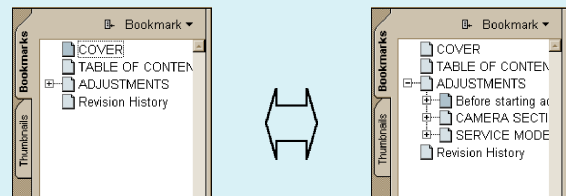
Moving with link

1. Select either palm tool , zoom tool , text selection tool , or graphic selection tool .
2. Place the pointer in the position in a text where the link exists (such as a button on cover and the table of contents page, or blue characters on the removal flowchart page or drawing page), and the pointer will change to the forefinger form .
3. Then, click the link. (You will go to the link destination.)

Moving with bookmark:

Click an item (text) on the bookmark pallet, and you can move to the link destination. Also, clicking  can display the hidden items.

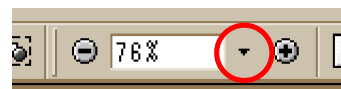
(To go back to original state, click )



Zooming or rotating the screen display

"Zoom in/out"

- Click the triangle button in the zoom control box to select the display magnification. Or, you may click  or  for zooming in or out.



"Rotate"

- Click rotate tool , and the page then rotates 90 degrees each.

Application to the Service Manual:

The printed circuit board diagram you see now can be changed to the same direction as the set.

Revision History

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2003.12	Official Release	—	—