

DSC-W55

SERVICE MANUAL

LEVEL 3

Ver. 1.2 2007.06

Revision History

How to use
Acrobat Reader

Internal memory
ON BOARD

Revised-1



Photo: Silver

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Hong Kong Model
Chinese Model
Korea Model
Argentine Model
Brazilian Model
Tourist Model

Link

• SERVICE NOTE

• PRINTED WIRING BOARDS

• REPAIR PARTS LIST

• SCHEMATIC DIAGRAMS

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.

DIGITAL STILL CAMERA

SONY®

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 PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPÉMENTS 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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1. SERVICE NOTE

1-3. METHOD FOR COPYING OR ERASING THE DATA IN INTERNAL MEMORY

The data can be copied/erased by the operations on the Setup screen. (When erasing the data, execute formatting the internal memory.)

Note 1: When replacing the SY-176 board, erase the data in internal memory of the board before replacement.

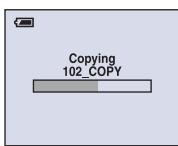
Note 2: When replacing the SY-176 board, execute formatting and initialize the internal memory after replacement.

Method for Copying the Data in Internal Memory

Copy

Copies all images in the internal memory to a “Memory Stick Duo”.

- ① Insert a “Memory Stick Duo” having 64 MB or larger capacity.
- ② Select [OK] with ▲ on the control button, then press ●.
The message “All data in internal memory will be copied Ready?” appears.
- ③ Select [OK] with ▲, then press ●.
Copying starts.



To cancel the copying

Select [Cancel] in step ② or ③, then press ●.

- Use a fully charged battery pack. If you attempt to copy image files using a battery pack with little remaining charge, the battery pack may run out, causing copying to fail or possibly corrupting the data.
- You cannot copy individual images.
- The original images in the internal memory are retained even after copying. To delete the contents of the internal memory, remove the “Memory Stick Duo” after copying, then execute the [Format] command in  (Internal Memory Tool) (page 54).
- When you copy the data in the internal Memory to the “Memory Stick Duo”, all the data will be copied. You cannot choose a specific folder on the “Memory Stick Duo” as the destination for the data to be copied.
- Even if you copy data, a  (Print order) mark is not copied.

Method for Formatting the Internal Memory

This item appears only when a “Memory Stick Duo” is inserted in the camera.

Format

Formats the “Memory Stick Duo”. A commercially available “Memory Stick Duo” is already formatted, and can be used immediately.

- Note that formatting irrevocably erases all data on a “Memory Stick Duo”, including even protected images.

- ① Select [OK] with ▲ on the control button, then press ●.
The message “All data in Memory Stick will be erased Ready?” appears.
- ② Select [OK] with ▲, then press ●.
The format is complete.

To cancel the formatting

Select [Cancel] in step ① or ②, then press ●.

4-2. SCHEMATIC DIAGRAMS

Link

- SY-176 BOARD (1/6)
(CCD SIGNAL PROCESS)
- SY-176 BOARD (2/6) (CAMERA DSP)
- SY-176 BOARD (3/6) (LENS DRIVE)
- SY-176 BOARD (4/6) (SDRAM, SUPER AND)
- SY-176 BOARD (5/6) (AUDIO, VIDEO)
- SY-176 BOARD (6/6) (DC/DC CONVERTER)

- COMMON NOTE FOR SCHEMATIC DIAGRAMS

4-2. SCHEMATIC DIAGRAMS

4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

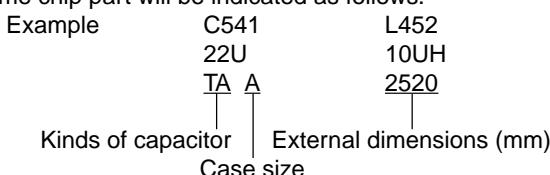
4-2. SCHEMATIC DIAGRAMS

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. $\text{pF} : \mu\text{F}$. 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.



- 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
 $\text{XEDIT} \rightarrow \text{EDIT}$ $\text{PB/XREC} \rightarrow \text{PB/REC}$
 : non flammable resistor
 : fusible resistor
 : panel designation
 : B+ Line
 : B- Line
 : IN/OUT direction of (+,-) B LINE.
 : adjustment for repair.
 : not use circuit

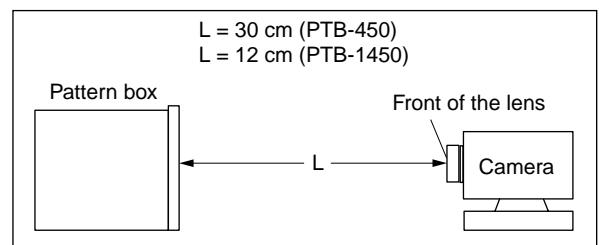
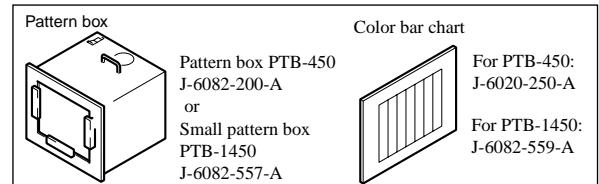
(Measuring conditions voltage and waveform)

- 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 M Ω input impedance is used)
- Voltage values change depending upon input impedance of VOM used.)

Precautions for Replacement of Imager

- If the imager has been replaced, carry out all the adjustments for the camera section.
- As the imager may be damaged by static electricity from its structure, handle it carefully like for the MOS IC.
In addition, ensure that the receiver is not covered with dusts nor exposed to strong light.

1. Connection



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

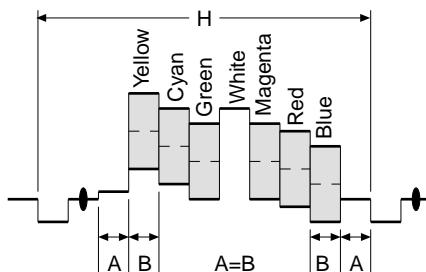


Fig. a (Video output terminal output waveform)

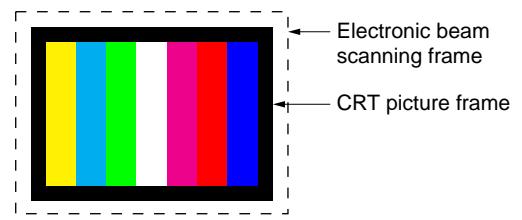


Fig. b (Picture on monitor TV)

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

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

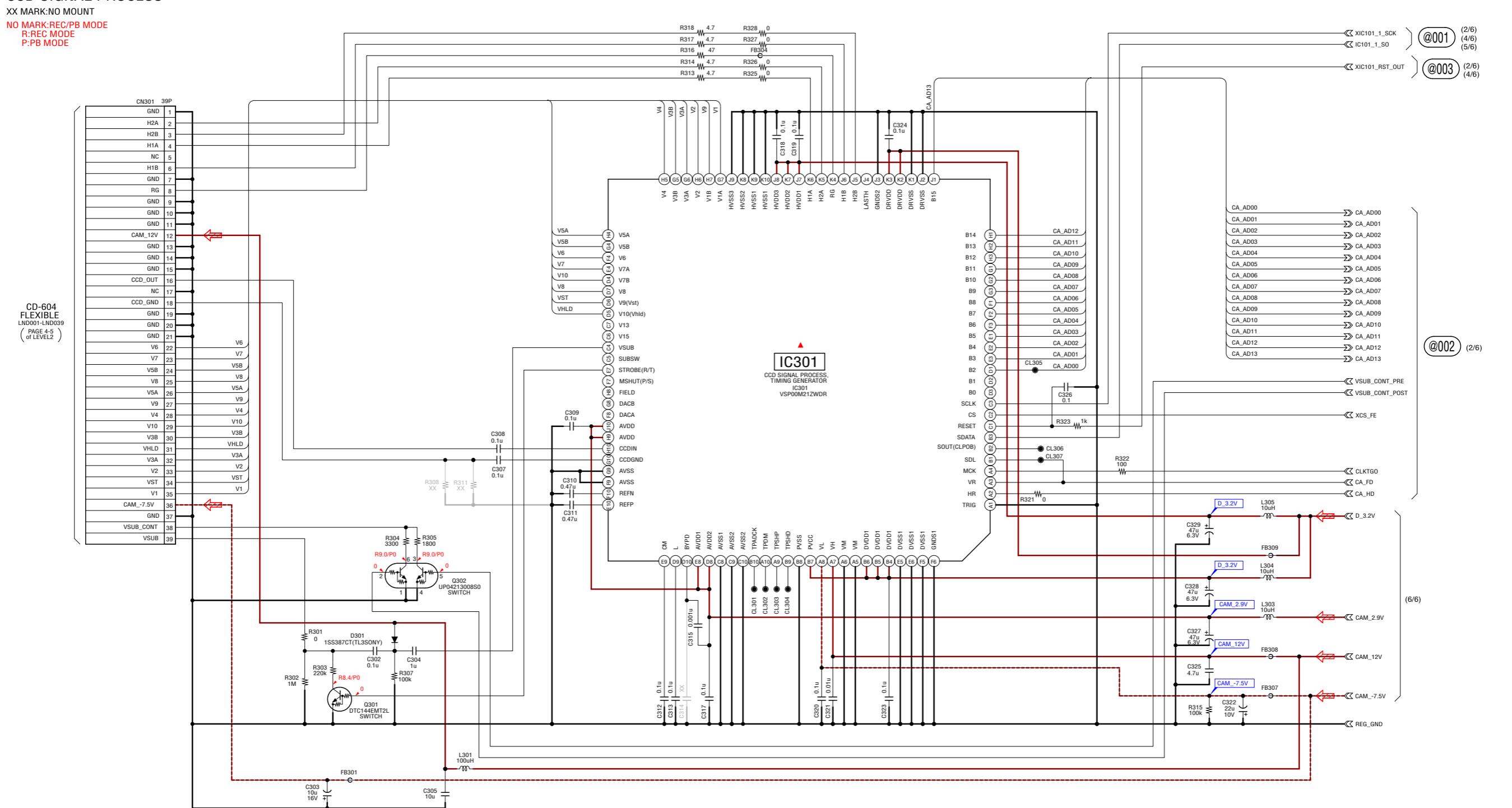
Les composants identifiés par une marque \triangle sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifique.

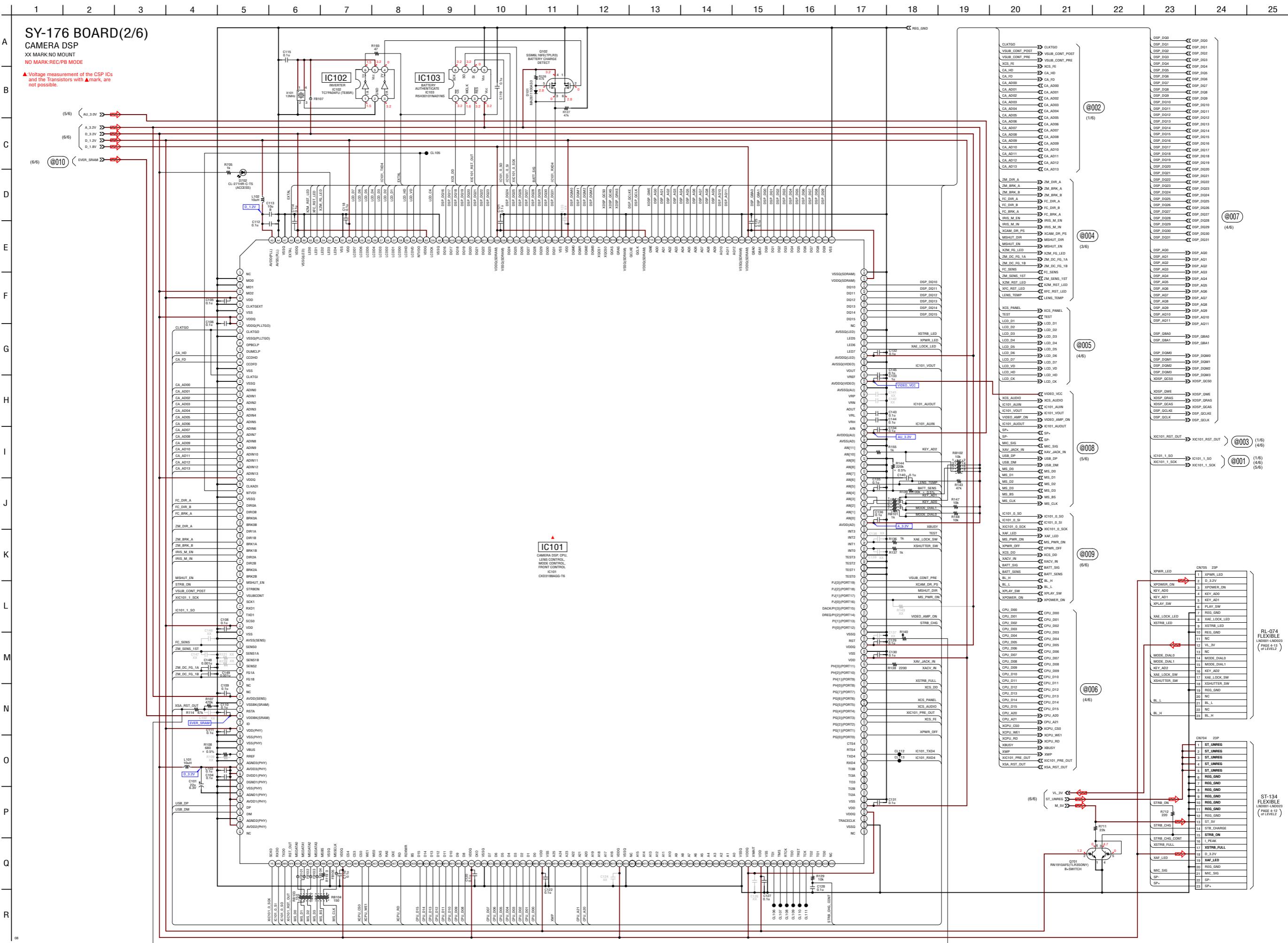
1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17

SY-176 BOARD(1/6)

CCD SIGNAL PROCESS

▲:Voltage measurement of the CSP ICs
and the Transistors with ▲ mark, are
not possible.





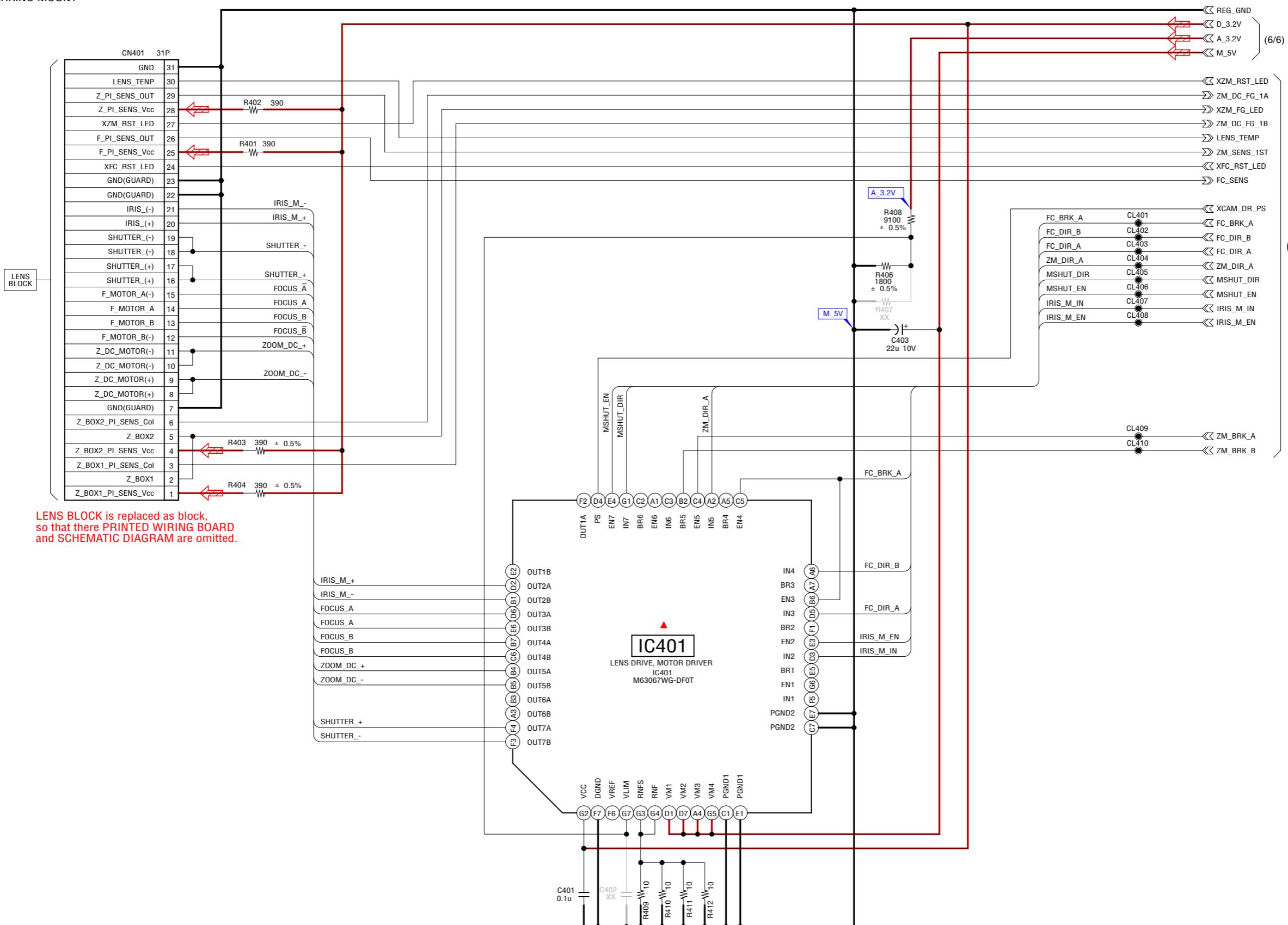
1 2 3 4 5 6 7 8 9 10 11 12 13

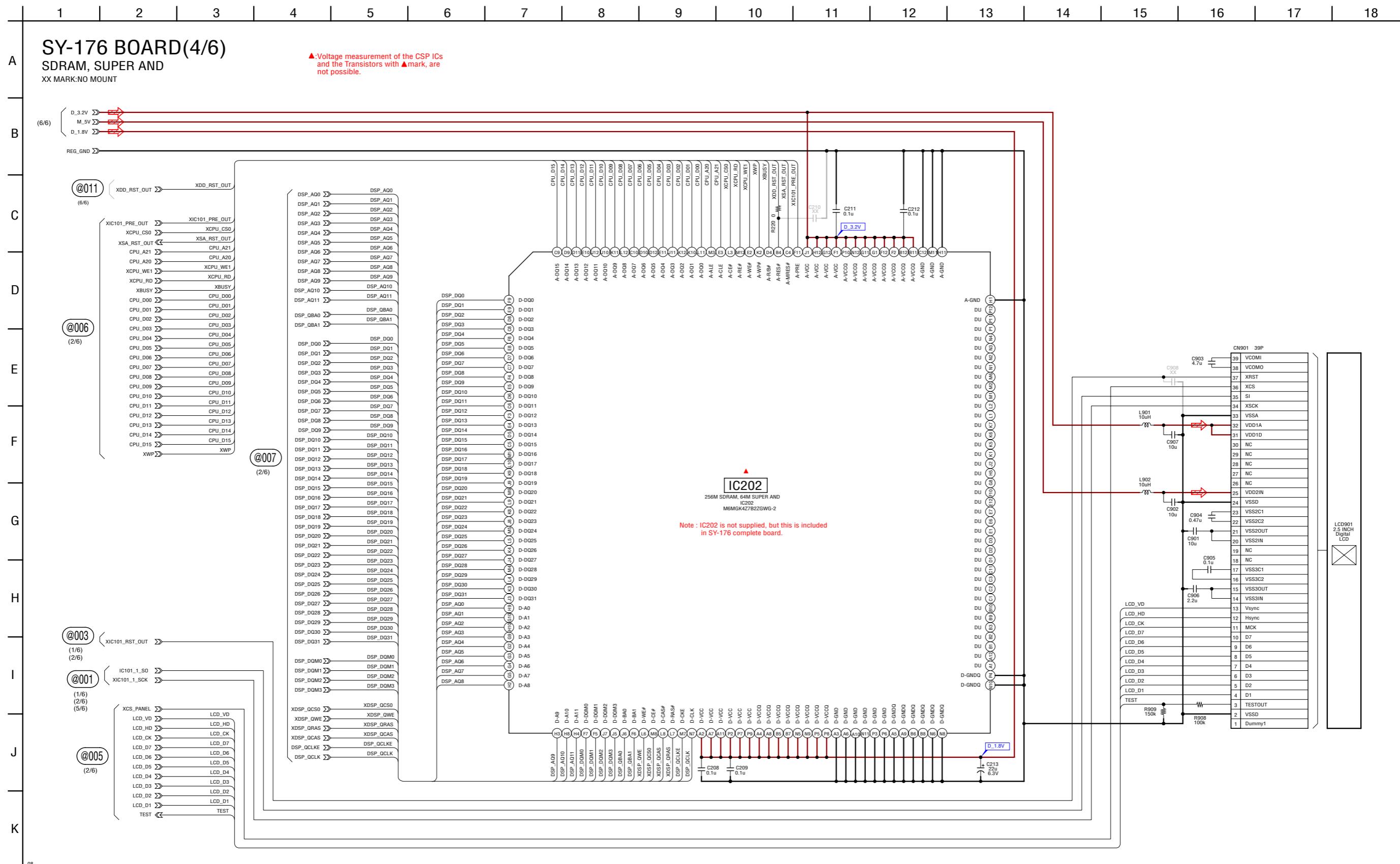
SY-176 BOARD(3/6)

LENS DRIVE

XX MARK: NO MOUNT

▲: Voltage measurement of the CSP ICs
and the Transistors with ▲ mark, are
not possible.





1 2 3 4 5 6 7 8 9 10 11 12

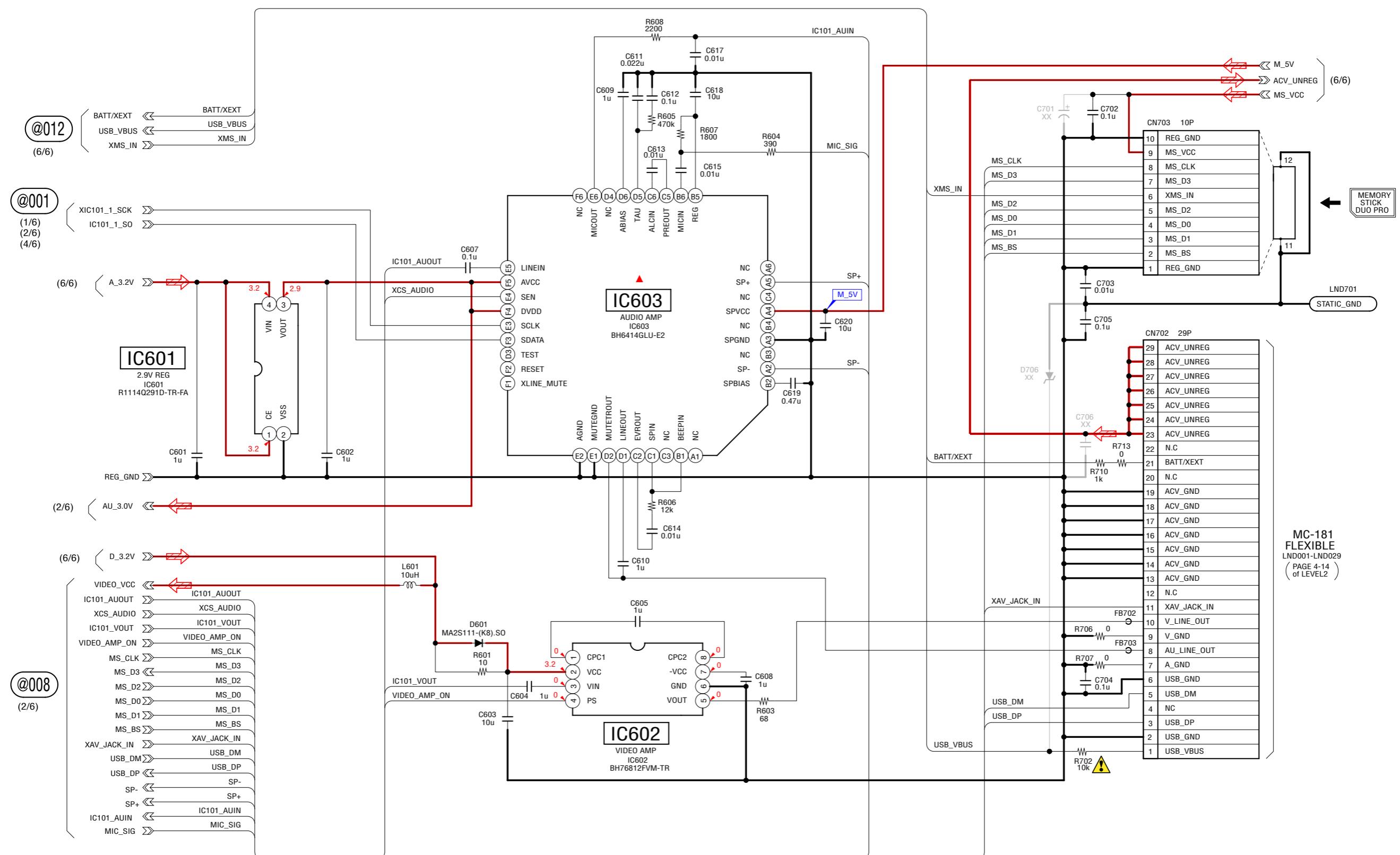
SY-176 BOARD(5/6)

AUDIO, VIDEO

XX MARK: NO MOUNT

NO MARK: REC/PB MODE

▲: Voltage measurement of the CSP ICs
and the Transistors with ▲ mark, are
not possible.



4-3. PRINTED WIRING BOARDS

Link

• SY-176 BOARD

• COMMON NOTE FOR PRINTED WIRING BOARDS

• MOUNTED PARTS LOCATION

4-3. PRINTED WIRING BOARDS

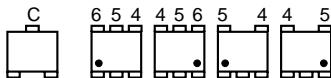
4-3. PRINTED WIRING BOARDS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS

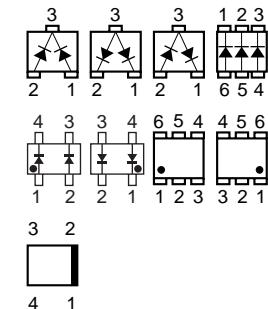
- : Uses unleaded solder.
- : Circuit board
- : Flexible board
- Pattern from the side which enables seeing.
 : pattern of the rear side
(The other layers' patterns are not indicated)
- Through hole is omitted.
- There are a few cases that the part printed on diagram isn't mounted in this model.
- :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

- Chip parts.

Transistor

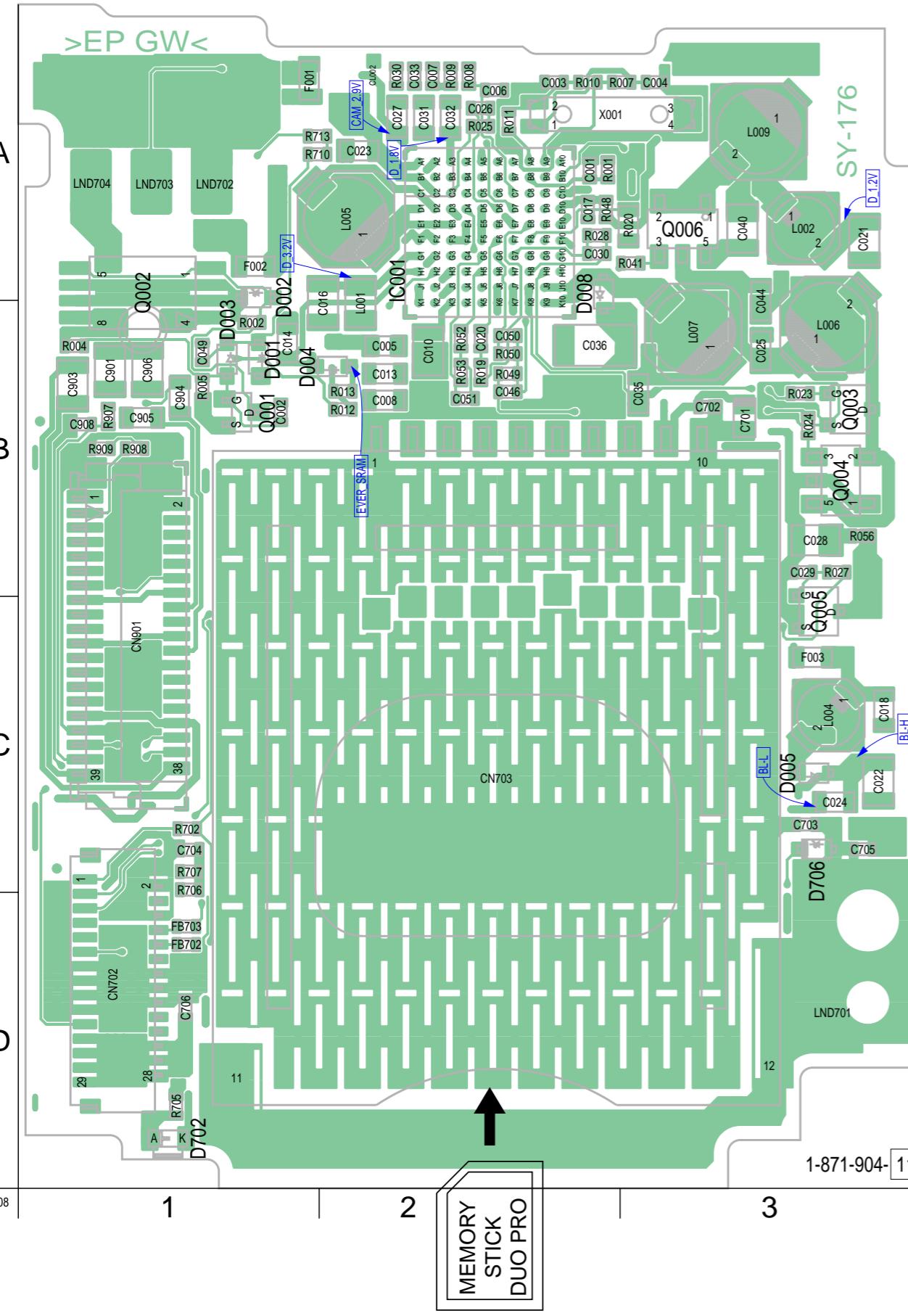


Diode

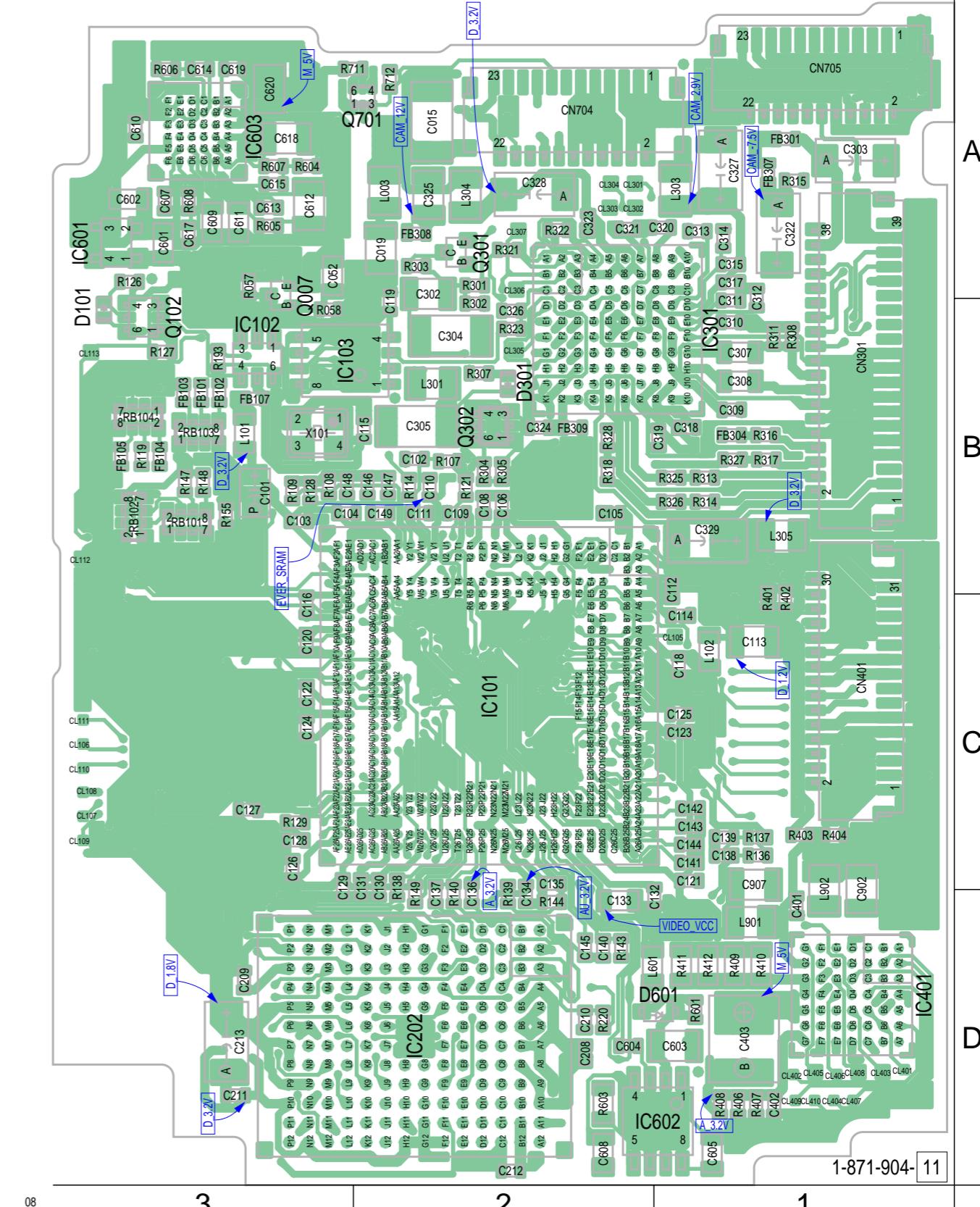


 : Uses unleaded solder.

SY-176 BOARD (SIDE A)



SY-176 BOARD (SIDE B)



Note: IC202 is not supplied, but this is included in SY-176 complete board.

4-3. PRINTED WIRING BOARDS

4-4. MOUNTED PARTS LOCATION

SY-176 BOARD

no mark : side A
* mark : side B

C001	A2	* C148	B3	* CL305	B2	LND704	A1	* R325	B1
C002	B1	* C149	B2	* CL306	A2			* R326	B1
C003	A2	* C208	D2	* CL307	A2	* P	B3	* R327	B1
C004	A3	* C209	D3	* CL401	D1	Q001	B1	* R328	B2
C005	B2	* C210	D2	* CL402	D1	Q002	A1	* R401	C1
C006	A2	* C211	D3	* CL403	D1	Q003	B3	* R402	C1
C007	A2	* C212	D2	* CL404	D1	Q004	B3	* R403	C1
C008	B2	* C213	D3	* CL405	D1	Q005	C3	* R404	C1
C010	B2	* C302	A2	* CL406	D1	Q006	A3	* R406	D1
C013	B2	* C303	A1	* CL407	D1	* Q007	A3	* R407	D1
C014	B1	* C304	B2	* CL408	D1	* Q102	B3	* R408	D1
* C015	A2	* C305	B2	* CL409	D1	* Q301	A2	* R409	D1
C016	B2	* C307	B1	* CL410	D1	* Q302	B2	* R410	D1
C017	A2	* C308	B1			* Q701	A2	* R411	D1
C018	C3	* C309	B1	* CN301	B1	* R009	A2	* R412	D1
* C019	A2	* C310	B1	* CN401	C1	R001	A2	* R601	D1
C020	B2	* C311	B1	CN702	D1	R002	B1	* R603	D2
C021	A3	* C312	A1	CN703	C2	R004	B1	* R604	A3
C022	C3	* C313	A1	* CN704	A2	R005	B1	* R605	A3
C023	A2	* C314	A1	* CN705	A1	R007	A3	* R606	A3
C024	C3	* C315	A1	CN901	C1	R008	A2	* R607	A3
C025	B3	* C317	A1			R009	A2	* R608	A3
C026	A2	* C318	B1	D001	B1	R010	A2	R702	C1
C027	A2	* C319	B1	D002	A1	R011	A2	R705	D1
C028	B3	* C320	A1	D003	B1	R012	B2	R706	C1
C029	B3	* C321	A2	D004	B1	R013	B2	R707	C1
C030	A2	* C322	A1	D005	C3	R019	B2	R710	A1
C031	A2	* C323	A2	D008	A2	R020	A3	* R711	A3
C032	A2	* C324	B2	* D101	B3	R023	B3	* R712	A2
C033	A2	* C325	A2	* D301	B2	R024	B3	R713	A1
C035	B3	* C326	B2	* D601	D1	R025	A2	R907	B1
C036	B2	* C327	A1	D702	D1	R027	B3	R908	B1
C040	A3	* C328	A2	D706	C3	R028	A2	R909	B1
C044	B3	* C329	B1			R030	A2	* RB101	B3
C046	B2	* C401	D1	F001	A1	R041	A3	* RB102	B3
C049	B1	* C402	D1	F002	A1	R048	A2	* RB103	B3
C050	B2	* C403	D1	F003	C3	R049	B2	* RB104	B3
C051	B2	* C601	A3			R050	B2	X001	A2
* C052	A3	* C602	A3	* FB101	B3	R052	B2	* X101	B3
* C101	B3	* C603	D1	* FB102	B3	R053	B2		
* C102	B2	* C604	D2	* FB103	B3	R056	B3		
* C103	B3	* C605	D1	* FB104	B3				
* C104	B3	* C607	A3	* FB105	B3	* R057	A3		
* C105	B2	* C608	D2	* FB107	B3	* R058	B3		
* C106	B2	* C609	A3	* FB301	A1	* R107	B2		
* C108	B2	* C610	A3	* FB304	B1	* R108	B3		
* C109	B2	* C611	A3	* FB307	A1	* R109	B3		
* C110	B2	* C612	A3	* FB308	A2	* R114	B2		
* C111	B2	* C613	A3	* FB309	B2	* R119	B3		
* C112	B1	* C614	A3	FB702	D1	* R121	B2		
* C113	C1	* C615	A3	FB703	D1	* R126	A3		
* C114	C1	* C617	A3			* R127	B3		
* C115	B2	* C618	A3	IC001	A2	* R128	B3		
* C116	C3	* C619	A3	* IC101	C2	* R129	C3		
* C118	C1	* C620	A3	* IC102	B3	* R136	C1		
* C119	B2	C701	B3	* IC103	B3	* R137	C1		
* C120	C3	C702	B3	* IC202	D2	* R138	C2		
* C121	C1	C703	C3	* IC301	B1	* R139	D2		
* C122	C3	C704	C1	* IC401	D1	* R140	D2		
* C123	C1	C705	C3	* IC601	A3	* R143	D2		
* C124	C3	C706	D1	* IC602	D1	* R144	D2		
* C125	C1	C901	B1	* IC603	A3	* R147	B3		
* C126	C3	* C902	C1			* R148	B3		
* C127	C3	C903	B1	L001	B2	* R149	D2		
* C128	C3	C904	B1	L002	A3	* R155	B3		
* C129	C3	C905	B1	* L003	A2	* R193	B3		
* C130	C2	C906	B1	L004	C3	* R220	D2		
* C131	C2	* C907	C1	L005	A2	* R301	A2		
* C132	D1	C908	B1	L006	B3	* R302	B2		
* C133	D2			L007	B3	* R303	A2		
* C134	D2	CL002	A2	L009	A3	* R304	B2		
* C135	C2	* CL105	C1	* L101	B3	* R305	B2		
* C136	D2	* CL106	C3	* L102	C1	* R307	B2		
* C137	D2	* CL107	C3	* L301	B2	* R308	B1		
* C138	C1	* CL108	C3	* L303	A1	* R311	B1		
* C139	C1	* CL109	C3	* L304	A2	* R313	B1		
* C140	D2	* CL110	C3	* L305	B1	* R314	B1		
* C141	C1	* CL111	C3	* L601	D2	* R315	A1		
* C142	C1	* CL112	B3	* L901	D1	* R316	B1		
* C143	C1	* CL113	B3	* L902	C1	* R317	B1		
* C144	C1	* CL301	A2			* R318	B2		
* C145	D2	* CL302	A2	LND701	D3	* R321	A2		
* C146	B2	* CL303	A2	LND702	A1	* R322	A2		
* C147	B2	* CL304	A2	LND703	A1	* R323	B2		

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..., μ PC..., μ PC...,
uPD..., μ PD...
- Abbreviation
AR : Argentine model
AUS : Australian model
BR : Brazilian model
CH : Chinese model
CND : Canadian model
EE : East European model
HK : Hong Kong model
J : Japanese model
JE : Tourist model
KR : Korea model
NE : North European model
TW : Taiwan 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.

• Language that can be selected about SY-176 board

	Area	English	French	German	Spanish	Italian	Portugal	Traditional Chinese	Simplified Chinese	Arabic	Korean	Dutch	Russian	Swedish	Thai	Persian	Danish	Finnish	Polish	Hungarian	Czech	Norwegian	Turkish	Greek	Malaysian
GP2	US CND AUS Vietnam	● ●			● ●			●	●																
GP3	AEP UK	● ● ● ● ● ●									● ● ●				● ● ● ● ● ● ● ●										
GP4	E AR BR TW JE HK CH KR MY																							●	

5-2. ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description					Ref. No.	Part No.	Description				
	A-1231-207-A	SY-176 BOARD, COMPLETE (SERVICE) (GP2)					C116	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
	A-1231-208-A	SY-176 BOARD, COMPLETE (SERVICE) (GP3)					C118	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
	A-1231-209-A	SY-176 BOARD, COMPLETE (SERVICE) (GP4)	*****	*****	*****	*****	C119	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
	(Refer to the table of page 5-1 about language of SY-176 board.)						C120	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
	(IC202 is not supplied, but this is included in SY-176 complete board.)						C121	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
	< CAPACITOR >						C122	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C001	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C125	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C002	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C127	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C003	1-164-852-11	CERAMIC CHIP	12PF	5%	50V		C128	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C004	1-164-852-11	CERAMIC CHIP	12PF	5%	50V		C129	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C005	1-165-908-11	CERAMIC CHIP	1uF	10%	10V		C130	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C006	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C131	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C007	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C132	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C008	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V		C133	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V	
C010	1-100-966-91	CERAMIC CHIP	10uF	20%	10V		C134	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C013	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V		C135	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C014	1-112-815-91	CERAMIC CHIP	10uF	20%	6.3V		C136	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C015	1-100-881-91	CERAMIC CHIP	47uF	20%	6.3V		C140	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C016	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V		C143	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C017	1-100-506-91	CERAMIC CHIP	1uF	20%	6.3V		C144	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C018	1-165-908-11	CERAMIC CHIP	1uF	10%	10V		C145	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C019	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V		C148	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V	
C020	1-164-933-11	CERAMIC CHIP	220PF	10%	50V		C149	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V	
C021	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V		C208	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C022	1-100-591-91	CERAMIC CHIP	1uF	10%	25V		C209	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C023	1-165-908-11	CERAMIC CHIP	1uF	10%	10V		C211	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C024	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V		C212	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C025	1-165-908-11	CERAMIC CHIP	1uF	10%	10V		C213	1-119-750-11	TANTAL. CHIP	22uF	20%	6.3V	
C027	1-112-815-91	CERAMIC CHIP	10uF	20%	6.3V		C302	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	
C028	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V		C303	1-137-910-11	TANTAL. CHIP	10uF	20%	16V	
C029	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C304	1-137-988-91	CERAMIC CHIP	1uF	10%	35V	
C030	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V		C305	1-100-672-11	CERAMIC CHIP	10uF	20%	16V	
C031	1-165-908-11	CERAMIC CHIP	1uF	10%	10V		C307	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C032	1-112-815-91	CERAMIC CHIP	10uF	20%	6.3V		C308	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C035	1-165-908-11	CERAMIC CHIP	1uF	10%	10V		C309	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C036	1-127-820-11	CERAMIC CHIP	4.7uF	10%	16V		C310	1-100-415-11	CERAMIC CHIP	0.47uF	10%	6.3V	
C040	1-100-966-91	CERAMIC CHIP	10uF	20%	10V		C311	1-100-415-11	CERAMIC CHIP	0.47uF	10%	6.3V	
C044	1-165-908-11	CERAMIC CHIP	1uF	10%	10V		C312	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C046	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V		C313	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C049	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C315	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V	
C050	1-164-935-11	CERAMIC CHIP	470PF	10%	50V		C317	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C051	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V		C318	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C101	1-100-786-91	TANTAL. CHIP	22uF	20%	6.3V		C319	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C103	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C320	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C104	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C321	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	
C105	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C322	1-165-897-11	TANTAL. CHIP	22uF	20%	10V	
C106	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C323	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C108	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C324	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C109	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C325	1-100-670-11	CERAMIC CHIP	4.7uF	20%	16V	
C110	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C326	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C111	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C327	1-100-539-91	TANTAL. CHIP	47uF	20%	6.3V	
C112	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C328	1-100-539-91	TANTAL. CHIP	47uF	20%	6.3V	
C113	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V		C329	1-100-539-91	TANTAL. CHIP	47uF	20%	6.3V	
C114	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C401	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C115	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C403	1-100-663-11	TANTAL. CHIP	22uF	20%	10V	
							C601	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V	

Ref. No.	Part No.	Description					Ref. No.	Part No.	Description				
C602	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V				< FERRITE BEAD >				
C603	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V			FB101	1-469-580-11	INDUCTOR, FERRITE BEAD (1005)			
C604	1-100-506-91	CERAMIC CHIP	1uF	20%	6.3V			FB102	1-469-580-11	INDUCTOR, FERRITE BEAD (1005)			
C605	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V			FB103	1-469-580-11	INDUCTOR, FERRITE BEAD (1005)			
C607	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V			FB104	1-469-580-11	INDUCTOR, FERRITE BEAD (1005)			
C608	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V			FB105	1-469-580-11	INDUCTOR, FERRITE BEAD (1005)			
C609	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V			FB107	1-469-080-11	INDUCTOR, FERRITE BEAD (1005)			
C610	1-100-506-91	CERAMIC CHIP	1uF	20%	6.3V			FB301	1-400-331-11	FERRITE, EMI (SMD) (1005)			
C611	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V			FB304	1-400-620-21	INDUCTOR, FERRITE BEAD (1005)			
C612	1-115-339-11	CERAMIC CHIP	0.1uF	10%	16V			FB307	1-400-331-11	FERRITE, EMI (SMD) (1005)			
C613	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V			FB308	1-400-331-11	FERRITE, EMI (SMD) (1005)			
C614	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V			FB309	1-400-331-11	FERRITE, EMI (SMD) (1005)			
C615	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V			FB702	1-469-581-11	INDUCTOR, FERRITE BEAD (1005)			
C617	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V			FB703	1-469-581-11	INDUCTOR, FERRITE BEAD (1005)			
C618	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V								
C619	1-100-415-11	CERAMIC CHIP	0.47uF	10%	6.3V								< IC >
C620	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V			* IC001	6-709-120-01	IC SC901571VOR2			
C702	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V			IC101	8-753-239-15	IC CXD3188AGG-T6			
C703	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V			* IC102	6-704-555-01	IC TC7PA04FU (TE85R)			
C704	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V			IC103	6-805-947-01	IC R5H30101NA01NS			
C705	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V			IC202	(Not supplied)	IC M6MGK4Z7B2ZGWG-2			
C901	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V			* IC301	6-709-616-01	IC VSP00M21ZWDR			
C902	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V			IC401	6-708-033-01	IC M63067WG-DF0T			
C903	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V			* IC601	6-708-445-01	IC R1114Q291D-TR-FA			
C904	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V			IC602	6-707-834-01	IC BH76812FVM-TR			
C905	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V			IC603	6-707-336-01	IC BH6414GLU-E2			
C906	1-125-889-11	CERAMIC CHIP	2.2uF	10%	10V								< COIL >
C907	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V			L001	1-400-588-11	INDUCTOR	10uH		
								L002	1-457-066-21	INDUCTOR	4.7uH		
								L003	1-400-676-11	INDUCTOR	22uH		
								L004	1-457-066-21	COIL, CHOKE	4.7uH		
								L005	1-456-499-11	COIL, CHOKE	4.7uH		
								L006	1-456-499-11	COIL, CHOKE	4.7uH		
								L007	1-456-499-11	COIL, CHOKE	4.7uH		
								L009	1-456-499-11	COIL, CHOKE	4.7uH		
								L101	1-400-137-11	INDUCTOR	10uH		
								L102	1-400-137-11	INDUCTOR	10uH		
								L301	1-400-678-11	INDUCTOR	100uH		
								L303	1-400-588-11	INDUCTOR	10uH		
								L304	1-400-588-11	INDUCTOR	10uH		
								L305	1-400-675-11	INDUCTOR	10uH		
								L601	1-400-137-11	INDUCTOR	10uH		
								L901	1-400-588-11	INDUCTOR	10uH		
								L902	1-400-588-11	INDUCTOR	10uH		
													< DIODE >
D001	8-719-069-29	DIODE	RB520S-30TE61										
D002	8-719-056-59	DIODE	MAZS120008SO										
D003	8-719-069-29	DIODE	RB520S-30TE61										
D004	8-719-069-29	DIODE	RB520S-30TE61										
D005	8-719-069-29	DIODE	RB520S-30TE61										
D008	8-719-069-29	DIODE	RB520S-30TE61										
D101	6-500-784-01	DIODE	MA2611100AS0										
D301	6-501-106-01	DIODE	1SS387CT (TL3SONY)										
D601	8-719-056-23	DIODE	MA2S111-(K8).SO										
D702	6-501-216-01	DIODE	CL-271HR-C-TS										
													< TRANSISTOR >
△ F001	1-523-002-21	FUSE, MICRO (1608)(1.25A/32V)						Q001	8-729-024-48	TRANSISTOR	2SK1830-TE85L		
△ F002	1-576-415-11	FUSE (2A/32V)						Q002	6-550-844-01	TRANSISTOR	FDW2508P/GNL		
△ F003	1-576-570-11	FUSE, MICRO (1608 TYPE)(0.63A/32V)						Q003	8-729-056-01	TRANSISTOR	MCH3405-TL-E		
								Q004	6-550-351-01	TRANSISTOR	CPH5812-S-TL-E		
								Q005	8-729-055-89	TRANSISTOR	MCH3306-TL-E-S		
								Q006	8-729-053-76	TRANSISTOR	CPH5802-TL-E-S		
								Q102	6-551-345-01	TRANSISTOR	SSM6L16FE (TPLR3)		
								Q301	6-550-119-01	TRANSISTOR	DTC144EMT2L		
								Q302	8-729-054-47	TRANSISTOR	UP04213008S0		
								* Q701	6-551-208-01	TRANSISTOR	RN1910AFS (TLR3SONY)		

• Refer to page 5-1 for mark △.

SY-176

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
< RESISTOR >					
R001	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R002	1-218-985-11	RES-CHIP	470K	5%	1/16W
R004	1-218-985-11	RES-CHIP	470K	5%	1/16W
R005	1-218-989-11	RES-CHIP	1M	5%	1/16W
R007	1-208-947-11	RES-CHIP	330K	5%	1/16W
R008	1-218-953-11	RES-CHIP	1K	5%	1/16W
R009	1-218-953-11	RES-CHIP	1K	5%	1/16W
R010	1-245-604-11	RES-CHIP	10M	5%	1/16W
R011	1-218-990-11	RES-CHIP	0		1/16W
R012	1-218-935-11	RES-CHIP	33	5%	1/16W
R013	1-218-949-11	RES-CHIP	470	5%	1/16W
R019	1-218-990-11	RES-CHIP	0		1/16W
R020	1-211-969-11	RES-CHIP	10	0.50%	1/10W
R023	1-218-929-11	RES-CHIP	10	5%	1/16W
R024	1-218-935-11	RES-CHIP	33	5%	1/16W
R027	1-218-977-11	RES-CHIP	100K	5%	1/16W
R028	1-218-989-11	RES-CHIP	1M	5%	1/16W
R030	1-208-935-11	RES-CHIP	100K	0.50%	1/16W
R041	1-218-929-11	RES-CHIP	10	5%	1/16W
R048	1-218-990-11	RES-CHIP	0		1/16W
R049	1-208-927-11	RES-CHIP	47K	0.50%	1/16W
R050	1-208-911-11	RES-CHIP	10K	0.50%	1/16W
R052	1-208-911-11	RES-CHIP	10K	0.50%	1/16W
R053	1-218-989-11	RES-CHIP	1M	5%	1/16W
R107	1-218-985-11	RES-CHIP	470K	5%	1/16W
R108	1-208-679-11	METAL CHIP	680	0.50%	1/16W
R114	1-218-973-11	RES-CHIP	47K	5%	1/16W
R119	1-218-990-11	RES-CHIP	0		1/16W
R126	1-218-973-11	RES-CHIP	47K	5%	1/16W
R127	1-218-973-11	RES-CHIP	47K	5%	1/16W
R129	1-218-965-11	RES-CHIP	10K	5%	1/16W
R136	1-218-953-11	RES-CHIP	1K	5%	1/16W
R137	1-218-953-11	RES-CHIP	1K	5%	1/16W
R138	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R139	1-208-935-11	RES-CHIP	100K	0.50%	1/16W
R140	1-218-990-11	RES-CHIP	0		1/16W
R143	1-218-973-11	RES-CHIP	47K	5%	1/16W
R144	1-208-943-11	METAL CHIP	220K	0.50%	1/16W
R147	1-218-965-11	RES-CHIP	10K	5%	1/16W
R148	1-218-965-11	RES-CHIP	10K	5%	1/16W
R155	1-218-953-11	RES-CHIP	1K	5%	1/16W
R193	1-218-937-11	RES-CHIP	47	5%	1/16W
R220	1-218-990-11	RES-CHIP	0		1/16W
R301	1-218-990-11	RES-CHIP	0		1/16W
R302	1-218-989-11	RES-CHIP	1M	5%	1/16W
R303	1-208-943-11	RES-CHIP	220K	0.5%	1/16W
R304	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R305	1-218-956-11	RES-CHIP	1.8K	5%	1/16W
R307	1-218-977-11	RES-CHIP	100K	5%	1/16W
R313	1-220-803-81	RES-CHIP	4.7	5%	1/16W
R314	1-208-943-11	RES-CHIP	4.7	0.5%	1/16W
R315	1-218-977-11	RES-CHIP	100K	5%	1/16W
R316	1-218-937-11	RES-CHIP	47	5%	1/16W
R317	1-220-803-81	RES-CHIP	4.7	5%	1/16W
R318	1-220-803-81	RES-CHIP	4.7	5%	1/16W
< COMPOSITION CIRCUIT BLOCK >					
< VIBRATOR >					
X001	1-781-525-21	VIBRATOR, CRYSTAL(32.768kHz)	RB101	1-234-375-21	RES, NETWORK 1K (1005X4)
* X101	1-813-403-21	QUARTZ CRYSTAL OSCILLATOR (12MHz)	RB102	1-234-378-21	RES, NETWORK 10K (1005X4)
			RB103	1-234-791-21	RES, NETWORK 150X4 (2010)
			RB104	1-234-791-21	RES, NETWORK 150X4 (2010)

• Refer to page 5-1 for mark △.

SERVICE MANUAL

Ver. 1.2 2007. 06

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

SUPPLEMENT-1

File this supplement with the service manual previously issued.
(DI07-034)

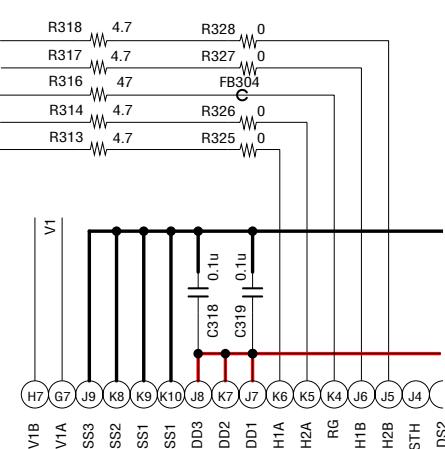
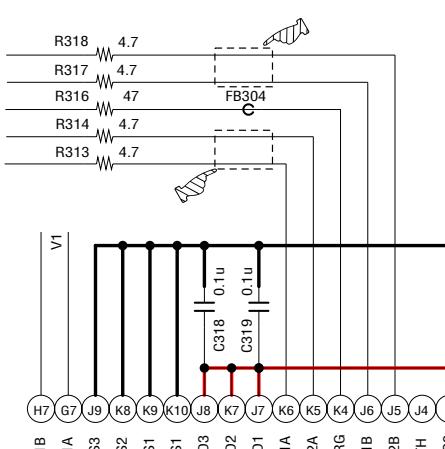
- SY-176 Board Modification (Suffix -11 to -12)
- Changed Description for IC602 and IC603

- Suffix No. of SY-176 Board has been changed from [11] to [12].

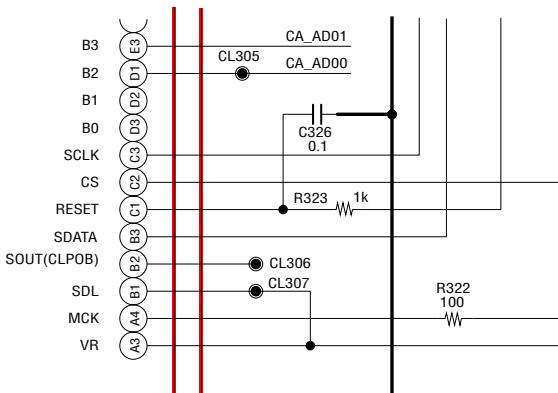
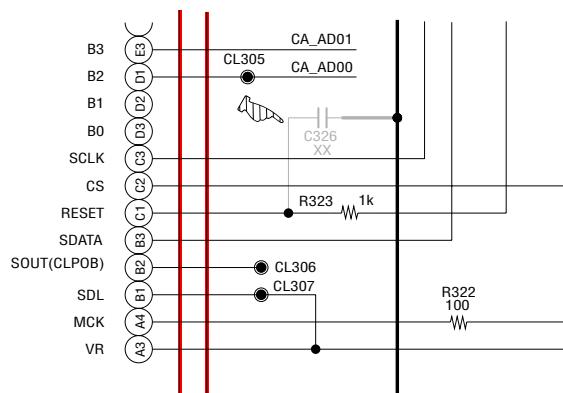
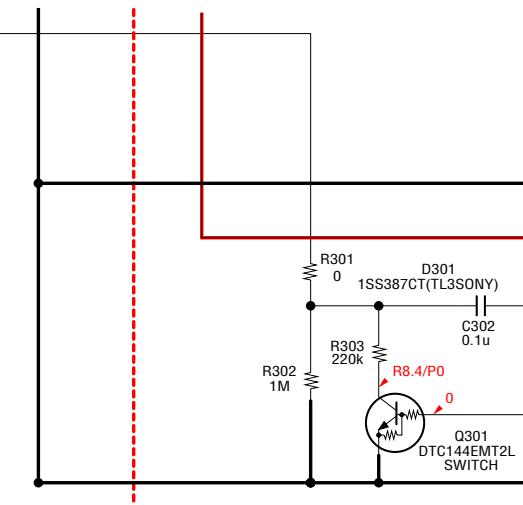
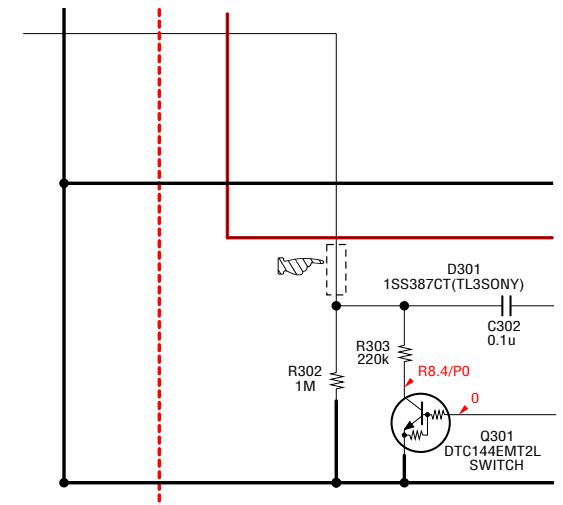
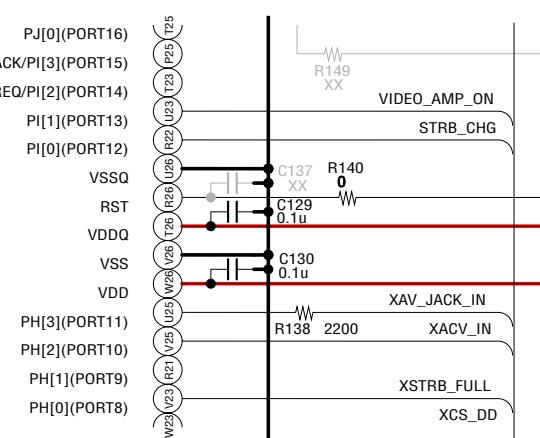
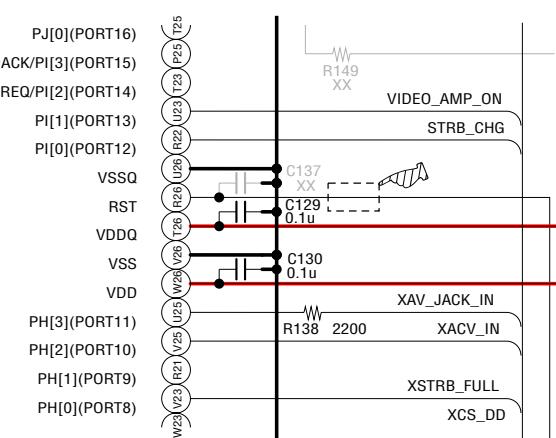
4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-2. SCHEMATIC DIAGRAMS

 : Points changed portion

Page	Suffix -11	Suffix -12
4-6	<p>SY-176 Board (1/6) Location: B-8 to C-10</p> 	<p>SY-176 Board (1/6) Location: B-8 to C-10</p> 

△ : Points changed portion

Page	Suffix -11	Suffix -12
	SY-176 Board (1/6) Location: E-12 to F-13 	SY-176 Board (1/6) Location: E-12 to F-13 
4-6	SY-176 Board (1/6) Location: G-3 to J-5 	SY-176 Board (1/6) Location: G-3 to J-5 
4-7	SY-176 Board (2/6) Location: L-17 to M-19 	SY-176 Board (2/6) Location: L-17 to M-19 

: Points changed portion

Page	Suffix -11	Suffix -12
4-7	<p>SY-176 Board (2/6) Location: Q-6 to R-8</p>	<p>SY-176 Board (2/6) Location: Q-6 to R-8</p>
4-9	<p>SY-176 Board (4/6) Location: B-10 to D-11</p>	<p>SY-176 Board (4/6) Location: B-10 to D-11</p>
4-10	<p>SY-176 Board (5/6) Location: E-10 to G-12</p>	<p>SY-176 Board (5/6) Location: E-10 to G-12</p>

☞ : Points changed portion

Page	Suffix -11	Suffix -12
4-11	SY-176 Board (6/6) Location: H-5 to J-7	SY-176 Board (6/6) Location: H-5 to J-7

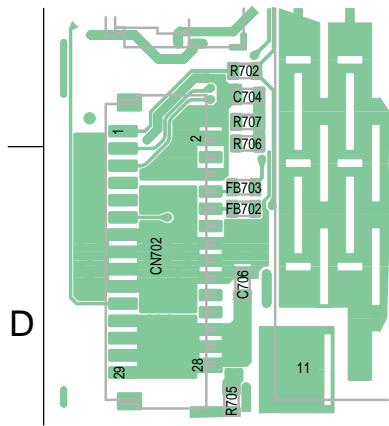
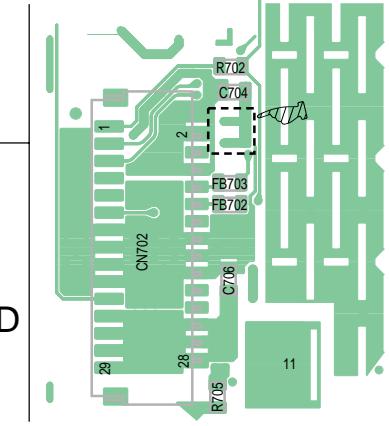
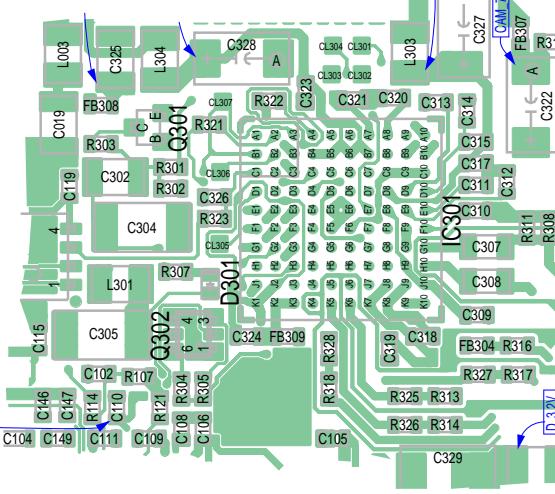
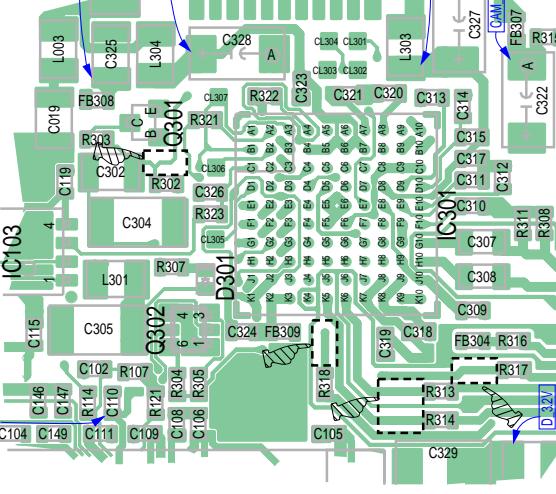
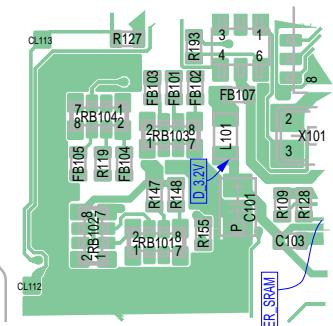
4-3. PRINTED WIRING BOARDS

☞ : Points changed portion

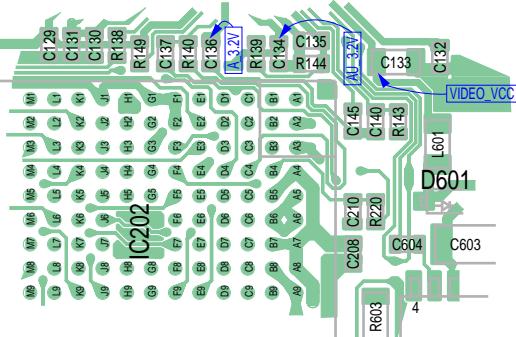
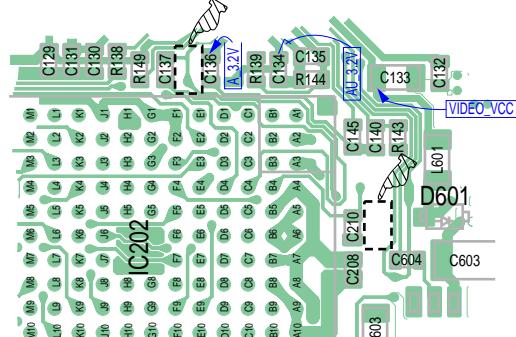
Page	Suffix -11	Suffix -12
4-18	SY-176 Board Location: Side A A-1 to B-2	SY-176 Board Location: Side A A-1 to B-2

<img alt="Printed Wiring Board Comparison between Suffix -11 and Suffix -12 for SY-176 Board. The boards are labeled A and B. A green shaded area covers most of the board. Blue arrows point to specific components: Q002, D003, and IC001 on the left side; and Q002, D003, and IC001 on the right side. Other components visible include LND704, LND703, LND702, F001, R713, R710, C023, C027, C031, C033, C038, C007, C028, C025, C006, C003, L005, R004, C005, C013, C008, C019, C020, C051, C046, R016, R013, R012, R005, C001, D001, C014, C016, R004, C003, C005, C006, C007, C008, C009, C010, C011, C012, C013, C014, C015, C016, C017, C018, C019, C020, C021, C022, C023, C024, C025, C026, C027, C028, C029, C030, C031, C032, C033, C034, C035, C036, C037, C038, C039, C040, C041, C042, C043, C044, C045, C046, C047, C048, C049, C050, C051, C052, C053, C054, C055, C056, C057, C058, C059, C060, C061, C062, C063, C064, C065, C066, C067, C068, C069, C070, C071, C072, C073, C074, C075, C076, C077, C078, C079, C080, C081, C082, C083, C084, C085, C086, C087, C088, C089, C090, C091, C092, C093, C094, C095, C096, C097, C098, C099, C0100, C0101, C0102, C0103, C0104, C0105, C0106, C0107, C0108, C0109, C0110, C0111, C0112, C0113, C0114, C0115, C0116, C0117, C0118, C0119, C0120, C0121, C0122, C0123, C0124, C0125, 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△ : Points changed portion

Page	Suffix -11	Suffix -12
4-18	SY-176 Board Location: Side A C-1 to D-1 	SY-176 Board Location: Side A C-1 to D-1 
	SY-176 Board Location: Side B A-1 to B-2 	SY-176 Board Location: Side B A-1 to B-2 
	SY-176 Board Location: Side B B-3 	SY-176 Board Location: Side B B-3 

 : Points changed portion

Page	Suffix -11	Suffix -12
4-18	SY-176 Board Location: Side B D-2 	SY-176 Board Location: Side B D-2 

5-2. ELECTRICAL PARTS LIST

Page	Suffix -11			Suffix -12		
5-8	SY-176 Board <u>Ref. No.</u> <u>Part No.</u> <u>Description</u> < CAPACITOR >			SY-176 Board <u>Ref. No.</u> <u>Part No.</u> <u>Description</u> < CAPACITOR >		
	C006	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
	C007	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
	C326	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
5-10	SY-176 Board <u>Ref. No.</u> <u>Part No.</u> <u>Description</u> < RESISTOR >			SY-176 Board <u>Ref. No.</u> <u>Part No.</u> <u>Description</u> < RESISTOR >		
	R011	1-218-990-11	RES-CHIP	0	1/16W	
	R119	1-218-990-11	RES-CHIP	0	1/16W	
	R140	1-218-990-11	RES-CHIP	0	1/16W	
	R220	1-218-990-11	RES-CHIP	0	1/16W	
	R301	1-218-990-11	RES-CHIP	0	1/16W	
	R325	1-218-990-11	RES-CHIP	0	1/16W	
	R326	1-218-990-11	RES-CHIP	0	1/16W	
	R327	1-218-990-11	RES-CHIP	0	1/16W	
	R328	1-218-990-11	RES-CHIP	0	1/16W	
	R706	1-218-990-11	RES-CHIP	0	1/16W	
	R707	1-218-990-11	RES-CHIP	0	1/16W	
	R710	1-218-953-11	RES-CHIP	1K	5%	1/16W
	R713	1-218-990-11	RES-CHIP	0	1/16W	

 : Points changed portion

Page	Before Change	After Change
5-9	SY-176 Board <u>Ref. No.</u> <u>Part No.</u> <u>Description</u> < IC > IC602 6-707-834-01 IC BH76812FVM-TR IC603 6-707-336-01 IC BH6414GLU-E2	SY-176 Board <u>Ref. No.</u> <u>Part No.</u> <u>Description</u> < IC > IC602 6-707-834-01 IC BH76812FVM-STR IC603 6-707-336-01 IC BH6414GLU-SE2

[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:

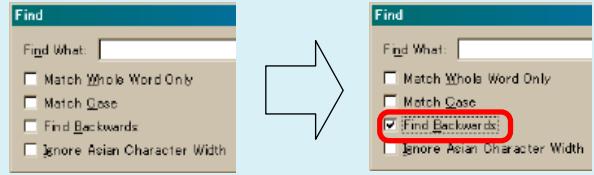
To set a range to be printed within a page, select the graphic selection tool  and drag on the page to enclose a range to be printed, and then click the Print button.

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.

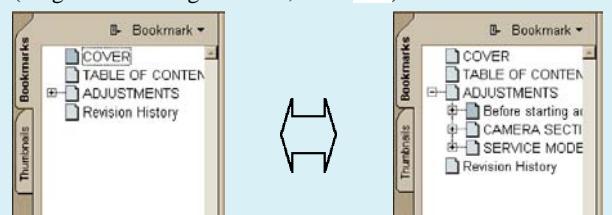
Moving with link

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	2007.01	Official Release	—	—
1.1	2007.06	Revised-1	<ul style="list-style-type: none">• Addition of Note for Schematic Diagrams. S.M Correction : Page 4-6, 4-7, 4-8, 4-9, 4-10, 4-11, 5-8, 5-9, 5-10	Yes
1.2	2007.06	Supplement-1 (DI07-034)	<ul style="list-style-type: none">• SY-176 Board Modification• Changed Description for IC602 and IC603	No