DSC-H7/H9

SERVICE MANUAL

LEVEL 3

Ver 1.1 2007.05
Revision History

Revised-1

Replace the previously issued SERVICE MANUAL 9-852-203-11 with this Manual.

Internal memory ON BOARD

Photo: DSC-H7 Black Model

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
Japanese Model

Link

- SERVICE NOTE
- PRINTED WIRING BOARDS
- SCHEMATIC DIAGRAMS
- REPAIR PARTS LIST

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

DIGITAL STILL CAMERA

SONY®

DSC-H7/H9_L3
9-852-203-12

Sony EMCS Co.

2007E0200-1

Published by Kohda TEC

Model information table

Model	DSC-H7/Silver	DSC-H7/Black	DSC-H9/Silver	DSC-H9/Black
Destination	US, CND, AEP, UK, E, AUS, HK, CH, KR, AR, J, JE	US, CND, AEP, UK, E, AUS, HK, CH, KR, J, JE	US, CND, AEP, UK, E, AUS, HK, CH, KR, JE	US, CND, AEP, UK, E, AUS, HK, CH, KR, AR, BR, JE
LCD	2.5 inch	2.5 inch	3.0 inch	3.0 inch
CK board	CK-180, CK-181	CK-180, CK-181	CK-179, CK-182	CK-179, CK-182
MS board	MS-364	MS-364	MS-366	MS-366
PL board	PL-046	PL-046	PL-047	PL-047
SW board	SW-500	SW-500	SW-499	SW-499

- Abbreviation
  AR : Argentine model
  AUS : Australian model
  BR : Brazilian model
  CH : Chinese model
  CND : Canadian model
  HK : Hong Kong model
  J : Japanese model
  JE : Tourist model
  KR : Korea model

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 IDENTIFÉS 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.

TABLE OF CONTENTS

1. SERVICE NOTE

1-4. METHOD FOR COPYING OR ERASING THE DATA IN INTERNAL MEMORY

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

Note: When replacing the SY-177 board, erase the data in internal memory of the board before 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 32 MB or larger capacity.

② Select [Copy] with ▲/▼/◄/► on the control button, then press ●.
The message "All data in internal memory will be copied" appears.

③ Select [OK] with ▲, then press ●.
Copying starts.

To cancel the copying

Select [Cancel] in step 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].
- 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 DPOF (Print order) mark is not copied.

Method for Formatting the Internal Memory

This item does not appear when a "Memory Stick Duo" is inserted in the camera.

Format

Formats the internal memory.

- Note that formatting irrevocably erases all data in the internal memory, including even protected images.

① Select [Format] with ▲/▼/◄/► on the control button, then press ●.
The message "All data in internal memory will be erased" appears.

② Select [OK] with ▲, then press ●.
The format is completed.

To cancel the formatting

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

4-2. SCHEMATIC DIAGRAMS

Link

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. pF : µµF. 50 V or less are not indicated except for electrolytics and tantalums.
- Chip resistors are 1/10 W unless otherwise noted. kΩ=1000 Ω, MΩ=1000 kΩ.
- 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 22U TA A / L452 10UH 2520

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

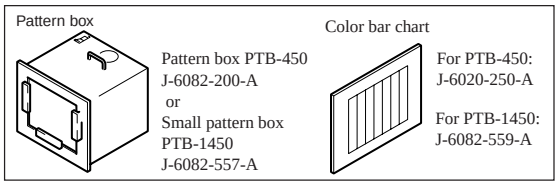
(Measuring conditions voltage and waveform)

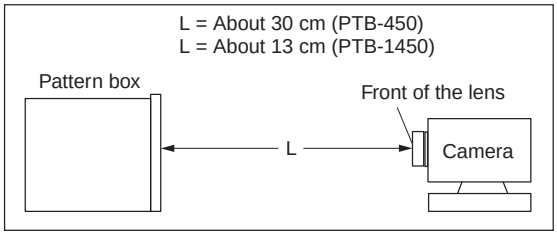
- Voltages are measured between the measurement points and ground when camera shoots color bar chart of pattern box. They are reference values and reference waveforms.
  (VOM of DC 10 MΩ input impedance is used)
- Voltage values change depending upon input impedance of VOM used.)

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.

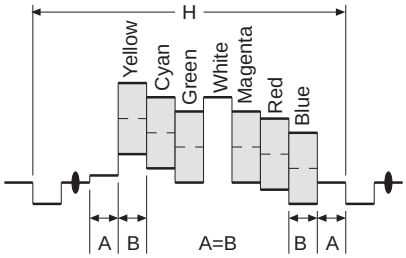


Fig. a (Video output terminal output waveform)

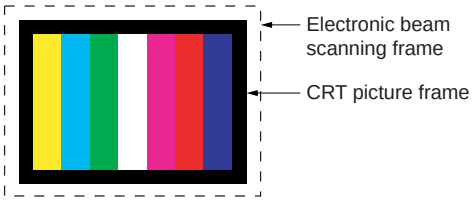


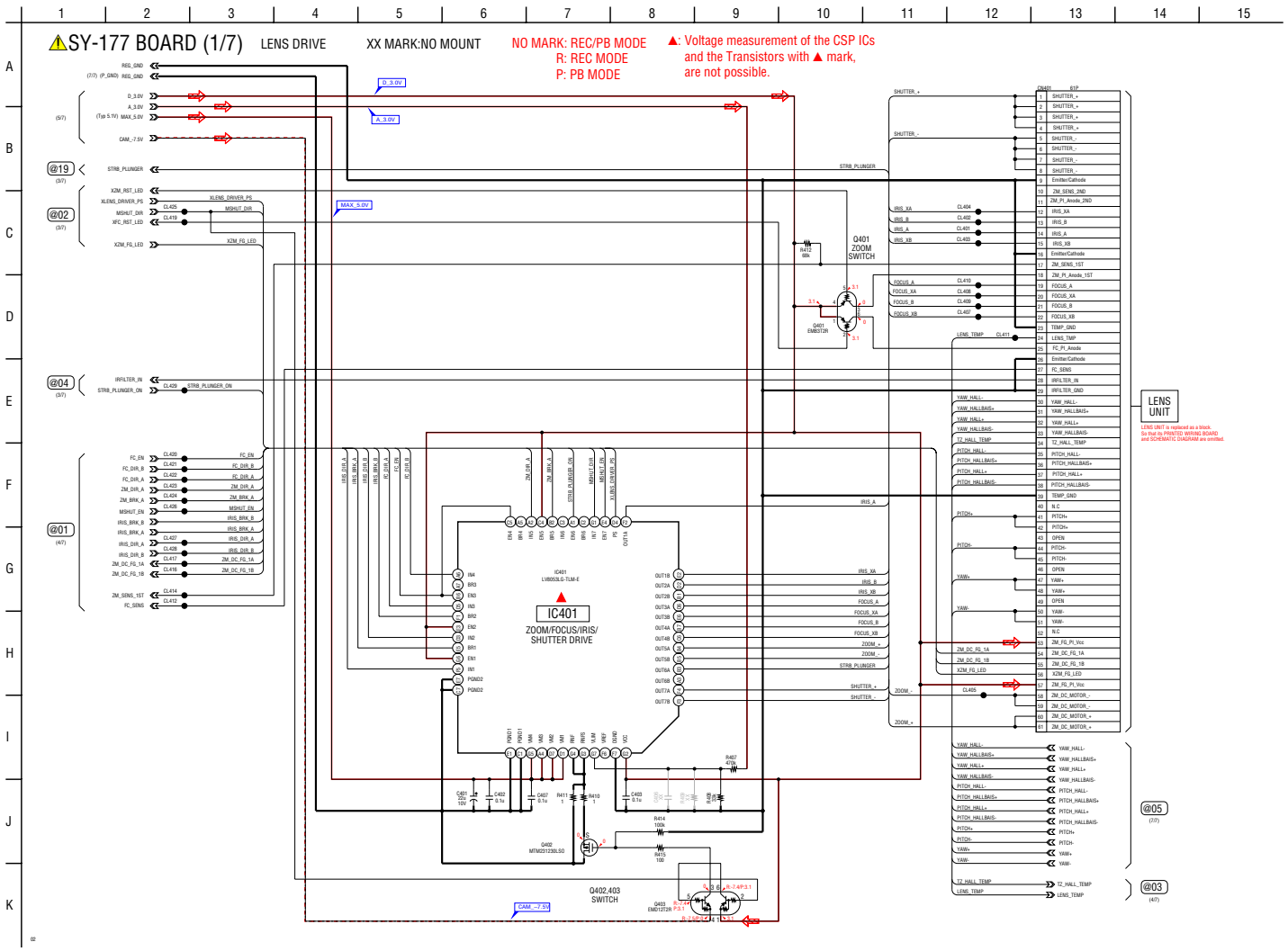
Fig.b (Picture on monitor TV)

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

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

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

• Refer to page 4-2 for mark ⚠.



• Refer to page 4-2 for mark ⚠.

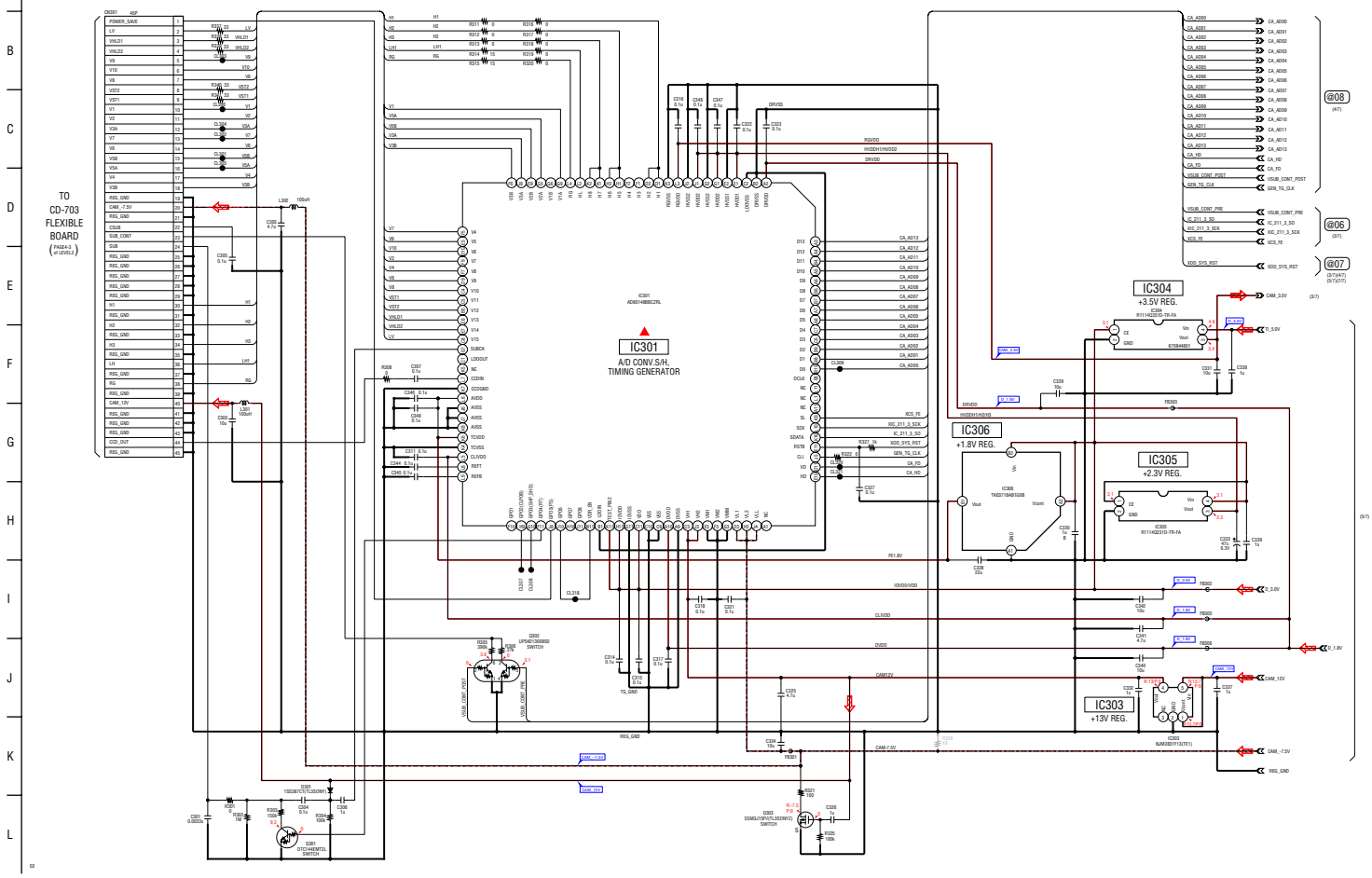
⚠SY-177 BOARD (2/7)

CAMERA A/D CONV.
TIMING GENERATOR DRIVE

XX MARK:NO MOUNT

NO MARK: REC/PB MODE
R: REC MODE
P: PB MODE

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



• Refer to page 4-2 for mark ⚠.

⚠SY-177 BOARD (3/7)

CAMERA DSP/SYSTEM CONTROL (1)

XX MARK:NO MOUNT

NO MARK: REC/PB MODE
R: REC MODE
P: PB MODE

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

Note: IC211 is not supplied, but this is included in SY-177 complete board.

IC211 (1/5) CAMERA DSP/SYSTEM CONTROL

IC201 BATT-SIG I/F

IC211 (2/5) CAMERA DSP/ SYSTEM CONTROL

TO SW-504 FLEXIBLE BOARD (FAGE4-15 (↵LEVEL2))

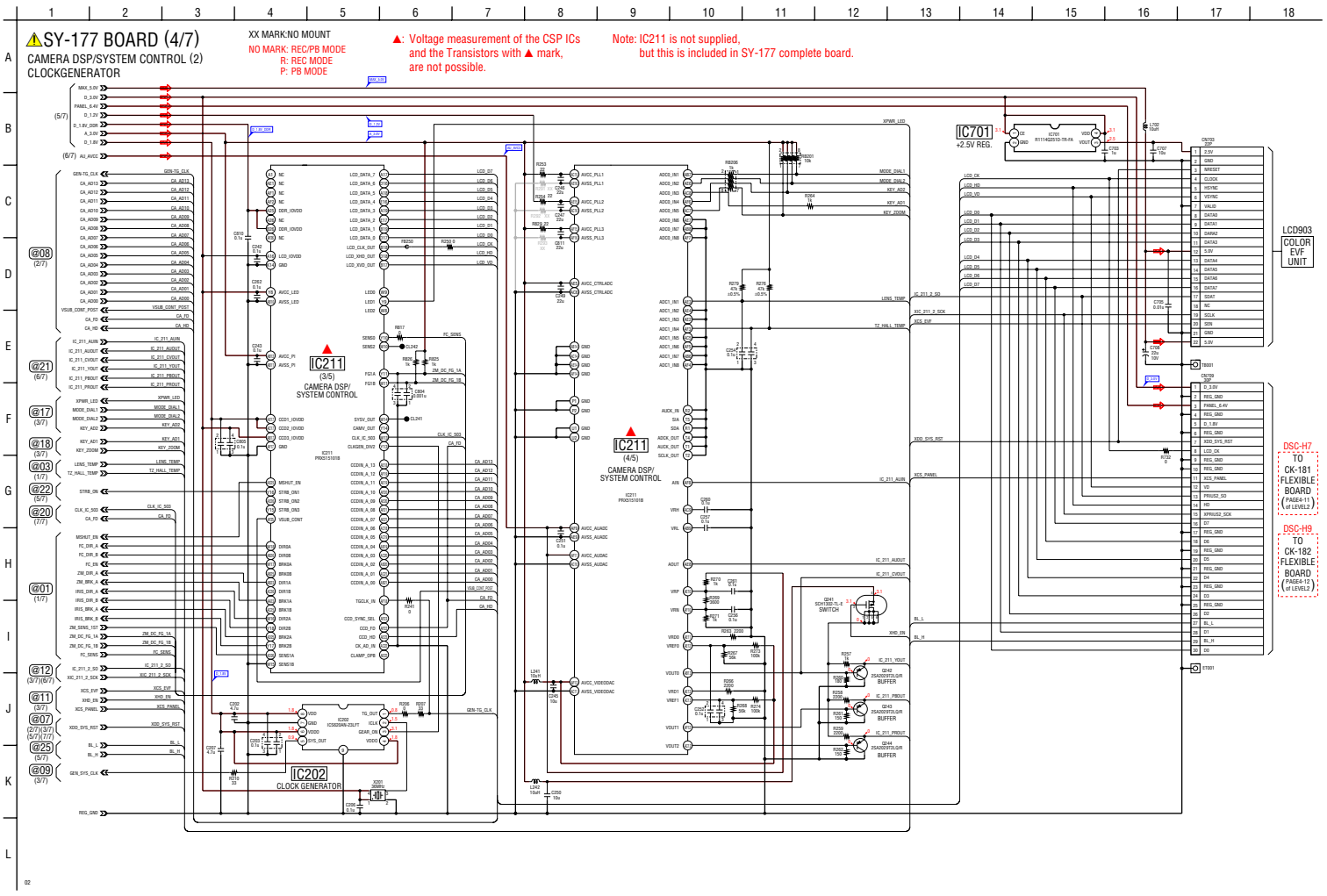
TO PW-134 FLEXIBLE BOARD (FAGE4-15 (↵LEVEL2))

TO MS-365 FLEXIBLE BOARD (FAGE4-15 (↵LEVEL2))

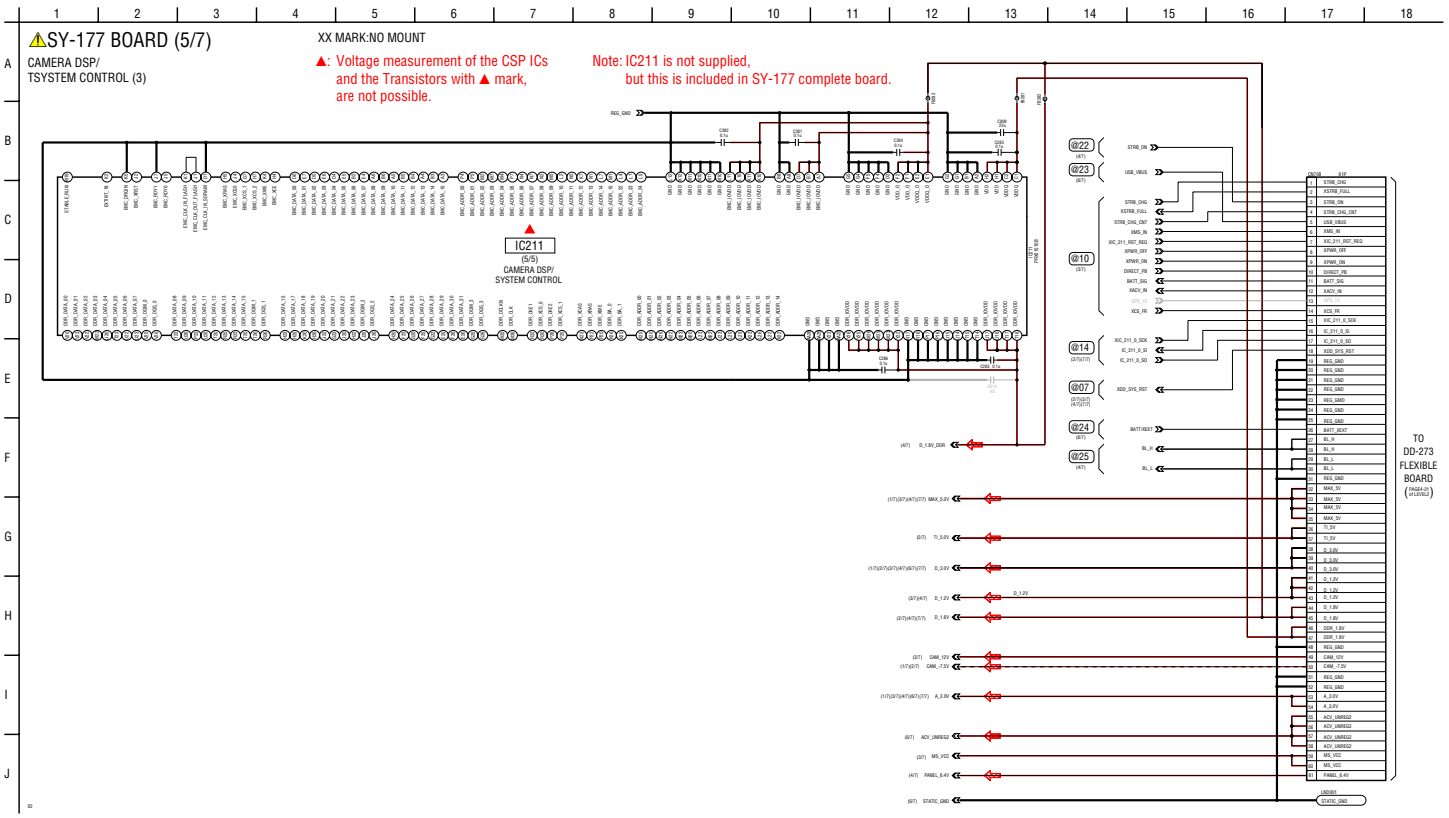
TO FLEXIBLE FLAT CABLE (PL-002) (FAGE4-15 (↵LEVEL2))

Note: It is connected to CN201 of PL-046 (DSC-H7) or PL-047 (DSC-H9) (Page 4-16 of LEVEL2) through the flexible flat cable (PL-002).

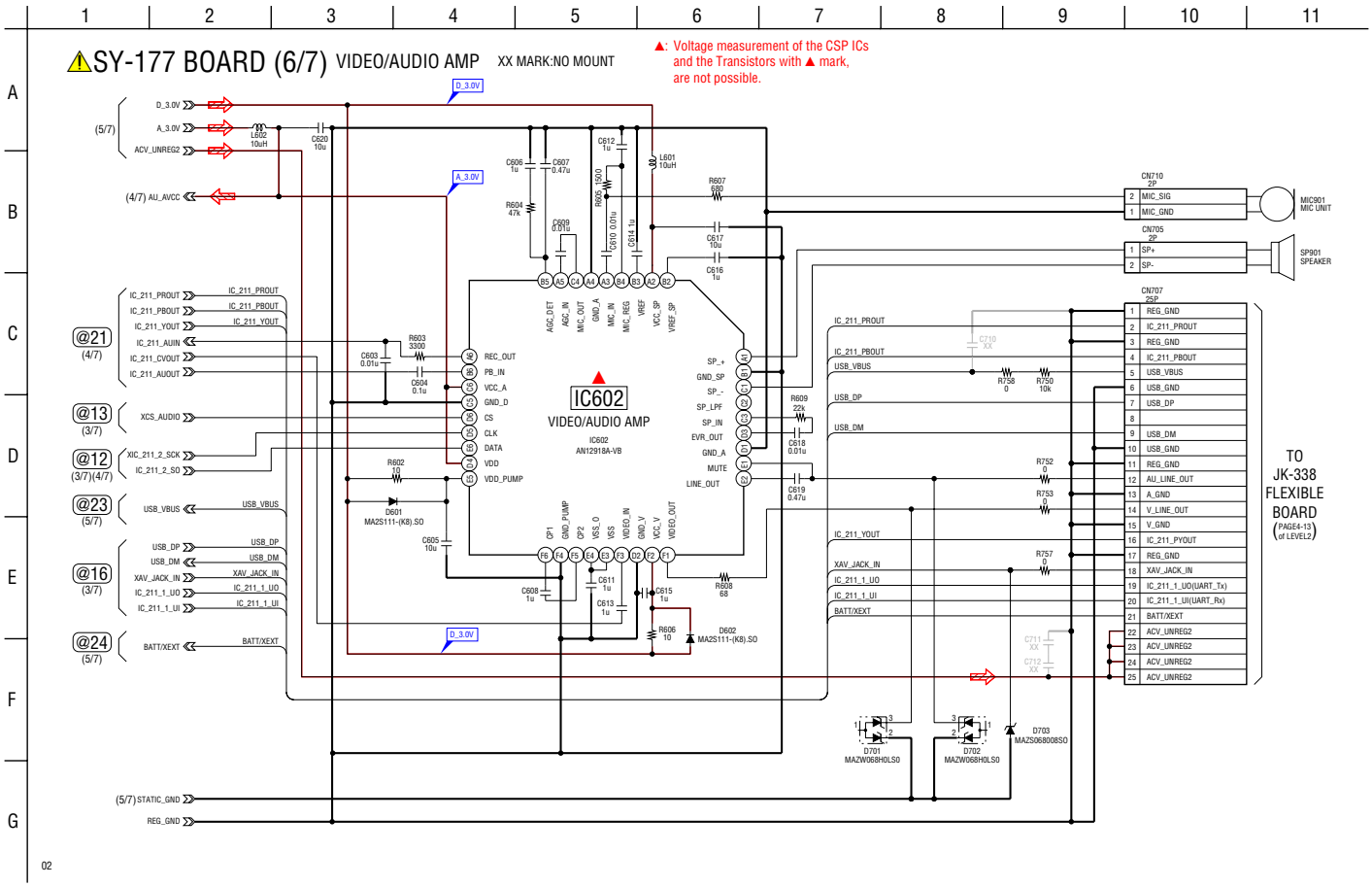
• Refer to page 4-2 for mark ⚠.



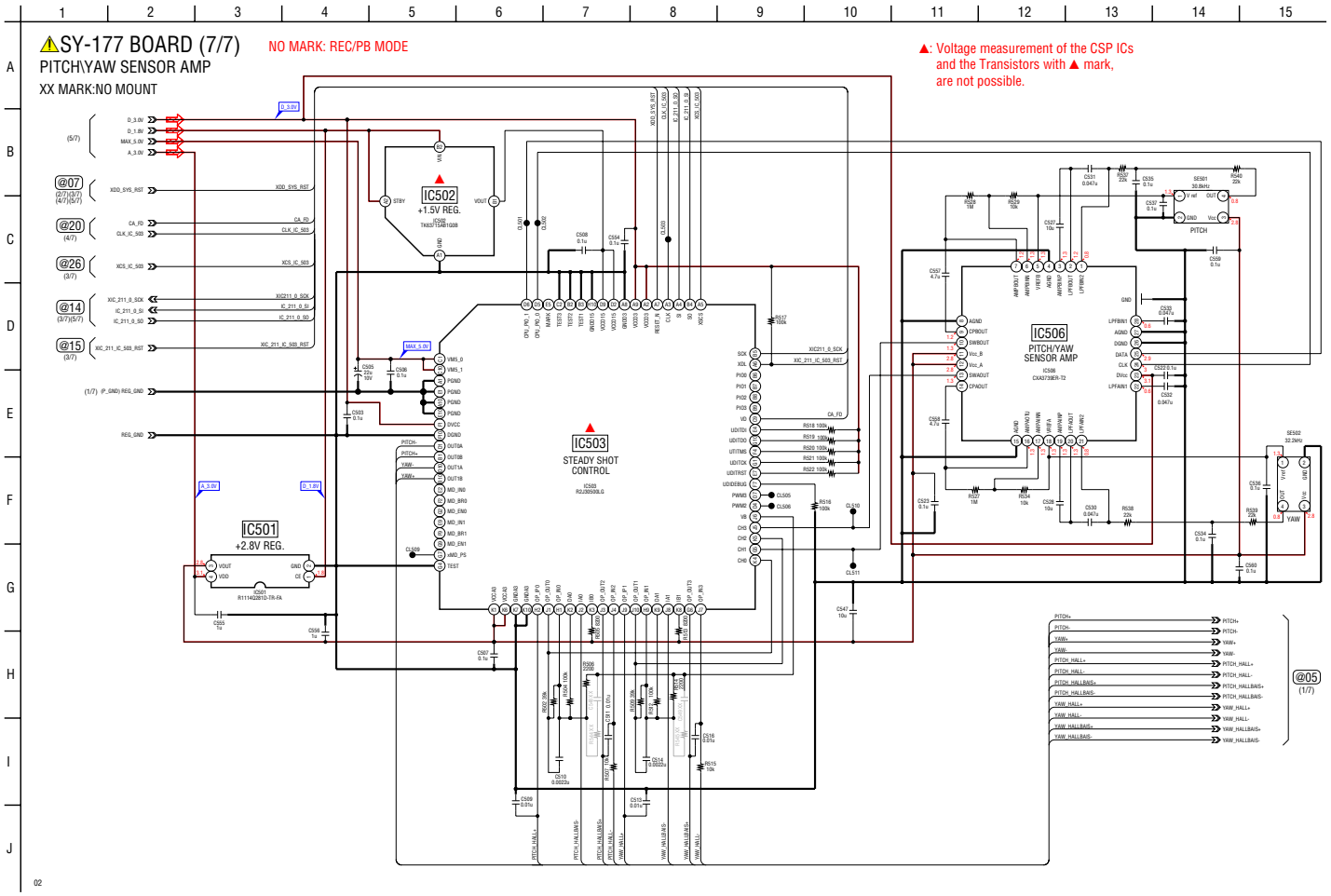
• Refer to page 4-2 for mark ⚠.



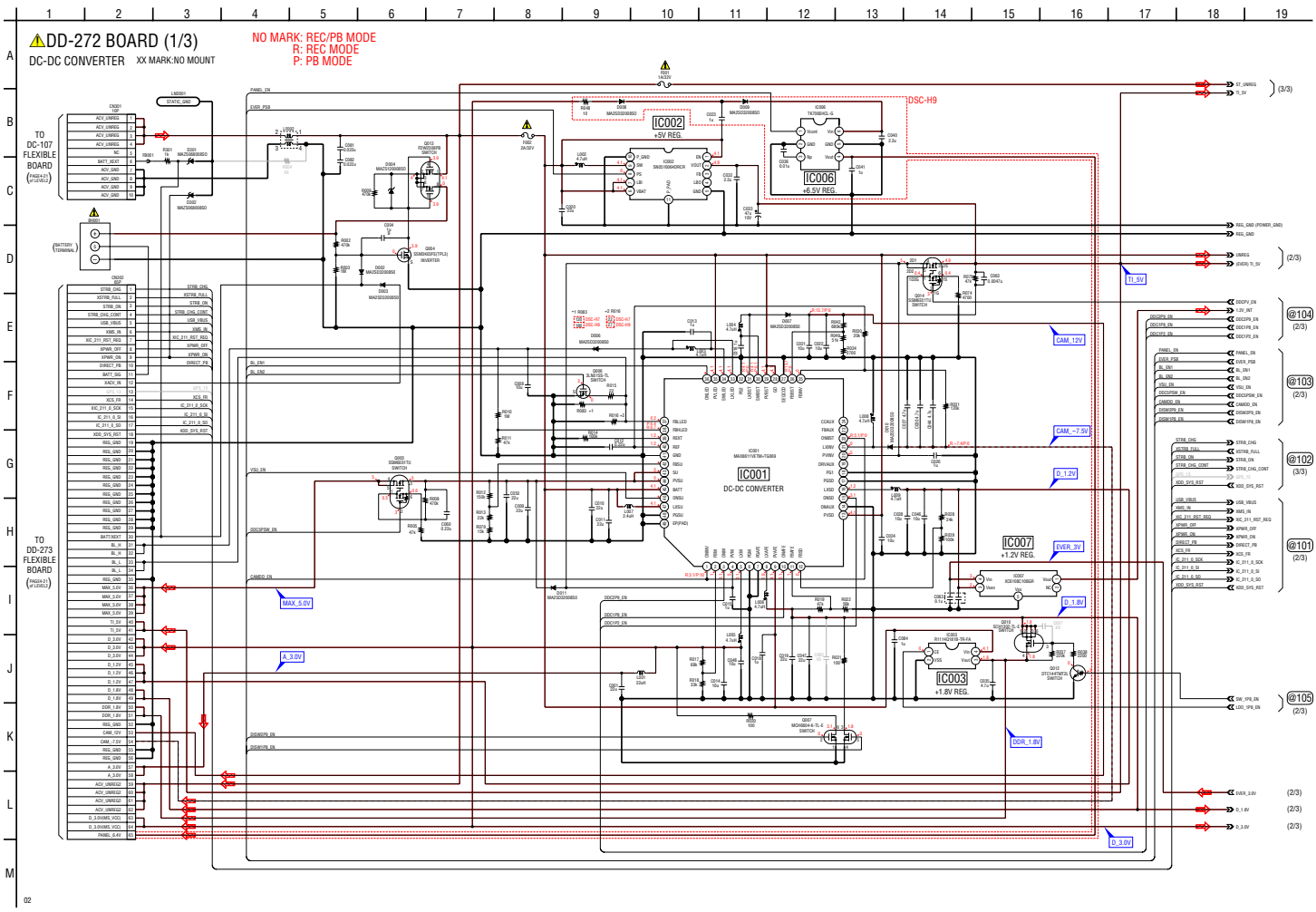
• Refer to page 4-2 for mark ⚠.



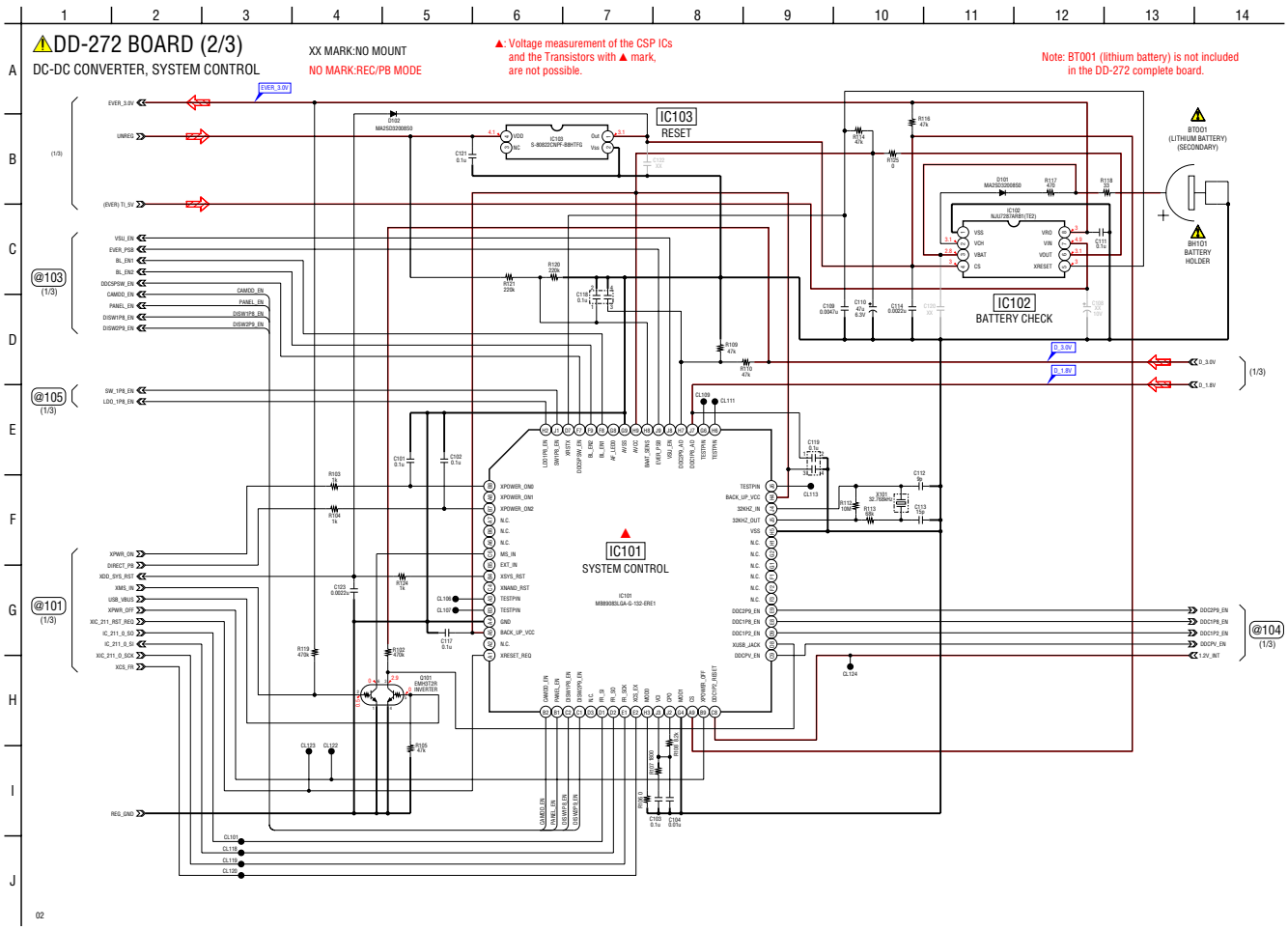
• Refer to page 4-2 for mark ⚠.



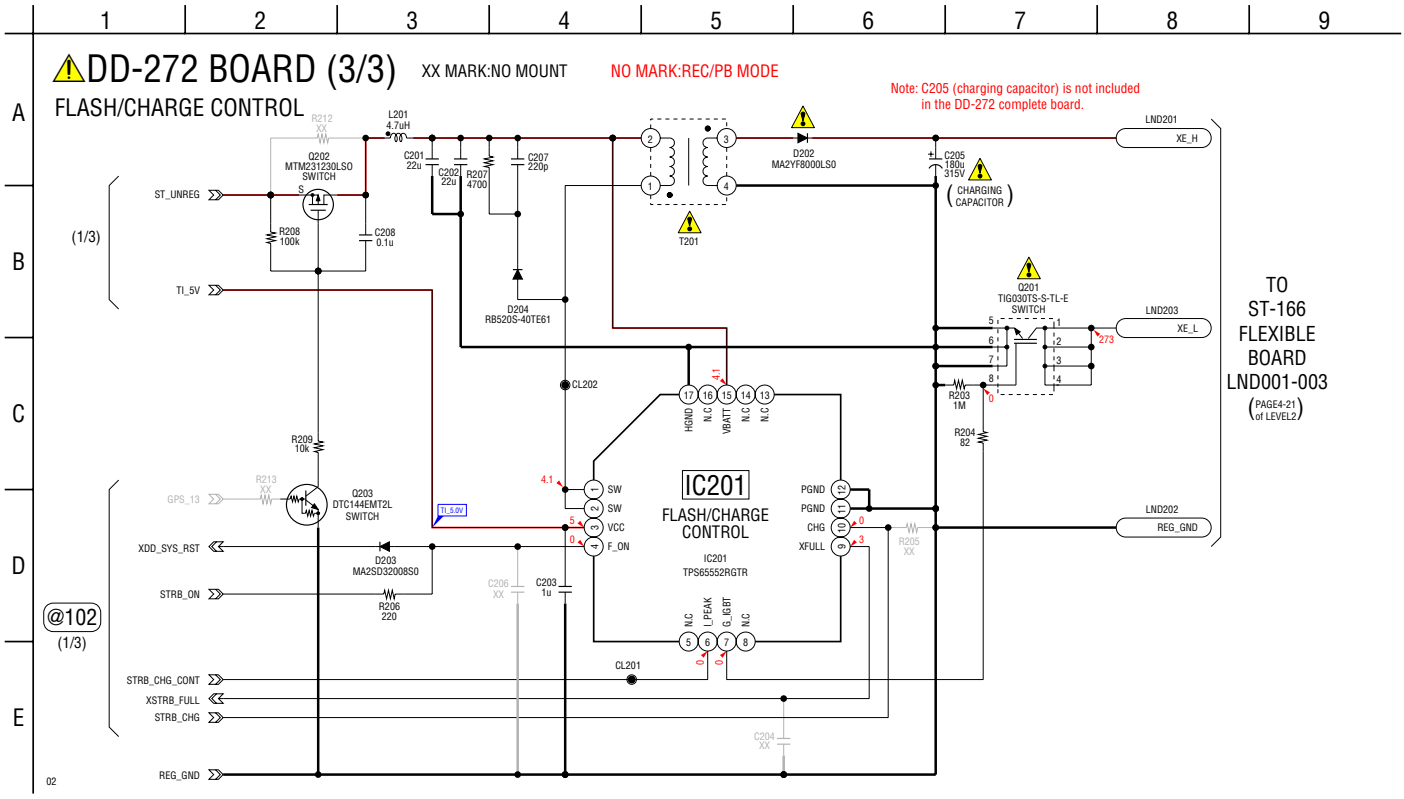
• Refer to page 4-2 for mark ⚠.



• Refer to page 4-2 for mark ⚠.



• Refer to page 4-2 for mark ⚠.



4-3. PRINTED WIRING BOARDS

Link

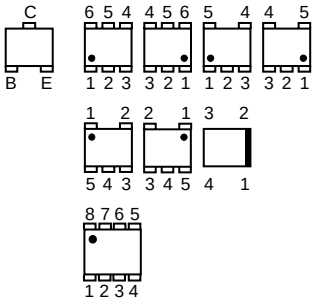
- SY-177 BOARD
- DD-272 BOARD
- COMMON NOTE FOR PRINTED WIRING BOARDS
- MOUNTED PARTS LOCATION

4-3. PRINTED WIRING BOARDS

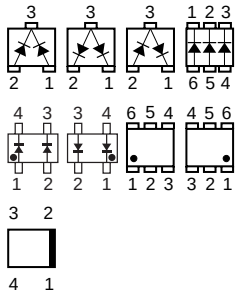
THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS

- : 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



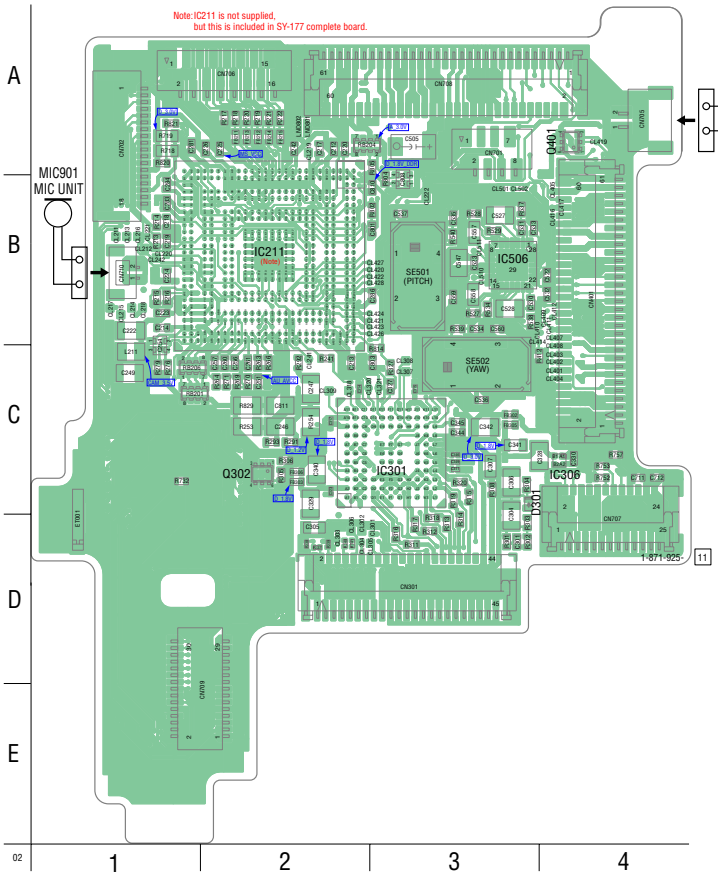
Diode



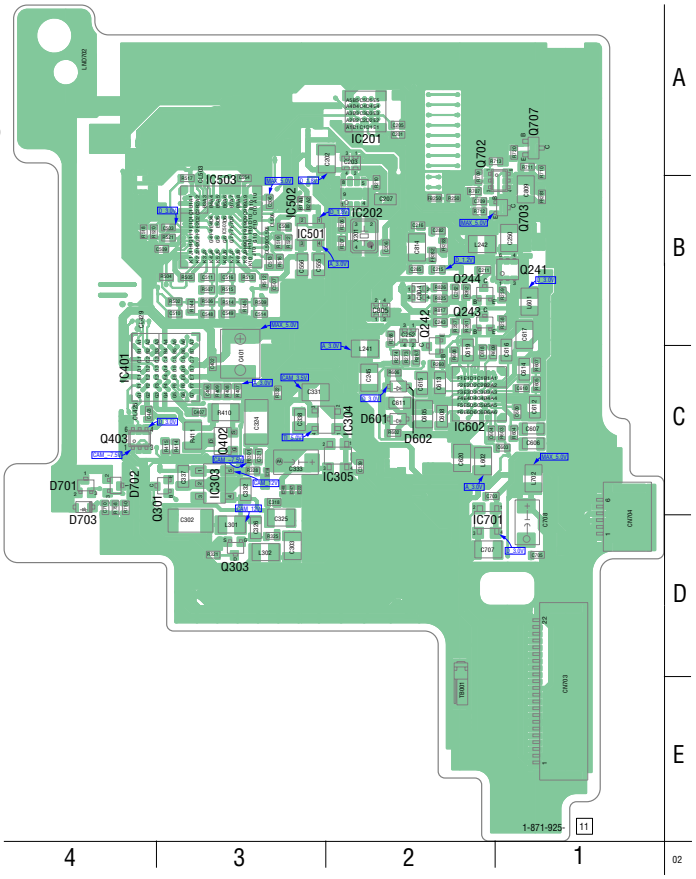
SY-177 (8 layers)

: Uses unleaded solder.

SY-177 BOARD (SIDE A)



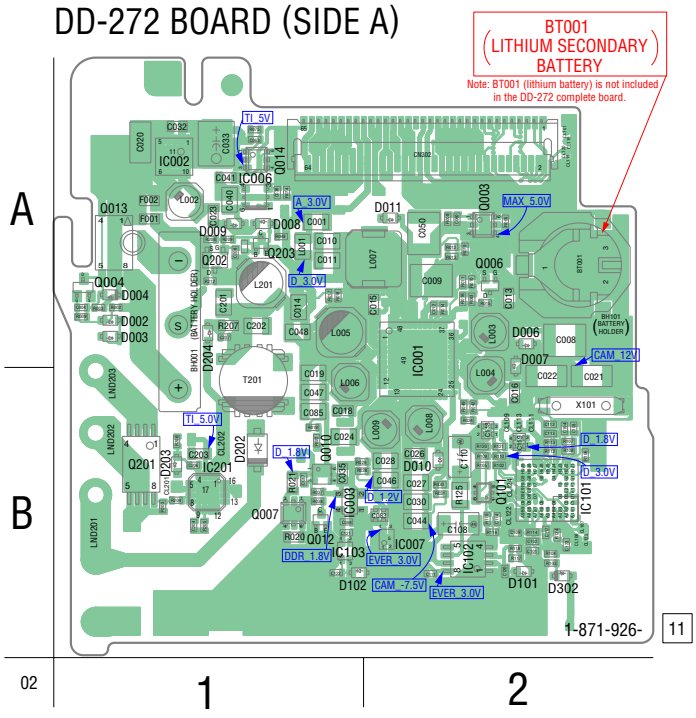
SY-177 BOARD (SIDE B)



DD-272 (6 layers)

: Uses unleaded solder.

DD-272 BOARD (SIDE A)



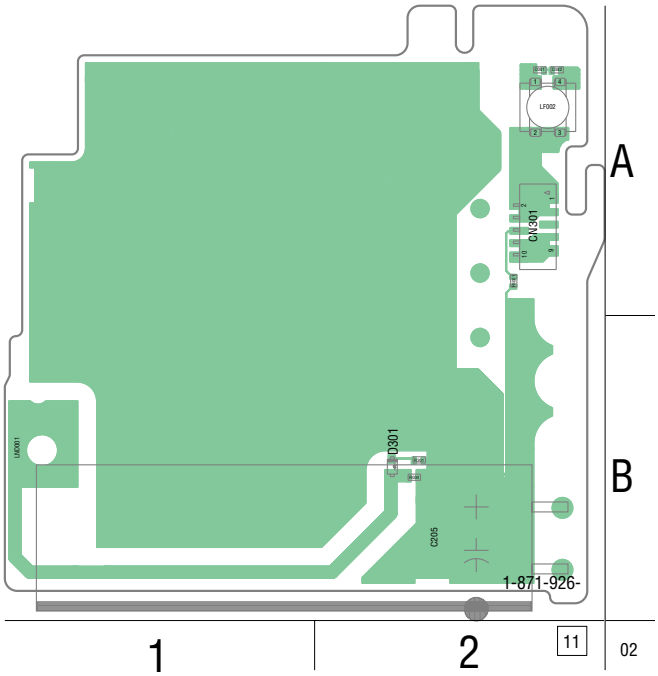
Note: Replace the battery holder (BH101) together when replacing the lithium battery (BT001) on the DD-272 board. (The battery holder removed once cannot be used again.)
When mounting these parts, mount new battery holder first and attach new lithium battery next.

Note: DD-272基板のリチウム電池(BT001)を交換する場合はバッテリホルダ(BH101)も同時に新品に交換して下さい。(一度使用したバッテリホルダは再使用できません。)
部品取付けの際は、先にバッテリホルダを取付けてからリチウム電池を装着して下さい。

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

注意
電池の交換は、正しく行わないと破裂する恐れがあります。電池を交換する場合には必ず同じ型名の電池又は同等品と交換してください。

DD-272 BOARD (SIDE B)



Note: C205 (charging capacitor) is not included in the DD-272 complete board.

4-4. MOUNTED PARTS LOCATION

no mark : side A
* mark : side B

DD-272 BOARD

BH001	A-1	F001	A-1	R114	B-2		
BH101	A-2	F002	A-1	R116	B-2		
BT001	A-2			R117	B-2		
		* FB001	B-1	R118	B-2		
C001	A-1			R119	B-2		
C004	A-1	IC001	A-2	R120	B-2		
C008	A-2	IC002	A-1	R121	B-2		
C009	A-2	IC003	B-1	R124	B-2		
C010	A-1	IC006	A-1	R125	B-2		
C011	A-1	IC007	B-2	R203	B-1		
C012	A-2	IC101	B-2	R204	B-1		
C013	A-2	IC102	B-2	R206	B-1		
C014	A-1	IC103	B-1	R207	A-1		
C015	A-2	IC201	B-1	R208	A-1		
C016	B-2			R209	A-1		
C018	B-1	L001	A-1	* R301	A-1		
C019	B-1	L002	A-1				
C020	A-1	L003	A-2	T201	B-1		
C021	B-2	L004	B-2				
C022	B-2	L005	A-1	X101	B-2		
C023	A-1	L006	B-1				
C024	B-1	L007	A-2				
C026	B-2	L008	B-2				
C027	B-2	L009	B-2				
C028	B-2	L201	A-1				
C030	B-2						
C032	A-1	* LF002	B-1				
C033	A-1						
C035	B-1	Q003	A-2				
C036	A-1	Q004	A-1				
C040	A-1	Q006	A-2				
C041	A-1	Q007	B-1				
C044	B-2	Q010	B-1				
C046	B-2	Q012	B-1				
C047	B-1	Q013	A-1				
C048	A-1	Q014	A-1				
C050	A-2	Q101	B-2				
C060	A-2	Q201	B-1				
C063	A-1	Q202	A-1				
* C081	B-1	Q203	A-1				
* C082	B-1						
C083	B-2	R002	A-1				
C084	B-1	R003	A-1				
C101	B-2	R005	A-2				
C102	B-2	R008	A-2				
C103	B-2	R009	A-1				
C104	B-2	R010	A-2				
C109	B-2	R011	A-2				
C110	B-2	R012	A-2				
C111	B-2	R013	A-2				
C112	B-2	R014	A-2				
C113	B-2	R015	A-2				
C114	B-2	R016	A-2				
C117	B-2	R017	A-1				
C118	B-2	R018	A-1				
C119	B-2	R019	B-1				
C121	B-1	R020	B-1				
C123	B-2	R021	B-1				
C201	A-1	R022	B-1				
C202	A-1	R024	B-2				
C203	B-1	R028	B-1				
* C205	A-1	R029	B-1				
C207	A-1	R030	B-2				
C208	A-1	R031	B-2				
		R037	B-1				
* CN301	B-1	R038	B-1				
CN302	A-2	R042	B-2				
		R048	A-1				
D002	A-1	R049	B-2				
D003	A-1	R074	A-1				
D004	A-1	R075	A-1				
D006	A-2	R079	A-2				
D007	A-2	R083	A-2				
D008	A-1	R102	B-2				
D009	A-1	R103	B-2				
D010	B-2	R104	B-2				
D011	A-2	R105	B-2				
D101	B-2	R106	B-2				
D102	B-1	R107	B-2				
D202	B-1	R108	B-2				
D203	B-1	R109	B-2				
D204	A-1	R110	B-2				
* D301	A-1	R112	B-2				
D302	B-2	R113	B-2				

SY-177 BOARD

* C201	A-2	C505	A-3	FB212	A-2		
* C202	A-2	* C506	B-3	FB213	A-2		
* C203	A-2	* C507	B-3	FB214	A-2		
* C205	A-2	* C508	B-3	FB215	A-2		
* C206	B-2	* C509	B-3	* FB250	B-2		
* C207	B-2	* C510	B-3	* FB281	B-1		
* C211	B-2	* C511	B-3	* FB282	B-2		
C212	A-2	* C513	B-3	* FB283	B-2		
C213	C-2	* C514	B-3	* FB301	C-3		
C214	B-1	* C516	B-3	FB302	C-3		
* C215	B-2	C522	B-4	FB303	C-2		
* C216	B-2	C523	B-3	FB305	C-3		
C217	A-2	C527	B-3	FB306	C-2		
C218	B-1	C528	B-3				
C219	B-1	C530	B-3	* IC201	A-2		
C220	A-2	C531	B-3	* IC202	B-2		
C222	B-1	C532	B-4	IC211	B-2		
C223	B-1	C533	B-3	IC301	C-3		
C224	B-1	C534	B-3	* IC303	C-3		
C225	A-2	C535	B-3	* IC304	C-2		
C242	A-2	C536	C-3	* IC305	C-2		
* C243	B-2	C537	B-3	IC306	C-4		
* C245	C-2	C547	B-3	* IC401	C-4		
C246	C-2	* C554	B-3	* IC501	B-3		
C247	C-2	* C555	B-3	* IC502	B-3		
C249	C-1	* C556	B-3	* IC503	B-3		
* C250	B-1	C557	B-3	IC506	B-3		
C251	C-2	C558	B-3	* IC602	C-2		
* C252	B-2	C559	B-3	* IC701	D-2		
C254	C-1	C560	B-3				
C256	C-2	* C603	C-1	L211	C-1		
C257	C-2	* C604	C-2	* L241	C-2		
C260	C-2	* C605	C-2	* L242	B-2		
C261	C-2	* C606	C-1	* L301	D-3		
* C262	B-2	* C607	C-1	* L302	D-3		
C281	A-1	* C608	C-2	* L601	B-1		
* C282	B-2	* C609	C-1	* L602	C-2		
C283	B-1	* C610	C-1	* L702	C-1		
C284	B-1	* C611	C-2				
* C285	B-2	* C612	C-1	* Q241	B-1		
C286	B-3	* C613	C-2	* Q242	C-2		
C301	D-3	* C614	C-1	* Q243	B-2		
* C302	D-3	* C615	C-2	* Q244	B-2		
* C303	D-3	* C616	C-1	* Q301	C-3		
C304	C-3	* C617	B-1	Q302	C-2		
C305	D-2	* C618	C-2	* Q303	D-3		
C306	C-3	* C619	C-2	Q401	A-4		
C307	C-3	* C620	C-2	* Q402	C-3		
C311	C-3	* C703	C-2	* Q403	C-4		
C314	C-2	* C705	D-1	* Q702	B-1		
C315	C-3	* C707	D-2	* Q703	B-1		
* C316	C-3	* C708	D-1	* Q707	A-1		
C317	C-2	* C709	B-2				
* C318	C-3	C803	C-3	* R206	B-2		
* C321	C-3	* C804	B-2	* R207	B-2		
* C322	C-3	* C805	B-2	* R210	B-2		
C323	C-2	C808	B-3	R213	B-1		
* C324	C-3	* C809	B-1	R214	B-1		
* C325	D-3	C810	B-3	R215	B-1		
* C326	D-3	C811	C-2	R216	B-1		
C327	C-3			R217	A-2		
C328	C-4	CN301	D-3	R218	A-2		
C329	C-2	CN401	B-4	R219	A-2		
C330	C-4	CN701	A-3	R220	A-2		
* C331	C-3	CN702	A-1	R221	A-2		
* C332	C-3	* CN703	D-1	R222	A-2		
* C333	C-3	* CN704	D-1	R241	C-2		
* C337	C-3	CN705	A-4	* R250	B-2		
* C338	C-3	CN706	A-2	R253	C-2		
* C339	C-2	CN707	D-4	R254	C-2		
C340	C-2	CN708	A-3	* R257	B-2		
C341	C-3	CN709	E-2	* R258	B-1		
C342	C-3	CN710	B-1	* R259	B-1		
C344	C-3			* R260	C-2		
C345	C-3	D301	C-3	* R261	B-2		
C346	C-3	* D601	C-2	* R262	B-2		
* C347	C-3	* D602	C-2	R263	C-2		
* C348	C-3	* D701	C-4	R264	C-2		
C349	C-3	* D702	C-4	R266	C-2		
* C401	C-3	D703	D-4	* R267	C-2		
* C402	C-3			* R268	B-2		
* C403	C-4	ET001	D-1	R269	C-2		
* C407	C-3			R270	C-2		
* C503	B-3	FB211	A-2	R271	C-2		

SY-177 BOARD

no mark : side A
* mark : side B

* R273	C-2	
* R274	C-2	
R276	C-1	
R279	C-1	
R301	D-3	
R302	D-3	
R303	D-3	
R304	C-3	
R305	C-2	
R306	C-2	
R308	C-3	
R311	D-3	
R312	D-3	
R313	D-3	
R314	D-3	
R315	C-3	
R316	D-3	
R317	D-3	
R318	D-3	
R319	C-3	
R320	C-3	
* R321	D-3	
* R322	C-3	
* R325	D-3	
R327	C-3	
R337	D-2	
R338	D-2	
R339	D-2	
R340	D-2	
R341	D-2	
* R407	C-3	
* R408	C-3	
* R410	C-3	
* R411	C-3	
R412	C-4	
* R414	C-3	
* R415	C-3	
* R502	B-3	
* R504	B-3	
* R505	B-3	
* R506	B-3	
* R507	B-3	
* R509	B-3	
* R512	B-3	
* R513	B-3	
* R514	B-3	
* R515	B-3	
* R516	B-3	
* R517	B-3	
* R518	B-4	
* R519	B-3	
* R520	B-4	
* R521	B-3	
* R522	B-3	
R527	B-3	
R528	B-3	
R529	B-3	
R534	B-3	
R537	B-3	
R538	B-3	
R539	B-3	
R540	B-3	
* R602	C-2	
* R603	C-1	
* R604	C-1	
* R605	C-1	
* R606	C-2	
* R607	C-1	
* R608	C-2	
* R609	C-2	
* R707	B-2	
* R709	B-2	
* R710	A-1	
* R711	A-1	
* R712	B-2	
* R713	A-1	
R718	A-1	
R719	A-1	
* R720	A-1	
R732	C-1	
* R750	C-4	
R752	C-4	
R753	C-4	
R757	C-4	
* R758	C-4	
R802	B-3	
R804	B-3	
R805	A-3	
R814	C-3	
* R817	B-2	
R821	A-1	
* R825	B-2	
* R826	B-2	
R829	C-2	
RB-201	C-1	
RB-204	A-2	
RB-206	C-1	
SE501	B-3	
SE502	C-3	
* TB001	E-2	
* X201	B-2	

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: µF
- COILS
  uH: µH
- 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...: µA... , uPA... , µPA... ,
  uPB... , µPB... , µPC... , µPC... ,
  uPD..., µPD...
- Abbreviation
  AR : Argentine model
  AUS : Australian model
  BR : Brazilian model
  CH : Chinese model
  CND : Canadian model
  HK : Hong Kong model
  J : Japanese model
  JE : Tourist model
  KR : Korea model

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

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

Les composants identifiés par une marque ⚠ 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
⚠	A-1251-444-A	DD-272 BOARD, COMPLETE (H7)
⚠	A-1251-454-A	DD-272 BOARD, COMPLETE (H9)
		**********

(BT001 (lithium battery) and C205 are not included in DD-272 complete board.)

< BATTERY TERMINAL BOARD >

⚠	BH001	1-780-061-21	BATTERY TERMINAL BOARD

< BATTERY HOLDER >

⚠	BH101	1-756-615-31	HOLDER, BATTERY (Note)

< BATTERY >

⚠	BT001	1-756-134-12	BATTERY, STRAGE, LITHIUM ION (Note)

< CAPACITOR >

	C001	1-100-611-91	CERAMIC CHIP	22UF	20% 6.3V
	C004	1-112-717-91	CERAMIC CHIP	1UF	10% 6.3V
	C008	1-135-960-91	CERAMIC CHIP	10uF	10% 25V
	C009	1-100-055-21	CERAMIC CHIP	22uF	20% 16V
	C010	1-100-611-91	CERAMIC CHIP	22UF	20% 6.3V
	C011	1-100-611-91	CERAMIC CHIP	22UF	20% 6.3V
	C012	1-165-887-91	CERAMIC CHIP	0.22uF	10% 6.3V
	C013	1-165-908-11	CERAMIC CHIP	1UF	10% 10V
	C014	1-165-989-11	CERAMIC CHIP	10UF	10% 6.3V
	C015	1-165-908-11	CERAMIC CHIP	1UF	10% 10V
	C016	1-165-908-11	CERAMIC CHIP	1UF	10% 10V
	C018	1-165-908-11	CERAMIC CHIP	1UF	10% 10V
	C019	1-100-611-91	CERAMIC CHIP	22UF	20% 6.3V
	C020	1-100-159-91	CERAMIC CHIP	22uF	10% 6.3V
	C021	1-100-672-11	CERAMIC CHIP	10UF	20% 16V
	C022	1-100-672-11	CERAMIC CHIP	10UF	20% 16V
	C023	1-165-908-11	CERAMIC CHIP	1UF	10% 10V (H9)
	C024	1-165-989-11	CERAMIC CHIP	10UF	10% 6.3V
	C026	1-165-908-11	CERAMIC CHIP	1UF	10% 10V
	C027	1-100-670-11	CERAMIC CHIP	4.7UF	20% 16V
	C028	1-165-989-11	CERAMIC CHIP	10UF	10% 6.3V
	C030	1-100-670-11	CERAMIC CHIP	4.7UF	20% 16V
	C032	1-165-884-91	CERAMIC CHIP	2.2uF	10% 6.3V
*	C033	1-112-662-91	TANTAL. CHIP	47uF	20% 10V
	C035	1-112-746-11	CERAMIC CHIP	4.7UF	10% 6.3V
	C036	1-100-567-81	CERAMIC CHIP	0.01UF	10% 25V (H9)
	C040	1-125-889-91	CERAMIC CHIP	2.2uF	10% 10V (H9)
	C041	1-165-908-11	CERAMIC CHIP	1UF	10% 10V (H9)
	C044	1-100-670-11	CERAMIC CHIP	4.7UF	20% 16V
	C046	1-165-989-11	CERAMIC CHIP	10UF	10% 6.3V
	C047	1-100-611-91	CERAMIC CHIP	22UF	20% 6.3V
	C048	1-165-989-11	CERAMIC CHIP	10UF	10% 6.3V
	C050	1-100-055-21	CERAMIC CHIP	22uF	20% 16V
	C060	1-165-887-91	CERAMIC CHIP	0.22uF	10% 6.3V
	C063	1-100-581-81	CERAMIC CHIP	047uF	10% 50V
	C081	1-107-819-11	CERAMIC CHIP	0.022uF	10% 16V
	C082	1-107-819-11	CERAMIC CHIP	0.022uF	10% 16V
	C083	1-100-252-11	CERAMIC CHIP	0.1UF	10% 6.3V
	C084	1-112-717-91	CERAMIC CHIP	1UF	10% 6.3V
	C101	1-125-777-11	CERAMIC CHIP	0.1UF	10% 10V
	C102	1-125-777-11	CERAMIC CHIP	0.1UF	10% 10V
	C103	1-125-777-11	CERAMIC CHIP	0.1UF	10% 10V
	C104	1-100-567-81	CERAMIC CHIP	0.01UF	10% 25V
	C109	1-100-581-81	CERAMIC CHIP	047uF	10% 50V
	C110	1-100-539-91	TANTAL. CHIP	47uF	20% 6.3V
	C111	1-125-777-11	CERAMIC CHIP	0.1UF	10% 10V
	C112	1-164-849-11	CERAMIC CHIP	9PF	0.5PF 50V
	C113	1-164-854-11	CERAMIC CHIP	15PF	5% 50V
	C114	1-164-939-11	CERAMIC CHIP	022UF	10% 50V
	C117	1-125-777-11	CERAMIC CHIP	0.1UF	10% 10V
	C118	1-100-252-11	CERAMIC CHIP	0.1UF	10% 6.3V
	C119	1-100-252-11	CERAMIC CHIP	0.1UF	10% 6.3V
	C121	1-125-777-11	CERAMIC CHIP	0.1UF	10% 10V
	C123	1-164-939-11	CERAMIC CHIP	022UF	10% 50V
	C201	1-100-611-91	CERAMIC CHIP	22UF	20% 6.3V
	C202	1-100-611-91	CERAMIC CHIP	22UF	20% 6.3V
	C203	1-165-908-11	CERAMIC CHIP	1UF	10% 10V
⚠	C205	1-114-341-11	ALUMINUM ELECT	180MF	315V
	C207	1-164-933-11	CERAMIC CHIP	220PF	10% 50V
	C208	1-125-777-11	CERAMIC CHIP	0.1UF	10% 10V

< CONNECTOR >

	CN301	1-779-329-51	CONNECTOR, FFC/FPC 10P
*	CN302	1-820-967-11	CONNECTOR, FPC (ZIF) 65P

< DIODE >

	D002	6-500-813-01	DIODE MA2SD32008S0
	D003	6-500-813-01	DIODE MA2SD32008S0
	D004	8-719-056-59	DIODE MAZS120008S0
	D006	6-500-813-01	DIODE MA2SD32008S0
	D007	6-500-813-01	DIODE MA2SD32008S0
	D008	6-500-813-01	DIODE MA2SD32008S0 (H9)
	D009	6-500-813-01	DIODE MA2SD32008S0 (H9)
	D010	6-500-813-01	DIODE MA2SD32008S0
	D011	6-500-813-01	DIODE MA2SD32008S0
	D101	6-500-813-01	DIODE MA2SD32008S0
	D102	6-500-813-01	DIODE MA2SD32008S0
⚠*	D202	6-501-433-01	DIODE MA2YF8000LS0
	D203	6-500-813-01	DIODE MA2SD32008S0
	D204	6-500-619-01	DIODE RB520S-40TE61
	D301	8-719-056-54	DIODE MAZS068008S0
	D302	8-719-056-54	DIODE MAZS068008S0

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

注意
電池の交換は、正しく行わないと破裂する恐れがあります。電池を交換する場合には必ず同じ型名の電池又は同等品と交換してください。

Note: Replace the battery holder (BH101) together when replacing the lithium battery (BT001) on the DD-272 board. (The battery holder removed once cannot be used again.)
When mounting these parts, mount new battery holder first and attach new lithium battery next.

Note: DD-272基板のリチウム電池(BT001)を交換する場合はバッテリホルダ(BH101)も同時に新品に交換して下さい。(一度使用したバッテリホルダは再使用できません。)
部品取付けの際は、先にバッテリホルダを取付けてからリチウム電池を装着して下さい。

• Refer to page 5-1 for mark ⚠.

DD-272

Ref. No.	Part No.	Description			
		< FUSE >			
⚠F001	1-576-612-21	FUSE (1A/32V)			
⚠F002	1-576-415-21	FUSE (2A/32V)			
		< FERRITE BEAD >			
FB001	1-469-580-21	FERRITE	0uH		
		< IC >			
* IC001	6-710-930-01	IC MAX8611VETM+TG069			
* IC002	6-709-726-01	IC SN0510064DRCR			
* IC003	6-710-854-01	IC R1114Q181B-TR-FA			
* IC006	6-710-846-01	IC TK70664HCL-G (H9)			
* IC007	6-710-970-01	IC XC6108C10BGR			
* IC101	6-807-383-01	IC MB89083LGA-G-132-ERE1			
* IC102	6-710-971-01	IC NJU7287ARB1 (TE2)			
* IC103	6-711-152-01	IC S-80822CNPF-B8HTFG			
IC201	6-707-555-01	IC TPS65552RGTR			
		< COIL >			
L001	1-400-676-11	INDUCTOR	22uH		
L002	1-457-066-21	INDUCTOR	4.7uH		
L003	1-457-066-21	INDUCTOR	4.7uH		
L004	1-457-066-21	INDUCTOR	4.7uH		
L005	1-456-995-22	INDUCTOR	4.7uH		
L006	1-457-066-21	INDUCTOR	4.7uH		
* L007	1-457-436-21	COIL, CHOKE	2.4uH		
L008	1-457-066-21	INDUCTOR	4.7uH		
L009	1-457-066-21	INDUCTOR	4.7uH		
L201	1-456-995-22	INDUCTOR	4.7uH		
		< LINE FILTER >			
* LF002	1-457-217-21	COMMON MODE CHOKE COIL			
		< TRANSISTOR >			
Q003	6-550-576-01	TRANSISTOR SSM6E01TU			
Q004	8-729-047-68	TRANSISTOR SSM3K03FE (TPL3)			
Q006	8-729-055-32	TRANSISTOR 3LN01SS-TL			
Q007	6-550-674-01	TRANSISTOR MCH6604-K-TL-E			
Q010	6-551-674-01	TRANSISTOR SCH1302-TL-E			
Q012	6-550-243-01	TRANSISTOR DTC144TMT2L			
Q013	6-550-844-01	TRANSISTOR FDW2508P/GNL			
Q014	6-550-576-01	TRANSISTOR SSM6E01TU			
Q101	8-729-054-52	TRANSISTOR UP04216008S0			
⚠*Q201	6-551-686-01	TRANSISTOR TIG030TS-S-TL-E			
Q202	6-551-304-01	TRANSISTOR MTM231230LSO			
Q203	6-550-119-01	TRANSISTOR DTC144EMT2L			
		< RESISTOR >			
R002	1-218-985-11	RES-CHIP	470K	5%	1/16W
R003	1-218-989-11	RES-CHIP	1M	5%	1/16W
R005	1-218-973-11	RES-CHIP	47K	5%	1/16W
R008	1-218-985-11	RES-CHIP	470K	5%	1/16W
R009	1-218-985-11	RES-CHIP	470K	5%	1/16W
R010	1-218-989-11	METAL CHIP	1M	0.5%	1/16W
R011	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R012	1-208-939-11	METAL CHIP	150K	1%	1/16W
R013	1-208-715-11	METAL CHIP	22K	1%	1/16W
R014	1-208-935-11	METAL CHIP	100K	0.5%	1/16W

• Refer to page 5-1 for mark ⚠.

Ref. No.	Part No.	Description			
R015	1-208-643-11	METAL CHIP	22	1%	1/16W
R016	1-208-643-11	METAL CHIP	22	1%	1/16W (H7)
R016	1-220-880-81	METAL CHIP	27	1%	1/16W (H9)
R017	1-208-931-11	METAL CHIP	68K	1%	1/16W
R018	1-208-923-11	METAL CHIP	33K	0.5%	1/16W
R019	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R020	1-216-809-11	METAL CHIP	100	5%	1/10W
R021	1-216-809-11	METAL CHIP	100	5%	1/10W
R022	1-208-929-81	METAL CHIP	56K	0.5%	1/16W
R024	1-218-958-11	RES-CHIP	2.7K	5%	1/16W
R028	1-208-920-81	METAL CHIP	24K	1%	1/16W
R029	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R030	1-208-918-81	METAL CHIP	20K	1%	1/16W
R031	1-218-978-11	RES-CHIP	120K	5%	1/16W
R037	1-218-981-11	RES-CHIP	220K	5%	1/16W
R038	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R042	1-208-955-11	METAL CHIP	680K	1%	1/16W
R048	1-218-929-11	RES-CHIP	10	5%	1/16W (H9)
R049	1-208-928-11	METAL CHIP	51K	1%	1/16W
R074	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R075	1-218-973-11	RES, CHIP	47K		
R079	1-208-711-11	METAL CHIP	15K	1%	1/16W
R083	1-208-661-11	METAL CHIP	120	1%	1/16W (H7)
R083	1-208-869-11	METAL CHIP	180	0.5%	1/16W (H9)
R102	1-218-985-11	RES-CHIP	470K	5%	1/16W
R103	1-218-953-11	RES-CHIP	1K	5%	1/16W
R104	1-218-953-11	RES-CHIP	1K	5%	1/16W
R105	1-218-973-11	RES-CHIP	47K	5%	1/16W
R106	1-218-990-81	CONDUCTOR, CHIP		0	
R107	1-208-893-11	METAL CHIP	1.8K	1%	1/16W
R108	1-218-964-11	RES-CHIP	8.2K	5%	1/16W
R109	1-208-927-81	METAL CHIP	100K	0.5%	1/16W
R110	1-208-927-81	METAL CHIP	100K	0.5%	1/16W
R112	1-245-604-11	METAL CHIP	10M	5%	1/16W
R113	1-218-975-11	RES-CHIP	68K	5%	1/16W
R114	1-218-973-11	RES-CHIP	47K	5%	1/16W
R116	1-218-973-11	RES-CHIP	47K	5%	1/16W
R117	1-218-949-11	RES-CHIP	470	5%	1/16W
R118	1-218-935-11	RES-CHIP	33	5%	1/16W
R119	1-218-985-11	RES-CHIP	470K	5%	1/16W
R120	1-208-943-11	METAL CHIP	220K	1%	1/16W
R121	1-208-943-11	METAL CHIP	220K	1%	1/16W
R124	1-218-953-11	RES-CHIP	1K	5%	1/16W
R125	1-216-295-91	SHORT CHIP	0		
R203	1-218-989-11	RES-CHIP	1M	5%	1/16W
R204	1-218-940-11	RES-CHIP	82	5%	1/16W
R206	1-218-945-11	RES-CHIP	220	5%	1/16W
R207	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R208	1-218-977-11	RES-CHIP	100K	5%	1/16W
R209	1-208-911-11	METAL CHIP	10K	0.5%	1/16W
R301	1-218-953-11	RES-CHIP	1K	5%	1/16W
		< TRANSFORMER >			
⚠T201	1-445-108-21	TRANSFORMER, D.C-D.C CONVERTER			
		< VIBRATOR >			
X101	1-781-525-21	VIBRATOR, CRYSTAL (32.768kHz)			

SY-177

Ref. No.	Part No.	Description
⚠	A-1256-807-A	SY-177 BOARD, COMPLETE (SERVICE) (H7)
⚠	A-1256-808-A	SY-177 BOARD, COMPLETE (SERVICE) (H9)
		**********

(IC211 is not supplied, but this is included in SY-177 complete board.)

< CAPACITOR >

Ref. No.	Part No.	Description			
C201	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C202	1-112-300-91	CERAMIC CHIP	4.7UF	10%	10V
C203	1-100-252-11	CERAMIC CHIP	0.1UF	10%	6.3V
C205	1-112-717-91	CERAMIC CHIP	1UF	10%	6.3V
C206	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C207	1-112-746-11	CERAMIC CHIP	4.7UF	10%	6.3V
C211	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C212	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C213	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C214	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C215	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C216	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C217	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C218	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C219	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C220	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C222	1-165-989-11	CERAMIC CHIP	10UF	10%	6.3V
C223	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C224	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C225	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C242	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C243	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C245	1-165-989-11	CERAMIC CHIP	10UF	10%	6.3V
C246	1-100-611-91	CERAMIC CHIP	22UF	20%	6.3V
C247	1-100-611-91	CERAMIC CHIP	22UF	20%	6.3V
C249	1-100-611-91	CERAMIC CHIP	22UF	20%	6.3V
C250	1-165-989-11	CERAMIC CHIP	10UF	10%	6.3V
C251	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C252	1-100-252-11	CERAMIC CHIP	0.1UF	10%	6.3V
C254	1-100-252-11	CERAMIC CHIP	0.1UF	10%	6.3V
C256	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C257	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C260	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C261	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C262	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C281	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C282	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C283	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C284	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C285	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C286	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C301	1-164-939-11	CERAMIC CHIP	022UF	10%	50V
C302	1-100-672-11	CERAMIC CHIP	10UF	20%	16V
C303	1-100-670-11	CERAMIC CHIP	4.7UF	20%	16V
C304	1-115-339-11	CERAMIC CHIP	0.1UF	10%	50V
C305	1-107-826-11	CERAMIC CHIP	0.1UF	10%	16V
C306	1-100-591-91	CERAMIC CHIP	1UF	10%	25V
C307	1-107-826-11	CERAMIC CHIP	0.1UF	10%	16V
C311	1-112-716-11	CERAMIC CHIP	0.1UF	10%	6.3V
C314	1-112-716-11	CERAMIC CHIP	0.1UF	10%	6.3V
C315	1-112-716-11	CERAMIC CHIP	0.1UF	10%	6.3V
C316	1-112-716-11	CERAMIC CHIP	0.1UF	10%	6.3V
C317	1-112-716-11	CERAMIC CHIP	0.1UF	10%	6.3V
C318	1-100-505-11	CERAMIC CHIP	0.1UF	20%	16V
C321	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C322	1-112-716-11	CERAMIC CHIP	0.1UF	10%	6.3V
C323	1-112-716-11	CERAMIC CHIP	0.1UF	10%	6.3V
C324	1-165-875-11	CERAMIC CHIP	10UF	10%	10V
C325	1-100-670-11	CERAMIC CHIP	4.7UF	20%	16V
C326	1-112-298-91	CERAMIC CHIP	1UF	10%	16V
C327	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C328	1-100-611-91	CERAMIC CHIP	22UF	20%	6.3V
C329	1-165-989-11	CERAMIC CHIP	10UF	10%	6.3V
C330	1-112-717-91	CERAMIC CHIP	1UF	10%	6.3V
C331	1-165-989-11	CERAMIC CHIP	10UF	10%	6.3V
C332	1-112-298-91	CERAMIC CHIP	1UF	10%	16V
C333	1-100-842-91	TANTAL. CHIP	47UF	20%	6.3V
C337	1-112-298-91	CCERAMIC CHIP	1UF	10%	16V
C338	1-165-908-11	CERAMIC CHIP	1UF	10%	10V
C339	1-112-717-91	CERAMIC CHIP	1UF	10%	6.3V
C340	1-165-989-11	CERAMIC CHIP	10UF	10%	6.3V
C341	1-112-746-11	CERAMIC CHIP	4.7UF	10%	6.3V
C342	1-165-989-11	CERAMIC CHIP	10UF	10%	6.3V
C344	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C345	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C346	1-112-716-11	CERAMIC CHIP	0.1UF	10%	6.3V
C347	1-112-716-11	CERAMIC CHIP	0.1UF	10%	6.3V
C348	1-112-716-11	CERAMIC CHIP	0.1UF	10%	6.3V
C349	1-112-716-11	CERAMIC CHIP	0.1UF	10%	6.3V
C401	1-100-663-11	TANTAL. CHIP	22UF	20%	10V
C402	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C403	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C407	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C503	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C505	1-165-897-11	TANTAL. CHIP	22UF	20%	10V
C506	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C507	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C508	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C509	1-100-567-81	CERAMIC CHIP	0.01UF	10%	25V
C510	1-164-939-11	CERAMIC CHIP	022UF	10%	50V
C511	1-100-567-81	CERAMIC CHIP	0.01UF	10%	25V
C513	1-100-567-81	CERAMIC CHIP	0.01UF	10%	25V
C514	1-164-939-11	CERAMIC CHIP	022UF	10%	50V
C516	1-100-567-81	CERAMIC CHIP	0.01UF	10%	25V
C522	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C523	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C527	1-165-989-11	CERAMIC CHIP	10UF	10%	6.3V
C528	1-165-989-11	CERAMIC CHIP	10UF	10%	6.3V
C530	1-119-923-11	CERAMIC CHIP	0.047UF	10%	10V
C531	1-119-923-11	CERAMIC CHIP	0.047UF	10%	10V
C532	1-119-923-11	CERAMIC CHIP	0.047UF	10%	10V
C533	1-119-923-11	CERAMIC CHIP	0.047UF	10%	10V
C534	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C535	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C536	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C537	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C547	1-165-989-11	CERAMIC CHIP	10UF	10%	6.3V
C554	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C555	1-165-908-11	CERAMIC CHIP	1UF	10%	10V
C556	1-165-908-11	CERAMIC CHIP	1UF	10%	10V

• Refer to page 5-1 for mark ⚠.

Ref. No.	Part No.	Description			
C557	1-112-746-11	CERAMIC CHIP	4.7UF	10%	6.3V
C558	1-112-746-11	CERAMIC CHIP	4.7UF	10%	6.3V
C559	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C560	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C603	1-164-943-81	CERAMIC CHIP	0.01UF	10%	16V
C604	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C605	1-165-989-11	CERAMIC CHIP	10UF	10%	6.3V
C606	1-165-908-11	CERAMIC CHIP	1UF	10%	10V
C607	1-125-891-11	CERAMIC CHIP	0.47UF	10%	10V
C608	1-165-908-11	CERAMIC CHIP	1UF	10%	10V
C609	1-100-567-81	CERAMIC CHIP	0.01UF	10%	25V
C610	1-100-567-81	CERAMIC CHIP	0.01UF	10%	25V
C611	1-165-908-11	CERAMIC CHIP	1UF	10%	10V
C612	1-165-908-11	CERAMIC CHIP	1UF	10%	10V
C613	1-165-908-11	CERAMIC CHIP	1UF	10%	10V
C614	1-165-908-11	CERAMIC CHIP	1UF	10%	10V
C615	1-165-908-11	CERAMIC CHIP	1UF	10%	10V
C616	1-165-908-11	CERAMIC CHIP	1UF	10%	10V
C617	1-165-989-11	CERAMIC CHIP	10UF	10%	6.3V
C618	1-100-567-81	CERAMIC CHIP	0.01UF	10%	25V
C619	1-125-891-11	CERAMIC CHIP	0.47UF	10%	10V
C620	1-165-989-11	CERAMIC CHIP	10UF	10%	6.3V
C703	1-112-717-91	CERAMIC CHIP	1UF	10%	6.3V
C705	1-164-943-81	CERAMIC CHIP	0.01UF	10%	16V
C707	1-137-710-91	CERAMIC CHIP	10UF	20%	6.3V
C708	1-165-897-11	TANTAL. CHIP	22UF	20%	10V
C709	1-164-931-11	CERAMIC CHIP	100PF	10%	50V
C803	1-164-933-11	CERAMIC CHIP	220PF	10%	50V
C804	1-100-246-11	CERAMIC CHIP	01UF	10%	50V
C805	1-100-252-11	CERAMIC CHIP	0.1UF	10%	6.3V
C808	1-100-252-11	CERAMIC CHIP	0.1UF	10%	6.3V
C809	1-100-611-91	CERAMIC CHIP	22UF	20%	6.3V
C810	1-125-777-11	CERAMIC CHIP	0.1UF	10%	10V
C811	1-100-611-91	CERAMIC CHIP	22UF	20%	6.3V
		< CONNECTOR >			
* CN301	1-817-910-71	CONNECTOR, FPC (ZIF) 45P			
* CN401	1-817-357-71	CONNECTOR, FPC (ZIF) 61P			
CN701	1-779-328-51	CONNECTOR, FFC/FPC 8P			
CN702	1-817-556-51	CONNECTOR, FFC/FPC 18P			
CN703	1-816-649-51	FFC/CONNECTOR, FPC (LIF) 22P			
* CN704	1-817-554-51	CONNECTOR, FFC/FPC 6P			
CN705	1-778-506-21	PIN, CONNECTOR (PC BOARD) 2P			
CN706	1-779-332-51	CONNECTOR, FFC/FPC 16P			
* CN707	1-817-562-71	CONNECTOR, FPC (ZIP) 25P			
* CN708	1-817-357-71	CONNECTOR, FPC (ZIF) 61P			
CN709	1-778-591-21	CONNECTOR, BOARD TO BOARD 30P			
CN710	1-818-210-21	PIN, CONNECTOR 2P			
		< DIODE >			
D301	6-501-106-01	DIODE 1SS387CT (TL3SONY)			
D601	8-719-056-23	DIODE MA2S111-(K8).SO			
D602	8-719-056-23	DIODE MA2S111-(K8).SO			
D701	6-500-776-01	DIODE MAZW068H0LS0			
D702	6-500-776-01	DIODE MAZW068H0LS0			
D703	8-719-056-54	DIODE MAZS068008SO			
		< TERMINAL >			

Ref. No.	Part No.	Description
ET001	1-694-766-21	TERMINAL (ONBOARD CONTACT)
		< FERRITE BEAD >
FB211	1-469-580-21	FERRITE 0UH
FB212	1-469-580-21	FERRITE 0UH
FB213	1-469-580-21	FERRITE 0UH
FB214	1-469-580-21	FERRITE 0UH
FB215	1-469-580-21	FERRITE 0UH
FB250	1-481-250-11	FERRITE 0UH
FB281	1-469-081-21	FERRITE 0UH
FB282	1-469-580-21	FERRITE 0UH
FB283	1-469-580-21	FERRITE 0UH
FB301	1-400-331-11	FERRITE 0UH
FB302	1-400-331-11	FERRITE 0UH
FB303	1-400-331-11	FERRITE 0UH
FB305	1-400-331-11	FERRITE 0UH
FB306	1-400-331-11	FERRITE 0UH
		< IC >
* IC201	6-807-231-01	IC uPD79F0043FC-401-2N1-E2-A
* IC202	6-710-918-01	IC ICS620AN-23LFT
IC211	(Not supplied)	IC PRX515101B
* IC301	6-710-767-01	IC AD80148BBCZRL
* IC303	6-710-853-01	IC NJM2831F13 (TE1)
* IC304	6-708-448-01	IC R1114Q351D-TR-FA
* IC305	6-708-462-01	IC R1114Q231D-TR-FA
* IC306	6-710-847-01	IC TK63718AB1G0B
IC401	6-708-988-01	IC LV8053LG-TLM-E
* IC501	6-708-444-01	IC R1114Q281D-TR-FA
* IC502	6-709-769-01	IC TK63715AB1G0B
* IC503	6-709-026-01	IC R2J30500LG
IC506	8-753-276-73	IC CXA3739ER-T2
* IC602	6-709-313-01	IC AN12918A-VB
* IC701	6-708-464-01	IC R1114Q251D-TR-FA
		< COIL >
L211	1-469-757-21	INDUCTOR 10uH (2012)
L241	1-400-588-11	INDUCTOR, CHIP 10UH (2012)
L242	1-400-588-11	INDUCTOR, CHIP 10UH (2012)
L301	1-400-678-11	INDUCTOR 100uH (2012)
L302	1-400-678-11	INDUCTOR 100uH (2012)
L601	1-400-588-11	INDUCTOR, CHIP 10UH (2012)
L602	1-400-588-11	INDUCTOR, CHIP 10UH (2012)
L702	1-400-588-11	INDUCTOR, CHIP 10UH (2012)
		< TRANSISTOR >
Q241	6-551-674-01	TRANSISTOR SCH1302-TL-E
Q242	6-550-232-01	TRANSISTOR 2SA2029T2LQ/R
Q243	6-550-232-01	TRANSISTOR 2SA2029T2LQ/R
Q244	6-550-232-01	TRANSISTOR 2SA2029T2LQ/R
Q301	6-550-119-01	TRANSISTOR DTC144EMT2L
Q302	8-729-054-47	TRANSISTOR UP04213008S0
Q303	6-550-791-01	TRANSISTOR SSM3J15FV (TL3SONYZ)
Q401	8-729-054-51	TRANSISTOR UP04116008S0
Q402	6-551-304-01	TRANSISTOR MTM231230LSO
Q403	6-550-025-01	TRANSISTOR EMD12T2R
Q702	8-729-053-52	TRANSISTOR HN1C01FE-Y/GR (TPLR3)

Ref. No.	Part No.	Description			
Q703	6-550-232-01	TRANSISTOR	2SA2029T2LQ/R		
Q707	8-729-037-52	TRANSISTOR	2SD2216J-QR (TX).SO		
		< RESISTOR >			
R206	1-218-990-81	SHORT CHIP	0		
R207	1-218-935-11	RES-CHIP	33	5%	1/16W
R210	1-218-935-11	RES-CHIP	33	5%	1/16W
R213	1-218-953-11	RES-CHIP	1K	5%	1/16W
R214	1-218-953-11	RES-CHIP	1K	5%	1/16W
R215	1-218-941-11	METAL CHIP	100	0.5%	1/16W
R216	1-220-180-11	METAL CHIP	620	0.5%	1/16W
R217	1-218-938-11	RES-CHIP	56	5%	1/16W
R218	1-218-940-11	RES-CHIP	82	5%	1/16W
R219	1-218-940-11	RES-CHIP	82	5%	1/16W
R220	1-218-940-11	RES-CHIP	82	5%	1/16W
R221	1-218-940-11	RES-CHIP	82	5%	1/16W
R222	1-218-940-11	RES-CHIP	82	5%	1/16W
R241	1-218-990-81	SHORT CHIP	0		
R250	1-218-990-81	SHORT CHIP	0		
R253	1-216-009-91	RES-CHIP	22	5%	1/10W
R254	1-216-009-91	RES-CHIP	22	5%	1/10W
R257	1-218-953-11	RES-CHIP	1K	5%	1/16W
R258	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R259	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R260	1-208-869-11	METAL CHIP	180	0.5%	1/16W
R261	1-208-663-11	METAL CHIP	150	0.5%	1/16W
R262	1-208-663-11	METAL CHIP	150	0.5%	1/16W
R263	1-208-691-11	METAL CHIP	2.2K	0.5%	1/16W
R264	1-218-953-11	RES-CHIP	1K	5%	1/16W
R266	1-208-691-11	METAL CHIP	2.2K	0.5%	1/16W
R267	1-208-929-81	METAL CHIP	56K	0.5%	1/16W
R268	1-208-929-81	METAL CHIP	56K	0.5%	1/16W
R269	1-208-696-11	METAL CHIP	3.6K	0.5%	1/16W
R270	1-208-683-11	METAL CHIP	1K	0.5%	1/16W
R271	1-208-683-11	METAL CHIP	1K	0.5%	1/16W
R273	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R274	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R276	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R279	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R301	1-218-990-81	SHORT CHIP	0		
R302	1-218-989-11	RES-CHIP	1M	5%	1/16W
R303	1-218-979-11	RES-CHIP	150K	5%	1/16W
R304	1-218-977-11	RES-CHIP	100K	5%	1/16W
R305	1-218-984-11	RES-CHIP	390K	5%	1/16W
R306	1-218-970-11	RES-CHIP	27K	5%	1/16W
R308	1-218-933-11	RES-CHIP	22	5%	1/16W
R311	1-218-990-81	SHORT CHIP	0		
R312	1-218-990-81	SHORT CHIP	0		
R313	1-218-990-81	SHORT CHIP	0		
R314	1-218-931-11	RES-CHIP	15	5%	1/16W
R315	1-218-931-11	RES-CHIP	15	5%	1/16W
R316	1-218-990-81	SHORT CHIP	0		
R317	1-218-990-81	SHORT CHIP	0		
R318	1-218-990-81	SHORT CHIP	0		
R319	1-218-990-81	SHORT CHIP	0		
R320	1-218-990-81	SHORT CHIP	0		
R321	1-218-941-81	RES-CHIP	100	5%	1/16W

Ref. No.	Part No.	Description			
R322	1-218-990-81	SHORT CHIP	0		
R325	1-218-977-11	RES-CHIP	100K	5%	1/16W
R327	1-218-953-11	RES-CHIP	1K	5%	1/16W
R337	1-240-678-91	METAL CHIP	33	5%	1/20W
R338	1-240-678-91	METAL CHIP	33	5%	1/20W
R339	1-240-678-91	METAL CHIP	33	5%	1/20W
R340	1-240-678-91	METAL CHIP	33	5%	1/20W
R341	1-240-678-91	METAL CHIP	33	5%	1/20W
R407	1-218-985-11	METAL CHIP	470K	0.5%	1/16W
R408	1-208-923-11	METAL CHIP	33K	0.5%	1/16W
R410	1-219-724-11	METAL CHIP	1	1%	1/4W
R411	1-219-724-11	METAL CHIP	1	1%	1/4W
R412	1-218-975-11	RES-CHIP	68K	5%	1/16W
R414	1-218-977-11	RES-CHIP	100K	5%	1/16W
R415	1-218-941-81	RES-CHIP	100	5%	1/16W
R502	1-208-721-11	METAL CHIP	39K	0.5%	1/16W
R504	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R505	1-208-909-11	METAL CHIP	8.2K	0.5%	1/16W
R506	1-208-691-11	METAL CHIP	2.2K	0.5%	1/16W
R507	1-208-911-11	METAL CHIP	10K	0.5%	1/16W
R509	1-208-721-11	METAL CHIP	39K	0.5%	1/16W
R512	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R513	1-208-909-11	METAL CHIP	8.2K	0.5%	1/16W
R514	1-208-691-11	METAL CHIP	2.2K	0.5%	1/16W
R515	1-208-911-11	METAL CHIP	10K	0.5%	1/16W
R516	1-218-977-11	RES-CHIP	100K	5%	1/16W
R517	1-218-977-11	RES-CHIP	100K	5%	1/16W
R518	1-218-977-11	RES-CHIP	100K	5%	1/16W
R519	1-218-977-11	RES-CHIP	100K	5%	1/16W
R520	1-218-977-11	RES-CHIP	100K	5%	1/16W
R521	1-218-977-11	RES-CHIP	100K	5%	1/16W
R522	1-218-977-11	RES-CHIP	100K	5%	1/16W
R527	1-218-989-11	METAL CHIP	1M	0.5%	1/16W
R528	1-218-989-11	METAL CHIP	1M	0.5%	1/16W
R529	1-208-911-11	METAL CHIP	10K	0.5%	1/16W
R534	1-208-911-11	METAL CHIP	10K	0.5%	1/16W
R537	1-218-969-11	RES-CHIP	22K	5%	1/16W
R538	1-218-969-11	RES-CHIP	22K	5%	1/16W
R539	1-218-969-11	RES-CHIP	22K	5%	1/16W
R540	1-218-969-11	RES-CHIP	22K	5%	1/16W
R602	1-218-929-11	RES-CHIP	10	5%	1/16W
R603	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R604	1-218-973-11	RES-CHIP	47K	5%	1/16W
R605	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R606	1-218-929-11	RES-CHIP	10	5%	1/16W
R607	1-218-951-11	RES-CHIP	680	5%	1/16W
R608	1-218-939-11	RES-CHIP	68	5%	1/16W
R609	1-218-969-11	RES-CHIP	22K	5%	1/16W
R707	1-208-889-11	METAL CHIP	1.2K	0.5%	1/16W
R709	1-208-687-11	METAL CHIP	1.5K	0.5%	1/16W
R710	1-220-874-81	METAL CHIP	15	0.5%	1/16W
R711	1-220-874-81	METAL CHIP	15	0.5%	1/16W
R712	1-218-977-11	RES-CHIP	100K	5%	1/16W
R713	1-218-952-11	RES-CHIP	820	5%	1/16W
R718	1-211-982-11	METAL CHIP	36	0.5%	1/10W
R719	1-211-982-11	METAL CHIP	36	0.5%	1/10W
R720	1-218-953-11	RES-CHIP	1K	5%	1/16W

Ref. No.	Part No.	Description			
R732	1-218-990-81	SHORT CHIP	0		
R750	1-218-965-11	RES-CHIP	10K	5%	1/16W
R752	1-218-990-81	SHORT CHIP	0		
R753	1-218-990-81	SHORT CHIP	0		
R757	1-218-990-81	SHORT CHIP	0		
R758	1-218-990-81	SHORT CHIP	0		
R802	1-218-953-11	RES-CHIP	1K	5%	1/16W
R804	1-218-953-11	RES-CHIP	1K	5%	1/16W
R805	1-218-953-11	RES-CHIP	1K	5%	1/16W
R814	1-218-953-11	RES-CHIP	1K	5%	1/16W
R817	1-218-990-81	SHORT CHIP	0		
R821	1-218-953-11	RES-CHIP	1K	5%	1/16W
R825	1-218-953-11	RES-CHIP	1K	5%	1/16W
R826	1-218-953-11	RES-CHIP	1K	5%	1/16W
R829	1-216-009-91	RES-CHIP	22	5%	1/10W
		< COMPOSITION CIRCUIT BLOCK >			
RB201	1-234-378-11	RES, NETWORK 10K (1005X4)			
RB204	1-234-378-11	RES, NETWORK 10K (1005X4)			
RB206	1-234-375-21	RES, NETWORK 1K (1005X4)			
		< SENSOR >			
SE501	1-479-022-51	SENSOR, ANGULAR VELOCITY (30.8KHZ) (PITCH)			
SE502	1-479-022-61	SENSOR, ANGULAR VELOCITY (32.2KHZ) (YAW)			
		< TERMINAL >			
TB001	1-780-112-11	TERMINAL, CONTACT			
		< VIBRATOR >			
* X201	1-813-860-21	OSCILLATOR, CRYSTAL (36MHz)			

Revision History

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2007.04	Official Release	—	—
1.1	2007.05	Revised-1	• Correction of SCHEMATIC DIAGRAMS • Correction of PRINTED WIRING BOARDS	Yes