

SERVICE MANUAL

LEVEL 3

Ver. 1.5 2007. 09

Revision History

**How to use
Acrobat Reader**



Photo : DCR-HC20E

Z MECHANISM (MDX-Z200)

DCR-HC20

US Model

Canadian Model

Korea Model

**DCR-HC16E/
HC18E/HC20E**

AEP Model

East European Model

North European Model

DCR-HC18E/HC20E

UK Model

DCR-HC20/HC20E

E Model

Tourist Model

DCR-HC20E

Australian Model

Chinese Model

Hong Kong Model

Link

• **SCHEMATIC DIAGRAMS**

• **PRINTED WIRING BOARDS**

• **REPAIR PARTS LIST**

- For INSTRUCTION MANUAL, refer to SERVICE MANUAL, LEVEL 1 (987670441.pdf).
- Reference number search on printed wiring boards is available.

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

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

Contents of LEVEL 2 Service Manual

1. SERVICE NOTE	
2. DISASSEMBLY	
3. BLOCK DIAGRAMS	OVERALL POWER
4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS	CD-489, PD-213, LB-095, SE-141, JK-260, IR-051, MS-200, FP-836 BOARD, CONTROL KEY BLOCK (SB6300, SS6300, CF6300) FP-228, FP-467, FP-826, FP-830 FLEXIBLE BOARD
5. REPAIR PARTS LIST	EXPLODED VIEWS ELECTRICAL PARTS LIST
6. ADJUSTMENTS	

Mini DV Digital Video Cassette

DIGITAL VIDEO CAMERA RECORDER

SONY®

HANDYCAM

 InfoLITHIUM™
P
SERIES

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.

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4-2. SCHEMATIC DIAGRAMS

Link

• VC-350 BOARD (1/13) (TIMING GENERATOR, S/H, AGC, ADC)	• VC-350 BOARD (8/13) (RGB DRIVE)
• VC-350 BOARD (2/13) (LENS DRIVE)	• VC-350 BOARD (9/13) (D/A-A/D CONV., MIC AMP, AUDIO OUT)
• VC-350 BOARD (3/13) (CAMERA/DV SIGNAL/AUDIO PROCESSOR, DV INTERFACE, VIDEO OUT)	• VC-350 BOARD (10/13) (POWER IN, CHARGE)
• VC-350 BOARD (4/13) (REC/PB AMP)	• VC-350 BOARD (11/13) (DC/DC CONVERTER)
• VC-350 BOARD (5/13) (DRUM/CAPSTAN/LOADING MOTOR DRIVE)	• VC-350 BOARD (12/13) (CONNECTOR-1)
• VC-350 BOARD (6/13) (CAMERA/MECHA CONTROL)	• VC-350 BOARD (13/13) (CONNECTOR-2)
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- COMMON NOTE FOR SCHEMATIC DIAGRAMS

4-2. SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR SCHEMATIC DIAGRAMS

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

(For schematic diagrams)

- All capacitors are in μF unless otherwise noted. $\text{pF} : \mu\text{F}$. 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.

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

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

(Measuring conditions voltage and waveform)

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

Precautions Upon Replacing CCD imager

- The CD-489 board mounted as a repair part is not equipped with a CCD imager.
When replacing this board, remove the CCD imager from the old one and mount it onto the new one.
- If the CCD imager has been replaced, carry out all the adjustments for the camera section.
- As the CCD 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.

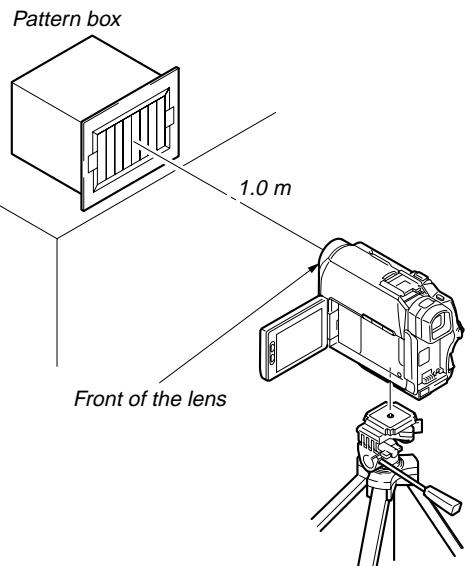
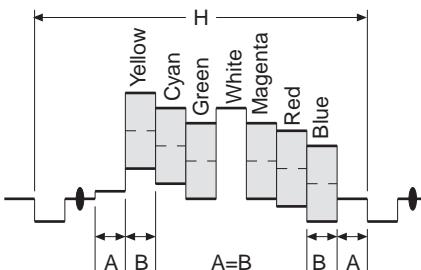
1. Connection**2. Adjust the distance so that the output waveform of Fig. a and the Fig. b can be obtain.**

Fig. a (Video output terminal output waveform)

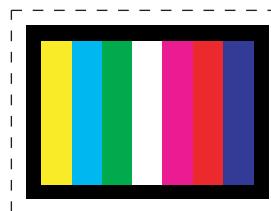


Fig. b (Picture on monitor TV)

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

Note :

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

Note :

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

4-2. SCHEMATIC DIAGRAMS

VC-350 BOARD SIDE A

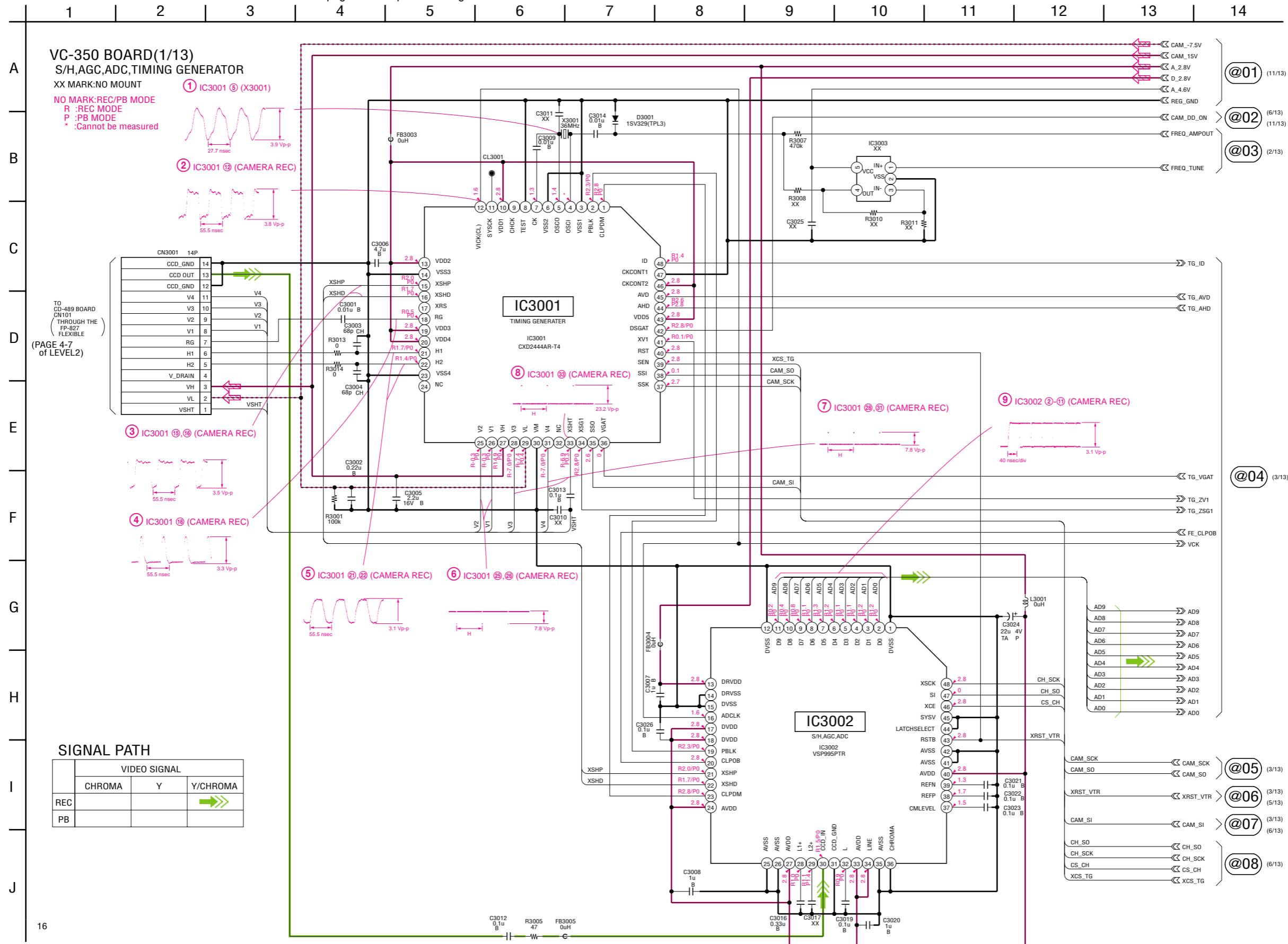
VC-350 BOARD SIDE B

SECTION 4 PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-2. SCHEMATIC DIAGRAMS

For Schematic Diagram

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



4-2. SCHEMATIC DIAGRAMS

VC-350 BOARD SIDE A

VC-350 BOARD SIDE B

For Schematic Diagram

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

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

VC-350 BOARD(2/13)

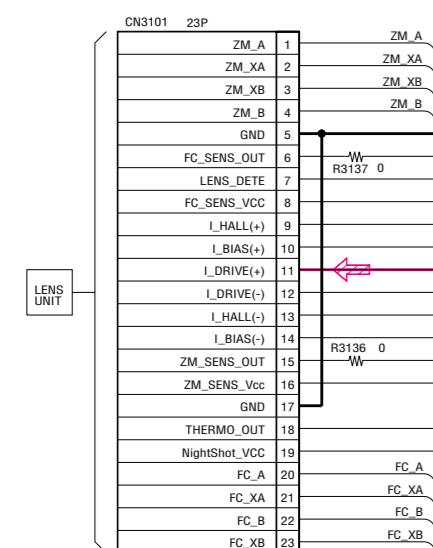
LENS DRIVE

XX MARK: NO MOUNT

NO MARK: REC/PB MODE

R : REC MODE

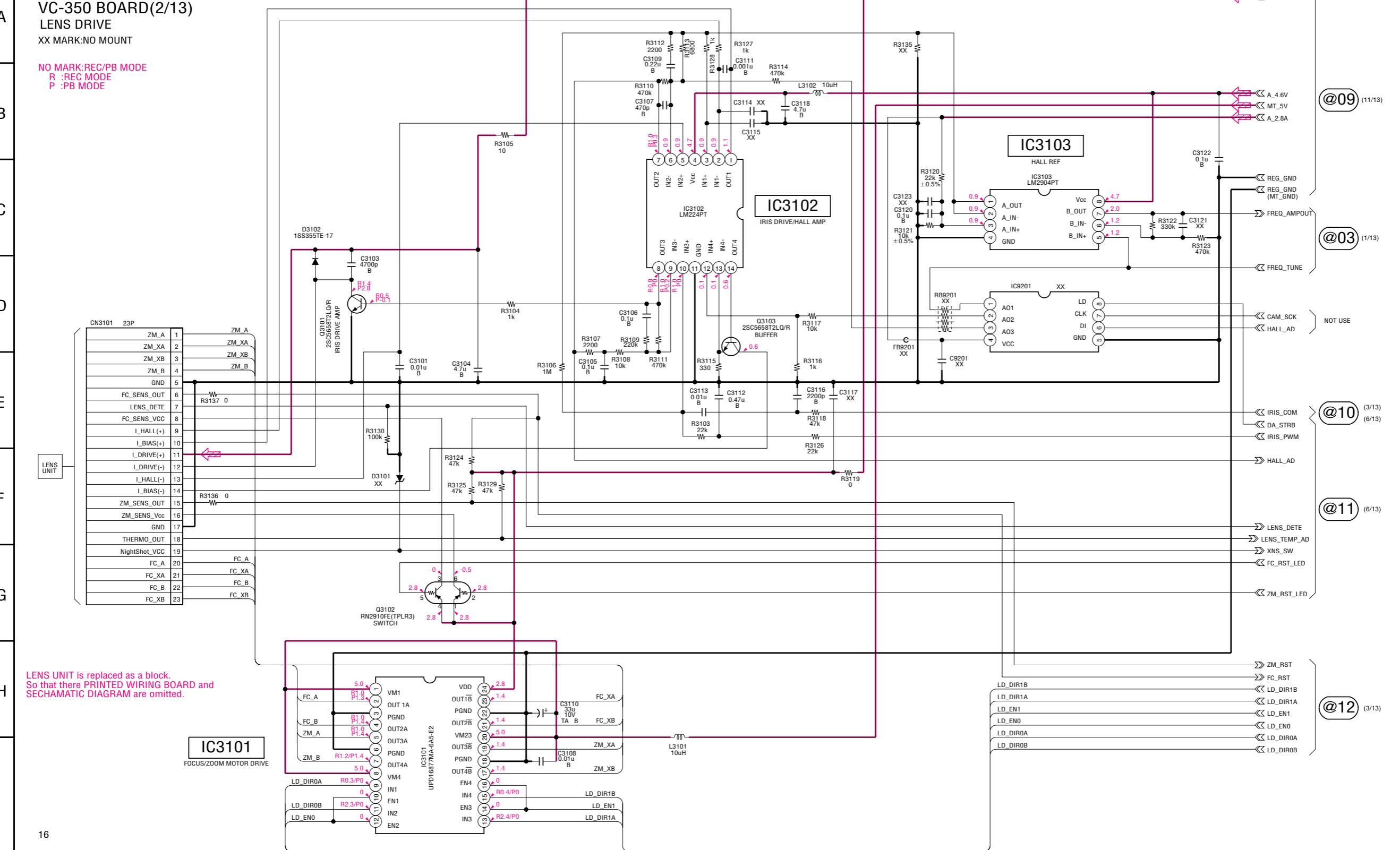
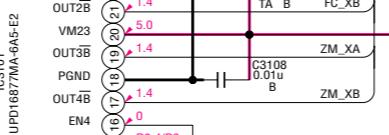
P : PB MODE



LENS UNIT is replaced as a block.
So that there PRINTED WIRING BOARD and SCHEAMATIC DIAGRAM are omitted.

IC3101
FOCUS/ZOOM MOTOR DRIVE

IC3101-1677MA-9A5-E2



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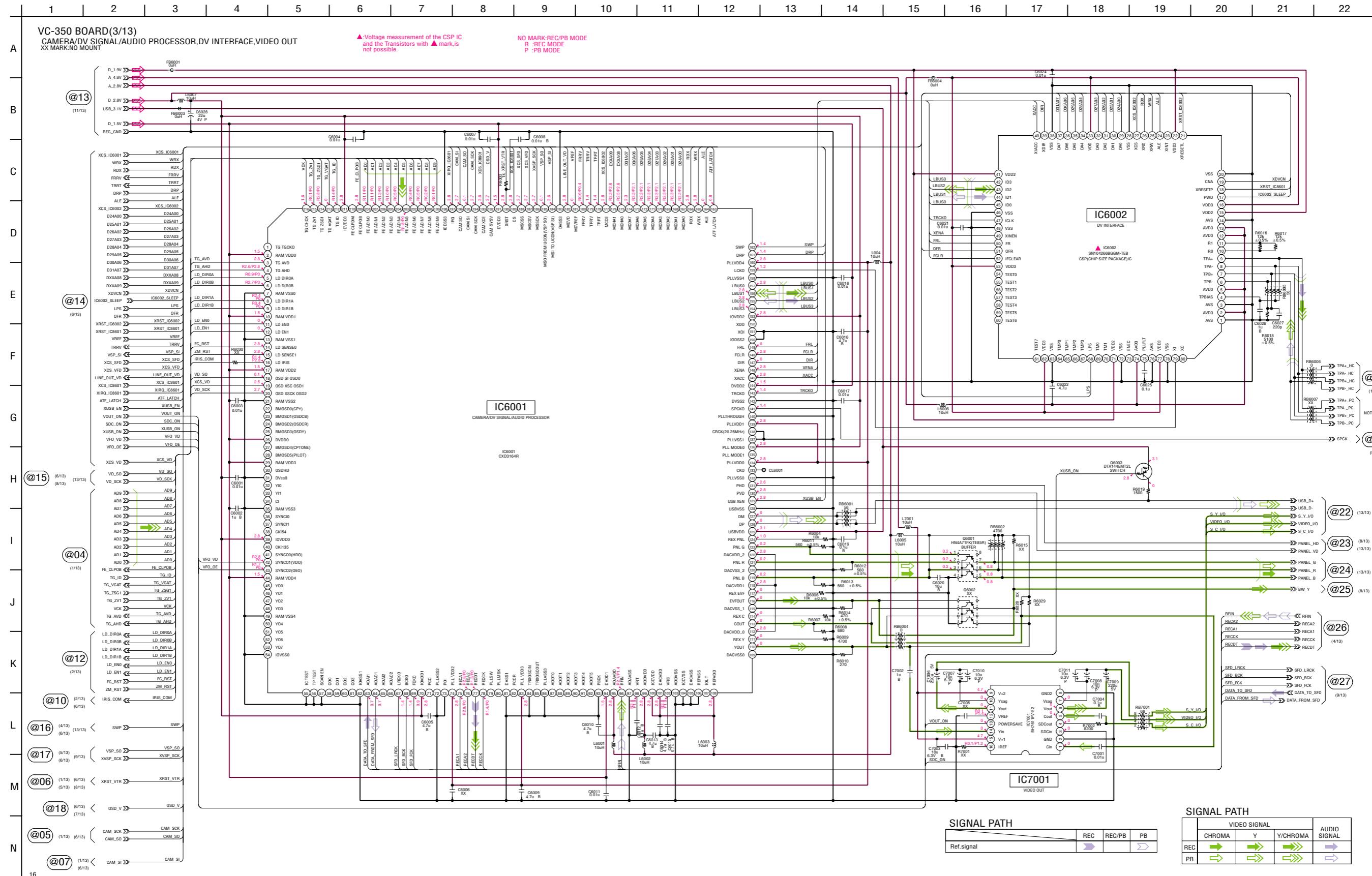
4-2. SCHEMATIC DIAGRAMS

VC-350 BOARD SIDE A

VC-350 BOARD SIDE B

For Schematic Diagram

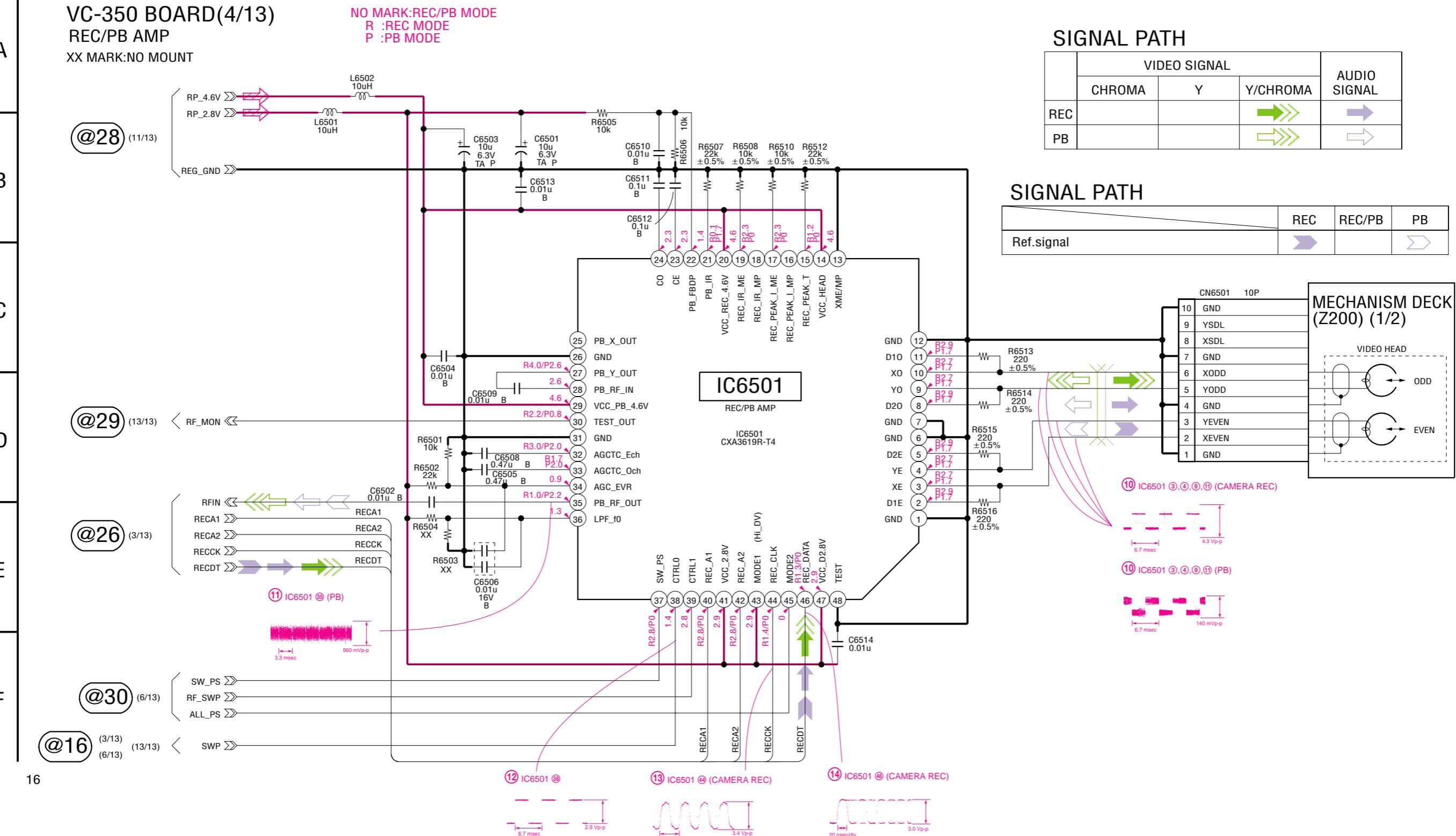
- Refer to page 4-59 for printed wiring board.



For Schematic Diagram

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

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



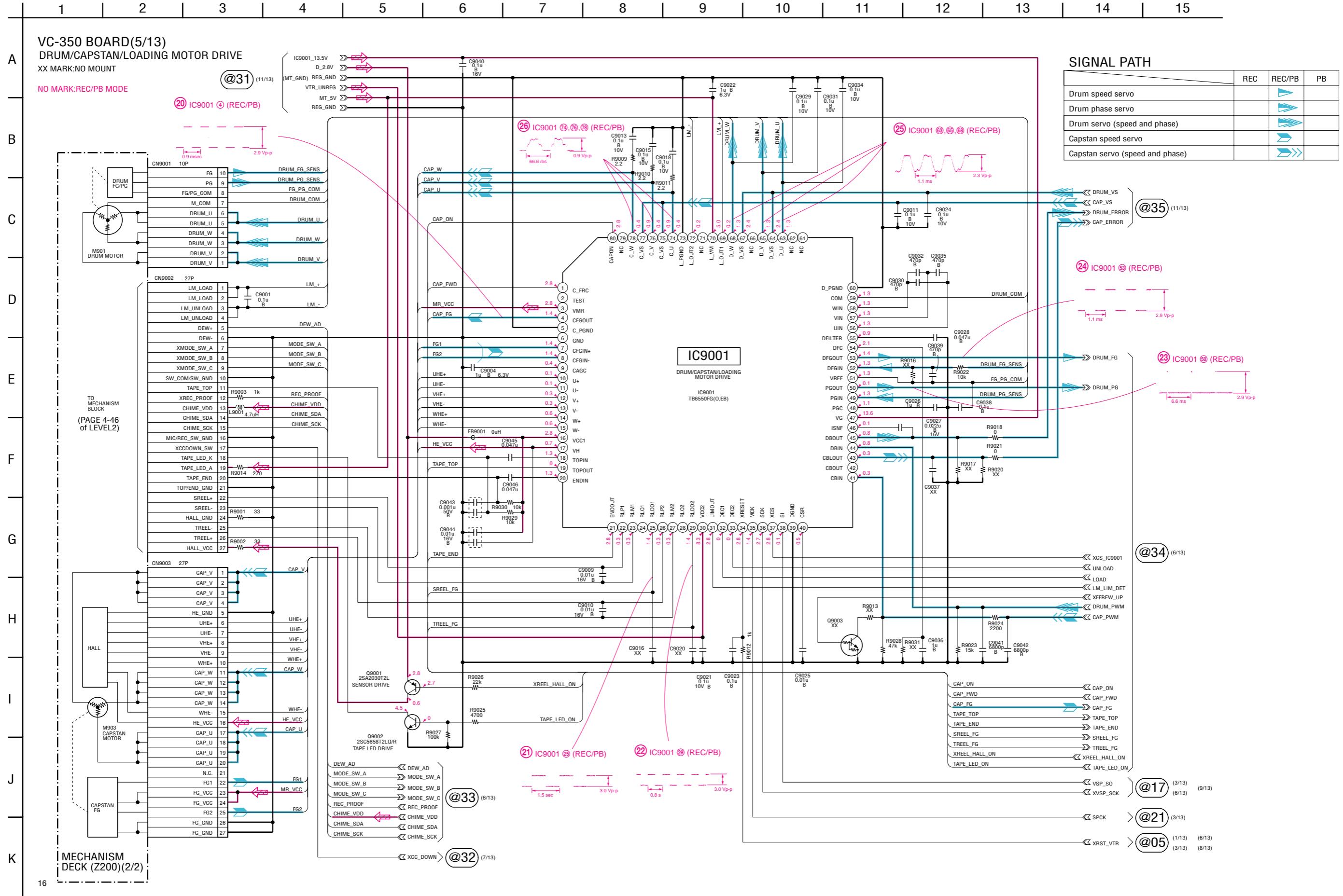
4-2. SCHEMATIC DIAGRAMS

VC-350 BOARD SIDE A

VC-350 BOARD SIDE B

For Schematic Diagram

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



4-2. SCHEMATIC DIAGRAMS

VC-350 BOARD SIDE A

VC-350 BOARD SIDE B

For Schematic Diagram

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

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20

VC-350 BOARD(6/13)
CAMERA/MECHA CONTROLNO MARK:REC/PB MODE
R : REC MODE
P : PB MODE
* : Cannot be measured

XX MARK: NO MOUNT

A | B | C | D | E | F | G | H | I | J | K | L | M

@11 (2/13)

LENS_TEMP_AD
HALL_AD
XNS_SW
LENS_DETECT
ZM_RST_LED
FC_RST_LED
IRIS_PWM
DA_STRB

NOT USE

ZOOM_VR_AD
ZOOM_VR_AD
XLOGO_LED
XEASY_MODE_LED
XCRADEL_IN
USB_DET_PCAV_JACK_IN_CRADLE
XS_JACK_INIR_ON
XSHUTTER_OPEN
XCS_LCD
VST_C_RESET
PITCH_AD
YAW_AD
AV_JACK_IN
USB_DET_HCXCS_EEP
EEP_SI
EEP_SO
EEP_SKXFFREW_UP
UNLOAD
LOAD
LOADXCS_IC9001
DRUM_PWN
CAP_PWN
LM_LIM_DET
TREEL_FG
SREEL_FG
TAPE_TOR
TAPE_ENDDRUM_FG
DRUM_PG
XREEL_HALL_OF
XREEL_HALL_OFTAPE_LED_ON
TAPE_LED_ON
CAP_FWD
CAP_FW
CAP_FW
CAP_FWRF_SWI
ALL_PS
SW_PS

@34 (5/13)

VD_SCK
VD_SO

@15 (3/13) (13/13)

OSD_V
OSD_V

@18 (3/13) (7/13)

CAM_DD_ON
CAM_DD_ON

@02 (1/13)

IRIS_COM
IRIS_COM

@10 (3/13)

XCS_EVF
XCS_EVF

@38 (8/13)

VD_SI
VD_SI

@39 (13/13) (8/13)

XRST_VTR
XRST_VTR

@40 (7/13)

SYS_V
IC8001_SCK
XCS_IC8001
IC8001_SI
IC8001_SO
XSYS_RST

NOT USE

MD2
XCS_MC_FLASH

SIGNAL PATH

REC REC/PB PB

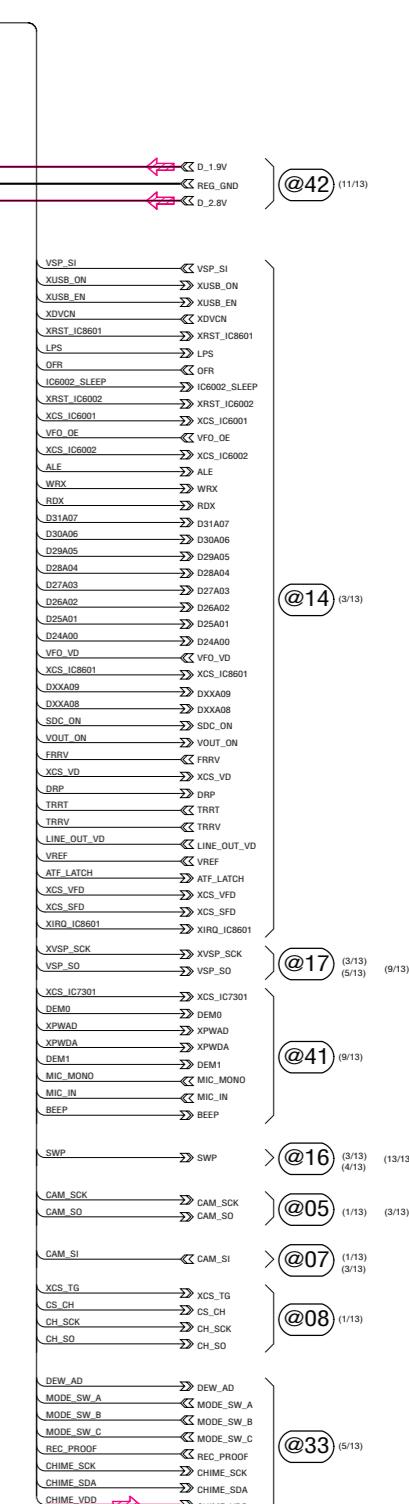
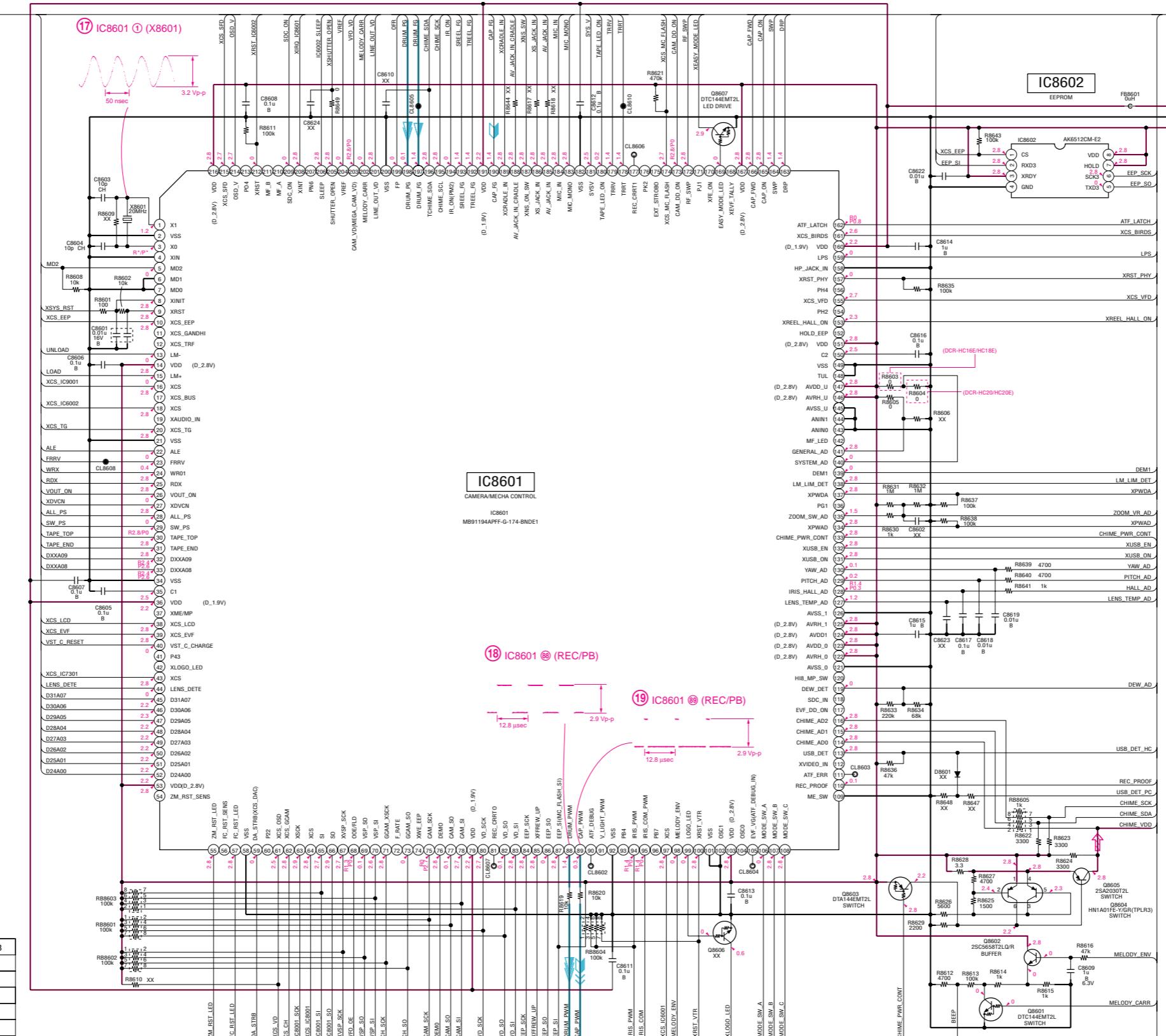
Drum speed servo

Drum phase servo

Drum servo (speed and phase)

Capstan speed servo

Capstan servo (speed and phase)



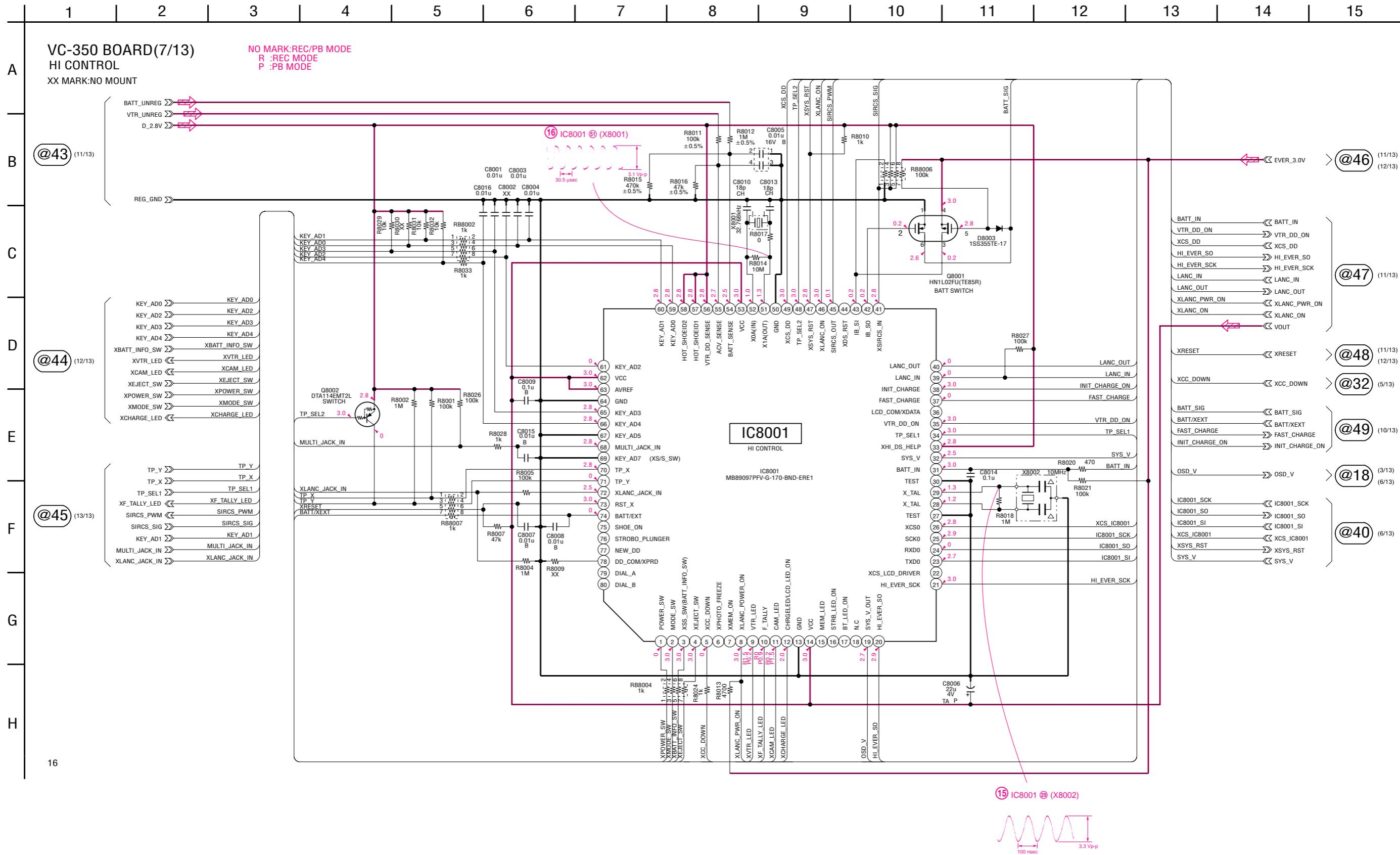
4-2. SCHEMATIC DIAGRAMS

VC-350 BOARD SIDE A

VC-350 BOARD SIDE B

For Schematic Diagram

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



For Schematic Diagram

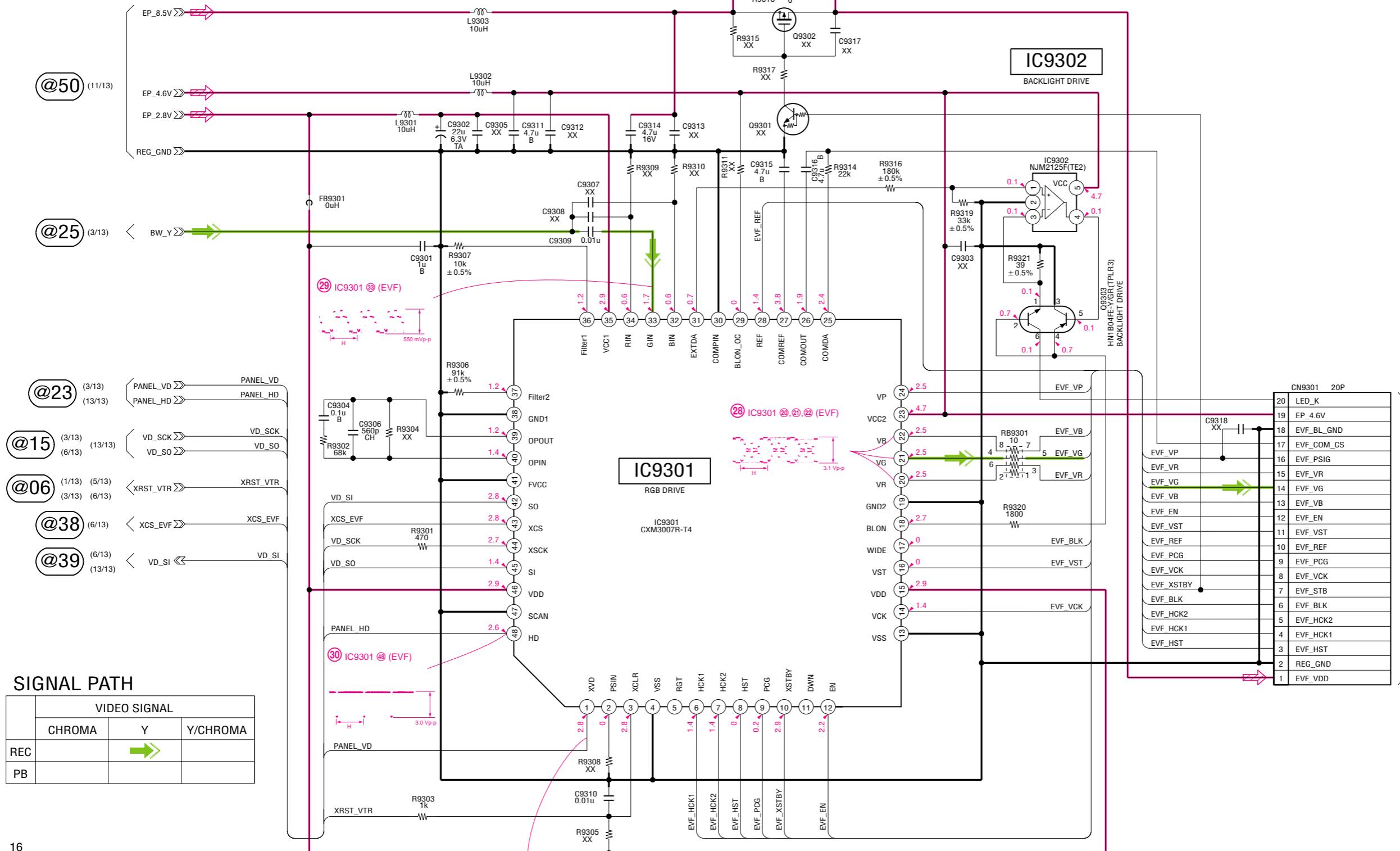
• Refer to page 4-59 for printed wiring board.

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

VC-350 BOARD(8/13)

NO MARK:REC/PB MODE

XX MARK: NO MOUNT



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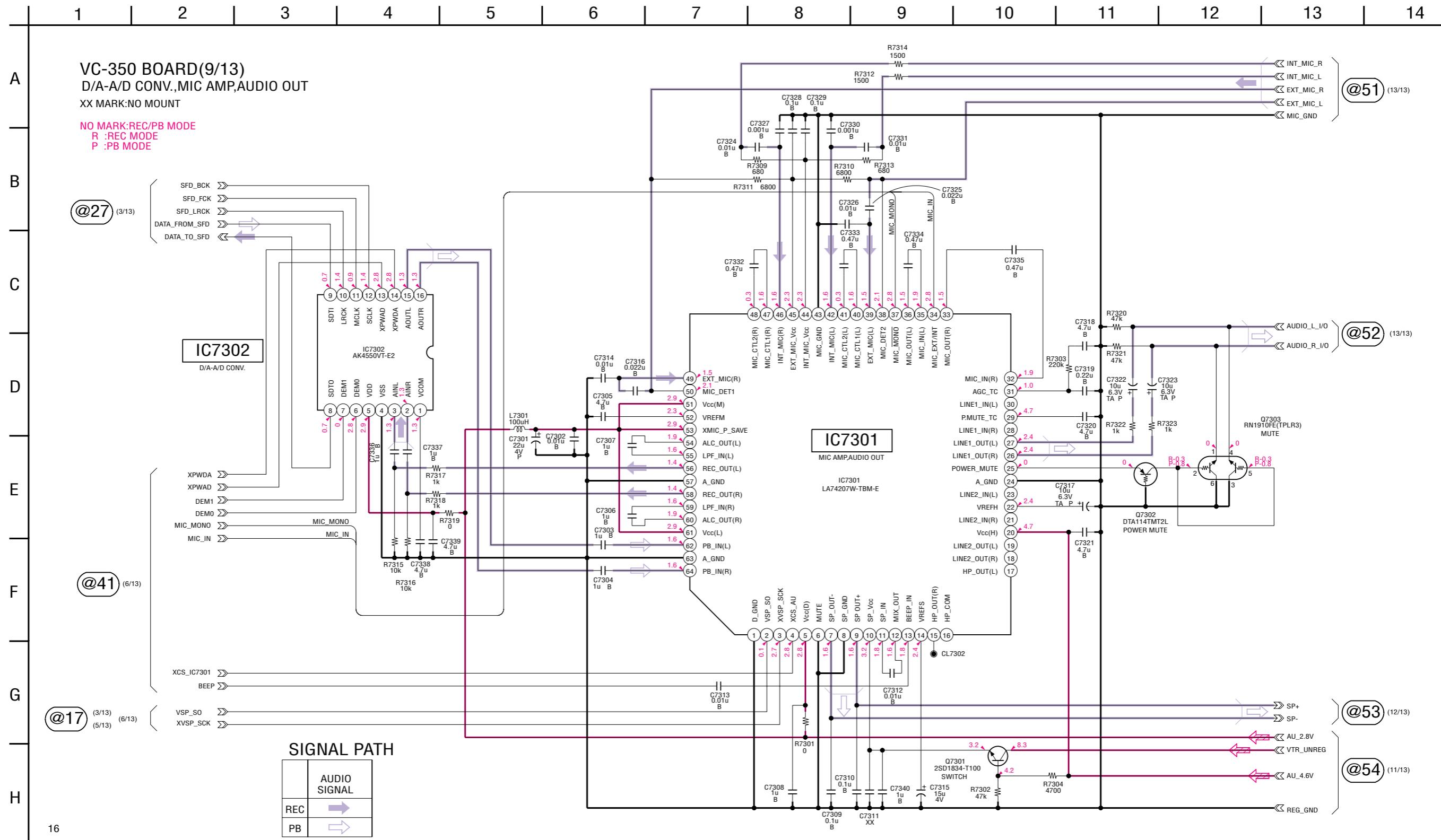
4-2. SCHEMATIC DIAGRAMS

VC-350 BOARD SIDE A

VC-350 BOARD SIDE B

For Schematic Diagram

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



4-2. SCHEMATIC DIAGRAMS

VC-350 BOARD SIDE A

VC-350 BOARD SIDE B

For Schematic Diagram

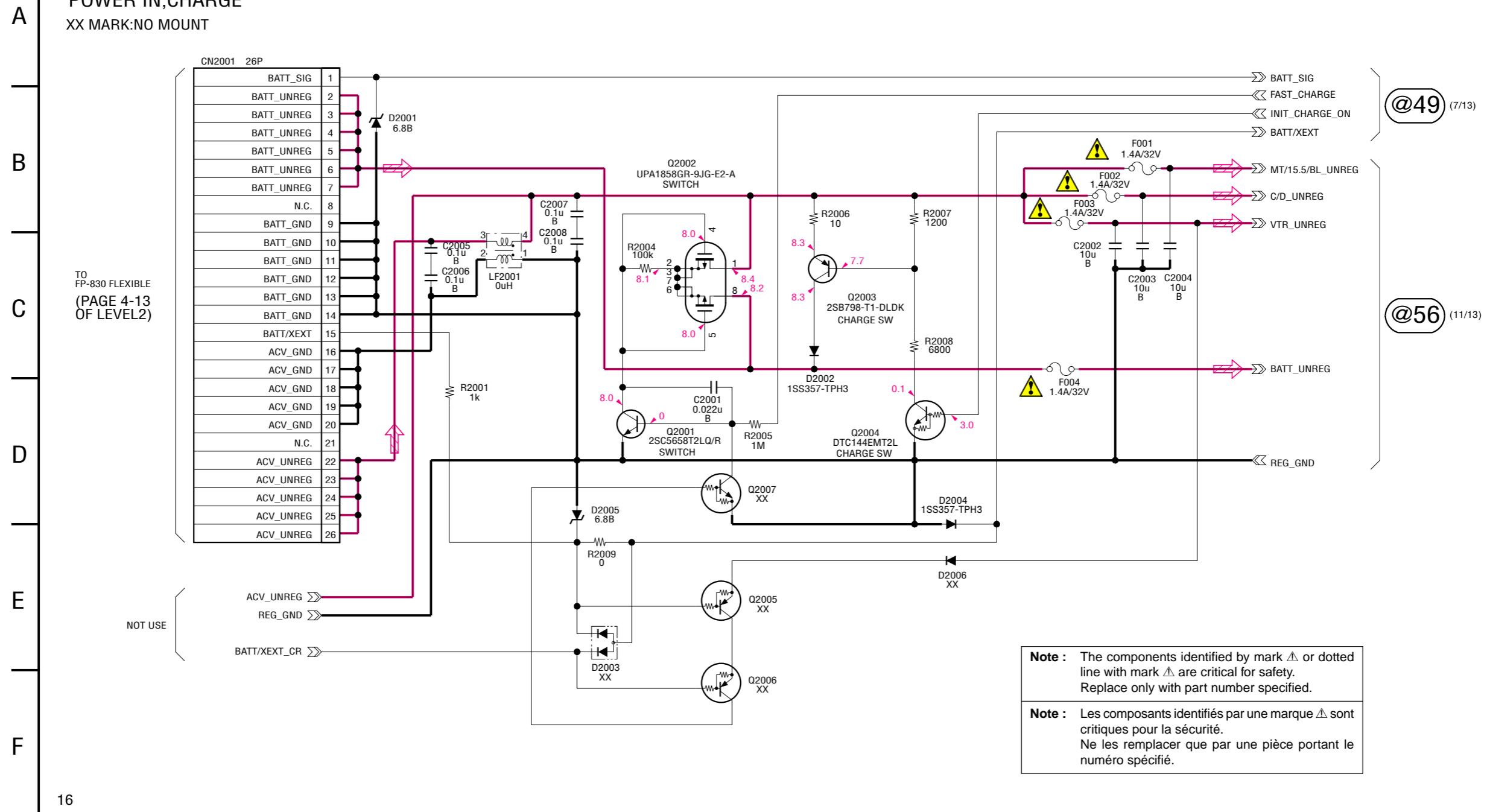
• Refer to page 4-59 for printed wiring board.

1 2 3 4 5 6 7 8 9 10

VC-350 BOARD(10/13)

POWER IN,CHARGE

XX MARK: NO MOUNT

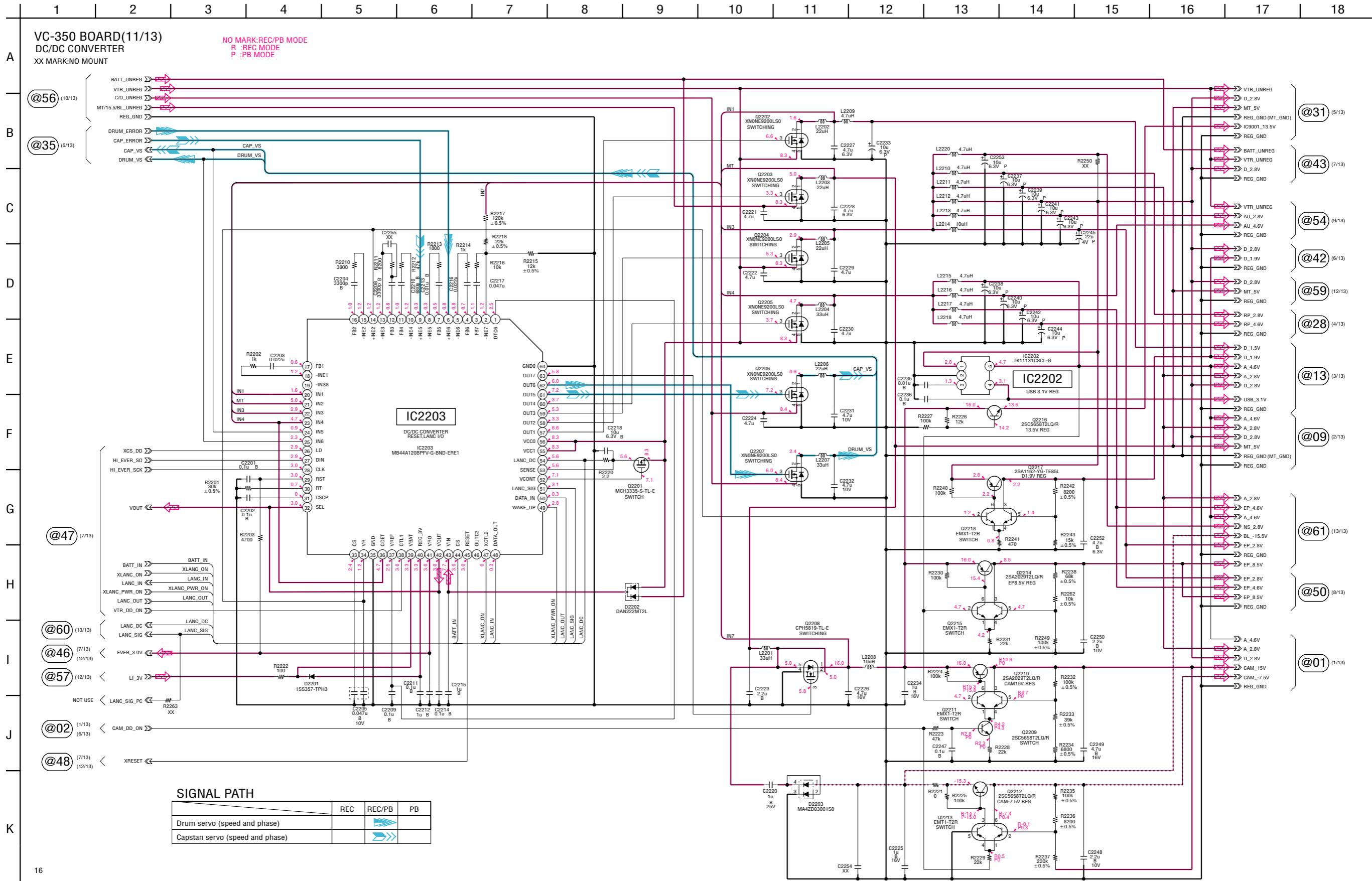


4-2. SCHEMATIC DIAGRAMS

VC-350 BOARD SIDE A

For Schematic Diagram

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



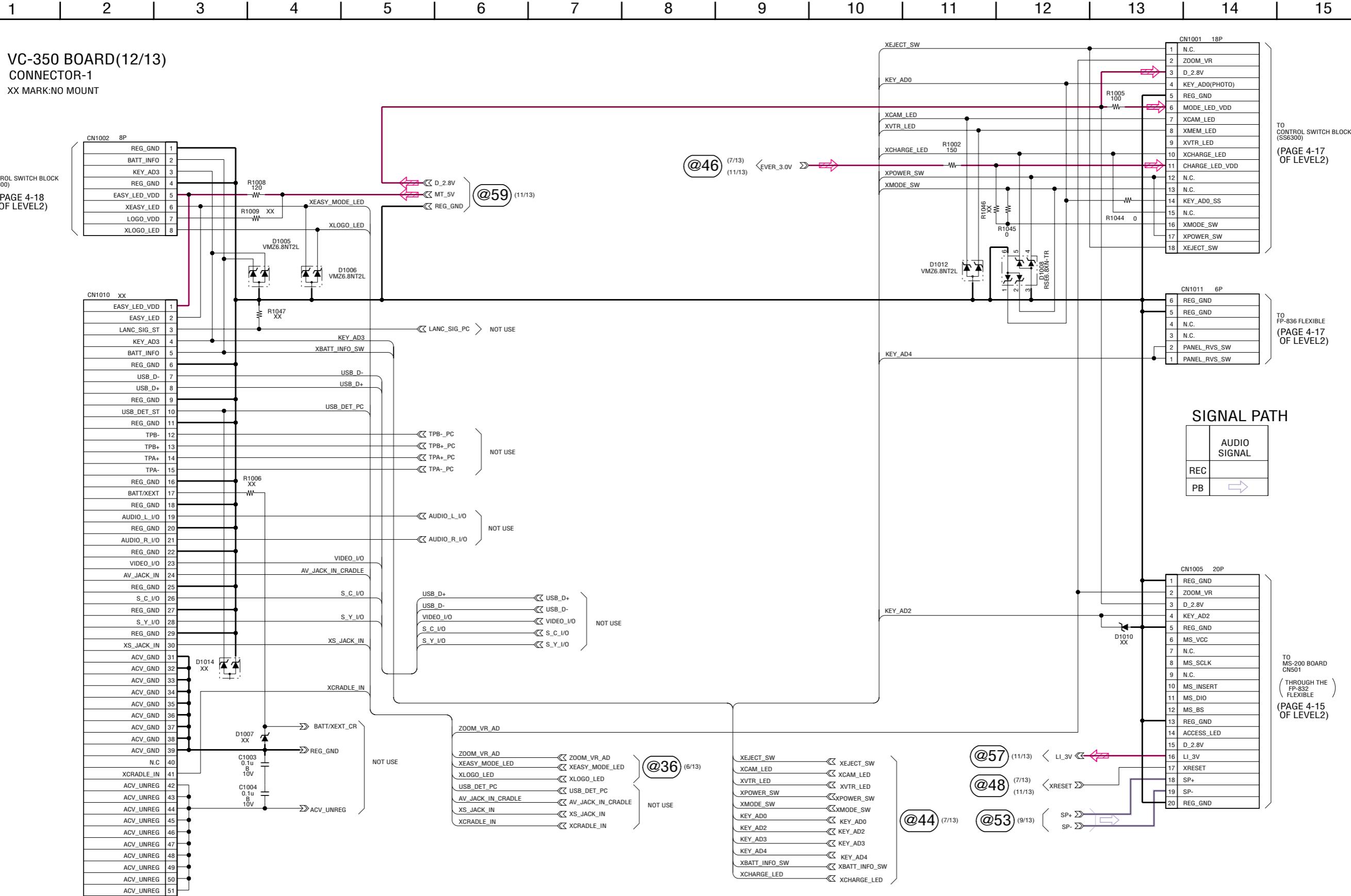
4-2. SCHEMATIC DIAGRAMS

VC-350 BOARD SIDE A

VC-350 BOARD SIDE B

For Schematic Diagram

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



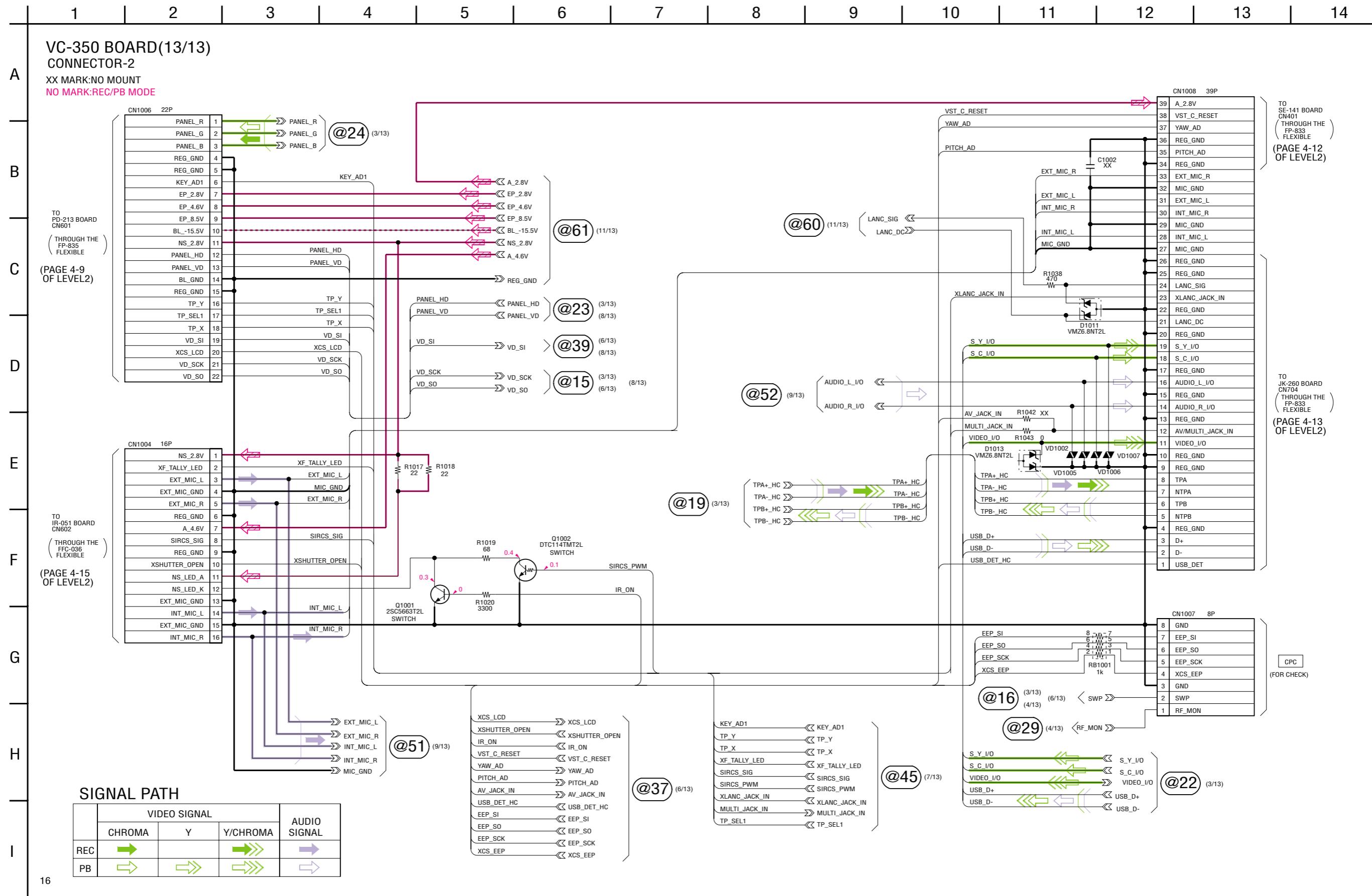
4-2. SCHEMATIC DIAGRAMS

VC-350 BOARD SIDE A

VC-350 BOARD SIDE B

For Schematic Diagram

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



4-3. PRINTED WIRING BOARDS

Link

- VC-350 BOARD (SIDE A)

- VC-350 BOARD (SIDE B)

- COMMON NOTE FOR PRINTED WIRING BOARDS

- MOUNTED PARTS LOCATION

NAME	FUNCTION
CD-489	<i>CCD IMAGER</i>
IR-051	<i>REMOTE COMMANDER RECEIVER, MIC IN</i>
JK-260	<i>JACK</i>
LB-095	<i>EVF RELAY</i>
MS-200	<i>INDICATOR</i>
PD-213	<i>LCD RGB DRIVE, BACKLIGHT</i>
SE-141	<i>PITCH/YAW SENSOR AMP</i>
VC-350	<i>TIMING GENERATOR, S/H, AGC, ADC., LENS DRIVE, CAMERA/DV SIGNAL/AUDIO PROCESSOR, DV INTERFACE, VIDEO OUT, REC/PB AMP, DRUM/CAPSTAN/LOADING MOTOR DRIVE, CAMERA/MECHA CONTROL, HI CONTROL, RGB DRIVE, D/A-A/D CONV., MIC AMP, AUDIO OUT, POWER IN, CHARGE, DC/DC CONVERTER, CONNECTOR-1, CONNECTOR-2</i>

4-3. PRINTED WIRING BOARDS

THIS NOTE IS COMMON FOR WIRING BOARDS

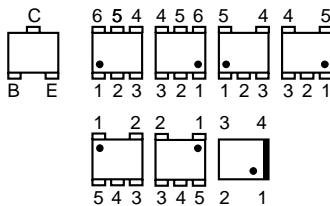
(In addition to this, the necessary note is printed in each block)

(For printed wiring boards)

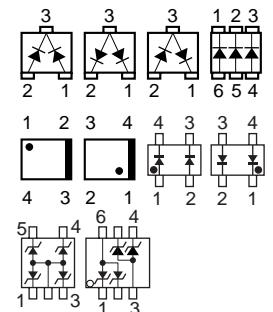
- : Uses unleaded solder.
- : Pattern from the side which enables seeing.
(The other layers' patterns are not indicated)
- Through hole is omitted.
- Circled numbers refer to waveforms.
- There are a few cases that the part printed on diagram isn't mounted in this model.
- : panel designation

- Chip parts.

Transistor



Diode

**BOARD INFORMATION**

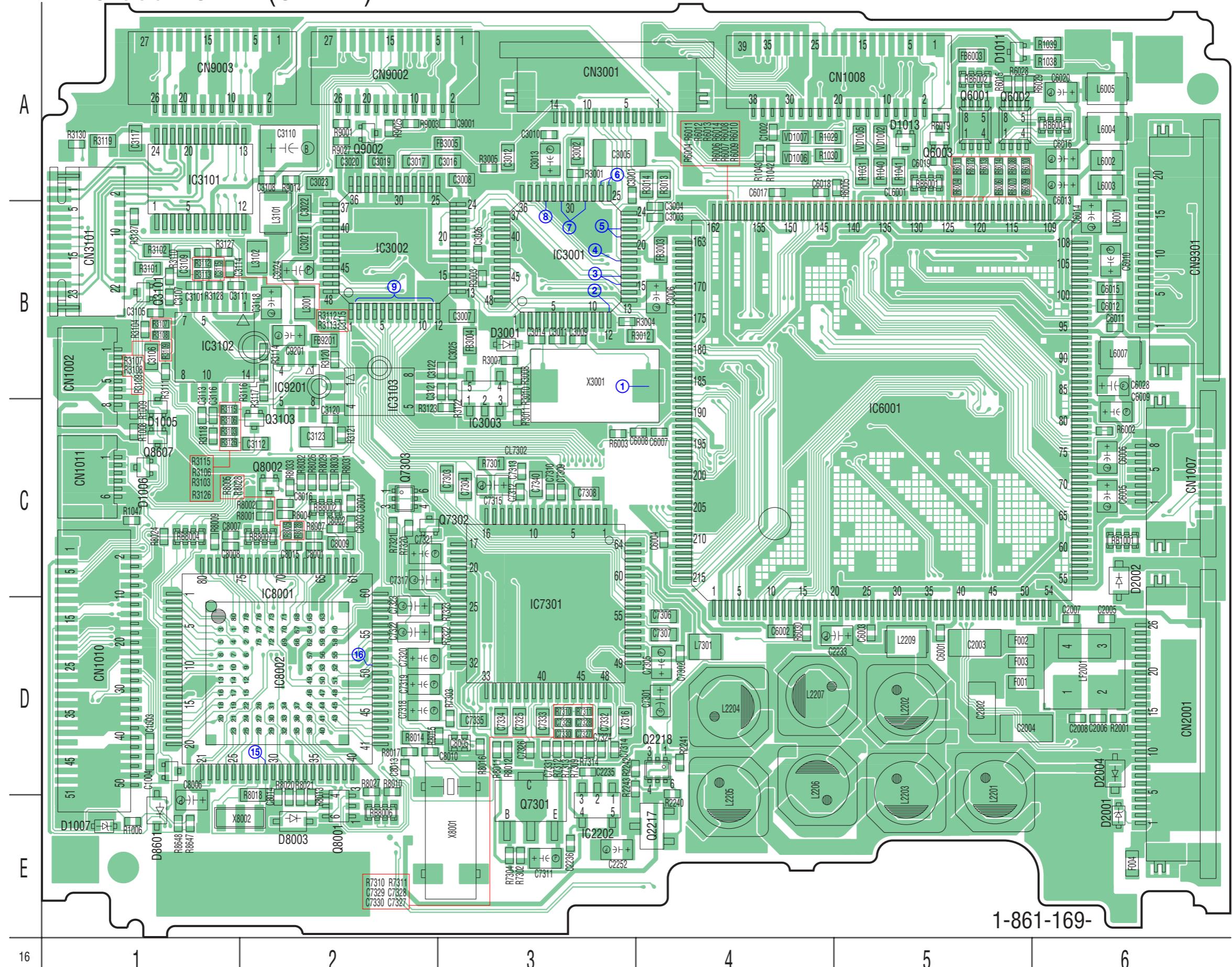
board name	parts location (shown on page)	pattern	
		number of layers	layers not shown
CD-489	—	2	—
IR-051	4-65	2	—
JK-260	4-65	2	—
LB-095	—	2	—
SE-141	4-65	2	—
PD-213	4-65	2	—
MS-200	4-66	2	—
VC-350	4-67	8	2 to 7

4-3. PRINTED WIRING BOARDS

VC-350 BOARD(SIDE A)

- Refer to page 4-47 for common note for printed wiring board.
- : Uses unleaded solder.

-  : Uses unleaded solder.



4-2. SCHEMATIC DIAGRAMS

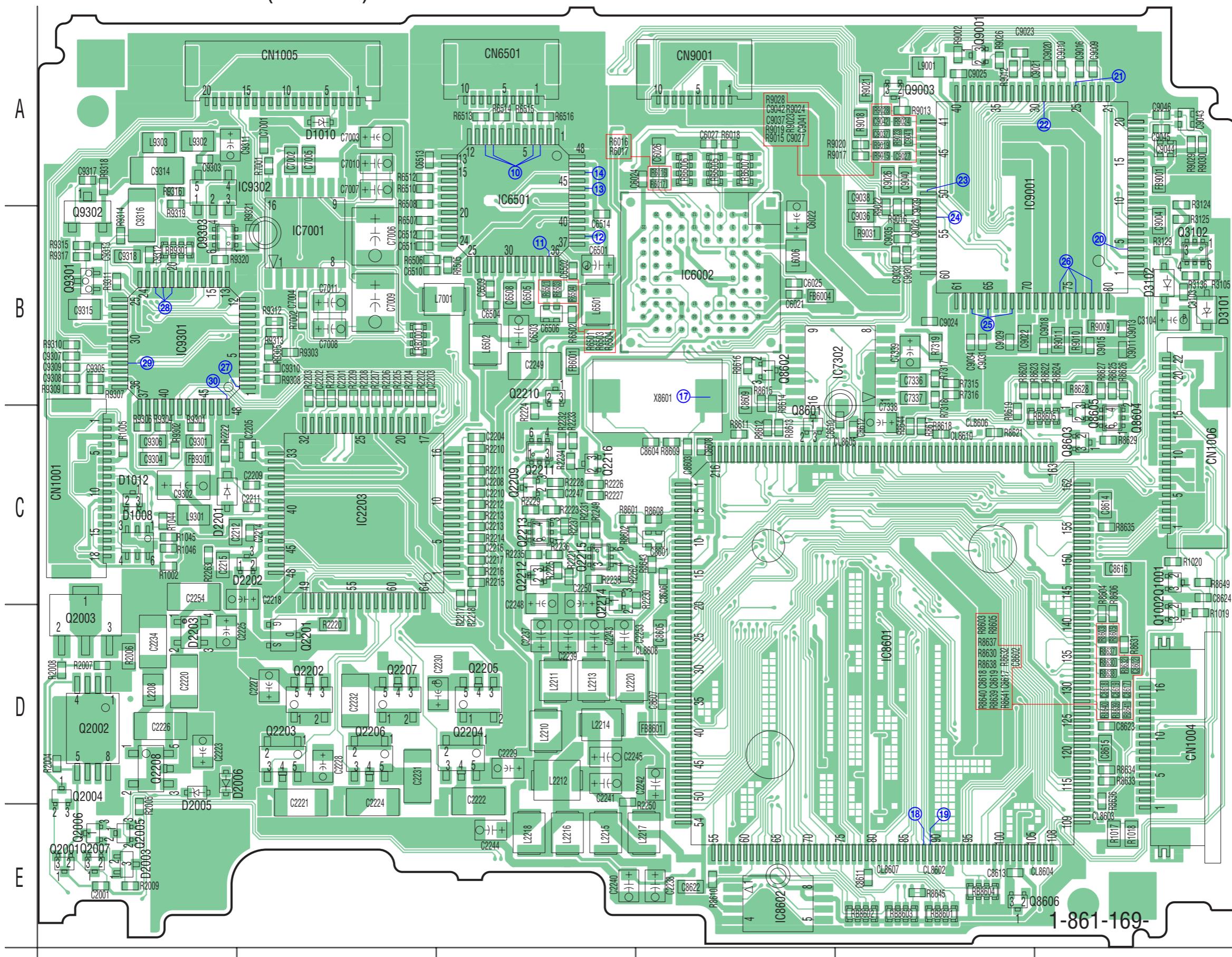
4-3. PRINTED WIRING BOARDS

MOUNTED PARTS LOCATION

VC-350 BOARD(SIDE B)

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

•  : Uses unleaded solder.



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4-3. PRINTED WIRING BOARDS

4-4. MOUNTED PARTS LOCATION

VC-350 BOARD

no mark : side A
 * mark : side B

C1002	A-4	C3101	B-1	C7313	C-3	* C9031	B-5	* FB6001	B-3	* Q2206	D-2	* R2218	C-3	R6015	A-5
C1003	D-1	* C3103	B-6	C7314	D-3	* C9032	B-5	* FB6003	A-5	* Q2207	D-2	* R2220	D-2	* R6016	A-4
C1004	D-1	* C3104	B-6	C7315	C-3	* C9034	B-5	* FB6004	B-4	* Q2208	D-1	* R2221	C-3	* R6017	A-4
* C2001	E-1	C3105	B-1	C7316	D-3	* C9035	B-5	* FB8601	D-4	* Q2209	C-3	* R2222	C-1	* R6018	A-4
C2002	D-5	C3106	B-1	C7317	C-2	* C9036	B-5	* FB9001	A-6	* Q2210	B-3	* R2223	C-3	R6019	A-5
C2003	D-5	C3107	B-1	C7318	D-2	* C9037	A-5	* FB9201	B-2	* Q2211	C-3	* R2224	C-3	R6028	A-5
C2004	D-5	C3108	A-2	C7319	D-2	* C9038	A-5	* FB9301	C-1	* Q2212	C-3	* R2225	C-3	R6029	A-5
C2005	D-6	C3109	B-1	C7320	D-2	* C9039	A-5	IC2202	E-3	* Q2213	C-3	* R2226	C-3	R6030	D-4
C2006	D-6	C3110	A-2	C7321	C-2	* C9040	A-5	* IC2203	C-2	* Q2214	C-3	* R2227	C-3	* R6501	B-3
C2007	D-6	C3111	B-1	C7322	D-2	* C9041	A-5	IC3001	B-3	* Q2215	C-3	* R2228	C-3	* R6502	B-3
C2008	D-6	C3112	C-2	C7323	D-2	* C9042	A-5	IC3002	B-2	* Q2216	C-3	* R2229	C-3	* R6503	B-3
* C2201	B-2	C3113	C-1	C7324	D-3	* C9043	A-6	IC3003	B-3	* Q2217	E-4	* R2230	C-4	* R6504	B-3
* C2202	B-2	C3114	B-1	C7325	D-3	* C9044	A-6	IC3004	A-1	* Q2218	D-4	* R2231	C-3	* R6505	B-3
* C2203	B-2	C3115	B-1	C7326	D-3	* C9045	A-6	IC3101	B-1	* Q2219	B-1	* R2232	C-3	* R6506	B-2
* C2204	C-3	C3116	C-1	C7327	D-3	* C9046	A-6	IC3102	B-1	* Q2220	B-6	* R2233	C-3	* R6507	B-2
* C2205	C-2	C3117	A-1	C7328	D-3	C9201	B-2	IC3103	C-2	* Q2221	C-3	* R2234	C-3	* R6508	A-2
* C2208	C-3	C3118	B-2	C7329	D-3	* C9047	C-1	IC6001	C-5	Q6001	A-5	* R2235	C-3	* R6510	A-2
* C2209	C-2	C3120	C-2	C7330	D-3	* C9048	C-1	* IC6002	B-4	Q6002	A-5	* R2236	C-3	* R6512	A-2
* C2210	C-3	C3121	B-3	C7331	D-3	* C9049	A-3	* IC6501	A-3	Q6003	A-5	* R2237	C-3	* R6513	A-3
* C2211	C-2	C3122	B-3	C7332	D-3	* C9050	C-1	IC7001	B-2	Q7301	E-3	* R2238	C-3	* R6514	A-3
* C2212	C-1	C3123	C-2	C7333	D-3	* C9051	B-1	IC7301	D-3	Q7302	C-2	* R2240	D-4	* R6515	A-3
* C2213	C-3	C6001	D-5	C7334	D-3	* C9052	C-1	* IC7302	B-5	Q7303	C-2	* R2241	D-4	* R6516	A-3
* C2214	C-2	C6002	D-4	C7335	D-3	* C9053	B-1	IC8001	D-2	Q8001	E-2	* R2242	D-3	* R7001	A-2
* C2215	C-1	C6003	D-5	* C7336	B-5	* C9054	B-1	* IC8601	D-5	Q8002	C-2	* R2243	D-3	* R7002	B-2
* C2216	C-3	C6004	C-4	* C7337	B-5	* C9055	B-1	* IC8602	E-4	* Q8601	C-4	* R2249	C-3	R7301	C-3
* C2217	C-3	C6005	C-6	* C7338	C-5	* C9056	B-2	* IC9001	A-5	* Q8602	B-4	* R2250	D-3	R7302	E-3
* C2218	C-2	C6006	C-6	* C7339	B-5	* C9057	A-1	IC9201	B-2	* Q8603	C-6	* R2262	C-3	R7303	D-3
* C2220	D-1	C6007	C-4	C7340	C-3	* C9058	B-1	* IC9301	B-1	* Q8604	C-6	* R2263	C-1	R7304	E-3
* C2221	D-2	C6008	C-4	C8001	C-2	* C9059	B-1	* IC9302	A-1	* Q8605	C-6	R3001	A-3	R7309	D-3
* C2222	D-3	C6009	C-6	C8002	C-2	* C9060	C-1	L2201	D-5	* Q8606	E-5	R3003	B-3	R7310	D-3
* C2223	D-1	C6010	B-6	C8003	C-2	* C9061	B-1	L2202	D-5	* Q9001	A-5	R3004	B-3	R7311	D-3
* C2224	D-2	C6011	B-6	C8004	C-2	* C9062	B-1	L2203	D-5	* Q9002	A-2	R3007	B-3	R7313	D-3
* C2225	D-1	C6012	B-6	C8005	D-3	* C9063	A-1	L2204	D-4	* Q9003	A-5	R3008	B-3	R7314	D-3
* C2226	D-1	C6013	A-6	C8006	D-1	* C9064	B-1	L2205	D-4	* Q9301	B-1	R3010	B-3	* R7315	B-5
* C2227	D-2	C6014	B-6	C8007	C-1	* CN1001	C-1	L2206	D-4	* Q9302	B-1	R3011	C-3	* R7316	B-5
* C2228	D-2	C6015	B-6	C8008	C-1	CN1002	B-1	L2207	D-4	* Q9303	B-1	R3012	B-4	* R7317	B-5
* C2230	D-2	C6017	A-4	C8010	D-3	* CN1004	D-6	L2208	D-1	R3013	A-4	* R7318	B-5	* R7319	B-5
* C2231	D-2	C6018	A-4	C8013	D-2	* CN1005	A-2	L2209	D-5	* R1002	C-1	R3014	A-4	* R7320	C-2
* C2232	D-2	C6019	A-5	C8014	D-2	* CN1006	C-6	* L2210	D-3	* R1005	C-1	R3101	B-1	R7321	C-2
C2233	D-4	C6020	A-6	C8015	C-2	CN1007	C-6	* L2211	D-3	R1006	E-1	R3102	B-1	R7322	D-2
* C2234	D-1	* C6021	B-4	C8016	C-2	CN1008	A-5	* L2212	D-3	R1008	C-1	R3103	C-1	R7323	D-2
C2235	D-3	* C6022	B-4	* C80601	C-4	CN1010	D-1	* L2213	D-3	R1009	C-1	R3104	B-1	R7324	D-2
C2236	E-3	* C6024	A-4	* C80602	D-6	CN1011	C-1	* L2214	D-3	* R1017	E-6	* R3105	B-6	R8001	C-2
* C2237	D-3	* C6025	B-4	* C80603	C-4	CN2001	D-6	* L2215	E-3	* R1018	E-6	R3106	C-1	R8002	C-2
* C2238	E-4	* C6026	A-4	* C80604	C-4	CN3001	A-3	* L2216	E-3	* R1019	D-6	R3107	B-1	R8004	C-2
* C2239	D-3	* C6027	A-4	* C80605	D-4	CN3101	B-1	* L2217	E-4	* R1020	C-6	R3108	B-1	R8005	C-2
* C2240	E-3	* C6028	B-6	* C80606	C-4	* CN6501	A-3	* L2218	E-3	R1029	A-4	R3109	B-1	R8007	C-2
* C2241	D-3	* C60501	B-3	* C80607	D-4	* CN9001	A-4	* L2220	D-3	R1030	A-4	R3110	B-1	R8009	C-1
* C2242	D-4	* C60502	B-3	* C80608	C-4	CN9002	A-2	L3001	B-2	R1031	A-5	R3111	B-1	R8010	D-2
* C2243	D-3	* C60503	B-3	* C80609	B-4	CN9003	A-1	L3101	B-2	R1038	A-6	R3112	B-1	R8011	D-3
* C2244	E-3	* C60504	B-3	* C80610	C-5	CN9301	B-6	L3102	B-2	R1039	A-6	R3113	B-1	R8012	D-3
* C2245	D-3	* C60505	B-3	* C80611	E-5	L6001	B-6	L6002	A-6	R1040	A-5	R3114	B-2	R8013	D-2
* C2247	C-3	* C60506	B-3	* C80612	C-5	D1005	C-1	L6003	A-6	R1041	A-5	R3115	C-1	R8014	D-2
* C2248	C-3	* C60508	B-3	* C80613	E-5	D1006	C-1	L6004	A-6	R1042	A-4	R3116	B-2	R8015	D-2
* C2249	B-3	* C60509	B-3	* C80614	C-6	D1007	E-1	L6005	A-6	R1043	A-4	R3117	B-2	R8016	D-3
* C2250	C-3	* C60510	B-2	* C80615	D-6	* D1008	C-1	L6006	B-4	* R1044	C-1	R3118	C-1	R8017	D-2
C2252	E-3	* C6511	B-2	* C80616	C-6	* D1010	A-2	* D1009	B-6	R1045	C-1	R3119	A-1	R8018	D-2
* C2253	D-3	* C6512	B-2	* C80617	D-6	D1011	A-5	L6007	B-6	* R1046	C-1	R3120	B-2	R8020	D-2
* C2254	C-1	* C6513	A-2	* C80618	D-6	* D1012	C-1	* L6501	B-3	R1047	C-1	R3121	C-2	R8021	D-2
C3001	A-3	* C6514	B-3	* C80619	D-6	D1013	A-5	* L6502	B-3	R2001	D-6	R3122	C-3	R8024	C-1
C3002	A-3	* C7001	A-2	* C80622	E-4	D2001	E-6	* L7001	B-3	* R2004	D-1	R3123	C-3	R8026	C-2
C3003	B-4	* C7002	A-2	* C80623	D-6	D2002	C-6	L7301	D-4	* R2005	D-1	* R3124	A-6	R8027	D-2
C3004	B-4	* C7003	A-2	* C80624	C-6	* D2003	E-1	* L9001	A-5	* R2006	D-1	* R3125	B-6	R8028	C-2
C3005	A-3	* C7004	B-2	* C9001	A-3	D2004	D-6	* L9001	C-1	* R2007	D-1	R3126	C-1	R8029	C-2
C3006	B-4	* C7005	A-2	* C9004	B-6	* D2005	D-1	* L9002	A-1	* R2008	D-1	R3127	B-1	R8030	C-2
C3007	B-3	* C7006	B-2	* C9009	A-6	* D2006	D-1	* L9003	A-1	* R2009	E-1	R3128	B-1	R8031	C-2
C3008	A-3	* C7007	A-2	* C9010	A-6	* D2201	C-1	* R2201	B-2	* R2202	B-2	* R3129	B-6	R8032	C-2
C3009	B-3	* C7008	B-2	* C9011	B-6	* D2202	C-2	LF2001	D-6	* R2202	B-2	R3130	A-1	R8033	C-2
C3010	A-3	* C7009	B-2	* C9013	B-6	* D2203	D-1	* R2203	B-2	* R2204	B-2	* R3136	B-6	* R8034	C-3
C3011	B-3	* C7010	A-2	* C9015	B-6	D3001	B-3	* Q1001	C-6	* R2205	B-2	R3137	B-1	* R8062	C-3
C3012	A-3	* C7011	B-2	* C9016	A-6	* D3101	B-6	* Q1002	D-6	R6002	C-6	* R8063	D-6		
C3013	A-3	* C7301	D-4	* C9018	B-6	* D3102	B-6	* Q2001	E-1	* R2206	B-2	R6003	C-3	* R8064	D-6
C3014	B-3	C7302	D-4	* C9020	A-6	D8003	E-2	* Q2002	D-1	* R2207	B-2	R6004	A-5	* R8065	D-6
C3016	A-3	C7303	C-3	* C9021	A-5	D8601	E-1	* Q2003	D-1	* R2208	B-2	R6005	A-5	* R8066	D-6
C3017	A-2	C7304	C-1	* C9022	B-5	F001	D-5	* Q2004	D-1	* R2209	B-2	R6006	A-5	* R8068	C-4
C3019	A-2	C7305	D-4	* C9023	A-5	F002	D-5	* Q2005	E-1	* R2210	C-3	R6007	A-5	* R8069	C-4
C3020	A-2	C7306	D-4	* C9024	B-5	F003	D-5	* Q2006	E-1	* R2211	C-3	R6008	A-5	* R8060	E-4
C3021	B-2	C7307	D-4	* C9025	A-5	F004	E-6								

4-3. PRINTED WIRING BOARDS

no mark : side A
 * mark : side B

VC-350 BOARD

* R8617	C-5	* RB6006	A-4
* R8618	C-5	* RB6007	A-4
* R8619	C-5	* RB7001	B-2
* R8620	B-5	RB8002	C-2
* R8621	C-5	RB8004	C-1
* R8622	B-6	RB8006	E-2
* R8623	B-5	RB8007	C-2
* R8624	B-6	* RB8601	E-5
* R8625	B-6	* RB8602	E-5
* R8626	B-6	* RB8603	E-5
* R8627	B-6	* RB8604	E-5
* R8628	B-6	* RB8605	C-6
* R8629	C-6	* RB9301	B-1
* R8630	D-6		
* R8631	D-6	VD1002	A-5
* R8632	D-6	VD1005	A-5
* R8633	D-6	VD1006	A-4
* R8634	D-6	VD1007	A-4
* R8635	C-6		
* R8636	D-6	X3001	B-3
* R8637	D-6	X8001	E-3
* R8638	D-6	X8002	E-2
* R8639	D-6	* X8601	B-4
* R8640	D-6		
* R8641	D-6		
* R8643	C-4		
* R8644	C-5		
* R8645	E-5		
R8647	E-1		
R8648	E-1		
* R8649	C-6		
R9001	A-2		
* R9002	A-5		
R9003	A-2		
* R9009	B-6		
* R9010	B-6		
* R9011	B-6		
* R9012	A-5		
* R9013	A-5		
R9014	A-2		
* R9015	A-5		
* R9016	A-5		
* R9017	A-5		
* R9018	A-5		
* R9019	A-5		
* R9020	A-5		
* R9021	A-5		
* R9022	A-5		
* R9023	A-5		
* R9024	A-5		
R9025	A-2		
* R9026	A-5		
R9027	A-2		
* R9028	A-5		
* R9029	A-6		
* R9030	A-6		
* R9031	B-5		
* R9301	C-1		
* R9302	C-1		
* R9303	B-2		
* R9304	C-1		
* R9305	B-2		
* R9306	C-1		
* R9307	B-1		
* R9308	B-2		
* R9309	B-1		
* R9310	B-1		
* R9311	B-1		
* R9312	B-2		
* R9313	B-2		
* R9314	B-1		
* R9315	B-1		
* R9316	A-1		
* R9317	B-1		
* R9318	A-1		
* R9319	A-1		
* R9320	B-1		
* R9321	B-2		
RB1001	C-6		
RB6001	A-5		
RB6002	A-5		
RB6004	A-6		
* RB6005	A-4		

SECTION 5

REPAIR PARTS LIST

NOTE:

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

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

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

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

5-2. ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
	A-7112-727-A	VC-350 BOARD, COMPLETE (SERVICE) (HC20/HC20E)	C2244	1-117-919-11	TANTAL. CHIP
		*****	C2245	1-127-895-91	TANTAL. CHIP
		*****	C2247	1-125-777-11	CERAMIC CHIP
	A-7113-163-A	VC-350 BOARD, COMPLETE (SERVICE) (HC16E/HC18E)	C2248	1-125-889-91	CERAMIC CHIP
		*****	C2249	1-127-820-11	CERAMIC CHIP
		< CAPACITOR >	C2250	1-125-889-91	CERAMIC CHIP
C1003	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C1004	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2001	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C2002	1-165-875-11	CERAMIC CHIP	10uF	10%	10V
C2003	1-165-875-11	CERAMIC CHIP	10uF	10%	10V
C2004	1-165-875-11	CERAMIC CHIP	10uF	10%	10V
C2005	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2006	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2007	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2008	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2201	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2202	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2203	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C2204	1-164-940-11	CERAMIC CHIP	0.0033uF	10%	16V
C2205	1-100-251-11	CERAMIC CHIP	0.047uF	10%	10V
C2208	1-164-940-11	CERAMIC CHIP	0.0033uF	10%	16V
C2209	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2210	1-164-936-11	CERAMIC CHIP	680PF	10%	50V
C2211	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2212	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C2213	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C2214	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2215	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C2216	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C2217	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C2218	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V
C2220	1-125-827-91	CERAMIC CHIP	1uF	10%	25V
C2221	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C2222	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C2223	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C2224	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C2225	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C2226	1-127-820-11	CERAMIC CHIP	4.7uF	10%	16V
C2227	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C2228	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C2229	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C2230	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C2231	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C2232	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C2233	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C2234	1-107-682-11	CERAMIC CHIP	1uF	10%	16V
C2235	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C2236	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2237	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C2238	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C2239	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C2240	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C2241	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C2242	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C2243	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C2244	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C2245	1-127-895-91	TANTAL. CHIP	22uF	20%	4V
C2247	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2248	1-125-889-91	CERAMIC CHIP	2.2uF	10%	10V
C2249	1-127-820-11	CERAMIC CHIP	4.7uF	10%	16V
C2250	1-125-889-91	CERAMIC CHIP	2.2uF	10%	10V
C2252	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C2253	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C3001	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3002	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C3003	1-164-870-11	CERAMIC CHIP	68PF	5%	50V
C3004	1-164-870-11	CERAMIC CHIP	68PF	5%	50V
C3005	1-127-861-11	CERAMIC CHIP	2.2uF	10%	16V
C3006	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C3007	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C3008	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C3009	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3012	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3013	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C3014	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3016	1-128-934-91	CERAMIC CHIP	0.33uF	20%	10V
C3019	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3020	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C3021	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3022	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3023	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3024	1-127-895-91	TANTAL. CHIP	22uF	20%	4V
C3026	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C3101	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3103	1-164-941-11	CERAMIC CHIP	0.0047uF	10%	16V
C3104	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C3105	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C3106	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3107	1-164-935-11	CERAMIC CHIP	470PF	10%	50V
C3108	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3109	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C3110	1-113-682-11	TANTAL. CHIP	33uF	20%	10V
C3111	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C3112	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C3113	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3116	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V
C3118	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C3120	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C3122	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6001	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6002	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C6003	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6004	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6005	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C6007	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6008	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6009	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C6010	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C6011	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6012	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

Ref. No.	Part No.	Description					Ref. No.	Part No.	Description			
C6013	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V		C7324	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6014	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V		C7325	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C6015	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		C7326	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6016	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V		C7327	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C6017	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V		C7328	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6018	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V		C7329	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6019	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C7330	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C6020	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V		C7331	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6021	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V		C7332	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C6022	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V		C7333	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C6024	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V		C7334	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C6025	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C7335	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C6026	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V		C7336	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C6027	1-164-882-11	CERAMIC CHIP	220PF	5%	16V		C7337	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C6028	1-127-895-91	TANTAL. CHIP	22uF	20%	4V		C7338	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C6501	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V		C7339	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C6502	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V		C7340	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C6503	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V		C8001	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6504	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V		C8003	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6505	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V		C8004	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6506	1-100-249-11	CERAMIC CHIP	0.01uF	10%	16V		C8005	1-100-249-11	CERAMIC CHIP	0.01uF	10%	16V
C6508	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V		C8006	1-127-895-91	TANTAL. CHIP	22uF	20%	4V
C6509	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V		C8007	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6510	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V		C8008	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6511	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C8009	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C6512	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C8010	1-164-856-81	CERAMIC CHIP	18PF	5%	50V
C6513	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V		C8013	1-164-856-81	CERAMIC CHIP	18PF	5%	50V
C6514	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V		C8014	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C7001	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V		C8015	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C7002	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V		C8016	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C7003	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V		C8601	1-100-249-11	CERAMIC CHIP	0.01uF	10%	16V
C7004	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C8603	1-164-850-11	CERAMIC CHIP	10PF	0.5PF	50V
C7006	1-100-609-11	TANTAL. CHIP	220uF		5V		C8604	1-164-850-11	CERAMIC CHIP	10PF	0.5PF	50V
C7007	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V		C8606	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C7008	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V		C8607	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C7009	1-100-609-11	TANTAL. CHIP	220uF		5V		C8608	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C7010	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V		C8609	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C7011	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V		C8611	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C7301	1-127-895-91	TANTAL. CHIP	22uF	20%	4V		C8612	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C7302	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V		C8613	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C7303	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V		C8614	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C7304	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V		C8615	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C7305	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V		C8617	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C7306	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V		C8618	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C7307	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V		C8619	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C7308	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V		C8622	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C7309	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C9001	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C7310	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V		C9004	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C7312	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V		C9009	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C7313	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V		C9010	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C7314	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V		C9011	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C7315	1-131-623-91	TANTAL. CHIP	15uF	20%	4V		C9013	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C7316	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V		C9015	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C7317	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V		C9018	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C7318	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V		C9021	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C7319	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V		C9022	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C7320	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V		C9023	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C7321	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V		C9024	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C7322	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V		C9025	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C7323	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V		C9026	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V

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Ref. No.	Part No.	Description	Ref. No.	Part No.	Description			
C9027	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V	D2201	8-719-027-76	DIODE 1SS357-TPH3
C9028	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V	D2202	6-500-314-01	DIODE DAN222MT2L
C9029	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	D2203	8-719-074-08	DIODE MA4ZD03001S0
C9030	1-164-935-11	CERAMIC CHIP	470PF	10%	50V	D3001	8-719-082-63	DIODE 1SV329 (TPL3)
C9031	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	D3102	8-719-988-61	DIODE 1SS355TE-17
C9032	1-164-935-11	CERAMIC CHIP	470PF	10%	50V	D8003	8-719-988-61	DIODE 1SS355TE-17
C9034	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V			< FUSE >
C9035	1-164-935-11	CERAMIC CHIP	470PF	10%	50V	△F001	1-576-406-11	FUSE 1.4A/32V
C9036	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V	△F002	1-576-406-11	FUSE 1.4A/32V
C9038	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	△F003	1-576-406-11	FUSE 1.4A/32V
C9039	1-164-935-11	CERAMIC CHIP	470PF	10%	50V	△F004	1-576-406-11	FUSE 1.4A/32V
C9040	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V			< FERRITE BEAD >
C9041	1-164-942-11	CERAMIC CHIP	0.0068uF	10%	16V	FB3003	1-414-760-21	FERRITE, EMI (SMD) (1608)
C9042	1-164-942-11	CERAMIC CHIP	0.0068uF	10%	16V	FB3004	1-414-760-21	FERRITE, EMI (SMD) (1608)
C9043	1-100-246-11	CERAMIC CHIP	0.001uF	10%	50V	FB3005	1-500-283-11	INDUCTOR, FERRITE BEAD
C9044	1-100-249-11	CERAMIC CHIP	0.01uF	10%	16V	FB6001	1-414-760-21	FERRITE, EMI (SMD) (1608)
C9045	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V	FB6003	1-414-760-21	FERRITE, EMI (SMD) (1608)
C9046	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V	FB6004	1-414-760-21	FERRITE, EMI (SMD) (1608)
C9201	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V	FB8601	1-414-760-21	FERRITE, EMI (SMD) (1608)
C9301	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V	FB9001	1-414-760-21	FERRITE, EMI (SMD) (1608)
C9302	1-119-750-11	TANTAL. CHIP	22uF	20%	6.3V	FB9201	1-414-760-21	FERRITE, EMI (SMD) (1608)
C9304	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	FB9301	1-414-760-21	FERRITE, EMI (SMD) (1608)
C9306	1-164-739-11	CERAMIC CHIP	560PF	5%	50V			< IC >
C9309	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	IC2202	6-703-227-01	IC TK11131CSCL-G
C9310	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	IC2203	6-705-264-01	IC MB44A120BPFV-G-BND-ERE1
C9311	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V	IC3001	8-752-417-70	IC CXD2444AR-T4
C9314	1-127-820-11	CERAMIC CHIP	4.7uF	10%	16V	IC3002	6-705-651-01	IC VSP995PTR
C9315	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V	IC3101	8-759-637-96	IC uPD16877MA-6A5-E2
C9316	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V	IC3102	8-759-681-42	IC NJM12902V (TE2)
						IC3103	6-705-632-01	IC LM2904PT
						IC6001	8-752-418-16	IC CXD3164R
						IC6002	6-700-553-01	IC SN104266BGGM-TEB
						IC6501	8-752-106-95	IC CXA3619R-T4
						IC7001	6-703-199-01	IC BH7611FV-E2
						IC7301	6-701-074-01	IC LA74207W-TBM-E
						IC7302	8-759-647-71	IC AK4550VT-E2
						IC8001	6-803-798-01	IC MB89097PFV-G-170-BND-ERE1
						IC8601	6-804-225-01	IC MB91194APFF-G-174-BNDE1
						IC8602	6-705-177-01	IC M95640-WDW6TG
						IC9001	6-705-676-01	IC TB6550FG (O, EB)
						IC9201	6-701-985-01	IC BH2220FVM-TR
						IC9301	8-752-110-48	IC CXM3007R-T4
						IC9302	8-759-581-11	IC NJM2125F (TE2)
								< CONNECTOR >
CN1001	1-817-550-11	CONNECTOR, FPC 18P						
CN1002	1-817-549-11	CONNECTOR, FPC 8P						
CN1004	1-691-354-21	CONNECTOR, FFC/FPC (ZIF) 16P						
CN1005	1-818-046-11	CONNECTOR, FFC/FPC 20P						
CN1006	1-816-649-31	FFC/FPC CONNECTOR (LIF) 22P						
CN1007	1-766-644-21	FFC/CONNECTOR, FPC (LIF (NON-ZIF)) 8P						
CN1008	1-784-423-21	FFC/CONNECTOR, FPC (ZIF) 39P						
CN1011	1-816-654-31	FFC/FPC CONNECTOR (LIF) 6P						
CN2001	1-766-356-21	CONNECTOR, FFC/FPC 26P						
CN3001	1-766-344-21	CONNECTOR, FFC/FPC 14P						
CN3101	1-816-595-31	CONNECTOR, FPC (ZIF) 23P						
CN6501	1-817-705-11	CONNECTOR, FPC (LIF (NON-ZIF)) 10P						
CN9001	1-817-705-11	CONNECTOR, FPC (LIF (NON-ZIF)) 10P						
CN9002	1-784-421-11	CONNECTOR, FFC/FPC (ZIF) 27P						
CN9003	1-784-421-11	CONNECTOR, FFC/FPC (ZIF) 27P						
CN9301	1-766-350-21	CONNECTOR, FFC/FPC 20P						< COIL >
								< DIODE >
D1005	6-500-776-01	DIODE MAZW068H0LS0				L2201	1-456-138-11	INDUCTOR 33uH
D1006	6-500-776-01	DIODE MAZW068H0LS0				L2202	1-456-137-11	INDUCTOR 22uH
D1008	6-500-044-01	DIODE DF6A6.8FU (TE85R)				L2203	1-456-137-11	INDUCTOR 22uH
D1011	6-500-776-01	DIODE MAZW068H0LS0				L2204	1-456-138-11	INDUCTOR 33uH
D1012	6-500-776-01	DIODE MAZW068H0LS0				L2205	1-456-137-11	INDUCTOR 22uH
D1013	6-500-776-01	DIODE MAZW068H0LS0				L2206	1-456-137-11	INDUCTOR 22uH
D2001	8-719-083-91	DIODE EDZ TE61 6.8B				L2207	1-456-138-11	INDUCTOR 33uH
D2002	8-719-027-76	DIODE 1SS357-TPH3				L2208	1-400-588-11	INDUCTOR, LAMINATE CHIP 10uH
D2004	8-719-027-76	DIODE 1SS357-TPH3				L2209	1-469-524-91	INDUCTOR 4.7uH
D2005	8-719-083-91	DIODE EDZ TE61 6.8B				L2210	1-469-524-91	INDUCTOR 4.7uH

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

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

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description						
L2211	1-469-524-91	INDUCTOR	4.7uH	Q3102	8-729-054-51	TRANSISTOR	UP04116008S0				
L2212	1-412-056-11	INDUCTOR	4.7uH	Q3103	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R				
L2213	1-469-524-91	INDUCTOR	4.7uH	Q6001	6-550-383-01	TRANSISTOR	HN4A71FK (TE85R)				
L2214	1-469-525-91	INDUCTOR	10uH	Q6003	6-550-239-01	TRANSISTOR	DTA144EMT2L				
L2215	1-469-524-91	INDUCTOR	4.7uH	Q7301	8-729-921-51	TRANSISTOR	2SD1834-T100				
L2216	1-469-524-91	INDUCTOR	4.7uH	Q7302	6-550-240-01	TRANSISTOR	DTA114TMT2L				
L2217	1-469-524-91	INDUCTOR	4.7uH	Q7303	8-729-054-52	TRANSISTOR	UP04216008S0				
L2218	1-469-524-91	INDUCTOR	4.7uH	Q8001	8-729-041-43	TRANSISTOR	HN1L02FU (TE85R)				
L2220	1-469-524-91	INDUCTOR	4.7uH	Q8002	6-550-238-01	TRANSISTOR	DTA114EMT2L				
L3001	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH	Q8601	6-550-119-01	TRANSISTOR	DTC144EMT2L				
L3101	1-469-525-91	INDUCTOR	10uH	Q8602	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R				
L3102	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH	Q8603	6-550-239-01	TRANSISTOR	DTA144EMT2L				
L6001	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH	Q8604	8-729-053-54	TRANSISTOR	HN1A01FE-Y/GR (TPLR3)				
L6002	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH	Q8605	6-550-174-01	TRANSISTOR	2SA2030T2L				
L6003	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH	Q8607	6-550-119-01	TRANSISTOR	DTC144EMT2L				
L6004	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH	Q9001	6-550-174-01	TRANSISTOR	2SA2030T2L				
L6005	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH	Q9002	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R				
L6006	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH	Q9303	8-729-054-48	TRANSISTOR	UP04601008S0				
L6007	1-469-525-91	INDUCTOR	10uH	< RESISTOR >							
L6501	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH	R1002	1-218-943-11	RES-CHIP	150	5%	1/16W		
L6502	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH	R1005	1-218-941-81	RES-CHIP	100	5%	1/16W		
L7001	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH	R1008	1-218-942-11	RES-CHIP	120	5%	1/16W		
L7301	1-469-561-21	INDUCTOR	100uH	R1017	1-216-801-11	METAL CHIP	22	5%	1/10W		
L9001	1-400-202-21	INDUCTOR	4.7uH	R1018	1-216-801-11	METAL CHIP	22	5%	1/10W		
L9301	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH	R1019	1-218-939-11	RES-CHIP	68	5%	1/16W		
L9302	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH	R1020	1-218-959-11	RES-CHIP	3.3K	5%	1/16W		
L9303	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH	R1038	1-216-817-11	METAL CHIP	470	5%	1/10W		
< LINE FILTER >						R1043	1-218-990-11	SHORT CHIP	0		
LF2001 1-456-681-21 COIL, CHOKE						R1044	1-218-990-11	SHORT CHIP	0		
< TRANSISTOR >						R1045	1-218-990-11	SHORT CHIP	0		
Q1001	6-550-102-01	TRANSISTOR	2SC5663T2L	R2001	1-218-953-11	RES-CHIP	1K	5%	1/16W		
Q1002	6-550-235-01	TRANSISTOR	UNR32A500LS0	R2004	1-218-977-11	RES-CHIP	100K	5%	1/16W		
Q2001	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R	R2005	1-218-989-11	RES-CHIP	1M	5%	1/16W		
Q2002	6-550-404-01	TRANSISTOR	UPA1858GR-9JG-E2-A	R2006	1-216-797-11	METAL CHIP	10	5%	1/10W		
Q2003	8-729-101-07	TRANSISTOR	2SB798-DL	R2007	1-218-954-11	RES-CHIP	1.2K	5%	1/16W		
Q2004	6-550-119-01	TRANSISTOR	DTC144EMT2L	R2008	1-218-963-11	RES-CHIP	6.8K	5%	1/16W		
Q2201	6-550-406-01	TRANSISTOR	MCH3335-S-TL-E	R2009	1-218-990-11	SHORT CHIP	0				
Q2202	6-550-559-01	TRANSISTOR	XNONE9200LS0	R2201	1-208-922-11	METAL CHIP	30K	0.5%	1/16W		
Q2203	6-550-559-01	TRANSISTOR	XNONE9200LS0	R2202	1-218-953-11	RES-CHIP	1K	5%	1/16W		
Q2204	6-550-559-01	TRANSISTOR	XNONE9200LS0	R2203	1-218-961-11	RES-CHIP	4.7K	5%	1/16W		
Q2205	6-550-559-01	TRANSISTOR	XNONE9200LS0	R2210	1-218-960-11	RES-CHIP	3.9K	5%	1/16W		
Q2206	6-550-559-01	TRANSISTOR	XNONE9200LS0	R2211	1-218-964-11	RES-CHIP	8.2K	5%	1/16W		
Q2207	6-550-559-01	TRANSISTOR	XNONE9200LS0	R2212	1-218-973-11	RES-CHIP	47K	5%	1/16W		
Q2208	6-550-560-01	TRANSISTOR	CPH5819-TL-E	R2213	1-218-956-11	RES-CHIP	1.8K	5%	1/16W		
Q2209	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R	R2214	1-218-953-11	RES-CHIP	1K	5%	1/16W		
Q2210	6-550-232-01	TRANSISTOR	2SA2029T2LQ/R	R2215	1-208-709-11	METAL CHIP	12K	0.5%	1/16W		
Q2211	8-729-053-52	TRANSISTOR	HN1C01FE-Y/GR (TPLR3)	R2216	1-218-965-11	RES-CHIP	10K	5%	1/16W		
Q2212	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R	R2217	1-218-978-11	RES-CHIP	120K	5%	1/16W		
Q2213	8-729-053-54	TRANSISTOR	HN1A01FE-Y/GR (TPLR3)	R2218	1-208-715-11	METAL CHIP	22K	0.5%	1/16W		
Q2214	6-550-232-01	TRANSISTOR	2SA2029T2LQ/R	R2220	1-216-789-11	METAL CHIP	2.2	5%	1/10W		
Q2215	8-729-053-52	TRANSISTOR	HN1C01FE-Y/GR (TPLR3)	R2221	1-218-990-11	SHORT CHIP	0				
Q2216	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R	R2222	1-218-941-81	RES-CHIP	100	5%	1/16W		
Q2217	8-729-216-22	TRANSISTOR	2SA1162-G	R2223	1-218-973-11	RES-CHIP	47K	5%	1/16W		
Q2218	8-729-053-52	TRANSISTOR	HN1C01FE-Y/GR (TPLR3)	R2224	1-218-977-11	RES-CHIP	100K	5%	1/16W		
Q3101	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R	R2225	1-218-977-11	RES-CHIP	100K	5%	1/16W		
				R2226	1-218-966-11	RES-CHIP	12K	5%	1/16W		
				R2227	1-218-977-11	RES-CHIP	100K	5%	1/16W		
				R2228	1-218-969-11	RES-CHIP	22K	5%	1/16W		
				R2229	1-218-969-11	RES-CHIP	22K	5%	1/16W		

DCR-HC16E/HC18E/HC20/HC20E

VC-350

Ref. No.	Part No.	Description				Ref. No.	Part No.	Description			
R2230	1-218-977-11	RES-CHIP	100K	5%	1/16W	R6014	1-208-675-11	METAL CHIP	470	0.5%	1/16W
R2231	1-218-969-11	RES-CHIP	22K	5%	1/16W	R6016	1-208-709-11	METAL CHIP	12K	0.5%	1/16W
R2232	1-208-935-11	METAL CHIP	100K	0.5%	1/16W	R6017	1-208-709-11	METAL CHIP	12K	0.5%	1/16W
R2233	1-208-721-11	METAL CHIP	39K	0.5%	1/16W	R6018	1-218-864-11	METAL CHIP	5.1K	0.5%	1/10W
R2234	1-208-703-11	METAL CHIP	6.8K	0.5%	1/16W	R6019	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R2235	1-208-935-11	METAL CHIP	100K	0.5%	1/16W	R6501	1-218-965-11	RES-CHIP	10K	5%	1/16W
R2236	1-208-909-11	METAL CHIP	8.2K	0.5%	1/16W	R6502	1-218-969-11	RES-CHIP	22K	5%	1/16W
R2237	1-208-943-11	METAL CHIP	220K	0.5%	1/16W	R6505	1-218-965-11	RES-CHIP	10K	5%	1/16W
R2238	1-208-931-11	METAL CHIP	68K	0.5%	1/16W	R6506	1-218-965-11	RES-CHIP	10K	5%	1/16W
R2240	1-218-977-11	RES-CHIP	100K	5%	1/16W	R6507	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R2241	1-218-949-11	RES-CHIP	470	5%	1/16W	R6508	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R2242	1-208-909-11	METAL CHIP	8.2K	0.5%	1/16W	R6510	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R2243	1-208-711-11	METAL CHIP	15K	0.5%	1/16W	R6512	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R2249	1-208-935-11	METAL CHIP	100K	0.5%	1/16W	R6513	1-218-945-11	RES-CHIP	220	5%	1/16W
R2262	1-208-707-11	METAL CHIP	10K	0.5%	1/16W	R6514	1-218-945-11	RES-CHIP	220	5%	1/16W
R3001	1-218-977-11	RES-CHIP	100K	5%	1/16W	R6515	1-218-945-11	RES-CHIP	220	5%	1/16W
R3005	1-218-937-11	RES-CHIP	47	5%	1/16W	R6516	1-218-945-11	RES-CHIP	220	5%	1/16W
R3007	1-218-985-11	RES-CHIP	470K	5%	1/16W	R7002	1-218-964-11	RES-CHIP	8.2K	5%	1/16W
R3013	1-216-864-11	SHORT CHIP	0			R7301	1-216-864-11	SHORT CHIP	0		
R3014	1-216-864-11	SHORT CHIP	0			R7302	1-218-973-11	RES-CHIP	47K	5%	1/16W
R3103	1-218-969-11	RES-CHIP	22K	5%	1/16W	R7303	1-218-981-11	RES-CHIP	220K	5%	1/16W
R3104	1-218-953-11	RES-CHIP	1K	5%	1/16W	R7304	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R3105	1-208-635-11	METAL CHIP	10	0.5%	1/16W	R7309	1-218-951-11	RES-CHIP	680	5%	1/16W
R3106	1-218-989-11	RES-CHIP	1M	5%	1/16W	R7310	1-218-963-11	RES-CHIP	6.8K	5%	1/16W
R3107	1-218-957-11	RES-CHIP	2.2K	5%	1/16W	R7311	1-218-963-11	RES-CHIP	6.8K	5%	1/16W
R3108	1-218-965-11	RES-CHIP	10K	5%	1/16W	R7312	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R3109	1-218-981-11	RES-CHIP	220K	5%	1/16W	R7313	1-218-951-11	RES-CHIP	680	5%	1/16W
R3110	1-218-985-11	RES-CHIP	470K	5%	1/16W	R7314	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R3111	1-218-985-11	RES-CHIP	470K	5%	1/16W	R7315	1-218-965-11	RES-CHIP	10K	5%	1/16W
R3112	1-218-957-11	RES-CHIP	2.2K	5%	1/16W	R7316	1-218-965-11	RES-CHIP	10K	5%	1/16W
R3113	1-218-963-11	RES-CHIP	6.8K	5%	1/16W	R7317	1-218-953-11	RES-CHIP	1K	5%	1/16W
R3114	1-218-985-11	RES-CHIP	470K	5%	1/16W	R7318	1-218-953-11	RES-CHIP	1K	5%	1/16W
R3115	1-218-947-11	RES-CHIP	330	5%	1/16W	R7319	1-216-864-11	SHORT CHIP	0		
R3116	1-218-953-11	RES-CHIP	1K	5%	1/16W	R7320	1-218-973-11	RES-CHIP	47K	5%	1/16W
R3117	1-218-965-11	RES-CHIP	10K	5%	1/16W	R7321	1-218-973-11	RES-CHIP	47K	5%	1/16W
R3118	1-218-973-11	RES-CHIP	47K	5%	1/16W	R7322	1-218-953-11	RES-CHIP	1K	5%	1/16W
R3119	1-216-864-11	SHORT CHIP	0			R7323	1-218-953-11	RES-CHIP	1K	5%	1/16W
R3120	1-208-715-11	METAL CHIP	22K	0.5%	1/16W	R8001	1-218-977-11	RES-CHIP	100K	5%	1/16W
R3121	1-208-707-11	METAL CHIP	10K	0.5%	1/16W	R8002	1-218-989-11	RES-CHIP	1M	5%	1/16W
R3122	1-218-983-11	RES-CHIP	330K	5%	1/16W	R8004	1-218-989-11	RES-CHIP	1M	5%	1/16W
R3123	1-218-985-11	RES-CHIP	470K	5%	1/16W	R8005	1-218-977-11	RES-CHIP	100K	5%	1/16W
R3124	1-218-973-11	RES-CHIP	47K	5%	1/16W	R8007	1-218-973-11	RES-CHIP	47K	5%	1/16W
R3125	1-218-973-11	RES-CHIP	47K	5%	1/16W	R8010	1-218-953-11	RES-CHIP	1K	5%	1/16W
R3126	1-218-969-11	RES-CHIP	22K	5%	1/16W	R8011	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R3127	1-218-953-11	RES-CHIP	1K	5%	1/16W	R8012	1-218-989-11	RES-CHIP	1M	5%	1/16W
R3128	1-218-953-11	RES-CHIP	1K	5%	1/16W	R8013	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R3129	1-218-973-11	RES-CHIP	47K	5%	1/16W	R8014	1-219-570-11	METAL CHIP	10M	5%	1/10W
R3130	1-218-977-11	RES-CHIP	100K	5%	1/16W	R8015	1-218-985-11	RES-CHIP	470K	5%	1/16W
R3136	1-218-990-11	SHORT CHIP	0			R8016	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R3137	1-218-990-11	SHORT CHIP	0			R8017	1-218-990-11	SHORT CHIP	0		
R6003	1-218-953-11	RES-CHIP	1K	5%	1/16W	R8018	1-216-857-11	METAL CHIP	1M	5%	1/10W
R6004	1-218-965-11	RES-CHIP	10K	5%	1/16W	R8020	1-218-949-11	RES-CHIP	470	5%	1/16W
R6006	1-208-707-11	METAL CHIP	10K	0.5%	1/16W	R8021	1-218-977-11	RES-CHIP	100K	5%	1/16W
R6007	1-218-965-11	RES-CHIP	10K	5%	1/16W	R8024	1-218-953-11	RES-CHIP	1K	5%	1/16W
R6008	1-218-951-11	RES-CHIP	680	5%	1/16W	R8026	1-218-977-11	RES-CHIP	100K	5%	1/16W
R6009	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R8027	1-218-977-11	RES-CHIP	100K	5%	1/16W
R6010	1-218-946-11	RES-CHIP	270	5%	1/16W	R8028	1-218-953-11	RES-CHIP	1K	5%	1/16W
R6011	1-208-677-11	METAL CHIP	560	0.5%	1/16W	R8029	1-218-965-11	RES-CHIP	10K	5%	1/16W
R6012	1-208-677-11	METAL CHIP	560	0.5%	1/16W	R8031	1-218-965-11	RES-CHIP	10K	5%	1/16W
R6013	1-208-677-11	METAL CHIP	560	0.5%	1/16W	R8032	1-218-965-11	RES-CHIP	10K	5%	1/16W

Ref. No.	Part No.	Description				Ref. No.	Part No.	Description			
R8033	1-218-953-11	RES-CHIP	1K	5%	1/16W	R9306	1-220-206-11	RES-CHIP	91K	5%	1/16W
R8601	1-218-941-81	RES-CHIP	100	5%	1/16W	R9307	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R8602	1-218-965-11	RES-CHIP	10K	5%	1/16W	R9314	1-218-969-11	RES-CHIP	22K	5%	1/16W
R8603	1-218-990-11	SHORT CHIP	0 (HC16E/HC18E)			R9316	1-208-941-11	METAL CHIP	180K	0.5%	1/16W
R8604	1-218-990-11	SHORT CHIP	0 (HC20/HC20E)			R9318	1-218-990-11	SHORT CHIP	0		
R8605	1-218-990-11	SHORT CHIP	0			R9319	1-208-719-11	METAL CHIP	33K	0.5%	1/16W
R8608	1-218-965-11	RES-CHIP	10K	5%	1/16W	R9320	1-218-956-11	RES-CHIP	1.8K	5%	1/16W
R8611	1-218-977-11	RES-CHIP	100K	5%	1/16W	R9321	1-211-983-11	METAL CHIP	39	0.5%	1/10W
R8612	1-218-961-11	RES-CHIP	4.7K	5%	1/16W						< COMPOSITION CIRCUIT BLOCK >
R8613	1-218-977-11	RES-CHIP	100K	5%	1/16W	R8614	1-218-953-11	RES-CHIP	1K	5%	1/16W
R8615	1-218-953-11	RES-CHIP	1K	5%	1/16W	RB1001	1-234-375-21	RES, NETWORK 1KX4 (1005)			
R8616	1-218-973-11	RES-CHIP	47K	5%	1/16W	RB6001	1-234-714-11	RES, NETWORK 56X4 (1005)			
R8619	1-218-965-11	RES-CHIP	10K	5%	1/16W	RB6002	1-234-377-21	RES, NETWORK 4.7KX4 (1005)			
R8620	1-218-965-11	RES-CHIP	10K	5%	1/16W	RB6004	1-234-400-21	CONDUCTOR, NETWORK (2010)			
R8621	1-218-985-11	RES-CHIP	470K	5%	1/16W	RB6005	1-234-714-11	RES, NETWORK 56X4 (1005)			
R8622	1-218-959-11	RES-CHIP	3.3K	5%	1/16W	RB6006	1-234-400-21	CONDUCTOR, NETWORK (2010)			
R8623	1-218-959-11	RES-CHIP	3.3K	5%	1/16W	RB7001	1-234-702-11	RES, NETWORK 68X4 (1005)			
R8624	1-218-959-11	RES-CHIP	3.3K	5%	1/16W	RB8002	1-234-375-21	RES, NETWORK 1KX4 (1005)			
R8625	1-218-955-11	RES-CHIP	1.5K	5%	1/16W	RB8004	1-234-375-21	RES, NETWORK 1KX4 (1005)			
R8626	1-218-962-11	RES-CHIP	5.6K	5%	1/16W	RB8006	1-234-381-21	RES, NETWORK 100KX4 (1005)			
R8627	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	RB8007	1-234-375-21	RES, NETWORK 1KX4 (1005)			
R8628	1-216-791-11	METAL CHIP	3.3	5%	1/10W	RB8603	1-234-381-21	RES, NETWORK 100KX4 (1005)			
R8629	1-218-957-11	RES-CHIP	2.2K	5%	1/16W	RB8604	1-234-381-21	RES, NETWORK 100KX4 (1005)			
R8630	1-218-953-11	RES-CHIP	1K	5%	1/16W	RB8605	1-234-375-21	RES, NETWORK 1KX4 (1005)			
R8631	1-218-989-11	RES-CHIP	1M	5%	1/16W	RB9301	1-234-369-21	RES, NETWORK 10X4 (1005)			
R8632	1-218-989-11	RES-CHIP	1M	5%	1/16W						< ABSORBER >
R8633	1-218-981-11	RES-CHIP	220K	5%	1/16W	VD1002	1-805-043-11	ABSORBER, CHIP SURGE			
R8634	1-218-975-11	RES-CHIP	68K	5%	1/16W	VD1005	1-805-043-11	ABSORBER, CHIP SURGE			
R8635	1-218-977-11	RES-CHIP	100K	5%	1/16W	VD1006	1-805-043-11	ABSORBER, CHIP SURGE			
R8636	1-218-973-11	RES-CHIP	47K	5%	1/16W	VD1007	1-805-043-11	ABSORBER, CHIP SURGE			
R8637	1-218-977-11	RES-CHIP	100K	5%	1/16W						< VIBRATOR >
R8638	1-218-977-11	RES-CHIP	100K	5%	1/16W	X3001	1-767-400-11	VIBRATOR, CRYSTAL (36MHz)			
R8639	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	X8001	1-760-458-21	VIBRATOR, CRYSTAL (32.768kHz)			
R8640	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	X8002	1-795-244-11	VIBRATOR, CERAMIC (10MHz)			
R8641	1-218-953-11	RES-CHIP	1K	5%	1/16W	X8601	1-760-655-41	VIBRATOR, CRYSTAL (20MHz)			
R8643	1-218-977-11	RES-CHIP	100K	5%	1/16W						
R8649	1-218-990-11	SHORT CHIP	0								
R9001	1-218-935-11	RES-CHIP	33	5%	1/16W						
R9002	1-218-935-11	RES-CHIP	33	5%	1/16W						
R9003	1-218-953-11	RES-CHIP	1K	5%	1/16W						
R9009	1-216-789-11	METAL CHIP	2.2	5%	1/10W						
R9010	1-216-789-11	METAL CHIP	2.2	5%	1/10W						
R9011	1-216-789-11	METAL CHIP	2.2	5%	1/10W						
R9012	1-218-953-11	RES-CHIP	1K	5%	1/16W						
R9014	1-218-946-11	RES-CHIP	270	5%	1/16W						
R9018	1-216-864-11	SHORT CHIP	0								
R9021	1-216-864-11	SHORT CHIP	0								
R9022	1-218-965-11	RES-CHIP	10K	5%	1/16W						
R9023	1-218-967-11	RES-CHIP	15K	5%	1/16W						
R9024	1-218-957-11	RES-CHIP	2.2K	5%	1/16W						
R9025	1-218-961-11	RES-CHIP	4.7K	5%	1/16W						
R9026	1-218-969-11	RES-CHIP	22K	5%	1/16W						
R9027	1-218-977-11	RES-CHIP	100K	5%	1/16W						
R9028	1-218-973-11	RES-CHIP	47K	5%	1/16W						
R9029	1-218-965-11	RES-CHIP	10K	5%	1/16W						
R9030	1-218-965-11	RES-CHIP	10K	5%	1/16W						
R9301	1-218-949-11	RES-CHIP	470	5%	1/16W						
R9302	1-218-975-11	RES-CHIP	68K	5%	1/16W						
R9303	1-218-953-11	RES-CHIP	1K	5%	1/16W						

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LEVEL 3

SERVICE MANUAL

Ver. 1.4 2006. 08

This SUPPLEMENT-2 is the revised version of SUPPLEMENT-1.

Replace the SUPPLEMENT-1 (9-876-704-85) with the SUPPLEMENT-2.

DCR-HC20

*US Model
Canadian Model
Korea Model*

**DCR-HC16E/
HC18E/HC20E**

*AEP Model
East European Model
North European Model*

**DCR-HC18E/
HC20E**

UK Model

**DCR-HC20/
HC20E**

*E Model
Tourist Model*

DCR-HC20E

*Australian Model
Chinese Model
Hong Kong Model*

SUPPLEMENT-2

**File this supplement-2 with the service manual.
(DI06-053)**

- Change of the VC-350 board suffix number (-21 → -22 → -23)
- Change of schematic diagrams
- Change of repair parts list

• Suffix number changed from -21 to -22

4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

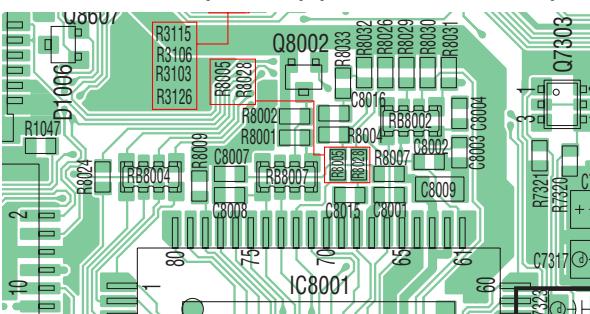
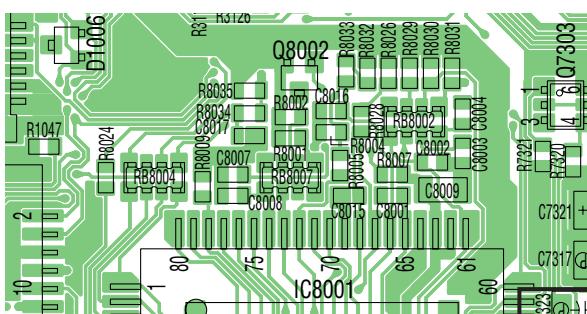
4-2. SCHEMATIC DIAGRAMS

: Changed portion : Added portion

Page	SUFFIX -21	SUFFIX -22
4-29, 4-30	VC-350 BOARD (6/13) (Location: F-14, 15) 	
4-31	VC-350 BOARD (7/13) (Location: E-1 to E-7) 	SUFFIX -21
4-42	VC-350 BOARD (12/13) (Location: A-13 to D-10) 	SUFFIX -22
	VC-350 BOARD (12/13) (Location: I-9 to I-10) 	

Note: It is changed at the same time when VC-350 board suffix number is changed (-21 → -22).

4-3. PRINTED WIRING BOARDS

Page	SUFFIX -21	SUFFIX -22 and higher
4-59	VC-350 BOARD (SIDE A) (Location: C-1, C-2) 	

5. REPAIR PARTS LIST

5-2. ELECTRICAL PARTS LIST

✓ : Changed portion ↗ : Added portion ✂ : Deleted portion

Page	SUFFIX -21	SUFFIX -22						
5-17	VC-350 BOARD Ref. No. Part No. Description	<table border="1"> <thead> <tr> <th>Ref. No.</th> <th>Part No.</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>—</td> <td>—</td> <td>—</td> </tr> </tbody> </table> <p>▀ C8017 1-164-943-11 CERAMIC CHIP 0.01uF 10% 16V</p>	Ref. No.	Part No.	Description	—	—	—
Ref. No.	Part No.	Description						
—	—	—						
5-19	▀ R1044 1-218-990-11 SHORT CHIP 0	—						
5-21	R8605 1-218-990-11 SHORT CHIP 0	<table border="1"> <tbody> <tr> <td>▀ R8034 1-218-953-11 RES-CHIP 1K 5% 1/16W</td> </tr> <tr> <td>▀ R8035 1-218-965-11 RES-CHIP 10K 5% 1/16W</td> </tr> </tbody> </table> <p>▀ R8605 1-218-973-11 RES-CHIP 47K 5% 1/16W (HC20/HC20E)</p> <table border="1"> <tbody> <tr> <td>▀ R8606 1-218-977-11 RES-CHIP 100K 5% 1/16W (HC20/HC20E)</td> </tr> <tr> <td>▀ R8606 1-218-990-11 SHORT CHIP 0 (HC16E/HC18E)</td> </tr> </tbody> </table>	▀ R8034 1-218-953-11 RES-CHIP 1K 5% 1/16W	▀ R8035 1-218-965-11 RES-CHIP 10K 5% 1/16W	▀ R8606 1-218-977-11 RES-CHIP 100K 5% 1/16W (HC20/HC20E)	▀ R8606 1-218-990-11 SHORT CHIP 0 (HC16E/HC18E)		
▀ R8034 1-218-953-11 RES-CHIP 1K 5% 1/16W								
▀ R8035 1-218-965-11 RES-CHIP 10K 5% 1/16W								
▀ R8606 1-218-977-11 RES-CHIP 100K 5% 1/16W (HC20/HC20E)								
▀ R8606 1-218-990-11 SHORT CHIP 0 (HC16E/HC18E)								

- Suffix number changed from -22 to -23

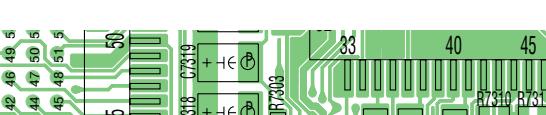
4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-2. SCHEMATIC DIAGRAMS

 : Changed portion

Page	SUFFIX -21/-22	SUFFIX -23
4-32	<p>VC-350 BOARD (7/13) (Location: B-9)</p>	<p>SUFFIX -23</p>

4-3. PRINTED WIRING BOARDS

Page	SUFFIX -21/-22	SUFFIX -23
4-59	VC-350 BOARD (SIDE A) (Location: D-2 to E-3) 	

5. REPAIR PARTS LIST

5-2. ELECTRICAL PARTS LIST

: Added portion : Deleted portion

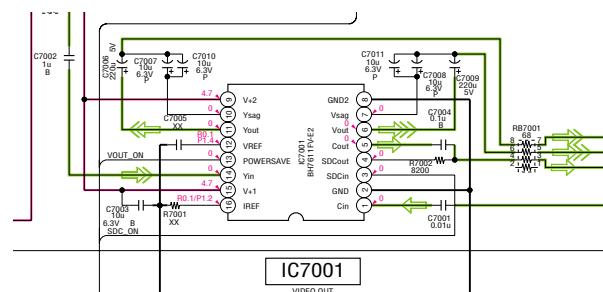
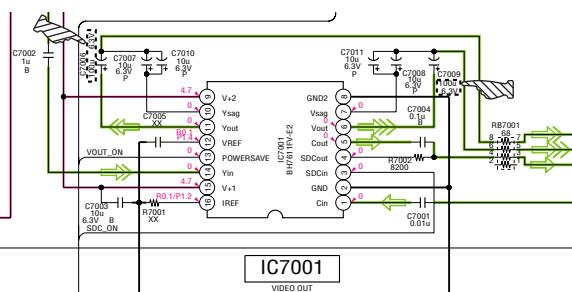
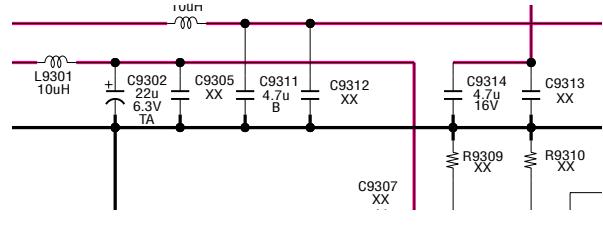
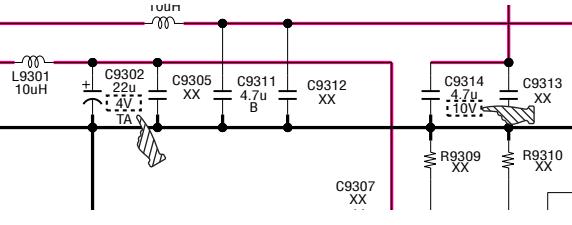
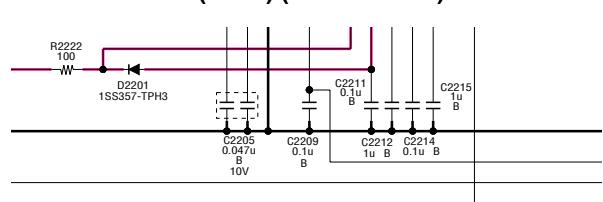
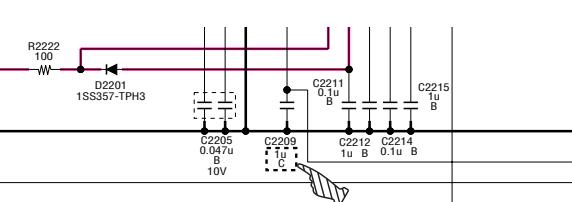
Page	SUFFIX -21/22	SUFFIX -23																																																								
5-17	<p>VC-350 BOARD</p> <table> <thead> <tr> <th>Ref. No.</th> <th>Part No.</th> <th>Description</th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>C8005</td> <td>1-100-249-11</td> <td>CERAMIC CHIP</td> <td>0.01uF</td> <td>10%</td> <td>16V</td> <td></td> </tr> <tr> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td></td> </tr> <tr> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td></td> </tr> </tbody> </table>	Ref. No.	Part No.	Description					C8005	1-100-249-11	CERAMIC CHIP	0.01uF	10%	16V		—	—	—	—	—	—		—	—	—	—	—	—		<table> <thead> <tr> <th>Ref. No.</th> <th>Part No.</th> <th>Description</th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td></td> </tr> <tr> <td>C8018</td> <td>1-164-943-11</td> <td>CERAMIC CHIP</td> <td>0.01uF</td> <td>10%</td> <td>16V</td> <td></td> </tr> <tr> <td>C8019</td> <td>1-164-943-11</td> <td>CERAMIC CHIP</td> <td>0.01uF</td> <td>10%</td> <td>16V</td> <td></td> </tr> </tbody> </table>	Ref. No.	Part No.	Description					—	—	—	—	—	—		C8018	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V		C8019	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	
Ref. No.	Part No.	Description																																																								
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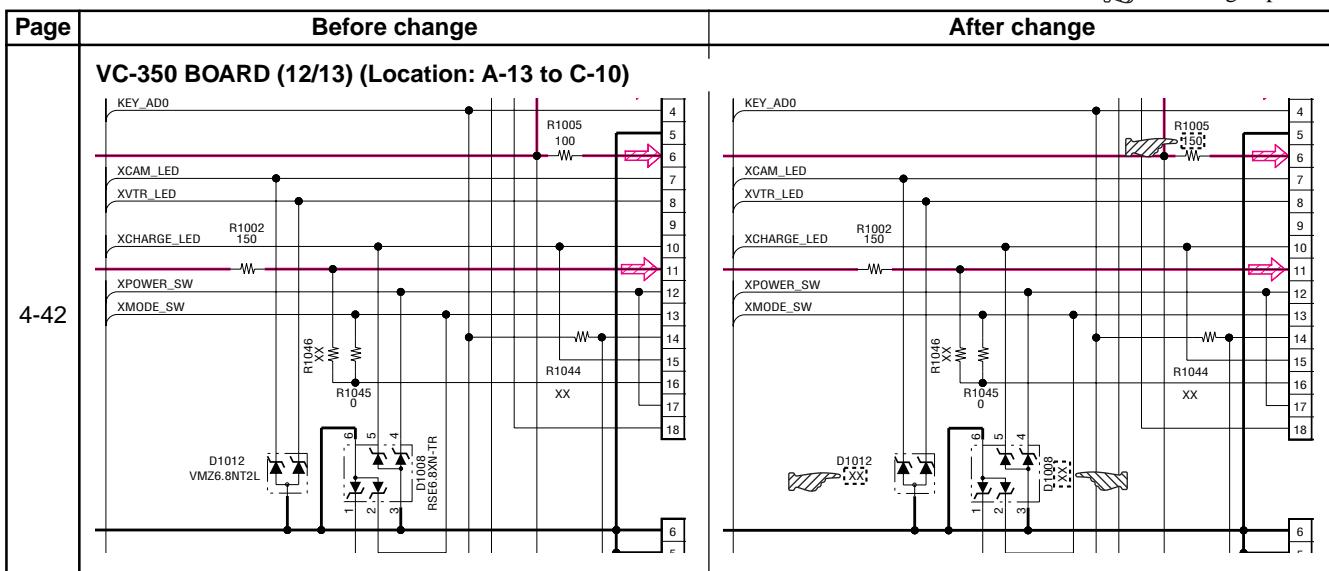
• Change of schematic diagrams

4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-2. SCHEMATIC DIAGRAMS

: Changed portion

Page	Before change	After change
4-24	VC-350 BOARD (3/13) (Location: L-15 to L-18)  IC7001 VIDEO OUT	 IC7001 VIDEO OUT
4-29, 4-30	VC-350 BOARD (6/13) (Location: G-10) IC8601 CAMERA/MECHA CONTROL IC8601 MB89194APFF-G-174-BNDE1	 IC8601 CAMERA/MECHA CONTROL
4-33	VC-350 BOARD (8/13) (Location: B-4 to B-6) 	
4-39	VC-350 BOARD (11/13) (Location: J-5) 	

**5. REPAIR PARTS LIST****5-2. ELECTRICAL PARTS LIST**

: Changed portion : Added portion : Deleted portion

Page	Before change	After change
5-16	VC-350 BOARD Ref. No. Part No. Description C2209 1-125-777-11 CERAMIC CHIP 0.1uF 10% 10V	Ref. No. Part No. Description C2209 <u>1-100-506-91</u> CERAMIC CHIP <u>1uF</u> 20% 6.3V
5-17	C7006 1-100-609-11 TANTAL. CHIP 220uF 5V C7009 1-100-609-11 TANTAL. CHIP 220uF 5V	C7006 <u>1-128-964-91</u> TANTAL. CHIP <u>100uF</u> 20% 6.3V C7009 <u>1-128-964-91</u> TANTAL. CHIP <u>100uF</u> 20% 6.3V
5-18	C9302 1-119-750-11 TANTAL. CHIP 22uF 20% 6.3V C9310 1-164-943-11 CERAMIC CHIP 0.01uF 10% 16V D1008 6-500-044-01 DIODE DF6A6.8FU (TE85R) D1012 6-500-776-01 DIODE MAZW068H0LSO IC8601 6-804-225-01 IC MB91194APFF-G-174-BNDE1	C9302 <u>1-104-847-11</u> TANTAL. CHIP 22uF 20% <u>4V</u> C9310 <u>1-218-957-11</u> RES-CHIP 2.2K 5% <u>1/16W</u> (Note 1) C9314 <u>1-115-566-11</u> CERAMIC CHIP 4.7uF 10% <u>10V</u> — — — —
5-19	R1005 1-218-941-81 RES-CHIP 100 5% 1/16W	R1005 <u>1-218-943-11</u> RES-CHIP <u>150</u> 5% 1/16W
5-21	R9303 1-218-953-11 RES-CHIP 1K 5% 1/16W VD1002 1-805-043-11 ABSORBER, CHIP SURGE VD1005 1-805-043-11 ABSORBER, CHIP SURGE VD1006 1-805-043-11 ABSORBER, CHIP SURGE VD1007 1-805-043-11 ABSORBER, CHIP SURGE	R9303 <u>1-218-990-11</u> SHORT CHIP <u>0</u> VD1002 <u>1-803-974-21</u> VARISTOR, CHIP VD1005 <u>1-803-974-21</u> VARISTOR, CHIP VD1006 <u>1-803-974-21</u> VARISTOR, CHIP VD1007 <u>1-803-974-21</u> VARISTOR, CHIP

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LEVEL 3

SERVICE MANUAL

Ver. 1.5 2007. 09

DCR-HC20

*US Model
Canadian Model
Korea Model*

**DCR-HC16E/
HC18E/HC20E**

*AEP Model
East European Model
North European Model*

**DCR-HC18E/
HC20E**

UK Model

**DCR-HC20/
HC20E**

*E Model
Tourist Model*

DCR-HC20E

*Australian Model
Chinese Model
Hong Kong Model*

SUPPLEMENT-3

**File this supplement-3 with the service manual.
(DI07-118)**

Subject :
 • Change of Repair parts list

5. REPAIR PARTS LIST

5-2. ELECTRICAL PARTS LIST

 : Added portion

Page	Before change	After change																																				
5-16	<p>VC-350 BOARD</p> <table> <thead> <tr> <th>Ref. No.</th> <th>Part No.</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td>A-7112-727-A</td> <td>VC-350 BOARD, COMPLETE (SERVICE) (HC20/HC20E)</td> </tr> <tr> <td></td> <td></td> <td>*****</td> </tr> <tr> <td></td> <td>A-7113-163-A</td> <td>VC-350 BOARD, COMPLETE (SERVICE) (HC16E/HC18E)</td> </tr> <tr> <td></td> <td></td> <td>*****</td> </tr> </tbody> </table>	Ref. No.	Part No.	Description		A-7112-727-A	VC-350 BOARD, COMPLETE (SERVICE) (HC20/HC20E)			*****		A-7113-163-A	VC-350 BOARD, COMPLETE (SERVICE) (HC16E/HC18E)			*****	<p>VC-350 BOARD</p> <table> <thead> <tr> <th>Ref. No.</th> <th>Part No.</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td>A-7112-727-A</td> <td>VC-350 BOARD, COMPLETE (SERVICE) (HC20: US, CND, E JE/HC20E) (Note)</td> </tr> <tr> <td></td> <td></td> <td>*****</td> </tr> <tr> <td></td> <td>A-7112-727-B</td> <td>VC-350 BOARD, COMPLETE (SERVICE) (HC20: KR) (Note)</td> </tr> <tr> <td></td> <td></td> <td>*****</td> </tr> <tr> <td></td> <td>A-7113-163-A</td> <td>VC-350 BOARD, COMPLETE (SERVICE) (HC16E/HC18E) (Note)</td> </tr> <tr> <td></td> <td></td> <td>*****</td> </tr> </tbody> </table>	Ref. No.	Part No.	Description		A-7112-727-A	VC-350 BOARD, COMPLETE (SERVICE) (HC20: US, CND, E JE/HC20E) (Note)			*****		A-7112-727-B	VC-350 BOARD, COMPLETE (SERVICE) (HC20: KR) (Note)			*****		A-7113-163-A	VC-350 BOARD, COMPLETE (SERVICE) (HC16E/HC18E) (Note)			*****
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Note :

As version numbers of the VC-350 board and microcontroller are upgraded, the microcontroller data need to be change.

To change the microcontroller data, see page 3 of Supplement-3 of LEVEL2.

- Abbreviation

CND : Canadian model
KR : Korea model
JE : Tourist model

[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:

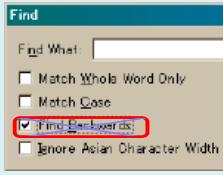
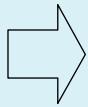
To set a range to be printed within a page, select the graphic selection tool and drag on the page to enclose a range to be printed, and then click the Print button.

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.

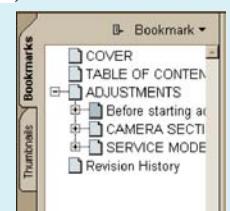
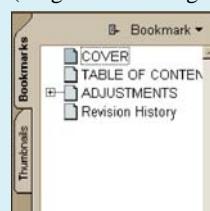
Moving with link

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	2004.02	Official Release	—	—
1.1	2006.03	Correction-1	<ul style="list-style-type: none">• Correction of repair parts list <p>S.M. correction: Page 5-17, 5-19, 5-21</p>	Yes
1.2	2006.03	Supplement-1 (PV05-088)	<ul style="list-style-type: none">• Change of the VC-350 board suffix number (-21 → -22 → -23)	No
1.3	2006.08	Correction-2	<ul style="list-style-type: none">• Correction of schematic diagrams• Correction of repair parts list <p>S.M. correction: Page 4-29, 4-30, 4-38, 5-17, 5-19, 5-21</p>	Yes
1.4	2006.08	Supplement-2 (DI06-053)	<ul style="list-style-type: none">• Change of the VC-350 board suffix number (-21 → -22 → -23)• Change of schematic diagrams• Change of repair parts list <p>(Revised version of Supplement-1)</p>	No
1.5	2007.09	Supplement-3 (DI07-118)	<ul style="list-style-type: none">• Change of repair parts list	No