



SCPH-39002
SCPH-39003
SCPH-39004
SCPH-39008

SCPH-39000 series

SERVICE MANUAL 4th Edition
for GH022 MOUNT
(G-chassis)

PlayStation®2

SONY



COMPUTER
ENTERTAINMENT

Sony Computer Entertainment Inc.
CS Department

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NOTICE

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REVISIONS.

This manual compiled by first edition of SCPH-39000 series design data. Design and Specification will be subject to changed without notice. The latest versions of service manual, Technical memo, Technical information should be used together.

SAFETY-RELATED COMPONENT WARNING !!

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

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ !

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

CAUTION

Replace the battery with a Sony CR2032 battery. Use of any other type of battery may present the risk of fire or explosion. The battery may explode if mistreated. Do not recharge, disassemble, or dispose of in fire.

CAUTION

The use of optical instruments with this product will increase eye Hazard. As the laser beam used in this CD/DVD player is harmful To eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

WARNING !!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION, BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 25cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.

CAUTION

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

CAUTION for electric shock

When power is ON, Don't touch to Power supply block, AC-inlet, Power switch and so on, not to get an electric shock at repair.

CAUTION for burning

When current is supplied, Some of part surface temperature like EE, GS, Regulator-IC, power supply, Optical device and so on. These part surface is become high temperature condition. When it repair, Don't touch them at a time during it surface is high temperature condition to take prevent against burning. Do repair after it is cooled down enough.

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

ADVARSEL!

Lithiumbatteri - Eksplosjonsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

ADVARSEL

Eksplosjonsfare ved feilaktig skifte av batteri. Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten. Brukte batterier kasseres i henhold til fabrikantens instruksjoner.

VARNING

Explosionsfara vid felaktigt batteribyte. Använt samma batterityp eller en ekvivalent typ som rekommenderas av apparatillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

VAROITUS

Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan valmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

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 cold-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the inter board 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, though functioning, show obvious signs of deterioration. Point them out of the customer and recommend their replacement.
5. Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
6. Check the b+ voltage to see it is at the values specified.
7. Check the antenna terminals, metal trim, "metalized" knobs, screws, and all other exposed metal parts for ac leakage. Check leakage as described below.

LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a Return to chassis, must not exceed 0.5 mA (500 micro-amperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the SIMPSON 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milli-ammeter. The Data Precision 245 digital multi-meter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated ac voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The SIMPSON 250 and SANWA SH-63TRD are examples of a passive VOM that is suitable. Nearly all battery operated digital multi-meters that have a 2V AC range are suitable.

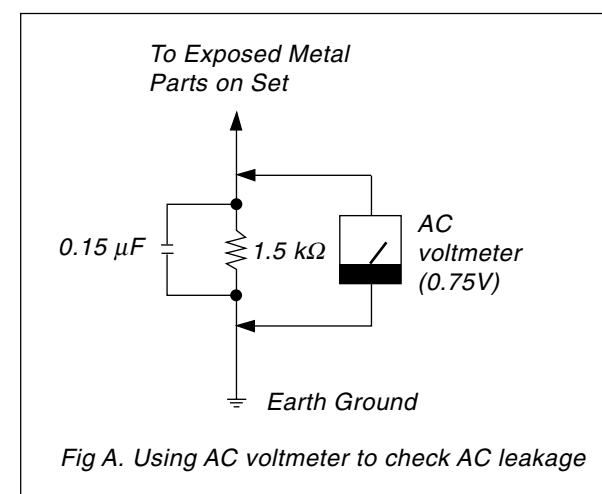


Fig A. Using AC voltmeter to check AC leakage

NOTIFICATION for environmental assessment

This model is CR2032 lithium battery onboard inside on the GB MOUNT or GH MOUNT as Timer backup power. CR2032 life may be about 5 to 8 years, so you have very few need for changing to new one. But if you have necessary to replaced to new one or disassemble for scrapping, you have to keep your country law, regulation, standard, etc. of environmental assessment and safety.

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SPECIFICATIONS

General

Power requirements

220 V-240 V AC, 50/60 Hz
(SCPH-39002, 39003, 39004,39008)

Power consumption

39 W

Dimensions

301 × 78 × 182 mm (w/h/d)

Mass

2.4 kg

Inputs/Outputs on the front

Controller ports (2)
Memory card slots (2)
USB ports (2)
S400 (i-Link) port (1)

Inputs/Outputs on the rear

HDD bay slot (1)

Outputs on the rear

AV Multi out port (1)
RGB, Ycbr, Y/C, Composite-video,
Audio-L/R, XGA
Digital out port (1)
Optical audio

Supplied accessories

AC power cord (1)
A/V connecting cable (1)
Dualshock2 Analog controller (1)

SUPPLIED ACCESSORIES, PACKING and INSTRUCTION MANUAL BLOCK

NOTE :

- 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.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
METAL : Metal-film resistor.
F : nonflammable
Unit is Ω.

- SEMICONDUCTORS
In each case, u : μ, for example :
uA . . : μA . . . uPA . . : μPA . .
uPB . . : μPB . . . uPC . . : μPC . . . uPD . . : μPD . .
- CAPACITORS
uF : μF
- COILS
uH : μH

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

SUPPLIED ACCESSORIES and PACKING GROUP PLACE CODE #23

SCPH-39002 (AU3) ACCESSORIES & PACKING GROUP

Ref.	Part No.	Description	Remarks
AC	1-555-074-51	CORD, POWER	
AV	1-792-028-22	AV CABLE (Integrated audio/video)	
AV	1-792-028-32	AV CABLE (Integrated audio/video)	
AV	1-792-028-42	AV CABLE (Integrated audio/video)	
AV	1-792-028-51	AV CABLE (Integrated audio/video)	
AV	1-792-028-61	AV CABLE (Integrated audio/video)	
CONT	1-823-069-51	ANALOG CONTROLLER (DUALSHOCK 2)	
CONT	1-823-552-11	ANALOG CONTROLLER (DUALSHOCK 2)	
CUR	3-072-422-01	CUSHION (R) PULP	not supply
CUL	3-072-423-01	CUSHION (L) PULP	not supply
SH	3-076-746-01	SHEET, PROTECTION	not supply
CA	3-076-748-01	INDIVIDUAL, CARTON	not supply
MC	3-076-745-21	MASTER CARTON, 3 SETS	not supply
TA	3-987-483-11	TAPE, BERODDED PREVENTION	not supply
IMB	A-6787-600-A	MANUAL BLOCK ASSY, INSTRUCTION	not supply

SCPH-39003 (CEK) ACCESSORIES & PACKING GROUP

Ref.	Part No.	Description	Remarks
Δ AC	1-751-115-21	CORD, POWER	
Δ AC	1-751-115-31	CORD, POWER	
Δ AC	1-751-115-44	CORD, POWER	
Δ AC	1-790-023-21	CORD, POWER	
AV	1-792-028-22	AV CABLE (Integrated audio/video)	
AV	1-792-028-32	AV CABLE (Integrated audio/video)	
AV	1-792-028-42	AV CABLE (Integrated audio/video)	
AV	1-792-028-51	AV CABLE (Integrated audio/video)	
AV	1-792-028-61	AV CABLE (Integrated audio/video)	
CONT	1-823-069-51	ANALOG CONTROLLER (DUALSHOCK 2)	
CONT	1-823-552-12	ANALOG CONTROLLER (DUALSHOCK 2)	
CONV	1-573-291-12	CONNECTOR, CONVERSION	
CONV	1-785-004-12	CONNECTOR, CONVERSION	
CUR	3-072-422-01	CUSHION (R) PULP	not supply
CUL	3-072-423-01	CUSHION (L) PULP	not supply
SH	3-076-746-01	SHEET, PROTECTION	not supply
CA	3-076-744-11	INDIVIDUAL CARTON	not supply
MC	3-076-745-11	MASTER CARTON, 3 SETS	not supply
PAD	3-065-172-01	PAD, TOGETHER PACKING	not supply
TA	3-987-483-11	TAPE, BERODDED PREVENTION	not supply
IMB	A-6787-587-A	MANUAL BLOCK ASSY, INSTRUCTION	not supply

SCPH-39004 (CEL) ACCESSORIES & PACKING GROUP

Ref.	Part No.	Description	Remarks
Δ AC	1-575-131-82	CORD, POWER	
Δ AC	1-823-152-11	CORD, POWER	
AV	1-792-028-22	AV CABLE (Integrated audio/video)	
AV	1-792-028-32	AV CABLE (Integrated audio/video)	
AV	1-792-028-42	AV CABLE (Integrated audio/video)	
AV	1-792-028-51	AV CABLE (Integrated audio/video)	
AV	1-792-028-61	AV CABLE (Integrated audio/video)	
CONT	1-823-069-51	ANALOG CONTROLLER (DUALSHOCK 2)	
CONT	1-823-552-12	ANALOG CONTROLLER (DUALSHOCK 2)	
CONV	1-573-291-12	CONNECTOR, CONVERSION	
CONV	1-785-004-12	CONNECTOR, CONVERSION	
CUR	3-072-422-01	CUSHION (R) PULP	not supply
CUL	3-072-423-01	CUSHION (L) PULP	not supply
SH	3-076-746-01	SHEET, PROTECTION	not supply
CA	3-076-744-01	INDIVIDUAL CARTON	not supply
MC	3-076-745-01	MASTER CARTON, 3 SETS	not supply
PAD	3-065-172-01	PAD, TOGETHER PACKING	not supply
TA	3-987-483-11	TAPE, BERODDED PREVENTION	not supply
IMB	A-6787-548-A	MANUAL BLOCK ASSY, INSTRUCTION	not supply

SCPH-39008 (RU3) ACCESSORIES & PACKING GROUP

Ref.	Part No.	Description	Remarks
Δ AC	1-575-131-82	CORD, POWER	
Δ AC	1-823-152-11	CORD, POWER	
AV	1-792-028-22	AV CABLE (Integrated audio/video)	
AV	1-792-028-32	AV CABLE (Integrated audio/video)	
AV	1-792-028-42	AV CABLE (Integrated audio/video)	
AV	1-792-028-51	AV CABLE (Integrated audio/video)	
AV	1-792-028-61	AV CABLE (Integrated audio/video)	
CONT	1-823-069-51	ANALOG CONTROLLER (DUALSHOCK 2)	
CONT	1-823-552-12	ANALOG CONTROLLER (DUALSHOCK 2)	
CONV	1-573-291-12	CONNECTOR, CONVERSION	
CONV	1-785-004-12	CONNECTOR, CONVERSION	
CUR	3-072-422-01	CUSHION (R) PULP	not supply
CUL	3-072-423-01	CUSHION (L) PULP	not supply
SH	3-076-746-01	SHEET, PROTECTION	not supply
CA	3-078-825-01	INDIVIDUAL CARTON	not supply
MC	3-078-826-01	MASTER CARTON, 3 SETS	not supply
PAD	3-065-172-01	PAD, TOGETHER PACKING	not supply
TA	3-987-483-11	TAPE, BERODDED PREVENTION	not supply
IMB	A-6787-943-A	MANUAL BLOCK ASSY, INSTRUCTION	not supply

INSTRUCTION MANUAL BLOCK ASSY PLACE CODE #23

SCPH-39002 (AU3) ACCESSORIES & PACKING GROUP

Ref.	Part No.	Description	Remarks
AOR	3-066-158-03	CARD (A), OWNER REGISTRATION	not supply
IM	3-076-132-21	MANUAL, INSTRUCTION	not supply
DISK	3-073-543-02	DISK, DEMONSTRATION	not supply
SE	3-987-375-02	SEAL, SEAL	not supply

SCPH-39003 (CEK) ACCESSORIES & PACKING GROUP

Ref.	Part No.	Description	Remarks
BOR	3-066-159-03	CARD (B), OWNER REGISTRATION	not supply
IM	3-076-132-31	MANUAL, INSTRUCTION	not supply
DISK	3-073-543-02	DISK, DEMONSTRATION	not supply
SE	3-987-375-02	SEAL, SEAL	not supply

SCPH-39004 (CEL) ACCESSORIES & PACKING GROUP

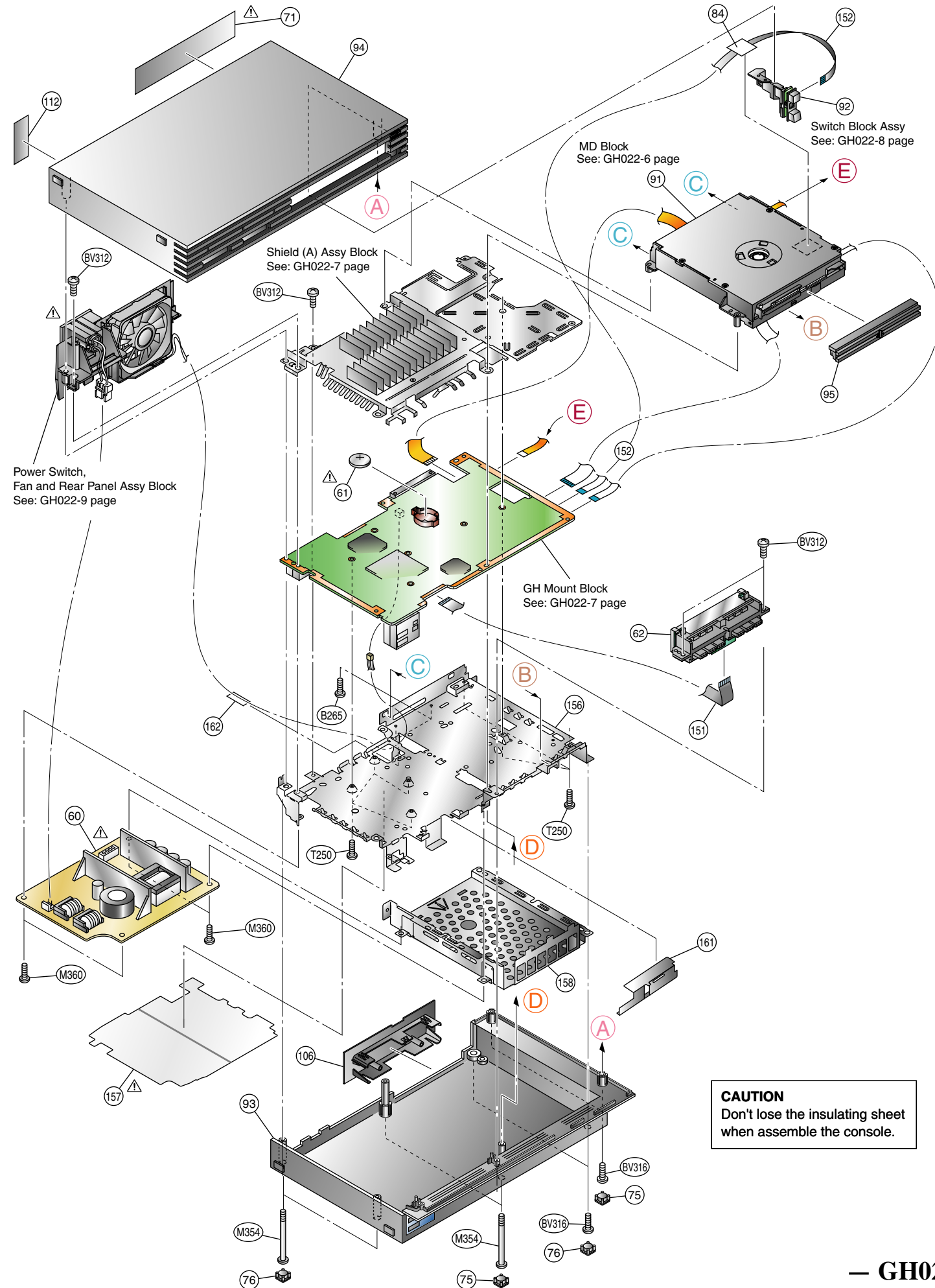
Ref.	Part No.	Description	Remarks
COR	3-066-160-04	CARD (C), OWNER REGISTRATION	not supply
IM	3-076-132-41	MANUAL, INSTRUCTION	not supply
IM	3-076-132-51	MANUAL, INSTRUCTION	not supply
DISK	3-073-543-02	DISK, DEMONSTRATION	not supply
SE	3-987-375-02	SEAL, SEAL	not supply

SCPH-39008 (RU3) ACCESSORIES & PACKING GROUP

Ref.	Part No.	Description	Remarks
COR	3-081-223-01	CARD (C), OWNER REGISTRATION	not supply
IM	3-076-132-62	MANUAL, INSTRUCTION	not supply
DISK	3-073-543-11	DISK, DEMONSTRATION	not supply
SE	3-987-375-02	SEAL, SEAL	not supply

EXPLODED VIEWS

Overall and Main Block



CAUTION

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

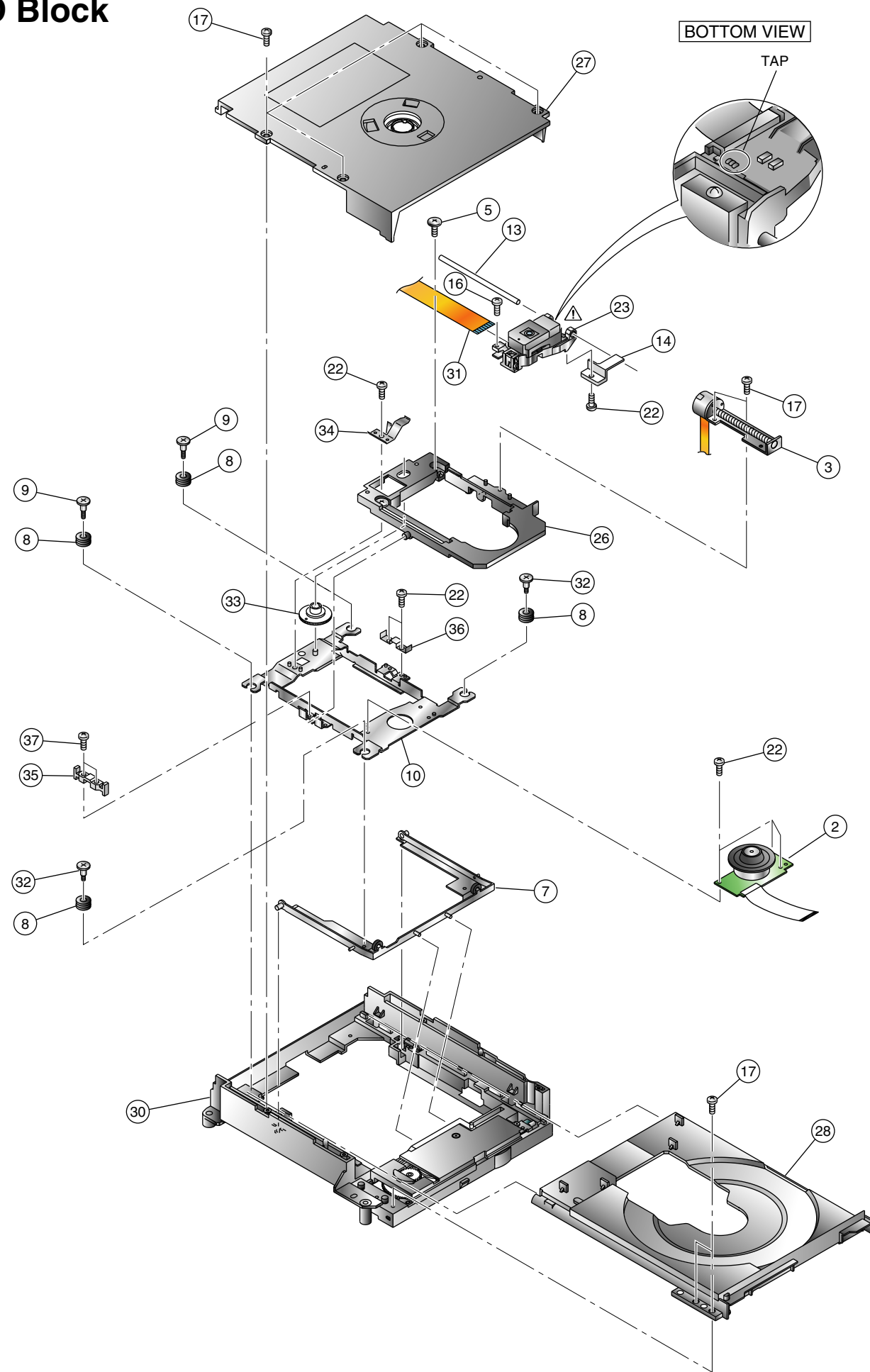
CAUTION : Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

OVERALL AND MAIN BLOCK

Ref-No.	Part No.	Description	Remark	Place code
Δ 60	1-468-605-41	POWER BLOCK	for 220-240V AC	#00
Δ 61	1-528-174-41	BATTERY, LITHIUM (CR2032 TYPE)		#25GH
62	1-694-873-11	TERMINAL BOARD (FRONT)		#17
62	1-694-874-11	TERMINAL BOARD (FRONT)		#17
62	1-694-875-11	TERMINAL BOARD (FRONT)		#17
Δ 71	3-077-345-01	LABEL, MODEL NUMBER (AU3)	for SCPH-39002	#87
Δ 71	3-077-346-01	LABEL, MODEL NUMBER (CEK)	for SCPH-39003	#87
Δ 71	3-077-347-01	LABEL, MODEL NUMBER (CEL)	for SCPH-39004	#87
Δ 71	3-079-073-51	LABEL, MODEL NUMBER (RU3)	for SCPH-39008	#87
75	3-059-626-03	COVER, SCREW		#22
76	3-059-627-01	CAP		#22
84	3-067-170-01	TAPE (20X20), HARNESS STOPPER		#87
91	A-6787-618-A	MD BLOCK ASSY		#10
92	A-6787-975-A	SWITCH BLOCK ASSY		#87
93	X-3951-705-2	COVER ASSY, LOWER		#87
94	X-3951-706-2	COVER ASSY, UPPER		#87
95	X-3951-099-1	PLATE ASSY, ORNAMENTAL		#25GH
106	3-070-847-11	LID		#87
112	3-066-498-01	TAPE,VOID	for SCPH-39002/39003/39004	#87
112	3-079-117-01	TAPE,VOID	for SCPH-39008	#87
151	1-757-934-11	CABLE, FLEXIBLE FLAT (FFC-011)		#12
151	1-757-934-21	CABLE, FLEXIBLE FLAT (FFC-011)		#12
151	1-757-934-31	CABLE, FLEXIBLE FLAT (FFC-011)		#12
151	1-757-934-41	CABLE, FLEXIBLE FLAT (FFC-011)		#12
152	1-823-341-11	CABLE, FLEXIBLE FLAT (FFC-015)		#12
152	1-823-341-21	CABLE, FLEXIBLE FLAT (FFC-015)		#12
152	1-823-341-51	CABLE, FLEXIBLE FLAT (FFC-015)		#12
Δ 156	3-077-018-01	SHIELD (B) (G)		#16
157	3-071-971-01	SHEET, INSULATING		#16
158	3-071-973-01	SHIELD HDD (F)		#87
161	3-070-120-01	SHEET, INTERCEPTION		#87
162	3-069-212-01	TAPE, HARNESS STOPPER		#87
B265	3-069-170-01	TAPPING (B2X6.5)		#87
BV312	3-072-627-01	SCREW, +BV TAPPING		#87
BV312	3-325-679-21	SCREW, TAPPING +BV 3X12		#87
BV316	3-070-296-01	TAPPING +BV 3X16		#87
BV316	3-072-627-11	SCREW, +BV TAPPING		#87
BV316	3-325-679-91	SCREW (2 LOCK), +BV TAPPING		#87
M354	3-059-622-02	SCREW (M3X54), HEAD TAPPING		#87
M360	3-069-168-01	TITE (CZN), M3X6 +BV S		#87
T250	3-071-976-01	TAPPING (2X5)		#87

CAUTION
Don't lose the insulating sheet when assemble the console.

MD Block



CAUTION

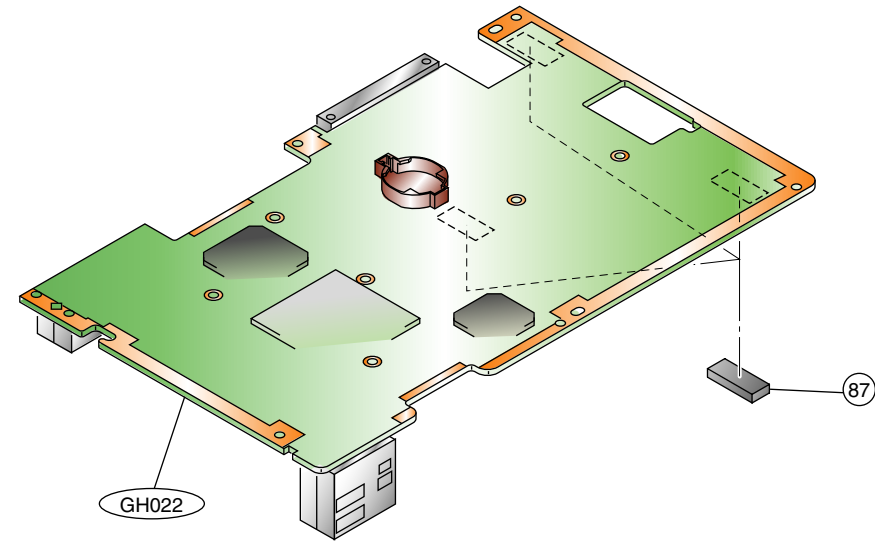
The components identified by mark \triangle or dotted line with mark. \triangle are critical for safety. Replace only with part number specified.

CAUTION :
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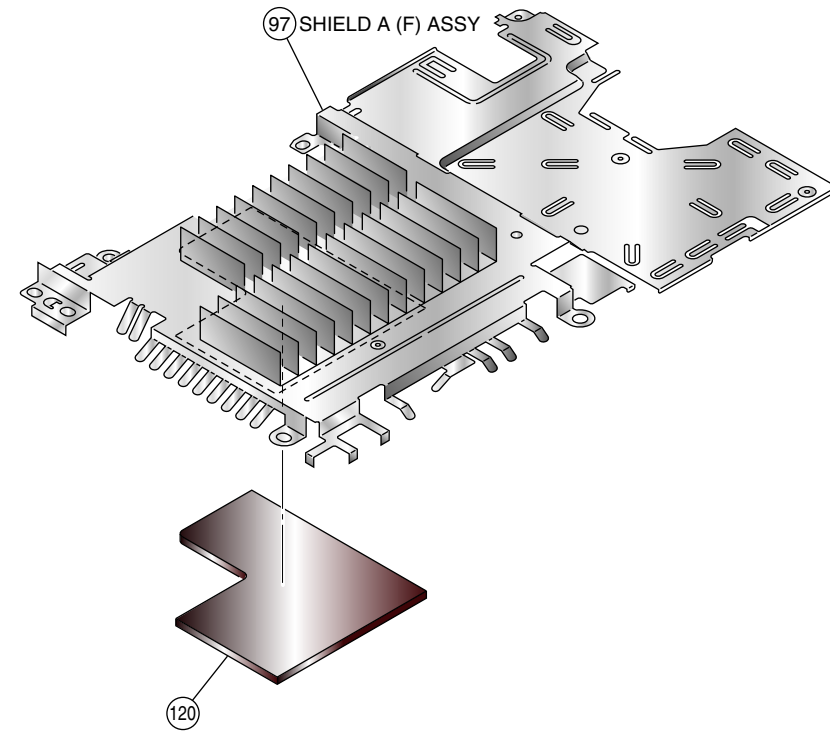
MD BLOCK

Ref-No.	Part No.	Description	Remark	Place code
2	1-763-700-21	MOTOR, DC (SPINDLE)		#10SP
3	1-763-639-21	MOTOR, DC		#10
3	1-763-791-11	MOTOR, DC (SLED)		#10
5	3-059-845-01	SCREW (B2X6.5), SHAFT RETAINER		#10
7	X-3951-637-1	FRAME ASSY, SUB		#10
8	3-065-277-01	INSULATOR		#10
9	3-065-276-01	SCREW, STEP		#10
10	3-071-957-01	CHASSIS, MAIN		#10
13	3-059-854-02	SHAFT, MAIN		#10
14	3-059-855-02	RACK		#10
16	3-060-399-01	SCREW, SKEW		#10
17	3-060-400-01	TAPPING (B2X6.5)		#10
22	3-062-728-01	O PLATE 3 MAIN M2X3.2		#10
\triangle 23	8-820-151-15	DEVICE, OPTICAL KHS-400C/K1NP4		#100P
\triangle 23	8-820-151-16	DEVICE, OPTICAL KHS-400C/C-NP4		#100P
\triangle 23	8-820-151-17	DEVICE, OPTICAL KHS-400C/C1NP4		#100P
\triangle 23	8-820-151-18	DEVICE, OPTICAL KHS-400C/J1NP2		#100P
26	X-3952-057-2	CHASSIS ASSY, SUB		#10
27	X-3952-059-1	BRACKET ASSY, PULLEY		#10
28	X-3952-060-1	TRAY ASSY		#10TR
30	X-3952-058-3	FRAME ASSY, MAIN		#10
31	1-680-370-22	PWB, FLEXIBLE		#10
32	3-068-075-02	SCREW (SUB), STEP		#10
33	3-071-965-03	CAM, TILT		#10
34	3-071-966-02	SPRING (TILT), LEAF		#10
35	3-065-282-01	GUIDE (L)		#10
36	3-065-283-01	GUIDE (R)		#10
37	3-065-557-01	SCREW (M2X6.0)		#10

GH Mount Block



Shield (A) Assy Block



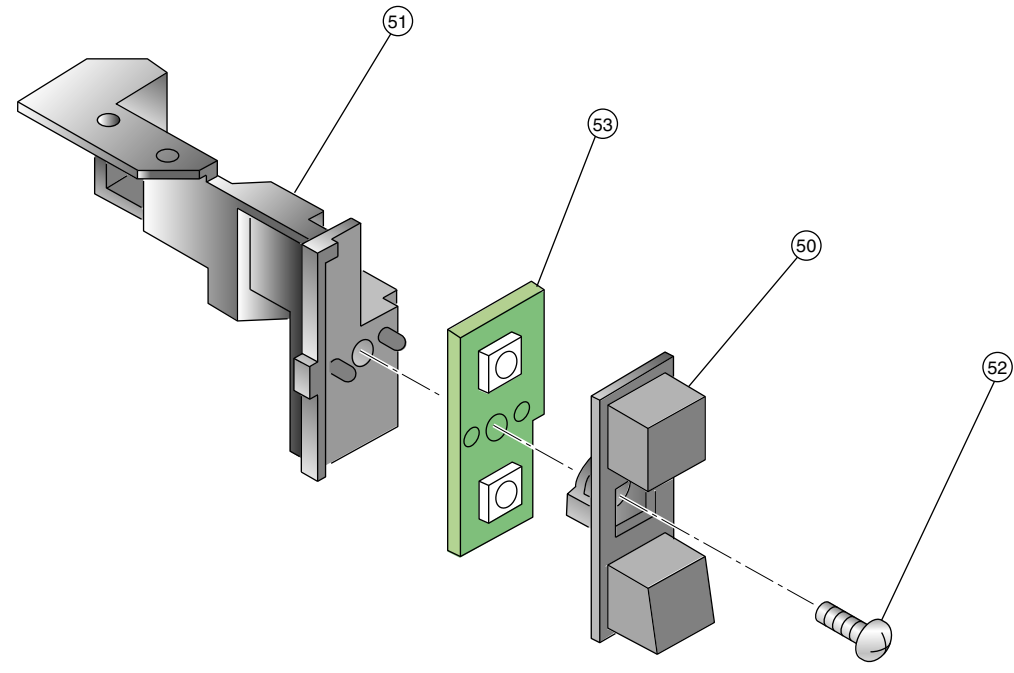
GH MOUNT BLOCK

Ref-No.	Part No.	Description	Remark	Place code
87	3-068-806-02	SHEET (DRIVER), ELECTRIC HEAT		#87
GH022	A-6787-985-A A-6787-986-A	GH-022 COMPL (DD FJT) GH-022 MOUNT (DD FJT)	for SCPH-39003/-39004	#25GH
GH022	A-6787-987-A A-6787-988-A	GH-022 COMPL (DD TXI) GH-022 MOUNT (DD TXI)	for SCPH-39003/-39004	#25GH
GH022	A-6787-991-A A-6787-992-A	GH-022 COMPL (DD FJT) GH-022 MOUNT (DD FJT)	for SCPH-39002	#25GH
GH022	A-6787-993-A A-6787-994-A	GH-022 COMPL (DD TXI) GH-022 MOUNT (DD TXI)	for SCPH-39002	#25GH
GH022	A-6787-996-A A-6787-997-A	GH-022 COMPL (DD FJT) GH-022 MOUNT (DD FJT)	for SCPH-39008	#25GH
GH022	A-6787-998-A A-6787-999-A	GH-022 COMPL (DD TXI) GH-022 MOUNT (DD TXI)	for SCPH-39008	#25GH

SHIELD (A) ASSY BLOCK

Ref-No.	Part No.	Description	Remark	Place code
97	X-3952-061-2	SHIELD A (F) ASSY		#87
97	X-3952-211-1	SHIELD A ASSY (FVA)		#87
97	X-3952-256-2	SHIELD (A (F)) ASSY		#87
120	3-059-652-01	SHEET (A), ELECTRIC HEAT		#87

Switch Assy Block



SWITCH ASSY BLOCK

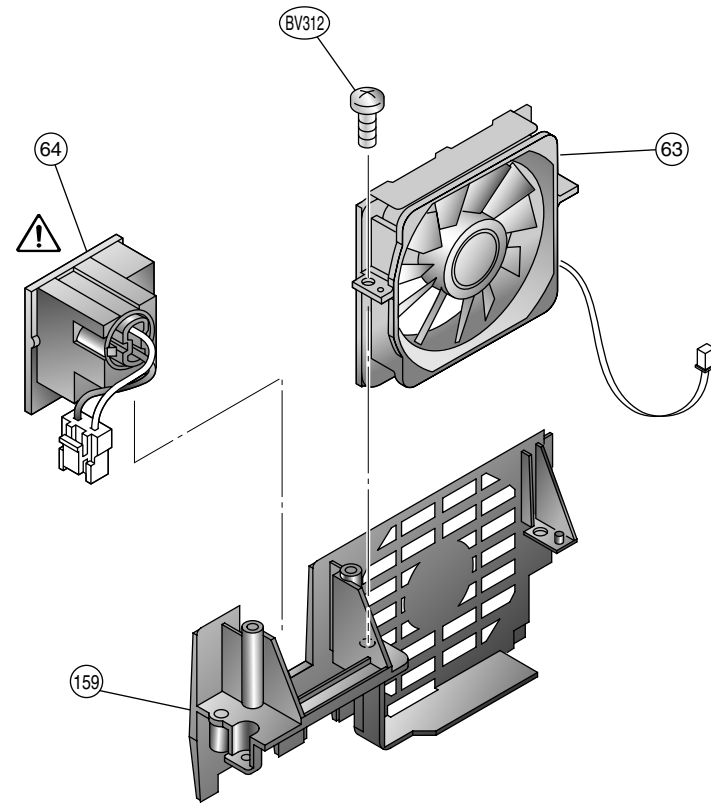
<u>Ref-No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Place code</u>
50	3-059-665-03	BUTTON, SWITCH		#25SW
51	3-059-666-05	BRACKET, SWITCH		#25SW
51	3-066-494-01	BRACKET, SWITCH		#25SW
52	7-685-105-11	TPG +P 2X8, TYPE 2, NON-SLIT		#25SW
53	A-6787-645-A	COMPLETE PWB, SW-382 Use with GH019 MOUNT		#25SW
	A-6787-646-A	SW-382 MOUNT		
53	A-6787-647-A	COMPLETE PWB (VA), SW-382 Use with GH019 MOUNT		#25SW
	A-6787-648-A	SW-382 MOUNT		
53	A-6787-976-A	COMPLETE PWB, SW-393 Use with GH022 MOUNT		#25SW
	A-6787-977-A	SW-393 MOUNT		
53	A-6787-978-A	COMPLETE PWB (VA), SW-393 Use with GH022 MOUNT		#25SW
	A-6787-979-A	SW-393 MOUNT (VA)		

Power Switch, Fan and Rear Panel Assy Block

CAUTION

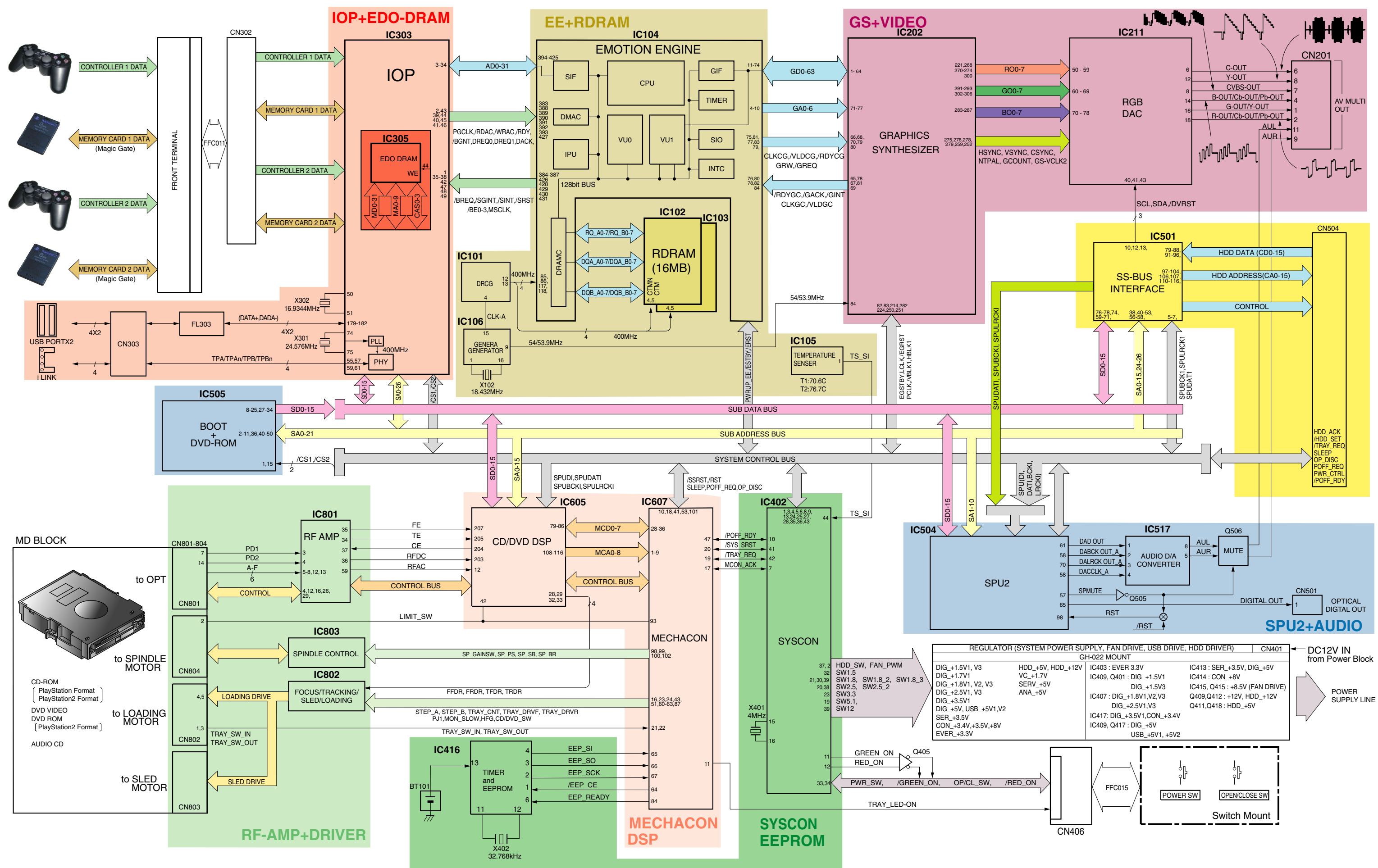
The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

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



<u>Ref-No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Place code</u>
63	1-763-480-31	DC. FAN		#74
\triangle 64	1-771-995-31	SWITCH, POWER (WITH AC INLET)		#00
\triangle 64	1-786-209-21	SWITCH, POWER (AC INLET)		#00
\triangle 64	1-786-345-11	SWITCH, POWER (WITH AC INLET)		#00
159	3-071-901-11	PANEL, REAR		#87
BV312	3-072-627-01	SCREW, +BV TAPPING		#87
BV312	3-325-679-21	SCREW, TAPPING +BV 3X12		#87


BLOCK DIAGRAM



PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.

Note on Printed Wiring Boards :

- Through hole is omitted.
-  : Pattern on the side which is seen.

Note on Schematic Diagram :

- Use 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.
- All capacitors are in μF unless otherwise noted. pF : $\mu\mu\text{F}$ 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W (Chip resistors : 1/10W) unless otherwise specified.
- Chip resistors are 1/8 W or 1/10 W unless otherwise noted.
 $\text{k}\Omega$: 1000Ω , $\text{M}\Omega$: $1000\text{k}\Omega$.

Note :
















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

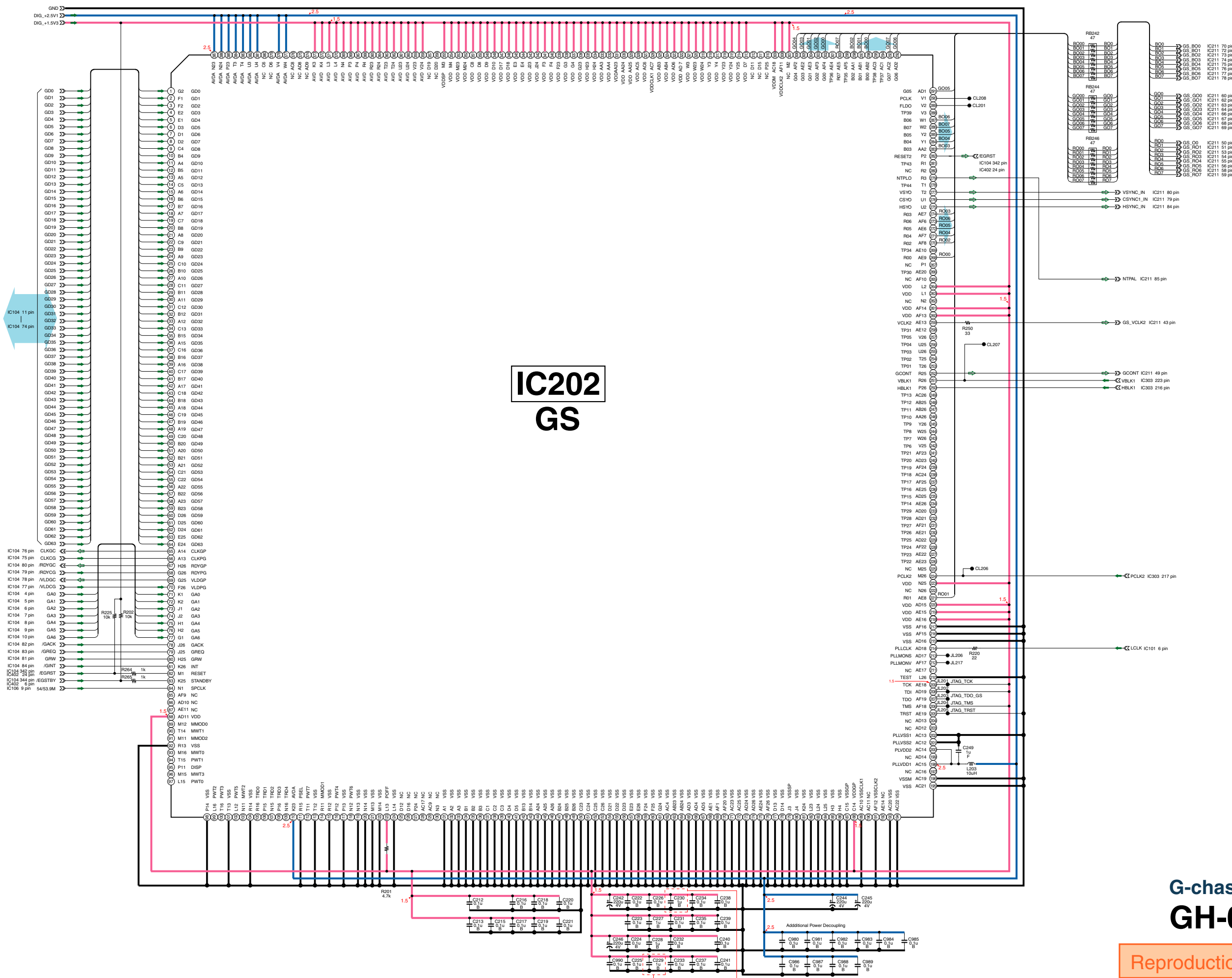
Note :

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

Note on DC Power line :

Unit of voltage is V (volt)

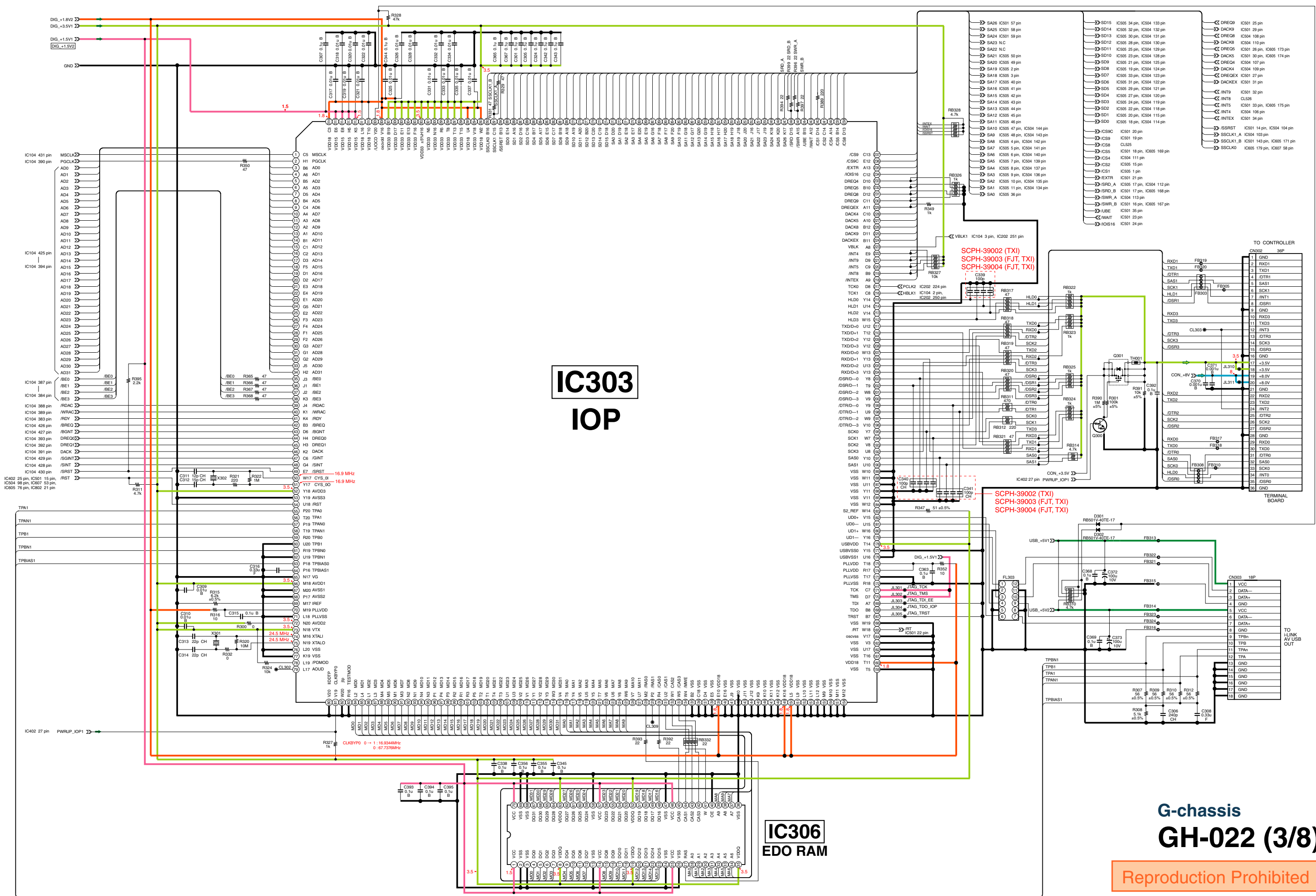
- | | |
|---|--|
| • +12V :  | • +3.3V :  |
| • +8.0V :  | • +2.5V :  |
| • +5.0V :  | • +1.8V :  |
| • +3.5V :  | • VC :  |
| • +3.4V :  | • +1.5V :  |
| • +1.7V :  | • +8.5V :  |
| • IN :  | • Main Signal Line :  |
| • OUT :  | |



IC202 GS

G-chassis GH-022 (2/8)

Reproduction Prohibited



IC303 IOP

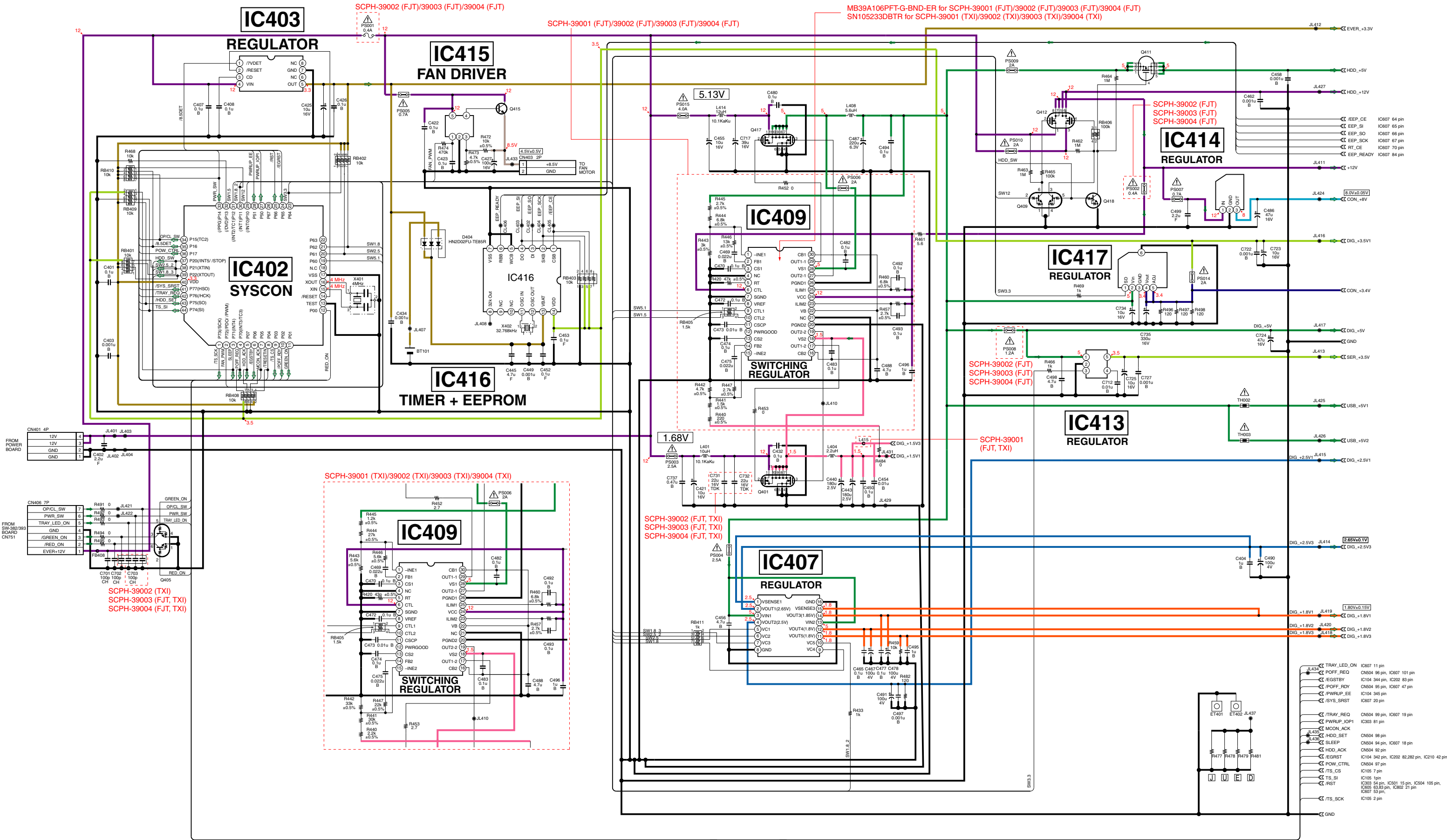
IC306 EDO RAM

SCPH-39002 (TXI) SCPH-39003 (FJT, TXI) SCPH-39004 (FJT, TXI)

SCPH-39002 (TXI) SCPH-39003 (FJT, TXI) SCPH-39004 (FJT, TXI)

G-chassis GH-022 (3/8)

Reproduction Prohibited

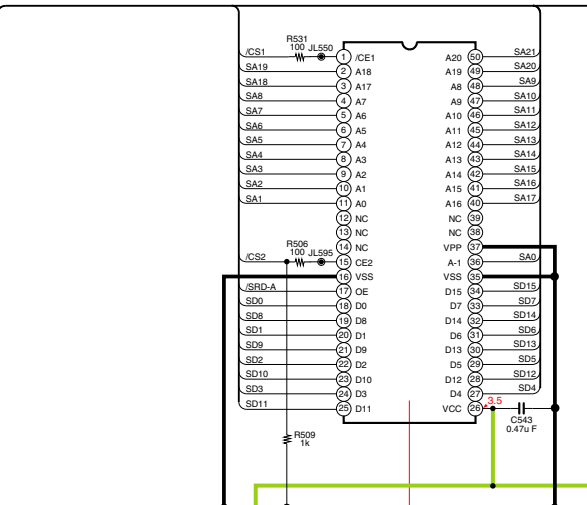


G-chassis
GH-022 (4/8)

Reproduction Prohibited

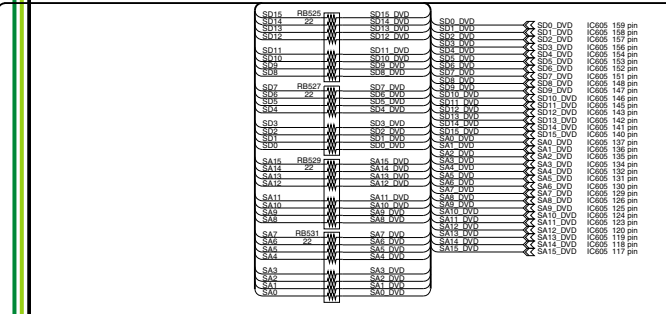
IC505
BOOT+DVD ROM

- IC303 239 pin, IC605 164 pin /CS\overline{S}
- IC303 220 pin, IC605 168 pin /INT\overline{S}
- IC303 232 pin, IC605 168 pin DREQ\overline{S}
- IC303 232 pin, IC605 167 pin DACK\overline{S}
- IC303 227 pin, IC303 237 pin /CS\overline{S}
- IC303 221 pin /INT\overline{S}
- IC303 230 pin DREQ\overline{S}
- IC303 225 pin DACK\overline{S}
- IC303 240 pin /CS\overline{S}
- IC303 222 pin /INT\overline{S}
- IC303 233 pin DREQ\overline{S}
- IC303 228 pin DACK\overline{S}
- IC303 243 pin /WAIT\overline{S}
- IC303 165 pin /RT\overline{S}
- IC303 231 pin DREQ\overline{S}
- IC303 226 pin DACK\overline{S}
- IC303 242 pin /CS\overline{S}
- IC303 235 pin /EXTR\overline{S}
- IC303 218 pin /INTEX\overline{S}
- IC303 236 pin /CS\overline{S}
- IC303 234 pin /IOIS16\overline{S}
- IC303 244 pin /A\overline{B}
- IC303 224 pin DACKEX\overline{S}
- IC303 229 pin DREQEX\overline{S}
- IC303 257 pin SA16\overline{S}
- IC303 256 pin SA17\overline{S}
- IC303 255 pin SA18\overline{S}
- IC303 254 pin SA19\overline{S}
- IC303 253 pin SA20\overline{S}
- IC303 252 pin SA21\overline{S}
- IC303 251 pin SA22\overline{S}
- IC303 250 pin SA23\overline{S}
- IC303 249 pin SA24\overline{S}
- IC303 292 pin, IC605 173 pin SSCLK\overline{S}
- IC303 238 pin /CS\overline{S}
- IC303 219 pin /INT\overline{S}

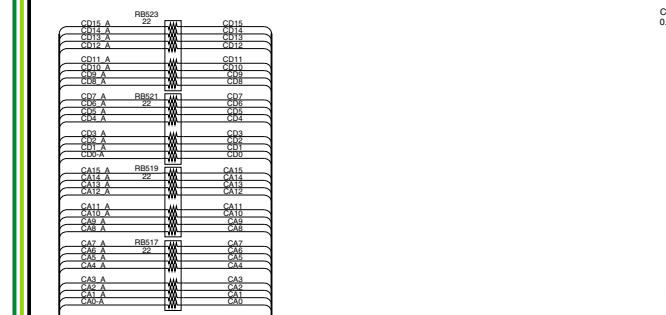


MR27V4812F-021TMZ for SCPH-39001 (FJT, TXI)
 MR27V4812F-022TMZ for SCPH-39003 (FJT, TXI)/39004(FJX, TXI)
 MR27V4812F-023TMZ for SCPH-39002 (FJT, TXI)

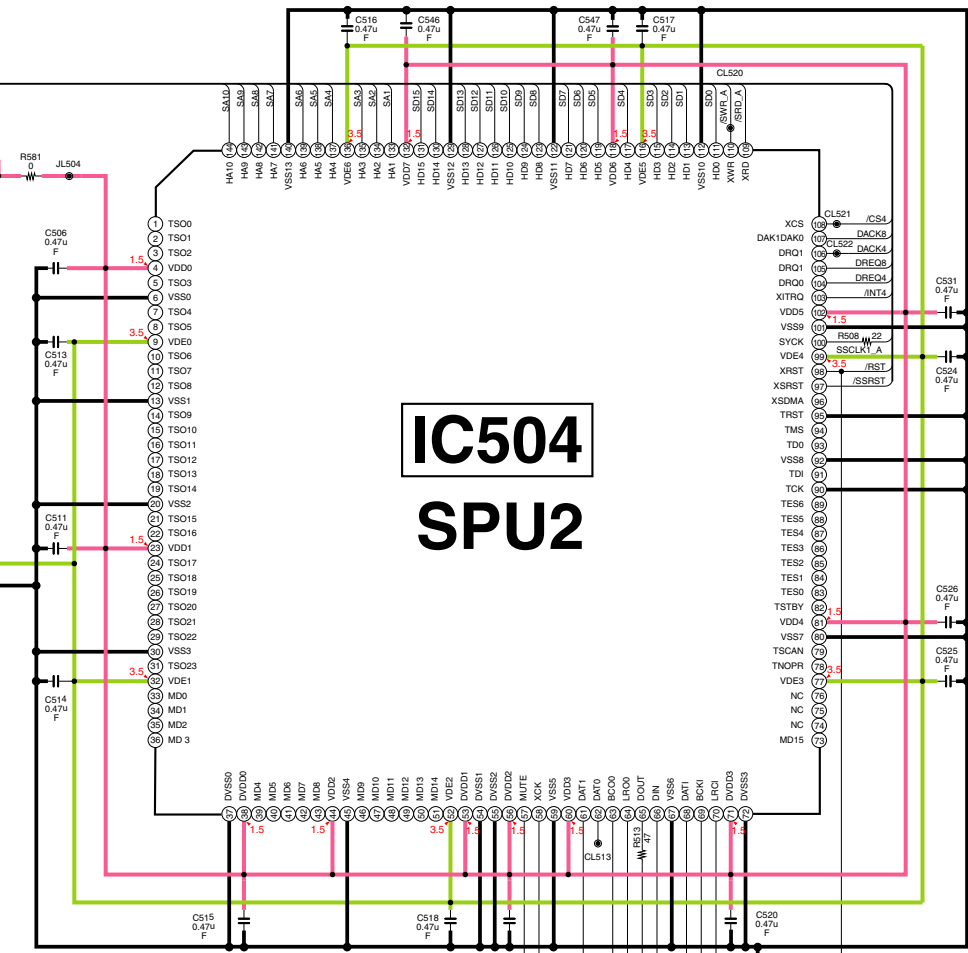
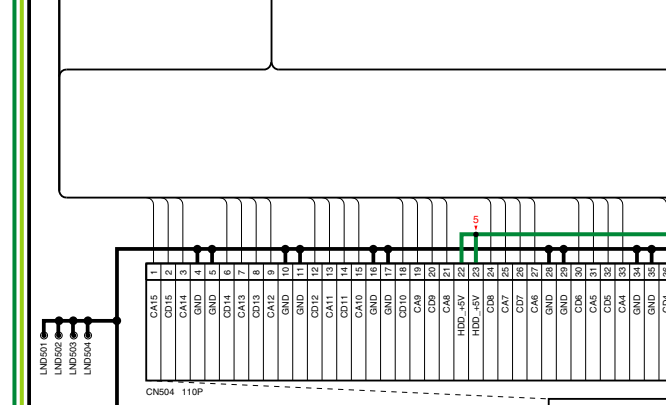
- IC303 273 pin
- IC303 258 pin
- IC303 246 pin /SRD_A
- IC303 246 pin, IC605 168 pin /SRD_B
- IC303 245 pin /SWR_A
- IC303 245 pin, IC605 167 pin /SWR_B
- IC303 54 pin, IC602 25 pin, /RST
- IC607 53 pin, IC605 76, 72 pin
- IC602 22 pin
- IC607 41 pin, IC303 290 pin /SSRST
- IC303 291 pin, IC605 176 pin /SSCLK\overline{S}
- IC602 36 pin /PW_CTRL



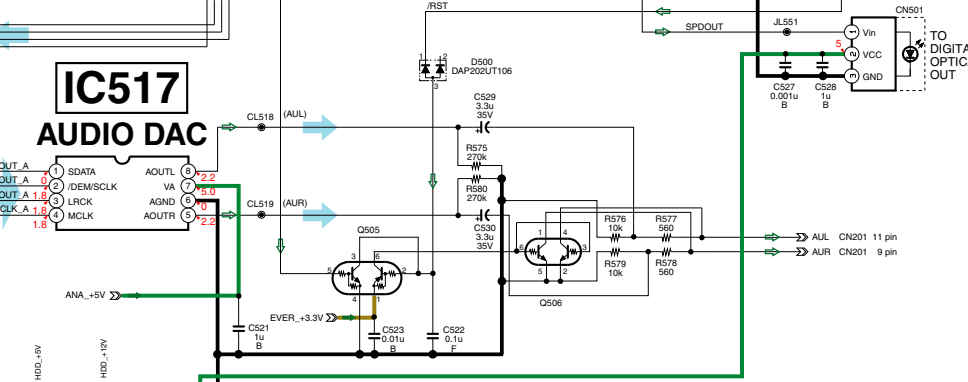
IC501
SS-BUS CONTROLLER



IC517
AUDIO DAC

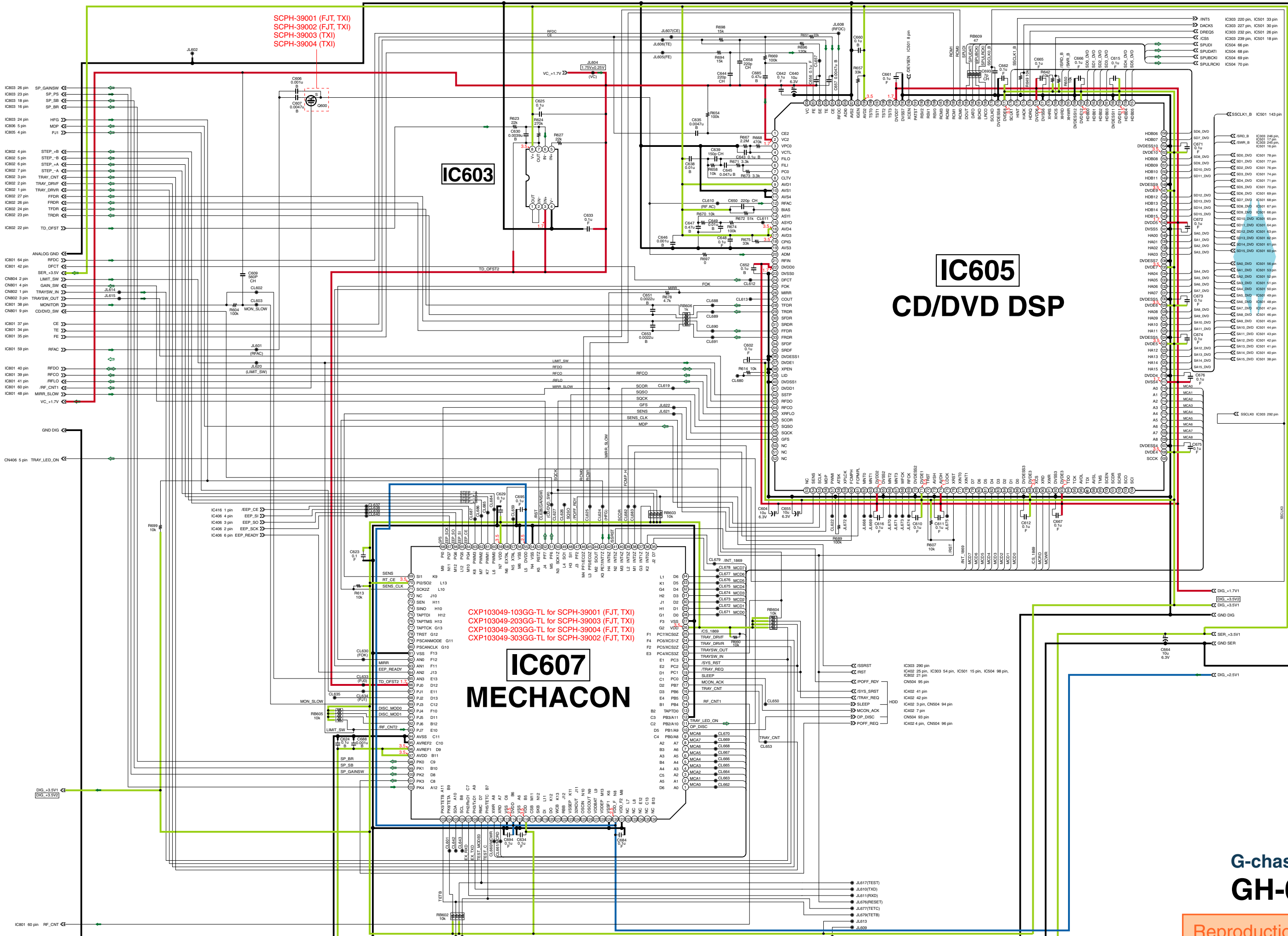


IC504
SPU2



G-chassis
 GH-022 (5/8)

Reproduction Prohibited



SCPH-39001 (FJT, TXI)
 SCPH-39002 (FJT, TXI)
 SCPH-39003 (TXI)
 SCPH-39004 (TXI)

IC603

IC605
 CD/DVD DSP

CXP103049-103GG-TL for SCPH-39001 (FJT, TXI)
 CXP103049-203GG-TL for SCPH-39003 (FJT, TXI)
 CXP103049-203GG-TL for SCPH-39004 (FJT, TXI)
 CXP103049-303GG-TL for SCPH-39002 (FJT, TXI)

IC607
 MECHACON

G-chassis
GH-022 (6/8)

Reproduction Prohibited

IC806

IC803 SPINDLE DRIVER

IC805

IC807 5V REG

SCPH-39002 (FJT)
SCPH-39003 (FJT)
SCPH-39004 (FJT)

SCPH-39002 (FJT)
SCPH-39003 (FJT)
SCPH-39004 (FJT)

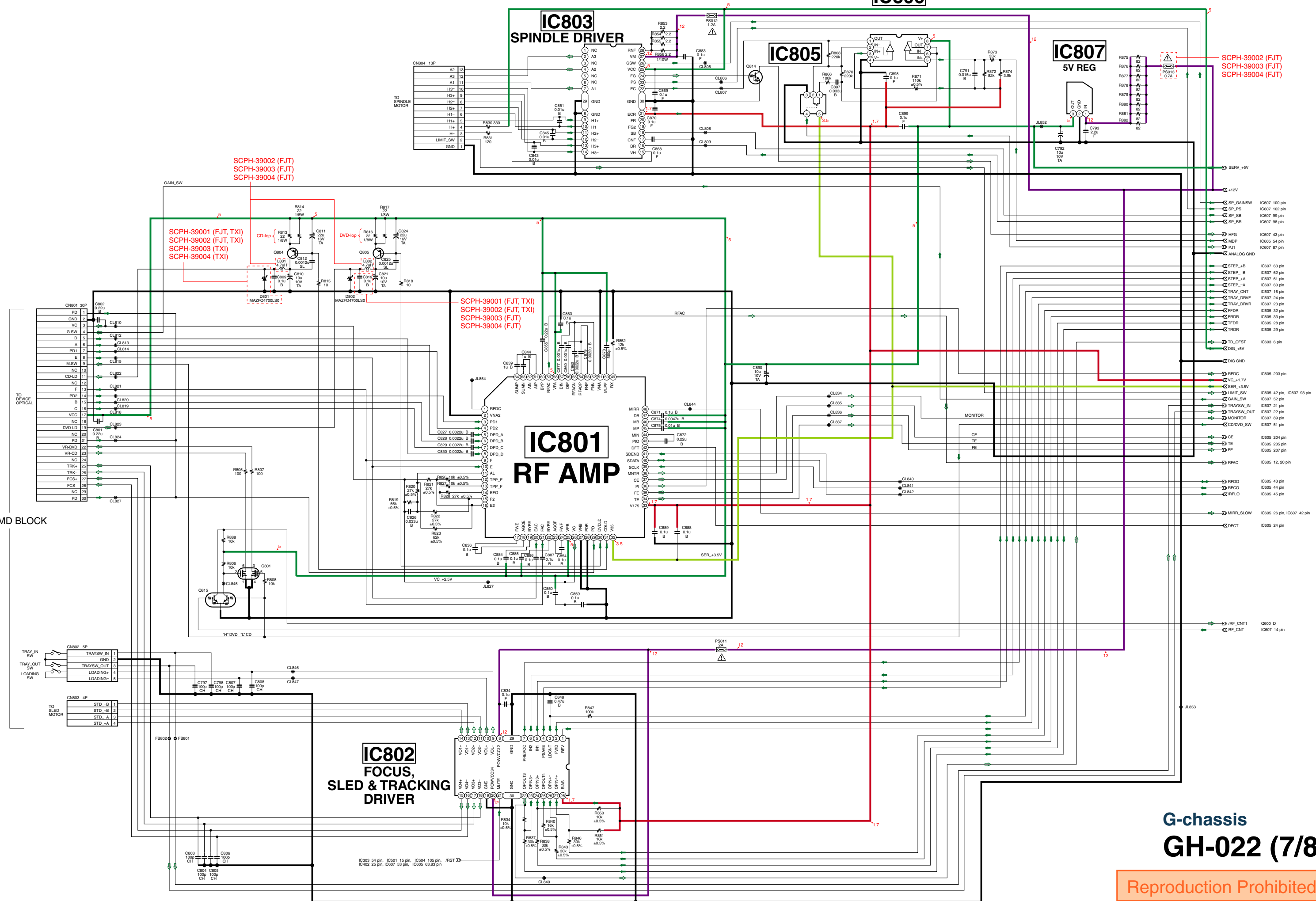
SCPH-39001 (FJT, TXI)
SCPH-39002 (FJT, TXI)
SCPH-39003 (TXI)
SCPH-39004 (TXI)

SCPH-39001 (FJT, TXI)
SCPH-39002 (FJT, TXI)
SCPH-39003 (FJT)
SCPH-39004 (FJT)

IC801 RF AMP

IC802 FOCUS, SLED & TRACKING DRIVER

IC203 54 pin, IC501 15 pin, IC504 105 pin, IRST
IC402 25 pin, IC607 53 pin, IC605 63.83 pin



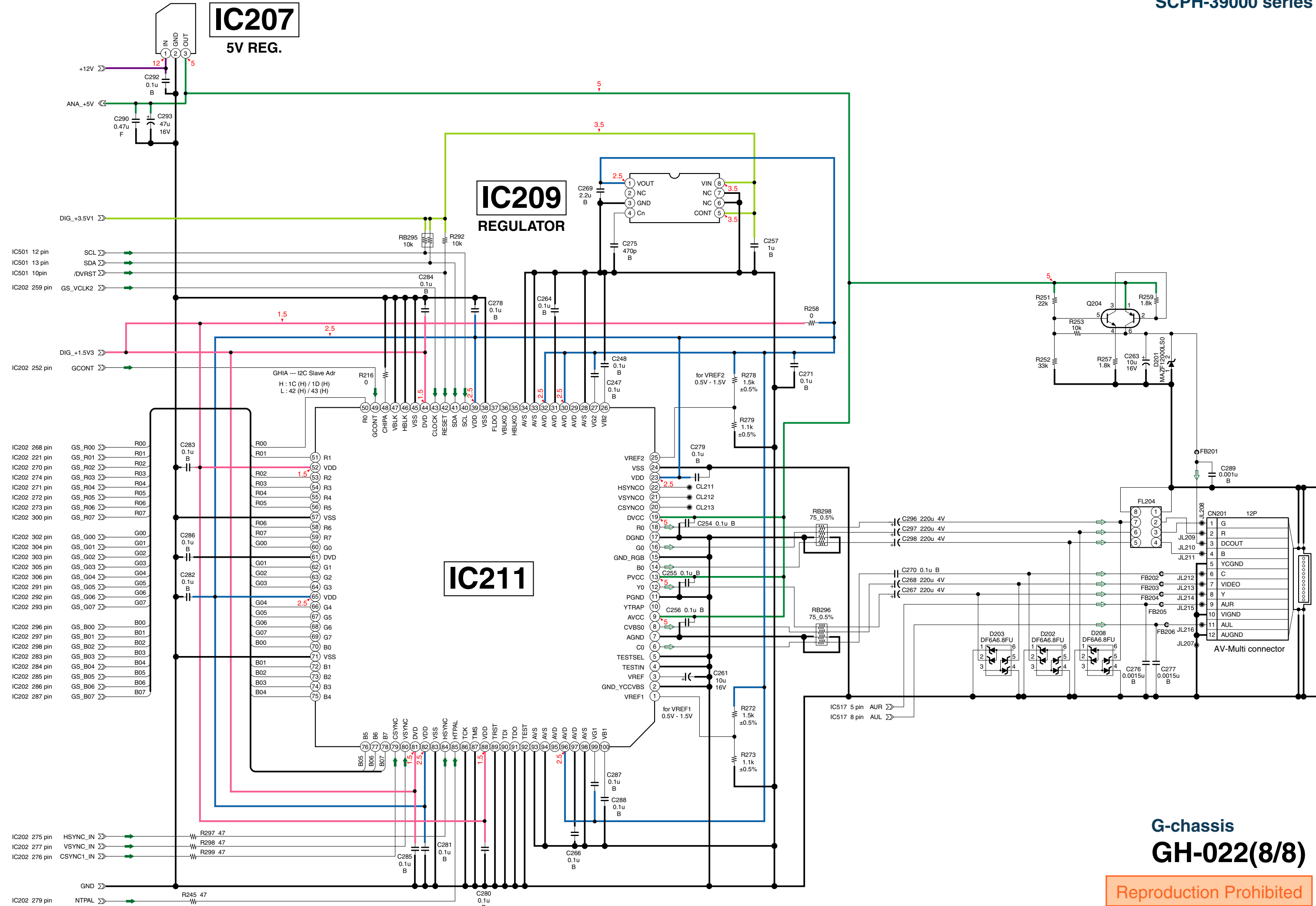
G-chassis
GH-022 (7/8)

Reproduction Prohibited

IC207
5V REG.

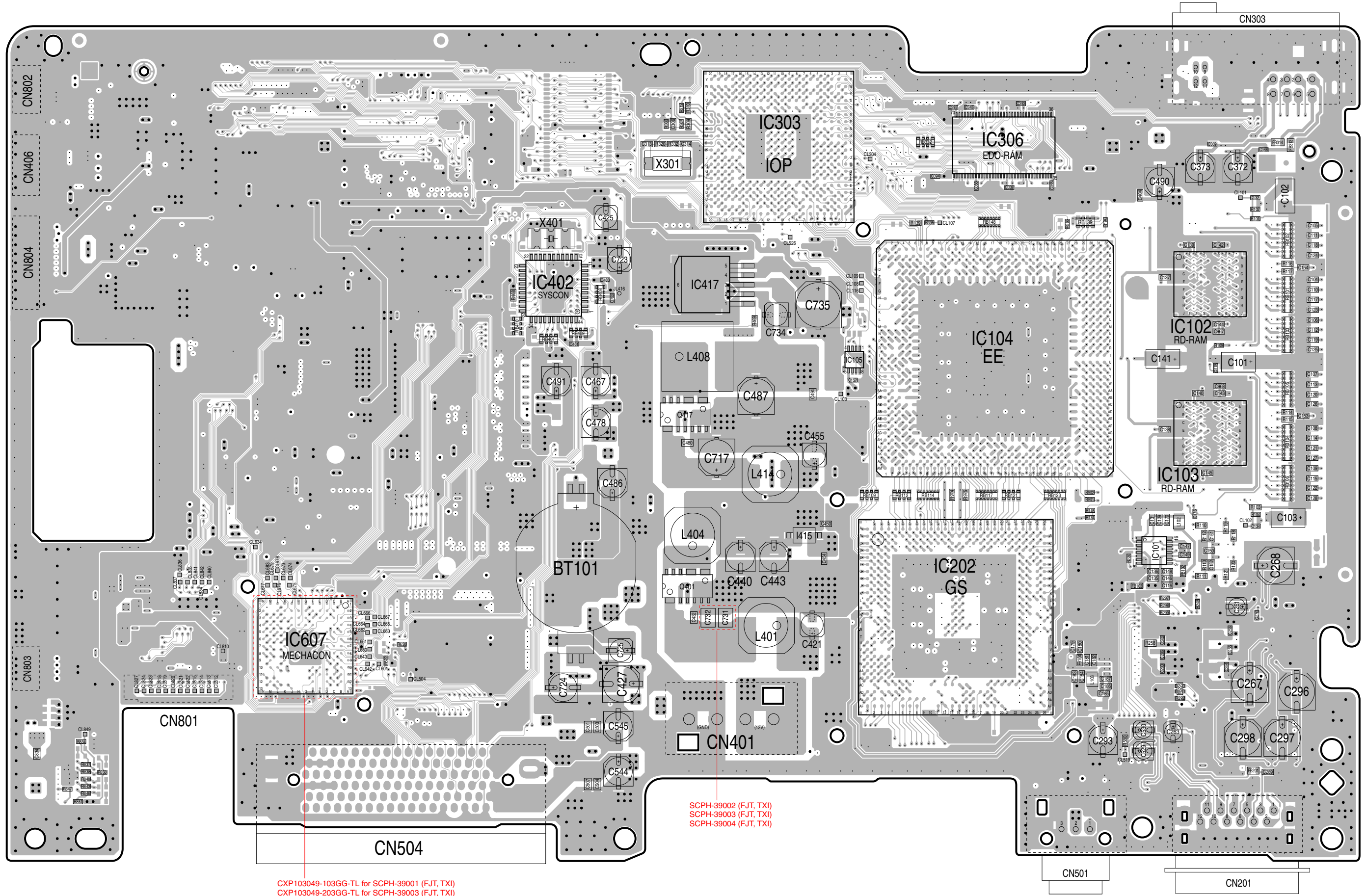
IC209
REGULATOR

IC211



G-chassis
GH-022(8/8)

Reproduction Prohibited



CXP103049-103GG-TL for SCPH-39001 (FJT, TXI)
 CXP103049-203GG-TL for SCPH-39003 (FJT, TXI)
 CXP103049-203GG-TL for SCPH-39004 (FJT, TXI)
 CXP103049-303GG-TL for SCPH-39002 (FJT, TXI)

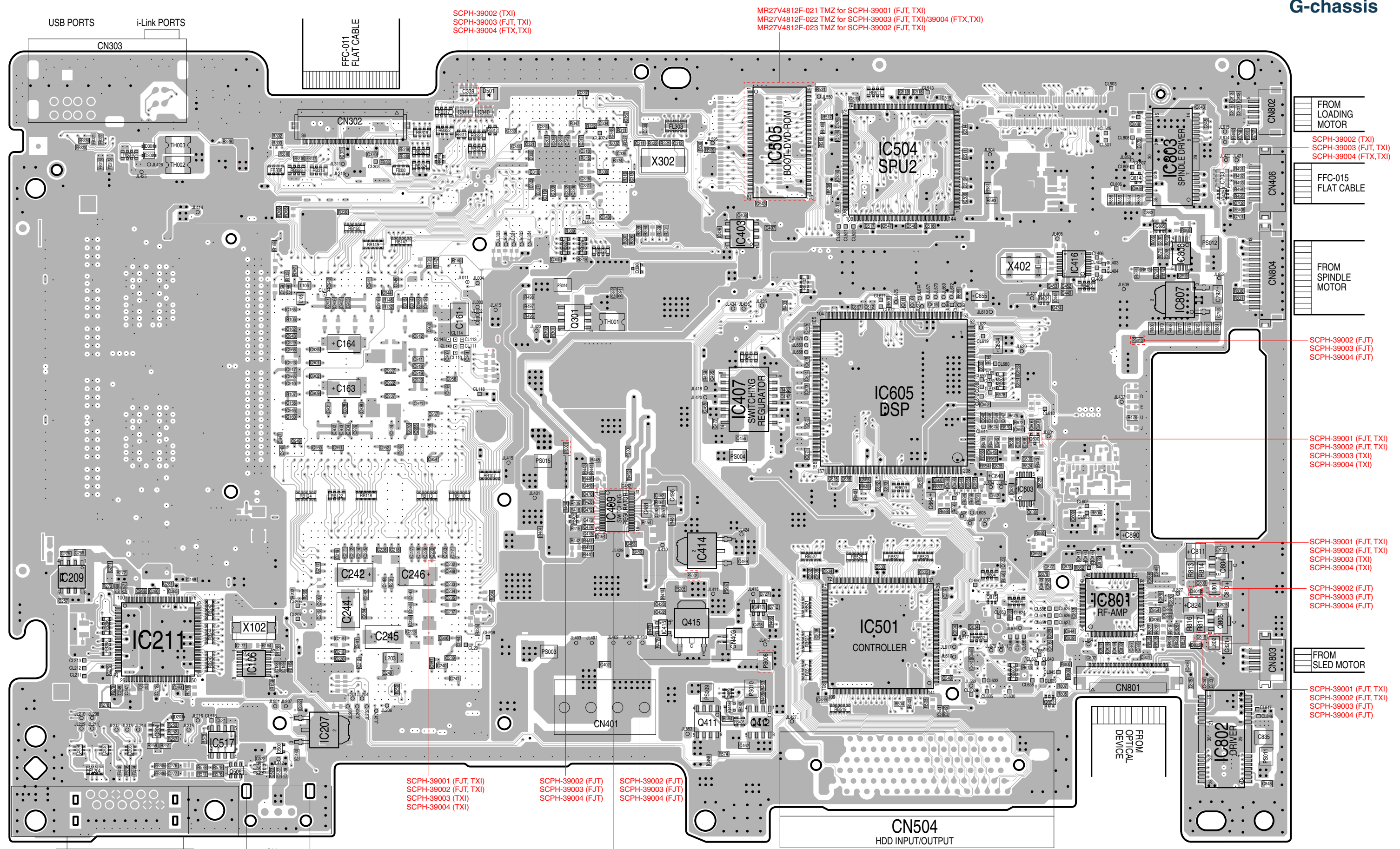
SCPH-39002 (FJT, TXI)
 SCPH-39003 (FJT, TXI)
 SCPH-39004 (FJT, TXI)

GH-022

A side

— GH022-20 —

Reproduction Prohibited



GH-022

B side

— GH022-21 —

Reproduction Prohibited

ELECTRICAL PARTS LIST

NOTE :

- 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.
• -XX and -X mean standardized parts, so they may have some difference from the original one.
• RESISTORS
METAL : Metal-film resistor.
F : nonflammable
Unit is Ω.

- SEMICONDUCTORS
In each case, u : , for example :
uA .. : μA .. uPA ... : μPA ...
uPB .. : μPB .. uPC ... : μPC .. uPD ... : μPD ..
• CAPACITORS
uF : μF
• COILS
uH : μH

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

Table with columns Ref., Part No., Description. Includes items like BT101 HOLDER, LITHIUM BATTERY and various capacitors (C101-C147).

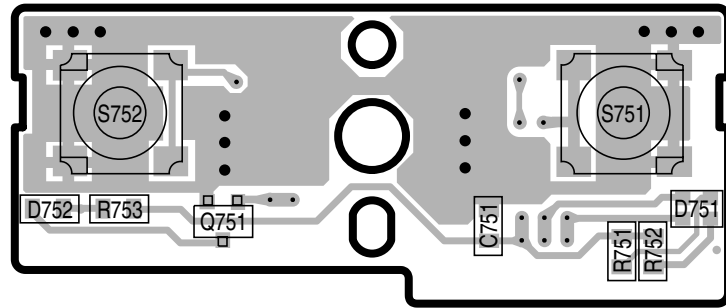
Table with columns Ref., Part No., Description. Includes various capacitors (C149-C229) and a resistor (C217).

Table with columns Ref., Part No., Description. Includes various capacitors (C230-C316) and a resistor (C217).

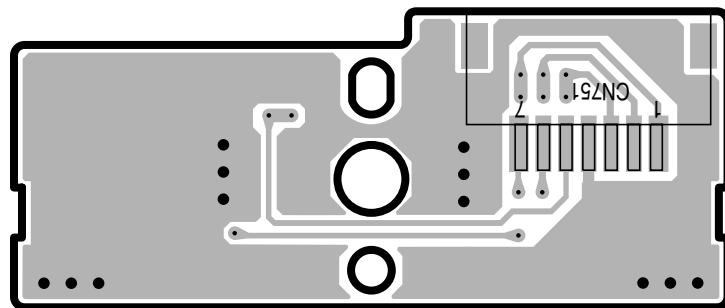
Table with columns Ref., Part No., Description. Includes various capacitors (C317-C454).

Ref.	Part No.	Description	
RB312	1-233-786-91	RES, NETWORK 220	(1608)
RB314	1-233-681-91	RES, NETWORK 4.7K	(1608)
RB317	1-233-423-21	RES, CHIP NETWORK 47	(3216)
RB318	1-233-423-21	RES, CHIP NETWORK 47	(3216)
RB319	1-233-423-21	RES, CHIP NETWORK 47	(3216)
RB320	1-233-423-21	RES, CHIP NETWORK 47	(3216)
RB321	1-233-423-21	RES, CHIP NETWORK 47	(3216)
RB322	1-233-412-21	RES, CHIP NETWORK 1.0K	(3216)
RB323	1-233-412-21	RES, CHIP NETWORK 1.0K	(3216)
RB324	1-233-412-21	RES, CHIP NETWORK 1.0K	(3216)
RB325	1-233-412-21	RES, CHIP NETWORK 1.0K	(3216)
RB326	1-233-412-21	RES, CHIP NETWORK 1.0K	(3216)
RB327	1-233-415-21	RES, CHIP NETWORK 10K	(3216)
RB328	1-233-414-21	RES, CHIP NETWORK 4.7K	(3216)
RB332	1-233-575-21	RES, CHIP NETWORK 22	
RB401	1-233-415-21	RES, CHIP NETWORK 10K	(3216)
RB402	1-233-415-21	RES, CHIP NETWORK 10K	(3216)
RB403	1-233-415-21	RES, CHIP NETWORK 10K	(3216)
RB405	1-233-803-91	RES, NETWORK 1.5K	(1608)
RB406	1-233-792-91	RES, NETWORK 100K	(1608)
RB408	1-233-415-21	RES, CHIP NETWORK 10K	(3216)
RB409	1-233-415-21	RES, CHIP NETWORK 10K	(3216)
RB410	1-233-415-21	RES, CHIP NETWORK 10K	(3216)
RB411	1-233-412-21	RES, CHIP NETWORK 1.0K	(3216)
RB511	1-233-423-21	RES, CHIP NETWORK 47	(3216)
RB517	1-234-711-21	RES, CHIP NETWORK 22X8	(3816)
RB519	1-234-711-21	RES, CHIP NETWORK 22X8	(3816)
RB521	1-234-711-21	RES, CHIP NETWORK 22X8	(3816)
RB523	1-234-711-21	RES, CHIP NETWORK 22X8	(3816)
RB525	1-234-711-21	RES, CHIP NETWORK 22X8	(3816)
RB527	1-234-711-21	RES, CHIP NETWORK 22X8	(3816)
RB529	1-234-711-21	RES, CHIP NETWORK 22X8	(3816)
RB531	1-234-711-21	RES, CHIP NETWORK 22X8	(3816)
RB602	1-233-415-21	RES, CHIP NETWORK 10K	(3216)
RB603	1-233-415-21	RES, CHIP NETWORK 10K	(3216)
RB604	1-233-415-21	RES, CHIP NETWORK 10K	(3216)
RB605	1-233-415-21	RES, CHIP NETWORK 10K	(3216)
RB606	1-233-412-21	RES, CHIP NETWORK 1.0K	(3216)
RB609	1-233-423-21	RES, CHIP NETWORK 47	(3216)
<THERMISTOR>			
△ TH001	1-533-817-21	THERMISTOR [SCPH-39002 (FJT, TXI) / 39003 (FJT, TXI) / 39004 (FJT, TXI)]	
△ TH001	1-804-384-31	THERMISTOR, POSITIVE [SCPH-39001 (TXI)]	
△ TH002	1-533-817-21	THERMISTOR	
△ TH003	1-533-817-21	THERMISTOR	
<CRYSTAL>			
X102	1-781-640-21	VIBRATOR, CRYSTAL	
X301	1-781-856-21	VIBRATOR, CRYSTAL	
X302	1-781-768-21	VIBRATOR, CRYSTAL	
X401	1-760-496-22	VIBRATOR, LITHIUM NIOBATE	
X402	1-760-928-41	VIBRATOR, CRYSTAL [SCPH-39002 (FJT)]	
X402	1-781-266-41	VIBRATOR, CRYSTAL [SCPH-39001 (TXI) / 39002 (TXI) / 39003 (FJT, TXI) / 39004 (FJT, TXI)]	

SWITCH MOUNT



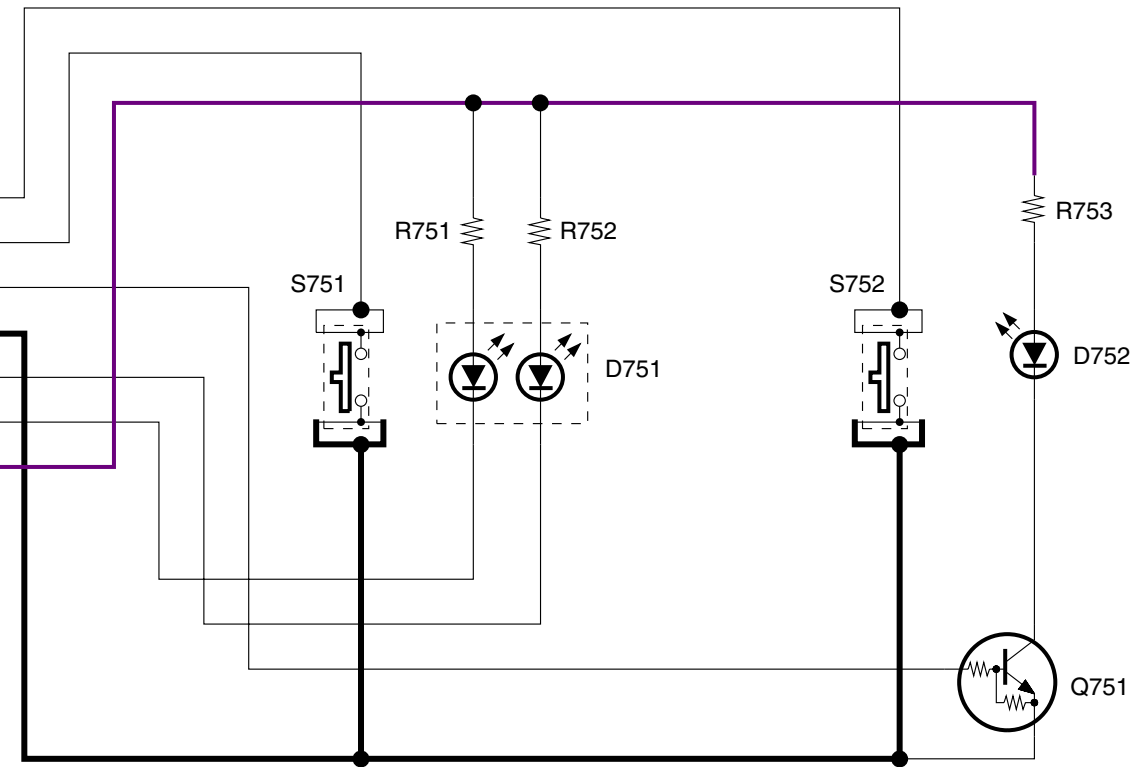
SW-382/SW-382(VA)
A side



SW-382/SW-382(VA)
B side

TO GH019
BOARD
CN406

CN751	7P
OP/CL_SW	7
POWER_SW	6
TRAY_LED_ON	5
GND	4
/GREEN_ON	3
/RED_ON	2
EVER_+12V	1



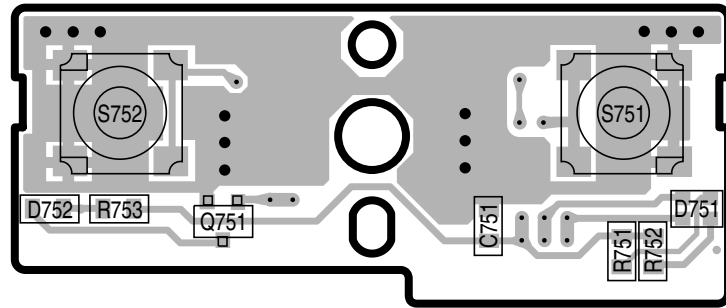
SW-382/SW-382(VA)

SWITCH MOUNTED CIRCUIT BOARD

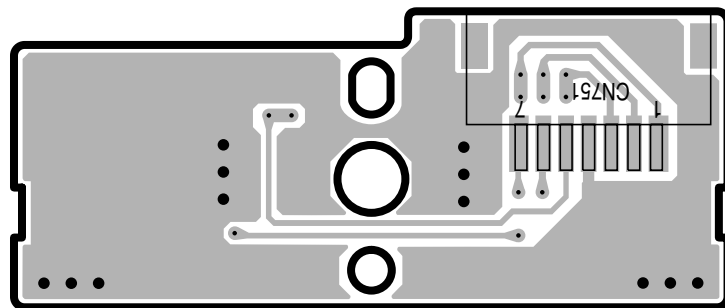
Ref-No.	Part No.	Description	Remark	Place code
PWB	1-685-774-11	PWB, SW-382		#25SW
PWB	1-685-774-21	PWB, SW-382		#25SW
CN751	1-785-470-21	CONNECTOR, FPC (LIF (NON-ZIF)) 7P		#25SW
D751	8-719-078-90	DIODE CL-165HR/G1-D-T	for SW-382	#25SW
D751	6-500-232-01	DIODE CL-165HR/G2-D-T	for SW-382 (VA)	#25SW
D751	6-500-245-01	DIODE SECS2D68C	for SW-382 (VA)	#25SW
D752	6-500-204-01	DIODE CL-190UB2-X-T		#25SW
D752	8-719-080-04	DIODE CL-190UB-X-T		#25SW
Q751	6-550-076-01	TRANSISTOR MUN5213T1		#25SW
Q751	8-729-013-97	TRANSISTOR RN1304-TE85L		#25SW
Q751	8-729-029-14	TRANSISTOR DTC144EUA-T106		#25SW
Q751	8-729-402-44	TRANSISTOR UN5213-TX		#25SW
R751	1-216-833-91	RES, CHIP 10K (1608)	for SW-382	#25SW
R751	1-216-832-91	RES, CHIP 8.2K (1608)	for SW-382 (VA)	#25SW
R752	1-216-835-91	RES, CHIP 15K (1608)	for SW-382	#25SW
R752	1-216-831-91	RES, CHIP 6.8K (1608)	for SW-382 (VA)	#25SW
R753	1-216-993-91	RES, CHIP 2.4K (1608)		#25SW
S751	1-771-917-21	SWITCH, TACTILE		#25SW
S752	1-771-917-21	SWITCH, TACTILE		#25SW

Reproduction Prohibited

SWITCH MOUNT



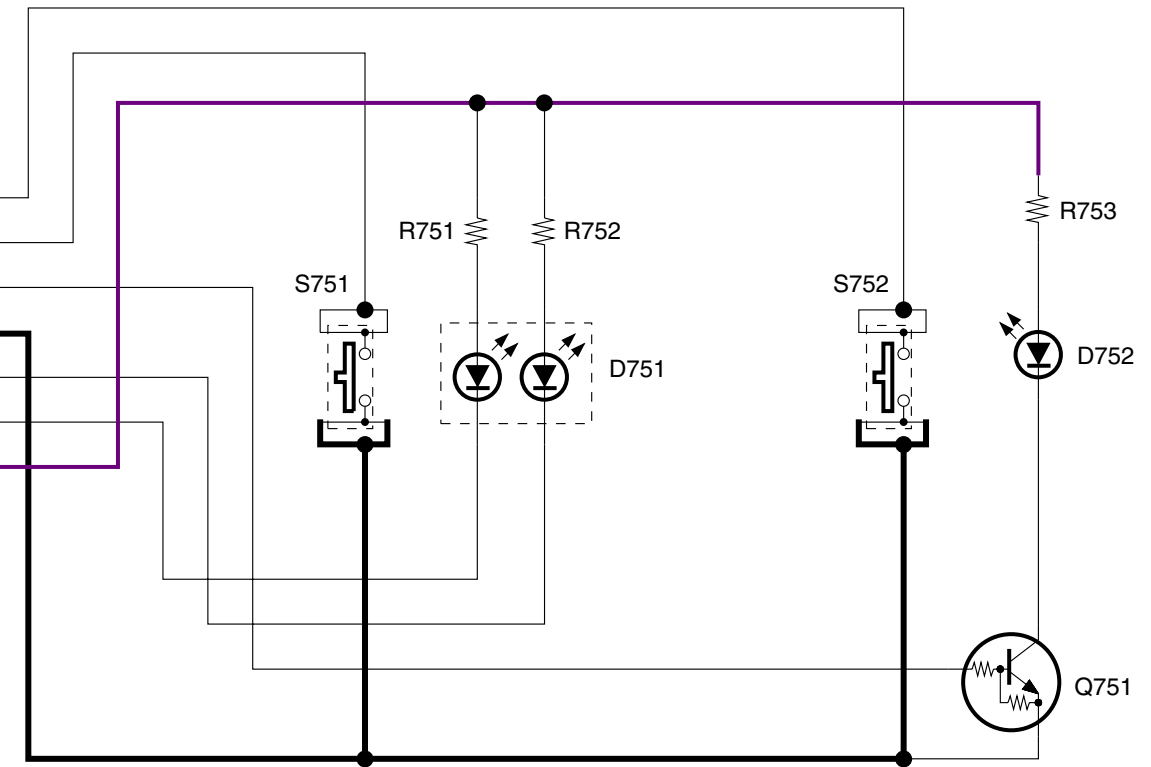
SW-393/SW-393(VA)
A side



SW-393/SW-393(VA)
B side

TO GH022
BOARD
CN406

CN751	7P
OP/CL_SW	7
POWER_SW	6
TRAY_LED_ON	5
GND	4
/GREEN_ON	3
/RED_ON	2
EVER_+12V	1



SW-393/SW-393(VA)

SWITCH MOUNTED CIRCUIT BOARD

Ref-No.	Part No.	Description	Remark	Place code
PWB	1-686-787-11	PWB, SW-393		#25SW
	1-686-787-21	PWB, SW-393		#25SW
	1-686-787-31	PWB, SW-393		#25SW
	1-686-787-41	PWB, SW-393		#25SW
CN751	1-785-470-21	CONNECTOR, FPC (LIF (NON-ZIF)) 7P		#25SW
D751	8-719-078-90	DIODE CL-165HR/G1-D-T	for SW-383	#25SW
D751	6-500-232-01	DIODE CL-165HR/G2-D-T	for SW-383 (VA)	#25SW
D751	6-500-245-01	DIODE SECS2D68C	for SW-383 (VA)	#25SW
D752	8-719-080-04	DIODE CL-190UB-X-T	for SW-383	#25SW
D752	6-500-204-01	DIODE CL-190UB2-X-T	for SW-383 (VA)	#25SW
Q751	6-550-076-01	TRANSISTOR MUN5213T1		#25SW
Q751	8-729-013-97	TRANSISTOR RN1304-TE85L	for SW-383	#25SW
Q751	8-729-402-44	TRANSISTOR UN5213-TX	for SW-383	#25SW
Q751	8-729-013-97	TRANSISTOR RN1304-TE85L	for SW-383 (VA)	#25SW
Q751	8-729-029-14	TRANSISTOR DTC144EUA-T106	for SW-383 (VA)	#25SW
Q751	8-729-402-44	TRANSISTOR UN5213-TX	for SW-383 (VA)	#25SW
R751	1-216-832-91	RES, CHIP 8.2K (1608)	for SW-383 (VA)	#25SW
R751	1-216-833-71	RES, CHIP 10K (1608)	for SW-383	#25SW
R751	1-216-833-81	RES, CHIP 10K (1608)	for SW-383	#25SW
R751	1-216-833-91	RES, CHIP 10K (1608)	for SW-383	#25SW
R752	1-216-831-91	RES, CHIP 6.8K (1608)	for SW-383 (VA)	#25SW
R752	1-216-835-91	RES, CHIP 15K (1608)	for SW-383	#25SW
R753	1-216-993-91	RES, CHIP 2.4K (1608)		#25SW
S751	1-771-917-21	SWITCH, TACTILE		#25SW
S752	1-771-917-21	SWITCH, TACTILE		#25SW

Reproduction Prohibited