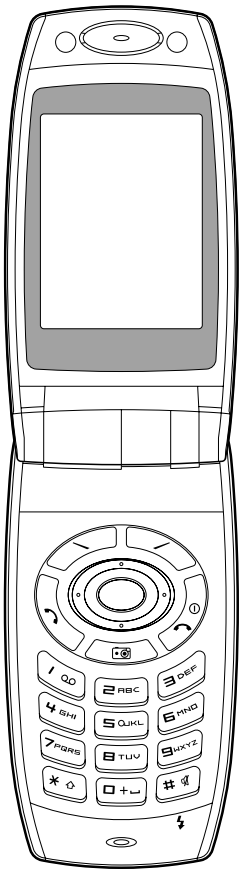
SHARP SERVICE MANUAL

No. S2509GX25SPL/

SUPPLEMENT

DIGITAL MOBILE PHONE

MODEL GX25



INTERNAL MODEL NAME	SELECTION CODE	DESTINATION
TQG250AB/TQH250AB	A	Australia
TQG250BB/TQH250BB	B	Hungary
TQG250CB/TQH250CB	C	Switzerland
TQG250DB/TQH250DB	D	Greece
TQG250EB/TQH250EB	E	U.K.
TQG251EB/TQH251EB	EP	U.K. (Prepaid)
TQG250GB/TQH250GB	G	Germany
TQG251GB/TQH251GB	GP	Germany (Prepaid)
TQG250HB/TQH250HB	H	Netherlands
TQG250LB/TQH250LB	L	Malta
TQG251PB/TQH251PB	PP	Portugal (Prepaid)
TQG250QB/TQH250QB	Q	Egypt
TQG250RB/TQH250RB	R	Ireland
TQG250SB/TQH250SB	S	Spain
TQG250TB/TQH250TB	T	Italy
TQG250VB/TQH250VB	V	Slovenia
TQG250WB/TQH250WB	W	Sweden
TQG250ZB/TQH250ZB	Z	New Zealand

- In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified should be used.

- Caution
  Risk of explosion if battery is replaced by an incorrect type, dispose of used batteries according to the instruction.

This supplemental service manual describes changes in PWB for the shown model, to be implemented as running changes from the production in February.
For servicing, refer to other existing service manuals (see below).

- Existing service manuals

Japanese Production	Chinese Production
S9419TQG250//	S1502HX25CHIN
SX429TQG250/B	

SHARP CORPORATION

• Confirm the differences with GX25 (Old P.W.Board).

(From page 2-43)

Ⓐ

Is 3.6 V or more applied to BATT terminal (TP520)?
NO → Battery terminals are defective, connector terminal is dirty, or soldering is improper.

YES

Is the voltage 1.2 V or lower on SENSE terminal (TP534)?
NO → The battery is defective or set improperly.

YES

Is there conduction through fuse (FS501)?
NO → Fuse (FS501) is blown.

YES

Is Flash memory (IC104) installed properly?
NO → Flash memory (IC104) is installed improperly.

YES

Are voltages of 3.00, 1.82, and 1.82 V applied to VINT (TP173), VCORE (TP171), and VRTC (TP167) respectively?
NO → IC103 is defective.

YES

Are voltages of 3.00, and 1.80 V applied to VINT (IC703 pin 1), and VLCD (TP714) respectively?
NO → CN103, CN701, and FPC are defective or mounted improperly.

YES

Is the waveform of signals connected to X101 (32 kHz) correct?
Are R167, R174A, C176, X101, and IC106 good in appearance and mounted properly?
NO → X101 (32 kHz oscillator), R167, R174A, and C176 are defective or mounted improperly.
Or oscillating circuit of IC106 is defective.

YES

Is the triangular wave of 13 MHz sent from C833?
YES → Ⓑ

NO

Is 2.9 V supplied from VTCXO (TP801)?
NO → Voltage Regulator (IC804) is defective.

YES

IC801 and peripheral circuits are defective.

Ⓑ

CN103, CN701, FPC, IC704, IC103, IC104, and IC106 are defective or mounted improperly.

NO

Is 13 MHz applied to 13MHzCLK (TP713)?
YES → Is “H“ supplied from CN704 pin 32?

NO

YES

CN103, CN701, FPC, IC103, IC104, and IC106 are defective or mounted improperly.

Is 13 MHz applied to R179?
YES → CN103, CN701, and FPC are defective or mounted improperly.

NO

IC108 and IC106 are defective or mounted improperly.

• Confirm the differences with GX25 (Old P.W.Board).

3. No voice is heard from the earpiece.

Phone (Handset)

Are signals sent to TP734 and TP735?
- YES → Internal receiver is defective (lead wire breakage, etc.). Or the connector is loose or in poor contact.
- NO ↓

Is the signal sent to both ends of C147?
- YES → L107, L108, C106, and C143 are defective or soldered improperly.
- NO ↓

Is 0.5 V or more applied to R101 (IC103 pin 9 side)?
- YES → IC103 is defective.
- NO ↓

Is 0.5 V or more applied to JK101 pin 5?
- YES → Parts between socket JK101 pin 5 and IC103 pin 9 are defective.
- NO ↓

Is 0.5 V or more applied to JK101 pin 3?
- YES → Socket JK101 is defective.
- NO ↓

Is 0.5 V or more applied to TP120?
- YES → Parts between socket JK101 pin 3 and TP120 are defective.
- NO ↓

Is 2.4 - 2.6 V applied to TP176?
- YES → R122 is defective.
- NO ↓

Is 2.4 - 2.6 V applied to R115 (IC103 pin 76 side)?
- YES → R115 is defective. (Hands free kit mode is set.)
- NO ↓

IC103 is defective.

Hands free kit (Headset)

Replace the hands free kit. Is sound produced?
- YES → The hands free kit is defective.
- NO ↓

Is signal sent to JK101 pin 4?
- YES → Socket JK101 is defective, or the hands free kit is in a poor contact with the socket plug.
- NO ↓

Is signal sent to TP121?
- YES → L103 is defective.
- NO ↓

Is signal sent to both ends of C121?
- YES → V102, C103, C105, and C107 are defective.
- NO ↓

Is signal sent to L124 (IC103 pin 60 side)?
- YES → L124 is defective.
- NO ↓

Disconnect the hands free kit. Is voice heard in phone mode?
- NO → IC103 or IC106 is defective.
- YES ↓

Is the voltage 0 V on R101 (IC103 pin 9 side)?
- YES → IC103 is defective.
- NO ↓

Socket JK101 is defective.

6. Clock Settings are reset.

Is 1.6 V or more applied to TP167 with a battery in the phone?
NO → IC103 is defective.
YES ↓
Is 1.2 V or more applied to TP167 without a battery in the phone?
NO → Is back-up battery holder properly installed to Main PWB?
NO ↑ The back-up battery holder is installed improperly.
YES ↓ • The remaining power of back-up battery is insufficient. • Back-up battery is defective. • Back-up battery holder is defective.
YES ↓
X101, R167, R174, R174A, and C176 are defective.

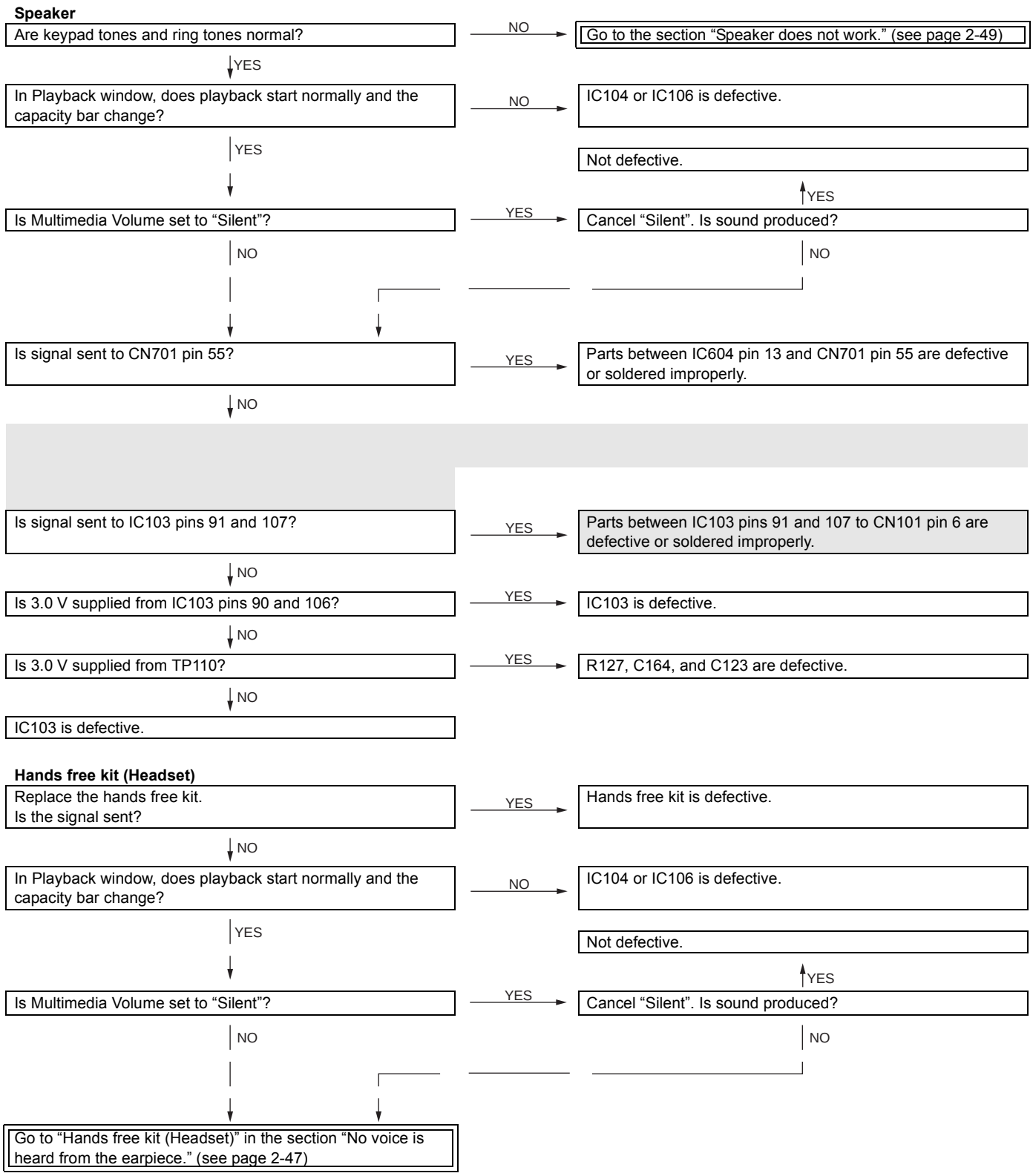
7. Speaker does not work.

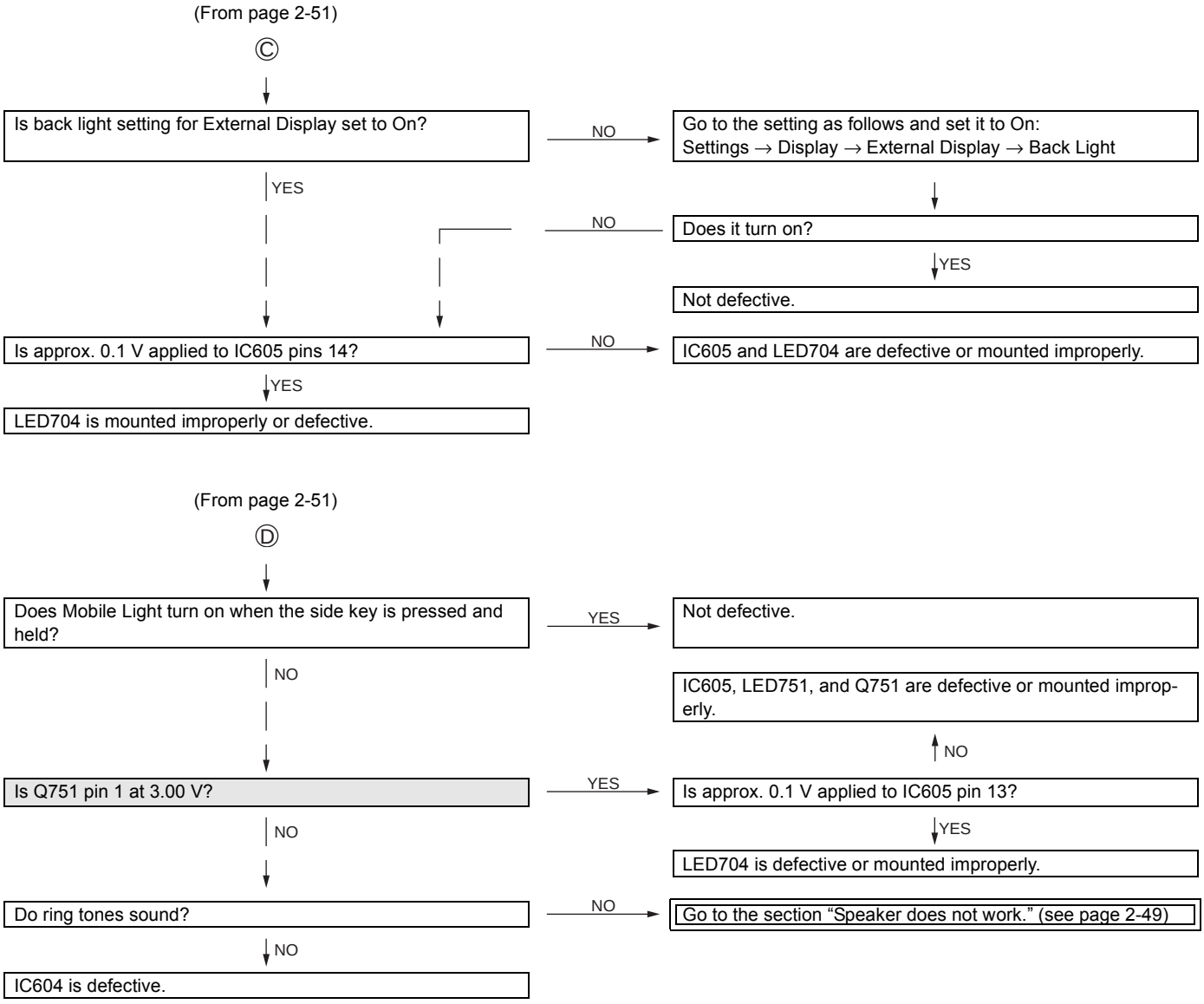
* When ring tones sound, but keypad tones do not, “Keypad Tones” is set to Off.
* When keypad tones and Voice Recorder playback sound are available but ring tones are not, Ringer Volume is set to “Silent”.
* Ring tones sound according to “Ringer Volume” settings.

Are speaker terminals in contact with the land?
NO → The speaker is defective.
YES ↓
Is the impedance between speaker terminals approx. 8 ohms?
NO → The speaker is defective.
YES ↓
Is signal sent to TP727, TP728, or the speaker contact pad?
YES → The speaker is defective.
NO ↓
Is signal sent to IC604 pins 17 and 18?
YES → Either of following parts are defective or soldered improperly:
· Between IC604 pin 18 and TP727.
· Between IC604 pin 17 and TP728.
NO ↓
Is VBAT applied to IC604 pin 15?
NO → Parts between VBAT and IC604 pin 15 are defective or soldered improperly.
YES ↓
Is approx. 3V applied to IC604 pins 7 and 32?
NO → Parts between VINT and IC604 pins 7 and 32 are defective or soldered improperly.
YES ↓
Is signal sent to IC604 pin 12?
YES → C622 and R622 are defective. Or IC604 is defective.
NO ↓
IC604 or the control line to IC106 is defective.

8. Video/Voice Recorder playback is impossible.

* Playback volume of video and Voice Recorder depends on the setting in "Multimedia Volume".




(From page 2-51)
Ⓒ
Is back light setting for External Display set to On?
NO
Go to the setting as follows and set it to On:
Settings → Display → External Display → Back Light
YES
NO
Does it turn on?
YES
Not defective.
Is approx. 0.1 V applied to IC605 pins 14?
NO
IC605 and LED704 are defective or mounted improperly.
YES
LED704 is mounted improperly or defective.
(From page 2-51)
Ⓓ
Does Mobile Light turn on when the side key is pressed and held?
YES
Not defective.
NO
IC605, LED751, and Q751 are defective or mounted improperly.
NO
Is Q751 pin 1 at 3.00 V?
YES
Is approx. 0.1 V applied to IC605 pin 13?
YES
NO
LED704 is defective or mounted improperly.
Do ring tones sound?
NO
Go to the section “Speaker does not work.” (see page 2-49)
NO
IC604 is defective.

• Confirm the differences with GX25 (Old P.W.Board).

11. The display does not appear on Main Display.

Check	Branch	Result
Is Main Display unit fully inserted to CN704?	NO	Improperly inserted to the connector.
↓ YES		
Clean the contact point of CN704 and insert the unit again. Does the display appear?	YES	The contact point of the connector is dirty.
↓ NO		
Replace Main Display. Does the display appear?	YES	Main Display unit is defective.
↓ NO		
Is 3.6 or more voltage applied to VBAT2 terminal (FS601) and VBAT1 terminal (IC601 pin 1)?	NO	Go to the section "Power is not turned on." (see page 2-43)
↓ YES		
Is 2.8 ± 0.1 V applied to TP170?	NO	Go to the section "Power is not turned on." (see page 2-43)
↓ YES		
Is 3.0 ± 0.1 V or more applied to TP173?	NO	Go to the section "Power is not turned on." (see page 2-43)
↓ YES		
Is 1.8 ± 0.1 V or more applied to TP714?	NO	Is 3.0 ± 0.1 V applied to IC703 pin 1? Is C728 good in appearance and mounted properly? — NO: Regulator IC703 is defective. — YES: Are CN701 and CN101 good in appearance and mounted properly? — YES: go to "Is 13 MHz applied to clock TP713?" — NO: CN701 and CN101 are defective or mounted improperly. And FPC is defective.
↓ YES		
Is 13 MHz applied to clock TP713?	NO	Go to the section "Power is not turned on." (see page 2-43)
↓ YES		
Is 3.0 ± 0.1 V supplied from LCD_RST (L749)? Are L749, C736, R773, CN701, and CN771 good in appearance and mounted properly?	NO	L749, C736, R773, CN701, and CN771 are defective or mounted improperly.
↓ YES		
Is 3.0 V ± 0.1 V applied to CN704 pins 29, 30, and 31? Is C730 good in appearance and mounted properly?	NO	CN704 and C730 are defective or mounted improperly.
↓ YES		
Is 3.0 ± 0.1 V applied to the LCD reset (CN704 pin 32 and C720)? Is C720 good in appearance and mounted properly?	NO	Display controller IC (IC704) and C720 are defective or mounted improperly.
↓ YES		
Are pulse signals sent to pins 26, 27, and 28 of CN704? Is CN771 good in appearance and mounted properly?	NO	Display controller IC (IC704) and CN771 are defective or mounted improperly.
↓ YES		
Is the signal of approx. 6.5 MHz present on CN704 pin 21? Are R711 and C717 good in appearance and mounted properly?	NO	Display controller IC (IC704), R711, and C717 are defective or mounted improperly.
↓ YES		

Ⓔ
(To page 2-55)

(From page 2-54)

Ⓔ

Is the signal of approx. 70 Hz present on CN704 pin 23?

NO → Display controller IC (IC704) is defective or mounted improperly.

YES ↓

Main Display unit is defective, or connector CN704 is mounted improperly.

12. The display does not appear on External Display.

Does the display appear on Main Display?

NO → Go to the section “Power is not turned on.” (see page 2-43)

YES ↓

Is External Display unit fully inserted to CN771?

NO → Improperly inserted to the connector.

YES ↓

Clean the contact point of the connector CN771 and insert the unit again. Does the display appear?

YES → The contact point of the connector is dirty.

NO ↓

Is 3 ± 0.1 V applied to CN771 pin 6?
Are D771 and C771 good in appearance and mounted properly?

NO → D771 and C771 are defective or mounted improperly.

YES ↓

Are CN701 and CN101 good in appearance and mounted properly?

NO → CN701 and CN101 are defective or mounted improperly.
And FPC is defective.

YES ↓

Is 3.0 ± 0.1 V supplied from LCD_RST (CN771 pin 5 and R773)?

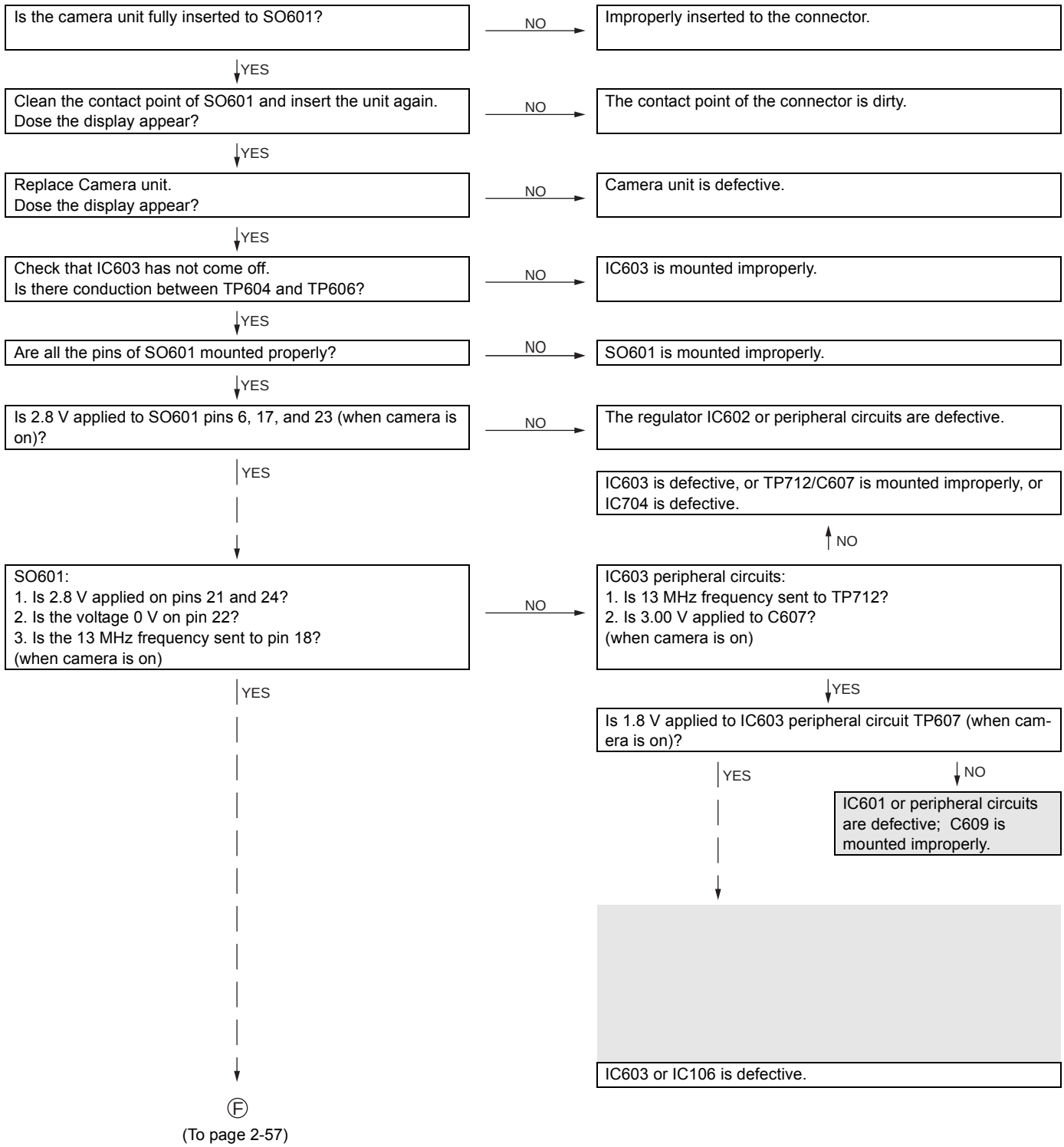
NO → IC106 and R773 are defective or mounted improperly.

YES ↓

External Display unit is defective.

• Confirm the differences with GX25 (Old P.W.Board).

13. Pictures cannot be taken.



(To page 2-57)

(From page 2-56)

Ⓕ

SO601:
1. Is 2.8 V applied on pins 14 and 16 (when camera is on)?
2. Are voltages of pins 14 and 16 within the range 0 to 2.8 V (when camera being activated)?

NO → Is 2.8 V applied to IC603 peripheral circuit (when camera is on)?

NO → IC602 and C610 are mounted improperly or defective.

YES → IC603 is defective.

YES

SO601:
Are voltages of the following pins within the range 0 to 2.8 V (when camera is on)?
1. pins 2 - 5, 7 - 8, 10, and 12
2. pins 11, 13, and 15

NO → R611, R612, R613, and IC603 are mounted improperly.

YES

IC603 is defective.

14. SIM card is not recognised.

Replace the SIM card. Is it recognised?

YES → SIM card is defective or not the one specified.

NO

Hereafter, check the signal waveform of each SIM when the power is turned on without a SIM card inserted.
(SIM signal waveform appears for approx. 70 ms after the power is turned on.)

Is 2.85 V supplied from pins 1, 2, and 6 of the SIM card? And is periodic pulse wave (3.25 MHz) sent from pin 3 of the SIM card?

YES → The contact point of the SIM card connector is deformed or dirty.

NO → C159 is defective.

Is 2.85 V applied to CN103 pin 6?

NO → Is C159 good in appearance and mounted properly?

NO

YES → IC103 is defective.

YES

Is 2.85 V applied to CN103 pin 5?

NO → IC106 is defective.

YES

Is periodic pulse wave sent from CN103 pin 4?

NO → IC106 is defective.

YES

Is 2.85 V supplied from CN103 pin 7?

NO → IC106 is defective.

YES

SIM FPC and SIM card connector are defective.

• Confirm the differences with GX25 (Old P.W.Board).

16. Bluetooth communication is impossible.

A connection cannot be established via Bluetooth.

↓

Is 3 V supplied from IC403 pin 3? —NO→ IC403 or C402, C409 is defective.

↓YES

Is IC402 pin 34 (RESET signal) always at “H”? —NO→ Parts (between IC106 pin 100 and IC402 pin 34) are defective.

↓YES

Are pulse signals sent to IC402 pin 74 (BT_TXD signal)? —NO→ IC402 is defective.

↓YES

IC106 is defective.

Phone can be connected to Bluetooth headset, but sound is not heard.

↓

Is waveform of PCMCLK signal (approx. 256 kHz clock) sent from R188? —NO→ IC106 is defective.

↓YES

Are pulse signals sent to BT_PCMOUT signal side of R199? —NO→ IC402 is defective.

↓YES

IC106 or IC402 is defective.

17. USB connection is impossible.

Connect a properly working phone to the PC/USB cable that is not recognised. Is it recognised? —NO→ Reinstall the driver and replace the USB cable to connect the phone.

↓YES

Connect to a PC with the USB cable.

↓

Is 5 V or more applied to TP515? —NO→ CN502 is connected improperly.

↓YES

Is Q503 pin 3 at “L”? —NO→ Q503 is defective.

↓YES

Is 3 V or more applied to TP507? —NO→ IC501 or IC106 is defective.

↓YES

Is 3 V or more applied to TP523? —NO→ Q504 and Q506 are defective.

↓YES

IC106 is defective.

MAIN PWB-A (1/3)

▷ RECEPTION SIGNAL

▶ TRANSMISSION SIGNAL

IC107 X61CN27N VOLTAGE DETECTOR

IC102 Q5RW45BF 4.5V REGULATOR

IC105 TC7SZ08F AND GATE

IC111 BH30MA3W REGULATOR

IC108 1323B30G REGULATOR

IC103 AD6537B ANALOGUE BASEBAND

IC106 AD6528B DIGITAL BASEBAND

IC104 LRS1898 FLASH MEMORY

IC109 TC7SZ32F LOGIC

IC114 TC7SS58A COMPARATOR

IC115 EW6671F HALL

UN101 2WD110VY INFRARED PORT

Q104 KRX205 E

CN101

CN103

FROM SIM FFC PWB-E

FROM DISPLAY PWB-B

FROM RELAY FPC PWB-F

BAT100 BACK-UP BATTERY

BACK-UP BATTERY HOLDER

MIC100 MICROPHONE

JK101 HANDS FREE CONNECTOR

TH101 10K THERMISTOR

X101 32kHz

X102 16.8MHz

FL101 NOISE FILTER

FL102 NOISE FILTER

FL103 NOISE FILTER

FL104 NOISE FILTER

FL105 NOISE FILTER

FL106 NOISE FILTER

FL107 NOISE FILTER

FL108 NOISE FILTER

FL109 NOISE FILTER

FL110 NOISE FILTER

FL111 NOISE FILTER

FL112 NOISE FILTER

FL113 NOISE FILTER

FL114 NOISE FILTER

FL115 NOISE FILTER

FL116 NOISE FILTER

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FL208 NOISE FILTER

FL209 NOISE FILTER

FL210 NOISE FILTER

FL211 NOISE FILTER

FL212 NOISE FILTER

FL213 NOISE FILTER

FL214 NOISE FILTER

FL215 NOISE FILTER

FL216 NOISE FILTER

FL217 NOISE FILTER

FL218 NOISE FILTER

FL219 NOISE FILTER

FL220 NOISE FILTER

FL221 NOISE FILTER

FL222 NOISE FILTER

FL223 NOISE FILTER

• NOTES ON SCHEMATIC DIAGRAM can be found on page 5-1.

• ( ) : Not Mount

• Waveform numbers of ❷ to ❹ are shown on page 5-2.

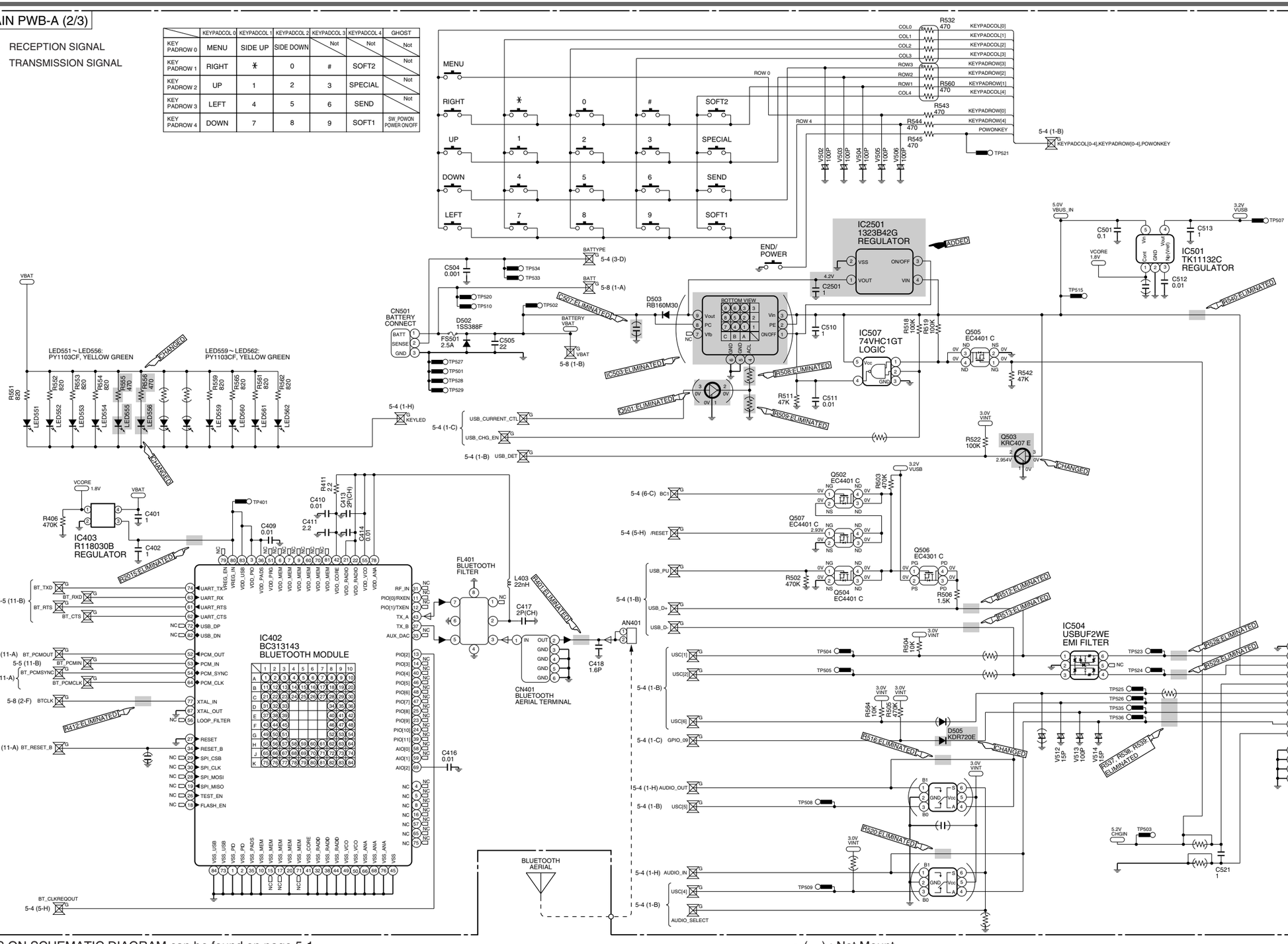
Figure 1 SCHEMATIC DIAGRAM (1/6)

MAIN PWB-A (2/3)

▷ RECEPTION SIGNAL

▶ TRANSMISSION SIGNAL

	KEYPADCOL 0	KEYPADCOL 1	KEYPADCOL 2	KEYPADCOL 3	KEYPADCOL 4	GHOST
KEY PADROW 0	MENU	SIDE UP	SIDE DOWN	Not	Not	Not
KEY PADROW 1	RIGHT	*	0	#	SOFT2	Not
KEY PADROW 2	UP	1	2	3	SPECIAL	Not
KEY PADROW 3	LEFT	4	5	6	SEND	Not
KEY PADROW 4	DOWN	7	8	9	SOFT1	SW_POWON POWER ON/OFF



	USB/Hands Free	AC/DC Charger	ES
1	GND USB	GND	GND UART
2	USB D+	Not connect	RXD
3	USB D-	Not connect	TXD
4	USB VBUS	Not connect	Not connect
5	Not connect	Power Supply	Power Supply
6	Reserved	Reserved	Genie Rx
7	Audio-out	Not connect	Genie Tx
8	Not connect	Manufacturer Specific	Manufacturer Specific
9	Audio-in	Not connect	Not connect
10	GND	GND	GND

• NOTES ON SCHEMATIC DIAGRAM can be found on page 5-1.

• ( ) : Not Mount

Figure 2 SCHEMATIC DIAGRAM (2/6)

MAIN PWB-A (3/3) ▷ RECEPTION SIGNAL ▶ TRANSMISSION SIGNAL

IC804 R5322P VOLTAGE REGULATOR

IC801 15515502 RF

IC802 RF3146 POWER AMP.

FL902 SAW FILTER

FL903 SAW FILTER

FL803 RF SWITCH

J801 RF CONNECTOR

FL905 ESD DEVICE

TCX801 26MHz VCTCXO

R1860:ELIMINATED

POWER AMP		
	BS4	BS5
GSM	HIGH	LOW
DCS	HIGH	HIGH
PCS	HIGH	HIGH

RF-SWITCH				
		BS1	BS2	BS3
GSM	TX	HIGH	LOW	HIGH
	RX	HIGH	LOW	LOW
DCS	TX	LOW	HIGH	LOW
	RX	HIGH	LOW	LOW
PCS	TX	LOW	HIGH	LOW
	RX	LOW	LOW	LOW

		BS1	BS2	BS3	BS4	BS5
GSM 900	TX	HIGH	LOW	HIGH	HIGH	LOW
	RX	HIGH	LOW	LOW	LOW	LOW
DCS 1800	TX	LOW	HIGH	LOW	HIGH	HIGH
	RX	HIGH	LOW	LOW	LOW	LOW
PCS 1900	TX	LOW	HIGH	LOW	HIGH	HIGH
	RX	LOW	LOW	LOW	LOW	LOW

• NOTES ON SCHEMATIC DIAGRAM can be found on page 5-1.

• ( ) : Not Mount

• Waveform numbers of ❶, ❼ to ⓲ are shown on pages 5-2, 5-3.

Figure 3 SCHEMATIC DIAGRAM (3/6)

• Confirm the differences with GX25 (Old P.W.Board).

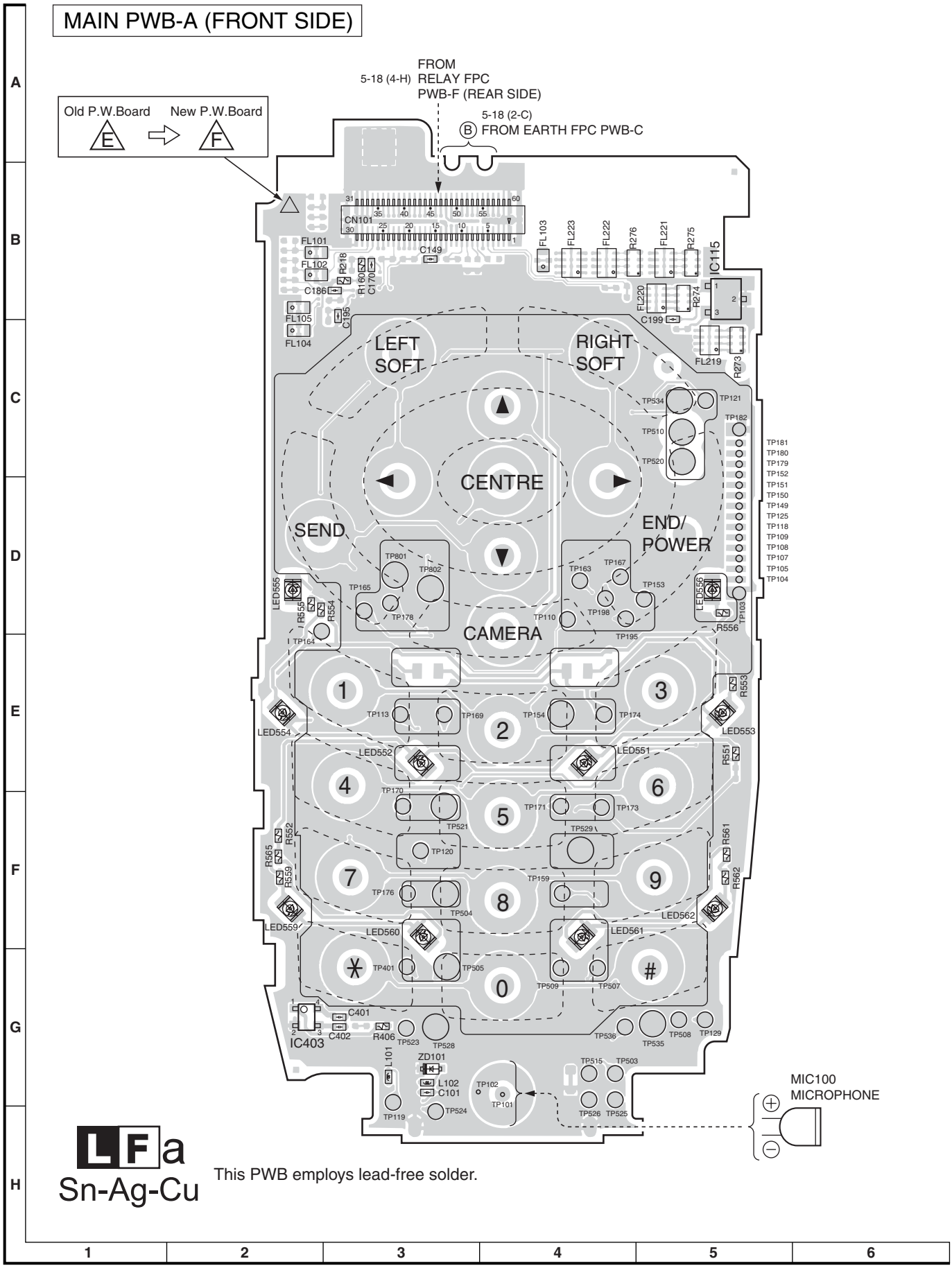
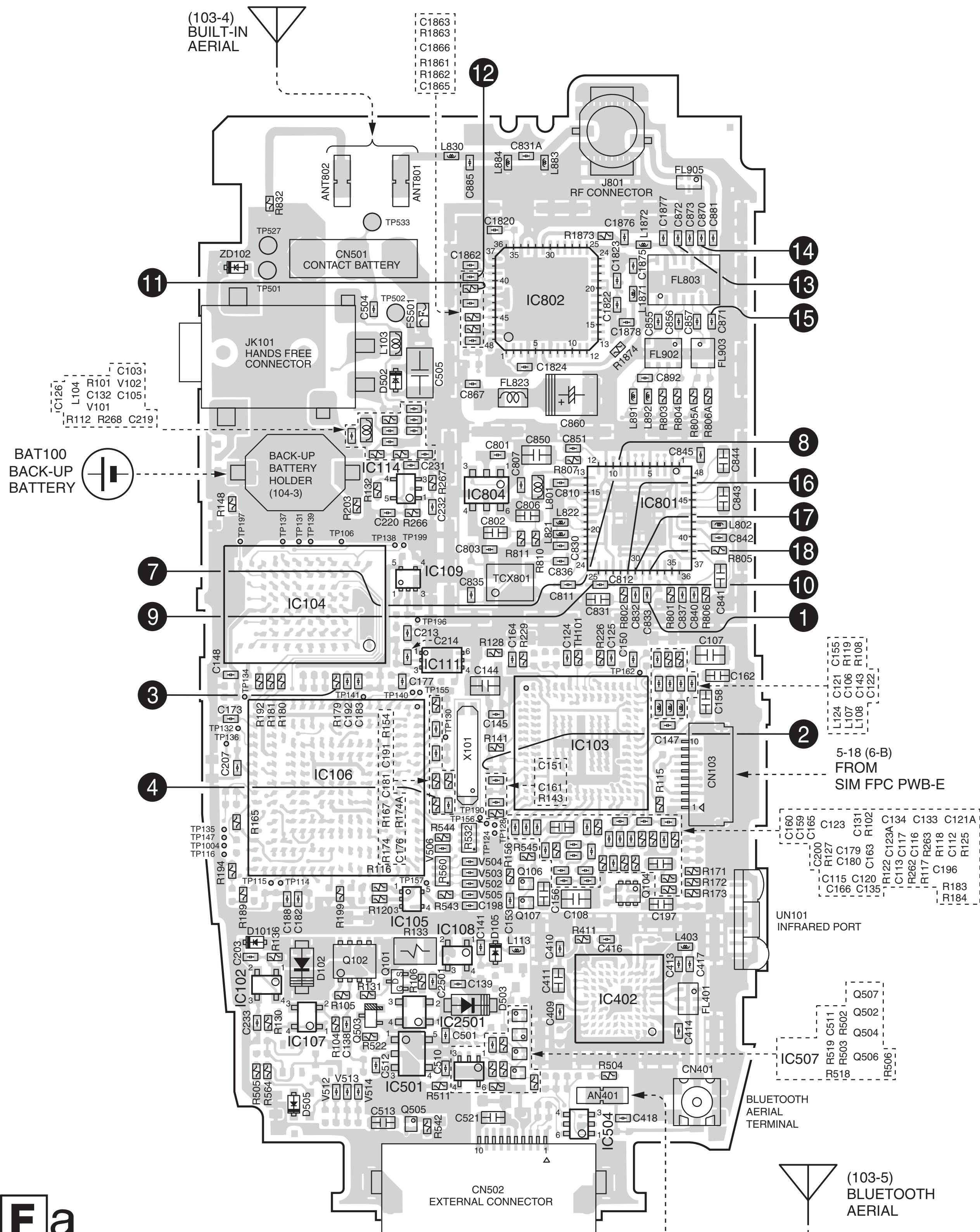


Figure 4 WIRING SIDE P.W.BOARD (1/5)

GX25 SERVICE MANUAL (SX429TQG250/B) Page 5 - 11

• Confirm the differences with GX25 (Old P.W.Board).

MAIN PWB-A (REAR SIDE)



LFa

Sn-Ag-Cu This PWB employs lead-free solder.

• Waveform numbers of 1 to 4, 7 to 18 are shown on pages 5-2, 5-3.

7	8	9	10	11	12

Figure 5 WIRING SIDE P.W.BOARD (2/5)

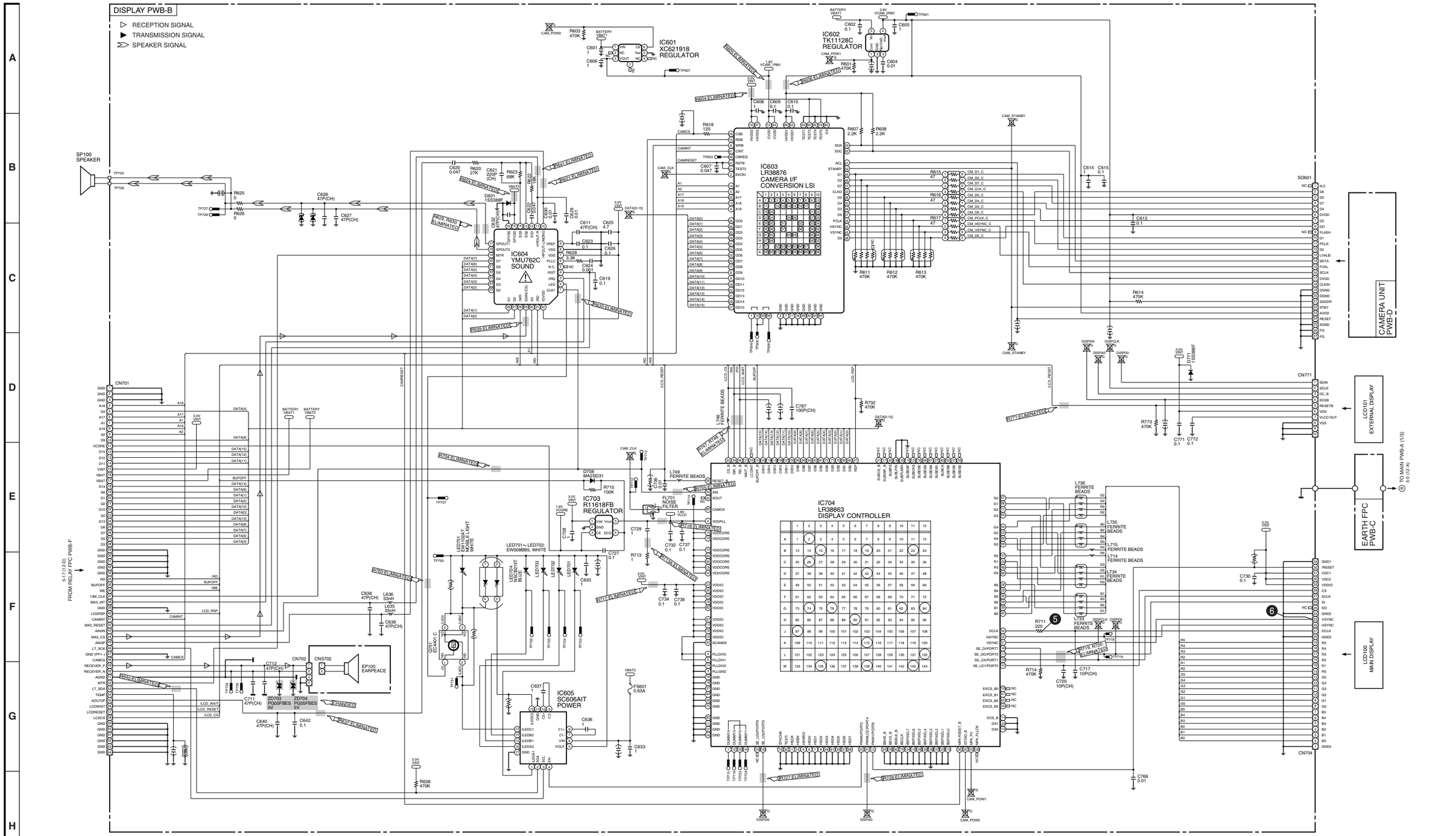
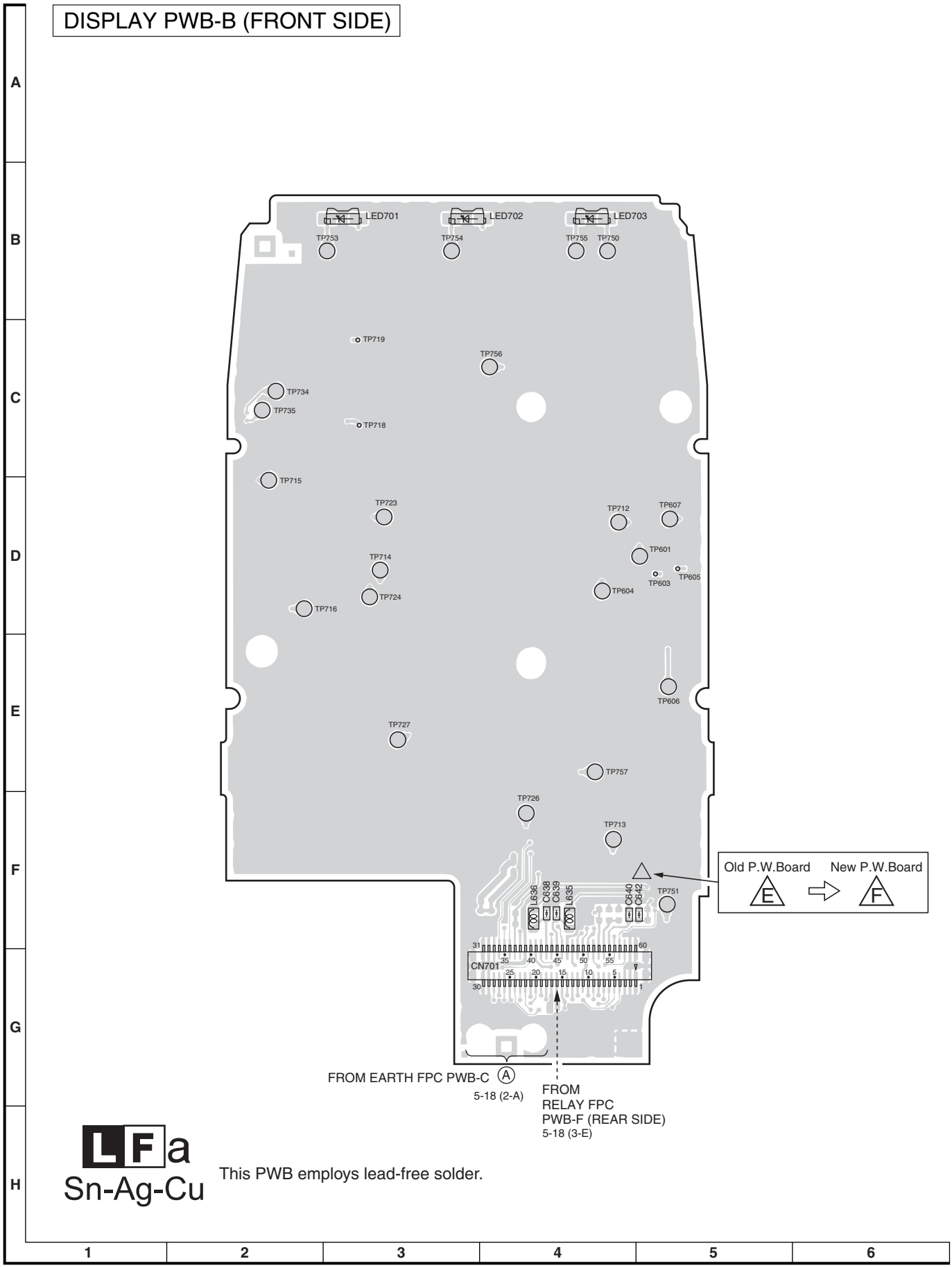


Figure 6 SCHEMATIC DIAGRAM (4/6)

• Confirm the differences with GX25 (Old P.W.Board).

DISPLAY PWB-B (FRONT SIDE)

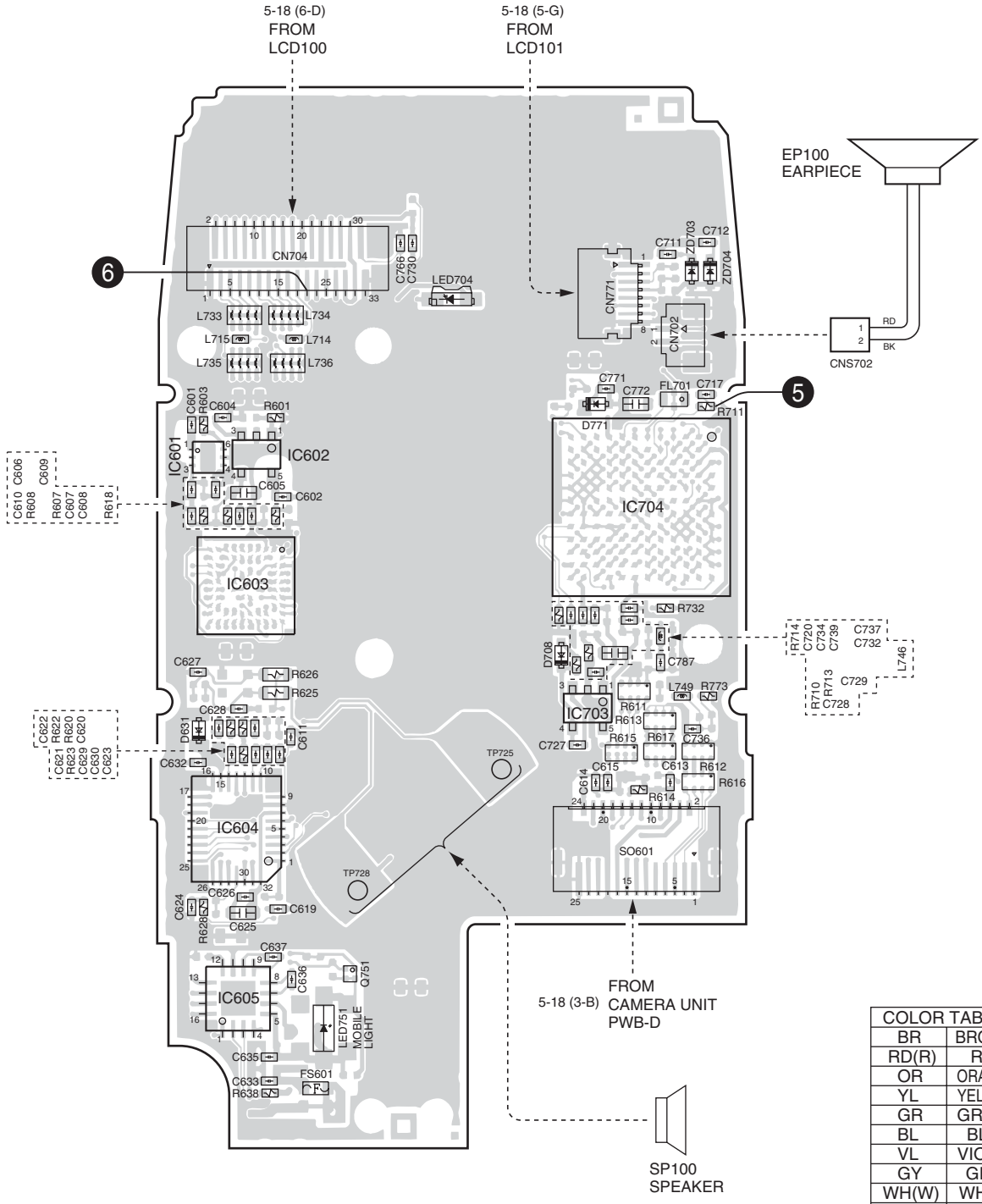


LFa
Sn-Ag-Cu

This PWB employs lead-free solder.

Figure 7 WIRING SIDE P.W.BOARD (3/5)

DISPLAY PWB-B (REAR SIDE)



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

LFa
Sn-Ag-Cu

This PWB employs lead-free solder.

• Waveform numbers of ❺, ❻ are shown on pages 5-2.

7	8	9	10	11	12

Figure 8 WIRING SIDE P.W.BOARD (4/5)

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SHARP PARTS GUIDE

No. S2509GX25SPL/

DIGITAL MOBILE PHONE

MODEL GX25

INTERNAL MODEL NAME	SELECTION CODE	DESTINATION
TQG250AB/TQH250AB	A	Australia
TQG250BB/TQH250BB	B	Hungary
TQG250CB/TQH250CB	C	Switzerland
TQG250DB/TQH250DB	D	Greece
TQG250EB/TQH250EB	E	U.K.
TQG251EB/TQH251EB	EP	U.K. (Prepaid)
TQG250GB/TQH250GB	G	Germany
TQG251GB/TQH251GB	GP	Germany (Prepaid)
TQG250HB/TQH250HB	H	Netherlands
TQG250LB/TQH250LB	L	Malta
TQG251PB/TQH251PB	PP	Portugal (Prepaid)
TQG250QB/TQH250QB	Q	Egypt
TQG250RB/TQH250RB	R	Ireland
TQG250SB/TQH250SB	S	Spain
TQG250TB/TQH250TB	T	Italy
TQG250VB/TQH250VB	V	Slovenia
TQG250WB/TQH250WB	W	Sweden
TQG250ZB/TQH250ZB	Z	New Zealand

This supplemental service manual describes changes in PWB for the shown model, to be implemented as running changes from the production in February.
For servicing, refer to other existing service manuals (see below).

- Existing service manuals

Japanese Production	Chinese Production
S9419TQG250//	S1502HX25CHIN
SX429TQG250/B	

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. No.
3. PART NO.
4. DESCRIPTION

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

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DIFFERENCE BETWEEN OLD P.W.BOARD AND NEW P.W.BOARD

No.	PARTS CODE Old P.W.Board	PARTS CODE New P.W.Board	DESCRIPTION	PRICE RANK
[1] INTEGRATED CIRCUITS				
IC503	VHiTK73840G-1L	Not Used	——	–
IC2501	Not Used	VHi1323B42G-1R	Regulator,1323B42G	AD
[2] TRANSISTORS				
Q104	VSNSBC143TP-1R	VSKRX205E++-1L	Digital,NPN/PNP,KRX205 E	
Q501	VSDC114YETG-1L	Not Used	——	–
Q503	VSDC114YETG-1L	VSKRC407E++-1L	Digital,NPN,KRC407 E	
[3] DIODE				
D101	VHDRB52030T-1L	VHDKDR730E+-1L	Silicon,KDR730E	
D105	VHDRB52130T-1L	VHDKDR720E+-1L	Silicon,KDR720E	
D505	VHDRB52130T-1L	VHDKDR720E+-1L	Silicon,KDR720E	
LED555	VHPYPY1105C-1L	VHPPY1103CF-1L	LED,Yellow green,PY1103CF	AB
LED556	VHPYPY1105C-1L	VHPPY1103CF-1L	LED,Yellow green,PY1103CF	AB
ZD101	VHERSB6R8S+-1L	VHEPG05FBES-1L	Zener,5V,PG05FBES	
ZD102	VHERSB6R8S+-1L	VHEPG05FBES-1L	Zener,5V,PG05FBES	
ZD703	VHERSB6R8S+-1L	VHEPG05FBES-1L	Zener,5V,PG05FBES	
ZD704	VHERSB6R8S+-1L	VHEPG05FBES-1L	Zener,5V,PG05FBES	
[10] CAPACITORS				
C127	VCKYCZ1AB104KT	Not Used	——	–
C129	VCKYCZ1AB104KT	Not Used	——	–
C137	VCKYCZ1AB104KT	Not Used	——	–
C146	VCKYCZ1AB104KT	Not Used	——	–
C178	VCKYCZ1AB104KT	Not Used	——	–
C184	VCKYCZ1AB104KT	Not Used	——	–
C187	VCKYCZ1AB104KT	Not Used	——	–
C507	VCKYCZ0JB105KT	Not Used	——	–
C2501	Not Used	VCKYCZ0JB105KT	1 μF,6.3V	AB
[11] RESISTORS				
R103	VRS-CZ1JB000JT	Not Used	——	–
R107	VRS-CZ1JB000JT	Not Used	——	–
R110	VRS-CZ1JB000JT	Not Used	——	–
R126	VRS-CZ1JB000JT	Not Used	——	–
R144	VRS-CZ1JB000JT	Not Used	——	–
R150	VRS-CZ1JB000JT	Not Used	——	–
R161	VRS-CZ1JB000JT	Not Used	——	–
R166	VRS-CZ1JB000JT	Not Used	——	–
R168	VRS-CZ1JB000JT	Not Used	——	–
R169	VRS-CZ1JB000JT	Not Used	——	–
R170	VRS-CZ1JB000JT	Not Used	——	–
R175	VRS-CZ1JB000JT	Not Used	——	–
R182	VRS-CZ1JB000JT	Not Used	——	–
R185	VRS-CZ1JB000JT	Not Used	——	–
R188	VRS-CZ1JB000JT	Not Used	——	–
R197	VRS-CZ1JB000JT	Not Used	——	–
R209	VRS-CZ1JB000JT	Not Used	——	–
R210	VRS-CZ1JB000JT	Not Used	——	–
R214	VRS-CZ1JB000JT	Not Used	——	–
R217	VRS-CZ1JB000JT	Not Used	——	–
R224	VRS-CZ1JB000JT	Not Used	——	–
R225	VRS-CZ1JB000JT	Not Used	——	–
R227	VRS-CZ1JB000JT	Not Used	——	–
R228	VRS-CZ1JB000JT	Not Used	——	–
R231	VRS-CZ1JB000JT	Not Used	——	–
R233	VRS-CZ1JB000JT	Not Used	——	–
R234	VRS-CZ1JB000JT	Not Used	——	–
R235	VRS-CZ1JB000JT	Not Used	——	–
R401	VRS-CZ1JB000JT	Not Used	——	–
R412	VRS-CZ1JB000JT	Not Used	——	–
R508	VRS-CZ1JB272JT	Not Used	——	–
R509	VRS-CZ1JB183JT	Not Used	——	–
R512	VRS-CZ1JB000JT	Not Used	——	–

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No.	PARTS CODE Old P.W.Board	PARTS CODE New P.W.Board	DESCRIPTION	PRICE RANK
R513	VRS-CZ1JB000JT	Not Used	——	–
R516	VRS-CZ1JB000JT	Not Used	——	–
R520	VRS-CZ1JB000JT	Not Used	——	–
R528	VRS-CZ1JB000JT	Not Used	——	–
R529	VRS-CZ1JB000JT	Not Used	——	–
R537	VRS-CZ1JB000JT	Not Used	——	–
R538	VRS-CZ1JB000JT	Not Used	——	–
R539	VRS-CZ1JB000JT	Not Used	——	–
R540	VRS-CY1JB000JT	Not Used	——	–
R555	VRS-CZ1JB821JT	VRS-CZ1JB471JT	470 ohms,1/16W	AA
R556	VRS-CZ1JB821JT	VRS-CZ1JB471JT	470 ohms,1/16W	AA
R604	VRS-CZ1JB000JT	Not Used	——	–
R605	VRS-CZ1JB000JT	Not Used	——	–
R606	VRS-CZ1JB000JT	Not Used	——	–
R621	VRS-CZ1JB000JT	Not Used	——	–
R624	VRS-CY1JB000JT	Not Used	——	–
R629	VRS-CZ1JB000JT	Not Used	——	–
R630	VRS-CZ1JB000JT	Not Used	——	–
R633	VRS-CZ1JB000JT	Not Used	——	–
R637	VRS-CZ1JB000JT	Not Used	——	–
R639	VRS-CZ1JB000JT	Not Used	——	–
R640	VRS-CZ1JB000JT	Not Used	——	–
R641	VRS-CZ1JB000JT	Not Used	——	–
R704	VRS-CZ1JB000JT	Not Used	——	–
R705	VRS-CZ1JB000JT	Not Used	——	–
R713A	VRS-CZ1JB000JT	Not Used	——	–
R716	VRS-CZ1JB000JT	Not Used	——	–
R717	VRS-CZ1JB000JT	Not Used	——	–
R719	VRS-CZ1JB000JT	Not Used	——	–
R720	VRS-CZ1JB000JT	Not Used	——	–
R727	VRS-CZ1JB000JT	Not Used	——	–
R728	VRS-CZ1JB000JT	Not Used	——	–
R747	VRS-CZ1JB000JT	Not Used	——	–
R748	VRS-CZ1JB000JT	Not Used	——	–
R763	VRS-CZ1JB000JT	Not Used	——	–
R771	VRS-CZ1JB000JT	Not Used	——	–
R1860	VRS-CZ1JB000JT	Not Used	——	–
R2002	VRS-CZ1JB000JT	Not Used	——	–
R2015	VRS-CZ1JB000JT	Not Used	——	–
[12] OTHER CIRCUITRY PART				
SP100	RSP-ZA012AFPZ	RSP-ZA012AFP1	Speaker	

– MEMO –

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SHARP

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Quality & Reliability Control Centre
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