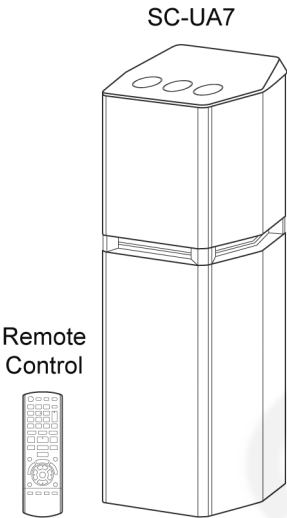


Service Manual

Wireless Speaker System

Model No. **SC-UA7GS**
SC-UA7GSX

Product Color: (K)...Black Type



Notes: Please use this manual together with service manual
Model No. SC-UA7E-K, Order no. PSG1606004CE.

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

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1 Notes

This simplified service manual is base on SC-UA7E (Order No. PSG1606004CE).

1) This service manual contains only following information

- Safety Precautions
- Specifications
- Schematic Diagram
 - Main (Aux Tuner) Circuit
 - Main (MICON) Circuit
- Printed Circuit Board
 - Main P.C.B. (Side B)
- Exploded View and Replacement Parts List
 - Packaging

2 Safety Precautions

2.1. Before Repair and Adjustment

Disconnect AC power to discharge AC Capacitors (C1001, C1002, C1003, C1004, C1007, C1008, C1409, C1518) through a 10 Ω , 10 W resistor to ground.

Caution:

DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices. After repairs are completed, restore power gradually using a variac to avoid overcurrent. Current consumption at AC 220~240 V, 50/60 Hz in Power ON, FM Tuner at volume minimal mode should be ~ 550 mA.

2.2. Safety Parts Information

Safety Parts List:

There are special components used in this equipment which are important for safety.

These parts are marked by $\triangle$ in the Schematic Diagrams, Exploded View & Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

Safety	Ref No.	Part No.	Part Name & Description	Remarks
$\triangle$	21	RFKZ0487AB1	REAR PANEL	
$\triangle$	A2	K2CJ2YY00101	AC CORD	
$\triangle$	A2	K2CP2YY00061	AC CORD	
$\triangle$	A2	K2CQ2YY00119	AC CORD	
$\triangle$	A2	K2CT2YY00097	AC CORD	
$\triangle$	A3	RQT0B17-G	O/I BOOK	
$\triangle$	PCB7	REP5347A	SMPS / AC INLET P.C.B	(RTL)
$\triangle$	Q1403	B3PBA0000579	PHOTO COUPLER	
$\triangle$	Q1404	B3PBA0000579	PHOTO COUPLER	
$\triangle$	Q1405	B3PBA0000579	PHOTO COUPLER	
$\triangle$	Q1505	B3PBA0000579	PHOTO COUPLER	
$\triangle$	Q1701	B3PBA0000579	PHOTO COUPLER	
$\triangle$	DZ1001	D4EAY511A127	VARISTOR	
$\triangle$	L1001	G0B223J00001	LINE FILTER	
$\triangle$	L1003	G0B223J00001	LINE FILTER	
$\triangle$	T1401	G4DYA0000592	TRANSFORMER	
$\triangle$	T1501	G4DYA0000778	TRANSFORMER	
$\triangle$	F1001	K5D103BNA005	FUSE	
$\triangle$	F1401	K5G501YA0081	FUSE	
$\triangle$	F1501	K5G502Y00006	FUSE	
$\triangle$	P1001	K2AA2B000011	AC INLET	
$\triangle$	R1001	D0GF474JA048	470K 1/4W	SMPS
$\triangle$	R1002	D0GF474JA048	470K 1/4W	SMPS
$\triangle$	R1003	D0GF474JA048	470K 1/4W	SMPS
$\triangle$	C1001	F0CAF474A105	0.47uF	SMPS
$\triangle$	C1002	F0CAF474A105	0.47uF	SMPS
$\triangle$	C1003	F1BAF471A215	470pF	SMPS
$\triangle$	C1004	F1BAF471A215	470pF	SMPS
$\triangle$	C1007	F1BAF471A215	470pF	SMPS
$\triangle$	C1008	F1BAF471A215	470pF	SMPS
$\triangle$	C1409	F1BAF471A215	470pF	
$\triangle$	C1518	F1BAF471A215	470pF	

3 Specifications

■ Amplifier section

RMS output power stereo mode

Front (Left/Right Ch)	375 W per channel (3 Ω), 1 kHz, 30% THD
Subwoofer Ch (x 2)	475 W per channel (2 Ω), 100 Hz, 30% THD
Total RMS stereo mode power	1700 W
PMPO output power	18700 W

■ Tuner, terminals section

Frequency modulation (FM)

Preset memory	30 stations
Frequency range	87.50 MHz to 108.00 MHz (50 kHz step)
Antenna terminals	75 Ω (unbalanced)

Digital audio input

Optical digital input	Optical terminal
Sampling frequency	32 kHz, 44.1 kHz, 48 kHz

AUX IN 1

Audio input	Pin jack
-------------	----------

AUX IN 2

Audio input	Stereo, 3.5 mm jack
-------------	---------------------

AUDIO OUT

Audio output	Pin jack
--------------	----------

Microphone

Terminal	Mono, 6.3 mm jack (2 systems)
----------	-------------------------------

■ USB section

USB port

USB standard	USB 2.0 full speed
Media file format support	MP3 (*.mp3)
USB device file system	FAT12, FAT16, FAT32

USB recording

Bit rate	128 kbps
USB recording speed	1x
Recording file format	MP3 (*.mp3)

■ Bluetooth® section

Version

Bluetooth® Ver. 2.1 + EDR

Class

Class 2

Supported profiles

A2DP, AVRCP, SPP, OPP, FTP

Operating frequency

2.4 GHz band FH-SS

Operation distance

10 m line of sight

■ Internal memory section

Memory

Memory size	4 GB
Media file format support	MP3 (*.mp3)

Memory recording

Bit rate	128 kbps
Memory recording speed	1x
Recording file format	MP3 (*.mp3)

■ General

Power supply

AC 220 V to 240 V, 50/60 Hz

Power consumption

190 W

Dimensions (W x H x D)

260 mm x 744 mm x 295 mm

Mass

14 kg

Operating temperature range

0 °C to +40 °C

Operating humidity range

20% to 80% RH
(no condensation)

Power consumption in standby mode (approximate)

0.5 W

Power consumption in standby mode (approximate)

0.6 W

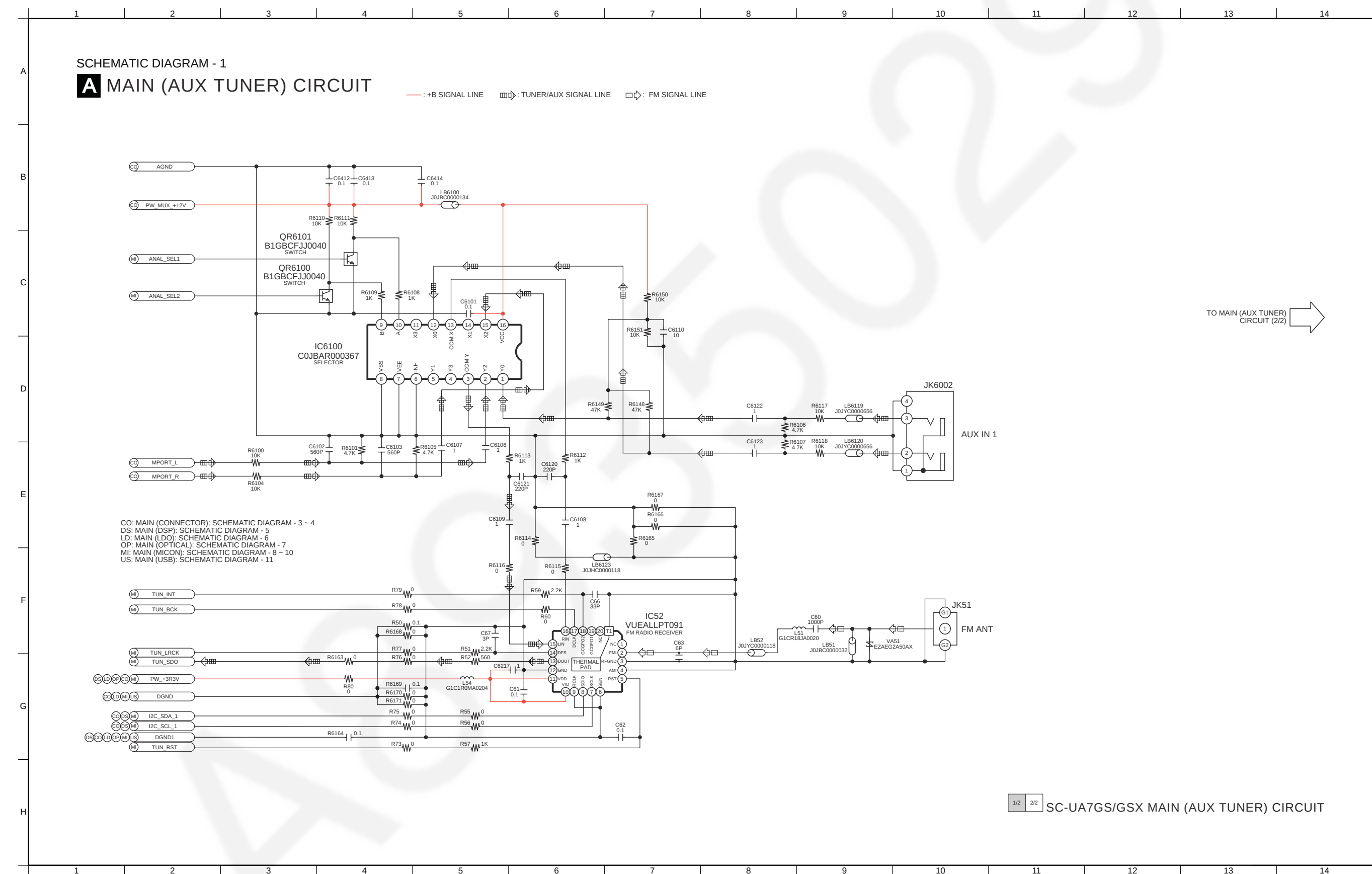
(With "BLUETOOTH STANDBY" set to "ON")

Note:

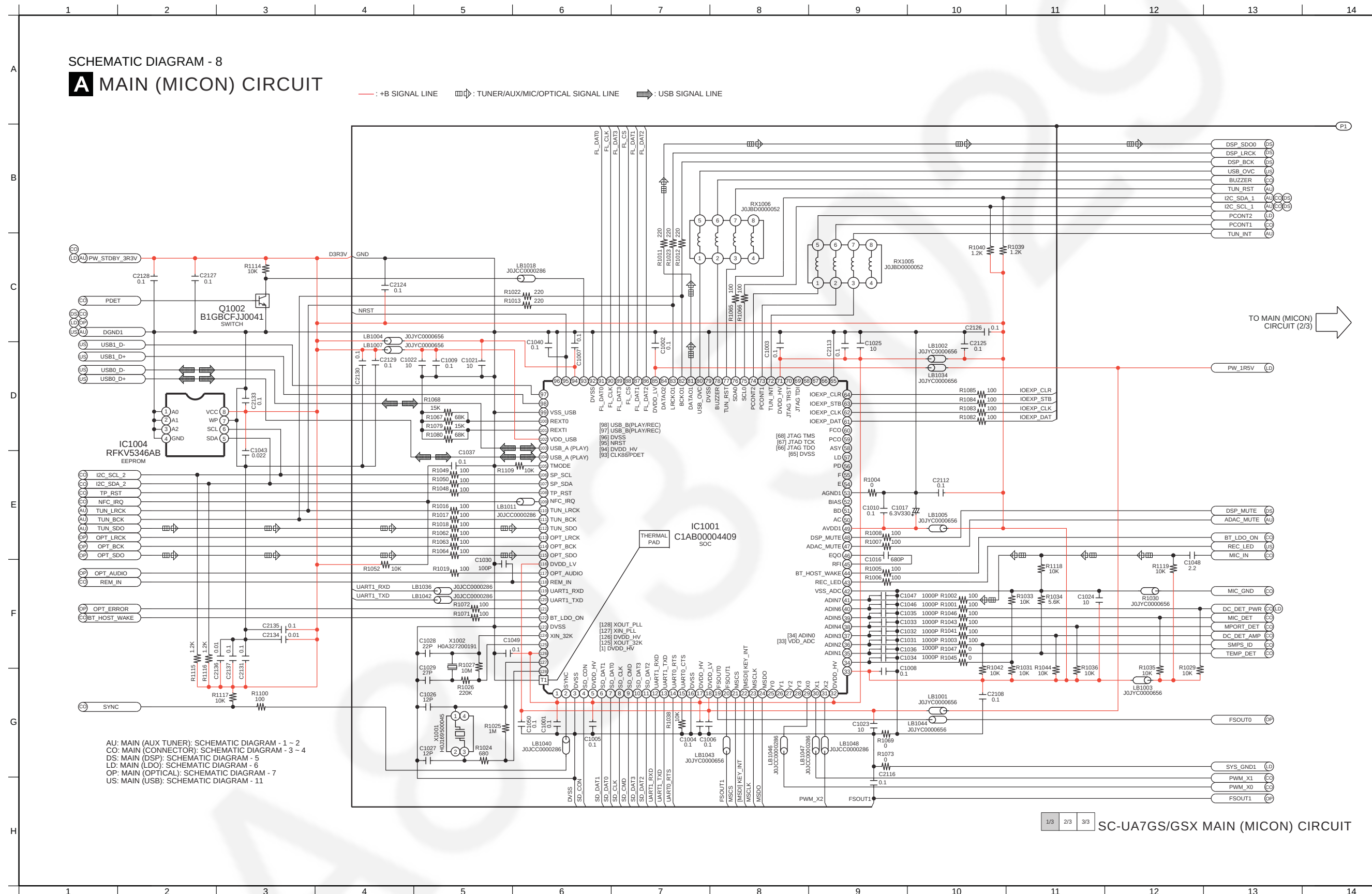
1. Specifications are subject to change without notice. Mass and dimension are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

4 Schematic Diagram

4.1. Main (AUX Tuner) Circuit



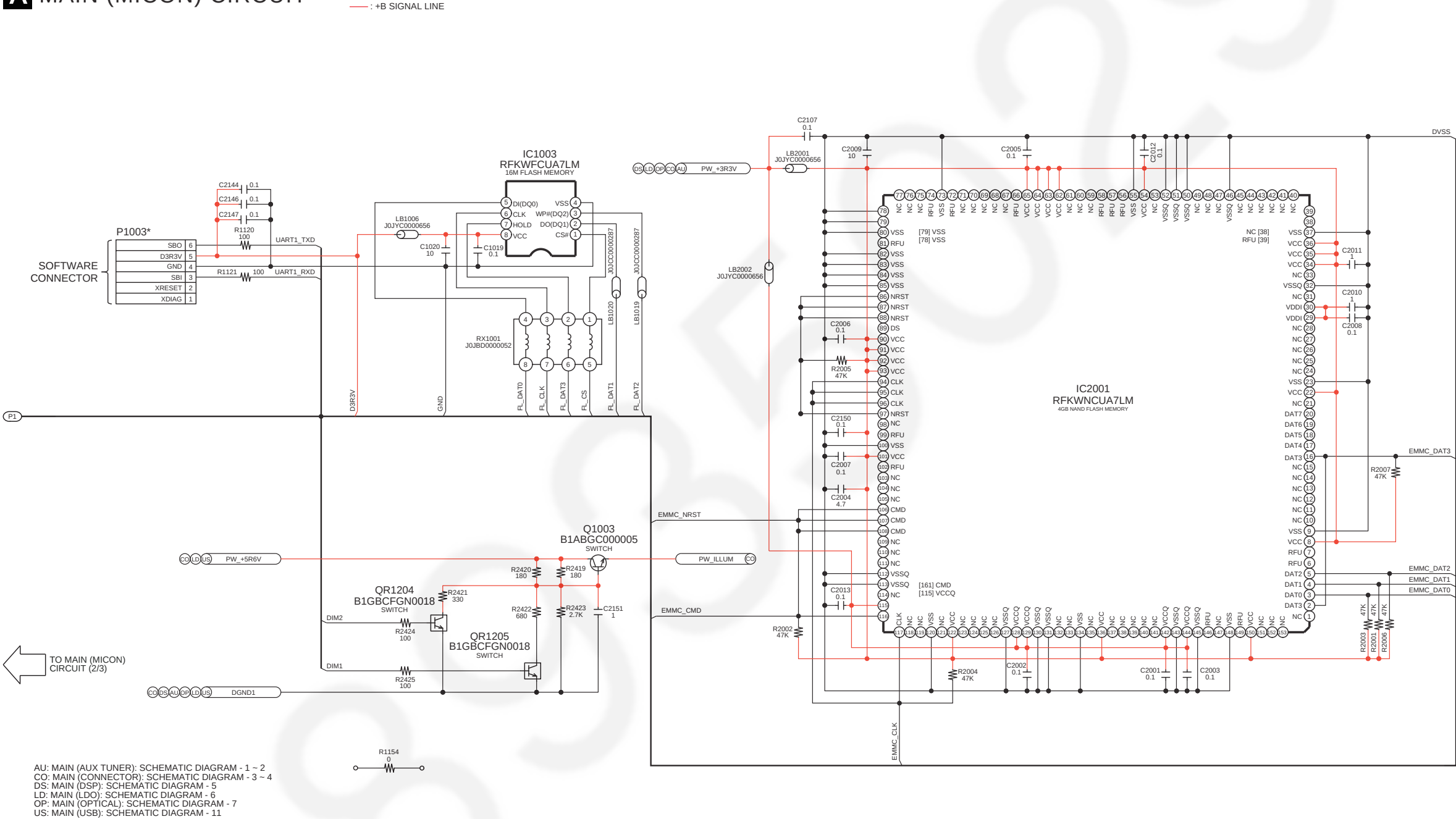
4.2. Main (MICON) Circuit (1/2)



4.3. Main (MICON) Circuit (2/2)

SCHEMATIC DIAGRAM - 10

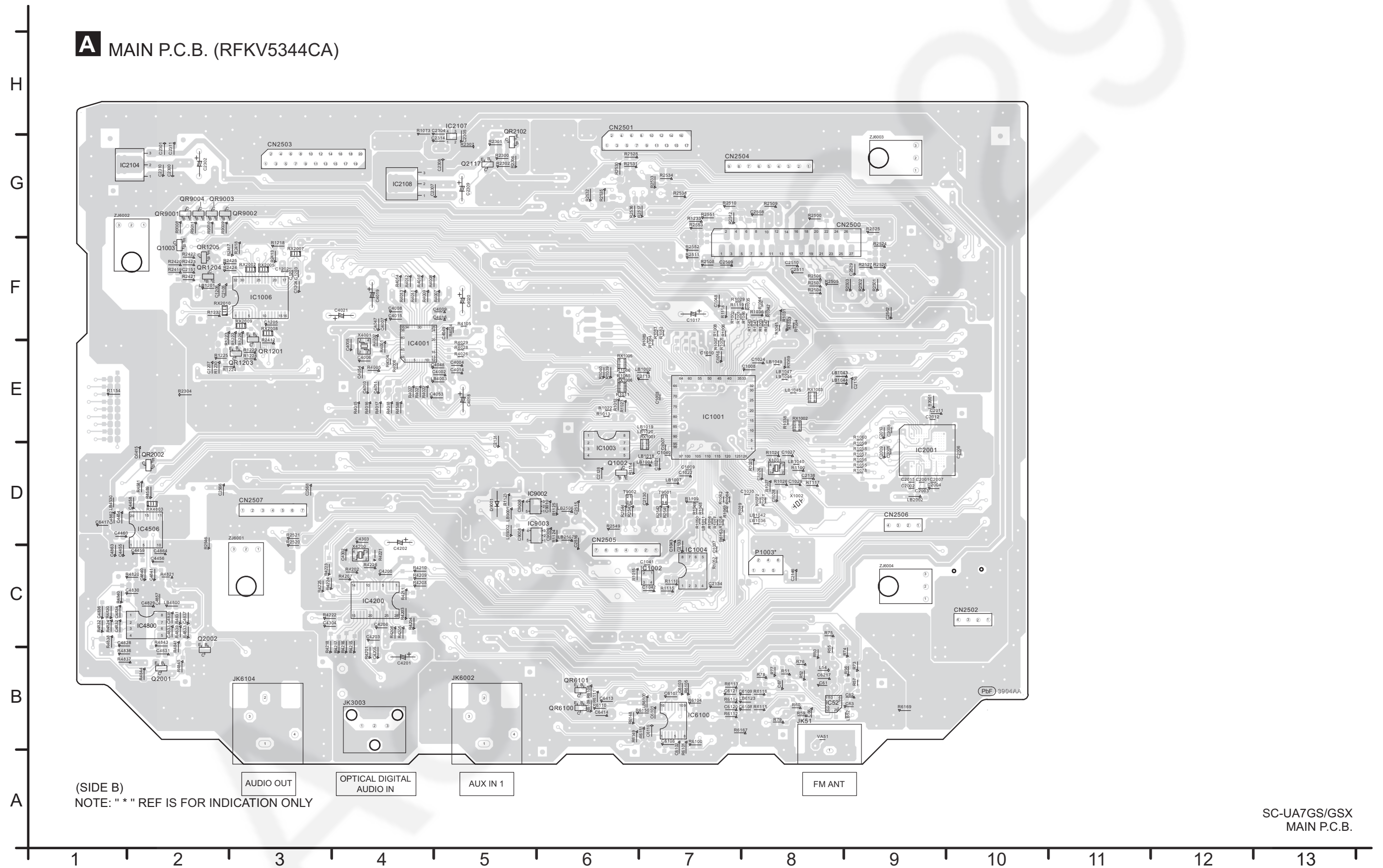
A MAIN (MICON) CIRCUIT



NOTE: " * " REF IS FOR INDICATION ONLY

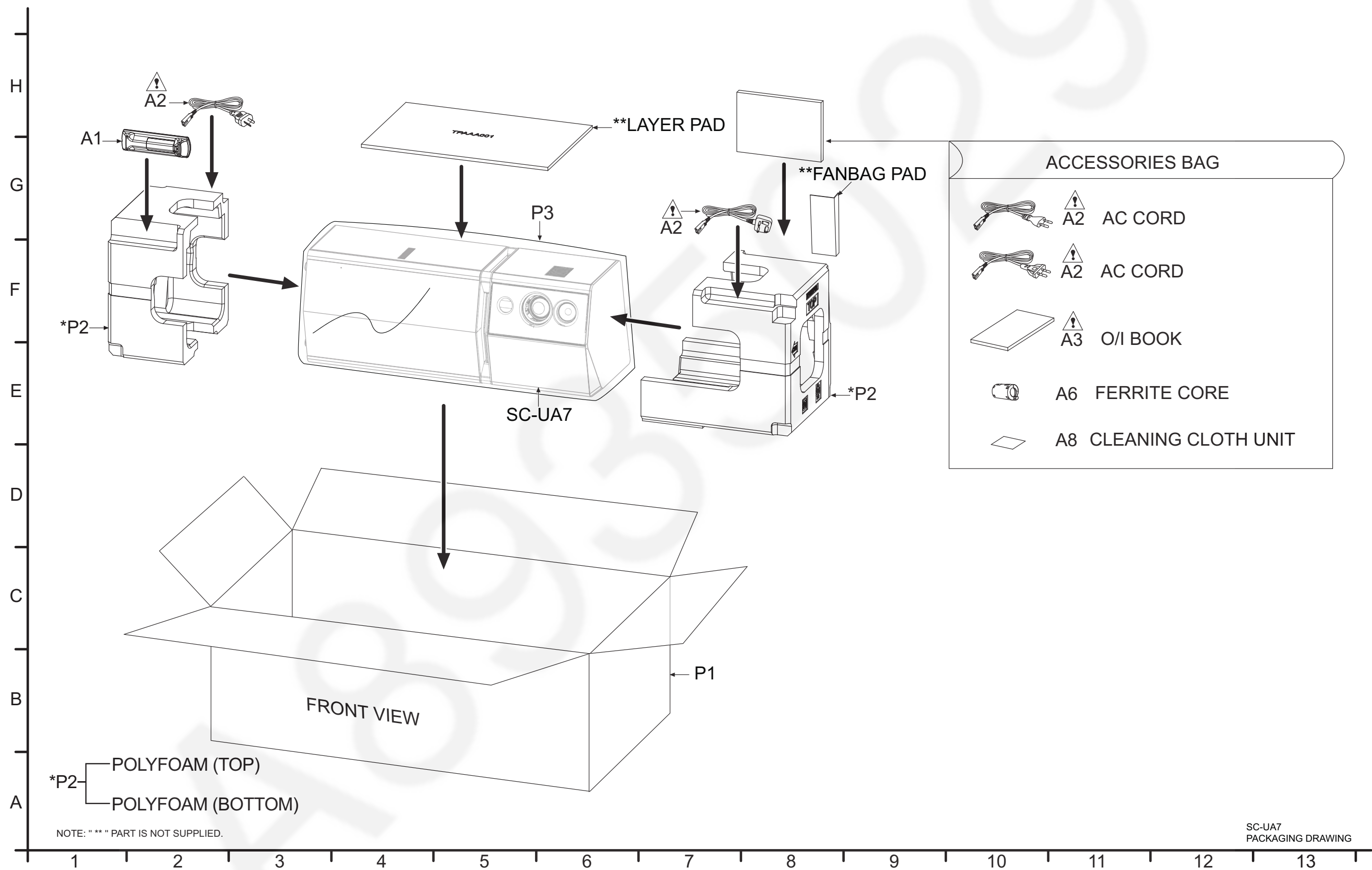
5.1. Main P.C.B. (Side B)

A MAIN P.C.B. (RFKV5344CA)



6 Exploded View and Replacement Parts List

6.1. Packaging



A88935029

6.2. Mechanical Replacement Part List

Important Safety Notice

Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

RTL (Retention Time Limited)

Note: The marking (RTL) indicates that the Retention Time is Limited for this item.

After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention.

After the end of this period, the assembly will no longer be available.

Note:

- When replacing any of these components, be sure to use only manufacturer's specified parts shown in the replacement part list.
- The parenthesized indications on the Remarks column specify the destination & product color (Refer to the cover page for the information).
- Parts without these indications shall be used for all areas.
- All parts mentioned are supplied by PAVCJM unless indicated likewise.
- Reference for O/I book languages are as follows:

Ar:	Arabic	Du:	Dutch	It:	Italian	Sp:	Spanish
Cf:	Canadian French	En:	English	Ko:	Korean	Sw:	Swedish
Cz:	Czech	Fr:	French	Po:	Polish	Co:	Traditional Chinese
Da:	Danish	Ge:	German	Ru:	Russian	Cn:	Simplified Chinese
Pe:	Persian	Ur:	Ukraine	Pr:	Portuguese	Fi:	Finnish

Safety	Ref. No.	Parts No.		Parts name & Description	Qty	Remarks
		SC-UA7E	SC-UA7GS/GSX			
	20	RFKGCUA7E-K	RFKGCUA7GSK	TOUCH SENSOR ASS'Y	1	
⚠	21	RGR0487A-A1	RFKZ0487AB1	REAR PANEL	1	
	P1	RPG0T40-4	RPG0T39-1	PACKING CASE	1	For GS
	P1	-	RFKZCUA7GSX	PACKING CASE	1	For GSX
⚠	A2	-	K2CJ2YY00101	AC CORD	1	
⚠	A2	-	K2CP2YY00061	AC CORD	1	
⚠	A3	RQT0B16-1D	RQT0B17-G	O/I BOOK	1	
	A7	K1YZ02000013	-	ANTENNA PLUG ADAPTOR	1	

6.3. Electrical Replacement Part List

Important Safety Notice

Components identified by $\triangle$ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

RTL (Retention Time Limited)

Note: The marking (RTL) indicates that the Retention Time is Limited for this item.

After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

Note:

- When replacing any of these components, be sure to use only manufacturer's specified parts shown in the replacement part list.
- The parenthesized indications on the Remarks column specify the destination & product color (Refer to the cover page for the information).
- Parts without these indications shall be used for all areas.
- Capacitor value are in microfarads (μ F) unless specified otherwise, P=Pico-farads (pF), F=Farads.
- Resistance values are in ohms, unless specified otherwise, 1K=1000 (OHM).
- All parts mentioned are supplied by PAVCJM unless indicated likewise.
- Parts mentioned [SPG] in the Remarks column are supplied by JAPAN.

E.S.D. standards for Electrostatically Sensitive Devices, refer to "PREVENTION OF ELECTROSTATIC DISCHARGE (ESD) TO ELECTROSTATIC SENSITIVE (ES) DEVICES" section.

Safety	Ref. No.	Parts No.		Parts name & Description	Qty	Remarks
		SC-UA7E	SC-UA7GS/GSX			
	PCB1	RFKV5344AA	RFKV5344CA	MAIN P.C.B ASS'Y	1	
	IC52	VUEALLPT093	VUEALLPT091	IC	1	(E.S.D)
	R1033	D0GB223JA065	D0GB103JA065	10K 1/10W	1	
	R1154	-	D0GBR00J0004	0 1/10W	1	For GS/GSX
	R1155	D0GBR00J0004	-	0 1/10W	1	For E

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