

SLIM PIANO SP201 PLUS

SERVICE MANUAL

Contents

Specifications.....	3
Layout & Connection.....	4
General Exploded Drawing and List.....	5
Circuit Boards.....	6
Parts List.....	11
PCB Boards.....	18
Diagnosis.....	21
Frequently Asked Questions.....	26
Spare Parts List.....	28

Specifications

Keyboard

Hammer-Action 88-Keys

Touch Response

5 types, Off

Polyphony

192 notes (max)

Sound

30

Layer

Left, Right 1, Right 2

Split

Yes

Twinova

Yes

Metronome / Rhythm

50

Metronome / Rhythm Control

Start / Stop

Metronome / Rhythm volume

Tempo

20 - 280

Effect

D.A.S.

Reverb (2 types)

Chorus (1 type)

Song

100

Sequencer

1 User song

(1 melody track)

Connectivity

2 Headphones,
Sustain Pedal, Unit Pedal,
MIDI Out, USB MIDI,
Aux In, Line Out

Power

DC 12V / 2A

Amplifier

20W x 2

Speaker

(16 x 7) cm Oval x 2,
3 cm x 2

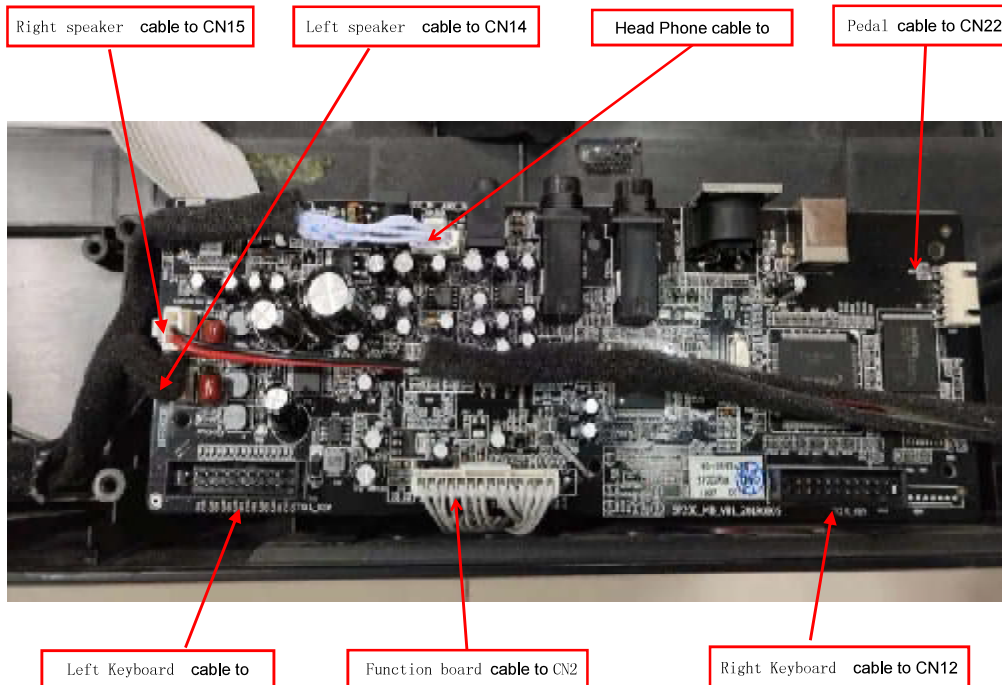
Dimension (LWH)

136.5. x 36.6 x 13.4 cm

Weight

12.5 kg

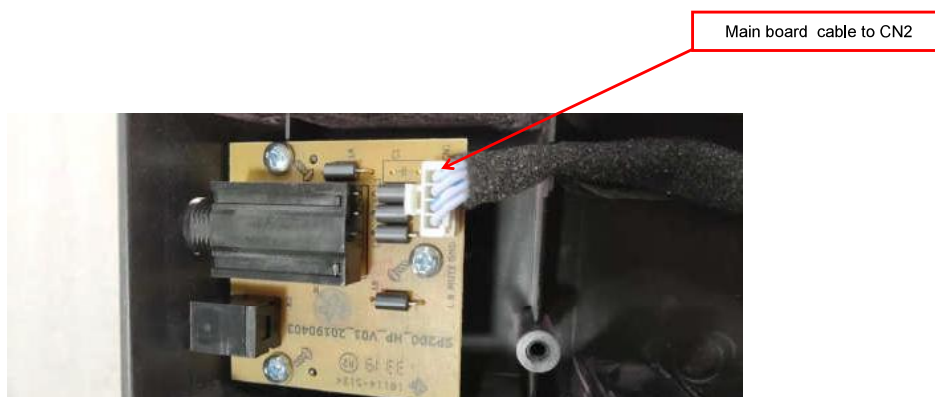
Layout & Connection



Main board to other board connection	
Main board	other board
CN1	Head Phone CN1
CN2	Function board CN1
CN11	Left keyboard
CN12	Right keyboard
CN14	Right speaker
CN15	Left keyboard
CN22	Pedal cable

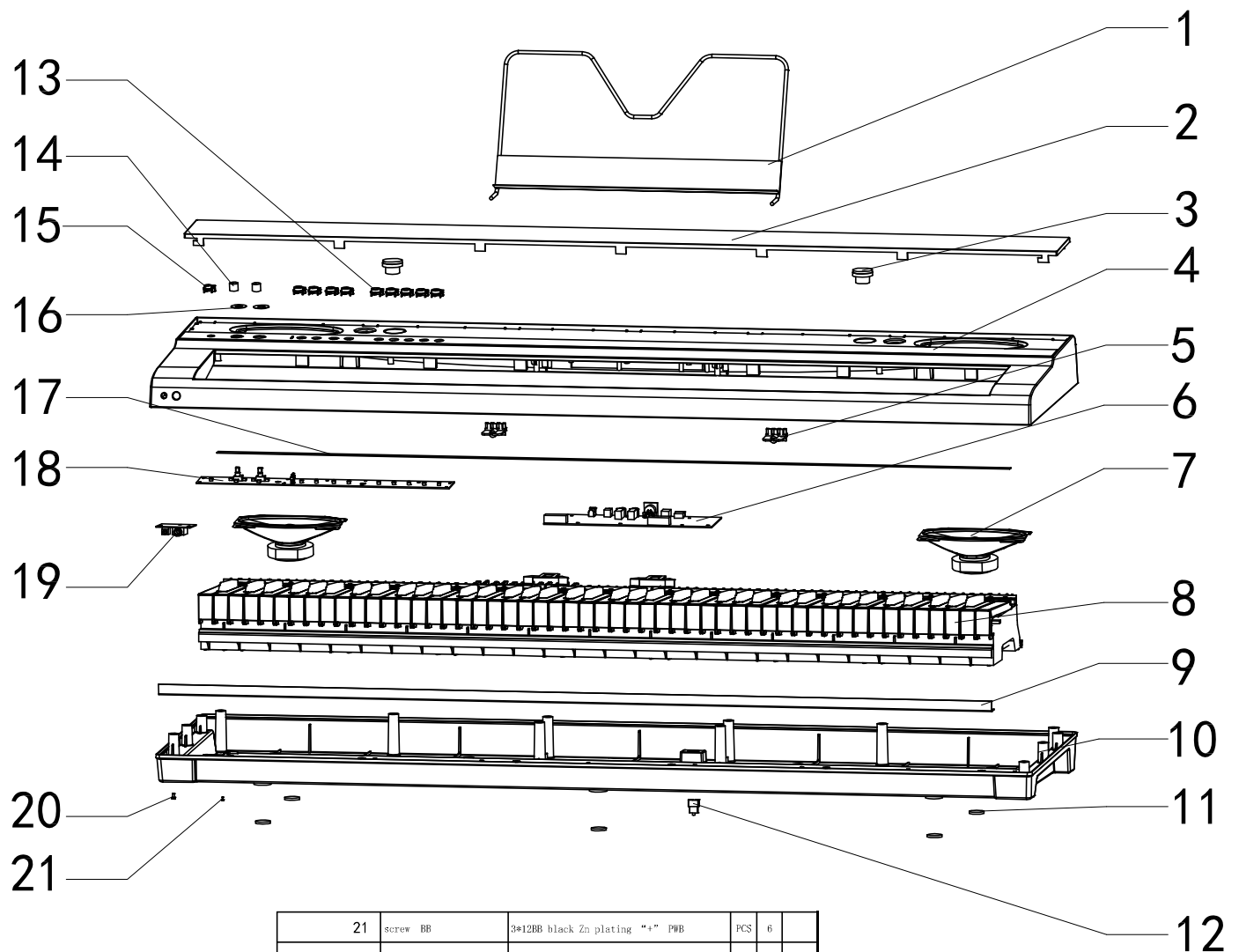


Function board to other connection	
Function board	other
CN1	Main board CN1



Head Phone board to other connection	
HP board	other
CN1	Main board CN2

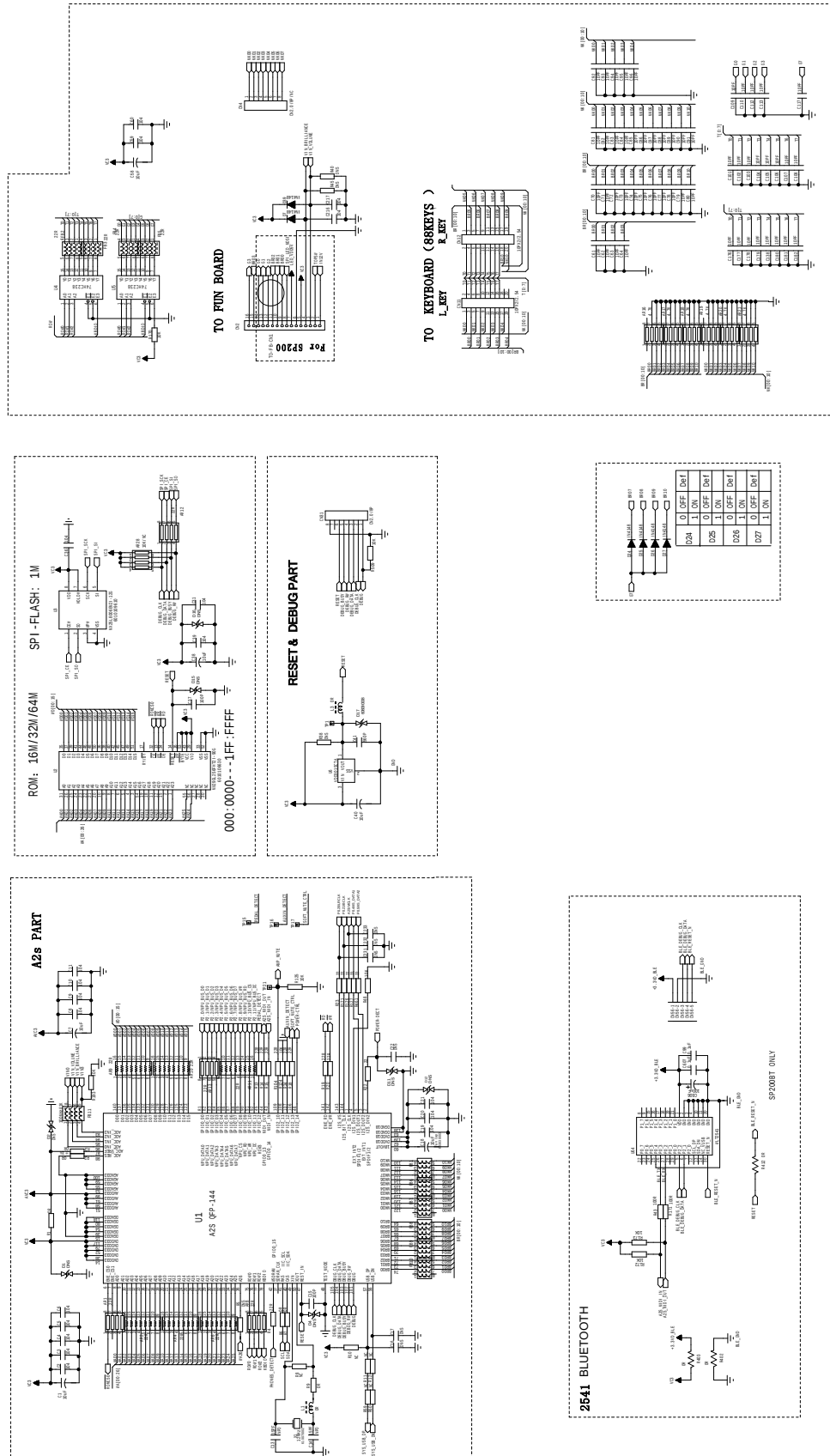
General Exploded Drawing and List



21	screw BB	3*12BB black Zn plating "+" PWB	PCS	6	
20	screw BB	4*12BB(00683-54012) black "+" PWB	PCS	14	
19	Headphone board Assy	SP200	SET	1	
18	Function board ASSY	SP200	SET	1	
17	Black velet	Black no visous size:1231*10*1mm	PCS	1	
16	Knob transmittance plate	Transparent PC piece P=1.0 size :723 silk printing for white rice	PCS	2	
15	Keys 2	ABS injection semi-transparent screen printing is dull black which needs to be printed twice. No light can be transmitted	PCS	1	
14	Volume knob	Al-plastic material D-handle sandblasted black Size: Φ13*13mm With indicator groove	PCS	2	
13	Button B	ABS+PC injection translucency+black N/A Size Φ26.5*23.3*12.5mm RD220170	PCS	9	
12	Flat cable with cathode plug	Spins 1=120mm #24 one side with Spins 8W/2.54mm cathode plug another side with Spins/2.54mm latching	PCS	1	
11	Deslick silicon gasket	Φ22.5*3mm black silicon single layer 3M glue	PCS	5	
10	Bottom cabinet	HIPS Black N/A YS9291B increase pillar after Change mode	PCS	1	
9	Push cover board L type ironware piece	Hot dip galvanizing N/A Long 1286mm	PCS	1	
8	Keyboard ASSY	K6S Keyboard 88 level 3 counterweight	SET	1	
7	SPEAKER	SAMCO 3X6-F1771E19E07 4Ω 10W SPEAKER	PCS	2	
6	Main board ASSY	SP200 Plus	SET	1	
5	Music stand support	HIPS injection black N/A Size: 40.9*30.4*18.2mm	PCS	1	
4	Face-piece	HIPS injection black screen printing for gray P=122C screen color for P=124C printed MEDEL SP200 Plus	PCS	1	
3	Tweeter speaker	BESTONE BSUG13-17B4G Bohm 20W 2.2 ΩF tweeter	PCS	2	
2	Speaker mesh	SPCC 1=0.8mm Spray Black Size: 1351.5*95.8*17.6mm	PCS	1	
1	Music stand	SPCC 1=1.0mm round steel 3.0mm size: 140*243.6*43.2mm dusting black	PCS	1	
NO.	PART NAME	SPCIFICATION	UNIT	QTY	NOTE

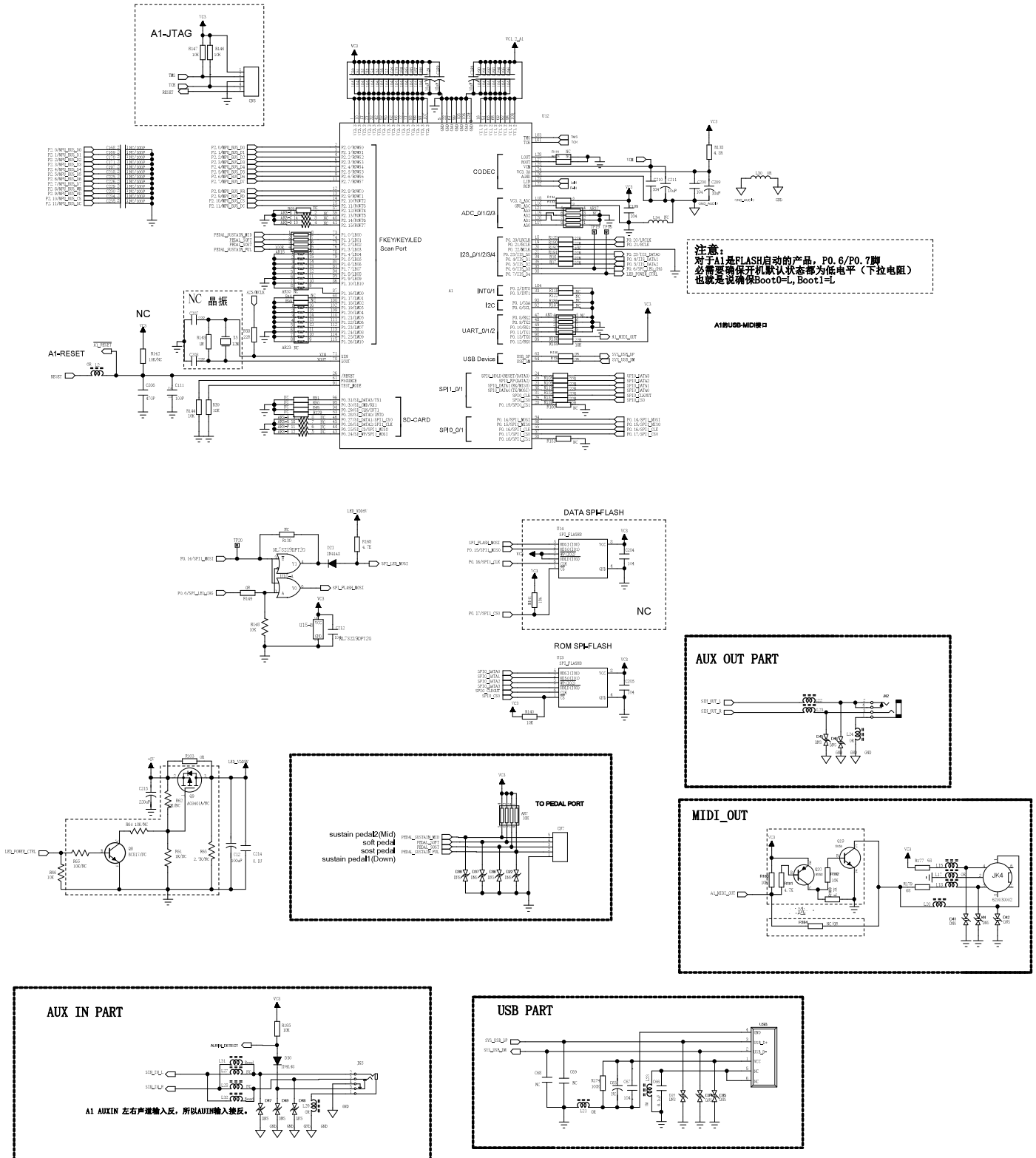
Circuit Boards

Main Board Schematic-01



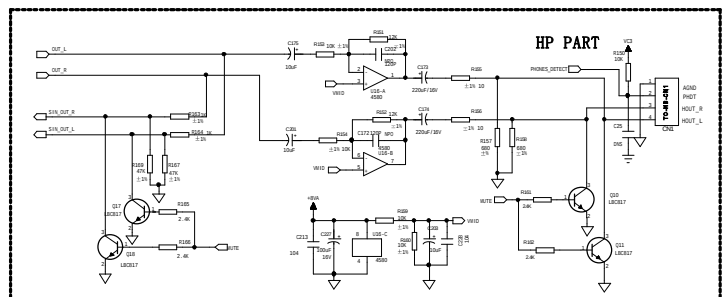
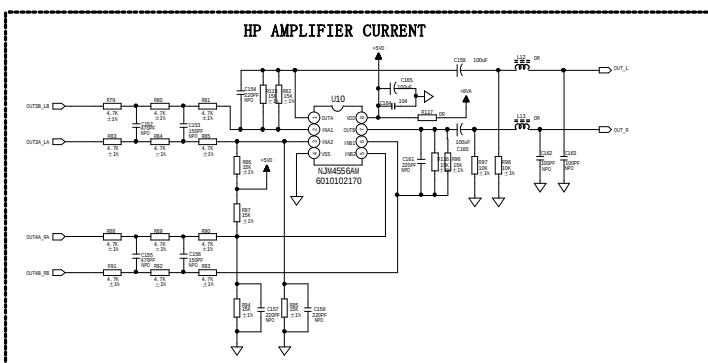
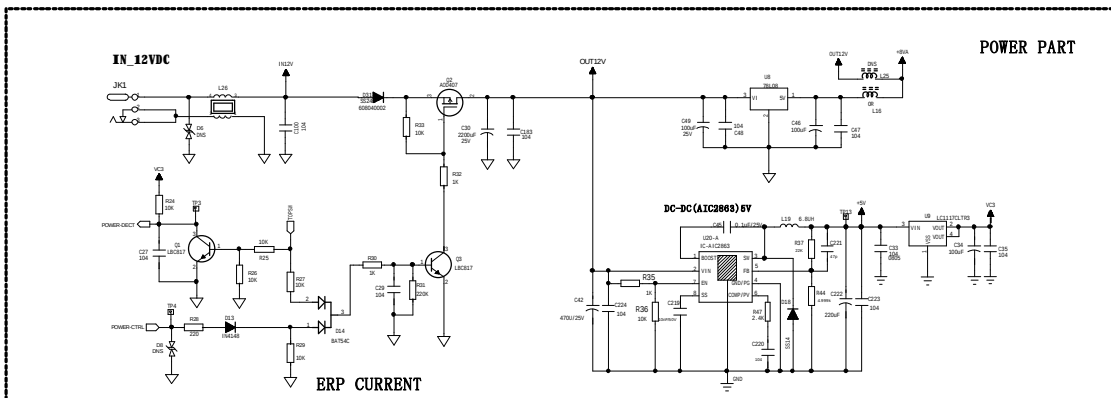
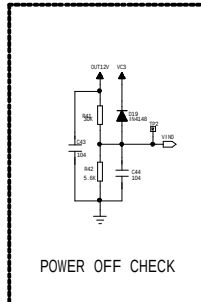
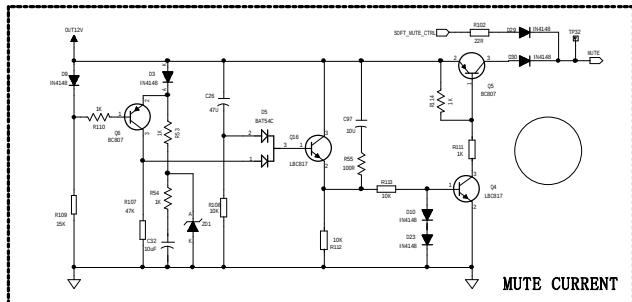
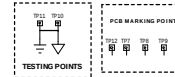
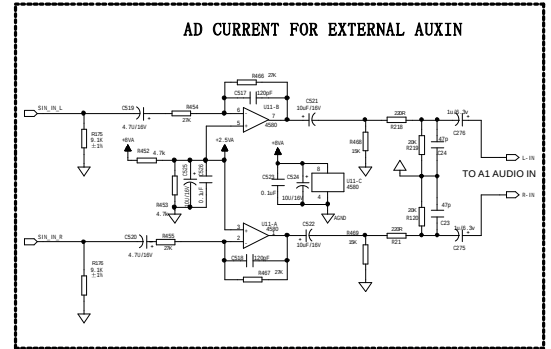
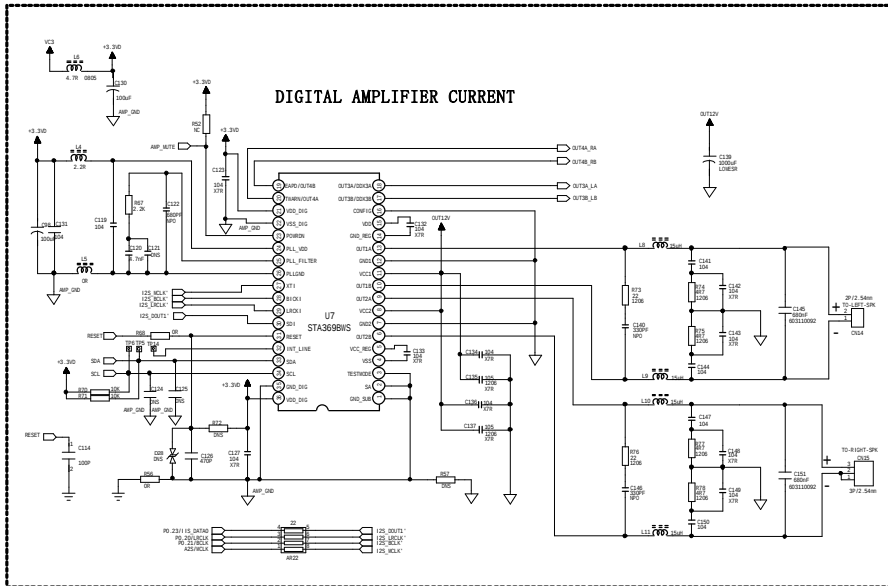
Circuit Boards

Main Board Schematic-02

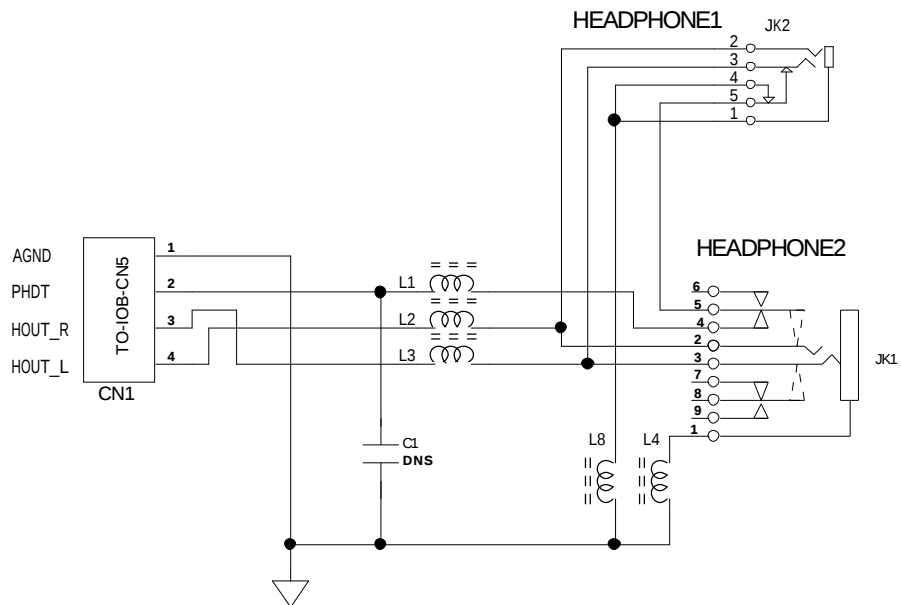


Circuit Boards

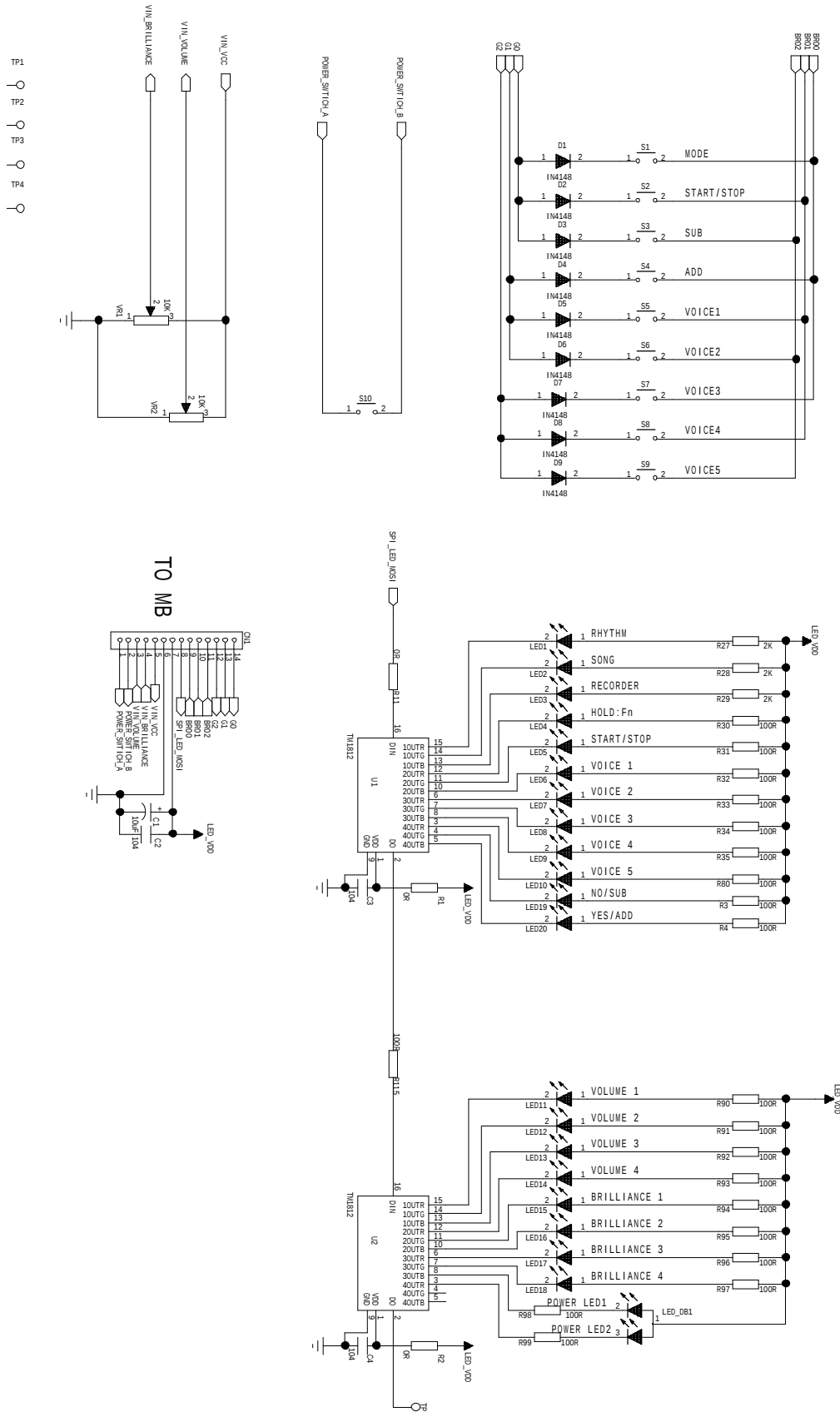
Main Board Schematic-03



Headphone Board Schematic



Function Board Schematic



Parts List

Lever	P/N	Description	Specification	QTY.	UO	Remark
+	1020110920	Unpacking part of the Stage Piano	SP201 Plus (Black)	1.00000	SET	
++	1020406750	Top cabinet ASSY	SP201 Plus (Black)	1.00000	SET	
+++	201030842	Top cabinet	Hips injection molding black surface spray matte black (same as akx10) screen printing is gray P = 422c logo silk scree	1.00000	PCS	
++++	2010102390 1	Top cabinet	HIPS injection black N/A Size: 134.9*366.3*77.7mm RD180608 Modify the mold	1.00000	PCS	
+++++	298020001	Plastic	HIPS	1.74894	Kg	
++++	652080053	Hard rubber anti - alcohol spray water paint + dumb dark gray oil	YHG-3058 5KG/	0.20000	Kg	
+++	206020040	Button 1	The semi-transparent screen printing of ABS injection molding is dull black which needs to be printed twice The size of	9.00000	PCS	
++++	2060103000 1	Button 1	PC injection translucent N/A Size: 26.1*16.5*12.4mm RD180610	1.00000	PCS	
+++	206040204	Keys 2	ABS injection semi-transparent screen printing is dull black which needs to be printed twice No light can be transmitted	1.00000	PCS	
++++	2060103010 1	Button 2	PC injection translucent N/A Size: 26.1*16.5*12.4mm RD180611	1.00000	PCS	
+++	2170100270 1	Music stand support	HIPS injection black N/A Size: 40.9*30.4*18.2mm RD180609	2.00000	PCS	
++++	298020001	Plastic	HIPS	0.00515	Kg	
+++	318030013	Volume knob	Al-plastic material D-handle sandblasted black Size: φ13*13mm With indicator groove	2.00000	PCS	
+++	642990247	Knob transmittance plate	Transparent PC piece T=1.0 size :23 silk printing for white rice	2.00000	PCS	
+++	301110024	screw BB	3*8BB Color Zn "+" PWB	25.00000	PCS	
+++	631040298	Force-rebound Glue	Black EVA 25*25mm T=1.0 with adhesive	6.00000	PCS	
+++	631040030	Force-rebound Glue	15*7*2mm viscosity	3.00000	PCS	
+++	628110021	cable tie with meson	outer Dia.9 inner Dia.φ4.0 T=0.5mm length 55+/- 5mm 55*9*0.5mm	6.00000	PCS	
+++	631040367	Guide voice canister EVA	Dia. 30 thickness 5mm Single layer viscosity Black	2.00000	PCS	
+++	901990032	Hot-Melt Tape	11.2±2*300 yeLLow Clarity	0.15000	Kg	
+++	301070026	screw PWB	3*8PWB(D=10mm) black "+" PWB	8.00000	PCS	
+++	631040002	EVA	1310*8*1mm viscosity Black	0.16000	PCS	
+++	301110028	screw BB	4*10BB black "+" PWB	6.00000	PCS	
+++	631030455	black felt SP200	1230*10*1mm black back side with 300LSE 3M	1.00000	PCS	
+++	1010118220 03	Main board ASSY	SP201 PLUS	1.00000	SET	
++++	605000002	Coil	TC623-30UH*2-F-03 DIP	1.00000	PCS	L26
++++	6030800180 1	CAP ELECT DIP	1000uF 25V 105℃ φ 10*16mm ±20% direct shear 3.5±0.3mm foot distance 5.0mm	1.00000	PCS	C139
++++	603080038	CAP ELECT DIP	2200uf/25V +20% -20% 13*20mm DIP	1.00000	PCS	C30
++++	6031100920 1	CAP MYLAR metallization DIP	0.68UF/100V +5%-5% distance=5MM PIN length 3.8+/-0.5MM	2.00000	PCS	C145 C151
++++	628010084	Masculine connector	10PIN*2 straight feet DUAL ROW WITH BOX HEADER	2.00000	PCS	CN11-12
++++	628010299	Masculine connector	14Pins/2.54mm pitch single line straight with latching	1.00000	PCS	CN2
++++	628010231	Masculine connector	2Pins/2.54mm Pitch single line straight prevent fall off	1.00000	PCS	CN14
++++	628010232	Masculine connector	3Pins/2.54mm Pitch single line straight prevent fall off	1.00000	PCS	CN15
++++	628010233	Masculine connector	4Pins/2.54mm Pitch single line straight prevent fall off	1.00000	PCS	CN1
++++	628010374	Masculine connector	5pins/2.54mm bend feet prevent fall off DIP	1.00000	PCS	CN7
++++	620050025	USB JACK	ST-001B-02 P=2.0mm Mating and Unmating Foce:15N~30N Black Plastic	1.00000	PCS	USB
++++	620010006	DC JACK	3Pin DS-210 DIP	1.00000	PCS	JK1
++++	620030002	MIDI JACK	5PIN DIN-503 FEMAL CONNECTOR DIP	1.00000	PCS	JK4
++++	620020047	Stereo jack	4PIN ST-015 PBT DIP The pore size of 6.5mm	2.00000	PCS	JK2-3
++++	620020034	Stereo Headphone Jack	3.5mm Stereo phone jack with switch PJ-339-2 ShenHong	1.00000	PCS	JK5
++++	1010118230 03	Main board ASSY(AI Part)	SP201 PLUS	1.00000	SET	
+++++	6030800020 2	CAP ELECT DIP with Tape&Reel Packing	1uf/50V +20% -20% 5*11mm DIP Pitch:2.5MM	2.00000	PCS	C275-276

Parts List

+++++	60308001002	CAP ELECT DIP with Tape&Reel Packing	10uf/50V +20% -20% BIPOLAR Pitch:2.5MM	10.00000	PCS	C32 C97 C175 C201 C209 C211 C521-522 C524-525
+++++	60308010002	CAP ELECT DIP with Tape&Reel Packing	100uf/16V +20%-20% 5*7mm DIP Pitch:2.5MM	11.00000	PCS	C12 C34 C46 C98 C130 C159-160 C165 C227 C606 C40
+++++	60308001302	CAP ELECT DIP with Tape&Reel Packing	100uf/25V +20% -20% 6.3*11mm Pitch:2.5MM	1.00000	PCS	C49
+++++	60308005202	CAP ELECT DIP with Tape&Reel Packing	4.7uF/50V +20% -20% BIPOLAR 5*11 Pitch:2.5MM	2.00000	PCS	C519-520
+++++	60308005802	CAP ELECT DIP with Tape&Reel Packing	47uf/25V +20% -20% 5*11mm Pitch:2.5MM	1.00000	PCS	C26
+++++	60308003402	CAP ELECT DIP with Tape&Reel Packing	220uf/16V +20% -20% 6.3*11mm DIP Pitch:2.5MM	4.00000	PCS	C215 C222 C173-174
+++++	101011824003	Main board ASSY(SMD Part)	SP201 PLUS	1.00000	SET	
+++++	506040738	PCB Dual layer FR4 1.6mm	SP200 Main board PCB V03 white silkscreen Gold brack oil 222*77*1.6mm	1.00000	PCS	
+++++	601011208	IC SMD	A1 built-in 2MBytes SDRAM LQFP128 MEDELI	1.00000	PCS	U12
+++++	601010993	IC SMD	A2S LQFP144 TYPE MEDELI	1.00000	PCS	U1
+++++	6010109270	IC SMD	S29GL512S10TFI010 TSOP56	1.00000	PCS	U2 software: SP200 series_A2S_V1.5.1_20210418.BIN
Replace	6010110180	IC SMD	MX29GL512FHT2I-10Q Macronix	1.00000		
+++++	6010112680	IC SMD	IS25LP064-JBLE ISSI	1.00000	PCS	U13 software: SP200 series_A1_V1.5.1_20210430.BIN
+++++	6010109610	IC SMD	MX25L8006EM2I-12G 8-PIN SOP 200mil MXIC	1.00000	PCS	U3
Replace	6010114430	IC SMD	KH25L8006EM2I-12G 8-PIN SOP KH	1.00000		
+++++	6010109720	IC SMD	STA369BWS PowerSSO-36 ST	1.00000	PCS	U7
Replace	6010114330	IC SMD	STA369BWTR PowerSSO-36 ST	1.00000		
+++++	6010111580	IC SMD	AIC2863-5GR8 SOP-8 AIC	1.00000	PCS	U20
+++++	6010100870	IC SMD	74HC238 SOP TYPE PHI	2.00000	PCS	U4-5
+++++	6010102170	IC SMD	NJM4556AM DMP8	1.00000	PCS	U10
+++++	6010101130	IC SMD	NJM4580 DUAL LOW NOISE DMP8 TYPE	2.00000	PCS	U11 U16
+++++	6010109330	IC SMD	AMS1117-3.3 SOT-223 linear regulator 3.3V 1A AMS	1.00000	PCS	U9
+++++	6010111130	IC SMD	NL7SZ19DFT2G SOT-363 ON	1.00000	PCS	U15
+++++	6010114580	IC SMD	CJ78L08 SOT-89-3L 100mA JCST	1.00000	PCS	U8
Replace	6010109990	IC SMD	KIA 78L08 SOT-89 100mA	1.00000		
Replace	6010114570	IC SMD	CJ78L08 SOT-89 100mA JCST(stand-by)	1.00000		
+++++	609990006	Patch mosfet	AOD407 TO-252 Alpha&Omega	1.00500	PCS	Q2
Replace	6099900400	FET SMD	MTB40P06J3 TO-252(DPAK) CYSTEK	1.00500		
+++++	6040100440	Inductor SMD	15uH ±20% DG6045C 1255AY-150M SMD TOKO	4.02000	PCS	L8-11
+++++	604010088	Patch inductor	SWPA6045S6R8MT 6.8uH 3.9A 6*6mm SMD Sunlord	1.00500	PCS	L19
+++++	608040026	Schottky Diode SMD	BAS70-05 SOT23 dual common cathode	2.01000	PCS	D5 D14
+++++	609010068	Transistor SMD	2SD2114KT146W NPN 500mA 20V Muting Transistor SOT-346 ROHM	2.01000	PCS	Q10-11
+++++	609010006	Transistor SMD	BC817-25L SOT-23 NPN	7.03500	PCS	Q1 Q3-4 Q16-18 Q19
+++++	609010005	Transistor SMD	BC807-25L SOT-23 PNP high frequency low power	3.01500	PCS	Q5-6 Q20
+++++	610030024	Taping Crystal SMD 49S	12MHz ±20PPM 20PF (HC-49S-SMD) WEJ	1.00500	PCS	X1
+++++	608040002	Schottky Diode SMD	SS24 2A 40V	1.00500	PCS	D31
+++++	608040001	Schottky Diode SMD	SS14 1A 40V	1.00500	PCS	D18
+++++	608010004	Switch Diode SMD	IN4148 SOP TYPE SMD	13.06500	PCS	D3 D7 D9-10 D13 D19 D21 D23 D29-30 D39 D50 D25
+++++	608020016	Zener Diode SMD	9.1V +5%-5% 1/2W SMD 1206(LL34) ZMM55C9V1	1.00500	PCS	ZD1
+++++	602030042	Resistor chain SMD	22 ohm(1/16W)+5%-5% 0602*8	6.06000	PCS	AR2 AR4 AR6 AR9-11
+++++	602030010	Resistor chain SMD	22 ohm(1/16w)+/-5% YC164	17.08500	PCS	AR1 AR12-13 AR15 AR8 AR22 FB1-11
+++++	602030020	Resistor chain SMD	4.7K ohm(1/16w)+5%-5% YC164	6.03000	PCS	AR16-21
+++++	602030005	Resistor chain SMD	10K ohm(1/16w)+5%-5% YC164	2.01000	PCS	AR7 AR28
+++++	606010009	Ferrite Bead SMD	600R@100Mhz 0603	8.08000	PCS	L14-15 L18 L20 L22 L23 L31-32
+++++	602010600	Resistor SMD	22 ohm(1/4W)+5%-5% 1206	2.01000	PCS	R73 R76
+++++	602010293	Resistor SMD	4.7 ohm(1/4w)+5%-5% 1206	4.02000	PCS	R74-75 R77-78

Parts List

+++++	602010002	Resistor SMD	0 ohm(1/8w)+5%-5% 0805	6.06000	PCS	L16 L30 R56 R103 R402 R403
+++++	602010157	Resistor SMD	4.7 ohm(1/8w)+5%-5% 0805	2.02000	PCS	L6 R138
+++++	602010004	Resistor SMD	0 ohm(1/10w)+5%-5% 0603	25.25000	PCS	R1-3 R6-7 R9 R68 R117 R133-136 R149 L1-3 L5 L7 L12-13 L17 L21 L24 L29 R412
+++++	602010006	Resistor SMD	10 ohm(1/10w)+5%-5% 0603	2.02000	PCS	R155-156
+++++	602010010	Resistor SMD	100 ohm(1/10w)+5%-5% 0603	3.03000	PCS	R55 R43 R171
+++++	602010393	Resistor SMD	10K ohm(1/10w)+1%-1% 0603	38.38000	PCS	R24-27 R33 R36 R39 R48 R66 R70-71 R97-98 R108 R112-113 R124-125 R140 R144 R146-R148 R150 R153-154 R159-160 R170 R178 R180 R182 R185 R192 R193 R509 R172-173
+++++	602010013	Resistor SMD	1K ohm(1/10w)+1%-1% 0603	10.10000	PCS	R30 R32 R35 R53-54 R110-111 R114 R163-164
+++++	602010489	Resistor SMD	12K ohm(1/10w)+1%-1% 0603	2.02000	PCS	R151-152
+++++	602010053	Resistor SMD	15K ohm(1/10w)+1%-1% 0603	11.11000	PCS	R82 R86-87 R94-96 R109 R115-116 R468-469
+++++	602010578	Resistor SMD	20K ohm(1/10w)+1%-1% 0603	2.02000	PCS	R120 R219
+++++	602010388	Resistor SMD	2.2 ohm(1/10w)+5%-5% 0603	1.01000	PCS	L4
+++++	602010074	Resistor SMD	22 ohm(1/10w)+5%-5% 0603	23.23000	PCS	R4 R13-17 R18-20 R22-23 R34 R58 R121 R126-128 R188 R190-191 R461 R104 R102
+++++	602010079	Resistor SMD	220 ohm(1/10w)+5%-5% 0603	3.03000	PCS	R21 R28 R218
+++++	602010082	Resistor SMD	2.2K ohm(1/10w)+5%-5% 0603	1.01000	PCS	R67
+++++	602010458	Resistor SMD	22K ohm(1/10w)+1%-1% 0603	2.02000	PCS	R29 R37
+++++	602010086	Resistor SMD	220K ohm(1/10w)+5%-5% 0603	1.01000	PCS	R31
+++++	602010319	Resistor SMD	2.4K ohm(1/10w)+5%-5% 0603	5.05000	PCS	R47 R161-162 R165-166
+++++	602010098	Resistor SMD	27K ohm(1/10w)+1%-1% 0603	4.04000	PCS	R454-455 R466-467
+++++	602010235	Resistor SMD	30K ohm(1/10w)-5%+5% 0603	1.01000	PCS	R41
+++++	602010144	Resistor SMD	4.7K ohm(1/10w)+1%-1% 0603	17.17000	PCS	R79-81 R83-85 R88-93 R168 R181 R183 R452-453
+++++	602010150	Resistor SMD	47K ohm(1/10w)+1%-1% 0603	3.03000	PCS	R107 R167 R169
+++++	602010158	Resistor SMD	4.99K ohm(1/10w)+1%-1% 0603	1.01000	PCS	R44
+++++	602010602	Resistor SMD	5.6K ohm(1/10w)+1%-1% 0603	1.01000	PCS	R42
+++++	602010205	Resistor SMD	68 ohm(1/10w)+5%-5% 0603	2.02000	PCS	R177 R179
+++++	602010386	Resistor SMD	680 ohm(1/10w)+1%-1% 0603	2.02000	PCS	R157-158
+++++	602010443	Resistor SMD	9.1K ohm(1/10w)+1%-1% 0603	2.02000	PCS	R175-176
+++++	603030032	CAP Tantalum SMD	10u/16v +10% -10% A 3216	8.04000	PCS	C1 C7 C18 C28 C38 C58 C189 C198
+++++	603010214	CAP CERAMIC SMD	1uF/50V +10% -10% 1206 X7R	2.01000	PCS	C135 C137
+++++	603010004	CAP CERAMIC SMD	100pf/50V +5% -5% 0603(NPO) SMD	6.06000	PCS	C162-163 C15 C37 C111 C114
+++++	603010014	CAP CERAMIC SMD	0.01uf/50V +10% -10% 0603 SMD	1.01000	PCS	C219
+++++	603010019	CAP CERAMIC SMD	0.1uf/50V +10% -10% 0603 X7R	85.85000	PCS	C2-6 C8-11 C19-21 C27 C29 C31 C33 C35-36 C39 C43-45 C47-48 C50-57 C59-60 C67 C100 C119 C123 C127-129 C131-134 C136 C141-144 C147-C150 C164 C183-188 C190-196 C199-200 C205 C210 C212 C213-214 C216-217 C220 C223-224 C228 C523 C526 C99 C607
+++++	603010122	CAP CERAMIC SMD	120pf/50V +10%-10% 0603	4.04000	PCS	C172 C202 C517-518
+++++	603010044	CAP CERAMIC SMD	220pf/50V +5% -5% 0603(NPO) SMD	4.04000	PCS	C154 C157-158 C161
+++++	603010064	CAP CERAMIC SMD	330pf/50V +5% -5% 0603 NPO	2.02000	PCS	C140 C146
+++++	603010076	CAP CERAMIC SMD	47pf/50V +5%-5% 0603(NPO) SMD	3.03000	PCS	C23-24 C221
+++++	603010078	CAP CERAMIC SMD	470pf/50V +5% -5% 0603(NPO) SMD	4.04000	PCS	C126 C152 C155 C206
+++++	603010084	CAP CERAMIC SMD	4700pf/50V +10% -10% 0603 SMD	1.01000	PCS	C120
+++++	603010088	CAP CERAMIC SMD	560pf/50V +5% -5% 0603(NPO) SMD	1.01000	PCS	C41
+++++	603010113	CAP SMD	680pf/50V +5%-5% 0603(NPO)	1.01000	PCS	C122
+++++	601011129	IC SMD	RESET IC PLD3025CTA SOT-23	1.00000	PCS	U6

Parts List

+++++	603010033	CAP CERAMIC SMD	15pf/50V +5% -5% 0603	2.02000	PCS	C13-14
+++++	603010126	CAP SMD	150pf/50V +5%-5% 0603	2.02000	PCS	C153 C156
+++++	603030017	Cap Tantalum ELECT SMD	10uf/6.3V+10%-10% SIZE:2012	1.00500	PCS	C203
+++++	699000289	Bluetooth module	single mode module WLT2541 WEI LIN TONG M5_V3.94	1.00000	PCS	U64
+++++	603010002	CAP CERAMIC SMD	10pf/50V +5% -5% 0603 SMD	52.52000	PCS	C61-64 C70-96 C101-110 C112-113 C117 C138 C176-182
+++++	602010021	Resistor SMD	100K ohm(1/10w)+1%-1% 0603	1.01000	PCS	R174
+++++	60308006802	CAP ELECT DIP with Tape&Reel Packing	470uF/25V +20% -20% DIA 8X12mm DIP Pitch:2.5MM	1.00000	PCS	C42
++++	641990611	Undried tagboard	high temperature resistance PI 20*10mm every line 4PCS roll(Bar code printer defined paper)	1.10000	PCS	
+++	101030633002	Function board ASSY	SP200	1.00000	SET	
++++	61901019201	Double color LED	5MM blue/white common anode DIP WEJ5090W-B3V6-BA-D32	1.00000	PCS	LED_DB1
++++	218010011	LED Fixation bracket	PA66 4.5*4.0mm	3.01500	PCS	FOR LED1-3
++++	611010207	Rotating potentiometer	H090K9P-1+C B10Kb L20FC*7(J2) Vertical Single Channel B10K+/-10% round handle hight 7mm with midpoint Hongyu	1.00000	PCS	VR1
++++	611010176	Rotating potentiometer	H090K9P-1 B10KB(300") L20FC*7(E2) Vertical Single Channel B10K+/-10% round handle hight 7mm (Not be used for reflow) HONG	1.00000	PCS	VR2
++++	101030634002	Function board ASSY(AI Part)	SP200	1.00000	SET	
+++++	60308010202	CAP ELECT DIP with Tape&Reel Packing	10uf/25V +20%-20% 4*7mm DIP Pitch:2.5MM	1.00000	PCS	C1
+++++	608050001	Switch Diode DIP	IN4148 DIP TYPE	9.00000	PCS	D1-9
+++++	6210100320	Tact Switch	SKRGAED010 6.2*6.2*5mm ALPS	10.00000	PCS	S1-10
+++++	602040248	Resistor brede DIP	2K ohm(1/8W)+5%-5% Dew solder joints	3.00000	PCS	R27-29
+++++	602040250	Resistor brede DIP	100 ohm(1/8w)+5%-5% Dew solder joints	20.00000	PCS	R3-4 R30-35 R80 R90-99 R115
+++++	628140005	jump	single flat cable 5mm	1.00000	PCS	JMP6
+++++	628140010	jump	single flat cable 7.5mm	3.00000	PCS	R1-2 JMP1
+++++	628140015	jump	single flat cable 10mm	5.00000	PCS	JMP3-4 JMP8-9 R11
+++++	628140019	jump	single flat cable 12mm	3.00000	PCS	JMP2 JMP5 JMP7
+++++	101030635001	Function board ASSY(SMD Part)	SP200	1.00000	SET	
+++++	502010239	PCB Single layer 22F 1.6mm	SP200 Function board PCB V02 black silkscreen green oil bonding pad with copper 401*41*1.6mm	1.00000	PCS	
+++++	6010112740	IC SMD	TM1812 SOP16 TITAN	2.00000	PCS	U1-2
+++++	60310001902	CAP MULTI CERAMIC DIP with Tape&Reel Packing	0.1uf/50V +80% -20% DIP Pitch:5.0MM	3.00000	PCS	C2-4
++++	619010184	LED	White WEJ2114W 270mcd(5mA)Ultra-High Brightness WEJ	20.00000	PCS	LED1-20
++++	628010440	Mascoline connector	14 pins / 2.54 mm single elbow the DIP with loss prevention	1.00000	PCS	CN1
+++	101100738	Headphone board Assy	SP200	1.00000	SET	
++++	628010233	Masculine connector	4Pins/2.54mm Pitch single line straight prevent fall off	1.00000	PCS	CN1
++++	620020046	Stereo JACK	7Pin MJ-631 DIP(The machine vibration new three)	1.00000	PCS	JK1
++++	620020034	Stereo Headphone Jack	3.5mm Stereo phone jack with switch P.J-339-2 ShenHong	1.00000	PCS	JK2
++++	101100739	Headphone board Assy (AI Part)	SP200	1.00000	SET	
+++++	502010234	PCB Single layer 22F 1.6mm	SP200 HP board PCB V01 black silkscreen green oil bonding pad with copper 48*50*1.6mm	1.00000	PCS	
+++++	606020002	Ferrite Bead DIP	FB35608	5.00000	PCS	L1-4 L8
+++	628072075	Two sides with Flat connector with cathode plug	4pin L=950mm 26# bule/white two sides with 4pin/2.54mm Prevent fall off connector	1.00000	PCS	
+++	628072149	Flat cable with cathode plug	5Pins L=120mm # 24 one side with 5pins SM/2.54mm cathode plug another side with 5pins/2.54mm latching	1.00000	PCS	
+++	628072038	Colorized flat cable with cathode plug	2PIN L=420mm RED BLACK 22# 1007 2Pin/2.54 female plug one side 3.5~4.0mm block up 30mm	1.00000	PCS	TO L SPK
+++	628072039	Colorized flat cable with cathode plug	2PIN L=650mm RED BLACK 22# 1007 3Pin/2.54 female plug the 3pin nc one side 3.5~4.0mm block up 30mm	1.00000	PCS	TO R SPK

Parts List

+++	626000140	Tweeter speaker	BESTONE BSQG13-17B4G 8ohm 20W 2.2 uF tweeter 29*29*20mm	2.00000	PCS	
+++	626000173	SPEAKER	SAMCO 3X6寸1771E19E07 4Q10W SPEAKER	2.00000	PCS	
+++	628072250	Gray flat cable with cathode plug	14 pin L=300mm 26# two sides with 14Pin/2.54 Prevent fall off connector	1.00000	PCS	
+++	633000176	Dual side Gummed paper	Black 3M Dual side Gummed paper 80*40*0.15mm	1.00000	PCS	
+++	631040584	EVA	1310*8*0.5mm 38° EVA black with 3M 9448A double-side adhesive strip on one side	2.00000	PCS	
+++	3100200500 2	Speaker mesh	SPCC T=0.8mm Spray Black Size: 1352.1*95.8*17.6mm RD180612	1.00000	PCS	
+++	631050082	Gray Sponge	720*40*3mm viscosity	1.00000	PCS	
+++	631050044	Gray Sponge	580*30*3mm viscosity	1.00000	PCS	
+++	631050021	Gray Sponge	360*25*3mm viscosity	1.00000	PCS	
++	1020504890	Bottom cabinet ASSY	SP200(BLACK)	1.00000	SET	
+++	2020101140 1	Bottom cabinet	HIPS Black N/A YS9291B increase pillar after Change mode 1350*360*670mm	1.00000	PCS	
++++	298020001	Plastic	HIPS	2.44234	Kg	
+++	102060182	Keyboard ASSY	K6S+ 88-key grading weight keyboard SP200	1.00000	SET	
++++	2150101620	k6+ Keyboard bracket	ABS black N/A (Add clamping plate rib)	1.00000	PCS	
+++++	298010001	Plastic	ABS	1.87460	Kg	
++++	2040100290 3	k6 Black keyboard (5key group)	K6+ ABS black visible surface matt fine lines no guide tooth structure added bars	7.00000	PCS	
+++++	298010001	Plastic	ABS	0.09167	Kg	
++++	2040100280 1	k6 Black key	ABS black visible surface matt fine lines no guide tooth structure	1.00000	PCS	
+++++	298010001	Plastic	ABS	0.01957	Kg	
++++	2050102030	k6 White key(4key group)	ABS121H White N/A (with guide rubber sleeve)	7.00000	PCS	
+++++	298010001	Plastic	ABS	0.09576	Kg	
+++++	298050011	Color seed	RM40614A (50Kg ABS757 The ratio of colors 3KgRM40614A)	4.94400	g	
++++	2050102020	k6 White key(3key group)	ABS121H White N/A(with guide rubber sleeve)	7.00000	PCS	
+++++	298010001	Plastic	ABS	0.07469	Kg	
+++++	298050011	Color seed	RM40614A (50Kg ABS757 The ratio of colors 3KgRM40614A)	4.00000	g	
++++	2050102060	k6 white key C8	ABS121H White N/A(with guide rubber sleeve)	1.00000	PCS	
+++++	298010001	Plastic	ABS	0.02635	Kg	
+++++	298050011	Color seed	RM40614A (50Kg ABS757 The ratio of colors 3KgRM40614A)	1.40000	g	
++++	2050102040	k6 White key B0	ABS121H White N/A(with guide rubber sleeve)	1.00000	PCS	
+++++	298010001	Plastic	ABS	0.02420	Kg	
+++++	298050011	Color seed	RM40614A (50Kg ABS757 The ratio of colors 3KgRM40614A)	1.20000	g	
++++	2050102050	k6 White key A0	ABS121H White N/A(with guide rubber sleeve)	1.00000	PCS	
+++++	298010001	Plastic	ABS	0.02761	Kg	
+++++	298050011	Color seed	RM40614A (50Kg ABS757 The ratio of colors 3KgRM40614A)	1.30000	g	
++++	211990037	K6+ Black key (heavy) pole arm	POM (celcon CE66) black Moulded stiffeners	8.00000	PCS	
+++++	319010052	K6 black key (heavy) weight	SGCC T=3.0MM N/A	1.00000	PCS	
+++++	398030007		3*55.6*L	0.01365	Kg	
++++	211990038	K6+ Black key (middle) pole arm	POM (celcon CE66) black Moulded stiffeners	15.00000	PCS	
+++++	319010053	K6 black key (middle) weight	SGCC T=2.5MM N/A	1.00000	PCS	
+++++	399070010			0.01260	PCS	
++++	211990039	K6+ Black key (light) pole arm	POM (celcon CE66) black Moulded stiffeners	13.00000	PCS	
+++++	319010054	K6 black key (light) weight	SGCC T=2.0 MM N/A	1.00000	PCS	
+++++	398030005	Hot Zn plating board	2.0mm	0.01050	Kg	
++++	211990040	K6+ White key (heavy) lever arm	POM (celcon CE66) White	11.00000	PCS	
+++++	319010048	K6 white key (heavy) weight	SGCC T=4.0 MM N/A	1.00000	PCS	
+++++	398030006		4*56.3*L	0.02310	Kg	
++++	211990041	K6+ White key (middle) lever arm	POM (celcon CE66) White	14.00000	PCS	
+++++	319010049	K6 white key (middle) weight	SPCC T=3.5 MM N/A	1.00000	PCS	
+++++	398030008		3.5*55*L	0.02100	Kg	
++++	211990042	K6+ White key (light) lever arm	POM (celcon CE66) White	14.00000	PCS	
+++++	319010050	K6 white key (light) weight	SGCC T=3.5 MM N/A	1.00000	PCS	
+++++	398030008		3.5*55*L	0.01995	Kg	
++++	211990043	K6+ White key (lightest) lever arm	POM (celcon CE66) White	13.00000	PCS	
+++++	319010051	K6 white key (lightest) weight	SGCC T=3.0MM N/A	1.00000	PCS	
+++++	398030007		3*55.6*L	0.01785	Kg	

Parts List

++++	631030315	K6 keyboard new block	k6/k6s 1228*10*11.5mm wool Beige slow rebound sponge rubber hardness 50 black foam RB25	1.00000	BAR	
++++	631040642	K6+ keyboard lever arm rest pad	The hardness of 70 degrees EVA yellow slow rebound sponge Polyester sponge1228*10*12.5mm	1.00000	PCS	
++++	631030434	K6+White key hook pad	K6+ 1228*7*2.5mm felt+flannelette	1.00000	PCS	
++++	631030414	K6 BLACK STOP PAD	K6 1228*8*3.0 Black velvet cotton HARDNESS 55	1.00000	PCS	
++++	1010801700	Left keyboard PCB ASSY	K6 88 key 2 connect the plank	1.00000	SET	
+++++	628010084	Masculine connector	10PIN*2 straight feet DUAL ROW WITH BOX HEADER	1.00000	PCS	CN1
+++++	901010013	Stannum of cord sotder wire (lead)	Sn-0.3Ag-0.7Cuφ1.0mm FLUX;2.2%	0.00230	ROL	
+++++	1010801720 2	Left Keyboard PCB ASSY(SMD PART)	K6 88 key 2 connect the plank	1.00000	SET	
+++++	503020050	PCB Single layer 22F 1.6mm	K6 key board left key board V06 printing carbon green oil backing surface covered with black oil oval screw hole (Half si	1.00000	PCS	
+++++	608010044	Switch Dual Diode SMD	BAV70-1 SOT-23 common cathode ESD18KV	40.20000	PCS	D1-D40
+++++	641990611	Undried tagboard	high temperature resistance PI 20*10mm every line 4PCS roll(Bar code printer defined paper)	1.10000	PCS	
++++	630010122	K6 KEYBOARD SOFT PAD	TPE N/A	88.00000	PCS	
++++	301070013	screw PWB	3*16PWB Color Zn crisscross PWB	31.00000	PCS	
++++	313010226	K6 line support	Electrolytic plate T=1.2mm	2.00000	PCS	
+++++	398010004	SECC	1.2mm	0.01600	Kg	
++++	6290100740 1	K6+Conductive Rubber	Painting carbon transparent white long life siticagel Hardness of 40 degrees	8.00000	BAR	
++++	628072028	Computer flat cable with cathode plug in both sides	20Pins L=280mm both sides with 10PIN*2/2.54 IDC cathode plug with HuDieKou belt HuDieKou belt reverse inlet	2.00000	PCS	
++++	301110010	screw BB	2.6*6BB black Zn plating "+" Dual teeth PWB	32.00000	PCS	
++++	901030130	Lubricant oil	K6 Milky white/E326F(B#) 1.0Kg/Tank	22.00000	g	
++++	632000031	keyboard silencing cotton	1228*10*0.2MM non-woven	1.00000	PCS	
++++	631030300	Velvet	40*25*0.5mm white	17.00000	PCS	
++++	901100070	Protect film	200M*165mm viscosity LDPE	0.00650	ROL	
++++	901020008	Sealing adhesive tape	24mm*50y	0.00200	ROL	
++++	901030159	Lubricant oil	currency SC-100LS Gu Run Jiangsu	21.00000	g	
++++	631030182	K6 white key hook pad	1228*8*2.5 Black velvet cotton hardness of 45	1.00000	PCS	
++++	2110102440 2	K6+ TPU guide tooth (Transparent Black)	TPU HARDNESS 75~85 DEGREES	52.00000	PCS	
++++	1010801710	Right keyboard PCB ASSY	K6 88 key 2 connect the plank	1.00000	SET	
+++++	628010084	Masculine connector	10PIN*2 straight feet DUAL ROW WITH BOX HEADER	1.00000	PCS	CN2
+++++	901010013	Stannum of cord sotder wire (lead)	Sn-0.3Ag-0.7Cuφ1.0mm FLUX;2.2%	0.00230	ROL	
+++++	1010801730 2	Right keyboard PCB ASSY(smd part)	K6 88 key 2 connect the plant	1.00000	SET	
+++++	608010044	Switch Dual Diode SMD	BAV70-1 SOT-23 common cathode ESD18KV	48.24000	PCS	D41-D88
+++++	503020049	PCB Single layer 22F 1.6mm	K6 Keyboard right keyboard V06 carbon green oil backing surface covered with black oil oval screw hole (Half side screw h	1.00000	PCS	
+++++	641990611	Undried tagboard	high temperature resistance PI 20*10mm every line 4PCS roll(Bar code printer defined paper)	1.10000	PCS	
+++	629990120	Deslick silicon gasket	φ22.5*3mm black silicon single layer 3M glue	5.00000	PCS	
+++	301110024	screw BB	3*8BB Color Zn "+" PWB	8.00000	PCS	
+++	301110029	screw BB	4*12BB(00683-54012) black "+" PWB	14.00000	PCS	
+++	301010015	screw PA	4*12PA black crisscross PA no harden	16.00000	PCS	
+++	3210100630 3	Push cover board L type ironware piece(matal pin)	Hot dip galvanizing N/A Long 1286mm Change the height from 16mm to 13mm	1.00000	PCS	
++++	398030003	Hot Zn plating board	1.5mm	0.55000	Kg	
+++	631040585	EVA	1680x15x1.5mm 38° EVA black with 3M 9448A double-side adhesive strip on one side	2.00000	PCS	
+++	301110017	screw BB	3*12BB black Zn plating "+" PWB	6.00000	PCS	
+++	631040008	EVA	20*15*10mm viscosity Black	1.00000	PCS	
+	102020831	Outer packing materials	SP201 Plus (Black)	1.00000	SET	
++	644001194	Foam_Left	Medium density 460*200*140mm RD180613	1.00000	PCS	
++	644001193	Foam_Right	Medium density 460*200*180mm RD180614	1.00000	PCS	
++	644001192	Foam MID UP	Medium density 460*150*124mm RD180615	2.00000	PCS	
++	644001195	Foam MID DOWN	Medium density 460*150*120mm RD180616	2.00000	PCS	
++	641011487	Label	English 64*48mm black word on silvery SP201 PLUS	1.00000	PCS	