순번	하위품명	규격	Q'ty	Location
1	ARM9 Processor	SC32442B-43	1	U1
2	USB Port Transient Suppressor	SN65220DBVR(SOT23-6)	1	U12
3	LED Driver IC	MAX1553ETA, TDEN8	1	U3
4	Touchscreen Controller IC	ADS7846E(TSSOP16)	1	U4
14	I2C Sound Codec	CS42L52-CNZ(LQFP40)	1	U5
6	Mini Logic IC(AND Gate)	SN74AHC1G08DCKR(SC-70)	4	U6,U9,U10,U11
7	Mini Logic IC(NOT Gate)	SN74AHC1G14DCKR(SC-70)	3	U8,U13,U18
8	Mini Logic IC(OR Gate)	SN74AHC1G32DCKR(SC-70)	2	U15,U19
9	Clock Time IC	DS3231SN(-40℃ to +85℃),16SO	1	U2
	Battery Monitoring IC	DS2782E+	1	U17
11	Battery Charge Controller	MAX8677A(TQFN24)	1	U16
12	Power Management IC	TPS65021RHA(QFN40)	1	U14
13	LED Chip	BL-HB336G-TRB(1608,SUPER-BLUE)	1	LED23
14	LED Chip	BL-HUB36D-TRB(1608,SUPER-RED)	1	LED22
15	LED Chip	BL-HB535-AV-TRB(N,P,2012,SUPER-BLUE)	17	LED1,LED2,LED3,LED4,LED5,LED6,LED7,LED8,LED13,LED14, LED15,LED16,LED17,LED18,LED19,LED20,LED21
16	Crystal Chip	32.768KHz, SSP-T7	1	Y2
	Crystal Chip	16.9344MHz, QS-3225	1	Y1
18	Ceramic Capacitor Chip	100nF, 16V, X7R, ±10%, 1005	103	C24,C25,C26,C27,C28,C32,C33,C34,C35,C36,C37,C38,C39,C40, C41,C42,C43,C44,C45,C46,C47,C48,C49,C50,C51,C52,C57,C58, C59,C60,C61,C62,C63,C64,C65,C66,C67,C68,C69,C70,C71,C72, C73,C74,C96,C97,C98,C101,C102,C103,C106,C108,C109,C110, C111,C112,C113,C120,C121,C122,C123,C126,C129,C131,C132, C133,C144,C145,C146,C147,C148,C149,C150,C152,C153,C154, C155,C156,C157,C158,C162,C163,C164,C165,C167,C171,C175,C
19	Ceramic Capacitor Chip	10pF, 50V, NPO, ±5%, 1005	3	C141,C142,C143
20	Ceramic Capacitor Chip	220pF, 50V, NPO, ±5%, 1005	1	C130
21	Ceramic Capacitor Chip	4.7nF, 50V, X7R, ±10%, 1608	1	C100
22	Ceramic Capacitor Chip	22nF, 50V, X7R, ±10%, 1005	2	C114,C115
23	Ceramic Capacitor Chip	1uF, 25V, X7R, ±10%, 2012		C105,C107
24	Tantalum Capacitor Chip	47uF, 6.3V, ±20%, 3216	12	CT1,CT2,CT3,CT4,CT5,CT6,CT7,CT8,CT10,CT12,CT13,CT14

25	Tantalum Capacitor Chip	100uF,10V, ±20%, 6032	2	CT9,CT11
26	Ceramic Capacitor Chip	12pF, 50V, NPO, ±5%,1005	2	C10,C11
27	Ceramic Capacitor Chip	15pF, 50V, NPO, ±5%, 1005	2	C1,C2
	Ceramic Capacitor Chip	150pF, 50V, C0G, ±5%, 1005	3	C118,C119,C128
	Ceramic Capacitor Chip	0.47uF, 10V, X7R, 1608	1	C174
	Ceramic Capacitor Chip	68nF, 16V, X7R, ±10%, 1005	1	C168
	Ceramic Capacitor Chip	1nF, 50V, X7R, ±10%, 1005	1	C151
32	Ceramic Capacitor Chip	1.5nF, 50V, C0G, ±5%, 1608	1	C6
33	Ceramic Capacitor Chip	4.7uF, 10V, JB(X5R), ±10%, 1608	11	C85,C86,C87,C88,C89,C90,C91,C92,C93,C94,C95
34	Ceramic Capacitor Chip	470nF, 25V, X5R, ±15%, 1608	1	C99
	Ceramic Capacitor Chip	10uF, 10V, JB(X5R), ±10%, 2012	27	C9,C29,C30,C31,C53,C54,C55,C56,C75,C76,C77,C78,C79,C80,C8 1,C104,
36	Ceramic Capacitor Chip	3.3uF, 16V, JB(X5R), ±10%, 2012	3	C82,C83,C84
37	Ceramic Capacitor Chip	820pF, 50V, COG, ±1%, 1005	1	C5
38	Switching Diode Chip	1N4148WS(SOD323)	1	D4
39	Schottky Diode Chip	SDB0540, 40V, 1A, SOD-123	3	D1,D2,D3
40	TVS Diode	NDB171, 5.78V(SOD-923)	4	ZD1,ZD3,ZD4,ZD5
41	Zender Diode	SDZ5V6D, 5.6V, (SOD-323)	1	ZD2
	Bead Chip	MPZ1005S121C	8	FB1,FB2,FB3,FB4,FB5,FB6,FB7,FB11
43	Bead Chip	MPZ1608S600A	3	FB8,FB9,FB10
44	Power Inductor Chip	VLCF4020-2R2N1R7	2	L2,L3
45	Power Inductor Chip	VLF4012AT-3R3M1R3	1	L4
	Power Inductor Chip	47uH, 100KHz, 3.5 X 3.7mm(VLF4012AT-470MR30	1	L1
	Network Resistor	100K ohm, 1/16W, ±5%, 1005*4	3	RP1,RP2,RP3
48	Resistor Chip	10 ohm, 1/16W, ±5%, 1005	4	R6,R9,R52,R116
49	Resistor Chip	1K ohm, 1/16W, ±1%, 1005	1	R129
50	Resistor Chip	10K ohm, 1/16W, ±1%, 1005	1	R28
51	Resistor Chip	10K ohm, 1/16W, ±5%, 1005	12	R7,R8,R35,R37,R38,R69,R86,R87,R122,R123,R132,R133
52	Resistor Chip	100K ohm, 1/16W, ±5%, 1005		R1,R5,R11,R12,R14,R15,R17,R26,R29,R30,R32,R39,R40,R41,R42, R43, R44,R59,R66,R67,R100,R117,R119,R121,R124,R126,R127,R136,R1
53	Resistor Chip	1.2M ohm, 1/16W, ±5%, 1005	1	R115
	Resistor Chip	1.5K ohm, 1/16W, ±5%, 1005	3	R33,R34,R70
	Resistor Chip	2K ohm, 1/16W, ±1%, 1005	1	R125

56	Resistor Chip	200K ohm, 1/16W, ±1%, 1005	2	R27,R50
	Resistor Chip	22 ohm, 1/16W, ±5%, 1005	6	R62,R64,R71,R72,R134,R135
	Resistor Chip	22 ohm, 1/16W, ±5%, 1005 2.2K ohm, 1/16W, ±5%, 1005 MCR01 J	2	R48,R141
	Resistor Chip	4.3K ohm, 1/16W, ±1%, 1005	1	R131
	Resistor Chip	470 ohm, 1/16W, ±5%, 1005	26	R58,R57,R61,R65,R68,R88,R89,R90,R91,R92,R93,R94,R95,R101,R 102,
	Resistor Chip	4.7K ohm, 1/16W, ±5%, 1005	15	R18,R19,R20,R21,R22,R23,R24,R25,R46,R55,R81,R82,R83,R84,R85
62	Resistor Chip	47K ohm, 1/16W, ±5%, 1005	1	R54
63	Resistor Chip	470K ohm, 1/16W, ±5%, 1005	1	R73
64	Resistor Chip	5.6K ohm, 1/16W, ±5%, 1005	1	R139
	Resistor Chip	82K ohm, $1/16W$ , $\pm 5\%$ , $1005$	1	R45
	Resistor Chip	820K ohm, 1/16W, ±5%, 1005	2	R47,R49
67	Resistor Chip	0 ohm, 1/10W, ±5%, 1608(MCR03****J000)	2	J1,J3
68	Resistor Chip	10 ohm, 1/8W, ±5%, 2012	2	R53,R56
69	Resistor Chip	4.7 ohm, 1/10W, ±5%, 2012	2	R60,R63
70	Resistor Chip	27 ohm, 1/4W, ±1%, 3212	1	R31
	Resistor Chip	0.02 ohm, 1W, ±1%, 6432	1	R138
	Resistor Chip	499 ohm, 1/16W, ±1%, 1005	1	R130
	Resistor Chip	499K ohm, 1/16W, ±1%, 1005	1	R120
74	Motion Sensor IC	LIS302DL, LGA14	1	U7
75	Transistor NPN Chip	STD123S(SOT23)	6	Q1,Q2,Q3,Q5,Q6,Q7
76	FET N-CH Chip	2N7002(SOT23)	5	Q4,Q8,Q9,Q11,Q12
77	FFC Connector	05002HR-60J02(G), SMD60	1	CON1
	Mini USB Connector	M2US-00SS-2(SMD, 5PIN)	1	CON4
79	Speaker Cable Connector	8005-002-100-867	1	CON2
80	JTAG Connector	12505WR-10(P),SMD	1	CON3
81	Ceramic Capacitor Chip	470pF,50V,NPO, ±5%,1005	1	C127
82	PCB(FR-4, 1.2T)	RH61A, FR4, 1.2mm, MLB 8Layer, GOLD	1	
	IR LED	HI-I3330SWC46(3mm, 30도)	2	IR1,IR2
<u> </u>	IR LED	HI-I520A(5mm, 20도, Blue), BULK	2	IR3,IR4

	Zigbee MODULE				
Part Name	Description	Quantity	unit	LOCATION	
BALUN	2.4GHz Band RF Application (2.0+1.25+0.95)	1	EΑ	B1	
Ceramic Capacitor Chip	0.75pF, 50V, COG, ±0.25pF, 1005	1	EΑ	C3	
Ceramic Capacitor Chip	10nF, 50V, X7R, ±10%, 1005	7	EΑ	C6,C10,C16,C18,C20,C21,C22	
Ceramic Capacitor Chip	10pF, 50V, NPO, ±5%, 1005	2	EΑ	C5,C19	
Ceramic Capacitor Chip	27pF, 50V, COG, ±5%, 1005	2	EΑ	C7,C8	
Ceramic Capacitor Chip	8.2pF, 50V, COG, ±5%, 1005	2	EΑ	C1,C2	
Ceramic Capacitor Chip	1uF, 50V, Y5V, -20~+80%, 1608	3	EΑ	C11,C17,C23	
Part Name	Description	Quantity	unit	LOCATION	
Ceramic Capacitor Chip	4.7uF, 25V, Y5V, -20~+80%, 2012	1	EΑ	C9	
Resistor Chip	0 ohm, 1/16W, ±5%, 1005	1	EΑ	R1	
Resistor Chip	100K ohm, 1/16W, ±5%, 1005	1	EΑ	R4	
Resistor Chip	10K ohm, 1/16W, ±5%, 1005	6	EΑ	R5,R8,R11,R12,R13,R15	
Resistor Chip	169K ohm, 1/16W, ±1%, 1005	1	EΑ	R3	
Resistor Chip	3.3K ohm, 1/16W, ±5%, 1005	1	EΑ	R7	
Resistor Chip	510 ohm, 1/16W, ±5%, 1005	1	EΑ	R6	
LED Chip	HI-LRF10HORC(1608, Red)	1	EΑ	D1	
Crystal	24MHz, 4.0+2.5mm(SMD), 10ppm	1	EΑ	Y1	
Zigbee IC	EM260(2.4GHz Zigbee IC, QFN40)	1	EΑ	U1	
PCB(FR-4, 0.8T)	MH61B(5.5X RF_MODULE),FR4,0.8mm,2Laver	1	EΑ		
Resistor Chip	10 ohm, 1/16W, ±5%, 1005	1	EΑ	R2	
Inductor Chip	GC2T 3N9 J00(1005), 3.9nH	2	EΑ	L1 ,L2	
Inductor Chip	GC2T 3N3 J00(1005), 3.3nH	1	EΑ	L5	
Voltage Regulator IC	NJM2882F03(SOT23-5,3.0V)	1	EA	U2	
Mini Logic IC(AND Gate)	KIC7SH08FU	1	EΑ	us	
BUFFER IC	SN74LVC3G34DCUR(VSSOP)	2	EΑ	U3,U4	
Pin Header	10 Pin(5x2), 1.27, SMD Type	1	EΑ	J1	