## **HUB Device**

Item	QTY	Designator	Description 1	Manufacturer	Manufacturer Part Number	Source/Rep/Dist
1	1	ANT1	1 Stage 15dB SMT Mount Active GPS Patch Antenna	Taoglas	AP.10C.01	Arrow
2	1	BT1	BATTERY LITHIUM 3.1V RECHARGE	Seiko Instruments	MS518SE-FL35E	Seiko
3	1	C1	CAP 2200PF 25V CERAMIC 0402 SMD	Panasonic - ECG	ECJ-0EB1E222K	Arrow
4	5	C4, C5, C46, C47, C221	CAP 22PF 50V CERAMIC 0402 SMD	Panasonic - ECG	ECJ-0EC1H220J	Arrow
5	3	C7, C201, C214	CAP CER 47PF 50V NP0 0402	Johanson Dielectrics Inc	500R07N470JV4T	Arrow
		C10, C12, C15, C17, C19, C22, C24, C26, C28, C30, C32, C40, C42, C115,				
6	15	C222	CAP .1UF 10V CERAMIC X5R 0402	Panasonic - ECG	ECJ-0EB1A104K	Arrow
7	3	C11, C21, C34	CAP CERAMIC 10UF 10V 0603 X5R	Panasonic - ECG	ECJ-1VB1A106M	Arrow
8	5	C13, C35, C37, C39, C41	CAP CER 4.7UF 10V Y5V 0603	Murata Electronics North America	GRM188F51A475ZE20D	Arrow
9	12	C14, C16, C18, C20, C23, C25, C27, C29, C31, C33, C36, C38	CAP CERAMIC 1UF 10V X5R 0402	Panasonic - ECG	ECJ-0EB1A105M	Arrow
10	1	C44	CAP .01UF 25V CERAMIC X7R 0402	Panasonic - ECG	ECJ-0EB1E103K	Arrow
11	6	C45, C100, C101, C202, C203, C208	CAP 100PF 50V CERAMIC 0402 SMD	Panasonic - ECG	ECJ-0EC1H101J	Arrow
12	1	C114	CAP CER 5.1PF 50V C0G 0402	Murata Electronics North America	GRM1555C1H5R1DZ01D	Arrow
13	5	C116, C204, C212, C213, C215	CAP CER 33PF 25V S 0402 UHI Q	Johanson Technology Inc	250R07S330GV4T	Arrow
14	2	C205, C207	CAP CER 3.6PF 50V S 0402 UHI Q	Johanson Technology Inc	500R07S3R6BV4T	Arrow
15	1	C206	CAP CER 6.2PF 50V S 0402 UHI Q	Johanson Technology Inc	500R07S6R2CV4T	Arrow
16	2	C209, C226	CAP 10000PF 16V CERAMIC 0402 SMD	Panasonic - ECG	ECJ-0EB1C103K	Arrow
17	1	C210	CAP 1000PF 25V CERAMIC 0402 SMD	Panasonic - ECG	ECJ-0EB1E102K	Arrow
18	4	C211, C223, C224, C225	CAP 27PF 50V CERAMIC 0402 SMD	Panasonic - ECG	ECJ-0EC1H270J	Arrow
19	1	C216	CAP CER 10PF 50V S 0402 UHI Q	Johanson Technology Inc	500R07S100JV4T	Arrow
20	1	C217	CAP CER 5.6PF 50V S 0402 UHI Q	Johanson Technology Inc	500R07S5R6CV4T	Arrow
21	1	C218	CAP CER 3.3PF 50V S 0402 UHI Q	Johanson Technology Inc	500R07S3R3BV4T	Arrow
22	1	C219	CAP 1.5PF 50V CERAMIC 0402 SMD	Panasonic - ECG	ECJ-0EC1H1R5C	Arrow
23	1	C220	CAP CER 10UF 16V X5R 20% 0805	AVX Corporation	0805YD106MAT2A	Arrow
24	1	C227	CAP CER 15PF 50V S 0402 UHI Q	Johanson Technology Inc	500R07S150JV4T	Arrow
25	3	D4, D5	DIODE SCHOTTKY 500MA 20V 0603	Comchip Technology	CDBU0520	Arrow
26	1	D6	DIODE SW 250MA 80V 150W SOT-523	Micro Commercial Co	MMBD4448HT-TP	Arrow
27	1	FB200	FERRITE CHIP 30 OHM 2200MA 0402	Murata Electronics North America	BLM15PD300SN1D	Arrow
28	2	FLT200, FLT201	FILTER SAW ISM 915MHZ RFID SMD	Murata Electronics North America	SAFEB915MAL0F00R12	Arrow
29	1	J1	CONN JACK UMC VERTICLE SMD	Emerson Network Power Connectivity Solutions	128-0711-201	Arrow
30	1	J3	CONN HEADER VERT SGL 5POS GOLD	3M	961105-0711-201	Molex
31	1	J4	ITW PANCON - JSA41G0 - Jumper Switch	ITW PANCON	JSA41G0	Arrow
32	3	L1, L2, R23	RES 0.0 OHM 1/16W 5% 0402 SMD, RES 0.0 OHM 1/16W 0402 SMD	Yageo	RC0402JR-070RL	Arrow
33	3	L201, L202, L206	INDUCTOR 10NH 500MA 0402	Murata Electronics North America	LQW15AN10NJ00D	Arrow
34	1	L203	INDUCTOR 11NH .64A WW 0402	Wurth Electronics Inc	744765111A	Arrow
35	1	L204	CER INDUCTOR 27NH 0402	Johanson Technology Inc	L-07C27NJV6T	Arrow
36	1	L205	CER INDUCTOR 2.2NH 0402	Johanson Technology Inc	L-07C2N2SV6T	Arrow
37	1	L207	INDUCTOR MULTILAYER 1.6NH 0402	TDK Corporation	MLG1005S1N6S	Arrow

38	1	L208	CER INDUCTOR 15NH 0402	Johanson Technology Inc	L-07C15NJV6T	Arrow
39	1	LS1	BUZZER MAGNETIC 3V 5MM SMD	PUI Audio	SMT-0540-S-R	PUI Audio
40	1	MD1	MODULE GPS	Wi2Wi	W2SG0006-006F-11WW	Roy Zappia
41	1	MD100	MOD 802.15.4/ZIGB 900MHZ RF OUT	Panasonic	ENW-59611N3A	Arrow
42	1	MP1	RF Shield, 27.89 x 17.96 x 2.5 mm (48 MHz)	Genesis	GTI09-60347 Rev6	Ken Erickson
43	1	MP2	RF Shield, 18.97 x 23.47 x 2.5 mm (900 MHz)	Genesis	GTI09-60348 Rev5	Ken Erickson
44	1	P2	CONN HEADER 3POS 1.25MM VERT SMD	Molex Connector Corporation	53398-0371	Arrow
45	1	P3	SAMTEC - FTSH-105-01-L-DV-K050 X .050	SAMTEC	FTSH-105-01-L-DV-K	Arrow
46	5	P4, P5, P6, P7, P8	CONN HEADER 2POS .100 VERT GOLD	Molex Connector Corporation	22-29-2021	Arrow
47	1	P200	CONN RECEPT COAX SWITCHING SMT	Hirose Electric Co Ltd	MS-147(06)	Arrow
48	3	Q1, Q2, Q3	MOSFET N-CH 20V 200MA 3-DFN	Diodes Inc	DMN2005LP4K-7	Arrow
49	1	Q4	MOSFET P-CH 20V 1.5A 3-DFN	Diodes Inc	DMP2104LP-7	Arrow
50	1	Q5	MOSFET P-CH 20V 3.7A SOT23-3	Vishay/Siliconix	SI2323DS-T1-E3	Arrow
51	1	R2	RES 174K OHM 1/10W 1% 0402 SMD	Panasonic - ECG	ERJ-2RKF1743X	Arrow
52	6	R3, R42, R100, R101, R200, R202	RES 1.0K OHM 1/16W 5% 0402 SMD	Rohm Semiconductor	MCR01MZPJ102	Arrow
53	3	R7, R201, R203	RES 0.0 OHM 1/16W 5% 0402 SMD	Rohm Semiconductor	MCR01MZPJ000	Arrow
54	1	R8	RES 20K OHM 1/10W 5% 0402 SMD	Panasonic - ECG	ERJ-2GEJ203X	Arrow
55	1	R10	RES 2.10K OHM 1/10W 1% 0402 SMD	Panasonic - ECG	ERJ-2RKF2101X	Arrow
56	1	R11	RES 71.5K OHM 1/10W 1% 0402 SMD	Panasonic - ECG	ERJ-2RKF7152X	Arrow
57	6	R12, R25, R26, R27, R28, R30	RES 10K OHM 1/10W 5% 0402 SMD	Panasonic - ECG	ERJ-2GEJ103X	Arrow
58	1	R13	RESISTOR 1.0 OHM 1/10W 5% 0603	Panasonic - ECG	ERJ-3GEYJ1R0V	Arrow
59	2	R14, R15	RES 27.0 OHM 1/10W 1% 0402 SMD	Panasonic - ECG	ERJ-2RKF27R0X	Arrow
60	1	R16	RES 100K OHM 1/10W 5% 0402 SMD	Panasonic - ECG	ERJ-2GEJ104X	Arrow
61	1	R17	RES 1.00M OHM 1/10W 1% 0402 SMD	Panasonic - ECG	ERJ-2RKF1004X	Arrow
62	1	R18	RES 3.74M OHM 1/16W 1% 0402 SMD	Vishay/Dale	CRCW04023M74FKED	Arrow
63	3	R20, R21, R22	RES 300 OHM 1/10W 5% 0402 SMD	Panasonic - ECG	ERJ-2GEJ301X	Arrow
64	1	R24	RES 249K OHM 1/10W 1% 0402 SMD	Panasonic - ECG	ERJ-2RKF2493X	Arrow
65	1	R31	RES 200 OHM 1/10W 5% 0402 SMD	Panasonic - ECG	ERJ-2GEJ201X	Arrow
66	1	R36	RES 82 OHM 1/10W 5% 0603 SMD	Panasonic - ECG	ERJ-3GEYJ820V	Arrow
67	1	R37	RES 59.0 OHM 1/10W 1% 0603 SMD	Panasonic - ECG	ERJ-3EKF59R0V	Arrow
68	2	R40, R41	RES 5.1K OHM 1/10W 5% 0402 SMD	Panasonic - ECG	ERJ-2GEJ512X	Arrow
69	1	R43	RES 270 OHM 1/10W 5% 0603 SMD	Panasonic - ECG	ERJ-3GEYJ271V	Arrow
70	2	R204, R205	RES 120 OHM 1/10W 5% 0402 SMD	Panasonic - ECG	ERJ-2GEJ121X	Arrow
71	1	SEN1	Omnidirectional Tilt and Vibration Sensor	SignalQuest Precision Microsensors	SQ-SEN-200	SignalQuest
72	1	SW1	SWITCH TACT SPST W/O GND SMD	Omron Electronics Inc-ECB Div	B3U-1000P	Arrow
73	1	SW2	SWITCH LIGHT TOUCH 160GF SMD	Panasonic - ECG	EVQ-PSD02K	Arrow
74	1	U1	IC MCU 16K FLASH 1K 68-QFN	Cypress Semiconductor Corp	CY8C3866LTI-030ES3	Arrow
75	1	U3	IC FLASH 4MBIT 66MHZ 8MLF	Atmel	AT45DB041D-MU-2.5	Arrow
76	2	U4, U7	IC REG ULDO 300MA 3.0V 4-MLF	Micrel Inc	MIC5303-3.0YMT TR	Arrow
77	1	U5	IC REG ULDO 300MA 3.3V 4-MLF	Micrel Inc	MIC5303-3.3YMT TR	Arrow
78	1	U6	IC USB POWER MANAGER 14-DFN	Linear Technology	LTC4085EDE#PBF	Arrow
79	1	U8	Integrated Common Mode Filter DFN8	On Semi	NUC2401MN	Kenny Walker
80	2	U100, U200	IC SW SPDT 0.1-2.5GHZ SOT23-6	Skyworks Solutions Inc	AS193-73LF	Arrow

81	1	U201	IC OP AMP WIDEBAND RF TSLP-7	Infineon Technologies	BGA 622L7 E6327	Arrow
82	1	U202	IC GSM POWER AMP 3V 16-QFN	RFMD	RF5110GTR7	Ken Erickson
83	1	Y1	CRYSTAL 32.768 KHZ 7PF SMD	Suntsu Frequency Control, Inc.	SCP8-32.768kHz TR	Suntsu