

## ISS-P2-BOM-BY-REF

REF	VALUE	DESC	ASSY_STATUS	SUPPLIER_1	SUPPLIER_2
B1	CR_2032	HOLDER BATT CR2032	Y	Mouser 712-BAT-HLD-001	Digikey BAT-HLD-001-ND
C1	22 pF	CAP CER SMD 0402 22 5 NPO	Y	Mouser 581-04023U220JAT2A	
C2	22 pF	CAP CER SMD 0402 22 5 NPO	Y	Mouser 581-04023U220JAT2A	
C3	12 pF	CAP CER SMD 0603 12 5 NPO	Y	Mouser 81-GRM39C120J50	Digikey 490-1405-1-ND
C4	12 pF	CAP CER SMD 0603 12 5 NPO	Y	Mouser 81-GRM39C120J50	Digikey 490-1405-1-ND
C5	12 pF	CAP CER SMD 0603 12 5 NPO	Y	Mouser 81-GRM39C120J50	Digikey 490-1405-1-ND
C6	12 pF	CAP CER SMD 0603 12 5 NPO	Y	Mouser 81-GRM39C120J50	Digikey 490-1405-1-ND
C8	.01 uF	CAP CER SMD .01 10 X7R 16V	Y	Mouser 81-GRM18R71C103KA01D	Digikey 490-1525-1-ND
C9	4.7 uF	CAP CER SMD 4.7uF 10% X7R 25V	Y	Mouser 81-GRM31CR71E475KA88	Digikey 490-1809-1-ND
C10	4.7 uF	CAP CER SMD 4.7uF 10% X7R 25V	Y	Mouser 81-GRM31CR71E475KA88	Digikey 490-1809-1-ND
C11	22 pF	CAP CER SMD 0402 22 5 NPO	Y	Mouser 581-04023U220JAT2A	
C12	4.7 uF	CAP CER SMD 4.7uF 10% X7R 25V	Y	Mouser 81-GRM31CR71E475KA88	Digikey 490-1809-1-ND
D1	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D2	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D3	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D4	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D5	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D6	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D7	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D8	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D9	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D10	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D11	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D12	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D13	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D14	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D15	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D16	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D17	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D18	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D19	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D20	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D21	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D22	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D23	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D24	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D25	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D26	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D27	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D28	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D29	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D30	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D31	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D32	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D33	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D34	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D35	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D36	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D37	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND

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D38	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D39	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D40	RED	DIODE LED RED 1206	Y	Mouser 604-APTL3216SURCK	Digi 754-1165-1-ND
D45	S01575	DIODE SIG SMD 75V 1206	Y	Mouser 652-CD1206-S01575	Digi CD1206-S01575CT-ND
R1	120	RES CER SMD 0603 120 5 1/10	Y	Mouser 667-ERJ-3GEYJ121V	DigiKey P120GCT-ND
R2	120	RES CER SMD 0603 120 5 1/10	Y	Mouser 667-ERJ-3GEYJ121V	DigiKey P120GCT-ND
R3	120	RES CER SMD 0603 120 5 1/10	Y	Mouser 667-ERJ-3GEYJ121V	DigiKey P120GCT-ND
R4	120	RES CER SMD 0603 120 5 1/10	Y	Mouser 667-ERJ-3GEYJ121V	DigiKey P120GCT-ND
R5	120	RES CER SMD 0603 120 5 1/10	Y	Mouser 667-ERJ-3GEYJ121V	DigiKey P120GCT-ND
R6	10K	RES CER SMD 0603 10K 5 1/10	Y	Mouser 667-ERJ-3GEYJ103V	Digikey P10KGCT-ND
R10	120	RES CER SMD 0603 120 5 1/10	Y	Mouser 667-ERJ-3GEYJ121V	DigiKey P120GCT-ND
R12	10K	RES CER SMD 0603 10K 5 1/10	Y	Mouser 667-ERJ-3GEYJ103V	Digikey P10KGCT-ND
R13	10K	RES CER SMD 0603 10K 5 1/10	Y	Mouser 667-ERJ-3GEYJ103V	Digikey P10KGCT-ND
R14	0	RES CER SMD 0603 0	Y	Mouser 667-ERJ-3GEY0R00V	Digikey P0.0GCT-ND
S1	RESET	SW PB SMD N.O.	Y	Mouser 667-EVQQ2P02W	Digikey P12943SCT-ND
U1	ATMEGA128RFA1	IC MICROCONT RF 2450	Y	Mouser 556-ATMEGA128RFA1-ZU	Digi ATMEGA128RFA1-ZURCT-ND
Y1	16.000 MHz	XTAL 16 MHZ	Y	Mouser 815-ABMM-16-B2-T	DigiKey 535-9155-1-ND
Y2	32.768 KHz	XTAL RTC 32768	Y	Mouser 520-ECS327-12.5-17X	DigiKey XC1195CT-ND

## NON-ITEMIZED PARTS

BATTERY, CR-2032	BATTERY, CR-2032	Y	Mouser 658-CR2032	Digikey P189-ND
BOARD, PC, THOTCO	Printed Circuit, each	Y	*Brigtflex quote / 800 pcs	

## DO NOT PLACE PARTS

C13	4.7 uF	CAP CER SMD 4.7u 10% X7R 25V	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
C14	.01 uF	CAP CER SMD .01 10 X7R 16V	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
C15	10 uF	CAP LYTIC SMD 10uF 20% 16V	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
D41	RxD	DIODE LED RED 1206	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
D42	TxD	DIODE LED RED 1206	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
D43	SCK	DIODE LED RED 1206	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
D44	ExT_PwR	DIODE LED RED 1206	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
F1	.5 A	FUSE POLY .5A 15V	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
J1	POWER	06-WAY SIL VERT SOCKET	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
J2	ANALOG	06-WAY SIL VERT SOCKET	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
J3	DIGITAL_0	SOCKET STRP .1 1X8	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
J4	DIGITAL_1	SOCKET STRP .1 1X8	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
P1	USB_2_MALE	CONN USB PCB M	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
P2	AVR-ISP-6A	CONN SPI AVR	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
R7	1K	RES CER SMD 0603 1K 5 1/10	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
R8	1K	RES CER SMD 0603 1K 5 1/10	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
R9	1K	RES CER SMD 0603 1K 5 1/10	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
R11	120	RES CER SMD 0603 120 5 1/10	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
R15	0	RES CER SMD 0603 0	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
R16	1K	RES CER SMD 0603 1K 5 1/10	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
R17	5V	VRSTR ESD 0603 LO-CAP	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
R18	5V	VRSTR ESD 0603 LO-CAP	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
R19	1K	RES CER SMD 0603 1K 5 1/10	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
R20	1K	RES CER SMD 0603 1K 5 1/10	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
R21	0	RES CER SMD 0603 0	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
S2	PF1	SW PB SMD N.O.	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE

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S3	PF2	SW PB SMD N.O.	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
TP1	USB_D-	TEST POINT	DO NOT PLACE	P/O PCB	P/O PCB
TP2	USB_D+	TEST POINT	DO NOT PLACE	P/O PCB	P/O PCB
TP3	SER_RXD	TEST POINT	DO NOT PLACE	P/O PCB	P/O PCB
TP4	SER_TXD	TEST POINT	DO NOT PLACE	P/O PCB	P/O PCB
TP5	GND	TEST POINT	DO NOT PLACE	P/O PCB	P/O PCB
TP6	+5	TEST POINT	DO NOT PLACE	P/O PCB	P/O PCB
U2	LP2985-33	IC REG 3.3V LDO SOT5	DO NOT PLACE	DO NOT PLACE	DO NOT PLACE
Z3	ANTENNA	DIPOLE_FOLDED	DO NOT PLACE	P/O PCB	P/O PCB