## BoM, for kit building assembly

BT1         BATT_RTC         DigiKey         BHX1-1632-SM-ND         SMD Battery socket for CR1632         1           *         CR1632         DigiKey         P036-ND         Battery, CR1632         1           C1         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C2         1u         DigiKey         445-1589-1-ND         Non-electrolytic (Ceramic)         1           C3         2u2         DigiKey         493-2331-1-ND         Tantalum, Polarized, 10V         1           C4         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C5         1u         DigiKey         445-1589-1-ND         Non-electrolytic (Ceramic)         1           C6         47u         DigiKey         PCE3875CT-ND         Electrolytic, SMD         1           C7         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C8         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C9         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C10         22p         DigiKey         709-1172-1-ND <td< th=""><th></th><th>AMOUNT</th></td<>		AMOUNT
C1 100n DigiKey 490-1734-1-ND Decoupling Capacitor 1  C2 1u DigiKey 445-1589-1-ND Non-electrolytic (Ceramic) 1  C3 2u2 DigiKey 493-2331-1-ND Tantalum, Polarized, 10V 1  C4 100n DigiKey 490-1734-1-ND Decoupling Capacitor 1  C5 1u DigiKey 445-1589-1-ND Non-electrolytic (Ceramic) 1  C6 47u DigiKey PCE3875CT-ND Electrolytic, SMD 1  C7 100n DigiKey 490-1734-1-ND Decoupling Capacitor 1  C8 100n DigiKey 490-1734-1-ND Decoupling Capacitor 1  C9 100n DigiKey 490-1734-1-ND Decoupling Capacitor 1  C1 22p DigiKey 709-1172-1-ND Decoupling Capacitor 1	0.44	0.44
C2         1u         DigiKey         445-1589-1-ND         Non-electrolytic (Ceramic)         1           C3         2u2         DigiKey         493-2331-1-ND         Tantalum, Polarized, 10V         1           C4         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C5         1u         DigiKey         445-1589-1-ND         Non-electrolytic (Ceramic)         1           C6         47u         DigiKey         PCE3875CT-ND         Electrolytic, SMD         1           C7         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C8         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C9         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C10         22p         DigiKey         709-1172-1-ND         1	1.08	1.08
C3         2u2         DigiKey         493-2331-1-ND         Tantalum, Polarized, 10V         1           C4         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C5         1u         DigiKey         445-1589-1-ND         Non-electrolytic (Ceramic)         1           C6         47u         DigiKey         PCE3875CT-ND         Electrolytic, SMD         1           C7         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C8         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C9         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C10         22p         DigiKey         709-1172-1-ND         1	0.05	0.05
C4         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C5         1u         DigiKey         445-1589-1-ND         Non-electrolytic (Ceramic)         1           C6         47u         DigiKey         PCE3875CT-ND         Electrolytic, SMD         1           C7         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C8         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C9         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C10         22p         DigiKey         709-1172-1-ND         1	0.06	0.06
C5         1u         DigiKey         445-1589-1-ND         Non-electrolytic (Ceramic)         1           C6         47u         DigiKey         PCE3875CT-ND         Electrolytic, SMD         1           C7         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C8         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C9         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C10         22p         DigiKey         709-1172-1-ND         1	0.46	0.46
C6         47u         DigiKey         PCE3875CT-ND         Electrolytic, SMD         1           C7         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C8         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C9         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C10         22p         DigiKey         709-1172-1-ND         1	0.05	0.05
C7         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C8         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C9         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C10         22p         DigiKey         709-1172-1-ND         1	0.06	0.06
C8         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C9         100n         DigiKey         490-1734-1-ND         Decoupling Capacitor         1           C10         22p         DigiKey         709-1172-1-ND         1	0.43	0.43
C9 100n DigiKey 490-1734-1-ND Decoupling Capacitor 1 C10 22p DigiKey 709-1172-1-ND 1	0.05	0.05
C10 22p DigiKey 709-1172-1-ND 1	0.05	0.05
	0.05	0.05
C11 22p DigiKey 709-1172-1-ND 1	0.04	0.04
	0.04	0.04
D1 LED DigiKey 475-2730-1-ND LED, Green, 2mA current 1	0.19	0.19
D2 LED DigiKey 475-2730-1-ND LED, Green, 2mA current 1	0.19	0.19
D3 RB886GT2R DigiKey RB886GT2RCT-ND Schottky Diode, Vf=0.35V 1	0.46	0.46
D4 RB886GT2R DigiKey RB886GT2RCT-ND Schottky Diode, Vf=0.35V 1	0.46	0.46
IC1 ATMEGA8-AI DigiKey ATMEGA328-AU-ND Micro-controller 1	2.77	2.77
P3 BootDrive DigiKey 475-2555-1-ND Header for BootDrive 1	0.18	0.18
P4 CONN_6 DigiKey 475-2555-1-ND Buckler Interface 1	0.18	0.18
P5 CONN_6 DigiKey 475-2555-1-ND Buckler Interface 1	0.18	0.18
P6 CONN_2 DigiKey 475-2555-1-ND Ext. 9V Battery 1	0.06	0.06
P7 GPS_UP501 DigiKey 475-2555-1-ND GPS Header 1	0.18	0.18
P8 FTDI DigiKey 475-2555-1-ND FTDI <> USB Interface 1	0.18	0.18
P9 ISP DigiKey 609-3456-ND ISP Programming Interface 1	0.37	0.37
P10 CD2 DigiKey S5635-ND ChronoDot/rtcBoB connections 1	0.92	0.92
P11 CD2 DigiKey S5635-ND either P10+P12 or P11+P13 1	0.92	0.92
P12 CD1 DigiKey S5635-ND 1	0.92	0.92

P13	CD1	DigiKey	S5635-ND		1	0.92	0.92
PCB1	PCB	seeed	PCB, 2.5" x 1.2"	PCB	1	0.00	0.00
R1	10k	DigiKey	RR12P10.0KDCT-ND		1	0.11	0.11
R2	10k	DigiKey	RR12P10.0KDCT-ND		1	0.11	0.11
R3	10k	DigiKey	RR12P10.0KDCT-ND		1	0.11	0.11
R4	10k	DigiKey	RR12P10.0KDCT-ND		1	0.11	0.11
R5	1k5	DigiKey	RR12P1.5KDCT-ND		1	0.11	0.11
R6	10k	DigiKey	RR12P10.0KDCT-ND		1	0.11	0.11
R7	10k	DigiKey	RR12P10.0KDCT-ND		1	0.11	0.11
R8	1k5	DigiKey	RR12P1.5KDCT-ND		1	0.11	0.11
R9	10k	DigiKey	RR12P10.0KDCT-ND		1	0.11	0.11
SD1	SD_CARD_MICRO	DigiKey	101-00434-68-1-ND	CONN SIM+MICRO-SD 14PIN PCB GOLD	1	3.06	3.06
SW1	SW_PUSH	DigiKey	P12301SCT-ND	Reset Switch	1	0.83	0.83
U1	3V3	DigiKey	MCP1700T3302ETTCT-ND	3.3V Regulator, MCP1700T-3302E/TT	1	0.45	0.45
U2	74HC125	DigiKey	MC74HC125ADGOS-ND	Alternative P/N – 296-1192-1-ND	1	0.44	0.44
U3	5V0	DigiKey	576-2770-1-ND	5.0V Regulator, MIC5219-5.0BM5	1	1.43	1.43
U4	DS3231N	DigiKey	DS3231S#-ND	RTC	1	7.94	7.94
X1	CRYSTAL_2	DigiKey	478-6622-1-ND	16MHz Crystal, SMD	1	1.30	1.30
					46	28.33	28.33
NOT USE	D COMPONENTS					·	
B1	1/0			break out pads	1	0.00	0.00
B2	1/0			break out pads	1	0.00	0.00
B3	1/0			break out pads	1	0.00	0.00
B4	1/0			break out pads	1	0.00	0.00
B5	I/O			break out pads	1	0.00	0.00
B6	1/0			break out pads	1	0.00	0.00
B7	I/O			break out pads	1	0.00	0.00
B8	I/O			break out pads	1	0.00	0.00
B9	1/0			break out pads	1	0.00	0.00
B10	1/0			break out pads	1	0.00	0.00
B11	I/O			break out pads	1	0.00	0.00
B12	I/O			break out pads	1	0.00	0.00
B13	I/O	•		break out pads	1	0.00	0.00

B14	1/0	break out pads	1	0.00	0.00
B15	1/0	break out pads	1	0.00	0.00
B16	I/O	break out pads	1	0.00	0.00
B17	I/O	break out pads	1	0.00	0.00
B18	I/O	break out pads	1	0.00	0.00
B19	I/O	break out pads	1	0.00	0.00
P1	1/0	break out pads	1	0.00	0.00
SC1	SCREW	Mounting Hole	1	0.00	0.00
			21	0.00	0.00

## MISC. COMPONENTS

SD_CARD	http://www.te.com/catalog/bin/TE.Connect?C=1&M=BYPN&TCPN=2041021-3&RQPN=2041021-3				
35R2925	http://www.newark.com/te-connectivity/2041021-3/memory-card-connector-sd-9pos/dp/35R2925?CMP=AFC				
A101492CT-ND	http://search.digikey.com/scripts/DkSearch/dksus.dll?Detail&name=A101492CT-ND				
		0	0.00	0.00	

28.33