

5.2 Bill of Materials

Table 5-1. Bill of Materials

Qty	Part Reference	Description	Value	Tolerance	Manufacturer	Manufacturer Part Number
1	BT1	PCB Battery Holder 2xAA	2462		Keystone	2462
14	C1 C2 C3 C4 C12 C18 C19 C21 C22 C25 C26 C27 C28 C30	Ceramic Capacitor X7R	0.1 μ F	10%	Venkel	C0402X7R160-104KNE
1	C6	Ceramic Capacitor COG	10pF	0.25pF	Samsung	CL05C100CO5NNNC
1	C7	Ceramic Capacitor COG	1pF	+/- 0.25pF	Yageo America	CC0402CRNPO9BN1R0
1	C8	Ceramic Capacitor COG	10pF	5%	Venkel	C0402C0G500-100JNP
2	C9, C10	Ceramic Capacitor COG	8pF	0.25pF	Murata	GRM1555C1H8R0CB01D
4	C11 C31 C33 C34	Ceramic Capacitor X5R	1uF	10%	AVX	0805YD105KAT2A
4	C13 C14 C17 C32	Ceramic Capacitor X5R	10uF	10%	Venkel	C0805X5R100-106KNE
2	C15 C16	Ceramic Capacitor COG	22pF	5%	Venkel	C0402C0G250-220JNE
1	C20	Ceramic Capacitor X7R	10nF	10%	Venkel	C0402X7R500103KNE
3	C23 C24 C36	Ceramic Capacitor X5R	4,7uF	10%	Panasonic	ECJ2FB1C475K
2	C37 C38	Ceramic Capacitor COG	15pF	5%	Venkel	C0402C0G250-150JNP
4	D1 D2 D3 D4	SMD Power Schottky Rectifier	MBR0520LT1		On Semiconductor	MBR0520LT1G
2	F1 F2	Polyswitch Overcurrent Protection Device	500mA		Raychem	MICROSMD050F-2
2	VCC GND	Test Point Pad	TP-107-02-T		Components Corporation	TP-107-02-T
4	J1 J6 J13 J15	Single Row Straight pin Header TH 1X2	TSW-102-07-S-S		Samtec	TSW-102-07-S-S
1	J2	DC Power Jack PCB, 2mm	PJ-102AH		CUI Stack	PJ-102AH

Table 5-1. Bill of Materials (continued)

1	J3	Double Row Straight pin Header TH 2X10	TSW-110-07-S-D		Samtec	TSW-110-07-S-D
1	J4	Double Row Straight pin Header TH 2X16	TSW-116-07-S-D		Samtec	TSW-116-07-S-D
1	J5	Single Row Straight pin Header TH 1X3	HTSW-103-07-S-M-S		Samtec	HTSW-103-07-SM-S
4	J7 J8 J10 J11	Double Row Straight pin Header TH 2X8	TSW-108-07-G-D		Samtec	TSW-108-07-G-D
1	J9	Double Row Straight pin Header TH 2X3	TSW-103-07-S-D		Samtec	TSW-103-07-S-D
1	J12	USB-series "B" receptacle	USB-B		SINGATRON	2UB1505-000101
1	J14	Connector DB 9 TH	DB 9		Tyco Electronics	5747844-6
2	J16 J17	Socket TH 1X6	SSW-116-01-G-S		Samtec	SSW-116-01-G-S
4	LED1 LED2 LED3 LED4	SMD Red top led	HSMH-C190		Avago Technologies	HSMH-C190
1	LED5	SMD Green top led	597-5312-407F		Dialight	597-5312-407F
1	LS1	SMD Speaker	CMI-1240		CUI STACK	CMI-1240
1	L1 L3	HF Chip coil	1,8nH	0,3nH	TOKO,Inc	LL1005-FHL1N8S
2	L2 L4	HF Chip coil	3,9nH	0,3nH	TOKO,Inc	LL1005-FHL3N9S
1	L5	Chip Ferrite Bead	500mA		Steward	LI0603E470R-10
1	Q1	P-channel MOSFET	ZXM61P02F		Zetex	ZXM61P02F
1	Q2	NPN BJT	MMBT3904LT1G		On Semiconductor	MMBT3904LT1G
8	R1 R7 R11 R33 R34 R35 R36 R37	Fixed resistor RC31	10K	5%	SEI Electronics INC	RMCF1/16S10K5%R
8	R2 R3 R5 R6 R8 R23 R24 R30	Fixed resistor RC31	0R	5%	ROHM	MCR01MZPJ000
5	R4 R12 R13 R15 R17	Fixed resistor RC31	390R	5%	SMEC	RC73L2Z391JTF
2	R9 R14	Fixed resistor RC31	100K	5%	Panasonic	ERJ2GEJ104X
1	R10	Fixed resistor RC31	1,5K	5%	Yageo America	RC0402JR-071K5L
3	R16 R18 R26	Fixed resistor RC31	4,7K	5%	SMEC	RC73L2Z472JTF
1	R19	Fixed resistor RC31	51K	5%	Venkel	CR0402-16W-513JT
4	R20 R21 R31 R38	Fixed resistor RC31	0R	5%	ROHM	MCR01MZPJ000

Table 5-1. Bill of Materials (continued)

1	R25	Fixed resistor RC31	10R	5%	Venkel Company	CR0402-16W-100JT
1	R27	Fixed resistor RC32H	100K	1%	Koa Speer	RK73H1ETTP1003F
1	R28	SMT Potentiometer Resistor	5K	20%	Bourns	3314J-1-502E
1	R29	Fixed resistor RC32H	383K	1%	Koa Speer	RK73H1ETTP3833F
4	R42 R43 R44 R45	Fixed resistor RC31	1K	5%	Vishay Intertechnology	CRCW04021K00JNED
1	R46	Fixed resistor RC31	470K	5%	Venkel	CR0402-16W-474JT
1	SW1	Switch 4PDT TH	1-1437575-0		Tyco Electronics	1-1437575-0
4	SW2 SW3 SW4 SW5	SMD Switch SPST	EVQPHP03T		Panasonic	EVQPHP03T
1	U1	ZigBee Wireless Transceiver	MC13202		Freescale	MC13202FC
1	U2	Low Dropout Voltage Regulator	LT1129CST-3.3# PBF		Linear Technology	LT1129CST-3.3#PBF
1	U3	EEPROM 128Kx8	AT24C1024BW		Atmel	AT24C1024BW
1	U5	RS-232 UART Transceiver	MAX3318EAP		Maxim	MAX3318EAP
1	U6	Low Dropout Voltage Regulator	LM2687		National Semiconductor	LM2687MMX
1	U7	USB UART, PB-free	FT232R		FTDI	FT232RQ
1	Y1	Crystal SMD	16,00MHz	+/-10ppm	NDK	NX3225SA-16.000000MHZ
1	Y2	Crystal SMD	32,768kHz	+/-20ppm	Abracon	ABS25-32.768-12.5-2-T
1	Z1	Transformer BALUN SMD	2400MHz 50OHM		Murata	LDB212G4005C-001
1		P&E MC9S08QE128 Daughter Board	MC9S08QE128_Daughter_card		P&E	MC9S08QE128_Daughter_card
1		STN LCD Daughter Board 16x2	CFAH1602B		Crystalfontz	CFAH1602NYG-JP