

## Bill of Materials

TI DESIGNS

TIDA-00824

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint
1	1	BT1		Battery Holder for CR2032, SMT	Memory Protection Devices	BK-912		
2	1	C1	10uF	CAP, CERM, 10 µF, 10 V, +/- 20%,	TDK	C1608X5R1A106M		
3	3	C2, C6, C8	0.1uF	CAP CER 0.1UF 16V 5% X7R 0402	Murata Electronics North America	GRM155R71C104JA88D		
4	2	C3, C4	12pF	CAP, CERM, 12 pF, 25 V, +/- 5%, C0G/NP0, 0402	MuRata	GRM1555C1E120JA01D		
5	1	C5	2200pF	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0402	TDK	C1005X7R1H222K		
6	1	C7	100pF	CAP, CERM, 100 pF, 50 V, +/- 5%,	MuRata	GRM1535C1H101JDD5		
7	2	C9, C10	1uF	CAP, CERM, 1 µF, 35 V, +/- 10%,	MuRata	GRM155R6YA105KE11D		
8	2	C11, C12	1000pF	CAP, CERM, 1000 pF, 25 V, +/-	MuRata	GRM155R61E102KA01D		
9	1	D1	5V	Diode, Schottky, 5 V, 0.03 A, SOD-	Toshiba	1SS315TPH3F		
10	1	D3		LED 660NM SUPER RED DIFF 0603SMD	Lumex Opto/Components Inc	SML-LX0603SRW-TR		
11	1	J3		Connector, FPC 10 Pos.	Hirose Electric Co. Ltd.	FH12-10S-0.5SH[55]		
12	1	R1	12.1	RES, 12.1, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040212R1FKED		
13	2	R2, R3	10k	RES, 10 k, 5%, 0.063 W, 0402	Vishay-Dale	CRCW040210K0JNED		
14	1	R4	1K	RES 1K OHM 1/10W 5% 0402 SMD	Panasonic Electronic Components	ERJ-2GEJ102X		
15	1	R5	33k	RES, 33k ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW040233K0JNED		
16	4	R7, R8, R9, R10	100k	RES, 100 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402100KFKED		
17	1	\$2		0.05 A, 12V, SMD	Panasonic	EVP-ANDA1A		
18	1	U1		16 MHz Mixed Signal Microcontroller with 16 KB Flash, 512 B SRAM and 24 GPIOs, -40 to 85 degC, 32-pin QFN (RHB), Green (RoHS & no Sb/Br)	Texas Instruments	MSP430G2553IRHB32R		
19	1	U2		Ultra-Small, Low-Power, 16-Bit Analog-to-Digital Converter with Internal Reference, RUG0010A	Texas Instruments	ADS1115IRUGR		
20	1	U3		±0.1°C Precision Analog Temperature Sensor, RTD and Precision NTC Thermistor IC, YFQ0004ACAC	Texas Instruments	LMT70YFQR		
21	1	U4		ESD in 0402 Package with 10 pF	Texas Instruments	TPD1E10B06DPYR		
22	1	Y1		Crystal, 32.768kHz, 12.5pF, SMD	Epson	FC-12M 32.7680KA-A3		
23	0	J1, J2		Header, 100mil, 3x1, Gold, TH	Samtec	TSW-103-07-G-S		
24	0	R6	0	RES, 0, 5%, 0.063 W, 0402	Vishay-Dale	CRCW04020000Z0ED		

Note

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