

# Bill of Materials

TI DESIGNS

TIDA-00615

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	1	IPC81		Printed Circuit Board	Any	TIDA-00615			
2	1	C1	0.01uF	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X7R, 0402	TDK	C1005X7R1C103K		0402	
3	1	C2	0.1uF	CAP CER 0.1UF 16V 5% X7R 0402	ta Electronics North Am	GRM155R71C104JA88D		0402	
4	1	C3	1uF	CAP, CERM, 1uF, 10V, +/-10%, X5R, 0402	MuRata	GRM155R61A105KE15D		0402	
5	1	C4	0.47uF	CAP, CERM, 0.47 uF, 6.3 V, +/- 10%, X5R, 0402	MuRata	GRM155R60J474KE19D		0402	
6	1	C6	0.1uF	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0402	TDK	C1005X7R1H104K		0402	
7	1	C7	220nF	CAP, CERM, 220nF, 10V, 10%, X7R, 0402	TDK Corporation	C1005X7R1A224K050BB		0402	
8	1	C8	22uF	CAP, CERM, 22uF, 16V, +/-10%, X5R, 0805	TDK	C2012X5R1C226K125AC		0805	
9	1	C9	0.1uF	CAP CER 0.1UF 16V 5% X7R 0402	ta Electronics North Am	GRM155R71C104JA88D		0402	
10	1	C10	220nF	CAP, CERM, 220nF, 10V, 10%, X7R, 0402	TDK Corporation	C1005X7R1A224K050BB		0402	
11	1	C11	0.1uF	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0402	TDK	C1005X7R1H104K		0603	
12	1	C13	18pF	CAP, CERM, 18pF, 100V, +/-5%, COG/NPO, 0603	MuRata	GRM1885C2A180JA01D		0603	
13	1	C14	18pF	CAP, CERM, 18pF, 100V, +/-5%, COG/NPO, 0603	MuRata	GRM1885C2A180JA01D		0603	
14	1	C27	2200pF	CAP, CERM, 2200pF, 50V, +/-10%, X7R, 0603	Kemet	C0603X222K5RACTU		0603	
15	1	C30	0.1uF	CAP CER 0.1UF 16V 5% X7R 0402	ta Electronics North Am	GRM155R71C104JA88D		0402	
16	1	C31	10uF	CAP, CERM, 10uF, 10V, +/-20%, X5R, 0603	TDK	C1608X5R1A106M		0603	
17	1	C32	0.1uF	CAP CER 0.1UF 16V 5% X7R 0402	ta Electronics North Am	GRM155R71C104JA88D		0402	
18	1	C33	0.1uF	CAP CER 0.1UF 16V 5% X7R 0402	ta Electronics North Am	GRM155R71C104JA88D		0402	
19	1	C51	10uF	CAP, CERM, 10uF, 10V, +/-20%, X5R, 0603	TDK	C1608X5R1A106M		0603	
20	1	C52	0.1uF	CAP CER 0.1UF 16V 5% X7R 0402	ta Electronics North Am	GRM155R71C104JA88D		0402	
21	1	C53	2.2uF	CAP, CERM, 2.2uF, 10V, +/-10%, X5R, 0603	Kemet	C0603C225K8PACTU		0603	
22	1	CSensor0	330pF	CAP, CERM, 330pF, 50V, +/-1%, COG/NPO, 0603	TDK	C1608COG1H331F080AA		0603	
23	1	CSensor1	330pF	CAP, CERM, 330pF, 50V, +/-1%, COG/NPO, 0603	TDK	C1608COG1H331F080AA		0603	
24	1	D1	5.6V	Diode, Zener, 5.6V, 500mW, SOD-123	Diodes Inc.	MMSZ5232B-7-F		SOD-123	
25	1	D2	Green	LED, Green, SMD	OSRAM	LG L29K-G2J1-24-Z			
26	1	D3	Blue	LED, Blue, SMD	OSRAM	LB Q39G-L2N2-35-1			
27	1	D4	Red	LED, Red, SMD	Kingbright	ACSC02-41SURKWA-F01			
28	1	D5	Red	LED, Red, SMD	Kingbright	ACSC02-41SURKWA-F01			
29	1	J1		Connector, Receptacle, Micro-USB Type B, SMT	Hirose Electric Co. Ltd.	ZX62R-B-5P			
30	1	L10	10uH	Inductor, Shielded, Ferrite, 10 uH, 0.4 A, 1.38 ohm, SMD	TDK	VLS201610ET-100M			
31	1	LBL1		Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	Brady	THT-14-423-10			
32	1	R1	1.0k	RES, 1.0k ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW04021K00JNED		0402	
33	1	R2	1.0k	RES, 1.0k ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW04021K00JNED		0402	
34	1	R3	10	RES, 10.0, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040210R0FKED		0402	
35	1	R4	10	RES, 10.0, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040210R0FKED		0402	
36	1	R5	1M	RES, 1M ohm, 5%, 0.063W, 0402	Yageo	RC0402JR-071ML		0402	
37	1	R6	1.5k	RES 1.5K OHM 1/16W 5% 0402 SMD	Vishay Dale	CRCW04021K50JNED		0402	
38	1	R7	33	RES, 33 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060333R0JNEA		0603	

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39	1	R8	4.7k	RES, 4.70 k, 1%, 0.1 W, 0402	Panasonic	ERJ-2RKF4701X		0402	
40	1	R9	33	RES, 33 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060333R0JNEA		0603	
41	1	R10	4.7	RES, 4.70 k, 1%, 0.1 W, 0402	Panasonic	ERJ-2RKF4701X		0402	
42	1	R11	220	RES, 220, 5%, 0.0625 W, Resistor Array - 8x1	Panasonic	EXB-2HV221JV			
43	1	R12	220	RES, 220, 5%, 0.0625 W, Resistor Array - 8x1	Panasonic	EXB-2HV221JV			
44	1	R29	33k	RES, 33k ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW040233K0JNED		0402	
45	1	U1		Multi-Channel 12/16-Bit Inductance to Digital Converter with I2C, DNT0012B	Texas Instruments	LDC1312DNT			
46	1	U2		Mixed Signal MicroController, RGC0064B	Texas Instruments	MSP430F5528IRGC			
47	1	U3	15kV	Low-Capacitance + / - 15 kV ESD-Protection Array for High-Speed Data Interfaces, 2 Channels, -40 to +85 degC, 5-pin SOT (DRL), Green (RoHS & no Sb/Br)	Texas Instruments	TPD2E001DRLR			
48	1	U4		High Speed CMOS Logic BCD-to-7-Segment Latch / Decoder / Driver, 2 to 6 V, -55 to 125 degC, 16-pin SOP (PW16), Green (RoHS & no Sb/Br)	Texas Instruments	CD74HC4511PWR			
49	1	U5		Micropower, 150mA Low-Dropout CMOS Voltage Regulator, 5-pin SC-70, Pb-Free	Texas Instruments	LP5951MG-3.3/NOPB			
50	1	U6		High Speed CMOS Logic BCD-to-7-Segment Latch / Decoder / Driver, 2 to 6 V, -55 to 125 degC, 16-pin SOP (PW16), Green (RoHS & no Sb/Br)	Texas Instruments	CD74HC4511PWR			
51	1	Y1	24.000MHz	Crystal, 24.000MHz, 18pF, SMD	Abracon Corporation	ABM8-24.000MHZ-B2-T			
52	0	J9		Header, TH, 100mil, 2x1, Gold plated, 230 mil above insulator	Samtec, Inc.	TSW-102-07-G-S			
53	0	R20	0	RES, 0 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06030000Z0EA		0603	

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