

Bill of Materials

TI DESIGNS

TIDA-00356

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	1	!PCB1		Printed Circuit Board	Any	TIDA-00356			
2	1	BT1		Battery Holder, CR123A, TH	Keystone	1051		CR123A Battery	
3	8	C1, C6, C14, C19, C26, C29, C34, C35	0.1uF	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0402	TDK	C1005X7R1H104K050B B		0402	
4	20	C2, C3, C4, C5, C7, C8, C9, C10, C15, C16, C17, C18, C20, C21, C22, C23, C24, C25, C27, C28	2200pF	CAP, CERM, 2200pF, 6.3V, +/- 10%, X7R, 0402	MuRata	GRM155R70J222KA01D		0402	
5	1	C11	0.1uF	CAP, CERM, 0.1 µF, 10 V, +/- 10%, X7R, 0402	MuRata	GRM155R71A104KA01D		0402	
6	1	C12	1uF	CAP, CERM, 1 µF, 10 V, +/- 10%, X7R, 0402	MuRata	GRM155R61A105KE15D		0402	
7	1	C13	10uF	CAP, CERM, 10 µF, 10 V, +/- 10%, X7R, 0402	MuRata	GRM21BR71A106KE51L		0805	
8	1	C36	4.7uF	CAP, CERM, 4.7 µF, 50 V, +/- 10%, X7R, 0402	TDK	C2012X5R1H475K125A		0805	
9	1	C37	100pF	CAP, CERM, 100 pF, 50 V, +/- 10%, X7R, 0603	AVX	06035A101JAT2A		0603	
10	1	C38	1uF	CAP, CERM, 1 µF, 10 V, +/- 10%, X7R, 0603	MuRata	GRM188R71A105KA61D		0603	
11	1	C39	0.01uF	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, 0603	TDK	C1608X7R1H103K		0603	
12	1	D1	Blue	LED, Blue, SMD	Rohm	SMLP12BC7TT86		Blue LED	
13	1	D2	Green	LED, Green, SMD	Rohm	SML-P12PTT86		LED, 1x.2x.6mm	
14	1	D3	40V	Diode, Schottky, 40 V, 1 A, SOD-123	Diodes Inc.	1N5819HW-7-F		SOD-123	
15	8	D4, D5, D6, D7, D8, D9, D10, D11	White	LED, White, SMD	OSRAM	LW-E6SG		Power TOPLED	
16	1	J1		Power Jack, mini, 2.5mm OD, R/A, TH	Switchcraft	RAPC712X		Jack, 14.5x11x9mm	
17	1	J2		Header, 100mil, 3x1, Tin, TH	Sullins Connector Solutions	PEC03SAAN		Header, 3 PIN, 100mil, Tin	
18	1	J3		Header, 50mil, 2x1, Gold, TH	Sullins Connector Solutions	GRPB031VWVN-RC		Header, 3x1, 50mil, TH	
19	3	J4, J5, J7		Header, 50mil, 2x1, Gold, TH	Sullins Connector Solutions	GRPB021VWVN-RC		2x1 Header	
20	1	J6		Header, 50mil, 5x2, Gold, TH	Sullins Connector Solutions	GRPB052VWVN-RC		Header, 5x2, 50mil	
21	1	Q1	8V	MOSFET, N-CH, 8 V, 1.34 A, SOT-23	Vishay-Siliconix	SI1050X-T1-GE3		SOT-563	
22	6	R1, R3, R4, R9, R10, R13	10k	RES, 10k ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW040210K0JNED		0402	
23	1	R2	130	RES, 130, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402130RFKED		0402	
24	1	R5	200k	RES, 200 k, 1%, 0.125 W, 0805	Vishay-Dale	CRCW0805200KFKEA		0805	
25	1	R6	150k	RES, 150 k, 1%, 0.125 W, 0805	Vishay-Dale	CRCW0805150KFKEA		0805	

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26	1	R7	1.0k	RES, 1.0 k, 5%, 0.063 W, 0402	Vishay-Dale	CRCW04021K00JNED		0402	
	1	R8	180	RES, 180, 5%, 0.063 W, 0402	Vishay-Dale	CRCW0402180RJNED		0402	
	1	R11	12.1k	RES, 12.1 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060312K1FKEA		0603	
	1	R12	100k	RES, 100k ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW0805100KFKEA		0805	
	1	RV1	48 V	Varistor 48 VDC, 100 A, SMD	AVX	VC120648D101DP		1206	
	20	S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18, S20, S21		Switch, Tactile, SPST-NO, 12 V, SMD	APEM	MJTPSMWBTR		Switch, Body 6.2x6.3mm	
	20	TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, TP14, TP15, TP16, TP17, TP18, TP19, TP20, TP21, TP22	SMT	Test Point, Miniature, SMT	Keystone	5015		Testpoint_Keyst one_Miniature	
	5	U1, U2, U3, U4, U5		4-CHANNEL ESD PROTECTION ARRAY WITH 1.5-pF IO CAPACITANCE, DBV006A	Texas Instruments	TPD4E001QDBVRQ1		DBV006A	
	1	U7		Automotive Catalog Low-Capacitance +/- 15 kV ESD-Protection Array for High-Speed Data Inter, 2 Channels, -40 to +85 degC, 5-pin SOT (DRL), Green (RoHS & no Sb/Br)	Texas Instruments	TPD2E001IDRLRQ1		DRL0005A	
	1	U8		50 mA, 3 V TO 50 V, MICROPOWER, LOW-DROPOUT LINEAR REGULATOR, DGN0008B	Texas Instruments	TPS79801QDGNRQ1		DGN0008B	
	1	U9		Eight-Channel Linear LED Driver with PWM Dimming, PWP0020B	Texas Instruments	TPS92638QPWPRQ1		PWP0020B	
	1	U10			Texas Instruments	SAT0016			
	0	FID1, FID2, FID3, FID4, FID5, FID6		Fiducial mark. There is nothing to buy or mount.	N/A	N/A		Fiducial	
	0	R14	0	RES, 0, 5%, 0.063 W, 0402	Vishay-Dale	CRCW04020000Z0ED		0402	
	0	S19		Switch, Multi-directional momentary action Navigation, SMD	C&K Components	TPA511GLFS		9.3x5.0x8.0 mm	
	0	TP1	Red	Test Point, Miniature, Red, TH	Keystone	5000		Red Miniature Testpoint	
	0	TP2	White	Test Point, Miniature, White, TH	Keystone	5002		White Miniature Testpoint	

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