

Bill of Materials

TI DESIGNS
TIDA-00856

Item	Designator	Qty	Value	Part Number	Manufacturer	Description	PackageReference
1	!PCB	1		AIP041	Any	Printed Circuit Board	
2	C1	1	3900pF	GRM155R71H392KA01D	MuRata	CAP, CERM, 3900 pF, 50 V, +/- 10%, X7R, 0402	0402
3	C2	1	1000pF	GRM155R61A102KA01D	MuRata	CAP, CERM, 1000 pF, 10 V, +/- 10%, X5R, 0402	0402
4	C3, C7	2	0.1uF	GRM188R71E104KA01D	MuRata	CAP, CERM, 0.1 µF, 25 V, +/- 10%, X7R, 0603	0603
5	C4, C9, C10	3	1uF	GRM155R71C104JA88D	Murata Electronics North America	CAP CER 0.1UF 16V 5% X7R 0402	0402
6	C5	1	1000pF	GRM31B5C2J102JW01L	MuRata	CAP, CERM, 1000 pF, 630 V, +/- 5%, C0G/NPO, 1206	1206
7	C6	1	0.047uF	GRM32DR72J473KW01L	MuRata	CAP, CERM, 0.047 µF, 630 V, +/- 10%, X7R, 1210	1210
8	C8	1	10uF	GRM188R61E106MA73	MuRata	CAP, CERM, 10 µF, 25 V, +/- 20%, X5R, 0603	0603
9	C11, C17	2	10uF	0805YD106MAT2A	AVX	CAP, CERM, 10uF, 16V, +/-20%, X5R, 0805	0805
10	C12	1	1000pF	GRM155R60J102KA01D	MuRata	CAP, CERM, 1000pF, 6.3V, +/-10%, X5R, 0402	0402
11	C13	1	22pF	C0805C220KBRACTU	Kemet	CAP, CERM, 22 pF, 630 V, +/- 10%, X7R, 0805_140	0805
12	C14, C15	2	10pF	GRM1555C1H100JA01D	MuRata	CAP, CERM, 10pF, 50V, +/-5%, C0G/NPO, 0402	0402
13	C18	1	0.01uF	GRM155R71C103KA01D	MuRata	CAP, CERM, 0.01 µF, 16 V, +/- 10%, X7R, 0402	0402
14	C19	1	6800pF	GRM155R71E682KA01D	MuRata	CAP, CERM, 6800 pF, 25 V, +/- 10%, X7R, 0402	0402
15	C20, C24, C26	3	0.1uF	C1005X5R0J104K	TDK	CAP, CERM, 0.1uF, 6.3V, +/-10%, X5R, 0402	0402
16	C21	1	8200pF	GRM155R71C822KA01D	MuRata	CAP, CERM, 8200 pF, 16 V, +/- 10%, X7R, 0402	0402
17	C22, C25	2	0.22uF	GRM155C80J224KE01D	MuRata	CAP, CERM, 0.22uF, 6.3V, +/-10%, X6S, 0402	0402
18	C23	1	0.47uF	C0603C474K8RACTU	Kemet	CAP, CERM, 0.47uF, 10V, +/-10%, X7R, 0603	0603
19	D1	1	350V	MMBD3004S-7-F	Diodes Inc.	Diode, Switching, 350 V, 0.225 A, SOT-23	SOT-23
20	D2	1	5.6V	MMSZ5232B-7-F	Diodes Inc.	Diode, Zener, 5.6V, 500 mW, SOD-123	SOD-123
21	D3, D4	2		LTST-C190KGKT	Lite-On	LED, Green, SMD	SMD
22	FID1, FID2, FID3	3		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
23	H1, H2, H3, H4	4	Black	SJ61A2	3M	Bumpon, Hemisphere, 0.375 X 0.235, Black	0.375 X 0.235, Black
24	J1	1		897-43-005-00-100001	Mill-Max	Connector, USB Mini B	
25	J2	1		691214310002	Würth Elektronik eiSos	Terminal Block, 2x1, 3.81mm, 24-16 AWG, 10A, 300VAC, TH	2x1, 3.81mm
26	J3	1		1725656	Phoenix Contact	Header, 2 Pos, 6A, 63V, TH	2 Pos, TH
27	J4	1		LPPB061NGCN-RC	Sullins Connector Solutions	Receptacle, 50mil, 6x1, R/A, TH	50mil, 6x1, TH
28	JP1	1	Gold	5-146261-1	TE Connectivity	Header, 100mil, 2x1, Gold, TH	100mil, 2x1, Gold, TH
29	JP2, JP3, JP4	3	Tin	5-146278-3	TE Connectivity	Header, 100mil, 3x1, Tin, TH	100mil, 3x1, Tin, TH
30	Q1	1	600V	BSS127 H6327	Infineon Technologies	MOSFET, N-CH, 600 V, 0.021 A, SOT-23	SOT-23
31	R1	1	90.9k	CRCW040290K9FKED	Vishay-Dale	RES, 90.9 k, 1%, 0.063 W, 0402	0402
32	R2	1	49.9k	CRCW040249K9FKED	Vishay-Dale	RES, 49.9 k, 1%, 0.063 W, 0402	0402
33	R3, R5, R14, R28	4	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402, RES, 10 k, 5%, 0.063 W, 0402, RES, 10k ohm, 5%, 0.063W, 0402, RES, 10 k, 5%, 0.063 W, 0402	0402
34	R4	1	220	CRCW0402220R0JNED	Vishay-Dale	RES, 220, 5%, 0.063 W, 0402	0402
35	R6	1	100	CRCW0402100RFKED	Vishay-Dale	RES, 100 ohm, 1%, 0.063W, 0402	0402
36	R7	1	3.3k	CRCW04023K30JNED	Vishay-Dale	RES, 3.3k ohm, 5%, 0.063W, 0402	0402

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37	R8	1	1.4k	CRCW04021K40FKED	Vishay-Dale	RES, 1.40k ohm, 1%, 0.063W, 0402	0402
38	R9	1	1M	CRCW08051M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.125 W, 0805	0805
39	R10, R24	2	750k	RT0805BRD07750KL	Yageo America	RES, 750 k, 0.1%, 0.125 W, 0805	0805
40	R11, R25	2	1.24M	CRCW08051M24FKEA	Vishay-Dale	RES, 1.24 M, 1%, 0.125 W, 0805	0805
41	R12	1	1M	CRCW04021M00JNED	Vishay-Dale	RES, 1.0Meg ohm, 5%, 0.063W, 0402	0402
42	R13, R15	2	511	CRCW0402511RFKED	Vishay-Dale	RES, 511 ohm, 1%, 0.063W, 0402	0402
43	R16, R17	2	33	CRCW040233R0JNED	Vishay-Dale	RES, 33 ohm, 5%, 0.063W, 0402	0402
44	R18	1	392	CRCW0402392RFKED	Vishay-Dale	RES, 392, 1%, 0.063 W, 0402	0402
45	R19	1	9.76k	CRCW04029K76FKED	Vishay-Dale	RES, 9.76k ohm, 1%, 0.063W, 0402	0402
46	R20	1	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402
47	R21	1	69.8k	CRCW040269K8FKED	Vishay-Dale	RES, 69.8 k, 1%, 0.063 W, 0402	0402
48	R23	1	1.05M	CRCW08051M05FKEA	Vishay-Dale	RES, 1.05 M, 1%, 0.125 W, 0805	0805
49	R26	1	5.11k	CRCW04025K11FKED	Vishay-Dale	RES, 5.11 k, 1%, 0.063 W, 0402	0402
50	R27, R29	2	5.1k	CRCW08055K10JNEA	Vishay-Dale	RES, 5.1 k, 5%, 0.125 W, 0805	0805
51	SH-JP1, SH-JP2, SH-JP3, SH-JP4	4	Black	2SN-BK-G	Samtec	Shunt, 2mm, Gold plated, Black	2mm, Gold plated, Black
52	SW1, SW2	2		TL1015AF160QG	E-Switch	Switch, Tactile, SPST-NO, 0.05A, 12V, SMT	SMT
53	SW3, SW4	2		CL-SB-22B-02T	Copal Electronics	Switch, Slide, DPDT, 0.2A, GULL, 12V, SMD	SMD
54	T1	1	7uH	ATB322515-0110	TDK	Transformer, Xenon Flash, 7uH, SMT	SMD
55	TP1	1	Orange	5013	Keystone	Test Point, Multipurpose, Orange, TH	Orange
56	TP2, TP3	2	Black	5011	Keystone	Test Point, Multipurpose, Black, TH	Black
57	U1	1		TPD4E004DRY	Texas Instruments	4-CHANNEL ESD-PROTECTION ARRAY FOR HIGH-SPEED DATA INTERFACES, DRY006A	Texas Instruments
58	U2	1		DRV2700RGP	Texas Instruments	Piezo Driver with Integrated Boost Converter, RGP0020D	Texas Instruments
59	U3	1		OPA2376AIYZD	Texas Instruments	Low-Noise, Low Quiescent Current, Precision Operational Amplifier e-trim Series	Texas Instruments
60	U4	1		TLV70033DCKR	Texas Instruments	Single Output LDO, 200 mA, Fixed 3.3 V Output, 2 to 5.5 V Input, with	Texas Instruments
61	U5	1		MSP430F5510IRGZ	Texas Instruments	Mixed Signal MicroController, RGZ0048A	Texas Instruments
62	Y1	1		ABM8G-12.000MHZ-B4Y-T	Abracon Corporation	CRYSTAL 12.000MHZ 10PF SMD	SMD

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