

TIDA-01382 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC81	1		TIDA-01382	Any	Printed Circuit Board	
2	C1	1	0.1uF	C3216C0G2A104J160AC	TDK	CAP, CERM, 0.1 uF, 100 V, +/- 5%, C0G/NP0, 1206_190	1206_190
3	C2	1	0.1uF	0603YC104JAT2A	AVX	CAP, CERM, 0.1 uF, 16 V, +/- 5%, X7R, 0603	0603
4	C3	1	1uF	GRM188R71C105KA12D	MuRata	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, 0603	0603
5	C4	1	10uF	GRT188C81A106ME13D	MuRata	CAP, CERM, 10 uF, 10 V, +/- 20%, X6S, AEC-Q200 Grade 2, 0603	0603
6	C5	1	0.47uF	GRM188R71E474KA12D	MuRata	CAP, CERM, 0.47 uF, 25 V, +/- 10%, X7R, 0603	0603
7	C6	1	0.01uF	GRM188R71C103KA01D	MuRata	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X7R, 0603	0603
8	C8, C9	2	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1 uF, 25 V, +/- 5%, X7R, 0603	0603
9	C10, C16, C17, C36	4	0.1uF	C2012X7R2A104K125AA	TDK	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0805	0805
10	C11	1	3300pF	GRM188R71E332KA01D	MuRata	CAP, CERM, 3300 pF, 25 V, +/- 10%, X7R, 0603	0603
11	C12, C14, C18, C19, C26, C27, C28, C29	8	4.7uF	C3225X7S2A475K200AE	TDK	CAP, CERM, 4.7 uF, 100 V, +/- 10%, X7S, 1210	1210
12	C13	1	0.033uF	GRM216R71E333KA01D	MuRata	CAP, CERM, 0.033 uF, 25 V, +/- 10%, X7R, 0805	0805
13	C15	1	10pF	06035A100JAT2A	AVX	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
14	C20	1	2.2uF	C0805C225K4RACTU	Kemet	CAP, CERM, 2.2 uF, 16 V, +/- 10%, X7R, 0805	0805
15	C25	1	1000pF	C1608C0G2A102J080AA	TDK	CAP, CERM, 1000 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
16	C31, C33	2	0.1uF	C3216X7R2A104K160AA	TDK	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 1206	1206
17	C34	1	2.2uF	GRT188R61H225KE13D	MuRata	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X5R, AEC-Q200 Grade 3, 0603	0603
18	C35	1	0.1uF	CGA3E3X8R1H104K080AB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X8R, AEC-Q200 Grade 0, 0603	0603
19	D1	1	40V	BAT165E6327HTSA1	Infineon Technologies	Diode, Schottky, 40 V, 0.75 A, AEC-Q101, SOD-323	SOD-323
20	D2	1	100V	PDS3100Q-13	Diodes Inc.	Diode, Schottky, 100 V, 3 A, AEC-Q101, PowerDI5	PowerDI5
21	D3	1	8.2V	MMS25237BS-7-F	Diodes Inc.	Diode, Zener, 8.2 V, 200 mW, SOD-323	SOD-323
22	D5	1	100V	PMEG10030ELPX	NXP Semiconductor	Diode, Schottky, 100 V, 3 A, AEC-Q101, SOD-128	SOD-128
23	D6	1	24V	SMCJ24A	Fairchild Semiconductor	Diode, TVS, Uni, 24 V, SMC	SMC
24	H1, H3, H6, H7	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
25	H2, H4, H5, H8	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
26	J1, J3	2		1727010	Phoenix Contact	Conn Term Block, 2POS, 3.81mm, TH	2POS Terminal Block
27	J2	1		D3082-05	Harwin	1mm Uninsulated Shorting Plug, 10.16mm spacing, TH	Shorting Plug, 10.16mm spacing, TH
28	J4	1		1727023	Phoenix Contact	Terminal Block Receptacle, 3x1, 3.81mm, R/A, TH	Term Block, 3 pos
29	L1, L2	2	220 ohm	FBMH3216HM221NTV	Taiyo Yuden	Ferrite Bead, 220 ohm @ 100 MHz, 4 A, 1206	1206
30	L3	1	3.3uH	CLF7045T-3R3N	TDK	Inductor, Shielded, Ferrite, 3.3 uH, 5 A, 0.0213 ohm, SMD	Inductor, 6.2x4.5x5.9mm
31	L4	1	22uH	IHL4040DZER220M8A	Vishay-Dale	Inductor, Shielded Drum Core, Powdered Iron, 22 uH, 4.1 A, 0.0705 ohm, AEC-Q200 Grade 0, SMD	IHL4040DZ
32	L6, L7	2	600 ohm	BLM31PG601SH1L	Laird-Signal Integrity Products	Ferrite Bead, 600 ohm @ 100 MHz, 1.5 A, 1206	1206
33	NEG(-)1, POS (+)1	2	Double	1502-2	Keystone	Terminal, Turret, TH, Double	Keystone1502-2
34	Q1	1	100V	STL8N10LF3	STMicroelectronics	MOSFET, N-CH, 100 V, 20 A, AEC-Q101, 8-PowerVDFN	8-PowerVDFN
35	Q2	1	100V	DMN10H220L-7	Diodes Inc.	MOSFET, N-CH, 100 V, 1.4 A, SOT-23	SOT-23
36	Q3	1	-60V	SI7415DN-T1-GE3	Vishay-Siliconix	MOSFET, P-CH, -60 V, -3.6 A, PowerPAK 1212	PowerPAK 1212
37	R1, R22	2	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
38	R2	1	39.0k	RC0603FR-0739KL	Yageo America	RES, 39.0 k, 1%, 0.1 W, 0603	0603
39	R3	1	8.20k	RC0603FR-078K2L	Yageo America	RES, 8.20 k, 1%, 0.1 W, 0603	0603
40	R4	1	470	CRCW0603470RJNEA	Vishay-Dale	RES, 470, 5%, 0.1 W, 0603	0603
41	R5	1	158k	CRCW0603158KFKEA	Vishay-Dale	RES, 158 k, 1%, 0.1 W, 0603	0603
42	R6	1	34.0k	CRCW060334K0FKEA	Vishay-Dale	RES, 34.0 k, 1%, 0.1 W, 0603	0603
43	R7	1	20.0k	RG1608P-203-B-T5	Susumu Co Ltd	RES, 20.0 k, 0.1%, 0.1 W, 0603	0603
44	R8	1	18.0k	RG1608P-183-B-T5	Susumu Co Ltd	RES, 18.0 k, 0.1%, 0.1 W, 0603	0603
45	R9	1	2.00k	RG1608P-202-B-T5	Susumu Co Ltd	RES, 2.00 k, 0.1%, 0.1 W, 0603	0603
46	R12	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
47	R13	1	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
48	R15	1	1.0k	CRCW06031K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, 0603	0603
49	R16	1	1.43k	CRCW06031K43FKEA	Vishay-Dale	RES, 1.43 k, 1%, 0.1 W, 0603	0603
50	R17	1	10.0	CRCW120610R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.25 W, 1206	1206
51	R18	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
52	R19	1	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
53	R20	1	0.06	CSRN2010FK60L0	Stackpole Electronics Inc	RES, 0.06, 1%, 1 W, 2010	2010
54	R21	1	487k	CRCW0603487KFKEA	Vishay-Dale	RES, 487 k, 1%, 0.1 W, 0603	0603
55	R23	1	2.00k	CRCW06032K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, 0603	0603
56	R24	1	1.00k	CRCW12061K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.25 W, 1206	1206
57	R25, R27	2	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
58	R26	1	0.22	MCR25JZHFR220	Rohm	RES, 0.22, 1%, 0.5 W, 1210	1210
59	R28	1	2.0k	CRCW06032K00JNEA	Vishay-Dale	RES, 2.0 k, 5%, 0.1 W, 0603	0603
60	U1	1		TLC555QDRQ1	Texas Instruments	LinCMOS Timer, D0008A	D0008A
61	U2	1		OPA2377QDGKRQ1	Texas Instruments	Low-Cost, Low Noise, 5 MHz CMOS Operational Amplifier, 2.2 to 5.5 V, -40 to 125 degC, 8-pin SOP (DGK0008A), Green (RoHS & no Sb/Br)	DGK0008A
62	U3	1		TL431AQDBZRQ1	Texas Instruments	Automotive Catalog Adjustable Precision Shunt Regulator, 34 ppm / degC, 100 mA, -40 to 125 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A
63	U4	1		TPS92691QPWPRQ1	Texas Instruments	Multi-Topology LED Driver with Rail-to-Rail Current Sense Amplifier, PWP0016J	PWP0016J
64	C21	0	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
65	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial

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