

TIDA-01179 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB	1		TIDA-01179	Any	Printed Circuit Board	
2	C1	1	150uF	EEE-FK1H151P	Panasonic	CAP, AL, 150 uF, 50 V, +/- 20%, 0.18 ohm, SMD	SMT Radial G
3	C2, C3	2	3.3uF	GRM32DR71H335KA88L	MuRata	CAP, CERM, 3.3 uF, 50 V, +/- 10%, X7R, 1210	1210
4	C4	1	0.033uF	GRM219R71H333KA01D	MuRata	CAP, CERM, 0.033 uF, 50 V, +/- 10%, X7R, 0805	0805
5	C5, C12, C15, C21	4	0.1uF	GRM188R71E104KA01D	MuRata	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	0603
6	C6	1	100uF	EEE-FK1V101XP	Panasonic	CAP, AL, 100 uF, 35 V, +/- 20%, 0.34 ohm, SMD	SMT Radial D8
7	C7, C8, C9	3	22uF	GRM32ER71E226KE15L	MuRata	CAP, CERM, 22 uF, 25 V, +/- 10%, X7R, 1210	1210
8	C10, C11	2	0.22uF	GRM219R71E224KA01D	MuRata	CAP, CERM, 0.22 uF, 25 V, +/- 10%, X7R, 0805	0805
9	C13	1	0.1uF	GRM21BR71H104KA01L	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0805	0805
10	C14	1	0.18uF	GRM188R71E184KA88D	MuRata	CAP, CERM, 0.18 uF, 25 V, +/- 10%, X7R, 0603	0603
11	C16	1	390pF	GRM188R71H391KA01D	MuRata	CAP, CERM, 390 pF, 50 V, +/- 10%, X7R, 0603	0603
12	C17	1	100pF	GRM1885C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
13	C18	1	470pF	GCM1885C1H471JA16D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 5%, COG/NP0, AEC-Q200 Grade 1, 0603	0603
14	C19, C20	2	1uF	GRM21BR71E105KA99L	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0805	0805
15	C22	1	47uF	EEE-FK1V470P	Panasonic	CAP, AL, 47 uF, 35 V, +/- 20%, 0.36 ohm, SMD	SMT Radial D
16	C23, C24	2	10uF	GRM21BZ71E106KE15L	MuRata	CAP, CERM, 10 uF, 25 V, +/- 10%, X7R, 0805	0805
17	C25, C26	2	4.7uF	GRM21BR71E475KA73L	MuRata	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X7R, 0805	0805
18	C27, C28	2	0.047uF	GRM219R71E473KA01D	MuRata	CAP, CERM, 0.047 uF, 25 V, +/- 10%, X7R, 0805	0805
19	C29, C30, C31	3	47uF	GRM32ER61C476ME15L	MuRata	CAP, CERM, 47 uF, 16 V, +/- 20%, X5R, 1210	1210
20	C32	1	47pF	GRM1885C1H470JA01D	MuRata	CAP, CERM, 47 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
21	C33	1	680pF	GRM188R71H681KA01D	MuRata	CAP, CERM, 680 pF, 50 V, +/- 10%, X7R, 0603	0603
22	C34	1	4700pF	GCM188R71H472KA37D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
23	C35, C37, C38	3	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
24	C36	1	1uF	GRM21BR71H105KA12L	MuRata	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	0805
25	C39	1	2.2uF	C2012X7R1H225K125AC	TDK	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, 0805	0805
26	C40, C41, C42, C43	4	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, 1210	1210
27	D1	1	60V	12CWQ06FNPBF	Vishay-Semiconductor	Diode, Schottky, 60 V, 12 A, DPAK	DPAK
28	D2	1	50V	CDBU0245	Comchip Technology	Diode, Schottky, 50 V, 0.2 A, SOD-523F	SOD-523F
29	D3	1	100V	VS-12CWQ10FNPBF	Vishay-Semiconductor	Diode, Schottky, 100 V, 6 A, DPAK	DPAK
30	D4, D7	2	12V	BZT52C12T-7	Diodes Inc.	Diode, Zener, 12 V, 300 mW, SOD-523	SOD-523
31	D5, D6, D12	3	Green	150060GS75000	Würth Elektronik	LED, Green, SMD	LED_0603
32	D8	1	40V	12CWQ04FNPBF	Vishay-Semiconductor	Diode, Schottky, 40 V, 12 A, DPAK	DPAK
33	D9	1	35V	MBRD835LT4G	ON Semiconductor	Diode, Schottky, 35 V, 8 A, DPAK	DPAK
34	D10	1	60V	6CWQ06FNPBF	Vishay-Semiconductor	Diode, Schottky, 60 V, 7 A, DPAK	DPAK
35	D11	1	26V	SMBJ26A-13-F	Diodes Inc.	Diode, TVS, Uni, 26 V, 600 W, SMB	SMB
36	D13	1	14V	SMBJ14A-13-F	Diodes Inc.	Diode, TVS, Uni, 14 V, 600 W, SMB	SMB
37	H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
38	H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5" L #4-40 Nylon	Standoff
39	J1, J3	2		HTSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	Header, 100mil, 2x1, TH
40	J2, J4, J5, J6, J7, J8	6		7693	Keystone	Terminal screw, vertical, snap-in	7693
41	L1	1	12uH	MSS1583-123MEB	Coilcraft	Inductor, Drum Core, Ferrite, 12 uH, 6.3 A, 0.014 ohm, SMD	14.8x8.6x14.8mm
42	L2, L4	2	4.7uH	MSS1260-472MLB	Coilcraft	Inductor, Shielded Drum Core, Ferrite, 4.7 uH, 7 A, 0.01 ohm, SMD	MSS1260
43	L3	1	6.1uH	SRR1260A-6R1Y	Bourns	Inductor, Shielded Drum Core, Ferrite, 6.1 uH, 6.6 A, 0.017 ohm, AEC-Q200 Grade 1, SMD	12.5 x 12.5mm
44	Q1, Q2, Q3	3	60V	CSD18563Q5A	Texas Instruments	MOSFET, N-CH, 60 V, 15 A, SON 5x6mm	SON 5x6mm
45	R2	1	33.2k	CRCW080533K2FKEA	Vishay-Dale	RES, 33.2 k, 1%, 0.125 W, 0805	0805
46	R3	1	10.0	CRCW080510R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.125 W, 0805	0805
47	R4	1	100k	CRCW0805100KFKFA	Vishay-Dale	RES, 100 k, 1%, 0.125 W, 0805	0805
48	R5	1	71.5k	CRCW080571K5FKFA	Vishay-Dale	RES, 71.5 k, 1%, 0.125 W, 0805	0805
49	R6, R10	2	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
50	R7	1	7.50k	CRCW06037K50FKFA	Vishay-Dale	RES, 7.50 k, 1%, 0.1 W, 0603	0603
51	R8, R21	2	16.9k	CRCW060316K9FKFA	Vishay-Dale	RES, 16.9 k, 1%, 0.1 W, 0603	0603
52	R9	1	0.015	CRA2512-FZ-R015ELF	Bourns	RES, 0.015, 1%, 3 W, 2512	2512
53	R11, R16	2	300	CRCW1206300R.JNEA	Vishay-Dale	RES, 300, 5%, 0.25 W, 1206	1206
54	R12	1	12k	CRCW080512K0JNEA	Vishay-Dale	RES, 12 k, 5%, 0.125 W, 0805	0805
55	R13	1	2.00k	CRCW08052K00FKFA	Vishay-Dale	RES, 2.00 k, 1%, 0.125 W, 0805	0805
56	R14	1	5.11k	CRCW06035K11FKFA	Vishay-Dale	RES, 5.11 k, 1%, 0.1 W, 0603	0603
57	R15	1	10.0	CRCW060310R0FKFA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
58	R17	1	464	CRCW0603464RFKFA	Vishay-Dale	RES, 464, 1%, 0.1 W, 0603	0603
59	R19	1	825k	CRCW0805825K2FKFA	Vishay-Dale	RES, 825 k, 1%, 0.125 W, 0805	0805
60	R20	1	5.6	CRCW12065R60JNEA	Vishay-Dale	RES, 5.6, 5%, 0.25 W, 1206	1206
61	R22	1	110k	CRCW0805110KFKFA	Vishay-Dale	RES, 110 k, 1%, 0.125 W, 0805	0805
62	R23	1	249k	CRCW0603249KFKFA	Vishay-Dale	RES, 249 k, 1%, 0.1 W, 0603	0603
63	R24	1	10.0k	CRCW060310K0FKFA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
64	R25	1	53.6k	CRCW060353K6FKFA	Vishay-Dale	RES, 53.6 k, 1%, 0.1 W, 0603	0603
65	R26	1	40.2	CRCW060340R2FKFA	Vishay-Dale	RES, 40.2, 1%, 0.1 W, 0603	0603
66	R27	1	9.1k	CRCW08059K10JNEA	Vishay-Dale	RES, 9.1 k, 5%, 0.125 W, 0805	0805
67	TP1, TP4, TP9, TP10, TP11, TP13, TP17, TP18, TP19	9		5005	Keystone	Test Point, Compact, Red, TH	Red Compact Testpoint
68	TP2, TP3, TP6, TP7, TP8, TP12, TP16	7	Blue	5122	Keystone	Test Point, Compact, Blue, TH	Blue Compact Testpoint
69	TP15, TP20, TP21	3		5006	Keystone	Test Point, Compact, Black, TH	Black Compact Testpoint
70	U1	1		LM5118Q1MH/NOPB	Texas Instruments	Wide Voltage Range Buck-Boost Controller, 20-pin TSSOP-EP, Pb-Free	MXA20A
71	U2	1		TPS54540DDARQ1	Texas Instruments	4.5 V to 42 V Input, 5 A, Step Down DC-DC Converter with Eco-mode™, DDA0008E	DDA0008E
72	U3	1		LM74610QDGKRQ1	Texas Instruments	Smart Diode Controller, DGK0008A	DGK0008A
73	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
74	R1, R18, R28, R29	0	0	CRCW25120000Z0EGHP	Vishay-Dale	RES, 0, 5%, 1.5 W, AEC-Q200 Grade 0, 2512	2512

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