

TIDA-00649 REV E2 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC B1	1		TIDA-00649	Any	Printed Circuit Board	
2	C1	1	560uF	EEEEPE561UAP	Panasonic	CAP, AL, 560 µF, 25 V, +/- 20%, 0.08 ohm, AEC-Q200 Grade 2, SMD	D10xL10.2mm
3	C3, C4, C5	3	10uF	GRM21BR61A106KE19L	MuRata	CAP, CERM, 10 µF, 10 V, +/- 10%, X5R, 0805	0805
4	C6	1	1000pF	C0603C102J5GAC	Kemet	CAP, CERM, 1000 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
5	C7	1	150pF	C0603C151J5GACTU	Kemet	CAP, CERM, 150 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
6	C8, C11	2	0.1uF	C0805C104K4RACTU	Kemet	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0805	0805
7	C9	1	4.7uF	LMK212B7475KG-T	Taiyo Yuden	CAP, CERM, 4.7 µF, 10 V, +/- 10%, X7R, 0805	0805
8	C10	1	4.7uF	C0805C475K8PACTU	Kemet	CAP, CERM, 4.7 µF, 10 V, +/- 10%, X5R, 0805	0805
9	C12	1	1000uF	EEE-FC1A102P	Panasonic	CAP, AL, 1000 µF, 10 V, +/- 20%, 0.15 ohm, SMD	SMT Radial G
10	C13	1	220uF	APXE100ARA221MH70G	Chemi-Con	CAP, AL, 220 µF, 10 V, +/- 20%, 0.021 ohm, SMD	H70
11	C14	1	100uF	C1210C107M8PACTU	Würth Elektronik	CAP, CERM, 100 µF, 10 V, +/- 20%, X5R, 1210	1210
12	C15	1	22uF	JMK212BJ226MG-T	Taiyo Yuden	CAP, CERM, 22 µF, 6.3 V, +/- 20%, X5R, 0805	0805
13	C16	1	4.7uF	GRM21BR71A475KA73L	MuRata	CAP, CERM, 4.7 µF, 10 V, +/- 10%, X7R, 0805	0805
14	C18	1	0.01uF	GRM188R71H103KA01D	MuRata	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, 0603	0603
15	C19, C20	2	0.1uF	885012206046	Würth Elektronik	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0603	0603
16	D1	1	200V	DFLS1200-7	Diodes Inc.	Diode, Schottky, 200 V, 1 A, PowerDI123	PowerDI123
17	D2, D3, D4, D5	4	200V	DFLU1200-7	Diodes Inc.	Diode, Superfast Rectifier, 200 V, 1 A, AEC-Q101, PowerDI123	PowerDI123
18	D6, D9	2	40V	1N5819HW-7-F	Diodes Inc.	Diode, Schottky, 40 V, 1 A, SOD-123	SOD-123
19	D7, D8	2	5V	SMAJ5.0A-TR	STMicroelectronics	Diode, TVS, Uni, 5 V, 13.4 Vc, SMA	SMA
20	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
21	H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
22	J1, J6, J8, J9, J11, J13, J16, J19, J21, J22	10		61300211121	Würth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
23	J2	1		61300621121	Würth Elektronik	Header, 2.54mm, 3x2, Gold, TH	Header, 2.54mm, 3x2, TH
24	J3, J4, J5	3		SSW-102-01-T-S	Samtec	Receptacle, 2x1, 2.54mm, Tin, TH	Receptacle, 2x1, 2.54mm, TH
25	J7, J14	2		PEC05DAAN	Sullins Connector Solutions	Header, 100mil, 5x2, Tin, TH	Header, 5x2, 100mil, Tin
26	J10, J12, J18, J20	4		61300311121	Würth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
27	J15, J25	2		PBC02DAAN	Sullins Connector Solutions	Header, 2.54mm, 2x2, Gold, TH	Header, 2.54mm, 2x2, TH
28	J17, J24	2		61300411121	Würth Elektronik	Header, 2.54 mm, 4x1, Gold, TH	Header, 2.54mm, 4x1, TH
29	L1	1	1.5mH	SLF10145T-152MR22-PF	TDK	Inductor, Shielded Drum Core, Ferrite, 1.5 mH, 0.22 A, 3.4 ohm, SMD	SLF10145
30	L2	1	22uH	744031220	Würth Elektronik	Inductor, Shielded Drum Core, Ferrite, 22 µH, 0.36 A, 0.41 ohm, SMD	WE-TPC-S
31	L3	1	10uH	744029100	Würth Elektronik	Inductor, Shielded Drum Core, Ferrite, 10 µH, 0.5 A, 0.39 ohm, SMD	2.8 x 1.35 x 2.8mm
32	LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650"H x 0.200"W
33	Q1	1	30V	CSD17313Q2	Texas Instruments	MOSFET, N-CH, 30 V, 5 A, DQK0006C (WSON-6)	DQK0006C
34	R1, R5, R6	3	10.0	CRCW120610R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.25 W, 1206	1206
35	R2, R3, R4	3	3.32	CRCW04023R32FKED	Vishay-Dale	RES, 3.32, 1%, 0.063 W, 0402	0402
36	R7	1	5.76k	RC0603FR-075K76L	Yageo America	RES, 5.76 k, 1%, 0.1 W, 0603	0603
37	R8	1	5.23k	CRCW06035K23FKEA	Vishay-Dale	RES, 5.23 k, 1%, 0.1 W, 0603	0603
38	R9	1	57.6k	CRCW060357K6FKEA	Vishay-Dale	RES, 57.6 k, 1%, 0.1 W, 0603	0603
39	R10	1	1.02Meg	CRCW06031M02FKEA	Vishay-Dale	RES, 1.02 M, 1%, 0.1 W, 0603	0603
40	R11	1	10.0Meg	CRCW060310M0FKEA	Vishay-Dale	RES, 10.0 M, 1%, 0.1 W, 0603	0603
41	R12	1	8.87Meg	CRCW06038M87FKEA	Vishay-Dale	RES, 8.87 M, 1%, 0.1 W, 0603	0603
42	R13	1	7.50Meg	CRCW06037M50FKEA	Vishay-Dale	RES, 7.50 M, 1%, 0.1 W, 0603	0603
43	R14	1	5.76Meg	CRCW06035M76FKEA	Vishay-Dale	RES, 5.76 M, 1%, 0.1 W, 0603	0603

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44	R15	1	73.2k	CRCW060373K2FKEA	Vishay-Dale	RES, 73.2 k, 1%, 0.1 W, 0603	0603
45	R16	1	7.68Meg	CRCW06037M68FKEA	Vishay-Dale	RES, 7.68 M, 1%, 0.1 W, 0603	0603
46	R17	1	4.42Meg	CRCW06034M42FKEA	Vishay-Dale	RES, 4.42 M, 1%, 0.1 W, 0603	0603
47	R18	1	8.25Meg	CRCW06038M25FKEA	Vishay-Dale	RES, 8.25 M, 1%, 0.1 W, 0603	0603
48	R19	1	4.75Meg	CRCW06034M75FKEA	Vishay-Dale	RES, 4.75 M, 1%, 0.1 W, 0603	0603
49	R20	1	1.00Meg	CRCW06031M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.1 W, 0603	0603
50	R22, R23	2	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
51	SH-J1, SH-J2, SH-J3, SH-J4, SH-J5, SH-J6, SH-J7, SH-J8, SH-J9, SH-J10, SH-J12, SH-J14, SH-J16, SH-J20, SH-J22, SH-J25	16		60900213421	Würth Elektronik	Shunt, 2.54mm, Gold, Black	Shunt, 2.54mm, Black
52	U1	1		TLV341AIDBVR	Texas Instruments	Low-Voltage, Rail-To-Rail Output CMOS Operational Amplifier with Shutdown, 1.5 to 5.5 V, -40 to 125 degC, 6-pin SOT23 (DBV0006A), Green (RoHS & no Sb/Br)	DBV0006A
53	U2	1		BQ25570RGR	Texas Instruments	Ultra Low Power Harvester Power Management IC with Boost Charger, and Nano-Powered Buck Converter, RGR0020A	RGR0020A
54	U3	1		TS5A3160DBVR	Texas Instruments	1-Ohm SPDT ANALOG SWITCH 5-V/3.3-V SINGLE-CHANNEL 2:1 MULTIPLEXER/DEMULTIPLEXER, DBV0006A	DBV0006A
55	C2	0	100uF	GRM21BR60J107M	MuRata	CAP, CERM, 100 µF, 6.3 V, +/- 20%, X5R, 0805	0805
56	C17	0	100uF	C1210C107M8PACTU	Würth Elektronik	CAP, CERM, 100 µF, 10 V, +/- 20%, X5R, 1210	1210
57	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
58	R21	0	0	MCR03EZPJ000	Rohm	RES, 0, 5%, 0.1 W, 0603	0603

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