

TIDA-010985 REV E2 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC81	1		TIDA-010985	Any	Printed Circuit Board	
2	C1, C2, C5	3	0.22uF	C0603C224J3RAC7867	Kemet	CAP, CERM, 0.22 uF, 25 V, +/- 5%, X7R, 0603	0603
3	C3, C4	2	100pF	GRM1555C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
4	C6, C11, C15, C29	4	10uF	CL31B106KBHNNNE	Samsung	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, 1206	1206
5	C7, C10, C14	3	1uF	GCM188R71C105KA64J	MuRata	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
6	C8, C13	2	0.01uF	GRM155R71H103KA88D	MuRata	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0402	0402
7	C9, C12	2	0.1uF	GRM155R71E104KE14D	MuRata	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0402	0402
8	C16, C18	2	68pF	C1005C0G1H680J050BA	TDK	CAP, CERM, 68 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
9	C17	1	4700pF	C0603X472K5RACTU	Kemet	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, 0603	0603
10	C19, C22	2	300pF	GRM1555C1E301JA01D	MuRata	CAP, CERM, 300 pF, 25 V, +/- 5%, C0G/NP0, 0402	0402
11	C20, C21, C23, C24, C25, C26	6	2200pF	1206J2K00222KXR	Knowles Capacitors	CAP, CERM, 2200 pF, 2000 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
12	C27, C30, C35	3	0.1uF	GCM155R71H104KE02D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
13	C28	1	1uF	GCM188R71C105KA64D	MuRata	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
14	C31, C32	2	2.2uF	EMK107BB7225KA-T	Taiyo Yuden	CAP, CERM, 2.2 uF, 16 V, +/- 10%, X7R, 0603	0603
15	C33, C34	2	22uF	GRM32ER71E226KE15L	MuRata	CAP, CERM, 22 uF, 25 V, +/- 10%, X7R, 1210	1210
16	D1, D3	2	Green	150060VS75000	Würth Elektronik	LED, Green, SMD	LED_0603
17	D2	1	60V	B160-13-F	Diodes Inc.	Diode, Schottky, 60 V, 1 A, SMA	SMA
18	FB1, FB2, FB7, FB13	4		74269244182	Würth Electronics	1.8 kOhms @ 100MHz 1 Power, Signal Line Ferrite Bead 0402 (1005 Metric) 210mA 2.1Ohm	0402
19	FB8, FB9, FB10, FB11, FB12	5		BLM15EX331SN1D	Murata	Chip Ferrite Bead, 0402, 330Ω @ 100MHz, 0.205Ω, 25%, 1.1A	0402
20	FB14	1		BLM18KG102SH1D	Murata	1 kOhms @ 100MHz 1 Power Line Ferrite Bead 0603 (1608 Metric) 1A 200mOhm	0603
21	J1, J2, J4, J9	4		999-11-113-10-000000	Mill-Max	Shorting Jumper, 7.62mm, 2 Position, Gold, TH	Shorting Jumper, 7.62mm, 2 Position, Gold, TH
22	J5, J13	2		SSQ-110-03-T-D	Samtec	Receptacle, 2.54mm, 10x2, Tin, TH	10x2 Receptacle
23	J6, J7, J14	3		1888687	Phoenix Contact		HDR2
24	J10	1		FCR7350R	Cliff Electronic Components	Panel Socket, 24A, R/A, Gold, TH	Panel Socket, R/A, TH
25	J11	1		FCR7350B	Cliff Electronic Components	Panel Socket, 24A, R/A, Gold, TH	Panel Socket, R/A, TH
26	J12	1		FCR7350G	CLIFF Electronic Components	Banana Test Connector, Socket, PCB Mount, 24 A, 1 kV, Gold Plated Contacts, Green	CONN_BANANA_JAC K
27	L1	1			TDK	100µH @ 100kHz 2 Line Common Mode Choke Surface Mount 5.8 kOhms @ 10MHz 150mA DCR 20hm	SMT_4MM5_3MM2
28	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 x 0.200 inch
29	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24	24	200k	RGV3216P-2003-B-T1	Susumu	200 kOhms ±0.1% 0.25W, 1/4W Chip Resistor 1206 (3216 Metric) Anti-Sulfur, Automotive AEC-Q200, High Voltage Thin Film	1206
30	R25, R51	2	499	CRCW0603499RFKEAC	Vishay-Dale	RES, 499, 1%, 0.1 W, 0603	0603
31	R26	1	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
32	R27, R30	2	0	RCS06030000Z0EA	Vishay-Dale	RES, 0, 0%, 0.25 W, AEC-Q200 Grade 0, 0603	0603
33	R28, R29	2	59.7	RT0603DRE0759R7L	Yageo America	RES, 59.7, 0.5%, 0.1 W, 0603	0603
34	R33, R34	2	309	CRCW0402309RFKED	Vishay-Dale	RES, 309, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
35	R35, R36, R40	3	1.00k	RC0603FR-071KL	Yageo	RES, 1.00 k, 1%, 0.1 W, 0603	0603
36	R37, R38, R39, R45	4	0	RC0603JR-070RL	Yageo	RES, 0, 5%, 0.1 W, 0603	0603
37	R41	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
38	R42	1	16.9k	RT0603BRD0716K9L	Yageo America	RES, 16.9 k, 0.1%, 0.1 W, 0603	0603
39	R43	1	10.0k	RG1608P-103-B-T5	Susumu Co Ltd	RES, 10.0 k, 0.1%, 0.1 W, 0603	0603
40	R44	1	255k	CRCW0402255KFKEED	Vishay-Dale	RES, 255 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
41	R48, R49	2	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
42	RN1, RN2	2		XRES60A315QDWVRQ1	Texas Instruments	XRES60A315QDWVRQ1	SOIC-WB8
43	TP1, TP2, TP3, TP4, TP11	5		5010	Keystone Electronics	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
44	TP5, TP6, TP7, TP10, TP15	5		5011	Keystone Electronics	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
45	TP13, TP14	2		5012	Keystone Electronics	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
46	U1, U2	2		TPSI2140QDWQRQ1	Texas Instruments	Isolated Solid State Relay	SOIC11
47	U3	1		TLV9002QDRQ1	Texas Instruments	Automotive-grade, dual, 5.5-V, 1-MHz, RRIO operational amplifier for cost-optimized applications 8-SOIC -40 to 125	SOIC8
48	U4	1		ISOW1044DFM	Texas Instruments	Reinforced 5-kVRMS Isolated CAN Transceiver with Integrated lowemissions DC-DC Converter	SOIC20
49	U5, U6	2		TSM24CADBZR	Texas Instruments	±24 V Low Capacitance Surge Diode for Industrial Networks in SOT-23 Package	SOT23-3
50	U7	1		TLV431BIDBVR	Texas Instruments	Low-Voltage Adjustable Precision Shunt Regulator, 15 mA, -40 to 85 degC, 5-pin SOT-23 (DBV), Green (RoHS & no Sb/Br)	DBV0005A
51	U8	1		TPSM33620S5QRDNRQ1	Texas Instruments	Automotive, 3V to 36V Input, 1V to 7V Output, 2A, Synchronous Buck Converter Power Module, QFN-FCMOD11	QFN-FCMOD11
52	U9	1		TPS7A2033PDBVR	Texas Instruments	300-mA, Ultra-Low-Noise, Low-IQ, High PSRR LDO	SOT23-5
53	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
54	R46, R52	0	0	RC0603JR-070RL	Yageo	RES, 0, 5%, 0.1 W, 0603	0603
55	R50	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402

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