

TIDA-00901 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC81	1		TIDA-00901	Any	Printed Circuit Board	
2	C1, C2, C3	3	1uF	UMK107AB7105KA-T	Taiyo Yuden	CAP, CERM, 1 µF, 50 V, +/- 10%, X7R, 0603	0603
3	C4, C5	2	1uF	GRM21BR71H105KA12L	MuRata	CAP, CERM, 1uF, 50V, +/-10%, X7R, 0805	0805
4	C6, C7, C14, C32, C37	5	0.1uF	C1608X7R1H104K	TDK	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603
5	C8, C9, C12, C13	4	330uF	EEE-FT1H331AP	Panasonic	CAP, AL, 330 µF, 50 V, +/- 20%, 0.3 ohm, SMD	SMT Radial G
6	C10, C11	2	0.01uF	C1608X7R1H103K	TDK	CAP, CERM, 0.01uF, 50V, +/-10%, X7R, 0603	0603
7	C15, C16, C17, C18	4	0.1uF	C0603C104J4RACTU	Kemet	CAP, CERM, 0.1 µF, 16 V, +/- 5%, X7R, 0603	0603
8	C19	1	0.1uF	C0402C104K4RACAU0	Kemet	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
9	C20, C22	2	0.047uF	C0603C473K1RACTU	Kemet	CAP, CERM, 0.047uF, 100V, +/-10%, X7R, 0603	0603
10	C21, C23, C34, C41	4	1uF	C1608X7R1C105K	TDK	CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, 0603	0603
11	C24	1	4.7uF	GRM31CR71H475KA12L	MuRata	CAP, CERM, 4.7 µF, 50 V, +/- 10%, X7R, 1206	1206
12	C25, C26, C27, C36, C39, C40	6	1000pF	GRM188R71C102KA01D	MuRata	CAP, CERM, 1000pF, 16V, +/-10%, X7R, 0603	0603
13	C28, C29, C31	3	2200pF	GRM188R71C222KA01D	MuRata	CAP, CERM, 2200pF, 16V, +/-10%, X7R, 0603	0603
14	C30	1	10uF	C2012X7R1A106M125AC	TDK	CAP, CERM, 10 µF, 10 V, +/- 20%, X7R, 0805	0805
15	C33	1	10uF	C3225X7R1H106M250AC	TDK	CAP, CERM, 10 µF, 50 V, +/- 20%, X7R, 1210	1210
16	C35	1	22uF	GRM31CR71A226KE15L	MuRata	CAP, CERM, 22 µF, 10 V, +/- 10%, X7R, 1206	1206
17	C38	1	0.01uF	GRM033R71A103KA01D	MuRata	CAP, CERM, 0.01 µF, 10 V, +/- 10%, X7R, 0201	0201
18	C42	1	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 µF, 100 V, +/- 10%, X7R, 1210	1210
19	D1	1	90V	CD0603-S0180	Bourns	Diode, Switching, 90V, 0.1A, 0603 Diode	0603 Diode
20	D2	1	Red	LTST-C170KRKT	Lite-On	LED, Red, SMD	LED_0805
21	D3	1	Orange	LTST-C190KFKT	Lite-On	LED, Orange, SMD	1.6x0.8x0.8mm
22	D4	1	30V	BAT54CDW-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOT-363	SOT-363
23	J1	1		282856-2	TE Connectivity	Thermal Block, 5 mm, 2-pole, Tin, TH	TH, 2-Leads, Body 10x10mm, Pitch 5mm
24	J2	1		282856-3	TE Connectivity	Receptacle, 3x1, 5mm, R/A, TH	Receptacle, 3x1, 5mm, R/A, TH
25	J3, J4	2		CRD-081413-A-G	Major League Electronics	Receptacle, 2.54 mm, 10x2, Gold, TH	Receptacle, 2.54 mm, 10x2, TH
26	J5	1		PPTC051LFBN-RC	Sullins Connector Solutions	Receptacle, 2.54 mm, 5x1, Tin, TH	Receptacle, 5x1, 2.54mm, TH
27	L1	1	2.2uH	XAL1010-222MEB	Coilcraft	Inductor, Shielded, Composite, 2.2 µH, 32 A, 0.00255 ohm, SMD	Inductor, 11.3x10x10mm
28	L2	1	4.7uH	SPM3012T-4R7M	TDK	Inductor, Shielded, Ferrite, 4.7 µH, 1.5 A, 0.27 ohm, SMD	SMD, 2-Leads, Body 3.2x3mm
29	L3	1	600 ohm	BLM15AX601SN1D	MuRata	Ferrite Bead, 600 ohm @ 100 MHz, 0.5 A, 0402	0402
30	Q1	1	0.7V	BC846BLT1G	ON Semiconductor	Transistor, NPN, 65V, 0.1A, SOT-23	SOT-23
31	Q2, Q3, Q4, Q5, Q6, Q7	6	40V	SQJ858AEP	Vishay-Siliconix	MOSFET, N-CH, 40 V, 58 A, PowerPAK_SO-8L	PowerPAK_SO-8L
32	Q8	1	40V	SQJ422EP-T1-GE3	Vishay-Siliconix	MOSFET, N-CH, 40 V, 75 A, PowerPAK_SO-8L	PowerPAK_SO-8L
33	R1, R2, R14, R19, R21, R24, R29	7	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402
34	R3, R4, R5	3	0.007	CRE2512-FZ-R007E-3	Bourns Inc.	RES SMD 0.007 OHM 1% 3W 2512	2512
35	R6, R7, R8, R9	4	25.5k	CRCW040225K5FKED	Vishay-Dale	RES, 25.5 k, 1%, 0.063 W, 0402	0402
36	R10, R11, R12, R13	4	4.99k	CRCW04024K99FKED	Vishay-Dale	RES, 4.99 k, 1%, 0.063 W, 0402	0402
37	R15	1	0	ERJ-2GE0R00X	Panasonic	RES, 0, 5%, 0.063 W, 0402	0402
38	R16, R17, R18	3	1.0k	CRCW04021K00JNED	Vishay-Dale	RES, 1.0 k, 5%, 0.063 W, 0402	0402
39	R20	1	100	CRCW0402100RFKED	Vishay-Dale	RES, 100, 1%, 0.063 W, 0402	0402
40	R22, R23, R25	3	56	CRCW040256R0JNED	Vishay-Dale	RES, 56, 5%, 0.063 W, 0402	0402
41	R26, R27, R28	3	15k	CRCW040215K0JNED	Vishay-Dale	RES, 15 k, 5%, 0.063 W, 0402	0402
42	R30, R31	2	330	CRCW0402330R0JNED	Vishay-Dale	RES, 330, 5%, 0.063 W, 0402	0402
43	TP1, TP3	2	Black	5006	Keystone	Test Point, Compact, Black, TH	Black Compact Testpoint
44	TP2	1	Red	5005	Keystone	Test Point, Compact, Red, TH	Red Compact Testpoint
45	U2	1		LMT86QDCKRQ1	Texas Instruments	SC70 Analog Temperature Sensor with Class-AB Output, DCK0005A	DCK0005A
46	U3	1		DRV8305NPHPQ1	Texas Instruments	Three Phase Automotive Gate Driver with Three Integrated Current Shunt Amplifiers and Voltage Regulator, PHP0048G	PHP0048G
47	U4	1		LM53600NQDSXRQ1	Texas Instruments	Synchronous Buck Regulator for 650mA Space Constraint Applications, DSX0010A	DSX0010A
48	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial

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