

TIDA-010044 REV A Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB	1		TIDA-010044	Any	Printed Circuit Board	
2	C1, C14, C15	3	0.1uF	GCM21BR71H104KA37K	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
3	C2	1	4700pF	CGA3E2X7R2A472K080AA	TDK	CAP, CERM, 4700 pF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
4	C3	1	0.1uF	0603YC104JAT2A	AVX	CAP, CERM, 0.1 uF, 16 V, +/- 5%, X7R, 0603	0603
5	C4, C17, C18	3	0.1uF	06035C104JAT2A	AVX	CAP, CERM, 0.1 uF, 50 V +/- 5%, X7R, 0603	0603
6	C5	1	2200pF	1812HC222KAT1A	AVX	CAP, CERM, 2200 pF, 3000 V, +/- 10%, X7R, 1812	1812
7	C6	1	0.01uF	C0603C103J5RACTU	Kemet	CAP, CERM, 0.01 uF, 50 V, +/- 5%, X7R, 0603	0603
8	C7	1	0.47uF	C3216X7R2A474K160AA	TDK	CAP, CERM, 0.47 uF, 100 V, +/- 10%, X7R, 1206	1206
9	C8	1	2.2uF	HMK325B7225KN-T	Taiyo Yuden	CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7R, 1210	1210
10	C9	1	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
11	C10	1	22uF	GCM32ER71C226KE19L	MuRata	CAP, CERM, 22 uF, 16 V, +/- 10%, X7R, 1210	1210
12	C11	1	0.022uF	C0603C223K3RACTU	Kemet	CAP, CERM, 0.022 uF, 25 V, +/- 10%, X7R, 0603	0603
13	C13	1	4.7uF	GRM31CR71H475KA12L	MuRata	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X7R, 1206	1206
14	C16	1	2200pF	202S41W222KV4E	Johanson Technology	CAP, CERM, 2200 pF, 2000 V, +/- 10%, X7R, 1210	1210
15	D1, D4, D15	3	Blue	LB Q39G-L2N2-35-1	OSRAM	LED, Blue, SMD	BLUE 0603 LED
16	D2, D9	2	40V	BAT54AFILM	STMicroelectronics	Diode, Schottky, 40 V, 0.3 A, SOT-23	SOT-23
17	D5	1	30V	BAT54S-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOT-23	SOT-23
18	D6	1	100V	MMSD4148T1G	ON Semiconductor	Diode, Switching, 100 V, 0.2 A, SOD-123	SOD-123
19	D7	1	30V	BAT42W-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOD-123	SOD-123
20	D11	1	Red	LTST-C190CKT	Lite-On	LED, Red, SMD	Red LED, 1.6x0.8x0.8mm
21	D14	1	Green	LTST-C190KGKT	Lite-On	LED, Green, SMD	1.6x0.8x0.8mm
22	D16	1	Orange	LTST-C190KFKT	Lite-On	LED, Orange, SMD	1.6x0.8x0.8mm
23	J1, J3	2		800-10-002-10-001000	Mill-Max	Header, 100mil, 2x1, TH	Header, 2x1, 100mil, TH
24	J2	1		1792863	Phoenix Contact	Terminal Block, 5mm, 2x1, R/A, TH	Terminal Block, 5mm, 2x1, R/A, TH
25	J4	1		TSW-101-17-T-S	Samtec	Header, 100mil, 1x1, Tin, TH	2.54mm Header
26	J5	1		800-10-006-10-001000	Mill-Max	Header, 100mil, 6x1, TH	Header, 6x1, 100mil, TH
27	R1	1	4.12k	RT0603BRD074K12L	Yageo America	RES, 4.12 k, 0.1%, 0.1 W, 0603	0603
28	R2, R5	2	402	MMB02070C4020FB200	Vishay/Beyschlag	RES, 402, 1%, 1 W, AEC-Q200 Grade 0, 2.2x5.8mm	2.2x5.8mm
29	R3, R14, R15	3	10k	RC1608J103CS	Samsung Electro-Mechanics	RES, 10 k, 5%, 0.1 W, 0603	0603
30	R4	1	8.35k	PTN0603E8351BST1	Vishay Thin Film	RES, 8.35 k, 0.1%, 0.15 W, Body 64x32mil	Body 64x32mil
31	R6	1	13.8k	RT0603BRD0713K8L	Yageo America	RES, 13.8 k, 0.1%, 0.1 W, 0603	0603
32	R7	1	3.61k	RT0603BRD073K61L	Yageo America	RES, 3.61 k, 0.1%, 0.1 W, 0603	0603
33	R8	1	6.04k	RT0603DRE076K04L	Yageo America	RES, 6.04 k, 0.5%, 0.1 W, 0603	0603
34	R9, R10, R11	3	2.2k	RC0603JR-072K2L	Yageo	RES, 2.2 k, 5%, 0.1 W, 0603	0603
35	R12	1	499	MMB02070C4990FB200	Vishay/Beyschlag	RES, 499, 1%, 1 W, AEC-Q200 Grade 0, 2.2x5.8mm	2.2x5.8mm
36	R13	1	100	CMB02070X1000GB200	Vishay/Beyschlag	RES, 100, 2%, 1 W, AEC-Q200 Grade 0, 2.2x5.8mm	2.2x5.8mm
37	R16	1	7.87k	RG1608P-7871-B-T5	Susumu Co Ltd	RES, 7.87 k, 0.1%, 0.1 W, 0603	0603
38	R17	1	8.87k	RT0603BRD078K87L	Yageo America	RES, 8.87 k, 0.1%, 0.1 W, 0603	0603
39	R18	1	10.0k	TNPW060310K0BEEA	Vishay-Dale	RES, 10.0 k, 0.1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
40	R19, R22	2	2.21k	RT0603BRD072K21L	Yageo America	RES, 2.21 k, 0.1%, 0.1 W, 0603	0603
41	R20, R46, R48	3	3.3k	RC0603JR-073K3L	Yageo	RES, 3.3 k, 5%, 0.1 W, 0603	0603
42	R21, R23, R50	3	1.00k	RT0603BRD071KL	Yageo America	RES, 1.00 k, 0.1%, 0.1 W, 0603	0603
43	R26	1	18.2k	ERA-3AEB1822V	Panasonic	RES, 18.2 k, 0.1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
44	R29, R32, R34	3	0	RC0603JR-070RL	Yageo	RES, 0, 5%, 0.1 W, 0603	0603
45	R31	1	7.5k	RC0603JR-077K6L	Yageo	RES, 7.5 k, 5%, 0.1 W, 0603	0603
46	R33	1	46.4k	RC0603FR-0746K4L	Yageo	RES, 46.4 k, 1%, 0.1 W, 0603	0603
47	R35	1	499k	RC0603FR-07499KL	Yageo	RES, 499 k, 1%, 0.1 W, 0603	0603
48	R36	1	82.5k	CRCW060382K5FKEA	Vishay-Dale	RES, 82.5 k, 1%, 0.1 W, 0603	0603
49	R37	1	127k	CRCW0603127K7FKEA	Vishay-Dale	RES, 127 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
50	R38	1	13.7k	CRCW060313K7FKEA	Vishay-Dale	RES, 13.7 k, 1%, 0.1 W, 0603	0603
51	R39	1	10.0k	ERJ-3EKF1002V	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0603	0603
52	R44	1	23.7k	RC0603FR-0723K7L	Yageo	RES, 23.7 k, 1%, 0.1 W, 0603	0603
53	R51	1	5.62k	RT0603BRD075K62L	Yageo America	RES, 5.62 k, 0.1%, 0.1 W, 0603	0603
54	T1	1	80uH	750317030	Würth Elektronik	Transformer, 80 uH, SMT	10x14mm
55	TP1	1		1573-2	Keystone	Terminal, Turret, TH, Double	Keystone1573-2
56	U1	1		SN74LVC1G14DRLR	Texas Instruments	Single Schmitt-Trigger Inverter, DRL0005A, LARGE T&R	DRL0005A
57	U2	1		TVS3301DRBR	Texas Instruments	33 V Bidirectional Flat-Clamp Surge Protection Device, DRB0008A (VSON-8)	DRB0008A
58	U3	1		ISO7340FCDWR	Texas Instruments	Robust EMC, Low Power, Quad-Channel 4/0 Digital Isolator, Fail-Safe Low, DW0016B (SOIC-16)	DW0016B
59	U4, U9	2		TL431LIAQDBZR	Texas Instruments	Programmable Shunt Regulator with Optimized Reference Current, DBZ0003A (SOT-23-3)	DBZ0003A
60	U5	1		LM2901AVQPWRQ1	Texas Instruments	Automotive Catalog Quad Differential Comparator, PW0014A (TSSOP-14)	PW0014A
61	U7	1		LM25019MRX/NOPB	Texas Instruments	7.5-48V Wide Vin, 100mA Constant On-Time Synchronous Buck Regulator, DDA0008B (SOIC-8)	DDA0008B
62	U11	1		TLV76050DBZR	Texas Instruments	100-mA, 30-V, Fixed-Output, Linear-Voltage Regulator, DBZ0003A (SOT-23-3)	DBZ0003A
63	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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