Variant: 001

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TID #: N/A

## **TIDA-01358 REV A Bill of Materials**



Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB	1		TIDA-01358	Any	Printed Circuit Board	•
2	C1	1	3.3uF	C1608X5R1E335K080AC	TDK	CAP, CERM, 3.3 µF, 25 V, +/- 10%, X5R, 0603	0603
3	C2	1	0.22uF	C1005X5R1E224M050BC	TDK	CAP, CERM, 0.22 µF, 25 V, +/- 20%, X5R, 0402	0402
4	C3	1	3.3uF	C3225X7S2A335M200AB	TDK	CAP, CERM, 3.3 µF, 100 V, +/- 20%, X7S, 1210	1210
	C4	1	47pF	GRM1555C1H470FA01D	MuRata	CAP, CERM, 47 pF, 50 V, +/- 1%, C0G/NP0, 0402	0402
6	C6	1	1uF	C1005X5R1E105K050BC	TDK	CAP, CERM, 1 µF, 25 V, +/- 10%, X5R, 0402	0402
7	C7, C8	2	4.7uF	GRM155R60J475ME47D	MuRata	CAP, CERM, 4.7 µF, 6.3 V, +/- 20%, X5R, 0402	0402
8	C9	1	10uF	C0603C106M9PACTU	Kemet	CAP, CERM, 10 µF, 6.3 V, +/- 20%, X5R, 0603	0603
9	C10	1	22uF	GRM21BR60J226ME39L	MuRata	CAP, CERM, 22 μF, 6.3 V, +/- 20%, X5R, 0805	0805
10	C11	1	0.01uF	CGA2B3X7S2A103K050BB	TDK	CAP, CERM, 0.01 μF, 100 V, +/- 10%, X7S, AEC-Q200 Grade 1, 0402	0402
	C12, C13	2	22uF	EEE-FK1J220XP	Panasonic	CAP, AL, 22 µF, 63 V, +/- 20%, 1.2 ohm, AEC-Q200 Grade 2, SMD	SMT Radial D8
12	C16, C17	2	0.068uF	C1608X7S2A683K080AB	TDK	CAP, CERM, 0.068 μF, 100 V, +/- 10%, X7S, 0603	0603
13	C18	1	3300pF	GRM155R71H332KA01D	MuRata	CAP, CERM, 3300 pF, 50 V, +/- 10%, X7R, 0402	0402
14	C19	1	0.033uF	GRM155R61C333KA01D	MuRata	CAP, CERM, 0.033 µF, 16 V, +/- 10%, X5R, 0402	0402
	C20	1	100pF	CC0402KRX7R9BB101	Yageo America	CAP, CERM, 100 pF, 50 V, +/- 10%, X7R, 0402	0402
16	C21	1	4.7uF	C1005X5R1A475M050BC	TDK	CAP, CERM, 4.7 µF, 10 V, +/- 20%, X5R, 0402	0402
17	C22	1	0.1uF	GRM155R61E104KA87D	MuRata	CAP, CERM, 0.1 µF, 25 V, +/- 10%, X5R, 0402	0402
	C23	1	47uF	GRM21BR60J476ME15L	MuRata	CAP, CERM, 47 µF, 6.3 V, +/- 20%, X5R, 0805	0805
19	C24	1	22uF	GRM21BR61A226ME44L	MuRata	CAP, CERM, 22 μF, 10 V, +/- 20%, X5R, 0805	0805
	C25, C26	2	1uF	C1005X5R1A105K050BB	TDK	CAP, CERM, 1 µF, 10 V, +/- 10%, X5R, 0402	0402
21	C27, C28	2	0.1uF	160R07X104KV4T	Johanson Technology	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X5R, 0402	0402
	C29	1	0.015uF	CGA2B2X7R1E153K050BA	TDK	CAP, CERM, 0.015 μF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
23	D1	1	200V	DF1502S-T	Diodes Inc.	Diode, Switching-Bridge, 200 V, 1.5 A, DF-S	DF-S
24	D2	1	12V	MMSZ5242BS-7-F	Diodes Inc.	Diode, Zener, 12 V, 200 mW, SOD-323	SOD-323
25	D3	1	Green	150060GS75000	Wurth Elektronik	LED, Green, SMD	LED_0603
26	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
27	H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
	J1	1		ZX62WRD-B-5PC	Hirose Electric Co. Ltd.	Connector, Receptacle, Micro-USB Type B, R/A, Top Mount SMT	Micro USB-B receptacle
29	J2	1		39357-0002	Molex	Terminal Block, 3.5 mm, 2x1, Tin, TH	Terminal Block, 3.5 mm, 2x1, TH
30	J3	1		1725669	Phoenix Contact	Terminal Block, 3x1, 2.54 mm, TH	Terminal Block, 3x1, 2.54 mm, TH
31	J4	1		1725672	Phoenix Contact	Terminal Block, 4x1, 2.54 mm, Green, TH	Terminal Block, 4x1, 2.54 mm, TH
32	L1	1	100uH	DR74-101-R	Coiltronics	Inductor, Shielded Drum Core, Ferrite, 100 µH, 0.86 A, 0.383 ohm, SMD	DR74
33	L2	1	1uH	XFL3012-102MEB	Coilcraft	Inductor, Shielded, Composite, 1 µH, 2.5 A, 0.04 ohm, SMD	3x1.2x3mm
	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
35	Q1	1	60V	IRLML0060TRPBF	International Rectifier	MOSFET, N-CH, 60 V, 2.7 A, SOT-23	SOT-23
	R1	1	1.2k	ERJ-6GEYJ122V	Panasonic	RES, 1.2 k, 5%, 0.125 W, 0805	0805
37	R2	1	150k	CRCW0402150KFKED	Vishay-Dale	RES, 150 k, 1%, 0.063 W, 0402	0402
	R3	1	453k	CRCW0402453KFKED	Vishay-Dale	RES, 453 k, 1%, 0.063 W, 0402	0402
39	R4	1	100k	CRCW0402100KJNED	Vishay-Dale	RES, 100 k, 5%, 0.063 W, 0402	0402
40	R5	1	226k	CRCW0402226KFKED	Vishay-Dale	RES, 226 k, 1%, 0.063 W, 0402	0402
	R6, R9	2	33.2k	CRCW040233K2FKED	Vishay-Dale	RES, 33.2 k, 1%, 0.063 W, 0402	0402
	R7	1	2.00k	CRCW04022K00FKED	Vishay-Dale Vishay-Dale	RES, 2.00 k, 1%, 0.063 W, 0402	0402
43	R11, R12, R13, R34	4	0	ERJ-6GEY0R00V	Panasonic	RES, 0, 5%, 0.125 W, 0805	0805
					Vishay-Dale Page 1 of 2	1	•

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
45	R16	1	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402
46	R17	1	100	CRCW0402100RJNED	Vishay-Dale	RES, 100, 5%, 0.063 W, 0402	0402
47	R18	1	178k	CRCW0402178KFKED	Vishay-Dale	RES, 178 k, 1%, 0.063 W, 0402	0402
48	R19	1	249k	CRCW0402249KFKED	Vishay-Dale	RES, 249 k, 1%, 0.063 W, 0402	0402
49	R20	1	39.2k	CRCW040239K2FKED	Vishay-Dale	RES, 39.2 k, 1%, 0.063 W, 0402	0402
50	R21	1	475k	CRCW0402475KFKED	Vishay-Dale	RES, 475 k, 1%, 0.063 W, 0402	0402
51	R22	1	309k	CRCW0402309KFKED	Vishay-Dale	RES, 309 k, 1%, 0.063 W, 0402	0402
52	R23	1	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
53	R24, R25, R26		20.0k	CRCW040220K0FKED	Vishay-Dale	RES, 20.0 k, 1%, 0.063 W, 0402	0402
54	R27	1	22.1k	CRCW040222K1FKED	Vishay-Dale	RES, 22.1 k, 1%, 0.063 W, 0402	0402
55	R28	1	200k	CRCW0402200KFKED	Vishay-Dale	RES, 200 k, 1%, 0.063 W, 0402	0402
56	R29	1	1.00	CRCW04021R00FKED	Vishay-Dale	RES, 1.00, 1%, 0.063 W, 0402	0402
57	R30, R31	2	3.0k	CRCW04023K00JNED	Vishay-Dale	RES, 3.0 k, 5%, 0.063 W, 0402	0402
58	R35	1	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603
59	TP1, TP3, TP7, TP9, TP10, TP11, TP12	7		5005	Keystone	Test Point, Compact, Red, TH	Red Compact Testpoint
60	TP2, TP4, TP5, TP16, TP17	5		5007	Keystone	Test Point, Compact, White, TH	White Compact Testpoint
61	TP18, TP19	2		5006	Keystone	Test Point, Compact, Black, TH	Black Compact Testpoint
62	U1	1		TPD2E2U06DRLR	Texas Instruments	DUAL CHANNEL HIGH SPEED ESD PROTECTION DEVICE, DRL0005A	DRL0005A
63	U2	1		LM5166DRCR	Texas Instruments	3.0-V to 65-V Input, 500-mA Synchronous Buck Converter with Ultra-Low IQ. DRC0010J	DRC0010J
64	U3, U4	2		TPS27081ADDCR	Texas Instruments	1.2V - 8V, 3A PFET High Side Load Switch with Level Shift & Adjustable Slew Rate Control, DDC0006A	DDC0006A
65	U5	1		BQ24072RGTT	Texas Instruments	USB-Friendly Li-Ion Battery Charger and Power-Path Management IC, Vout 200 mV above Vbat, 4.3 V, -40 to 85 degC, 16-pin QFN (RGT), Green (RoHS & no Sb/Br)	RGT0016C
66	U6	1		TLV62080DSGR	Texas Instruments	1.2A High Efficient Step Down Converter in 2x2mm SON Package, DSG0008A	DSG0008A
67	U7	1		LM2903D	Texas Instruments	Dual Comparator, D0008A	D0008A
68	U8	1		TPD1E10B06DPYR	Texas Instruments	ESD in 0402 Package with 10 pF Capacitance and 6 V Breakdown, 1 Channel, -40 to +125 degC, 2-pin X2SON (DPY), Green (RoHS & no Sb/Br)	DPY0002A
69	C5	0	47pF	GRM1555C1H470FA01D	MuRata	CAP, CERM, 47 pF, 50 V, +/- 1%, C0G/NP0, 0402	0402
70	FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
71	R8	0	2.00k	CRCW04022K00FKED	Vishay-Dale	RES, 2.00 k, 1%, 0.063 W, 0402	0402
72	R10		5.1k	CRCW04025K10JNED	Vishay-Dale	RES, 5.1 k, 5%, 0.063 W, 0402	0402
73	R15	0	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402

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