

Variant: 001
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TIDA-010251 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB	1		TIDA-010251	Any	Printed Circuit Board	
2	C1, C11, C12	3	10uF	GRM155R61A106ME21D	MuRata	CAP, CERM, 10 uF, 10 V, +/- 20%, X5R, 0402	0402
3	C2	1	10uF	GRM155R60J106ME11	MuRata	CAP, CERM, 10 uF, 6.3 V, +/- 20%, X5R, 0402	0402
4	C3	1	0.47uF	GRM155R60J474KE19D	MuRata	CAP, CERM, 0.47 uF, 6.3 V, +/- 10%, X5R, 0402	0402
5	C4, C9, C13	3	1uF	C1608X5R1H105K080AB	TDK	CAP, CERM, 1 uF, 50 V, +/- 10%, X5R, 0603	0603
6	C5, C21, C22, C23, C24, C25, C26, C37, C38, C39, C40	11	1000pF	GCM155R71H102KA37D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
7	C6, C8	2	10uF	GRM188R6YA106MA73	Nichicon	CAP, CERM, 10 uF, 35 V, +/- 20%, X5R, 0603	0603
8	C7, C14, C17, C18, C19, C20, C36, C41	8	0.1uF	GRM155R71H104ME14D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 20%, X7R, 0402	0402
9	C10	1	0.47uF	CGA3E3X7R1H474M080AE	TDK	CAP, CERM, 0.47 uF, 50 V, +/- 20%, X7R, AEC-Q200 Grade 1, 0603	0603
10	C15, C16	2	220uF	ELXZ500ELL221M.J20S	Chemi-Con	CAP, AL, 220 uF, 50 V, +/- 20%, AEC-Q200 Grade 2, TH	D10xL20mm
11	C27, C28, C29, C33, C34, C35	6	3900pF	12061C392KAZ2A	AVX Corporation	CAP CER 3900PF 100V X7R 1206	1206
12	C30, C31, C32	3	0.01uF	GRM21BR72A103KA01L	MuRata	CAP, CERM, 0.01 uF, 100 V, +/- 10%, X7R, 0805	0805
13	D1	1	40V	ZHCS400TA	Diodes Inc.	Diode, Schottky, 40 V, 0.4 A, SOD-323	SOD-323
14	D3	1	Green	150060GS75000	Würth Elektronik	LED, Green, SMD	LED_0603
15	D5	1	Yellow	150060YS75000	Würth Elektronik	LED, Yellow, SMD	LED_0603
16	J2, J8	2		61300311121	Würth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
17	J3, J7	2		61300211121	Würth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
18	J5	1		61300411121	Würth Elektronik	Header, 2.54 mm, 4x1, Gold, TH	Header, 2.54mm, 4x1, TH
19	J6	1		61300511121	Würth Elektronik	Header, 2.54mm, 5x1, Gold, TH	Header, 2.54mm, 5x1, TH
20	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
21	Q1, Q2, Q3, Q4, Q5, Q6	6	40V	CSD18510Q5B	Texas Instruments	MOSFET, N-CH, 40 V, 42 A, DNK0008A (VSON-CLIP-8)	DNK0008A
22	Q7	1	100 V	FMMT493TA	Diodes Incorporated	TRANS NPN 100V 1A SOT23-3	SOT-23
23	R1, R10, R30, R38, R43	5	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402
24	R2	1	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 1%, 0.063 W, 0402	0402
25	R4, R5, R6, R9, R11, R12, R34	7	3.3k	CRCW04023K30JNED	Vishay-Dale	RES, 3.3 k, 5%, 0.063 W, 0402	0402
26	R7, R8	2	1.00Meg	CRCW04021M00FKED	Vishay-Dale	RES, 1.00 M, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
27	R13, R26, R27, R37, R40	5	180	CRCW0402180RJNED	Vishay-Dale	RES, 180, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
28	R14, R15, R16, R22, R23, R24	6	1.5	CRCW12061R50FKEA	Vishay-Dale	RES, 1.50, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
29	R17, R18, R19, R20, R21, R25	6	10	CRCW040210R0JNED	Vishay-Dale	RES, 10, 5%, 0.063 W, 0402	0402
30	R28, R39, R44	3	100k	ERJ-2GEJ104X	Panasonic	RES, 100 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
31	R29	1	100	RC0603FR-07100RL	Yageo	RES, 100, 1%, 0.1 W, 0603	0603
32	R31, R32	2	0.0005	WSL2512L5000FEA18	Vishay-Dale	RES, 0.0005, 1%, 2 W, 2512	2512
33	R33, R36, R41, R42, R45	5	4.7k	CRCW04024K70JNED	Vishay-Dale	RES, 4.7 k, 5%, 0.063 W, 0402	0402
34	R35	1	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
35	RT1	1		TMP6131DECR	Texas Instruments	Thermistor, DEC0002A (X1SON-2)	DEC0002A
36	U1	1		MSPM0G1507SRHB	Texas Instruments	Mixed-Signal Microcontrollers VQFN32	VQFN32
37	U2	1		DRV8328CRUYR	Texas Instruments	Three-Phase BLDC Gate Driver	VQFN28
38	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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