

Variant: 001
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TIDA-050095 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB1	1		TIDA-050095	Any	Printed Circuit Board	
2	C7, C9, C10, C11, C12	5	10µF	C3225X7R2A106K250AC	TDK	10 µF ±10% 100V Ceramic Capacitor X7R 1210 (3225 Metric)	1210
3	C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C44	24	4.7µF	C2012X5R2A475K125AC	TDK	4.7 µF ±10% 100V Ceramic Capacitor X5R 0805 (2012 Metric)	0805
4	C53, C54, C55, C56	4	470nF	GRT155R71A474KE01D	Murata	Multi-Layer Ceramic Capacitor 470nF 10V X7R ±10% 0402 Paper T/R	0402
5	C57, C58, C59, C60, C61, C62, C63, C64, C65	9	10µF	CL32B106KBJNNWE	Samsung Electro-Mechanics	CAP, CERM, 10 µF, 50 V, +/- 10%, X7R, 1210	1210
6	C66, C67, C68, C69, C120, C123, C124	7	2.2µF	C1005X5R1C225K050BC	TDK	CAP, CERM, 2.2 µF, 16 V, +/- 10%, X5R, 0402	0402
7	C70, C71, C72, C73, C93, C143, C144	7	100pF	GRM033R71E101JA01D	MuRata	CAP, CERM, 100 pF, 25 V, +/- 5%, COG/NP0, 0201	0201
8	C81, C82, C83, C84	4	0.1µF	GRM155R71C104KA88D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0402	0402
9	C89, C90, C91, C92, C113	5	1500pF	GRM033R71E152KA01D	MuRata	CAP, CERM, 1500 pF, 25 V, +/- 10%, X7R, 0201	0201
10	C94	1	470pF	GRM033R71C471KA01D	MuRata	CAP, CERM, 470 pF, 16 V, +/- 10%, X7R, 0201	0201
11	C96, C99, C102, C103, C104, C106, C109, C114	8	2.2µF	GRM033R61A225KE47D	MuRata	CAP, CERM, 2.2 µF, 10 V, +/- 10%, X5R, 0201	0201
12	C97, C98, C100, C101, C105, C126	6	0.1µF	GRM033Z71C104KE14D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0201	0201
13	C107, C108, C111	3	1000pF	GRM033R71C102KA01D	MuRata	CAP, CERM, 1000 pF, 16 V, +/- 10%, X7R, 0201	0201
14	C118	1	2.2µF	12061C225KAT2A	AVX	2.2µF @ ±10% 100V Ceramic Capacitor X7R 15% 1206 (3216 Metric)	1206
15	C119	1	100nF	06031C104K472A	KYOCERA AVX	Cap Ceramic 100nF 100V X7R 10% SMD 0603 125°C Paper T/R	0603
16	C121, C122, C125	3	10µF	GRM188R61C106KAALD	MuRata	CAP, CERM, 10 µF, 16 V, +/- 10%, X5R, 0603	0603
17	C127, C128, C129, C130, C131, C132, C133, C134, C135, C136, C137, C138, C139, C140, C141, C142	16	1µF	C1608X7R2A105K080AC	TDK	1 µF ±10% 100V Ceramic Capacitor X7R 0603 (1608 Metric)	0603
18	J1, J2, J3, J4, J5, J6, J7	7		5191-0-00-15-00-00-03-0	Mill-Max	PC Pin Terminal Connector Through Hole Gold 0.060" (1.52mm) Dia	CONN_PIN
19	J8	1		62000811121	Würth Elektronik	Header, 2 mm, 8x1, Gold, TH	Header, 2mm, 8x1, TH
20	L1, L2	2	5.4µH	ERUC23-2R8K	TDK	Unshielded 2 Coil Inductor Array Inductance - Connected in Series 5.4 µH Inductance - Connected in Parallel 1.25mOhm DC Resistance (DCR) - Parallel Nonstandard, 4 Lead	SMT_IND_26MM8_13 MM8
21	MP1, MP2	2		RM2X8MM 2701	APM Hexseal	M2 Pan Head Machine Screw Phillips Drive Stainless Steel	MACH_SCREW_PAN HEAD M2
22	Q1	1	12V	CS01D3201W10	Texas Instruments	MOSFET, N-CH, 12 V, 1.6 A, YZB0004AEAE (DSBGA-4)	YZB0004AEAE
23	R9, R11, R13, R15	4	330	RC0201JR-07330RL	Yageo America	RES, 330, 5%, 0.05 W, 0201	0201
24	R17, R18, R19, R20, R48, R52, R70	7	0	CRCW02010000Z0ED	Vishay-Dale	RES, 0, 5%, 0.05 W, 0201	0201
25	R25, R26, R27, R28, R29, R30, R31, R32	8	300µ	WSLF1206L3000FE6	Vishay	300 µOhms ±1% 5W Chip Resistor 1206 (3216 Metric) Anti-Sulfur, Current Sense, Pulse Withstanding Metal Element	1206
26	R33, R34, R35, R36, R41, R42, R43, R44	8	9.31	CRCW04029R31FKED	Vishay-Dale	RES, 9.31, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
27	R37, R38, R39, R40, R57	5	1.00k	RC0201FR-071KL	Yageo America	RES, 1.00 k, 1%, 0.05 W, 0201	0201
28	R46, R47, R59	3	100k	RC0201DR-07100KL	Yageo America	RES, 100 k, 0.5%, 0.05 W, 0201	0201
29	R49	1	3.90k	RC0201FR-073K9L	Yageo America	RES, 3.90 k, 1%, 0.05 W, 0201	0201
30	R50	1	20.0k	RC0201DR-0720KL	Yageo America	RES, 20.0 k, 0.5%, 0.05 W, 0201	0201
31	R53	1	10.0k	RC0201FR-7D10KL	Yageo America	RES, 10.0 k, 1%, 0.05 W, 0201	0201
32	R54, R55, R56, R58	4	2.20k	CRCW02012K20FKED	Vishay-Dale	RES, 2.20 k, 1%, 0.05 W, 0201	0201
33	R60	1	768k	RC0201FR-07768KL	Yageo America	RES, 768 k, 1%, 0.05 W, 0201	0201
34	R61, R62	2	100k	RC0201FR-07100KL	Yageo America	RES, 100 k, 1%, 0.05 W, 0201	0201
35	R63, R64	2	110	RC0201FR-07110RL	Yageo America	RES, 110, 1%, 0.05 W, 0201	0201
36	R65	1	16.2k	RC0201FR-0716K2L	Yageo America	RES, 16.2 k, 1%, 0.05 W, 0201	0201
37	R66, R68	2	15	RC0201FR-0715RL	Yageo America	RES, 15.0, 1%, 0.05 W, 0201	0201
38	R67	1	1.82k	RC0201FR-071K82L	Yageo America	RES, 1.82 k, 1%, 0.05 W, 0201	0201
39	R69	1	1.62k	RC0201FR-071K62L	Yageo America	RES, 1.62 k, 1%, 0.05 W, 0201	0201
40	RT1	1		TMP6131DECT	Texas Instruments	Thermistor, DEC0002A (X1SON-2)	DEC0002A
41	U5, U6, U7, U8, U9, U10, U11, U12	8		LMG3100R017	Texas Instruments	100-V, 64-A GaN With Integrated Driver	VQFN-FCRLF15
42	U14, U15, U16, U17	4		INA241A4IDDF	Texas Instruments	-4-V to 110-V, Bidirectional, Ultra-Precise Current Sense Amplifier With Enhanced PWM Rejection	SOT-23-8
43	U18	1		UCD3138ARJAT	Texas Instruments	UCD3138A Highly Integrated Digital Controller for Isolated Power 40-VQFN-40 to 125	VQFN40
44	U21	1		TMUX1104DQAR	Texas Instruments	1 Circuit IC Switch 4:1 40hm 10-USON (2.5x1)	USON10
45	U22	1		TPSM365R6V5RDNR	Texas Instruments	5-V to 65-V Input, 1-V to 13-V Output, 600-mA Synchronous Buck Converter Power Module in a HeatRod QFN Package	VQFN-HR9
46	U23	1		TPS7A2033PDBVR	Texas Instruments	300-mA, Ultra-Low-Noise, Low-IQ, High PSRR LDO	SOT23-5
47	C85, C86, C87, C88	0	0.1µF	GRM155R71C104KA88D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0402	0402
48	R45, R51	0	0	CRCW02010000Z0ED	Vishay-Dale	RES, 0, 5%, 0.05 W, 0201	0201

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