

TIDA-01407 REV B Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1	1	150uF	EEV-FK2A151M	Panasonic	CAP, AL, 150 uF, 100 V, +/- 20%, 0.17 ohm, AEC-Q200 Grade 2, SMD	SMT Radial J16
2	C2, C3, C4, C5	4	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7R, 1210	1210
3	C6, C7	2	0.1uF	GRM31CR72E104KW03L	MuRata	CAP, CERM, 0.1 uF, 250 V, +/- 10%, X7R, 1206	1206
4	C8	1	DNP	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7R, 1210	1210
5	C9	1	170nH Custom Shim	170nH Custom Shim		Inductor, Flat Wire, 680 nH, 3.5 A, 0.035 ohm, SMD	3.2x1.2x2.5mm
6	C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C22, C23, C24, C25, C26	16	22uF	GRM32ER71E226KE15L	MuRata	CAP, CERM, 22 uF, 25 V, +/- 10%, X7R, 1210	1210
7	C21	1	33uF	EKZE350ELL330ME11D	Chemi-Con	CAP, AL, 33 uF, 35 V, +/- 20%, TH	D5xL11mm
8	C27, C28	2	DNP	16TQC150MYF	Panasonic	CAP, Tantalum Polymer, 150 uF, 16 V, +/- 20%, 0.05 ohm, 7343-31 SMD	7343-31
9	C29	1	DNP	GRM1885C1H470JA01D	MuRata	CAP, CERM, 47 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
10	C30	1	330pF	GRM1885C1H331JA01D	MuRata	CAP, CERM, 330 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
11	C31	1	0.01uF	GRM188R71H103KA01D	MuRata	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0603	0603
12	C32, C33, C36, C38, C42, C44	6	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
13	C34	1	820pF	GRM1885C1H821JA01D	MuRata	CAP, CERM, 820 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
14	C35	1	0.047uF	GRM188R71H473KA61D	MuRata	CAP, CERM, 0.047 uF, 50 V, +/- 10%, X7R, 0603	0603
15	C37, C39, C40, C41, C43, C45	6	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
16	D1, D2	2	200V	ES1D-13-F	Diodes Inc.	Diode, Ultrafast, 200 V, 1 A, SMA	SMA
17	D3	1	100V	1N4148W-7-F	Diodes Inc.	Diode, Ultrafast, 100 V, 0.15 A, SOD-123	SOD-123
18	D4, D5	2	200V	DNP	Diodes Inc.	Diode, Ultrafast, 200 V, 1 A, SMA	SMA
19	J1, J2, J5, J6, J8, J10, J11	7		PPTC021LFBN-RC	Sullins Connector Solutions	Receptacle, 100mil, 2x1, Tin, TH	Receptacle, 2x1, 100mil, Tin
20	J3, J4, J7, J9	4		L35	Thomas & Betts	Connector, L Type Copper Single Conductor, TH	Connector, L Type Copper Single Conductor, TH
21	L1	1	1uH	59024	Payton	Inductor, 1 uH, 47 A, TH	20x19.5mm
22	Q1, Q4, Q5, Q6, Q7, Q8	6	80V	BSC057N08NS3 G	Infineon Technologies	MOSFET, N-CH, 80 V, 100 A, PG-TDSON-8	PG-TDSON-8
23	Q2, Q3, Q9, Q10	4	80V	BSC072N08NS5ATMA1	Infineon Technologies	MOSFET, N-CH, 80 V, 74 A, PG-TDSON-8	PG-TDSON-8
24	R1, R11, R13, R18, R24, R26	6	2.2	CRCW06032R20JNEA	Vishay-Dale	RES, 2.2, 5%, 0.1 W, 0603	0603
25	R2, R3, R4, R5	4	5.1k	CRCW25125K10JNEH	Vishay-Dale	RES, 5.1 k, 5%, 1 W, AEC-Q200 Grade 0, 2512	2512
26	R6, R8, R19, R21, R41, R42, R55, R56, R57, R58	10	0	CRCW0603000020EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
27	R7, R9, R10, R12, R14, R20, R22, R23, R25, R27, R34, R44, R45, R53, R54	15	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
28	R15	1	10.0	CRCW120610R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.25 W, 1206	1206
29	R16	1	49.9	CRCW120649R9FKEA	Vishay-Dale	RES, 49.9, 1%, 0.25 W, 1206	1206
30	R17, R36, R37, R38, R40, R43	6	DNP	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
31	R28	1	DNP	CRCW0603000020EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
32	R29	1	13.3k	CRCW060313K3FKEA	Vishay-Dale	RES, 13.3 k, 1%, 0.1 W, 0603	0603
33	R30	1	49.9	CRCW060349R9FKEA	Vishay-Dale	RES, 49.9, 1%, 0.1 W, 0603	0603
34	R31	1	10	CRCW060310R0JNEA	Vishay-Dale	RES, 10, 5%, 0.1 W, 0603	0603
35	R32	1	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
36	R33	1	18.2k	CRCW060318K2FKEA	Vishay-Dale	RES, 18.2 k, 1%, 0.1 W, 0603	0603
37	R35	1	1.96k	CRCW06031K96FKEA	Vishay-Dale	RES, 1.96 k, 1%, 0.1 W, 0603	0603
38	R39	1	19.1k	CRCW060319K1FKEA	Vishay-Dale	RES, 19.1 k, 1%, 0.1 W, 0603	0603
39	R46	1	60.4k	CRCW060360K4FKEA	Vishay-Dale	RES, 60.4 k, 1%, 0.1 W, 0603	0603
40	R47	1	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
41	R48	1	1.54k	CRCW06031K54FKEA	Vishay-Dale	RES, 1.54 k, 1%, 0.1 W, 0603	0603
42	R49, R50, R51	3	13.0k	RC0603FR-0713KL	Yageo America	RES, 13.0 k, 1%, 0.1 W, 0603	0603
43	R52	1	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603
44	T1	1		PA1005.100NL	Pulse Engineering	SMT Current Sense Tranformer	P82xx
45	T2	1		59023	Payton	Transformer, TH	31x26mm
46	TP1, TP3, TP4	3		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
47	TP2, TP5, TP6	3		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
48	U1	1		UCC28951QPWRQ1	Texas Instruments	Green Phase-Shifted Full-Bridge Controller with Synchronous Rectification with Current Mode Control, 97 % Duty Cycle, -40 to +125 degC, 24-pin TSSOP (PW), Green (RoHS & no Sb/Br)	PW0024A
49	U2, U3	2		UCC27511AQDBVRQ1	Texas Instruments	Single-Channel High-Speed Low-Side Gate Driver (with 4-A Peak Source and 8-A Peak Sink), DBV0006A (SOT-6)	DBV0006A
50	U4, U5	2		UCC27212AQDDARQ1	Texas Instruments	120-V Boot, 4-A Peak, High Frequency High-Side and Low-Side Driver, DDA0008E (SOIC-8)	DDA0008E

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