

TIDA-010058 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB	1		TIDA-010058	Any	Printed Circuit Board	
C1	1	0.22uF	ECQ-U2A224ML	Panasonic	CAP, Film, 0.22 μ F, 275 V, +/- 20%, TH	17.5x8x17.5mm
C2	1	100uF	400KXW100MEFC16X30	Rubycon	CAP, AL, 100 μ F, 400 V, +/- 20%, TH	RCAP, 16x30mm
C3	1	2.2uF	C2012X7R1H225K125AC	TDK	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, 0805	0805
C6	1	100pF	GRM1885C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
C8	1	6800pF	GRM188R71E682KA01D	MuRata	CAP, CERM, 6800 pF, 25 V, +/- 10%, X7R, 0603	0603
C10	1	2200pF	C921U222MVVDBA7317	Kemet	CAP, CERM, 2200 pF, X1 400 VAC/Y1 400 VAC, +/- 20%, Y5V, D9xL13mm	D9xL13mm
C11, C16	2	0.22uF	GCM155R71C224KE02	MuRata	CAP, CERM, 0.22 μ F, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C12, C13	2	100pF	GRM21A5C2E101JW01D	MuRata	CAP, CERM, 100 pF, 250 V, +/- 5%, COG/NP0, 0805	0805
C17, C19, C20	3	680uF	EKZE250ELL681MJ20S	Chemi-Con	CAP, AL, 680 μ F, 25 V, +/- 20%, 0.023 ohm, TH	TH, 2-Leads, Body 10x20mm, Pin Spacing 5mm
C18	1	1000uF	16ZLJ1000MCE10X16	Rubycon	CAP, AL, 1000 μ F, 16 V, +/- 20%, TH	CAPPR5-10x16
C21, C22	2	0.1uF	GCM21BR71H104KA37K	MuRata	CAP, CERM, 0.1 μ F, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
D1	1	600V	GBU4J-BP	Micro Commercial Component	Diode, P-N-Bridge, 600 V, 4 A, TH	GBU
D2	1	170V	SMBJ170A-TR	STMicroelectronics	Diode, TVS, Uni, 170 V, 600 W, SMB	SMB
D3	1	1000V	1N4007	Fairchild Semiconductor	Diode, P-N, 1000 V, 1 A, TH	DO-41
D4	1	1000V	UF4007-TP	Micro Commercial Component	Diode, Ultrafast, 1000 V, 1 A, TH	DO-41
D5	1		SB540	ON Semiconductor / Fairchild	Diode, Schottky, 40 V, 5 A, TH	
D6	1		MBRF20L120CT	Taiwan Semiconductor	Diode, Schottky, 120 V, 20 A, TH	TO-220AB
D7	1		SB540	ON Semiconductor / Fairchild	Diode, Schottky, 40 V, 5 A, TH	DO-201AD
F1	1		RST 2.5-BULK	Bel Fuse	Fuse, 2.5 A, 250 VAC, TH	8.35x7.7x4mm
H1, H2	2		531102B02500G	Aavid		
H9, H10, H11, H12	4		SJ-5303 (CLEAR)	3M	Bumpon, Hemisphere, 0.44 X 0.20, Clear	Transparent Bumpon
J1	1		1-1318301-2	TE Connectivity	Polarized Header, 7.92 mm, 2x1, Tin, TH	TH Header
J2, J3	2		691214110002	Würth Elektronik	Terminal Block, 3.5mm, 2x1, Tin, TH	Receptacle, 3.5mm, 2x1, TH
JP1, JP2, R12	3	0	CRCW12060000Z0EA	Vishay-Dale	RES, 0, 5%, 0.25 W, 1206	1206
L1	1	20mH	744823220	Würth Elektronik	Coupled inductor, 20 mH, 1.5 A, 0.27 ohm, TH	13x22x17.5mm
L2, L3, L4	3	2.2uH	7447462022	Würth Elektronik	Inductor, Unshielded Drum Core, Ferrite, 2.2 uH, 4.3 A, 0.01 ohm, TH	D6 x 8.5mm
Q1	1		TK13A65D	TOSHIBA	MOSFET, N-CH, 650 V, 13 A, TO-220FP	
R1, R2, R3	3	1.50Meg	CRCW12061M50FKEA	Vishay-Dale	RES, 1.50 M, 1%, 0.25 W, 1206	1206
R4, R5, R6	3	3.3Meg	CRCW12063M30JNEA	Vishay-Dale	RES, 3.3 M, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R7	1	10	CRCW120610R0JNEA	Vishay-Dale	RES, 10, 5%, 0.25 W, 1206	1206
R8	1	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603
R9	1	10.0	CRCW120610R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.25 W, 1206	1206
R10	1	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R11, R14	2	0.56	ERJ-8RQFR56V	Panasonic	RES, 0.56, 1%, 0.25 W, 1206	1206
R15	1	33.0k	RC0603FR-0733KL	Yageo	RES, 33.0 k, 1%, 0.1 W, 0603	0603
R16	1	4.22k	CRCW06034K22FKEA	Vishay-Dale	RES, 4.22 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R17	1	78.7k	CRCW080578K7FKEA	Vishay-Dale	RES, 78.7 k, 1%, 0.125 W, 0805	0805

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R18	1	27.0k	RR1220P-273-D	Susumu Co Ltd	RES, 27.0 k, 0.5%, 0.1 W, 0805	0805
R19, R20, R21, R22	4	30	CRCW120630R0JNEA	Vishay-Dale	RES, 30, 5%, 0.25 W, 1206	1206
R23	1	750	CRCW0603750RFKEA	Vishay-Dale	RES, 750, 1%, 0.1 W, 0603	0603
R24	1	1.0k	CRCW06031K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, 0603	0603
R25	1	470	CRCW0603470RJNEA	Vishay-Dale	RES, 470, 5%, 0.1 W, 0603	0603
R26	1	20	CRCW060320R0JNEA	Vishay-Dale	RES, 20, 5%, 0.1 W, 0603	0603
R27, R28	2	200k	CRCW0603200KFKEA	Vishay-Dale	RES, 200 k, 1%, 0.1 W, 0603	0603
RT1	1	5.0	B57235S0509M000	TDK EPCOS	Thermistor NTC, 5.0 ohm, 20%, D9.5xT6mm	
T1	1	236uH	EER28		Transformer, 236 uH, TH	EER28
U1	1		UCC28742DBVR	Texas Instruments	High-Efficiency Low-Cost Flyback Controller with Secondary-Side Regulation, DBV0006A (SOT-23-6)	DBV0006A
U2	1		TLP785	TOSHIBA	Optocoupler, 5 kV, 80-160% CTR, TH	DIP, 4-Leads, Body 6.86x4.83mm, Pitch 2.54mm
U3	1		ATL431BQDBZR	Texas Instruments	2.5V Low Iq Adjustable Precision Shunt Regulator, DBZ0003A	DBZ0003A

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