

TIDA-00709 REV E1 Bill of Materials



Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPC1	1		TIDA-00709	Any	Printed Circuit Board	
C2	1	0.1uF	B32671P6104K	TDK	CAP, Film, 0.1 µF, 630 V, +/- 10%, TH	13x5x11mm
C3	1	0.01uF	C0805W103KBRAC7800	Kemet	10000pF 630V Ceramic Capacitor X7R 0805	0805
C4, C5	2	390uF	20SEPF390M	Panasonic Electronic	CAP, AL, 390 µF, 20 V, +/- 20%, 0.014 ohm, TH	D8xL12mm
C6	1	100uF	25YXJ100M5X11	Rubycon	CAP, AL, 100 µF, 25 V, +/- 20%, TH	CAPPR2-5x11
C8	1	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1 µF, 25 V, +/- 5%, X7R, 0603	0603
C9	1	47pF	06035A470JAT2A	AVX	CAP, CERM, 47 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C10, C11	2	1uF	GRM188R61E105KA12D	MuRata	CAP, CERM, 1 µF, 25 V, +/- 10%, X5R, 0603	0603
C12, C21	2	1uF	C0603C105K3RACTU	Kemet	CAP CER 1UF 25V X7R 0603	0603
C13	1	10uF	GRM188R61E106MA73D	MuRata	CAP, CERM, 10 µF, 25 V, +/- 20%, X5R, 0603	0603
C14	1	33pF	GRM1885C1H330JA01D	MuRata	CAP, CERM, 33 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C15	1	0.1uF	C1608X7R1H104K	TDK	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
C16	1	1200pF	C1608C0G1H122J	TDK	CAP, CERM, 1200 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C17	1	0.047uF	C1608X7R1H473K	TDK	CAP, CERM, 0.047 µF, 50 V, +/- 10%, X7R, 0603	0603
C18	1	2200 pF	DE1E3KX222MN4AP01F	Kemet	CAP, CERM, 2.2 µF, 250 V, +/- 20%, Y5V, Cap 9x13mm	Cap 9x13mm
C20	1	1uF	C0603C105K3RACTU	Kemet	CAP, CERM, 1 µF, 25 V, +/- 10%, X7R, 0603	0603
C23	1	1000pF	GRM1885C1E102JA01D	MuRata	CAP, CERM, 1000 pF, 25 V, +/- 5%, C0G/NP0, 0603	0603
D1	1	160V	SMBJ160A	Fairchild Semiconductor	TVS DIODE 160VWM 259VC SMB	SMB
D2	1	1000V	STTH110UFY	STMicroelectronics	Diode Standard 1000V (1kV) 1A Surface Mount SMBflat	SMB
D3	1	150V	PMEG10020AELRX	NXP Semiconductors	DIODE SCHOTTKY 100V 2K SOD2123	SOD-123FL
D4	1	75V	1N4148WT	Fairchild Semiconductor	Diode, Switching, 75 V, 0.3 A, SOD-523F	SOD-523F
D9	1	40V	B0540WS-7	Diodes Inc.	Diode, Schottky, 40 V, 0.5 A, SOD-323	SOD-323
D10, D11	2	15V	BZT52C15-7-F	Diodes Inc.	Diode, Zener, 15 V, 370 mW, AEC-Q101, SOD-123	SOD-123
HS1	1		ATS-PCBT1093	Advanced Thermal Solutions	Heat Sink TO-220 Copper Board Level, Vertical	Heat Sink TO-220 Copper Board Level, Vertical
J1	1		1935161	Phoenix Contact	Phoenix Contact	TH, 2-Leads, Body 10x9mm, Pitch 5mm
J2	1		PEC03SBAN	Sullins Connector Solutions	Header, 100mil, 3x1, Tin, R/A, TH	Header, 3x1, RA
J4	1		PEC02SBAN	Sullins Connector Solutions	Header, 2.54 mm, 2x1, Tin, R/A, TH	Header, 2.54 mm, 2x1, R/A, TH
Q1	1	100V	CSD19531Q5A	Texas Instruments	MOSFET, N-CH, 100 V, 16 A, SON 5x6mm	SON 5x6mm
Q2	1	800V	IPU80R1K0CEBKMA1	Infineon Technologies	MOSFET N-CH 800V 5.7A TO251-3	IPAK
R1	1	47.5	CRCW080547R5FKEA	Vishay-Dale	RES, 47.5, 1%, 0.125 W, 0805	0805
R2	1	1.00Meg	CRCW06031M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.1 W, 0603	0603
R3	1	402	CRCW0603402RFKEA	Vishay-Dale	RES, 402, 1%, 0.1 W, 0603	0603
R4	1	464k	RT0603DRE07464KL	Yageo America	RES, 464 k, 0.5%, 0.1 W, 0603	0603
R5	1	1.50	CRCW06031R50FKEA	Vishay-Dale	RES, 1.50, 1%, 0.1 W, 0603	0603
R6	1	46.4k	CRCW060346K4FKEA	Vishay-Dale	RES, 46.4 k, 1%, 0.1 W, 0603	0603
R7	1	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R8	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R9	1	348k	RT0603DRE07348KL	Yageo America	RES, 348 k, 0.5%, 0.1 W, 0603	0603
R10	1	37.4k	CRCW060337K4FKEA	Vishay-Dale	RES, 37.4 k, 1%, 0.1 W, 0603	0603
R11	1	18.0k	RT0603DRE0718KL	Yageo America	RES, 18.0 k, 0.5%, 0.1 W, 0603	0603
R12	1	1.87k	CRCW06031K87FKEA	Vishay-Dale	RES, 1.87 k, 1%, 0.1 W, 0603	0603
R13, R16	2	0.25	CSR1206FKR250	Stackpole Electronics Inc	RES, 0.25, 1%, 0.5 W, 1206	1206
R14	1	20.5k	CRCW060320K5FKEA	Vishay-Dale	RES, 20.5 k, 1%, 0.1 W, 0603	0603
R15	1	22k	CRCW060322K0JNEA	Vishay-Dale	RES, 22 k, 5%, 0.1 W, 0603	0603
R17	1	47.5	CRCW060347R5FKEA	Vishay-Dale	RES, 47.5, 1%, 0.1 W, 0603	0603
R18	1	1.50k	CRCW06031K50FKEA	Vishay-Dale	RES, 1.50 k, 1%, 0.1 W, 0603	0603
R19, R20	2	84.5k	CRCW060384K5FKEA	Vishay-Dale	RES, 84.5 k, 1%, 0.1 W, 0603	0603

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R21	1	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603
R22	1	200k	CRCW0603200KFKEA	Vishay-Dale	RES, 200 k, 1%, 0.1 W, 0603	0603
R23	1	44.2k	CRCW060344K2FKEA	Vishay-Dale	RES, 44.2 k, 1%, 0.1 W, 0603	0603
R24	1	43.2k	CRCW060343K2FKEA	Vishay-Dale	RES, 43.2 k, 1%, 0.1 W, 0603	0603
T1	1		750343306R01	WURTH ELECTRONIK	TRANSFORMER, TH	
U1	1		UCC24636DBV	Texas Instruments	Sync. Rectifier Controller	DBV0006A
U2	1		UCC28740DR	Texas Instruments	Constant-Voltage, Constant-Current Flyback Controller Using Opto-Coupler Feedback, D0007A	D0007A
U3	1		LTV-817	Lite-On	Optocoupler, 5 kV, 50-600% CTR, TH-4	DIP-4
U4	1		ATL431BQDBZR	Texas Instruments	2.5V Low Iq Adjustable Precision Shunt Regulator, DBZ0003A	DBZ0003A
U5	1		TPS259241DRCR	Texas Instruments	12-V eFuse with Over Voltage Protection and Blocking FET Control, DRC0010J	DRC0010J
FID1, FID2	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial

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