

TIDA-01558 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPCB	1		TIDA-01558	Any	Printed Circuit Board	
C1, C12, C13	3	120uF	127AVG050MFBJ	Illinois Capacitor	CAP, AL, 120 μ F, 50 V, +/- 20%, TH	D8xL11.5
C2, C3, C5, C7, C14, C24, C27, C28	8	10uF	C3225X7R1H106M250AC	TDK	CAP, CERM, 10 μ F, 50 V, +/- 20%, X7R, 1210	1210
C4, C15	2	0.22uF	06033D224KAT2A	AVX	CAP, CERM, 0.22 μ F, 25 V, +/- 10%, X5R, 0603	0603
C8	1	4700pF	GRM188R71E472KA01D	MuRata	CAP, CERM, 4700 pF, 25 V, +/- 10%, X7R, 0603	0603
C9	1	470pF	C0603C471K3RACTU	Kemet	CAP, CERM, 470 pF, 25 V, +/- 10%, X7R, 0603	0603
C10	1	390pF	06035A391JAT2A	AVX	CAP, CERM, 390 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C11	1	0.047uF	06033C473JAT2A	AVX	CAP, CERM, 0.047 μ F, 25 V, +/- 5%, X7R, 0603	0603
C16, C20	2	1uF	06033C105KAT2A	AVX	CAP, CERM, 1 μ F, 25 V, +/- 10%, X7R, 0603	0603
C17, C19	2	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1 μ F, 50 V, +/- 10%, X7R, 0603	0603
C18	1	0.047uF	GRM31M5C1H473JA01L	MuRata	CAP, CERM, 0.047 μ F, 50 V, +/- 5%, C0G/NP0, 1206	1206
C23	1	0.47uF	GRM188R71E474KA12D	MuRata	CAP, CERM, 0.47 μ F, 25 V, +/- 10%, X7R, 0603	0603
C25, C26	2	0.1uF	06033C104KAT2A	AVX	CAP, CERM, 0.1 μ F, 25 V, +/- 10%, X7R, 0603	0603
D1	1	60V	MBR10U60-TP	Micro Commercial Co	DIODE SCHOTTKY 60V 10A TO277	TO-277A
D2, D4	2	60V	PMEG6010CEJ,115	Nexperia	Diode, Schottky, 60 V, 1 A, SOD-323F	SOD-323F
D3	1	7.5V	SMAJ5922B-TP	Micro Commercial Co	DIODE ZENER 7.5V 1.5W DO214AC	SMA
D5	1	8.2V	MM3Z8V2T1G	On Semi	Diode, Zener, 8.7 V, 200 mW, SOD-323	SOD-323
D6	1	75V	1N4448WX-TP	Micro Commercial Component	Diode, Switching, 75 V, 0.25 A, SOD-323	SOD-323
D7	1	60V	TSN520M60 S3G	Taiwan Semiconductor	Diode, Schottky, 60 V, 20 A, AEC-Q101, PDFN56	PDFN56
H13	1		7-340-2PP-BA	CTS Thermal Management Pr	Heatsink, TO-220, Black Anodized	Heat Sink, TO-220
J1, J2	2		691134710002	Würth Elektronik	WR-TBL Serie 1347 - 5.00 mm Horizontal Cable Entry with Pressure Clamp, 02p	
L1	1	6.8uH	SER2915H-682KL	Coilcraft	Inductor, Shielded E Core, Ferrite, 6.8uH, 30A, 0.00186 ohm, SMD	SER29xx
L2	1	18uH	RLB9012-180KL	BOURNS	INDUCTOR, FIXED, 18uH, 10%, 2.66A, 11MHz, TH, 2-PIN	
L3	1	600 ohm	BLM18KG601SN1D	MuRata	Ferrite Bead, 600 ohm @ 100 MHz, 1.3 A, 0603	0603
Q1, Q2	2	60V	CSD18532KCS	Texas Instruments	MOSFET, N-CH, 60 V, 100 A, KCS0003B (TO-220-3)	KCS0003B
R1	1	0.002	CRE2512-FZ-R002E-3	Bourns Inc.	RES SMD 2 MOHM 1% 3W 2512	2512
R2	1	0.1	CRM1206-FX-R100ELF	Bourns	RES, 0.1, 1%, 0.5 W, 1206	1206
R3	1	20.0	RC0603FR-0720RL	Yageo America	RES, 20.0, 1%, 0.1 W, 0603	0603
R5	1	309k	RT0603BRD07309KL	Yageo America	RES, 309 k, 0.1%, 0.1 W, 0603	0603
R6	1	49.3k	RT0603DRE0749K3L	Yageo America	RES, 49.3 k, 0.5%, 0.1 W, 0603	0603
R7, R11, R14, R18	4	10.0k	ERJ-3EKF1002V	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R8, R19	2	2.20	RC0805FR-072R2L	Yageo America	RES, 2.20, 1%, 0.125 W, 0805	0805
R9	1	576k	RT0603DRE07576KL	Yageo America	RES, 576 k, 0.5%, 0.1 W, 0603	0603
R10	1	6.98k	RT0603DRE076K98L	Yageo America	RES, 6.98 k, 0.5%, 0.1 W, 0603	0603
R12	1	237k	RT0603BRD07237KL	Yageo America	RES, 237 k, 0.1%, 0.1 W, 0603	0603
R13	1	2.20	ERJ-8RQF2R2V	Panasonic	RES, 2.20, 1%, 0.25 W, 1206	1206
R15	1	110k	RT0603DRE07110KL	Yageo America	RES, 110 k, 0.5%, 0.1 W, 0603	0603
R16, R26, R28	3	15.0k	RT0603BRD0715KL	Yageo America	RES, 15.0 k, 0.1%, 0.1 W, 0603	0603
R17, R23	2	5.11k	RG1608P-5111-B-T5	Susumu Co Ltd	RES, 5.11 k, 0.1%, 0.1 W, 0603	0603
R20	1	549k	RC0603FR-07549KL	Yageo America	RES, 549 k, 1%, 0.1 W, 0603	0603
R22, R25, R34, R35	4	1.50k	RT0603BRD071K5L	Yageo America	RES, 1.50 k, 0.1%, 0.1 W, 0603	0603
R27	1	2.00k	RT0603BRD072KL	Yageo America	RES, 2.00 k, 0.1%, 0.1 W, 0603	0603

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R30	1	5.05k	RT0603BRD075K05L	Yageo America	RES, 5.05 k, 0.1%, 0.1 W, 0603	0603
R32	1	154k	RT0603DRE07154KL	Yageo America	RES, 154 k, 0.5%, 0.1 W, 0603	0603
U1	1		LMR14020SDDAR	Texas Instruments	SIMPLE SWITCHER, 4V to 40V, 2A 2.2MHz Step-Down Regulator with Low IQ, DDA0008E (SOIC-8)	DDA0008E
U2	1		TPS43060RTER	Texas Instruments	Low Iq, Synchronous Boost Controller with Wide Input Voltage and 7.5V Gate Drive for Standard FETs, RTE0016E (WQFN-16)	RTE0016E
U3	1		TLV70450DBVT	Texas Instruments	Single Output LDO, 150 mA, Fixed 5 V Output, 2.5 to 24 V Input, with Ultra Low IQ, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A
U4	1		LM293AD	Texas Instruments	Dual Comparator, D0008A	D0008A
U5	1		LM358AD	Texas Instruments	Dual Low Power Op Amp, D0008A	D0008A

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