

TIDA-01183 REV B Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPC1B1	1		TIDA-01183	Any	Printed Circuit Board	
C1	1	0.1uF	C3216C0G2A104J160AC	TDK	CAP, CERM, 0.1 μF, 100 V, +/- 5%, C0G/NP0, 1206_190	1206_190
C2	1	0.1uF	0603YC104JAT2A	AVX	CAP, CERM, 0.1 μF, 16 V, +/- 5%, X7R, 0603	0603
C3	1	1uF	GRM188R71C105KA12D	MuRata	CAP, CERM, 1 μF, 16 V, +/- 10%, X7R, 0603	0603
C4	1	4.7uF	GRM188R61C475KAAJ	MuRata	CAP, CERM, 4.7 μF, 16 V, +/- 10%, X5R, 0603	0603
C5	1	0.47uF	GRM188R71E474KA12D	MuRata	CAP, CERM, 0.47 μF, 25 V, +/- 10%, X7R, 0603	0603
C6	1	0.01uF	GRM188R71C103KA01D	MuRata	CAP, CERM, 0.01 μF, 16 V, +/- 10%, X7R, 0603	0603
C7, C8, C9	3	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1 μF, 25 V, +/- 5%, X7R, 0603	0603
C10, C16, C17	3	0.1uF	C2012X7R2A104K125AA	TDK	CAP, CERM, 0.1 μF, 100 V, +/- 10%, X7R, 0805	0805
C11	1	3300pF	GRM188R71E332KA01D	MuRata	CAP, CERM, 3300 pF, 25 V, +/- 10%, X7R, 0603	0603
C12, C14, C18, C19, C26, C27, C28, C29	8	4.7uF	C3225X7S2A475K200AE	TDK	CAP, CERM, 4.7 μF, 100 V, +/- 10%, X7S, 1210	1210
C13	1	0.033uF	GRM216R71E333KA01D	MuRata	CAP, CERM, 0.033 μF, 25 V, +/- 10%, X7R, 0805	0805
C15	1	10pF	06035A100JAT2A	AVX	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C20	1	2.2uF	C0805C225K4RACTU	Kemet	CAP, CERM, 2.2 μF, 16 V, +/- 10%, X7R, 0805	0805
C23, C24	2	0.01uF	CGA3E2X7R2A103K080AA	TDK	CAP, CERM, 0.01 μF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C25	1	1000pF	C1608C0G2A102J080AA	TDK	CAP, CERM, 1000 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
C30, C31, C33	3	0.1uF	C3216X7R2A104K160AA	TDK	CAP, CERM, 0.1 μF, 100 V, +/- 10%, X7R, 1206	1206
C32	1	0.47uF	C3216X7R2A474K160AA	TDK	CAP, CERM, 0.47 μF, 100 V, +/- 10%, X7R, 1206	1206
D1	1	40V	BAT165E6327HTSA1	Infineon Technologies	Diode, Schottky, 40 V, 0.75 A, AEC-Q101, SOD-323	SOD-323
D2	1	100V	PDS3100Q-13	Diodes Inc.	Diode, Schottky, 100 V, 3 A, AEC-Q101, PowerDI5	PowerDI5
D3	1	8.2V	MMSZ5237BS-7-F	Diodes Inc.	Diode, Zener, 8.2 V, 200 mW, SOD-323	SOD-323
GND1	1	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
H1, H3, H6, H7	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
H2, H4, H5, H8	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
J1	1		1727023	Phoenix Contact	Terminal Block Receptacle, 3x1, 3.81mm, R/A, TH	Term Block, 3 pos
J2, J3	2		1727010	Phoenix Contact	Conn Term Block, 2POS, 3.81mm, TH	2POS Terminal Block
L1, L2	2	160 ohm	HI1206T161R-10	Laird-Signal Integrity Products	Ferrite Bead, 160 ohm @ 100 MHz, 6 A, 1206	1206
L3	1	3.3uH	CLF7045T-3R3N	TDK	Inductor, Shielded, Ferrite, 3.3 μH, 5 A, 0.0213 ohm, SMD	Inductor, 6.2x4.5x5.9mm
L4	1	22uH	IHLP4040DZER220M8A	Vishay-Dale	Inductor, Shielded Drum Core, Powdered Iron, 22 μH, 4.1 A, 0.0705 ohm, AEC-Q200 Grade 0, SMD	IHLP-4040DZ
L5, L6, L7	3	600 ohm	MI1206K601R-10	Laird-Signal Integrity Products	Ferrite Bead, 600 ohm @ 100 MHz, 1.5 A, 1206	1206
NEG(-)1, POS (+)1	2	Double	1502-2	Keystone	Terminal, Turret, TH, Double	Keystone1502-2
Q1	1	100V	STL8N10LF3	STMicroelectronics	MOSFET, N-CH, 100 V, 20 A, AEC-Q101, 8-PowerVDFN	8-PowerVDFN
Q2	1	100V	DMN10H220L-7	Diodes Inc.	MOSFET, N-CH, 100 V, 1.4 A, SOT-23	SOT-23
Q3	1	-60V	SI7415DN-T1-GE3	Vishay-Siliconix	MOSFET, P-CH, -60 V, -3.6 A, PowerPAK 1212	PowerPAK 1212
R1, R22	2	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R2	1	39.0k	RC0603FR-0739KL	Yageo America	RES, 39.0 k, 1%, 0.1 W, 0603	0603
R3	1	8.20k	RC0603FR-078K2L	Yageo America	RES, 8.20 k, 1%, 0.1 W, 0603	0603

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R4	1	470	CRCW0603470RJNEA	Vishay-Dale	RES, 470, 5%, 0.1 W, 0603	0603
R5	1	158k	CRCW0603158KFKEA	Vishay-Dale	RES, 158 k, 1%, 0.1 W, 0603	0603
R6	1	34.0k	CRCW060334K0FKEA	Vishay-Dale	RES, 34.0 k, 1%, 0.1 W, 0603	0603
R7	1	20.0k	RG1608P-203-B-T5	Susumu Co Ltd	RES, 20.0 k, 0.1%, 0.1 W, 0603	0603
R8	1	18.0k	RG1608P-183-B-T5	Susumu Co Ltd	RES, 18.0 k, 0.1%, 0.1 W, 0603	0603
R9	1	2.00k	RG1608P-202-B-T5	Susumu Co Ltd	RES, 2.00 k, 0.1%, 0.1 W, 0603	0603
R10	1	102k	CRCW0603102KFKEA	Vishay-Dale	RES, 102 k, 1%, 0.1 W, 0603	0603
R11	1	11.8k	CRCW060311K8FKEA	Vishay-Dale	RES, 11.8 k, 1%, 0.1 W, 0603	0603
R12	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R13	1	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
R15	1	1.0k	CRCW06031K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, 0603	0603
R16	1	1.43k	CRCW06031K43FKEA	Vishay-Dale	RES, 1.43 k, 1%, 0.1 W, 0603	0603
R17	1	10.0	CRCW120610R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.25 W, 1206	1206
R18	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R19	1	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
R20	1	0.06	CSRN2010FK60L0	Stackpole Electronics Inc	RES, 0.06, 1%, 1 W, 2010	2010
R21	1	487k	CRCW0603487KFKEA	Vishay-Dale	RES, 487 k, 1%, 0.1 W, 0603	0603
R23	1	2.00k	CRCW06032K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, 0603	0603
R24	1	1.00k	CRCW12061K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.25 W, 1206	1206
R25, R27	2	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
R26	1	0.16	MCR25JZHFLR160	Rohm	RES, 0.16, 1%, 0.5 W, 1210	1210
TP1, TP2	2	Orange	5003	Keystone	Test Point, Miniature, Orange, TH	Orange Miniature Testpoint
U1	1		TLC555QDRQ1	Texas Instruments	LinCMOS Timer, D0008A	D0008A
U2	1		OPA2377QDGKRQ1	Texas Instruments	Low-Cost, Low Noise, 5 MHz CMOS Operational Amplifier, 2.2 to 5.5 V, -40 to 125 degC, 8-pin SOP (DGK0008A), Green (RoHS & no Sb/Br)	DGK0008A
U3	1		TL431AQDBZRQ1	Texas Instruments	Automotive Catalog Adjustable Precision Shunt Regulator, 34 ppm / degC, 100 mA, -40 to 125 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A
U4	1		TPS92691QPWPRQ1	Texas Instruments	Multi-Topology LED Driver with Rail-to-Rail Current Sense Amplifier, PWP0016J	PWP0016J
C21	0	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C22	0	1000pF	GRM1885C2A102JA01D	MuRata	CAP, CERM, 1000 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
R14	0	4.99Meg	CRCW06034M99FKEA	Vishay-Dale	RES, 4.99 M, 1%, 0.1 W, 0603	0603
R28	0	0	CRCW12060000Z0EA	Vishay-Dale	RES, 0, 5%, 0.25 W, 1206	1206
TP3, TP4, TP5	0	Double	1502-2	Keystone	Terminal, Turret, TH, Double	Keystone1502-2

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