

TIDA-00679 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		TIDA-00679	Any	Printed Circuit Board	
C1, C2	2	0.047uF	GRM188R71H473KA61D	MuRata	CAP, CERM, 0.047 uF, 50 V, +/- 10%, X7R, 0603	0603
C3, C4, C5, C6	4	2.2uF	C2012X5R1H225K125AB	TDK	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X5R, 0805	0805
C7	1	1000pF	GRM188R72A102KA01D	MuRata	CAP, CERM, 1000 pF, 100 V, +/- 10%, X7R, 0603	0603
C8, C12, C13, C15, C18, C21, C36, C40	8	4.7uF	GRM31CR71H475KA12L	MuRata	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X7R, 1206	1206
C9	1	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, 1210	1210
C10	1	0.1uF	C1608X7R1H104K080AA	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C11	1	0.82uF	GRM219R71E824KA88D	MuRata	CAP, CERM, 0.82 uF, 25 V, +/- 10%, X7R, 0805	0805
C14, C16, C17, C19, C20, C22, C23, C24, C25, C27, C38, C41, C42	13	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C26	1	0.22uF	0805YC224JAT2A	AVX	CAP, CERM, 0.22 uF, 16 V, +/- 5%, X7R, 0805	0805
C28, C29, C30, C31, C32, C33, C34, C43, C45, C47	10	0.01uF	06031C103JAT2A	AVX	CAP, CERM, 0.01 uF, 100 V, +/- 5%, X7R, 0603	0603
C35	1	0.1uF	C1608X7R1H104K	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C37, C44, C46	3	0.1uF	0603YC104JAT2A	AVX	CAP, CERM, 0.1 uF, 16 V, +/- 5%, X7R, 0603	0603
C39	1	22uF	C1608X5R1A226M080AC	TDK	CAP, CERM, 22 uF, 10 V, +/- 20%, X5R, 0603	0603
D1	1	100V	1N4148W-7-F	Diodes Inc.	Diode, Ultrafast, 100 V, 0.15 A, SOD-123	SOD-123
D2, D3, D5, D11	4	60V	PMEG6010CEJ,115	NXP Semiconductor	Diode, Schottky, 60 V, 1 A, SOD-323F	SOD-323F
D4, D7, D9, D12	4	Green	SML-P12PT86	Rohm	LED, Green, SMD	LED, 1x.2x.6mm
D6, D8, D13	3	9.1V	BZT52C9V1S-7-F	Diodes Inc.	Diode, Zener, 9.1 V, 200 mW, SOD-323	SOD-323
D10	1	4.3V	MMSZ5229BS-7-F	Diodes Inc.	Diode, Zener, 4.3 V, 200 mW, SOD-323	SOD-323
D14	1	Red	SML-P12UTT86	Rohm	LED, Red, SMD	LED, 1x.2x.6mm
D15, D16, D17	3	20V	SBR0220T5-7-F	Diodes Inc.	Diode, Schottky, 20 V, 0.2 A, SOD-523	SOD-523
GND_1, GND_2, GND_3	3		5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
H1, H3, H5, H7	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
H2, H4, H6, 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		1725656	Phoenix Contact	Terminal Block, 100mil, 2x1, 6A, 63V, TH	6.2x8.5x5.54 mm
J2	1		PEC04DAAN	Sullins Connector Solutions	Header, 100mil, 4x2, Tin, TH	Header, 4x2, 100mil, Tin
J3, J5	2		PEC03SAAN	Sullins Connector Solutions	Header, 100mil, 3x1, Tin, TH	Header, 3 PIN, 100mil, Tin
J4	1		PEC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Tin, TH	Header, 2 PIN, 100mil, Tin
J6, J7, J9	3		1715747	Phoenix Contact	Terminal Block, 5.08mm, 4x1, TH	Terminal Block, 5.08mm, 4x1, TH
J8	1		SSQ-106-02-G-D-RA	Samtec	Receptacle, 100mil, 6x2, Gold, R/A, TH	SSQ-106-02-G-D-RA
Q1, Q2	2	60V	SQ9945BEY-T1-GE3	Vishay-Siliconix	MOSFET, N-CH, 60 V, 5.4 A, SOIC-8	SOIC-8
Q3	1	20V	CSD85301Q2	Texas Instruments	MOSFET, N-CH, 20 V, 6.7 A, DQK0006B	DQK0006B
R1	1	0	RC0603JR-070RL	Yageo America	RES, 0, 5%, 0.1 W, 0603	0603
R2, R6, R9, R28	4	3.3k	CRCW06033K30JNEA	Vishay-Dale	RES, 3.3 k, 5%, 0.1 W, 0603	0603
R3, R4	2	680k	CRCW0805680KJNEA	Vishay-Dale	RES, 680 k, 5%, 0.125 W, 0805	0805
R5, R7, R29	3	59.0k	RC0603FR-0759KL	Yageo America	RES, 59.0 k, 1%, 0.1 W, 0603	0603
R8, R10, R30	3	42.2k	RC0603FR-0742K2L	Yageo America	RES, 42.2 k, 1%, 0.1 W, 0603	0603
R11, R12	2	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R13	1	21.5k	CRCW080521K5FKEA	Vishay-Dale	RES, 21.5 k, 1%, 0.125 W, 0805	0805
R14	1	20k	CRCW080520K0JNEA	Vishay-Dale	RES, 20 k, 5%, 0.125 W, 0805	0805
R15	1	100k	CRCW0805100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.125 W, 0805	0805
R16, R17, R21, R23, R25, R36, R40, R42, R44	9	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R18, R19, R38	3	1.21k	CRCW06031K21FKEA	Vishay-Dale	RES, 1.21 k, 1%, 0.1 W, 0603	0603
R20	1	2.43k	CRCW06032K43FKEA	Vishay-Dale	RES, 2.43 k, 1%, 0.1 W, 0603	0603
R22, R24, R26, R41, R43, R45	6	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
R27, R34, R35	3	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R31	1	470	RC0603FR-07470RL	Yageo America	RES, 470, 1%, 0.1 W, 0603	0603
R32	1	5.62k	CRCW06035K62FKEA	Vishay-Dale	RES, 5.62 k, 1%, 0.1 W, 0603	0603
R33	1	510	RC0603FR-07510RL	Yageo America	RES, 510, 1%, 0.1 W, 0603	0603
R37	1	2.55k	RC0603FR-072K55L	Yageo America	RES, 2.55 k, 1%, 0.1 W, 0603	0603
R39	1	47.0k	RC0603FR-0747KL	Yageo America	RES, 47.0 k, 1%, 0.1 W, 0603	0603
S1	1		7914G-1-000E	Bourns	Switch, Tactile, SPST-NO, 0.1A, 16V, SMT	4.93x4.19x6.2 mm
TP1, TP2, TP3, TP4	4		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
U1, U2, U3, U4	4		LM74610QDQGRQ1	Texas Instruments	Smart Diode Controller, DGK0008A	DGK0008A
U5	1		TLC555QDRQ1	Texas Instruments	LinCMOS Timer, D0008A	D0008A
U6, U7, U10	3		TPS92630QPWPRQ1	Texas Instruments	Three-Channel Linear LED Driver with Analog and PWM Dimming, PWP0016F	PWP0016F
U8	1		TPS7A1633QDGNRQ1	Texas Instruments	60-V, 5-uA IQ, 100-mA, Low-Dropout VOLTAGE REGULATOR With Enable and Power-Good, DGN0008C	DGN0008C
U9	1		SN74LVC1G07DBVR	Texas Instruments	SINGLE BUFFER/DRIVER WITH OPEN-DRAIN OUTPUT, DBV0005A	DBV0005A
U11	1		LMV7239QM7	Texas Instruments	Automotive 75 nsec, 2.7V to 5V comparator with Rail-to-Rail Input and Output, DCK0005A	DCK0005A
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
L1	0	2.2uH	74408943022	Würth Elektronik	Inductor, Shielded Drum Core, Ferrite, 2.2 uH, 3 A, 0.026 ohm, SMD	4.8x3.8x4.8mm

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