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TIDA-00559 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB1	1		TIDA-00559	Any	Printed Circuit Board	
2	C1, C4	2	0.01uF	GRM188R71E103KA01D	MuRata	CAP, CERM, 0.01 uF, 25 V, +/- 10%, X7R, 0603	0603
3	C2, C3	2	10uF	TMK316B7106KL-TD	Taiyo Yuden	CAP, CERM, 10 uF, 25 V, +/- 10%, X7R, 1206_190	1206_190
4	C5, C6	2	4.7uF	GRM32ER71K475KE14L	MuRata	CAP, CERM, 4.7 uF, 80 V, +/- 10%, X7R, 1210	1210
5	C7, C10, C11, C13, C14, C15	6	0.1uF	885012206095	Würth Elektronik	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
6	C8, C9	2	100pF	885012006057	Würth Elektronik	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
7	C12	1	0.022uF	885012206091	Würth Elektronik	CAP, CERM, 0.022 uF, 50 V, +/- 10%, X7R, 0603	0603
8	C16, C17, C18, C19	4	1000pF	GRM188R72A102KA01D	MuRata	CAP, CERM, 1000 pF, 100 V, +/- 10%, X7R, 0603	0603
9	D1	1	100V	PMEG10010ELRX	NXP Semiconductor	Diode, Schottky, 100 V, 1 A, AEC-Q101, SOD-123W	SOD-123W
10	D2	1	200V	RF071M2S	Rohm	Diode, Ultrafast, 200 V, 1 A, SOD-123	SOD-123
11	D3	1	13V	SMM4F13A-TR	STMicroelectronics	Diode, TVS, Uni, 13 V, 400 W, DO-216-AA	DO-216-AA
12	D4	1	Super Red	150060SS75000	Würth Elektronik	LED, Super Red, SMD	LED_0603
13	D5	1	Green	150060GS75000	Würth Elektronik	LED, Green, SMD	LED_0603
14	D6, D7	2	70V	DESD1P0RFWQ-7	Diodes Inc.	Diode, TVS, Uni, 70 V, W, SOT-323	SOT-323
15	D8	1	39V	SM6T39CA	STMicroelectronics	Diode, TVS, Bi, 39 V, 600 W, SMB	SMB
16	D9	1	36V	SM6T42CAY	STMicroelectronics	Diode, TVS, Bi, 36 V, 600 W, AEC-Q101, SMB	SMB
17	D10	1	12.8V	SM6T15A	STMicroelectronics	Diode, TVS, Uni, 12.8 V, 600 W, AEC-Q101, SMB	SMB
18	H1, H2, H3, H4	4		SJ5382	3M	Bumpon, Hemisphere, 0.25 X 0.075, Clear	75x250 mil
19	J1, J5	2		61300211121	Würth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
20	J2	1		851-43-010-20-001000	Mill-Max	Receptacle, 50mil, 10x1, Gold, R/A, TH	receptacle 10x1, 50mil
21	J3	1		61300611121	Würth Elektronik	Header, 2.54 mm, 6x1, Gold, TH	Header, 2.54mm, 6x1, TH
22	J4, J6	2		61300311121	Würth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
23	L1	1	600 ohm	BLM18HG601SN1D	MuRata	Ferrite Bead, 600 ohm @ 100 MHz, 0.2 A, 0603	0603
24	R2	1	100k	RT0805BRD07100KL	Yageo America	RES, 100 k, 0.1%, 0.125 W, 0805	0805
25	R3	1	10.0k	RT0805BRD0710KL	Yageo America	RES, 10.0 k, 0.1%, 0.125 W, 0805	0805
26	R4	1	2.74k	CRCW04022K74FKED	Vishay-Dale	RES, 2.74 k, 1%, 0.063 W, 0402	0402
27	R5, R8	2	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
28	R6	1	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
29	R7	1	1.00	CRCW06031R00FKEA	Vishay-Dale	RES, 1.00, 1%, 0.1 W, 0603	0603
30	R9, R13	2	10.0	CRCW120610R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.25 W, 1206	1206
31	R10	1	15.0	CRCW060315R0FKEA	Vishay-Dale	RES, 15.0, 1%, 0.1 W, 0603	0603
32	R11	1	15.0k	RG1608P-153-B-T5	Susumu Co Ltd	RES, 15.0 k, 0.1%, 0.1 W, 0603	0603
33	R12	1	100	CRCW1206100RFKEAHP	Vishay-Dale	RES, 100, 1%, 0.5 W, AEC-Q200 Grade 0, 1206	1206
34	R14	1	20.0	CRCW120620R0FKEAHP	Vishay-Dale	RES, 20.0, 1%, 0.5 W, AEC-Q200 Grade 0, 1206	1206
35	U1	1		TPS7A1601DRBR	Texas Instruments	60-V, 5-uA IQ, 100-mA, Low-Dropout Voltage Regulator with Enable and Power-Good, DRB0008B	DRB0008B
36	U2	1		OPA170AIDRLR	Texas Instruments	MicroPower, Rail-to-Rail Output, General Purpose Operational Amplifier, 2.7 to 36 V, -40 to 125 degC, 5-pin SOT23 (DRL0005A), Green (RoHS & no Sb/Br)	DRL0005A
37	U3	1		DAC8760IRHAR	Texas Instruments	Single-Channel, 16-Bit Programmable Current Output and Voltage Output DIGITAL-TO-ANALOG CONVERTER for 4-mA to 20-mA Current Loop Applications, RHA0040C	RHA0040C
38	U4	1		ISO7641FCDW	Texas Instruments	Low Power Triple and Quad Channels Digital Isolator, DW0016B	DW0016B
39	C20	0	22pF	GRM1555C1H220FA01D	MuRata	CAP, CERM, 22 pF, 50 V, +/- 1%, C0G/NP0, 0402	0402
40	C21	0	0.1uF	885012206095	Würth Elektronik	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
41	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
42	LBL1	0		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650"H x 0.200"W
43	TP1	0	White	5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint

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