

TIDA-00879 REV A Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB1	1		TIDA-00879	Any	Printed Circuit Board	
2	C1, C2	2	18pF	GRM1555C1H180JA01D	MuRata	CAP, CERM, 18 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
3	C3, C4	2	10uF	GRM188R60J106ME84	MuRata	CAP, CERM, 10 uF, 6.3 V, +/- 20%, X5R, 0603	0603
4	C5, C10, C12, C16, C18	5	4.7uF	C1005X5R1A475K050BC	TDK	CAP, CERM, 4.7 uF, 10 V, +/- 10%, X5R, 0402	0402
5	C6, C7, C9, C11, C13, C15, C17, C19, C21, C22, C29, C35, C50, C53, C56	15	0.1uF	C1005X5R1A104K050BA	TDK	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X5R, 0402	0402
6	C8	1	22uF	GRM155R60J226ME11D	MuRata	CAP, CERM, 22 uF, 6.3 V, +/- 20%, X5R, 0402	0402
7	C14	1	0.1uF	06033C104JA2TA	AVX	CAP, CERM, 0.1 uF, 25 V, +/- 5%, X7R, 0603	0603
8	C23	1	0.1uF	C0603C104J4RACTU	Kemet	CAP, CERM, 0.1 uF, 16 V, +/- 5%, X7R, 0603	0603
9	C25	1	510pF	GRM1555C1H511GA01D	MuRata	CAP, CERM, 510 pF, 50 V, +/- 2%, COG/NP0, 0402	0402
10	C27	1	100pF	C1608COG2A101F080AA	TDK	CAP, CERM, 100 pF, 100 V, +/- 1%, COG/NP0, 0603	0603
11	C30	1	100pF	GRM1555C1H101FA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 1%, COG/NP0, 0402	0402
12	C33, C34	2	4.5 - 20pF	TZB4R200AB10B00	MuRata	Ceramic Trimmer Capacitor, 4.5 to 20 pF, SMT	4.5x4mm
13	C38	1	470pF	08055A471FAT2A	AVX	CAP, CERM, 470 pF, 50 V, +/- 1%, COG/NP0, 0805	0805
14	C41	1	1800pF	GRM1557U1A182JA01D	MuRata	CAP, CERM, 1800 pF, 10 V, +/- 5%, L2J, 0402	0402
15	C42	1	8200pF	C1608COG1E822J	TDK	CAP, CERM, 8200 pF, 25 V, +/- 5%, COG/NP0, 0603	0603
16	C43	1	910pF	C0603C911J5GACTU	Kemet	CAP, CERM, 910 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
17	C44	1	0.01uF	C0805C103F1GACTU	Kemet	CAP, CERM, 0.01 uF, 100 V, +/- 1%, COG/NP0, 0805	0805
18	C51, C52	2	10uF	293D106X9050E2TE3	Vishay-Sprague	CAP, TANT, 10uF, 50V, +/-10%, 0.8 ohm, 7343-43 SMD	7343-43
19	C54, C55	2	1uF	GRM188R61A105KA61D	MuRata	CAP, CERM, 1 uF, 10 V, +/- 10%, X5R, 0603	0603
20	D50, D51, D52, D53	4	40V	LL103A-GS08	Vishay-Semiconductor	Diode, Schottky, 40 V, 0.2 A, DO-213AC	DO-213AC
21	F1	1		NANOSMDC020F-2	TE Connectivity	Fuse, Resettable, 0.2 A, 24 VDC, SMD	1206
22	H1, H2, H6, H7	4		1902C	Keystone	Standoff, Hex, 0.5" L #4-40 Nylon	Standoff
23	H3, H4, H8, H9	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
24	J1, J7, J13	3		800-10-003-10-001000	Mill-Max	Header, 100mil, 3x1, TH	Header, 3x1, 100mil, TH
25	J2	1		N2514-6002-RB	3M	Header (shrouded), 100mil, 7x2, Gold, TH	7x2 Header
26	J4, J5	2		Used in BOM report	Used in BOM report		N/A
27	J6	1	10A	571-0500	DEM Manufacturing	Standard Banana Jack, insulated, 10A, red	571-0500
28	J8	1	10A	571-0100	DEM Manufacturing	Standard Banana Jack, insulated, 10A, black	571-0100
29	J9	1	10A	571-0200	DEM Manufacturing	Standard Banana Jack, insulated, 10A, blue	571-0200
30	J11	1		182-009-213R171	NorComp	CONN DB9 FEMALE R/A SOLDER TH	D-SUB 9 PIN
31	J12	1		90120-0122	Molex	Header, 100mil, 2x1, Tin, TH	Header 2x1
32	L1	1	2.2uH	VL302515MT-2R2M	TDK	Inductor, Shielded, Ferrite, 2.2 uH, 1.57 A, 0.042 ohm, SMD	IND_3x1.5x3mm
33	LCD1	1		Supplied by TI	Custom	160 segment LCD	Custom
34	Q1	1	50V	BSS138	Fairchild Semiconductor	MOSFET, N-CH, 50 V, 0.22 A, SOT-23	SOT-23
35	Q2	1	-20V	FDN302P	Fairchild Semiconductor	MOSFET, P-CH, -20 V, -2.4 A, SOT-23	SOT-23
36	Q50, Q51	2	0.075V	BC857B	Diodes Inc.	Transistor, PNP, 45V, 0.1A, SOT-23	SOT-23
37	R1, R2, R3, R4, R55	5	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402
38	R5	1	10	CRCW040210R0JNED	Vishay-Dale	RES, 10, 5%, 0.063 W, 0402	0402
39	R6, R8, R40	3	100k	CRCW0402100KFED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
40	R7	1	4.7	CRCW04024R70JNED	Vishay-Dale	RES, 4.7, 5%, 0.063 W, 0402	0402
41	R10	1	9.09k	CRCW04029K09FKED	Vishay-Dale	RES, 9.09 k, 1%, 0.063 W, 0402	0402
42	R11	1	90.9k	CRCW040290K9FKED	Vishay-Dale	RES, 90.9 k, 1%, 0.063 W, 0402	0402
43	R12	1	1.00Meg	CRCW04021M00FKED	Vishay-Dale	RES, 1.00 M, 1%, 0.063 W, 0402	0402
44	R13	1	100Meg	CRCW0603100MJPEAHR	Vishay-Dale	RES, 100 M, 5%, 0.1 W, 0603	0603
45	R14	1	10.0	CRCW040210R0FKED	Vishay-Dale	RES, 10.0, 1%, 0.063 W, 0402	0402
46	R15	1	931	CRCW0402931RFKED	Vishay-Dale	RES, 931, 1%, 0.063 W, 0402	0402
47	R16	1	10.2k	CRCW040210K2FKED	Vishay-Dale	RES, 10.2 k, 1%, 0.063 W, 0402	0402
48	R17, R24	2	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
49	R19	1	10.0Meg	CRHV1206AF10M0FKE5	Vishay-Dale	RES, 10.0 M, 1%, 0.3 W, 1206	1206
50	R20	1	499k	CRCW0402499KFED	Vishay-Dale	RES, 499 k, 1%, 0.063 W, 0402	0402
51	R21	1	47k	CRCW040247K0JNED	Vishay-Dale	RES, 47 k, 5%, 0.063 W, 0402	0402
52	R22	1	95.3	CRCW251295R3FKEG	Vishay-Dale	RES, 95.3, 1%, 1 W, 2512	2512
53	R23	1	0.5	RL0603FR-070R5L	Yageo America	RES, 0.5, 1%, 0.1 W, 0603	0603
54	R30, R36	2	100	CRCW0402100RFKED	Vishay-Dale	RES, 100, 1%, 0.063 W, 0402	0402
55	R41	1	249k	CRCW0402249KFED	Vishay-Dale	RES, 249 k, 1%, 0.063 W, 0402	0402
56	R42	1	1.0Meg	CRCW04021M00JNED	Vishay-Dale	RES, 1.0 M, 5%, 0.063 W, 0402	0402
57	R50, R57	2	2.20k	CRCW04022K20FKED	Vishay-Dale	RES, 2.20 k, 1%, 0.063 W, 0402	0402
58	R51, R52	2	1.0k	CRCW04021K00JNED	Vishay-Dale	RES, 1.0 k, 5%, 0.063 W, 0402	0402
59	R53	1	2.2k	CRCW04022K20JNED	Vishay-Dale	RES, 2.2 k, 5%, 0.063 W, 0402	0402
60	R54	1	68	CRCW040268R0JNED	Vishay-Dale	RES, 68, 5%, 0.063 W, 0402	0402
61	R56	1	1.5k	CRCW04021K50JNED	Vishay-Dale	RES, 1.5 k, 5%, 0.063 W, 0402	0402
62	R58	1	220	CRCW0402220R0JNED	Vishay-Dale	RES, 220, 5%, 0.063 W, 0402	0402
63	R71	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
64	S1, S3, S4	3		EVG-PAD04M	Panasonic	SWITCH TACTILE SPST-NO 0.02A 15V, TH	6x4.3x6mm
65	U1	1		MSP430F6736IPZ	Texas Instruments	25 MHz Mixed Signal Microcontroller with 128 KB Flash, 8192 B SRAM (and 72 GPIOs, -40 to 85 degC, 100-pin QFP (PZ), Green (RoHS & no Sb/Br)	PZ0100A
66	U2	1		TPS62740DSSR	Texas Instruments	360mA IQ Step Down Converter for Low Power Applications, DSS0012A	DSS0012A
67	U3, U4, U10	3		OPA333AIDCKT	Texas Instruments	17 uA, MicroPower, Precision, Zero Drift CMOS Operational Amplifier, 1.8 to 5.5 V, -40 to 125 degC, 5-pin SOT23 (DCK0005A), Green (RoHS & no Sb/Br)	DCK0005A
68	U5	1		TS5A3359DCUR	Texas Instruments	1-Ohm SP3T ANALOG SWITCH 5-V/3.3-V SINGLE-CHANNEL 3:1 MULTIPLEXER/DEMULTIPLEXER, DCU0008A	DCU0008A
69	U13	1		TS3A21459DGSR	Texas Instruments	0.3-Ohm DUAL SPDT ANALOG SWITCH DUAL-CHANNEL 2:1 MULTIPLEXER/DEMULTIPLEXER, DGS0010A	DGS0010A
70	U50	1		TPS7823DDCCR	Texas Instruments	Single Output LDO, 150 mA, Fixed 3 V Output, 2.2 to 5.5 V Input, with 0.5 uA Quiescent Current, 5-pin SOT (DDC), -40 to 125 degC, Green (RoHS & no Sb/Br)	DDC0005A
71	U51, U52	2		PS8802-1	Used in BOM report		SO-8
72	U53	1		23K640-I/SN	Microchip	64K SPI Bus Low-Power Serial SRAM, SOIC-8	SOIC-8
73	Y1	1		MC-306 32.768K-E3:ROHS	Epson	Crystal, 32.768kHz, 6pF, SMD	8x2.54x3.8mm
74	C20	0	DNP	Used in BOM Report	Used in BOM report	Cap, 0603 footprint placeholder	0603
75	C26, C31, C36	0	DNP	Used in BOM Report	Used in BOM report	Cap, 0402 footprint placeholder	0402
76	FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
77	R43, R44	0	DNP	Used in BOM report	Used in BOM report	RES, 0402 footprint placeholder	0402

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