

TIDA-01439 REV E2 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC81	1		TIDA-01439	Any	Printed Circuit Board	
2	C2, C3, C5, C6, C8, C9, C14, C20, C21, C22, C24, C25, C34, C46, C47, C48, C49, C50, C52	19	0.1uF	GRM155R70J104KA01D	MuRata	CAP, CERM, 0.1 uF, 6.3 V, +/- 10%, X7R, 0402	0402
3	C4, C7	2	10uF	GRM21BR70J106KE76L	MuRata	CAP, CERM, 10 uF, 6.3 V, +/- 10%, X7R, 0805	0805
4	C13	1	1uF	GRM188R70J105KA01D	MuRata	CAP, CERM, 1 uF, 6.3 V, +/- 10%, X7R, 0603	0603
5	C15, C16	2	22pF	06035A220JA2TA	AVX	CAP, CERM, 22 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
6	C17, C18	2		Used in BOM report	Used in BOM report	CAP, CERM, xxxF, xxV, [TempCo], xx%, [PackageReference]	Used in PnP output and some BOM reports
7	C19	1	4.7uF	CC08052RY5V6BB475	Yageo America	CAP, CERM, 4.7 uF, 10 V, +80/-20%, Y5V, 0805	0805
8	C23	1	10uF	GRM188R60J106ME47D	MuRata	CAP, CERM, 10 uF, 6.3 V, +/- 20%, X5R, 0603	0603
9	C26	1	1uF	GRM31CR72A105KA01L	MuRata	CAP, CERM, 1 uF, 100 V, +/- 10%, X7R, 1206	1206
10	C27	1	47uF	GRM32ER71A476KE15L	MuRata	CAP, CERM, 47 uF, 10 V, +/- 10%, X7R, 1210	1210
11	C28, C51	2	1uF	C1005X7S1A105K050BC	TDK	CAP, CERM, 1 uF, 10 V, +/- 10%, X7S, 0402	0402
12	C29, C32, C35, C37	4	22pF	GRM1555C1H220JA01D	MuRata	CAP, CERM, 22 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
13	C30	1	0.01uF	C1005X7R1C103K050BA	TDK	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X7R, 0402	0402
14	C31	1	0.047uF	GRM155R71C473KA01D	MuRata	CAP, CERM, 0.047 uF, 16 V, +/- 10%, X7R, 0402	0402
15	C33	1	10uF	GRM32ER71A105KA12L	MuRata	CAP, CERM, 10 uF, 6.3 V, +/- 10%, X7R, 1210	1210
16	C36	1	2.2uF	UMK316B722SKLT	Taiyo Yuden	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, 1206	1206
17	C38, C40	2	1800pF	GRM155R72A182KA01D	MuRata	CAP, CERM, 1800pF, 100V, +/-10%, X7R, 0402	0402
18	C39	1	0.018uF	O603C183K1RACTU	Kemet	CAP, CERM, 0.018uF, 100V, +/-10%, X7R, 0603	0603
19	C41, C42	2	0.22uF	GRM155R60J224KE01D	MuRata	CAP, CERM, 0.22uF, 6.3V, +/-10%, X5R, 0402	0402
20	C43, C45	2	2700pF	GRM155R72A272KA01D	MuRata	CAP, CERM, 2700pF, 100V, +/-10%, X7R, 0402	0402
21	C44	1	0.027uF	O603C273K1RACTU	Kemet	CAP, CERM, 0.027uF, 100V, +/-10%, X7R, 0603	0603
22	C53	1	0.1uF	GRM31CR72E104KW03L	MuRata	CAP, CERM, 0.1 uF, 250 V, +/- 10%, X7R, 1206	1206
23	D1, D8, D10, D13	4	Green	KPTL-3216C3CK-01	Kingbright	LED, Green, SMD	3.2x1.6mm
24	D2, D9	2	Red	KPTL-3216S1RCR-01	Kingbright	LED, Red, SMD	3.2x1.6mm
25	D3, D4	2	40V	ZHCS350TA	Diodes Inc.	Diode, Schottky, 40V, 0.35A, SOD-523	SOD-523
26	D5	1	30V	BAT54C-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOT-23	SOT-23
27	D6, D7	2	7V	CDSOT23-SM712	Bourns	Diode, TVS, Bi, 7 V, SOT-23	SOT-23
28	D11	1	5V	SMAJ5.0A-TR	STMicroelectronics	Diode, TVS, Uni, 5 V, 13.4 Vc, SMA	SMA
29	F1, F2	2		0459.500	Littelfuse	Fuse, 0.5 A, 125VAC/VDC, SMD	PicoSMF459
30	FL1	1	2.45 GHz	LFB182G45B6G5D920	MuRata	Filter, BandPass, 2.45GHz, SMD	1.6x0.8mm
31	J2	1		SMA-J-P-H-ST-EM1	Samtec	SMA Jack, 50 Ohm, Gold, R/A, SMT	SMA Jack, R/A, SMT
32	J3, J6	2		GRPB052VWVN-RC	Sullins Connector Solutions	Header, 50mil, 5x2, Gold, TH	Header, 5x2, 50mil
33	J4	1		FH12-10S-0.5SH[5]	Hirose Electric Co. Ltd.	Connector, FPC 10 Pos, 9.1x2.0x5.6 mm	Connector FPC, 9.1x2.0x5.6mm
34	J5	1		618026330923	Würth Elektronik	Receptacle, D-Sub, 2.29mm, 27 Pos, Gold, R/A, TH	Receptacle, D-Sub, 2.29mm, 26 Pos, R/A, TH
35	L1, L6	2	1500 ohm	BLM18HE152SN1D	MuRata	Ferrite Bead, 1500 ohm @ 100 MHz, 0.5 A, 0603	0603
36	L2	1	10uH	CKS2125100M-T	Taiyo Yuden	Inductor, Multilayer, Ferrite, 10 uH, 0.11 A, 0.52 ohm, SMD	0805
37	L3, L4	2	4.7uH	MLP2520S4R7S10S1	TDK	Inductor, Multilayer, Ferrite, 4.7 uH, 0.3 A, 0.143 ohm, SMD	Inductor, 2.5x1.1x2mm
38	L5	1	1000 ohm	BLM15HG102SN1D	MuRata	Ferrite Bead, 1000 ohm @ 100 MHz, 0.25 A, 0402	0402
39	L7	1	100uH	744053101	Würth Elektronik	Inductor, Shielded Drum Core, Ferrite, 100 uH, 0.45 A, 0.36 ohm, SMD	WE-TPC-LH
40	R1, R2	2	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0.5%, 0.063 W, 0402	0402
41	R4, R5, R33, R38, R39, R40	6	470	CRCW0402470RJNED	Vishay-Dale	RES, 470, 5%, 0.063 W, 0402	0402
42	R8	1	47.5k	CRCW040247K5FKED	Vishay-Dale	RES, 47.5 k, 1%, 0.063 W, 0402	0402
43	R9	1	100k	CRCW0402100KJNED	Vishay-Dale	RES, 100 k, 5%, 0.063 W, 0402	0402
44	R10	1	91.0k	RG1608P-913-B-T5	Susumu Co Ltd	RES, 91.0 k, 0.1%, 0.1 W, 0603	0603
45	R11	1	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
46	R13, R16, R21, R23, R25	5	18.0k	CRCW040218K0FKED	Vishay-Dale	RES, 18.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
47	R14, R19, R22, R24, R26	5	33k	CRCW040233K0JNED	Vishay-Dale	RES, 33 k, 5%, 0.063 W, 0402	0402
48	R15	1	2.00Meg	CRCW04022M00FKED	Vishay-Dale	RES, 2.00 M, 1%, 0.063 W, 0402	0402
49	R17	1	130k	CRCW0402130KJNED	Vishay-Dale	RES, 130 k, 5%, 0.063 W, 0402	0402
50	R18	1	110k	CRCW0402110KFKED	Vishay-Dale	RES, 110 k, 1%, 0.063 W, 0402	0402
51	R20	1	24.9k	CRCW040224K9FKED	Vishay-Dale	RES, 24.9 k, 1%, 0.063 W, 0402	0402
52	R27, R29, R30, R31	4	4.12k	RG1608P-4121-B-T5	Susumu Co Ltd	RES, 4.12k ohm, 0.1%, 0.1W, 0603	0603
53	R28	1	3.24k	PFC-W1206R-12.3241-B	TT Electronics/IRC	RES, 3.24k ohm, 0.1%, 0.333W, 1206	1206
54	R32	1	383k	CRCW0402383KFKED	Vishay-Dale	RES, 383 k, 1%, 0.063 W, 0402	0402
55	R34, R35, R36, R37	4	10	CRCW060310R0JNEAHP	Vishay-Dale	RES, 10, 5%, 0.25 W, 0603	0603
56	R41, R42	2	120	CRCW0603120RJNEA	Vishay-Dale	RES, 120, 5%, 0.1 W, 0603	0603
57	R43, R44	2	100	CRCW1206100RJNEA	Vishay-Dale	RES, 100, 5%, 0.25 W, 1206	1206
58	U1	1		TVS3300DRVR	Texas Instruments	33V Precision Surge Protection Clamp, DRV0006A (WSON-6)	DRV0006A
59	U3	1		CC2650F128RHBR	Texas Instruments	Ultra low-power ARM Cortex M3 2.4 GHz Radio MCU, Multi-Protocol, RSHB032E	RHB0032E
60	U4	1		MSP432P401RIRGCR	Texas Instruments	Low-Power and High Performance 32-Bit ARM Cortex M4F With 256KB Flash and 64KB RAM, RGC0064B (VQFN-64)	RGC0064B
61	U5	1		LM5165DRCR	Texas Instruments	3V-65V, 150mA Synchronous Buck Converter With Ultra-Low IQ, DRC0010J (VSON-10)	DRC0010J
62	U6	1		ADS1220RVAR	Texas Instruments	24-Bit, 2kSPS, 4-Ch, Low-Power, Delta-Sigma ADC with PGA and Voltage Reference, RVA0016A (VQFN-16)	RVA0016A
63	U7	1		TPS71733DSE	Texas Instruments	Single Output High PSRR LDO, 150 mA, Fixed 3.3 V Output, 2.5 to 6.5 V Input, with Low IQ, 6-pin WSON (DSE), -40 to 125 degC, Green (RoHS & no Sb/Bf)	DSE0006A
64	U8	1		MAX3232EIPWR	Texas Instruments	3-V to 5.5-V Multichannel RS-232 Line Driver / Receiver with ±15-kV IEC ESD Protection, -40 to 85 degC, 16-Pin TSSOP (PW), Green (RoHS & no Sb/Bf)	PW0016A
65	U9	1		SN65HVDT1DGKR	Texas Instruments	3.3V Full-Duplex RS-485 Transceivers With 12-kV IEC ESD, DGK0008A (VSSOP-8)	DGK0008A
66	Y1	1		TSX3225 24.0000MF20G-AC3	Epson	Crystal, 24 MHz, 9 pF, SMD	SMD, 4-Leads, Body 2.65x3.35mm, Height 0.6mm
67	Y2, Y4	2		FC-12M 32.7680KA-A3	Epson	Crystal, 32.768kHz, 12.5pF, SMD	Crystal 2.05x.6x1.2mm
68	Y3	1		FA-238 48.0000MB-W0	Epson	Crystal, 48MHz, 12pF, SMD	3.2x2.5mm
69	C1, C10, C11	0		Used in BOM report	Used in BOM report	CAP, CERM, xxxF, xxV, [TempCo], xx%, [PackageReference]	Used in PnP output and some BOM reports
70	FID1, FID2, FID3	0	NA	NA	NA	Fiducial mark. There is nothing to buy or mount.	Fiducial
71	J1, J11	0		6130101121	Würth Elektronik	Header, 2.54mm, 10x1, Gold, TH	Header, 2.54mm, 10x1, TH

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