

**TIDA-00666 REV E2 Bill of Materials**

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC81	1		TIDA-00666	Any	Printed Circuit Board	
2	C2, C3, C5, C6, C8, C9, C32	7	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	C11, C12	2	12pF	06035A120JAT2A	AVX	CAP, CERM, 12 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
5	C15	1	0.01uF	C1608X7R2A103K	TDK	CAP, CERM, 0.01 uF, 100 V, +/- 10%, X7R, 0603	0603
6	C16	1	1uF	GRM188R70J105KA01D	MuRata	CAP, CERM, 1 uF, 6.3 V, +/- 10%, X7R, 0603	0603
7	C17	1	2.2uF	C1005X5R1C225K050BC	TDK	CAP, CERM, 2.2 uF, 16 V, +/- 10%, X5R, 0402	0402
8	C18, C19	2	0.1uF	C1005X5R0J104K	TDK	CAP, CERM, 0.1 uF, 6.3 V, +/- 10%, X5R, 0402	0402
9	C20	1	0.1uF	12061C104JAT2A	AVX	CAP, CERM, 0.1 uF, 100 V, +/- 5%, X7R, 1206	1206
10	C21, C26	2	1uF	GRM31CR72A105KA01L	MuRata	CAP, CERM, 1 uF, 100 V, +/- 10%, X7R, 1206	1206
11	C22	1	0.39uF	GRM155R61A394KE15D	MuRata	CAP, CERM, 0.39 uF, 10 V, +/- 10%, X5R, 0402	0402
12	C23	1	0.22uF	GRM155R60J224KE01D	MuRata	CAP, CERM, 0.22 uF, 6.3 V, +/- 10%, X5R, 0402	0402
13	C24	1	6800pF	GRM155R71E682KA01D	MuRata	CAP, CERM, 6800 pF, 25 V, +/- 10%, X7R, 0402	0402
14	C25	1	1000pF	GRM155R60J102KA01D	MuRata	CAP, CERM, 1000 pF, 6.3 V, +/- 10%, X5R, 0402	0402
15	C27	1	22uF	GRM31CR71A226KE15L	MuRata	CAP, CERM, 22 uF, 10 V, +/- 10%, X7R, 1206	1206
16	C28, C29	2	1uF	C1005X7S1A105K050BC	TDK	CAP, CERM, 1 uF, 10 V, +/- 10%, X7S, 0402	0402
17	C30	1	0.01uF	C1005X7R1C103K050BA	TDK	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X7R, 0402	0402
18	C31	1	0.047uF	GRM155R71C473KA01D	MuRata	CAP, CERM, 0.047 uF, 16 V, +/- 10%, X7R, 0402	0402
19	C36	1	2.2uF	UMK316B7225KL-T	Taiyo Yuden	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, 1206	1206
20	D1	1	Green	150060VS75000	Würth Elektronik	LED, Green, SMD	LED_0603
21	D2	1	Super Red	150060SS75000	Würth Elektronik	LED, Super Red, SMD	LED_0603
22	D3, D6	2	100V	BAT46WJ.115	NXP Semiconductor	Diode, Schottky, 100 V, 0.25 A, SOD-323F	SOD-323F
23	D4	1	39V	SM6T39CA	STMicroelectronics	Diode, TVS, Bi, 39 V, 600 W, SMB	SMB
24	D5	1	3.9V	MMSZ4686T1G	ON Semiconductor	Diode, Zener, 3.9 V, 500 mW, SOD-123	SOD-123
25	FL1	1	2.45 GHz	LF182G45BG5D920	MuRata	Filter, BandPass, 2.45GHz, SMD	1.6x0.8mm
26	J1	1		MM5829-2700RJ4	MuRata	Connector, RF, 50 Ohm, SMT	Connector, RF, SMT
27	J2	1		GRPBO52VWVN-RC	Sullins Connector Solutions	Header, 50mil, 5x2, Gold, TH	Header, 5x2, 50mil
28	J3, J5, J7, J10	4		61300211121	Würth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
29	J4	1		ED555/2DS	On-Shore Technology	Terminal Block, 3.5mm Pitch, 2x1, TH	7.0x8.2x6.5mm
30	J6, J8, J11	3		61300311121	Würth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
31	J9	1		GRPBO41VWVN-RC	Sullins Connector Solutions	Header, 50mil, 4x1, Gold, TH	TH Header, 1.27 mm, 4x1, Straight
32	L1	1	1500 ohm	BLM18HE152SN1D	MuRata	Ferrite Bead, 1500 ohm @ 100 MHz, 0.5 A, 0603	0603
33	L2	1	10uH	CKS2125100M-T	Taiyo Yuden	Inductor, Multilayer, Ferrite, 10 uH, 0.11 A, 0.52 ohm, SMD	0805
34	L7	1	180uH	LPS4018-184MLB	Coilcraft	Inductor, Shielded Drum Core, Ferrite, 180 uH, 0.27 A, 2.5 ohm, SMD	LPS4018
35	Q1, Q3	2	60 V	BC55-16PA.115	NXP Semiconductor	Transistor, NPN, 60 V, 1 A, AEC-Q101, SOT1061	SOT1061
36	Q2	1	80 V	MM5TA06-7-F	Diodes Inc.	Transistor, NPN, 80 V, 0.5 A, SOT-323	SOT-323
37	R1, R2	2	470	CRCW0402470RJNED	Vishay-Dale	RES, 470, 5%, 0.063 W, 0402	0402
38	R3, R4	2	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
39	R5, R21	2	47.5k	CRCW040247K5FKED	Vishay-Dale	RES, 47.5 k, 1%, 0.063 W, 0402	0402
40	R6, R11	2	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
41	R7	1	200	CRCW1206200RFKEA	Vishay-Dale	RES, 200, 1%, 0.25 W, 1206	1206
42	R9	1	24.9k	CRCW060324K9FKEA	Vishay-Dale	RES, 24.9 k, 1%, 0.1 W, 0603	0603
43	R10	1	49.9	CRCW120649R9FKEA	Vishay-Dale	RES, 49.9, 1%, 0.25 W, 1206	1206
44	R12	1	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
45	R13	1	20.0	CRCW060320R0FKEA	Vishay-Dale	RES, 20.0, 1%, 0.1 W, 0603	0603
46	R14	1	1.0Meg	CRCW04021M00JNED	Vishay-Dale	RES, 1.0 M, 5%, 0.063 W, 0402	0402
47	R15	1	2.00Meg	CRCW04022M00FKED	Vishay-Dale	RES, 2.00 M, 1%, 0.063 W, 0402	0402
48	R16	1	499k	CRCW0402499KFKED	Vishay-Dale	RES, 499 k, 1%, 0.063 W, 0402	0402
49	R18	1	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
50	R19	1	294k	CRCW0402294KFKED	Vishay-Dale	RES, 294 k, 1%, 0.063 W, 0402	0402
51	R23, R24	2	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
52	S1	1		434121025816	Würth Elektronik	Switch, Tactile, SPST, 12 V, SMD	SMD, 6x3.9mm
53	SH-J1, SH-J2, SH-J3, SH-J4, SH-J5, SH-J6	6	1x2	969102-0000-DA	3M	Shunt, 100mil, Gold plated, Black	Shunt
54	TP1, TP2, TP3	3	SMT	5015	Keystone	Test Point, Miniature, SMT	Testpoint_Keystone_Minature
55	U1	1		HDC1080DMBR	Texas Instruments	Low Power, High Accuracy Digital Humidity Sensor with Temperature Sensor, DMB0006A	DMB0006A
56	U2	1	2.45 GHz	2450AT18D0100E	Johanson Technology	2.45 GHz Antenna, EIA 1210, Detuning resilient, Edge Mount, SMD	3.2x1.6mm
57	U3	1		CC2650F128RHBR	Texas Instruments	Ultra low-power ARM Cortex M3 2.4 GHz Radio MCU, Multi-Protocol, RSHB032E	RHB0032E
58	U4	1		DAC161S997RGHR	Texas Instruments	16-bit SPI Programmable DAC for 4-20mA Loops, RGH0016A	RGH0016A
59	U5	1		LM5165DRCR	Texas Instruments	3.0-V to 65-V Input, 150-mA Output, Ultra-Low Quiescent (ULQ) Synchronous Step-Down Voltage Regulator, DRC0010J	DRC0010J
60	U6	1		TPS71728DSE	Texas Instruments	Single Output High PSRR LDO, 150 mA, Fixed 2.8 V Output, 2.5 to 6.5 V Input, with Low IQ, 6-pin WSON (DSE), -40 to 85 degC, Green (RoHS & no Sb/Br)	DSE0006A
61	Y1	1		TSX-3225 24.0000MF20G-AC3	Epson	Crystal, 24 MHz, 9 pF, SMD	SMD, 4-Leads, Body 2.65x3.35mm, Height 0.6mm
62	Y2	1		FC-12M 32.7680KA-A3	Epson	Crystal, 32.768kHz, 12.5pF, SMD	Crystal 2.05x6x1.2mm
63	C1, C10, C13, C14, C34, C35	0		Used in BOM report	Used in BOM report	CAP, CERM, xxxF, xxV, [TempCo], xx%, [PackageReference]	Used in PnP output and some BOM reports
64	C33	0	10uF	GRM32ER71J106KA12L	MuRata	CAP, CERM, 10 uF, 63 V, +/- 10%, X7R, 1210	1210
65	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
66	J12	0		61300211121	Würth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
67	R8	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
68	R17	0	357k	CRCW0402357KFKED	Vishay-Dale	RES, 357 k, 1%, 0.063 W, 0402	0402
69	R20	0	34.0k	CRCW040234K0FKED	Vishay-Dale	RES, 34.0 k, 1%, 0.063 W, 0402	0402
70	R22	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402

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