

Bill of Materials

TI DESIGNS

ISE-4031 REV E1 Bill of Materials

TIDA-0037	5						
Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB	1		ISE-4031	Any	Printed Circuit Board	
2	C1, C2, C12	3	0.1uF	GRM155R71A104KA01D	MuRata	CAP, CERM, 0.1 μF, 10 V, +/- 10%, X7R, 0402	0402
3	C3	1	0.1uF	12061C104KAT2A	AVX	CAP, CERM, 0.1 μF, 100 V, +/- 10%, X7R, 1206	1206
4	C4	1	1000pF	06031C102KAT2A	AVX	CAP, CERM, 1000 pF, 100 V, +/- 10%, X7R, 0603	0603
5	C5	1	0.01uF	06031C103KAT2A	AVX	CAP, CERM, 0.01 μF, 100 V, +/- 10%, X7R, 0603	0603
6	C6	1	0.1uF	VJ1206Y104KBBAT4X	Vishay-Vitramon	CAP, CERM, 0.1 μF, 100 V, +/- 10%, X7R, 1206	1206
7	C7, C8	2	1uF	C3216X7R2A105M160AA	TDK	CAP, CERM, 1 μF, 100 V, +/- 20%, X7R, 1206	1206
8	C9, C10	2	10uF	C2012X7R0J106M125AB	TDK	CAP, CERM, 10 μF, 6.3 V, +/- 20%, X7R, 0805	0805
9	C11	1	10pF	GRM1555C1H100JA01D	MuRata	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
10	C13	1	100uF	C1210C107M9PACTU	Kemet	CAP, CERM, 100 μF, 6.3 V, +/- 20%, X5R, 1210	1210
11	C14, C16	2	4.7uF	GRM155R60J475ME87D	MuRata	CAP, CERM, 4.7 μF, 6.3 V, +/- 20%, X5R, 0402	0402
12	C15	1	1000uF	EEV-FK1H102M	Panasonic	CAP, AL, 1000 μF, 50 V, +/- 20%, 0.073 ohm, SMD	SMT Radial J16
13	C18	1	1pF	GRM1555C1H1R0BA01D	MuRata	CAP, CERM, 1 pF, 50 V, +/- 10%, C0G/NP0, 0402	0402
	D1	1	200V	DF1502S-T	Diodes Inc.	Diode, Switching-Bridge, 200 V, 1.5 A, DF-S	DF-S
15	D2	1	Green	LG L29K-G2J1-24-Z	OSRAM	LED, Green, SMD	1.7x0.65x0.8mm
16	D3	1	45V	SMAJ45CA	Littelfuse	Diode, TVS, Bi, 45 V, 400 W, SMA	SMA
17	D4	1	100V	MBR1H100SFT3G	ON Semiconductor	Diode, Schottky, 100 V, 1 A, SOD-123FL	SOD-123FL
18	D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17	11		TPD1E10B06DPYR	Texas Instruments	ESD in 0402 Package with 10 pF Capacitance and 6 V Breakdown, 1 Channel, -40 to +125 degC, 2-pin X2SON (DPY), Green (RoHS & no Sb/Br)	DPY0002A
19	E1	1		AH316M245001-T	Taiyo Yuden	ANT BLUETOOTH W-LAN ZIGBEE WIMAX, SMD	3.2x1.6mm
20	F1	1		0154002.DRT	Littelfuse	Fuse, 2 A, 125 V, SMD	SMD, 2-Leads, Body 9.73x5.03mm
21	FL1	1	1.02 dB	DEA202450BT-1294C1-H	TDK	Multilayer Chip Band Pass Filter For 2.4GHz W-LAN/Bluetooth, SMD	2x1.25mm
22	H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
23	H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
24	J1	1		55510-114TRLF	FCI	Receptacle, 2mm, 7x2, Gold, SMT	Receptacle, 2mm, 7x2, SMT
25	J2	1		1757242	Phoenix Contact	Header (Shrouded), 5.08 mm, 2x1, Tin, R/A, TH	Header, 5.08 mm, 2x1, R/A, TH
26	J3	1		5-1814832-1	TE Connectivity	SMA Straight PCB Socket Die Cast, 50 Ohm, TH	SMA Straight PCB Socket Die Cast, TH
27	J4	1		MM8030-2610RJ3	MuRata	Coaxial Connectors with Switch, 50 Ohm, SMD	Coaxial Connector with Switch
28	J5	1		PBC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Gold, TH	Sullins 100mil, 1x2, 230 mil above insulator
29	J7	1		PEC07DAAN	Sullins Connector Solutions	Header, 100mil, 7x2, Tin, TH	Header, 7x2, 100mil, Tin
30	L1, L5	2	330 ohm	BLM18SG331TN1D	MuRata	Ferrite Bead, 330 ohm @ 100 MHz, 1.5 A, 0603	0603
31	L2	1	22uH	CLF7045T-220M	TDK	Inductor, Shielded, Ferrite, 22 µH, 1.9 A, 0.0828 ohm, SMD	Inductor, 6.2x4.5x5.9mm
32	L4	1		SRF2012-300Y	Bourns	Inductor, Wirewound, Ferrite, , 0.45 A, 0.2 ohm, SMD	SMD, 2.05x1.25mm
33	L7	1	3.6nH	LQP15MN3N6B02D	MuRata	Inductor, Film, 3.6 nH, 0.17 A, 0.5 ohm, SMD	SMD, 2-Leads, Body 1.1x 0.6mm

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
34	Q1	1	50V	BSS138	Fairchild Semiconductor	MOSFET, N-CH, 50 V, 0.22 A, SOT-23	SOT-23
35	R2, R3, R12, R19, R20	5	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
36	R4, R5, R6	3	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
37	R7	1	301	CRCW0402301RFKED	Vishay-Dale	RES, 301, 1%, 0.063 W, 0402	0402
38	R8	1	249k	CRCW0402249KFKED	Vishay-Dale	RES, 249 k, 1%, 0.063 W, 0402	0402
39	R9	1	75.0k	CRCW040275K0FKED	Vishay-Dale	RES, 75.0 k, 1%, 0.063 W, 0402	0402
40	R11, R13, R16, R17	4	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
41	R14	1	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
42	R15	1	270	CRCW0402270RJNED	Vishay-Dale	RES, 270, 5%, 0.063 W, 0402	0402
43	R18, R21	2	2.67k	CRCW04022K67FKED	Vishay-Dale	RES, 2.67 k, 1%, 0.063 W, 0402	0402
44	S1	1		B3U-1000P	Omron Electronic Componen	ts SWITCH TACTILE SPST-NO 0.05A 12V	3x1.6x2.5mm
45	SH-J5	1	1x2	2SN-BK-G	Samtec	Shunt, 2mm, Gold plated, Black	2mm Shunt, Closed Top
46	TP1, TP2	2	Red	5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
47	TP3, TP4	2	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
48	U1, U2	2		SN74LV1T34DCKR	Texas Instruments	Single Power Supply Single Buffer GATE CMOS Logic Level Shifter, DCK0005A	DCK0005A
49	U3	1		LMR16006XDDC	Texas Instruments	Wide Input Voltage Range Buck Regulator with High Efficiency Sleep Mode, DDC0006A	DDC0006A
50	U4	1		CC3200MODR1M2AMOBR	Texas Instruments	SimpleLink™ Wi-Fi ® and Internet-of-Things Module Solution, a Single-Chip Wireless MCU, MOB0063A	MOB0063A
51	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
52	J6	0		PEC06DAAN	Sullins Connector Solutions	Header, 100mil, 6x2, Tin, TH	Header, 6x2, 100mil, Tin
53	L6	0	3.6nH	LQG15HS3N6S02D	MuRata	Inductor, Multilayer, Air Core, 3.6 nH, 0.3 A, 0.18 ohm, SMD	0402 polarized
54	R1, R10	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402

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