

ISE4037 REV E3 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
I PCB1	1		ISE4037	Any	Printed Circuit Board	
C1	1	1000pF	06031C102KAT2A	AVX	CAP, CERM, 1000 pF, 100 V, +/- 10%, X7R, 0603	0603
C2	1	330uF	EEV-FK1K331M	Panasonic	CAP, AL, 330 μF, 80 V, +/- 20%, 0.17 ohm, SMD	SMT Radial J16
C3, C4	2	2.2uF	C1210C225K1RACTU	Kemet	CAP, CERM, 2.2 μF, 100 V, +/- 10%, X7R, 1210	1210
C5, C12, C13	3	0.1uF	C0805C104K1RACTU	Kemet	CAP, CERM, 0.1 μF, 100 V, +/- 10%, X7R, 0805	0805
C8	1	0.022uF	08051C223KAT2A	AVX	CAP, CERM, 0.022 μF, 100 V, +/- 10%, X7R, 0805	0805
C9	1	4700pF	06031C472KAT2A	AVX	CAP, CERM, 4700 pF, 100 V, +/- 10%, X7R, 0603	0603
C10	1	100uF	C1210C107M8PACTU	Würth Elektronik	CAP, CERM, 100 μF, 10 V, +/- 20%, X5R, 1210	1210
C14	1	0.082uF	C0805C823K1RACTU	Kemet	CAP, CERM, 0.082 μF, 100 V, +/- 10%, X7R, 0805	0805
C18	1	1pF	GRM1555C1H1R0BA01D	MuRata	CAP, CERM, 1 pF, 50 V, +/- 10%, C0G/NP0, 0402	0402
C19, C21	2	4.7uF	GRM155R60J475ME87D	MuRata	CAP, CERM, 4.7 μF, 6.3 V, +/- 20%, X5R, 0402	0402
C20, C22, C25	3	0.1uF	GRM155R71A104KA01D	MuRata	CAP, CERM, 0.1 μF, 10 V, +/- 10%, X7R, 0402	0402
D1	1	51V	SMAJ51CA	Littelfuse	Diode, TVS, Bi, 51 V, 400 W, SMA	SMA
D2	1	200V	DFLS1200-7	Diodes Inc.	Diode, Schottky, 200 V, 1 A, PowerDI123	PowerDI123
D4, D6, D7	3		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
D5	1	Green	LG L29K-G2J1-24-Z	OSRAM	LED, Green, SMD	1.7x0.65x0.8mm
D9	1	7V, 12V	SM712.TCT	Semtech	Asymmetrical TVS Diode for Extended Common-Mode RS-485, SOT-23	SOT-23
E1	1		AH316M245001-T	Taiyo Yuden	ANT BLUETOOTH W-LAN ZIGBEE WIMAX, SMD	3.2x1.6mm
F1	1		0154002.DRT	Littelfuse	Fuse, 2 A, 125 V, SMD	SMD, 2-Leads, Body 9.73x5.03mm
FL1	1	1.02 dB	DEA202450BT-1294C1-H	TDK	Multilayer Chip Band Pass Filter For 2.4GHz W-LAN/Bluetooth, SMD	2x1.25mm
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
H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
J1	1	2x1	1727010	Phoenix Contact	Conn Term Block, 2POS, 3.81mm, TH	2POS Terminal Block
J3	1		PEC07DAAN	Sullins Connector Solutions	Header, 100mil, 7x2, Tin, TH	Header, 7x2, 100mil, Tin
J4	1		MM8030-2610RJ3	MuRata	Coaxial Connectors with Switch, 50 Ohm, SMD	Coaxial Connector with Switch
J5	1	1x3	PBC03SAAN	Sullins Connector Solutions	Header, 100mil, 3x1, Gold, TH	PBC03SAAN
J6, J9	2		PBC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Gold, TH	Sullins 100mil, 1x2, 230 mil above insulator
J10	1		1725669	Phoenix Contact	Terminal Block, 3x1, 2.54 mm, TH	Terminal Block, 3x1, 2.54 mm, TH
L1	1		DLW5BTM102TQ2K	MuRata	Coupled inductor, 2.5 A, 0.034 ohm, SMD	SMD, 5x5mm
L2	1	47uH	7447789147	Würth Elektronik	Inductor, Shielded Drum Core, Ferrite, 47 μH, 0.85 A, 0.315 ohm, SMD	WE-PD-S
L4	1	3.6nH	LQP15MN3N6B02D	MuRata	Inductor, Film, 3.6 nH, 0.17 A, 0.5 ohm, SMD	SMD, 2-Leads, Body 1.1x0.6mm
R1, R4	2	0	CRCW20100000Z0EF	Vishay-Dale	RES, 0, 5%, 0.75 W, 2010	2010
R3	1	110k	CRCW0402110KFKED	Vishay-Dale	RES, 110 k, 1%, 0.063 W, 0402	0402
R5	1	127k	CRCW0402127KFKED	Vishay-Dale	RES, 127 k, 1%, 0.063 W, 0402	0402
R6, R16, R17, R19, R22, R23	6	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
R7	1	17.8k	CRCW040217K8FKED	Vishay-Dale	RES, 17.8 k, 1%, 0.063 W, 0402	0402

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R8	1	1.96k	CRCW04021K96FKED	Vishay-Dale	RES, 1.96 k, 1%, 0.063 W, 0402	0402
R9	1	3.01k	CRCW04023K01FKED	Vishay-Dale	RES, 3.01 k, 1%, 0.063 W, 0402	0402
R12, R14, R15	3	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
R18, R24	2	2.67k	CRCW04022K67FKED	Vishay-Dale	RES, 2.67 k, 1%, 0.063 W, 0402	0402
R20	1	270	CRCW0402270RJNED	Vishay-Dale	RES, 270, 5%, 0.063 W, 0402	0402
R21	1	402	CRCW0402402RFKED	Vishay-Dale	RES, 402, 1%, 0.063 W, 0402	0402
R31	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R32, R34	2	348	CRCW0603348RFKEA	Vishay-Dale	RES, 348, 1%, 0.1 W, 0603	0603
R33	1	120	RC0603FR-07120RL	Yageo America	RES, 120, 1%, 0.1 W, 0603	0603
R36, R37	2	10.0	CRCW040210R0FKED	Vishay-Dale	RES, 10.0, 1%, 0.063 W, 0402	0402
S1	1		B3U-1000P	Omron Electronic Components	SWITCH TACTILE SPST-NO 0.05A 12V	3x1.6x2.5mm
SH-J6, SH-J9	2		881545-2	TE Connectivity	Shunt, 100mil, Gold plated, Black	Shunt 2 pos. 100 mil
TP1, TP4	2	White	5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
TP2, TP3	2	Red	5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP5, TP6	2	Grey	5128	Keystone	Test Point, Multipurpose, Grey, TH	Grey Multipurpose Testpoint
TP7, TP9	2	Orange	5003	Keystone	Test Point, Miniature, Orange, TH	Orange Miniature Testpoint
TP8, TP10	2	Yellow	5004	Keystone	Test Point, Miniature, Yellow, TH	Yellow Miniature Testpoint
U1	1		LM5160DNTR	Texas Instruments	Wide Input 65V, 1.5A Synchronous Step-Down DC-DC Converter, DNT0012B	DNT0012B
U3	1		CC3200MODR1M2AMOBR	Texas Instruments	SimpleLink™ Wi-Fi @ and Internet-of-Things Module Solution, a Single-Chip Wireless MCU, MOB0063A	MOB0063A
U5	1		SN65HVD72DR	Texas Instruments	3.3V-Supply RS-485 with IEC ESD Protection, D0008A	D0008A
C6	0	1000pF	DEBE33F102ZC3B	MuRata	CAP, CERM, 1000 pF, 3150 V, +80/-20%, E, Radial Disc D7x6mm	Radial Disc D7x6mm
C7	0	4.7uF	C3216X7R1C475K	TDK	CAP, CERM, 4.7 uF, 16 V, +/- 10%, X7R, 1206	1206
C11	0	100uF	C1210C107M8PACTU	Würth Elektronik	CAP, CERM, 100 uF, 10 V, +/- 20%, X5R, 1210	1210
C15	0	1uF	GRM188R71A105KA61D	MuRata	CAP, CERM, 1 uF, 10 V, +/- 10%, X7R, 0603	0603
C16, C23, C24	0	0.1uF	GRM155R71A104KA01D	MuRata	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X7R, 0402	0402
C17	0	10pF	GRM1555C1H100JA01D	MuRata	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
D3	0	100V	CD214A-B1100LF	Bourns	Diode, Schottky, 100 V, 1 A, SMA	SMA
D8	0	7V, 12V	SM712.TCT	Semtech	Asymmetrical TVS Diode for Extended Common-Mode RS-485, SOT-23	SOT-23
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
J2	0		5-1814832-1	TE Connectivity	SMA Straight PCB Socket Die Cast, 50 Ohm, TH	SMA Straight PCB Socket Die Cast, TH
J7	0		PBC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Gold, TH	Sullins 100mil, 1x2, 230 mil above insulator
J8	0		1725669	Phoenix Contact	Terminal Block, 3x1, 2.54 mm, TH	Terminal Block, 3x1, 2.54 mm, TH
L3	0	3.6nH	LQG15HS3N6S02D	MuRata	Inductor, Multilayer, Air Core, 3.6 nH, 0.3 A, 0.18 ohm, SMD	0402 polarized
R2	0	2.00k	CRCW04022K00FKED	Vishay-Dale	RES, 2.00 k, 1%, 0.063 W, 0402	0402
R10, R27	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R13	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
R25, R35	0	10.0	CRCW040210R0FKED	Vishay-Dale	RES, 10.0, 1%, 0.063 W, 0402	0402
R28, R30	0	348	CRCW0603348RFKEA	Vishay-Dale	RES, 348, 1%, 0.1 W, 0603	0603
R29	0	120	RC0603FR-07120RL	Yageo America	RES, 120, 1%, 0.1 W, 0603	0603
SH-J7	0		881545-2	TE Connectivity	Shunt, 100mil, Gold plated, Black	Shunt 2 pos. 100 mil
T1	0	42 uH	750315547	Würth Elektronik	Transformer, 42 uH, SMT	9.14x9.78mm
TP11	0	Green	5126	Keystone	Test Point, Multipurpose, Green, TH	Green Multipurpose Testpoint

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
TP12	0	Purple	5129	Keystone	Test Point, Multipurpose, Purple, TH	Purple Multipurpose Testpoint
TP13	0	Brown	5125	Keystone	Test Point, Multipurpose, Brown, TH	Brown Multipurpose Testpoint
U2	0		TLV71333PDBV	Texas Instruments	Capacitor-Free, 150-mA, Low-Dropout Regulator with Foldback Current Limit for Portable Devices, DBV0005A	DBV0005A
U4	0		ISO15DW	Texas Instruments	Isolated 3.3 V RS-485 Transceiver, 1 Mbps, 3.3 V, Half Duplex, -40 to 85 degC, 16-pin SOIC (DW), Green (RoHS & no Sb/Br)	DW0016A

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