

Acorn Electron ULA - MAX 10 Board - V1.02
Bill of Materials

Id	Designator	Package	Quantity	Designation	Description	Supplier and ref
1	D2,D1	D_SOD-323_HandSoldering	2	Schottky Diode	BAT54	https://www.digikey.co.uk/product-detail/en/on-semiconductor/BAT54HT1G/BAT54HT1GOSCT-ND/917809
2	U10	TSSOP-14_4.4x5mm_P0.65mm	1	74HCT125D	Quad Buffer	https://www.digikey.co.uk/product-detail/en/nexperia-usa-inc/74HCT125PW_118/1727-4087-1-ND/1965389
3	R25,R20,R24,R23,R22,R21,R19,R18,R17,R16,R15,R14,R13,R12,R11,R10,R9,R8,R7	R_0603_1608Metric_Pad1.05x0.95mm_HandSolder	19	10K Resistor		
4	SW1	SW_DIP_SPSTx04_Slide_Copal_CHS-04B_W7.62mm_P1.27mm	1	SW_DIP_x04	Configuration Switch	https://www.digikey.co.uk/product-detail/en/nidec-copal-electronics/CHS-04TB/563-1008-1-ND/948417
5	J1	PinHeader_1x02_P2.54mm_Vertical	1	Conn_01x02	5V Power Input Normal Square Pins	
6	JTAG1	PinHeader_2x05_P2.54mm_Vertical	1	Conn_02x05_Odd_Even	JTAG Pins Normal Square Pins	
7	C29,C27,C25,C23,C22,C21,C19,C18,C13,C12,C10,C8,C6,C4,C9,C7,C5,C3,C2,C11,C16,C30,C17,C15,C14,C1	C_0603_1608Metric_Pad1.05x0.95mm_HandSolder	26	0.1uf Capacitor		
8	X1	Crystal_SMD_7050_4Pads	1	Oscillator	16Mhz Oscillator	Not required unless Electron 16Mhz signal is very poor. FPGA will require an update to use the on board 16Mhz signal
9	C28	C_0805_2012Metric_Pad1.15x1.40mm_HandSolder	1	10uF Capacitor Tantalum		
10	U8	SOT-223	1	AP2114H-3.3TRG1	Regulator	https://www.digikey.co.uk/product-detail/en/diodes-incorporated/AP2114H-3.3TRG1/AP2114H-3.3TRG1DICT-ND/4505142?utm_adgroup=PMIC%20-%20Voltage%20Regulators%20-%20Linear&utm_source=google&utm_medium=cpc&utm_campaign=Google%20Shopping_Integrated%20Circuits%20%28ICs%29&utm_term=&productid=4505142&gclid=EAlaIqObChMkoq-teuO6rIVC4myCh007wo0EAQYASABEgJpyfD_BwE
11	C31,C26	C_0805_2012Metric_Pad1.15x1.40mm_HandSolder	2	0.1uf Capacitor		
12	R2,R1,R5,R4,R3	R_0805_2012Metric_Pad1.15x1.40mm_HandSolder	5	10K Resistor		
13	U1	EQFP	1	10M08SCE144C8G	Intel MAX 10 FPGA	https://www.digikey.co.uk/products/en?keywords=10M08SCE144C8G
14	U5,U7,U3,U6,U4,U2	TSSOP-24_4.4x7.8mm_P0.65mm	6	74LVC4245APW	Octal Transceiver	https://www.digikey.co.uk/product-detail/en/nexperia-usa-inc/74LVC4245APW-118/1727-4308-1-ND/2209918
15	U9	ULA Socket Pins - 1x40 - 2.54mm Pin Headers	2	PGA 68 Pin Layout	ULA Socket Pins Turned Pin Type	https://hobbycomponents.com/connectors/439-01-254mm-40way-sil-turned-pin-m-m-headers-pack-of-5
16	CMP1	SOT-23-5	1	MIC7221YM5-TR	Comparator	https://www.digikey.co.uk/product-detail/en/microchip-technology/MIC7221YM5-TR/576-2901-1-ND
17	C20	C_0805_2012Metric_Pad1.15x1.40mm_HandSolder	1	0.1uf Capacitor		
18	R6	R_0805_2012Metric_Pad1.15x1.40mm_HandSolder	1	100 Resistor		
19	C24	C_0805_2012Metric_Pad1.15x1.40mm_HandSolder	1	2.7nf Capacitor		