

BOM InterconnectIO Board
610-1000-011

Component for this board has been selected to be not expensive and available over the world. The quantity specified on the BOM are the required quantity and not the quantity received because most of the components sales by AlieExpress are coming in a lot of 5 or more

ITEM	Ref	Qty	Value	Component number	Component Link	Footprint
1	BZ1,	1	TM812A05	5V active Buzzer	https://www.aliexpress.com/item/4000118703011.html?spm=a2g0o.order_list.order_list_main.124.18751802TGrCM3	Buzzer_Beeper:Buzzer_12x9.5RM7.6
2	C1, C2, C16, C17, C18, C19, C20,	7	10uF, 50V	4 mmx7mm	https://www.aliexpress.com/item/1005001831366715.html?spm=a2g0o.order_list.order_list_main.128.18751802TGrCM3	Capacitor_THT:CP_Radial_D4.0mm_P1.50mm
3	D1, D19, D20, D21, D22, D23, D30, D31, D32, D33,	10	1N4148	DO-35	https://www.aliexpress.com/item/1005002761024460.html?spm=a2g0o.order_list.order_list_main.134.18751802TGrCM3	Diode_THT:D_DO-35_SOD27_P7.62mm_Horizontal
4	D34,	1	1N5339B	Zener 5.6V 5W	https://www.aliexpress.com/item/1005007252102432.html?spm=a2g0o.cart.0.0.382738davUv7k5&mp=1	Diode_THT:D_DO-201_P15.24mm_Horizontal
5	D35, D37	2	Green Led	5 color mixing	https://www.aliexpress.com/item/32890682652.html?spm=a2g0o.cart.0.0.484b38da3R3jzV&mp=1	LED_THT:LED_D3.0mm
6	D36,	1	Red Led	5 color mixing	https://www.aliexpress.com/item/32890682652.html?spm=a2g0o.cart.0.0.484b38da3R3jzV&mp=1	LED_THT:LED_D3.0mm_Clear
7	F1	1	2A Fuse	5x20MM 2A	https://www.aliexpress.com/item/1005004651911205.html?spm=a2g0o.cart.0.0.1c8438daX57J70&mp=1	
8	F2	1	1A Fuse	5x20MM 1A	https://www.aliexpress.com/item/1005004651911205.html?spm=a2g0o.cart.0.0.1c8438daX57J70&mp=1	
9	F1_socket F2_socket,	2	MC000827	MC000827	https://www.aliexpress.com/item/1005003663678449.html?spm=a2g0o.order_list.order_list_main.109.5ad91802qJ50cI	SnapEDA Library:MC000827
10	J1, J2,	2	9001-11961C00A	396-RA-M	https://www.aliexpress.com/item/32808173331.html?spm=a2g0o.order_detail.order_detail_item.3.8a9af19cRF49dn	9001-11961:900111961C00A
11	J3, J4,	2	7760	M3 Term Screw	https://www.digikey.ca/en/products/detail/keystone-electronics/7760/2745938	SnapEDA Library:7760
12	J5, J6, J7, J8, J9, J10,	6	10x2.54mm	Cut to length	https://www.aliexpress.com/item/1000007373786.html?spm=a2g0o.order_list.order_list_main.82.21ef18021ielzP	Connector_PinSocket_2.54mm:PinSocket_1x10_P2.54mm_Vertical
13	J11, J12, J13, J14, J15, J16, J30, J31,	8	6x2.54mm	Cut to length	https://www.aliexpress.com/item/1000007373786.html?spm=a2g0o.order_list.order_list_main.82.21ef18021ielzP	Connector_PinSocket_2.54mm:PinSocket_1x06_P2.54mm_Vertical
14	J17,	1	4 Pins 5.08mm	4P	https://www.aliexpress.com/item/1005001666625465.html?spm=a2g0o.order_list.order_list_main.134.21ef18021ielzP	4pin_5:1146770000
15	J18, J19,J21,J22	4	BNC	Conn_Coaxial gold plated	https://www.aliexpress.com/item/1005006866967010.html?spm=a2g0o.cart.0.0.5dcc38daPY7vC2&mp=1	BNC:TE_1-1337542-0
16	J20,	1	6 pins 3.81mm	6P 3.81mm Plug and Socket-A	https://www.aliexpress.com/item/32880910367.html?spm=a2g0o.order_detail.order_detail_item.3.2a65f19ceWcMGt	6pin_3:SHDRRA6W80P0X381_1X6_2405X920X700P
17	J23,	1	4 pins 3.81mm	4P 3.81mm Plug and Socket-A	https://www.aliexpress.com/item/32880910367.html?spm=a2g0o.order_detail.order_detail_item.3.7110f19cKK7wMr	4pins_3:691322310004
18	J24,	1	RJ45	8P8C Right Angle No led	https://www.aliexpress.com/item/32694863099.html?spm=a2g0o.cart.0.0.7fd538dawwnp2x&mp=1	Connector_RJ:RJ45_Ninigi_GE
19	J25,	1	USB-B1HSB6	USB_B Right Angle	https://www.aliexpress.com/item/32834923469.html?spm=a2g0o.order_list.order_list_main.34.21ef18021ielzP	Connector_USB:USB_B_OST_USB-B1HSxx_Horizontal
20	J26,	1	2x5 2.54mm RA	10P	https://www.aliexpress.com/item/1714360661.html?spm=a2g0o.order_list.order_list_main.29.21ef18021ielzP	Connector_jtag:SHDRRA10W64P254_2X5_1270X910X880P
21	J27,	1	DC007B	Power Jack 5.5mm	https://www.aliexpress.com/item/1005003742132830.html?spm=a2g0o.order_detail.order_detail_item.3.5979f19cN90o6a	SnapEDA Library:CUI_PJ-082BH
22	J29, J34,	2	Conn_01x04_Female	Cut to length	https://www.aliexpress.com/item/1000007373786.html?spm=a2g0o.order_list.order_list_main.82.21ef18021ielzP	Connector_PinSocket_2.54mm:PinSocket_1x04_P2.54mm_Vertical
23	J32, J33,	2	8 x 2.54mm Female	Cut to length	https://www.aliexpress.com/item/1000007373786.html?spm=a2g0o.order_list.order_list_main.82.21ef18021ielzP	Connector_PinSocket_2.54mm:PinSocket_1x08_P2.54mm_Vertical
24	J35,	1	Wire Bridge	0 ohm resistor	https://www.aliexpress.com/item/4000174550644.html?spm=a2g0o.cart.0.0.69c038dacU7SYy&mp=1	Connector_PinSocket_2.54mm:PinSocket_1x03_P2.54mm_Vertical
25	K12, K13, K14, K15, K16, K17, K18, K19, K20, K22, K24, K25, K26, K27, K28, K29, K30, K31, K32, K33, K34, K35, K36, K37, K38, K39, K40, K41,	39	TQ2-5	TQ2-5	https://www.aliexpress.com/item/1005004349797638.html?spm=a2g0o.order_detail.order_detail_item.3.29bdf19cH6EBPl	Relay_THT:Relay_DPDT_FRT5
26	Relay Socket	10	1x40P Female Gold	Cut in 5 pins section	https://www.aliexpress.com/item/1005005053790061.html?spm=a2g0o.order_list.order_list_main.16.2c1a1802vA8wf5	optionnal
27	K21, K42	2	SRD-5VDC-SL-C	SRD-5VDC-SL	https://www.aliexpress.com/item/1005002916764977.html?spm=a2g0o.cart.0.0.678938dalwTZ3N&mp=1	Relay_THT:Relay_SPDT_Omron-G5LE-1
28	K23,	1	CPC1706Y	0-60V 4A	https://www.digikey.ca/en/products/detail/ixys-integrated-circuits-division/CPC1706Y/3077519?s=N4lgTCBcDaIMIAU4EYDsAGAbATRAXQF8g	SnapEDA Library:RELAY_CPC1706Y
29	Q1, Q2, Q3, Q5, Q19, Q22, Q24,	7	2N2222	TO-92	https://www.aliexpress.com/item/1005005303849667.html?spm=a2g0o.cart.0.0.5c5438daSYNCOD&mp=1	Package_TO_SOT_THT:TO-92_Inline
30	R1, R10, R11, R12, R13, R14, R15,R16, R17,	9	4.7K	1% 1/4W Resistor Kit	https://www.aliexpress.com/item/1005001818485416.html?spm=a2g0o.cart.0.0.616b38daLOtFWH&mp=1	Resistor_THT:R_Axial_DIN0207_L6.3mm_D2.5mm_P10.16mm_Horizontal
31	R2, R3, R5, R7, R8, R9, R31, R35, R40,	9	10K	1% 1/4W Resistor Kit	https://www.aliexpress.com/item/1005001818485416.html?spm=a2g0o.cart.0.0.616b38daLOtFWH&mp=1	Resistor_THT:R_Axial_DIN0207_L6.3mm_D2.5mm_P10.16mm_Horizontal
32	R4, R71,	2	0	1% 1/4W Low value Resistor Kit	https://www.aliexpress.com/item/4000174550644.html?spm=a2g0o.cart.0.0.69c038dacU7SYy&mp=1	Resistor_THT:R_Axial_DIN0207_L6.3mm_D2.5mm_P10.16mm_Horizontal
33	R6, R27, R28, R66, R67, R18	5	220	1% 1/4W Resistor Kit	https://www.aliexpress.com/item/1005001818485416.html?spm=a2g0o.cart.0.0.405a38daqYlSw&mp=1	Resistor_THT:R_Axial_DIN0207_L6.3mm_D2.5mm_P10.16mm_Horizontal
34	R29,	1	10	10W 10R	https://www.aliexpress.com/item/1005002584950177.html?spm=a2g0o.order_list.order_list_main.76.68501802kRK9e9	Resistor_THT:R_Axial_Power_L38.0mm_W9.0mm_P45.72mm
35	R36,	1	470	1% 1/4W Resistor Kit	https://www.aliexpress.com/item/1005001818485416.html?spm=a2g0o.cart.0.0.616b38daLOtFWH&mp=1	Resistor_THT:R_Axial_DIN0207_L6.3mm_D2.5mm_P10.16mm_Horizontal
36	R69,	1	150	1% 1/4W Resistor Kit	https://www.aliexpress.com/item/1005001818485416.html?spm=a2g0o.cart.0.0.616b38daLOtFWH&mp=1	Resistor_THT:R_Axial_DIN0207_L6.3mm_D2.5mm_P10.16mm_Horizontal
37	S1,	1	PB400EEQR1BLK	PB400EEQR1BLK	https://www.digikey.ca/en/products/detail/e-switch/PB400EEQR1BLK/8042726	SnapEDA Library:SW_PB400EEQR1BLK
38	U1, U2, U3, U4,	4	Pico	Raspberry Pico Module	https://www.digikey.ca/en/products/detail/raspberry-pi/SC0915/13624793	MCU_RaspberryPi_and_Boards:RPI_Pico_SMD_TH
39	U1_header,U2_header,U3_header,U4_header	4	1x40P Male L-11.96mm	Cut in 20 pins section	https://www.aliexpress.com/item/1005005053790061.html?spm=a2g0o.cart.0.0.215538daKAWJrh&mp=1	Pico round male pins mount on bottom of Pico controller
40	U1_debug,U2_debug,U3_debug,U4_debug	1	1x40P Female Gold	Cut in 3 pins section	https://www.aliexpress.com/item/1005005053790061.html?spm=a2g0o.cart.0.0.215538daKAWJrh&mp=1	Pico 3-pin round socket mount on top of Pico controller (SWD)
41	U1_dhead,U2_dhead,U3_dhead,U4_dhead	1	1x40P Male L-11.96mm	Cut in 3 pins section	https://www.aliexpress.com/item/1005005053790061.html?spm=a2g0o.cart.0.0.215538daKAWJrh&mp=1	Pico 3-pin round male pins mount on round socket of Pico controller (SWD)
42	U1_socket,U2_socket,U3_socket,U4_socket	4	1x40P Female Gold	Cut in 20 pins section	https://www.aliexpress.com/item/1005005053790061.html?spm=a2g0o.cart.0.0.215538daKAWJrh&mp=1	Pico round socket mount on PCB
43	U5,	1	LM4040LP-3	LM4040LP-3	https://www.digikey.ca/en/products/detail/texas-instruments/LM4040D30ILPR/1493976	Package_TO_SOT_THT:TO-92_Inline
44	U6, U7, U8,	3	TXS0108E module	TXS0108E 5pcs	https://www.aliexpress.com/item/1005005611794764.html?spm=a2g0o.cart.0.0.48ca38daLJipET&mp=1	
45	U9,	1	MAX3232	Serial Module	https://www.aliexpress.com/item/4000587246651.html?spm=a2g0o.cart.0.0.251f38daKBNFzg&mp=1	
46	U10,	1	INA219AxD	Current Monitoring Module	https://www.aliexpress.com/item/32375566240.html?spm=a2g0o.order_list.order_list_main.44.68501802kRK9e9	
47	U11,	1	MCP4725xxx-xCH	DAC Module	https://www.aliexpress.com/item/1005003301834508.html?spm=a2g0o.order_detail.order_detail_item.9.30154f03ARKf2e	
48	U12,	1	24LC32	24LC32	https://www.aliexpress.com/item/1005007109141216.html?spm=a2g0o.cart.0.0.110c38dab4kaqM&mp=1	Package_DIP:DIP-8_W7.62mm
49	U13, U14, U15, U16, U17, U18,	6	ULN2003A	ULN2003AN DIP	https://www.aliexpress.com/item/1005003321113000.html?spm=a2g0o.order_list.order_list_main.55.68501802kRK9e9	Package_DIP:DIP-16_W7.62mm_LongPads
50	U16_socket, U17_socket, U18_socket,	6	16 pin socket	round hole DIP-16p	https://www.aliexpress.com/item/4000578067926.html?spm=a2g0o.cart.0.0.2bcc38da88bsXx&mp=1	Package_DIP:DIP-16_W7.62mm_LongPads
51	U20 U21, U22	3	BSS138	Logic level converter	https://www.aliexpress.com/item/1005006096023556.html?spm=a2g0o.cart.0.0.512038daUH9mqE&mp=1	
52	TP22,TP86,TP87,TP88,TP101	5	Testpoint	Black,Blue,Green,Red,Yellow	https://www.aliexpress.com/item/1005001843784820.html?spm=a2g0o.cart.0.0.7faa38daxjUNz&mp=1	TestPoint_Loop_D2.54mm_Drill1.5mm_Beaded
53	Hardware nylon Standoff	1	F-F nylon Standoff	M2 Black nylon mix 300pcs	https://www.aliexpress.com/item/32869450950.html?spm=a2g0o.cart.0.0.5bee38daupPiNY&mp=1	
54	Hardware metal Screw	1	M2.5	M2.5 600pcs	https://www.aliexpress.com/item/1005007148394693.html?spm=a2g0o.order_detail.order_detail_item.3.6db7f19cOLlCTk	
55	PCB InterconnectIO Board	1	660-1000-011	Gerbers to order	https://ilcpcb.com/	
0	Q26, Q27, Q28, Q29, Q30, Q31, Q32, Q33, Q34,	12	BSS138	BSS138	Not installed, use already assembled module	Import_library:SOT-23W_SHORT
0	R42, R43, R44, R45, R46, R47, R48, R49, R50, R51,	24	10K	R_US	Not installed, use already assembled module	Resistor_SMD:R_0603_1608Metric
0	R73, R74, R78, R79, R80, R81, R82,	7	10K	R_US	Not installed, use already assembled module	Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder
0	R75, R76,	2	4.7K	R_US	Not installed, use already assembled module	Resistor_SMD:R_0603_1608Metric_Pad0.98x0.95mm_HandSolder
0	R77,	1	0.1	R_US	Not installed, use already assembled module	Resistor_SMD:R_2512_6332Metric_Pad1.40x3.35mm_HandSolder
0	R83,	1	10K	R_US	Not installed, use already assembled module	Resistor_SMD:R_0603_1608Metric_Pad0.98x0.95mm_HandSolder
0	C3, C4, C5, C6, C7, C8, C13, C14,	8	0.1uF	C_Small	Not installed, use already assembled module	Capacitor_SMD:C_0603_1608Metric_Pad1.08x0.95mm_HandSolder
0	C9, C10, C11, C12,	4	100n	C_Small	Not installed, use already assembled module	Capacitor_SMD:C_0603_1608Metric_Pad1.08x0.95mm_HandSolder
0	C15,	1	0.1uF	C_Small	Not installed, use already assembled module	Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder
0	J28,	1	DB9_Female_RA	DB9_Female_MountingHoles	Not installed, use already assembled module	Connector_Dsub:DSUB-9_Female_Horizontal_P2.77x2.84mm_EdgePinOffs et4.94mm_Housed_MountingHolesOffset7.48mm