

## Pico-EuroCARD Rev 2.2 Bill of Materials

Board Underside, solder these first, in this order! (Q1 MOSFET is soldered last so it has a bit of protection. Observe ESD precautions!)

Designator	Quantity	Designation
R22	1	220k 0805 Resistor
R2, R3, R5, R16, R17, R18, R19	7	10k 0805 Resistor
R1, R4, R6, R7, R8	5	100 ohm 0805 Resistor
R20, R21	2	0R Resistor
R9, R10, R11, R12, R13, R14, R15	7	Do Not Fit (DNF)
C2,C5	2	100n 0805 Capacitor X7R 16V
C7,C8	2	10n 0805 Capacitor
C6	1	1u 1210 Capacitor X7R 10V
J40	1	Optional MicroSD Socket, example is Molex 502774-0891, might need some epoxy glue
Q1	1	P-ch MOSFET Si2301 or FDV304P or IRLML2246 (SOT-23)

Board Topside, solder in the order shown, or any order that makes sense

Designator	Quantity	Designation
N/A	2	Pin Header Single Row 20 way for Pico
N/A	2	Pin Header Right Angle Single Row 3-way for SWD connections
N/A	6	Crimp Sockets 2226TG (Farnell/Newark) for assembling SWD cable
N/A	2	Connector Housing 3-way SIL 2226A-03 (Farnell/Newark) for assembling SWD cable
U3	1	XIAO RP2040
N/A	2	SIL sockets 2212S-20SG-85 (cheap) or 801-87-036-10-001101 (luxury)
N/A	2	Pin Header Single Row 40 way (cut as required)
SW1, SW2	2	Tact Push Switch, 6 x 6mm (ideally 1 x red for reset, and 1 x any other color)
D1	1	3mm LED Amber
D2	1	3mm LED Red
N/A	1	Pin Header Dual Row 6 way (2x3)
C3, C4	2	10u 16V Electrolytic Capacitor, 6.3mm dia, 2.5mm pitch
C1	1	22u 16V Electrolytic Capacitor 6.3mm dia 2.5mm pitch
J9	1	Screw Terminal Block 3.5 mm pitch 2-way
J7	1	Barrel DC Power Socket 2.1mm with flat pins, example is FC68148
U2	1	Recom R-78E5.0-0.5 (5V DC-DC Converter)
U4	1	Recom R-78E3.3-0.5 (3.3V DC-DC Converter)
J2, J3	2	Pin Header Dual Row 40 way (2x20)
U1	1	Pi Pico (original or Pico-W wireless version)
J15	1	Optional Screw Terminal Block, 3.81mm, 4 way
SW3	1	Rotary Encoder Alps EC12E, example is EC12E24104A6
N/A	10	2.54mm Jumpers (Ideally 1 x Orange, 2 x Red, 7 x Blue or Black)