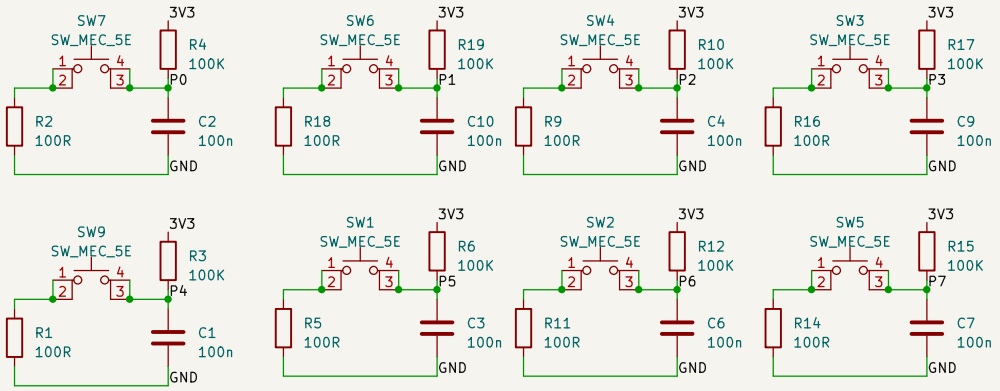
UNI-KIT Button Breakout Board Schematic

0.01 mS Time Constant
for RC Debounce

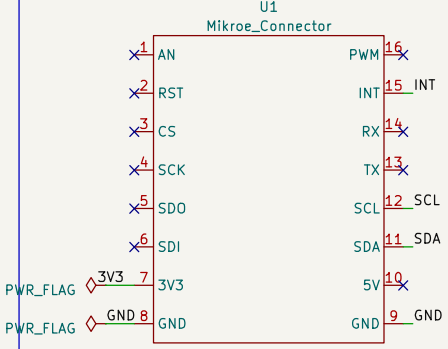
Push Buttons



Current Calculation = Current flowing through the button is I = V/R where R = 100K and V = 3.3V
hence I = 30uA, Ports handle 25mA.
30uA x 8 = 240uA + Standby current + Input Current
=240uA + 1uA at 3.3V + 1uA

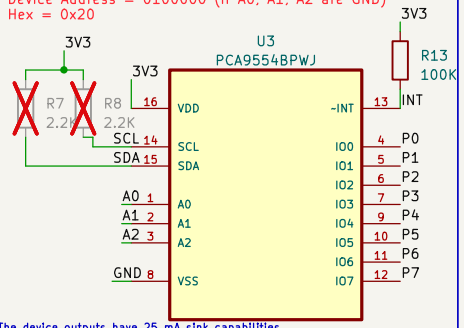
=-242uA

Mikroe Connector



I2C Driver

Device Address = 0100000 (If A0, A1, A2 are GND)
Hex = 0x20

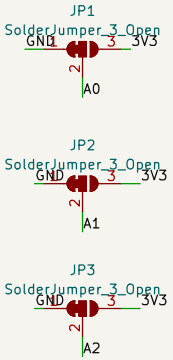


The device outputs have 25 mA sink capabilities for directly driving LEDs while consuming low device current.

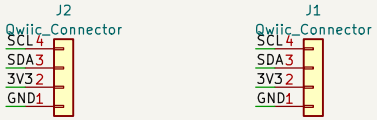
Latched outputs with 25 mA drive maximum capability for directly driving LED

The only difference between the PCA9554B and PCA9554C is their I2C fixed address allowing a larger number of the same device on the I2C-bus with no chance of address conflict

Address Line Selection

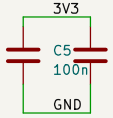


Qwiic Connector



Verified with UNI-KIT

Decoupling Capacitor



DNP

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