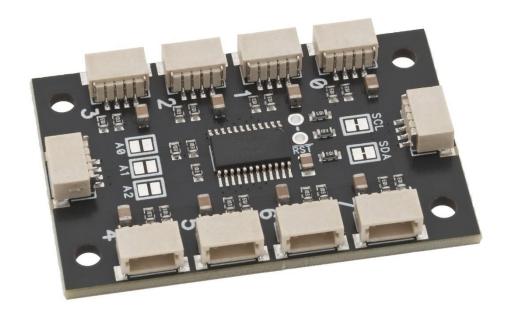
TCA9548A 8-ch I2C bus multiplexer



8-channel multiplexer board with QWIIC connectors for I2C devices. This module makes it easy to wire up many I2C devices to a single microcontroller. Perfect for devices with hardwired I2C address.

Functions

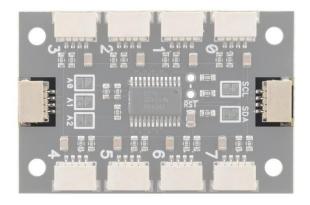
- 3-bit address for up to 8 multiplexers per bus
- 0 400 kHz clock frequency
- 5V tolerant inputs
- QWIIC connectors

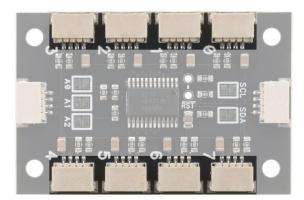
Specifications

- Supply voltage: 1.65 5.5 VDC
- I2C address: 0x70 (default) 0x77
- Mounting holes: ø2.5 mm / 36 x 20 mm
- Dimensions: 42 x 28 mm

Connections

QWIIC I2C Connectors:

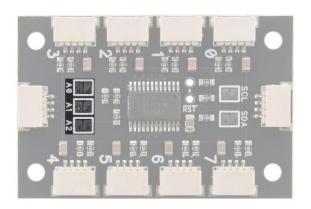


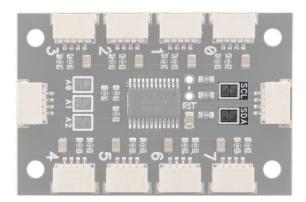


The two QWIIC connectors on the left and right edges are the main bus connectors and should be wired to the microcontroller.

The eight connectors on the top and bottom edges are the multiplexed ports.

I2C Address and Pullup resistors:



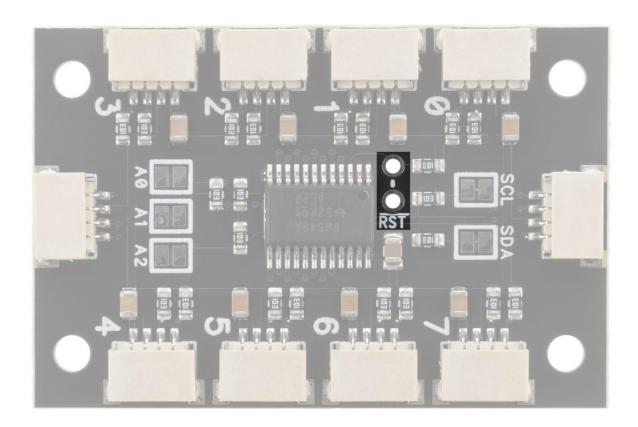


Three address pins are available on the multiplexer. Default address is 0x70 (0,0,0). To change the address, short the A0, A1 and/or A2 solder jumpers.

Α0	A1	A2	I2C Address
open	open	open	0x70 (default)
short	open	open	0x71
open	short	open	0x72
short	short	open	0x73
open	open	short	0x74
short	open	short	0x75
open	short	short	0x76
short	short	short	0x77

The two solder jumpers on the right side, marked SCL and SDA, can be cut to disable the internal pullup resistors for the main bus.

Reset:



Short the two pins marked RST to recover from any fault condition.

Datasheet & Example code

- TCA9548A Datasheet
- Arduino library Python library

Mechanical dimensions

