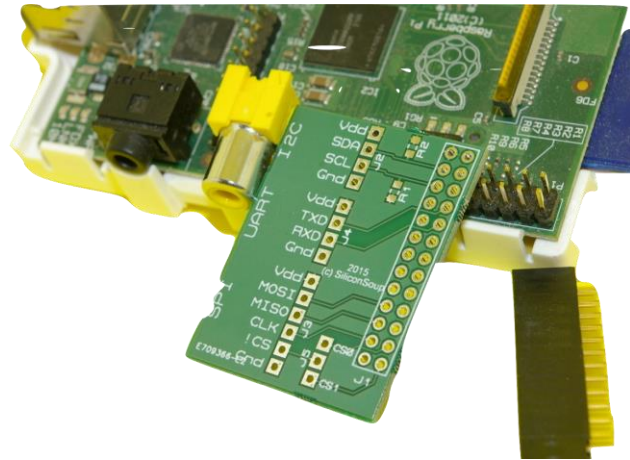


Serial Products

Multi-Serial I/O Adapter

The Multi-Serial I/O adapter from CognIoT brings the UART, I2C and SPI ports to convenient 0.1" headers. Raspberry Pi add-ons that require any of the serial ports can be easily connected via the Multi-Serial I/O adapter.

All of the headers have 3.3V and GND as well as the signals of the port. The I2C port has pull-ups on SCL and SDA to prevent erroneous operation. These are an optional fit – already present on Raspberry-Pi.



The Raspberry Pi 26-pin header and the pin header for the serial ports are supplied ready for the user to solder to the adapter board.

4-pin I²C

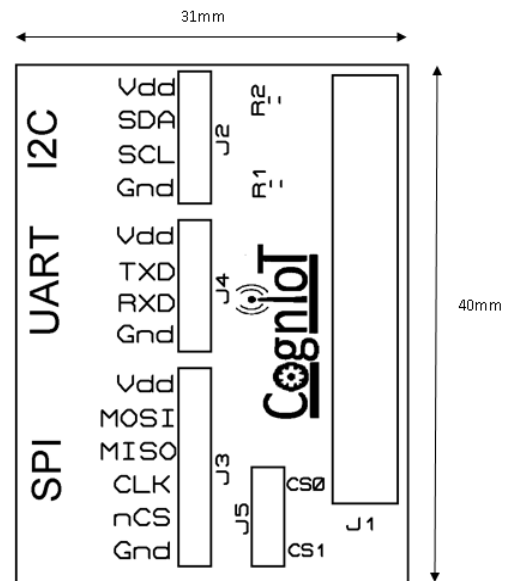
1. 3.3V power
2. GND
3. SCL (with optional pull-up resistor)
4. SDA (with optional pull-up resistor)

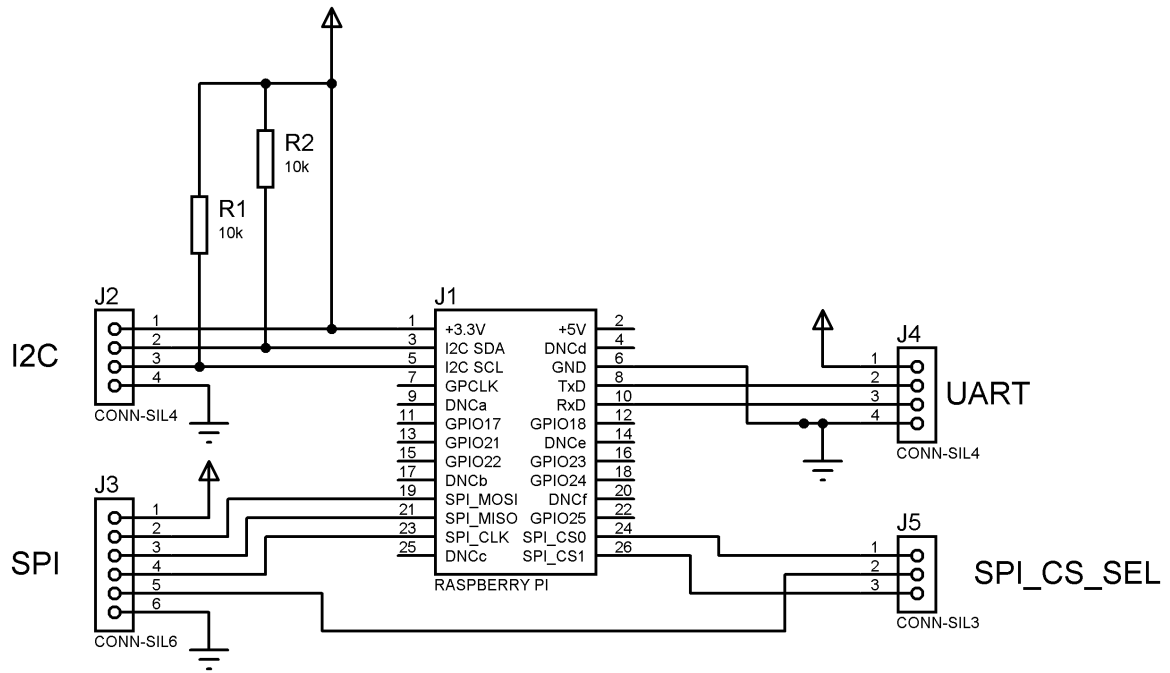
4-pin UART

1. 3.3V
2. TxD
3. RxD
4. GND

6-pin SPI

1. 3.3V
2. GND
3. MOSI
4. MISO
5. CLK
6. /CS link selectable on J5 to Raspberry-Pi SPI_CS0 or SPI_CS1





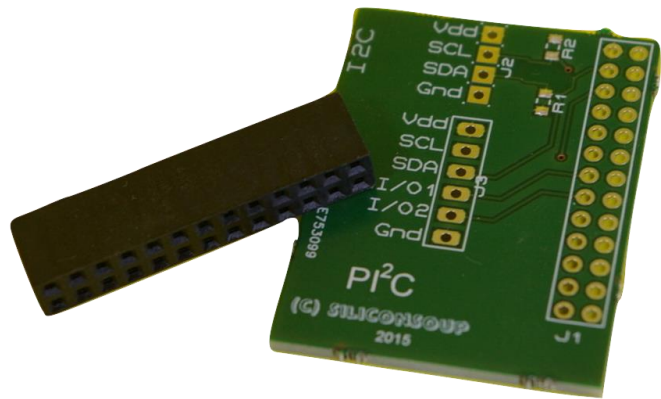
Pi²C - I²C Serial Adapter

The I²C serial Adapter from CognIoT brings the I²C port from the Raspberry Pi to convenient 0.1" connections.

Two different headers options are provided on the board

- one has I²C and power
- the other adds 2 GPIO ports from the Raspberry Pi to the I²C and power to accommodate any interrupt signals from an I²C device.

This enables direct connection of the CognIoT™ range of sensor boards

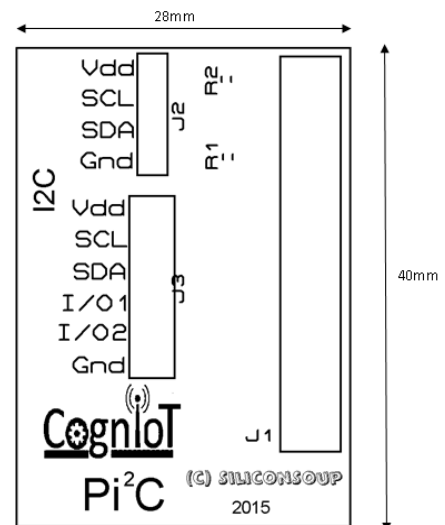


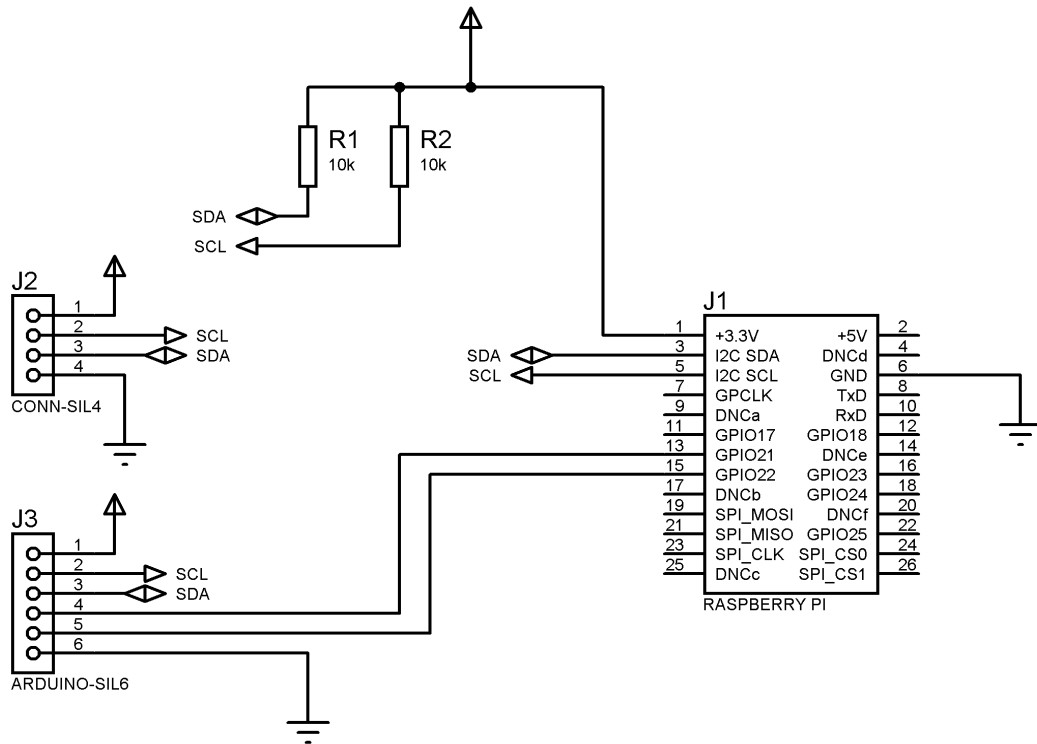
4-pin I²C

1. 3.3V
2. SCL (optional fit for pull-up resistor)
3. SDA (optional fit for pull-up resistor)
4. GND

6-pin I²C

1. 3.3V
2. SCL (optional fit for pull-up resistor)
3. SDA (optional fit for pull-up resistor)
4. GPIO21
5. GPIO22
6. GND





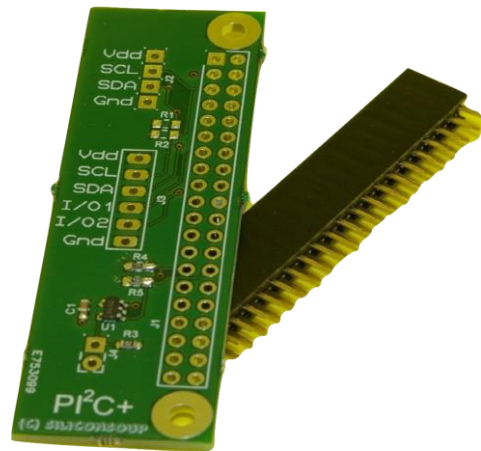
Pi²C+ - HAT Compatible I²C Serial Adapter

The I²C serial Adapter from CognIoT brings the I²C port from the Raspberry Pi to convenient 0.1" connections.

Two different headers options are provided on the board

- one has I²C and power
- the other adds 2 GPIO ports from the Raspberry Pi to the I²C and power to accommodate any interrupt signals from an I²C device.

This enables direct connection of the CognIoT™ range of sensor boards



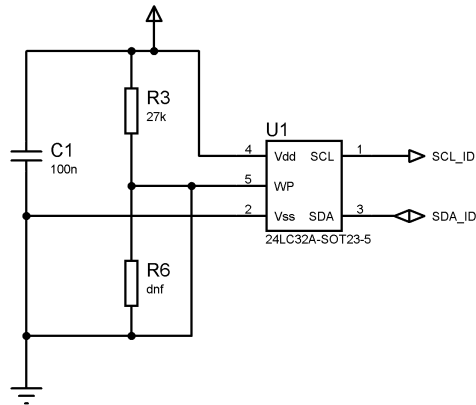
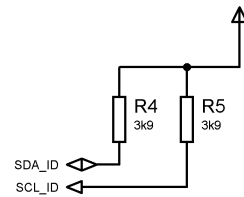
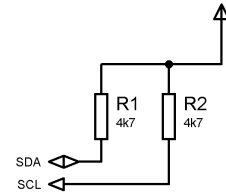
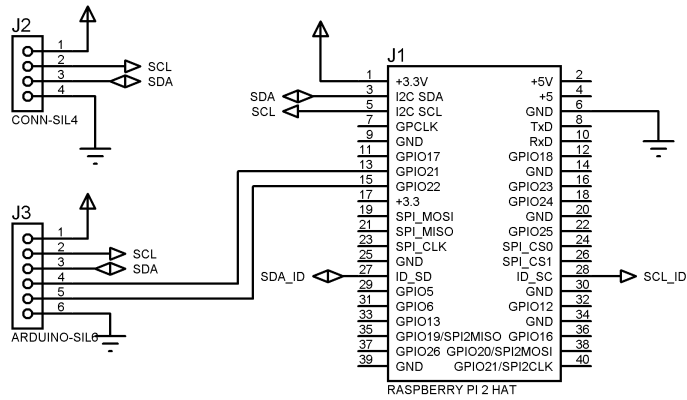
4-pin I2C

1. 3.3V
2. SCL (optional fit pull-up resistor)
3. SDA (optional fit pull-up resistor)
4. GND

6-pin I2C

1. 3.3V
2. SCL (optional fit pull-up resistor)
3. SDA (optional fit pull-up resistor)
4. GPIO21
5. GPIO22
6. GND

- Separate pull ups on I2C connectors and HAT-ID I²C memory
- 24LC32A HAT ID EEPROM chip



FILE NAME: **PI-squared-C2.pdsprj**
 DESIGN TITLE: **PI-squared-C2.pdsori**