

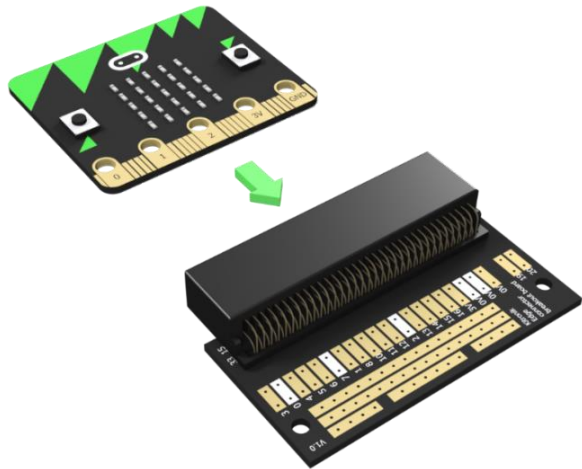
Edge Connector Breakout Board for the BBC micro:bit

www.kitronik.co.uk/5601

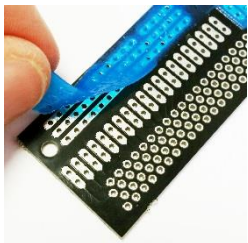


Introduction: This breakout board has been designed to offer an easy way to connect additional circuits and hardware to the edge connector on the BBC micro:bit. This edge connector offers access to a large number of the BBC micro:bit processor pins. For details on these please refer to the next page.

To use the breakout board the BBC micro:bit should be inserted firmly into the connector as shown below.



Examples of board in use: This breakout board is used in our 'Inventors kit for BBC micro:bit'. This kit is supplied with instructions detailing a number of uses for the board. These can be found at www.kitronik.co.uk/microbitinvent



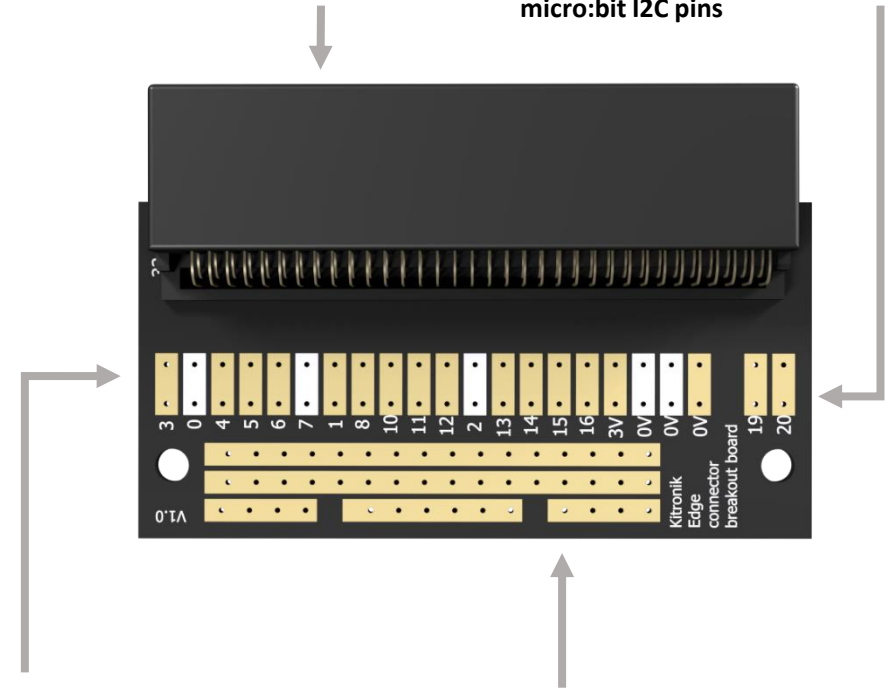
Assembly: Before using your breakout board you will need to solder that the edge connector into place on the PCB.

You will also notice that there is a blue plastic covering some of the pins. This should just be peeled away before the board is used (see image left).

Layout:

BBC micro:bit compatible connector

Solder pads connected to the BBC micro:bit I2C pins



Solder pads connected through to the BBC micro:bit pin numbers as indicated

This area has been designed so that a 20x2 row of pin headers can be soldered in if required (for example to connect an IDC lead)

Prototyping area

This area has been designed to allow you to prototype small circuits. There is a 3V and 0V row, and three additional connecting sections.

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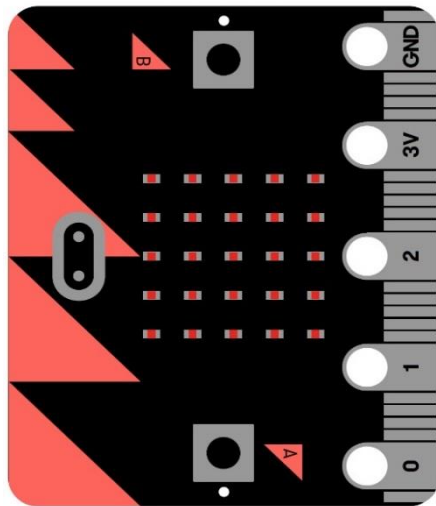


Breakout PCB Ref (if applicable)

Name Description

Edge Connector Pinout

Note: A number of these pins may not be accessible in all editors.



- 0V
- Special function pin
- 3V
- Digital input / output
- Analogue input / digital IO
- Digital input (shared with a button)
- Digital output (shared with LED matrix)

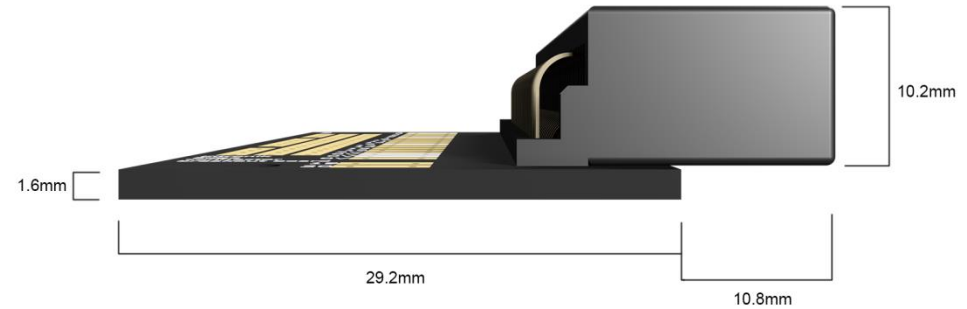
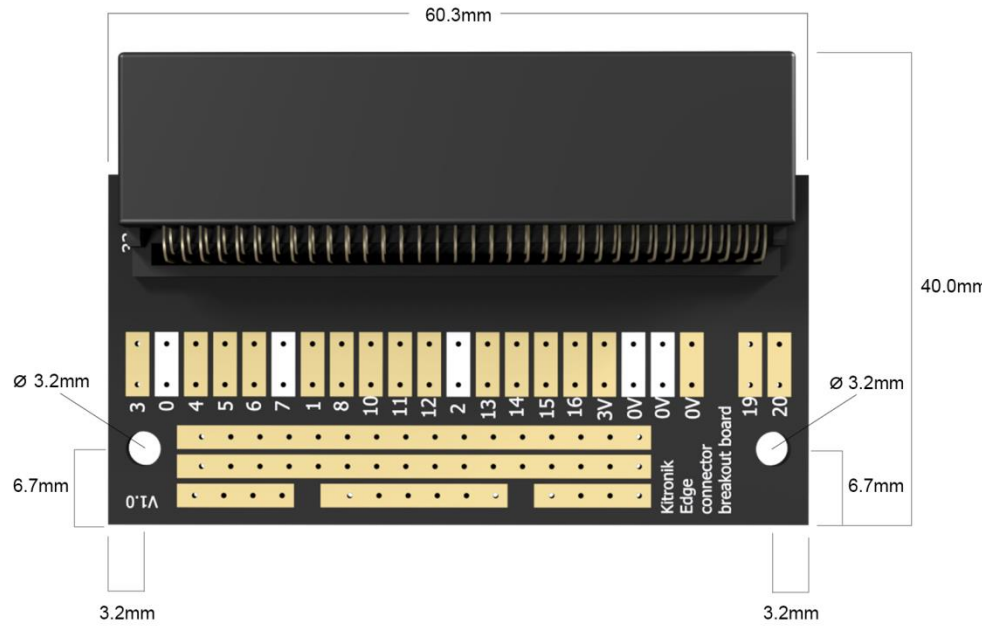
22	0V	0V / ground
0V	0V	0V / ground
21	0V	0V / ground
20	SDA	Serial data pin connected to the magnetometer & accelerometer
19	SCL	Serial clock pin connected to the magnetometer & accelerometer
18	3V	3V / positive supply
3V	3V	3V / positive supply
17	3V	3V / positive supply
16	DIO	General purpose digital IO (P16 in editors)
15	SCK	Serial connection - Clock
14	MISO	Serial connection - Master Input / Slave Output
13	MOSI	Serial connection - Master Output / Slave Input
2	PAD2	General purpose digital / analogue IO (P2 in editors)
12	DIO	General purpose digital IO (P12 in editors)
11	BTN_B	Button B – Normally high, going low on press (Button B in editors)
10	COL3	Column 3 on the LED matrix
9	COL7	Column 7 on the LED matrix
8	DIO	General purpose digital IO (P8 in in editors)
1	PAD1	General purpose digital / analogue IO (P1 in editors)
7	COL8	Column 8 on the LED matrix
6	COL9	Column 9 on the LED matrix
5	BTN_A	Button A – Normally high, going low on press (Button A in editors)
4	COL2	Column 2 on the LED matrix
0	PAD0	General purpose digital / analogue IO (P0 in editors)
3	COL1	Column 1 on the LED matrix

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Dimensions



(Dimensions +/- 0.8mm)