

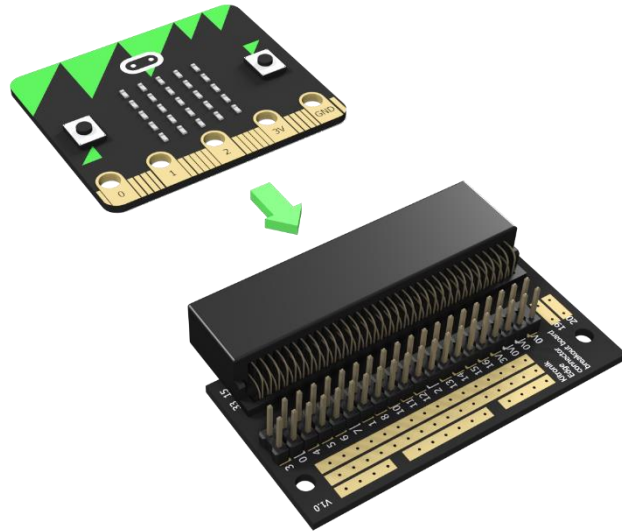
# Edge Connector Breakout Board for the BBC micro:bit

www.kitronik.co.uk/5601B



**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.

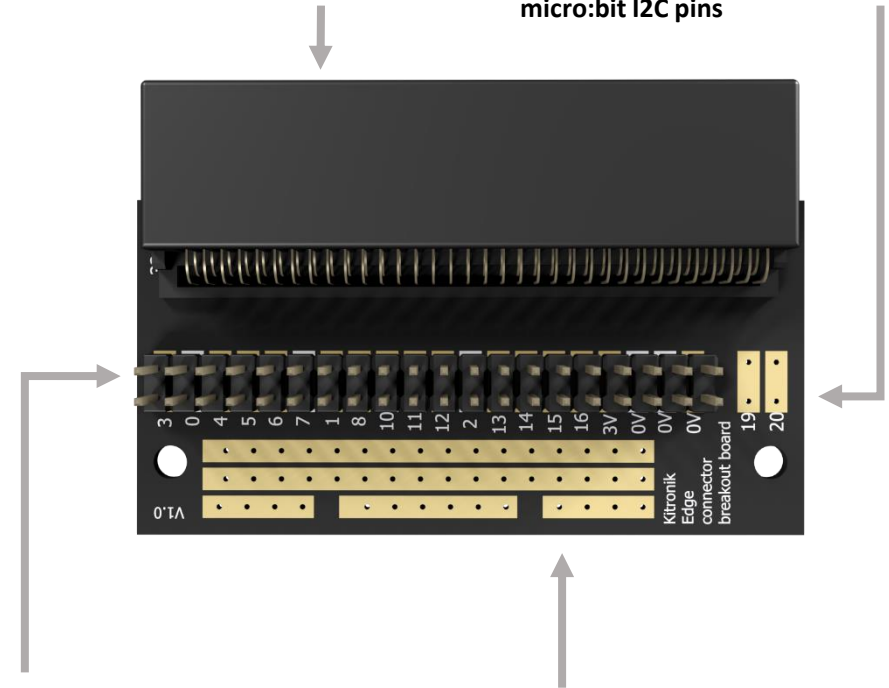


**Examples of board in use:** This breakout board is used in our 'Inventors kit for BBC micro:bit'. This kit is supplied with instructions detailing a number of uses for the board. These can be found at [www.kitronik.co.uk/microbitinvent](http://www.kitronik.co.uk/microbitinvent)

## Layout:

BBC micro:bit compatible connector

Solder pads connected to the BBC micro:bit I2C pins



**Pin headers connected through to the BBC micro:bit pin numbers as indicated**

This area is fitted with a 20x2 row of pin headers. These can be used to connect an IDC cable or jumper wires.

**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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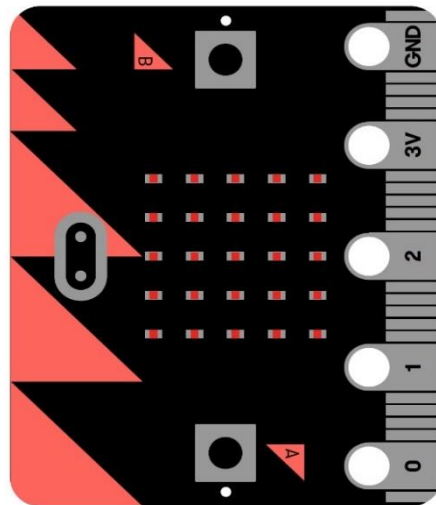


Breakout PCB Ref (if applicable)

Breakout PCB Ref (if applicable)	Name	Description
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 ( <b>P16 in editors</b> )
15	MOSI	Serial connection - Master Output / Slave Input
14	MISO	Serial connection - Master Input / Slave Output
13	SCK	Serial connection - Clock
2	PAD2	General purpose digital / analogue IO ( <b>P2 in editors</b> )
12	DIO	General purpose digital IO ( <b>P12 in editors</b> )
11	BTN_B	Button B – Normally high, going low on press ( <b>Button B in editors</b> )
10	COL3	Column 3 on the LED matrix
9	COL7	Column 7 on the LED matrix
8	DIO	General purpose digital IO ( <b>P8 in in editors</b> )
1	PAD1	General purpose digital / analogue IO ( <b>P1 in editors</b> )
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 ( <b>Button A in editors</b> )
4	COL2	Column 2 on the LED matrix
0	PAD0	General purpose digital / analogue IO ( <b>P0 in editors</b> )
3	COL1	Column 1 on the LED matrix

## Edge Connector Pinout

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



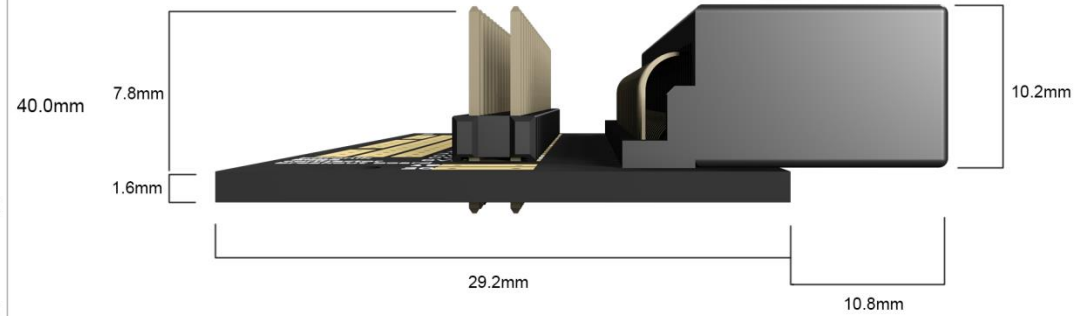
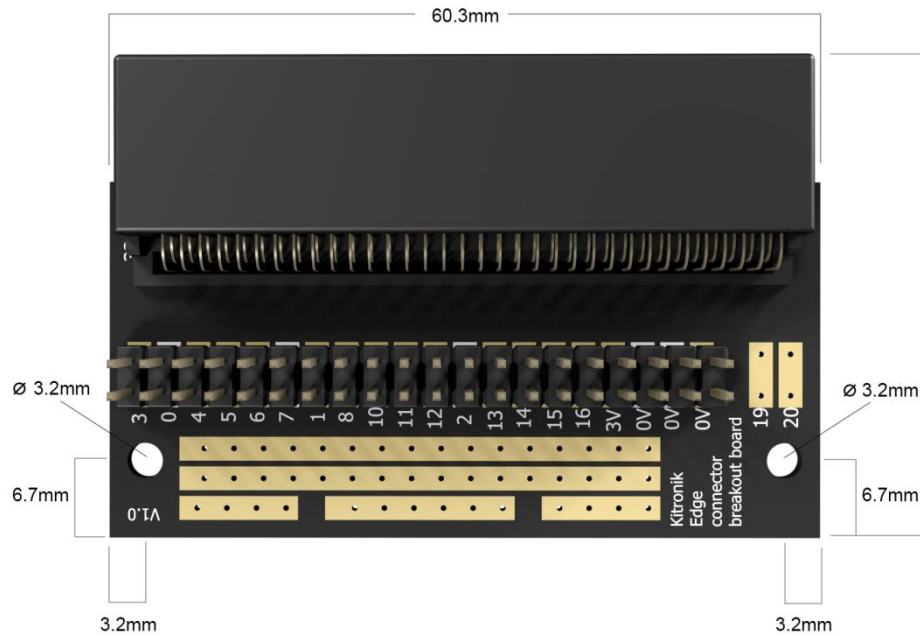
- 0V
- Special function pin
- 3V
- Digital input / output
- Analogue input / digital IO
- Digital input (shared with a button)
- Digital output (shared with LED matrix)

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## Dimensions



(Dimensions +/- 0.8mm)