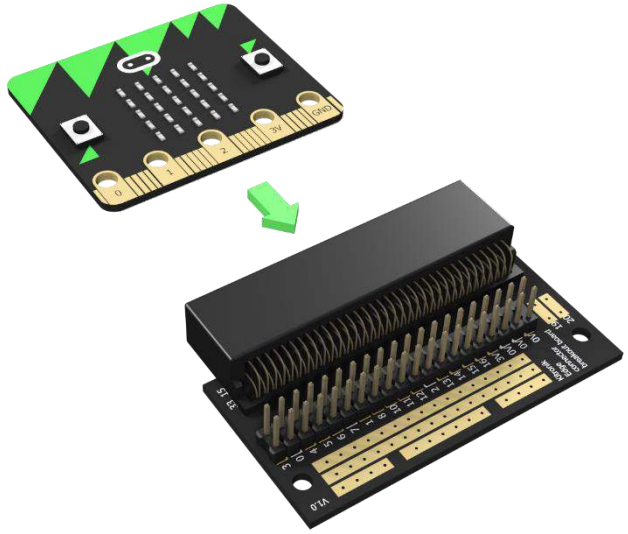
Edge Connector Breakout Board for the BBC micro:bit

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.

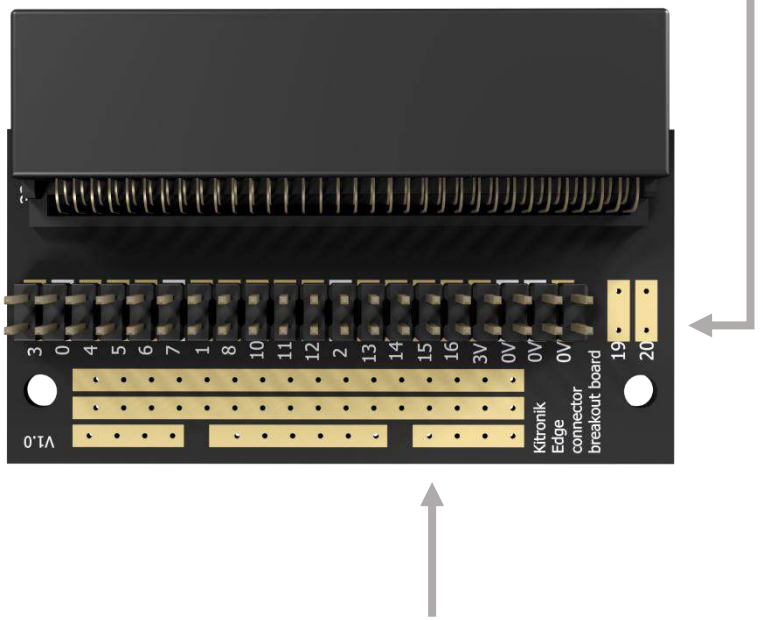


Examples of board in use: This breakout board is used in our 'Inventors kit for BBC micro:bit'. This kit is supplied with instructions detailing a number of uses for the board. These can be found at www.kitronik.co.uk/microbitinvent

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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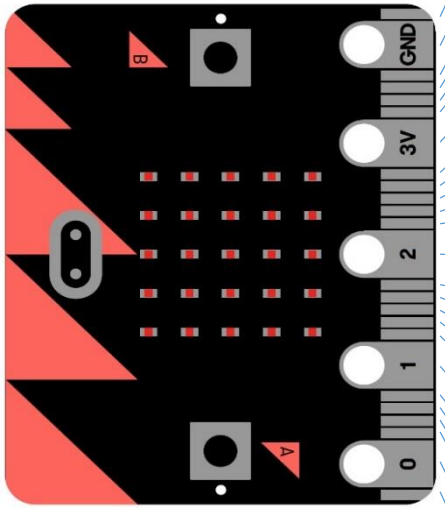
Edge Connector Pinout

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)

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 **(P16 in editors)**
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 **(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 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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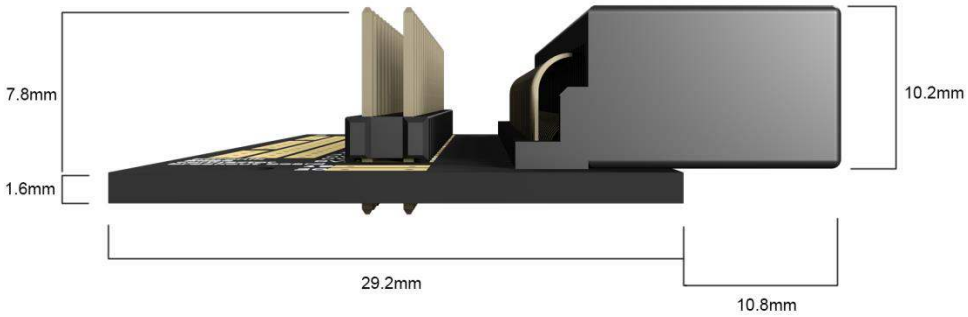
Dimensions



(Dimensions +/- 0.8mm)