

Klip Halo V2.0 Board for the BBC micro:bit

www.kitronik.co.uk/5648-BAT



Introduction: The Klip Halo V2.0 board for the BBC micro:bit breaks out each of the 19 GPIO pins from the BBC micro:bit, with easily accessible, clearly marked connection points compatible with both crocodile clips and 4mm banana plugs. The edge connector allows simple assembly by inserting the BBC micro:bit into the Klip Halo V2.0. Detailed information regarding the uses of each micro:bit pin can be found at: www.microbit.co.uk/device/pins

Power Supply:

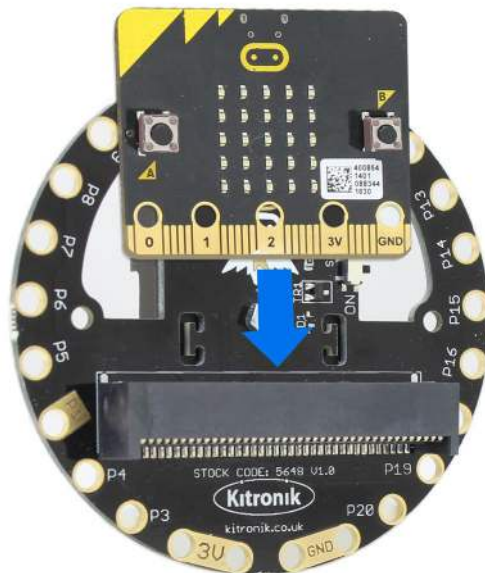
The Klip Halo V2.0 with battery cage has an integrated 2xAA battery holder and an on/off switch. The switch also turns on /off the power to the 3V connections.

Connecting a BBC micro:bit:

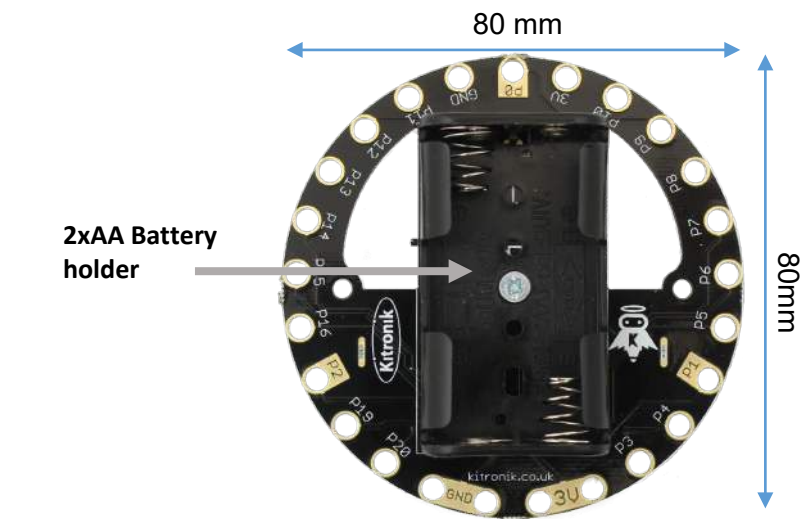
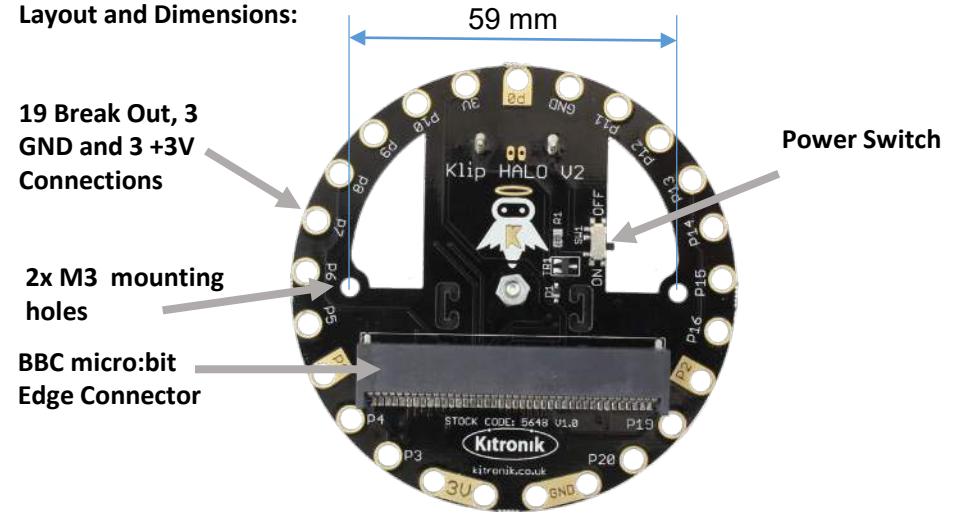
The board has been designed so that the BBC micro:bit can be slotted into the edge connector.

No tools are required for installation.

The blue arrow shows the direction of insertion of the BBC micro:bit.



Layout and Dimensions:



The Klip Halo board is 28.3mm thick (including BBC micro:bit connector and Battery holder)

Klip Halo V2.0 Board for the BBC micro:bit

www.kitronik.co.uk/5648-BAT



Electrical Information

| | |
|--------------------------|--------------|
| Operating Voltage (Vcc) | 3.0V (2x AA) |
| Number of Pin Break Outs | 19 GPIO |

JavaScript Blocks editor code

Example: Connect Kitronik Electro-Fashion Sewable LED positive terminals to Klip Halo break out pins P3, P6, P13 and P15, and the negative pins to GND using conductive thread or crocodile clips.

The BBC micro:bit LED display will be turned off.
Button A will flash each LED in turn around the Klip Halo V2.0.

Button B will flash all the LEDs together.

Example Uses: Uses for the Klip Halo V2.0 could include attaching external components using crocodile clips, or connecting to Kitronik electro-fashion products. For more details see: www.kitronik.co.uk/e-textiles-conductive-thread.html

```
forever
  led enable false
  if button A is pressed then
    while not button B is pressed
      do
        digital write pin P3 to 1
        pause (ms) 100
        digital write pin P3 to 0
        digital write pin P6 to 1
        pause (ms) 100
        digital write pin P6 to 0
        digital write pin P13 to 1
        pause (ms) 100
        digital write pin P13 to 0
        digital write pin P15 to 1
        pause (ms) 100
        digital write pin P15 to 0
```

```
forever
  led enable false
  if button B is pressed then
    while not button A is pressed
      do
        digital write pin P3 to 1
        digital write pin P6 to 1
        digital write pin P13 to 1
        digital write pin P15 to 1
        pause (ms) 500
        digital write pin P3 to 0
        digital write pin P6 to 0
        digital write pin P13 to 0
        digital write pin P15 to 0
        pause (ms) 500
```