

Klip Halo V2.0 Board (with JST) for the BBC micro:bit



www.kitronik.co.uk/5648-JST

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

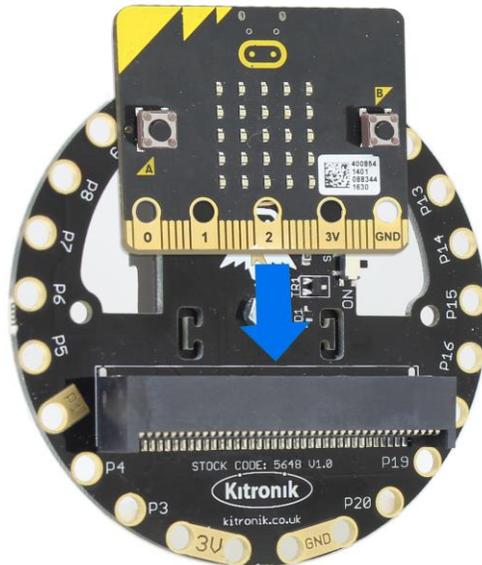
Power Supply:

The Klip Halo V2.0 with JST has an integrated connector for 3V power, and an on/off switch. The connector is the same as on the BBC micro:bit, so BBC micro:bit battery packs will plug in. **DO NOT use with LiPo batteries.** . The switch also turns on /off the power to the 3V connections.

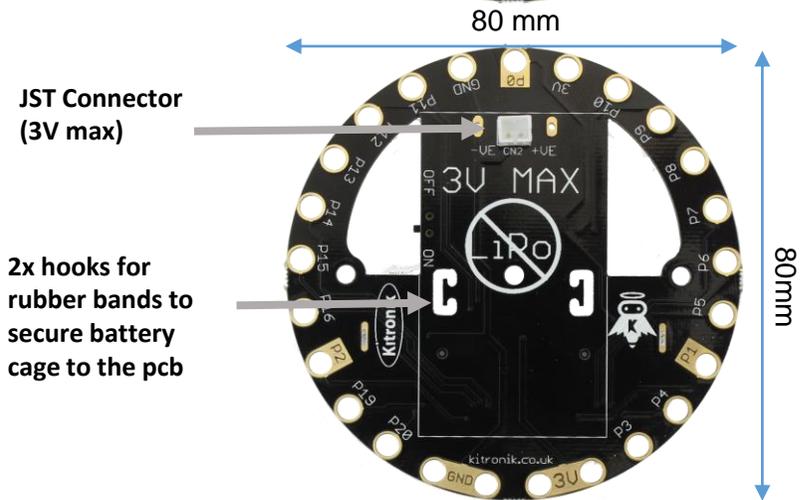
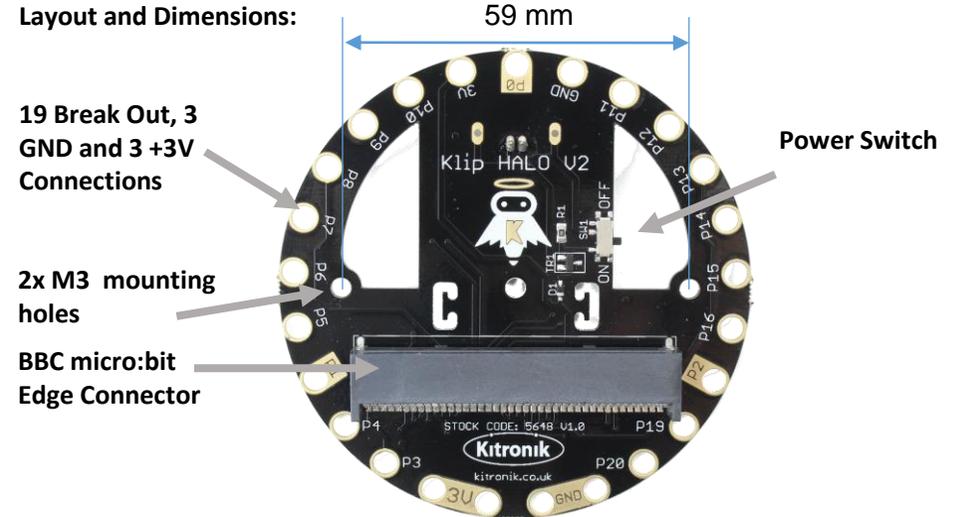
Connecting a BBC micro:bit:

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 show the direction of insertion of the BBC micro:bit.



Layout and Dimensions:



The Klip Halo board is 18mm thick (including BBC micro:bit and JST connector)

Klip Halo V2.0 Board (with JST) for the BBC micro:bit

www.kitronik.co.uk/5648-JST



Electrical Information

Operating Voltage (Vcc)	3.0V (Not suitable for LiPo batteries)
Number of Pin Break Outs	19 GPIO

JavaScript Blocks editor code

Example: Connect Kitronik Electro-Fashion Sewable LED positive terminals to Klip Halo V2.0 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.

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
```