:CREATE Proto Board for the BBC micro:bit

www.kitronik.co.uk/5634



Introduction: The :CREATE Proto board is designed to allow the creation and use of prototype circuits in conjunction with a BBC micro:bit. It has been carefully designed to allow the use of a mixture of surface mount and conventional components.

The prototyping board area is based on two grids. The through holes are on a 2.54mm (0.1") pitch grid and the surface mount pads on a 1.27mm (0.05") pitch grid. These grid sizes are designed for most common components to fit. The surface mount pads are also designed to be linked with solder so small tracks can be made

All BBC micro:bit pins are available to connect to the prototype area.

The board does not produce a regulated 3V supply, the BBC micro:bit will either need to be powered by a different source or a user fitted regulated 3V supply (connections to 3V pad and GND pad). Also, the :CREATE Proto Board does not have any reverse polarity protection. There is an allocated space for a terminal block to be fitted. From this are 4 positive pads and 4 negative pads which are easily linked to the prototype area.



Inserting a BBC micro:bit: To use the :CREATE proto board the BBC micro:bit should be inserted firmly into the connector as shown left.

This board includes expansion pads that conform to the 'Link' standard allowing use with other 'Link' compatible expansion boards

Layout:

Power Supply Pads designed for the BBC micro:bit supplied terminal block (one of the 4 x compatible connector. - pads will need to be connected to GND of BBC micro:bit to create a common ground) 'Link' Power pads to compatible prototype area, Stock Code 5634 expansion x4 +V Supply U1.0 header pads x4 –V Supply O GND P20 O P19 **0** 3U O P16 P15 P14 P13 P2 P12 • P1: O P16 P9 P8 • P1 • P7 P6 P5 Prototype area: P4 Holes on 2.54mm P0 P: CREATE Proto Board (0.1") pitch. www.kitronik.co.uk SMD pads on 1.27mm (0.05") pitch.

BBC micro:bit pins broken out to prototype area on 2.54mm (0.1") pitch. For pin specifications visit:

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Examples of compatible components:





0805 & 0603

SOT223



SMC



SOD323



SO8

and

similar styles



SOT23 and similar styles

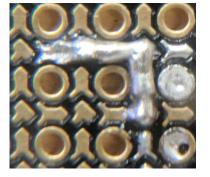
Creating 'tracks':



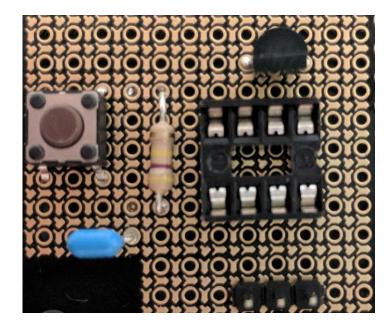
Feed the solder to the pads/joints while slowly moving the soldering iron along the pads to form a track. Small tip soldering irons recommended.







Examples of linked pads to create tracks with solder.



Standard conventional components.

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Dimensions

