## imall

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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# micro:pixel 4x8 WS2812B board for BBC micro:bit

PPMB00100



Love your micro:bit but wish it had a splash of colour? Well, with this nifty add-on you have 32 individually controllable RGB WS2812B (NeoPixel) LEDs in a well proportioned 4x8 grid.

The WS2812B LEDs are also known as NeoPixels, which is Adafruits Trademark name for them. As such, they use the NeoPixel library in TouchDevelop etc.

The micro:pixel comes fully assembled with an edge connector, simply plug your micro:bit in and get coding! We have a link in the Example Code Section to the code we have been using to play with them!

By default the micro:pixel uses Pin0 as the LED data pin as this is the default value for the touch develop neopixel library. If you wish to use another pin in Micropython or Java then we have designed in a handy solder jumper on the board, simply cut the thin track using a craft knife and solder between the other pads this will enable pin 8 as the data pin for the LEDs and free up pin 0.



WARNING: These little WS2812B Neopixel fellas can get VERY bright so we recommend running at a low brightness ONLY (we recommend 1/8th which is 32 out of 255 in your code). If you run the micro:pixel board at brightnesses higher than this, then you may well damage your micro:bit board as the pixels will try to pull more power than the micro:bit itself can handle.

The micro:pixel board also has the micro:bits pins 0, 1 and 2 broken out along with 3v and ground which can accommodate a banana plug or croc clip

Please note that at the time of publishing the microsoft block editor doesn't have a neopixel library, touch develop, code kingdoms JavaScript and Micropython however do.

### Please note, micro:bit is not included.

### Example code (Right click save as):

- Touch develop https://www.proto-pic.co.uk/user/products/large/microbitmicropixelrainbow%20test.hex
- JavaScript (coming soon)
- Micropython Flame https://www.proto-pic.co.uk/user/RealisticFlame.hex
- Micropython Disco Flame https://www.proto-pic.co.uk/user/SpookyColours.hex