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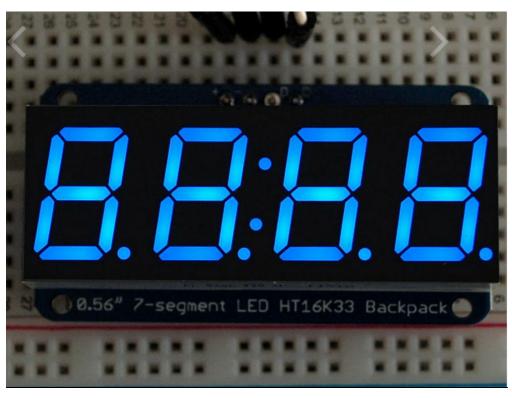
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LEDS / SEGMENTED / ADAFRUIT 0.56" 4-DIGIT 7-SEGMENT DISPLAY W/I2C BACKPACK - BLUE



# Adafruit 0.56" 4-Digit 7-Segment Display w/I2C Backpack - Blue

PRODUCT ID: 881

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**DESCRIPTION** 

**TECHNICAL DETAILS** 







#### **DESCRIPTION**

What's better than a single LED? Lots of LEDs! A fun way to make a small display is to use an 8x8 matrix or a 4-digit 7-segment display. Matrices like these are 'multiplexed' - so to control all the seven-segment LEDs you need 14 pins. That's a lot of pins, and there are driver chips like the MAX7219 that can control a matrix for you but there's a lot of wiring to set up and they take up a ton of space. Here at Adafruit we feel your pain! After all, wouldn't it be awesome if you could control a matrix without tons of wiring? That's where these adorable LED matrix backpacks come in. We have them in two flavors - a mini 8x8 and a 4-digit 0.56" 7-segment. They work perfectly with the matrices we stock in the Adafruit shop and make adding a bright little display trivial.

The matrices use a driver chip that does all the heavy lifting for you: They have a built in clock so they multiplex the display. They use constant-current drivers for ultra-bright, consistent color (the images above are photographed at the dimmest setting to avoid overloading our camera!), 1/16 step display dimming, all via a simple I2C interface. The backpacks come with address-selection jumpers so you can connect up to four mini 8x8's or eight 7-segments (or a combination, such as four mini 8x8's and four 7-segments, etc) on a single I2C bus.

The product kit comes with:

- A fully tested and assembled LED backpack
- Ultra-bright 4-digit 0.56" tall blue seven-segment display
- 4-pin header

A bit of soldering is required to attach the matrix onto the backpack but its very easy to do and only takes about 5 minutes.

Of course, in classic Adafruit fashion, we also have a detailed tutorial showing you how to solder, wire and control the display. We even wrote a very nice library for the backpacks so you can get running in under half an hour, displaying images on the matrix or numbers on the 7-segment. If you've been eyeing matrix displays but hesitated because of the complexity, his is the solution you've been looking for!

#### TECHNICAL DETAILS

This board/chip uses I2C 7-bit address between 0x70-0x77, selectable with jumpers

- Backpack Dimensions: 27mm x 50mm x 4mm / 1.1" x 2" x 0.16"
- Backpack Weight: 5.3g
- 7-Segment Display Dimensions: 19mm x 50mm x 14mm / 0.75" x 2" x 0.56"
- 7-Segment Display Weight: 8.4g

Datasheets, schematic, EagleCAD PCB files, and Fritzing available in the product tutorial



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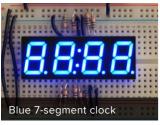
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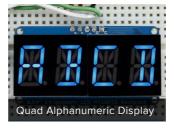












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