



SparkFun Pi AVR Programmer HAT

DEV-14747



DESCRIPTION

INCLUDES

DOCUMENTS

The SparkFun Pi AVR Programmer HAT makes it easy to program AVR's directly from the SPI hardware pins on any Raspberry Pi. It was originally designed as an in-house solution for SparkFun production, but now is offered as a robust programming tool for anyone to purchase! This programmer is by far one of the fastest, most reliable, and hack-able (fully open sourced) AVR programming solutions available. Whether you're a beginner or experienced electronics enthusiast, the Pi AVR Programmer HAT should be easy to get up-and-running.

The SparkFun Pi AVR Programmer HAT plugs directly into the GPIO port on your Raspberry Pi and provides multiple unique amenities onboard including (but not limited to) a capacitive touch pad to engage programming, multiple Pass / Fail status LEDs, an isolation switch, and label boxes to keep track of your projects. Also included with each HAT is a 1x6 hookup cable that connects to the programmer's ISP header, and an ISP interface adapter equipped with a 2x3 header. Programming an AVR through an in-system programmer (ISP) can provide many benefits including a faster code upload rate, the ability to overwrite the bootloader and gain a bit more flash space, and a way to influence the fuse bits to change a multitude of settings on your target.

This HAT can be used directly from the command line using AVRDUDE commands, with some simple setup steps, or it can function as a stand-alone programmer with a capacitive touch pad engage button and status LEDs!

GET STARTED WITH THE SPARKFUN PI AVR PROGRAMMER HAT GUIDE

Tags

- ARDUINO
- AVR
- CAPACITIVE
- DEVELOPMENT
- GPIO
- HAT
- ISP
- PROGRAMMER
- RASPBERRY PI
- SPI

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SparkFun Pi AVR Programmer HAT Product Help and Resources

TUTORIALS

VIDEOS

SKILLS NEEDED



Raspberry Pi Stand-Alone Programmer

MARCH 8, 2018

This tutorial will show you how to use a headless Raspberry Pi to flash hex files onto AVR microcontrollers as a stand-alone programmer. It also tells the story



Pi AVR Programmer HAT Hookup Guide

JULY 26, 2018

In this tutorial, we will use a Raspberry Pi 3 and the Pi AVR Programmer HAT to program an ATmega328P target. We are going to first program the Arduino

about production programming challenges, how SparkFun came to this solution, and all the lessons learned along the way.

bootloader over SPI, and then upload an Arduino sketch over a USB serial COM port.

COMMENTS **2**

REVIEWS ★★★★★ **1**

Customer Reviews

★★★★★ 5 out of 5

Based on 1 ratings:

5 star	<div style="width: 100%; height: 10px; background-color: #e67e22;"></div>	1
4 star	<div style="width: 0%; height: 10px; background-color: #e67e22;"></div>	0
3 star	<div style="width: 0%; height: 10px; background-color: #e67e22;"></div>	0
2 star	<div style="width: 0%; height: 10px; background-color: #e67e22;"></div>	0
1 star	<div style="width: 0%; height: 10px; background-color: #e67e22;"></div>	0

Currently viewing all customer reviews.

★★★★★ **Awesome! Easy to setup - even for a noob.**

about a month ago by **Member #118354** ✓ verified purchaser

I'm a raspi noob and had it up and running in about 10 minutes. Would have been sooner, but SPI wasn't enabled on my Raspi. Ran raspi-config, enabled SPI, and worked right away. Didn't have to reboot.

I haven't tested the logic levels and powered my Uno with a USB cord. So, I will update my review if I have trouble with the 3.3v or 5v jumpers.



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