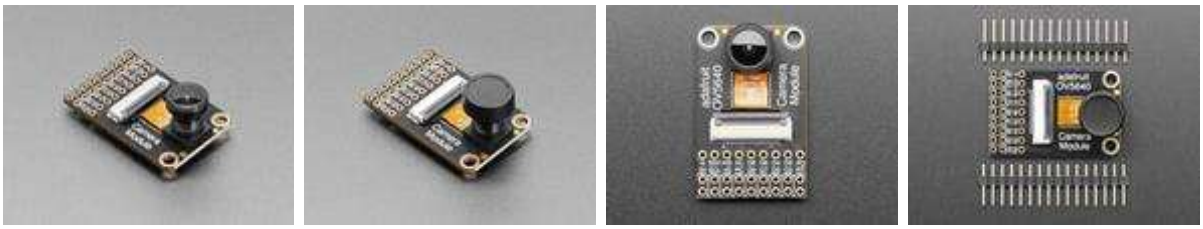
Adafruit OV5640 Camera Breakout - 120 Degree Lens

Product ID: 5673



Description

Hobby-level microcontrollers are finally getting big and powerful enough to start handling camera modules that historically would have required a full computer or FPGA to handle. The RP2040 and ESP32-Sx series of chips, for example, have enough pins to communicate with the 8-bit data output, DMA to quickly grab a frame, and the necessary RAM to buffer a raw snapshot. Now all we need is a nice camera module to make interfacing easy!

This Adafruit OV5640 Camera Breakout with 120 Degree Lens has a nice quality OV5640 camera with a 5 Megapixel sensor element, 120-degree wide angle lens, and all the support circuitry you need. We looked at existing camera modules and while this breakout board is backwards compatible, we made some improvements:

- Standard 2x9 header if you want it, but also a duplicated header strip 0.3" apart so you can plug it into a breadboard or perfboard
- Selectable external or internal 24MHz "XCLK" clock generation - save one gpio pin, or just have a nice stable 24 MHz signal even if your microcontroller can't generate it for you.
- Heat-sinking camera area with exposed ground pad, with lots of vias for good thermal transfer. Helpful for when doing continuous encoding and reducing thermal image drift.

- Optional VMotor 3.3V power jumper on DATA1, for auto-focusing camera modules
- 3.3V power-good LED on back that can be disabled

YouTube links:
https://www.youtube.com/watch?t=684&v=djkzn9eSXe8&embeds_euri=https%3A%2F%2Fwww.adafruit.com%2F&feature=emb_imp_woyt

https://www.youtube.com/watch?t=465&v=ur_Rojlr9EE&embeds_euri=https%3A%2F%2Fwww.adafruit.com%2F&feature=emb_imp_woyt

Technical Details

Product Dimensions: 35.7mm x 23.0mm x 17.5mm / 1.4" x 0.9" x 0.7"

Product Weight: 4.6g / 0.2oz