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OpenMV H7 Camera

● SEN-15325

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| DESCRIPTION | INCLUDES | **FEATURES** | DOCUMENTS | EXAMPLES |
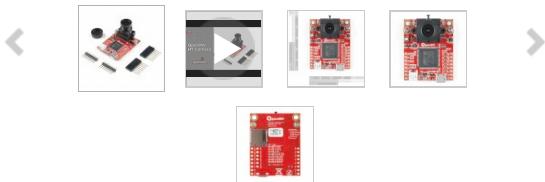
- The STM32H743VI ARM Cortex M7 processor running at 400 MHz with 1MB of RAM and 2 MB of flash. All I/O pins output 3.3V and are 5V tolerant. The processor has the following I/O interfaces:
  - Full speed USB (12Mbs) interface to your computer. Your OpenMV Cam will appear as a Virtual COM Port and a USB Flash Drive when plugged in.
  - μSD Card socket capable of 100Mbs reads/writes which allows your OpenMV Cam to record video and easy pull machine vision assets off of the μSD card.
  - SPI bus that can run up to 100Mbs allowing you to easily stream image data off the system to either the LCD Shield, the WiFi Shield, or another microcontroller.
  - I²C Bus, CAN Bus, and an Asynchronous Serial Bus (TX/RX) for interfacing with other microcontrollers and sensors.
  - 12-bit ADC and a 12-bit DAC.
  - Three I/O pins for servo control.
  - Interrupts and PWM on all I/O pins (there are 10 I/O pins on the board).
  - RGB LED and two high power 850nm IR LEDs.
- A removable camera module system allowing the OpenMV Cam H7 to interface with different sensors:
  - The OpenMV Cam H7 comes with a OV7725 image sensor is capable of taking 640x480 8-bit Grayscale images or 640x480 16-bit RGB565 images at 60 FPS when the resolution is above 320x240 and 120 FPS when it is below. Most simple algorithms will run at above 60 FPS. Your image sensor comes with a 2.8mm lens on a standard M12 lens mount. If you want to use more specialized lenses with your image sensor you can easily buy and attach them yourself.
  - For professional machine vision applications you can buy our Global Shutter Camera Module.
  - For thermal machine vision applications you can buy our FLIR Lepton Adapter Module.
- LiPo battery connector compatible with 3.7V LiPo batteries commonly sold online for hobbyist robotic applications.

Tags

CAMERA HEADER LIGHT / IMAGING MACHINE LEARNING MACHINE VISION MICROPYTHON OPENMV OV7725 PYTHON SENSOR

OpenMV H7 Camera Product Help and Resources

| **TUTORIALS** | VIDEOS | SKILLS NEEDED |

[How to Load MicroPython on a Microcontroller Board](#)
SEPTEMBER 4, 2018

This tutorial will show you how to load the MicroPython interpreter onto a variety of development boards.

COMMENTS `0`   REVIEWS ★★★★★ `1`

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★★★★★ **5 out of 5**

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4 star	▭	0
3 star	▭	0
2 star	▭	0
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★★★★★ **OpenMV H7**

about 2 months ago by Member #1374979 ✔ verified purchaser

Thank you.

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