JeVois Smart Machine Vision Camera SEN-15137

The JeVois Camera is a low cost, all-in-one 1.3MP machine vision camera. With an on board quad core CPU and MicroSD slot, all computer vision algorithms run on the device itself and can interface to computers or other devices such as Arduinos via USB or serial connection. At just 1.7 cubic inches and 17g, this sensor is one of the smallest TensorFlow enabled, deep learning AI, smart camera on the market today. With the added ability to run most popular machine vision frameworks (Open CV 4.0.0, Caffe, Darknet), you will have plenty of options when it comes to deciding how you want to operate your new camera!

The plastic case has four mounting holes making positioning the device simple along with an integrated cooling fan insuring no overheating or thermal throttling. For those looking to get into machine vision, this camera stands to be a solid, inexpensive starting point.

INCLUDES

- 1.3MP Jevois Camera
- Dual USB-A to USB-MiniB Cable.
- MicroSd to USB Adapter
- 16GB MicroSD Card with MicroSD to SD Adapter (Comes with the latest firmware pre-installed)
- JST to Bare Wire Interface Cable for serial connection
- Comes in a reusable metal case

- Processor: Allwinner A33 quad core ARM Cortex A7 processor @ 1.34GHz with VFPv4 and NEON, and a dual core Mali-400 GPU supporting OpenGL-ES 2.0.
- Memory: 256MB DDR3 SDRAM.
- Solid state disk: micro SD slot for firmware, Linux operating system, machine vision software, and data. Supports up to 25Mbyte/s.
- Camera sensor: 1.3MP camera with:
  - SXGA (1280 x 1024) up to 15 fps (frames/second)
  - VGA (640 x 480) up to 30 fps
  - CIF (352 x 288) up to 60 fps
  - QVGA (320 x 240) up to 60 fps
  - QCIF (176 x 144) up to 120 fps
  - QQVGA (160 x 120) up to 60 fps
  - QQCIF (88 x 72) up to 120 fps
- Camera field of view: 65 degrees horizontal, F2.8, 4:3 sensor aspect ratio.
- USB device interface: mini USB port for power, video streaming (UVC webcam standard), and serial-over-USB command-line interface and text data streaming.
- Hardware serial port: 5V or 3.3V (selected through VCC-IO pin) micro serial port connector to communicate with Arduino or other embedded controllers.
- Power: 3.5 Watts maximum from USB port. Requires USB 3.0 port or Y-cable to two USB 2.0 ports.
- Thermal: Integrated cooling fan, maintain stable 1.34GHz speed under full processor load, no overheating or thermal throttling.
- LED: One two-color LED: Green: power is good. Orange: power is good and camera is streaming video frames.
- Size: 28 cc or 1.7 cubic inches (plastic case included with 4 holes for secure mounting).
- Weight: 17 grams (not including microSD card, which is about 1 gram).

https://www.sparkfun.com/products/15137/1-21-19