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uCam-III
Micro Serial Camera Module

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OVERVIEW

MicroCAM 3 (uCAM-III)

The uCAM-III (microCAM-III) is a highly integrated serial camera module which can be attached to any host system that requires a video camera or a JPEG compressed still camera for embedded imaging applications, and is the new upgrade to the popular uCAM-II, which is backwards compatible but includes some additional features.

The module uses a CMOS VGA colour sensor along with a JPEG compression chip that provides a low cost and low powered camera system. The module has an on-board serial interface (TTL) that is suitable for a direct connection to any host micro-controller UART or a PC system COM port.

The uCAM-III is capable of outputting both RAW format and JPEG format images.

User commands are sent using a simple serial protocol that can instruct the camera to send low resolution (80x60 to 160x120) single frame raw images for viewing or high resolution (160x128 to 640x480) JPEG images for storage or viewing.

The uCAM-III comes in a compact form factor with a built in lens and a 5-wire connector that provides easy access to both power and serial data.

There are 3 lenses available for this camera from 4D Systems. A 56 degree (Standard), a 76 degree, and a 116 degree.

These are available to purchase from 4D Systems separately if required. The uCAM-III ships with the 56 degree lens installed.

There is a locking nut on the barrel thread of the lens, which is used to lock the focus in place once set, to prevent it from inadvertently being changed.

If you are looking for the uCAM-II, please refer here: http://www.4dsystems.com.au/product/uCAM-II

Information about the module

- Small size, low cost and low powered camera module for embedded imaging applications.

- uCAM-III: 5V DC Supply nominal

- On-board EEPROM provides a command-based interface to external host via TTL serial link.

- UART: up to 3.68Mbps for transferring JPEG still pictures or raw images.

- On board VGA colour sensor and RAW / JPEG CODEC for different resolutions.

- Built-in down sampling, clamping and windowing circuits for VGA, QVGA or 160x120 image resolutions.

- Built-in colour conversion circuits for 16-bit CrYCbY, 8-bit gray, 16-bit RGB or standard JPEG images.

- No external DRAM required.

- Additions lenses available

- Locking nut for locking focus in place

- Weight ~6g.

- Dimensions: 32mm x 32mm x 21mm (without lens, including header)

- RoHS

ANNOUNCEMENTS

The uCAM-III is a backwards-compatible upgrade to the uCAM-II

It can be used in places where the uCAM-II was used, but adds additional benefits such as:

- Addition of Hardware Reset on 5-way header pin.
- Addition of 128KB of RAM on the camera to allow uCAM to handle more complex images rather than degrade picture quality.
- Addition of new commands exposure, contrast and brightness control, as well as adjustable sleep timeouts.
- Pullup Resistor on RX pin to prevent floating pin being mistaken as data.

Please refer to the uCAM-III datasheet for more information

SOFTWARE

Introducing 4D Systems' Workshop4 IDE
Supports multiple development environments, to cater for different user requirements and skill level.

Workshop4 is a comprehensive software IDE for Microsoft Windows that provides an integrated software development platform for all of the 4D family of processors and modules. The IDE combines the Editor, Compiler, Linker and Downloader to develop complete 4DGL application code. All user application code is developed within the Workshop4 IDE.

The uCAM-III has a Demo Tool available as part of the Workshop4 IDE, which allows the User to communicate to the uCAM-III and send commands and capture images to aid the development process. Please download the latest version of Workshop4.
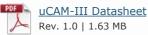
PRODUCT VIDEO

DOWNLOADS

uCAM-III Documentation

uCAM-III Datasheet
Rev. 1.0 | 1.63 MB

Software

Workshop 4 IDE
Product Page

uCAM-III Demo
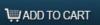Windows Only

BUY NOW

uCAM-III

This item includes the following:
- uCAM-III Module
- 56° Lens

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In stock
In stock
uCAM-III

uCAM-III-76LENS (Lens)

The item includes the following:
- 76° Lens

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In stock
uCAM-III-76LENS

uCAM-III-116LENS (LENS)

The item includes the following:
- 116° Lens

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