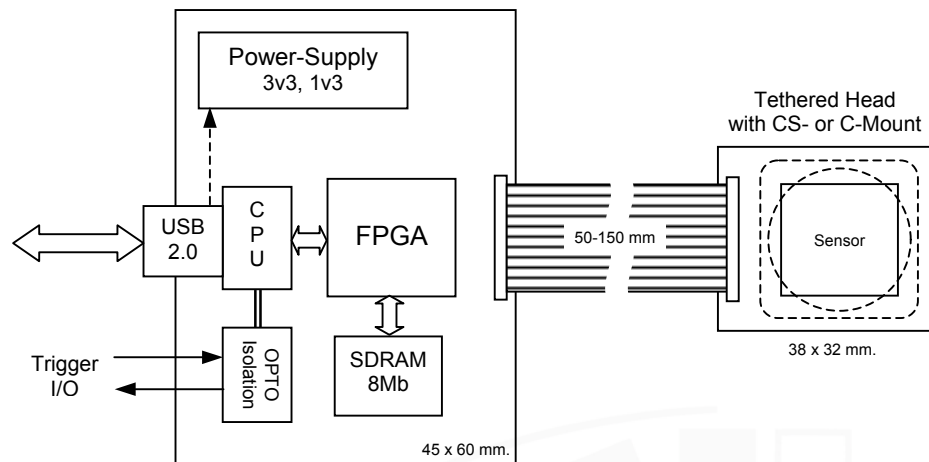
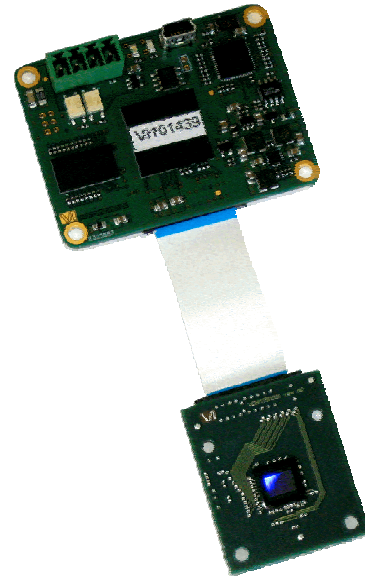


VC OEM Camera

Features:

- Various sensor formats
- 12, 10, 8-bit pixel resolution
- Monochrome or Colour
- USB 2.0 interface
- Power from USB
- Tethered-Head construction
- Opto-isolated Trigger I/O
- C-Mount or CS-Mount option
- Compact Housing option



The VC camera is conceived for the original equipment manufacturer who wants to integrate the electronics and sensor into a proprietary design. The small size and two-part construction allows for many mechanical solutions.

The base unit provides power, FPGA for sensor control and memory for image buffering. The user enjoys the flexibility provided by a USB 2.0 interface for loading camera logic, sending commands to the camera and acquiring image data.

The sensor PCB connects to this base unit using a flat-cable that can be as long as 150 mm.

Most sensors are available in monochrome or colour versions, the latter with Bayer demosaicing performed in the camera, presenting the user with 24-bit RGB pixel data. (8+8+8)

A flexible window-of-interest and several sub-sampling and binning modes allows the user to reduce resolution and increase the frame-rate. Images can be mirrored horizontally and vertically.

All VC cameras are supported by C-Cam's standard Application Programming Interface, CCAPI, providing high-level language support for camera control, image acquisition and image processing.

The camera has opto-isolated hardware trigger option with input for synchronising image acquisition with external events and output for control of lighting.

VC OEM Camera

Specifications

Imager type	CMOS low-power sensors Monochrome or Bayer colour
Window-of-Interest (WOI)	Rectangle or line image format specified by the user
Spectral range	400 – 1000 nm

USB Interface

Remote control	Via USB 2.0 interface
Connector type	Standard USB type B
Cable lengths	max 5 meters

Hardware Trigger

Trigger input-output	1 each, opto-isolated
Connector type	Screw terminal header, 4P
Signal	5v. standard Up to 24v with ext. resistor

Mechanical Specifications

Main PCB	60 x 45 x 10mm.
Tethered head	38 x 32 x 5mm
Flat-cable lengths	50, 75, 100, 125, 150mm
Weight	50 grams

Compact Housing	65 x 50 x 30mm.
Housing weight	approx.150 grams
Housing fixing	1 x ¼" + 2 x M6

Environmental Requirements

Operating temperature	-30°C to +70°C
Storage temperature	-30°C to +80°C in non-condensing conditions

Power Requirements

Power supply	via USB cable
Power consumption	(estimated) < 0.5 Watt

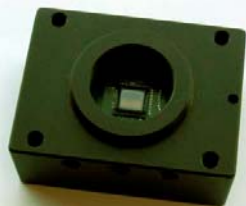
Available sensors	Pixel Array	Mpix	Pixel size	ADC	Dynamic range	Response V/lux-sec	FPS*	Shutter
Micron MT9P031	2592 x 1944	5	2.2 µm	12-bit	70dB	1.4 (colour) 2.1 (mono)	14	Rolling
Micron MT9V032	752 x 480	WVGA	6 µm	10-bit	80 – 120dB	4.8	60	Global

* The frame rate shown can be achieved by the sensor at full resolution. The acquired rate could be lower, depending on the loading of the host's USB interface, and the number of bits per pixel (e.g. RGB-8:8:8 colour requires 24-bits)

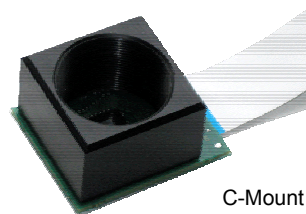
Ordering Information

	Monochrome	Bayer Colour
Micron 5 Mpix	VC-MT5000-U-M	VC-MT5000-U-B
Micron WVGA	VC-MT360-U-M	VC-MT360-U-B

Options



Compact housing



C-Mount



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