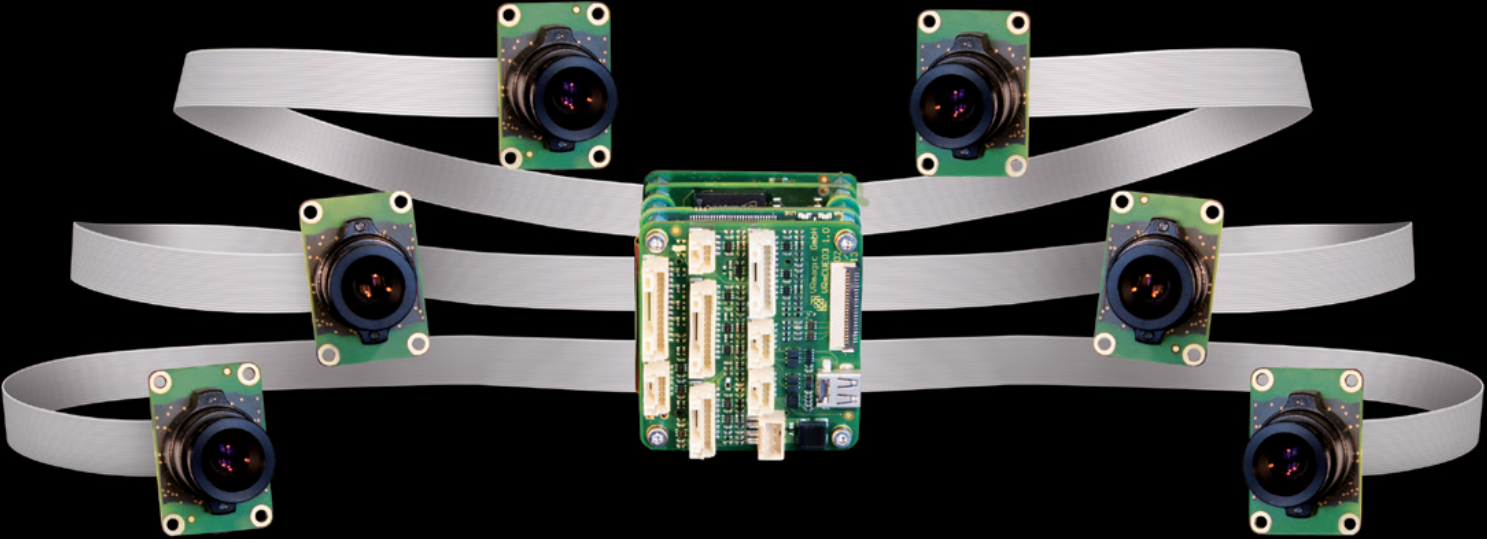


New!

6 Sensors on 1 Camera

See things from different perspectives

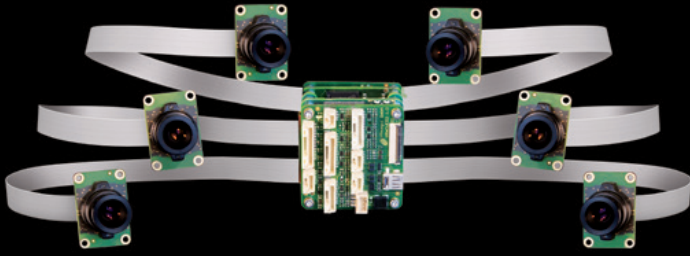


D3 Intelligent Multi-Sensor Camera with Six Image Sensors

Up to six external plug and play sensor boards may be connected to the camera base unit using flex-foil cables. This revolutionary camera design makes it possible to capture and process pixel-synchronous images from six different perspectives. By combining different sensor types on one camera, different spectral sensitivities and sensor characteristics can be used to get more information from your images. The core component of the camera is the D3 intelligent camera platform, which ensures rapid processing of the image data for reliable and efficient autonomous sensor applications.



STEMMER[®]
IMAGING



Product Highlights

- Six freely-positionable, pixel-synchronous sensors
- Plug and play functionality: sensors can be added or removed easily; different sensor types may be connected to the same base unit
- Programmable camera with Ubuntu Linux OS
- 1 GHz ARM® Cortex™-A8 Core, 700 MHz C674x™ DSP, both with Floating Point Unit (FPU)
- 2 GB DDR3-800 RAM, 32 GB flash memory
- Widest support for embedded image processing software currently available on the market

Technical Data

Available Interfaces (depending on interface board)		Physical Characteristics	
Communication	Gigabit Ethernet, 2 x USB 2.0 host/device, up to 44 GPIOs, RS232, RS485, CAN bus, SPI bus, I2C bus	Dimensions Camera Base Unit W x H x D [mm]	36 x 42 x 38 (with CUEO3 interface board)
Video	HDMI, RGB888, S-Video, analog audio (line in/out, mic in), digital audio (S/PDIF out)	Sensor Board Designs	OEM: without lens mount COB M9LP: M9 low profile lens mount and 6.0 mm F2.8 lens coated with IR-cut filter (VRmMS-12 only) COB S-Mount: M12 lens mount, 12.0 mm F2.0 lens, filter glass COB C-Mount: C-Mount and filter glass, lens not included (VRmS-12 and VRmS-14 only)
Further Interfaces	SD card reader, SATA, JTAG, trigger, strobe, Watchdog, 5 V DC power in		

Available Sensor Boards

Sensor Board	VRmS-12	VRmMS-12
Sensor Type	Aptina MT9V024	Aptina MT9V024
Technology	CMOS global shutter	CMOS global shutter
Color / Monochrome	● / ●	● / ●
Sensor Size [inch]	1/3 wide	1/3 wide
Resolution [px]	754 x 480	754 x 480
Bit Depth [bit]	8/10	8/10
Min. Exposure Time [µs]	30	30
Pixel Clock [MHz]	27	27
Max. Frame Rate [Hz] *	70	70
Board Size [mm]	42 x 38	28 x 19

Sensor Board	VRmS-14	VRmTS-20
Sensor Type	Sony ICX445	Aptina AR0134
Technology	CCD interline transfer	CMOS global shutter
Color / Monochrome	● / ●	● / ●
Sensor Size [inch]	1/3	1/3
Resolution [px]	1296 x 966	1280 x 960
Bit Depth [bit]	8/10	8/10
Min. Exposure Time [µs]	15	75
Pixel Clock [MHz]	36	66
Max. Frame Rate [Hz] *	22	40
Board size [mm]	42 x 38	26 x 26

* This is the maximum value at full ROI with minimum exposure time. The actual frame rate depends on the pixel clock, sensor settings, and image format. Other bandwidth limitations may lower this framerate.

