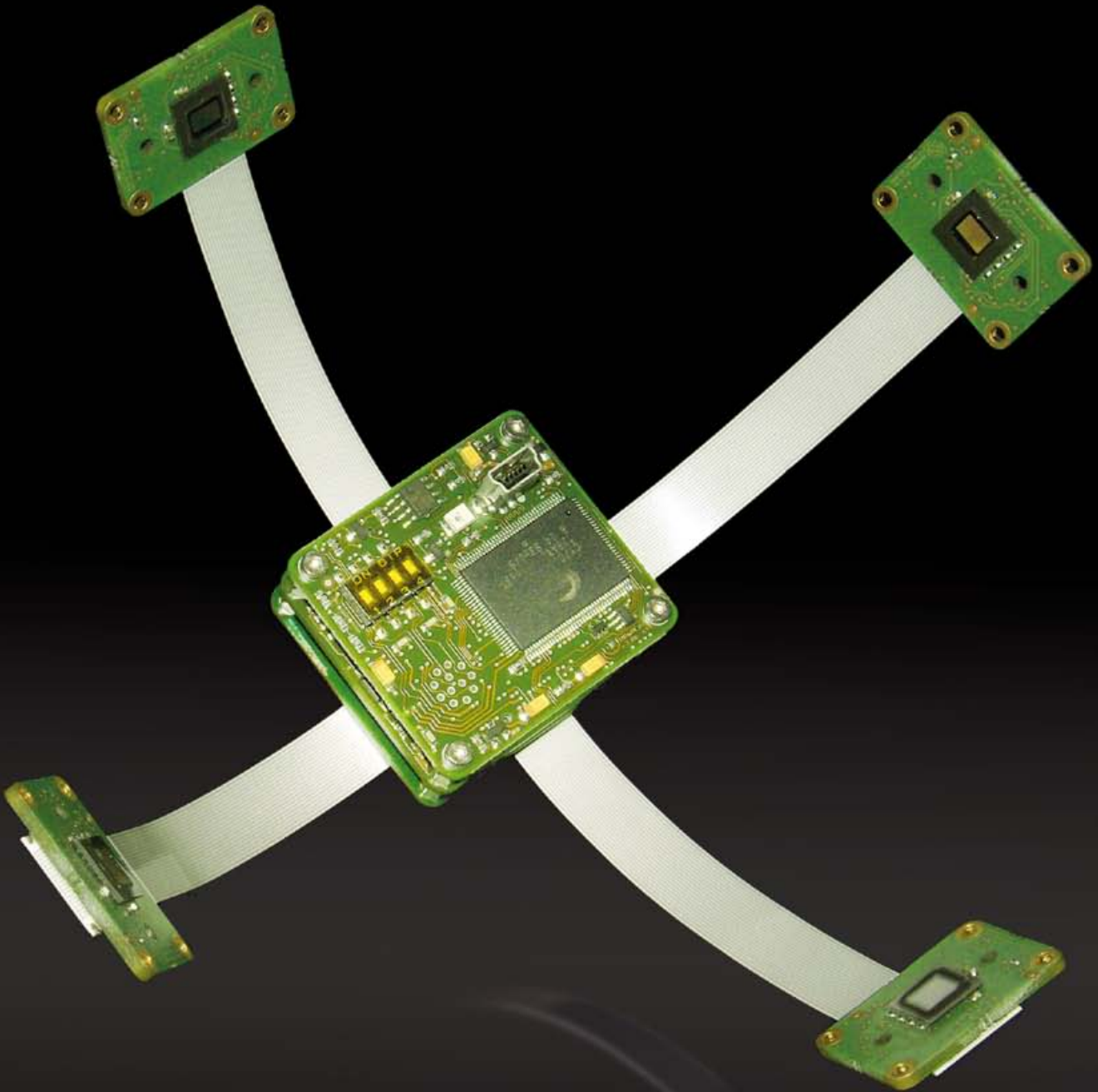
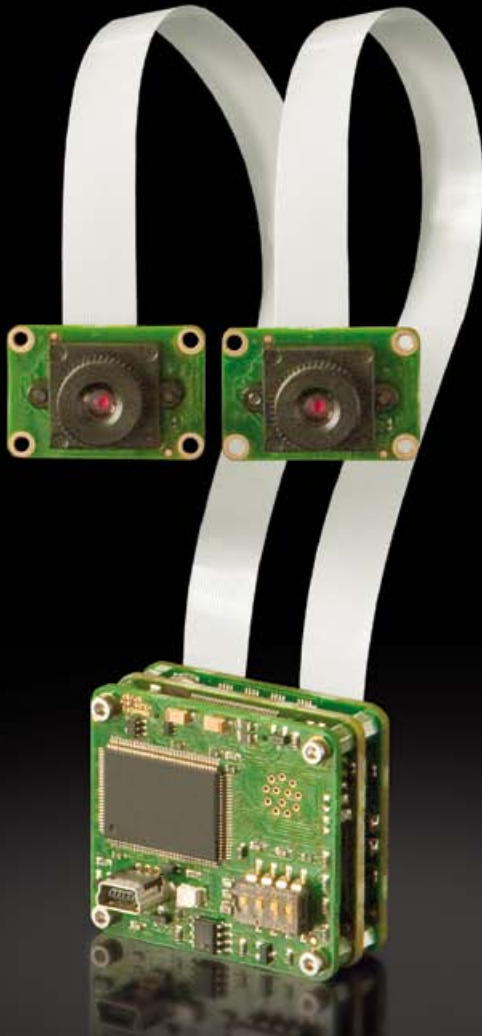


multisensor camera!



Up to four external sensors • Pixel-synchronous • Freely positionable • 256MB RAM • USB 2.0 Interface

multisensor camera



with 1, 2, 3 or 4
pixel-synchronous
sensors!

The multisensor camera from VRmagic can be equipped with up to four pixel-synchronous sensors. The external CMOS sensors with global shutter are connected to the camera by an LVDS data cable and can be freely positioned. The image data is coordinated on a FPGA module with at least 256 MB RAM.

Dimensions

Sensor boards: 28x19x7 mm
Central unit: 42x38x25 mm

Available Designs

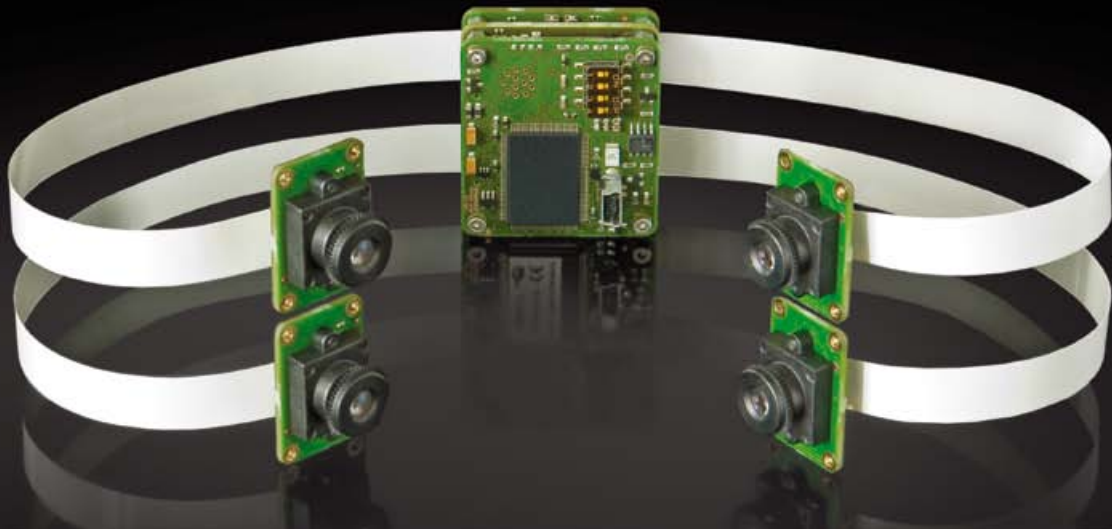
Board Cameras - Design mOEM
Board cameras with lens - Design mCOB.

	VRm2FC-12	VRm3FC-12	VRm4FC-12
CMOS Sensor	2x 1/3"	3x 1/3"	4x 1/3"
Color	x	x	x
Monochrome	x	x	x
Resolution	752x480	752x480	752x480
Pixelsize	6x6 μm	6x6 μm	6x6 μm
FPS	69	69	69
Pixelclock	5-26.6 MHz	5-26.6 MHz	5-26.6 MHz
Shutter	global	global	global
Board size (mm)	42x38x25 2x 28x19x7	42x38x25 3x 28x19x7	42x38x25 4x 28x19x7
Internal (RAM)	256MB	256MB	256MB

Camera Features

- Freely programmable sensor timings
- Unrestricted access to raw sensor data
- Trigger/strobe signals
- Optimized for parallel operation of multiple cameras
- Soft-trigger, Timestamps, Framecounter
- Storage of user configurations in the device
- Multiple standard formats plus one freely definable ROI (Region of Interest)
- Lossless realtime compression (RLE-encoding)
- Correction of gamma, luminance and contrast via Look-Up Tables

more than meets the eye!



Software Development Kit

Access all Camera Parameters

The free Software Development Kit contains a single API that works with all models from VRmagic. The Self Describing Interface allows for generic code development - an exchange of the camera model later on is thus possible without additional programming. The provided user interface allows access to all camera parameters. Demo applications and free source code for several developing platforms are included.

Special features of the Software Development Kit:

- Free control of exposure time, pixelclock and blanking interval
- Individual adjustment of auto exposure, gains or white balance
- Optimized image conversion (1-pass) to RGB32, RGB24, RGB565, Gray and YUYV; optional horizontal or vertical image inversion
- Correction of gamma, luminance and contrast via Look-Up-Tables.

The CamLab of the VRmagic > SDK allows users to control important sensor parameters via the graphical user interface.



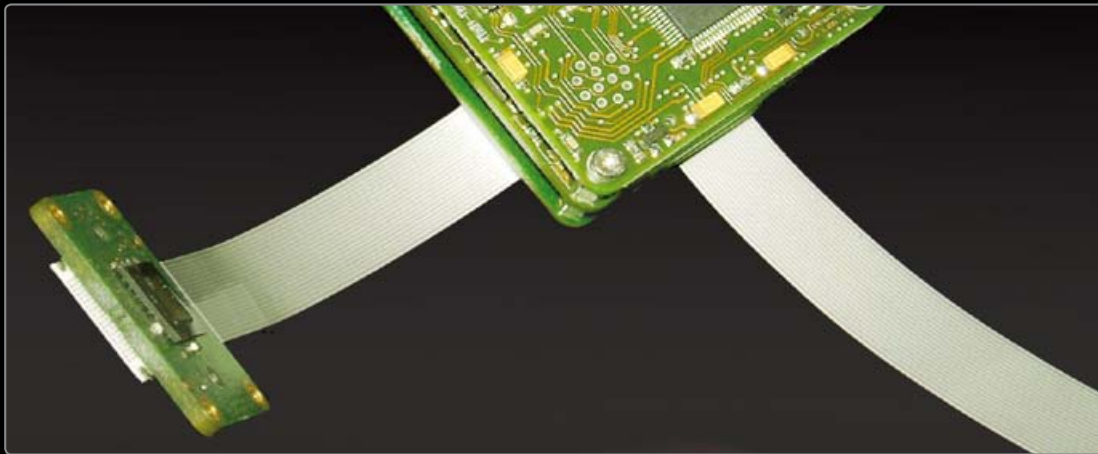
Multi Viewer Support

The Software Development Kit from VRmagic offers multi viewer support for the multisensor camera; the pixel-synchronous images of up to four connected external sensors can be displayed on the PC desktop at the same time. Further user-friendly features include the graphical configuration of regions of interest und the configuration of camera parameters without grabbing. The API allows users to access multiple frames of the host ring buffer simultaneously.



^ The multisensor camera can produce pixel-synchronous images from several positions, as required for 3D reconstruction, for example. Light-section-, Gray-code- and phase shift processes can even be applied to moving objects when using the multisensor camera.

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