

**It's no trick...  
it's a vision system**

## VCSBC4016



The VCSBC4016 is an extremely fast intelligent single board camera and one of the fastest intelligent cameras all over with a computational power of 3200 MIPS rivalling a 2.6 GHz Pentium. It has 32 MB DRAM, 4 MB Flash EPROM for program and data storage and can acquire full frame 1024 x 768 pixels at 16 frames per second!

The own internal operating system "VCRT" of the VCSBC4016 is multitasking. This means that user interface commands can execute in parallel without stopping the inspection process.

It has a video output onto a PC via 100MBit Ethernet interface and also a High Speed Trigger input with absolute constant capture delay, which allows absolutely jitter-free image acquisition even at very high speed processes.

And whereas a standard progressive scan camera gets a trigger, starts exposure and then reads out the pixel data, the VCSBC4016 has optimized the image acquisition process so that exposure and readout are in parallel.

The VCSBC4016 offers thus an extremely inexpensive entrance into the world of the high performance intelligent cameras.

All Vision Components cameras are built for industrial applications. They are insensitive to shock and vibration, and have multiple I/O lines for direct control of external equipment. For more complex control tasks, they can easily be interfaced to a PLC.

<u>Specifications</u>	<b>VCSBC4016</b> <i>(Also available as colour version!)</i>
<b>Sensor:</b>	1/3", 1024 (H) x 768 (V) Pixel
<b>Shutter:</b>	High-speed: up to 46,7 µsec in steps of 76,2 µsec Low-speed: up to 2 sec adjustable integration time
<b>Integration:</b>	Full Frame Progressive Scan
<b>Frame rate:</b>	16 fps
<b>Acquisition:</b>	asynchronous, program-controlled, or triggered externally, full-frame, Acquisition jitter free
<b>A/D Conversion:</b>	1 x 16.7 MHz / 10 Bit
<b>Processor:</b>	3200 MIPS, 400 MHz Texas Instruments TMS320C64xx
<b>Video output:</b>	Via 100Mbit Ethernet onto PC
<b>Image-/data memory:</b>	32 MBytes SDRAM
<b>Flash memory:</b>	4 MBytes Flash EPROM (non volatile memory) for programs and data, programmable in the system
<b>Dig. I/O's:</b>	2 inputs / 4 outputs optically decoupled 24V, Outputs 4 x 400mA, TTL I/O 4 In- and 4 outputs, 1 picture trigger input, 1 flash trigger output
<b>Interface:</b>	Ethernet 100 MBit TCP/IP
<b>Supply voltage:</b>	24V +/-20% DC, max. 300 mA
<b>Electrical connections:</b>	I/O (DC IN, PLC, 12-pin), Ethernet (8-pin), TTL I/O (20-pin), LED Lighting plug (4-pin)
<b>Dimensions:</b>	Approx. 60 x 80 x 35 mm

(No liability is assumed for possible errors!)