



VCSBC4012

VCBOARD CAM

The new 5 mega pixel single board camera with a CMOS sensor 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 64 MB DRAM, 4 MB Flash EPROM for program and data storage and can acquire full frame 2592 x 1944 pixels at 11,6 frames per second!

The own internal operating system "VCRT" of the **VCSBC4012** 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 100 Mbit Ethernet interface and also a High-Speed Trigger input with absolute constant capture delay, which allows absolutely jitterfree 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 **VCSBC4012** has optimized the image acquisition process so that exposure and readout are in parallel.

The **VCSBC4012** offers thus an extremely inexpensive entrance into the world of the high performance intelligent cameras.

All Vision Components Smart 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.

SPECIFICATIONS	VCSBC4012 (Also available as colour version!)
CMOS SENSOR	1/2.5", 2592 (H) x 1944 (V) pixels
SHUTTER	high-speed: 15 μ s, 45 μ s, 75 μ s (in steps of 30 μ s) low-speed: up to 30 μ s (adjustable integration time)
INTEGRATION	ERS/ GRR*
FRAME RATE	11,6 fps (skipping binning = 102 fps)
ACQUISITION	asynchronous, program controlled, or triggered externally, full frame, acquisition jitterfree
A/D CONVERSION	1 x 80 MHz / 12 bit
PROCESSOR	3200 MIPS, 400 MHz Texas Instruments TMS320C64xx
IMAGE/ DATA MEMORY	64 MB SDRAM
FLASH MEMORY	4 MB Flash EPROM (non volatile memory) for programs and data, programmable in the system
DIG. I/O'S	2 inputs / 4 outputs open collector, 24 V, outputs 4 x 400 mA, TTL I/O 4 in- and 4 outputs, 1 picture trigger input, 1 flash trigger output
INTERFACE	Ethernet 10/ 100 Mbit TCP/IP
VIDEO OUTPUT	via 100 Mbit Ethernet onto PC
SUPPLY VOLTAGE	24 V +/-20 % DC, max. 300 mA
ELECTRICAL CONNECTIONS	I/O (DC In, PLC, 12-pin), Ethernet (8-pin), TTL I/O (20-pin), LED Lighting plug (4-pin)
DIMENSIONS	approx. 40 x 120 mm

* ERS= Electronic Rolling Shutter; GRR = Global Reset Release

No liability is assumed for possible errors!

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