

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

## VC4458

The VC4458 is one of the world's fastest and most excellent smart cameras with computational power of 8000 MIPS rivalling a 7.2 GHz Pentium. It has 64 MB DRAM, 4 MB Flash EPROM for program and data storage (Expanded by the standard 512 MB SD card inside). It can acquire full frame 640 x 480 pixels at 200 frames per second!

The own internal operating system "VCRT" of the VC4458 is multitasking. This means that multiple processes can be executed in parallel.

The camera has 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 VC4458 has optimized the image acquisition process so that exposure, readout and the image processing can be done in parallel.

It has an 8 bit colour overlay which can operate in opaque or semi-transparent mode so that you can block out or still see the underlying image.

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.



<u>Specifications</u>	<b>VC4458</b>
<b>Sensor:</b>	1/3", 640 (H) x 480 (V) Pixel
<b>Shutter:</b>	High-speed: up to 5 µsec Low-speed: up to 20 sec adjustable integration time
<b>Integration:</b>	Full Frame Progressive Scan
<b>Frame rate:</b>	242 fps (484 fps with 2 times binning)
<b>Acquisition:</b>	Asynchronous, program controlled or external trigger, full frame
<b>A/D conversion:</b>	1 x 33 MHz / 10 Bit
<b>Processor:</b>	8000 MIPS, 1 GHz Texas Instruments TMS320C64xx
<b>Image display:</b>	B&W or pseudo color from 3x8 bit RGB lookup table
<b>Image/Data memory:</b>	64 MBytes SDRAM (option for 128)
<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>	4 inputs / 4 outputs optically decoupled 24V, outputs 4 x 500 mA
<b>Interfaces:</b>	RS232 up to 115.200 Baud max. <b>and</b> 100Mbit Ethernet
<b>Video output:</b>	SVGA 800x600 (VESA standard)
<b>Supply voltage:</b>	24V +/-20% DC, max. 300 mA
<b>Electrical connections:</b>	I/O (DC IN, PLC, 12-pin), V24 (6-pin), Trig (Trigger/keypad, 6-pin), VGA Out (10-pin)
<b>Dimensions:</b>	Approx. 110 x 80 x 35 mm, approx. 500 g

(No liability is assumed for possible errors!)