Smart Cameras made in Germany

VC4438

VCOPTIMUM

The **VC4438** 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 63 frames per second!

The own internal operating system ''VCRT'' of the **VC4438** is multitasking. This means that multiple processes can be executed in parallel.

The Smart Camera has 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 **VC4438** has optimized the image acquisition process so that exposure, read-out and the image processing can be done in parallel.

It has an 8 bit colour overlay which can operate in opaque or semitransparent 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 inter-faced to a PLC.

SPECIFICATIONS	VC4438
SENSOR	1/3“, 640 (H) x 480 (V) pixels
SHUTTER	**high-speed:** up to 5 µs **low-speed:** up to 8 s adjustable integration time
INTEGRATION	full frame progressive scan
FRAME RATE	63 fps (126 fps with 2 times binning)
ACQUISITION	asynchronous, program controlled or external trigger, full frame
A/D CONVERSION	1 x 25 MHz / 10 bit
PROCESSOR	8000 MIPS, 1 GHz Texas Instruments TMS320C64xx
IMAGE DISPLAY	B&W or pseudocolor from 3 x 8 bit RGB lookup table
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	4 inputs / 4 outputs optically decoupled 24 V, outputs 4 x 500 mA
INTERFACES	RS232 up to 115 . 200 baud max. **AND** 100 Mbit Ethernet
VIDEO OUTPUT	SVGA 800 x 600 (VESA standard)
SUPPLY VOLTAGE	24 V +/-20 % DC, max. 300 mA
ELECTRICAL CONNECTIONS	I/O (DC In, PLC, 12-pin), V24 (6-pin), Trig (trigger/keypad, 6-pin), VGA Out (10-pin)
DIMENSIONS	approx. 110 x 50 x 35 mm, approx. 400 g

No liability is assumed for possible errors!