VCXU-02M

USB 3.0, 0,3 Megapixel, Monochrome

Article number: 11165914

Overview

- 640 x 480 px
- Onsemi PYTHON300
- 1/4" CMOS
- 891 fps
- USB 3.0



Technical data

Sensor information	
Sensor	onsemi PYTHON300
Mono/Color	Mono
Sensor type	1/4″ CMOS
Shutter type	Global shutter
Resolution	640 × 480 px
Pixel size	4.8 × 4.8 µm
Exposure time	0.02 … 1000 ms
Data quality (EMVA 1288 typical)	
Dark noise	9.86 e-
Saturation capacity	7352 e-
Dynamic range	56.7 dB
Signal-to-noise ratio	38.7 dB
Quantum efficiency	53.3 % @ 536 nm
Acquisition formats	
Image formats, interface frame rate max.	Full Frame, 640 × 480 px, max. 891 fps Binning 2×2, 320 × 240 px, max. 891 fps Binning 2×1, 320 × 480 px, max. 891 fps Binning 1×2, 640 × 240 px, max. 891 fps
Image formats, aquisition frame rate max. (Burst Mode)	Full Frame, 640 × 480 px, max. 892 fps
Pixel formats	Mono8 Mono10
Image preprocessing	
Analog controls	Gain (0 … 12 dB) Offset (0 … 63 LSB 10 Bit)
Color models	Mono

Camera features	
Basic Functions	Exposure Gain Trigger / Exposure Active (Flash) Binning 2x2 Partial Scan Offset Free Running Mode (Live Image)
Auto Functions	Exposure Auto Gain Auto
Image Pre-processing	Image Flipping (X/Y) LUT / Gamma
Acquisition / Interface	Burst Mode Adjustable Framerate Device Link Throughput Limit Internal Image Buffer
Synchronization	free running trigger
Trigger sources	Hardware Software
Trigger delay	0 … 2 sec, tracking and buffering of up to 256 trigger signals

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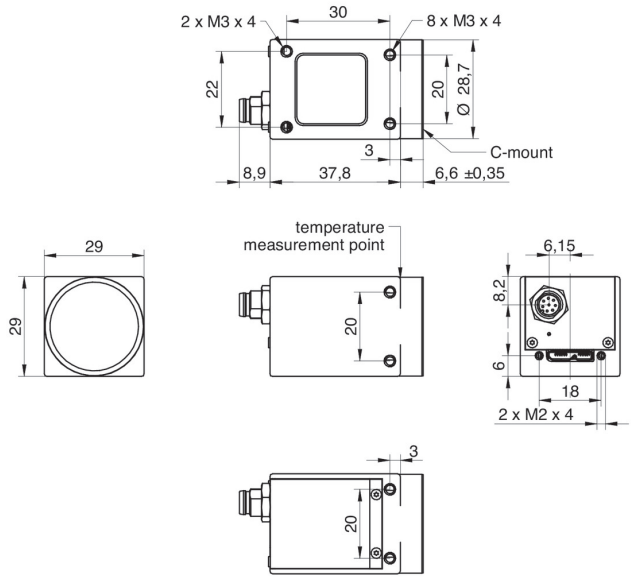
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Technical data

Camera features	
Process Synchronization	Events Timer Trigger Delay Debouncer Counter Sequencer Trigger via Action CMD (GigE) Additional Output Modes (e.g. Trigger Ready) Chunk data inside transferred image Encoder support via Counter End trigger source
Additional Functions	User Set Integrated temperature sensor Readable additional information (e.g. sensor information) Save Custom Data
Internal image buffer	436 MB 496 images (Trigger Mode) 1 image (Free Running Mode)
Interfaces and connectors	
Data interface	USB 3.0, Transfer Rate 5000 Mbits/sec, Connector: USB 3.0 Micro B
Process interface	M8 / 8 pins (SACC-DSI-M8MS-8CON-M8-L180)
Power supply	via USB 3.0 interface
Mechanical data	
Lens mount	C-mount

Mechanical data	
Width	29 mm
Height	29 mm
Depth	38 mm
Weight	≤ 90 g
Material	zinc die casting, baked varnish (until 02-2020 nickel-chrome-plated), IP 40
Electrical data	
Power consumption	approx. 2,5 W @ 891 fps
Operating voltage	5 VDC (via USB3.0 interface)
Non-volatile memory	
Flash memory size	128 kB
Environmental conditions	
Operating temperature	0 … +65 ° @ T = measurement point
Humidity	10 … 90 % (non-condensing)
Protection class	IP 40
Digital I/Os	
Lines	1 input line 1 output line 2 general purpose lines
Conformity	
Conformity	CE RoHS KC (MSIP-REI-BkR-VCXU13M) EAC

Dimension drawing



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