

## VCXU.2-13M

USB 3.0, 1,3 Megapixel, Monochrome

Article number: 11708175

### Overview

- 1280 x 1024 px
- onsemi PYTHON1300
- 1/2" CMOS
- 222 fps
- USB 3.0



Picture similar



### Technical data

#### Sensor information

Sensor	onsemi PYTHON1300
Mono/Color	Mono
Sensor type	1/2" CMOS
Shutter type	Global shutter
Resolution	1280 × 1024 px
Pixel size	4.8 × 4.8 μm
Exposure time	0.02 ... 1000 ms

#### Data quality (EMVA 1288 typical)

Dark noise	9.78 e-
Saturation capacity	6952 e-
Dynamic range	56.3 dB
Signal-to-noise ratio	38.4 dB
Quantum efficiency	53.5 % @ 536 nm

#### Acquisition formats

Image formats, interface frame rate max.	Full Frame, 1280 × 1024 px, max. 222 fps Binning 2×2, 640 × 512 px, max. 222 fps Binning 2×1, 640 × 1024 px, max. 222 fps Binning 1×2, 1280 × 512 px, max. 222 fps
Image formats, acquisition frame rate max. (Burst Mode)	Full Frame, 1280 × 1024 px, max. 222 fps
Pixel formats	Mono8 Mono10

#### Image preprocessing

Analog controls	Gain (0 ... 48 dB) Offset (0 ... 255 LSB 12 Bit)
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#### Image preprocessing

Color models	Mono
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#### 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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### Camera features

Process Synchronization	Events Timer Trigger Delay Debouncer Counter Chunk data inside transferred image Encoder support via Counter End trigger source
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Additional Functions	User Set Integrated temperature sensor Readable additional information (e.g. sensor information)
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Calibration data	Camera calibration data (user defined storage for intrinsic / extrinsic camera parameters, and geometry distortion values) Customer data storage (128 bytes user defined)
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Internal image buffer	477 MB 127 images (Trigger Mode) 1 image (Free Running Mode)
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### 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
Width	29 mm
Height	29 mm
Depth	38 mm
Weight	≤ 90 g
Material	zinc die casting, baked varnish

### Electrical data

Power consumption	Approx. 2.7 W @ 222 fps
Operating voltage	5 VDC (via USB3.0 interface)

### Non-volatile memory

Flash memory size	128 kB
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### 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
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### Conformity

Conformity	CE RoHS
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## Dimension drawing

