

## V CXU.2-13C

USB 3.0, 1,3 Megapixel, Color

Article number: 11708174

### Overview

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



Picture similar



GEN*i*CAM



### Technical data

#### Sensor information

Sensor	onsemi PYTHON1300
Mono/Color	Color
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	10.88 e-
Saturation capacity	7625 e-
Dynamic range	56.3 dB
Signal-to-noise ratio	38.8 dB
Quantum efficiency	38.7 % @ 465 nm 42 % @ 536 nm 45.3 % @ 631 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

#### Acquisition formats

Pixel formats	BayerRG8 BayerRG10 Mono8 Mono10 RGB8 BGR8
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#### Image preprocessing

Analog controls	Gain (0 ... 12 dB) Offset (0 ... 63 LSB 10 Bit)
Color models	Mono Raw Bayer RGB

#### Camera features

Basic Functions	Exposure Gain / Color Gain Trigger / Exposure Active (Flash) Binning 2x2 Partial Scan Offset Free Running Mode (Live Image)
Auto Functions	Exposure Auto Gain Auto White Balance Auto Color Transformation Auto
Image Pre-processing	Image Flipping (X/Y) Color Processing (RGB, BGR, Mono) Color Enhancement (with optimized ColorTransformationMatrix) LUT / Gamma

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### Camera features

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
Process Synchronization	Events Timer Trigger Delay Debouncer Counter 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)
Calibration data	Integrated color correction matrix (3000 K, 5000 K, 6500 K, 9500 K, and user defined) Camera calibration data (user defined storage for intrinsic / extrinsic camera parameters, and geometry distortion values) Customer data storage (128 bytes user defined)
Internal image buffer	477 MB 127 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
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

