

VCXU-53C

USB 3.0, 5,3 Megapixel, Color

Article number: 11165901

Overview

- 2592 x 2048 px
- onsemi PYTHON5000
- 1" CMOS
- 73 fps
- USB 3.0



Technical data

Sensor information

Sensor	onsemi PYTHON5000
Mono/Color	Color
Sensor type	1" CMOS
Shutter type	Global shutter
Resolution	2592 × 2048 px
Pixel size	4.8 × 4.8 µm
Exposure time	0.02 ... 1000 ms

Acquisition formats

Image formats, interface frame rate max.	Full Frame, 2592 × 2048 px, max. 73 fps Binning 2×2, 1296 × 1024 px, max. 73 fps Binning 2×1, 1296 × 2048 px, max. 73 fps Binning 1×2, 2592 × 1024 px, max. 73 fps
Image formats, acquisition frame rate max. (Burst Mode)	Full Frame, 2592 × 2048 px, max. 73 fps
Pixel formats	BayerRG8 BayerRG10 Mono8 Mono10 RGB8 BGR8

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
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 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
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Additional Functions	User Set Integrated temperature sensor Readable additional information (e.g. sensor information) Save Custom Data
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Internal image buffer	471 MB 31 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
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Process interface	M8 / 8 pins (SACC-DSI-M8MS-8CON-M8-L180)
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Power supply	via USB 3.0 interface
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Mechanical data

Lens mount	C-mount
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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. 3,9 W @ 73 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 KC (R-R-BkR-VCXU-53M) EAC
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Dimension drawing

