

VLXT-490M.I

Gigabit Ethernet, 49 Megapixel, Mono

Article number: 11705801

Overview

- 7008 × 7000 px
- Gpixel GMAX3249
- 2.3" CMOS
- 23 fps
- 10 GigE



GEN*i*CAM



Technical data

Sensor information

Sensor	Gpixel GMAX3249
Mono/Color	Mono
Sensor type	2.3" CMOS
Shutter type	Global shutter
Resolution	7008 × 7000 px
Pixel size	3.2 × 3.2 µm
Exposure time	0.02 ... 60000 ms

Data quality (EMVA 1288 typical)

Dark noise	5.16 e-
Saturation capacity	11281 e-
Dynamic range	65.9 dB
Signal-to-noise ratio	40.5 dB
Quantum efficiency	61 % @ 536 nm 60.8 % @ 533 nm

Acquisition formats

Image formats, interface frame rate max.	Full Frame, 7008 × 7000 px, max. 23 fps Binning 2×2, 3504 × 3500 px, max. 23 fps Binning 2×1, 3504 × 7000 px, max. 23 fps Binning 1×2, 7008 × 3500 px, max. 23 fps
Image formats, acquisition frame rate max. (Burst Mode)	Full Frame, 7008 × 7000 px, max. 23 fps
Pixel formats	Mono8 Mono10 Mono12 Mono12 Packed

Image preprocessing

Analog controls	Gain (0 ... 44 dB) Offset (-256 ... 255 LSB 12 Bit)
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Color models	Mono
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Camera features

Basic Functions	Exposure Gain / Color Gain Trigger / Exposure Active (Flash) Binning 2x2 Partial Scan Offset Free Running Mode (Live Image) Multi ROI
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Auto Functions	Exposure Auto Gain Auto
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Image Pre-processing	Image Flipping (X/Y) LUT / Gamma Shading Correction Edge Sharpening Noise Reduction
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Acquisition / Interface	Burst Mode Adjustable Framerate Short Exposure Time Enable Device Link Throughput Limit Internal Image Buffer
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Synchronization	free running trigger
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Trigger sources	Hardware Software ActionCommand
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Camera features

Trigger delay	0 ... 2 sec, tracking and buffering of up to 256 trigger signals
Process Synchronization	Events Timer Trigger Delay Debouncer Counter Sequencer Trigger via Action CMD (GigE) Action CMD Request ID Trigger ID inside Chunk Additional Output Modes (e.g. Trigger Ready) PWM (PWM Duration / PWM Duty Cycle) Selectable Output format (e.g. Tri State, Push Pull) Chunk data inside transferred image Encoder support via Counter End trigger source 4 power outputs with up to 120 W (max. 48 V / 2.5 A)
Time synchronization IEEE 1588	IEEE 1588 / Master and Slave function IEEE 1588 / Scheduled Action CMD IEEE 1588 / Synchronized Acquisition Framerate
Additional Functions	User Set Integrated temperature sensor Readable additional information (e.g. sensor information) Save Custom Data
Lens control	Corning liquid lens
Internal image buffer	1024 MB 21 images (Trigger Mode) 1 image (Free Running Mode)

Interfaces and connectors

Data interface	10 Gigabit Ethernet, Transfer rate 10000 Mbits/sec, Gigabit Ethernet, Transfer rate 1000 Mbits/sec, Fast Ethernet, Transfer rate 100 Mbits/sec, Connector: M12 / 8-pol x-coded (SACC-CI-M12FS-8CON-L180-10G)
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Interfaces and connectors

Process interface	M12 / 12 pins a-coded (SACC-CI-M12MS-12CON-L180)
Power supply	via M12/12 pins a-coded

Mechanical data

Lens mount	M58-mount (F-mount, M42, C-mount via adapter)
Width	60 mm
Height	60 mm
Depth	103.8 mm
Weight	≤ 485 g
Material	aluminum

Electrical data

Voltage supply range +Vs	19.2 ... 28.8 V DC (external power supply)
Power consumption	approx. 14,3 W @ 24 VDC and 23 fps

Non-volatile memory

Flash memory size	128 kB
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Environmental conditions

Operating temperature	-30 ... +70 °C @ T = measurement point
Humidity	10 ... 90 % (non-condensing)
Protection class	IP 40

Digital I/Os

Lines	2 input lines 4 power output lines with pulse width modulation (PWM) (max. 48 V / max. 2,5 A) RS232
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Conformity

Conformity	CE RoHS
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Dimension drawing

