

# VCXG.2-204M

Gigabit Ethernet, 20.1 Megapixel, Monochrome

Article number: 11708160

## Overview

- 4480 x 4496 px
- Sony IMX541
- 1.1" CMOS
- 6 fps
- Gigabit Ethernet



Picture similar



GEN<i>i>CAM



## Technical data

### Sensor information

Sensor	Sony IMX541 Gen4
Mono/Color	Mono
Sensor type	1.1" CMOS
Shutter type	Global shutter
Resolution	4480 × 4496 px
Pixel size	2.74 × 2.74 μm
Exposure time	0.001 ... 60000 ms

### Data quality (EMVA 1288 typical)

Dark noise	2.28 e-
Saturation capacity	9038 e-
Dynamic range	69.8 dB
Signal-to-noise ratio	39.6 dB
Quantum efficiency	71.1 % @ 536 nm 1 % @ 1041 nm 18.9 % @ 840 nm 7.4 % @ 930 nm 67.1 % @ 406 nm

### Acquisition formats

Image formats, interface frame rate max.	Full Frame, 4480 × 4496 px, max. 6 fps Binning 2×2, 2240 × 2248 px, max. 23 fps Binning 2×1, 2240 × 4496 px, max. 6 fps Binning 1×2, 4480 × 2248 px, max. 6 fps
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Image formats, acquisition frame rate max. (Burst Mode)	Full Frame, 4480 × 4496 px, max. 6 fps
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### Acquisition formats

Pixel formats	Mono8 Mono10 Mono12 Mono12 Packed
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### Image preprocessing

Analog controls	Gain (0 ... 48 dB) Offset (0 ... 255 LSB 12 Bit)
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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)
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Auto Functions	Exposure Auto Gain Auto
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Image Pre-processing	Image Flipping (X/Y) LUT / Gamma
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Acquisition / Interface	Burst Mode Adjustable Framerate Device Link Throughput Limit Internal Image Buffer
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Synchronization	free running trigger
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### Camera features

Trigger sources	Hardware Software ActionCommand
Trigger delay	0 ... 2 s, tracking and buffering of up to 256 trigger signals
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)
Calibration data	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	231 MB 4 image (Trigger Mode) 1 image (Free Running Mode)

### Interfaces and connectors

Data interface	Gigabit Ethernet, Transfer rate 1000 Mbits/sec, Fast Ethernet, Transfer Rate 100 Mbits/sec, Connector: 8P8C Modular Jack (RJ45), screwable TYPE090 (according to GigE Vision Mechanical Supplement)
Process interface	M8 / 8 pins (SACC-DSI-M8MS-8CON-M8-L180)
Power supply	via M8/8 pins or Power over Ethernet (PoE)

### Mechanical data

Lens mount	C-mount
Width	29 mm
Height	29 mm
Depth	49 mm
Weight	≤ 120 g
Material	zinc die casting, baked varnish

### Electrical data

Voltage supply range +Vs	12 ... 24 V DC (external power supply) 36 ... 57 V DC (Power over Ethernet)
Power consumption	Approx. 3.4 W @ 12 VDC and 6 fps Approx. 4.1 W @ 48 VDC (PoE) and 6 fps

### Non-volatile memory

Flash memory size	128 kB
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### Environmental conditions

Operating temperature	0 ... +65 ° @ T = measurement point
Storage temperature	-20 ... +70 °C
Humidity	10 ... 90 % (non-condensing)
Protection class	IP 40 (with mounted lens and cable)

### Digital I/Os

Lines	1 input line 1 output line 2 general purpose lines
Output line sources	Off Exposure Active Timer1 Readout Active User0 User1 User2 TriggerReady

### Conformity

Conformity	CE RoHS UL recognized
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## Dimension drawing

