

VCXG.2-127M

Gigabit Ethernet, 12.2 Megapixel, Monochrome

Article number: 11708158

Overview

- 4096 x 2992 px
- Sony IMX545
- 1/1.1" CMOS
- 10 fps
- Gigabit Ethernet



Picture similar



GEN<i>i>CAM



Technical data

Sensor information

| | |
|---------------|--------------------|
| Sensor | Sony IMX545 Gen4 |
| Mono/Color | Mono |
| Sensor type | 1/1.1" CMOS |
| Shutter type | Global shutter |
| Resolution | 4096 × 2992 px |
| Pixel size | 2.74 × 2.74 μm |
| Exposure time | 0.001 ... 60000 ms |

Data quality (EMVA 1288 typical)

| | |
|-----------------------|-----------------|
| Dark noise | 2.35 e- |
| Saturation capacity | 9205 e- |
| Dynamic range | 69.7 dB |
| Signal-to-noise ratio | 39.6 dB |
| Quantum efficiency | 65.5 % @ 536 nm |

Acquisition formats

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|---|---|
| Image formats, interface frame rate max. | Full Frame, 4096 × 2992 px, max. 10 fps Binning 2×2, 2048 × 1496 px, max. 36 fps Binning 2×1, 2048 × 2992 px, max. 11 fps Binning 1×2, 4096 × 1496 px, max. 11 fps |
| Image formats, acquisition frame rate max. (Burst Mode) | Full Frame, 4096 × 2992 px, max. 11 fps |
| Pixel formats | Mono8 Mono10 Mono12 Mono12 Packed |

Image preprocessing

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|-----------------|---|
| 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

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| 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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| Trigger sources | Hardware Software ActionCommand |
|-----------------|---------------------------------------|

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| Trigger delay | 0 ... 2 s, tracking and buffering of up to 256 trigger signals |
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Camera features

| | |
|-------------------------|---|
| Process Synchronization | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> User Set Integrated temperature sensor Readable additional information (e.g. sensor information) |
|----------------------|--|

| | |
|------------------|--|
| Calibration data | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> 141 MB 4 image (Trigger Mode) 1 image (Free Running Mode) |
|-----------------------|---|

Interfaces and connectors

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|----------------|---|
| 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) |
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|-------------------|--|
| Process interface | M8 / 8 pins (SACC-DSI-M8MS-8CON-M8-L180) |
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| | |
|--------------|--|
| Power supply | via M8/8 pins or Power over Ethernet (PoE) |
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Mechanical data

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|------------|---------|
| Lens mount | C-mount |
|------------|---------|

Mechanical data

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

Electrical data

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|--------------------------|--|
| Voltage supply range +Vs | 12 ... 24 V DC (external power supply) 36 ... 57 V DC (Power over Ethernet) |
| Power consumption | Approx. 2.9 W @ 12 VDC and 10 fps Approx. 3.5 W @ 48 VDC (PoE) and 10 fps |

Non-volatile memory

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| Flash memory size | 128 kB |
|-------------------|--------|

Environmental conditions

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|-----------------------|-------------------------------------|
| 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

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|---------------------|---|
| Lines | <ul style="list-style-type: none"> 1 input line 1 output line 2 general purpose lines |
| Output line sources | <ul style="list-style-type: none"> Off Exposure Active Timer1 Readout Active User0 User1 User2 TriggerReady |

Conformity

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|------------|---|
| Conformity | <ul style="list-style-type: none"> CE RoHS UL recognized |
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Dimension drawing

