

VAX-32M.I.NVN

3,1 Megapixel, Monochrome, NVIDIA Jetson Nano

Article number: 11702238

Overview

- Sony IMX265
- 2048 x 1536 px, 1/1.8" CMOS, 55 fps
- Quad-Core ARM Cortex-A57
- 128-core NVIDIA MAXwell GPU
- 4 GB 64-bit LPDDR4
- Gigabit Ethernet, USB 3.0, RS232



Technical data

Processor data

Processor configuration	NVIDIA Jetson Nano
GPU data	128 Core Maxwell GPU
CPU data	4-Core ARM A57
Memory RAM	4 GB LPDDR4
Memory Flash	16 GB eMMC 5.1

Sensor information

Sensor	Sony IMX265 Gen2
Mono/Color	Mono
Sensor type	1/1.8" CMOS
Shutter type	Global shutter
Resolution	2048 × 1536 px
Pixel size	3.45 × 3.45 µm
Exposure time	0.001 ... 60000 ms

Data quality (EMVA 1288 typical)

Dark noise	2.04 e-
Saturation capacity	9341 e-
Dynamic range	70.7 dB
Signal-to-noise ratio	39.7 dB
Quantum efficiency	64.8 % @ 535 nm

Acquisition formats

Image formats, interface frame rate max.	Full Frame, 2048 × 1536 px, max. 55 fps Binning 2×2, 1024 × 768 px, max. 55 fps Binning 2×1, 1024 × 1536 px, max. 55 fps Binning 1×2, 2048 × 768 px, max. 55 fps
Image formats, acquisition frame rate max. (Burst Mode)	Full Frame, 2048 × 1536 px, max. 55 fps
Pixel formats	Mono8 Mono10 Mono12 Mono12 Packed

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

Auto Functions	Exposure Auto Gain Auto
Image Pre-processing	Image Flipping (X/Y) LUT / Gamma
Acquisition / Interface	Burst Mode Adjustable Framerate Short Exposure Time Enable Device Link Throughput Limit Internal Image Buffer
Synchronization	free running trigger
Trigger sources	Hardware Software ActionCommand
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) PWM (PWM Duration / PWM Duty Cycle) 4 power outputs with up to 120 W (max. 48 V / 2.5 A) Selectable Output format (e.g. Tri State, Push Pull) Chunk data inside transferred image Encoder support via Counter End trigger source
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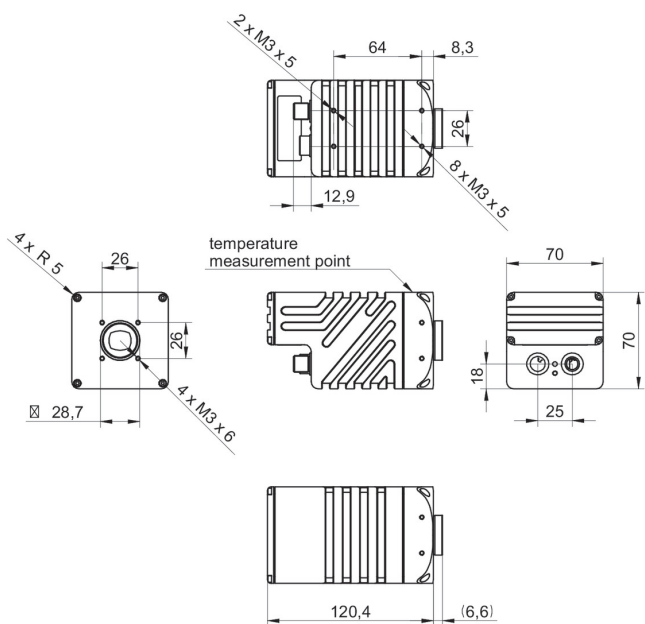
Additional Functions	User Set Integrated temperature sensor Readable additional information (e.g. sensor information) Save Custom Data
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Internal image buffer	432 MB 48 images (Trigger Mode) 1 image (Free Running Mode)
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Interfaces and connectors

Data interface	GigE USB 3.0 RS232
Process interface	M12 / 12 pins a-coded (SACC-CI-M12MS-12CON-L180)
Power supply	via M12/12 pins a-coded

Dimension drawing



Mechanical data

Lens mount	C-mount
Width	70 mm
Height	70 mm
Depth	120 mm
Weight	≤ 650 g
Material	aluminum, hard-anodized

Electrical data

Power consumption	approx. 13,2 W @ 55 fps
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Environmental conditions

Operating temperature	0 ... +65 ° @ T = measurement point
Humidity	10 ... 90 % (non-condensing)
Protection class	IP 65 (with mounted tube and cable) IP 67 (with mounted tube and cable)

Digital I/Os

Lines	1 input line 3 power output lines with pulse width modulation (PWM) (max. 48 V / max. 2,5 A)
Output line sources	Off Exposure Active Timer1 Readout Active User0 User1 User2 TriggerReady

Conformity

Conformity	CE RoHS
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Principle

