OEM2-D1280-O01-3D06-G1

The camera OEM2-D1280-O01-3D06-G1 is based on the ON Semiconductor PYTHON1300 CMOS image sensor

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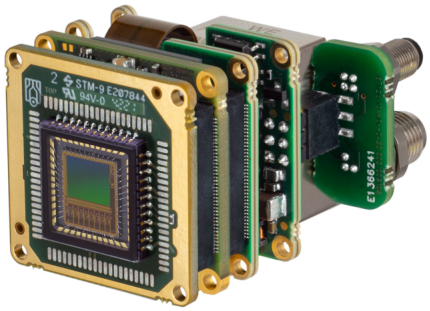
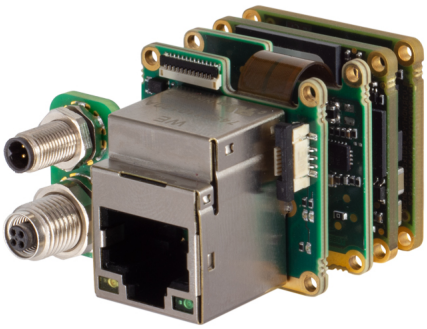
Features

- ON Semiconductor PYTHON1300 CMOS image sensor
- 1280 x 1024 pixel resolution
- Good NIR spectral response
- Suitable for standard and low light applications
- Up to 6700 profiles per second (pps) @ 640 x 11 resolution
- Global shutter
- Available in monochrome
- Extended sensor and camera features
- Up to 10bit greyscale resolution
- GigEVision interface





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Quantum Efficiency Image Sensor

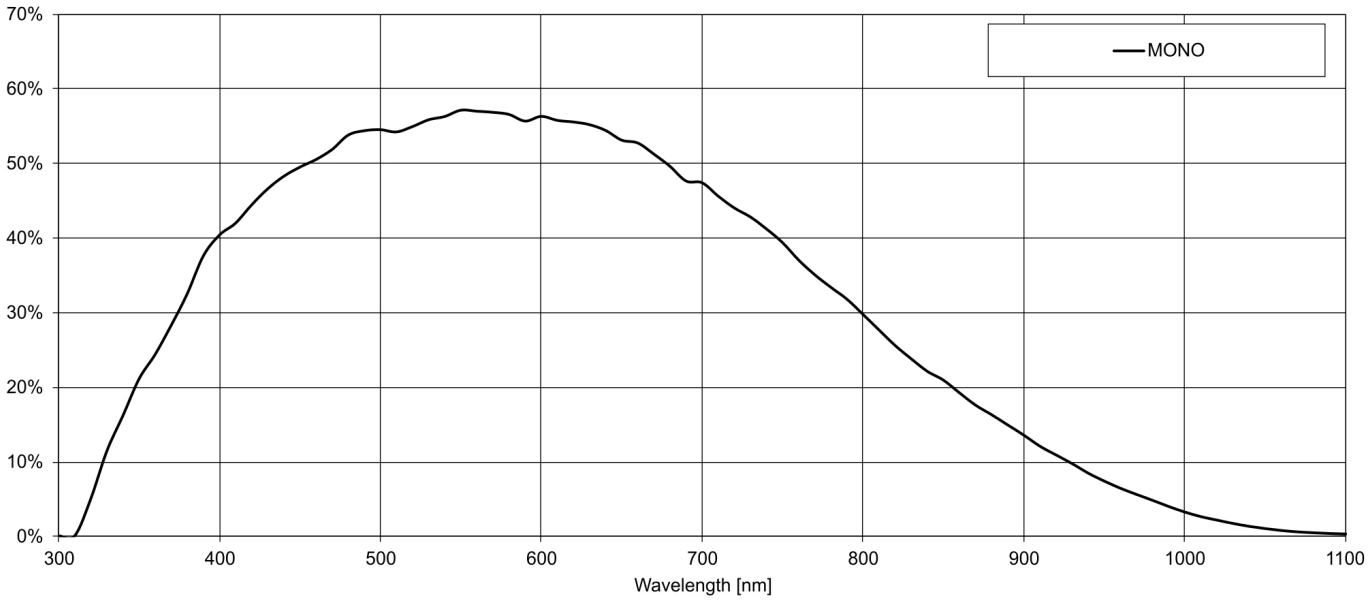

Image Sensor Specifications

Manufacturer / Type	ON Semiconductor, PYTHON1300
Technology	CMOS
Optical format	1/2"
Optical diagonal	7.87mm
Resolution	1280 x 1024
Pixel size	4.8µm x 4.8µm
Active optical area	6.14mm x 4.92mm
Dark current	5e-/s
Read out noise	9e-
Full well capacity / SNR	10ke- / 100:1
Spectral range	Monochrome: 330 to 930nm (to 10% of peak responsivity)
Responsivity	Monochrome: 943 x 10^3 DN / (J/m^2) @ 540nm / 8bit
Quantum Efficiency	Monochrome: < 57%
Optical fill factor	n/a
Dynamic range	60dB
Characteristic curve	Linear
Shutter mode	Global shutter

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Camera Specifications

Interface	GigE
Frame rate	6700pps
Pixel clock	n/a
Camera taps	n/a
Greyscale resolution	8bit
Fixed pattern noise (FPN)	< 1DN RMS @ 8Bit
Exposure time range	10µs - 419ms
Analog gain	yes
Digital gain	0.1 to 15.99 (FineGain)
Trigger Modes	Free running (non triggered), external Trigger, SWTrigger
Features	Configurable region of interest (ROI), Decimation in y-direction, 2 look-up tables (12-to-8Bit) on user-defined image region (Region-LUT), Constant frame rate independent of exposure time, Temperature monitoring of camera, Camera informations readable over SDK, Ultra low trigger delay and low trigger jitter, Extended trigger input and strobe output functionality, Status line in picture, with Shaft Encoder
Operation temperature / moisture	0°C ... + 50°C / 20% ... 80%
Storage temperature / moisture	-25°C ... 60°C / 20% ... 95%
Power supply	+12VDC (-10%) ... +24VDC (+10%)
Power consumption	< 4.2W
Lens mount	C-Mount
I/O Inputs	2x Opto-isolated
I/O Outputs	1x Opto-isolated
Dimensions	31.6 x 26.5 x 47.9mm³
Mass	150 g
Connector I/O (Power)	Binder 4-pin (I/O); Binder 3-pin (Power); mating plug M5 x 0.5, Series 707
Connector Interface	RJ-45
Conformity	CE / RoHS / WEEE
IP Code	IP40

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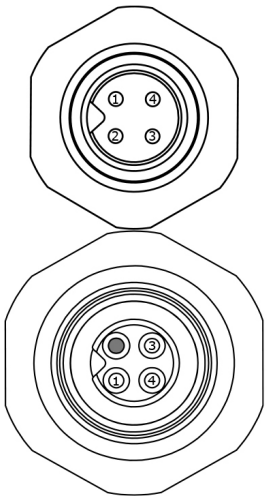
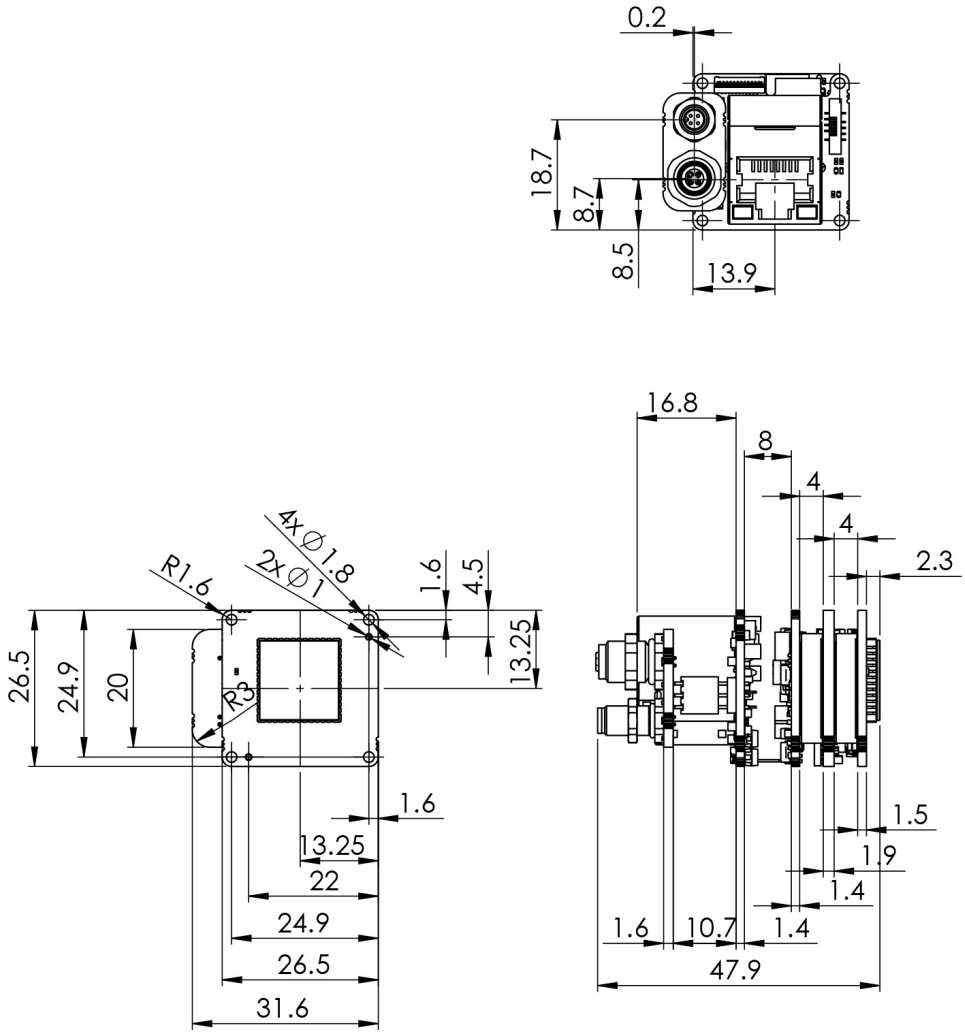
Connectors

Pin	I/O Type	Name	Description I/O Connector
1	I	ISO_IN0	Trigger input 0 (opto-isolated)
2	PWR	ISO_GND	I/O GND 0V
3	O	ISO_OUT	Strobe output (opto-isolated)
4	I	ISO_IN1	Trigger input 1 (opto-isolated)

Pin	I/O Type	Name	Description Power Connector
1	PWR	CAMERA_PWR	Camera Power
n.a.	n.a.	not connected	Not connected pin
3	PWR	CAMERA_GND	Camera GND
4	n.a.	Reserved	Do not connect



Dimensions



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Explanation

DN DigitalNumber (equals to LSB)

e^- Electrons

Order Information

OEM2-D1280-O01-3D06-G1	BW model

Compatibility

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