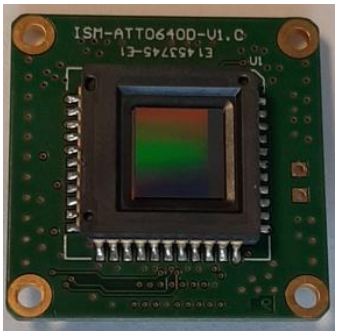
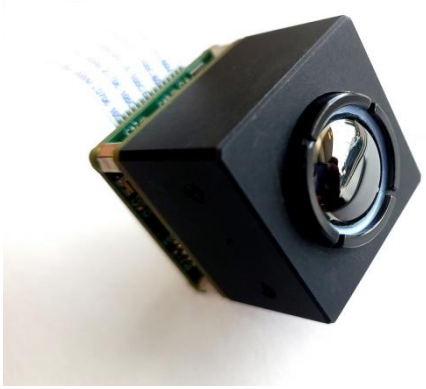
ISM-ATTO640D with MIPI CSI-2

Lynred ATTO640D-02 Infrared Sensor Module

Infrared Sensor Module with MIPI CSI-2 Digital Output





Key Benefits & Features

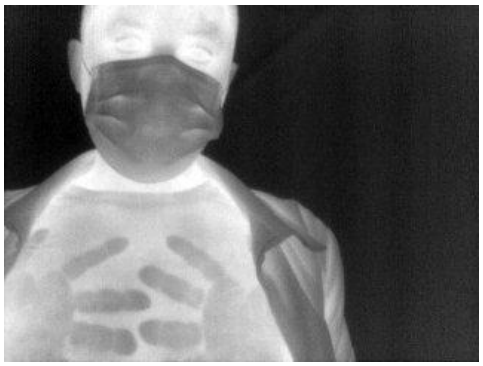
- ✓ 640 x 480 - 12µm pixel pitch, Lynred thermal imager
- ✓ GUI Software including NUC & BPR
- ✓ Shutterless continuous imaging
- ✓ Low power LWIR sensor (< 300 mW)

MIPI CSI-2 Frame Capture API and drivers for V4L2 Developers Platforms NVIDIA JETSON Xavier NX and Nano / Raspberry PI IV

NVIDIA

RaspberryPi

Interface Software CSEye GUI



CD023-03 Product Brochure
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www.idao-engineering.com

IDAO ENGINEERING EMBEDDED
Phone: +33.(0)6.84.14.68.71
Email: info@idao-engineering.com

ISM-ATTO640D with MIPI CSI-2

Lynred ATTO640D-02 Infrared Sensor Module

Specifications

Model Name	ISM-ATTO640D

IR Image Sensor

Vendor / Name	Lynred ATTO640D-02
Technology	Uncooled (Microbolometer), LWIR
Pixel pitch	12µm
Max. Resolution	640 x 480
Sensor performance NETD	< 50 mK (for ATTO640D-02), or < 40mK (for ATTO640D-02+)
Optical lens	5.3 mm F/1.3 HFOV (89°) fixed focus or others (customized on request)
Bit depth	14 bits

Interface

Module Interface	MIPI CSI-2, 2 lanes
Frame Rate	30Hz (standard) or 60Hz
Control Interface	I2C (2 wires serial communication)
Interface Connector	MOLEX FPC 15POS 1.0 MM : 52271-1579
Trigger Input	Yes, 3.3V LVTTL / LVCMOS
Trigger Output	Yes, 3.3V LVTTL / LVCMOS
GPIO	1 OUT, 1.8V LVCMOS

Mechanical

Dimensions (LxWxH)	Stacking size 30mm x30mm x10mm

Electrical & Environmental

Input voltage	5V to 12V.
Power consumption	< 0.60 W (including LWIR image sensor)
Operating temperature	-40°C to +85°C
Storage temperature	-40°C to +85°C
Ambient Humidity	95% RH

Software Support

Driver	V4L2 Based Device Driver
Supported Platform(s)	NVIDIA JETSON Xavier NX / JETSON Nano / Raspberry PI IV
Linux Version(s)	Kernel 4.9.201
API Language	C / C++

Accessories

Flex cable 150 mm	WURTH : WR-FFC 686715152001

Interface GUI for NVIDIA JETSON Xavier NX JETSON Nano and Raspberry PI IV

CSEye GUI and SDK	Camera Control, Image Capture and Viewer Software

IDAO ENGINEERING EMBEDDED
Phone: +33.(0)6.84.14.68.71
Email: info@idao-engineering.com