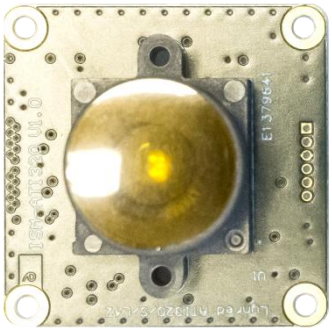
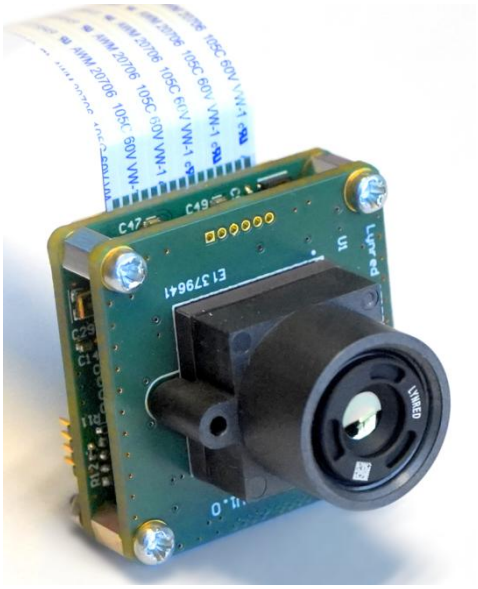
ISM-ATI320 Product Brochure

Lynred ATI320L / ATI320S Infrared Sensor Module

Infrared Sensor Module with MIPI CSI-2 Digital Output



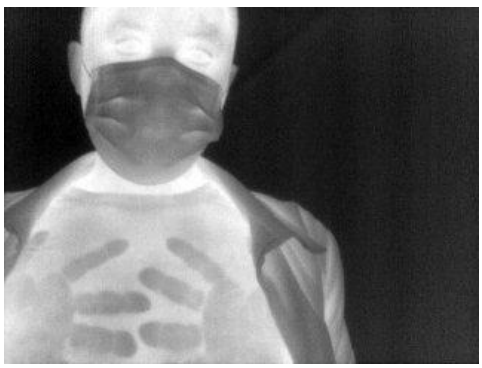


Key Benefits & Features

- ✓ 320 x 240 - 12µm pixel pitch, Lynred thermal imager
- ✓ Embedded Image Correction
- ✓ Shuterless continuous imaging
- ✓ Low power thermal imager (< 400 mW)

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

NVIDIA



Interface Software ISEye GUI

CD022-06 Product Brochure
June 2022
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ISM-ATI320 Product Specifications

Lynred ATI320L / ATI320S Infrared Sensor Module

Specifications

Model Name	ISM-ATI320L / ISM-ATI320S

IR Image Sensor

Vendor / Name	Lynred ATI320L42 / ATI320S (without lens)
Technology	Uncooled (Microbolometer), LWIR
Pixel pitch	12µm
Max. Resolution	320 x 240
Sensor performance NETD	< 60 mK (for ATI320S)
Optical lens	5.3 mm; F/1.3; HFOV (40.8°); VFOV (31.0°); fixed focus
Bit depth	8 / 14 bits mode, selectable

Interface

Module Interface	MIPI CSI-2, 2 lanes
Control Interface	I2C (2 wires serial communication)
Clock Frequency	40 MHz
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 15V.
Power consumption	< 0.75 W (including IR 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
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 and Nano

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

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