

# Prosilica GX 1050



- 240 MBps with dual port LAG technology
- 3-axis motorized lens control
- High frame rate at full bit depth
- ON Semi KAI-01050 sensor

## Description

### ON Semi KAI-01050 industrial camera, Global shutter, 112 fps

Prosilica GX1050 is a high resolution CCD camera with dual GigE Vision® output. It features the ON Semiconductor KAI-01050 CCD sensor with global shutter. At full resolution, this camera has a frame rate of 112 frames per second (dual GigE mode). With a smaller region of interest higher frame rates are possible. Prosilica GX1050 is offered as monochrome and color models. This camera has two screw-captivated Gigabit Ethernet ports configured as a Link Aggregation Group (LAG) to provide a sustained maximum data rate of 240 MBps. It can also work at half the bandwidth (120 MBps) using a single cable. By default monochrome models ship with no optical filter and color models ship with an IRC30 IR cut filter.

### Benefits and features:

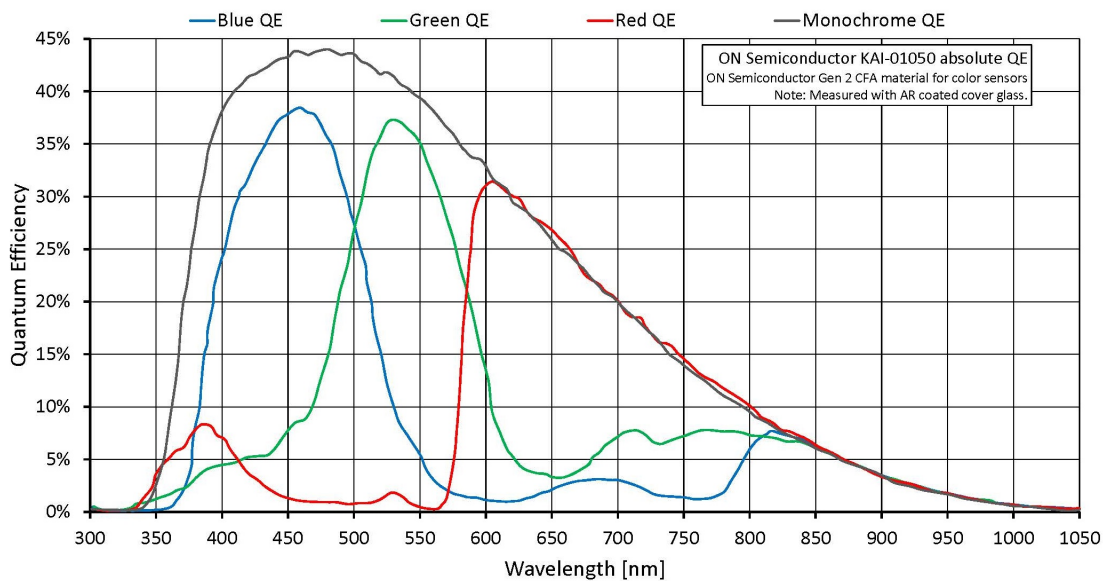
- Monochrome (GX1050) and color (GX1050C) models
- Dual GigE ports can be configured as a Link Aggregation Group (LAG), single GigE and dual GigE modes
- Screw mount RJ45 Ethernet connectors for industrial environments
- Supports cable lengths up to 100 meters (CAT-5e or CAT-6)
- ON Semiconductor KAI-01050 (Gen2) Type 1/2 CCD sensor
- Support for popular third party image-processing libraries

## Specifications

Prosilica GX	1050
インターフェイス	IEEE 802.3 1000baseT
解像度	1024 (H) × 1024 (V)
センサー	ON Semi KAI-01050



Prosilica GX	1050
Sensor type	CCD Progressive
センサーサイズ	Type 1/2
ピクセルサイズ	5.5 $\mu\text{m}$ $\times$ 5.5 $\mu\text{m}$
レンズマウント (標準搭載)	C-Mount
フレームレート (フル解像度)	112 fps
ADC	14 bit
Image buffer (RAM)	128 MByte
Output	
Bit depth	14 (monochrome); 12 (color) bit
ビデオフォーマット(Mono)	Mono8, Mono12, Mono12Packed, Mono14
ビデオフォーマット(YUV)	YUV411Packed, YUV422Packed, YUV444Packed
ビデオフォーマット(RGB)	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed, RGB12Packed
ビデオフォーマット(Raw)	BayerGR8, BayerGR12, BayerGR12Packed
General purpose inputs/outputs (GPIOs)	
Opto-isolated I/Os	2 inputs, 4 outputs
RS232	1
Operating conditions/dimensions	
Operating temperature	0 $^{\circ}\text{C}$ to +50 $^{\circ}\text{C}$ ambient (without condensation)
Power requirements (DC)	10 to 24 VDC
消費電力	5.4 W at 12 VDC (Single GigE Mode); 6.7 W at 12 VDC (Dual GigE Mode)
Mass	269 g
Body dimensions (L $\times$ W $\times$ H in mm)	107.2 $\times$ 53.3 $\times$ 33 (including connectors)
Regulations	CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class A; CAN ICES-003



## Features

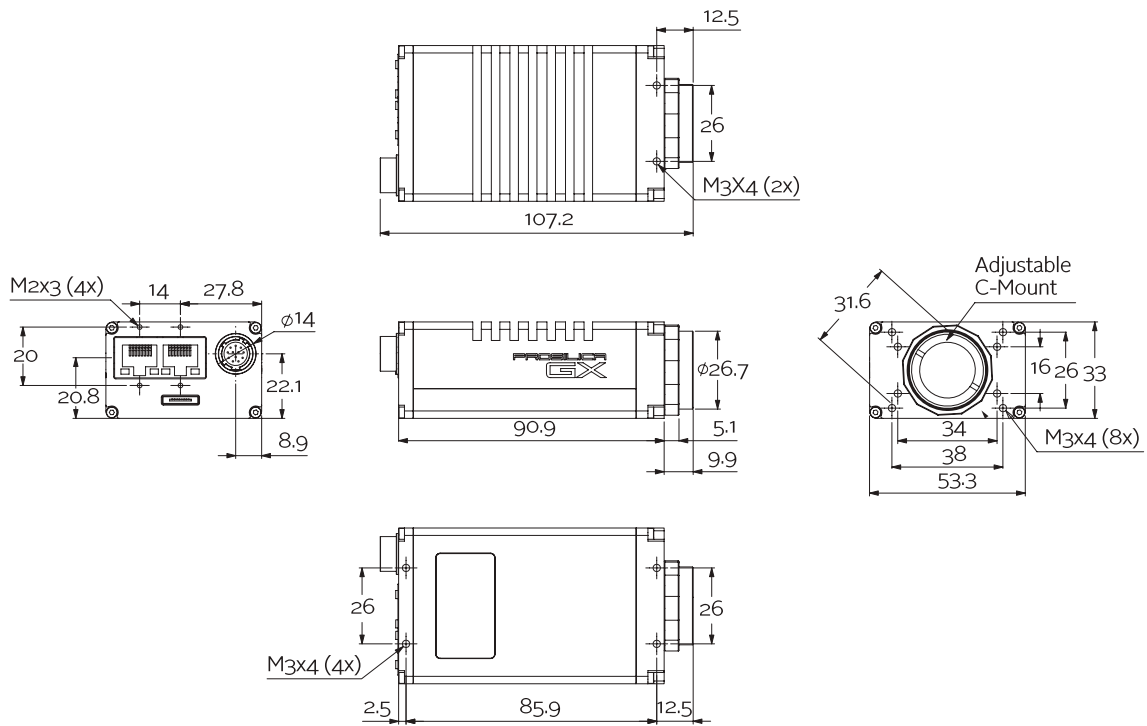
### Image optimization features:

- Auto gain (manual gain control: 0 to 34 dB)
- Auto exposure (manual exposure controls: 10  $\mu$ s to 26.8 s)
- Auto white balance (GX1050C only)
- Binning (Sum)
- Region of interest (ROI), separate ROI for auto features

### Camera control features:

- 3-axis motorized lens control
- Auto-Iris (video type)
- Event channel
- Global shutter (digital shutter)
- Image chunk data
- Recorder and Multiframe acquisition modes
- RS232
- Storable user sets
- StreamBytesPerSecond (bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO

## Technical drawing





## Applications

Prosilica GX1050 is ideal for a wide range of applications including:

- Industrial inspection
- Machine vision
- Medical imaging
- Public security
- Surveillance
- Traffic imaging
- OEM applications