

# Prosilica GE 1050



- 59 fps @ full resolution
- ON Semi KAI-01050 sensor
- Galvanically isolated I/O
- Various lens mount options

For speed and good sensitivity

Compact, high performance CCD machine vision cameras with GigE Vision

Prosilica GE 1050 with ON Semi KAI-01050 runs 59.0 frames per second at 1.0 MP resolution.

Prosilica GE cameras are very compact, high-performance machine vision cameras with Gigabit Ethernet interface (GigE Vision®).

The GigE interface allows for very fast frame rates and long cable lengths.

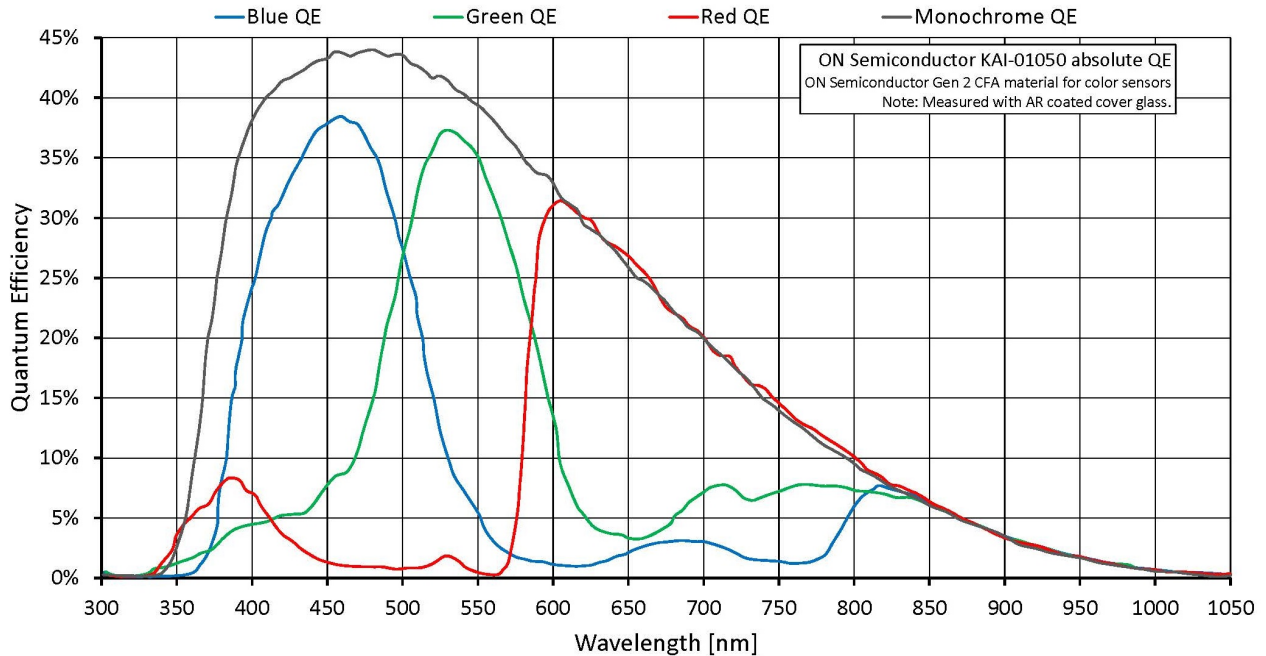
- Compact size
- VGA to 16 Megapixel resolution
- Fast frame rates to 205 fps
- OnSemi KAI CCD sensors
- Modular options available

## Specifications

Prosilica GE 1050	
Interface	IEEE 802.3 1000baseT
Resolution	1024 (H) × 1024 (V)
Sensor	ON Semi KAI-01050
Sensor type	CCD Progressive
Sensor size	Type 1/2

<b>Prosilica GE 1050</b>	
Pixel size	5.5 $\mu\text{m}$ $\times$ 5.5 $\mu\text{m}$
Lens mount (default)	C-Mount
Max. frame rate at full resolution	59 fps
ADC	12 Bit
Image buffer (RAM)	32 MByte
<b>Output</b>	
Bit depth	8/12 Bit
Monochrome pixel formats	Mono8, Mono12, Mono12Packed
YUV color pixel formats	YUV411Packed
RGB color pixel formats	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed, RGB12Packed
Raw pixel formats	BayerGR8, BayerGR12, BayerGR12Packed
<b>General purpose inputs/outputs (GPIOs)</b>	
TTL I/Os	1 input, 3 outputs (with galvanic isolation)
RS232	1
<b>Operating conditions/dimensions</b>	
Operating temperature	0 °C to +50 °C ambient (without condensation)
Power requirements (DC)	5 to 24 VDC
Power consumption	5 W at 12 VDC
Mass	178 g
Body dimensions (L $\times$ W $\times$ H in mm)	80 $\times$ 51 $\times$ 39 (including connectors)
Regulations	2011/65/EU, including amendment 2015/863/EU (RoHS)

## Quantum efficiency

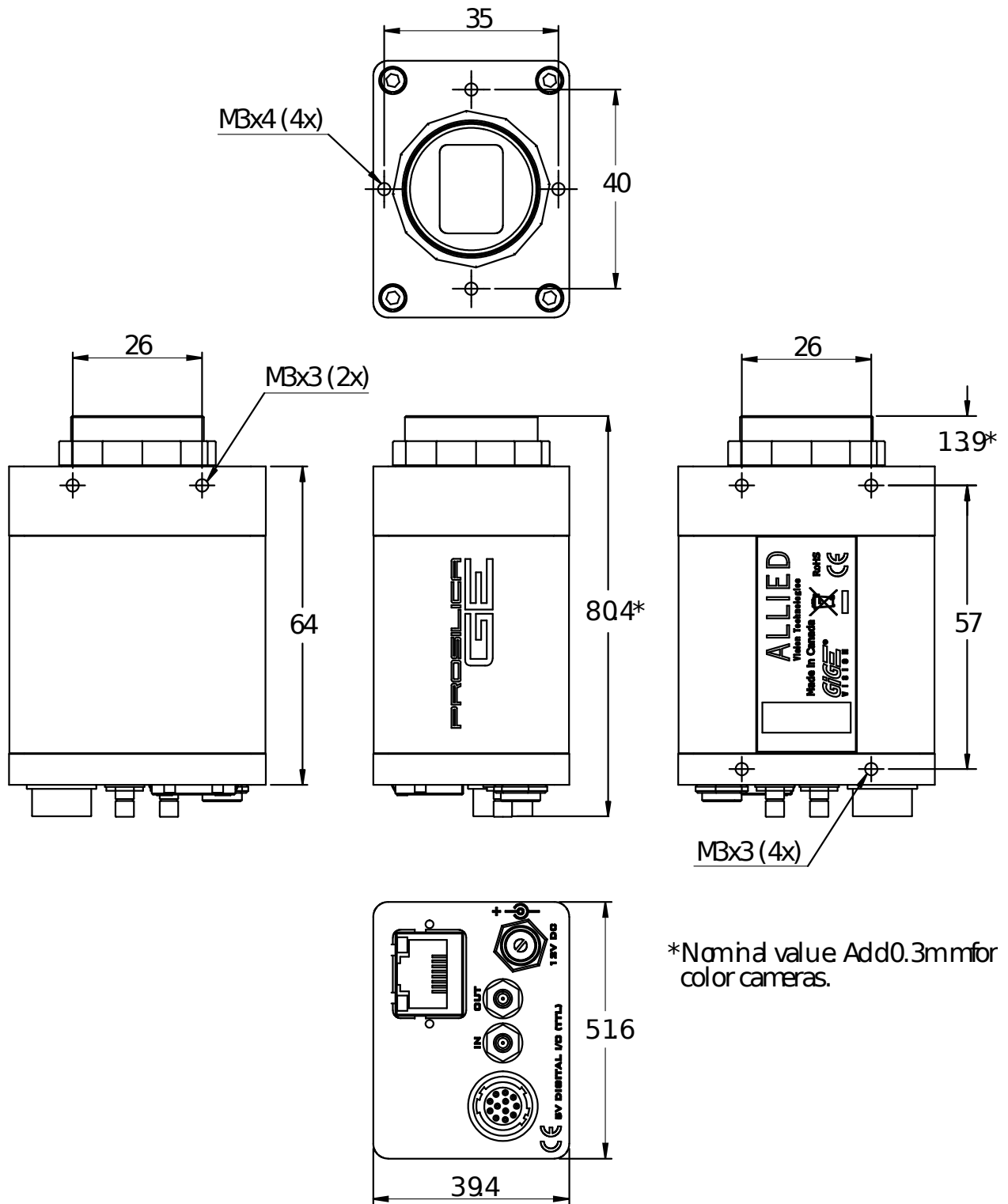


## Features

Prosilica GE1050 features include:

- Region of interest (ROI), DSP subregion (selectable ROI for auto features)
- Binning (Sum)
- Auto gain (manual gain control: 0 to 34 dB)
- Auto exposure (manual exposure controls: 10  $\mu$ s to 53.7 s)
- Auto white balance
- StreamBytesPerSecond (bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Global shutter (digital shutter)
- Recorder and Multiframe acquisition modes
- Event channel
- Image chunk data
- Storable user sets

## Technical drawing





## Applications

Prosilica GE1050 is ideal for a wide range of applications including:

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