

# Prosilica GE 2040



- 15 fps @ full resolution
- ON Semi KAI-04022 sensor
- Galvanically isolated I/O
- Various lens mount options

## Description

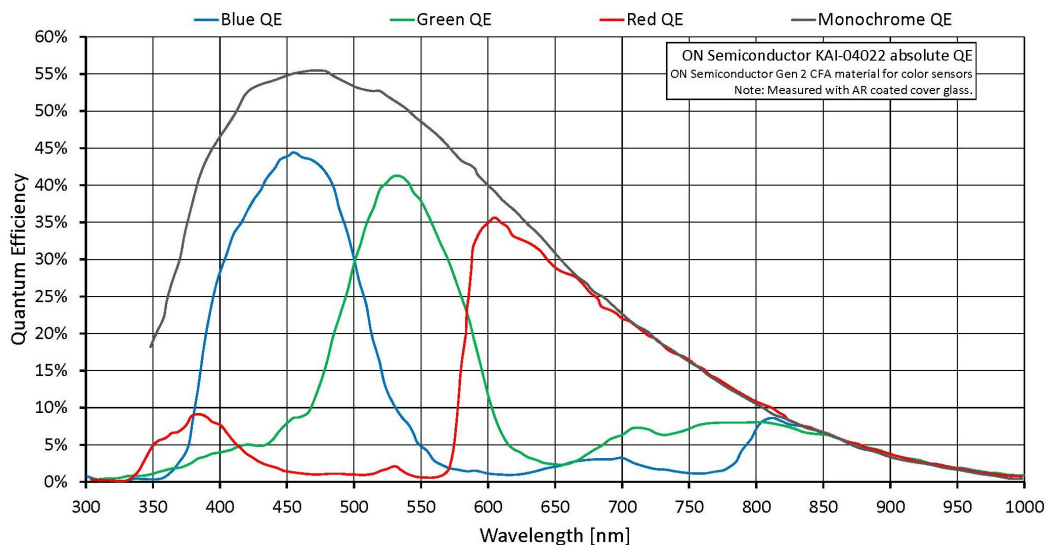
ON Semi KAI-04022 4.2 Megapixel CCD camera, 15 frames per second

Prosilica GE2040 is a very high-resolution CCD camera with Gigabit Ethernet output. This camera features the high-quality ON Semiconductor KAI-04022 CCD image sensor that provides superior image quality, excellent sensitivity, and low noise. At full resolution, this camera has a frame rate of 15 frames per second. With a smaller region of interest higher frame rates are possible. By default monochrome models ship with no optical filter and color models ship with an IRC30 IR cut filter.

## Specifications

Prosilica GE	2040
インターフェイス	IEEE 802.3 1000baseT
解像度	2040 (H) × 2048 (V)
センサー	ON Semi KAI-04022
Sensor type	CCD Progressive
センサーサイズ	Type 1.2
ピクセルサイズ	7.4 μm × 7.4 μm
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)	15 fps
ADC	12 bit
Image buffer (RAM)	32 MByte
	Output
Bit depth	8/12 bit
ビデオフォーマット(Mono)	Mono8, Mono12, Mono12Packed

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ビデオフォーマット(YUV)	YUV411Packed
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)	
TTL I/Os	1 input, 3 outputs (with galvanic isolation)
RS232	1
Operating conditions/dimensions	
Operating temperature	0 °C to +50 °C ambient (without condensation)
Power requirements (DC)	5 to 24 VDC
消費電力	5.5 W at 12 VDC
Mass	169 g
Body dimensions (L × W × H in mm)	80 × 51 × 39 (including connectors)
Regulations	2011/65/EU, including amendment 2015/863/EU (RoHS)



## Features

Prosilica GE2040 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: 75  $\mu$ 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
- Chunk data
- Storable user sets

## Technical drawing



\* Nominal value Add 0.3mm for color cameras.



## Applications

Prosilica GE2040 is ideal for a wide range of applications including:

- High-resolution industrial inspection
- General machine vision
- 3D metrology
- LCD panel inspection
- Military surveillance
- Public security
- Traffic imaging (Intelligent Traffic Systems)
- Embedded systems
- OEM applications