

Prosilica GE 2040



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

Description

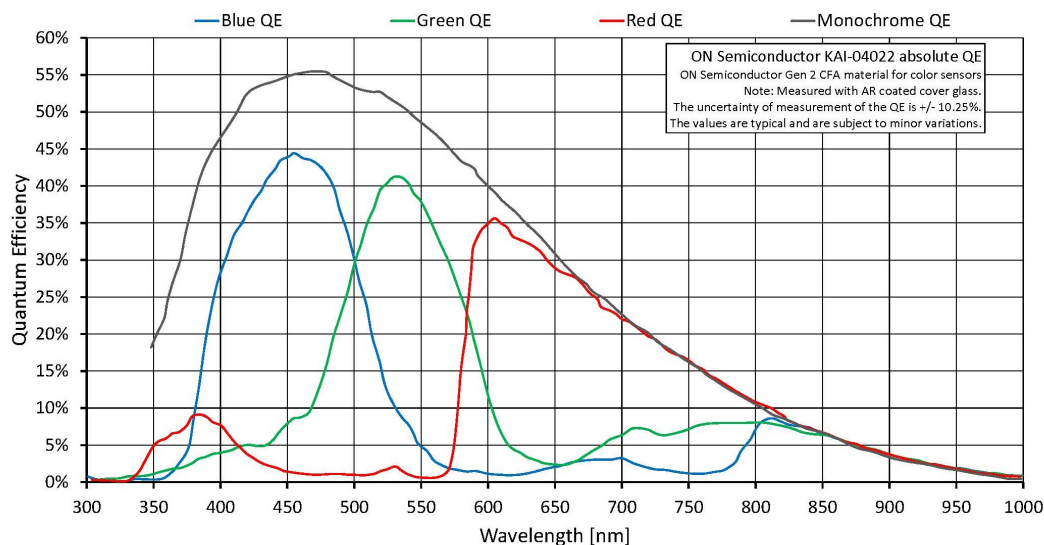
ON Semi KAI-04022 4.2 Megapixel CCD camera, 15 frames per second

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	CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class A



Features

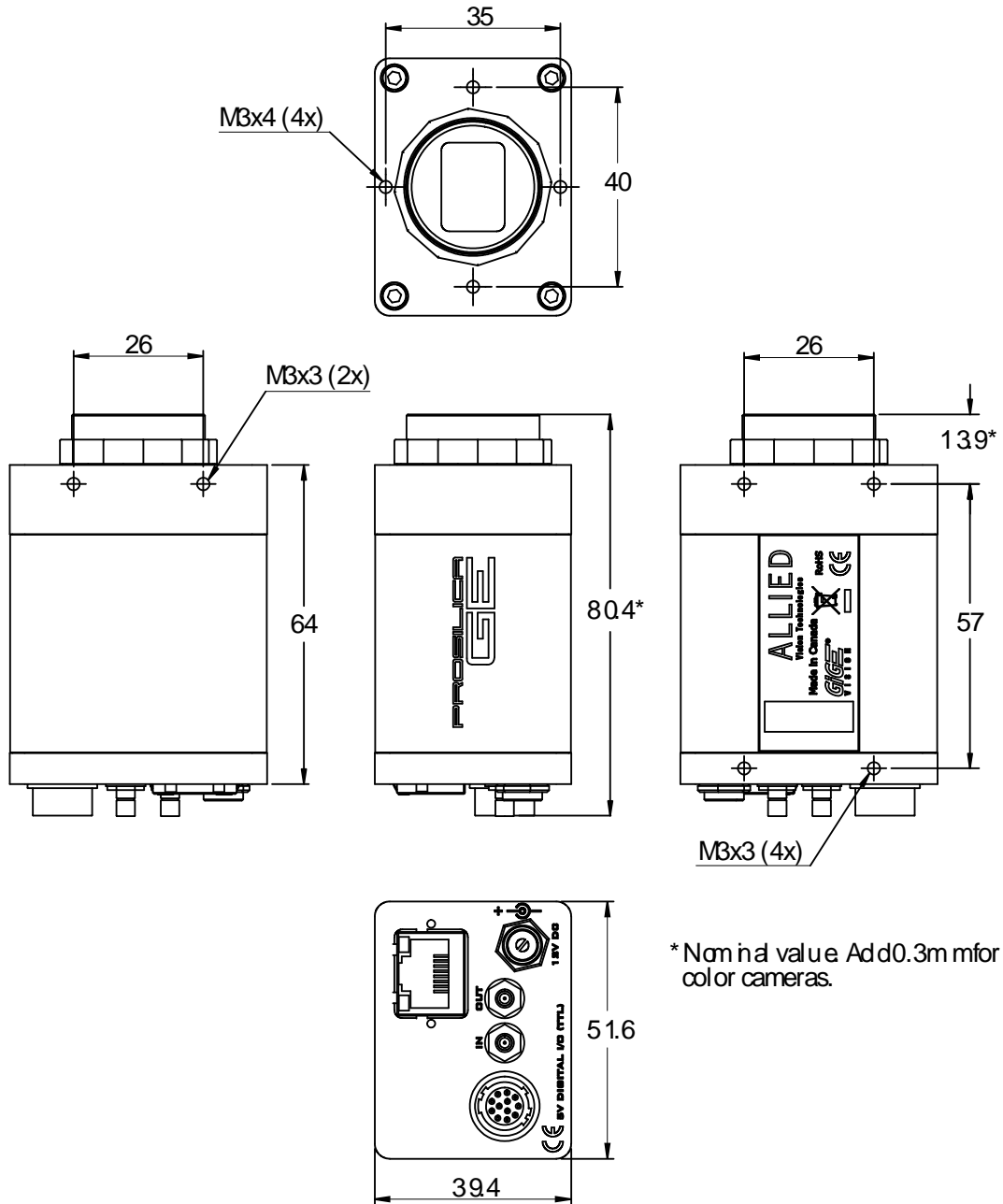
Prosilica GE2040 features include:

- 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 μ 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