

Prosilica GE

2040



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

Description

High-performance 4.2 Megapixel CCD camera, 15 frames per second

Prosilica#GE2040/GE2040C 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.

Options:

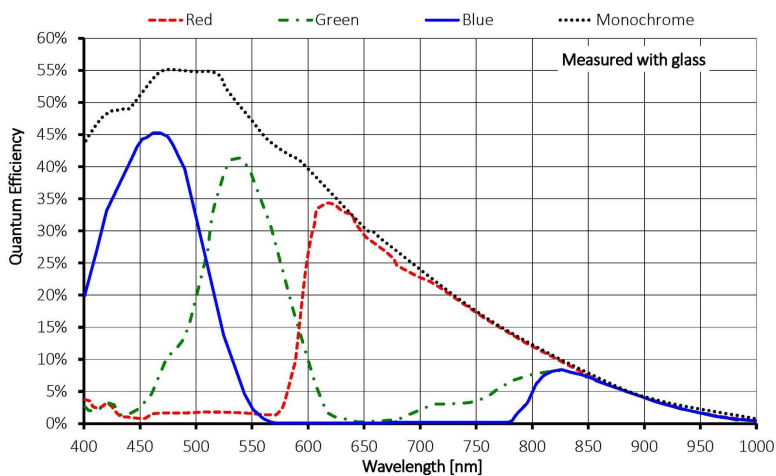
- Optical filters (IR cut filter/Protection glass)
- Taped cover glass with or without microlenses
- Various lens mounts

See the [Modular Concept](#) for lens mount, optical filter, and sensor options.

Specifications

Prosilica GE	2040
Interface	IEEE 802.3 1000baseT
Resolution	2040 (H) × 2048 (V)
Sensor	OnSemi KAI-04022
Sensor type	CCD Progressive
Cell size	7.4 μm x 7.4 μm
Lens mount	C-Mount
Max frame rate at full resolution	15 fps
ADC	12 bit
Image buffer (RAM)	32 MByte
Output	
Bit depth	8/12 bit

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Mono modes	Mono8, Mono12, Mono12Packed
Color modes RGB	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed, RGB12Packed
Raw modes	BayerGR8, BayerGR12, BayerGR12Packed
General purpose inputs/outputs (GPIOs)	
TTL I/Os	1 input, 3 outputs (with galvanic isolation)
RS-232	1
Operating conditions/dimensions	
Operating temperature	0 °C to +50 °C ambient (without condensation)
Power requirements (DC)	5 to 24 VDC
Power consumption (@12 V)	5.5 W
Mass	169 g
Body dimensions (L × W × H in mm)	80 × 51 × 39 (including connectors)
Regulations	CE, RoHS, REACH, WEEE, FCC, ICES



Features

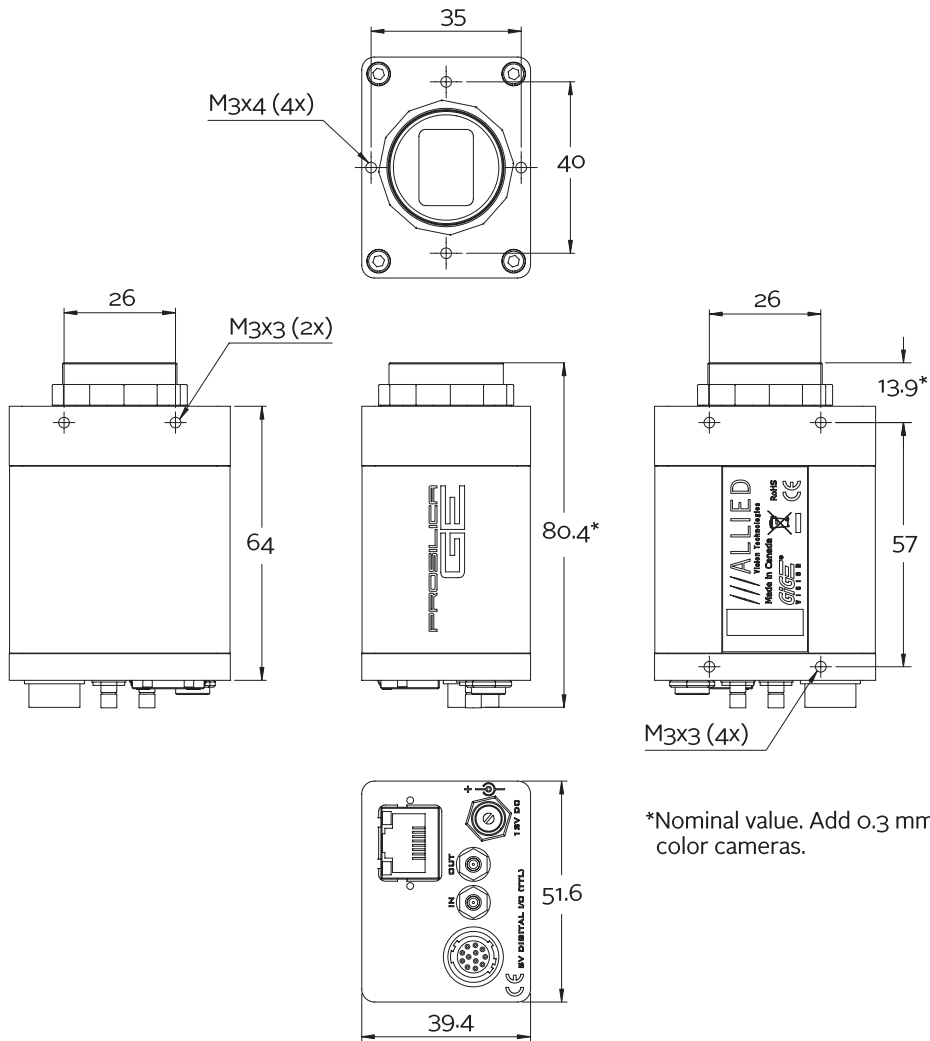
Prosilica GE2040/GE2040C features include:

- Region of interest (ROI), DSP subregion (selectable ROI for auto features)
- Binning
- Auto gain (manual gain control: 0 to 34 dB)
- Auto exposure (manual exposure controls: 75 #s to 53.7 s)



- Auto white balance
- StreamBytesPerSecond (easy 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





Applications

Prosilica#GE2040/GE2040C 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