

Prosilica GE

2040



- 15 fps @ 4.2 Megapixel
- OnSemi KAI-04022 sensor
- Galvanically isolated I/O
- Various mount options

Description

High-performance 4.2 Megapixel CCD camera

Prosilica GE2040 is a very high-resolution CCD camera with Gigabit Ethernet output. GE2040 features the high-quality OnSemi KAI-04022 CCD image sensor that provides superior image quality, excellent sensitivity, and low noise.

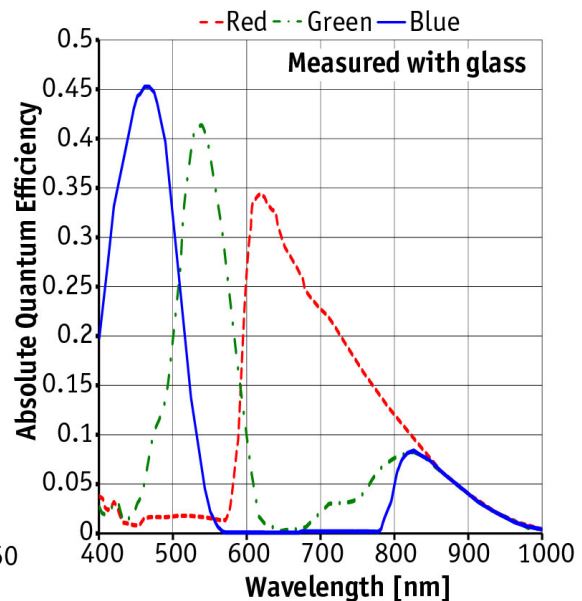
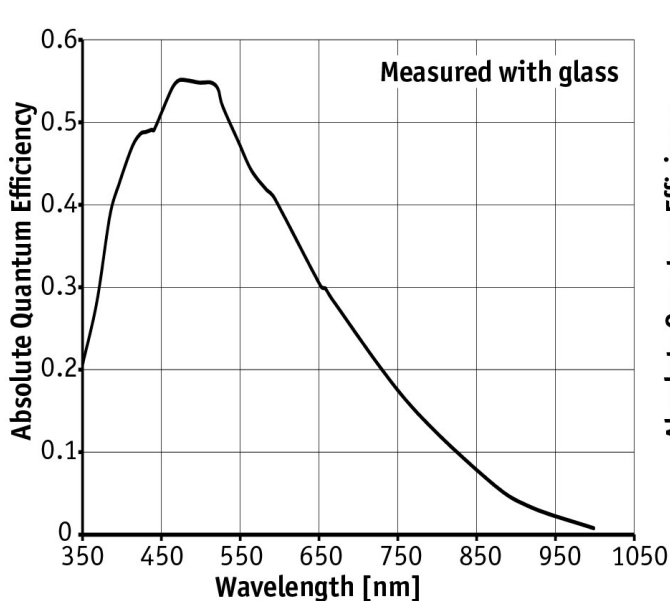
Options

- IR cut filter (monochrome cameras)
- Taped cover glass with or without microlenses
- Various lens mounts

Specifications

Prosilica GE	2040
Interface	IEEE 802.3 1000baseT
Resolution	2040 × 2048
Sensor	OnSemi KAI-04022
Sensor type	CCD Progressive
Cell size	7.4 μm
Lens mount	C-Mount, F-Mount
Max frame rate at full resolution	15 fps
ADC	12 bit
On-board FIFO	32 Mbyte
Output	
Bit depth	8/12 bit
Mono modes	Mono8, Mono12, Mono12Packed

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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 ... +50°C
Power requirements (DC)	5V - 24V
Power consumption (@12 V)	5.5 W
Mass	169 g
Body dimensions (L × W × H in mm)	80 × 51 × 39 including connectors, w/o tripod and lens
Regulations	CE, FCC Class A, RoHS (2011/65/EU)



Features

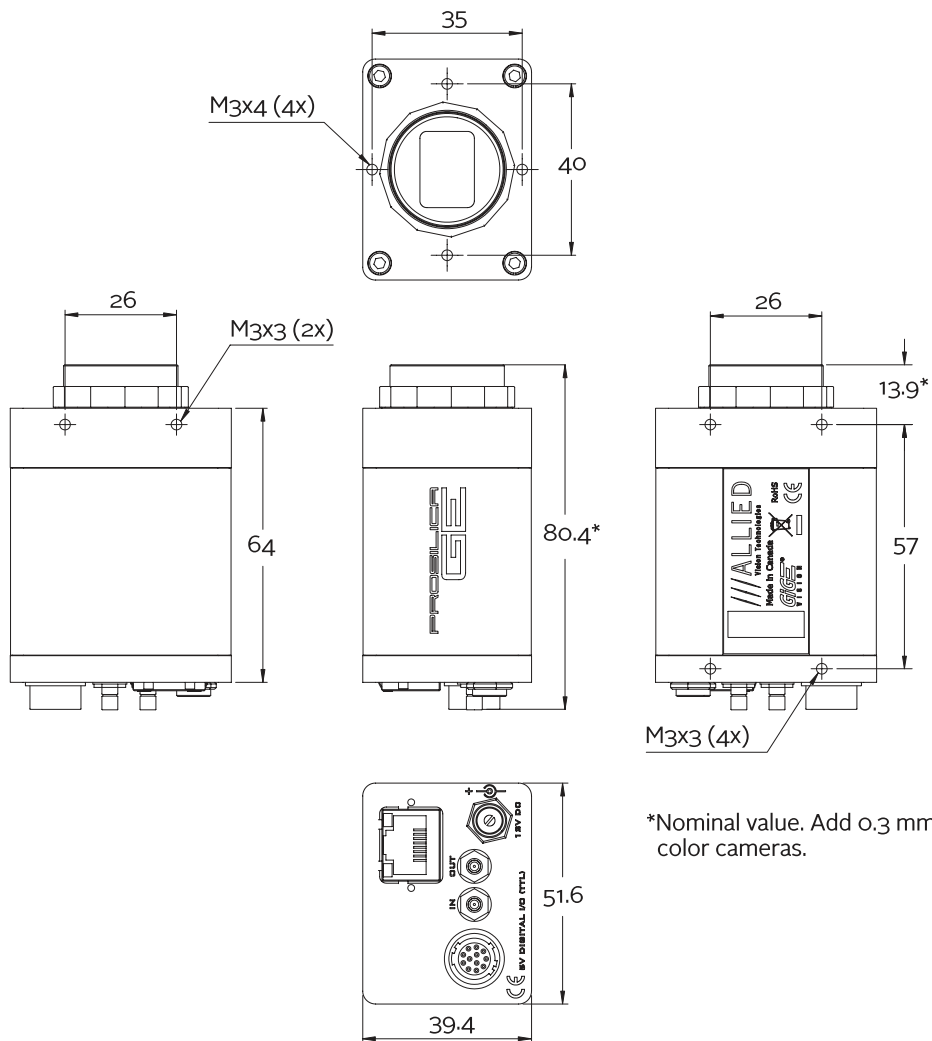
Features include:

- ROI, DSP subregion (selectable ROI for auto features)
- Binning
- Auto gain (manual gain control: 0 to 34 dB)
- Auto exposure (manual exposure controls: 75 µs 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



*Nominal value. Add 0.3 mm for color cameras.



Applications

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

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