Allied Vision

Prosilica GE

680

- High frame rate
- OnSemi KAI-0340 sensor
- Galvanically isolated I/O
- Various mount options

Description

Fast CCD camera with Gigabit Ethernet interface - more than 200 fps

Prosilica GE680 is a very fast, VGA resolution, high-performance machine vision camera with a Gigabit Ethernet interface (GigE Vision). The CCD sensor is suitable for applications where speed and good sensitivity are required.
Options

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

Specifications

Prosilica GE	**680**
Interface	IEEE 802.3 1000baseT
Resolution	640 × 480
Sensor	OnSemi KAI-0340
Sensor type	CCD Progressive
Cell size	7.4 µm
Lens mount	C-Mount
Max frame rate at full resolution	205 fps
ADC	12 bit
On-board FIFO	32 Mbyte
Output	
Bit depth	8/12 bit
Mono modes	Mono8, Mono12, Mono12Packed

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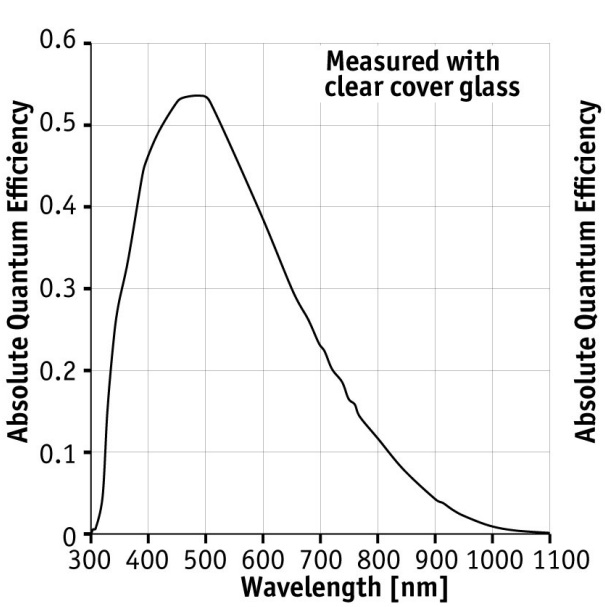
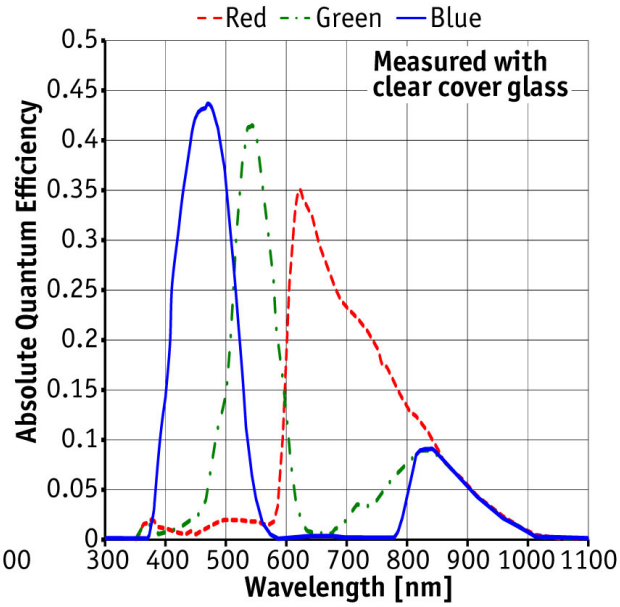
Color modes RGB	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed, RGB12Packed
Raw modes	BayerGR8, BayerGR12, BayerGR12Packed
General purpose inputs/outputs (GPIOs)	
TTL I/Os	1 input, 3 outputs (with galvanic isolation)
RS-232	1
Operating conditions/dimensions	
Operating temperature	0°C ... +50°C
Power requirements (DC)	5V - 24V
Power consumption (@12 V)	4.5 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

Prosilica GE680 incorporates an advanced set of camera features including:

- ROI, DSP subregion (selectable ROI for auto features)
- Binning
- Auto gain (manual gain control: 0 to 34 dB)
- Auto exposure (manual exposure controls: 25 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

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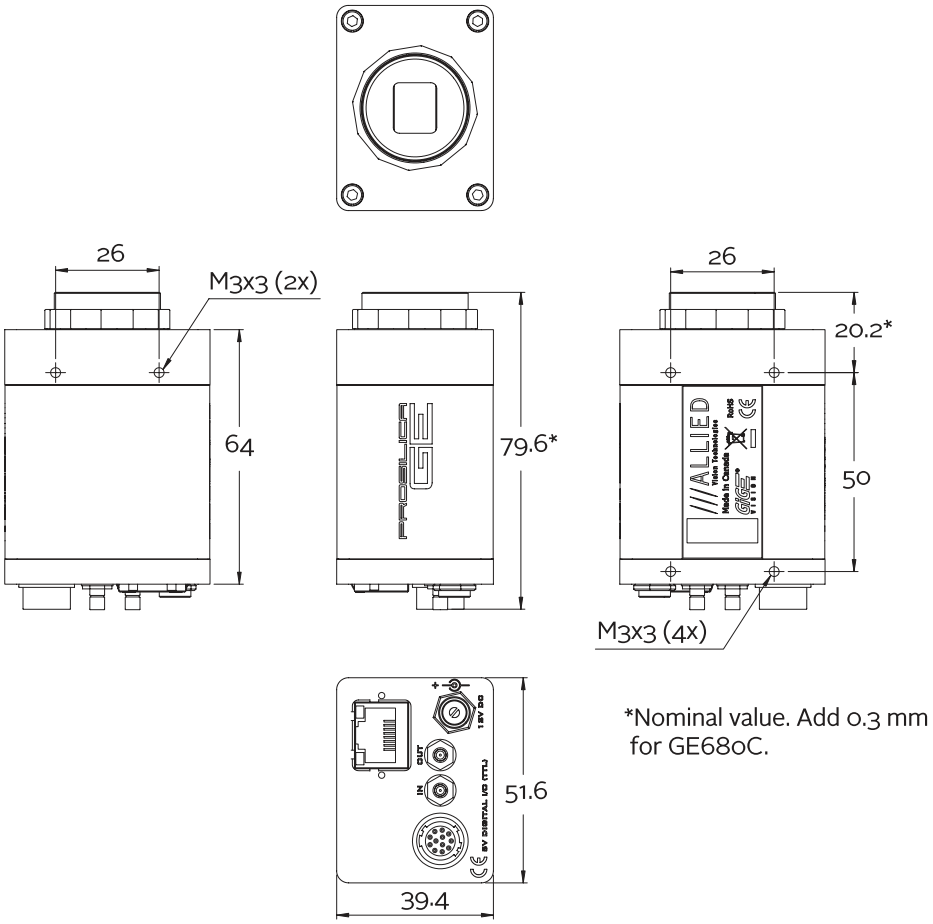
Technical drawing



*Nominal value. Add 0.3 mm for GE680C.

Applications

Prosilica GE680 is ideal for applications where speed and good sensitivity are required. These include:

- high-speed inspection
- machine vision
- optical character recognition
- traffic imaging
- robotics
- OEM applications