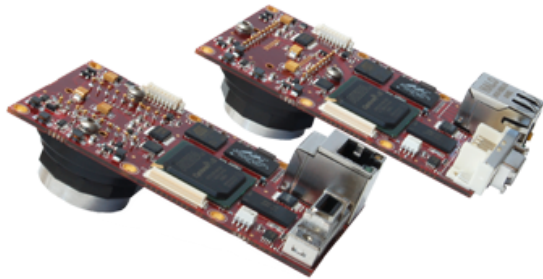


Prosilica GB

650



- Single board
- High frame rate
- Landscape or portrait sensor orientation
- Auto-iris (video type)

Landscape or portrait sensor orientation

Single-board OEM cameras with Gigabit Ethernet interface

Prosilica GB 650 with Sony ICX424 runs 121 frames per second at 0.3 MP resolution.

Prosilica GB Gigabit Ethernet CCD cameras are single-board versions of our popular **GC** GigE Vision cameras. The credit card-sized Prosilica GB are high-performance machine vision cameras with Gigabit Ethernet interface (GigE Vision®).

- Ultra-compact size (2" x 3.5")
- VGA to 5 Megapixel resolution
- Fast frame rates to 120 fps
- Optional vertical connector orientation
- Portrait or landscape sensor orientation

Specifications

Interface	IEEE 802.3 1000BASE-T
Resolution	659 (H) × 493 (V)
Sensor	Sony ICX424
Sensor type	CCD Progressive
Shutter mode	GS (Global shutter)
Sensor size	Type 1/3
Pixel size	7.4 μm × 7.4 μm
Lens mount (default)	C-Mount
Max. frame rate at full resolution	121.6 fps
ADC	14 Bit
Image buffer (RAM)	16 MByte

Output

Bit depth	8-bit or 12-bit
Monochrome pixel formats	Mono8, Mono12, Mono12Packed
YUV color pixel formats	YUV411Packed, YUV422Packed, YUV444Packed
RGB color pixel formats	RGB8Packed, BGR8Packed
Raw color pixel formats (Bayer)	BayerRG8, BayerRG12, BayerGR12Packed

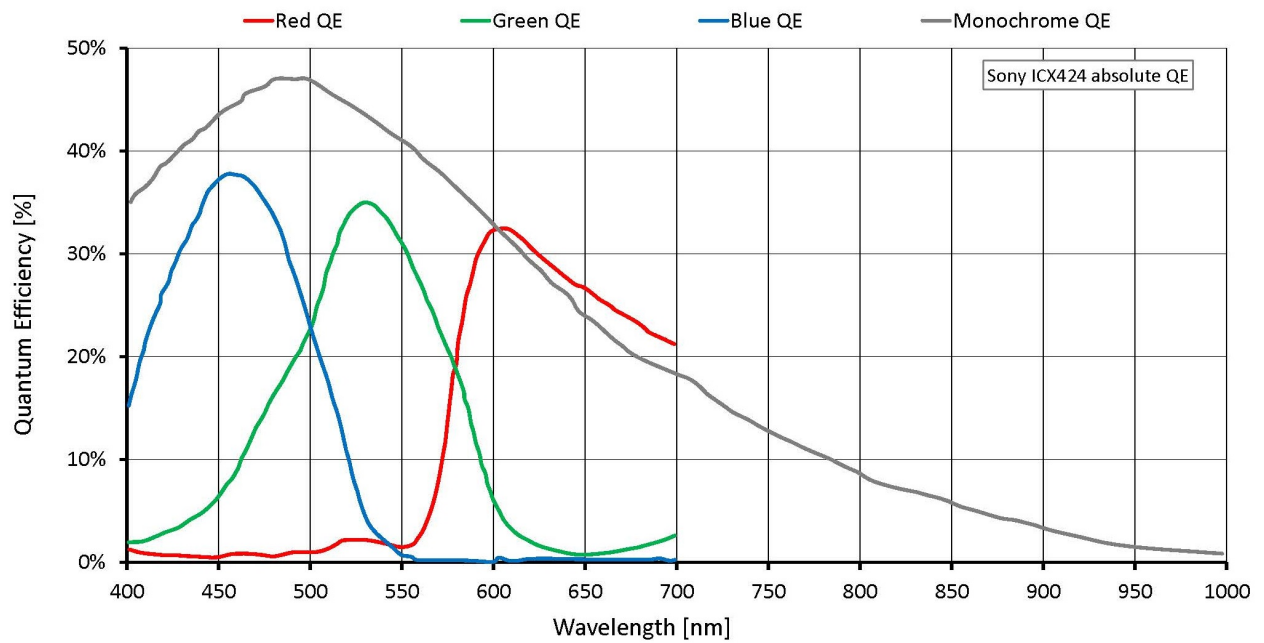
General purpose inputs/outputs (GPIOs)

TTL I/Os	1 input, 1 output
Opto-isolated I/Os	1 input, 1 output
RS232	1

Operating conditions/dimensions

Operating temperature	0 °C to +70 °C ambient (without condensation)
Power requirements (DC)	5 to 25 VDC
Power consumption	3 W at 12 VDC
Mass	59 g
Body dimensions (L × W × H in mm)	51 × 89 (board size - W × L)

Quantum efficiency



Features

Image optimization features:

- Auto gain (manual gain control: 0 to 30 dB; 1 dB increments)
- Auto exposure (manual exposure control: 10 μ s to 78.5 s; 1 μ s increments)
- Auto white balance (GB650C only)
- Binning (horizontal and vertical) (sum)
- Region of interest (ROI), DSP subregion (selectable ROI for auto features)

Camera control features:

- Auto-iris (video type)
- Event channel
- Global shutter (digital shutter)
- Image chunk data
- Recorder and Multiframe acquisition modes
- RS232
- Storable user sets
- StreamBytesPerSecond (bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO

Applications

Prosilica GB650 is ideal for a wide range of applications including:

- Machine vision
- Industrial inspection
- Public security
- Traffic monitoring
- Robotics