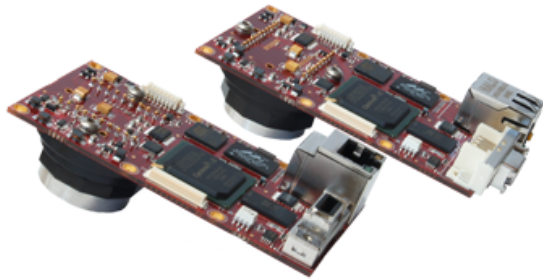


Prosilica GB

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 121.6 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 1000baseT
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 pixel formats	BayerRG8, BayerRG12, BayerGR12Packed

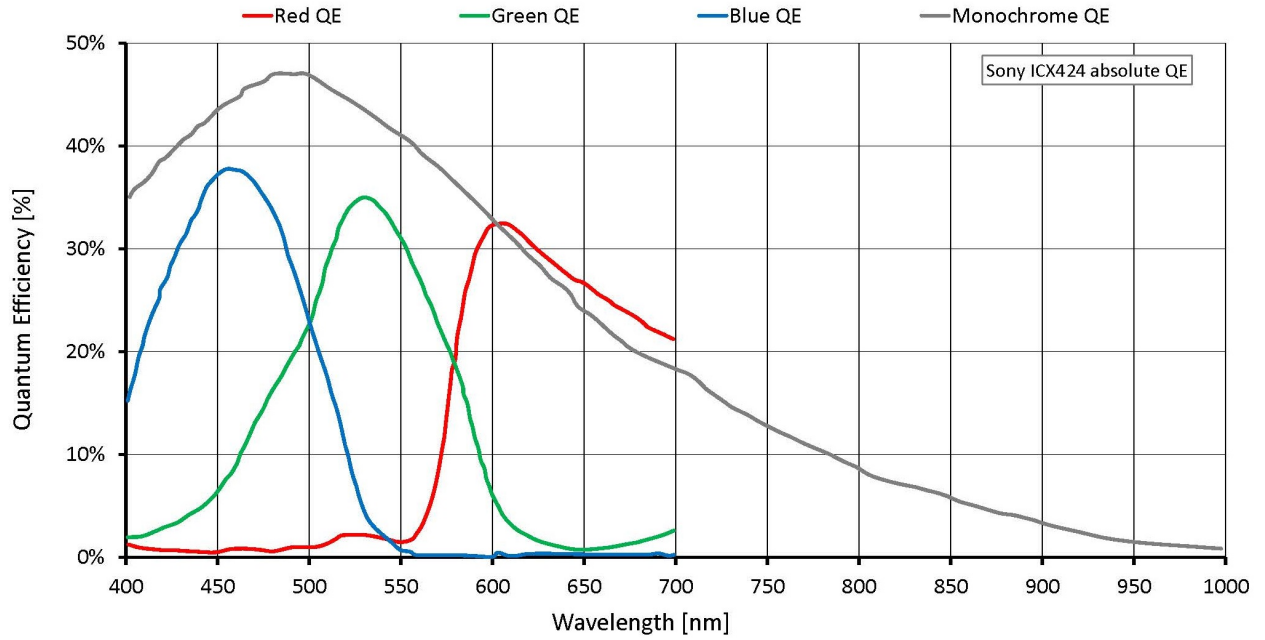
General purpose inputs/outputs (GPIOs)

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