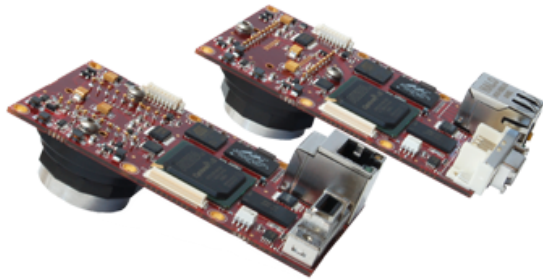


Prosilica GB

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 | 8/12 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 |

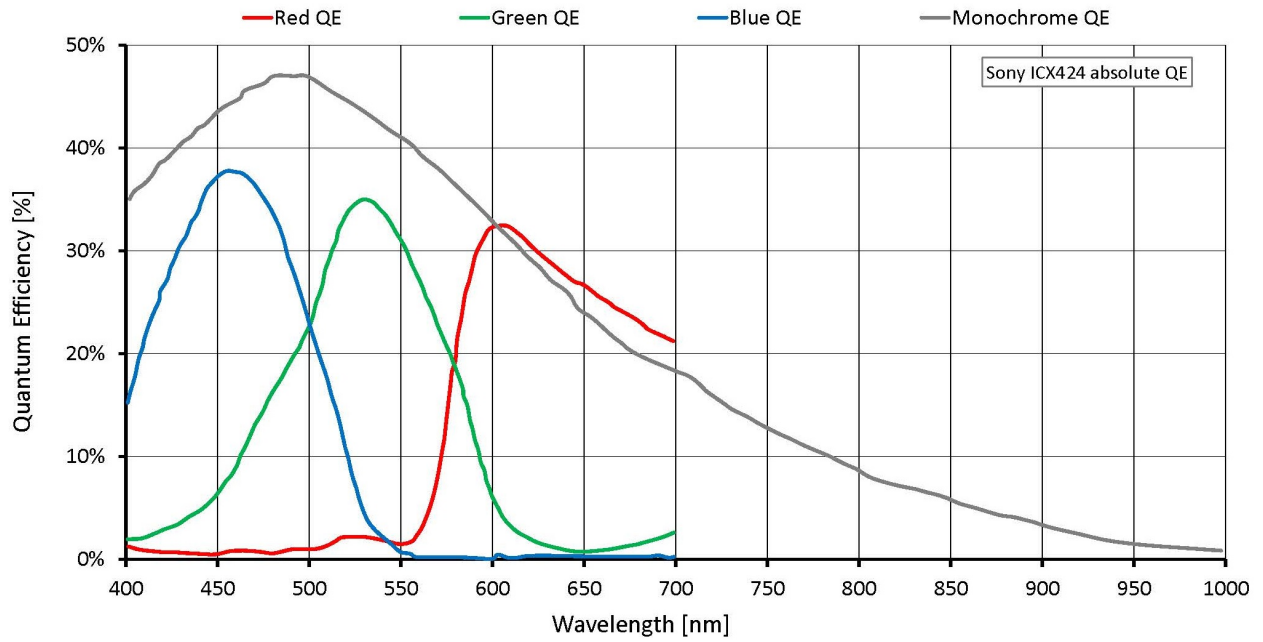
General purpose inputs/outputs (GPIOs)

| | |
|--------------------|-------------------|
| 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