

- Single board
- 15.1 fps @ full resolution
- Landscape sensor orientation
- Auto-iris (video type)

Description

5 Megapixel single-board CCD camera with a GigE Vision interface

Prosilica GB2450/GB2450C is a very high-resolution CCD single-board camera with Gigabit Ethernet interface. This camera incorporates the high-quality Type 2/3 (11.016 mm diagonal) Sony ICX625 CCD image sensor that provides superior image quality, excellent sensitivity, and low noise. At full resolution, this camera runs 15.1 frames per second. With a smaller region of interest, higher frame rates are possible. By default monochrome models ship with no optical filter and color models ship with an IRC30 IR cut filter.

Options:

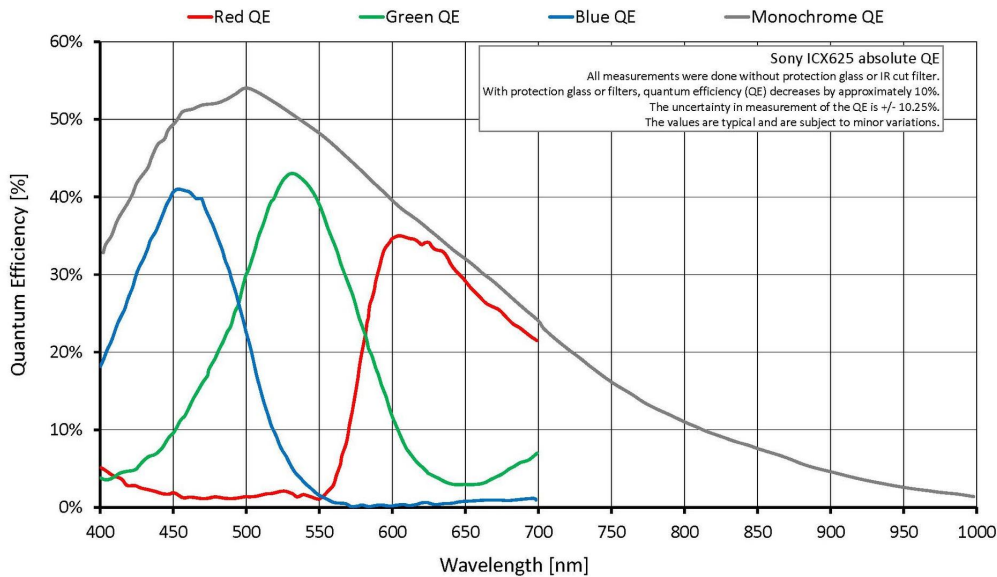
- CS-Mount
- Optical filters (IR cut filter/Protection glass)
- Landscape sensor orientation
- Inline or vertical connector orientation

See the Modular Concept for lens mount and optical filter options.

Specifications

Prosilica GB	2450
Interface	IEEE 802.3 1000baseT
Resolution	2448 (H) × 2050 (V)
Sensor	Sony ICX625
Sensor type	CCD Progressive
Cell size	3.45 μm x 3.45 μm
Lens mount	C-Mount

Prosilica GB	2450
Max frame rate at full resolution	15.1 fps
ADC	14 bit
Image buffer (RAM)	16 MByte
Output	
Bit depth	8/12 bit
Mono modes	Mono8, Mono12, Mono12Packed
Color modes RGB	RGB8Packed, BGR8Packed
Raw modes	BayerRG8, BayerRG12, BayerGR12Packed
General purpose inputs/outputs (GPIOs)	
TTL I/Os	1 input, 1 output
Opto-isolated I/Os	1 input, 1 output
RS-232	1
Operating conditions/dimensions	
Operating temperature	0 °C to +70 °C ambient (without condensation)
Power requirements (DC)	5 to 25 VDC
Power consumption (@12 V)	3.8 V
Mass	54 g
Body dimensions (L × W × H in mm)	51 × 89 (board-size W × L)
Regulations	RoHS, REACH, WEEE





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 42.9 s; 1 μ s increments)
- Auto white balance (color models only)
- Binning (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 (easy bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO



Applications

Prosilica GB2450/GB2450C is ideal for a wide range of applications including:

- LCD panel inspection
- High-resolution industrial inspection
- 3D metrologyGeneral machine vision
- Public security
- Surveillance
- Intelligent Traffic Systems (ITS)
- Embedded systems
- OEM applications