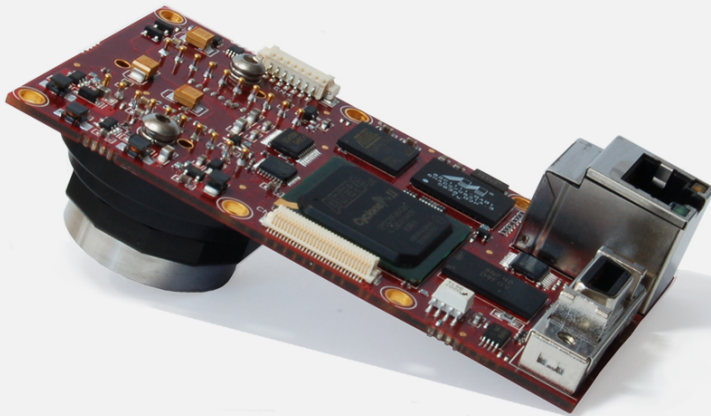


## GB650



### Description

#### Single-board CCD camera, VGA resolution - 120 fps

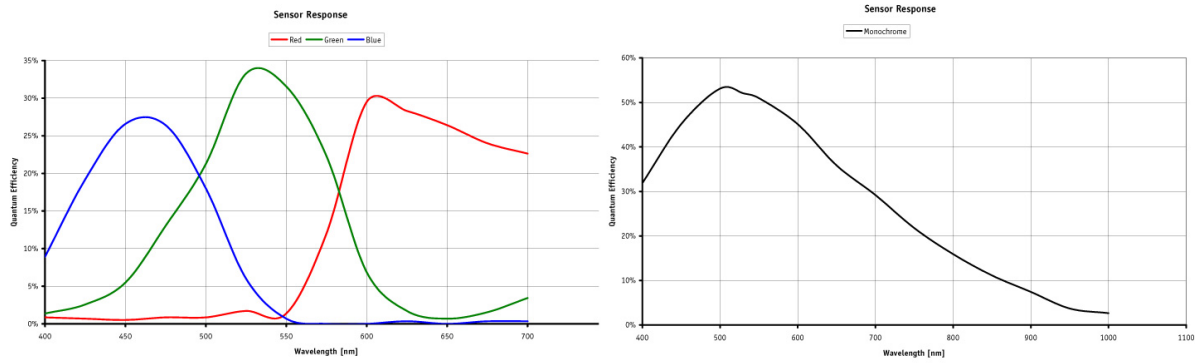
The GB650 is a fast, VGA resolution, high-performance single-board machine vision camera with Gigabit Ethernet interface (GigE Vision®).

- Sony ICX424 Progressive Scan CCD
- 120 fps at 659x493
- available in portrait or landscape sensor orientation and with in-line or vertical connector orientation
- **Models:**
  - GB650, 659x493, 120 fps, CCD, Mono
  - GB650C, 659x493, 120 fps, CCD, Color
  - GB650-V, 659x493, 120 fps, CCD, Mono, Vertical
  - GB650C-V, 659x493, 120 fps, CCD, Color, Vertical
  - GB650-P, 659x493, 120 fps, CCD, Mono, Portrait
  - GB650C-P, 659x493, 120 fps, CCD, Color, Portrait
  - GB650-PV, 659x493, 120 fps, CCD, Mono, Portrait, Vertical
  - GB650C-PV, 659x493, 120 fps, CCD, Color, Portrait, Vertical
  - Explanation of model suffixes (-P, -V, -PV, portrait, vertical)

## Specifications

<b>Prosilica GB</b>		<b>650</b>
<b>Interface</b>	IEEE 802.3 1000baseT	
<b>Resolution</b>	659 x 493	
<b>Sensor</b>	Sony ICX424	
<b>Type</b>	CCD Progressive	
<b>Sensor Size</b>	Type 1/3	
<b>Cell size</b>	7.4 $\mu\text{m}$	
<b>Lens mount</b>	C/CS	
<b>Max frame rate at full resolution</b>	120 fps	
<b>A/D</b>	14 bit	
<b>On-board FIFO</b>	16 MB	
<b>Output</b>		
<b>Bit depth</b>	8/12 bit	
<b>Mono modes</b>	Mono8, Mono12, Mono16	
<b>Color modes YUV</b>	YUV411, YUV422, YUV444	
<b>Color modes RGB</b>	RGB24, BGR24, RGBA24, BGRA24	
<b>Raw modes</b>	Bayer8, Bayer12, Bayer16	
<b>General purpose inputs/outputs (GPIOs)</b>		
<b>TTL I/Os</b>	1 input, 1 output	
<b>Opto-coupled I/Os</b>	1 input, 1 output	
<b>RS-232</b>	1	
<b>Power/Mass/Dimensions/Regulations</b>		
<b>Power requirements (DC)</b>	5V - 25V	
<b>Power consumption (12 V)</b>	3 W	
<b>Mass</b>	59 g	
<b>Body Dimensions (L x W x H in mm)</b>	51 x 89 mm (Board Size - W x L)	
<b>Regulations</b>	RoHS, Class A	

[Download Prosilica GB650 technical drawing \(click here\)](#)



## Smart features

### The GB650 features include:

- Auto Exposure
- Auto Gain
- Auto White balance
- Flexible Binning
- Region of Interest readout (AOI partial scan)
- StreamBytesPerSecond (easy bandwidth control)
- Stream hold
- Asynchronous external trigger and sync I/O
- Global shutter (digital shutter)
- Recorder and Multiframe Acquisition Modes

## **Applications**

The GB650 is suitable for applications where speed and excellent image quality are key requirements. These include:

- machine vision
- industrial inspection
- public security
- traffic monitoring
- robotics