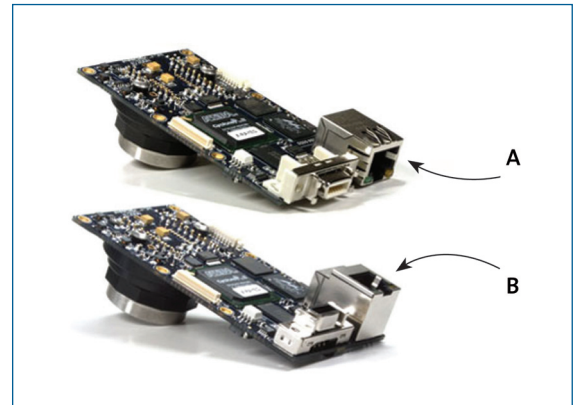


## ▶ Colour camera modules with angled head

The AVT Prosilica GB is the boardlevel OEM-periscope version of the AVT Prosilica GS camera series with GigE Vision interface and angled camera head. The models in the GB-series are especially suited to applications requiring an on-board camera with 90° viewing direction. The dimensions of the camera measure only 51 x 89mm. For flexible adaptation to fit any application requirements, sensor rotation and connector orientation can be individually defined by the customer.

A selection of progressive scan CCD sensors with resolutions from VGA to 5 megapixels is available to meet different requirements and to guarantee excellent image quality and colour fidelity. The sensor signals are digitised using a 14-bit A/D converter and can be output in numerous output formats, such as Bayer, RGB, or YUV. Due to their I/Os, RS232 interface (in/out), auto-iris and different trigger modes the AVT GB models can be used very flexibly in a wide variety of applications. A 16 Mbyte memory is used for deferred data transmission and for use of the recorder mode (camera is running free and sends n images before and after a trigger signal); it also prevents data loss in case of excessive triggering.

The data is output via standard CAT5e and CAT6 cables with lengths of up to 100 m. Configuration and integration of the cameras is easy using either the manufacturer's SDK (Windows, Linux, QNX) or CVB CameraSuite, both included in the delivery.



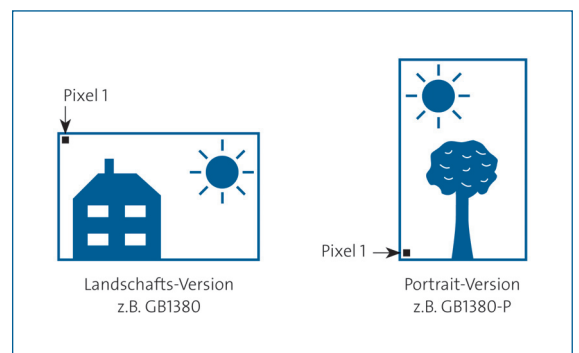
The Prosilica GB is available with various connector orientation, e.g. model GB650C with in-line connector orientation (A) and model GB650C-V with vertical connector orientation (B).

## ▶ Examples of possible applications

- Production control (e.g. inspection, high-precision measurement and process monitoring)
- Pharmaceutical industry (e.g. checking blister packages and filling levels)
- Food industry (e.g. sorting)
- Microscopy

## ▶ Technical highlights

- Boardlevel OEM-periscope version
- Different sensor types: 1/3" to 2/3" progressive scan CCD
- Resolutions from VGA to 5 megapixels
- Automatic gain and shutter control
- Opto-isolated inputs and outputs, RS232, video type auto-iris
- 16 MByte memory for deferred image transfer and recorder mode
- C-Mount connection (optionally CS-Mount, except for GB1380C)
- Sensor rotation 0° or 270° (Portrait) selectable
- Vertical connector orientation or 90° angled
- CVB CameraSuite and manufacturer's SDK for Windows, Linux and QNX
- Compatible with Common Vision Blox



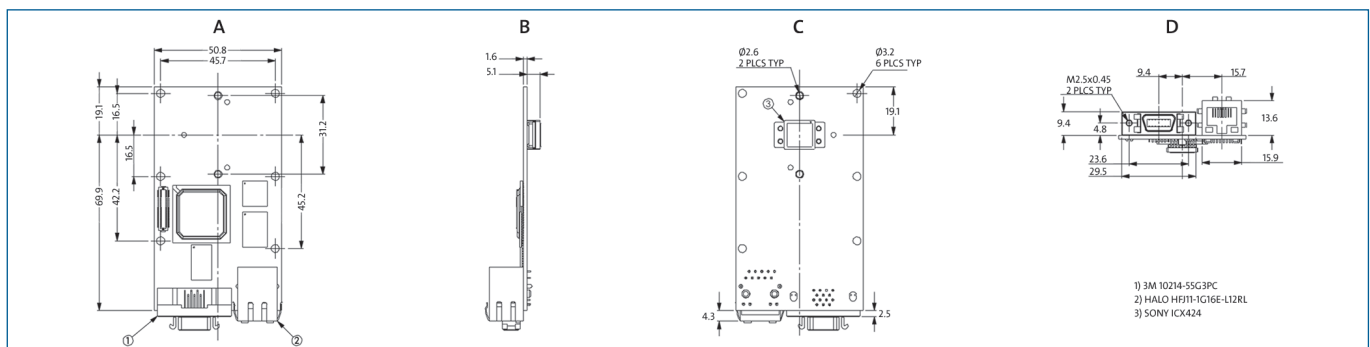
Possible sensor rotation of GB-series



► Technical Data

Specification	GB650C	GB660C	GB1380C	GB2450C
Camera class	Area scan camera, Colour			
Sensor class	1/3"-CCD, Non Interlaced (Progressive Scan)	1/4"-CCD, Non Interlaced (Progressive Scan)	2/3"-CCD, Non Interlaced (Progressive Scan)	2/3"-CCD, Non Interlaced (Progressive Scan)
Colour technology	RGB (Bayer filter)			
Sensing area	4.9 x 3.7 (W x H in mm)	3.7 x 2.8 (W x H in mm)	8.8 x 6.6 (W x H in mm)	8.4 x 7.1 (W x H in mm)
Resolution (effective)	659 x 494 (H x V)	659 x 494 (H x V)	1,360 x 1,024 (H x V)	2,448 x 2,050 (H x V)
Pixel size	7.4 x 7.4 (W x H in µm)	5.6 x 5.6 (W x H in µm)	6.45 x 6.45 (W x H in µm)	3.45 x 3.45 (W x H in µm)
Frame rate (standard)	120 Hz	119 Hz	30 Hz	15.1 Hz
Shutter	10 µs - 60 s	10 µs - 60 s	10 µs - 60 s	25 µs - 60 s
Internal memory	16 MB			
Bit per pixel	14 bit			
Output format	Mono8, Bayer8/16, RGB24, YUV411/422/444, BGR24, RGBA24, BGRA24	Mono8, Bayer8/16, RGB24, YUV411/422/444, BGR24, RGBA24, BGRA24	Mono8, Bayer8/16, RGB24, YUV411/422/444, BGR24, RGBA24, BGRA24	Mono8, Bayer8/16
Trigger modes	Edge Pre-Select, Start/Stop, Software trigger, and more			
Digital interface	GigE Vision			
Supply voltage	5 - 25 V			
Power consumption	3.2 W	3 W	3.5 W	3.8 W
Control interface	GigE Vision Interface			
Connectors	RJ-45, Mini-D-Sub (14 pins)			
I/O's	Triggers 1, Strobe 1			
Features	Flexible ROI, White Balance, Binning, Iris video output, Timestamp, Sequence Recorder			
Lens mount	C-Mount			
Dimensions	51 x 89 (W x H x L in mm)			
Weight	59 g			
Operating temperature	0 - 70 °C			
Included in delivery	IR-Cut filter, CVB CameraSuite, SDK (Windows, Linux, QNX), User GUI			
Options	CS-Mount, sensor rotation 270° (portrait), connector orientation (in-line or vertical)	CS-Mount, connector orientation (in-line or vertical)	CS-Mount, sensor rotation 270° (portrait), connector orientation (in-line or vertical)	CS-Mount, connector orientation (in-line or vertical)
Regulations	CE, FCC, RoHS			

► Dimensions



Dimensions of model GB650C: Top view (A), side view (B), bottom view (C), connectors (D), all dimensions in mm