

Prosilica GE

1050



- 59 fps @ full resolution
- ON Semi KAI-01050 sensor
- Galvanically isolated I/O
- Various lens mount options

Description

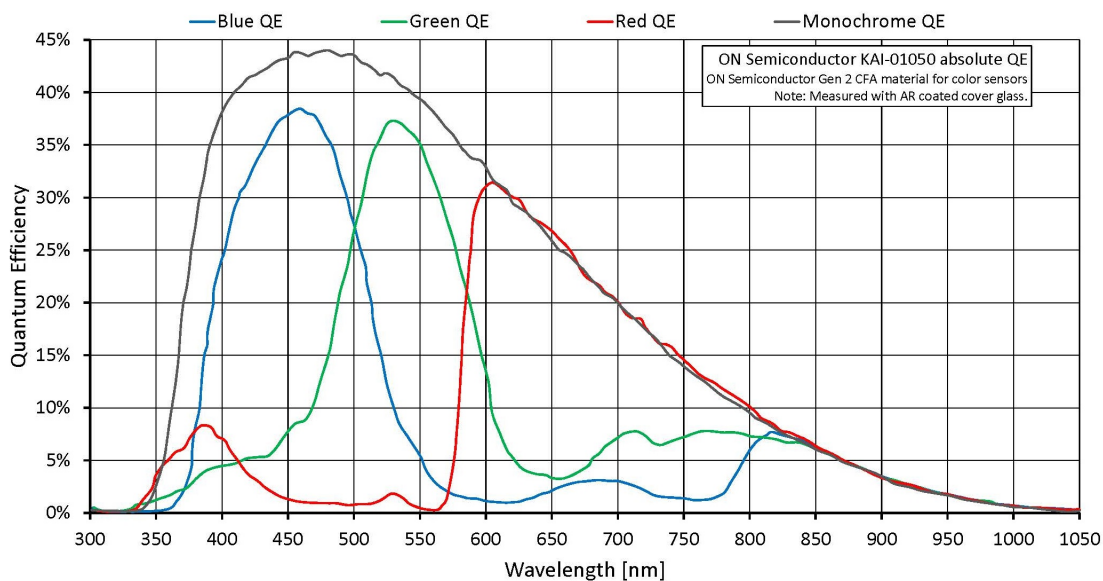
Fast 1.0 Megapixel ON Semi KAI-01050 CCD camera, 59 frames per second

Prosilica GE1050 is a fast CCD camera with Gigabit Ethernet interface (GigE Vision®). It incorporates the ON Semiconductor KAI-01050 CCD sensor that runs just under 59 frames per second at full resolution and even faster with region of interest readout. By default monochrome models ship with no optical filter and color models ship with an IRC30 IR cut filter.

Specifications

| Prosilica GE | 1050 |
|------------------------------------|-----------------------------|
| Interface | IEEE 802.3 1000baseT |
| Resolution | 1024 (H) × 1024 (V) |
| Sensor | ON Semi KAI-01050 |
| Sensor type | CCD Progressive |
| Sensor size | Type 1/2 |
| Pixel size | 5.5 μm × 5.5 μm |
| Lens mount (default) | C-Mount |
| Max. frame rate at full resolution | 59 fps |
| ADC | 12 bit |
| Image buffer (RAM) | 32 MByte |
| Output | |
| Bit depth | 8/12 bit |
| Monochrome pixel formats | Mono8, Mono12, Mono12Packed |
| YUV color pixel formats | YUV411Packed |

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|---|---|
| Prosilica GE | 1050 |
| RGB color pixel formats | RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed, RGB12Packed |
| Raw pixel formats | BayerGR8, BayerGR12, BayerGR12Packed |
| General purpose inputs/outputs (GPIOs) | |
| TTL I/Os | 1 input, 3 outputs (with galvanic isolation) |
| RS232 | 1 |
| Operating conditions/dimensions | |
| Operating temperature | 0 °C to +50 °C ambient (without condensation) |
| Power requirements (DC) | 5 to 24 VDC |
| Power consumption | 5 W at 12 VDC |
| Mass | 178 g |
| Body dimensions (L × W × H in mm) | 80 × 51 × 39 (including connectors) |
| Regulations | 2011/65/EU, including amendment 2015/863/EU (RoHS) |



Features

Prosilica GE1050 features include:

- Region of interest (ROI), DSP subregion (selectable ROI for auto features)
- Binning (Sum)
- Auto gain (manual gain control: 0 to 34 dB)
- Auto exposure (manual exposure controls: 10 μ s to 53.7 s)



- Auto white balance
- StreamBytesPerSecond (bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Global shutter (digital shutter)
- Recorder and Multiframe acquisition modes
- Event channel
- Image chunk data
- Storable user sets

Technical drawing



* Nominal value Add 0.3mm for color cameras.



Applications

Prosilica GE1050 is ideal for a wide range of applications including:

- Industrial inspection
- Machine vision
- Medical imaging
- Public security
- Surveillance
- Traffic imaging
- OEM applications