Prosilica GX 1050C

- 240 MBps with dual port LAG technology
- 3-axis motorized lens control
- High frame rate at full bit depth
- ON Semi KAI-01050 sensor

ON Semi KAI-01050 industrial camera, Global shutter, 112 fps

Prosilica GX1050C is a high resolution CCD camera with dual GigE Vision® output. It features the ON Semi KAI-01050 CCD sensor with global shutter. At full resolution, this camera has a frame rate of 112 frames per second (dual GigE mode). With a smaller region of interest higher frame rates are possible. This camera has two screw-captivated Gigabit Ethernet ports configured as a Link Aggregation Group (LAG) to provide a sustained maximum data rate of 240 MBps. It can also work at half the bandwidth (120 MBps) using a single cable. By default color models ship with a Type IRC30 IR cut filter.

Benefits and features:

- Dual GigE ports can be configured as a Link Aggregation Group (LAG), single GigE and dual GigE modes
- Screw mount RJ45 Ethernet connectors for industrial environments
- Supports cable lengths up to 100 meters (CAT-5e or CAT-6)
- ON Semi KAI-01050 (Gen2) Type 1/2 CCD sensor
- Support for popular third party image-processing libraries

Specifications

<table>
<thead>
<tr>
<th>Prosilica GX 1050C</th>
<th>1050C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interface</td>
<td>IEEE 802.3 1000baseT</td>
</tr>
<tr>
<td>Resolution</td>
<td>1024 (H) × 1024 (V)</td>
</tr>
<tr>
<td>Sensor</td>
<td>ON Semi KAI-01050</td>
</tr>
<tr>
<td>Sensor type</td>
<td>CCD Progressive</td>
</tr>
<tr>
<td>Shutter mode</td>
<td>Global shutter</td>
</tr>
<tr>
<td>Sensor size</td>
<td>Type 1/2</td>
</tr>
<tr>
<td>Pixel size</td>
<td>5.5 µm × 5.5 µm</td>
</tr>
<tr>
<td><strong>Prosilica GX</strong></td>
<td><strong>1050C</strong></td>
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<tr>
<td>Lens mount (default)</td>
<td>C-Mount</td>
</tr>
<tr>
<td>Max. frame rate at full resolution</td>
<td>112 fps</td>
</tr>
<tr>
<td>ADC</td>
<td>14 Bit</td>
</tr>
<tr>
<td>Image buffer (RAM)</td>
<td>128 MByte</td>
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</tbody>
</table>

**Output**

- Bit depth: 12 Bit
- Monochrome pixel formats: Mono8
- YUV color pixel formats: YUV411Packed, YUV422Packed, YUV444Packed
- RGB color pixel formats: RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed, RGB12Packed
- Raw pixel formats: BayerGR8, BayerGR12, BayerGR12Packed

**General purpose inputs/outputs (GPIOs)**

- Opto-isolated I/Os: 2 inputs, 4 outputs
- RS232: 1

**Operating conditions/dimensions**

- Operating temperature: 0 °C to +50 °C ambient (without condensation)
- Power requirements (DC): 10 to 24 VDC
- Power consumption: 5.4 W at 12 VDC (Single GigE Mode); 6.7 W at 12 VDC (Dual GigE Mode)
- Mass: 269 g
- Body dimensions (L × W × H in mm): 107.2 × 53.3 × 33 (including connectors)
- Regulations: CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class A; CAN ICES-003
Quantum efficiency

Features

Image optimization features:
- Auto gain (manual gain control: 0 to 34 dB)
- Auto exposure (manual exposure controls: 10 µs to 26.8 s)
- Auto white balance
- Binning (Sum)
- Region of interest, separate region for auto features

Camera control features:
- 3-axis motorized lens control
- 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
Technical drawing
Applications

Prosilica GX1050C is ideal for a wide range of applications including:

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