

## Prosilica GT

### Prosilica GT 2050NIR

Prosilica GT2050NIR is a 4.2 Megapixel camera with a GigE Vision compliant Gigabit Ethernet port and Hirose I/O port. This camera incorporates a NIR-optimized variant of the high-quality CMOSIS/ams CMV4000 CMOS sensor. At 900 nm this sensor offers double the quantum efficiency, an increase from 8% to 16% absolute.

#### General

|                |                      |
|----------------|----------------------|
| Model          | Prosilica GT 2050NIR |
| Product series | Prosilica GT         |
| Status         | Available            |

#### Sensor

|                                |                         |
|--------------------------------|-------------------------|
| Sensor type                    | Area scan               |
| Chroma                         | Mono                    |
| Spectrum                       | Visible-NIR             |
| Resolution                     | 2,048 × 2,048 (4.20 MP) |
| Sensor model                   | CMOSIS/ams CMV4000 NIR  |
| Sensor architecture (material) | CMOS                    |
| Shutter type(s)                | Global Shutter          |
| Sensor size                    | 16.3 mm ø (Type 1)      |
| Pixel size                     | 5.50 µm × 5.50 µm       |

#### Pixel formats

|                          |                             |
|--------------------------|-----------------------------|
| Sensor bit depth         | 8-bit or 12-bit             |
| Monochrome pixel formats | Mono8, Mono12, Mono12Packed |

#### Imaging performance

|                             |      |
|-----------------------------|------|
| Quantum efficiency @ 529 nm | 79 % |
| Quantum efficiency @ 850 nm | 42 % |

#### Timing and gain

|                 |        |
|-----------------|--------|
| Max. frame rate | 28 fps |
|-----------------|--------|

## I/Os and power

|                             |                                       |
|-----------------------------|---------------------------------------|
| Non-isolated lines          | 1 input, 2 outputs                    |
| Specific non-isolated lines | 1                                     |
| Opto-isolated lines         | 1 input, 2 outputs                    |
| Power supply                | 7 to 25 VDC AUX or 802.3at Type 1 PoE |
| Power consumption           | 3.5 W at 12 VDC; 4.3 W PoE            |

## Operating conditions

|                                 |                                                  |
|---------------------------------|--------------------------------------------------|
| Operating temperature (housing) | -20 °C to 65 °C (ambient (without condensation)) |
|---------------------------------|--------------------------------------------------|

## Mechanical properties

|                                   |              |
|-----------------------------------|--------------|
| Body dimensions (L x W x H in mm) | 86 × 53 × 33 |
| Weight                            | 210 g        |

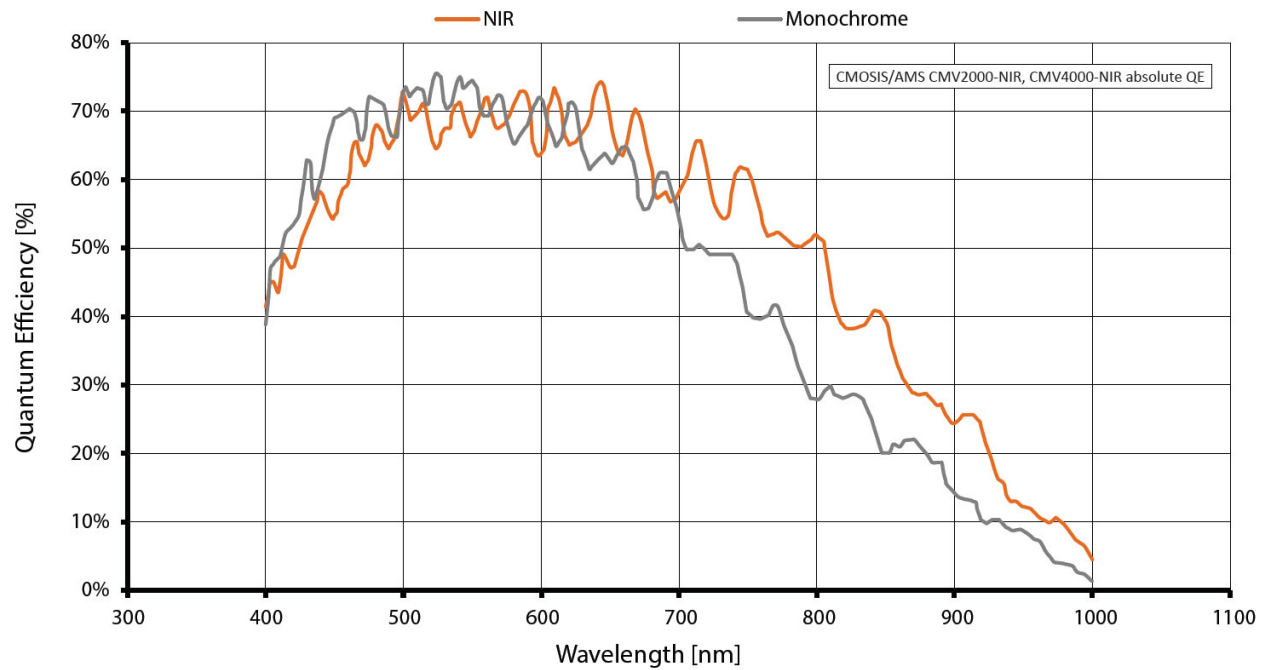
## On-board memory and FPGA

|                             |            |
|-----------------------------|------------|
| Image buffer (RAM)          | 128 MByte  |
| Non-volatile memory (Flash) | 1024 KByte |

## Interfaces

|                   |                                           |
|-------------------|-------------------------------------------|
| Digital interface | IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) |
|-------------------|-------------------------------------------|

## Quantum Efficiency



## Technical Drawing

