

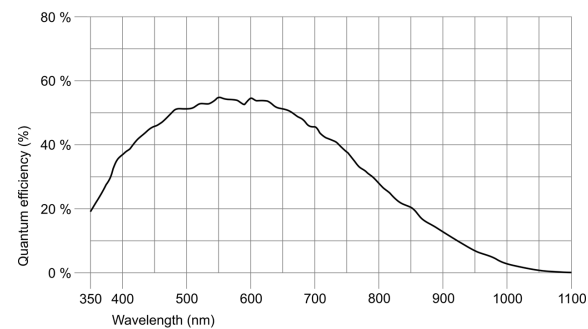
Not recommended for new designs  
The camera model is no longer recommended for new application development.



Specification

Sensor

|                                         |                      |
|-----------------------------------------|----------------------|
| Sensor type                             | CMOS Mono            |
| Shutter                                 | Global Shutter       |
| Sensor characteristic                   | Linear               |
| Readout mode                            | Progressive scan     |
| Pixel Class                             | 2 MP                 |
| Resolution                              | 2.30 Mpix            |
| Resolution (h x v)                      | 1920 x 1200 Pixel    |
| Aspect ratio                            | 16:10                |
| ADC                                     | 10 bit               |
| Color depth (camera)                    | 12 bit               |
| Optical sensor class                    | 2/3"                 |
| Optical Size                            | 9.216 mm x 5.760 mm  |
| Optical sensor diagonal                 | 10.87 mm (1/1.47")   |
| Pixel size                              | 4.8 µm               |
| Micro lens shift                        | 4.00                 |
| Manufacturer                            | Onsemi               |
| Sensor Model                            | NOIP1SN2000A-LTI     |
| Gain (master/RGB)                       | 4x/4x                |
| AOI horizontal                          | increased frame rate |
| AOI vertical                            | increased frame rate |
| AOI image width / step width            | 128 / 16             |
| AOI image height / step width           | 2 / 2                |
| AOI position grid (horizontal/vertical) | 16 / 2               |
| Binning horizontal                      | same frame rate      |
| Binning vertical                        | same frame rate      |
| Binning method                          | Mono                 |
| Binning factor                          | 2                    |
| Subsampling horizontal                  | increased frame rate |
| Subsampling vertical                    | increased frame rate |
| Subsampling method                      | M/C automatic        |
| Subsampling factor                      | 2                    |



Model

|                                         |                                                                          |
|-----------------------------------------|--------------------------------------------------------------------------|
| Pixel clock range                       | 120 MHz - 480 MHz                                                        |
| Frame rate freerun mode (in 8-bit mode) | 169 fps                                                                  |
| Frame rate trigger (continuous)         | 169 fps                                                                  |
| Frame rate trigger (maximum)            | 181 fps                                                                  |
| Exposure time (minimum - maximum)       | 0.044 ms - 500 ms                                                        |
| Long exposure (maximum)                 | 1000 ms                                                                  |
| Power consumption                       | 1.6 W - 4.3 W                                                            |
| Image memory                            | 128 MB                                                                   |
| Special features                        | IDS line scan mode<br>Overlap trigger<br>Sensor source gain<br>Multi-AOI |

Ambient conditions

The temperature values given below refer to the outer device temperature of the camera housing.

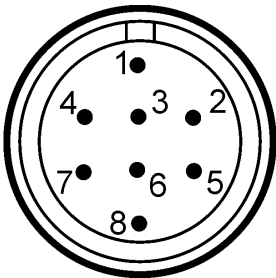
|                                     |                                 |
|-------------------------------------|---------------------------------|
| Device temperature during operation | 0 °C - 55 °C / 32 °F - 131 °F   |
| Device temperature during storage   | -20 °C - 60 °C / -4 °F - 140 °F |
| Humidity (relative, non-condensing) | 20 % - 80 %                     |

Connectors

|                     |                                           |
|---------------------|-------------------------------------------|
| Interface connector | USB 3.0 micro-B, screwable                |
| I/O connector       | 8-pin Hirose connector (HR25-7TR-8PA(73)) |
| Power supply        | USB cable                                 |

Pin assignment I/O connector

|   |                                     |
|---|-------------------------------------|
| 1 | Ground (GND)                        |
| 2 | Flash output with optocoupler (-)   |
| 3 | General Purpose I/O (GPIO) 1        |
| 4 | Trigger input with optocoupler (-)  |
| 5 | Flash output with optocoupler (+)   |
| 6 | General Purpose I/O (GPIO) 2        |
| 7 | Trigger input with optocoupler (+)  |
| 8 | Output supply voltage, 5 V (100 mA) |



Design

|                  |                             |
|------------------|-----------------------------|
| Lens Mount       | C-Mount                     |
| IP code          | IP30                        |
| Dimensions H/W/L | 29.0 mm x 29.0 mm x 29.0 mm |
| Mass             | 50 g                        |