

# MV-CL082-92CM V2.0

## 8192 P Camera Link Line Scan Camera



GEN*i*CAM



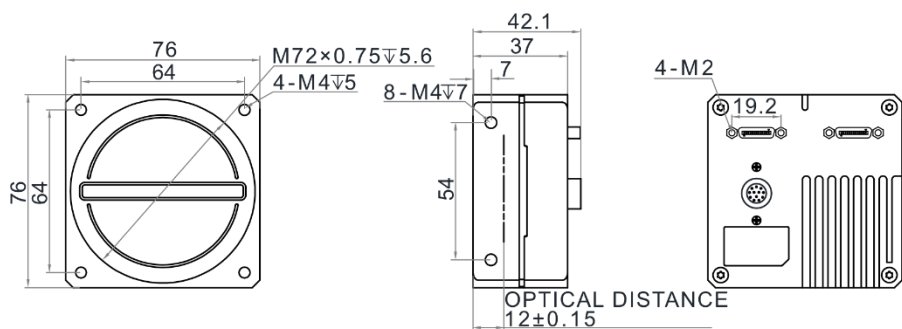
### Introduction

MV-CL082-92CM V2.0 camera adopts CMOS sensor to provide high quality images and uses Camera Link interface to transmit images in real time, and its max. line rate reaches 100 kHz in full resolution. It adopts multiple ISP technologies, and supports external trigger modes like line trigger, frame trigger, and trigger-width exposure.

### Key Features

- Supports multiple exposure and image acquisition modes.
- Adopts multiple ISP technologies and supports manual adjustment for Gamma correction, FFC correction, LUT, black level, etc.
- Supports ROI to increase line rate (max. 200 kHz in 1-line mode).
- Supports bi-directional I/O wiring for flexible input/output settings.
- Compact design and flexible installation.
- Compatible with Camera Link Protocol and GenICam Standard.

### Dimension



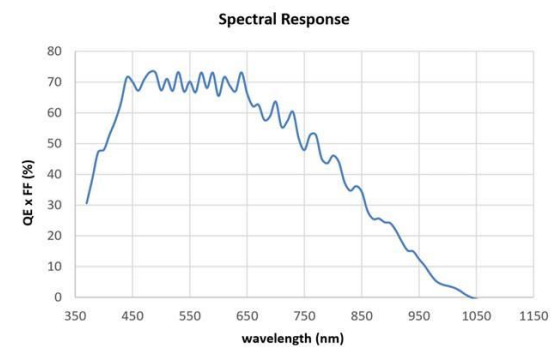
### Available Model

MV-CL082-92CM V2.0

### Applicable Industry

New energy, screen detection, consumer electronics, PCB, metallurgy.

### Sensor Quantum Efficiency



Unit: mm

|                              |                                                                                                                                                                                                    |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Model</b>                 | <b>MV-CL082-92CM V2.0</b>                                                                                                                                                                          |
| <b>Camera</b>                |                                                                                                                                                                                                    |
| <b>Sensor type</b>           | CMOS                                                                                                                                                                                               |
| <b>Pixel size</b>            | 7 $\mu$ m                                                                                                                                                                                          |
| <b>Resolution</b>            | 8192 $\times$ 2                                                                                                                                                                                    |
| <b>Image mode</b>            | Supports 1-line, 2-TDI                                                                                                                                                                             |
| <b>Max. line rate</b>        | 20 kHz (Base), 40 kHz (Medium), 80 kHz (Full), 100 kHz (80-bit)                                                                                                                                    |
| <b>Configuration mode</b>    | Base, Medium, Full, 80-bit                                                                                                                                                                         |
| <b>Tap geometry</b>          | 1 $\times$ 2, 1 $\times$ 4, 1 $\times$ 8, 1 $\times$ 10                                                                                                                                            |
| <b>Tap number</b>            | 2 Taps, 4 Taps, 8 Taps, 10 Taps                                                                                                                                                                    |
| <b>Pixel clock</b>           | 40 MHz, 66 MHz, 80 MHz, 85 MHz                                                                                                                                                                     |
| <b>Dynamic range</b>         | 63.4 dB                                                                                                                                                                                            |
| <b>SNR</b>                   | 40.8 dB                                                                                                                                                                                            |
| <b>Gain</b>                  | Supports 1.0 $\times$                                                                                                                                                                              |
| <b>Exposure time</b>         | 3 $\mu$ s to 10 ms                                                                                                                                                                                 |
| <b>Exposure mode</b>         | Off/ Once/ Continuous exposure mode; supports fixed time exposure, trigger-width exposure                                                                                                          |
| <b>Mono/color</b>            | Mono                                                                                                                                                                                               |
| <b>Pixel format</b>          | Mono 8/10/12                                                                                                                                                                                       |
| <b>Binning</b>               | Supports 1 $\times$ 1, 2 $\times$ 2, 4 $\times$ 4                                                                                                                                                  |
| <b>Reverse image</b>         | Supports horizontal reverse image output                                                                                                                                                           |
| <b>Trigger mode</b>          | External trigger, internal trigger                                                                                                                                                                 |
| <b>External trigger mode</b> | Line trigger, frame trigger, line + frame trigger                                                                                                                                                  |
| <b>Electrical features</b>   |                                                                                                                                                                                                    |
| <b>Data interface</b>        | Camera Link (SDR connector); USB interface for updating firmware                                                                                                                                   |
| <b>Digital I/O</b>           | 12-pin P10 connector provides power and I/O: configurable input/output $\times$ 4 (Line 0/1/3/4) and support single-ended/differential. Camera Link provides I/O (CC1/CC2/CC3/CC4).                |
| <b>Power supply</b>          | 12 VDC to 24 VDC                                                                                                                                                                                   |
| <b>Power consumption</b>     | Typ. 9.8 W @ 12 VDC                                                                                                                                                                                |
| <b>Mechanical</b>            |                                                                                                                                                                                                    |
| <b>Lens mount</b>            | M72*0.75, flange back length 12 mm, applicable to F-mount via lens adapter                                                                                                                         |
| <b>Dimension</b>             | 76 mm $\times$ 76 mm $\times$ 42.1 mm (3.0" $\times$ 3.0" $\times$ 1.7")                                                                                                                           |
| <b>Weight</b>                | Approx. 320 g (0.7 lb.)                                                                                                                                                                            |
| <b>Ingress protection</b>    | IP40 (under proper lens installation and wiring)                                                                                                                                                   |
| <b>Temperature</b>           | Working temperature: -20 $^{\circ}$ C to 55 $^{\circ}$ C (-4 $^{\circ}$ F to 131 $^{\circ}$ F)<br>Storage temperature : -30 $^{\circ}$ C to 80 $^{\circ}$ C (-22 $^{\circ}$ F to 176 $^{\circ}$ F) |
| <b>Humidity</b>              | 5% RH to 90% RH (no condensation)                                                                                                                                                                  |
| <b>General</b>               |                                                                                                                                                                                                    |
| <b>Client software</b>       | MVS and frame grabber software meeting with Camera Link Protocol                                                                                                                                   |
| <b>Operating system</b>      | 32/64-bit Windows 7/10, 64-bit Windows 11                                                                                                                                                          |
| <b>Compatibility</b>         | Camera Link V1.2, GenICam                                                                                                                                                                          |
| <b>Certification</b>         | CE, RoHS2.0, KC                                                                                                                                                                                    |