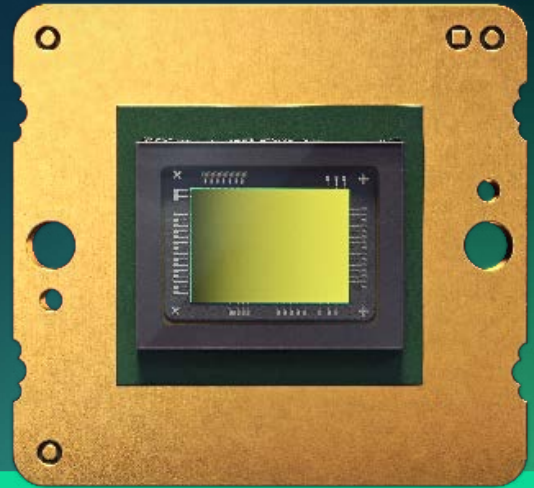


# MIPI Camera Module

## MIPI for industry starts here



The ultra-compact boards support the MIPI CSI-2 specification and they are available with many different image sensors. Thanks to standardized data transmission, the miniature cameras can be manufactured and integrated into various platforms at extremely low costs. MIPI modules are ideal for multi camera applications including mobile and distributed applications like

autonomous driving, UAVs, Smart City, medical technology, and laboratory automation.

With MIPI sensor boards we offer OEMs a highly versatile component for their embedded vision solutions – all made in Germany!

### VC MIPI CAMERA MODULE

| Module ID                | CMOS Sensor    | Resolution MP (px) | Pixel Size | Shutter      | TrigIn/<br>FlashOut | fps | price<br>€/1000 units excl.<br>VAT |
|--------------------------|----------------|--------------------|------------|--------------|---------------------|-----|------------------------------------|
| VC MIPI OV7251           | Omnivision®    | 0.3 (640 x 480)    | 3.00 µm    | Global       | ✓                   | 120 | ●33.99                             |
| VC MIPI OV9281           | Omnivision®    | 1.0 (1280 x 800)   | 3.00 µm    | Global       | ✓                   | 120 | ●37.99                             |
| VC MIPI IMX178           | SONY® Starvis™ | 6.3 (3072 x 2048)  | 2.40 µm    | Global Reset | ✓                   | 60  | ●162.99                            |
| VC MIPI IMX183           | SONY® Exmor R® | 20.2 (5496 x 3672) | 2.40 µm    | Global Reset | ✓                   | 24  | ●349.99                            |
| VC MIPI IMX183-C         | SONY® Exmor R® | 20.2 (5496 x 3672) | 2.40 µm    | Global Reset | ✓                   | 24  | ●310.99                            |
| VC MIPI IMX226 -B&W / -C | SONY® Starvis™ | 12.4 (4072 x 3046) | 1.85 µm    | Global Reset | ✓                   | 44  | ●212.99                            |
| VC MIPI IMX250 -B&W /-C  | SONY® Pregius™ | 5.1 (2464 x 2056)  | 3.45 µm    | Global       | ✓                   | 101 | ●527.99                            |
| VC MIPI IMX252 -B&W /-C  | SONY® Pregius™ | 3.2 (2464 x 2056)  | 3.45 µm    | Global       | ✓                   | 160 | ●342.99                            |
| VC MIPI IMX264 -B&W /-C  | SONY® Pregius™ | 5.1 (2464 x 2056)  | 3.45 µm    | Global       | ✓                   | 30  | ●362.99                            |
| VC MIPI IMX265 -B&W /-C  | SONY® Pregius™ | 3.2 (2064 x 1544)  | 3.45 µm    | Global       | ✓                   | 50  | ●257.99                            |
| VC MIPI IMX273 -B&W /-C  | SONY® Pregius™ | 1.6 (1456 x 1088)  | 3.45 µm    | Global       | ✓                   | 225 | ●158.99                            |
| VC MIPI IMX290           | SONY® Starvis™ | 2.1 (1920 x 1080)  | 2.90 µm    | Rolling      | ✗                   | 120 | ●98.99                             |
| VC MIPI IMX296 -B&W /-C  | SONY® Pregius™ | 1.6 (1440 x 1080)  | 3.45 µm    | Global       | ✓                   | 60  | ●76.99                             |
| VC MIPI IMX297           | SONY® Pregius™ | 0.4 (728 x 544)    | 6.90 µm    | Global       | ✓                   | 120 | ●76.99                             |
| VC MIPI IMX327-C         | SONY® Starvis™ | 2.1 (1920 x 1080)  | 2.90 µm    | Rolling      | ✗                   | 60  | ●54.99                             |
| VC MIPI IMX335           | SONY® Starvis™ | 5.0 (2592 x 1944)  | 2.00 µm    | Rolling      | ✗                   | 60  | ●65.99                             |
| VC MIPI IMX335 -C        | SONY® Starvis™ | 5.0 (2592 x 1944)  | 2.00 µm    | Rolling      | ✗                   | 60  | ●65.99                             |
| VC MIPI IMX392 -B&W /-C  | SONY® Pregius™ | 2.3 (1920 x 1200)  | 3.45 µm    | Global       | ✓                   | 200 | ●178.99                            |

| Module ID               | CMOS Sensor      | Resolution MP (px) | Pixel Size | Shutter | TrigIn/FlashOut | fps | price €/1000 units excl. VAT |
|-------------------------|------------------|--------------------|------------|---------|-----------------|-----|------------------------------|
| VC MIPI IMX412-C        | SONY® Starvis™   | 12.3 (4056 x 3040) | 1.55 µm    | Rolling | ✘               | 40  | ●109.99                      |
| VC MIPI IMX415          | SONY® Starvis™   | 8.3 (3840x 2160)   | 1.45 µm    | Rolling | ✘               | 60  | ●109.99                      |
| VC MIPI IMX415-C        | SONY® Starvis™   | 8.3 (3840 x 2160)  | 1.45 µm    | Rolling | ✘               | 60  | ●98.99                       |
| VC MIPI IMX565          | SONY® Pregius™ S | 12.0 (4096 x 3000) | 2.74 µm    | Global  | ✔               | 42  | ●654.49                      |
| VC MIPI IMX566          | SONY® Pregius™ S | 8.1 (2856 x 2848)  | 2.74 µm    | Global  | ✔               | 62  | ●412.49                      |
| VC MIPI IMX567          | SONY® Pregius™ S | 5.1 (2472 x 2064)  | 2.74 µm    | Global  | ✔               | 96  | ●269.49                      |
| VC MIPI IMX568 -B&W /-C | SONY® Pregius™ S | 5.1 (2472 x 2064)  | 2.74 µm    | Global  | ✔               | 96  | ●225.99                      |
| VC MIPI IMX287 -B&W /-C | SONY® Pregius™   | 0.4 (728 x 544)    | 6.90 µm    | Global  | ✔               | 530 | ●on request                  |
| VC MIPI IMX290-C        | SONY® Starvis™   | 2.1 (1920 x 1080)  | 2.90 µm    | Rolling | ✘               | 120 | ●on request                  |
| VC MIPI IMX462-C        | SONY® Starvis™   | 2.1 (1920 x 1080)  | 2.90 µm    | Rolling | ✘               | 120 | ●on request                  |
| VC MIPI IMX490-C        | SONY®            | 5.4 (2896 x 1876)  | 3.00 µm    | Rolling | ✘               | 40  | ●on request                  |
| VC MIPI IMX500-C        | SONY®            | 12.3 (4056 x 3040) | 1.55 µm    | Rolling | ✘               | 60  | ●on request                  |
| VC MIPI IMX501-C        | SONY®            | 12.3 (4056 x 3040) | 1.55 µm    | Rolling | ✘               | 60  | ●on request                  |
| VC MIPI IMX990-SWIR     | SONY®            | 1.3 (1280 x 1024)  | 5.00 µm    | Global  | ✔               | 134 | ●on request                  |
| VC MIPI IMX991-SWIR     | SONY®            | 0.3 (640 x 512)    | 5.00 µm    | Global  | ✔               | 258 | ●on request                  |

## MIPI Accessories

### Driver

Of course, we also provide the drivers for an optimal sensor connection! Being experts in the field of camera development, driver development is a core mission for us. That's why the standard drivers are included for free!

### VC MIPI Repeater Board

The MIPI Repeater Board provides for a cable extension and additional interfaces like trigger input and flash trigger output at the same time.

### Cable

Maximizing the output of the powerful MIPI-CSI-2 interface, we developed shielded FPC cables (for 15-22 and 22-22) to be able to transfer the data reliably and lossless. Thanks to that cable, the MIPI camera module can be connected directly, without any additional board, to the CPU board.

### Lensholder

Useful: Our standardized lensholder for C and S mount lenses - ready to order!

## Compatible CPU Boards

### Vision Components®

VC Adap96 CSI & Ethernet Adapter  
VC Compute Module Interface (CMI) Board

### Auvideo

Auvideo NVIDIA® Jetson™ J100 Processor: NVIDIA® TX1 Auvideo  
NVIDIA® Jetson™ AGX Xavier™ Carrier

### Raspberry Pi®

Raspberry Pi® Zero V1.3 Processor: Broadcomm®  
RaspberryPi® 3B+ Processor: Broadcomm®  
RaspberryPi® 4B Processor: Broadcomm®  
Raspberry Pi® Compute Module Industrial Processor: Broadcomm®

### Toradex

Verdin iMX8M Mini  
Verdin iMX8M Nano  
Verdin iMX8M Plus

### NVIDIA®

NVIDIA® Jetson™ TX2 module Processor: NVIDIA® TX2  
NVIDIA® AGX Xavier™  
NVIDIA® Jetson Nano™  
NVIDIA® Jetson Xavier™ NX