



**LEOPARD**  
IMAGING

# LI-OV08D10-USB-AF



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## INTRODUCTION

The LI-OV08D10-USB-AF is equipped with OmniVision 8MP CMOS digital image color sensor OV08D10 which features PureCel® Plus technology. This camera is assembled with VCM for auto focus and outputs RAW data.

## SPECIFICATIONS

|                                 |                                                                                                                        |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Maximum Frame Rate              | MJPEG: 25 fps @ 3264 x 2448<br>YUV: 1 fps @ 3264 x 2448                                                                |
| Adjustment<br>(Auto by default) | Brightness, Contrast, Hue, Saturation,<br>Sharpness, Gamma, White Balance,<br>Backlight Comp, Gain, Focus,<br>Exposure |
| Focusing Range                  | 10 cm ~ Infinity                                                                                                       |
| Sensor                          | OmniVision 8MP CMOS digital image<br>sensor OV08D10                                                                    |
| Color / Mono                    | Color sensor                                                                                                           |
| Optical Format                  | 1/4"                                                                                                                   |
| Pixel Size                      | 1.12 $\mu\text{m}$ x 1.12 $\mu\text{m}$                                                                                |
| Shutter Type                    | Rolling shutter                                                                                                        |
| Resolution                      | 3280 (H) x 2464 (V) (active pixels)                                                                                    |
| Output Format                   | MJPEG / YUV                                                                                                            |
| Auto Focus                      | Supported                                                                                                              |
| VCM for Auto Focus              | Yes                                                                                                                    |
| Interface                       | USB-5pin                                                                                                               |
| Power Supply                    | 5 VDC                                                                                                                  |
| Power Consumption               | ~ 1.2 W                                                                                                                |
| Operating Temp                  | TBD                                                                                                                    |
| Storage Temp                    | TBD                                                                                                                    |
| Weight                          | ~ 4 g                                                                                                                  |

## SUPPORTED FRAME RATE

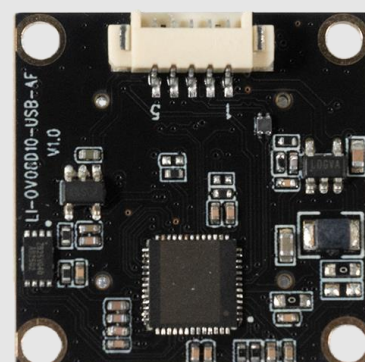
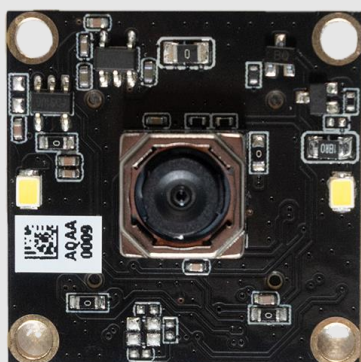
| Resolution  | MJPEG Frame Rate (fps) | YUY2 Frame Rate (fps) |
|-------------|------------------------|-----------------------|
| 640 × 480   | 5, 10, 15, 20, 25      | -                     |
| 1280 × 720  | 5, 10, 15, 20, 25      | 10                    |
| 1920 × 1080 | 5, 10, 15, 20, 25      | 5                     |
| 2592 × 1944 | 5, 10, 15, 20, 25      | 1                     |
| 3264 × 2448 | 5, 10, 15, 20, 25      | 1                     |

## APPLICATIONS

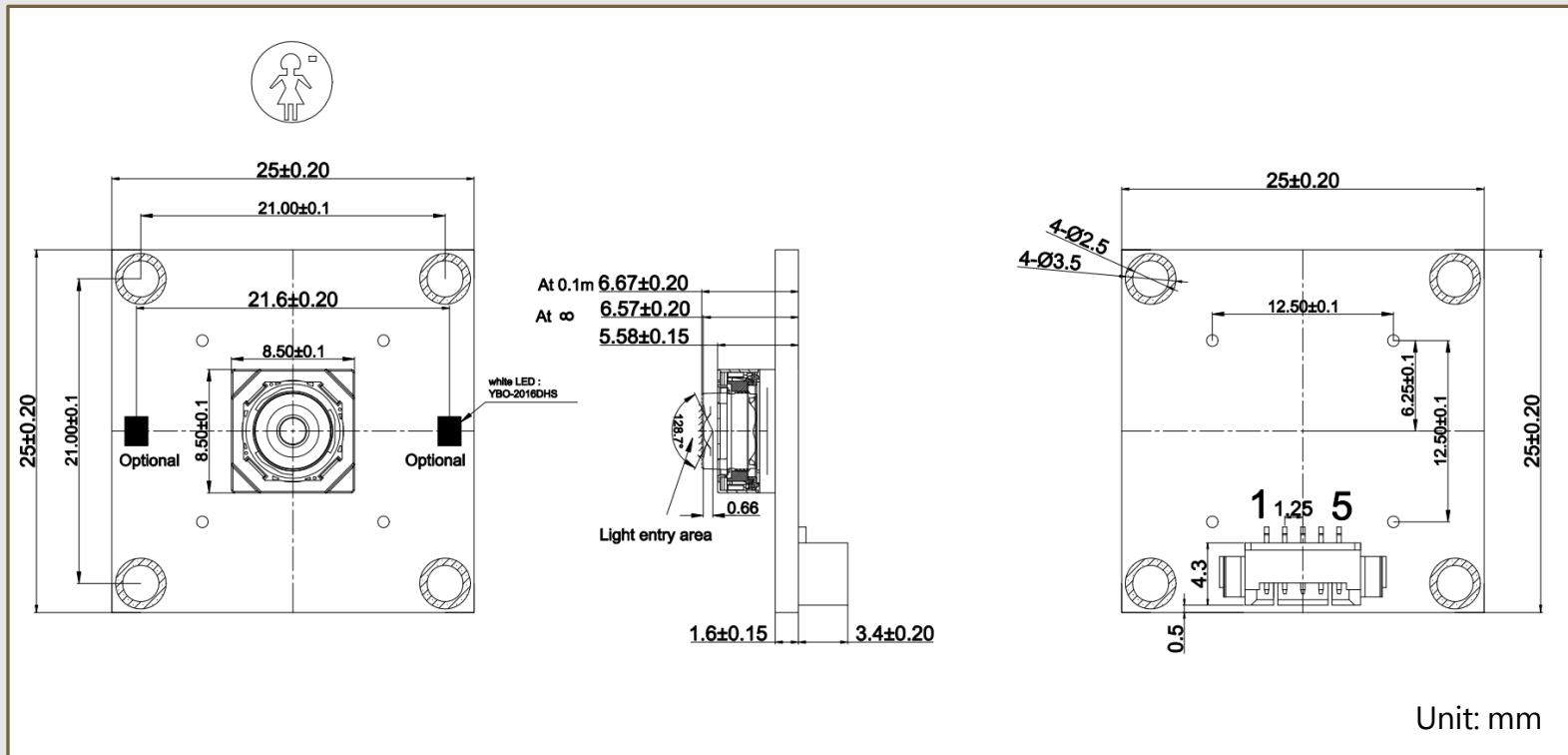
- Digital Still Cameras
- PC Cameras
- IoT
- Robots

## LENS SPECIFICATIONS

|               |                |
|---------------|----------------|
| Focal Length  | 1.79 mm        |
| Aperture, F/# | 2.4 ± 5 %      |
| FOV           | 119° diagonal  |
|               | 92° horizontal |
|               | 74° vertical   |
| TV Distortion | < -12.2%       |

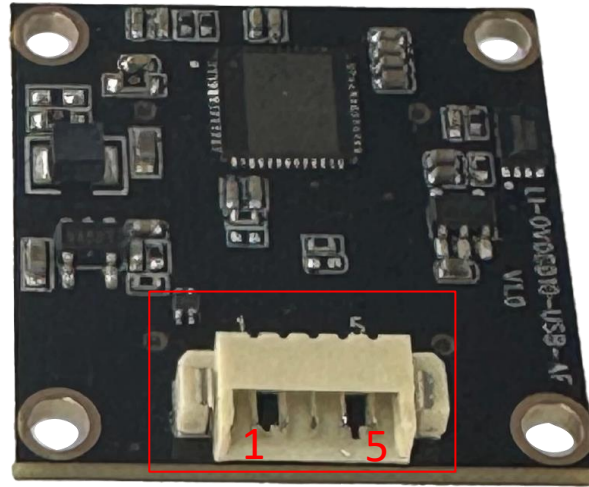


## DIMENSIONS



## INTERFACE

- Number of Positions: 5
- Pitch: 1.25 mm



## PINOUT DETAILS

| Pin No | Signal Name | Pin Type | Description              | Voltage Level |
|--------|-------------|----------|--------------------------|---------------|
| 1      | USB_5V      | POWER    | 5V Power supply from USB | -             |
| 2      | USB_D-      | I/O      | Data Minus               | -             |
| 3      | USB_D+      | I/O      | Data Plus                | -             |
| 4      | GND         | -        | -                        | -             |
| 5      | GND         | -        | -                        | -             |

## • REVISION HISTORY

| Revision | Description                                                                                                       | Release Date |
|----------|-------------------------------------------------------------------------------------------------------------------|--------------|
| 0.1      | Initial draft.                                                                                                    | 10 Nov 2025  |
| 0.2      | 1. Corrected maximum framerate and output format.<br>2. Added Adjustment and Supported Resolution and Frame Rate. | 09 Jun 2026  |

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