

Product Overview : IMX678 Sensor Camera Module

The IMX678 Sensor is a next-generation 4K Ultra HD camera module powered by Sony's latest STARVIS 2 technology. Featuring a large 1/1.8" back-illuminated sensor, it delivers unparalleled sensitivity and high dynamic range (HDR) performance. Designed for mission-critical applications, the IMX678 excels in extreme low-light conditions and complex lighting environments, making it the premier choice for medical robotics, high-end AIoT surveillance, and industrial automation.

Technical Specifications:

Character	Details
Sensor	Sony STARVIS 2 IMX678 (Back-Illuminated CMOS)
Effective Resolution	3840 (H) x 2160 (V) / 8.3 Megapixel
Optical Size	1/1.8"
Frame Rate(max)	60 fps @4K
Pixel Size	2.0 μm x 2.0 μm
High Dynamic Range	80dB
Interface	USB3.0
Technology	CMOS Rolling Shutter
Chromaticity	Color
Lens Mount	M12 or C/CS-mount option
Supported Platform	Windows/Linux/Android/MacOS

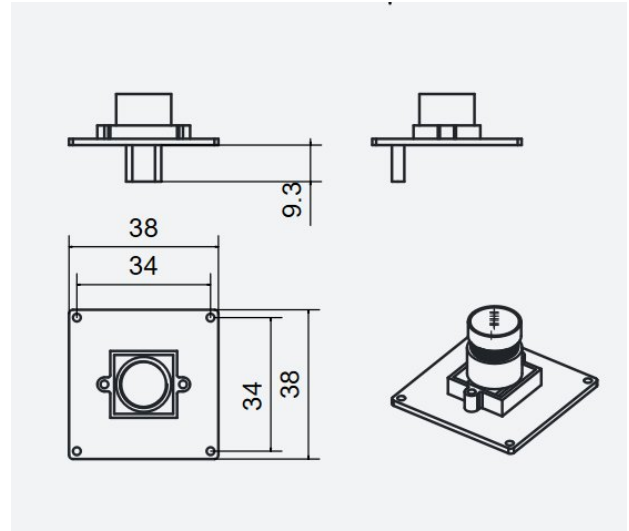
Key Features:

- **Next-Gen STARVIS 2 Technology:** Significantly improved sensitivity in both visible and near-infrared (NIR) spectrums compared to traditional Starvis sensors.
- **True 4K Ultra HD Resolution:** Captures 8.3 Megapixels (3840 x 2160) for crystal-clear imaging and precise digital zooming.
- **Superior Dynamic Range (Clear HDR):** Equipped with advanced HDR processing to handle high-contrast scenes without ghosting or loss of detail in shadows/highlights.
- **1/1.8" Large Optical Format:** The larger sensor size allows for greater light intake, resulting in superior image quality and a shallower depth of field.
- **Versatile Connectivity:** Supports high-speed USB 3.0 (UVC) for plug-and-play desktop integration or MIPI CSI-2 for low-latency embedded systems (Jetson Nano/NX).

Image and Dimensions



Product Picture



Product Structure