

# ISM-IMX224

## MIPI SENSOR MODULE

The iENSO MIPI sensor module ISM-IMX224 is superbly adaptable to iENSO's embedded ecosystem of SOMs, camera modules, and wireless connectivity modules.

The ISM-IMX224 uses SONY's IMX224 sensor to realize the capture of high-resolution color images even under dark nighttime conditions equivalent to 0.005 lux.

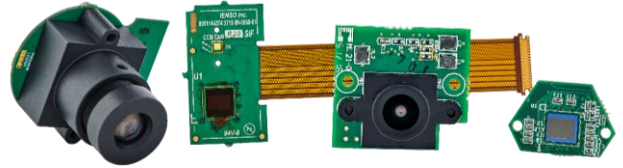
The SONY IMX224 sensor features a type 1/3" color CMOS with 1.27M effective pixel to achieve 720p HD resolution with Digital Overlap type Wide Dynamic Range (DOL WDR) function that improves sensitivity in the near infrared light region.

### APPLICATIONS

- Industrial
- Night Vision
- Specialty Surveillance
- Automotive
- IoT and Embedded vision

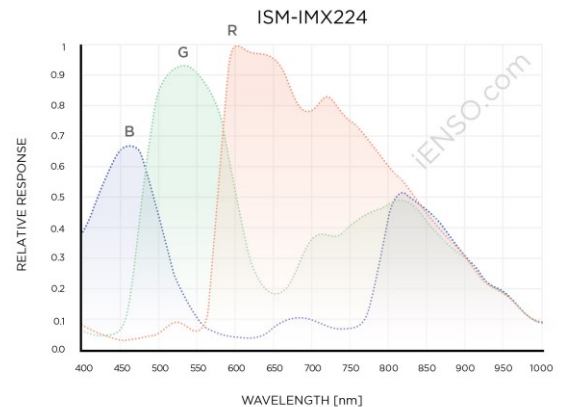
### KEY SPECIFICATIONS

- Framerate details: 120/60 fps at QVGA and 720P mode 10/12 bit over a 4-lane MIPI CSI-2 interface.
- Pixel details: 3.75  $\mu\text{m}$ , 1305 x 977 array, color or mono, rolling shutter, front illuminated.
- Package/Environmental: 110-pin LGA or 75-pin BGA, 9.0 mm x 7.5 mm.
- Temperature range: -40°C to 85°C.
- Power supply: digital 1.2V; interface 1.8V



reference

### SPECTRAL RESPONSE



iENSO.COM

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Maker	Sony	Silicon Optonics		ON Semi	Sony	OmniVision	Sony
Sensor	IMX224	JX-F22	JX-K02	AR0521	IMX326	OV8865	IMX317
Megapixels (MP)	1.27	2.1	4.1	5.0	6.8	8.0	8.5
Frame Rate (fps)	120	60	60	60	30	30	60
Optical Format (inch)	1/3	1/2.7	1/2.7	1/2.5	1/2.9	1/3.2	1/2.5
Pixel size (µm)	3.75	3.0	2.2	2.2	1.62	1.4	1.62
Benefits	<ul style="list-style-type: none"> <li>• HDR</li> <li>• Low Light</li> <li>• Near IR enhanced</li> </ul>	<ul style="list-style-type: none"> <li>• HDR</li> <li>• Low light</li> </ul>	<ul style="list-style-type: none"> <li>• On-chip ISP</li> <li>• HDR</li> <li>• Low light</li> </ul>	<ul style="list-style-type: none"> <li>• HDR</li> <li>• BSI</li> <li>• Low light</li> </ul>	<ul style="list-style-type: none"> <li>• BSI</li> <li>• Low light</li> <li>• HDR</li> <li>• Near IR enhanced</li> </ul>	<ul style="list-style-type: none"> <li>• BSI</li> </ul>	<ul style="list-style-type: none"> <li>• HDR</li> <li>• BSI</li> </ul>

## THE RIGHT EMBEDDED VISION SYSTEM FOR YOUR APPLICATION

**CONSISTENT QUALITY:** From six-axis lens alignment to consistently accurate color quality, to AI and ubiquitous connectivity, we guarantee that every iENSO embedded vision system will perform to spec.

**SECURE SUPPLY:** With iENSO engineers on the floor in all of our manufacturing partner facilities, we guarantee the quality and quantity of supply you need to make your application a success.

**COMPELLING ECONOMICS:** With our years of experience in the design and development of industrial, machine and consumer vision technologies, we can provide a cost-effective, no compromise embedded vision solution for your application.

## ABOUT iENSO

Established in 2003, iENSO provides imaging and wireless solutions that are helping global brands take their products to the next level in the age of embedded systems and AI platforms. iENSO accelerates the deployment of innovative imaging and wireless products in a wide range of verticals such as IoT, home automation, automotive,

drones, professional entertainment, robotics, remote surveillance and security. With offices in Canada and China, iENSO has perfected the engineering ecosystems that exist between initial design and high-volume manufacturing.



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