ISM-JXF22

IMAGE SENSOR MODULE

The embedded ecosystem from iENSO includes the low-power Silicon Optoelectronics JX-F22 1/2.7" camera sensor in a chip-scale package. It includes features such as black level correction, correlated double sampling (CDS) for noise reduction and black sun spot cancellation. The JX-F22 module enables efficient, compact system designs for surveillance, action cameras, drones, robotics, and more!

APPLICATIONS

- Security
- Action cameras
- After-market automotive
- Drones
- Robotics
- Embedded vision

KEY SPECIFICATIONS

- Framerate: 1080p60 (2M, 60 fps) or 1080p30 2-frame HDR mode, over a 2-lane MIPI CSI-2 10-bit interface.
- Pixel details: 3.0 µm, 1932 x 1088 array (16:9), color, front illuminated, HDR, rolling shutter, CRA 17.5° (linear).
- Package/Environmental: wafer-level CSP. Junction temp. range -30°C to 85°C (60°C stable image).

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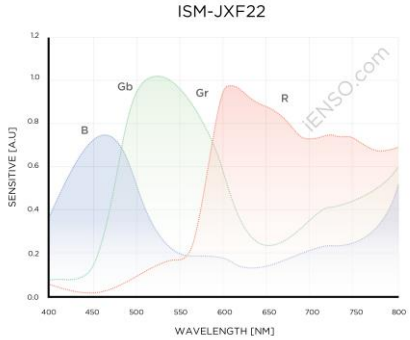
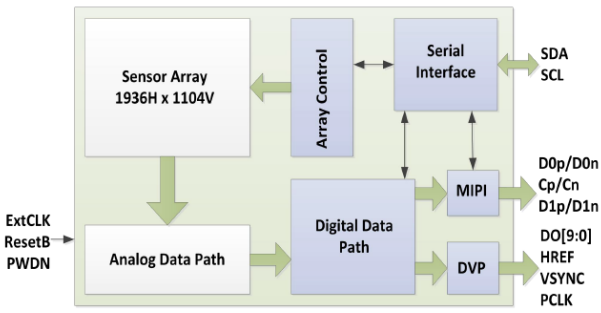
SPECTRAL RESPONSE



CHIEF RAY ANGLE

FUNCTIONAL BLOCK DIAGRAM



Maker	ON Semiconductor		Silicon Optronics		ON Semi	Sony	OmniVision	Sony
Sensor	AR0144	AR0130	JX-F22	JX-K02	AR0521	**IMX326**	OV8865	IMX317
Megapixels	1.0	1.2	2.1	4.1	5.0	**6.8**	8.0	8.3 (4K)
Fps	60	45	60	60	30	**30**	30	32.8
Optical format	1/4	1/3	1/2.7	1/2.6	1/2.5	**1/2.9**	1/3.2	1/2.5
Pixel size (Mm)	3.0	3.75	3.0	2.2	2.2	**1.62**	1.4	1.62
Benefits	Stop motion Very compact Low power	Large pixels Low-light use Near-IR	Automatic Compact Low power	Automatic On-chip ISP Compact	Low light HDR LSC	**High image quality** **DOL-HDR**	Low power Very robust Compact	True 4K UHD image quality DOL-HDR
Applications	Biometrics, VR/AR, Drones	Gaming, Security, near-IR	Security, Action, In-car, Drones	Security, Facial recognition	In-car, Action Industrial, Security	**Security, Action, In-car use**	VR/AR, Wearables, Drones, In-car	Action, VR/AR, In-car use

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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