



LEOPARD
IMAGING

LI-IMX678-RV-GigE-124H



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INTRODUCTION

LI-IMX678-RV-GigE-124H is an IP67-rated HDR Power-over-Ethernet (PoE) camera equipped with the Sony® diagonal 8.86 mm STARVIS2 CMOS color sensor IMX678. This camera can stream compressed 1080p video at 60 fps. It also adheres to IEEE 802.3af compliance and includes PTP synchronization support. It comes with the high-performance in-built ISP that helps in achieving excellent HDR performance even in ultra-low light environments. Supporting the ONVIF protocol, our product offers maximum flexibility and interoperability for your security ecosystem.

TECHNICAL FEATURES

- Rockchip RV1126 Processor:
 - CPU: Quad core ARM Cortex-A7 and RISC-V MCU
 - 2.0Tops NPU, support INT8/ INT16
 - Memory:
 - 32-bit DDR3 / DDR3L / LPDDR3 / DDR4 / LPDDR4
 - Support eMMC 4.51, SPI Flash, Nand Flash
 - Support 250 ms fast booting
 - Up to 3 sensor simultaneous input
 - 4K H.264 / H.265 encoder and decoder
- Sensor: Sony diagonal 8.86 mm STARVIS2 CMOS color sensor IMX678
- Resolution: 3856 (H) x 2176(V) (active pixels)
- Output Format: Compressed MJPEG, H.265 and H.264 formats
- Interface: GigE
- Connector: M12
- Allow customizable for cable length

Applications

- IoT
- Drone
- Robots



Electrical and Mechanical

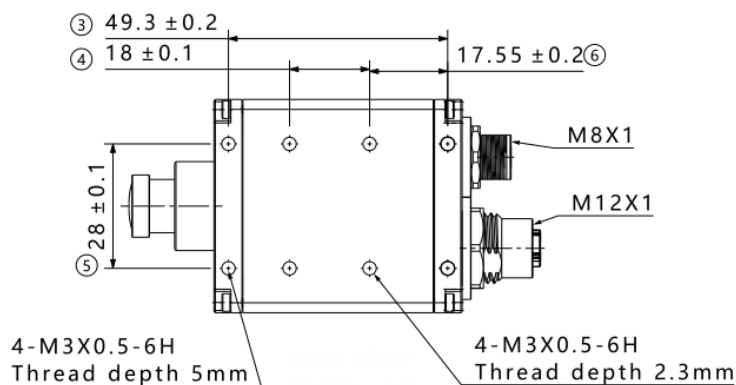
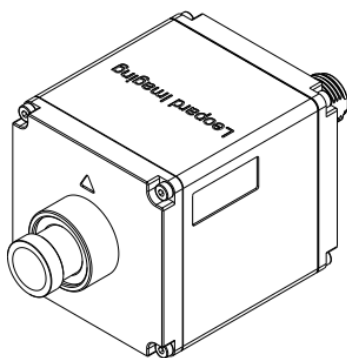
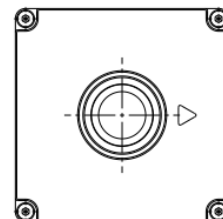
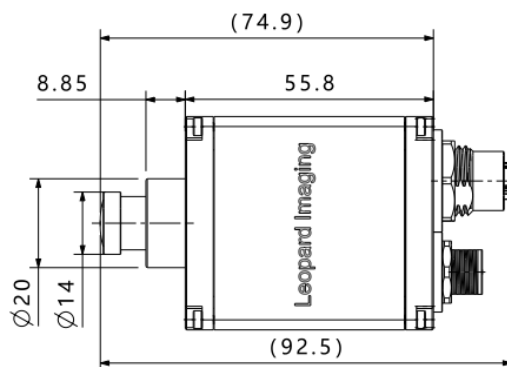
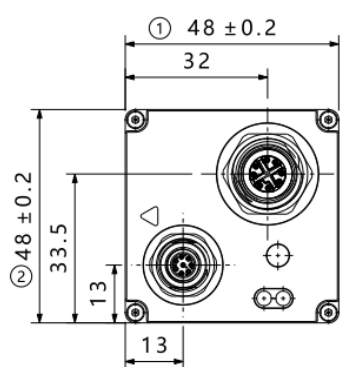
- Input power supply:
 - a. IEEE802.3af standard PoE Input through M8 Connector
 - b. 12V supply through M8 connector for non-POE applications
- Note:** POE in default
- Power Consumption: TBD
- Operating temperature: TBD
- Weight: ~ 205 g
- Ingress Protection: IP67

LENS SPECIFICATIONS

Effective Focal Length	3.8 mm
Aperture, F/#	2.6
Field of View (FOV)	124° horizontal
TV Distortion	-14.8%
Relative Illumination	77.9%
IR Filter	650 nm IR cut filter
Lens Mount	M12 x P0.5



DIMENSIONS

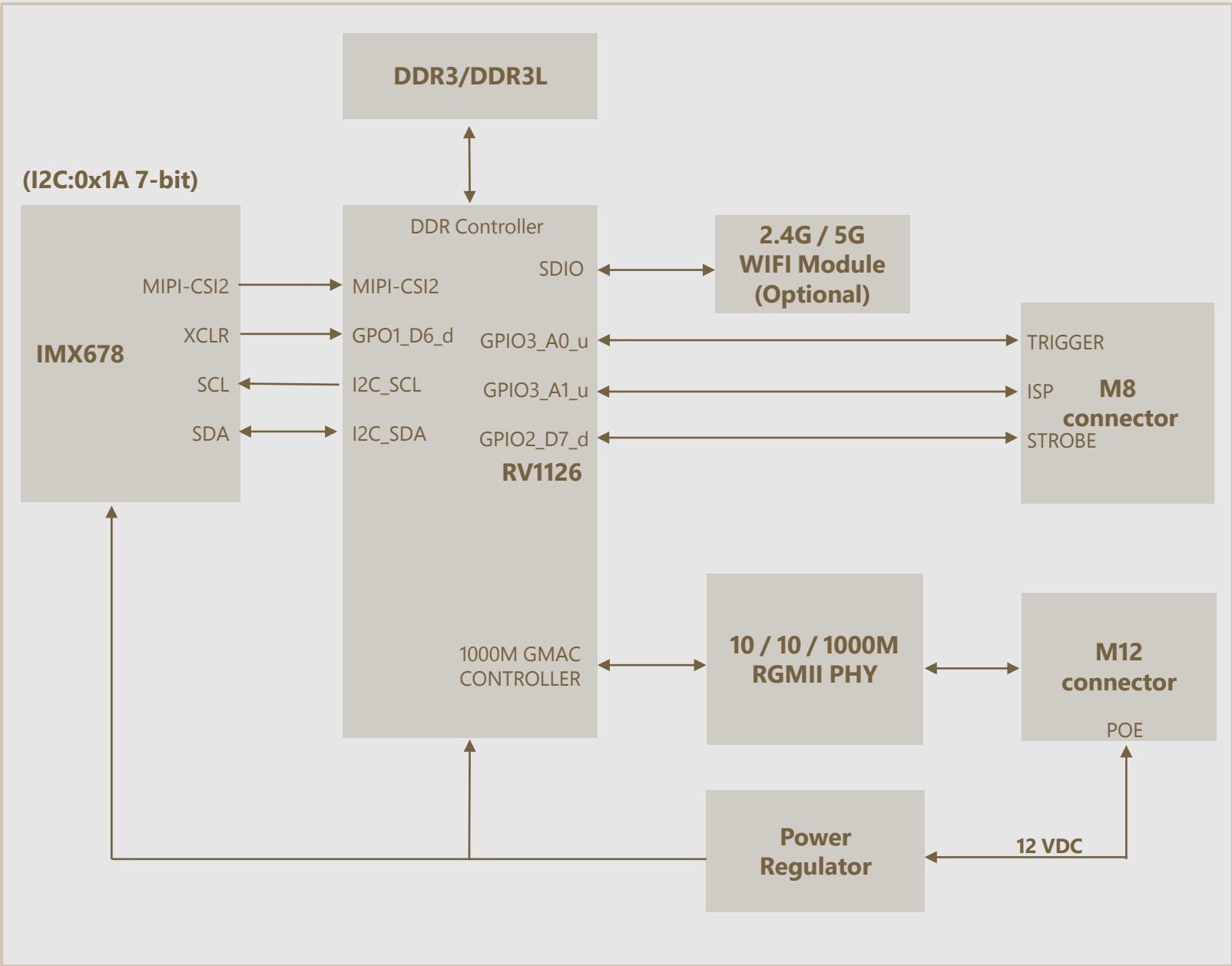


NOTE:

- Other unmarked tolerances refer to the tolerance table.
- ⊗ marked are important sizes.
- All materials are compliant with RoHS requirements.
- Unit: mm

TOLERANCE TABLE					
LENGTH TOLERANCE		CHAMFER TOLERANCE		ANGLE TOLERANCE	
Size X	Tolerance	Size X	Tolerance	Size X	Tolerance
0.5 < X ≤ 3	±0.1	0.5 < X ≤ 3	±0.2	X ≤ 10	±1°
3 < X ≤ 6	±0.1	3 < X ≤ 6	±0.5	10 < X ≤ 50	±30'
6 < X ≤ 30	±0.2	6 < X ≤ 30	±1	50 < X ≤ 120	±20'
30 < X ≤ 120	±0.3	X > 30	±2	120 < X ≤ 400	±10'
120 < X ≤ 400	±0.5			X > 400	±5'
400 < X ≤ 1000	±0.8				
X > 1000	±1.2				

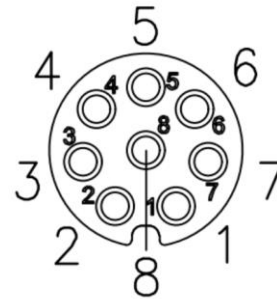
SYSTEM BLOCK DIAGRAM



● INTERFACE M8 CONNECTOR

■ Connector Part#: M8-S8A-GWFM12

■ Number of Positions: 8



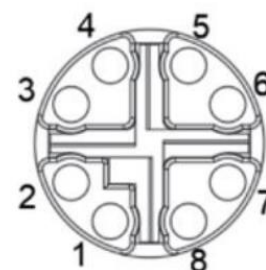
● PINOUT DETAILS OF M8

Pin No	Signal Name	Pin Type	Description	Voltage Level
1	EXT-TRIGGER +	INPUT	Opto Coupler Isolated Trigger Input +	3.3V
2	VCC_12P0	POWER	Optional external input 12V power (nonisolated)	12V
3	GPO_ISP +	OUTPUT	Opto Coupler Isolated GPO signal +	3.3V
4	GROUND	POWER	Ground	-
5	CAM_STROBE +	OUTPUT	Opto Coupler Isolated Strobe output +	3.3V
6	CAM_STROBE -	OUTPUT	Opto Coupler Isolated Strobe output -	-
7	EXT-TRIGGER -	INPUT	Opto Coupler Isolated Trigger Input -	-
8	GPO_ISP -	OUTPUT	Opto Coupler Isolated GPO signal -	-

● INTERFACE M12 CONNECTOR

■ Connector Part#: M12-S8X-GWFM16

■ Number of Positions: 12



● PINOUT DETAILS OF M12

Pin No	Signal Name	Pin Type	Description	Voltage Level
1	MDI0+	OUTPUT	Ethernet MDI Signal 0 pair +	48V
2	MDI0-	OUTPUT	Ethernet MDI Signal 0 pair -	48V
3	MDI1+	OUTPUT	Ethernet MDI Signal 1 pair +	48V
4	MDI1-	OUTPUT	Ethernet MDI Signal 1 pair -	48V
5	MDI3+	OUTPUT	Ethernet MDI Signal 3 pair +	48V
6	MDI3-	OUTPUT	Ethernet MDI Signal 3 pair -	48V
7	MDI2-	OUTPUT	Ethernet MDI Signal 2 pair -	48V
8	MDI2+	OUTPUT	Ethernet MDI Signal 2 pair +	48V

● REVISION HISTORY

Revision	Description	Release Date
0.1	Initial draft.	27 Mar 2025
0.2	1. Updated pictures on the page 1 & 2. 2. Added introductions.	19 Nov 2025

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