

# NeuroEye-C08M678R

## Business Card Size AI Edge Camera

YUAN  
Visualize Intelligent Planet

### Features

- Adopting Sony STARVIS 2 & Pregius S Sensor
- Hardware ISP desing without CPU/GPU Loading
- HDR ( High Dynamic Range ) Support
- DMA PCIe Design High-Bandwidth Capture, providing RGB444 image quality
- C-Mount Design offering flexibility for professional customers to use different lens combinations

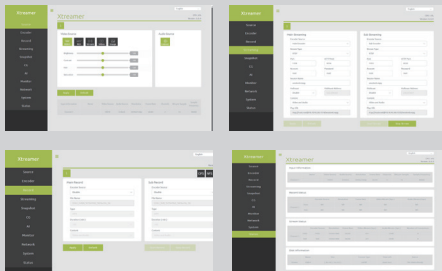


### Sensor Specifications

CMOS Specifications			
Image Sensor	IMX678		
Resolution	3840x2160	Frame Rate	60
Shutter	Rolling Sutter	Sensor Size	1/1.8"
Pixel Size	2.0 x 2.0 μm	Sensor Model	Sony IMX678
Color/Mono	Color	Lens Mount	C Mount

### Specifications

System		
CPU	NVIDIA Jetson Orin™ NX 8GB 6-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 1.5MB L2 + 4MB L3	NVIDIA Jetson Orin™ NX 16GB 8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3
GPU	1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores	
AI Performance	NVIDIA Jetson Orin™ NX 8GB 70 TOPS	NVIDIA Jetson Orin™ NX 16GB 100 TOPS
System Memory	NVIDIA Jetson Orin™ NX 8GB 8GB LPDDR5	NVIDIA Jetson Orin™ NX 16GB 16GB LPDDR5
Interface		
Storage	Supports External NVMe 1×Micro SD Card Slot	
Display Interface	1×Mini DP1.4	
Ethernet	1×RJ45 for 10/100/1000Mbps Ethernet DHCP Client	
Expansion Slot	M.2 1×M.2 2230 M Key PCIe Gen4×2 Slot 1×M.2 2230 E Key PCIe Gen4×1 Slot	
USB	1×USB3.2 Gen2 ( Type-C ) 1×USB3.2 Gen1 ( Type-A )	
Peripheral Communication	14 Pin Header 1×USB2.0 4×GPIO 1×UART 1×I2C	
	8 Pin Pheonix Connector ( CON1 ) 1×GPIO 1×RS232 1×RS485	
Misc. Features	8 Pin Pheonix Connector ( CON2 ) 1×GPIO 2×I2C	
	Firmware Upgradable	

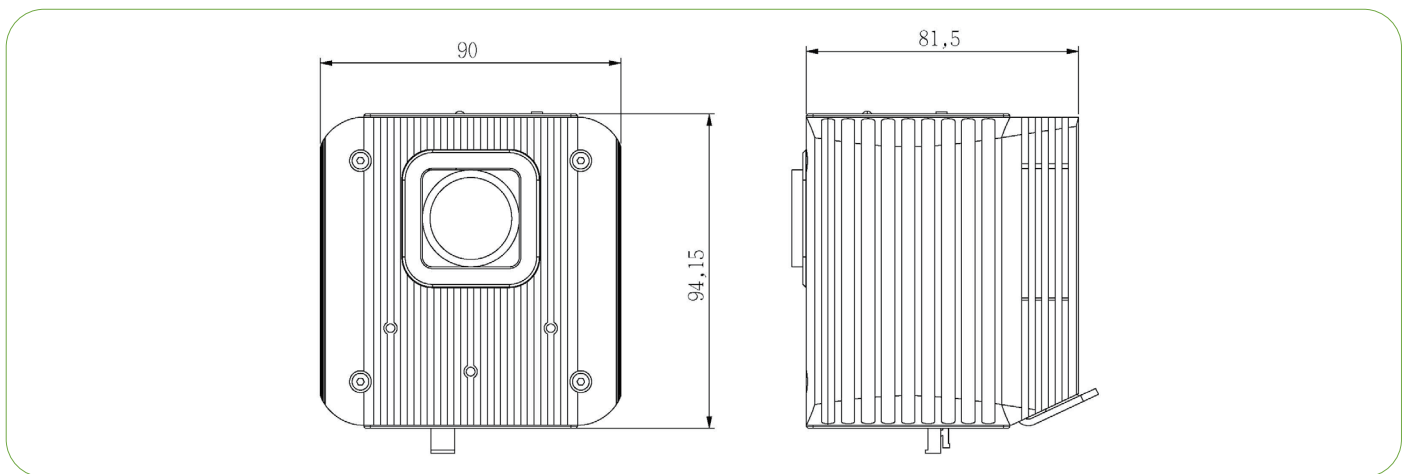
Video Feature		
Video Encode	AV1 ( UHP ) 1×4K60   3×4K30   6×1080p60   12×1080p30	
	H.265 ( UHP ) 1×4K60   3×4K30   6×1080p60   12×1080p30	
	H.264 ( UHP ) 1×4K60   2×4K30   5×1080p60   11×1080p30	
Video Decode	AV1 ( Main Profile ) 1×8K30   2×4K60   4×4K30   9×1080p60   20×1080p30	
	H.265 ( Main, Main10 ) 1×8K30   2×4K60   4×4K30   9×1080p60   18×1080p30	
	H.264 ( Baseline, Main, High ) 1×4K60   2×4K30   5×1080p60   11×1080p30	
	VP9 ( Profile 0, Profile 2 ) 1×4K60   3×4K30   7×1080p60   15×1080p30	
SDK		
QCAP	Capture High Performance Renderer Image Snapshot Deinterlace, Alpha Blending Engine Auto Signal Detection 2D/3D Video, Audio and VANC Streams Capture	
	Record Encrypt / Sync / Clone / Recording Time-Shifting / Rewind / Pre-Event / Recording Multi-Streams ( 3D ) Recording Animation Transition Effect Video Cropping, Scaling and Alpha Blending Engine	
	Stream 2D/3D Universal Stream Client 2D/3D Multi-Streams Stream Server RTSP, RTMP, HLS, SRT, TS, WebRTC. NDI-HX (*), Full NDI (*), Dante AV-H (*) Animation Transition Effect Video Cropping, Scaling and Alpha Blending Engine <b>*Separate License Required</b>	
QDEEP	AI SDK Integrated Multiple Algorithms and Deep-Learning Models in Various Fields of Applications Face Recognition Objects Detection Objects Segment Optical Character Recognition License Plate Recognition Customizable Video AI Functions Upon Request	
Software ( Optional )		
Xtremer	Web Based User Interface	
	Encode / Decode AV1, H.26X	
	Color Format Adjust 444 / 422 / 420, 10Bit / 8Bit Select	
	Record MP4, TS	
	Stream / Network RTSP, RTMP, HLS, SRT, TS, WebRTC. NDI-HX (*), Full NDI (*), Dante AV-H (*) <b>*Separate License Required</b>	

## Environment

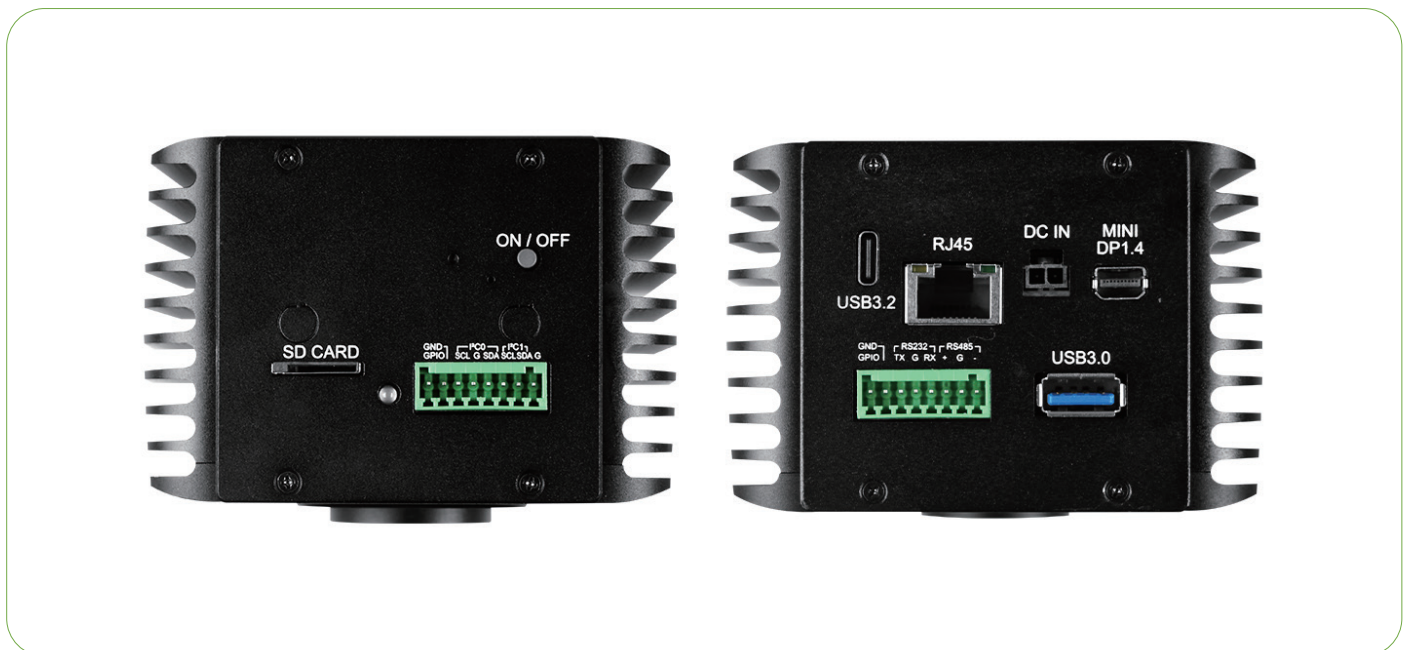
Development Environment	
OS	Ubuntu: 20.04
Kernel	5.10.104-tegra or Higher
BSP	Linux for Tegra(L4T) R35.3.1 or Higher
SDK	JetPack 5.1.1 or Higher
Environment	
Power Supply	DC Input : 9~24V ( Max 3.5A )
Power Consumption	TBA
Operating Temperature	Standard Version: 0~60 ° C with Airflow
Storage Temperature	-20~80 ° C

## Mechanical

- Dimension of Case: 94.15mm×90mm×81.5mm
- Dimension of main Board: 90mm×55mm
- Weight: TBA



## I/O Layout



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