

EVO ORIN SPEC

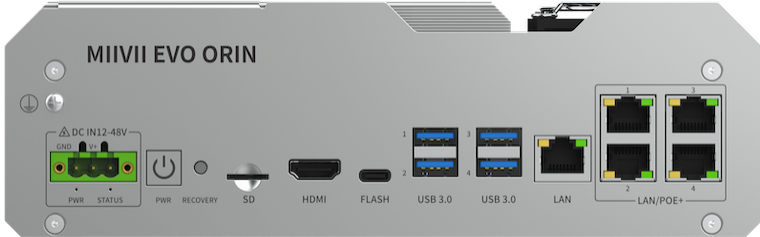
Brief

MIIVII EVO ORIN is an embedded edge computing device designed for industrial scenarios, provided 200/275 Tops computing capability, The equipment adopts high efficiency and active heat dissipation design, which can operate stably in harsh industrial environment. The fastening embedded design can achieve high vibration resistance level. The product provides a variety of I/O interfaces to meet the access requirements of a variety of sensors. At the same time, it provides efficient sensor clock synchronization function, and reserves a variety of internal expansion interfaces to provide more wireless communication and storage expansion solutions.

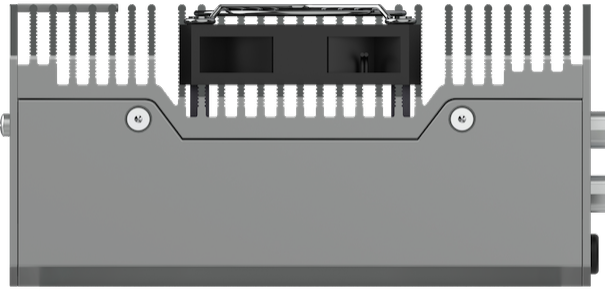


Appearance

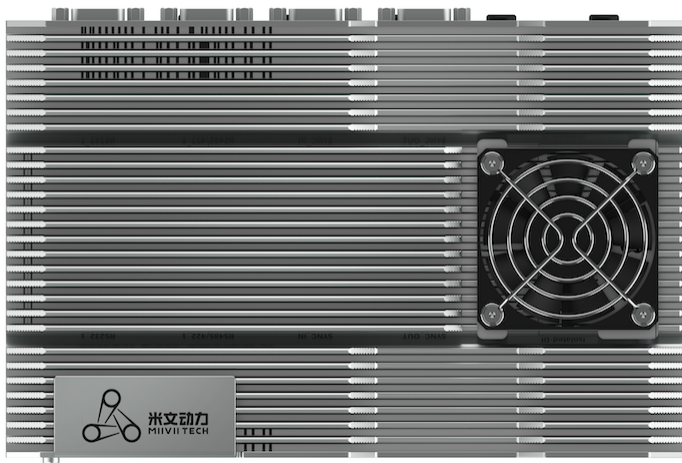
Front view



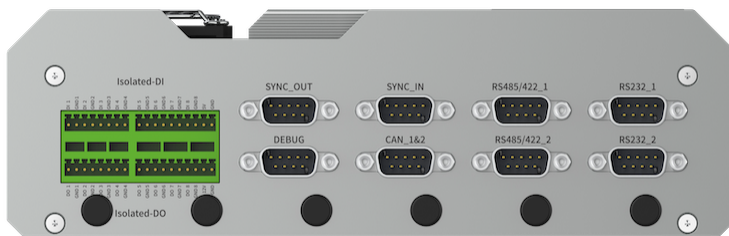
Side view



Top view



Rear view



Features

High performance active fan cooling system

IP5X Protection

5× Gigabit Port

Vibration resistance according to IEC 60068

-20°C-60°C Operating temperature

Various I/O interface and expansion

Specifications

Processor

	Specification	
Processor	NVIDIA Jetson AGX Orin 32GB	NVIDIA Jetson AGX Orin 64GB
AI Performance	200 TOPS	275 TOPS
CPU	8 Core ARM® Cortex®-A78	12 Core ARM® Cortex®-A78
GPU	NVIDIA Ampere 1792-CUDA® Core	NVIDIA Ampere 2048-CUDA® Core
Memory	32 GB 64 bit LPDDR4 204 GB/s	64 GB 64 bit LPDDR4 204 GB/s
DL Accelerator	2×NVDLA 2.0 Engines	
Storage	64GB eMMC 5.1	
Video Encode	<p>H.265</p> <p>1x 4K60, 3x4k30, 6x 1080p60, 12x 1080p30</p> <p>H.264</p> <p>1x 4K60, 2x 4K30, 5x 1080p60, 11x 1080p30</p>	<p>H.265</p> <p>2x 4K60, 4x4k30, 8x 1080p60, 16x 1080p30</p> <p>H.264</p> <p>2x 4K60, 4x 4K30, 7x 1080p60, 15x 1080p30</p>
Video Decode	<p>H.265</p> <p>1x 8K30, 2x 4K60, 4x4k30, 9x 1080p60, 18x 1080p30</p> <p>H.264</p> <p>1x 4K60, 2x 4K30, 5x 1080p60, 11x 1080p30</p>	<p>H.265</p> <p>1x 8K30, 3x 4K60, 6x4k30, 12x 1080p60, 24x 1080p30</p> <p>H.264</p> <p>1x 4K60, 3x 4K30, 7x 1080p60, 14x 1080p30</p>

I/O

	Interface	Quantity	Note
Function KEY	Power Button	1	
	Recovery Button	1	
Network/Camera	Ethernet	5×Gigabit Port	
Video output	HDMI	1×HDMI 2.0 TYPE A	5V 1A
USB	USB	4×USB 3.0 TYPE A 1×USB 2.0 TYPE C	USB 5V, 1A USB 2.0 Flashing Port
I/O	UART	3×RS232	DB9 Terminal RS232_sync FOR GPS Time Synchronize
		2×RS485/422 1×Debug	

	SYNC I/O	1xSYNC_IN 1xPPS_OUT 2xSYNC_OUT	1 x pps in with TTL, UART with RS232 1 x pps out with TTL, UART with RS232 2 x Sync out withTTL
	CAN	2xCAN FD	Two CAN in One DB9 Terminal With CAN chip, terminal resistor 120
	GPIO	8xIsolated DI 8xIsolated DO Output Voltage 1x DC5V、1xDC12V	DI 5-48V DC DO 5-48V DC
User Expansion	TF Socket	1xTF Slot	MicroSD card supported
	M.2	1xM.2 M Key	M.2 M Key2280 SIZE NVME SSD
		1xM.2 B Key	M.2 B Key For 5G
	Mini PCIe	2	For WIFI or 4G expansion
	Nano SIM Socket	4	For Nano SIM Card

Power Supply

Power Supply	Spec
Input Type	DC
Input Voltage	Wide input 12-48V
Typical consumption	40W / 60W

Mechanical

Mechanical	Spec
Dimensions (W×H×D)	226mm×70mm×144.5mm (I/O ports and mounting holes excluded)
Weight	2.3Kg

Environmental

Environmental	Spec
Operating Temperature	-20°C-60°C
Storage Temperature	-40°C-80°C
Storage Humidity	10%-90% non-condensing
Vibration	3 Grms,10Hz~500Hz,1h/axis
Protection	IP5X
ESD	Touch 6KV, Air 8KV

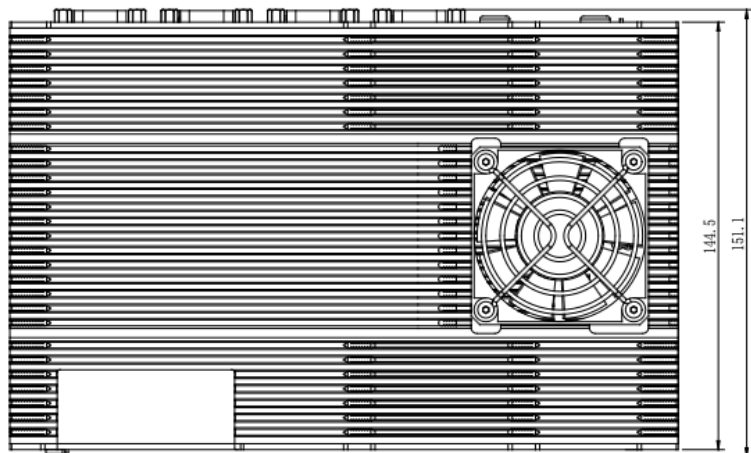
Certification

Certification	Status
CCC, CE, FCC, RoHS	Processing

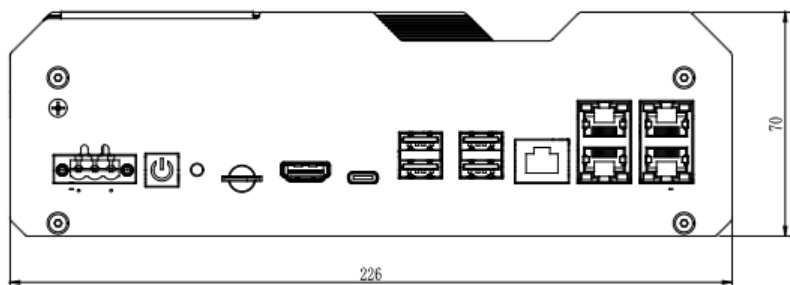
Install Dimension

Dimensions and mounting hole position as below:(Unit:mm)

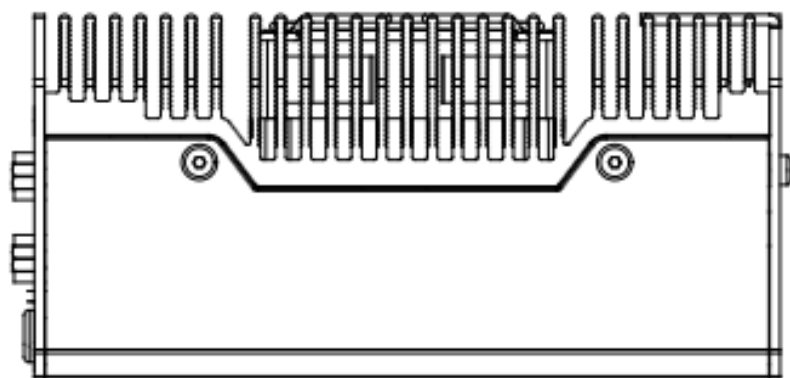
Up view



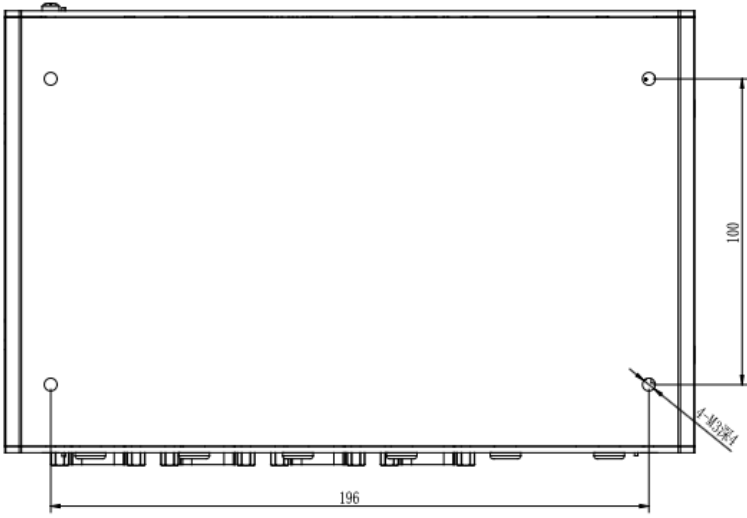
Front view



Left view



Mounting Hole 1



Mounting Hole 2

