



# AV710-CU

**MILITARY JETSON AGX ORIN COUNTER UAV  
COMPUTER**



- Counter UAV visulation Platform with Multi-Sensors Data Fusion
- NVIDIA Jetson AGX Orin 32G/64G LPDDR5 DRAM
- Data Fusion: 4xCH 3G-SDI NVENC H.264 Low Latency (options)
- Data Input: 1x10G SFP+ 2xLAN , 8xCH GMSL 2.0 (options)
- Connectivity: CAN Bus+1x RS232/422/485 Support
- IP65 Classified with M12/DTL38999 Connector (options)
- DC-DC 12V~30V, Options 18V~36V with MIL-461 EMI Filter
- MIL-STD-810 Vibration Method 514.6: ◎Acceleration : 5.0 Grms
- MIL-STD-810 Vibration Method 514.6: ◎PSD : 0.01257 g2/Hz
- MIL-STD-810 Shock Method 516.6: ◎Wave Form: Half Shine Wave
- MIL-STD-810 Shock Method 516.6: ◎Acceleration: 40G
- Extended Temperature -20°C to +55°C
- Size : 250x325x100mm

# Specifications

## SYSTEM

High performance Processor	Ampere GPU + Arm Cortex-A78AE CPU + 64GB LPDDR5 + 64GB eMMC 5.1 Ampere GPU + Arm Cortex-A78AE CPU + 32GB LPDDR5 + 64GB eMMC 5.1
GPU	<b>64GB:</b> Two graphics processing cluster (GPC)   eight texture processing clusters (TPC)   2048 NVIDIA® CUDA® cores   64 Tensor cores Ray-Tracing cores   170 Sparse TOPS   Maximum Operating Frequency: 1.3 GHz <b>32GB:</b> Two graphics processing cluster (GPC)   seven texture processing clusters (TPC)   1792 NVIDIA® CUDA® cores   56 Tensor cores Ray-Tracing cores   108 Sparse TOPS   Maximum Operating Frequency: 939 MHz
AI Performance	64GB: Up to 275 Sparse TOPS (INT8) 32GB: Up to 200 Sparse TOPs (INT8)
Memory Type	Jetson AGX Orin 64GB: 64GB 256-bit LPDDR5 DRAM Jetson AGX Orin 32GB: 32GB 256-bit LPDDR5 DRAM

## EXPANSION SLOT

Expansion Slot	1x M.2 Key-B, 1x SIM, 1x MicroSD, 1x 5V Fan 1x I2C, 2x UART, 1x I2S, 2x SPI, 1x CAN 1x Camera Connector (6 CSI camera support)
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## DISPLAY

Graphics Interfaces	1x HDMI 2.0 (max resolution 3840x2160)
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## STORAGE

M.2	1x M.2 M-Key 256GB SSD Slot
OS	64 GB eMMC 5.1 Flash

## ETHERNET

Controller	2x GLAN 1x 10G (SFP+ Based)
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## FRONT I/O

Power-IN	DC 12-30 VDC
X1	1x 1GbE LAN with M12 connector
X2	1x 1GbE LAN with M12 connector
X3	1x RS232 with M12 connector
X4	1x USB3.0 with M20 connector
X5	1x HDMI with M20 connector

## REAR I/O

Antenna	4G/5G/LTE Antenna with SMA connector
Ground Screw	1x
Debug Access Panel	1x Reset Button
	1x Recover Button
	1x USB Type-C for Debug
	1x USB Type-C for Recovery
	1x Reboot LED
X7	2x 3G-SDI with BNC

### POWER REQUIREMENT

Power Input	12V~30V; Options 18V~36V with MIL-461 EMI Filter
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### OPERATING SYSTEM

Operating System	Ubuntu 20.04 with JetPack 6.0
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### PHYSICAL

Dimension	250 x 325 x 100 mm(W x D x H)
Weight	TBD
Chassis	Aluminum AL6061
Heatsink	Aluminum Alloy, Corrosion Resistant.
Finish	Anodic aluminum oxide (Color).
Cooling	Natural Passive Convection/Conduction. No Moving Parts
Ingress Protection	IP65

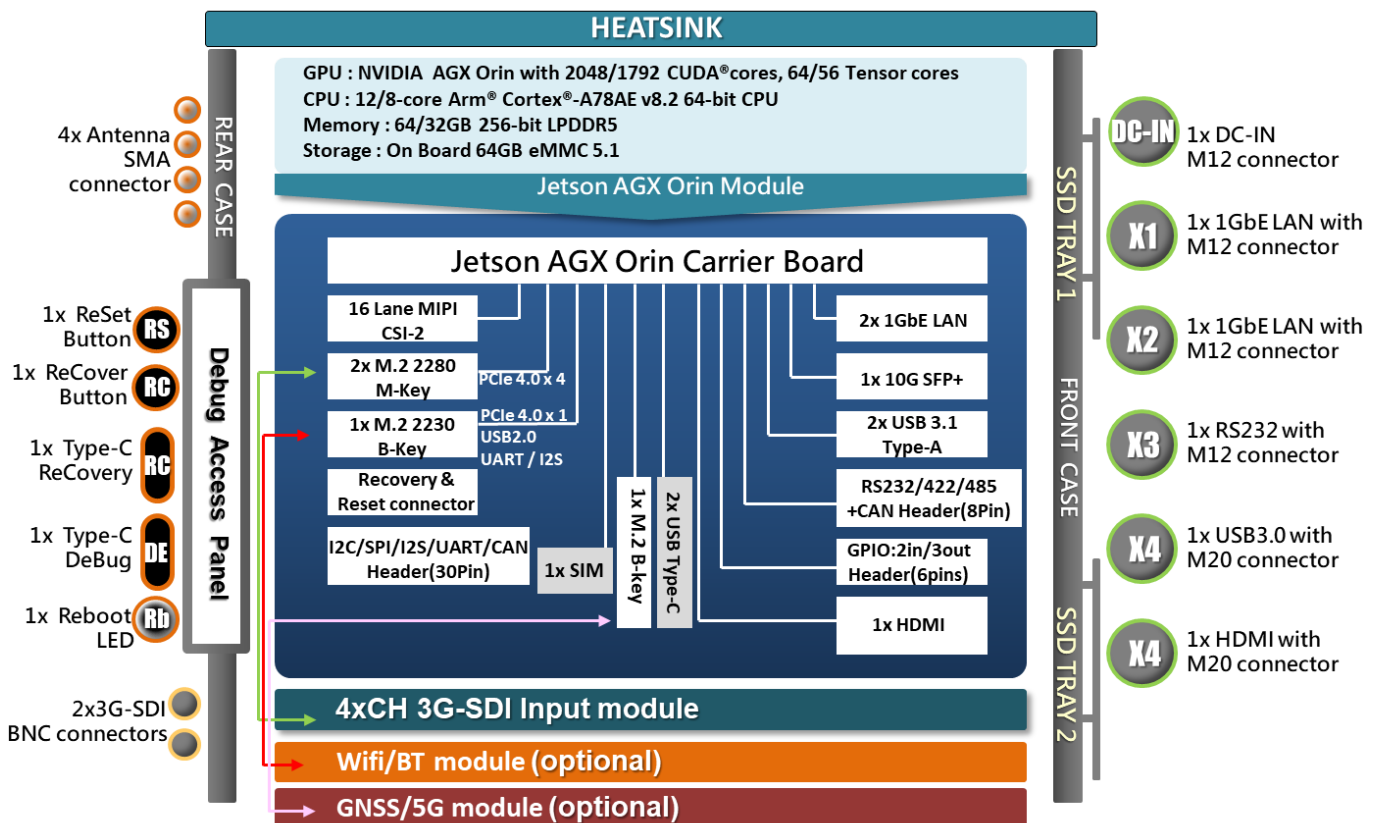
### ENVIRONMENTAL

MIL-STD-461 (Options)	
EMC	CE102 basic curve, 10kHz - 30 MHz
	RE102-4, (1.5 MHz) -30 MHz - 5 GHz
	RS103, 1.5 MHz - 5 GHz, 50 V/m equal for all frequencies
Reliability	No Moving Parts; Passive Cooling.
	Designed & Manufactured using ISO 9001/2000 Certified Quality Program.
Operating Temp.	-20 to 55°C (ambient with air flow)
Storage Temp.	-40 to 85°C
Relative Humidity	5% to 95%, non-condensing.

# Ordering Information

		AV710-CU-2L4S	AV710-CU-3L4S	AV710-CU-3LP	AV710-CU-2L2S	AV710-CU-3L2S
Computing	CPU	AGX Orin 32GB	AGX Orin 64GB	AGX Orin 64GB	AGX Orin 32GB	AGX Orin 64GB
	GPU					
	RAM	32GB	64GB	64GB	32GB	64GB
	Storage-1	eMMC 64GB	eMMC 64GB	eMMC 64GB	eMMC 64GB	eMMC 64GB
	Storage-2	2TB	2TB	-	2TB	2TB
Data Input	2CH 3G-SDI-in	YES	YES	-	YES	YES
	2CH HD-SDI-in	YES	YES	-	-	-
	1x10G(SFP+)	-	YES	YES	-	YES
	2xLAN	YES	YES	YES	YES	YES
	2xPOE (30W)	-	-	YES	-	-
	1xDVI-I	-	-	-	-	-
Data Output	DP	-	-	-	-	-
	HDMI	YES	YES	YES	YES	YES
	DVI	-	-	-	-	-
Communication Connectivity	4G/5G LTE	-	YES	YES	YES	YES
	WiFi	-	YES	YES	YES	YES
	GPS	-	YES	YES	-	YES
	1x10G(SFP+)	-	YES	YES	-	YES

# Block Diagram



# Dimension

TBA

# Appearance

