

Hybrid Cooled Mini - Jetson Orin – 64GB - IP41

AI Compute

Fanless • Passively cooled

IP41

Our Latest Hybrid Cooling Machine with 2048-core NVIDIA Ampere GPU with 64 Tensor Cores



Product Overview

Designed for extreme computing power and efficiency, featuring 2048-core NVIDIA Ampere GPU with 64 Tensor Cores, this powerhouse is built to accelerate AI workloads, deep learning, and high graphics rendering. At the heart of this machine lies the 12-core NVIDIA Arm Cortex-A78AE v8.2 64-bit CPU, offering extraordinary computational capabilities. Coupled with 3MB of L2 cache and 6MB of L3 cache, it ensures rapid data access and smooth multi-tasking, even under heavy workloads.

Key Specifications

- Processor: 8-core NVIDIA Arm Cortex -A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3
- 2048-core NVIDIA Ampere GPU with 64 Tensor Cores
- Operating Range: -25C to 80C
- High Performance AI computing
- Energy Efficiency

Key benefits of FANLESS and RUGGED computers



No fans obviously means no noise, but it's not the only benefit!



No fans allow an important decrease in power consumption, making our products more sustainable!



A fanless computer eliminates the risk to draw in dust and dirt from the environment, the cause of potential failures and costly downtime.



The absence of moving parts enable our products to resist shocks and vibrations, for an increased reliability.



They are built to withstand harsh and constrained working conditions.



High Ingress Protection (IP) rating, indicating the protection level of products against both solid and liquids in electrical enclosures.



The in-house designed and milled aluminium chassis is optimized for efficient passive cooling and durability. Its conception proved their reliability in extended operating temperatures.



The aluminium used for the chassis production is repurposed and recycled, and the production waste is recycled too!

SOLUTION FAMILY

Tranquil AI - AI Compute platforms

This platform is delivered within the Tranquil AI solution family by 2CRSi Edge. Configuration options including OS imaging, software preload, and customer branding are available without altering the certified platform baseline

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I/O Rear

DC-In 9-36V, 2 x RJ45for LAN, 1 x HDMI, 2 x USB 3.2, 2 x USB (OTG)

Technical Specification

Processor	12-core Arm® Cortex®-A78AE v 8.2 64-bit CPU 3MB L2 + 6MB L3		
Memory	MAX Capacity: 64GB Type: LPDDR5 ECC Support: No	Storage	Storage 1: 64GB eMMC 5.1 Storage 2: 4TB M2.NVME 2280 Storage 3: MicroSD Card Slot
Graphics Controller	2048-core NVIDIA Ampere GPU with 64 Tensor Cores	Graphics	1 x HDMI 2.0 Type A
Network Interface	1 x RJ 45 1GbE, 1 x RJ 45 10GbE	Network Options	1 x M.2 B-Key 3042/3052 (LTE/4G/5G) 1 x M.2 E-Key 2230 (WiFi/BT)
Network Feature	N/A	Encryption	TPM v2.0 (optional)
Hardware Monitoring	Watchdog On-Board	Supported OS	Linux (Support Jetpack 5.0 above)
Power Input	4 pin DC Jack connector		
Input Voltage	9-36V		
Consumption	6.9 - 72.25 W		

Physical Specification

I/O Front	Power switch, 1 x Sim slot, 1 x SD slot, 1 x reset	LED Front	Power
LED Rear	Network Uplink/Activity	I/O Optional	Wifi Ports
COM Port Option	CAN BUS, RS232/GPIO/ I2C/UART, RS422/ RS485/GPIO I2C/UART/SPI/USB2.0, MIPI CSI-2 Connector	Cooling Type	Hybrid cooling
Operational Temp	-25C to 80C (-13F to 176F)	Storage Temp	-40C to 85C (-40F to 185F)
Maximum relative humidity	5% to 95%	Size	242 x 132 x 55 mm
Weight	2.235 Kg	Accessories	Power Cord
Optional Accessories	Wifi Antenna	Warranty	3 Years
Certifications	CEUKCARoHSFCCWEEE		

Configuration options (OS, branding, software preload) are available and do not alter the certified platform baseline. For bespoke requirements requiring engineering change, enquire about Tranquil Studio.