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DATASHEET

Edge Compute (EC) Autonomy 2.0

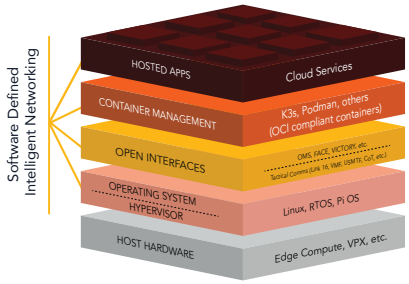
Bringing Small Form Factor Compute Power to the Edge: the EC Autonomy module is the first fully qualified SWaP optimized hardware solution on the market containing two NVIDIA® Jetson AGX Orin™ SoMs. It provides unparalleled NVIDIA GPU compute power for real-time execution of applications such as autonomy, AI/ML, and visual based navigation (VBN) capabilities for legacy and next generation platforms. It provides external PCI Express for connection to Parry Labs' EC Hyper or additional EC Autonomy systems.

EC Autonomy is a cost-effective SWaP-constrained compute platform that includes:

- Two NVIDIA® Jetson AGX Orin™ SoMs
- MOSA compliance
- Multicore ARM® processors in addition to GPU processing
- 2+ TB of storage

Available with the Parry Labs Stratia Software Stack that includes:

- FACE and OMS compliance
- Modern Open, Microservice-based Software Architecture with Kubernetes Orchestration
- Airworthiness and Security Accreditation CATO
- Support for military messaging standards (e.g., Link 16, Cursor-on-Target)
- Application Hosting including Third-Party (e.g., APNT, Mission Management, AI/ML, Sensor Processing)



Flexibility

- 2 x PCIe x4 External Interfaces to support high-speed interconnect with third-party products
- Factory can add different NVMe SSD capacities and FIPS-140-4 certified on request with MOQ IO configurability for different applications

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CPCPU System on Module (SoM) Specification

Each SoM supports the following:

Processor System	CPU	12-core ARM® Cortex®-A78AE v8.2 64-bit CPU 3MB L2 + 6MB L3
	GPU	2048-core NVIDIA Ampere with 64 Tensor Cores
	Memory	64GB 256-bit LPDDR5
	Flash	64GB eMMC 5.1
Ethernet	Interface	10/100/1000 BASE-T Ethernet *(downlink to Switch)*
I/O Ports	USB	(1) USB 3.0 Host/Device
	PCIe (Gen 3 or Gen 4)	(1) x PCIe x2 Internal Interface (provides SoM to SoM interface) (1) x PCIe x4 Endpoint External Interface (ie. CCM to UMC Connection) (1) x PCIe x4 Root complex External Interface (downstream connections)
Storage	M.2 2280 SSD	(1) 1TB NVMe PCIe x1 SSD drive *(Alternate PCIe M.2 solutions may be supported)*
Operating System	Linux	Ubuntu 20.04 LTS with JetPack 4.6

SWaP Attributes

Power	Supply Voltage	16-32VDC input
	Power Consumption	80W max-typical, 120W peak
Mechanical	Dimensions (LxWxH)	Core Dimensions – 6.5" x 6.6" x 3.435" Outer Dimensions – 7.359" x 6.5" x 3.435"
	Weight	6lbs, including two M.2 SSDs
Environmentals	Operational Temperature	-55 to 71 °C Fanless, Conduction Cooled *(*MODE 0 not supported)* *Contact factory for appropriate board configuration based on environmental requirements*
	EMI, Shock, Vibe, Power	MIL-STD-461, MIL-STD-810H & MIL-STD-704