



Athena+™

2U Rackmount High Performance NVMe Platform



Athena+ is a high availability, dual-node flash storage platform that supports 24 PCIe NVMe dual ported solid state drives (SSD). Both nodes utilize a pair of the new Intel® Xeon® Scalable Processors for excellent Software Defined Storage capabilities.

Analytics

Ideal for use in data analytics applications, Athena+ combines 24 dual ported NVMe SSDs in the same platform as a pair of compute nodes with dual Intel® Xeon® Scalable Processors, giving it high performance with extremely low latency.

Software Defined Architecture

Athena+ is an excellent hardware platform for OEMs to deploy their software-defined intelligence. In doing so, Athena+ has the flexibility to work for converged infrastructure applications or more malleable composable applications, depending on the needs of the OEM's target customers.

High Availability Solution

Dual redundant controller nodes deliver an effective HA solution. Features like dual redundant hot swappable power supplies plus optional battery backup units provide redundant data access to all of the hot swappable NVMe modules.

Flexibility

Athena+'s base 2U Rackmount platform supports 24 PCIe NVMe dual-port solid state drives (SSD). With its two redundant computing nodes, Athena+ can be tailored to provide powerful compute or storage workloads. Four native 10GbE ports, plus 3 PCIe expansion slots per node enable further tuning to the required application, such as All Flash Arrays and High Performance Compute.

Reliability

Athena+ is the 4th generation Storage platform Celestica has delivered to OEM customers. Hundreds of thousands of platforms are currently in use worldwide, with extremely low failure rates. Modular design methodology and reuse by the seasoned engineering team ensures the same enterprise quality the industry has come to expect from Celestica.



Enterprise-Class Quality. Cloud Economics.

FEATURES

2U chassis, fits 19" rack

2x hot-swap computing nodes

24x PCIe NVMe SSDs

Dual redundant power supplies

3 PCIe (x16) low profile slots per node

Optional on-board BBUs available for node power in the event of AC power loss

NODE FEATURES

Dual Intel Xeon/2nd Gen Intel Xeon Scalable Processors

24x DDR4 DIMMs support RDIMM/LRDIMM

Support BMC (ASPEED AST2500)

3 PCIe x16 slots

4x 10Gb LAN (RJ45)

POWER AND COOLING

Two 2000W 80 plus Platinum, off-the-shelf CRPS

200-240Vac, 47-63 Hz

1+1 redundant, hot-swappable

Ten 40x56 FAN, hot-swapped with Compute node (5 per node)

PHYSICAL DIMENSIONS

Height: 87.3 mm (3.44")

Width: 447 mm (17.6")

Depth: 825 mm (32.48")

ENVIRONMENTAL: OPERATING

Temperature: 5°C to 35°C

Humidity: 8% to 85% RH

Altitude: 0 to 950 m (De-rate temperature 1°C per 300 m above 950 m)

Shock: 10G, 5ms half sine pulse width

Vibration: 0.278 Grms; 5-500Hz; Random Vibration Spectrum

ENVIRONMENTAL: NON-OPERATING

Temperature: -40°C to 60°C

Humidity: 8% to 95% RH

Altitude: 0 to 12,000 m

Shock: 35G, 152 in/sec; Trapezoidal Shock

Vibration: 1.04 Grms with Power Spectrum; 1-200 Hz; (transit)

APPLICATION TOPOLOGY

Address mainstream applications with dual Intel Xeon® Scalable processors per node

Extremely low latency and high bandwidth

Delivers 184TB using 7.68TB NVMe SSD

3 PCIe x16 slots available in 3HHHL or 1FHHL + 2HHHL configurations

2x USB 3.0

VGA

4 10Gb LAN connectors

APPROVALS

EMC: EMI Class A, FCC, ICES-003, CE, VCCI

Safety: CB Scheme, cUL, IEC/UL62368

Environment: RoHS, REACH, WEEE

Note: All specifications and figures are subject to change without prior notice.

