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

Combining 24 dual ported NVMe SSDs in the same platform as a pair of compute nodes with dual Intel® Xeon® Scalable Processors gives Athena high performance with extremely low latency. This makes the Athena platform ideal for use in data analytics applications.

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 on 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 Xeon® E5-2600 v5 processors, socket LGA3647
- 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)

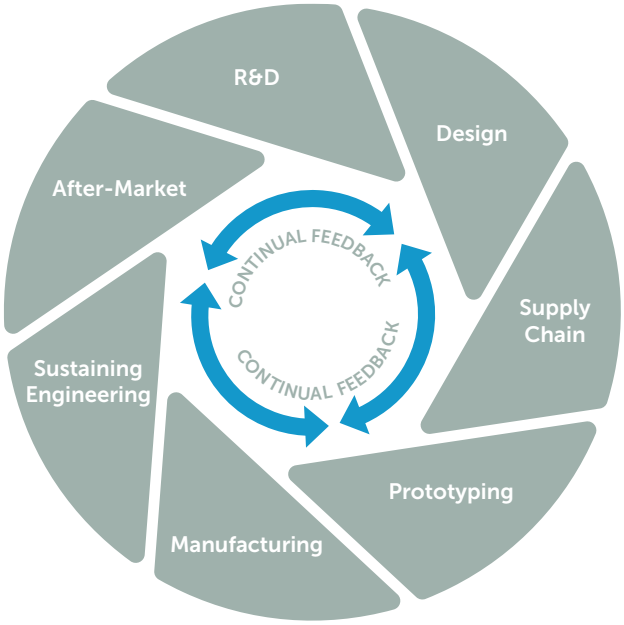
APPLICATION TOPOLOGY

- Address mainstream applications with dual Intel® Xeon E5-2600 v5 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: Class A, CISPR 22, FCC, ICES-003, CE, CQC, VCCI
- Safety: CB Scheme, UL, cUL, CE, CQC, BSMI, LVD
- Environment: RoHS

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



Celestica Hardware Platform Solutions

Complete lifecycle services and support