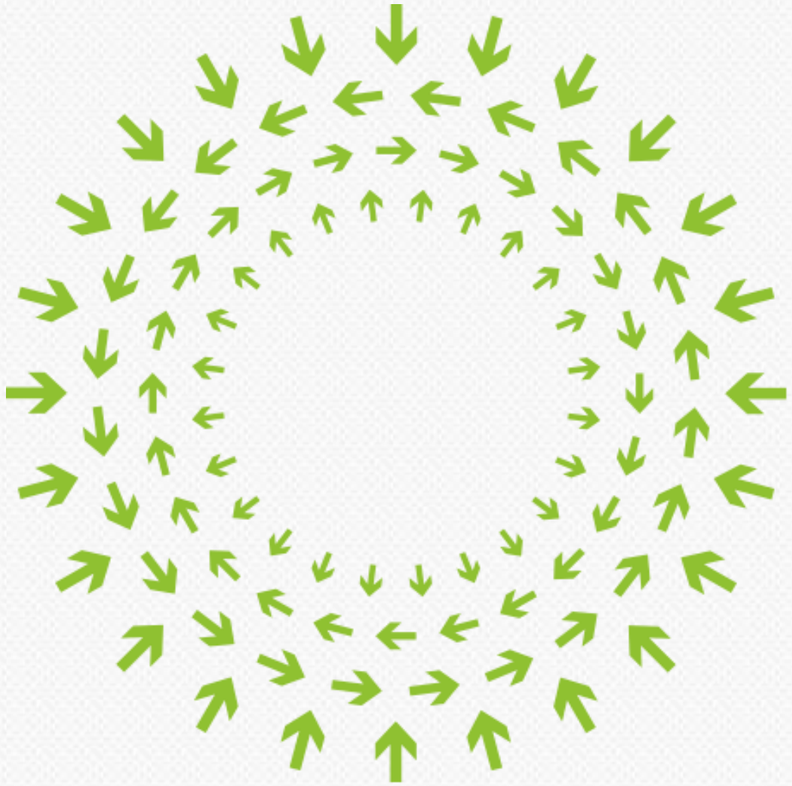

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Open CloudServer v2.1 specification

Systems Overview

Martin Goldstein
Microsoft
Principal Systems Architect

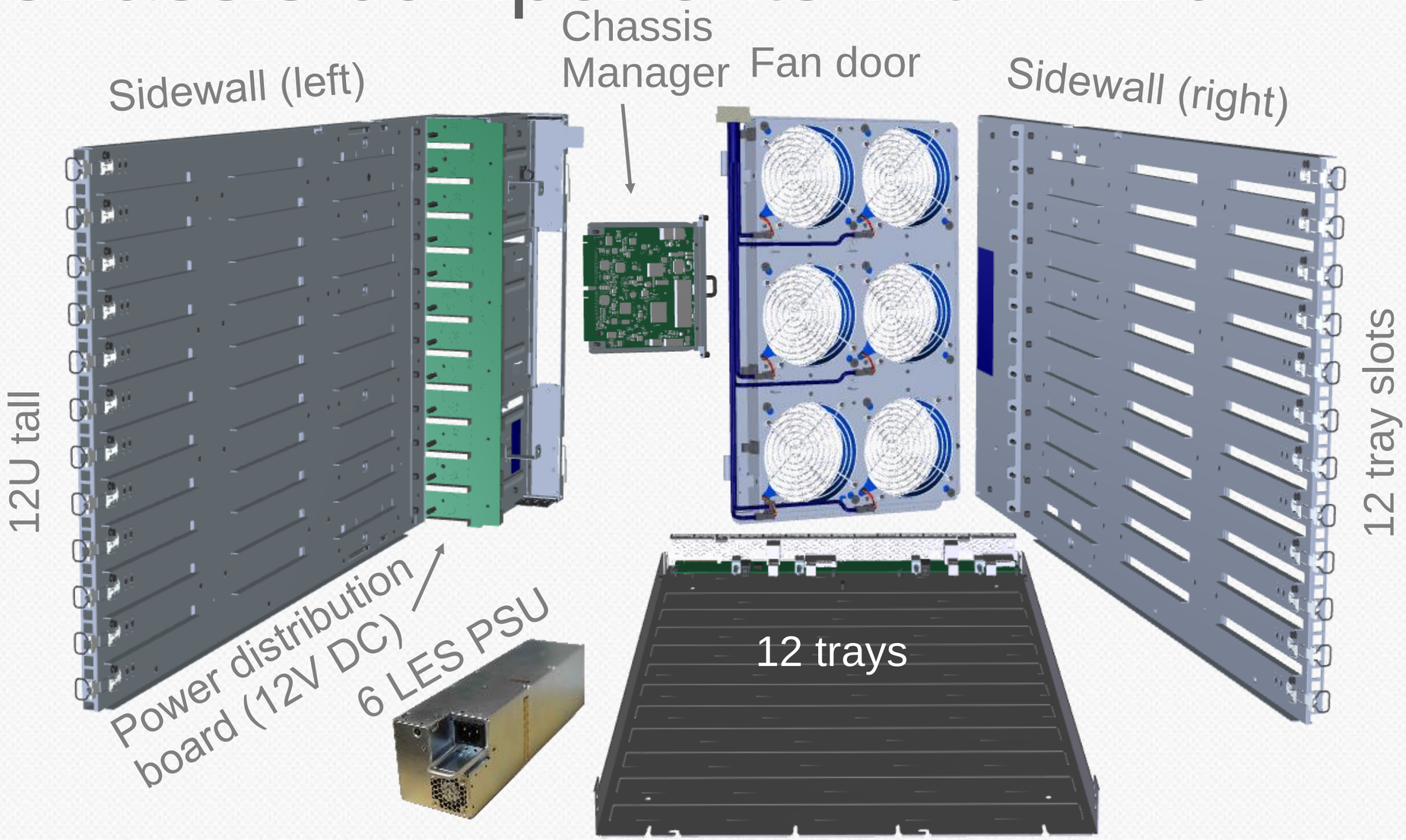
Microsoft

Common Chassis components with V2.0

V2.0 chassis plus

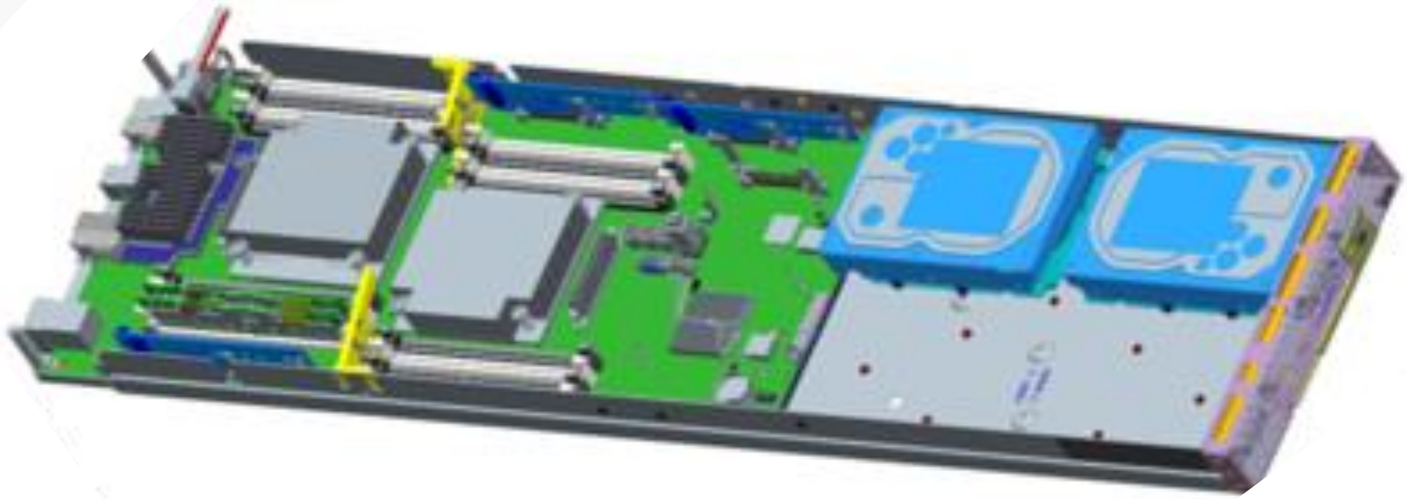
New Compute Blades

New Tray Backplane



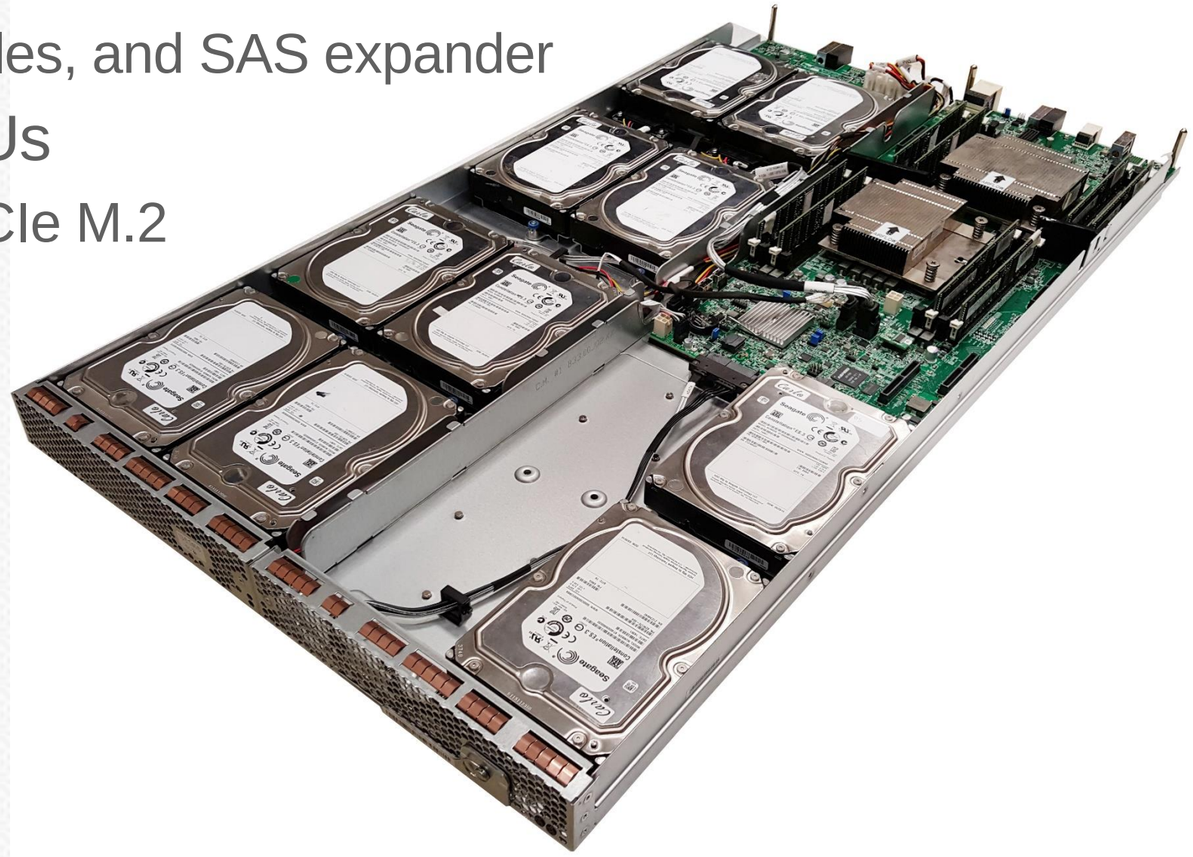
Open CloudServer v2.1 half-wide blade

- Supports next-generation Xeon CPU
- Improved airflow to support up to 135W CPUs
  - Reduction from four SATA HDDs to two SATA HDDs
  - Transition FLASH from SATA SSD to PCIe M.2



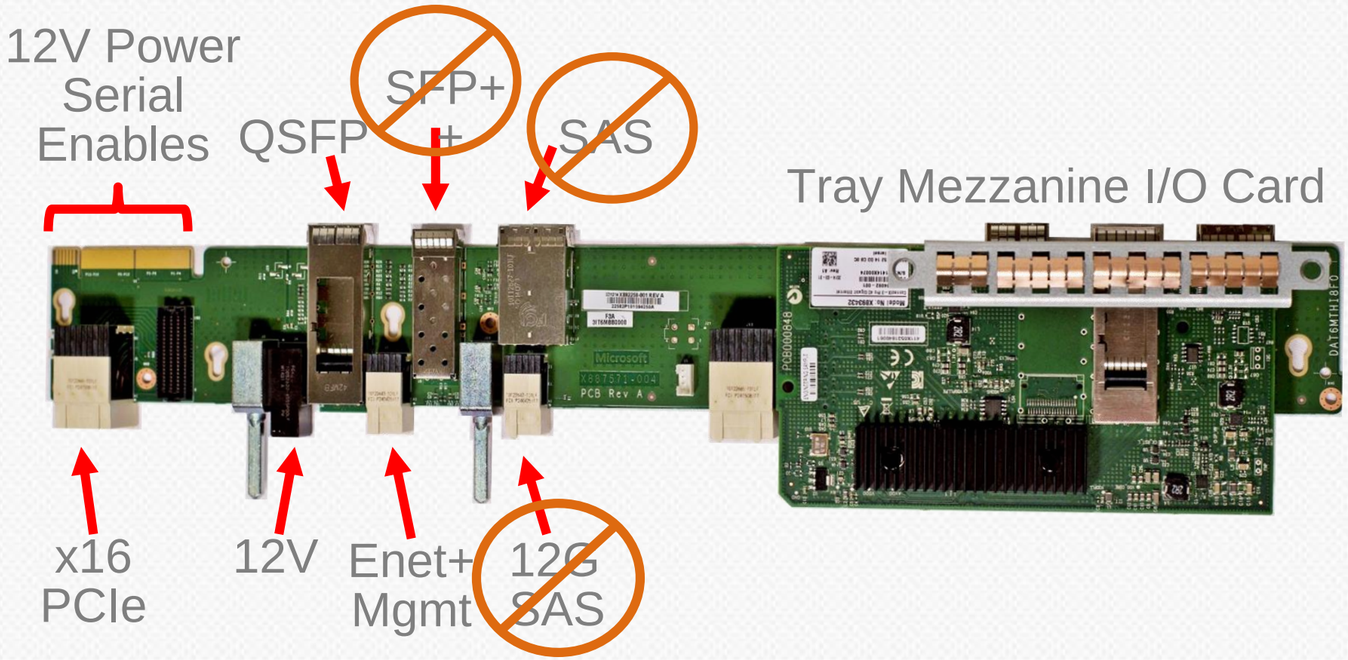
Open CloudServer v2.1 full-wide blade

- Full wide tray supports two CPUs and ten SATA HDDs
  - Lower cost compared to half wide blade + half wide JBOD
  - Removes SAS HBA, internal/external SAS cables, and SAS expander
- Improved airflow supports up to 135W CPUs
  - Remove two HDDs and transition FLASH to PCIe M.2



[1]SpecInt Rate E5-2670 v3 120W vs. E5-2470 v2 95W

Open CloudServer v2.1 Tray Backplane



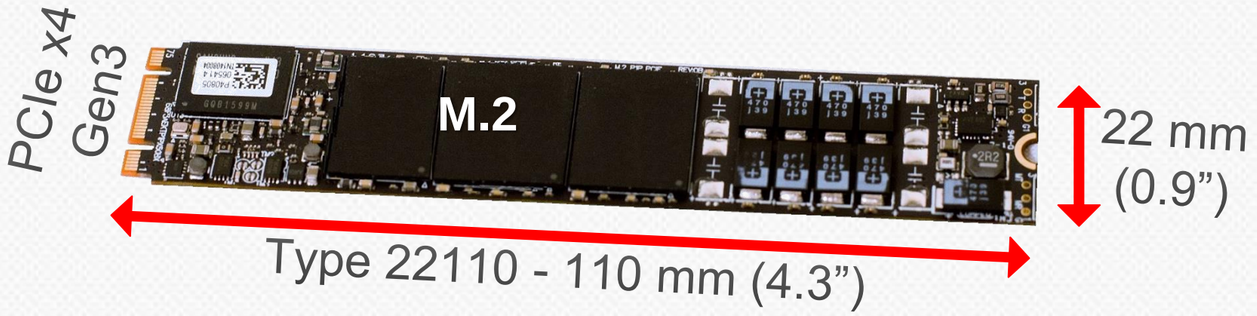
Limited changes from V2.0 to V2.1 tray backplane

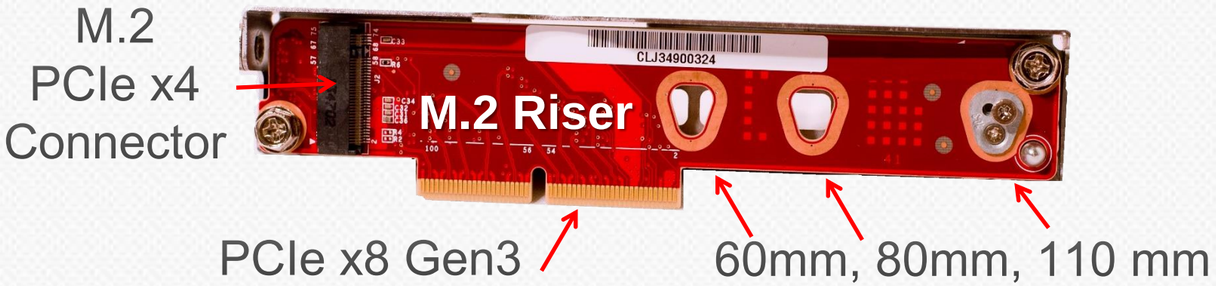
- Removes SFP+ and SAS connectors to reduce cost.
- Enables higher power tray backplane mezzanine cards

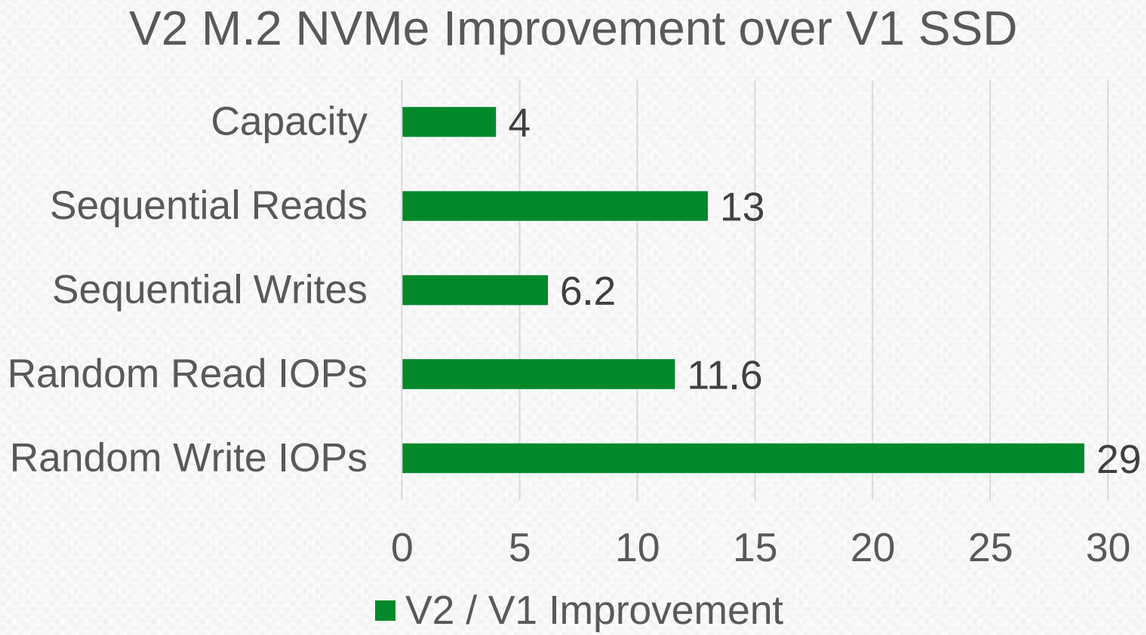
OCS M.2 CloudSSD Optimized Flash

M.2 CloudSSD Flash Drives

- Four risers supporting eight M.2 modules
- PCI-Express Gen3 x4 NVMe
- Multiple lengths: 60mm, 80mm, 110mm
- Vertical provides better thermal than SSD
- Low and high endurance capable

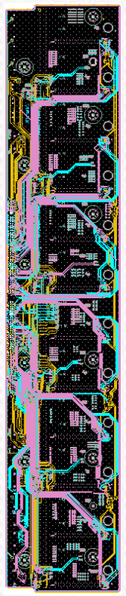






Comprehensive Contribution

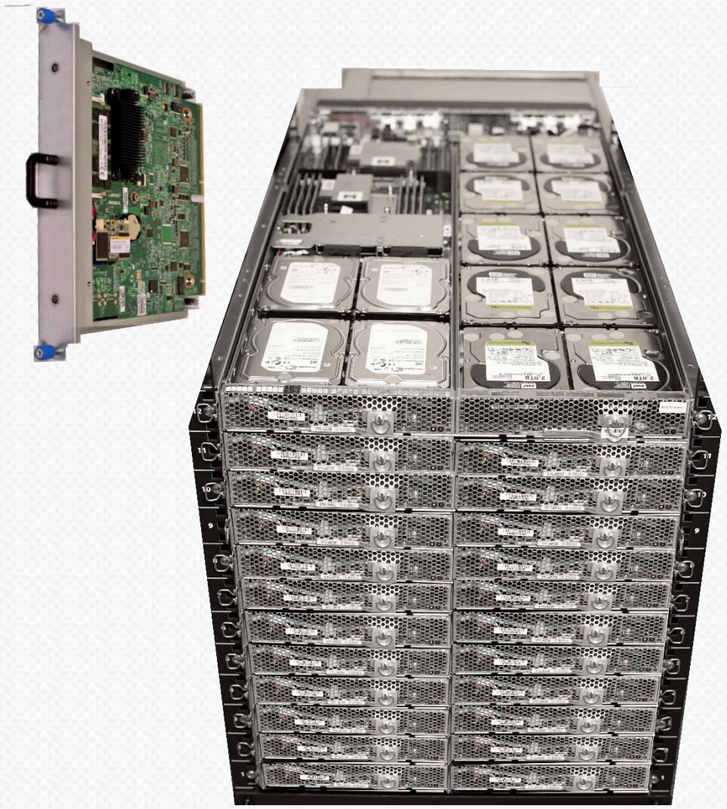
Open Source Code
Chassis management
Operations Toolkit
Interoperability Toolkit



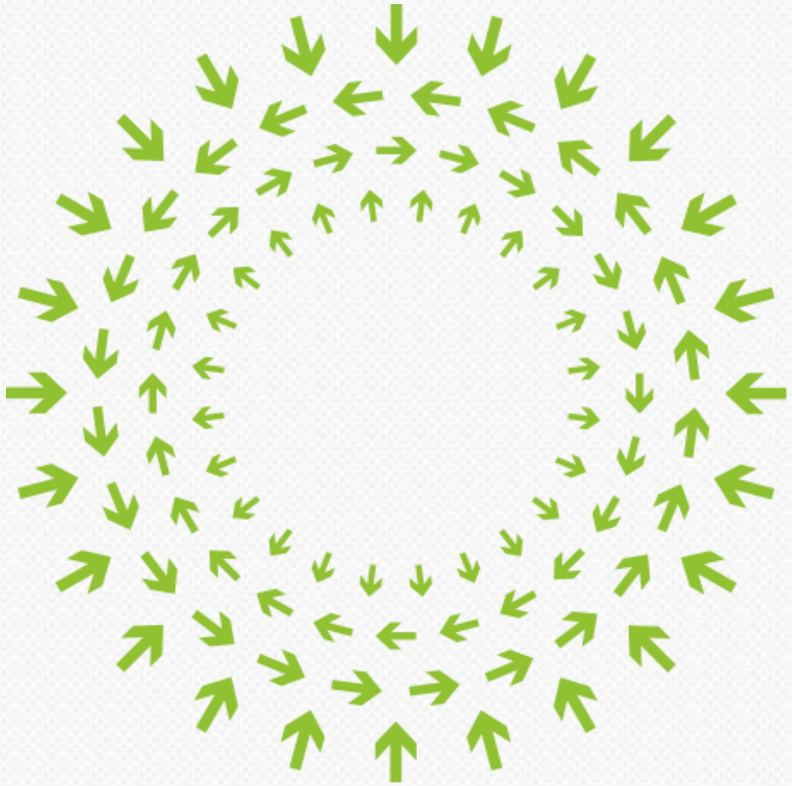
Board Files & Gerbers
Power Distribution Backplane
Tray Backplane

Specifications
Chassis, Blade, Mezzanines
Management APIs
Certification Requirements

Mechanical CAD Models
Chassis, Blade, Mezzanines



Q&A



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