

Compose Bare-Metal Machines in Seconds



Liquid Command Center

Composable management software that automates, orchestrates, and dynamically composes physical computer systems from pools of individual bare-metal elements.

Liquid Grid

The low latency, intelligent, and managed switching fabric that electrically interconnects pools of disaggregated system elements.

Adjusting to real-time business requirements is paramount in the modern data center. Liquid empowers IT administrators to manage, scale, and configure physical bare-metal server systems in seconds and then reallocate core data center devices on-demand as business needs evolve.

Pools of storage, compute, networking, and graphics processing (GPU) devices are interconnected over PCIe to deliver dynamically configurable bare-metal servers perfectly sized with the exact physical resources required by the application being deployed.

Our intelligent fabric switching technology, Liquid Grid, allows core system resources to be instantly interconnected into physical servers via a PCI-Express (PCIe) fabric, and dynamically reconfigured as needed.

Liquid Command Center is the powerful management software platform that automates, orchestrates, and composes physical computer systems from pools of bare-metal resources.

Liquid enables IT administrators to deliver adaptive compute infrastructure and scale core resources on demand for the world's most data-intensive workloads.





TECHNICAL SPECIFICATIONS

Liquid Command Center Management Software

- Bare-Metal Machine Orchestration
- Policy-based Automation and Provisioning
- Cluster Management (Create, Edit, Delete)
- Bare-Metal Machine Management (Create, Edit, Delete)
- Device Management (CPU, NIC, SSD/HDD, and GPU)
- Package Management (OS Deployment, Configuration, Snapshots)
- Advanced Cluster, Machine, and Device Statistics & Monitoring
- Multiple Control Methods: GUI, RESTful API, and CLI
- Secure, Remote Configuration and Management over IPv4/IPv6
- Fabric Scale-Out & Scale-Up Capable
- High Availability (Device/machine failover and migration)
- Error, Event and Status Notifications
- System Alarms
- Advanced GPU peer-to-peer support
- Advanced Fabric DMA NIC

Liquid Grid Hardware Specifications

Solution	Composable Infrastructure Controller
Management	Liquid Command Center
Protocol	Managed PCIe Gen 3.0 Switching Fabric
Architecture	Disaggregated Bare-metal Infrastructure
Physical Interconnect	Photonics and/or Copper over MiniSAS HD Cabling
Number of Ports	24-Ports (16 front, 8 rear), 96-Lanes, Gen3.0 x4 per Port
Port Bandwidth	8 GB/s – Full Duplex
Total Bandwidth	192 GB/s – Full Duplex
Port Latency	150 ns
Management CPU	Intel Xeon D-1548 – 2.00 GHz 64 GB DDR4 w/ECC
Cable Configurations	x4, x8, or x16 (SRIS Ready)
Management port	Secured, 1 GBASE-T
Fail Over	N+1 Support via Multi Switch
Scalable	Multi-switch Topologies - Star, Mesh
Typical Power	170 W
Input Voltage	90-264 VAC
PSU	200 W x2 (Redundant fail in place, field replaceable)
Cable	Mini-SAS HD - short and long range copper or photonics
Dimensions	1/2 - 1 RU (H - 43.8 mm , W - 200.0 mm, D - 508.0 mm)
Weight	4.540 kg (10 LB)