

Compose Bare-Metal Machines in Seconds



Liqid Command Center™

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

LQD9424 Liqid PCIe Gen4 Fabric

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. Liqid 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, graphics processing (GPU) and FPGA devices are interconnected over Gen4 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, Liqid Grid, allows core system resources to be instantly interconnected into physical servers via a Gen4 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

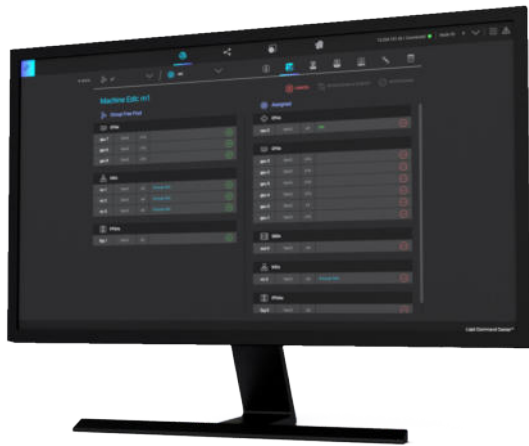
SKU	L20SW-CC9000-000
Description	Liquid Command Center 2.2 Orchestration Software
Bare-Metal Machine Orchestration	
Policy-based Automation and Provisioning	
Cluster Management (Create, Edit, Delete)	
Bare-Metal Machine Management (Create, Edit, Delete)	
Device Management (CPU, NIC, SSD/HDD, GPU and FPGA)	
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	
Multi-Fabric Support	



LQD9424 Liquid PCIe Gen4 Fabric Hardware Specifications

SKU	L9424-096L24-04N
Description	Grid LQD9424 // 1U half-width, PCIe Gen 4.0 Switch, 24 Ports, Data
Solution	Composable Infrastructure Controller
Management	Liquid Command Center™
Protocol	Managed PCIe Gen 4.0 Switching Fabric
Architecture	Disaggregated Bare-metal Infrastructure
Physical Interconnect	Photonics and/or Copper over MiniSAS HD Cabling
Number of Ports	Up to 24-Ports per switch, Gen4.0 x4 per Port
Port Bandwidth	16 GB/s – Full Duplex
Total Bandwidth	384 GB/s – Full Duplex
Port Latency	100 ns
Port 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, other
Typical Power	225 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 RU (H - 43.8 mm , W - 200.0 mm, D - 508.0 mm)
Weight	6.75 kg (15 LB)

Compose Bare-Metal Machines in Seconds



Liqid Command Center™

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

LQD9448 Liqid PCIe Gen4 Fabric

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

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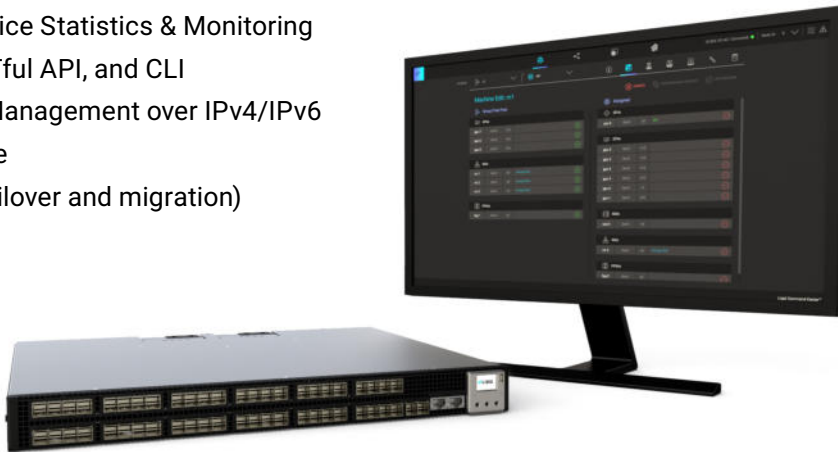


TECHNICAL SPECIFICATIONS



Liquid Command Center™ Management Software

SKU	L20SW-CC9000-000
Description	Liquid Command Center 2.2 Orchestration 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, GPU and FPGA)	
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	
Multi-Fabric Support	



LQD9448 Liquid PCIe Gen4 Fabric Hardware Specifications

SKU	L9448-096L48-04N
Description	Grid LQD9448 // 1U, PCIe Gen 4.0 Switch, 48 Ports, Data
Solution	Composable Infrastructure Controller
Management	Liquid Command Center™
Protocol	Managed PCIe Gen 4.0 Switching Fabric
Architecture	Disaggregated Bare-metal Infrastructure
Physical Interconnect	Photonics and/or Copper over MiniSAS HD Cabling
Number of Ports	Up to 48-Ports per switch, Gen4.0 x4 per Port
Port Bandwidth	16 GB/s – Full Duplex
Total Bandwidth	768 GB/s – Full Duplex
Port Latency	100 ns
Management CPU	Intel Xeon D-1548 – 2.00 GHz 64 GB DDR4 w/ECC
Port 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, other
Typical Power	225 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 RU (H - 43.8 mm , W - 200.0 mm, D - 508.0 mm)
Weight	6.75 kg (15 LB)