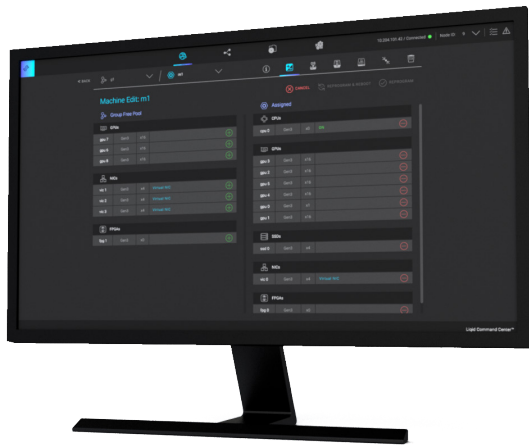


Liquid and Western Digital Offer Full Stack Support for NVMe-oF with OpenFlex™



Liquid Command Center™

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

OpenFlex™ F3100 Series Fabric Device

OpenFlex™: Modular Building Block for Open, Composable NVMe-over-Fabrics (NVMe-oF).



As AI, 5G/Edge, next-gen HPC, and other data-intensive applications increasingly require data center resource flexibility up and down the hardware stack and across distance, Liquid and Western Digital have teamed up to deliver Western Digital's OpenFlex™ open composable platform featuring multi-fabric composability powered by Liquid Command Center 2.2 software.

The powerful OpenFlex™ composable platform is purpose-built for disaggregated deployment in the world's most data-intensive environments that require agile, optimized storage performance for diverse and unpredictable workflows.

Liquid software leverages the [Open Compute Project Open Composable API](#), contributed to the project by Western Digital, to orchestrate OpenFlex™ platform resources enabling faster NVMe-over-fabric (NVMe-oF) deployments via Ethernet and further expanding the scope of composable resources. Liquid software can also compose for the OpenFlex™ platform in tandem with disaggregated accelerators such as GPU, FPGA, and Intel® Optane™ memory technology resources.

The full OpenFlex™ appliance enclosure is managed and automated by Liquid software, including data volume management, sensor monitoring, power usage, fan speeds, and other critical activities. Compose for resources inside the appliance, and connect multiple OpenFlex™-based racks together with Liquid software.

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
- Multi-Fabric Support



OpenFlex™ F3100 Series Fabric Device Specifications

Protocol	NVMe-oF - Ethernet
Media	NAND Flash
Ports	QSFP28 (20-ports x 50GbE)
Bandwidth	Up to 120 GB/s (Chassis)
IOPs	Up to 20M IOPs (Chassis)
Endurance	0.8 DWPD 2 DWPD
Formatted Capacity (TB) ³	153 307 614 128 256 512
Max. # Devices	10x Dual-port fabric device bays - Up to 61.4TB per device
Weight	Product fully populated: 68.5kg (151.0 lbs)
Fabric/Network Interface Management	Dual 50GbE QSFP28 per device RJ45 1Gbps connector Open Composable API (in band or out of band via RJ45) ²
LED Indicators	Power/Activity, Locate and Fault
Physical Dimensions	Height 131mm (5.16"), Width 447mm (17.61"), Depth 828mm (32.60")
Device Bay Power	140 W
Chassis Power	220V, Dual 1600W Power Supplies with fans
Cooling	4 Fans (N+1 Supported)
Environmental	Operating Temperature: 5°- 40°C Non-op Temperature: -30°- 60°C
Serviceability	Hot-swappable power supplies, fans, and fabric devices

