

NVMe Flash Integrated Server

Optimized Performance for
Data-Hungry Workloads



Increase efficiency and accelerate operations

Modern datacenter workloads require servers optimized to meet increased IO performance demands. The Liquid NVMe Integrated Server (aka Badger Den) maximizes performance density by supporting from two to four ultra-low latency LQD4500 (Honey Badger) FHFL NVMe add-in-cards into a single 2U server. Coupled with 2x AMD EPYC™ 7542 2.9G, 32C/64T CPUs, the Badger Den is designed to meet the massive compute and throughput demands of modern workloads such as database, media content creation, scientific research, data analytics, and more.

With the ability to right-size hardware to meet workload performance requirements, the Liquid Badger Den delivers unprecedented flexibility and speed for high-performance workloads.

Leading Performance Scalability

- » Up to 16M 4K Reads IOPS
- » Up to 4M 4K Write IOPS
- » Up to 98GB/s Seq Read Bandwidth
- » Up to 40GB/s Seq Write Bandwidth



Contact Information

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Technical Specifications

MASTER PART NUMBER	L8000-038BGD-C40
PRODUCT NAME	The Liquid NVMe Integrated Server
PRODUCT NICKNAME	"Badger Den"
SERVER PLATFORM	Dell PowerEdge R7525
SERVER CHASSIS	8X 2.5 NVME without XGMI
OPERATING SYSTEM(S)	No factory installed OS Ubuntu Linux Server, Red Hat Enterprise Server and Windows Server supported
SYSTEM/REMOTE MGMT	iDRAC9, Enterprise
SERVER BIOS	Standard Dell BIOS
CPU	2x 2nd Gen AMD EPYC™ 7542 2.9GHz, 32C/64T 128M
MEMORY	Base: 256GB RAM; Options: 512GB, 1024GB
NETWORKING	1x Dual Port 10/25GbE OCP SFP28; 2x 1GbE LOM
PCIe SLOTS	Up to 7x PCIe Gen4 slots
PCIe RISER CONFIG	Riser Config 6 - 5 x16 Full Height and 2 x16 Low Profile
STORAGE - LIQID LQD4500	2-4x Liquid Element LQD4500 PCIe NVMe Add-in cards (LQD4500 available in 6.40, 7.68, 12.80, 15.36, 25.60 and 30.72TB capacity points)
STORAGE - CAPACITY	12.8TB - 122.8TB
STORAGE - INTERNAL	None
STORAGE - BOOT	BOSS controller card + with 2 M.2 Sticks 240G (RAID 1),LP
STORAGE CONTROLLER(S)	BOSS controller card
RAID CONFIG	Hardware RAID-1, boot devices only Software RAID-0/1/5/6, LQD4500 NVMe devices
POWER SUPPLY	Dual, Hot-Plug,Power Supply Redundant (1+1), 1400W
PHYSICAL DIMENSIONS	3.42" (86.8mm) x 17.09" (434.0mm) x 28.99" (736.29mm)
RACK UNITS	2 RU (rack units)
WEIGHT	Up to 59.3 lbs / 26.9 kg - with 4x LQD4500 installed
RAIL KIT	ReadyRails Sliding Rails
SECURITY	Trusted Platform Module 2.0
HARDWARE WARRANTY	3 Year Next Business Day standard warranty included. Extended / Premium warranty options available.

Configurations	Capacity Points based on LQD4500 config					
LQD4500 Card Capacity	6.40 TB	7.68 TB	12.80 TB	15.36 TB	25.60 TB	30.72 TB
2x LQD4500	12.80 TB	15.36 TB	25.60 TB	30.72 TB	51.20 TB	61.44 TB
3X LQD4500	19.20 TB	23.04 TB	38.40 TB	46.08 TB	76.80 TB	92.16 TB
4X LQD4500	25.60 TB	30.72 TB	51.20 TB	61.44 TB	102.40 TB	122.88 TB