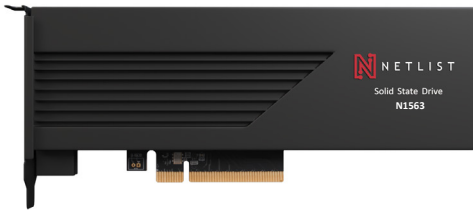




NETLIST

Netlist N1563 Series NVMe SSD

PCI Express Gen4 Data Center Product Brief



N1563 delivers Data Center Class Performance with a cost efficient \$/GB that will ensure that you meet your performances and TCO requirements for all data center applications

Netlist's Next Generation Data Center NVM Express™ (NVMe™) Solid State Drives (SSDs) are built using PCI Express™ (PCIe™) Gen4 protocol and efficient NVMe interface. By combining a feature-rich PCIe Gen4 controller with 176-layer 3D Triple Level Cell (TLC) NAND and best-in-class firmware, Netlist's NVMe SSDs scale in capacity (up to 8TB) as well as performance to handle the toughest data center application workloads.

HIGHLIGHTS



COST-OPTIMIZED FAST PERFORMANCE

N1563 SSDs deliver the perfect balance of Data Center performance and \$/GB with sequential reads up to 6.8 GB/s and 1.1M random read IOPS.



AVAILABILITY

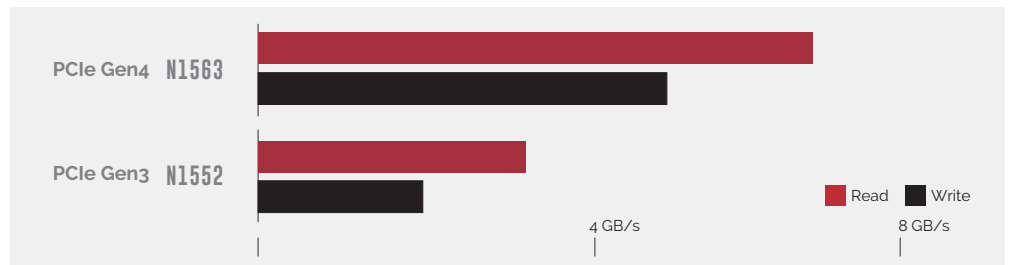
Netlist availabilities include broad capacity range (up to 8TB) NVMe SSD drives with short lead times, differentiating features, and unparalleled technical and logistical support



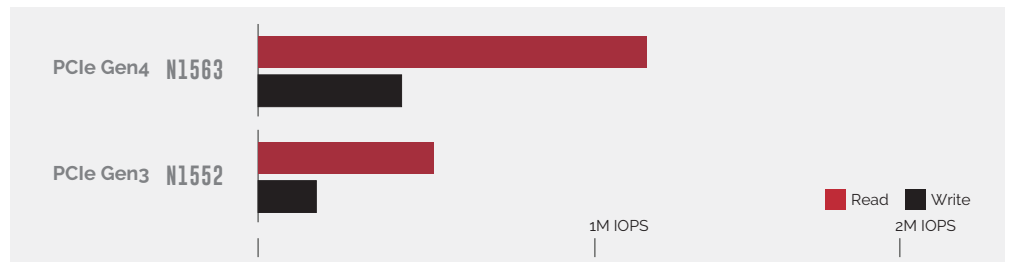
LONG PRODUCT LIFECYCLE

Netlist extends the typical SSD lifecycle (~1 to 2 years) beyond what the majors do, to not only ensure a longer continuity of supply, but also reduce overall engineering and test spend (lower TCO)

Gen3 vs. Gen4 Sequential Performance (GB/s)



Gen3 vs. Gen4 Random 4KB Performance (IOPS)





Netlist's N1563 supports PCIe Gen4 (Gen4 x4) and is backward compatible to PCIe Gen3. A variety of capacities ranging from 1.6 TB up to 7.68 TB enable builders to scale up as needed. The NVMe SSD Series can be over-provisioned to support 1 DWPD and 3 DWPD, but can also be customized up to 9 DWPD for computational or write intensive applications and/or products that require very long lifecycle operation. Additionally, the N1563 comes in two form factors - 2.5-inch U.2 and HHHL AIC - maximizing system fit options.

NETLIST N1563 SPECIFICATIONS / FEATURES:

Attribute	Specification	
Series	N1563 (2.5-inch U.2)	N1563 (HHHL AIC)
NAND Type	176-Layer 3D TLC NAND	
Endurance	1, 3 DWPD (up to 9 DWPD) ¹	
Form factor & Capacity	U.2 15mm: 1.6 TB up to 7.68 TB	HHHL AIC: 1.6 TB up to 7.68 TB
Sequential Read	Gen4: 6.8 GB/s (backwards compatible to) Gen3: 3.5 GB/s	
Sequential Write	Gen4: 4.8 GB/s (backwards compatible to) Gen3: 3.5 GB/s	
Random Read	Gen4: 1100K IOPS (backwards compatible to) Gen3: 840K IOPS	
Random Write	Gen4: 420K IOPS (backwards compatible to) Gen3: 420K IOPS	
Latency Read	Gen4: 72 μ s (backwards compatible to) Gen3: 72 μ s	
Latency Write	Gen4: 11 μ s (backwards compatible to) Gen3: 11 μ s	
Uncorrectable Bit Error Rate (UBER)	1 sector per 10^{17} bits read	
Mean Time Between Failure (MTBF)	2 million hours	
Self-Encrypting Drive (SED)	Yes	
Power Loss Protection (PLP)	Yes	
Sanitize / Crypto Erase / Telemetry	Yes / Yes / Yes	
TCG Opal	Yes	

Note 1: Customizable over-provisioning (endurance) available up to 9 DWPD

LEARN MORE: EMAIL US AT SSD@NETLIST.COM

The Memory Storage Company™

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