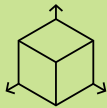


# The Future of Enterprise and Data Center Storage is EDSFF is here

NVMe SSD Solutions for HPE Solutions

## Benefits of EDSFF SSDs



### Flexibility

EDSFF connector design is compliant to the same connector standard specification across all EDSFF configurations, and it can be used without limitation on the number of lanes and is flexible to chassis and backplane designs.



### Powerful

EDSFF is design to support higher power up to 70W\*, delivering superior performance, while 2.5-inch SSDs using the SFF-8639 connector typically max out at 25W.

\* The design value of maximum power depends on the device.



### Higher Performance

EDSFF can support up to 4x higher performance in a 4C configuration with 16 lanes and 2x higher performance in a 2C configuration with 8 lanes than a 4 lane 2.5-inch SSD (U.2 or U.3). \*

\* The number of lanes depends on the device. As of October 2023, KIOXIA does not support SSDs beyond PCIe® x4 lanes.



### Efficient

The EDSFF is designed with efficient use of space and surface area, improving thermal dissipation and allowing for higher density chassis.



### Versatile

EDSFF is designed to support other PCIe® devices, such as NICs or accelerators, that can be used in the same chassis not limited to SSDs.

## KIOXIA EDSFF E3.S Offerings



### KIOXIA CM7 Series Enterprise NVMe™ SSD

- PCIe® Gen5 x4 (32 GT/s x4)
- NVMe™ 2.0 specification compliant
- OCP Datacenter NVMe™ SSD 2.0 supported
- 1.6 TB to 15.36 TB capacities
- 1 and 3 DWPD endurance

### KIOXIA CD8P Series Data Center NVMe™ SSD

- PCIe® Gen5 x4 (32 GT/s x4)
- NVMe™ 2.0 specification compliant
- OCP Datacenter NVMe™ SSD 2.0 supported
- 1.6 TB to 15.36 TB capacities
- 1 and 3 DWPD endurance

## Models / Specifications

Family	Endurance	Platform	Capacity	Hewlett Packard Enterprise Option Kit SKU	Max Random Read IOPS (4KiB)	Max Random Write IOPS (4KiB)	Max Sequential Read (MiB/s)	Max Sequential Write (MiB/s)
CM7 E3.S/EDSFF	Read Intensive 1 DWPD (for 5 years)	ProLiant HPC ClusterStor 3PAR Alletra Raider	3,840	P61179-B21	2,700,000	310,000	13,351	6,437
			7,680	P61183-B21	2,450,000	300,000	13,351	6,437
			15,360	P61187-B21	2,000,000	260,000	13,351	5,055
	Mixed Use 3 DWPD (for 5 years)		3,200	P61191-B21	2,700,000	600,000	13,351	6,437
			6,400	P61195-B21	2,450,000	550,000	13,351	6,437

Family	Endurance	Platform	Capacity	Hewlett Packard Enterprise Option Kit SKU	Max Random Read IOPS (4KiB)	Max Random Write IOPS (4KiB)	Max Sequential Read (MiB/s)	Max Sequential Write (MiB/s)
CD8P E3.S/EDSFF	Read Intensive 1 DWPD (for 5 years)	ProLiant	1,920	P69234-B21	1,600,000	150,000	11,444	3,338
			3,840	P69237-B21	1,900,000	200,000	11,444	5,245
			7,680	P69239-B21	2,000,000	200,000	11,444	5,245
			15,360	P69546-B21	2,000,000	200,000	11,444	5,054
	Mixed Use 3 DWPD (for 5 years)		1,600	P69241-B21	1,600,000	300,000	11,444	3,338
			3,200	P69243-B21	1,900,000	400,000	11,444	5,245
			6,400	P69245-B21	2,000,000	400,000	11,444	5,245
			12,800	N/A	2,000,000	400,000	11,444	5,054

Please contact your sales rep for more options not shown here:

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## Where to Find More on EDSFF?

### KIOXIA EDSFF Solutions

<https://americas.kioxia.com/en-us/business/ssd/solution/edsff.html>

### Open Compute Project Datacenter NVMe SSD specification

<https://www.opencompute.org/wiki/Storage#Documents>

### SNIA SSD Form Factors Web Page

<https://www.snia.org/forums/cmsi/knowledge/formfactors>

### E1.S & E1.L

- SNIA SFF-TA-1002 – Protocol Agnostic Multi-lane High Speed Connector
- SNIA SFF-TA-1006 – Enterprise and Datacenter 1U Short Device Form Factor (E1.S)
- SNIA SFF-TA-1007 – Enterprise and Datacenter 1U Long Device Form Factor (E1.L)
- SNIA SFF-TA-1009 – Enterprise and Datacenter Standard Form Factor Pin and Signal Specification
- SNIA REF-TA-1012 – Pin Assignment Reference for SFF-TA-1002 Connectors
- SNIA SFF-TA-1023 – Thermal Characterization Specification for EDSFF Devices

### E3.S & E3.L

- SNIA SFF-TA-1002 – Protocol Agnostic Multi-Lane High Speed Connector
- SNIA SFF-TA-1008 – Enterprise and Datacenter Device Form Factor (E3)
- SNIA SFF-TA-1009 – Enterprise and Datacenter Standard Form Factor Pin and Signal Specification
- SNIA REF-TA-1012 – Pin Assignment Reference for SFF-TA-1002 Connectors
- SNIA SFF-TA-1023 – Thermal Characterization Specification for EDSFF Devices