

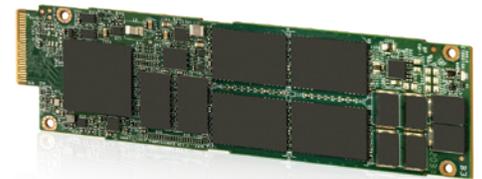


DuraFlash™

MDC7000 | EDSFF E1.S PCIe NVMe

SMART Modular's Enterprise and Data Center SSDs are an ideal solution for capturing, storing and analyzing very large amounts of data. The high performance, E1.S form factor and 12V operation are specifically optimized for scale-out main storage in servers. They fit vertically in 1U servers to provide improved cooling and maximum system capacity (up to 32 EDSFF SSDs in a 1U server).

SMART Modular's EDSFF E1.S SSDs support a full range of command sets and provide the security and reliability needed by the most demanding data center applications.



Features & Benefits

- E1.S 5.9mm 12W Form Factor (31.5mm x 111.49mm x 5.9mm)
- Fits in Common Datacenter System Chassis (1U, 2U, etc.)
- Designed to be Front Panel Accessible
- Up to 32 EDSFF SSDs in a 1U Server (up to 256TB Total Capacity)
- Cost Benefit to System Designs with 12V Only for Main Power
- Compatible Connector Options to Support x4 and x8 NVMe Drives
- Enhanced Reliability with On-Board Error Detection and Correction
- High Security - Digital Signed Firmware, Secure Boot, Crypto Erase, Secure Erase, TCG OPAL 2.0 (Optional)
- SafeDATA™ Power Loss Data Protection
- Full Range of NVMe Command Sets
- Supports Hot-Plug Insertion and Removal

Applications

- Data Centers
- Software Defined Storage
- AI Analytics
- Cloud Computing
- Ideal for Capturing, Storing and Analysis of Very Large Amounts of Data

Product Family Overview

Capacity	Sequential Performance
800GB to 7680GB	Up to 3000MB/s Read; Up to 1350MB/s Write

Specifications

MDC7000 EDSFF E1.S PCIe NVMe	
NAND Type	TLC
Performance	
Host Interface Rate	PCIe Gen3 x4 (8Gbps)
Capacities	800GB to 7680GB
Sequential Read (maximum)	Up to 3000MB/s (3840GB)
Sequential Write (maximum)	Up to 1350MB/s (3840GB)
Reliability	
Data Reliability	< 1 Non-Recoverable Error in 10 ¹⁷ bits read
Data Retention	7 years >90% life remaining 1 year at the end of life
Endurance (JEDEC Enterprise Workload) ¹	7680GB: 16368 TBW
	3840GB: 8184 TBW
	1920GB: 4092 TBW
	960GB: 2046 TBW
Error Correction	LDPC
Environmental	
Shock	1500 g half-sine, 0.5 msec, 1 shock along each axis, X, Y, Z in each direction
Vibration	20G rms 80-2000Hz, 1.52mm 20-80Hz, 3 axis
Operating Temperature	Commercial: 0°C to +70°C
Storage Temperature	-40°C to +85°C
Humidity	40°C, Operation: 90% RH, Storage: 93% RH
Physical	
Length	111.49 mm
Width	31.5 mm
Height	5.9 mm

¹Endurance is directly related to the User Specific Workload.

Ordering Information

Part Number	Density
EDSFF E1.S PCIe NVMe (1DWPD)	
Commercial Operating Temperature (0°C to +70°C)	
SRE1S7T68F1N1A71	7680GB
SRE1S3T84F1N1A71	3840GB
SRE1S1T92F1N1A71	1920GB
SRE1S960GF1N1A71	960GB
EDSFF E1.S PCIe NVMe (3DWPD)	
Commercial Operating Temperature (0°C to +70°C)	
SRE1S6T40F1N1A71	6400GB
SRE1S3T20F1N1A71	3200GB
SRE1S1T60F1N1A71	1600GB
SRE1S800GF1N1A71	800GB



For more information, please visit: www.smartm.com

Headquarters/North America:

T: (+1) 800-956-7627 • T: (+1) 510-623-1231
F: (+1) 510-623-1434 • E: info@smartm.com

Latin America:

T: (+55) 11 4417-7200 • E: sales.br@smartm.com

Asia/Pacific:

T: (+65) 6678-7670 • E: sales.asia@smartm.com

EMEA:

T: (+44) 0 7826-064-745 • E: sales.euro@smartm.com

Customer Service:

T: (+1) 510-623-1231 • E: customers@smartm.com