

## SMART Modular Introduces MDC7000 Enterprise-Class Solid State Drive

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SSD Products in New EDSFF E1.S Form Factor for Storage Server and High-Performance Compute Applications  
NEWARK, Calif., November 5, 2020—**SMART Modular Technologies**, a subsidiary of **SMART Global Holdings, Inc.**, (NASDAQ: SGH), announces the **MDC7000 PCIe NVMe SSD**, an enterprise-class solid-state drive (SSD) product by SMART Modular designed to meet the needs of data center, high performance computing and other high-performance, high-capacity enterprise server applications.

The MDC7000 SSD product is available in the Enterprise and Data Center SSD Form Factor (EDSFF). E1.S is a new form factor standard that specifically meets the needs of high-performance compute and storage servers. SMART Modular, with its long history of innovation in leading-edge DRAM and Flash memory products for the data center and enterprise server market, is among the first in the industry to introduce a production-ready E1.S enterprise-class SSD product.

The MDC7000 EDSFF E1.S SSD is an ideal solution for capturing, storing and analyzing very large amounts of data. It is the first in a line of enterprise-class SSD products to be released by SMART Modular. The high performance SSD in E1.S form factor and 12V operation is specifically optimized for scale-out main storage in servers. The new drive fits length-wise on the side in 1U servers to provide improved cooling and maximum system capacity (up to 32 EDSFF SSDs in a 1U server). The MDC7000, EDSFF E1.S SSD supports a full range of command sets and provides the security and reliability needed for the most demanding data center and enterprise server applications.

SMART Modular Flash product director, Victor Tsai said, “EDSFF E1.S enterprise-class SSD addresses many of the deficiencies of existing SSD form factors and provides an optimal solution in storage capacity, packing efficiency, power and thermal management for data center and enterprise server applications. Backed by our renowned product reliability and exceptional technical support, SMART Modular is an ideal partner for early adopters of EDSFF

storage solutions in their system designs.”

**On November 4, 2019, VentureBeat published the following** about EDSFF technology, “The availability of first-wave storage products based on this hot design specification promises disruptive, screamingly fast new possibilities for high-performance computing. Think big data servers, AI, high-end gaming, and other data-or graphics-intensive applications where large amounts of fast memory and storage are advantageous.”

## Technical Highlights

Memory range capacity of the EDSFF E.1S drive ranges from 1TB to 8TB and the drive contains SMART Modular’s NVMSentry™ firmware security feature. Other features of this innovative new drive include:

### MDC7000 EDSFF E1.S SSD

- E1.S 5.9mm 12W Form factor (31.5mm x 111.49mm x 5.9mm)
- Available configurations:
  - Read intensive (1 DWPD): 960GB, 1.92TB, 3.84TB, 7.68TB
  - Mixed use (3 DWPD): 800GB, 1.6TB, 3.2TB, 6.4TB
- Enterprise-class SSD controller with SMART proprietary NVMSentry™ firmware
- PCIe Gen 3x4 supporting single-port and independent dual-port functions
- NVMe 1.3 compliant with SMBus NVMe management interface support
- Namespace management – up to 16 namespaces
- High security
  - Digital signed firmware, Secure Boot, Crypto erase, secure erase, TCG OPAL 2.0 (option)
- SafeDATA™ power loss data protection
- Supports Hot-plug insertion and removal

### EDSFF E1.S form factor benefits

- Fits in common data center system chassis: 1U, 2U, etc.
- Designed to be front panel accessible

- Up to 32 8TB E1.S SSDs in a 1U server for up to 256TB total storage capacity
- Common EDSFF connector for other advanced memory peripherals such as CXL and GenZ
- Cost benefit to system designs with 12V only for main power

For more information on this new **EDSFF E.1 S form factor**, contact **SMART Modular's Sales Team** or Flash product director, Victor Tsai at [victor.tsai@smartm.com](mailto:victor.tsai@smartm.com).

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#### About SMART Modular Technologies

Serving the specialty memory industry for more than 30 years, SMART Modular is a global leader in memory modules, solid-state storage products and high-performance computing. Critical to electronic devices, SMART Modular has developed a comprehensive product line comprised of DRAM, hybrid memory, Flash and storage technologies across various form factors that are available in standard, custom and ruggedized versions where high performance and high capacity are critical.

SMART Modular collaborates closely with its global OEM customers with a strong focus on extensive customer-specific designs, technical support and value-added testing services. Throughout the design process and across multiple platforms, SMART Modular creates solutions for demanding applications with differentiated requirements.

SMART Modular is a pioneer in secure, ruggedized solid-state drives (SSDs). Additional attributes such as encryption, secure data elimination and write-protect features are incorporated providing highly secure storage for military, aerospace and industrial markets.

NVMSentry is a trademark of SMART Modular Technologies, Inc.

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