



SMART Modular Expands Lineup of High-Performance, High-Density DDR4 Solutions for Space-Constrained Applications

April 14, 2020

New, higher-density Module-In-A-Package™ (MIP™), is an ideal solution for increasing memory capacity in IIoT and Embedded Computing applications.

NEWARK, CA, April 14, 2020 — [SMART Modular Technologies, Inc.](#), a subsidiary of [SMART Global Holdings, Inc.](#) (NASDAQ: SGH), and a leader in specialty memory, storage and hybrid solutions including DRAM memory modules, solid state drives (SSDs) and other Flash memory products, today announced its new higher density DDR4 Module-in-a-Package (MIP), expanding the currently offered MIP density range to 16GB. SMART's MIP is an innovative, tiny form factor design targeted for uses in IIoT, embedded computing, broadcast video, and mobile routers, where maximizing DRAM capacity within space-constrained limitations are a principle concern.

SMART's MIP, operating up to DDR4-3200, is an ideal solution to replace multiple down-board DRAMs or SO-DIMMs to maximize DRAM density within minimal board space. Additional advantages of the MIP:

- Simplified system design
 - Compared to solder down approaches, main board routing complexity is greatly reduced by avoiding the need for back-to-back chip placements. Plus, the MIP contains all necessary passives and a thermal sensor, eliminating the need to place these components.
- Performance benefits
 - Removes the need for a mating connector, resulting in better signal integrity and reduced flight time.
- Better flexibility over die stacking and packaging solutions
 - Build-to-order model with multiple standard DRAM sources available.

The 16GB MIP is available in two configurations, the standard 1Gx64 version or the two channels of x32 configuration to replace either soldered down DRAMs or SO-DIMMs. The MIP is an ideal solution for MCU, CPU, or FPGA-based embedded computing and IIoT systems that require a x64 or x32 memory access. For example, a small form factor COMe system for IIoT can be populated with 128GB of memory using four 16GB MIPs on the top of the system and four 16GB MIPs mirrored on the bottom.

SMART offers a full lineup of MIPs, 4GB to 16GB with speeds up to DDR4-3200.

To learn more about SMART's MIP please visit www.smartm.com/mip.

###

About SMART Modular Technologies

Serving industry for over 30 years, SMART Modular Technologies is a global leader in specialty products including memory modules, solid state storage products and hybrid solutions which are critical to electronic devices and are available in standard, custom and ruggedized, high performance, high capacity applications. SMART Modular delivers solutions to a broad customer base, including OEMs in computing, networking, communications, storage, mobile, military, aerospace and industrial markets. Focused on providing extensive customer-specific design capabilities, technical support and value-added testing services, SMART collaborates closely with their global OEM customers throughout the design process and across multiple projects to create solutions for demanding applications with differentiated requirements. SMART is a pioneer of secure, ruggedized solid state drives (SSDs) incorporating additional attributes such as encryption, secure data elimination and write-protect features required in the high-performance military, aerospace and industrial markets. Taking innovations from the design stage through manufacturing and supply, SMART Modular has developed a comprehensive product line comprised of DRAM, Flash and hybrid memory and storage technologies across various form factors. SMART Modular is a subsidiary of [SMART Global Holdings, Inc.](#)

See www.smartm.com for more information.

Connect with SMART on [LinkedIn](#).

SMART Media Contacts:

United States

Arthur Sainio, Director of Product Marketing

SMART Modular Technologies

+1 (510) 624-8126

arthur.sainio@smartm.com

EMEA

Rhianna Bull, Account Manager

Napier Partnership Limited

+44 (0) 1243 531123

rhianna@napierb2b.com