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New Power Module Enhances AI Data Center Power Density and Efficiency

Microchip's MCPF1525 power module with PMBus™ delivers 25A DC-DC power, stackable up to 200A

CHANDLER, Ariz., Feb. 03, 2026 (GLOBE NEWSWIRE) -- The increasing AI and high-performance computing workloads demand power solutions that combine efficiency, reliability and scalability. Integrated power modules help streamline design, reduce energy use and deliver the stable performance required for advanced data centers. Microchip Technology **(Nasdaq: MCHP)** today announces the launch of the **MCPF1525 Power Module**, a highly integrated device with a 16V Vin buck converter that can deliver 25A per module, stackable up to 200A. The MCPF1525 enables higher power delivery within the same rack space and is combined with a programmable PMBus™ and I^2C controls. This device is designed to power the latest generation of PCIe® switches and high-performance compute MPU applications needed for AI deployments.

The MCPF1525 is packaged in an innovative vertical construction that maximizes board space efficiency and can offer up to a 40% board area reduction when compared to other solutions. The compact power module is approximately 6.8 mm x 7.65 mm x 3.82 mm, making it an optimal solution for space-constrained AI servers.

For increased reliability, the MCPF1525 includes multiple diagnostic functions reported over PMBus™, including over-temperature, over-current and over-voltage protection to minimize undetected faults. With a thermally enhanced package, the device is engineered to work within an operating junction temperature range of -40°C to +125°C. An on-board embedded EEPROM allows users to program the default power-up configuration.

"By leveraging Microchip's comprehensive solutions including PCIe® Switchtec™ technology, FPGAs, MPUs and Flashtec® NVMe® controllers, the MCPF1525 power module can help customers achieve the system efficiency, reliability and scalability required for high-performance data center and industrial computing applications," said Rudy Jaramillo, vice president of Microchip's analog power and interface division. "Seamless integration across Microchip's portfolio simplifies development and lowers risk, helping designers accelerate time-to-market."

The MCPF1525 features a customized integrated inductor for low conducted and radiated noise, enhancing signal integrity, data accuracy and reliability of high-speed computing, helping reduce repeated data transmissions that waste valuable system power and time.

Microchip offers a wide range of DC-DC power modules with input voltages from 5.5-70V, available in ultra-compact, rugged and thermally enhanced packaging designed to improve high power density. To learn more about Microchip's power modules, visit the **web page**.

Pricing and Availability

The MCPF1525 Power Module is available for $12.00 each in 1,000-unit quantities. You can **purchase** directly from Microchip or contact a Microchip **sales representative or authorized worldwide distributor**.

Resources

High-res images available through Flickr or editorial contact (feel free to publish):

- Application image: **www.flickr.com/photos/microchiptechnology/55040467447/sizes/l**

About Microchip Technology:
Microchip Technology Inc. is a broadline supplier of semiconductors committed to making innovative design easier through total system solutions that address critical challenges at the intersection of emerging technologies and durable end markets. Its easy-to-use development tools and comprehensive product portfolio supports customers throughout the design process, from concept to completion. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support and delivers solutions across the industrial, automotive, consumer, aerospace and defense, communications and computing markets. For more information, visit the Microchip website at **www.microchip.com**.

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