

Microchip Technology Unveils Industry's Fastest 1 Mb SPI Serial EEPROM; Completes SPI Line With 128- and 512-Kbit Devices

New Serial EEPROMs Offer Byte-Level Reads & Writes, Full Voltage Range Functionality and Operation up to 125 Degrees C

CHANDLER, Ariz .-- (BUSINESS WIRE)--

Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller and analog semiconductors, today announced the 25AA1024 and 25LC1024 (25XX1024)--the fastest (20 MHz) 1 Megabit (Mb) SPI serial EEPROM devices in the industry. The Company also announced the 25AA128, 25LC128, 25AA512 and 25LC512 (25XX128/512) 128 Kbit and 512 Kbit devices today, meaning Microchip now provides serial EEPROMs across the entire SPI memory-density range (1 Kbit - 1 Mbit). All of the new devices are specified to operate up to 125 degrees Celsius (125 C), and all provide the features and performance for which Microchip's entire portfolio of serial EEPROM devices is known, including over 1 million erase/write cycles and 200-year data retention.

With byte-level reads and writes, the 10 MHz 25XX128/512 devices and 20 MHz 25XX1024 EEPROM devices require no external memory, nor do they require sector erases prior to writes. This results in faster programming times, lower program voltages, fewer components and simplified system operations. Additionally, low operating and standby currents enable all of the new serial EEPROMs to consume very little power during operation and standby. The devices were created using the latest version of Microchip's unique PMOS Electrically Erasable Cell (PEEC), process technology, providing customers with the outstanding erase/write endurance for which Microchip is known, with full voltage-range operation from 1.8 to 5.5 V.

"Our customers have been asking for high-density, true SPI EEPROM devices for use in applications where serial Flash's limitations in voltage, temperature and sector operations are severe," said Randy Drwinga, vice president of Microchip's Memory Products Division. "Our entire SPI family delivers this performance. Customers can continue to count on Microchip for excellent endurance and data retention, as well as great service with reliable, on-time delivery."

Device-Specific Features

The 25XX512 and 25XX1024 are the only 512 Kbit and 1 Mb SPI serial EEPROMs specified to 125 degrees C. Additionally, these two devices feature a "deep power-down mode" command, which further reduces standby currents to conserve power when the EEPROM device is not in use. For applications still requiring some Flash commands, the 25XX1024

and 25XX512 devices offer sector erase, chip erase and read identification (ID) with four sectors per chip. In other words, the devices respond to both serial EEPROM and Flash commands, making them the most flexible devices in their class.

With extended temperature capabilities and low power draw, the 25XX128/512/1024 serial EEPROM devices are ideal for high- or low-voltage applications, as well as high-temperature applications, such as those found in consumer electronic (mobile phone earpieces), medical (hearing aids) and automotive applications.

Development Support

The 25XX128/512 and 25XX1024 serial EEPROM devices are supported by the same development tools that support all of Microchip's memory parts. These tools include the SEEVAL(R) 32 Serial EEPROM Designer's Kit (Part # DV243002), which enables quick and easy development of robust, reliable serial EEPROM-based applications. This kit significantly reduces the time required for system integration and hardware/software debug. It is available today at www.microchipdirect.com for just \$99.99 and includes:

- -- Microchip's Total Endurance(TM) software model
- -- SEEVAL 32 developer board and user-interface software
- -- Serial cable and power supply
- -- Serial EEPROM sample pack
- -- SEEVAL 32 Ouick Start Guide

The Total Endurance software is a powerful and easy-to-use tool for modeling and designing serial EEPROM applications. The software takes the guesswork out of determining the life of a serial EEPROM device in an embedded design. Design trade-off analysis that formerly consumed days or weeks can now be accomplished in minutes, with a level of accuracy that delivers a truly robust design.

Pricing and Availability

The 25XX128 devices are available in 8-pin PDIP, TSSOP, SOIC, SOIJ, 5 mm x 6 mm DFN and Rotated SOIC packages; at prices ranging from \$0.90 - \$1.21 each in 10,000-unit quantities, depending upon device and package option. The 25XX512 serial EEPROM devices are available in 8-pin PDIP, SOIC, SOIJ and 5 mm x 6 mm DFN packages; at prices ranging from \$1.44 - \$1.75 each in 10,000-unit quantities, depending upon device and package option. The 25XX1024 serial EEPROMs are offered in 8-pin PDIP, SOIJ and 5 mm x 6 mm DFN packages; at prices ranging from \$2.43 - \$2.73 each in 10,000-unit quantities, again depending upon device and package option.

Samples of all the new devices are available today at http://sample.microchip.com, and volume production orders can be placed today at http://sample.microchip.com, and volume production orders can be placed today at http://sample.microchip.com, and http://sample.microchip.com.

For further information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at www.microchip.com/25XX128, www.microchip.com/25XX1024, respectively.

Microchip Customer Support

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About Microchip Technology

Microchip Technology Inc. (NASDAQ: MCHP) is a leading provider of microcontroller and analog semiconductors, providing low-risk product development, lower total system cost and faster time to market for thousands of diverse customer applications worldwide. Headquartered in Chandler, Ariz., Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip website at www.microchip.com.

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