

Microchip Technology Launches Stand-Alone Serial SRAM Devices

8- and 32-KByte Devices Increase Design Flexibility, Reduce Costs & Time to Market

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller and analog semiconductors, today announced a family of 8- and 32-KByte stand-alone serial SRAM devices, which increase a system's available RAM memory by adding small, inexpensive external devices. The [23A640](#), [23K640](#) (23X640), [23A256](#) and [23K256](#) (23X256) devices feature a familiar, industry-standard SPI interface and enable increased design flexibility, while reducing design and production costs, and time to market.

Many embedded applications require volatile RAM for temporary data storage, or for use as a scratchpad, for bulk processing and for math algorithms. In many cases, this RAM is embedded within the microcontroller (MCU). In the past, the most viable way to add more RAM was to buy a larger MCU, which could add unnecessary feature overhead and increase design costs. The only alternative was to add large, parallel-access RAM devices that use up large numbers of I/O pins. Microchip's serial SRAM devices provide a simple, inexpensive way for designers to add more RAM to their application while keeping the same MCU, or even using a smaller one if replacing parallel external RAM with serial RAM. Additionally, the devices feature a bus speed of 20 MHz for fast access, and low operating and standby currents to help extend battery life. They are available in 8-pin packages but only use four MCU pins, compared with 16 to 24 pins for parallel RAM.

"Microchip is pleased to offer a high-performance, low-cost option for designers wanting to easily and inexpensively add more memory to their applications," said Randy Drwinga, vice president of Microchip's Memory Products Division. "These devices show our commitment to finding new, creative solutions that help our customers save time and money, while enabling them to enjoy high performance, including the immediate writes, infinite endurance and low power draw that these serial SRAM devices provide."

The 23A640 and 23A256 devices have an operating voltage range of 1.7 - 1.95V. The 23K640 and 23K256 devices have an operating voltage range of 2.7 - 3.6V. All of the devices are well suited for applications involving bulk data transfers; DSP and other math algorithms (e.g. FFT and DFT); audio/video, speech encoding, VoIP and Internet applications. Specific examples include applications in the consumer (Internet appliances, Internet radios and printers); industrial (utility meters, vending machines); and medical markets (portable patient-monitoring devices), among others.

Device Part Numbers, Pricing & Availability

Microchip's serial SRAM devices are all available in 8-pin SOIC, PDIP and TSSOP packages. In 10,000-unit quantities, the 23X640 devices are priced at \$0.48 each for the

SOIC package; \$0.50 each for the PDIP package, and \$0.51 each for the TSSOP package. The 23X256 devices are priced in 10,000-unit quantities at \$0.90 each for the SOIC package; \$0.91 each for the PDIP package, and \$0.93 each for the TSSOP package.

Samples are available today at <http://sample.microchip.com>, and volume-production quantities can be ordered today at <http://www.microchipdirect.com>. For further information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at <http://www.microchip.com/SRAM>.

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 <http://www.microchip.com>.

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