



**Market overview**

- ..... Careers
- ..... RTOS
- ..... Players & Products Look-up

**Publications**

- ..... Books
- ..... Magazines
- ..... Faq
- ..... Websites

**Technology**

- ..... Research
- ..... Terminology
- ..... Organisations

**Event Calendar**

- ..... Europe
- ..... North America
- ..... Elsewhere

**VirtualPressRoom™**

- ..... Recent news
- ..... Search news
- ..... Submit news
- ..... About

## Ramtron announces high-speed and power flexible 1-megabit serial F-RAM

**Publication date on this website:** Tuesday, September 23, 2008  
**Company:** Ramtron  
**Category:** [Press Releases](#) : [Active Components](#)



**Summary:**

First in a family of new serial and parallel high-speed F-RAM devices from Ramtron

Ramtron International Corporation (Nasdaq: RMTR), a leading developer and supplier of nonvolatile ferroelectric random access memory (F-RAM) and integrated semiconductor products, has announced the first device in a family of new F-RAM products that offer high-speed read/write performance, low voltage operation, and optional device features. The first device in Ramtron's V-Family of F-RAM products is the FM25V10, a 1-megabit (Mb), 2.0 to 3.6-volt, serial peripheral interface (SPI) nonvolatile RAM in an 8-pin SOIC package that features fast access, NoDelay™ writes, 1E14 read/write cycles, and low power consumption. The FM25V10 is an ideal alternative to 1Mb serial Flash and serial EEPROM memory in industrial control, metering, medical, automotive, military, gaming, and computing applications, among others. Additional SPI, I2C, and parallel interface V-Family F-RAM products are planned for introduction in 2008.

**Full Text:**

Ramtron International Corporation (Nasdaq: RMTR), a leading developer and supplier of nonvolatile ferroelectric random access memory (F-RAM) and integrated semiconductor products, has announced the first device in a family of new F-RAM products that offer high-speed read/write performance, low voltage operation, and optional device features. The first device in Ramtron's V-Family of F-RAM products is the FM25V10, a 1-megabit (Mb), 2.0 to 3.6-volt, serial peripheral interface (SPI) nonvolatile RAM in an 8-pin SOIC package that features fast access, NoDelay™ writes, 1E14 read/write cycles, and low power consumption. The FM25V10 is an ideal alternative to 1Mb serial Flash and serial EEPROM memory in industrial control, metering, medical, automotive, military, gaming, and computing applications, among others. Additional SPI, I2C, and parallel interface V-Family F-RAM products are planned for introduction in 2008.

"Ramtron's V-Family of F-RAM products addresses our customer demand for lower operating voltage and integrated features that reduce board space as well as assembly and device costs," explains Ramtron Marketing Manager, Duncan Bennett. "Our device performance capabilities have been expanded by our high-density F-RAM manufacturing process, allowing our V-Family of F-RAM products to operate over a much wider voltage range."

**About the FM25V10**

Unlike serial Flash memory or serial EEPROM, the FM25V10 performs write operations at bus speed without write delays, allowing data to be written immediately to the memory array. The next bus cycle can start without the need for data polling. Compared to serial Flash and serial EEPROM, the FM25V10 also offers greater than eight orders of magnitude more endurance and consumes less than one-tenth the active power.

High-performance F-RAM capabilities make the FM25V10 ideal for nonvolatile memory applications that require frequent or rapid data writes or low power operation. Applications range from high frequency data collection where a high number of write cycles are critical, to demanding industrial controls where the long write time of serial Flash or EEPROM is impractical due to potential data loss.

The FM25V10 has a read-only device ID and can be ordered with a unique serial number and/or system reset option. The device ID provides information about the manufacturer, product density, and product revision of the device. The unique serial number allows the host to have an ID that is different from any other host in the world. The system reset option eliminates the need for an external system reset component in the system.

The FM25V10 operates over the industrial temperature range of -40°C to +85°C, and consumes only 3 milliamps while running at a 40MHz SPI clock rate, 90 microamps during standby, and 5 microamps during sleep mode. The FM25V10 offers an active power consumption of 38 microamps per MHz, which is an order of magnitude lower current than similar serial Flash or EEPROM products.

**About the F-RAM V-Family**

Manufactured on the proven 130nm CMOS manufacturing process developed by Ramtron and Texas Instruments, the Ramtron V-Family of F-RAM products will include a variety of parallel, serial I2C and SPI memories. The advanced manufacturing process enables improved device specifications and increased feature sets. Additional Ramtron V-Family products planned for introduction before the end of 2008 will feature additional SPI product densities, as well as I2C and parallel interfaces. All serial F-RAM V-Family products can be equipped with optional device features including unique serial numbering and a system reset option.

**Pricing and availability**

Samples of the FM25V10 are available now in a RoHS-compliant, 8-pin SOIC package. Unit pricing begins at \$6.51 in high volume.

###

**About Ramtron**

Ramtron International Corporation, headquartered in Colorado Springs, Colorado, is a fabless semiconductor company that designs, develops and markets specialised semiconductor memory and integrated semiconductor solutions used in a wide range of product applications and markets worldwide. For more information, visit [www.ramtron.com](http://www.ramtron.com).

"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995: Statements herein that are not historical facts are "forward-looking statements" involving risks and uncertainties, including but not limited to: the effect of global

**V V**

[Myspace Background](#)  
 Unlimited Images on your Desktop Wallpapers, From Nation. Get em'.  
[Nation.com](#)

[Pimp My Profile \(Free\)](#)  
 Layouts, Backgrounds & Graphics!  
 Download Them All Now (100% Free)  
[Backgrounds-and-Layout](#)

[Pimp My Profile \(Free\)](#)  
 Layouts, Backgrounds, & Graphics:  
 Download them Now! - (100% Free)  
[www.Webfetti.com](#)

[Free Custom Layouts @](#)  
 100% Free Layouts & Backgrounds  
 Download Now to Pimp Your Profile!  
[Custom-MySpace.com](#)

economic conditions, shifts in supply and demand, market acceptance, the rate at which design-ins result in actual customer orders and sales, the impact of competitive products and pricing, product development, commercialization and technological difficulties, and capacity and supply constraints. Please refer to Ramtron's Securities and Exchange Commission filings for a discussion of such risks.

Please send reader enquiries to:

Ramtron International Corporation  
Tel: +1 514 871 2447 x 208  
Fax: +1 514 394 0661  
framinfo@ramtron.com  
mcuinfo@ramtron.com

Ref: RAM068  
Words: 570

This press release and associated images (in high-resolution compressed jpeg format) can be downloaded from [www.humbugpr.com](http://www.humbugpr.com)

**Contact:**

Media contacts:

Chris Wray, Marketing Communications Specialist  
Tel: +1 719 481 7182.  
Email: [chris.wray@ramtron.com](mailto:chris.wray@ramtron.com)

Keith Mason, Humbug PR  
Tel: +44 (0)1305 849403.  
Email: [keith.mason@humbugpr.com](mailto:keith.mason@humbugpr.com)

Ann Williams, Humbug PR  
Tel: +44 (0)1305 849402.  
Email: [ann.williams@humbugpr.com](mailto:ann.williams@humbugpr.com)

Technologies, Methods, Tools, Products and Services for **Embedded Systems To Be** [www.es2.be](http://www.es2.be)

© 2007 Dedicated Systems All Rights Reserved [Privacy statement](#).