

Announcing the Highest 4-Megabit Density FRAM with Quadruple the Memory Capacity

RAMTRON

Based on groundbreaking 130nm process developed by Texas Instruments in partnership with Ramtron.

The FM22L16 is the semiconductor industry's highest density FRAM, a 4-Mbit, 3V, parallel non-volatile RAM that breaks new technological ground. It is manufactured on TI's advanced 130nm CMOS process.

The FM22L16 is a 256Kx16 nonvolatile memory that reads and writes like a standard SRAM. A ferroelectric random access memory or FRAM is nonvolatile, which means that data is retained after power is removed. It provides data retention for over 10 years while eliminating the reliability concerns, functional disadvantages and system design complexities of battery-backed SRAM (BBSRAM). Fast write timing and high write endurance make FRAM superior to other types of memory.

The FM22L16 includes a low voltage monitor that blocks access to the memory array when VDD drops below a critical threshold. The memory is protected against an inadvertent access and data corruption under this condition. The device also features software-controlled write protection. The memory array is divided into 8 uniform blocks, each of which can be individually write protected.

FEATURES

- Fast access: 55ns access time and 110ns cycle time
- NoDelay™ writes: reads and writes at bus speed
- Virtually unlimited read/write cycles: at least 1e14 (100-trillion) writes
- Low power consumption: draws 18mA at full speed, 150µA in standby, and below 5µA in ultra low current sleep mode

APPLICATIONS

- Industrial control systems such as robotics, network and data storage applications
- Multi-function printers
- Auto navigation systems



TO BUY THIS PRODUCT OR
DOWNLOAD DATA GO TO

WWW.FUTURE-MAG.COM/061102

Boards Available!

WWW.FUTURE-MAG.COM/070403