1K Bit X22C12 256 x 4

Nonvolatile Static RAM

FEATURES

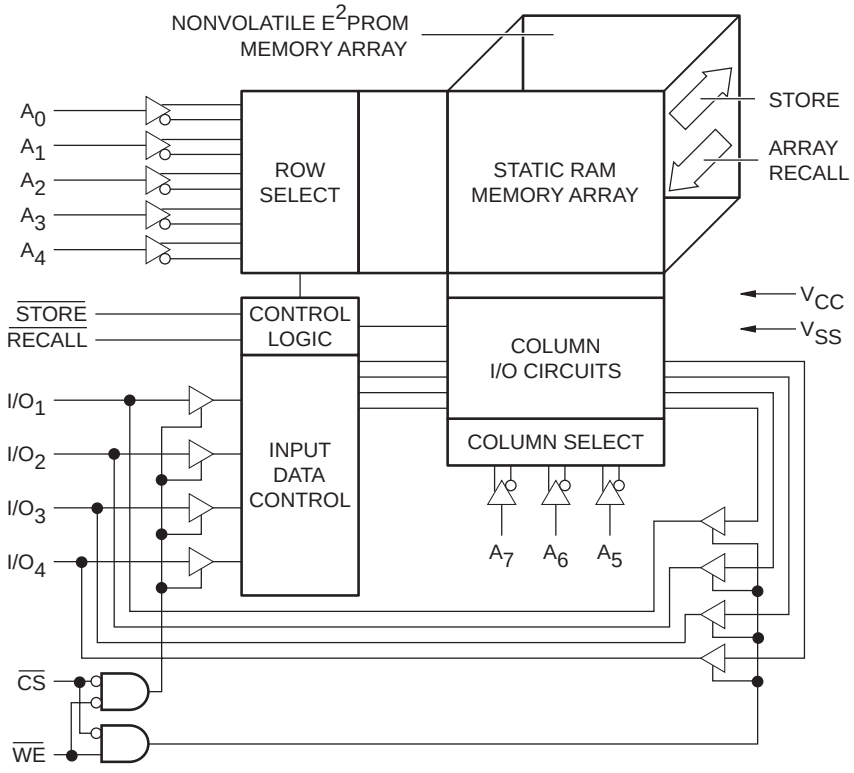
- **High Performance CMOS**
  - **—150ns RAM Access Time**
- **High Reliability**
  - **—Store Cycles: 1,000,000**
  - **—Data Retention: 100 Years**
- **Low Power Consumption**
  - **—Active: 40mA Max.**
  - **—Standby: 100μA Max.**
- **Infinite Array Recall, RAM Read and Write Cycles**
- **Nonvolatile Store Inhibit: V_{CC} = 3.5V Typical**
- **Fully TTL and CMOS Compatible**
- **JEDEC Standard 18-Pin 300-mil DIP**
- **100% Compatible with X2212**
  - **—With Timing Enhancements**

DESCRIPTION

The X22C12 is a 256 x 4 CMOS NOVRAM featuring a high-speed static RAM overlaid bit-for-bit with a nonvolatile E^2PROM. The NOVRAM design allows data to be easily transferred from RAM to E^2PROM (STORE) and from E^2PROM to RAM (RECALL). The STORE operation is completed within 5ms or less and the RECALL is completed within 1μs.

Xicor NOVRAMs are designed for unlimited write operations to the RAM, either RECALLs from E^2PROM or writes from the host. The X22C12 will reliably endure 1,000,000 STORE cycles. Inherent data retention is greater than 100 years.

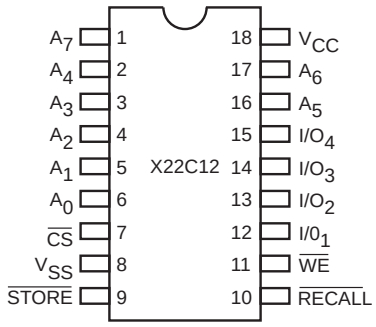
FUNCTIONAL DIAGRAM



3817 FHD F01

PIN CONFIGURATION

PLASTIC DIP
CERDIP



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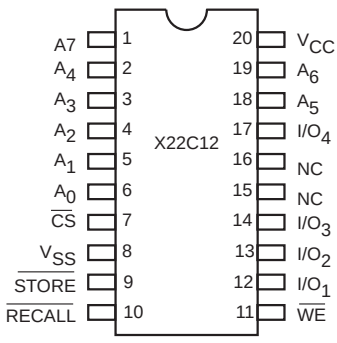

3815 FHD F10.1