

CAT28F002

2 Megabit CMOS Boot Block Flash Memory

FEATURES

- Fast Read Access Time: 120/150/200 ns
- On-Chip Address, Data Latches, Programming and Erase Algorithms
- Blocked Architecture:
 - One 16 KB Boot Block
 - Two 8 KB Parameter Blocks
 - One 96 KB Main Block
 - One 128 KB Main Block
- Low Power CMOS Operation
- 12.0V \pm 5% Programming and Erase Voltage
- Electronic Signature
- 100,000 Program/Erase Cycles and 10 Year Data Retention
- JEDEC Standard Pinouts:
 - 32-pin DIP
 - 32-pin PLCC
 - 32-pin TSOP
 - 40-pin TSOP, 44-pin PSOP
- High Speed Programming
- Commercial and Industrial Temperature Ranges

DESCRIPTION

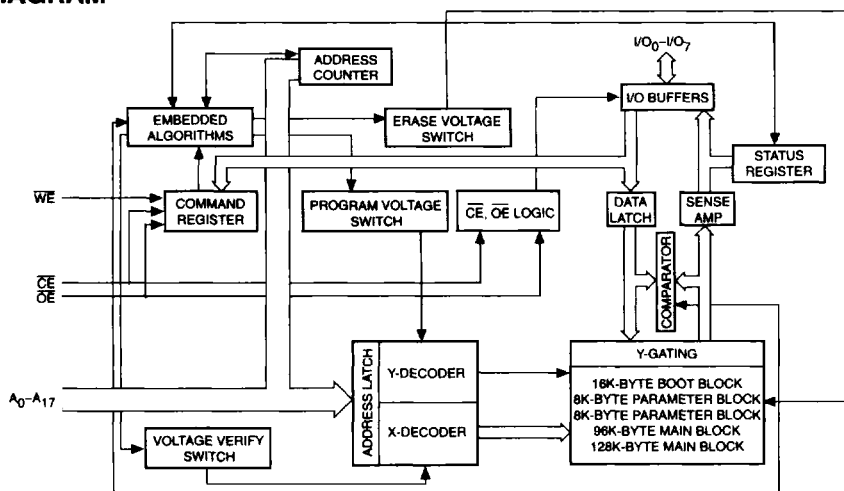
The CAT28F002 is a high speed 256K X 8-bit electrically erasable and reprogrammable Flash memory ideally suited for applications requiring in-system or after sale code updates.

The CAT28F002 has a blocked architecture with one 16 KB Boot Block, two 8 KB Parameter Blocks, one 96 KB Main Block and one 128 KB Main Block. The Boot Block section optionally can be at the top or bottom of the memory map. The Boot Block section includes a reprogramming write lock out feature to guarantee data integrity. It is designed to contain secure code which will bring up the system minimally and download code to other locations of CAT28F002.

The CAT28F002 is designed with a signature mode which allows the user to identify the IC manufacturer and device type. The CAT28F002 is also designed with on-Chip Address Latches, Data Latches, Programming and Erase Algorithms.

The CAT28F002 is manufactured using Catalyst's advanced CMOS floating gate technology. It is designed to endure 100,000 program/erase cycles and has a data retention of 10 years. The device is available in JEDEC approved 32-pin PDIP, PLCC or TSOP packages, 40-pin TSOP packages and 44-pin PSOP packages.

BLOCK DIAGRAM



28F002 F01