KEY FEATURES

- **Single Power Supply Operation**
  - Read, program and erase operations from 2.7 to 3.6 volts
  - Ideal for battery-powered applications
- **High Performance**
  - 70, 80, 90 and 120 ns access time versions for full voltage range operation
- **Ultra-low Power Consumption (Typical/ Maximum Values)**
  - Automatic sleep/standby current: 0.5/5.0 µA
  - Read current: 9/16 mA (@ 5 MHz)
  - Program/erase current: 20/30 mA
- **Top and Bottom Boot Block Versions**
  - Provide one 8 KW, two 4 KW, one 16 KW and sixty-three 32 KW sectors
- **Secured Sector**
  - An extra 128-word, factory-lockable sector available for an Electronic Serial Number and/or additional secured data
- **Sector Protection**
  - Allows locking of a sector or sectors to prevent program or erase operations within that sector
  - Temporary Sector Unprotect allows changes in locked sectors
- **Fast Program and Erase Times (typicals)**
  - Sector erase time: 0.5 sec per sector
  - Chip erase time: 32 sec
  - Word program time: 11 µs
  - Accelerated program time per word: 7 µs
- **Automatic Erase Algorithm Preprograms and Erases Any Combination of Sectors or the Entire Chip**
- **Automatic Program Algorithm Writes and Verifies Data at Specified Addresses**
- **Compliant With Common Flash Memory Interface (CFI) Specification**
  - Flash device parameters stored directly on the device
  - Allows software driver to identify and use a variety of current and future Flash products
- **Minimum 100,000 Write Cycles per Sector**
- **Compatible With JEDEC standards**
  - Pinout and software compatible with single-power supply Flash devices
  - Superior inadvertent write protection
- **Data# Polling and Toggle Bits**
  - Provide software confirmation of completion of program and erase operations
- **Ready/Busy (RY/BY#) Pin**
  - Provides hardware confirmation of completion of program and erase operations
- **Write Protect Function (WP#/ACC pin)**
  - Allows hardware protection of the first or last 32 KW of the array, regardless of sector protect status
- **Acceleration Function (WP#/ACC pin)**
  - Provides accelerated program times
- **Erase Suspend/Erase Resume**
  - Suspends an erase operation to allow reading data from, or programming data to, a sector that is not being erased
  - Erase Resume can then be invoked to complete suspended erasure
- **Hardware Reset Pin (RESET#) Resets the Device to Reading Array Data**
- **Space Efficient Packaging**
  - 48-pin TSOP and 48-ball FBGA packages

LOGIC DIAGRAM