



Intel® Advanced Boot Block Flash Memory (B3)

28F008/800B3, 28F016/160B3, 28F320B3, 28F640B3

Datasheet

Product Features

- Flexible SmartVoltage Technology
 - 2.7 V – 3.6 V read/program/erase
 - 12 V V_{PP} fast production programming
- 1.65 V – .5 V or 2.7 V – 3.6 V I/O option
 - Reduces overall system power
- High Performance
 - 2.7 V – 3.6 V: 70 ns max access time
- Optimized Block Sizes
 - Eight 8-KB blocks for data, top or bottom locations
 - Up to 127 x 64-KB blocks for code
- Block Locking
 - V_{CC} -level control through Write Protect WP#
- Low Power Consumption
 - 9 mA typical read current
- Absolute Hardware-Protection
 - V_{PP} = GND option
 - V_{CC} lockout voltage
- Extended Temperature Operation
 - -40 °C to +85 °C
- Automated Program and Block Erase
 - Status registers
- Intel® Flash Data Integrator Software
 - Flash Memory Manager
 - System Interrupt Manager
 - Supports parameter storage, streaming data (for example, voice)
- Extended Cycling Capability
 - Minimum 100,000 block erase cycles
- Automatic Power Savings Feature
 - Typical I_{CCS} after bus inactivity
- Standard Surface Mount Packaging
 - 48-Ball CSP packages
 - 40-Lead and 48-Lead TSOP packages
- Density and Footprint Upgradeable for common package
 - 8-, 16-, 32-, and 64-Mbit densities
- ETOX™ VIII (0.13 μ m) Flash Technology
 - 16-Mbit and 32-Mbit densities
- ETOX™ VII (0.18 μ m) Flash Technology
 - 16-, 32-, and 64-Mbit densities
- ETOX™ VI (0.25 μ m) Flash Technology
 - 8-, 16-, and 32-Mbit densities
- Do not use the x8 option for new designs

The Intel® Advanced Boot Block Flash Memory (B3) device, manufactured on the Intel 0.13 μ m and 0.18 μ m technologies, is a feature-rich solution at a low system cost. The B3 device in x16 is available in 48-lead TSOP and 48-ball CSP packages. The x8 option of this product family is available only in 40-lead TSOP and 48-ball μ BGA* packages. For additional information about this product family, see the Intel website: <http://www.intel.com/design/flash>.

Notice: This specification is subject to change without notice. Verify with your local Intel sales office that you have the latest datasheet before finalizing a design.

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