SHARP®

Integrated Circuits Group

APPLICATIONS:
- Set Top Box
- Pager

LH28F004SCT 4M (512K × 8) SmartVoltage Flash Memory

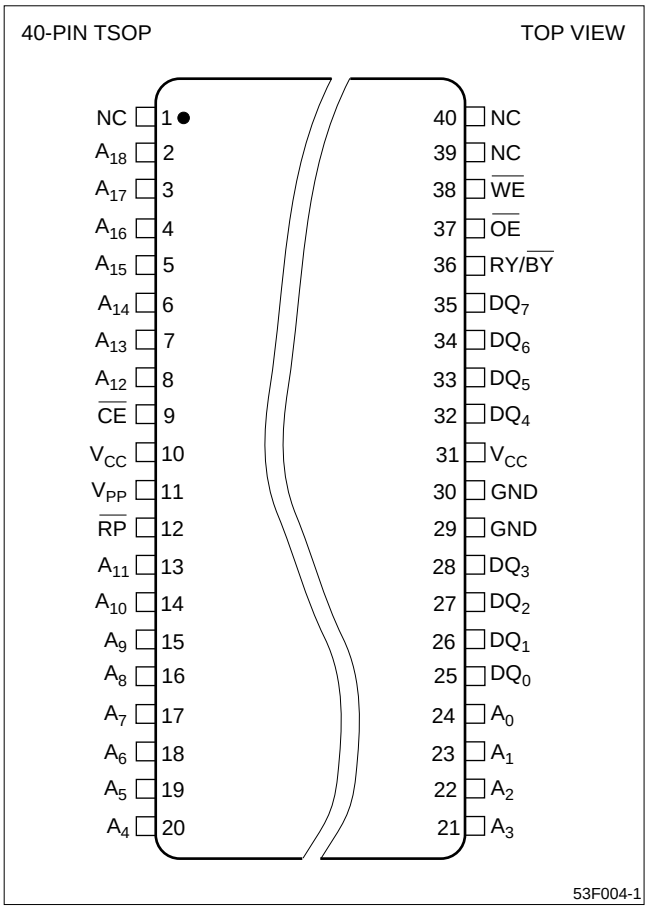
FEATURES

- SmartVoltage technology
  - 2.7 V (Read-Only), 3.3 V or 5 V V_{CC}
  - 3.3 V, 5 V or 12 V V_{PP}
- High-performance
  - 85 ns read access time
- Enhanced automated suspend options
  - byte write suspend to read
  - block erase suspend to byte write
  - block erase suspend to read
- Enhanced data protection features
  - absolute protection with V_{PP} = GND
  - flexible block locking
  - block erase/byte write lockout during power transitions
- Industry-standard packaging
  - 40-pin TSOP
- SRAM-compatible write interface
- High-density symmetrically-blocked architecture
  - eight 64K erasable blocks
- Extended cycling capability
  - 100,000 block erase cycles
  - 0.8 million block erase cycles/chip
- Low power management
  - deep power-down mode
  - Automatic power savings mode decreases I_{CC} in static mode
- Automated byte write and block erase
  - Command user interface
  - status register
- ETOX™ nonvolatile flash technology
- Not designed or rated as radiation hardened

DESCRIPTION

SHARP's LH28F004SCT Flash memory with SmartVoltage technology is a high-density, low-cost, nonvolatile, read/write storage solution for a wide range of applications. Its symmetrically-blocked architecture, flexible voltage and extended cycling provide for high flexible component suitable for resident flash arrays, SIMMs and memory cards. Its enhanced suspend capabilities provide for an ideal solution for code and data storage applications. For secure code storage applications, such as networking, where code is either directly executed out of flash or downloaded to DRAM, the LH28F004SCT offers three levels of protection: absolute protection with V_{PP} at GND, selective hardware block locking, or flexible software block locking. These alternatives give designers ultimate control of their security needs.

40-PIN TSOP PINOUT



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