

4K 5.0V CMOS Serial EEPROM Product Brief

FEATURES

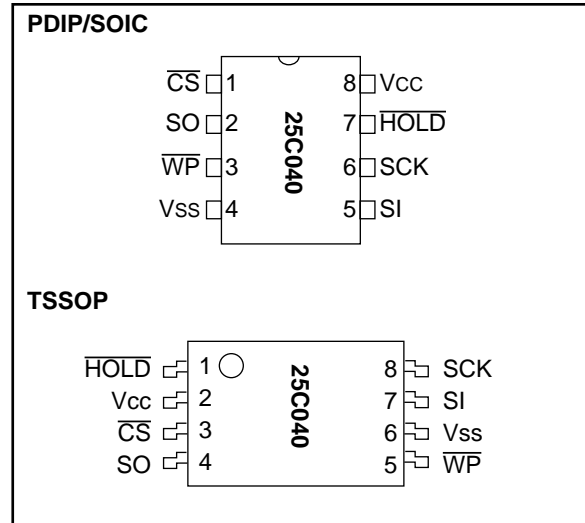
- 3 MHz Clock Rate
- Single 5V supply
- Low Power CMOS Technology
 - Max Write Current: 5 mA
 - Read Current: 500 μ A at 5V, 3MHz
 - Standby Current: 5 μ A
- 512 x 8 Organization
- 16 Byte Page
- Self-timed ERASE and WRITE Cycles
- Block Write Protection
 - Protect none, 1/4, 1/2, or all of Array
- Built-in Uncommanded Write Protection
 - Power On/Off Data Protection Circuitry
 - Write Enable Latch
 - Write Protect Pin
- High Reliability
 - Endurance: 10M cycles guaranteed
 - Data Retention: >200 years
 - ESD protection: >4000 V
- 8-pin PDIP, SOIC, and TSSOP.
- Temperature Ranges Supported
 - Automotive (E): -40°C to +125°C

DESCRIPTION

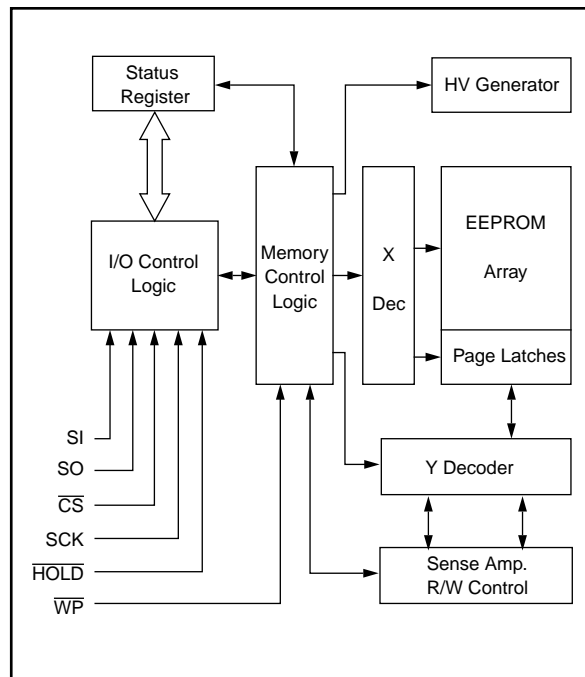
The Microchip Technology Inc. 25C040 is a 4K bit Serial Electrically Erasable PROM. The memory is accessed via a simple Serial Peripheral Interface (SPI™) compatible serial bus. The bus signals required are a clock input (SCK) plus separate data in (SI) and data out (SO) lines. Access to the device is controlled through a chip select (\overline{CS}) input, allowing any number of devices to share the same bus.

There are two other inputs that provide the end user with additional flexibility. Communication to the device can be paused via the hold pin (HOLD). While the device is paused, transitions on its inputs will be ignored, allowing the host to service higher priority interrupts. Also write operations to the device can be disabled via the write protect pin (\overline{WP}). This can be used to limit end user write capability to the array.

PACKAGE TYPES



BLOCK DIAGRAM



SPI is a trademark of Motorola.

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