

FEATURES

- 1MHz Clock Rate
- 512 X 8 Bits
 - 4 Byte page mode
- Low Power CMOS
 - 2µA Standby Current
 - 3mA Active Write Current
- 3V to 5.5V Power Supply
- Block Write Protection
 - Protected 1/4, 1/2 or all E²PROM array
- Built-In Inadvertent Write Protection
 - Power-Up/Power-Down protection circuitry
 - Write Latch
 - Write Protect Pin
- Self-Timed Write Cycle
 - 5mS Write Cycle Time (Typical)
- High Reliability
 - Endurance: 100,000 cycles per byte
 - Data retention: 10 years
 - ESD protection: 2000V on all pins

OVERVIEW

The XL25040 is a CMOS 4,096 bit serial E²PROM, internally organized as 512 x 8. It features a serial interface and software protocol allowing operation on a simple three wire bus. The bus signals 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 (CS) input, allowing any number of devices to share the same bus.

The XL25040 also features two additional inputs that provide the end user with added flexibility. By asserting the HOLD input, the XL25040 will ignore transitions on its inputs, thus allowing the host service higher priority interrupts. The WP input can be used as a hardware input to the XL25020 disabling all write attempts; thus providing a mechanism for limiting end user capability of altering the memory.

The XL25020 provides a minimum endurance of 100,000 cycles per byte and a minimum data retention of 10 years.

BLOCK DIAGRAM

