

16K 2.5V Cascadable CMOS Serial EEPROM

FEATURES

- Single supply with operation down to 2.5V
- Low power CMOS technology
 - 1 mA active current typical
 - 5 μ A standby current typical at 3.0V
- Functional device select lines A0, A1, A2 for up to eight devices on the same bus
- Two wire serial interface bus, I²C compatible
- Schmitt trigger, filtered inputs for noise suppression
- Output slope control to eliminate ground bounce
- 100 KHz (2.5V) and 400 KHz (5V) compatibility
- Self-timed write cycle (including auto-erase)
- Page-write buffer for up to 16 bytes
- 2 ms typical write cycle time for page-write
- Hardware write-protect for the entire memory
- Can be operated as serial ROM
- ESD protection > 4,000V
- 1,000,000 ERASE/WRITE cycles (typical)
- Data retention > 40 years
- 8 pin DIP, 8-lead SOIC packages
 - Commercial: 0°C to + 70°C
 - Industrial: -40°C to + 85°C

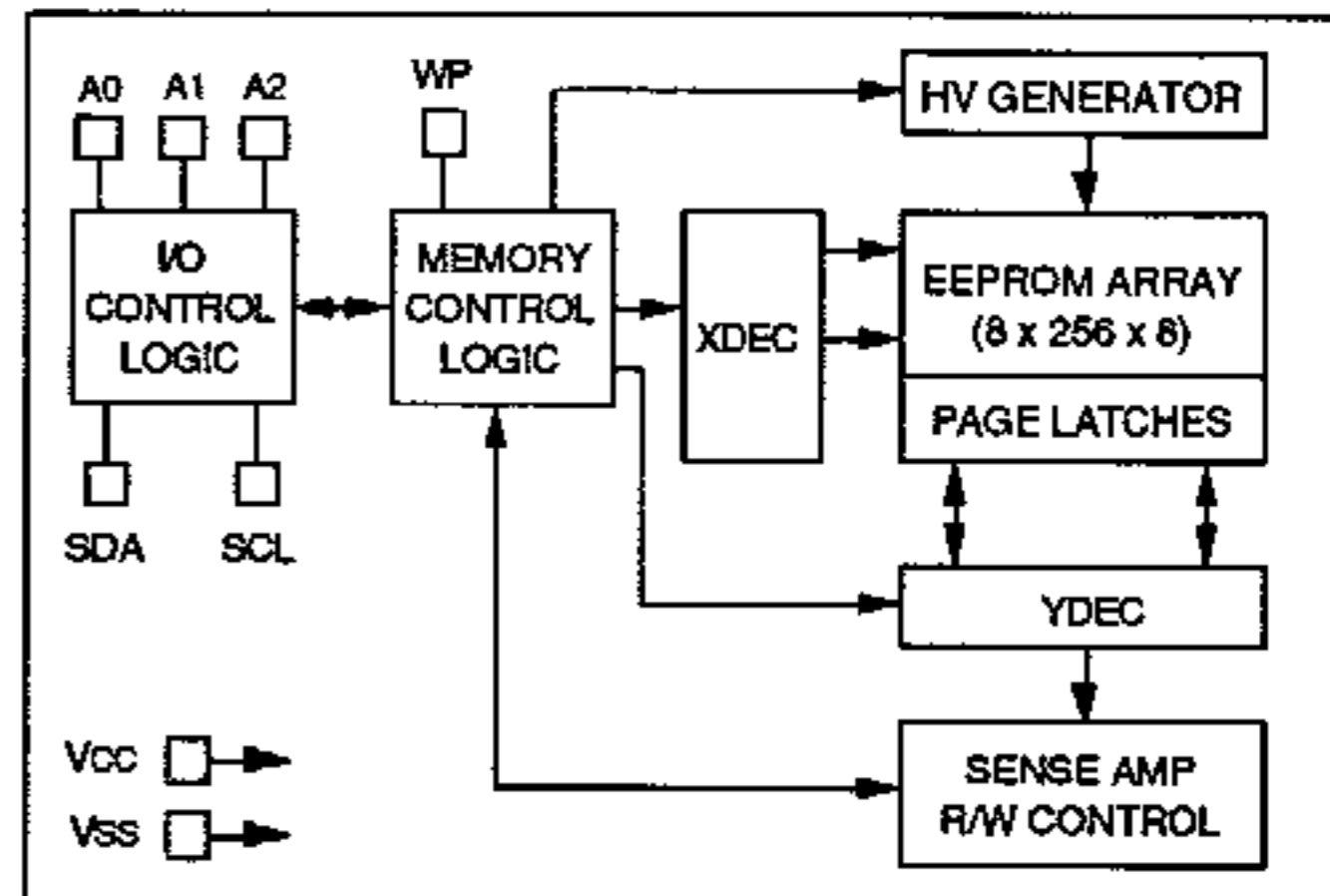
DESCRIPTION

The Microchip Technology Inc. 24LC164 is a cascadable 16K bit Electrically Erasable PROM. The device is organized as 8 blocks of 256 x 8 bit memory with a two wire serial interface. Low voltage design permits operation down to 2.5 volts with typical standby and active currents of only 5 μ A and 1 mA respectively. The 24LC164 also has a page-write capability for up to 16 bytes of data. The 24LC164 is available in the standard 8-pin DIP and 8-lead surface mount SOIC packages.

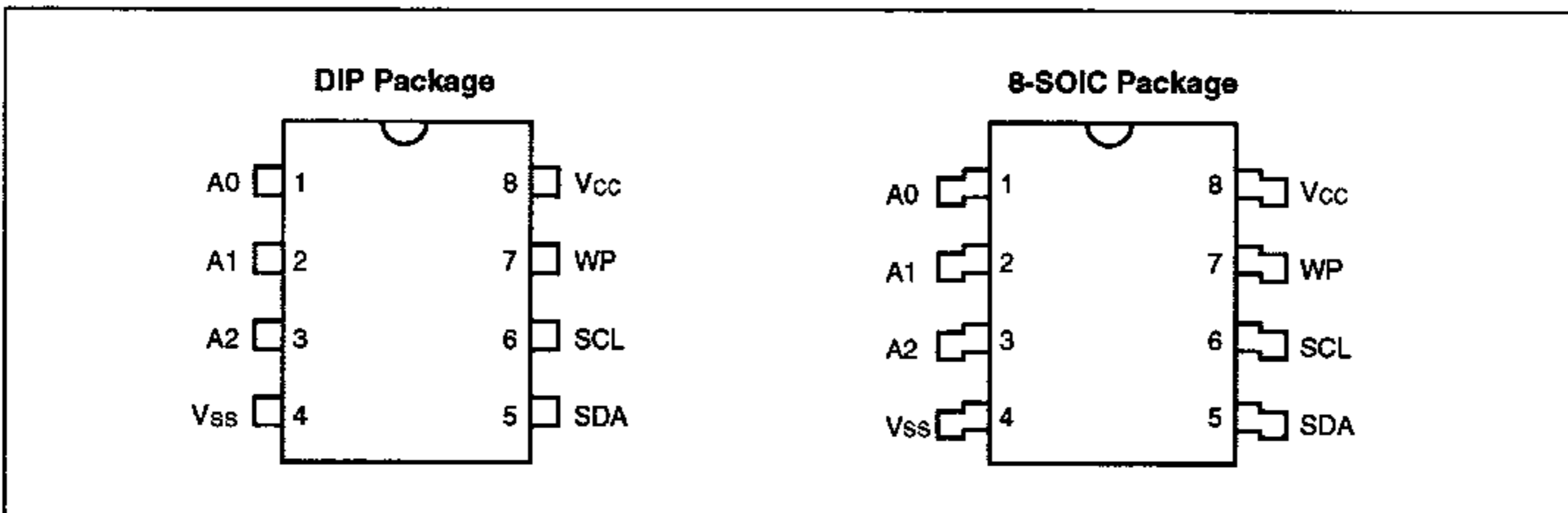
The three select pins, A0, A1, and A2, function as chip select inputs and allow up to eight devices to share a common bus, for up to 128K bits total system EEPROM.

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BLOCK DIAGRAM



24LC164 PIN CONFIGURATION



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