

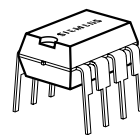
## 4 Kbit (512 × 8 bit) Serial CMOS EEPROMs, Serial Peripheral Interface (SPI) Synchronous Bus

SLx 25C040

### Preliminary

#### Features

- Serial peripheral interface (SPI) compatible, supports SPI Modes 0,0 and 1,1
- Page Protection Mode™ for protecting the EEPROM against unintended data changes (SLx 25C040.../P types only)
- Low power CMOS
- Clock frequency up to 2.1 MHz
- $V_{CC} = 2.7$  to 5.5 V operation
- 8-byte page mode
- Write protect ( $\overline{WP}$ ) pin and write disable instruction for both hardware and software data protection
- Block write protection
  - Protect 1/4, 1/2 or entire array
- Filtered inputs for noise suppression with Schmitt trigger
- High programming flexibility
  - Internal programming voltage
  - Self timed write cycle including erase (5 ms typical) for up to 8 bytes
  - Byte-write and page-write programming, between 1 and 8 bytes
- High reliability
  - Endurance  $10^6$  cycles<sup>1)</sup>
  - Data retention 40 years<sup>1)</sup>
  - ESD protection > 4000 V on all pins
- 8 pin DIP/DSO packages
- Available for extended temperature ranges
  - Industrial: – 40 °C to + 85 °C
  - Automotive: – 40 °C to + 125 °C  
(– 40 °C to +150 °C on request)



P-DIP-8-4



P-DSO-8-3

<sup>1)</sup> Values are temperature dependent, for further information please refer to your Siemens sales office.