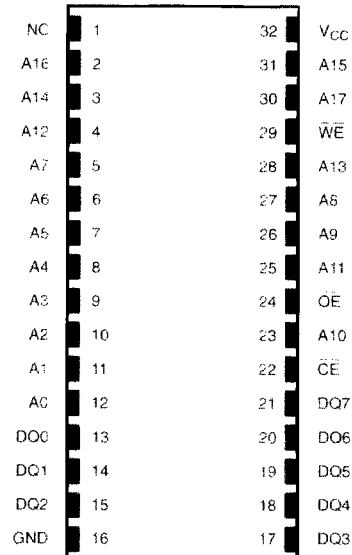


FEATURES

- 10 years minimum data retention in the absence of external power
- Data is automatically protected during power loss
- Unlimited write cycles
- Low-power CMOS operation
- Read and write access times as fast as 70 ns
- Lithium energy source is electrically disconnected to retain freshness until power is applied for the first time
- Full $\pm 10\%$ V_{CC} operating range (DS1249Y)
- Optional $\pm 5\%$ V_{CC} operating range (DS1249AB)
- Optional industrial temperature range of -40°C to $+85^{\circ}\text{C}$, designated IND
- JEDEC standard 32-pin DIP package

PIN ASSIGNMENT



32-PIN ENCAPSULATED PACKAGE
740 MIL EXTENDED

PIN DESCRIPTION

A0 – A17	– Address Inputs
DQ0 – DQ7	– Data In/Data Out
\overline{CE}	– Chip Enable
\overline{WE}	– Write Enable
\overline{OE}	– Output Enable
V_{CC}	– Power (+5V)
GND	– Ground
NC	– No Connect

DESCRIPTION

The DS1249 2048K Nonvolatile SRAMs are 2,097,152-bit, fully static, nonvolatile SRAMs organized as 262,144 words by 8 bits. Each NV SRAM has a self-contained lithium energy source and control circuitry which constantly monitors V_{CC} for an out-of-tolerance condition. When such a condition occurs, the

lithium energy source is automatically switched on and write protection is unconditionally enabled to prevent data corruption. There is no limit on the number of write cycles which can be executed and no additional support circuitry is required for microprocessor interfacing.