

DALLAS SEMICONDUCTOR

DS2012 4096 x 9 FIFO Chip

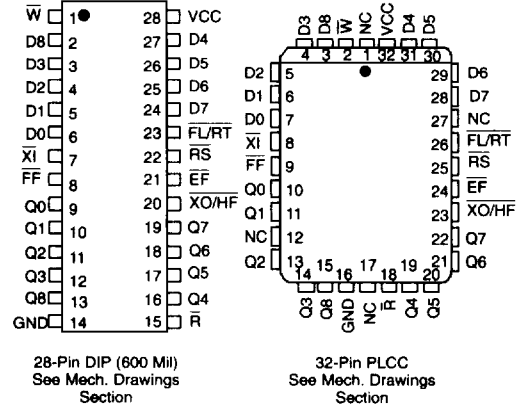
FEATURES

- First-in, first-out memory-based architecture
- Flexible 4096 x 9 organization
- Low-power HCMOS technology
- Asynchronous and simultaneous read/write
- Bidirectional applications
- Fully expandable by word width or depth
- Empty and full warning flags
- Half-full flag capability in single-device mode
- Retransmit capability
- Available in 50 ns, 65 ns, 80 ns, and 120 ns access times
- Optional industrial temperature range -40°C to +85°C available, designated N

DESCRIPTION

The DS2012 FIFO Chip implements a first-in, first-out algorithm featuring asynchronous read/write operations, full, empty, and half full flags, and unlimited expansion capability in both word size and depth. The DS2012 is functionally and electrically equivalent to the DS2009

PIN ASSIGNMENT



28-Pin DIP (600 Mil)
See Mech. Drawings
Section

32-Pin PLCC
See Mech. Drawings
Section

PIN DESCRIPTION

| | |
|--------------------|---------------------------|
| \overline{W} | - WRITE |
| \overline{R} | - READ |
| \overline{RS} | - RESET |
| $\overline{FL/RT}$ | - First Load/Retransmit |
| D_{0-8} | - Data In |
| Q_{0-8} | - Data Out |
| \overline{XI} | - Expansion In |
| $\overline{XO/HF}$ | - Expansion Out/Half Full |
| \overline{FF} | - Full Flag |
| \overline{EF} | - Empty Flag |
| V_{CC} | - 5 Volts |
| GND | - Ground |
| NC | - No Connect |

512 x 9 FIFO Chip, with the exceptions listed in the notes for DC Electrical Characteristics of the DS2009 data sheet. Refer to the DS2009 data sheet for detailed device description.