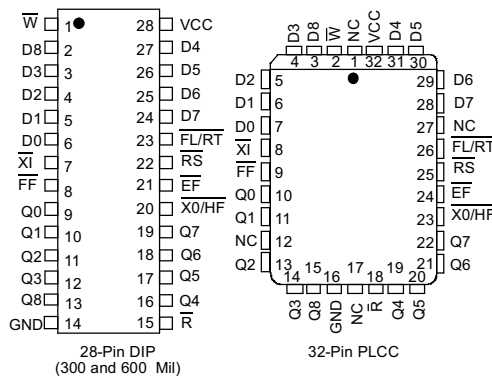


FEATURES

- First-in, first-out memory-based architecture
- Flexible 1024 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 50ns, 65ns, 80ns, and 120ns access times
- Optional industrial temperature range -40°C to +85°C available, designated N

PIN ASSIGNMENT



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

DESCRIPTION

The DS2010 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 DS2010 is functionally and electrically equivalent to the

DS2009 512 x 9 FIFO, 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.