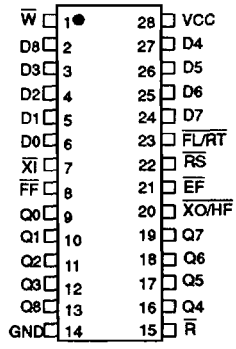
DALLAS SEMICONDUCTOR

DS2013
8192 x 9 FIFO Chip

FEATURES

- First-in, first-out memory-based architecture
- Flexible 8192 x 9 organization
- Low-power HCMOS technology
- Asychronous 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
- Industrial temperature range -40°C to +85°C available designated N, in 50 ns, 65 ns, 80 ns, and 120 ns access times

PIN ASSIGNMENT



28-Pin DIP (300 and 600 Mil)
See Mech. Drawings – Sect. 16, Pgs. 1 & 4

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 DS2013 8192 x 9 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 DS2013 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 DS2009 512 x 9 FIFO Chip data sheet for detailed device description.