

DALLAS
SEMICONDUCTOR

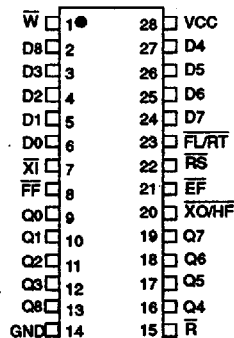
T-46-35

DS2013
8192 x 9 FIFO Chip

FEATURES

- First-in, first-out memory-based architecture
- Flexible 8192 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
- 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

W	- WRITE
R	- READ
RS	- RESET
FL/RT	- First Load/Retransmit
D ₀₋₈	- Data In
Q ₀₋₈	- Data Out
XI	- Expansion In
XO/HF	- Expansion Out/Half Full
FF	- Full Flag
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.