

54ACT/74ACT2726

512 x 9 Bidirectional First In, First Out Memory (BIFIFO)

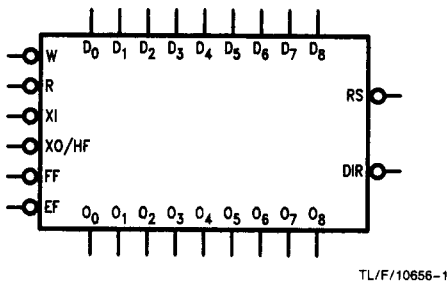
General Description

The 512 x 9 FIFO is a first-in, first-out dual port memory capable of asynchronous, simultaneous read and write. Other important features are: expansion capability in both the word depth and bit width, half-full flag capability in the single device mode, empty and full warning flags, and ring pointers for zero fall-through time. There are two sets of bidirectional ports, each 9 bits wide, through which data flow can be controlled. A direction pin (DIR) controls the direction of the data: when the DIR is HIGH, A is the input port and B is the output port. When the DIR is LOW, the input port is B and output port is A. It is suited for high-speed applications.

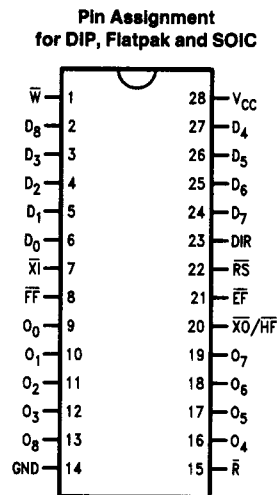
Features

- First-in, first-out bidirectional memory
- 512 x 9 organization
- Low power consumption
- Asynchronous and simultaneous read and write
- Fully expandable by word depth and/or bit width
- Half-full flag capability in single device mode
- Master/slave multiprocessing applications
- Bidirectional and rate buffer applications
- Empty and full warning flags
- Outputs source/sink 8 mA
- 'ACT2726 has TTL-compatible inputs

Logic Symbol



Connection Diagram



Pin Names	Description
D ₀ -D ₈	Data Inputs
O ₀ -O ₈	Data Outputs
\bar{W}	Write Enable
\bar{R}	Read Enable
$\bar{X}\bar{I}$	Expansion In
$\bar{X}\bar{O}/\bar{H}\bar{F}$	Expansion Out, Half-Full Flag
$\bar{E}\bar{F}$	Empty Flag
$\bar{F}\bar{F}$	Full Flag
$\bar{R}\bar{S}$	Reset
DIR	Direction