

74ABT16260 12-Bit to 24-Bit Multiplexed D-Type Latches with TRI-STATE® OUTPUTS

General Description

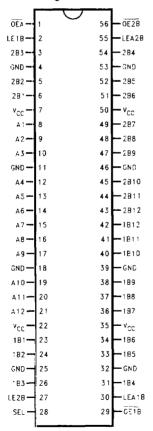
The 'ABT16260 is a 12-bit to 24-bit multiplexed D-type latch with TRI-STATE outputs. Its intended use is to multiplex two separate data paths onto one, or demultiplex from a single data path. Applications include multiplexing and or demultiplexing of address and data info in microprocessors, memory interleaving and bus interface.

Features

- Guaranteed latch-up protection
- Non-destructive hot insertion capability
- High impedance glitch free bus loading during entire power up and power down cycle
- Flow through architecture optimizes PCB layout

Connection Diagram

Pin Assignment for SSOP



Function Tables

B to A (OEB = H)

	Outputs						
1B	2B	SEL	LE1B	LE2B	ŌĒĀ	An	
Н	X	Н	Н	Х	L	н	
L	Χ	Н	Н	X	L	L	
Χ	Χ	Н	L	X	L	An	
Х	Н	Ł	Х	Н	L	H	
Χ	L	L	Х	н	L	L	
Х	Χ	L	X	L	L.	An	
Х	X	X	X	X	Н	Z	

A to B (OEA = H)

		Outputs				
A	LEA18	LEA2B	OE1B	OE2B	1Bn	2Bn
Н	Н	Н	L	L	н	Н
L	Н	Н	L	L	L	Ł
Н	Н	L	L	L	Н	2Bn
Ł	Н	L	L	L.	L	2Bn
Н	L	Н	L	L	1Bn	н
L	L	Н	L	L	1Bn	L
X	L	L	L	L.	1Bn	2Bn
Х	X	X	Н	Н	Z	Z
Х	X	X	L	Н	Active	Z
Х	X	X	Н	L	Z	Active
Х	Х	Х	L	L	Active	Active

TL/F/12101-1

Function Description

Three 12-bit I/O ports (A1-A12, 1B1-1B12, 2B1-2B12) are available for address and or data transfer. The output enable (OEA, OE1B, OE2B) inputs control the bus transceiver functions. The OE1B and OE2B signals also allow bank control in the A to B direction. Address and data info can be stored using the internal storage latches. The latch enable (LE1B, LE2B, LEA1B, LEA2B) inputs are used to

control the data storage function. When the latch enable is high, the latch is transparent. When the latch enable goes low, the data at the inputs is latched and stays latched until the latch enable input is switched back to high. To ensure the high-impedance state during power up or power down, the OE should be tied to V_{CC} through a pullup resistor, the minimum value of the resistor is determined by the current sinking capability of the driver.

Logic Diagram

