



Integrated Device Technology, Inc.

HIGH-SPEED 16-BIT BIDIRECTIONAL LATCH

**ADVANCE
INFORMATION
IDT49FCT601**

FEATURES:

- 16-bit bidirectional latch
- Byte swap control to match bus byte ordering
- Independent upper and lower byte output enables
- Independent latch enable controls for both directions
- $I_{OL} = 48\text{mA}$ (commercial) and 32mA (military) for back plane drive capability
- CMOS power levels (5 μ W typ. static)
- TTL input and output level compatible
- CMOS output level compatible
- Available in 48-pin plastic and sidebrazed DIP, 52-pin PLCC and LCC
- Product available in Radiation Tolerant and Enhanced versions
- Military product compliant to MIL-STD-883, Class B

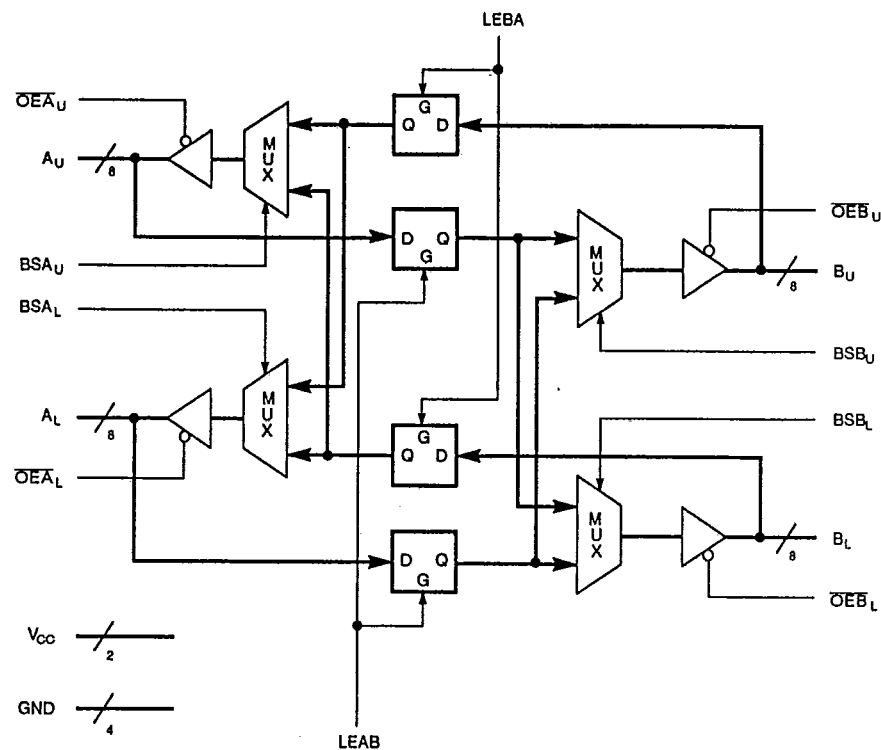
DESCRIPTION:

The IDT49FCT601 is a 16-bit bidirectional latch with byte swap/reordering capability for 16-bit buses. This device can be used in pairs to provide support for 32-bit buses like the VME bus. The byte swap facility allows upper order bytes to be brought down to lower positions for transfer on the bus. The byte swap facility can be used to solve byte ordering conflicts when interfacing Motorola-type devices with Intel-type devices and for resizing data widths.

The high output drive makes this device suitable for driving back plane buses. The four ground pins in the center of the package greatly reduce package inductance and, therefore, ground noise.

This device is manufactured using advanced CEMOS™, a dual metal CMOS technology.

FUNCTIONAL BLOCK DIAGRAM



CEMOS is a trademark of Integrated Device Technology, Inc.

MILITARY AND COMMERCIAL TEMPERATURE RANGES

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