



54FCT/74FCT521 8-Bit Identity Comparator

General Description

The 'FCT521 is an expandable 8-bit comparator. It compares two words of up to eight bits each and provides a LOW output when the two words match bit for bit. The expansion input $\bar{T}_A = B$ also serves as an active LOW enable input.

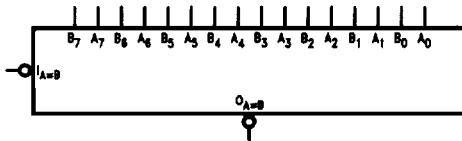
FACT™ FCT utilizes NSC quiet series technology to provide improved quiet output switching and dynamic threshold performance.

FACT FCT features GTO™ output control and undershoot corrector in addition to a split ground bus for superior performance.

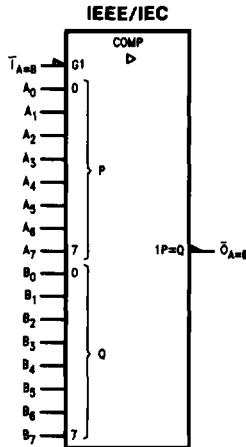
Features

- NSC 54FCT/74FCT521 is pin and functionally equivalent to IDT 54FCT/74FCT521
- Expandable to any word length
- Input clamp diodes to limit bus reflections
- TTL/CMOS input and output level compatible
- $I_{OL} = 48 \text{ mA (Com), } 32 \text{ mA (Mil)}$
- CMOS power levels
- 4 kV minimum ESD immunity
- Military Product compliant to MIL-STD 883

Logic Symbols



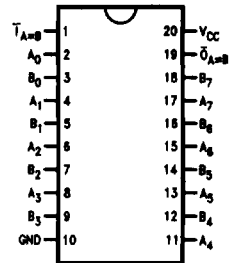
TL/F/10662-1



TL/F/10662-4

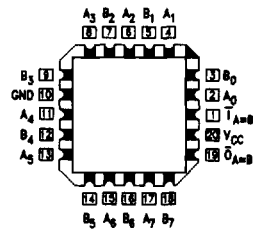
Connection Diagrams

Pin Assignment for DIP, Flatpak and SOIC



TL/F/10662-2

Pin Assignment for LCC



TL/F/10662-3

Pin Names	Description
A ₀ -A ₇	Word A Inputs
B ₀ -B ₇	Word B Inputs
T _A = B	Expansion or Enable Input
O _A = B	Identity Output