

54FCT/74FCT138A

1-of-8 Decoder/Demultiplexer

General Description

The 'FCT138A is a high-speed 1-of-8 decoder/demultiplexer. This device is ideally suited for high-speed bipolar memory chip select address decoding. The multiple input enables allow parallel expansion to a 1-of-24 decoder using just three 'FCT138A devices or a 1-of-32 decoder using four 'FCT138A devices and one inverter.

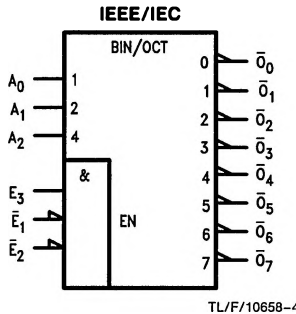
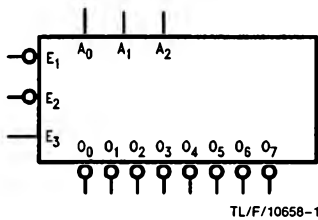
FACT™ FCTA utilizes NSC quiet series technology to provide improved quiet output switching and dynamic threshold performance.

FACT FCTA features undershoot correction and split ground bus for superior performance.

Features

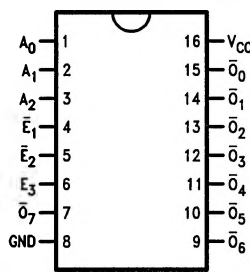
- NSC 54FCT/74FCT138A is pin and functionally equivalent to IDT 54FCT/74FCT138A
- Input clamp diodes to limit bus reflections
- TTL/CMOS input and output level compatible
- $I_{OL} = 48 \text{ mA (Com)}, 32 \text{ mA (Mil)}$
- CMOS power levels
- 4 kV minimum ESD immunity
- Military Product compliant to MIL-STD 883

Logic Symbol

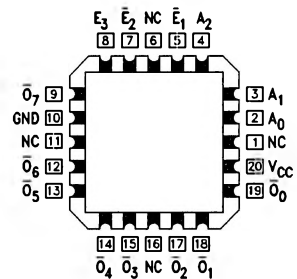


Connection Diagrams

Pin Assignment for DIP, Flatpak and SOIC



Pin Assignment for LCC



| Pin Names | Description |
|--------------------------------|----------------|
| A ₀ -A ₂ | Address Inputs |
| E ₁ -E ₂ | Enable Inputs |
| E ₃ | Enable Input |
| O ₀ -O ₇ | Outputs |