

## 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.

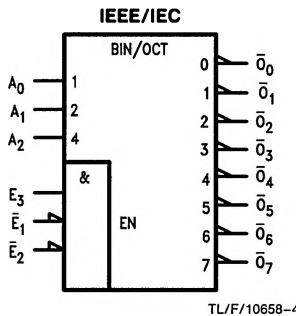
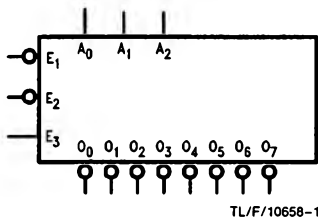
FACT™ FCTA utilizes NSC quiet series technology to provide improved quiet output switching and dynamic threshold performance.

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

#### Features

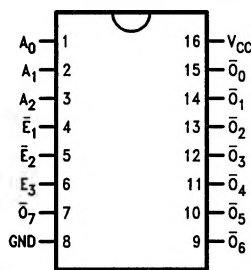
- NSC 54FCT/74FCT138A is pin and functionally equivalent to IDT 54FCT/74FCT138A
- Input clamp diodes to limit bus reflections
- TTL/CMOS input and output level compatible
- $I_{OL} = 48 \text{ mA (Com)}, 32 \text{ mA (Mil)}$
- CMOS power levels
- 4 kV minimum ESD immunity
- Military Product compliant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

#### Logic Symbol

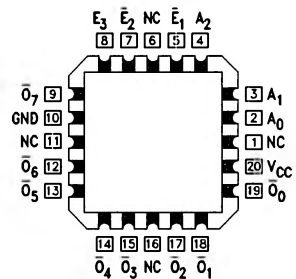


#### Connection Diagrams

Pin Assignment  
for DIP, Flatpak and SOIC



Pin Assignment  
for LCC



Pin Names	Description
$A_0$ - $A_2$	Address Inputs
$\bar{E}_1$ - $\bar{E}_2$	Enable Inputs
$E_3$	Enable Input
$\bar{O}_0$ - $\bar{O}_7$	Outputs