



# DS26LS31C/DS26LS31M Quad High Speed Differential Line Driver

## General Description

The DS26LS31 is a quad differential line driver designed for digital data transmission over balanced lines. The DS26LS31 meets all the requirements of EIA Standard RS-422 and Federal Standard 1020. It is designed to provide unipolar differential drive to twisted-pair or parallel-wire transmission lines.

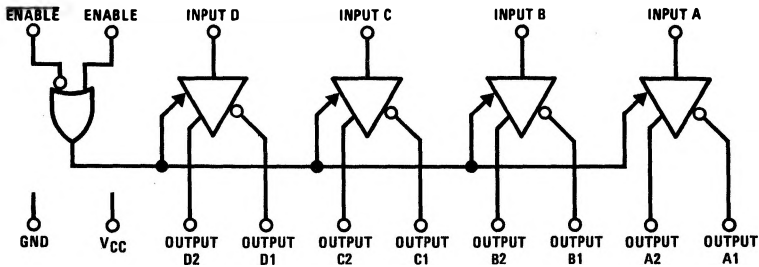
The circuit provides an enable and disable function common to all four drivers. The DS26LS31 features TRI-STATE® outputs and logically ANDed complementary outputs. The inputs are all LS compatible and are all one unit load.

The DS26LS31 features a power up/down protection circuit which keeps the output in a high impedance state (TRI-STATE) during power up or down preventing erroneous glitches on the transmission lines.

## Features

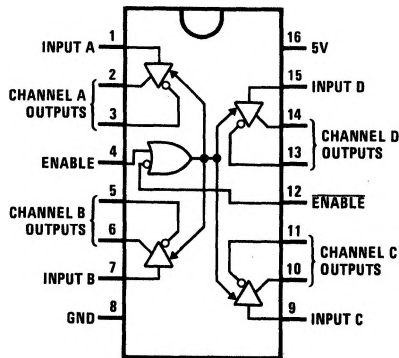
- Output skew—2.0 ns typical
- Input to output delay—10 ns
- Operation from single 5V supply
- 16-pin hermetic and molded DIP package
- Outputs won't load line when  $V_{CC} = 0V$
- Four line drivers in one package for maximum package density
- Output short-circuit protection
- Complementary outputs
- Meets the requirements of EIA Standard RS-422
- Pin compatible with AM26LS31
- Available in military and commercial temperature range
- Glitch free power up/down

## Logic and Connection Diagrams



TL/F/5778-1

### Dual-In-Line Package



TL/F/5778-2

### Top View

Order Number DS26LS31CJ, DS26LS31CM,  
DS26LS31CN or DS26LS31MJ  
See NS Package Number J16A, M16A or N16A