

**SN75172**  
**SN75174**

**Product Preview**

**QUAD LINE DRIVERS WITH NAND ENABLED  
 THREE-STATE OUTPUTS**

The Motorola SN75172/174 are monolithic quad differential line drivers with three-state outputs. They are designed specifically to meet the requirements of EIA-485, EIA-422A Standards and CCITT recommendations V.11 and X.27.

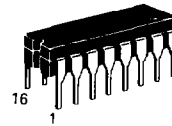
The device is optimized for balanced multipoint bus transmission at rates up to 4 megabits per second. Each driver features wide positive and negative common-mode output voltage ranges making it suitable for party-line applications in noisy environments.

The SN75172/174 provides positive- and negative-current limiting and thermal shutdown for protection from line fault conditions on the transmission bus line. Shutdown occurs at a junction temperature of approximately 150°C. These devices offer optimum performance when used with the SN75173 or SN75175 quadruple differential line receivers.

- Meets EIA-485 Standard for Party-Line Operation
- Meets EIA Standard EIA-422A and CCITT Recommendations V.11 and X.27
- Designed for Multipoint Transmission on Long Bus Lines in Noisy Environments
- 3-State Outputs
- Common Mode Output Voltage Range . . . -7.0 V to 12 V
- Active High and Active Low Enables
- Thermal Shutdown Protection
- Positive and Negative Current Limiting
- Operates from Single 5.0 Volt Supply
- Low Power Requirements
- Functionally Interchangeable With AM26LS31 (SN75172) MC3487 (SN75174)

**QUAD EIA-485 LINE DRIVERS  
 WITH THREE-STATE OUTPUTS**

**SILICON MONOLITHIC  
 INTEGRATED CIRCUIT**



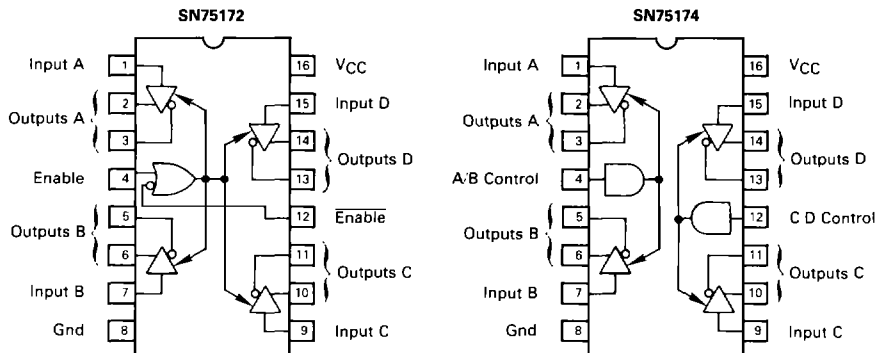
**J SUFFIX**  
 CERAMIC PACKAGE  
 CASE 620



**N SUFFIX**  
 PLASTIC PACKAGE  
 CASE 648

7

**PIN CONNECTIONS**



This document contains information on a product under development. Motorola reserves the right to change or discontinue this product without notice.

# SN75172, SN75174

SN75172

TRUTH TABLE			
Input	Control Inputs (E/ $\bar{E}$ )	Noninverting Output	Inverting Output
H	H-L	H	L
L	H-L	L	H
X	L-H	Z	Z
L = Low Logic State H = High Logic State X = Irrelevant Z = Third-State (High Impedance)			

SN75174

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Input	Control Input	Noninverting Output	Inverting Output
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