



# DS3587/DS3487 Quad TRI-STATE® Line Driver

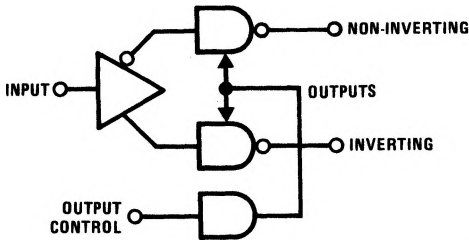
## General Description

National's quad RS-422 driver features four independent driver chains which comply with EIA Standards for the electrical characteristics of balanced voltage digital interface circuits. The outputs are TRI-STATE structures which are forced to a high impedance state when the appropriate output control pin reaches a logic zero condition. All input pins are PNP buffered to minimize input loading for either logic one or logic zero inputs. In addition, internal circuitry assures a high impedance output state during the transition between power up and power down.

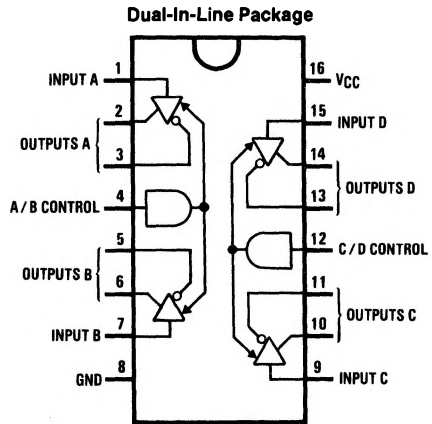
## Features

- Four independent driver chains
- TRI-STATE outputs
- PNP high impedance inputs (PIA compatible)
- Power up/down protection
- Fast propagation times (typ 10 ns)
- TTL compatible
- Single 5V supply voltage
- Output rise and fall times less than 20 ns (typ 10 ns)
- Pin compatible with DS8924 and MC3487
- Output skew—2 ns typ

## Block and Connection Diagrams



TL/F/5780-1



TL/F/5780-2

Top View

Order Number DS3587J, DS3487J,  
DS3487M or DS3487N  
See NS Package Number J16A, M16A or N16A

## Truth Table

Input	Control Input	Non-Inverter Output	Inverter Output
H	H	H	L
L	H	L	H
X	L	Z	Z

L = Low logic state

H = High logic state

X = Irrelevant

Z = TRI-STATE (high impedance)