National Semiconductor

ADVANCE INFORMATION

100392
Single Supply Quint CMOS-to-ECL Translator with Cutoff Drivers

General Description

The 100392 is a quint translator for converting CMOS logic levels to positive referenced F100K ECL logic levels (or PECL). This translator is designed to operate from a single +5V supply, eliminating the need for a separate −5V supply. The differential outputs of the 100392, due to its high common mode rejection, overcomes voltage gradients between the CMOS and ECL ground systems.

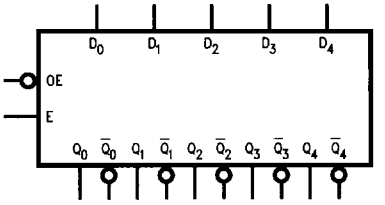
A LOW on the input enable pin (E) sets the true outputs to a LOW state and the inverting outputs to a HIGH state. A HIGH on the output enable pin (OE) sets both true and inverting outputs to a cutoff or high impedance state.

The outputs of the 100392 are designed to drive a double terminated 50Ω differential transmission line (25Ω load impedance).

Features

- Drives 25Ω load with cutoff capability
- Operates from a single +5V supply
- Differential ECL outputs
- 2000V ESD protection

Logic Symbol



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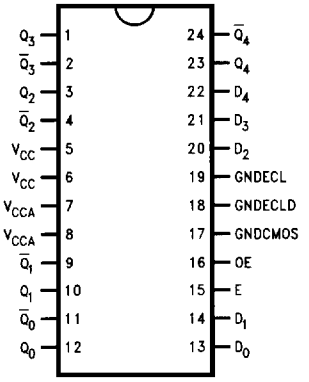
Pin Names	Description
D_0–D_4	Data Inputs (CMOS)
Q_0–Q_4	Data Outputs (PECL)
$\overline{Q}_0$–$\overline{Q}_4$	Inverting Data Outputs (PECL)
E	Enable Input (CMOS)
OE	Output Enable Input (CMOS)

Connection Diagrams

24-Pin DIP/SOIC



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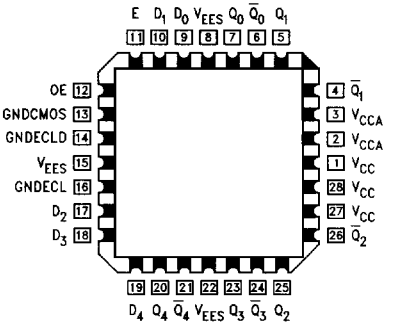
28-Pin PCC



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