

Product Overview

NLSX4378: Level Translator, 4-Bit, 24 Mbps, Dual-Supply

For complete documentation, see the data sheet.

The NLSX4378 is a 4-Bit configurable dual-supply bidirectional auto sensing translator that does not require a directional control pin. The VCC I/O and VL I/O ports are designed to track two different power supply rails, VCC and VL respectively. The VCC Supply rail is configurable from 1.65V to 5.5V while the VL supply rail is configurable from 1.65V to 5.5V. This allows voltage logic signals on the VL side to be translated into lower, higher or equal value voltage logic signals on the VCC side, and vice-versa. The NLSX4378 translator has integrated 10K ohm pullup resistors on the I/O lines. The integrated pullup resistors are used to pullup the I/O lines to either VL or VCC. The NLSX4378 is an excellent match for open-drain applications such as the I2C communication bus.

Features

- Wide VCC Operating Range: 1.65V to 5.5V Wide VL Operating Range: 1.65V to 5.5V
- High Speed with 24 Mb/s Guaranteed Data Rates
- Low Bit-to-Bit Skew
- Small Packaging - 2.02 x 1.54mm uBump12

Applications

- I2C, SMBus, PMBus
- Low Voltage ASIC Level Translation

Benefits

- Allows interfacing to multiple voltage systems
- Minimizes system delays
- Good for differential signaling
- Physical space savings over alternate solutions

End Products

- Mobile Phones, PDAs, Cameras

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