

NLSX4402

2-BIT 20 MB/S DUAL-SUPPLY Level Translator

Product Overview

For complete documentation, see the data sheet.

The NLSX4402 is a 2-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. Both the VCC and VL supply rails are configurable from 1.5 V to 5.5 V. 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 NLSX4402 translator uses external pull-up resistors on the I/O lines. The external pull-up resistors are used to pull up the I/O lines to either VL or VCC. The NLSX4402 is an excellent match for open-drain applications such as the I2C communication bus.

Features

- VL can be Less than, Greater than or Equal to VCC
 - Wide VCC Operating Range: 1.5 V to 5.5 V
 - Wide VL Operating Range: 1.5 V to 5.5 V
 - High-Speed with 20 Mb/s Guaranteed Data Rate
 - Low Bit-to-Bit Skew
 - Enable Input and I/O Pins are Overvoltage Tolerant (OVT) to 5.5 V
 - Non-preferential Powerup Sequencing
 - Power-Off Protection
 - Small Space Saving Package: 1.4 mm x 1.0 mm UQFN8 Package
 - These Devices are Pb-Free and are RoHS Compliant
- For more features, see the data sheet

Applications

- I2C, SMBus
- Low Voltage ASIC Level Translation
- Mobile Phones, PDAs, Cameras

Part Electrical Specifications										
Product	Pricing (\$/Unit)	Compliance	Status	Channels	Input Level	V _{CC} Min (V)	V _{CC} Max (V)	t _{pd} Max (ns)	I _O Max (mA)	Package Type
NLSX4402FMU TAG	0.3667		Active	2	CMOS	1.5	5.5	8.6	0.02	UDFN-8
NLSX4402FMU TCG	0.4693		Active	2	CMOS	1.5	5.5	8.6	0.02	UDFN-8