



NLSX4401

1-Bit 20 Mb/s Dual-Supply Level Translator

The NLSX4401 is a 1-bit configurable dual-supply bidirectional auto sensing translator that does not require a directional control pin. The I/O VCC and I/O VL 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 NLSX4401 translator has integrated 10 k pull-up resistors on the I/O lines. The integrated pull-up resistors are used to pull up the I/O lines to either VL or VCC. The NLSX4401 is an excellent match for open-drain applications such as the I2C communication bus.

- 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 24 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
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- I2C, SMBus, PMBus
 - Mobile Phones, Cameras, Consumer Products
 - Low Voltage ASIC Level Translation

	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
NLSX4401MU1T CG	0.4147	 	Active	1	CMOS	1.5	5.5	12	0.02	UDFN-6