FXLA0104

Low-Voltage Dual-Supply 4-Bit Voltage Translator with Configurable Voltage Supplies and Signal Levels, 3-State Outputs, and Auto Direction Sensing

Product Overview

For complete documentation, see the data sheet.

The FXLA0104 is a configurable dual-voltage supply translator for both uni-directional and bi-directional voltage translation between two logic levels. The device allows translation between voltages as high as 3.6V to as low as 1.1V. The A port tracks the VCCA level and the B port tracks the VCCB level. This allows for bi-directional voltage translation over a variety of voltage levels: 1.2V, 1.5V, 1.8V, 2.5V, and 3.3V.
The device remains in three-state as long as either VCC=0V, allowing either VCC to be powered up first. Internal power-down control circuits place the device in 3-state if either VCC is removed.
The OE input, when LOW, disables both the A and B ports by placing them in a 3-state condition. The OEinput is supplied by VCCA.
The FXLA0104 supports bi-directional translation without the need for a direction control pin. The two ports of the device have auto-direction sense capability. Either port may sense an input signal and transfer it as an output signal to the other port.

Features

- Bi-Directional Interface between Two Levels: from 1.1V to 3.6V
- Fully Configurable: Inputs and Outputs Track VCC
- Non-Preferential Power-Up; Either VCC May Be Powered Up First
- Outputs Switch to 3-State if Either VCC is at GND
- Power-Off Protection
- Bus-Hold on Data Inputs Eliminates the Need for Pull-Up Resistors; Do Not Use Pull-Up Resistors on A or B Ports
- Control Input (OE) Referenced to VCCA Voltage
- Available in the 12-Lead, 1.7mm x 2.0mm UMLP Package
- Direction Control Not Necessary
- 100Mbps Throughput when Translating Between 1.8V and 2.5V
  For more features, see the data sheet

Applications

- Mobile Handsets
- Media Tablets
- Medical Electronics/Devices
- Notebook PC
- E-book Reader

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
FXLA0104QFX	0.4416	Pb H	Active	4	CMOS	1.1	3.6	4	4000	UQFN-12