

## FXMA2102

# Dual Supply 2-Bit Voltage Translator/Buffer/Repeater Isolator for I<sup>2</sup>C Applications

## Product Overview

For complete documentation, see the data sheet.

The FXMA2102 is a high-performance configurable dual-voltage-supply translator for bi-directional voltage translation over a wide range of input and output voltages levels.

Intended for use as a voltage translator in applications using the I2C bus interface, the input and output voltage levels are compatible with I2C device specification voltage levels. External pull-up resistors are required.

The device is designed so that the A port tracks the VCCA level and the B port tracks the VCCB level. This allows for bi-directional A/B port voltage translation between any two levels from 1.65V to 5.5V. VCCA can equal VCCB from 1.65V to 5.5V. The OE pin is referenced to VCCA.

Either VCC can be powered-up first. Internal power-down control circuits place the device in 3-state if either VCC is removed.

The two ports of the device have automatic 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 any Two Levels from 1.65V to 5.5V
- Direction Control not Needed
- System GPIO Resources Not Required when OE Tied to VCCA
- I2C 400pF Buffer / Repeater
- I2C Bus Isolation
- A/B Port VOL = 175mV (Typical), VIL = 150mV, IOL = 6mA
- Open-Drain Inputs / Outputs
- Accommodates Standard-Mode and Fast-Mode I2C-Bus Devices
- Supports I2C Clock Stretching & Multi-Master
- Fully Configurable: Inputs and Outputs Track VCC

For more features, see the data sheet

## Applications

- This product is general usage and suitable for many different applications.

## Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Channels	Input Level	V <sub>CC</sub> Min (V)	V <sub>CC</sub> Max (V)	t <sub>pd</sub> Max (ns)	I <sub>O</sub> Max (mA)	Package Type
FXMA2102L8X	0.3433	<span style="color: orange;">Pb</span> <span style="color: green;">H</span>	Active	2	CMOS	1.65	5.5	3	6	UQFN-8
FXMA2102UMX	0.2916	<span style="color: orange;">Pb</span> <span style="color: green;">H</span>	Active	2	CMOS	1.65	5.5	3	6	UQFN-8