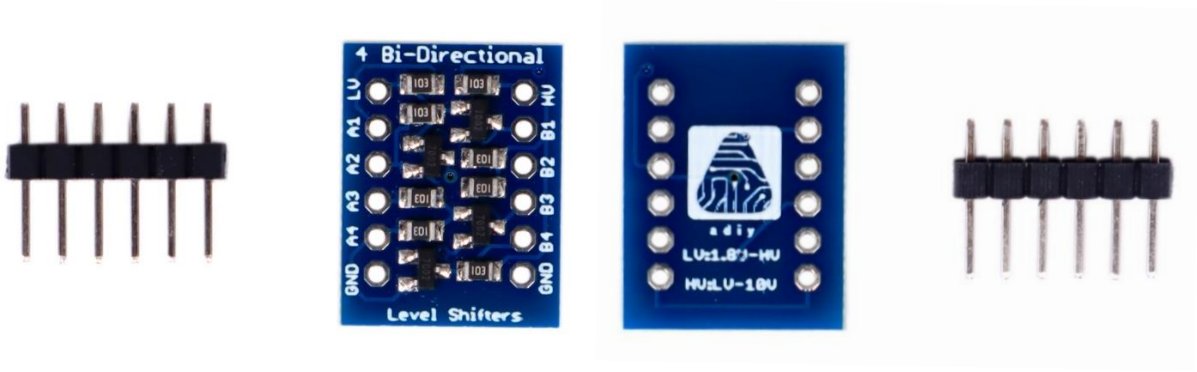
# ADIY 4 Channel I2C Safe Bi-directional Logic Level Converter 2N7002




## Description:

Bi-directional logic level convertor is a small device that safely steps down 5V signals to 3.3V AND steps up 3.3V to 5V at the same time. User can successfully set your high and low voltages and step up and down safely on the same channel. Each level converter has the capability of converting 4 pins on the high side to 4 pins on the low side with two inputs and two outputs provided for each side.

The logic level converter circuit convert signals as low as 1.8 V to as high as 5 V and vice versa, and its four channels are enough to support most common bidirectional and unidirectional digital interfaces, including IC, SPI, and asynchronous TTL serial.

## Specifications and Features:

1. Mutual transform between 5V TTL and 3.3V TTL.
2. Four channels of logic and high voltage low voltage logic can two-way transform.
3. Portable and lightness, with 2 rows 6 pin contact pins.
4. Level Converter- 4 Channel Compatible with the bread plate, can be used directly put on the breadboard.
5. 4 Channel Module (great for I2C or SPI) and will work with all microcontrollers, UNO, Nano, Raspberry Pi, Intel Edison, NXP Mbed.
6. Dimensions: 20mm (L) × 16mm (W)

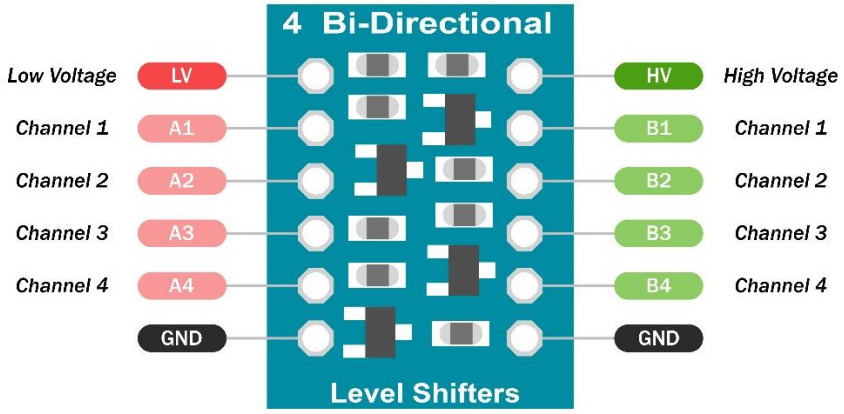
## How to use:

- High voltage (5V for example) to the HV pin
- Low voltage (3.3V for example) to LV
- Ground from the system to the GND pin.

## Connections:

The right column consists of high voltage supply and ground pins (HV and GND) and 4 high voltage channels (B1, B2, B3 and B4).

The left columns consists of low voltage supply and ground (LV and GND) and 4 low voltage channels (A1, A2, A3 and A4). I combined two such modules to make an 8-channel Logic Level Converter.




## Advantages:

- Safely transform from low to high and high to low level
- Bi-directional transformation
- Small in size
- Cost effective