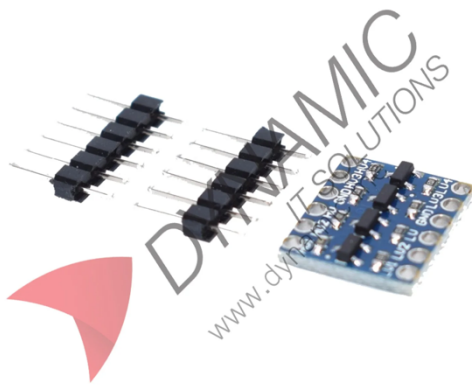


# Logic Level Converter Bi-Directional 5V/3.3V IIC I2C

**Features:**

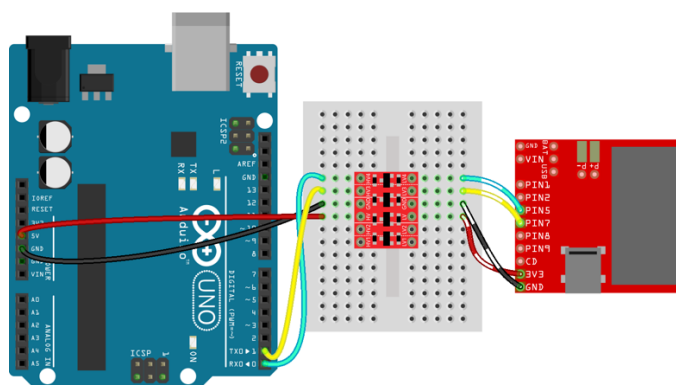
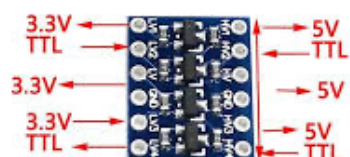
The Bi-Directional Logic Level Converter allows safe and reliable communication between devices operating at different voltage levels. It supports conversion between 5V and 3.3V as well as 2.8V and 1.8V logic levels. This makes it ideal for interfacing 5V microcontrollers with 3.3V sensors or components, and vice versa. Designed for ease of use, the module offers four channels (2 input and 2 output per voltage side), and is fully compatible with I2C communication. It requires separate voltage sources for both high and low sides and allows flexible bidirectional signal conversion on each channel. It's particularly well-suited for Arduino and other microcontroller-based projects.

| Specifications           |                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------|
| Voltage Levels Supported | 5V to 3.3V or 2.8V to 1.8V                                                                              |
| Channels                 | 4 (2 input and 2 output per side)                                                                       |
| Conversion Type          | Bidirectional logic level shifting                                                                      |
| Communication Protocol   | I2C-compatible (also usable for SPI, UART, etc.)                                                        |
| Voltage Sources Required | 2 (one for high side, one for low side)                                                                 |
| Compatibility            | Arduino, ESP8266, ESP32, Raspberry Pi, other 3.3V/5V systems                                            |
| Use Cases                | Logic level shifting between microcontrollers and sensors or peripherals with different voltage domains |

**Pinouts:**

| Pin Name | Type         | Description                              |
|----------|--------------|------------------------------------------|
| HV       | Power Input  | High-side logic voltage input (e.g. 5V)  |
| LV       | Power Input  | Low-side logic voltage input (e.g. 3.3V) |
| GND      | Power Ground | Common ground for both voltage domains   |
| TXI1     | Input        | Low-side input channel 1                 |
| TXO1     | Output       | High-side output channel 1               |
| TXI2     | Input        | Low-side input channel 2                 |
| TXO2     | Output       | High-side output channel 2               |

|             |        |                           |
|-------------|--------|---------------------------|
| <b>TXI3</b> | Input  | High-side input channel 1 |
| <b>TXO3</b> | Output | Low-side output channel 1 |
| <b>TXI4</b> | Input  | High-side input channel 2 |
| <b>TXO4</b> | Output | Low-side output channel 2 |



### Product Pictures:

