

# Level Shifter - 8 Channel (TXS0108E)

BOB-19626

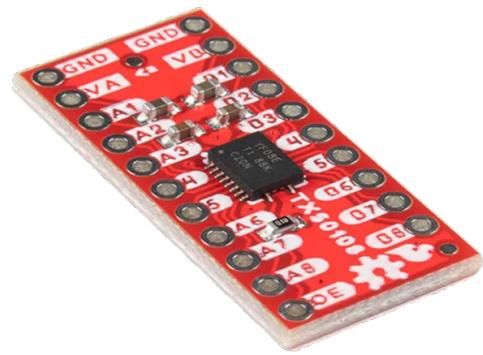
## Product Overview

10/12/2022

For the most up-to-date information, visit [www.mouser.com](http://www.mouser.com) or the supplier's website.

## Description

SparkFun Level Shifter - 8 Channel (TXS0108E) shifts logic between devices running at different common microcontroller voltages such as 1.8V, 3.3V, and 5V. This 8 Channel (TXS0108E) features a bi-directional logic level translator from Texas Instruments and TXS0108E™ 8-bit. The data is transmitted at a speed of 1.2Mbps (open drain) or the maximum speed of 110Mbps (push/pull) by TXS0108E between the ports. This transmitted data allows using a 3.3V SPI device with a 5V microcontroller like the red board plus without sacrificing data transmission speeds. This Level Shifter - 8 channel (TXS0108E) features open-drain, bi-directional level-shifting, and push-pull applications. The TXS0108E operates at a 1.65V to 5.5V supply voltage range on port B and a 1.4V to 3.6V supply voltage range on port A. This Level Shifter - 8 Channel (TXS0108E) is used in handsets, tablets, and smartphones.



## Features

- Bi-directional level-shifting
- Open-drain and push-pull applications
- Max data rates:
  - 110 Mbps (push-pull)
  - 1.2 Mbps (open-drain)
- Supply voltage range:
  - 1.4V to 3.6V on port A
  - 1.65V to 5.5V on port B

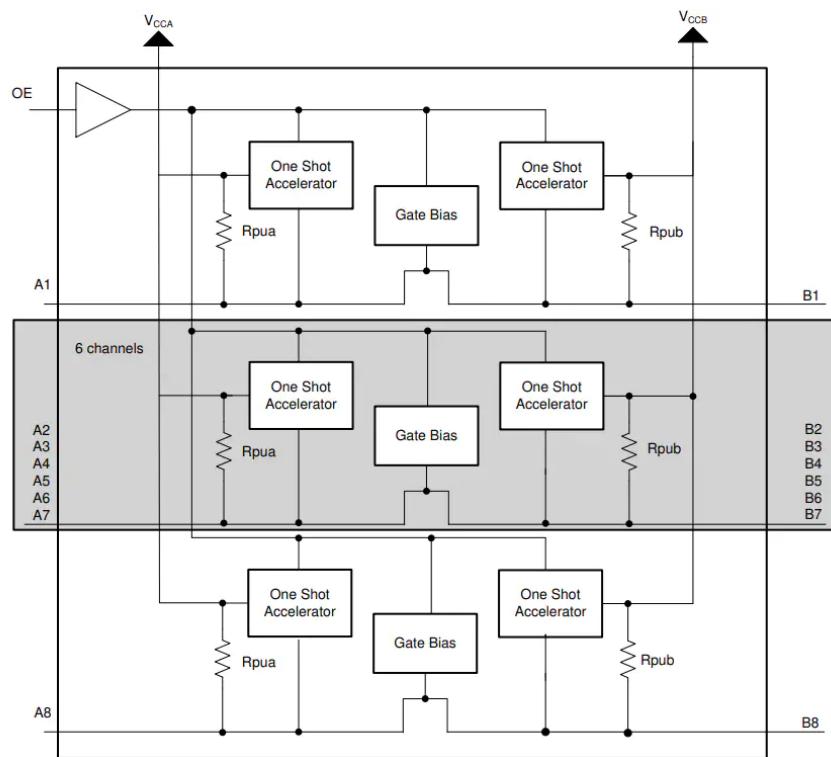
## Applications

- Handsets
- Smartphones
- Tablets
- Desktop PCs

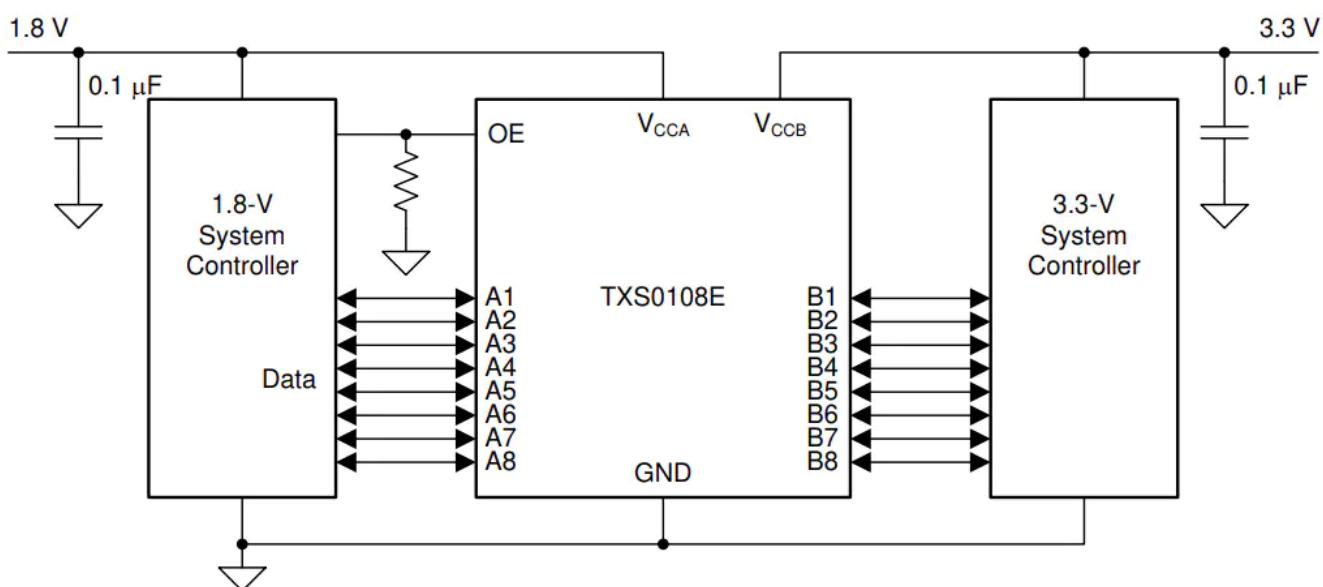
## Schematic

- [BOB-19626](#)

## Block Diagram



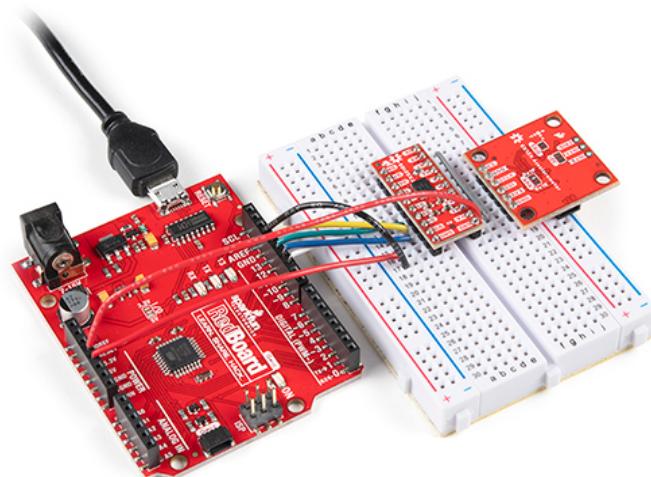
## Application Circuit Diagram



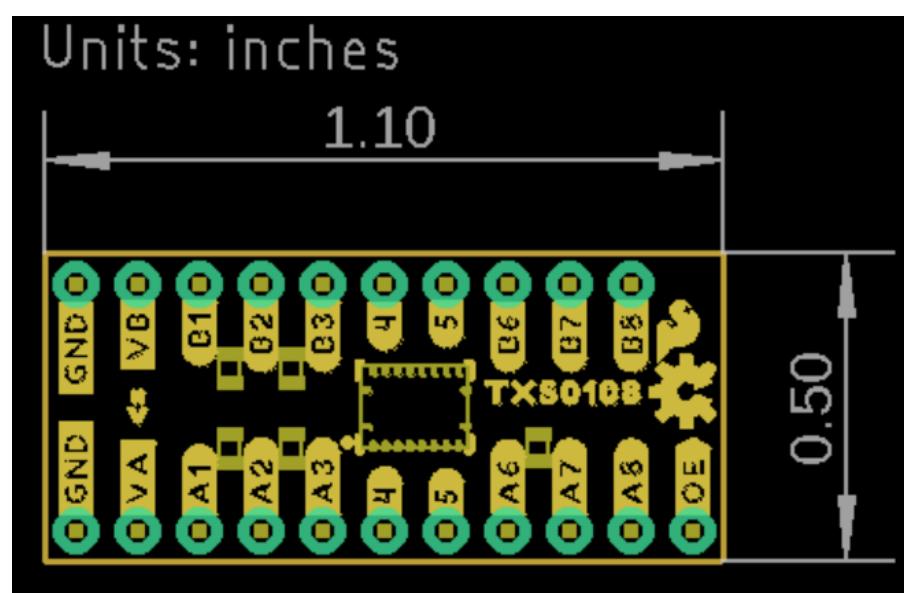
## Board Overview



## Application Overview



## Board Dimensions



## Mouser Part Number

[View Part](#)

To learn more, visit <https://www.mouser.com/new/sparkfun/sparkfun-level-shifter-8-channel-txs0108e/>