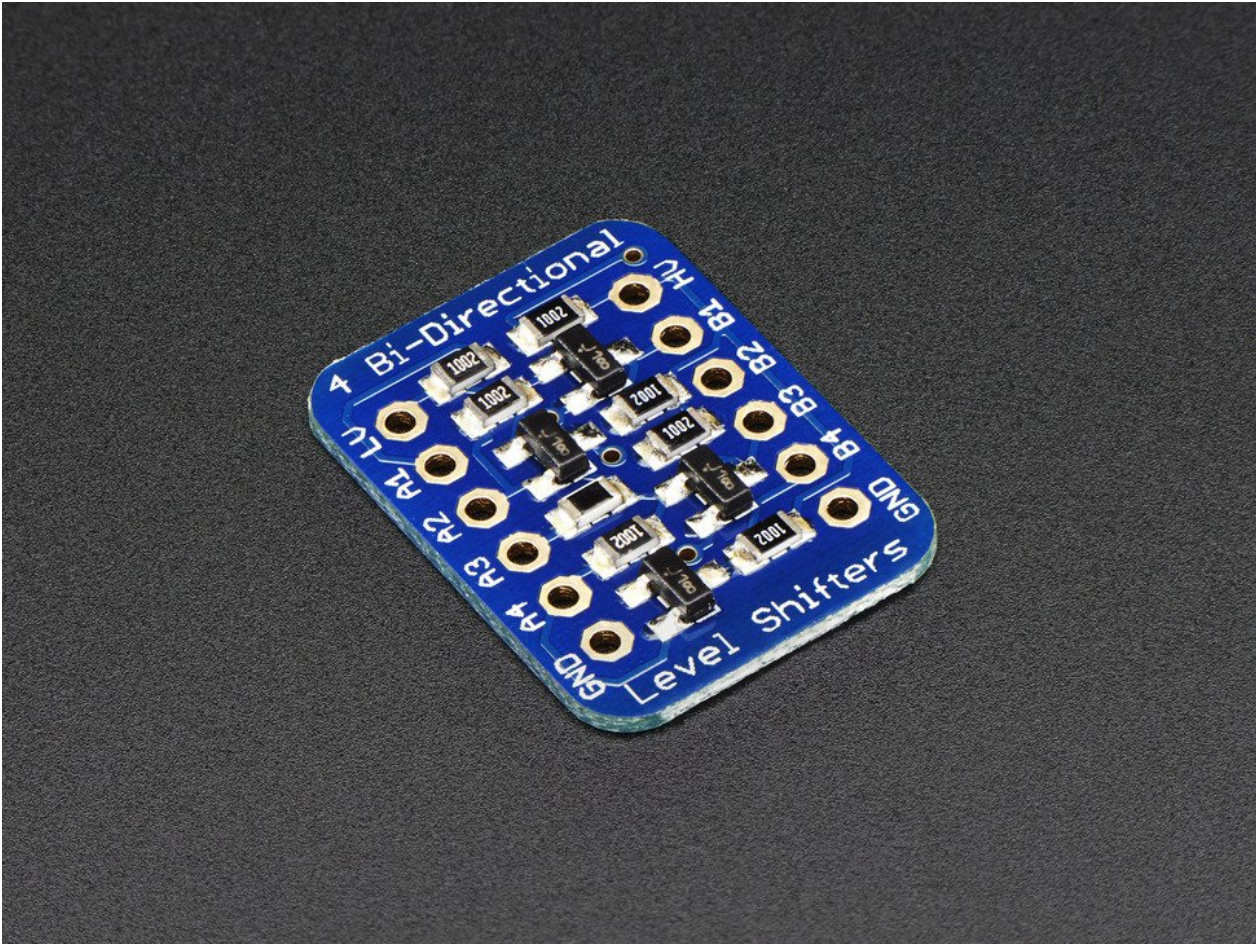


BREAKOUT BOARDS / LEVEL SHIFTERS & EXPANDERS / 4-CHANNEL I2C-SAFE BI-DIRECTIONAL LOGIC LEVEL CONVERTER



4-channel I2C-safe Bi-directional Logic Level Converter - BSS138

PRODUCT ID: 757

\$3.95

IN STOCK

1

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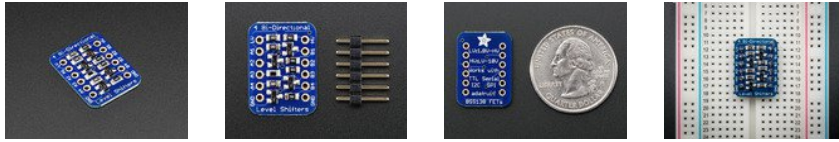
QTY	DISCOUNT
1-9	\$3.95
10-99	\$3.56
100+	\$3.16

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DESCRIPTION

TECHNICAL DETAILS

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DESCRIPTION

Because the Arduino (and Basic Stamp) are 5V devices, and most modern sensors, displays, flash cards and modes are 3.3V-only, many makers find that they need to perform level shifting/conversion to protect the 3.3V device from 5V.

We do have some other handy level shifters in the shop, from the DIP 74LVC245 to the fancy bi-directional TXB0108. However, neither of these are happy to work with I2C, which uses a funky pull-up system to transfer data back and forth. This level shifter board combines the ease-of-use of the bi-directional TXB0108 with an I2C-compatible FET design following NXP's app note.

This breakout has 4 BSS138 FETs with 10K pullups. It works down to 1.8V on the low side, and up to 10V on the high side. The 10K's do make the interface a little more sluggish than using a TXB0108 or 74LVC245 so we suggest checking those out if you need high-speed transfer.

While we designed it for use with I2C, this works as well for TTL Serial, slow <2MHz SPI, and any other digital interface both uni-directional and bidirectional. Comes with a fully assembled, and tested PCB with 4 full bidirectional converter lines as well as 2 pieces of 6-pin header you can solder on to plug into a breadboard or perfboard.

TECHNICAL DETAILS

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MAY WE ALSO SUGGEST...



74LVC245 - Breadboard



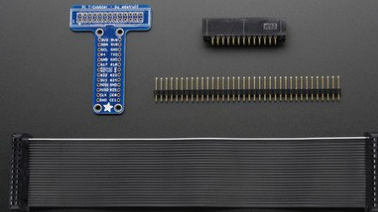
8-channel Bi-directional Logic



TCA9548A I2C Multiplexer



74AHCT125 - Quad Level-



Adafruit Pi Unassembled



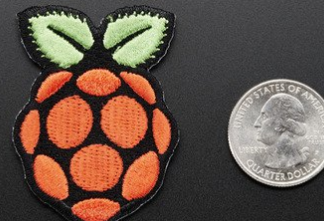
Raspberry Pi Model B 512MB



TXB0104 Bi-Directional Level



Adafruit Assembled Pi



Raspberry Pi - Skill badge,

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