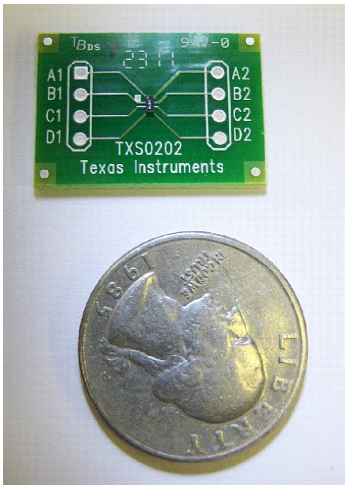
TXS0202 Evaluation Module

1 Features

- Inter Chip-USB Voltage Level Translator
- Breakout board style EVM for prototype and evaluation



2 EVM Description and Configuration

The TXS0202 is a 2-bit voltage level translator optimized for use in Interchip USB (IC-USB) applications. VCCA and VCCB can each operate over the full range of 1.65 V to 3.6 V. The device has been designed to maintain cross-over skew to be less than 1 ns. The device has integrated pull-ups and pull-down resistors to aid in the protocol communication between a host and a peripheral. The translator is a buffered auto-direction sensing type translator. When the output-enable (OE) input is low, all outputs are placed in the high-impedance state.

The TXS0202 EVM was created to allow simplified evaluation and prototyping without the need for full board development. This EVM provides peripheral header style pads for probing and signal connection to each device pin. Headers are labeled with the corresponding pin number. The pin number assignments are given in the following table.

Table 1. Pin Out

	1	2
A	D+(B)	D–(B)
B	GND	VCCB
C	VCCA	OE
D	D+(A)	D–(A)

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3 Setup Procedure

Ensure that VCCA, VCCB and GND are all connected and configured properly. Bypass capacitors on the VCCA and VCCB are recommended and will optimize device performance.

When connecting signals, minimize connection length and keep GND leads short when probing. This will ensure minimal capacitive, resistive and inductive loading caused by the connection and connector.

4 PCB Layout

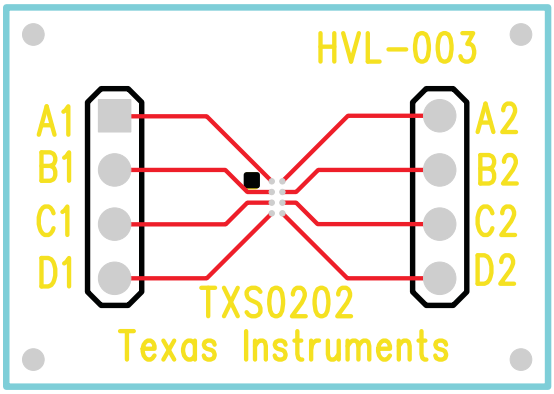
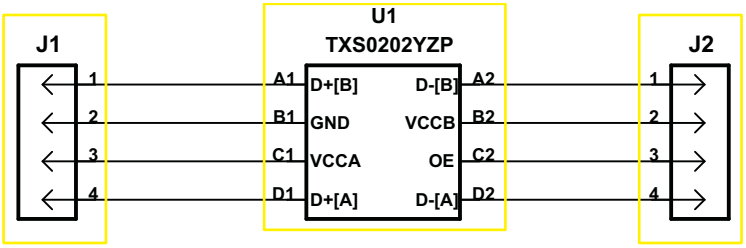


Figure 1. Top Layer

5 TXS0202 EVM Schematic



△ **VCCA Range - 1.65V to 3.6V**
△ **VCCB Range - 1.65V to 3.6V**

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