Product Overview
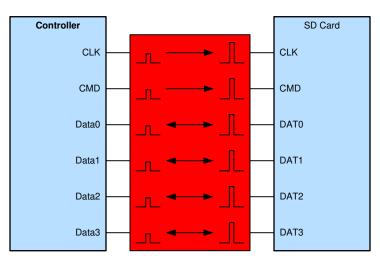# *Translate Voltages for SDIO*

Example of Using Voltage Translation With an SD Card Communication Bus

Design Considerations

- Enable communication when devices have mismatched logic voltage levels
- Prevent damage to devices that cannot support higher voltage inputs
- Improve data rates over discrete translation solutions
- Protect controller while SD Card is not connected
- [FAQ] Are there voltage level translation / level shifter device recommendations for the industry standard interfaces like GPIO, SPI, UART, I2C, MDIO, RGMII, I2S etc?
- Need additional assistance? Ask our engineers a question on the *TI E2E™ logic support forum*

Recommended Parts

Part Number	Voltage Translation Range	Maximum Data Rate (Mbps)	Features
TXS02612	1.1 V–3.6 V	120	Enables a single SDIO port to be interfaced with two SDIO peripherals 8-kV System-level (IEC 61000-4-2) ESD protection
TXS0206	1.1 V–3.6 V	60	Auto-bidirectional Integrated EMI Filtering 8-kV System-level (IEC 61000-4-2) ESD protection
TXS0206-29	1.1 V–3.6 V	60	Auto-bidirectional Integrated 2.9 V LDO regulator 8-kV System-level (IEC 61000-4-2) ESD protection
SN74AVCA406	1.2 V–3.6 V	52	MMC, SD, Memory Stick, Smart Media, and XD-Picture Card Voltage Translation Transceiver 15-kV System-level (IEC 61000-4-2) ESD protection

For more devices, browse through the *online parametric tool* where you can sort by desired voltage, channel numbers, and other features.

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