

USB-I²C-AUTO-PCB Information Sheet

Using the USB-I²C-AUTO-PCB

This product provides an interface to convert I²C and debug signals to USB and communicate with the PC-based applications. This product is designed to be used with Microchip maXTouch[®] touchscreen controllers.

The USB-I²C-AUTO-PCB automatically adapts the voltage levels for SDA, SCL, /CHG, /RESET, DBG_CLK, and DBG_DATA signals depending on the connected maXTouch device. The valid VDD levels for these signals are between 1.6V and 3.6V.

The communication interface between the bridge IC and the target can be either via the level shifter ICs or bypassing them:

Using Level shifter

- VDD_BRIDGE must be 5V
- R6 + R7 are placed
- R8 + R13 are DNF
- LK3, LK5, LK6, LK7, LK8, LK9 are OPEN

Bypassing Level shifter

- VDD_BRIDGE must be 3V
- R6 + R7 are DNF
- R8 + R13 are placed
- LK3, LK5, LK6, LK7, LK8, LK9 are CLOSED

In either case, power for the VDD rail must be supplied from the host. The USB-I²C-AUTO-PCB is not designed to supply power to a host system.



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