

## **What is USB to UART bridge?**

The RTMC Series controller provides bridging between a USB port and an enhanced UART serial port. It contains all the necessary logic to communicate with the host computer using the USB bus. TI's TUSB3410 controller is embedded in our RTMC controller that handles all the bridge functions. All the device functions such as the USB command decoding, UART setup, and error reporting are managed by the internal MCU firmware under the auspices of the PC host. The RTMC controller supports interface between a legacy serial peripheral device and a PC with USB ports, such as a legacy-free PC. Once the USB window driver installed, data flows from the host to the RTMC controller via USB port and data receives from RTMC controller to host works similar to UART communication.

## **What is RS232 to CAN bridge?**

The RTMCx00-232CAN provides firmware to convert ASCII string to CAN bus protocol and meantime also convert the CAN protocol back to ASCII string. By doing this, a virtual UART communication is created. Communication to the slave board, such as RTMCx00-CAN, is similar to communication in RS-485. Customer does not need to know the CAN protocol at all.

## **What is USB to CAN bridge?**

The RTMCx00-USB-CAN has built-in bridges for USB-UART and CAN-UART. By doing this, a virtual UART communication is created. Communication to the slave board, such as RTMCx00-CAN, is similar to communication in RS-485. Customer does not need to know the CAN protocol at all. Communication between PC and the RTMCx00-USB-CAN is similar to the communication in RS-232.