USB-UART REFERENCE DESIGN KIT

Kit Based on USB-UART LP Bridge – CY7C65213

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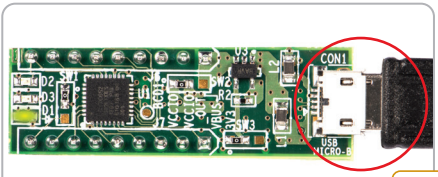

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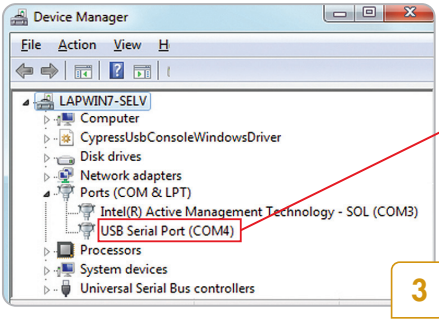
Step 1: Software Installation

- Download and Unzip the ISO file from www.cypress.com/go/CYUSBS232
- Run cyautorun.exe and follow the steps in the installer window
- Install Tera Term from the following location: <install directory>/Cypress/CYUSBS232 RDK/1.0/teraterm



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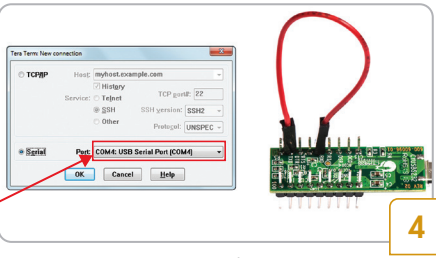
Step 3: Enumeration

- Device will appear as a USB Serial Port **(COM#)** in the Device Manager (For example, in Win 7, click **Start > Control Panel > Device Manager**)

Step 2: Powering the board*

- Connect the board to the PC using the USB cable
- LED D1 (as shown in next page) glows to indicate the board is powered



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Step 4: Testing basic UART functionality

- Connect TXD with RXD with the "Jumper wire", refer picture in next page
- Run Tera Term **(Start > All Programs > Tera Term)**
- In "Tera Term: New Connection" window, click **Serial** and select Port **(COM#)**, click **OK**
- Enable local echo option (go to **Setup > Terminal** and check the local echo box)
- Type "HELLO WORLD". Text will appear on the same terminal **

Kit operation: Data is transmitted from USB to UART (TXD). The TXD-RXD loop back connection enables the data to be fed back to the UART (RXD) to USB and is displayed on the Tera Term window

Notes:

* Connect the board to PC only after software installation. For the latest software updates and MAC/LINUX/Android users visit www.cypress.com/go/usbserial

** Each character will appear twice – "HHEELLLLOO WWOORRLLDD"

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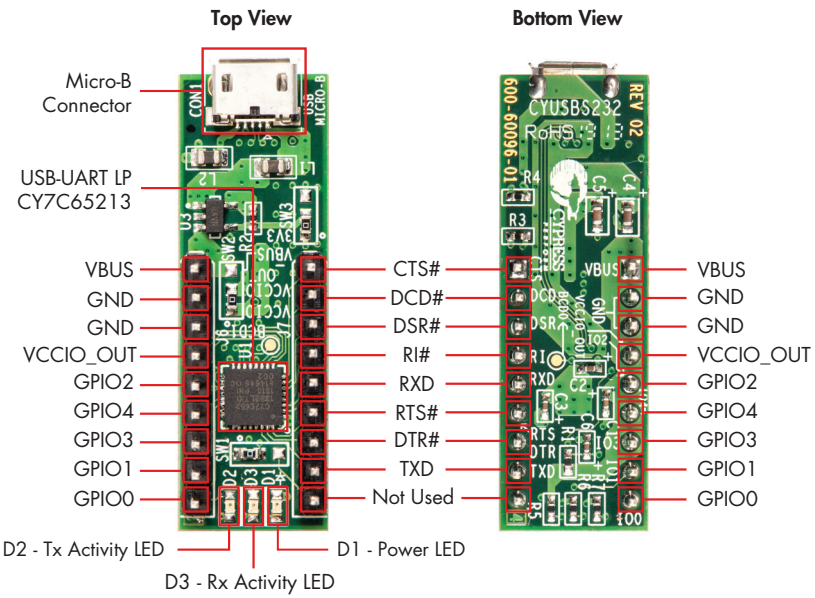
Step 5: 10 MB File transfer at 3 Mbps, with no Data-Loss

- In the Tera Term window, go to **Setup > Serial Port**, enter 3000000 in baud rate box, and select **Hardware** in **Flow control** drop-down menu; go to **Setup > Terminal > Receive**, select **CR+LF**
- Connect TXD to RXD and CTS# to RTS#, with "Jumper Wires"
- Enable file capture: go to **File > Log;** uncheck **Append** and select <file name> to save the received data
- Go to **File > Send File**, select Test.txt file from <Install directory>\Cypress\CYUSBS232 RDK\1.0
- "Tera Term: Send file" window shows effective data throughput; multiply by 2X to get uni-directional throughput. Actual throughput will be less than 3 Mbps, usually around 1 Mbps, due to protocol overhead and PC Application latency
- Compare Test.txt and Received file, using file compare utilities to verify data integrity



For the latest information about this Kit and to download Kit Software and Hardware files, visit www.cypress.com/go/CYUSBS232

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