Flashing the TDI and TDI Extension

I.   <u>Overview</u>

The following will guide you through flashing the Tucor TDI and TDI Extension. Read this over first before trying. The sequence must be followed exactly and may take a few tries to do it within the allotted time. You'll have one minute from the time you power on the TDI to finish steps 3-6.

II.   <u>Parts needed</u>

- A Windows PC with a USB port
- A USB cable: A-Male to Mini-B *(Fig 1)*
- TDI firmware file
  a. Hard-wired flow: TDI_1.2b1.chx
  b. SD-100 flow: Tucor_x_2.0b1.chx
- Tera Term Software (or other HyperTerminal software)

Figure 1

III.   <u>Flashing the TDI</u>

A. If this is the firm time connecting a TDI to your PC, drivers may need to install. If this is the case, connect the TDI to your PC with the USB cable *(Fig 2)* and apply power. The drivers should install automatically. After installed, determine the COM port number by opening Device Manager on your PC *(Fig 3)*. This example uses COM5.
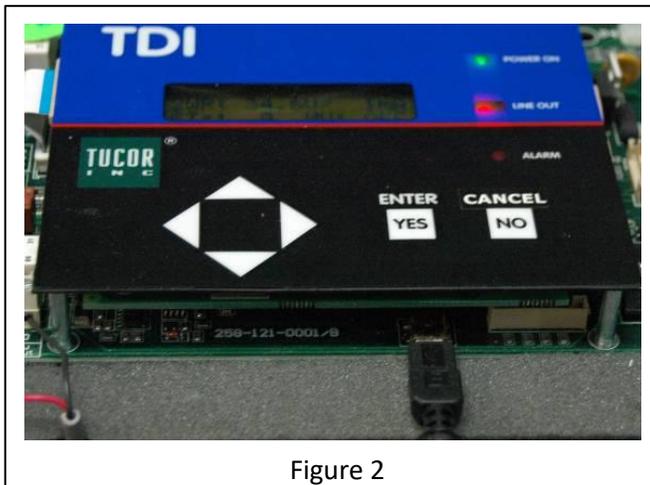
Figure 2
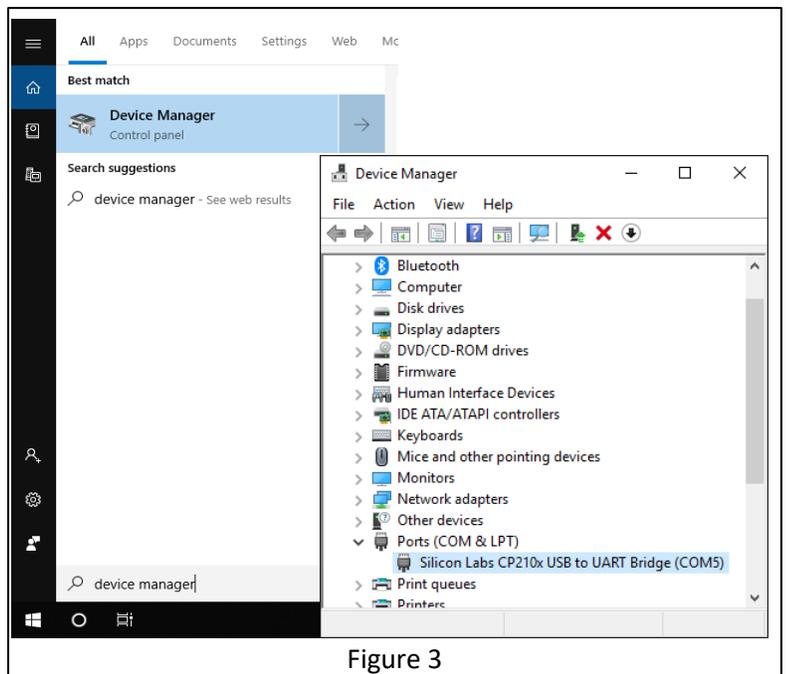
Figure 3

B. Open the Tera Term software.
   i. At the New Connection dialog, click **Cancel**.

   Click **Setup.** *(Fig 4)*

   ii. Click on the **Port** drop box and choose the appropriate COM port (from Step A).
   iii. Set the following parameters:

   a. **Baud Rate**: 115200

   b. **Data**: 8 bit

   c. **Parity**: none

   d. **Stop**: 1 bit

   e. **Flow control**: none

   f. **Transmit delay**: 0 0

   g. Click **OK**
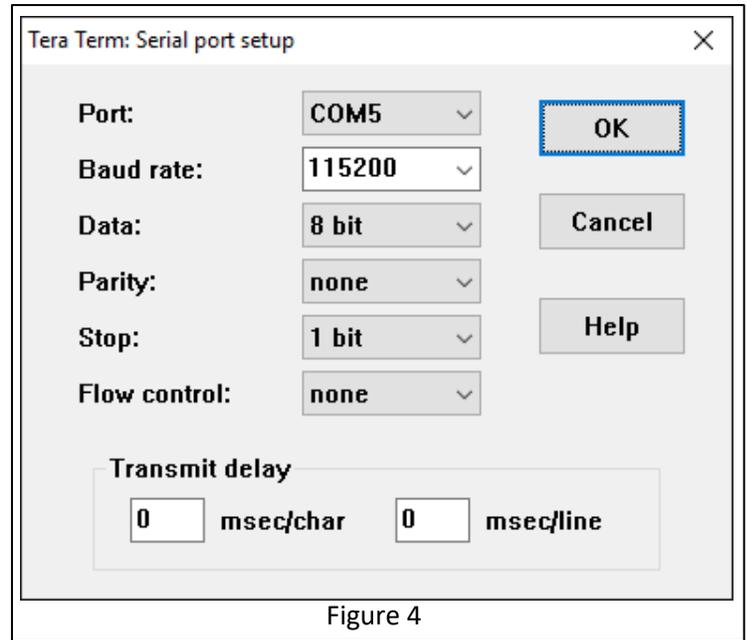
Figure 4

Note: The serial port setup configuration can be saved by clicking **Saved setup...** under the **Setup** tab.

C. Power off the TDI. Press and hold the **Enter** button, apply power, and release. The **Power ON** and **Alarm** LEDs should flash alternately. The TDI is in program mode for the next 60 seconds. Step D must be completed during that time.

D. Using the Tera Term software *(Fig 5)*
   i. Press **Enter** on your keyboard four or more times. You will see the Password prompt, type: **t098**.
   ii. The **Flash Menu** will appear with your options. To flash the TDI, type **1**.
   iii. **Flash new firmware?** will appear, type **y**.
   iv. **Load TDI.chx** file appears. Click **File** and **Send File…**
   v. An Explorer window will open. Locate the .chx file and click **Open**. *(Fig 6)*
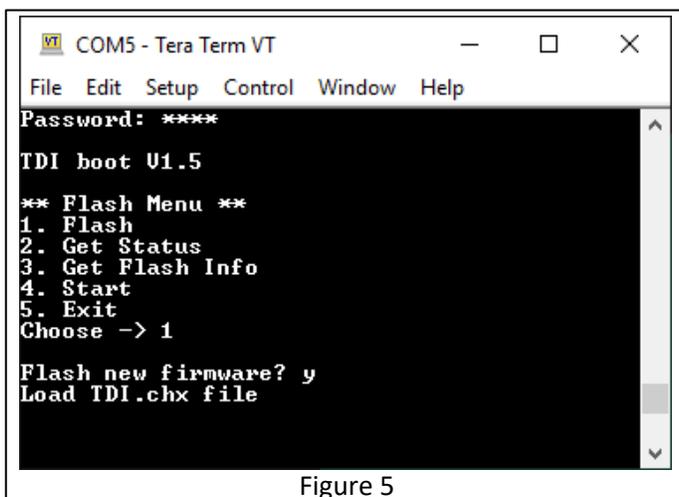
Figure 5
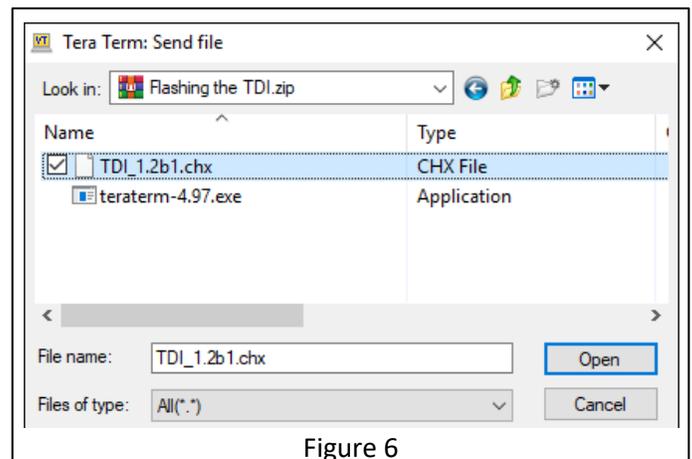
Figure 6

vi. A new window will open to display the status of the upload. *(Fig 7)*

vii. When flashing is complete, the software will verify it was uploaded correctly.

viii. The **Flash Menu** will be displayed again, type **5** to exit *(Fig 8)*. The TDI will reboot.
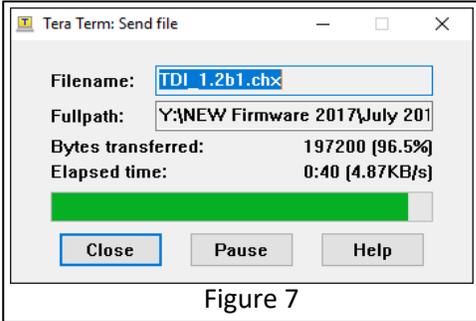
Figure 7

E. Verify the firmware version from the TDI's LCD screen by pressing the **Left** button to view the **Main Menu**. Scroll down to **About** using the **Down** button and press **Enter.**
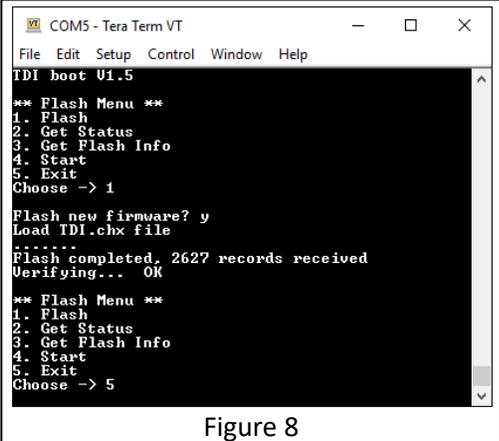
Figure 8

IV. Flashing the TDI Extension

Flashing the TDI Extension board is similar to flashing the main TDI board with one major exception: You use the TDI extension board, not the PC and hyperterminal.

A. Connect the TDI with the TDI extension *(Fig 9)*.
B. Connect the Mini-B end of the USB cable into the extension board.
C. Power on both the TDI and the extension.
D. From the TDI's LCD screen, press the **Left** button to view the **Main Menu**. Scroll down to **Upgrade** menu using the **Down** button and press **Enter**.
E. Scroll **Down** to **Ext Upgrade** and press **Enter**.
F. Follow the instructions in Step III. Flashing the TDI
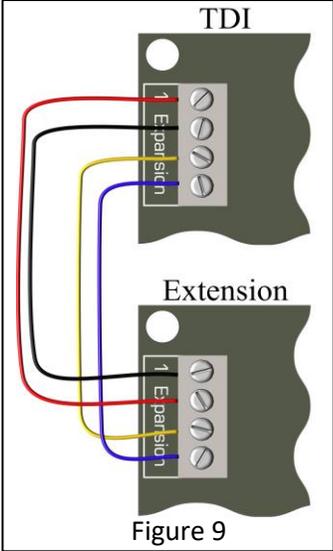
Figure 9

For additional support, please contact Tucor directly:
1-800-272-7472   www.tucor.com