thinklogical®

TLX CATx Extender
FPGA Program Code Update Procedure

The following procedure documents the process for updating the FPGA Program Code, using a Windows-based computer, for TLX10 and TLX20 CATx Extenders Modules

1 **STEP 1: FPGA Update Preparation:** Please contact your *thinklogical* Sales Representative or Customer Service (**1-203-647-8700**) for access to the FPGA Download Update application and firmware.

2 **STEP 2:** Install the provided FPGA Download Update application on the system's CPU.

3 **STEP 3:** Save the FPGA program code update file provided by Thinklogical to a known location on the CPU. The program code update file will have a file extension of "**.lbf**". This is the file that will be retrieved in Step 9.

4 **STEP 4: Connect a USB mini-B cable from the Update Port of the TLX10 or TLX20 chassis to the CPU.** (When connecting Thinklogical equipment to your PC for the first time, it may take a few moments for Windows to correctly install the required drivers.) Open the Windows *Device Manager* to check that all drivers are installed correctly.
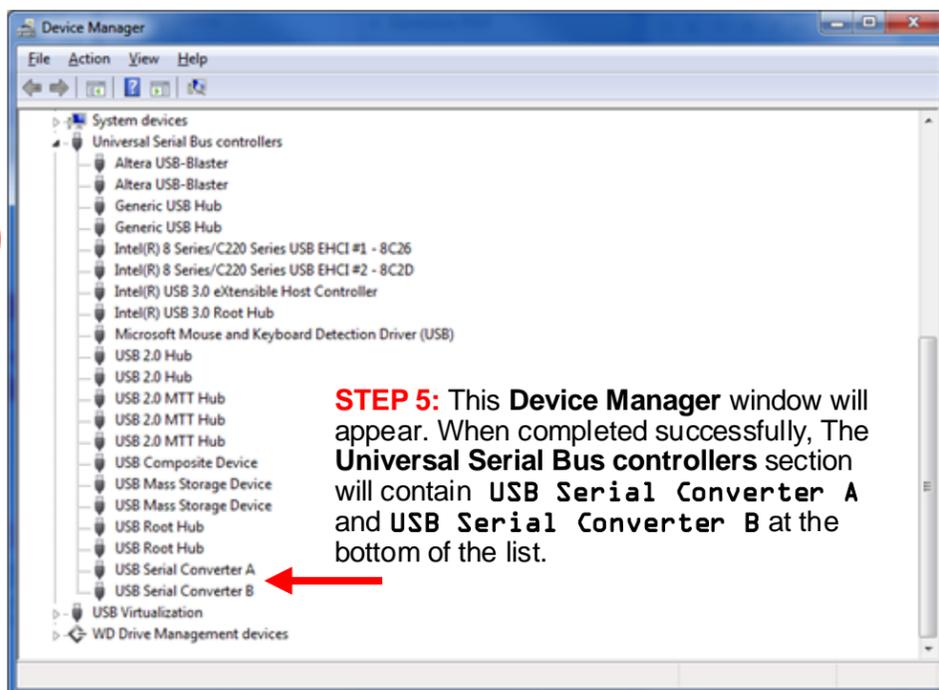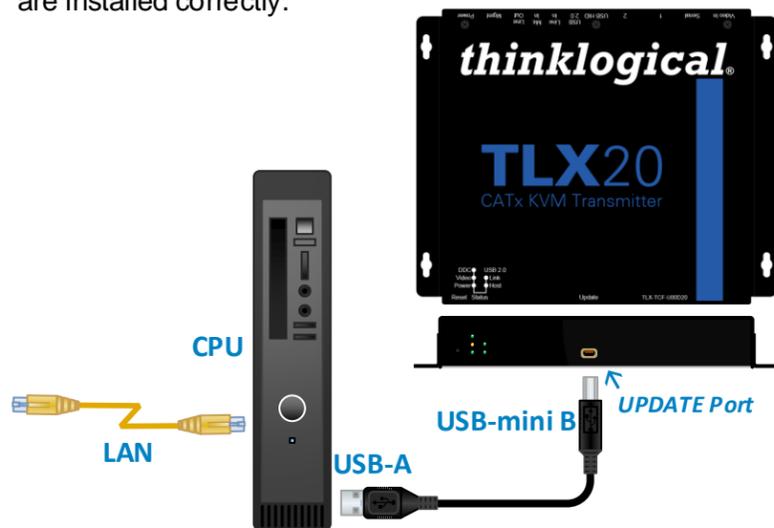
5 **STEP 5:** This **Device Manager** window will appear. When completed successfully, The **Universal Serial Bus controllers** section will contain **USB Serial Converter A** and **USB Serial Converter B** at the bottom of the list.
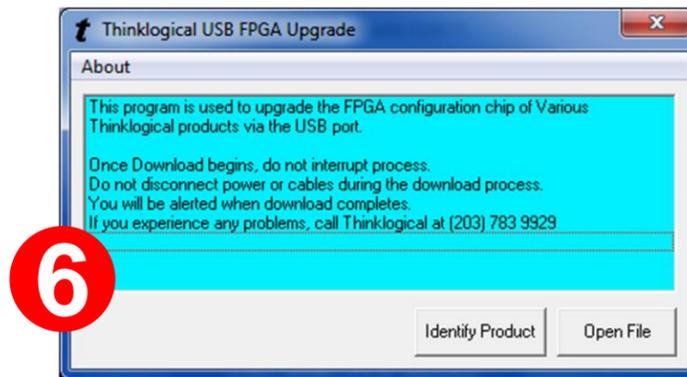
6 **STEP 6:** Once the drivers are installed, go to the **Start** menu and choose: **Start → All Programs → FPGA_Download → FPGA_Download.** The window above will appear. Select *Identify Product*.

7 **STEP 7: If you do not see CATX_TX, call Thinklogical for assistance.** Otherwise, select *Open File*.
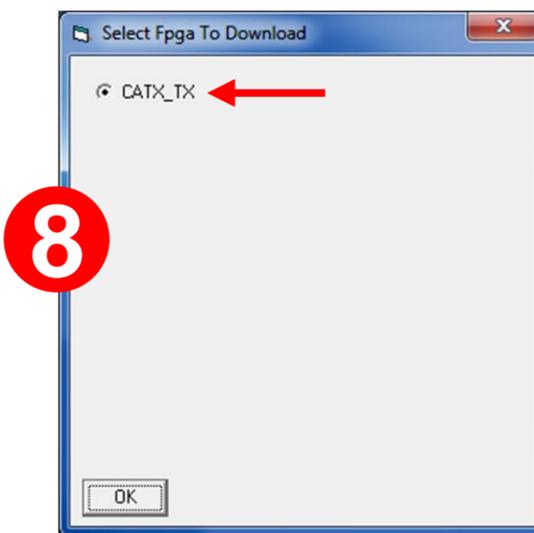
8 **STEP 8:** A window similar to this will open. As shown, there is only one firmware option for each of the CATX Extender Transmitters. To upgrade the Tx, select the file and click OK. as shown above.
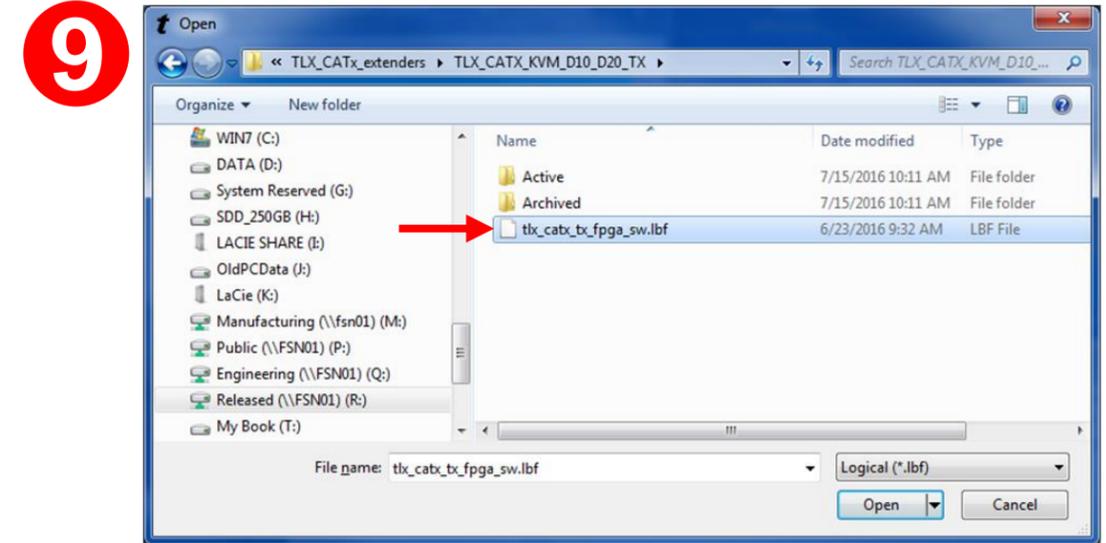
9 **STEP 9:** A dialog box similar to this will appear. **Navigate to the folder with the unzipped firmware files from Step 3 (tlx_catx_tx_fpga_sw.lbf).** The dialog box will already be populated with the correct file name. Click *Open*. This will take approximately 10 minutes. The *Upgrade* window will open again.

10 **STEP 10:** Select *Open File* and repeat the previous steps to update the RX modules. Be sure to move the USB cable to the Receiver's Update Port.

11 **STEP 11:** To make the new firmware active, cycle power to the unit by momentarily removing and reinstalling the power cord.

If you have any problems or questions, please call *thinklogical* for help: 203-647-8700