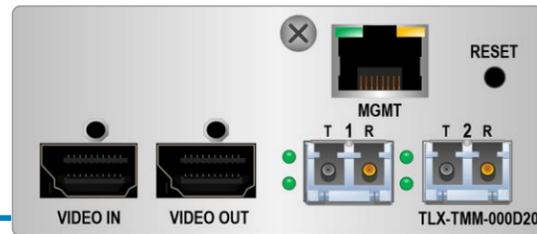


TLX Video Extender Module FPGA Program Code Update Procedure



The following procedure documents the process for updating the FPGA Program Code, using a Windows-based computer, for the following TLX Video Extender Modules in a CHS-2 or CHS-4 Chassis:
(T=Tx, R=Rx, MM=Multi-Mode, SM=Single-Mode, D=DisplayPort 1.2, HDMI 1.4)

TLX-TMM/TSM-000D10, -S00D10, -N00D10, -K00D10, -000D20, -S00D20, -N00D20, -K00D20
TLX-RMM/RSM-000D10, -S00D10, -N00D10, -K00D10, -000D20, -S00D20, -N00D20, -K00D20

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.

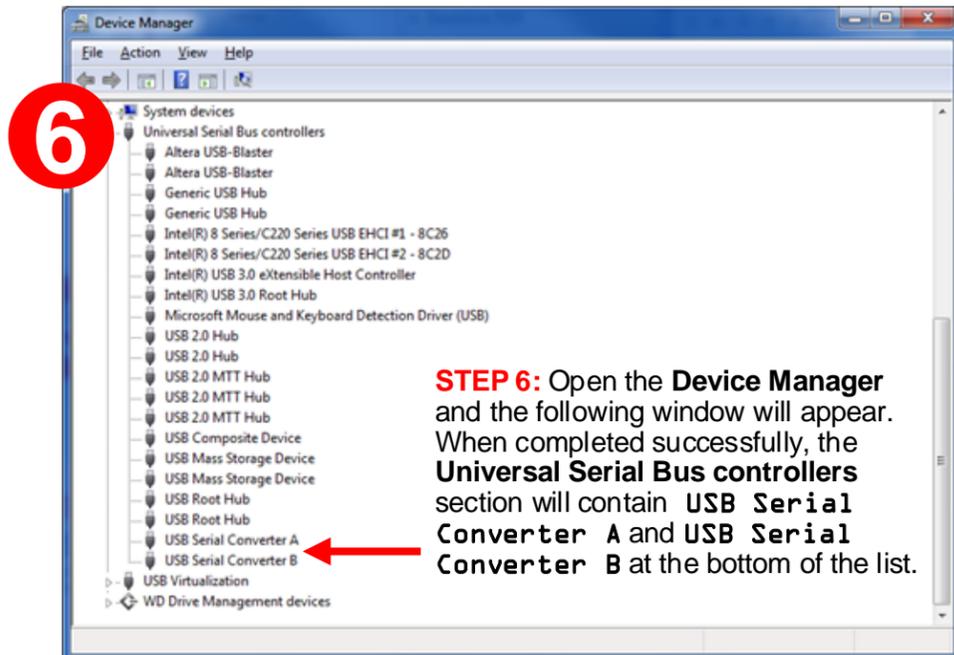
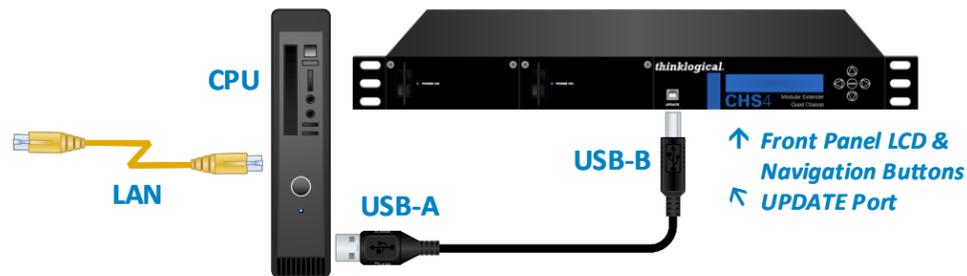
2 STEP 2: Install the provided FPGA Download Update application on the system's CPU.

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 10.

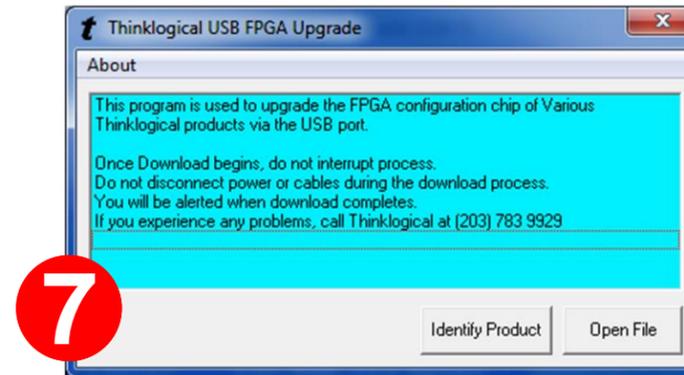
4 STEP 4: Use the Navigation buttons ▼ to get to *System. Scroll right ► to **Allow FPGA Update**. Press **enter**. Use the down arrow ▼ to select Yes and press **enter**.



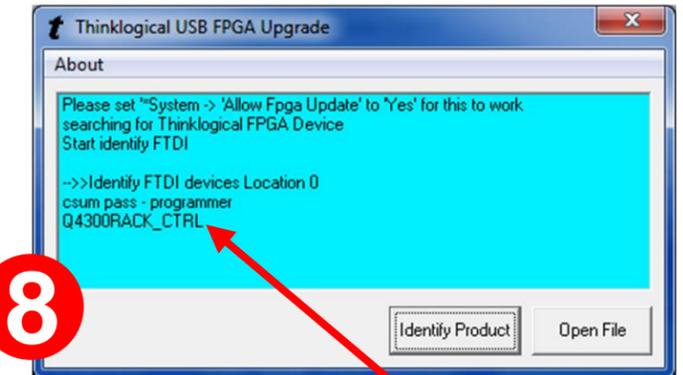
5 STEP 5: Connect a USB cable from the front panel of the CHS-2 or CHS-4 chassis to the CPU. (When connecting Thinklogical equipment to your PC for the first time, it may take a few moments for Windows to correctly install the required drivers.) Open the Windows *Device Manager* to check that all drivers are installed correctly.



STEP 6: Open the **Device Manager** and the following 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.



7 STEP 7: 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*.



8 STEP 8: If you do not see **Q4300RACK_CTRL** (CHS4 Chassis) or **Q2300RACK_CTRL** (CHS2 Chassis) call Thinklogical for assistance. Otherwise, select *Open File*.

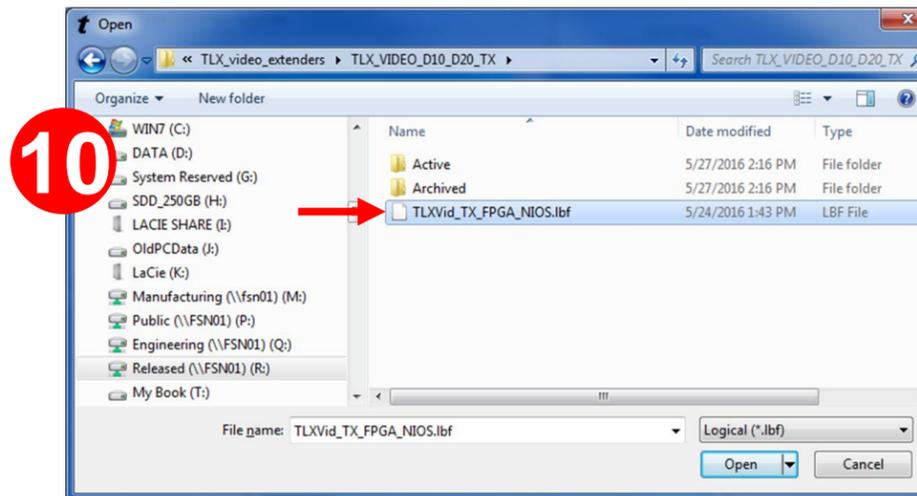


9 STEP 9: You will see a window similar to this, depending on how many slots in the chassis are occupied (2 in this example). As shown, there is one firmware option for each of the TLX Video modules.

Slot 1 is a TX module and Slot 2 is an RX module.

To upgrade the TX, for example, select: **Slot 1-TLX_VIDEO_TX_FPGA_SW** (left).

(The procedures are the same whether updating a Tx or Rx module. Screen options will reflect either choice. The Tx module update is shown here.)



10 STEP 10: A dialog box similar to this will appear. **Navigate to the folder with the unzipped firmware files from Step 3 (TLXVid_TX_FPGA_NIOS.lbf)**. The dialog box will already be populated with the correct file name.

Click *Open*.

(This will take approximately 10 minutes.)

The *Update* window will open again.

11 STEP 11: Select *Open File* and repeat the steps above to update the RX modules.

12 STEP 12: Power-cycle the chassis to make the new firmware active. **If you have any problems, please call thinklogical for help: 203-647-8700**