



Updating the Gen6 PCIe Host Card – SRIS w/ Precoding

Flashing the mCPU and Atlas 3 Switch

This process will describe how to update the micro-CPU interface as well as flash the newest firmware for the Broadcom Atlas 3 switch on the card.

Updating the mCPU interface

Step 1: Connect to the serial interface via the USB-C port at CN7



- Identify the COM port assigned using your systems Device Manager
- Use a terminal emulator to connect to the above COM port
 - (ex. TeraTerm/puTTY for Windows or minicom for Linux)
- Successful connection should show a cmd> prompt
- First, run the 'ver' command to check the version of the mCPU and make sure it is lower than the target version you plan to flash
 - Current Version: v0.0.9 (As of 7/14/2025)

Answering these questions can help in narrowing down the possibilities.

Step 2: Run the upload command and send the target file

- Run the 'fdl mcu' command
- Send the target file via XMODEM
 - Current File: Gen6HC_MCU_v009.bin

- In TeraTerm: File > Transfer > XMODEM > Send
- In minicom: Send File > XMODEM
- Once the upload completes, run the 'reset' command to cycle the host card
- Run the 'ver' command again to verify the new version of the mCPU firmware.

Updating the Atlas 3 firmware

Step 1: Connect to the serial interface via the USB-C port at CN7

- Identify the COM port assigned using your systems Device Manager
- Use a terminal emulator to connect to the above COM port
 - (ex. TeraTerm/puTTY for Windows or minicom for Linux)
- Successful connection should show a cmd> prompt

Step 2: Run the upload command and send the target file

- Run the 'fdl sbr0' command
- Send the target file via XMODEM
 - Current File: RC28_SSC_0715_precoding_6.IMD.bin
 - In TeraTerm: File > Transfer > XMODEM > Send
 - In minicom: Send File > XMODEM
- Run the 'fdl sbr1' command
- Send the target file via XMODEM
 - Current File: RC28_SSC_0715_precoding_6.IMD.bin
 - In TeraTerm: File > Transfer > XMODEM > Send
- In minicom: Send File > XMODEM
- Once the upload completes, completely power cycle the host card
- Run the 'showport' command to verify the link status of both the upstream (gold finger) and the downstream (end points) are all linking at the desired speed and width.