DE-4000 ST-Link Programming Procedure

R0 8/1/2018
R1 2/13/2019
R2 3/11/2019
R3 6/14/2019

1. Power OFF the unit.

2. Connect the ST-Link to the intended Module being updated.* VERY IMPORTANT: Check that Pin 1 of the Module matches with Pin 1 of the 10-pin connector (See Figure 1.d and Figure 1.e). When connecting the ST-Link to a Module, unplug the ST-Link from the computer, and make sure that the Module is disconnected from power. This is very important because it will make sure that there are no short circuits. The correct setup can be seen in Figure 1.a, Figure 1.b, and Figure 1.c.

3. Power ON the unit.

Figure 1.a: ST-Link Programmer Connected to JTAG Board
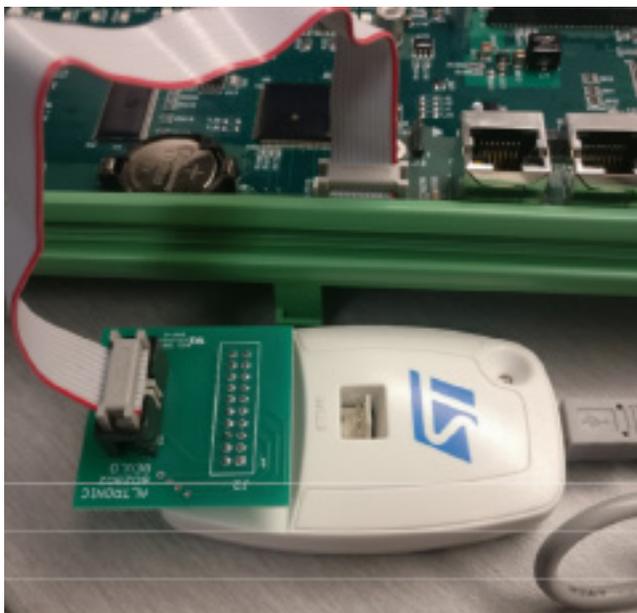
Figure 1.b: ST-Link Connected to Controller Module
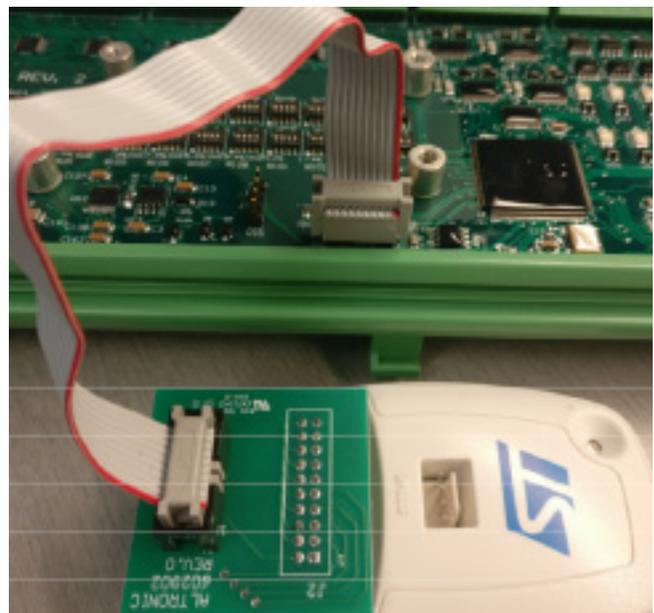
Figure 1.c: ST-Link Connected to Terminal Module
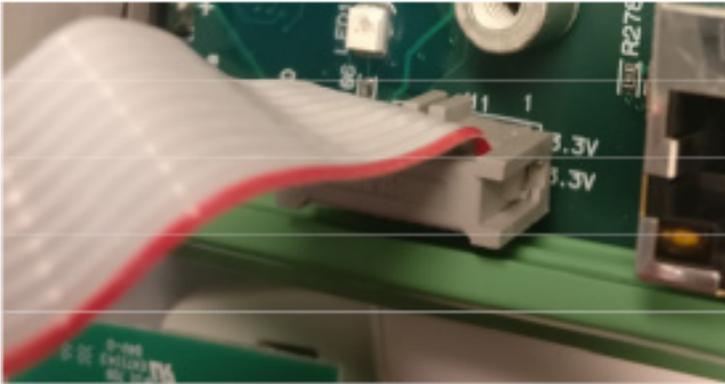
Figure 1.d: Pin Connection for Controller Module (Red strip is Pin 1)

Figure1.e: Pin Connection for Terminal Module

4. Open ST-Link V2:

5. After opening the program, it should match Figure 2:
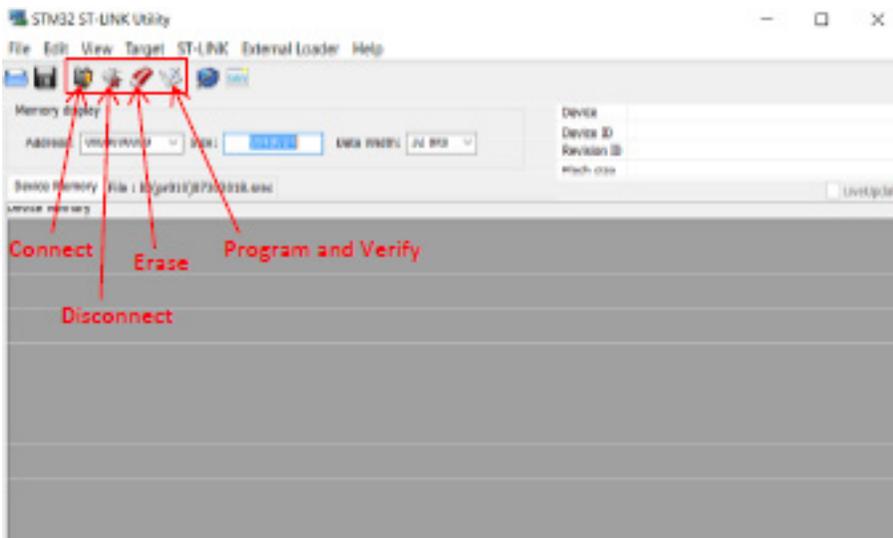
Figure 2: ST-Link Display

6. Click on the Connect icon .

7. After a successful connection, click on the Erase icon .
    (This will erase the old .srec file from the Module. See Figure 3
    and Figure 3.a)

Old Loaded Firmware
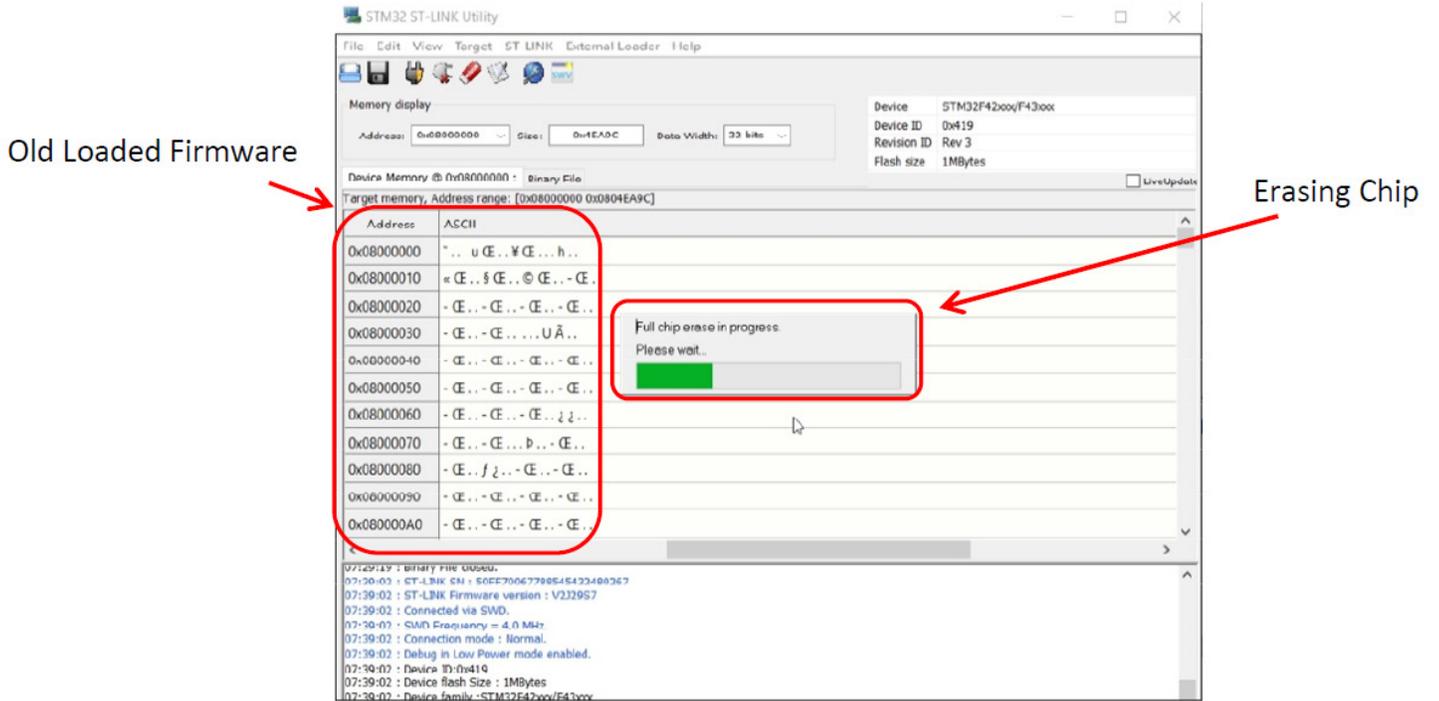
Erasing Chip

Figure 3: Erasing Chip
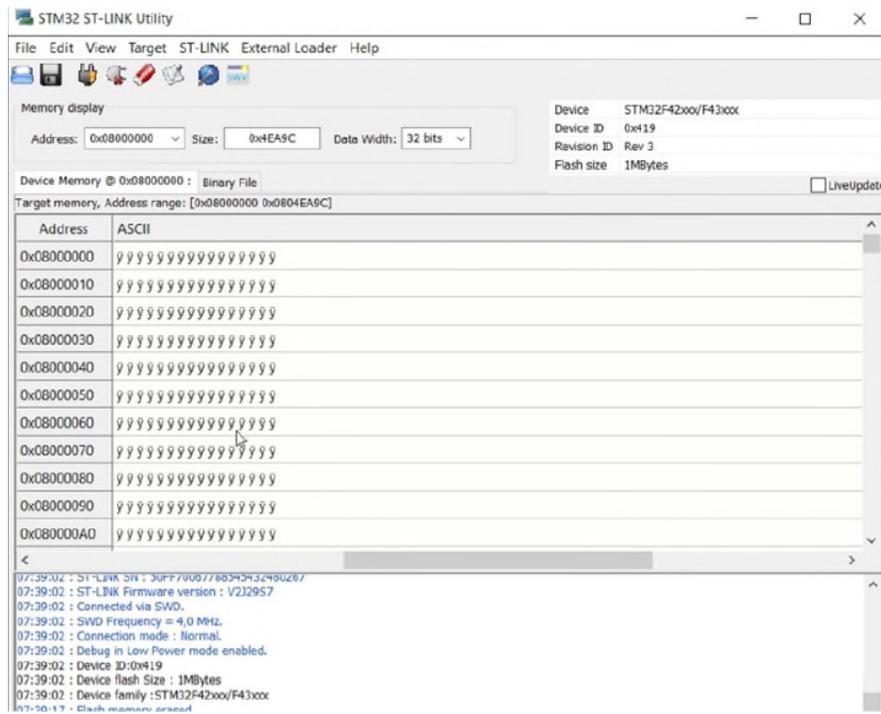
Figure 3.a: Module Chip Erased

8. Click on the Program and Verify icon   .

9. Figure 4 will appear. Once this window appears, click on Browse next to the File Path Box. Find the correct .srec file for the Module that is being configured. Click Start to program the Module.
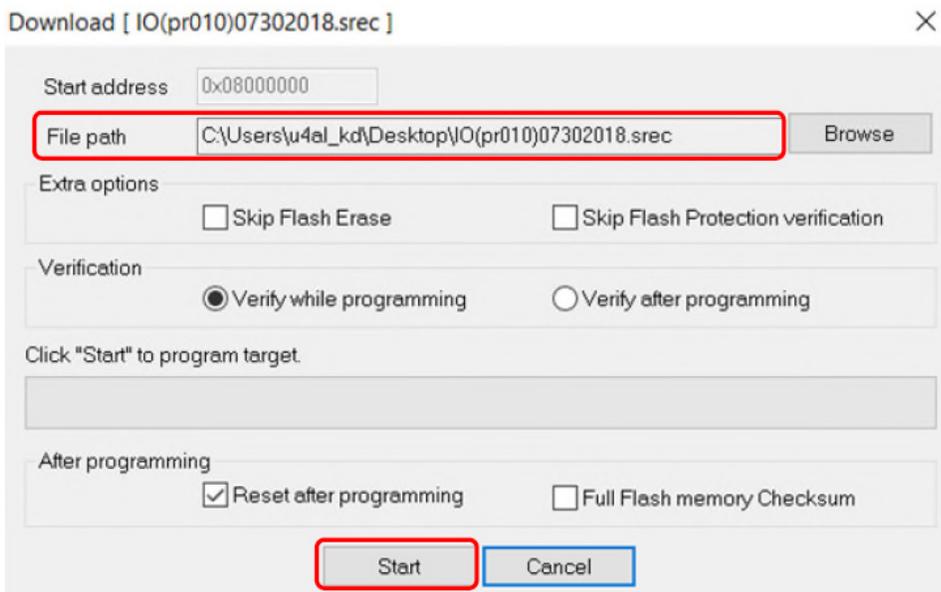
Figure 4: Start Programming

10. Once the Module is programmed, the main page of the ST-Link will show Verification (Figure 5).
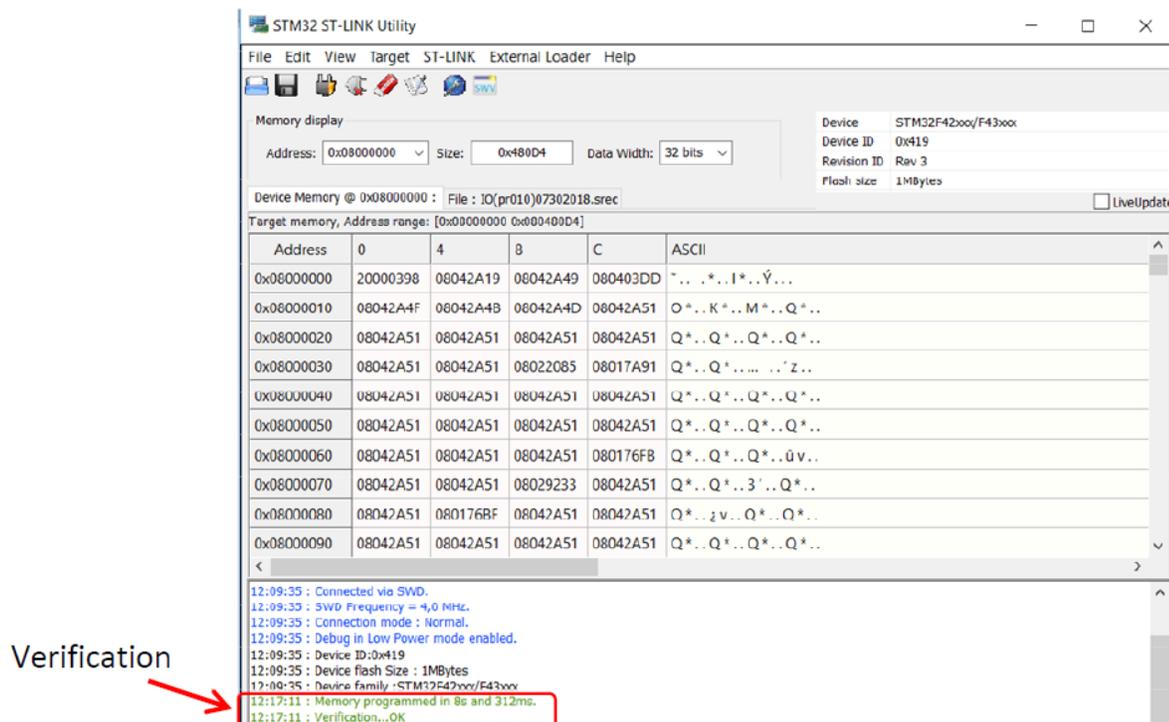
Figure 5: Complete Flash of Terminal Module

11. Click on the Disconnect icon   .

12. Power OFF the DE-4000 System and disconnect the cable.