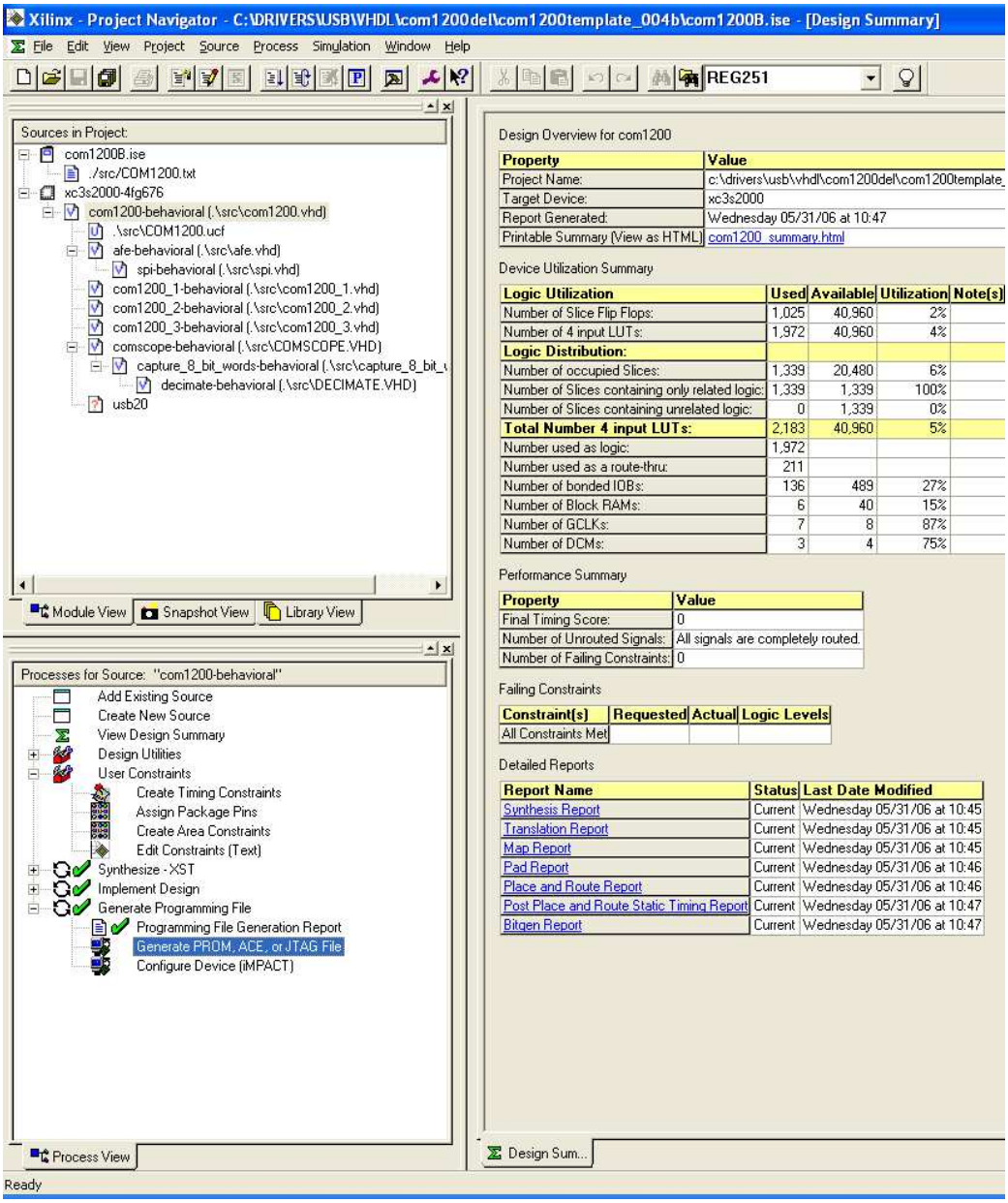
CREATING A FPGA CONFIGURATION FILE (.MCS) USING XILINX ISE 7.1

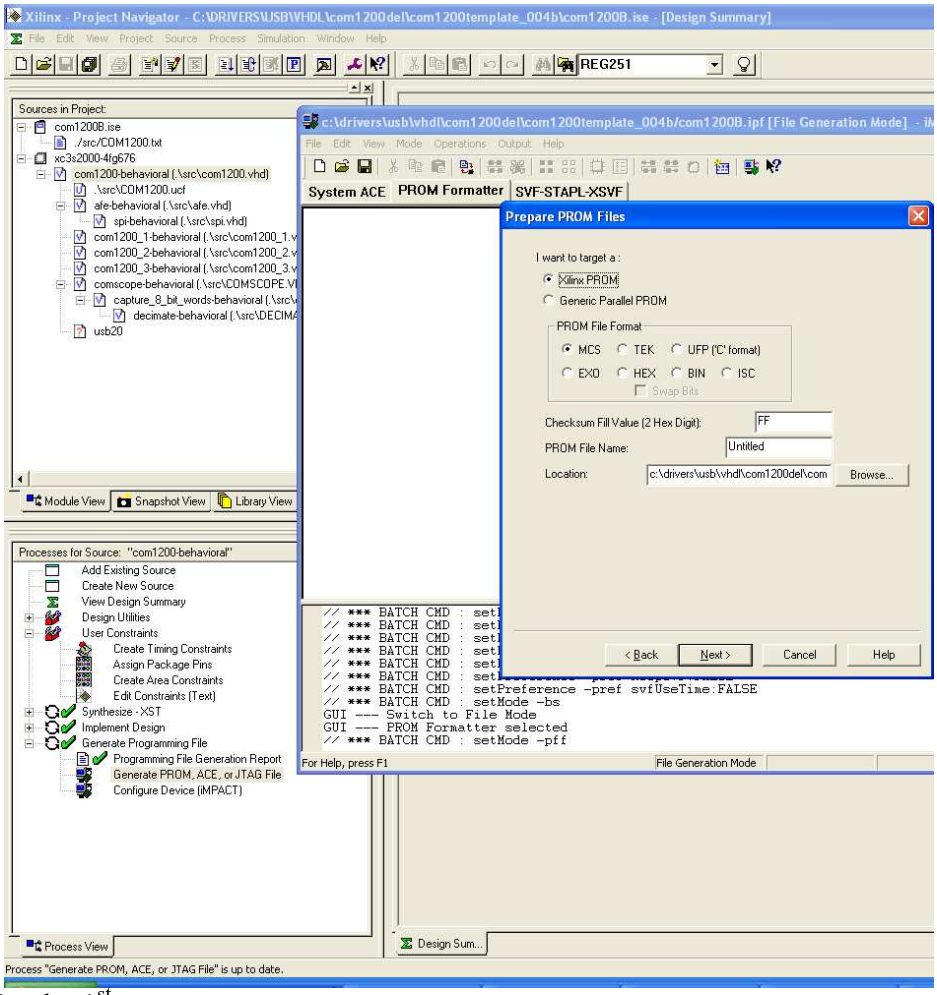
Following are the instructions to be followed to obtain a mcs file from a Xilinx ISE project (to program a ComBlock FPGA development platform for example). Please note that a newer document is available here.

1.

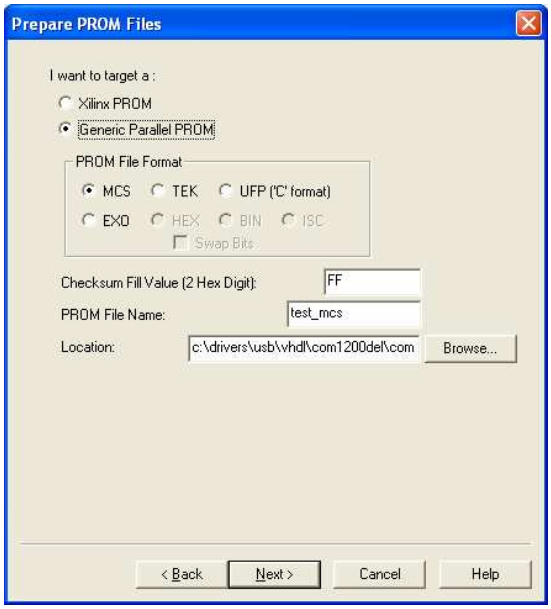


From the Processes window of the Xilinx ISE run “Generate PROM, ACE or JTAG file” under the Generate Programming File process.

This will bring up iMPACT in a new window.

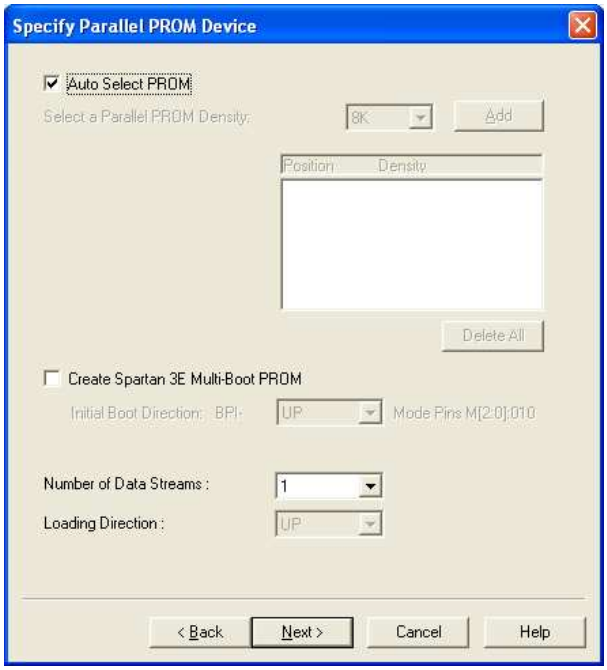


2. On the 1st screen:



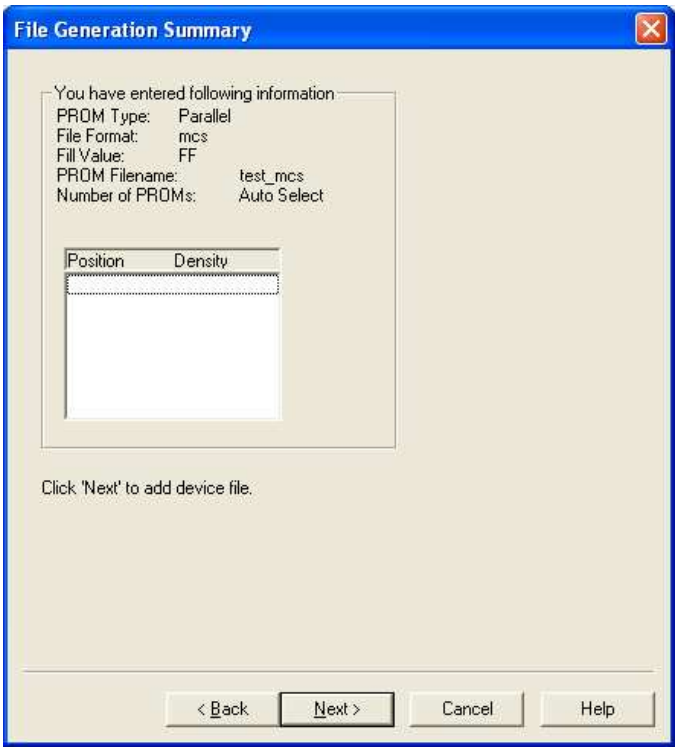
Target: Generic Parallel PROM
PROM file format: MCS
Checksum: FF (unchanged)
PROM file name: user defined
Location: user defined
Click next.

3.



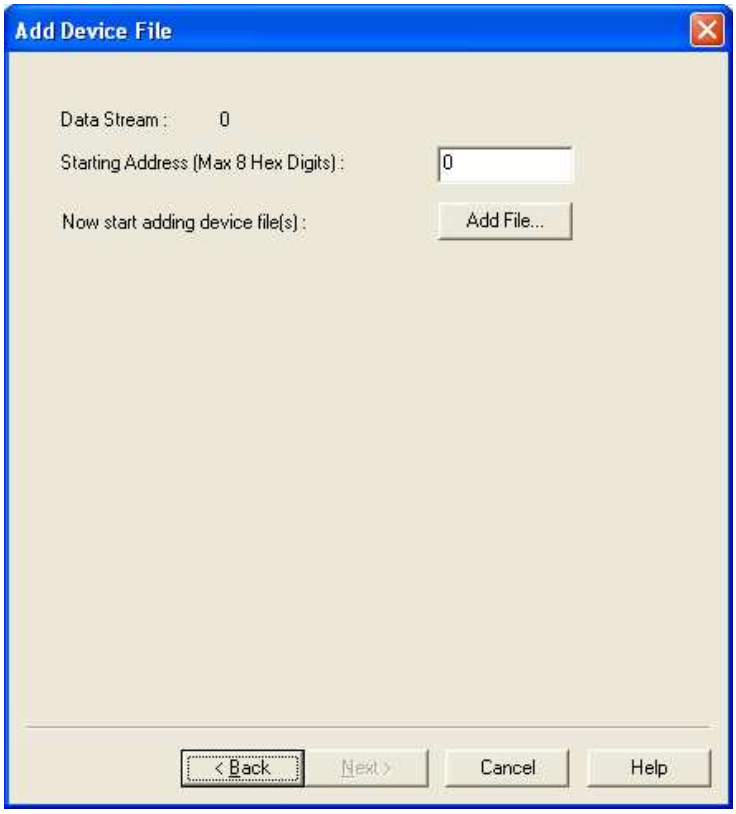
Select “Auto select PROM” and click next.

4.



In the File Generation Summary screen, just click “Next”.

5.



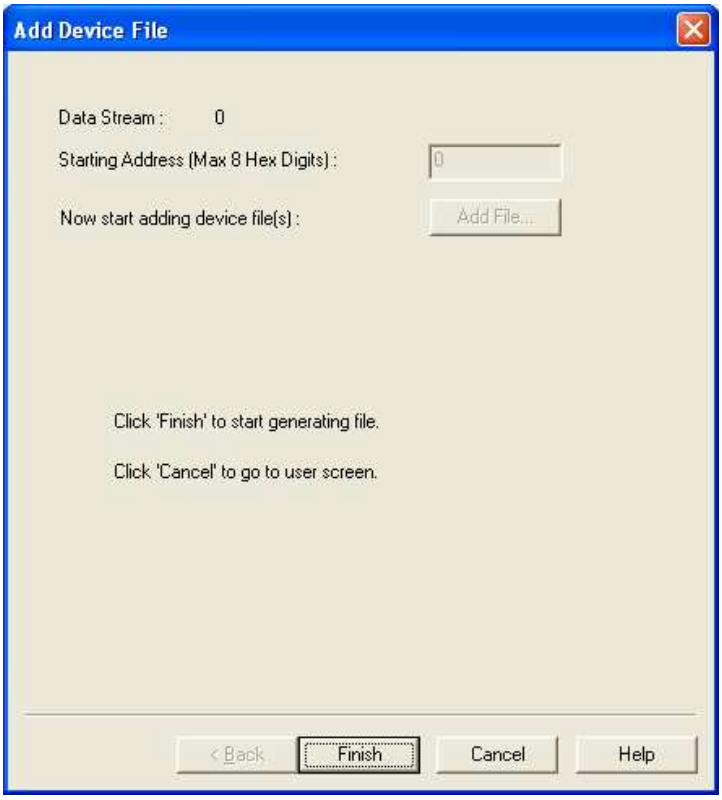
In the Add Device File Click on “Add File” to select the appropriate bit file.

Select the bit file and click “Open”

6.

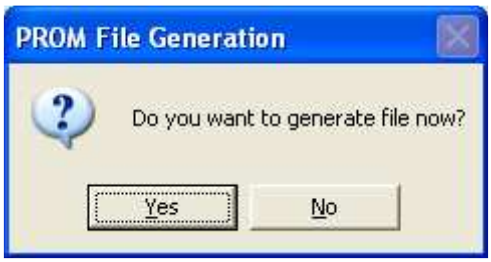
Answer “No” to the above question.

7.

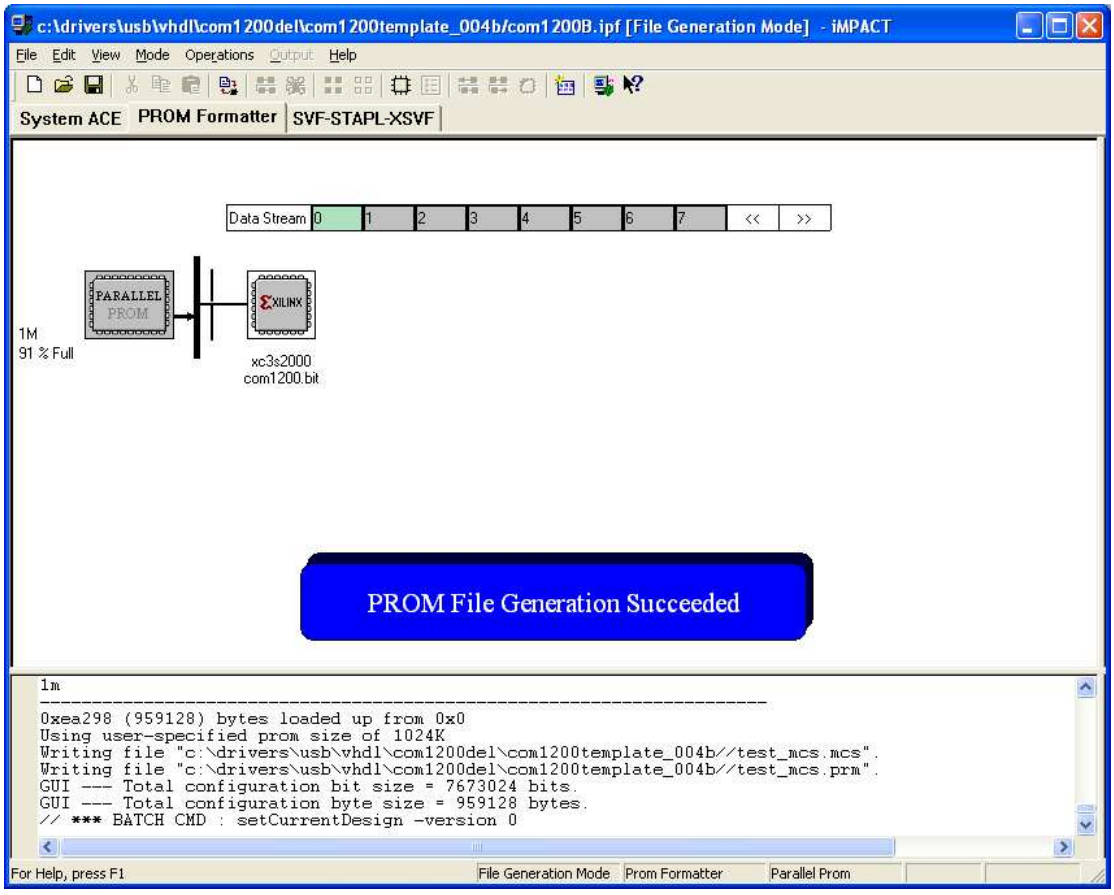


Click on “Finish” in the next screen that appears.

8.



Select “Yes” in the above screen. At this point the impact window will become inactive. Once it is activated again, it shows the successful creation of a PROM file in .mcs format in the directory specified by the user.


c:\drivers\usb\vhdl\com1200del\com1200template_004b/com1200B.ipf [File Generation Mode] - iMPACT
File Edit View Mode Operations Output Help
System ACE PROM Formatter SVF-STAPL-XSVF
Data Stream 0 1 2 3 4 5 6 7 << >>
PARALLEL PROM
XILINX
1M
91 % Full
xc3s2000
com1200.bit
PROM File Generation Succeeded
1m
0xea298 (959128) bytes loaded up from 0x0
Using user-specified prom size of 1024K
Writing file "c:\drivers\usb\vhdl\com1200del\com1200template_004b//test_mcs.mcs".
Writing file "c:\drivers\usb\vhdl\com1200del\com1200template_004b//test_mcs.prm".
GUI --- Total configuration bit size = 7673024 bits.
GUI --- Total configuration byte size = 959128 bytes.
// *** BATCH CMD : setCurrentDesign -version 0
For Help, press F1
File Generation Mode
Prom Formatter
Parallel Prom