

# Indirect SPI Programming using iMPACT (bitstream only)

For your convenience, a [reference video](#) is available on the [TrenzElectronic's Channel at YouTube](#).



For further reference, please read [Xilinx XAPP974: Indirect Programming of SPI Serial Flash PROMs with Spartan-3A FPGAs](#) and this [discussion](#) (in particular for TE0630 Spartan 6 module) on the Xilinx forum.



Direct SPI configuration is supported only up to Xilinx iMPACT version 11.x. See [Xilinx AR#36156](#).

To indirect program SPI Flash using Xilinx iMPACT do following steps.

Connect JTAG cable to corresponding module connector (see JTAG connector).

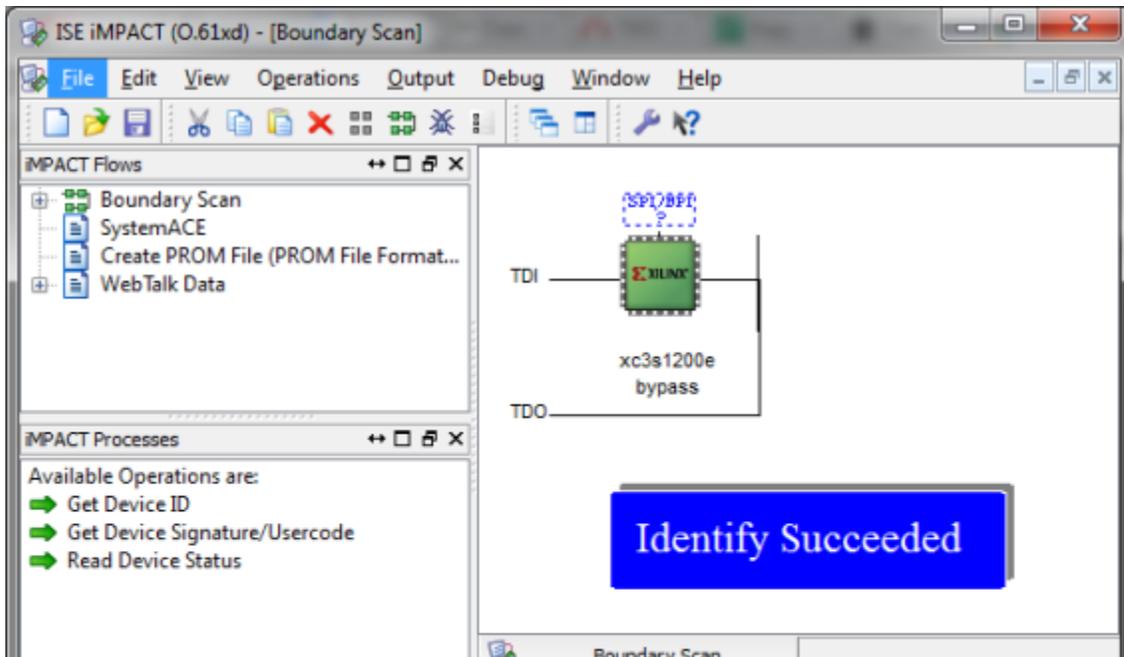
Connect JTAG cable to host computer with installed Xilinx iMPACT software.

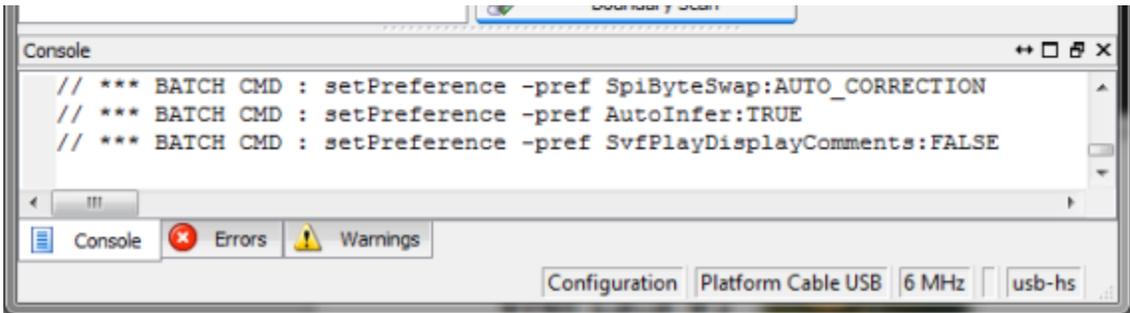
Power-on module by external power supply source or by USB cable.

Run Xilinx iMPACT.

Select Boundary Scan mode.

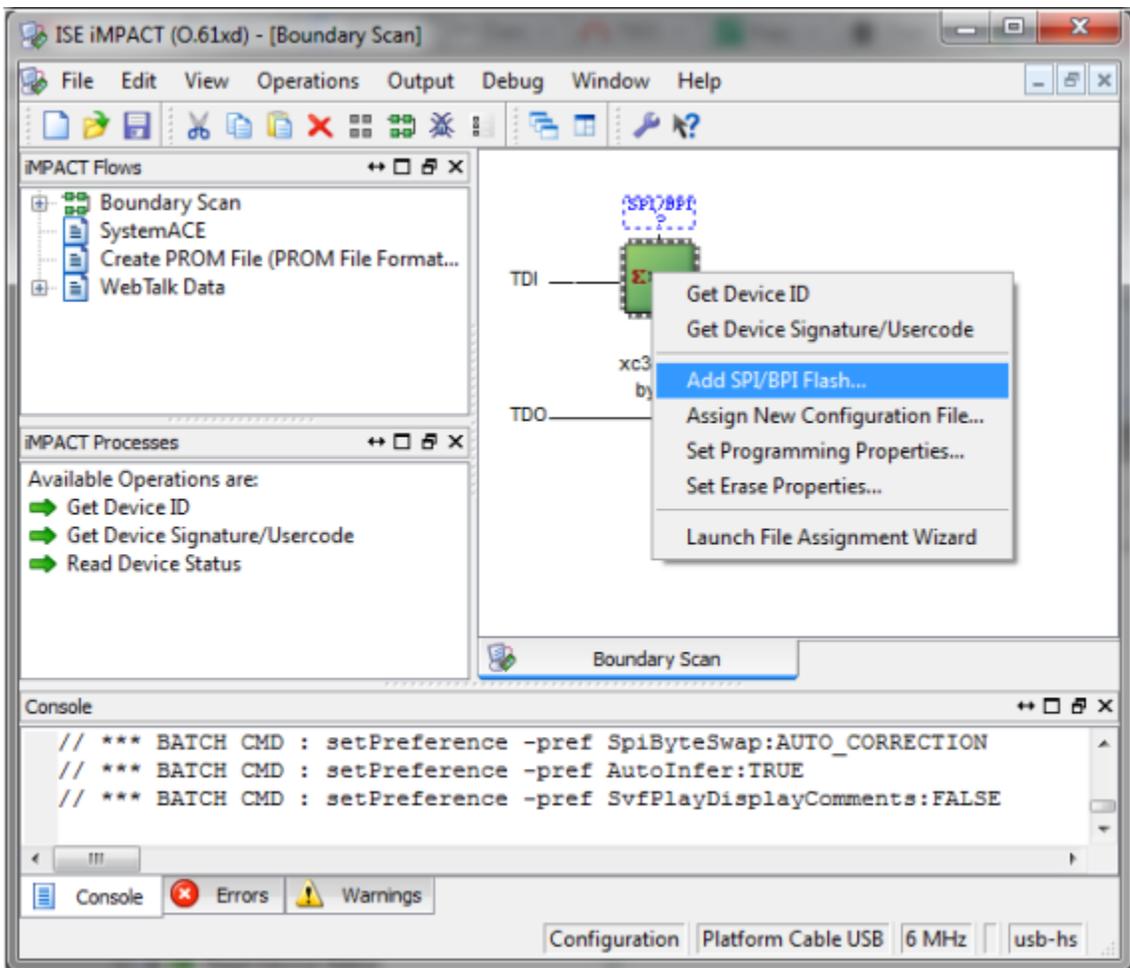
After initialization iMPACT window should look like





iMPACT Boundary Scan identification success

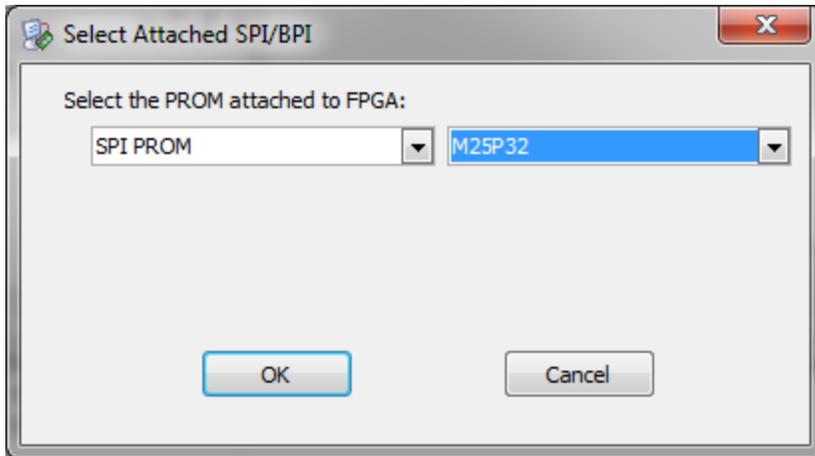
Right click on FPGA image and select "Add SPI/BPI Flash..." from menu.



"Add SPI/BPI Flash..." selection

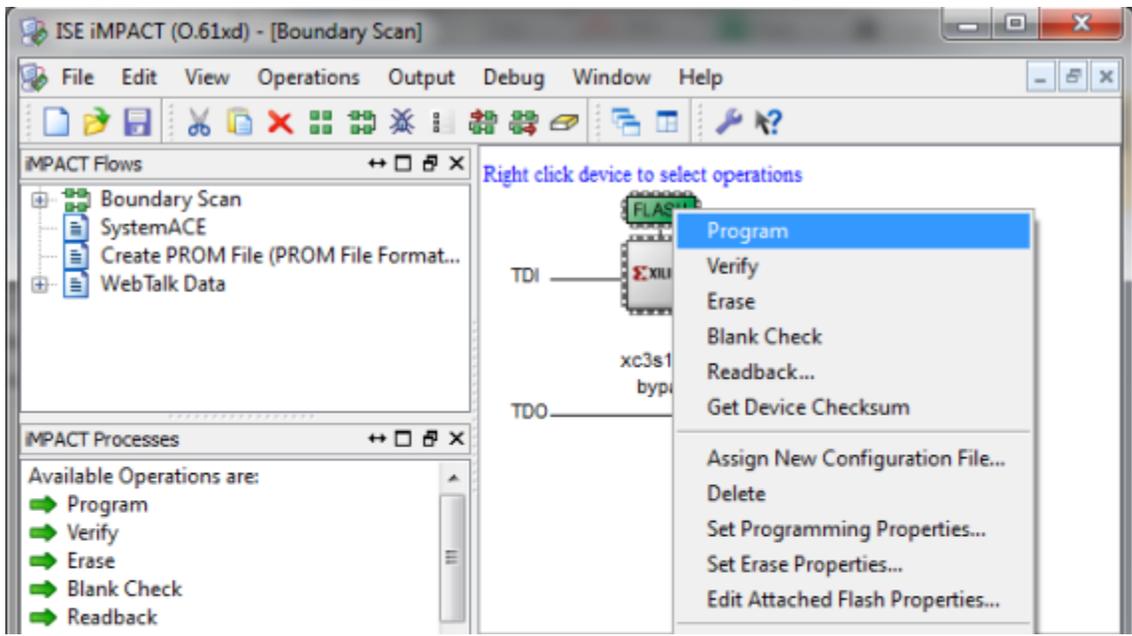
Select mcs file to program.

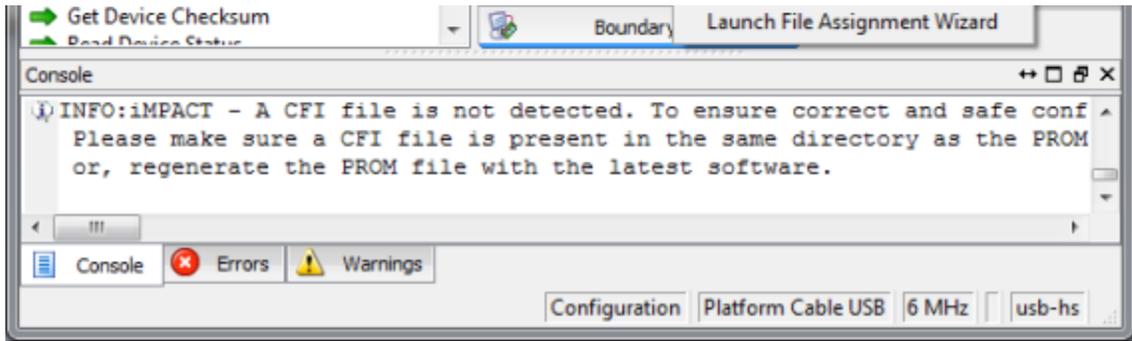
Select SPI Flash type corresponding to your module type and revision.



**Select SPI Flash type pop-up**

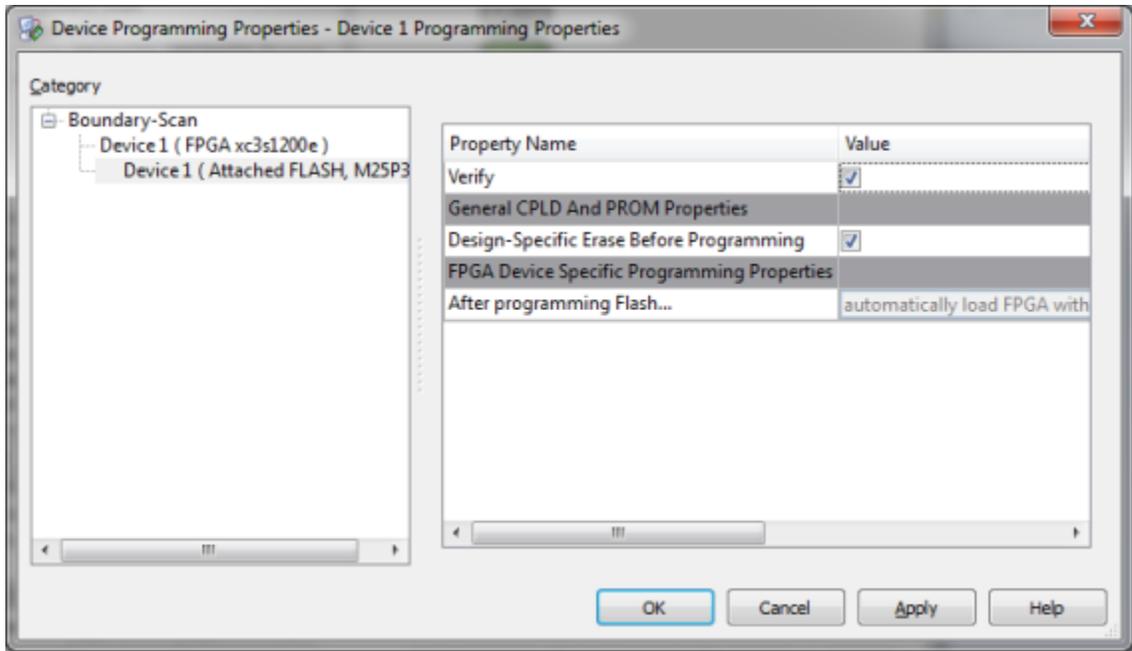
Right click on Flash image and select "Program" from menu.





Select "Program"

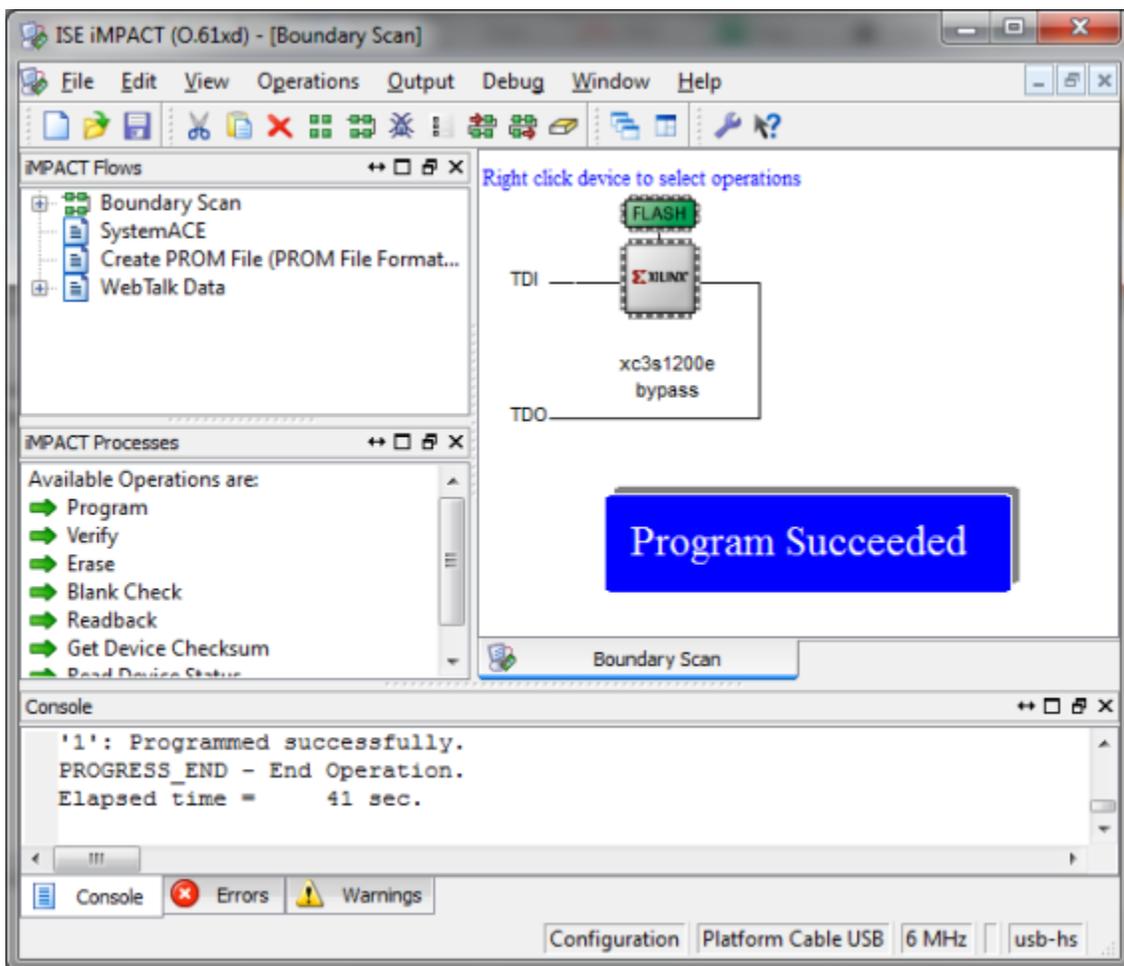
Leave default programming properties and press "OK".



Press "OK" in the pop-up

Wait for operation to complete.

After completion iMPACT window should show "Program Succeeded" sign.



Flash Program Succeeded