

GB1 Xilinx Spartan-6 EVB SPI Serial Flash Memory Write

방법

<http://www.mangoboard.com/>

<http://cafe.naver.com/embeddedcrazyboys>

Crazy Embedded Laboratory



Document History

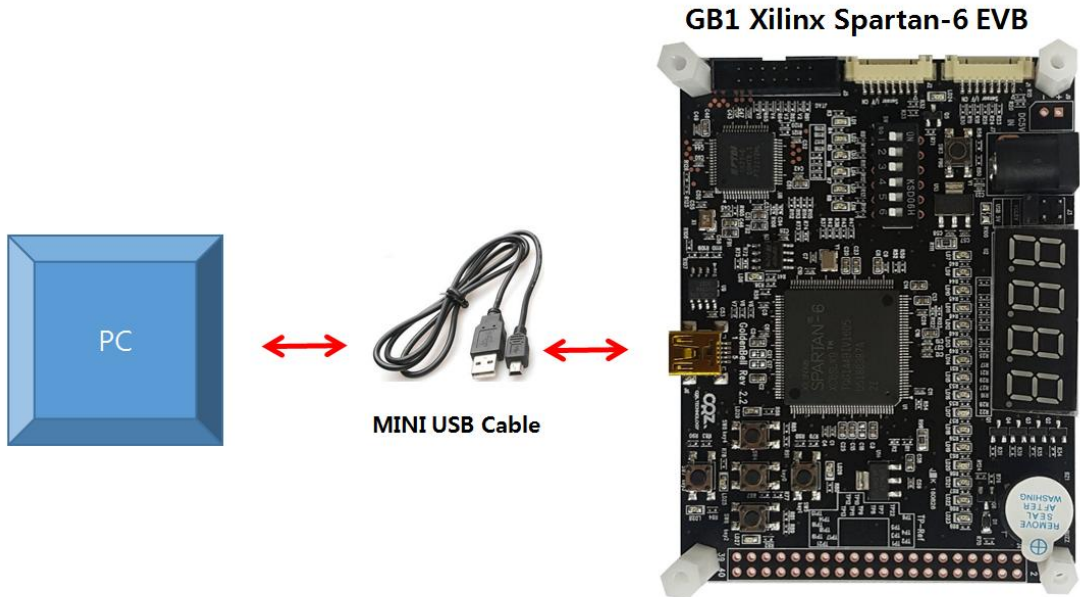
Revision	Date	Change note
Init	2016-10-10	전종인

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1. SPI Serial Flash Memory에 Write하기

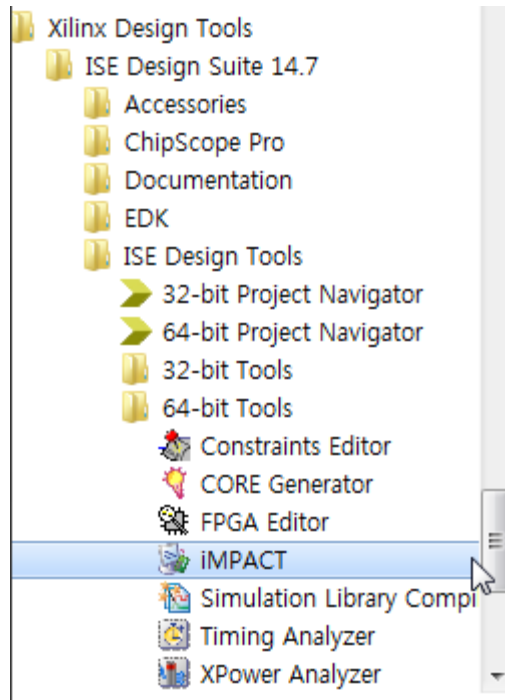
GoldenBell Xilinx Spartan-6 보드에는 SPI Serial Flash Memory가 있습니다.

만든 이미지를 Write를 하면 전원을 인가하면, Serial Flash Memory에 있는 이미지가 실행이 됩니다.

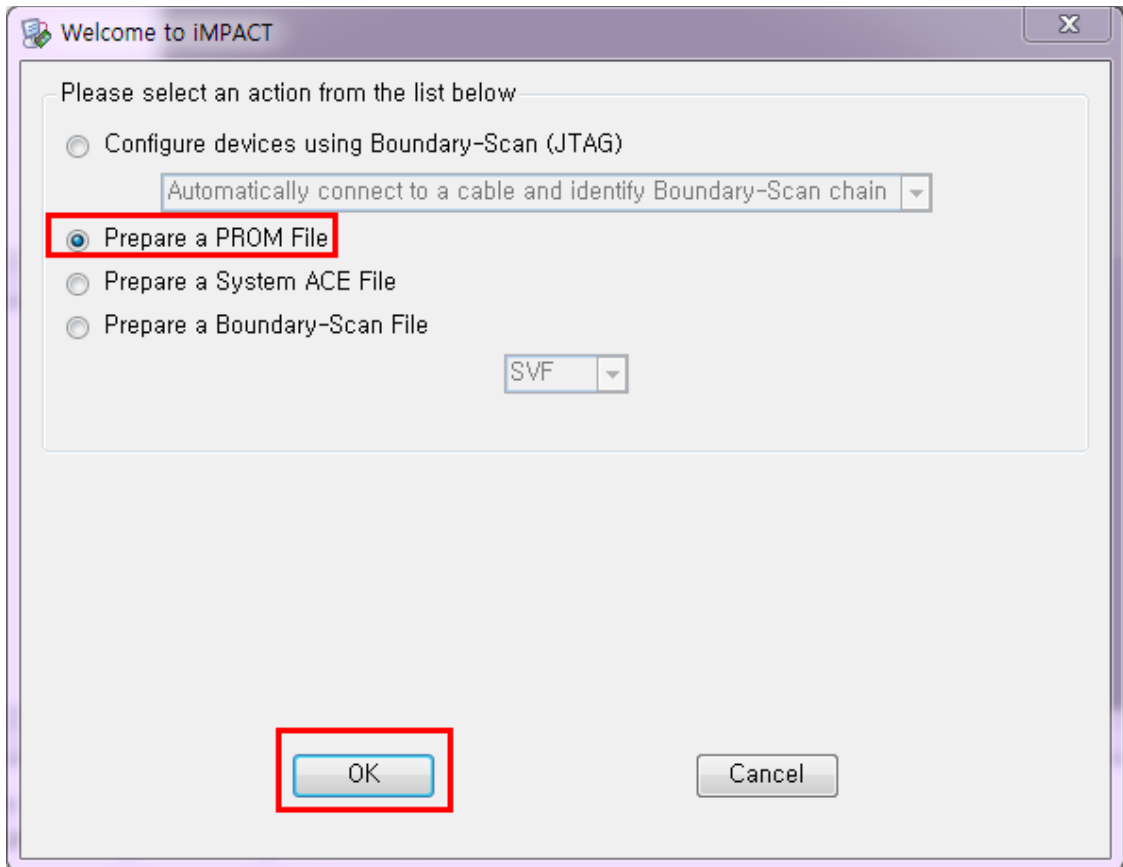


GoldenBell 보드에 USB device에 USB Cable 연결하면, 전원이 인가가 됩니다.

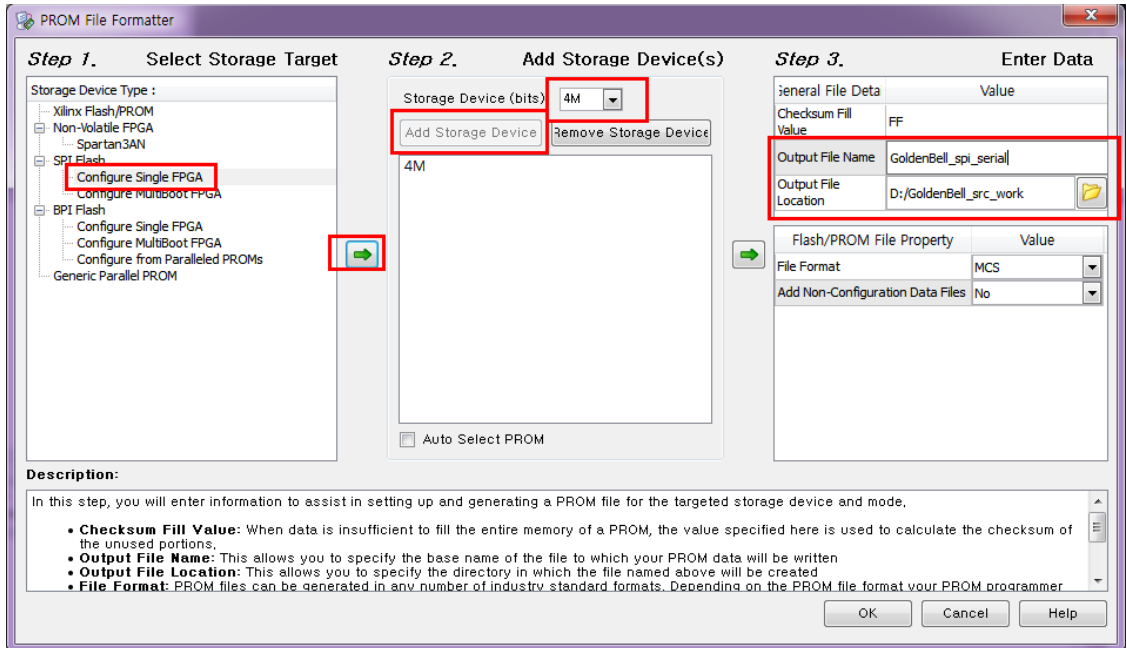
1.1. MCS 파일 만들기



실행을 합니다.



"Prepare a PROM File" 선택

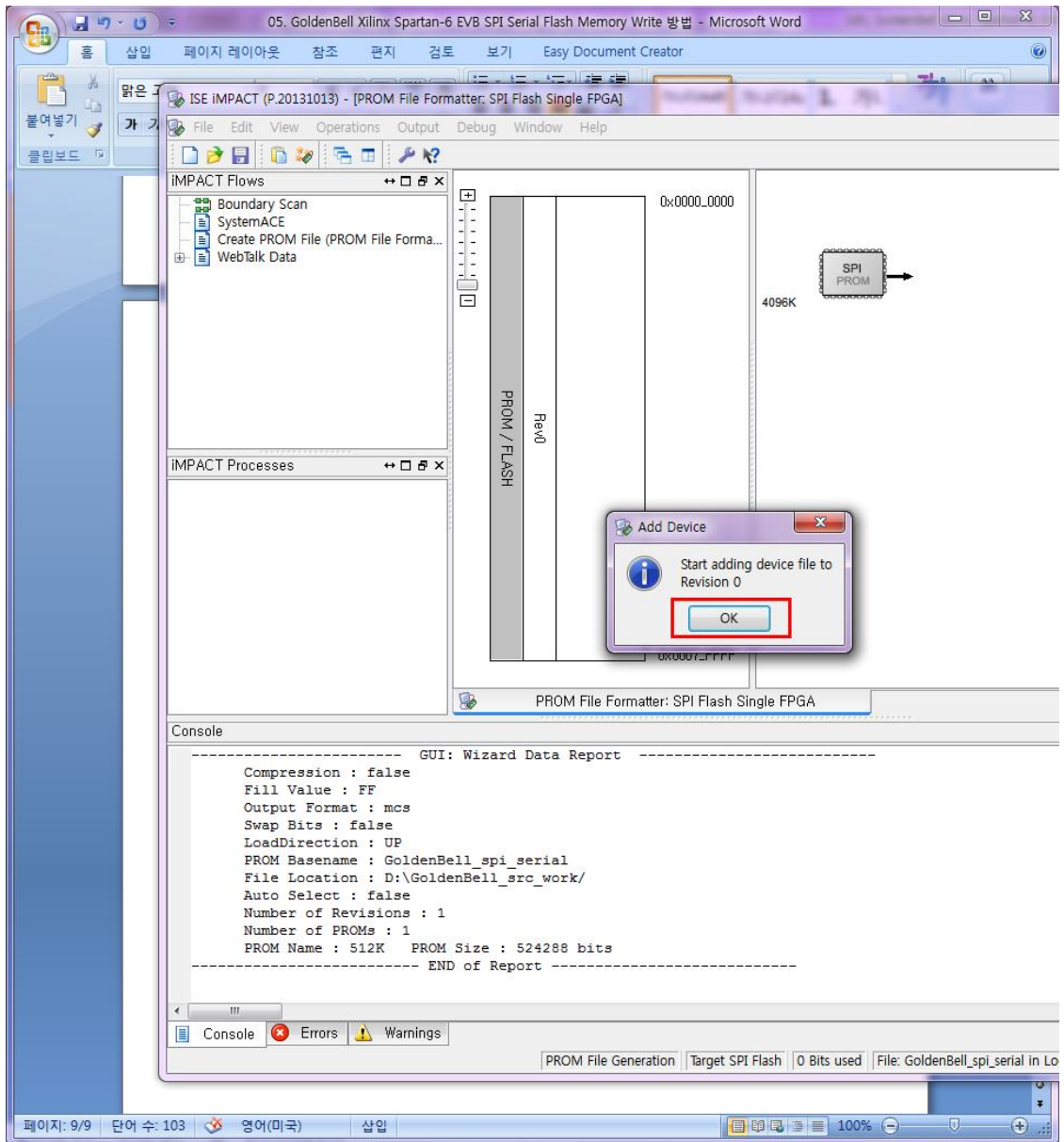


선택을 하고, OK

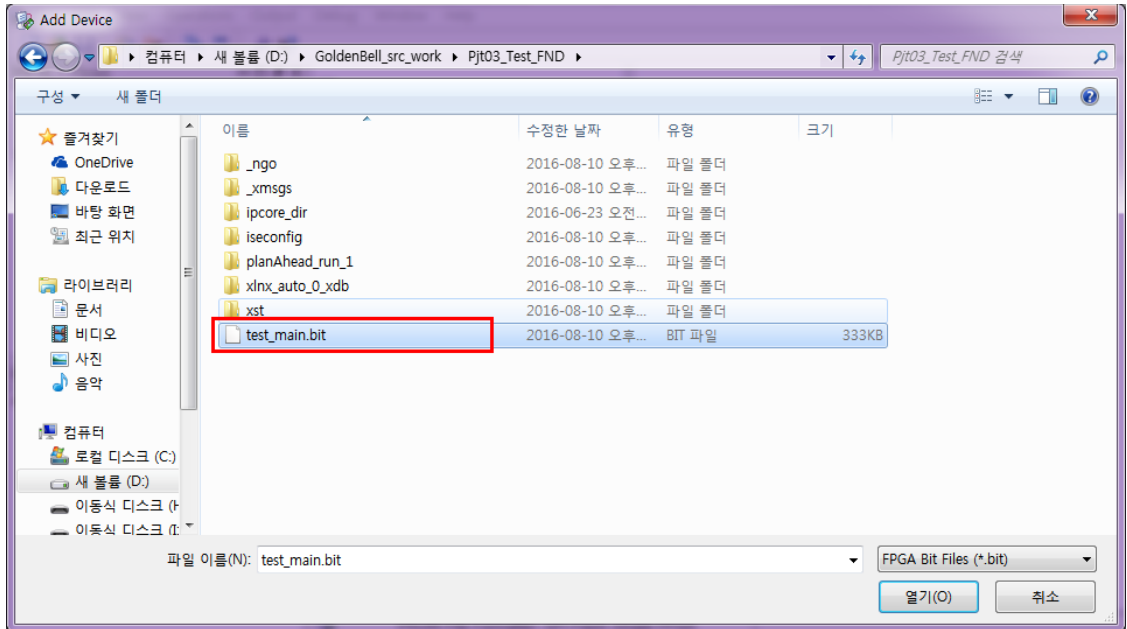
GoldenBell 보드에는 32MBit(4MB) M25P40 Serial Flash Memory가 탑재가 되어 있습니다.

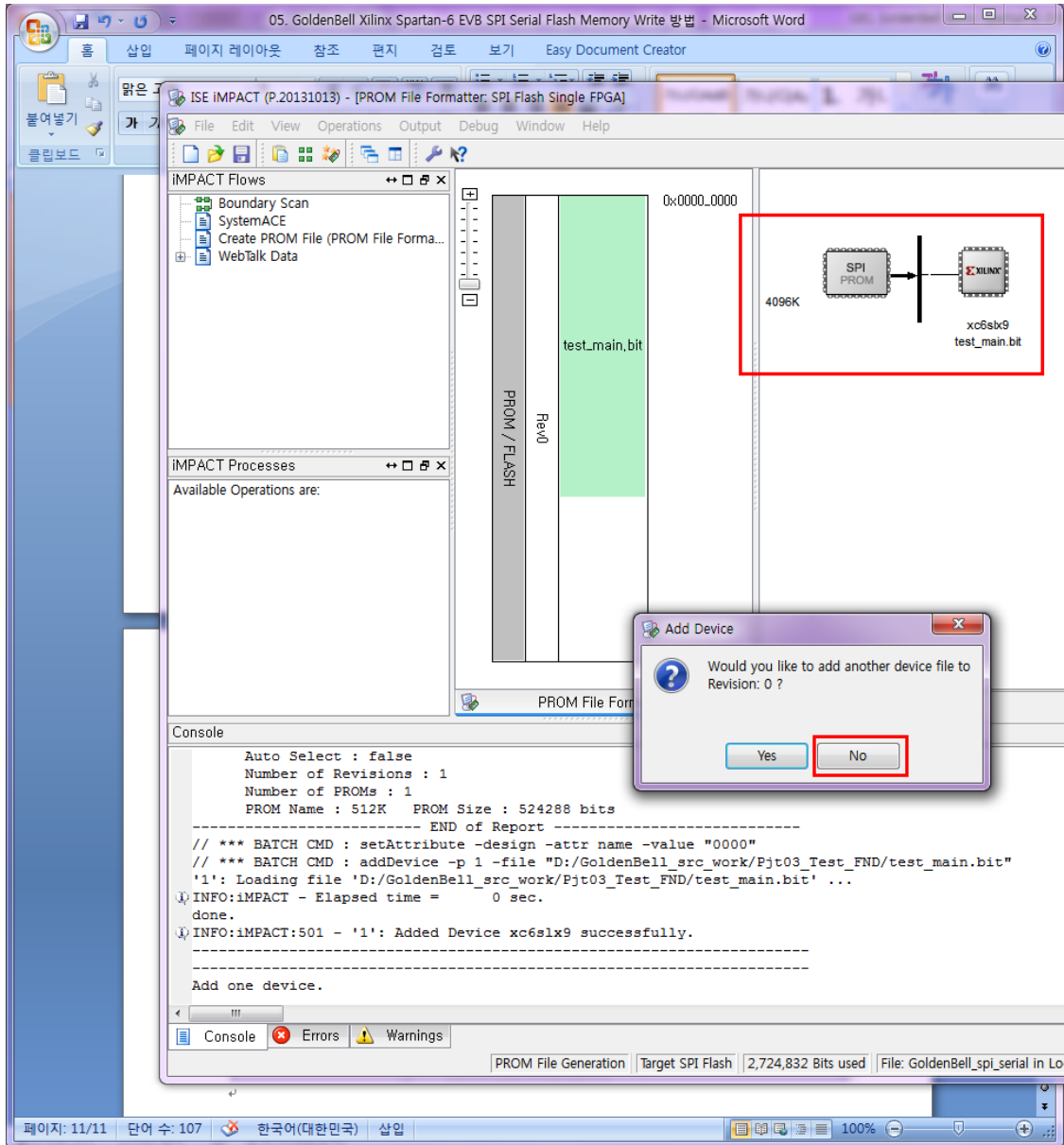
참조사이트

http://www.xilinx.com/support/documentation/sw_manuals/xilinx11/pim_p_configure_spi_bpi_through_fpga.htm

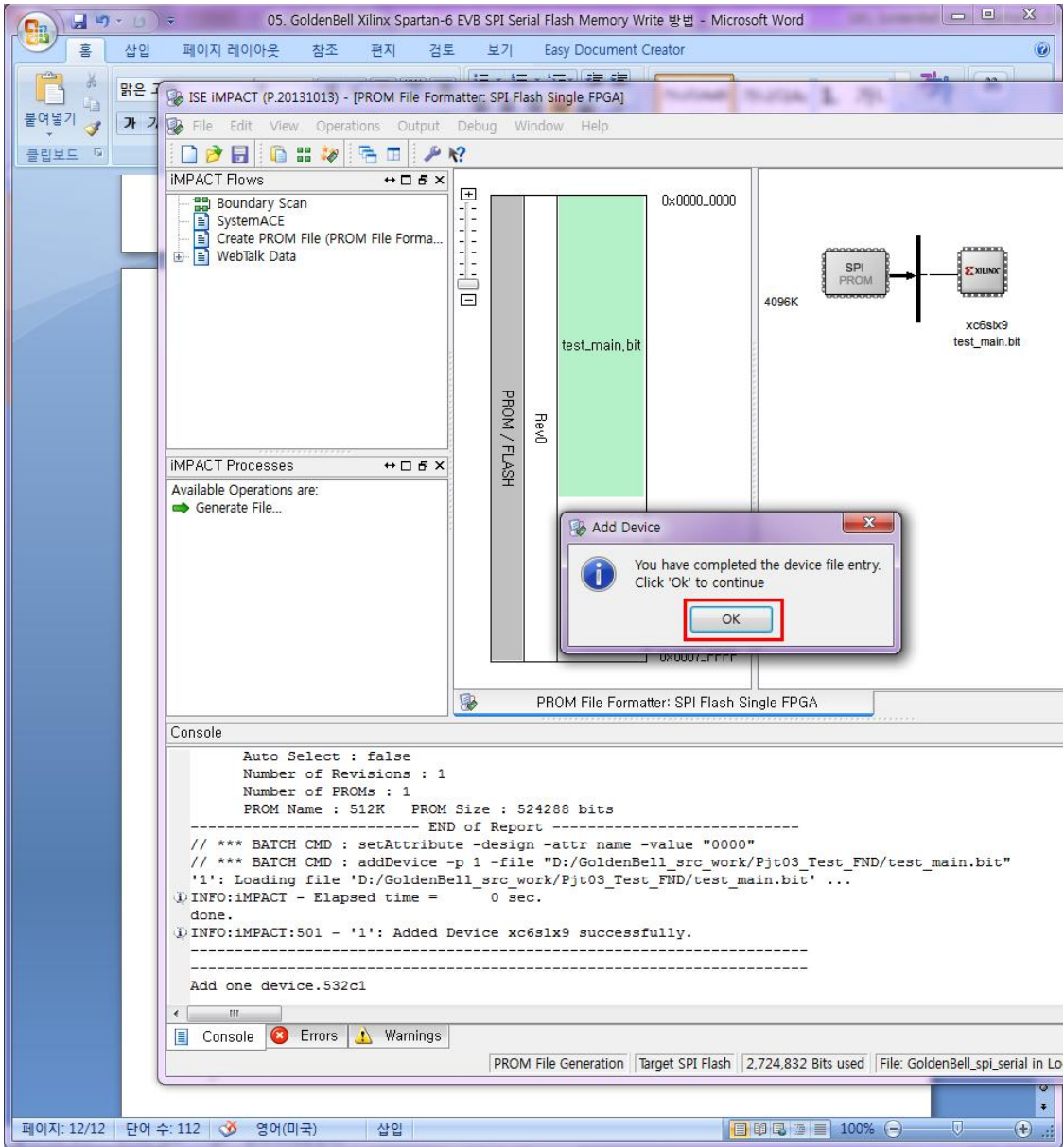


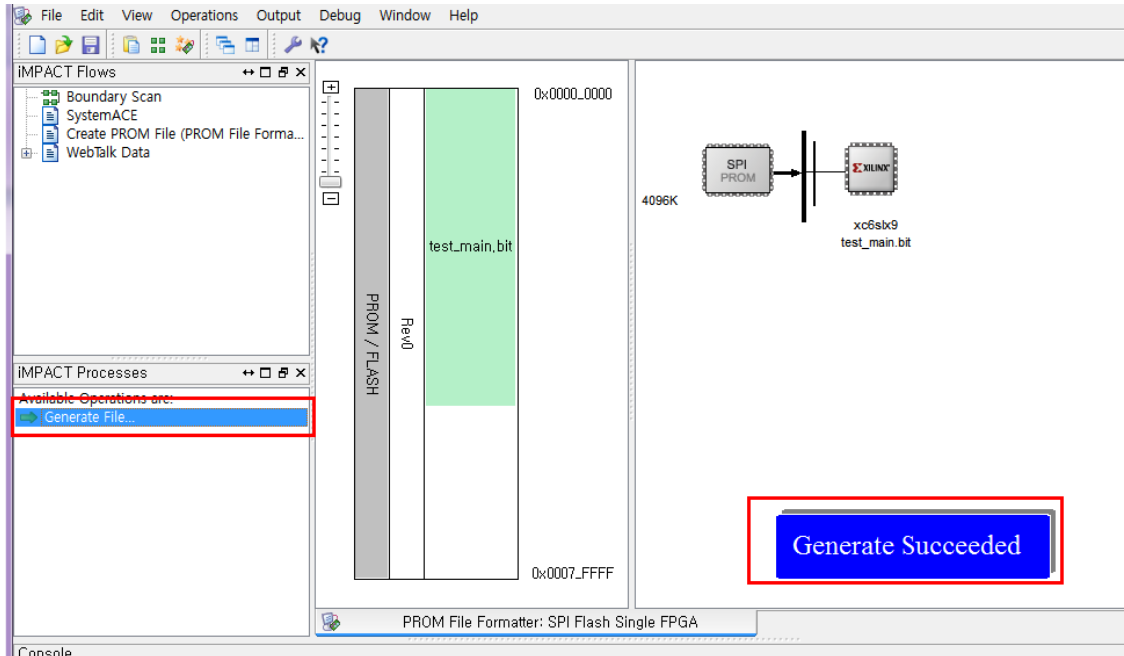
프로젝트로 생성된 이미지를 선택합니다.



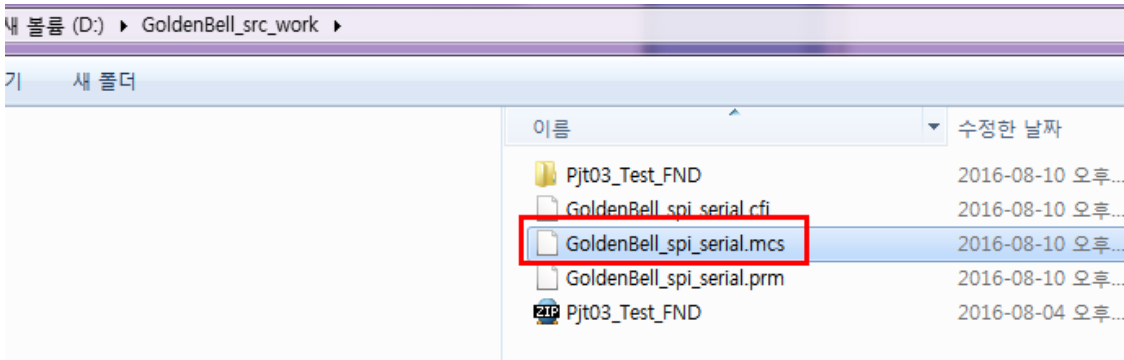


다시 팝업창이 나타나면, NO를 선택합니다.





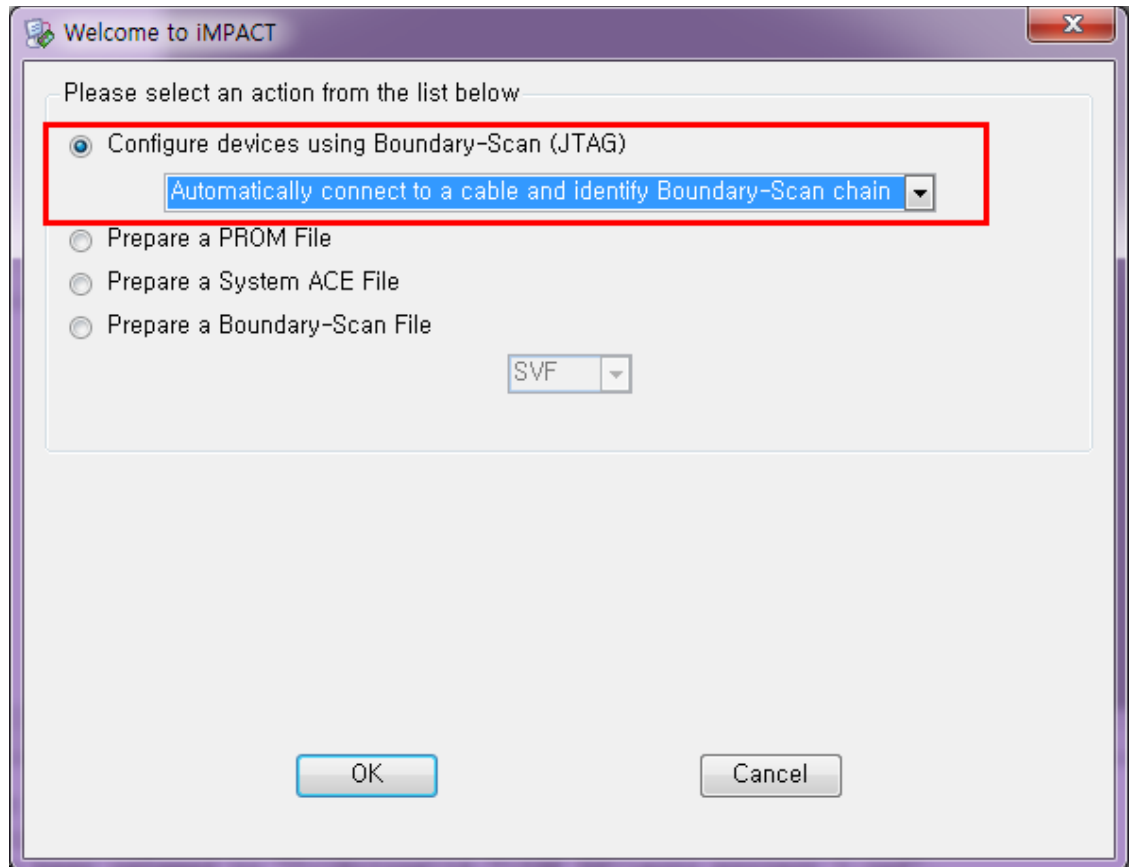
“Generate file” 선택하면, 해당 디렉토리에 mcs파일이 생성이 됩니다.

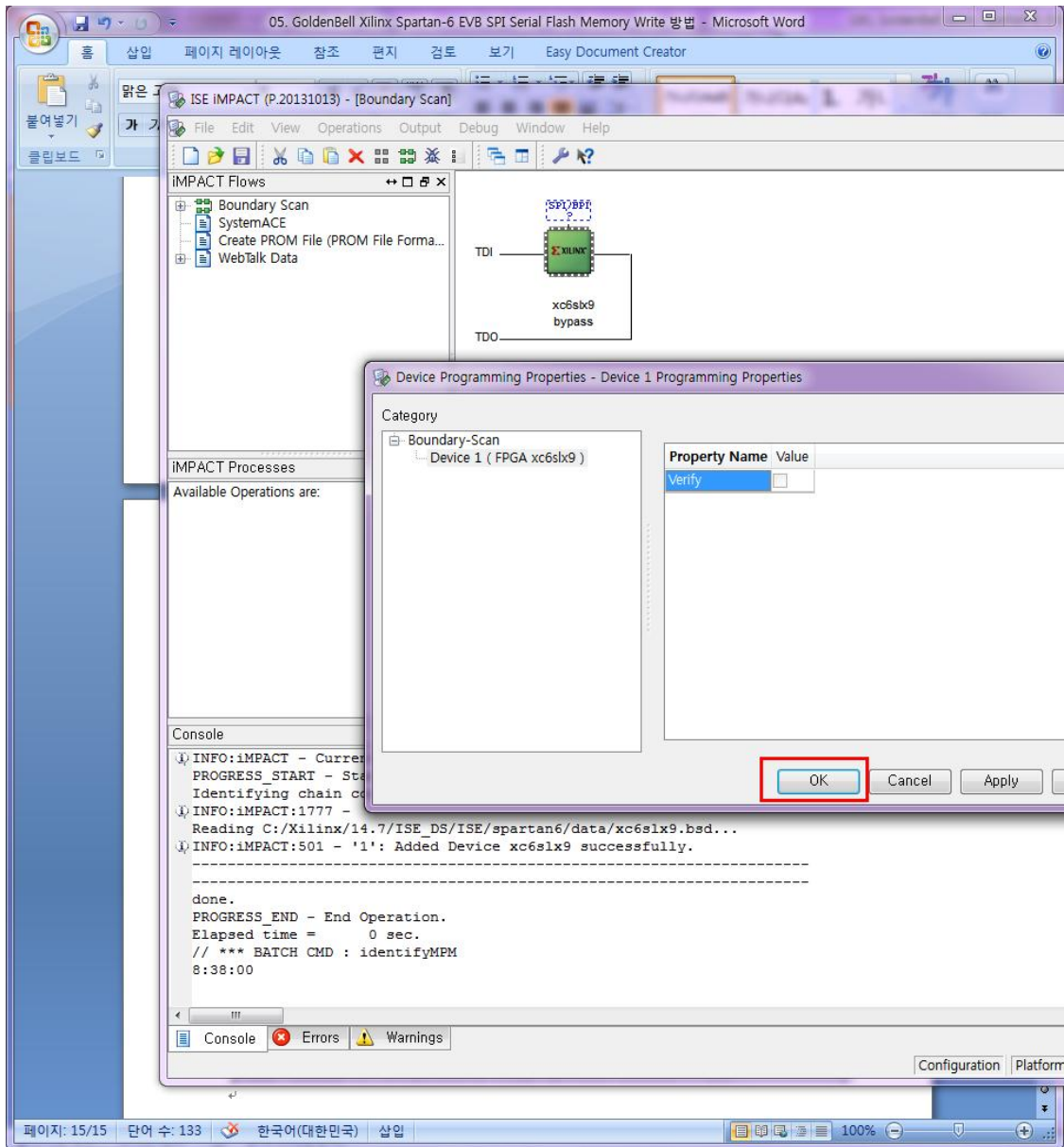


그리고, IMPACT 프로그램을 종료 합니다.

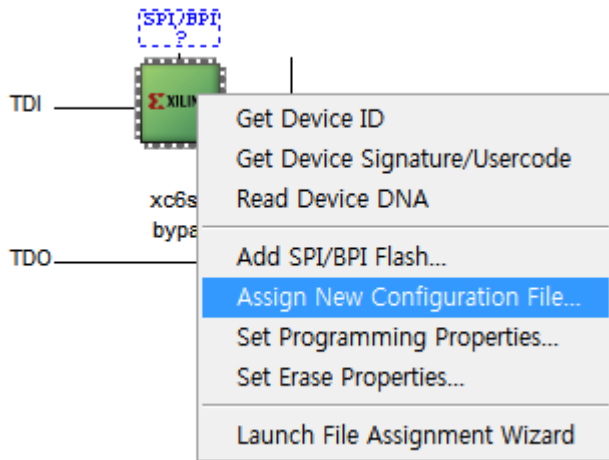
1.2. SPI Write하기

IMPACT 프로그램을 다시 실행합니다.

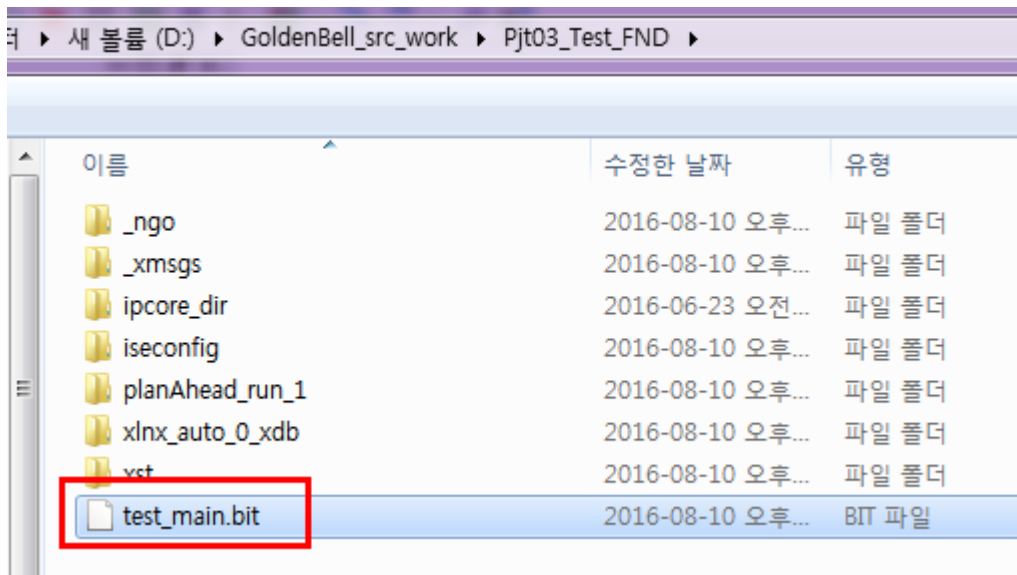




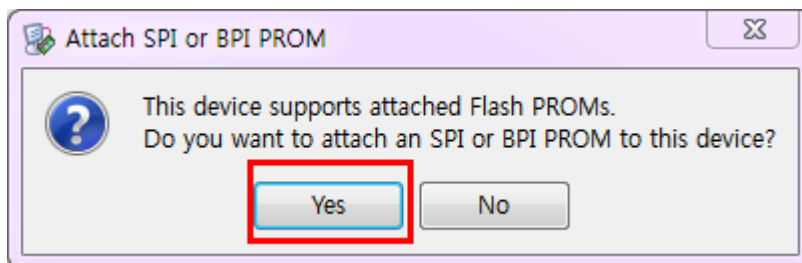
칩을 선택하고 마우스 우측을 Click하고

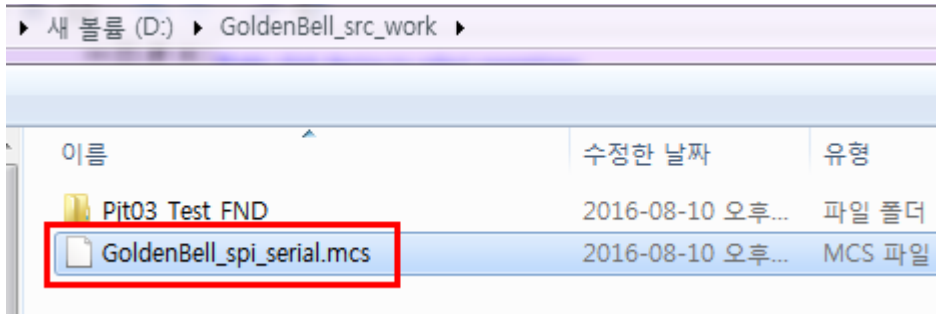


Assign New Configuration File dialog box 선택

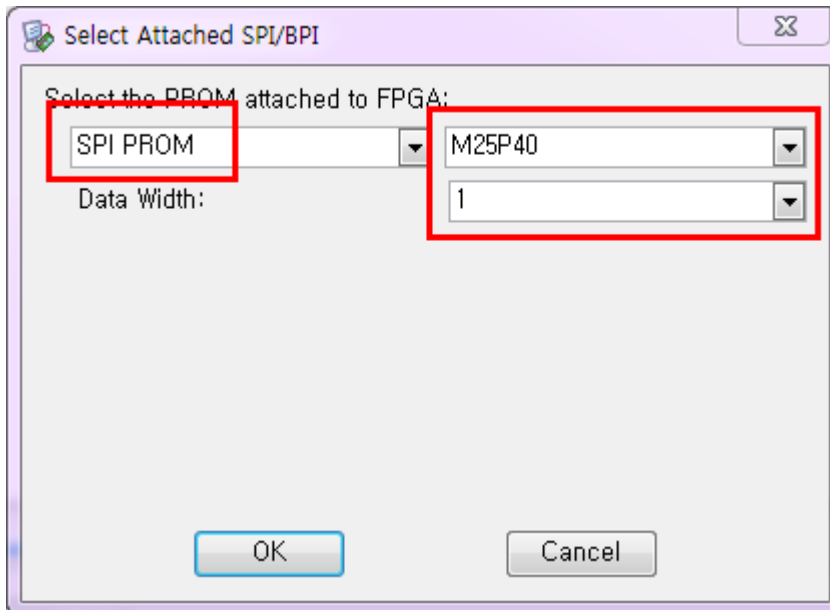


확장자 bit 선택

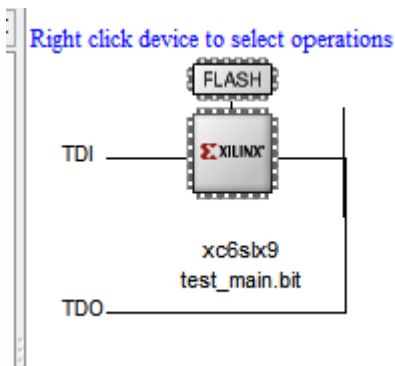




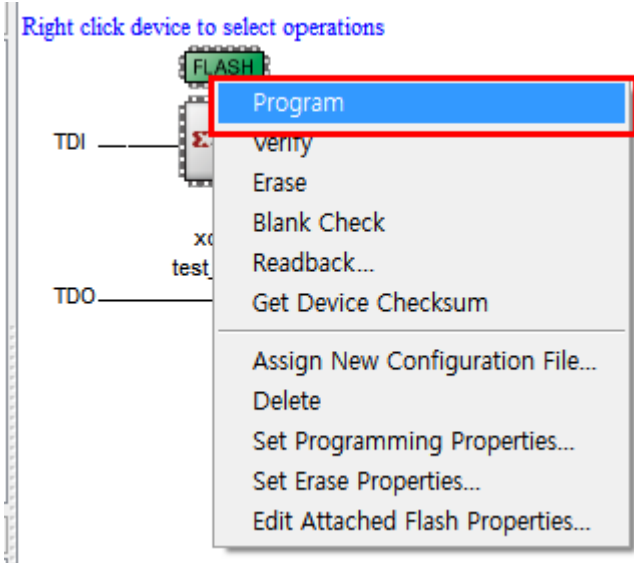
선택



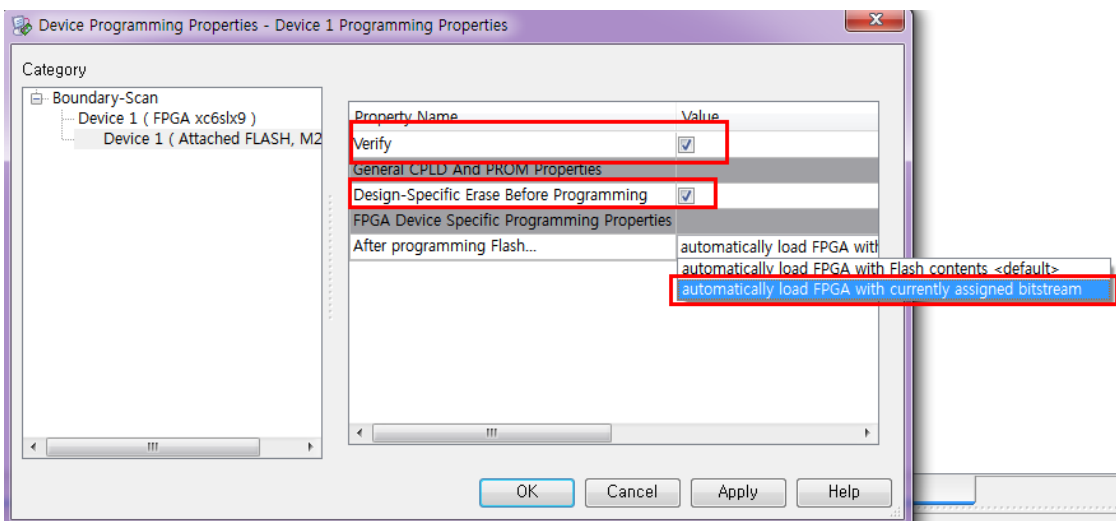
“Select the PROM attached to FPGA” 에서 MP2540선택합니다.



Flash가 보입니다.



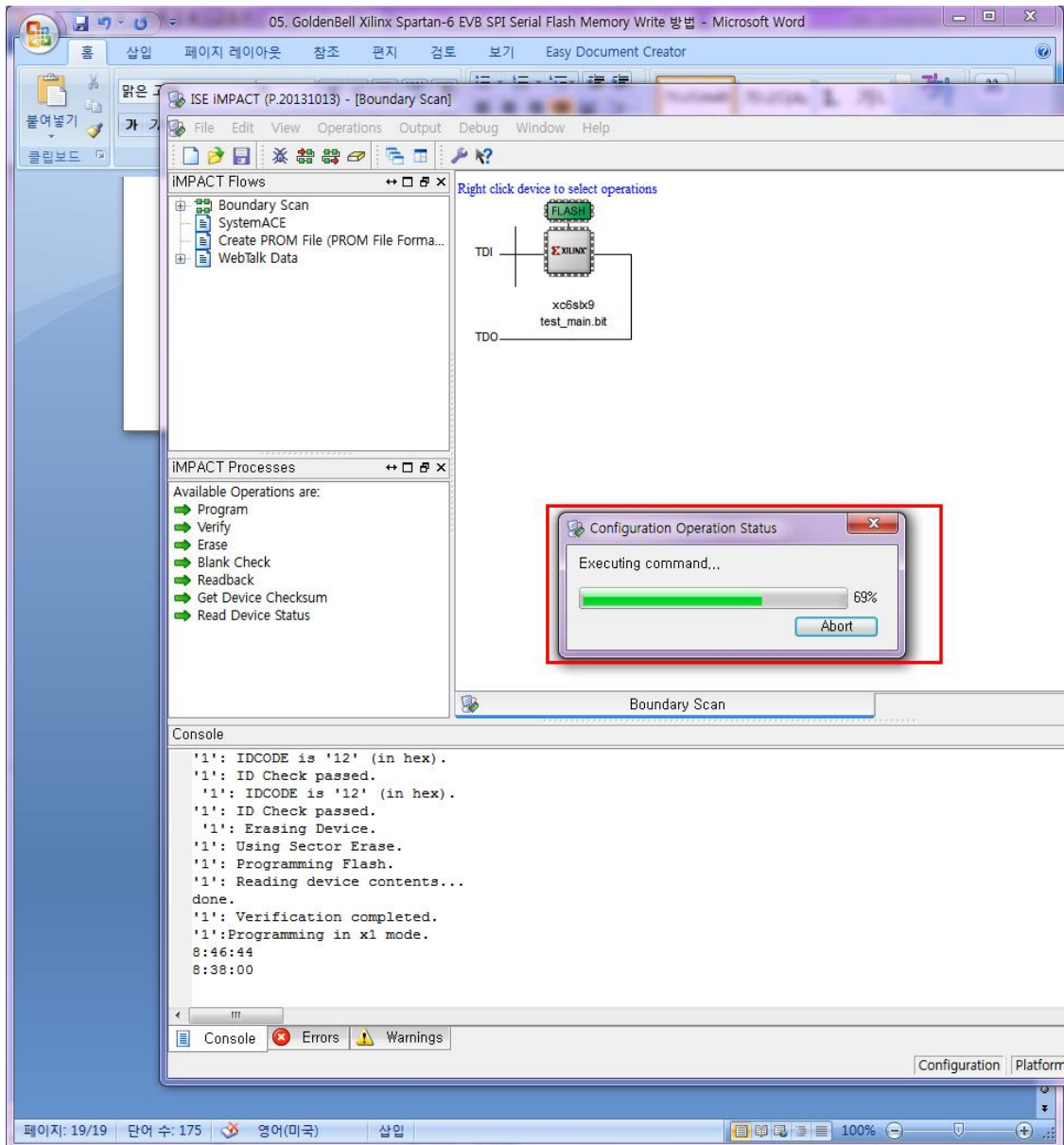
마우스로 Flash 그림을 선택하고, 마우스 우측 클릭하고 Program을 선택하면 됩니다.



“Verify”와 Design-Specific Erase Before Programming”은 권장 사항입니다.

중요한 것은 “automatically load FPGA With currently assigned bitstream” 을 선택

위와 같이 선택하고 , OK버튼 클릭



이미지 Write를 진행합니다.

Write시 Fail이 나면, Erase를 했다가 다시 Program하기 바랍니다.

이미지 Write하는 시간은 40초

1.3. References

http://www.xilinx.com/support/documentation/sw_manuals/xilinx11/pim_p_configure_spi_bpi_through_fpga.htm