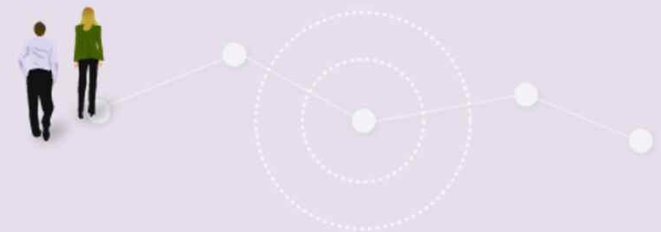


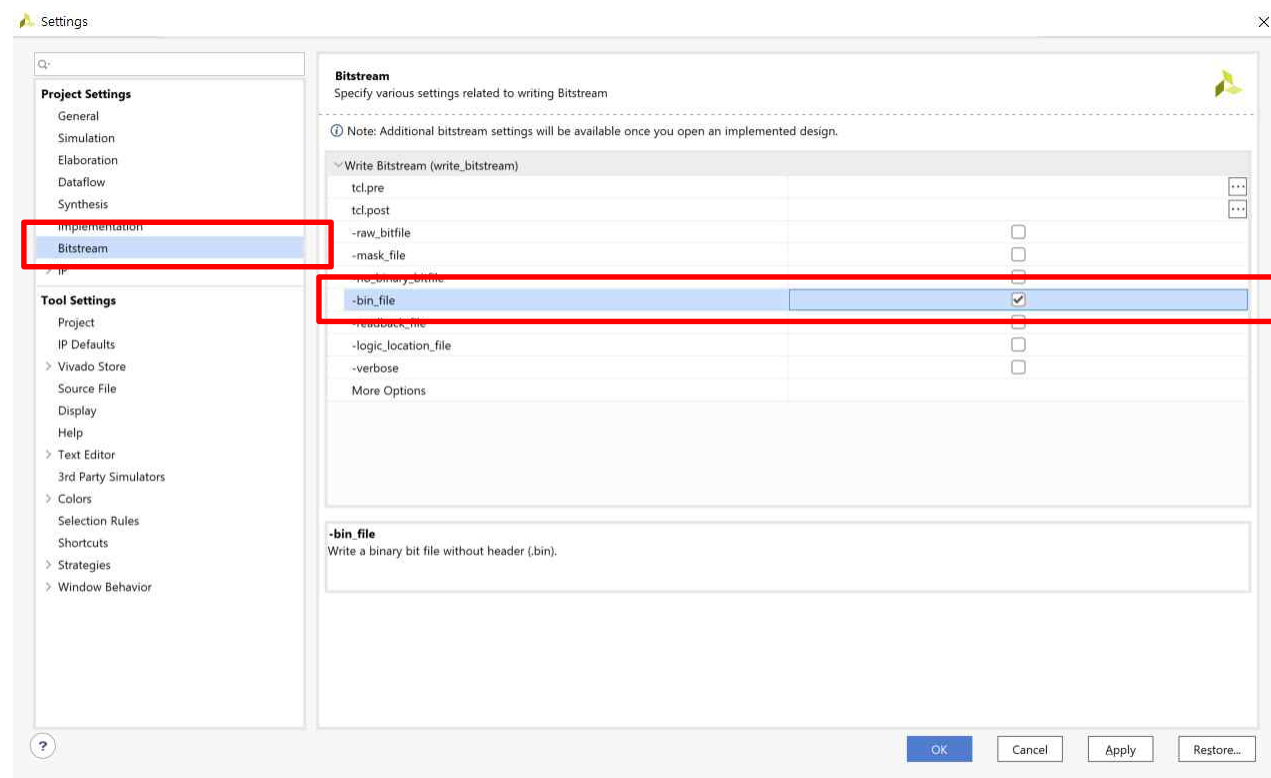
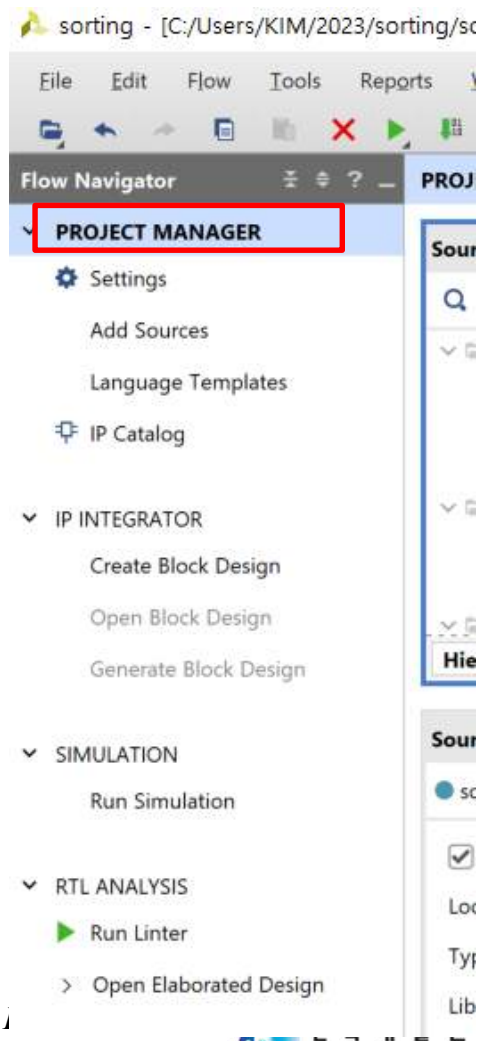
Example 00. Flash Memory Down



Example 00. *Flash Memory Down*

Example 00. Flash Memory Down

- FPGA(Basys3) 를 Off ➔ On 경우, 프로그램 유지되게 하기 위한 방법
 - Project Manager ➔ Settings 선택 ➔ Bitstream ➔ bin_file 체크 & Apply : Basys3 보드 뒤에 있는 QSPI Flash Memory에 결과 bin파일이 저장



Example 00. Flash Memory Down

➤ FPGA(Basys3) 를 꺾다켜도 프로그램 유지되게 하기 위한 방법

- Project Manager → Settings 선택 → Bitstream → bin_file 체크 & Apply : Basys3 보드 뒤에 있는 QSPI Flash Memory에 결과 bin파일이 저장
- Program and Debug → Open Hardware Manager → Add Configuration Memory Device → FPGA Manual과 보드를 확인 및 보드에 맞는 Memory를 선택

The screenshot illustrates the process of adding configuration memory to an FPGA project. The 'PROGRAM AND DEBUG' tab is selected in the left sidebar, and 'Open Hardware Manager' is highlighted. The 'Add Configuration Memory Device' dialog is open, showing a search for '3233' with one match: 'mx2513273f-spi-x1_x2_x4'. The 'Hardware' window shows the device 'xc7a35t_0' is programmed. Red boxes and arrows highlight the selection process, with labels '모델 확인' (Model Check) and 'Click'.

Part: xc7a35t_0

Device: xc7a35t_0

Filter

Manufacturer: All Type: All

Density (Mb): All Width: All

Reset All Filters

Select Configuration Memory Part

Search: 3233 (1 match)

Name	Part	Manufacturer	Alias
mx2513273f-spi-x1_x2_x4	mx2513273f	Macronix	mx2513273f-spi-x1_x2_x4

Hardware

Name	Status
localhost (1)	Connected
xilinx_tcf/Digilent/210183B7A295A	Open
xc7a35t_0 (2)	Programmed
XADC (System Monitor)	

모델 확인 mx2513273f-spi-x1_x2_x4

Click

Click

OK Cancel

Example 00. Flash Memory Down

➤ FPGA(Basys3) 를 꺾다켜도 프로그램 유지되게 하기 위한 방법

- Program and Debug → Open Hardware Manager → Add Configuration Memory Device → FPGA Manual과 보드를 확인 및 보드에 맞는 Memory를 선택

The screenshot illustrates the steps to add a configuration memory device in Xilinx Vivado:

- Hardware Panel:** Shows the connected hardware (xc7a35t_0) and the configuration memory device (mx25l3273f-spi-x1_x2_x4). A red box highlights the device name with the Korean text "우클릭" (Right-click).
- Configuration Memory Device Properties:** A context menu is open, showing options like "Program Configuration Memory Device...". A red box highlights this option.
- Program Configuration Memory Device:** A dialog box prompts to select a configuration file. The "Memory Device" is set to "mx25l3273f-spi-x1_x2_x4". A red box highlights the "Configuration file:" field.
- Specify File:** A file selection dialog shows the file "Sorting.bin" selected in the "Look in: impl_1" directory. A red box highlights the file name.
- Program Operations:** The "Program" checkbox is checked under the "Program Operations" section.
- SVF Options:** The "Create SVF Only" checkbox is unchecked.

The bottom of the image shows the Tcl Console with commands like `set_property PROGRAM.FILE [C:/Users/KIM/2023/sorting/sorting.srcs/impl_1/Sorting.bin] program_hw_devices [get_hw_devices xc7a35t_0]` and the status bar indicating the device is in "HIGH" status.