**Example Project: Running the “Hello World” Application from Arm Cortex-A53**

Double the following icon：



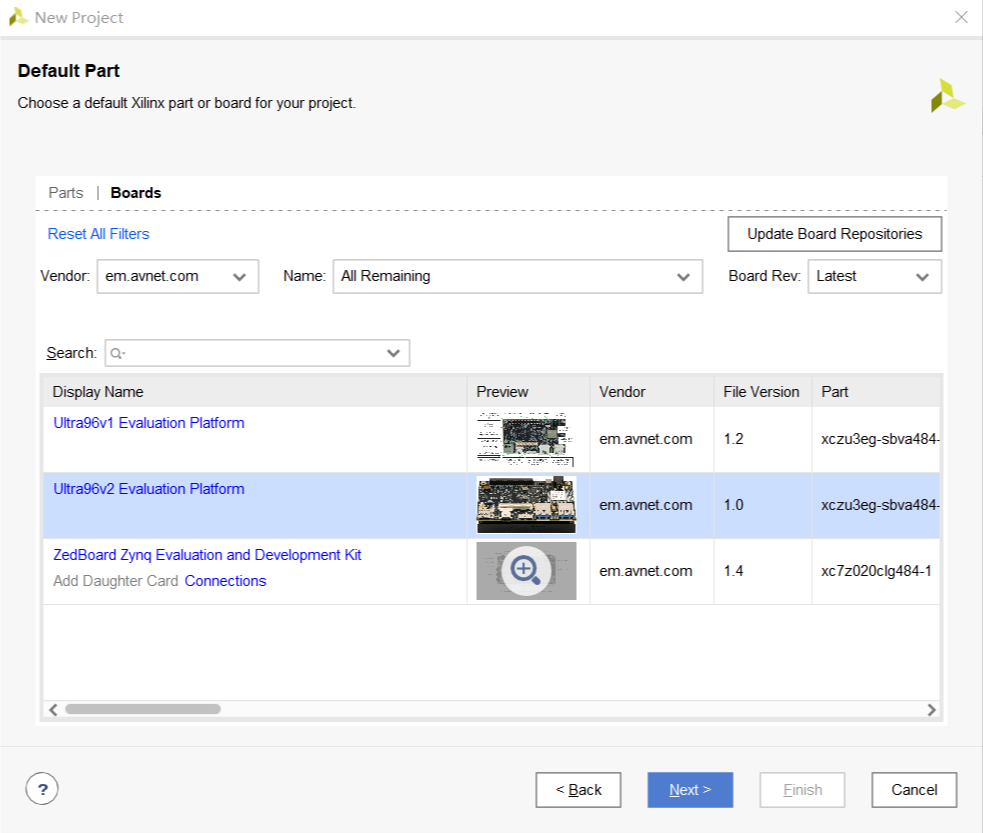
Do not click the following icon:

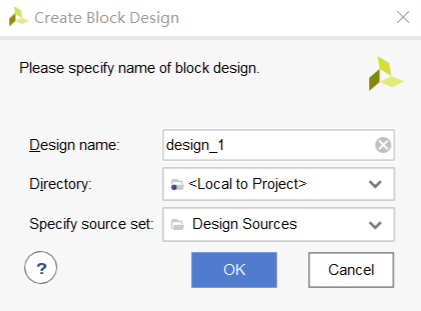


Or

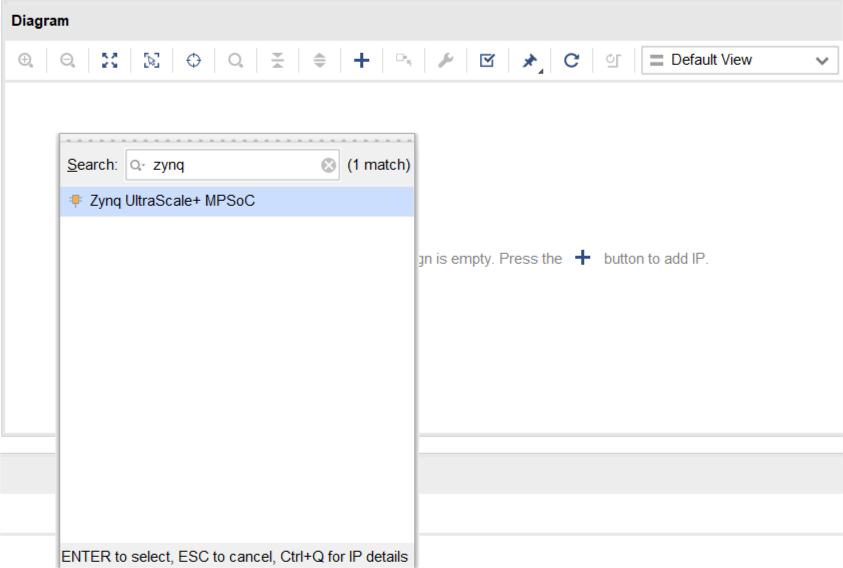
Launch the Vivado Design Suite IDE, by using either of the following methods: Start > All Programs > Xilinx Design Tools > Vivado 2019.2

Select the following BDF file：

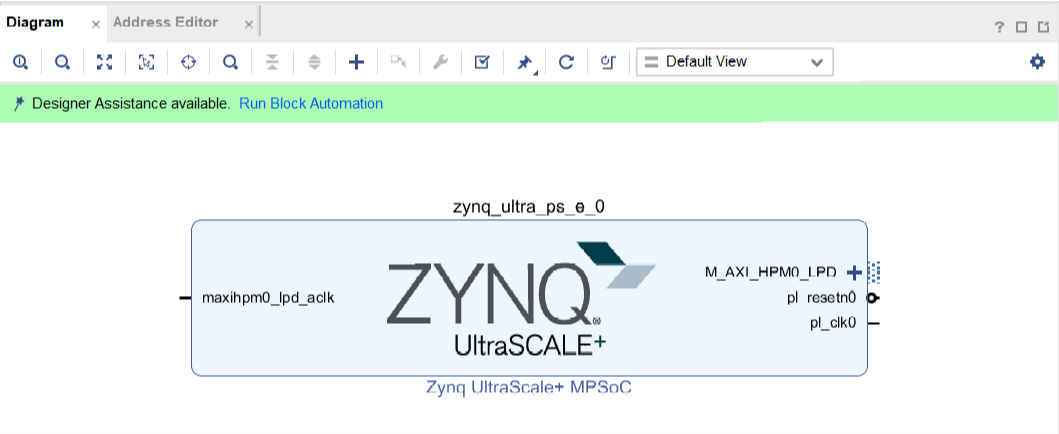




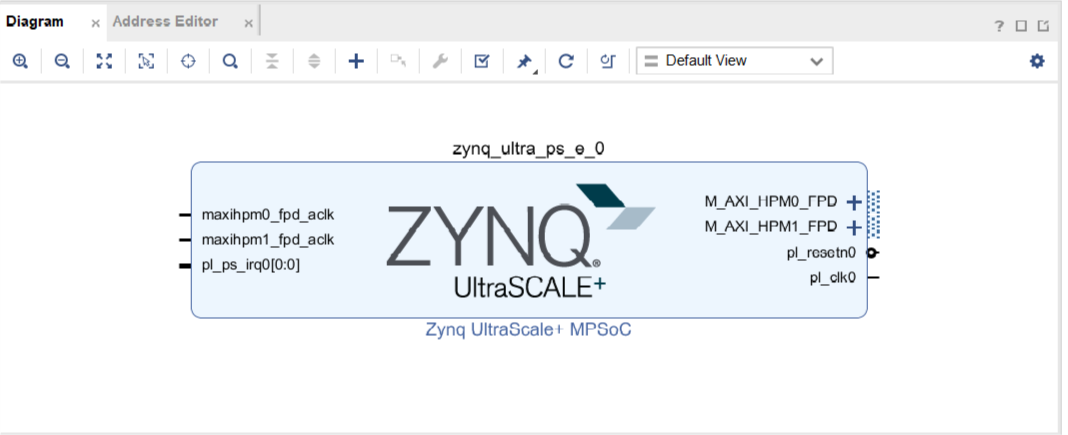
Add IP



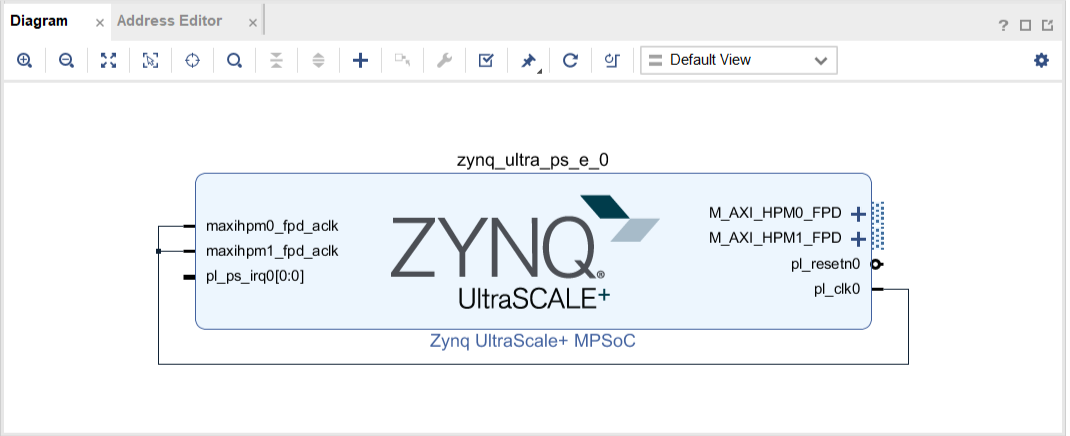
Run Block Automation



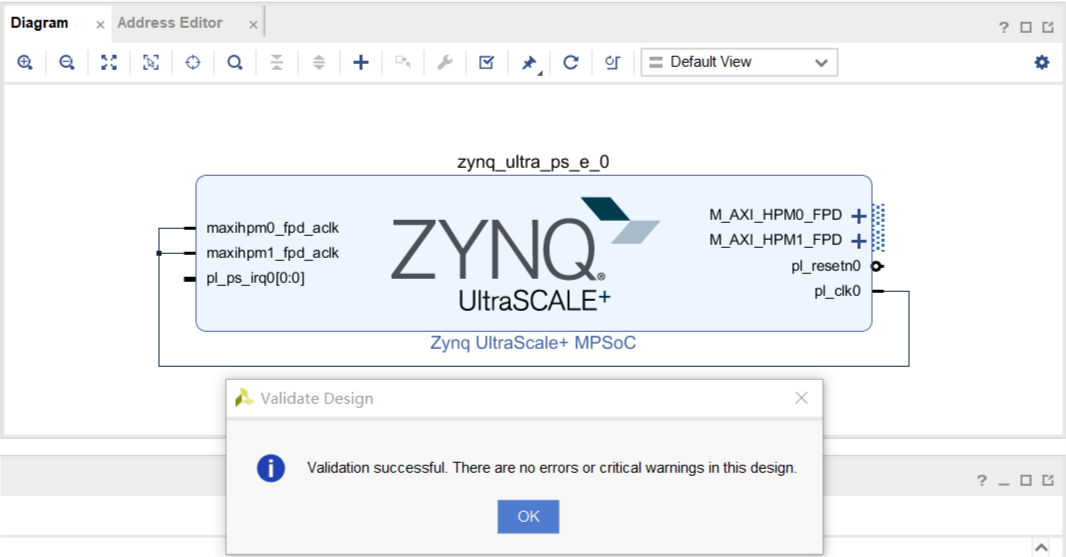
Finished



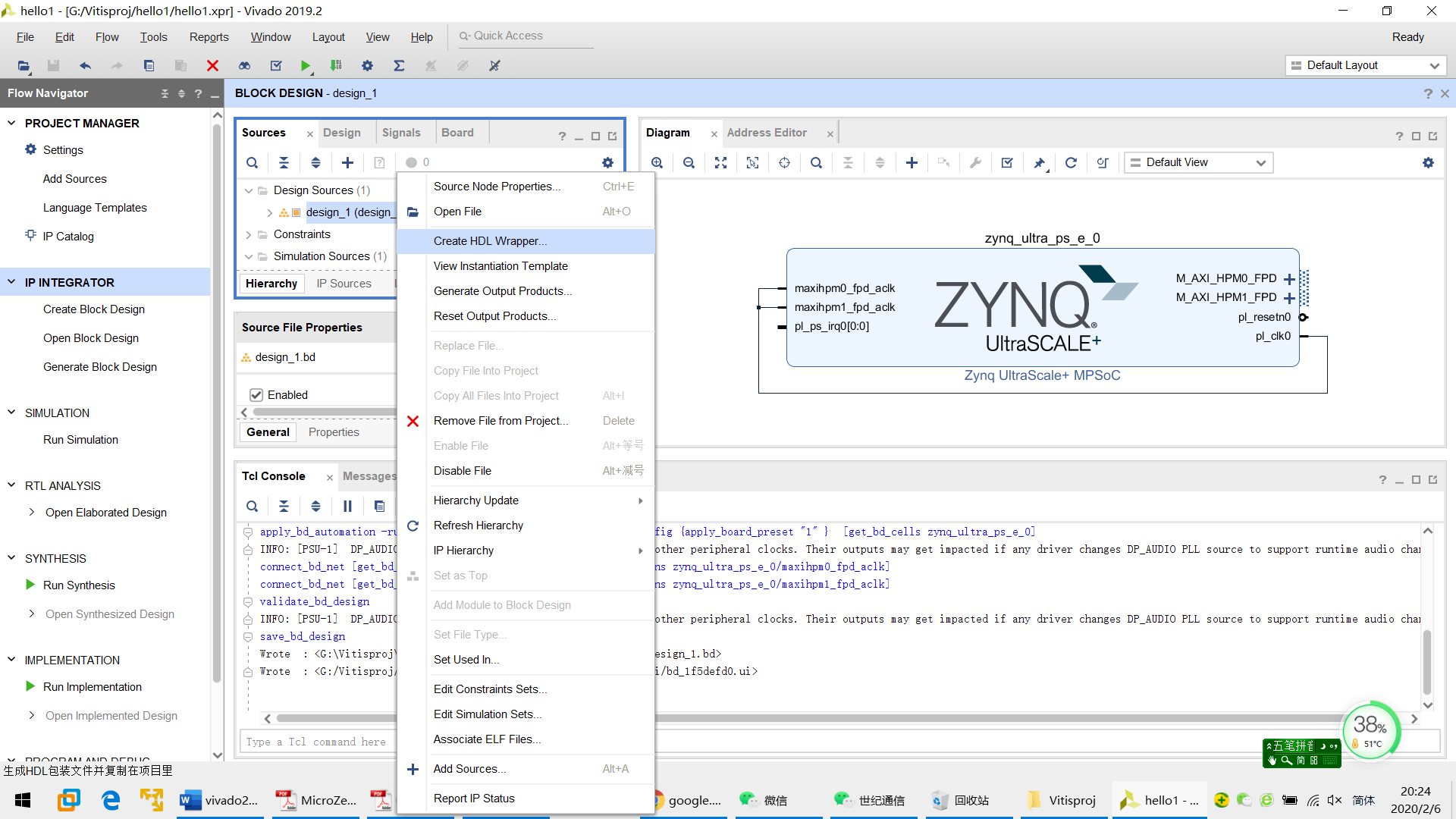
Connect the lines

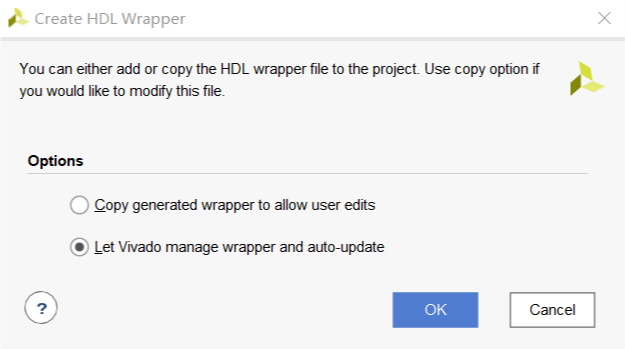


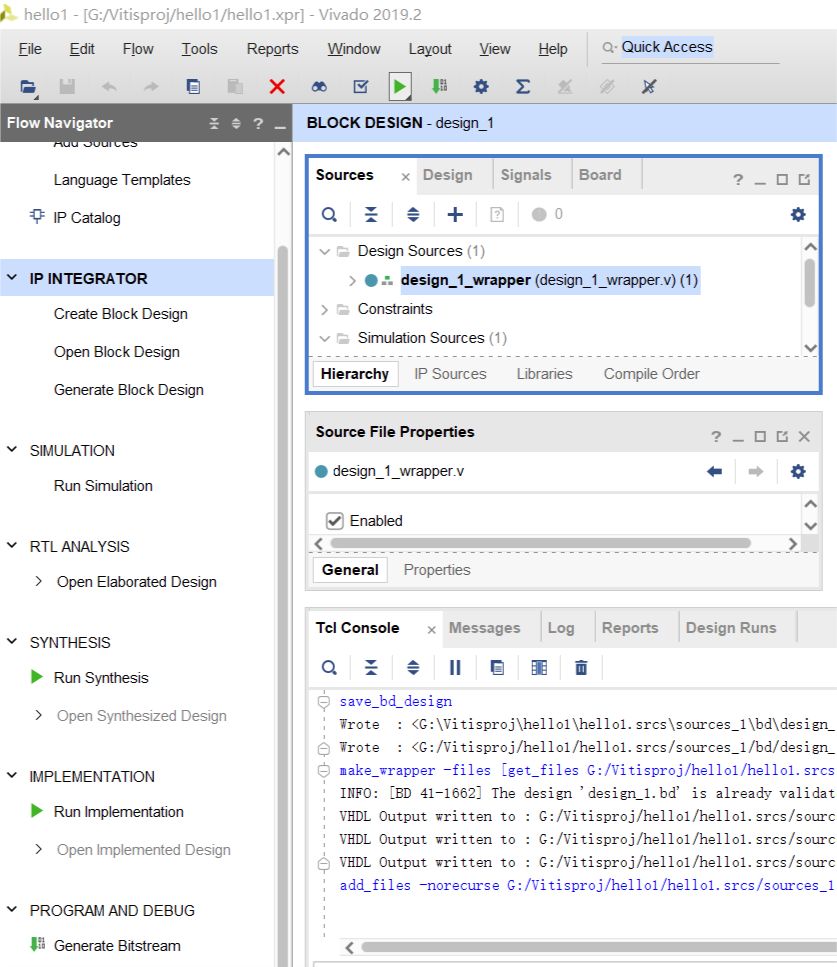
Validation



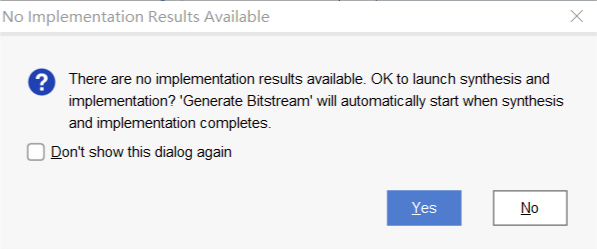
Create HDL Wrapper

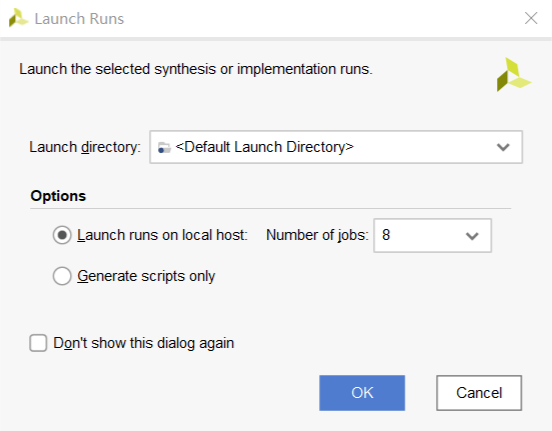




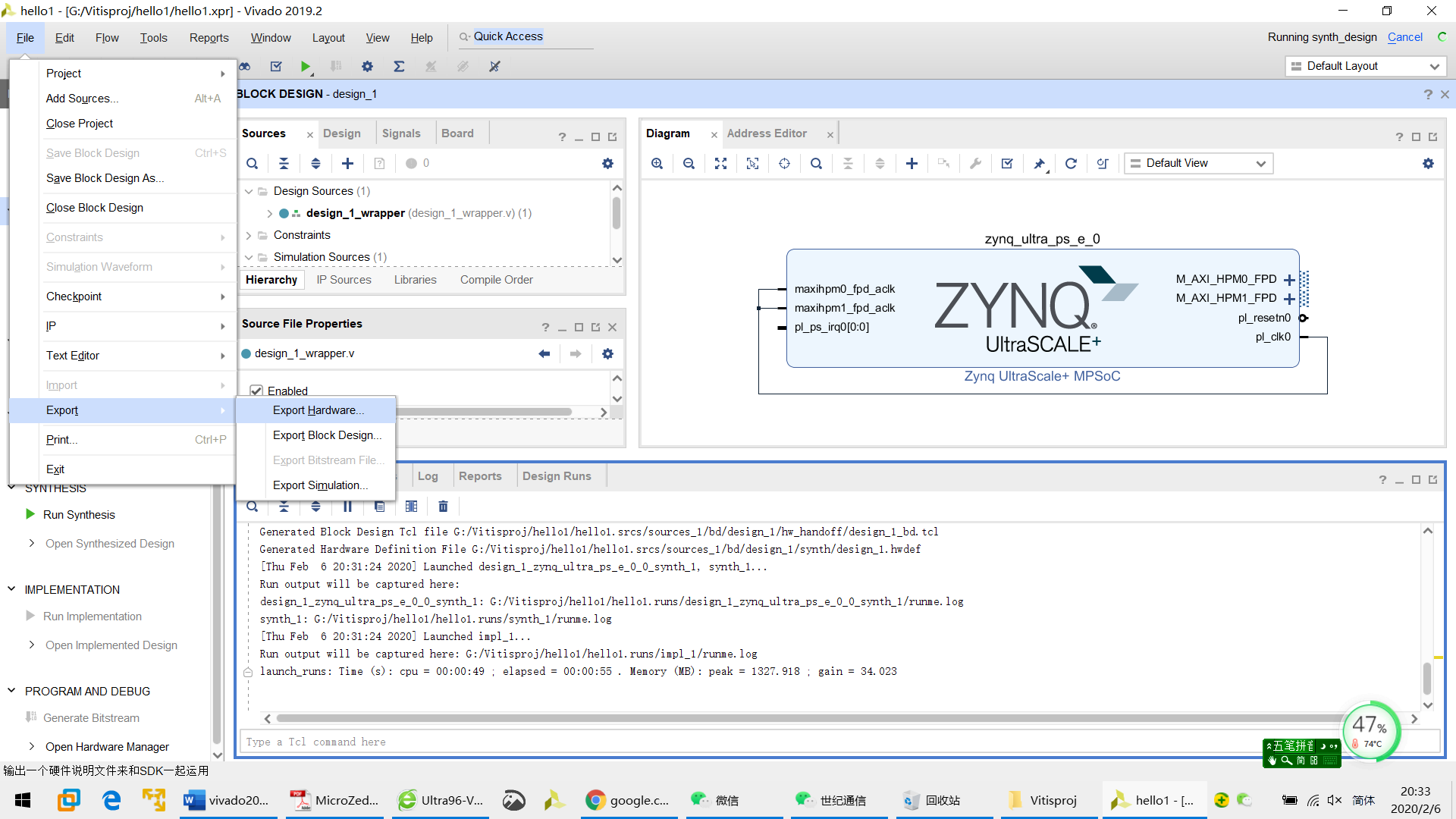


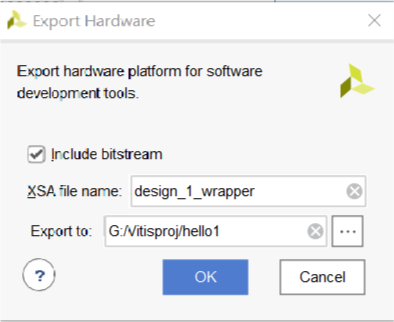
Double click Generate Bitstream

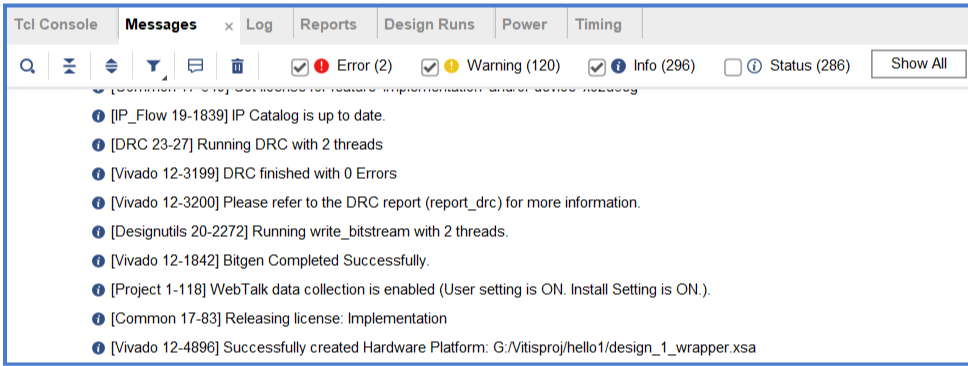




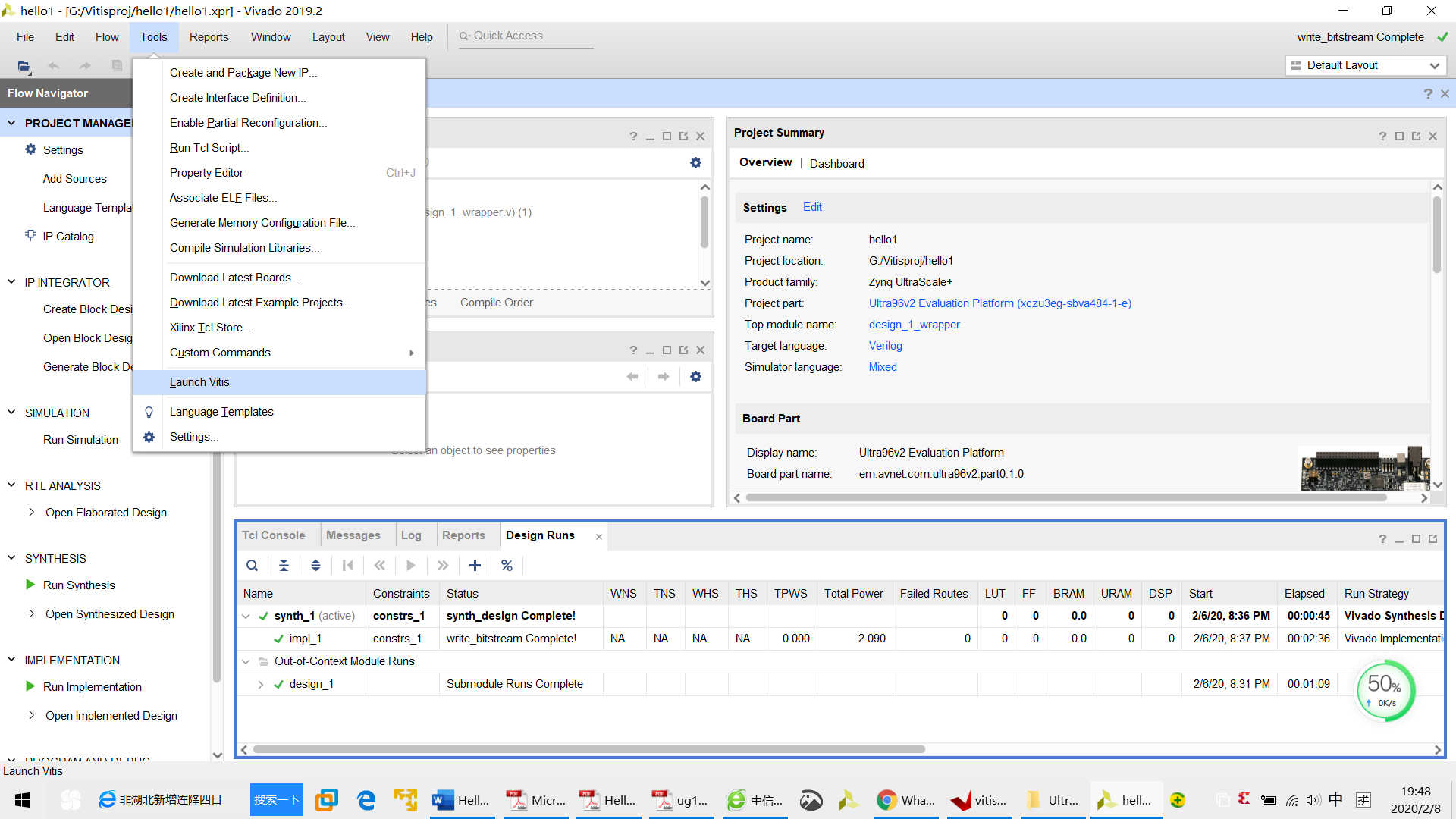
Export Hardware after done



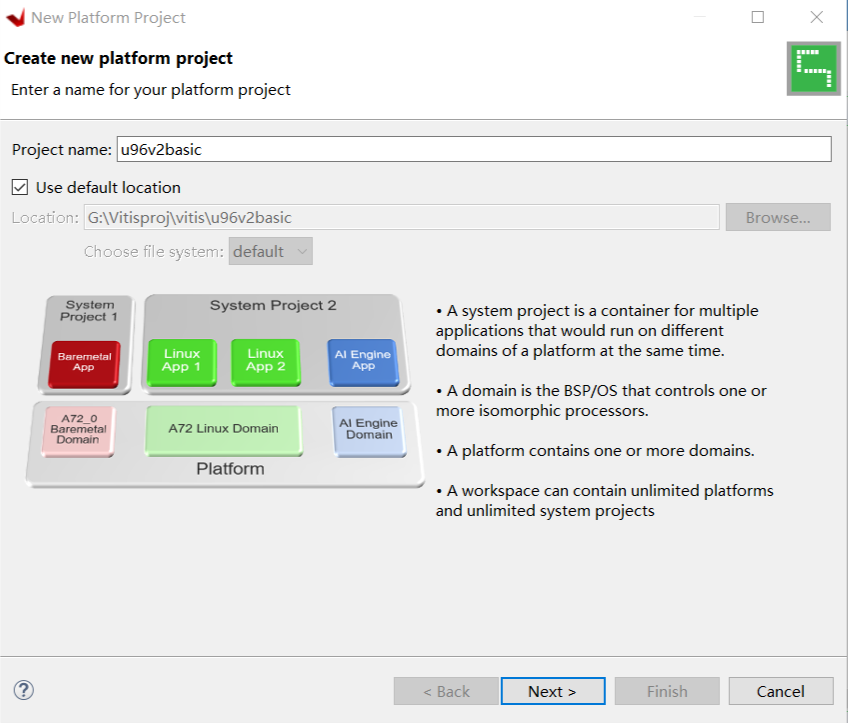




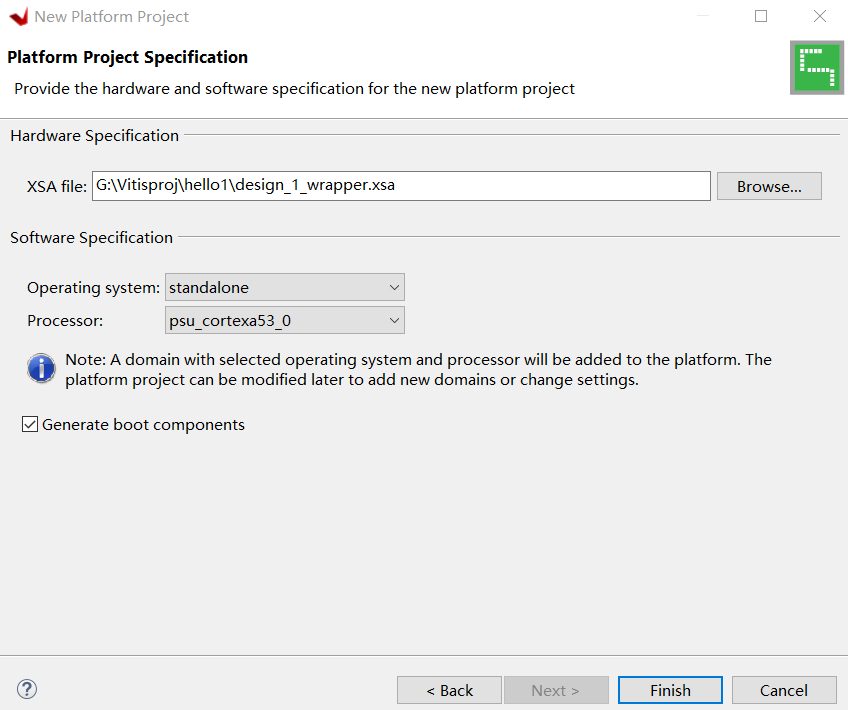
Select Tools – Launch Vitis



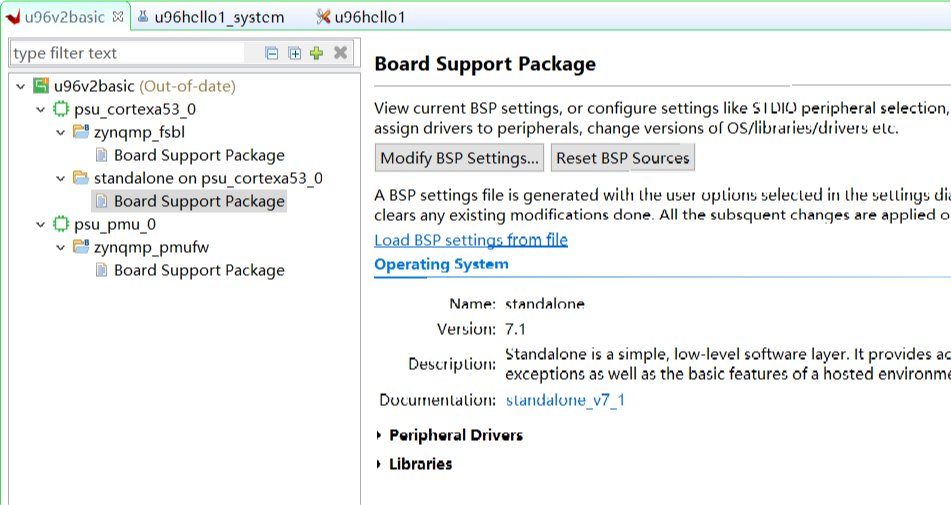
Create new platform project after opening vitis

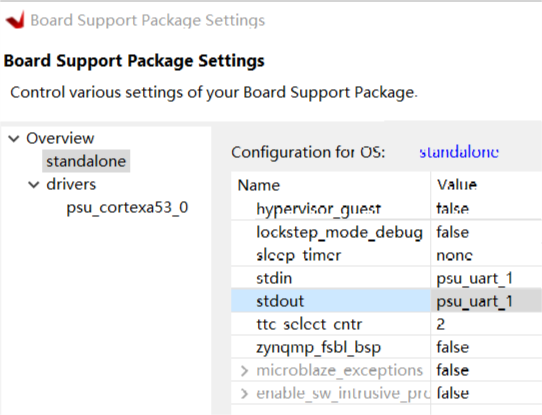


Select the default .xsa file

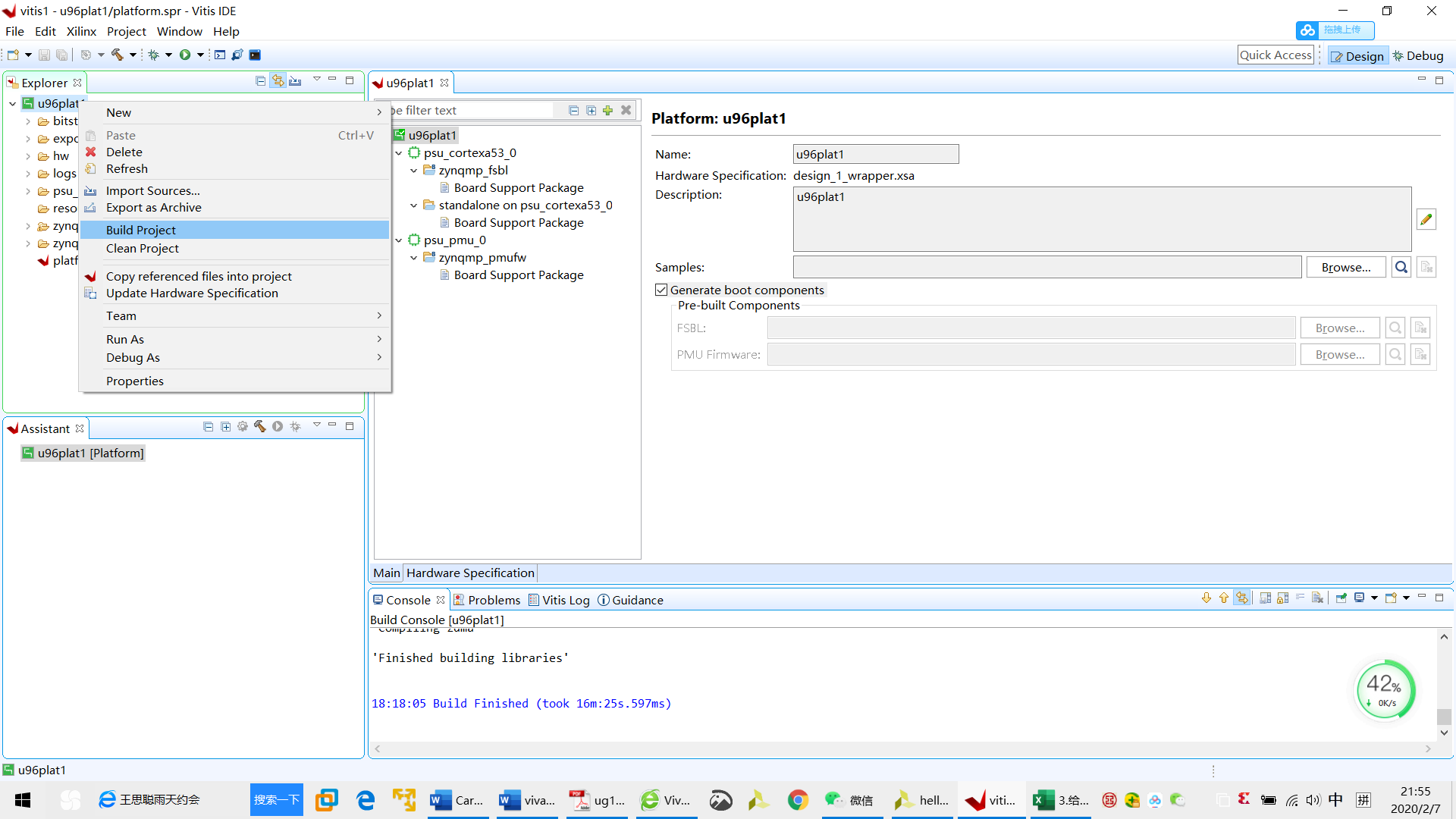


Double click Modify BSP Settings

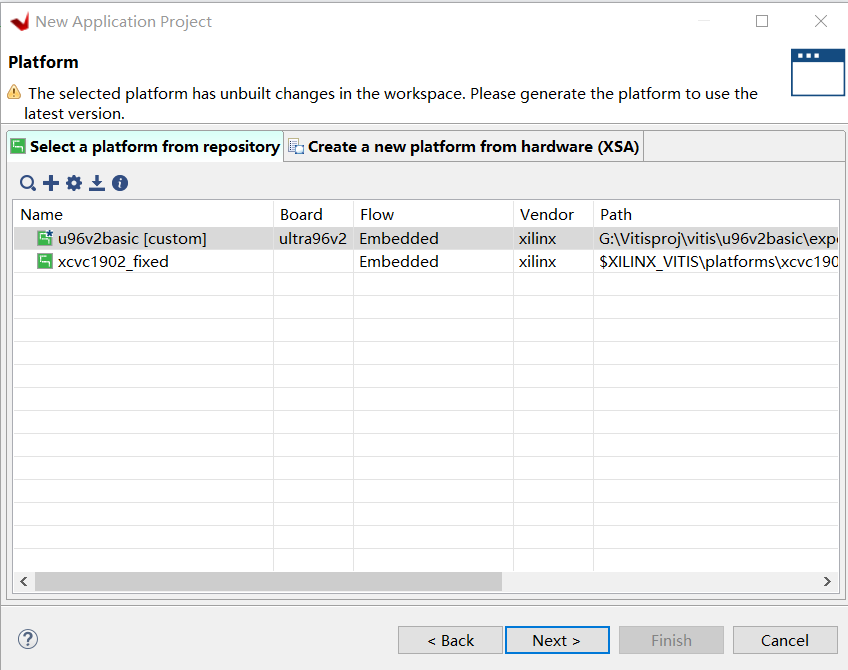




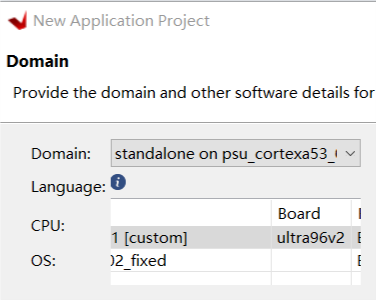
Build Project



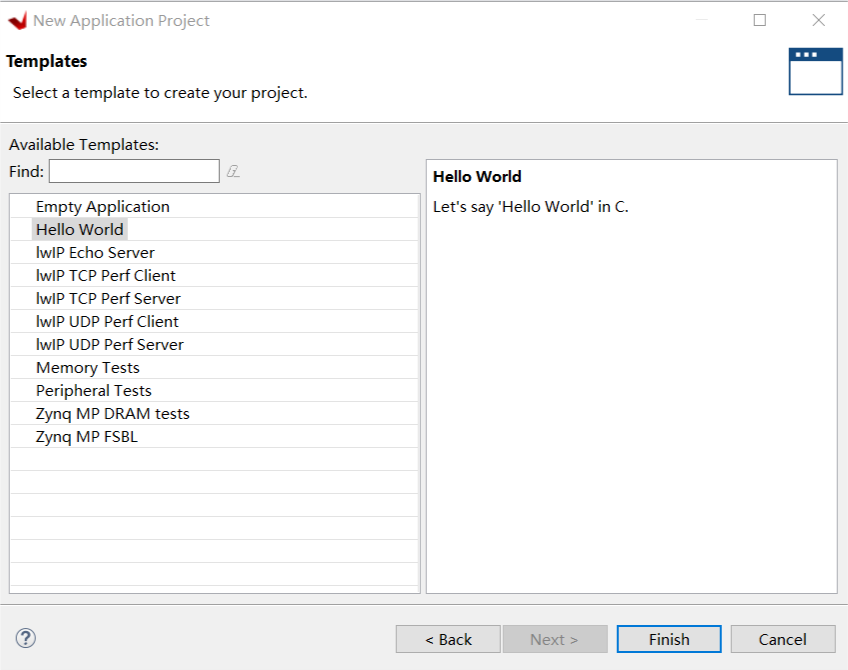
Create New Application Project

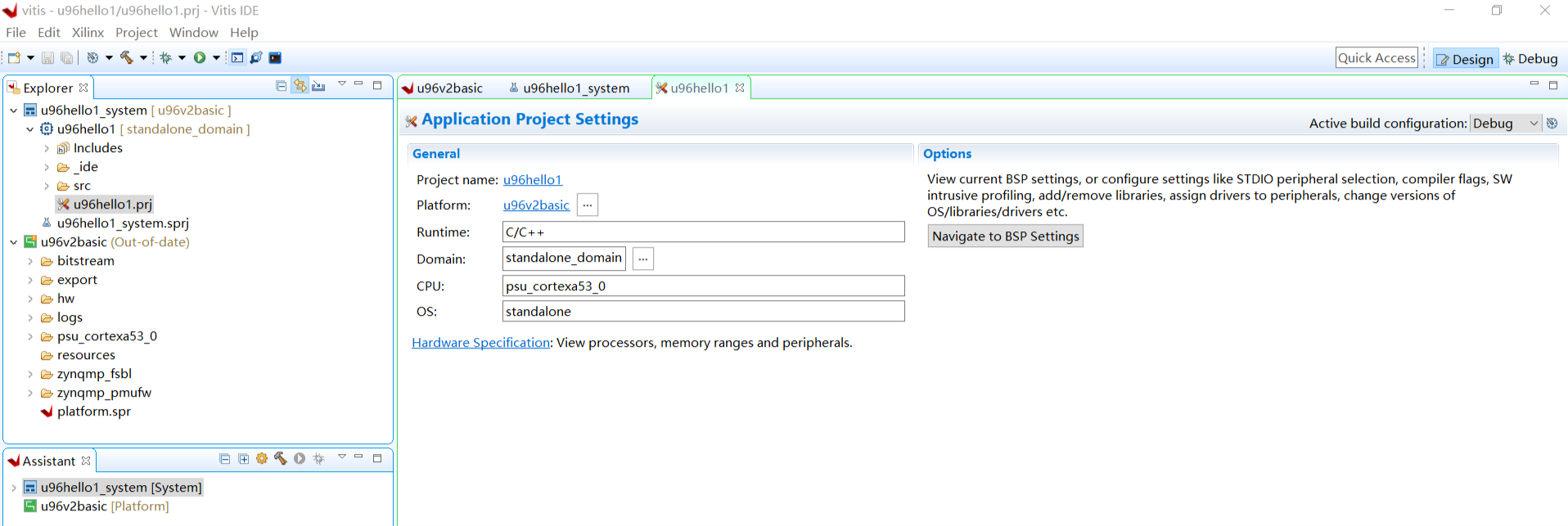


Select Domain

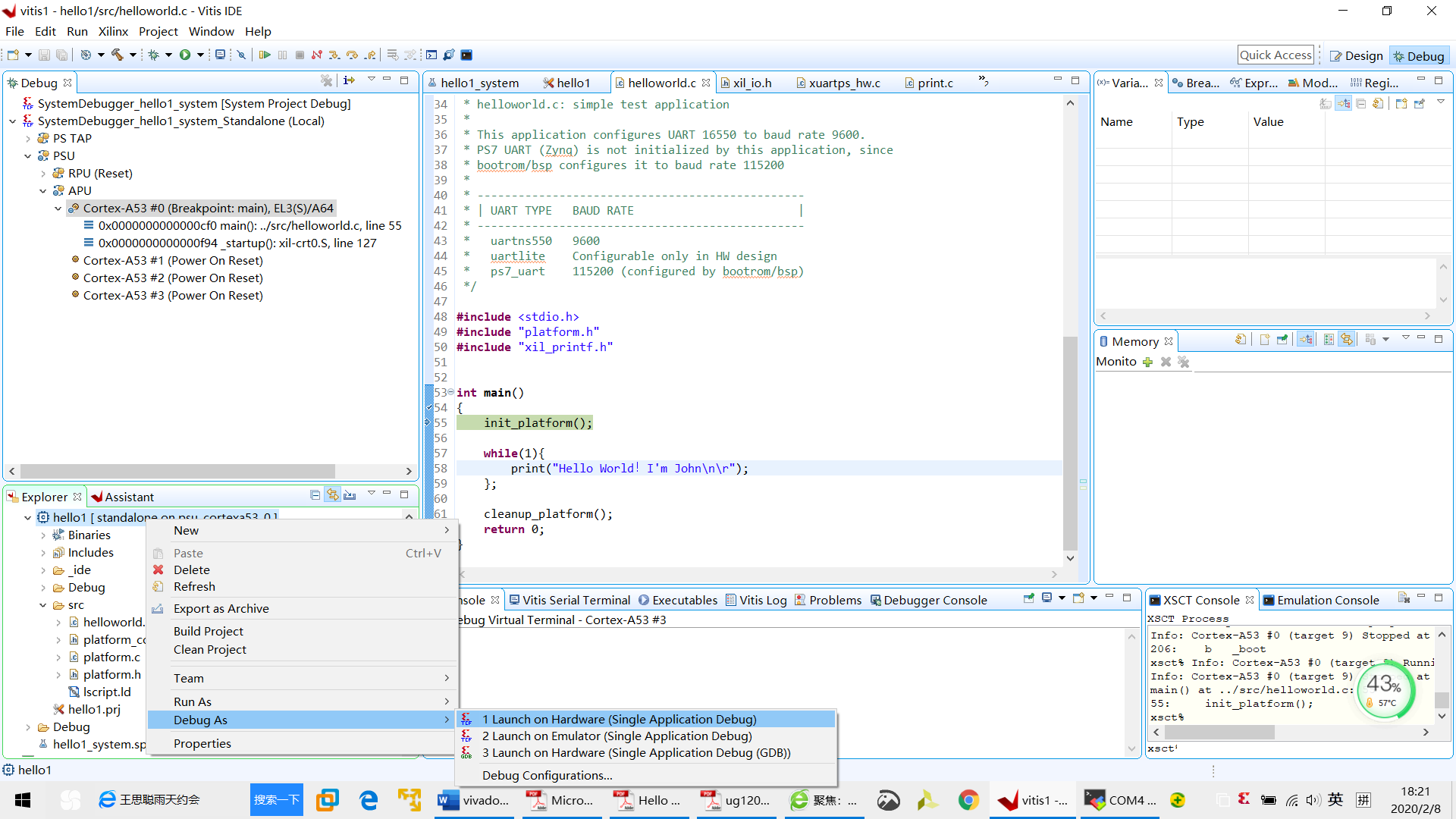


Select Hello template





Open src directory and edit helloworld.c



Suggest to select Debug As mode

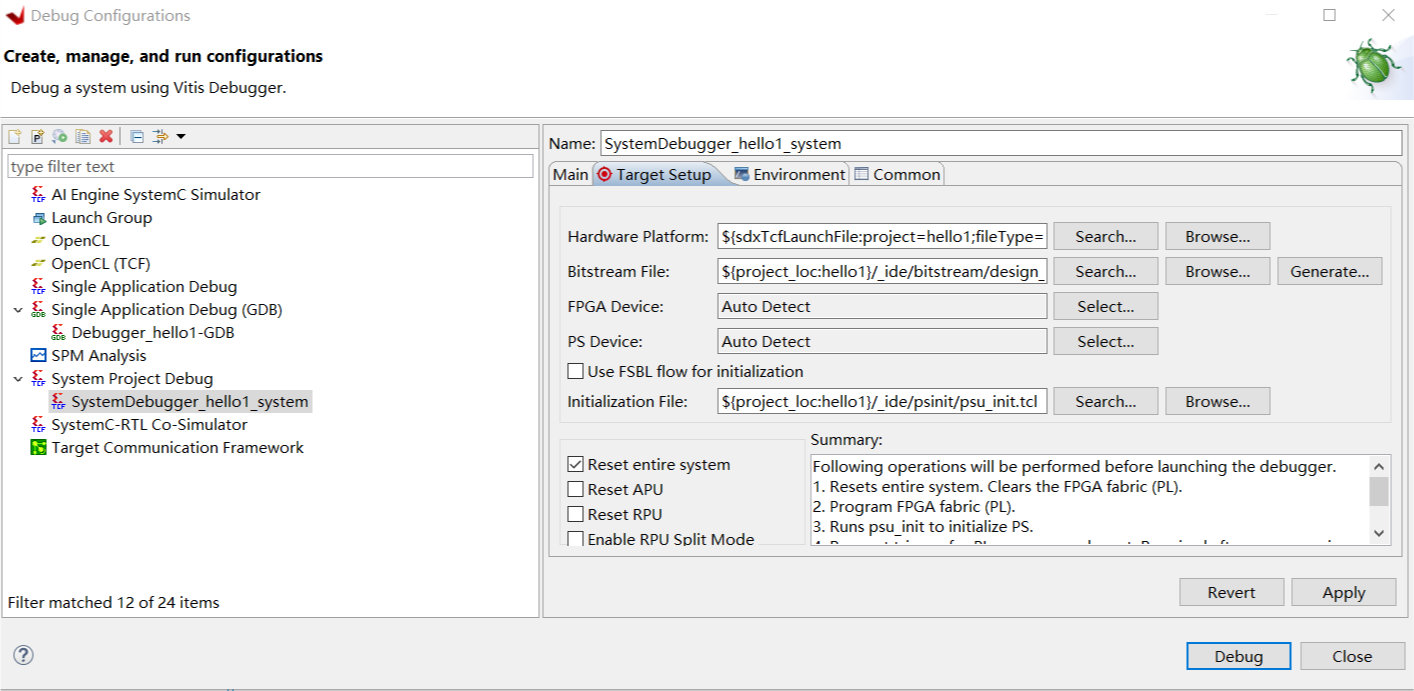
The programs may be launched in either run or debug mode.

* In run mode, the program executes, but the execution may not be suspended or examined.
* In debug mode, execution may be suspended and resumed, variables may be inspected, and expressions may be evaluated.

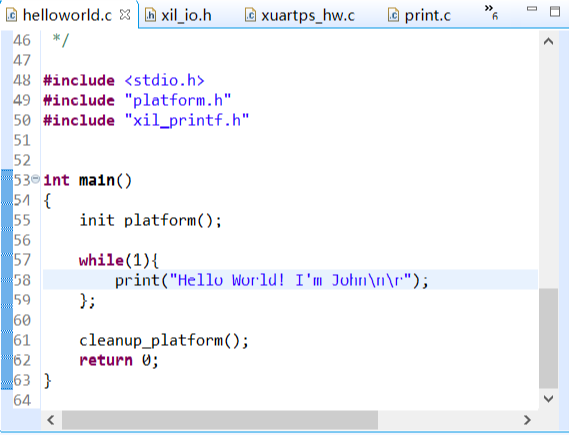
If you select Run mode, the following debug buttons are grey



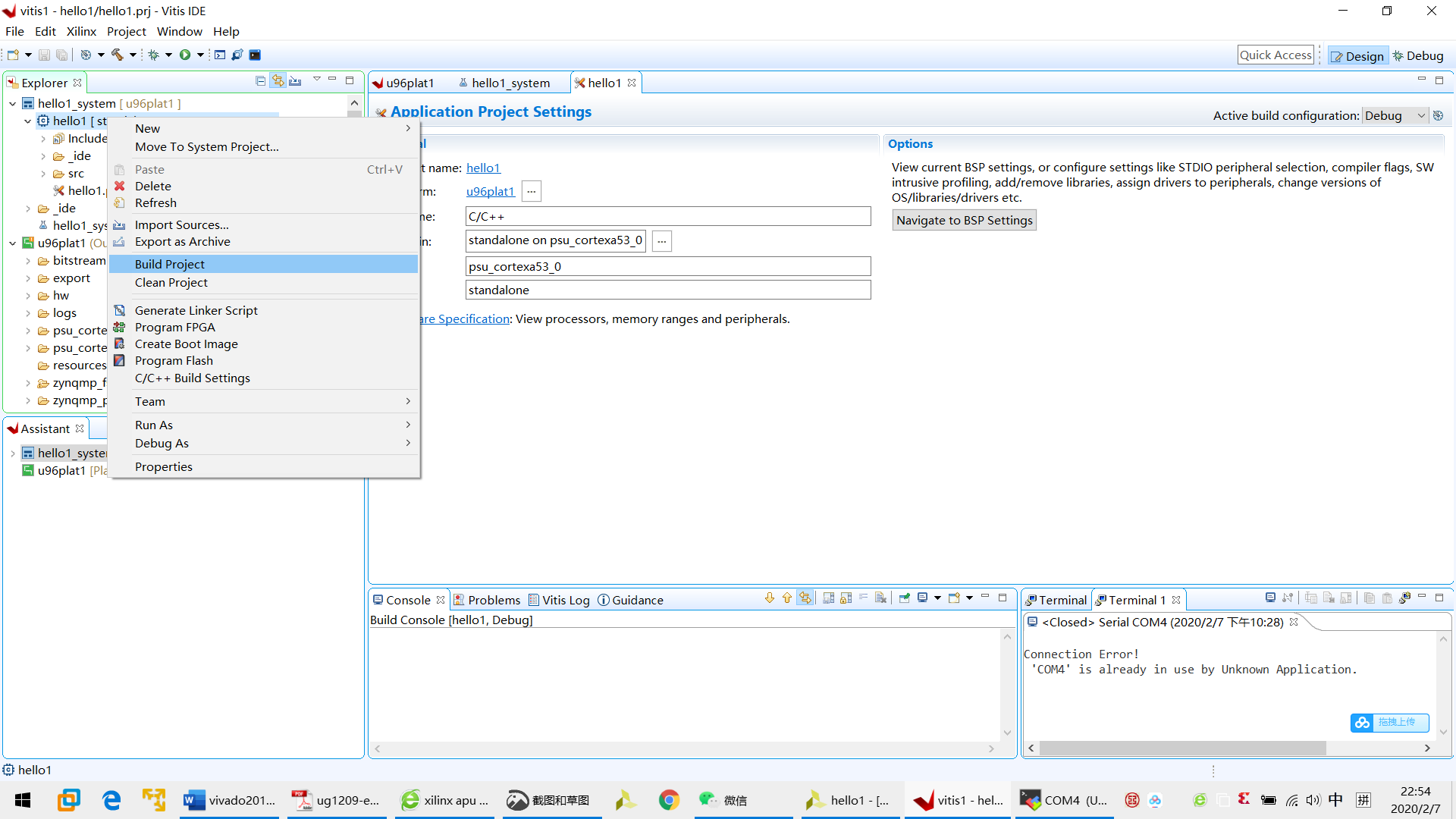
No need to modify



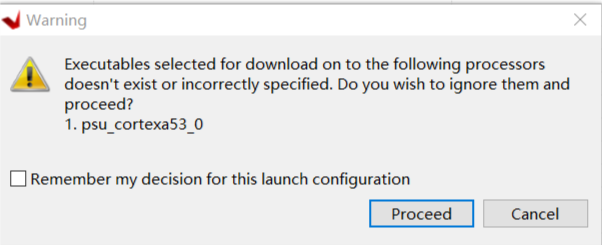
Add while command



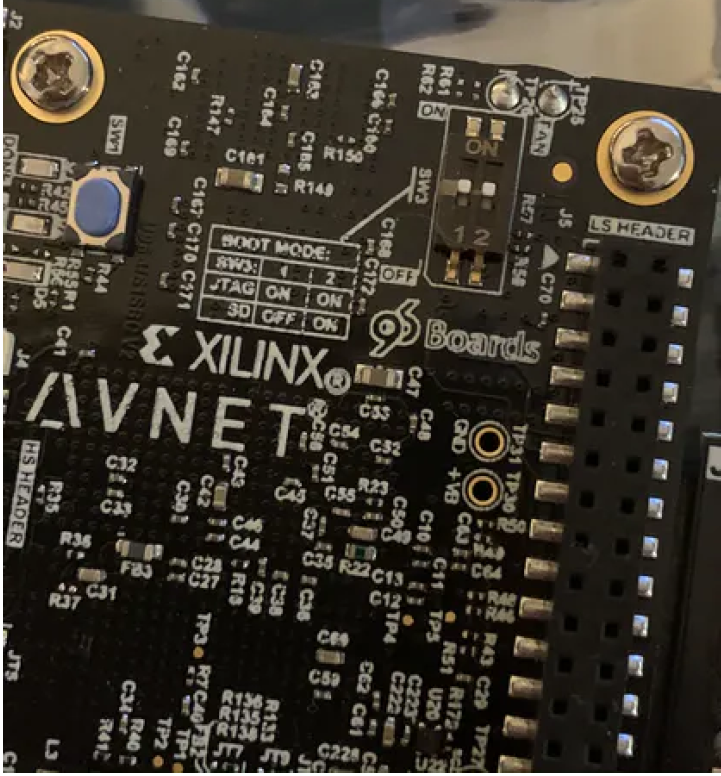
Build Project



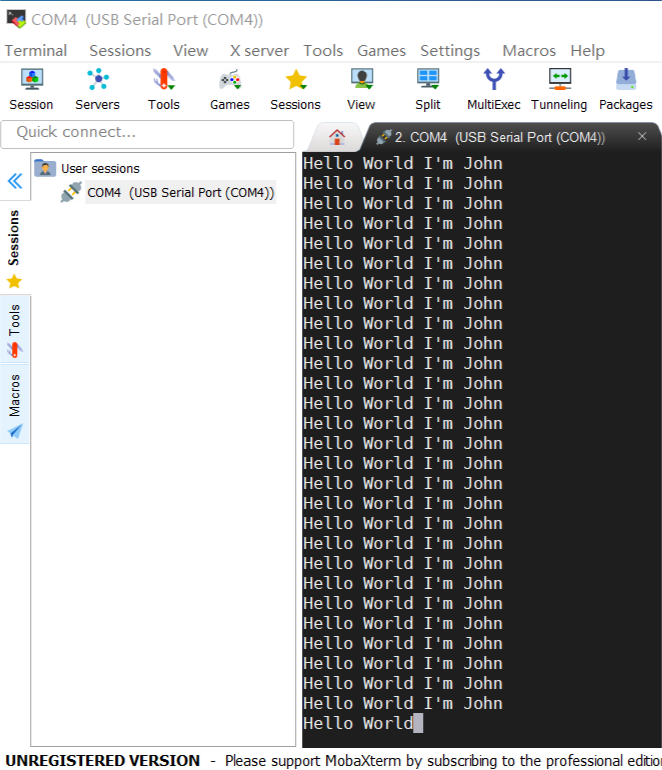
If the following error appear, pls build the project again



Boot mode switches in the configuration to boot from JTAG



Open MobaXterm serial tool, you can see



**Running the “Hello World” Application from Arm Cortex-R5**

