

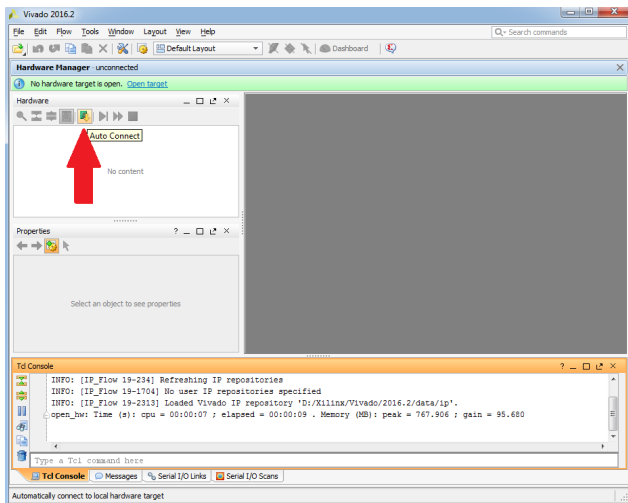
ATLAS: CHESS2: How to program the FPGA

How to reprogram the FPGA with a new .bit image

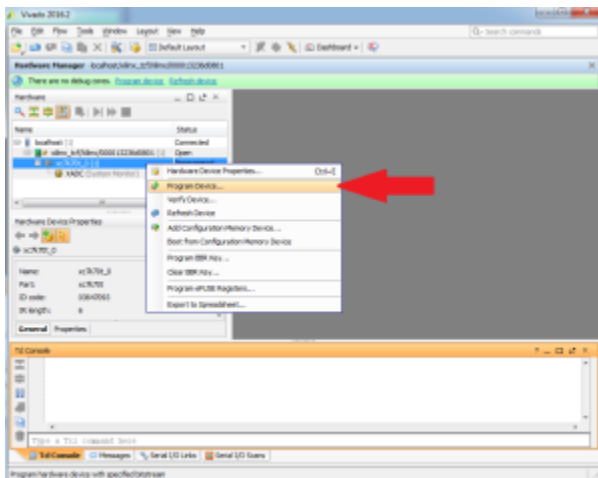
1) Launch Vivado and start the Hardware manager:



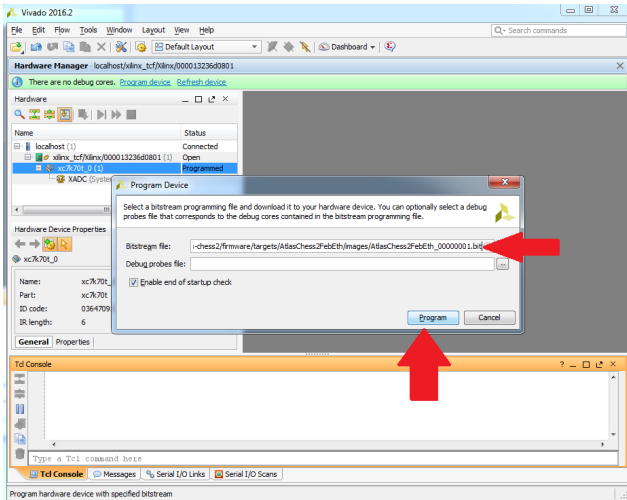
2) Power up the carrier board, connect your JTAG cable, then start the connection



3) Right click on the FPGA, then click on "Program Device ..."



4) Set the "Bitstream file:" to the .bit file that you want load, then click "Program"

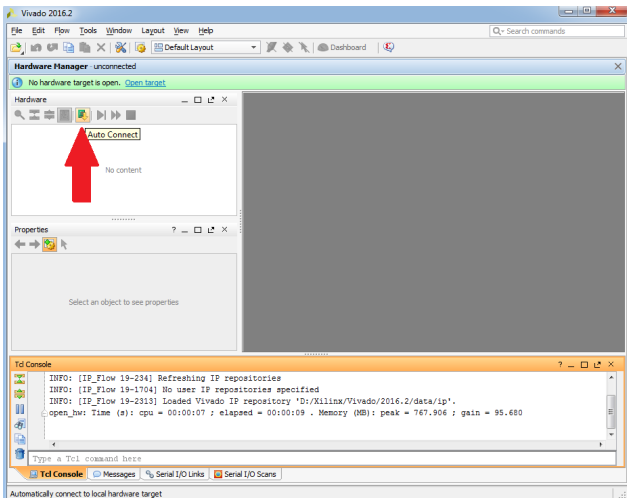


How to reprogram the FPGA's boot PROM with a new .mcs image

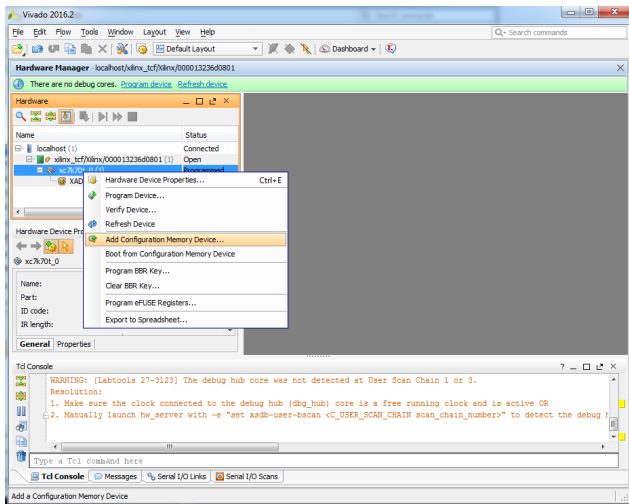
1) Launch Vivado and start the Hardware manager:



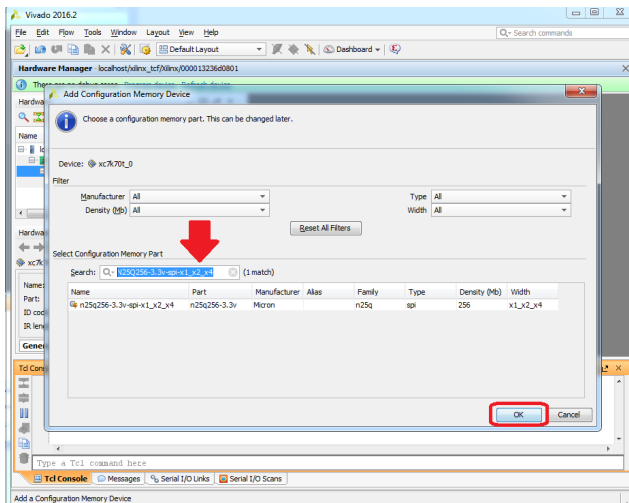
2) Power up the carrier board, connect your JTAG cable, then start the connection



3) Right click on the FPGA, then click on "Add Configuration Memory Device"

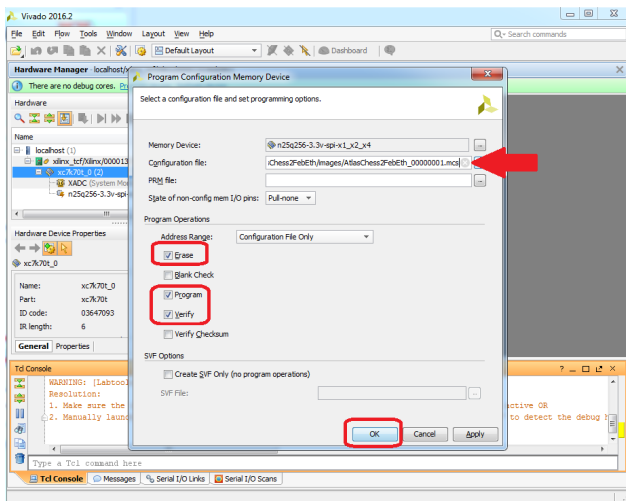


4) Select "N25Q256-3.3v-spi-x1_x2_x4" PROM then click "OK"

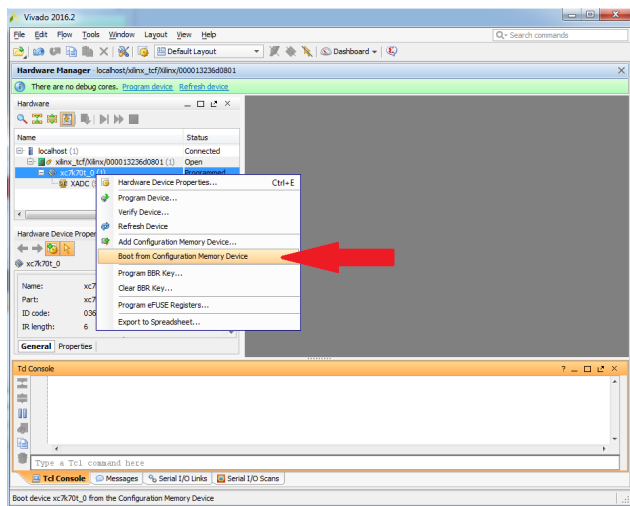


5) Set the "Configuration file:" to the .mcs file that you want load, then click "Program"

Note: The program operation (which are the default options) are "Erase", "Program", and "Verify" only



6) After your done loading the PROM, you can either power cycle the carrier board to load the new image from the boot PROM to the FPGA or "Boot from Configuration Memory Device" via the JTAG interface



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