Downloading CE2800_project.pof to DE0

This document describes the process used to download the Nios II system configuration to the DE0 board. The programming file is a POF file. By downloading this file to the configuration ROM on the DE0 board, you essentially create a permanent Nios II configuration that will load int the Cyclone III FPGA every time you power the board on. The process outlined below should only have to be performed once. You must have Quartus II installed (see link on my web page) and you will also need the POF file which is available on my web page. Get the POF file and save it in a convenient folder on your laptop. Follow the steps below in the order in which they are presented.

- Connect a USB cable from the DE0 board to an available USB port on your laptop.

- Make sure the RUN/PROG switch on the DE0 board is in the RUN position and turn on the power to the DE0 board. The first time you do this, Windows will search for and install the USB-Blaster driver.

- Start Quartus II.

- From the Tools menu, chose programmer.

- Make sure that the USB-Blaster is selected. You may have to click the Hardware Setup button and then double-click USB-Blaster.

- In the Mode: field, pull down and select Active Serial Programming.

- Click the Add File button and browse to the directory in which you saved CE2800_project.POF.

- Select CE2800_project.POF as the programming file.

- Click the check box to select Program/Configure.

- Turn OFF the power to the DE0 board.

- Move the RUN/PROG switch to the PROG position.

- Turn ON the power to the DE0 board.

- Click the Start button to begin programming.

- When Progress indicates 100% successful, you may close the programmer and Quartus II.

- Turn OFF the power to the DE0 board.

- Move the RUN/PROG switch to the RUN position.

From now on, whenever the power to the DE0 is turned on, the Nios II system configuration will automatically be loaded to the Cyclone III FPGA. You should not need Quartus II again.