LAB Assignment #1 for ECE 495/595

Assigned: Wed., Feb 3, 2010
Due: Thur., Feb 10, 2010

Description: Learn LABVIEW and implement a simple serial transfer between LABVIEW and the PP 405.

Modify the HelloWorld program to read an array of integers from STDIN using scanf . Once read, write them to STDOUT using printf. STDIN and STDOUT point to the UART in the HelloWorld program. Use the LABVIEW code provided to send a file to the UART and then read it back. Construct the data such that the first line indicates the number of integers that the file contains. The integers themselves should follow this simple header, one per line. A sample data file and the LABVIEW code are given as supplimentary files.

NOTE: You MUST increase the size of the stack and heap under the 'Generate Linker Script' dialog (upper right) to at least 0x2000. I would also increase the size of BRAM under the 'Address' tab in the main window. Click on the 'Size' dropdown for the 'xps_bram_if_cntlr_1' item and increase to 128K. (Alternatively, use xil_printf and xil_scanf)

Laboratory Report Requirements:

1) No written report required for this laboratory. Be prepared to demonstrate your project in class on Thurs, Feb 12.

Grading:
LABVIEW coding style: 20%
Proper operation: 80%