Weekly Report

Date:10/16/13

Group name : Portable FPGA Based Serial Bus Multiplexer (Group 13)

Client/Advisor: Dr. Somani, Dr. Celik

Attendees/Role:

Steven LeBlanc - Leader/Firmware Design

Adriana Ceylan - Communications/Hardware Design

Darin Cleveland - Webmaster/Hardware Design

Justin Wheeler - Software Design

What	Who	Date
Integrated SDRAM w/ Nios II - UART system, but getting errors relating to downloading .elf file after compiling onto the DE2 board.	Adriana	10-15
Worked on final presentation slideshow	All	10-13
Created a program that (as far as we can tell) sends signals to the usb controller without crashing the board. Also assisted Justin in figuring out how read the UART module's reactions.	Darin	10-14
Got basic UART testbench to work, recorded details of UART operations' timing.	Justin	10-14
Created comprehensive hardware system to run "golden code".	Steve	10-13-13
Researched SRAM as a stepping stone to SDRAM	Steve	10-15-13
Researched standalone VHDL module for USB communication that was downloaded from online.	Steve	10-14-13

Accomplishments For Past Week

Plan for Coming Week/Individual Tasks

What	Who	When
Use Steve's SRAM working demo system to interact with the UART system. Then trace SDRAM ".elf" problem.	Adriana	10-19
Work on final presentation	All	10-22
Add jtag-UART to program to retrieve data from usb controller. Get a working program that reads and writes to usb as expected.	Darin	10-22
Now that I know how to time the various functions of the UART, will try to break the UART within those limits with a more complex testbench. Will also figure out how to test elements of our API without access to USB communication with the board.	Justin	10-22
Attempt to apply techniques learned from reverse engineering of VHDL module, to the "golden code" hardware configuration	Steve	10-21-13

Pending Issues

Issue	Responsibility
JTAG connections for programming the Nios Have become spotty. Connection will randomly die leaving us with inability to load new firmware.	Adriana, Darin, Steve

Individual Hourly Contribution

Darin Cleveland	8
Adriana Ceylan	13
Steve LeBlanc	9
Justin Wheeler	6

Minutes: none, Dr Somani and Dr Celik were unavailable for meeting.