

Simon Fraser University
School of Engineering Science
ENSC452/894: Advanced Digital System Design
Fall 2009

Lab Demonstration Requirements

September 8th, 2009

For the lab demo on October 8th, 2009, you should do the following task and be prepared to demonstrate how it works and answer questions. This is worth 5% of your final grade.

1. Build a MicroBlaze system that can blink an LED at the rate of once per second based on interrupts from a timer. The program should run until a character is typed on the serial port.
2. Add the snoopy core from Module m05 to determine:
 - (a) The time it takes to execute the interrupt service routine;
 - (b) The number of times the interrupt service routine is called.
3. Create a testbed for Module m06. Be sure to:
 - (a) Provide the appropriate input signals;
 - (b) Generate the appropriate simulation waveform including both input and output signals.

Be prepared to answer questions on your final implementation and design choices.