Out: October 27th, 2016
Due: November 3rd, 2016

Goal

To develop a basic testbench design document based on a test plan.

Procedure

1. Review the PDM specification and completed PDM test plan spreadsheet included in this assignment package.
2. Prepare a simple PDM testbench design document with the following sections:
    a. Block Diagram

        Draw a block diagram for the PDM Phase I testbench, similar to the block diagram for the SBIU Phase I testbench in the Lecture 10 notes. Specifically show the individual signals/buses to which each driver is connected. Don't worry about making the diagram fancy/colored, just capture the structure of the testbench.

    b. Testbench Environment Requirements

        List the capabilities that the testbench env needs to provide (e.g. clock generation details). Bullet points are fine.

    c. Input Driver Requirements

        List the features that the input driver needs to provide, based on your review of the test plan (e.g. capability to drive packets with different post-ACK timing).

    d. Input Driver Packet Protocol

        List the steps required to drive a packet on the input interface, pseudo-code style. For example, "1. Wait for device reset deassertion. 2. Assert BND_PLSE and first packet byte on DATA_IN, etc.".

    e. Output Driver Requirements

        List the features that the output driver needs to provide, based on your review of the test plan (e.g. capability to vary the delay on PROCEED_x).

    f. Output Driver Packet Protocol

        List the steps required to facilitate the transmission of a packet out of an output interface. For example, "1. Wait for NEWDATA_LEN_x assertion, etc.".

NOTE - This is not intended to be a major undertaking or a particularly formal document. It should be possible to supply the required information in 2 or 3 pages.

Deliverable

Your completed testbench design document in any reasonable format (e.g. Word doc, PDF). Include your name, NSID, and student number in the filename, and email to the course marker Mehedi Hasan (mehedi.hasan@usask.ca) by midnight on November 3rd.