University of Engineering & Technology, Peshawar DEPARTMENT OF COMPUTER SYSTEM ENGINEERING

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LAB 08

Introduction to Modelsim

Computer Organization and Architecture Lab

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MODELSIM:

MODELSIM is used to simulate HDL and VHDL.

Steps of Installation:

- 1) Unzip, unRAR or use the installer
- 2) Install using "setup.exe"
- 3) After installation, copy "mgls.dll", "modeltech.exe" and "vlm.exe" into your "<installdir>\Win32" dir, overwrite when prompted
- 4) Copy "license.dat" into your "<installdir>\Win32" dir and into "C:\FlexLM", overwrite when prompted.
- 5) Done

How to use ModelSim?

Step 1

Create a new project:

Select **File** > **New** > **Project** (Main window) to create a new project. This opens the **Create Project** dialog. The dialog includes these options:

Project Name

The name of the new project.

Project Location

The directory in which the .mpf file will be created.

• Default Library Name

The name of the working library.

You can generally leave the **Default Library Name** set to "work." The name you specify will be used to create a working library subdirectory within the Project Location. After selecting OK, you will see a blank Project tab in the workspace area of the Main window and the **Add Items to the Project** dialog.

Step 2

Adding items to the project

The Add Items to the Project dialog includes these options:

> Create New File

Create a new VHDL, Verilog, Tcl, or text file using the Source window. See below for details.

→ Add Existing File

Add an existing file. See below for details.

> Create Simulation

Create a Simulation Configuration that specifies source files and simulator options.

Create New Folder

Create an organization folder.

Create New File

The **Create New File** command lets you create a new VHDL, Verilog, Tcl, or text file using the Source window. You can also access this command by selecting **File** > **Add to Project** > **New File** (Main window) or right-clicking (2nd button in Windows; 3rd button in UNIX) in the Project tab and selecting **Add to Project** > **New File**.

The Create Project File dialog includes these options:

➢ File Name

The name of the new file

Add file as type

Add the type of the new file. Select VHDL, Verilog, TCL, or text.