

ECE 745

ASIC Verification

Project 4 Assignment – Closing I2CMB Test Plan Coverage



- 1) Create directed and random tests to close coverage listed in the test plan
- 2) Complete bug report form for identified bugs

Provided in Assignment

- In Moodle:
 - Bug report form: ece745_bug_report.docx

Project Setup Instructions

1. In your project_benches directory:
 - Copy your proj_3 project directory to proj_4 directory

Project Completion Instructions

1. In the ece745_projects/proj_4/sim directory
 1. Run directed and random tests to close test plan coverage
 2. Changes to bench, environment, wishbone, and i2c are allowed to accommodate testing needs.

Project 4 Requirements

- List of test name and seed pairs used to achieve test plan coverage results
 - File name with the names of tests run and seeds used for each test: testlist
 - Entries in test list should contain arguments required when running the test
 - Place test list in sim directory
- The test plan spreadsheet in xml format
- A script named regress.sh in the sim directory that
 - Runs all directed and randomized tests with the desired seeds, arguments, etc.
 - Merges the ucdb's from all tests into a single merged_tests.ucdb
 - Converts test plan xml into test_plan.ucdb
 - Merges test_plan.ucdb and merged_tests.ucdb into regression.ucdb
 - Opens GUI for viewing regression.ucdb
- Bug reports for any bugs found

- 1) TA's will run regress.sh
- 2) Any debugging of regress.sh will reduce project score
- 3) Unzip your submission in a separate area to ensure no dependency on local files, directories, environment variables, etc.

Project 4 Grading Criteria

- Closure on test plan coverage
 - Higher coverage achieved is better
- Simulation time required by tests to achieve test plan coverage
 - Shorter time is better

Project Submission

- Submit by 11:59pm on Thursday, April 24th
- Single tar file
 - Containing: ece745_projects directory and all sub-directories
 - Project_benches directory should include lab_1, proj_1, proj_2, proj_3 and proj_4 sub-directories
 - Named: <unityId>_p4.tar
 - Remove work directory from sim directory before creating tar file



