Course Title: Introduction to Writing Verilog Codes   Course Code: EEA 199

Course Background / Summary:

Verilog is a Hardware Description Language; a textual format for describing electronic circuits and systems. It is most commonly used in the design and verification of digital circuits at the register-transfer level of abstraction. It is also used in the verification of analog circuits and mixed-signal circuits, as well as in the design of genetic circuits. Applied to electronic design, Verilog is intended to be used for verification through simulation, timing analysis, test analysis (testability analysis and fault grading), and logic synthesis. Learning Verilog is not that hard if you have some programming background.

Course Objectives:

- Translate a basic schematic logic circuit into Verilog codes and vice versa
- Write a hierarchical Verilog code for combinational circuits
- Solve a basic design problem using Verilog codes

Target Audience:

- Industrial workers from technicians to engineers, etc.
- Teaching staff (vocational & technical teachers), lecturers, etc.

Course Duration: 3 Days

Course Contents

1.0 Basic Understanding of Design Process

2.0 Design Entry using Verilog

3.0 Writing Test bench for Verilog Codes

4.0 Hierarchical Verilog Codes

5.0 Verilog for Combinational Circuit

6.0 Verilog for Arithmetic Circuit

7.0 Design Examples

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