

ECPS 203

Embedded Systems Modeling and Design

Lecture 6

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Lecture 6: Overview

- SystemC: From the Ground Up (Part 2)
 - Processes and events
 - Channels and interfaces
 - Ports
- Assignment 3

IEEE SystemC Language

- SystemC: From the Ground Up (Part 2)
 - **DAC15_SystemC_Training.pdf**, slides 25 through 43 by David Black, Doulos
 - SystemC training day at Design Automation Conference 2015
 - *“The Definitive Guide to SystemC: The SystemC Language”*
 - Core Concepts and Syntax
 - Review: Modules and connectivity
 - Processes and events

Project Assignment 3

- Task: Introduction to SystemC
 - Capture and simulate the introductory example by Doulos
- Steps
 1. Structural model is shown on slide 25
 2. Source file structure is shown on slide 32
 3. Capture the partial source code provided on slides 21-36
 4. Fill in the omitted source code for the monitor module
 - For test cases 1*6, 2*6, ..., 7*6, monitor and validate the output
 5. Simulate the model with Accellera SystemC library
- Deliverables
 - Source files, **Makefile**, **README** in **hw3.tar.gz**
- Due
 - Wednesday, October 24, 2018, 6pm