SystemC Community Update

10th North American SystemC User’s Group
DVCon; February 24, 2009

Ken Tallo
OSCI Board Chairman
Outline

- Update on the OSCI organization, events and activities
- Technical Working Group updates
  - Transaction-Level Modeling (TLM)
  - Analog/Mixed-Signal (AMS)
  - Synthesizable subset
  - Configuration, Control and Inspection
OSCI Membership

Corporate Members

Associate Members

* 6 new members in 2008
OSCI/SystemC Events And Activities

- TLM-2.0 Approved
- AMS Whitepaper

DAC ‘08

- End Draft 1 AMS public review
- Start Draft 1.2 Synthesis Subset public review

CCI WG formed

Q3 ‘08

- Member, then public, reviews of:
  - TLM-2.0 LRM
  - CCI requirements

Q4 ‘08

Q1 ‘09

Q2 ‘09

FEATURED EVENT

NASCUG 9
SystemC Symposium
DAC
Anaheim, CA
June 8-9, 2008

ESCUG 18
Stuttgart Germany
Sept 23, 2008

JEITA SystemC User’s Forum
EDS Fair
Yokohama, Japan
January 23, 2009

NASCUG 10
DVCon
San Jose, CA
February 24, 2009

ESCUG 19
DATE
Nice, France
April 21, 2009

Stay Tuned...
DAC
San Francisco, CA
July 26-31, 2009
Transaction-Level Modeling WG Update

- TLM-2.0 released June 9, 2008; experiencing rapid adoption
  - 6,153 downloads as of 2/19/09
  - Includes Users Guide, implementation and examples
  - Encompasses:
    - Approximately Timed (AT) & Loosely Timed (LT) modeling
    - Temporal Decoupling
    - Direct Memory Interface
    - Debug Transactions
    - Extensible Base Protocol for modeling memory mapped buses
- Public review of the TLM-2.0 LRM to start in 09Q2
- Chair: Bart Vanthournout, CoWare
  Vice-Chair: James Aldis, Texas Instrument
Analog/Mixed-Signal WG Update

- Public review of the AMS Draft 1 kit through March 31, 2009; the kit includes:
  - LRM
  - Requirements specification
  - Whitepaper “An Introduction to Modeling Embedded Analog/Mixed-Signal Systems using SystemC AMS extensions”
  - Code example

- Steady membership growth: 53 individuals from 19 organizations
  - Strong drive from semiconductor industry
  - Solid support from universities and research institutes
  - Growing interest and participation from EDA/ESL vendors

- Chair: Martin Barnasconi, NXP Semiconductors
  Vice-Chair: Christoph Grimm, Vienna University of Technology
Synthesis Subset WG Update

- Public review of draft 1.2 to start by early 09Q2; updates include:
  - Added section on processes, clocks, resets
  - Added discussion on abstraction levels to introduction
  - Added Annex B in anticipation of the Process Control Extensions being considered by the Language Working Group

- Chair: Andres Takach, Mentor
  Vice-Chair: Mike Meredith, Forte
Configuration, Control & Inspection WG

- New working group announced 2/24/09
- Charter: to develop standards that allow tools to interact with models in order to perform activities such as configuration, debug and analysis
- Initial scope includes:
  - Configuration parameters
  - Command and control
  - Registers
  - Save and restore
- 38 initial participants representing 24 organizations
- Chair: Trevor Wieman, Intel
  Vice-Chair: Bart Vanthournout, CoWare
Summary

- OSCI continues to fuel the ESL industry with SystemC standards
- TLM 2.0 is seeing rapid adoption across the ecosystem
- SystemC AMS draft 1 is now out for public review
- Synthesis Subset draft 1.2 to be available for public review soon
- New “Configuration, Control & Inspection” WG formed and ramping
  - Still time to get in on the ground floor!

Visit [www.systemc.org](http://www.systemc.org) for details!