



# SystemC Community Update

10<sup>th</sup> 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



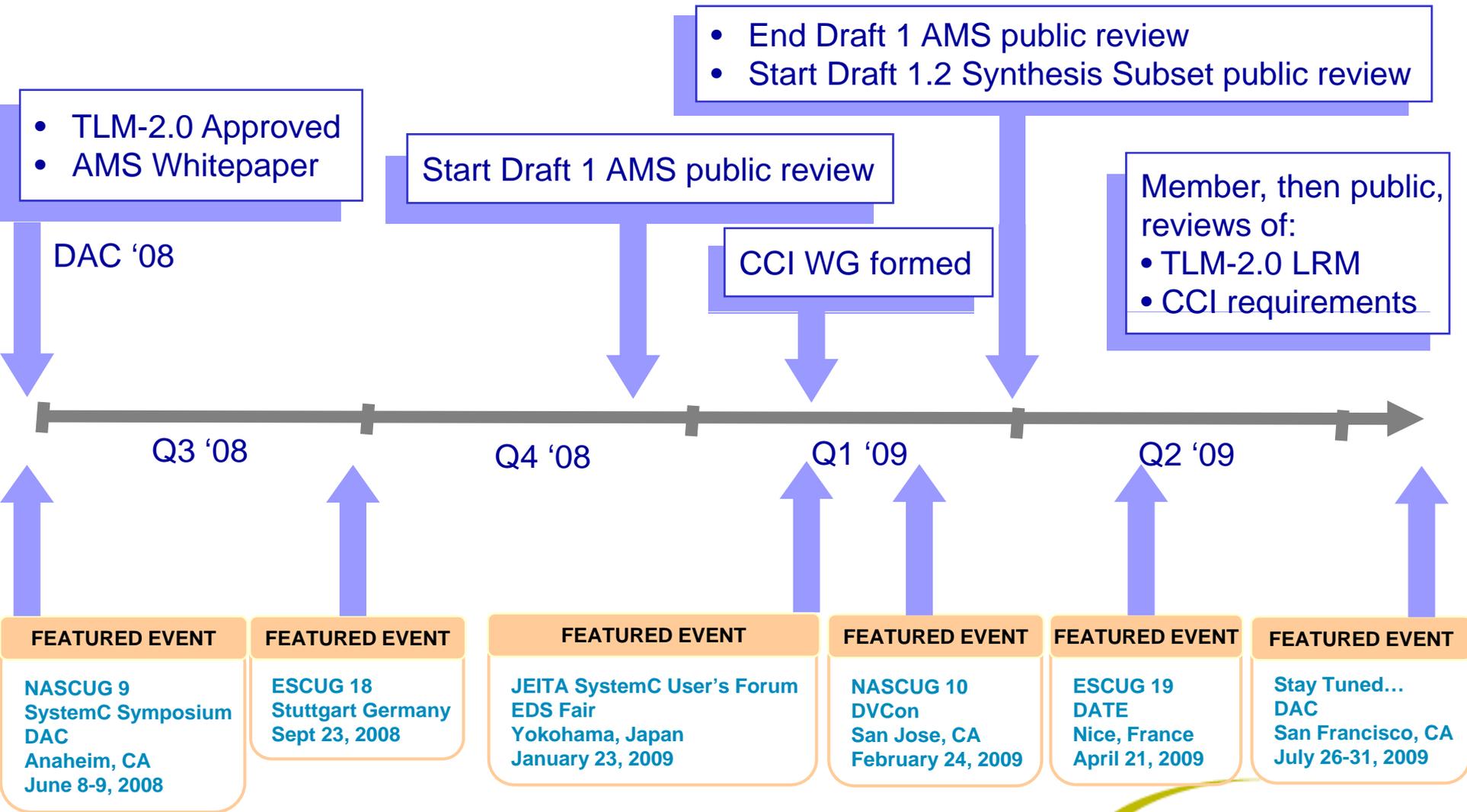
Associate  
Members



\* 6 new members in 2008



# OSCI/SystemC Events And Activities



# 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!

