SystemC Community Update

ISCUG   May 9, 2008
Girish Nanappa, OSCI

OSCI Membership

Corporate Members
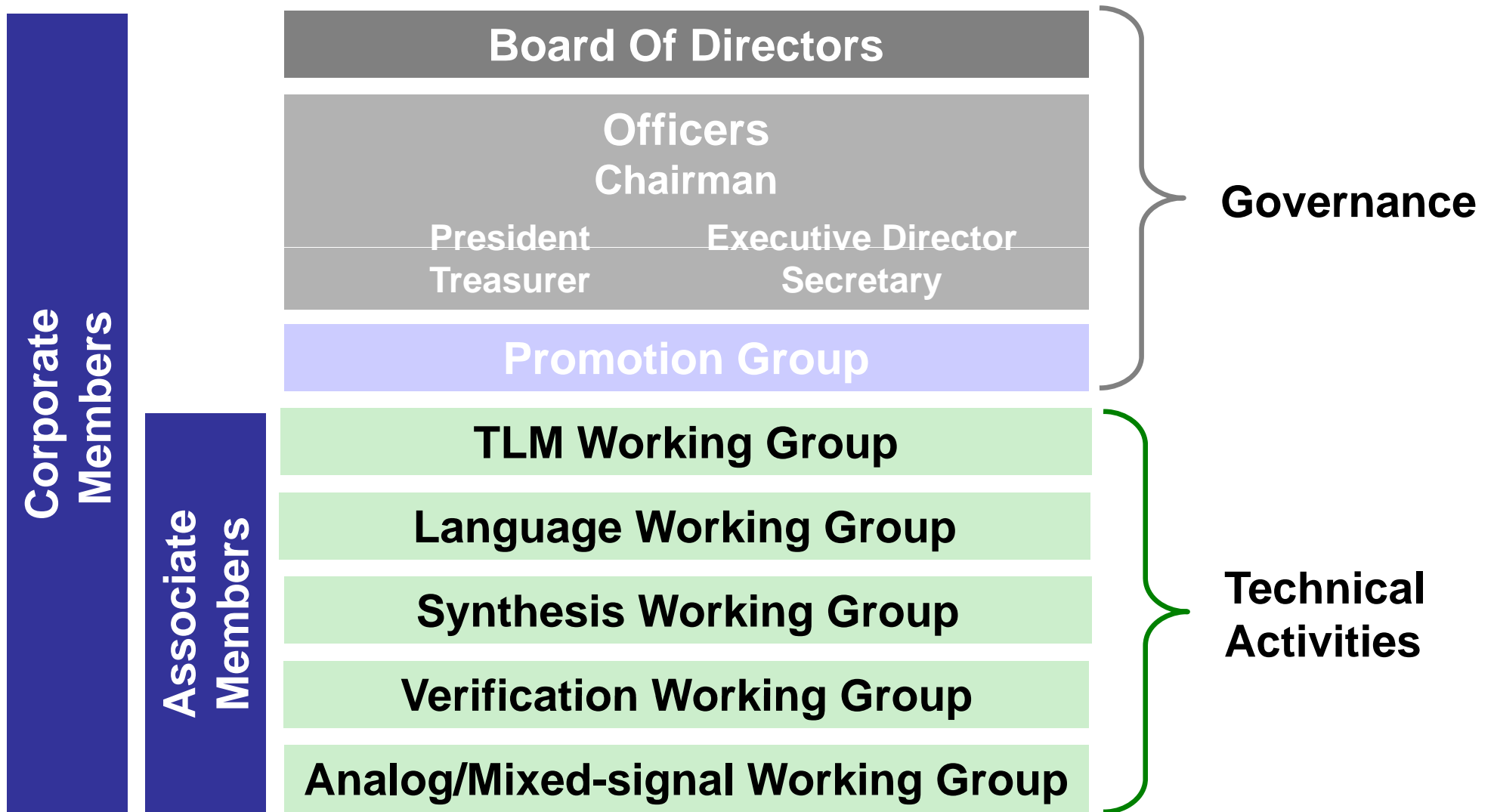

Associate Members
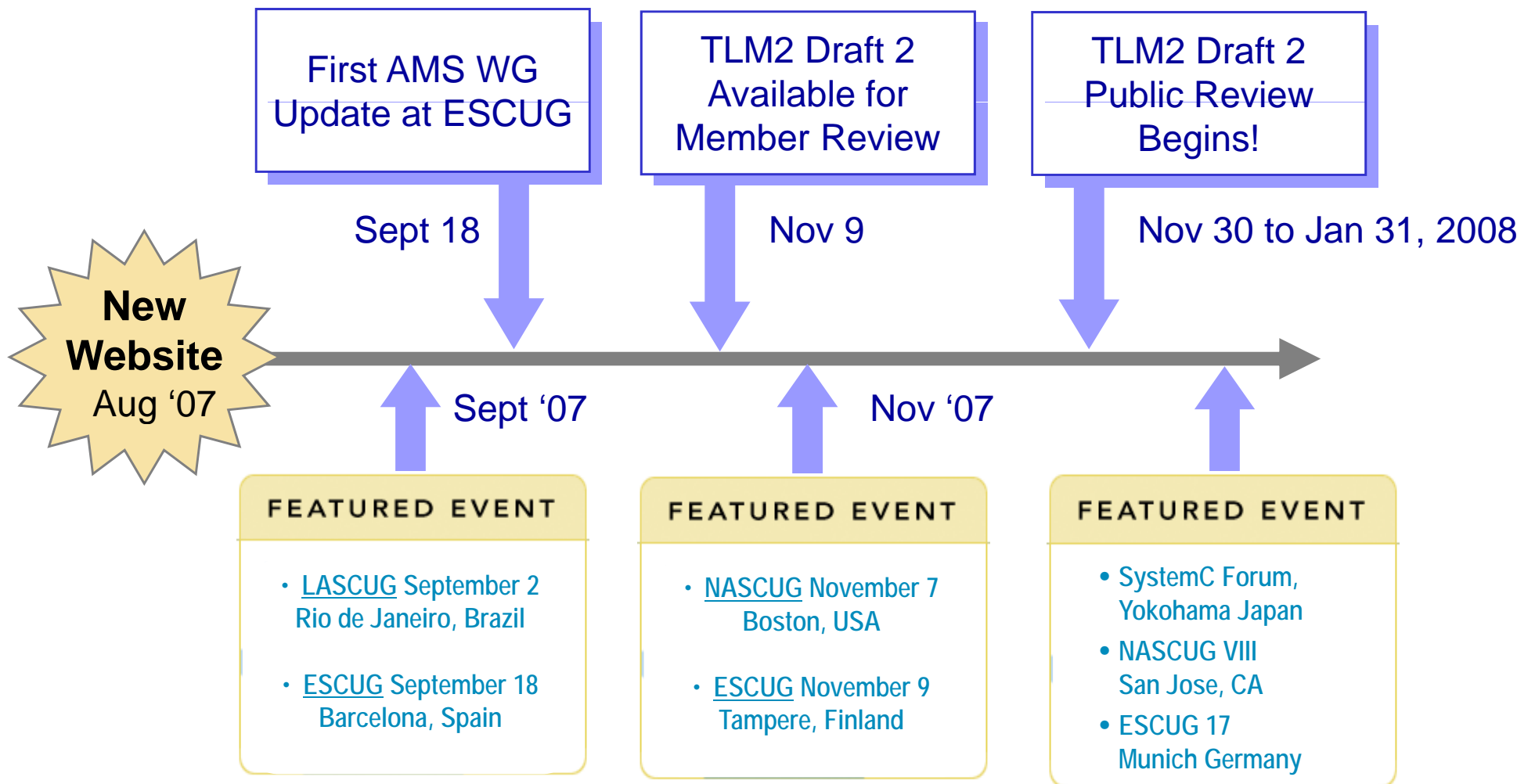

36 member companies, including 8 new since DATE 2007:
CISC, CoFluent, ITRI, UPMC, STARC, TI, Maple DA , Virtutech

OSCI Organization

Corporate Members

Associate Members

Board Of Directors

Officers
Chairman

President   Executive Director
Treasurer   Secretary

Promotion Group

Governance

TLM Working Group

Language Working Group

Synthesis Working Group

Verification Working Group

Analog/Mixed-signal Working Group

Technical Activities

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What's New at OSCI

First AMS WG Update at ESCUG	TLM2 Draft 2 Available for Member Review	TLM2 Draft 2 Public Review Begins!
Sept 18	Nov 9	Nov 30 to Jan 31, 2008

New Website Aug '07

Sept '07 — Nov '07

FEATURED EVENT
- LASCUG September 2 Rio de Janeiro, Brazil
- ESCUG September 18 Barcelona, Spain

FEATURED EVENT
- NASCUG November 7 Boston, USA
- ESCUG November 9 Tampere, Finland

FEATURED EVENT
- SystemC Forum, Yokohama Japan
- NASCUG VIII San Jose, CA
- ESCUG 17 Munich Germany

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See us at DAC!

7th Symposium on Electronic System-Level Design with SystemC

Opening Session and Reception – North American SystemC Users Group Meeting
Sunday, June 8, 4:00pm - 7:00pm

Panel Discussion: Real World Advantages of the OSCI TLM-2.0 Standard for Interoperability and IP Reuse
Monday, June 9, 12:00pm - 2:00pm; lunch provided

Special Workshop: OSCI TLM-2.0 in 2008 – A Leap Forward for Transaction-Level Modeling Standards
Monday, June 9, 2:00pm - 5:00pm

Free to industry professionals!
www.systemc.org

Analog Mixed Signal WG

- Requirement documentation for SystemC-AMS completed
  - Identified application domains and target use cases
  - (code) implementation requirements

- Interest in AMS WG is increasing
  - Solid participation and contributions from semiconductor industry (4), Universities (2), EDA vendor (2), Training (1) and Research (2) institutes
  - Very successful public workshop in Dresden, June 2007: *"C/C++-Based Modeling of Embedded Mixed-Signal Systems"*
  - *"Where 2 worlds meet: SystemC AMS and TLM interaction" at DATE 2008*

- Definition of Language Reference Manual for AMS extension has started
  - Additions: analogue-mixed signal synchronization, models of computation, ...
  - Architecture and code review of SystemC-AMS prototype started

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Synthesis Working Group

- **Target**
  - Working on synthesizable subset description
- **Scope**
  - Mixed-level synthesis
    of SC_CTHREAD and SC_METHOD
- **Schedule**
  - Updated draft planned for public review . . . soon

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TLM WG in 2007

- Thanks to Trevor Wieman (Intel) and Stuart Swan (Cadence) who served as chair and vice-chair

- Participation in the WG continues to be strong
  - 18 organizations total

- Public review of TLM-2 Draft 1 was completed in February
- Detailed requirements spec released for public review in June
- TLM-2 Draft 2 released for public review in November

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TLM 2.0 Status _Update_

Thanks for Comments!

- **TLM-2.0 Draft 2**
  - Available for public review on November 30th
    - ◆ The public review period extended through January 31st
  - OSCI tutorial at DVCon on February 19th
    - ◆ Will recap feedback from public review

- **OSCI Language Reference Manual (LRM)**

Start Adopting!

  - Will be based on TLM-2.0
  - Work will begin after DAC 2008
  - OSCI intends to pursue IEEE TLM standardization

- **New WG leadership!**
  - Bart Vanthournout (CoWare) – New Chair
  - James Aldis (TI) – New Vice-chair

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TLM-2.0 Draft 2 Contents

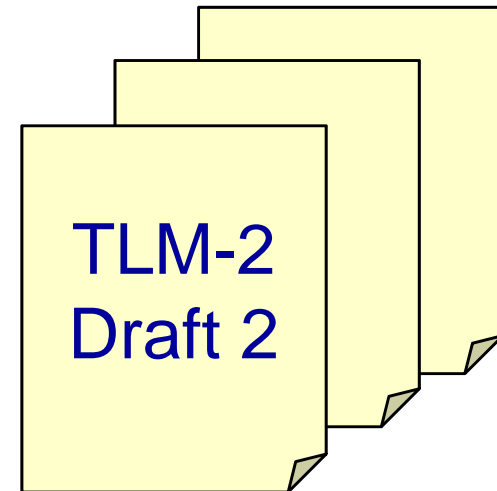- Cross-referenced to the requirements specification:

Mandatory Goals – Achieved !
- Untimed (UT) Modeling
- Loosely Timed (LT) Modeling
- Payload for Generic Memory-Mapped Bus
  - Built-in Extension Mechanism
- Temporal Decoupling
- Non-intrusive Transactions
- Analysis Ports
- *Documentation, Examples*

Stretch Goals – Achieved !
- Model Synchronization
- Direct Memory Interface

Pulled in from TLM 2.1 – Achieved !
- Approximately Timed (AT) Modeling

TLM-2
Draft 2

Not too late to download the kit and get up to speed!

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