SystemC Evolution Fika – September 2022

Introduction

Ola Dahl, Ericsson





SystemC Evolution Fika - 15 September 2022

Workshop on the Evolution of SystemC Standards

The SystemC Evolution Fika is a series of online workshops to discuss the latest SystemC developments and applications. We refer to these workshops as *fikas*, to honor the fika tradition of sharing a coffee, slowing down a bit, and talking about things that we care about.

Event information

Date: **15 September 2022** Time: **16:00 - 18:00 CEST** Location: Online, Virtual Workshop.

Registration

Registration is free of charge. Register here.

NOTE: After registration you will receive an email including meeting details to attend the online event.

Organization Team

- Ola Dahl, Ericsson (Chair)
- Martin Barnasconi, NXP
- Jerome Cornet, STMicroelectronics
- Christian Sauer, Cadence
- Mark Burton, Qualcomm
- Peter de Jager, Intel



https://systemc.org/events/scef202209/





Agenda

Main theme of the event: Safety-related Use Cases of SystemC-based Virtual Prototypes

Time (CEST)	Title	Presenter(s)	Affiliation(s)
16:00 - 16:15	Introduction	Ola Dahl	Ericsson, Stockholm, Sweden
16:15 - <mark>1</mark> 6:45	A fault-injection methodology for the system-level reliability analysis of computing systems modeled in SystemC Abstract	Antonio Miele	University Politecnico di Milano, Italy
16:45 - 17:15	Dynamic Fault Injection with SystemC AMS for Quantitative Safety Verification Abstract	Thomas Markwirth	Fraunhofer IIS/EAS, Dresden, Germany
17:15 - 17:45	A Scalable Platform for QEMU Based Fault Effect Analysis for RISC-V Hardware Architectures Abstract	Peer Adelt	Heinz Nixdorf Institut/Universität Paderborn, Paderborn, Germany
17:45 - 18:00	Q&A and Closure	Ola Dahl	Ericsson, Stockholm, Sweden





Accellera SystemC Working Groups

- SystemC Language Working Group (LWG)
 - Chair: Laurent Maillet-Contoz (ST)
 - Subgroups
 - Transaction-Level Modeling (TLMWG), Chair: Bart Vanthournout (Synopsys)
 - SystemC Datatypes (SDTWG), Chair: Frederic Doucet (Qualcomm)
 - Common Practices (CPSWG): Chair: Mark Burton (Qualcomm)
- SystemC Analog/Mixed-Signal Working Group (AMSWG)
 - Chair: Martin Barnasconi (NXP)
- SystemC Configuration, Control & Inspection Working Group (CCIWG)
 - Chair: Ola Dahl (Ericsson)
- SystemC Synthesis Working Group (SWG)
 - Chair: Andres Takach (Mentor)
- SystemC Verification Working Group (VWG)
 - Chair: Stephan Gerth (Bosch)





Accellera SystemC Working Groups – What's On?

- SystemC Language Working Group (LWG)
 - Preparing SystemC 2.3.4 bug-fix release
 - Common Practices for <u>TLM extensions based on CCI Parameters</u>
- SystemC Analog/Mixed-Signal Working Group (AMSWG)
 - Preparing release of regression suite for upcoming SystemC 2.3.4 and SystemC-AMS 2.4
- SystemC Configuration, Control & Inspection Working Group (CCIWG)
 - Preparing incremental CCI 1.0.1 release (no standard updates, no functional updates)
 - Public repo created, at https://github.com/accellera-official/cci
- SystemC Verification Working Group (VWG)

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 UVM-SystemC development ongoing with constrained random (CRAVE) and functional coverage (FC4SC) extensions





Advancing SystemC Standards Together

- Become an Accellera Working Group member
 - Join Accellera and participate in the Accellera working groups
 - Direct access to the latest standardization proposals and development tree
- Become a member of the IEEE Standards Association
 - Join <u>IEEE-SA</u> to participate in the *ongoing* standardization in the P1666 (SystemC) working group
- Share your experiences
 - Visit <u>www.accellera.org</u> and join the community forums at <u>forums.accellera.org</u>
 - Report your issues and/or create pull requests on the public SystemC <u>GitHub</u> repository
- Help us to grow the SystemC ecosystem and community
 - Participate in community events such as the <u>SystemC Evolution Day</u>
 - Contribute to the SystemC Community Portal <u>systemc.org</u>
 - Promote the use of the SystemC standard in complex system simulation tasks





Next up - SystemC Evolution Day 2022

- Mark your calendar to attend this face-to-face event: Date: 8 December 2022. This the day after DVCon Europe 2022 Time: 09:00 - 17:00 CEST Venue: Holiday Inn Munich City Centre, Hochstrasse 3, 81669 Munich, Germany
- Call for Presentations still open
 - Submit your ideas and contributions for additions and improvements to SystemC and/or its extensions covering TLM, CCI, AMS, Synthesis and/or Verification
 - A contribution can be in the form of a finding, a result, or a proposal, but also a problem experienced that you feel needs attention and discussion in an Accellera and SystemC usercommunity context
- More information on the event and abstract submission process

https://systemc.org/events/sced2022/





Discussion



