

Methodology and Toolset for Model Verification, Hardware/Software co-simulation, Performance Optimisation and Customisable Source-code generation - DTU Orbit (09/11/2017)

Methodology and Toolset for Model Verification, Hardware/Software co-simulation, Performance Optimisation and Customisable Source-code generation

The MODUS project aims to provide a pragmatic and viable solution that will allow SMEs to substantially improve their positioning in the embedded-systems development market. The MODUS tool will provide a model verification and Hardware/Software co-simulation tool (TRIAL) and a performance optimisation and customisable source-code generation tool (TUNE). The concept is depicted in automated modelling and optimisation of embedded-systems development. The tool will enable model verification by guiding the selection of existing open-source model verification engines, based on the automated analysis of system properties, and producing inputs to be fed into these engines, interfacing with standard (SystemC) simulation platforms for HW/SW co-simulation, customisable source-code generation towards respecting coding standards and conventions and software performance-tuning optimisation through automated design transformations.

General information

State: Published

Organisations: Department of Photonics Engineering, Networks Technology and Service Platforms

Authors: Berger, M. S. (Intern), Soler, J. (Intern), Yu, H. (Intern), Tsagkaropoulos, M. (Ekstern), Leclerc, Y. (Ekstern), Olma, C. (Ekstern)

Pages: 169-178

Publication date: 2013

Main Research Area: Technical/natural sciences

Publication information

Journal: W S E A S Transactions on Information Science and Applications

Volume: 6

Issue number: 10

ISSN (Print): 1790-0832

Ratings:

Scopus rating (2016): SJR 0.116 SNIP 0.482

Scopus rating (2015): SJR 0.162 SNIP 1.251

Scopus rating (2014): SJR 0.181 SNIP 0.377

Scopus rating (2013): SJR 0.144 SNIP 0.437

ISI indexed (2013): ISI indexed no

BFI (2012): BFI-level 1

Scopus rating (2012): SJR 0.182 SNIP 0.591

ISI indexed (2012): ISI indexed no

BFI (2011): BFI-level 1

Scopus rating (2011): SJR 0.176 SNIP 0.231

ISI indexed (2011): ISI indexed no

BFI (2010): BFI-level 1

Scopus rating (2010): SJR 0.235 SNIP 0.386

BFI (2009): BFI-level 1

Scopus rating (2009): SJR 0.243 SNIP 0.393

BFI (2008): BFI-level 1

Scopus rating (2008): SJR 0.197 SNIP 0.212

Scopus rating (2007): SJR 0.143 SNIP 0.126

Web of Science (2007): Indexed yes

Scopus rating (2006): SJR 0.118 SNIP 0.102

Original language: English

Model verification, HW/SW co-simulation, Customisablecode generation, SW optimization

Electronic versions:

105701-156.pdf

Links:

<http://www.modus-fp7.eu/>

Source: dtu

Source-ID: u:8813

Publication: Research - peer-review › Journal article – Annual report year: 2013

