ARTEMIS Call 2009 Project
100203

iFEST

industrial Framework for Embedded Systems Tools

ARTEMIS

COMPLETED

EXECUTIVE *summary*

iFEST will specify and develop an open integration framework for establishing and maintaining tool chains for the engineering of complex industrial embedded systems with an emphasis on HW/SW co-design and life-cycle support.

RELEVANCE CALL *2009 objectives*

> 'Establishment of an integrated chain of European-sourced tools [...] to support a complete process flow of development [...]'
> 'System-level model-based tools and design processes that contribute, in an integrated fashion, to elevating the abstraction level for architecture exploration and product design'

RELEVANCE CALL *2009 objectives*

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TECHNICAL *innovation*

A new systematic approach to tool integration where key ingredients in the framework include shared concepts, models, meta-models, transformations and tool integration services;

> integration of model-driven engineering tools with traditional HW/SW co-design tools
> extensive support throughout the product's life-cycle, including hardware and software upgradability
> a framework allowing different tool chains to be efficiently derived and maintained, offering the simple exchange of tools
> two operational tool chain prototypes targeting heterogeneous multi-core platforms

The use of tool chains that support abstract modelling combined with automated transformations to low-level software/hardware will be a major step forward for the industry.
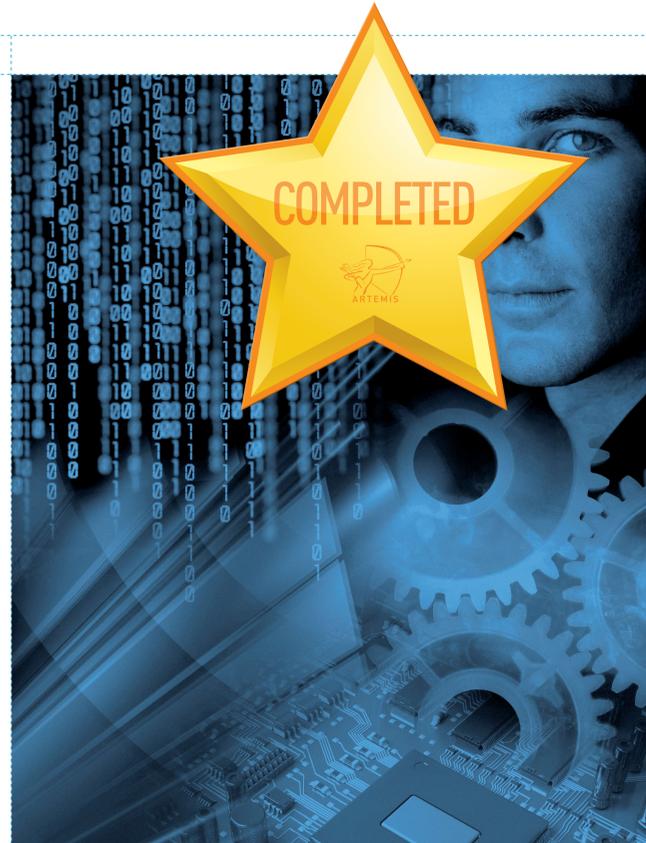
iFEST

PROJECT COORDINATOR Dagfin Brodtkorb	**START** April 2011
INSTITUTION ABB AS	**DURATION** 36 months
EMAIL dagfin.brodtkorb@no.abb.com	**TOTAL INVESTMENT** €15.8 M
WEBSITE www.artemis-ifest.eu	**PARTICIPATING ORGANISATIONS** 20
	NUMBER OF COUNTRIES 8

NORWAY
ABB · University of Oslo

SWEDEN
ENEA · ABB · KTH ROYAL INSTITUTE OF TECHNOLOGY

UNITED KINGDOM
Systonomy · atego · Loughborough University · SELEX GALILEO A Finmeccanica Company

GERMANY
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CZECH REPUBLIC
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