MINALOGIC

Socket: Skills and Technology Transfer

Background

Due to technological advancements and evolving application needs, embedded software and hardware systems are becoming increasingly complex. Companies must be able to understand this complexity and ensure shorter, cheaper development, testing, and certification of critical systems if they are to enjoy continued success. They need to be able to manage continuous design flows using a collection of engineering tools that can check, test, and certify critical systems based on SoCs, if they want to develop onboard aircraft computing devices, increase the computing power of embedded spatial systems, and penetrate new markets for secure applications for ecommerce, medicine, and automobiles.

Innovation

The SoCKET project aims to leverage the complementary skills of manufacturers and research labs working on embedded systems, and to solve current problems with development methods for critical systems. The project's goals are to:

- Outline a continuous design flow that includes equipment testing and certification, from the overall system to its integrated circuits and the software tested on these circuits
- Enhance SoC development methods for critical embedded systems
- Understand the "system dimension" (hardware and software) of SoC integration
- Minimize the complexity, reduce the cycle time, and improve the design of systems using SoCs
- Evaluate the use of hardware simulation models for testing and integrating critical embedded software

Partners

Corporate

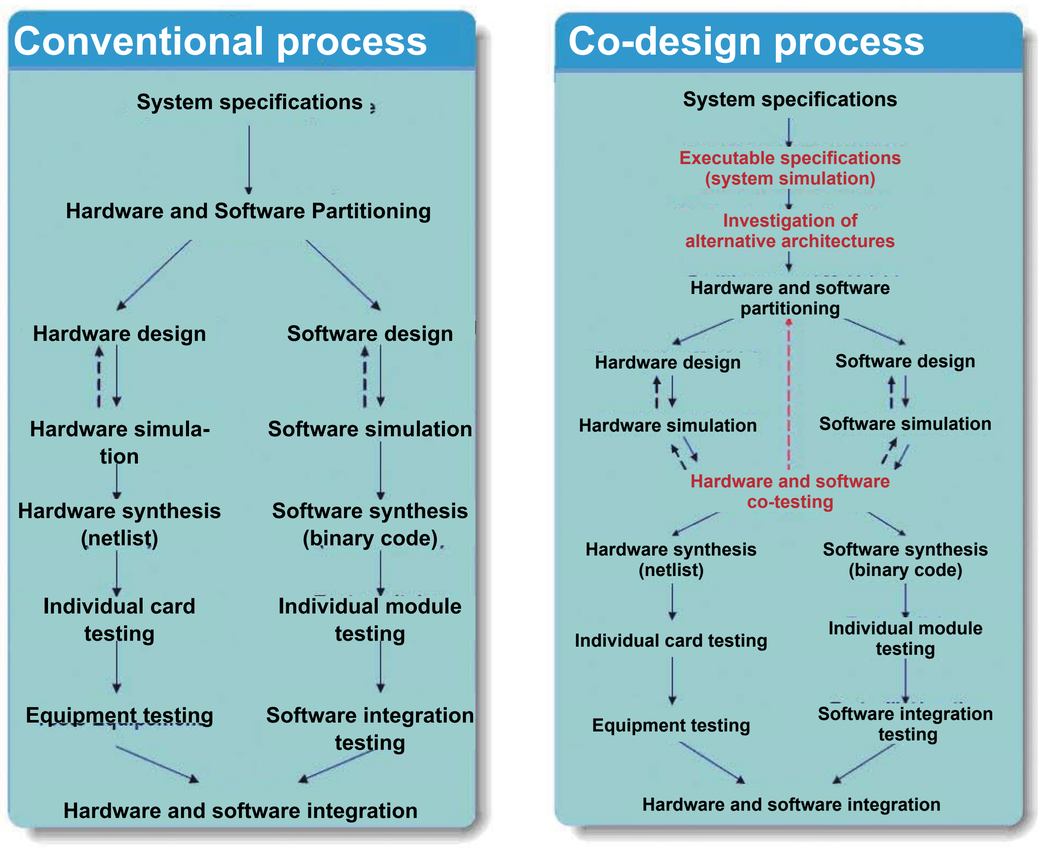
Airbus - Astrium - CNES - Schneider Electric - STMicroelectronics - Thales R&T

SME

Magillem Design Services - PSI-S

Research laboratories

UPS-IRIT - UBS-LESTER - CEA-Leti - INPG-TIMA



Key figures

Budget: €11.5 million

Duration: 36 months

Human resources allocated: 85.5 FTE