A network of design centers boosting and initiating synergies between Innovative companies, major CPS-platforms and CPS-competency providers

ICT1-clustering and communication event
Ph.Bonnot, Vienna, April 14, 2016
Smart Anything Everywhere initiative

Innovation Services for European Smartization by SMEs

*Coordinator: Blumorpho*

Smart Access to Manufacturing for Systems Integration

*Coordinator: Hahn-Schickard Ges.*

CPS Engineering Labs

*Coordinator: Fortiss*

Industrial access to CPS technologies and competencies

*Coordinator: CEA-Leti*

>25M€ of funding invested by the European Commission to catch the CPS market
EuroCPS in a nutshell

- Call: ICT-01-2014
- Launched: Feb 1\textsuperscript{st}, 2015
- Duration: 3 years
- 9 Countries
- 15 Partners
- 8 Technology Platforms
- Budget: 9,178,641€
- EC funding: 8,186,835€

\textbullet Industrial Experiment support: 76% of the EuroCPS funding
EuroCPS objectives

Industrial experiments

Innovative company’s needs from any sectors

New innovative CPS products with long-term differentiator

Better EU competitiveness

Technology innovations & Export revenues

Sustained demand for local manufacturing

European available Platforms & Competencies

EuroCPS

ICT1-clustering and communication event
EuroCPS mission

• **Provide an easy path to build innovative CPS systems** to SMEs from any sector
  ➢ Leverage the existing regional ecosystem across the full value chain and range of competencies

• **Facilitates user-supplier partnerships** across value chains and regions
  ➢ One-stop-shop providing a critical mass of technologies and competencies

• **Enable a new cooperation model** linking software, system and nano-electronic industries along the full CPS value chain
  ➢ Industrial experiments initiated and led by SMEs

 Reduce development time and certification efforts
EuroCPS structure

Innovative embedded ICT users across regions: Industrial experiments

Needs

IE definition
IE selection
IE Services
IE coaching
IE dev plan

IE Services
Full Value chain suppliers

Provide access and support to techno

Final innovative product

Objective 1: Bring innovative CPS to businesses from any sectors

Objective 2: linking user-supplier across value-chains and regions

Outcome: Innovative EU CPS products + Sustained demand for EU manufacturing

Supported, managed and monitored by project partners

Beneficiaries (CA)

Networking partners
Competence platform partners

ICT1-clustering and communication event
14 / 04 / 2016
EuroCPS Industrial Experiments

**SW intensive project**

- **USER** (SW intensive project)
- CPS specifications
- SW
- HW
- HW/SW integration
- CPS platforms

**Solution using existing prog. platforms**

- **SW prototype demonstrator**

**System integration project**

- **USER** (System integration project)
- CPS specifications
- SW
- HW
- HW/SW integration
- Comp. platforms
- CPS platforms

**Solution using existing SW & HW components**

- **Integrated system prototype demonstrator**

**CPS w/ innovative component project**

- **USER** (Innovative device project)
- CPS specifications
- SW
- HW
- HW/SW integration
- Comp. platforms
- CPS platforms

**Solution using specific SW & HW components**

- **System architecture virtual prototype demonstrator**

- **Architecture study funded only**
The 8 EuroCPS platforms

Software

Avionics Platform
Processing board & real time SW solutions provided by Thales

Integrated and Open Development Platform
Simulation methods and tools for development provided by AVL

Connectivity Platform
Solution for digitalization application provided by Schneider

STM32 Microcontroller Platform
32-bit product range provided by STMicroelectronics

iNEMO Inertial Platform
A sensor platform provided by STMicroelectronics

Quark System on Chip Platform
Low-power platform provided by Intel

Hardware

Power management Platform
Component platform provided by Infineon

Silicon Process and Package Technology
Leading-edge silicon processes and package technologies provided by STMicroelectronics
Cascade funding (70% of the budget): Support R&D work of 3rd parties
+ Platform funding: Support the technology access
+ Competence funding: Support the expertise, know-how access
EuroCPS industrial experiments

From industrial experiments to industrial products

- Ideas
- Prototype
- CPS-enabled product

EuroCPS: Help SME submitting Ideas, open calls, CPS specification and coaching
SME: R&D and product design

- TRL 4
- 5
- 6
- 7
- 8
- 9

Project criteria: Excellence, Impact, Quality
Fast track experiments (18 months maximum)
EuroCPS open calls

Dates:

- 1st IE batch: Apr’15 Oct’15 May’16
- 2nd IE batch: Apr’15 Oct’15 May’16
- 3rd IE batch: Apr’15 Oct’15 May’16

Basic principal:

- Open call opened
- Selection
- Evaluation reporting
- PO review
- Open call closed
- Selection of IEs
- Evaluation report
- Start of IEs
EuroCPS 1\textsuperscript{st} and 2\textsuperscript{nd} call IEs

- Innovation Branding Through Trusted IoT IBT3
- Mb/s Green-OFDM IoT
- Development and Automatic Test and Verification System (DATVS)
- GUDA – Multifunctional graphical universal data display
- Localization and Tracking with inertial sensors for agri-food applications (LTIS)
- Mixed Critical Avionics on Multicore Xtratum Hypervisor (MCS-MX)
- SmartLAB – Sample Management with RFID Tags for Laboratories
- SmartSSL
- WEETSY2 – Wearable Eye Tracking System V2

\textbf{⇒} 72 proposals, 24 granted IEs
Thank you

www.eurocps.org

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