Industrial Excellence Center (IXC)
Embedded Applications Software
Engineering (EASE)

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EASE fact sheet

10 years of research
8.6 MSEK funding/year (+2 MSEK in kind)
7 research challenges
5 industry partners
4 research themes
2 academic partners
1st phase started Oct 1, 2008
7 Challenges in 10 years

1. Multi-purpose architecture
2. Dynamic resources utilization
3. Trade-offs between actors
4. Homogenous user experience
5. Distributed development
6. Information management
7. Industry-academia research model
Industrial Challenges

1. Multi-purpose architecture
   to find a logical architecture of flexible and networked embedded systems.

2. Dynamic resources utilization
   to find principles and mechanisms for dynamic utilization across the system architecture.

3. Trade-offs between actors
   to find instruments to balance trade-offs between operators, suppliers, requirements and resources.

4. Homogenous user experience
   to give a homogenous user experience in an open and flexible environment.
Industrial Challenges (cont’d)

5. Distributed development
to improve the distribution of development of products and services across projects, sites and companies.

6. Information management
to find new approaches for management of information, versions and variants.

7. Industry-academia research model
to industry-academia research models for mutual benefit for involved parties.
EASE partners and funding
10.5 MSEK/year

Industry
• Sony Ericsson
• ST Ericsson
• Ericsson
• AXIS
• SoftHouse
• ABB

Academia
• LU
• BTH

Public
• VINNOVA
Themes

A: User Experience-Driven System Configuration

“Software products are built “inside-out”, not taking the users into account.”

B: Flexible Execution of Software in Parallel Embedded Systems

“Parallel processors provide power, but require new ways of programming.”
Themes (cont.)

C: Efficient Software Development

“More and better products must be developed with less effort.”

D: Aligning Requirements and Verification

“Effort is wasted on rework, since product information is not aligned.”