Embedded Applications Software Engineering (EASE)

an Industrial Excellence Center

Prof. Per Runeson
Industry-academia collaboration

Vinnova goals

• More commercial transfer of results
• Efficiency in TTM for results
• High degree of cooperation
EASE partners and funding
≈10 MSEK/year

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

Academia
• LU
• BTH

Public
• VINNOVA
Software Themes

A: Flexible System Configuration
B: Parallel Embedded Systems
C: Efficient Software Methods (OSS, Agile)
D: Aligning Requirements and Verification
A – Flexible System Configuration

• PalCom - Ad hoc combination
• Support for Product-line architectures
B – Parallel Embedded Systems

- Thread-level speculation – guess parallel parts - back-track if necessary
- Reconfigurable hardware – program in dataflow language (CAL)

by Joshua Schnees
C – Efficient Software Methods

C1. Non-functional aspects in development
C2. Open source in commercial organizations
C3. Agile methods in industry
Theme D – Alignment
Academia-industry collaboration

Off-line
- Technology pilot
- Workshops
- Interviews/analyses
- Seminars
- Senior advisors

On-line
“Centers such as EASE, bridging research and practice, are of high importance to Swedish innovation. Challenges are many in starting and running such a center but the expected benefits are enormous…”
…Attention must continue to be paid to mechanisms ensuring a tight relationship between researchers and partner companies. For example, identifying and cultivating motivated and qualified ‘champions’ inside the companies is a crucial success factor.”
Future work

• Continue research in themes
• Renewal of contracts fall 2011 – new partners welcome
• Interfacing to Sigrun

http://ease.cs.lth.se/