

ERA: Embedded Reconfigurable Architectures

Computer systems in the last 30 years

- Drastic increase of complexity
- Efficiency is not increasing
- Understanding is decreasing
- No reliability anymore
- Waste of power consumption
- Inefficient use of parallelism
- Applicability not achieving its potential

ERA: Embedded Reconfigurable Architectures

Fundamental redesign required

- Programming language
 - Simple, natural and practical model
 - Machine-independent concept
- Runtime system
 - Simple design and clean implementation
 - Configurable (redundancy, parallelism, power)
- Computer machine
 - Simple, efficient, parallel, small and embedded
 - Reliability with configurable redundancy

ERA: Embedded Reconfigurable Architectures

Consortium

- London Metropolitan University (UK) SW
- ETH Zürich (Switzerland)
- Centre of RT Thessaly (Greece)
- University of Passau (Germany)
- Fraunhofer-Gesellschaft (Germany) HW
- Semefab (UK)
- Circuits Multi Projects (France)
- Re-Active Electronics (UK)
- Phillips (The Netherlands) App
- TU Eindhoven (The Netherlands)