ARM at ETH Systems

Support

- Cortex A5-A17
- X-Gene
- „The Machine“

Large-Scale Architectures

Verification

HSSTP

Log & process offline

Check temporal assertions
A Streaming Verification Engine

Sources
- HSSTP
- Packet Capture

Capture
- ETM Sequencer
- FPGA Capture

Processing
- Dataflow Engine
- FPGA Offload

Properties
- TESLA malloc()
- pairing
- Coherence correctness

Constraints

Requirements
BRISC: Research Amplification

• Seed the research community
  – Remove major barrier to innovation at a stroke

• Precedents:
  – PlanetLab
  – Berkeley Unix
  – ...