Linaro Connect

February 2012

About Linaro

GOALS

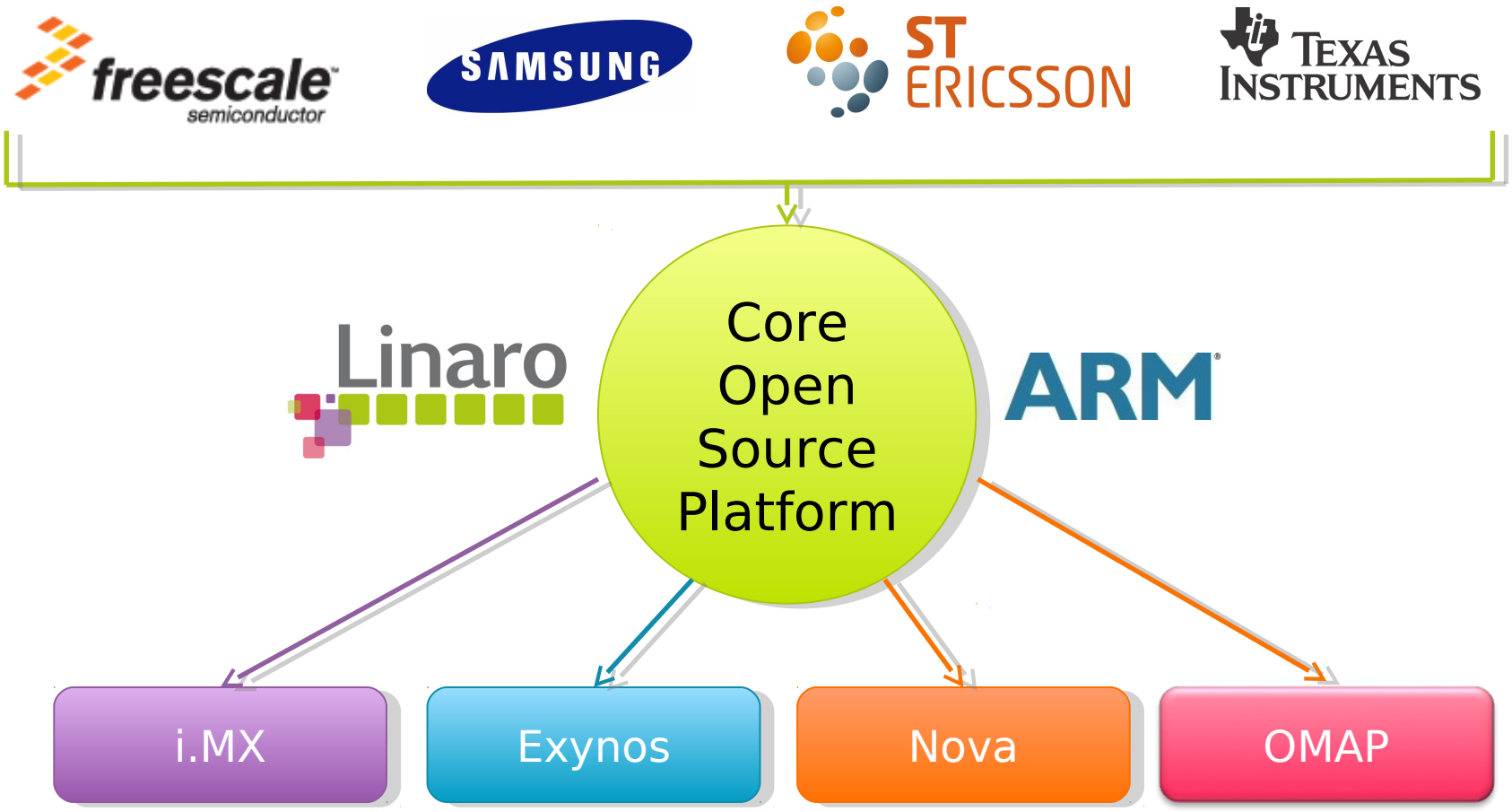
- To provide our members with leading open source technology for their ARM SoCs
- To make ARM a leading open source architecture

STRUCTURE

- Not-for-profit software engineering company
- Over 120 full time engineers

Members

Linaro 2012


freescale semiconductor
SAMSUNG
ST ERICSSON
TEXAS INSTRUMENTS
Linaro
Core Open Source Platform
ARM
i.MX
Exynos
Nova
OMAP

Linaro 2012

- Membership
- Product Ready Quality
- New ARM Technology

Linaro 2012

- Membership

Linaro 2012

- Driving new membership
  - Linaro's engineering output and success
  - Recognition of ROI and time to market
  - Increasing software engineering costs
  - New ARM technology
  - Need for stronger open source influence

Linaro 2012

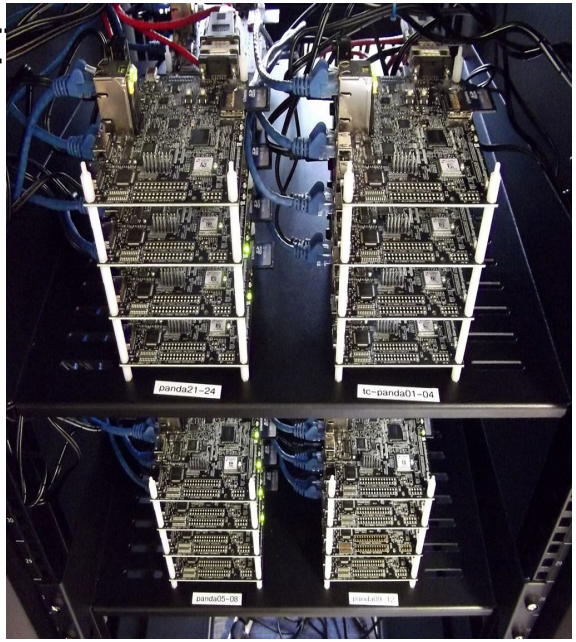
- Beyond Mobile
  - Automotive, STB/DTV, Consumer electronics
  - Embedded and Appliances – ARM A5/A8/A15
  - Server – multicore A15 and ARM v8
- Linaro is the place for ARM licensees to influence and develop within the open source community

Linaro 2012

- Testing and Validation

Linaro 2012

- LAVA
  - Open source test & validation plat
- From Building to Using
  - Member hardware farm
  - Create the Linaro testing suite
    - Smoke tests
    - Functional tests
    - Scenario Stress testing
    - Initial focus on stress testing kernel trees, both Upstream and Linaro staging, for members



Linaro 2012

- New ARM Technology

Linaro 2012

- Cortex A7 & A15, big.LITTLE
  - Upstream task-migration (switcher) software
    - Time to market critical
    - Release candidate in May before 1st silicon
    - Product-ready quality, supported by Linaro
  - Multi-processing software
    - Processes on any or all cores
    - New technology for Linux kernel
    - Linaro working with ARM, members & community

Linaro 2012

- ARM v8
  - 64 bit architecture
  - Avoid early adopter fragmentation of core software platform
  - Help ARM to upstream v8 support early
  - Test & Validate multiple distributions
    - Use 32 bit as the staging technology

Linaro 2012

- Build Linaro membership
- Lead open source testing
- Accelerate time to market for new ARM technology

Connect

- A week of intensive engineering

ARM SoC v8 big.LITTLE
Android UEFI Power Management
Scheduler Multimedia UMM LAVA
Tools Graphics kernel.org Server
eMMC Mobile Linux RedHat A15
Thermal Ubuntu Devicetree NEON
ACPI Trustzone A5 gcc GPU STM