Upstream Kernel Testing

The kernelci.org project

kernel-build-reports@lists.linaro.org
http://kernelci.org
#kernelci
https://plus.google.com/u/0/+kernelbot
Background

- Lots of ARM platforms, boards
- Easy to break other platforms
- Not much upstream testing
- Needed early detection and warning of problems
- Target audience: ARM platform maintainers
Upstream Kernel CI

- Development
  - Patch Series
  - Mailing List

Monitored Kernel Trees
- Merge
- Trigger the CI Process

Dashboard
- Report

Build
- 22 Tree/Branch Combinations
- 1 x86 build
- 4 ARM64 builds
- 121 ARM builds
- 126 Kernel Builds
- ~ 30 Minutes

Tests
- Depth Tests
- In Kernel Tests
- Boot Tests

Who / How / with what urgency are regressions addressed

5 distributed labs
- 86 device types
- 208 boots

15 - 45 minute per lab
Dashboard - kernelci.org

Landing page describes the current state of the upstream trees, focused on failures

- What builds are failing?
- What boots are failing?
- What are trending searches?
What is a job?

- A linked collection of build/boot/test data for a given tree/branch
- At a glance it will display
  - Tree/Branch
  - Build Status (Passed/Failed Defconfigs)
  - Boot Status (Passed/Failed Boots/Tests)
- Job -> Build -> Boots/Tests
Dashboard - kernelci.org/build/

Displays build status

- Tree/Branch
- Kernel
- Board
- Defconfig
- Arch

Queries supported
  - http://kernelci.org/build/?arm64
Dashboard - kernelci.org/boot/

Displays boot status

- Tree/Branch
- Kernel
- Defconfig
- Arch
- Queries supported
  - http://kernelci.org/boot/?sunxi
Dashboard - Bisection

Builds and Boots

- Displays bisection table
- Bad Commit SHA1
- Good Commit SHA1
- Link to bisection script
Email Reporting -
kernel-build-reports@lists.linaro.org

Build Reports
  ● Sent to the mailing list when build (s) are finished

Boot Reports
  ● Sent to the mailing list one hour after build completes