

# **ARM Linux Automated Testing**

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- Public test results from ARM Linux kernels
- Automated build and boot tests (+ others)
- Testing Linus, -rc, -stable, stable-queue, -next, arm-soc
- Results posted to [kernel-build-reports@lists.linaro.org](mailto:kernel-build-reports@lists.linaro.org) (and sometimes to other lists & web sites)

# Olof Johansson's setup

- What it does
  - Pulls every 10 minutes from Linus, arm-soc, -next, stable-queue
  - Builds kernels & DTBs (120 defconfigs!)
  - Boots ~15 ARM boards via homebrew scripts (pexpect)
  - Trinity tests coming
- Hardware
  - Baytech RPC power switch, DC relays
  - USB serial adapters on a 28-port hub

# Kevin Hilman's setup

- What it does
  - Boot-tests Olof's kernels & DT data
  - Can also measure power throughout the boot (future)
  - Boots ~20 ARM boards via pyboot
    - <http://git.linaro.org/gitweb?p=people/khilman/pyboot.git;a=summary>
- Hardware
  - Phidgets, BK 1697 for DC power control
  - 28 port USB hub with USB serial adapters

# Paul Walmsley's setup

- What it does
  - Tegra & OMAP build/boot/PM idle/checkpatch/sparse
  - Boot memory consumption & vmlinux size tracking (bloat)
  - ~15 OMAP boards, ~4 Tegra boards
  - Software: SLURM/Minicom/dtach/scripts
  - Tegra results posted on the web at <http://nvt.pwsan.com/pub>
- Hardware
  - Ethernet controlled AC power switches: WTI NPS-115
  - Ethernet controlled DC power switches: DLI DIN Relays
  - Agilent 66332a DC power supply

# Results

- Lots of work to set up and keep running, but...
- Bugs caught before patches are sent upstream
  - Examples: devres change broke one board; OMAP CCF port
- Bugs caught before patches merged to stable
- Regressions caught after new kernel releases
  - Example: regular ARMv6 boot breakage