



**Linaro
connect**
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PMWG Farm Status and Next Steps

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Goals

- Have a low-cost way of sharing reference boards
- Automate the benchmarking process to collect power measurements and create a score pair (performance and power)
- Graph trends over time
- Extend kernelci to include power readings
- Get continuous feedback on improvements that can be made

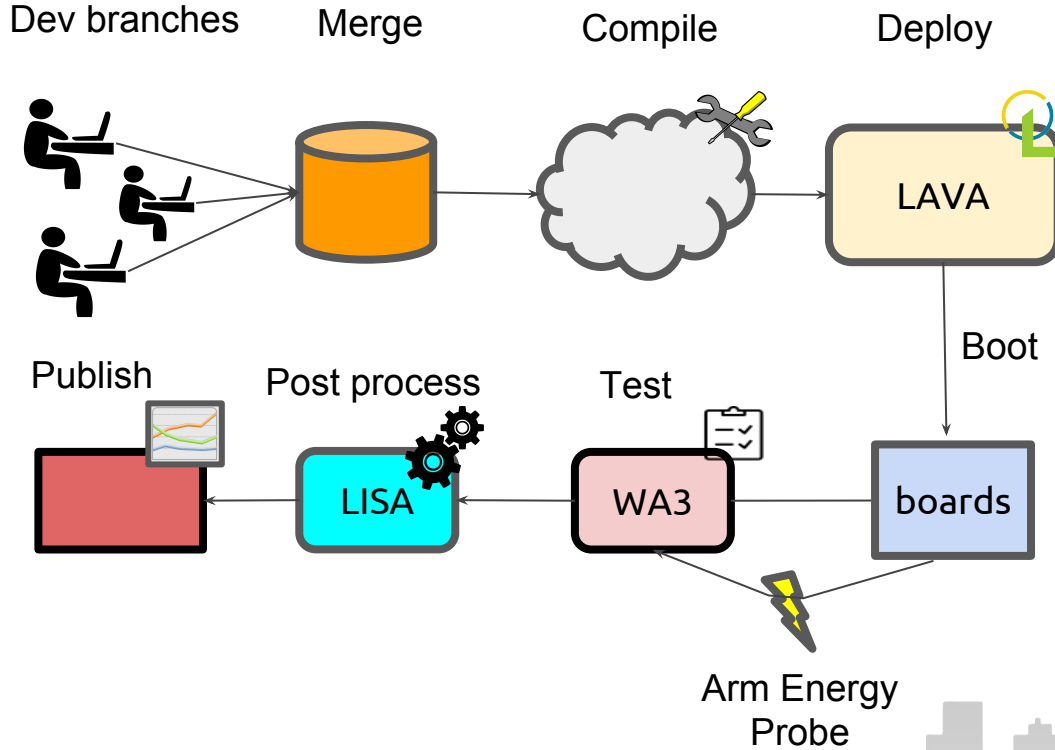


PMWG Board Farm Setup

- Physically managed by the Linaro LAVA Lab team in Cambridge, UK.
- Remotely monitored by Vincent and Lisa from PMWG
- Devices:
 - db410c, db820c, b2260, hikey6220, hikey960, mt8173evb, panda, juno r2
- Software and Services:
 - Automerger, Jenkins, kernelci, LAVA, arm-probe command line tool, SQUAD
- Instruments:
 - Arm energy probes
- Test Suites:
 - Workload Automation, LISA toolkit



PMWG CI Loop Setup



Updates since HKG18 Connect

- We have a demo on Friday at YVR18!
- Switched from using WA2 to WA3
- Added LISA post processing script with adjustments to our CI loop
 - Converted ipython notebook script to a normal python script
- Some graphs and test results available on QA reports
- Stabilizing test results
 - Updating apks, increasing iterations on workloads
 - Noticed that idle workloads “consumed” more power than audio workloads, which isn’t right
- Made multiple hardware changes due to power consumption offsets
 - replacing heatsinks, mounting fans, reconnecting and calibrating AEPs



Next steps

- Waiting for db820c Android support in LAVA
- Work our way to add Android 4.14 branch to our CI loop
- Submitted feature requests for SQUAD
 - Multiple metrics on one chart, marking outliers, date range filtering, metric threshold support
- Figure out what is considered pass or fail in our reports
 - Focus on collecting data and stability first before fine tuning the results
- Continue adding more boards and tests
- Integrate our board farm with kernelci
- Deploy nested WA agendas in LAVA

