

# Detecting device probe regressions



COLLABORA

Open First

# Motivation

- Device probe regressions
  - Big impact on platform's functionality
  - Commonplace
  - Not immediately detected (lack of tests)

# Dead ends

- Report all unprobed devices
  - Not all devices need drivers
- `call_driver_probe()`
  - Logs errors returned from probe
  - Issues:
    - `ENODEV/ENXIO` sometimes used on error path, rather than match rejection
    - Other errors logged as warning
    - Doesn't detect missing driver or device instantiation



# Current status

- Rely on existing static device definitions:
  - Kselftest merged to verify probe of devices based on DT and compatibles present in driver's match. [1]
  - Similar kselftest for ACPI from Laura - still waiting for feedback. [2]
- Kselftest to test devices from discoverable busses (USB/PCI) being discussed. [3]
  - Current RFC focusing on DT-based platforms
  - How to describe HW topology in stable way for all platforms?



**Thank you!**



COLLABORA

**Open First**



We are hiring  
[col.la/careers](https://col.la/careers)



COLLABORA

Open First