LEDGE/Automotive/ML reference platform
Milosz Wasilewski
Outline

- Platform ingredients
- Hardware support
- Testing base OS
- Testing OTA updates
- Future plans
Reference platform parts

- **Linux kernel**
  - 4.16
  - Plans to update to 4.18 (or 4.19)
- **Base OS**
  - OpenEmbedded based distribution
  - Includes 96boards layers
- **Docker support**
  - No new features/changes comparing to upstream docker
- **OTA (over-the-air) updates**
  - Updates to base OS only
  - Using OSTree as means to perform updates
Reference platform parts (cont.)

- Container technology
- Additional BSP
- OSF microPlatform
Hardware support

● HiKey 6220
  ○ Currently supported

● Other hardware requirements
  ○ Support in Linux
  ○ Machine recipe for OpenEmbedded
OTA updates mechanism

- **Infrastructure**
  - OTA server
  - Device registration

- **Build setup**
  - Snapshots publishing
  - OTA server publishing
Testing base OS

- Testing in LAVA
  - Smoke test
  - LTP
  - Docker features
- Issues when running tests in LAVA
- Testing locally
  - test-runner.py script
Testing OTA updates

- OTA server
- Device registration in OTA server
- LAVA device setup
- LAVA-OTA server communications
Setup in one picture
Future plans

- **Upgrade kernel to 4.18 (4.19)**
  - We’re currently on 4.16
- **Add meta-ledge layer** (https://github.com/Linaro/meta-ledge)
  - Layer requires some fixes before this is possible
- **Add docker test suite**
  - Test suite should validate docker interfaces
  - Our current test that validates docker is very rudimentary
Questions?