Linaro Connect
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MAD24-213: An update on DevBoardsForAndroid

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Unraveling the Age-Old Question

- "Which device prototype or a development board do you suggest for my XYZ project?"
  - Got to be one of the most frequently asked question in the embedded world.

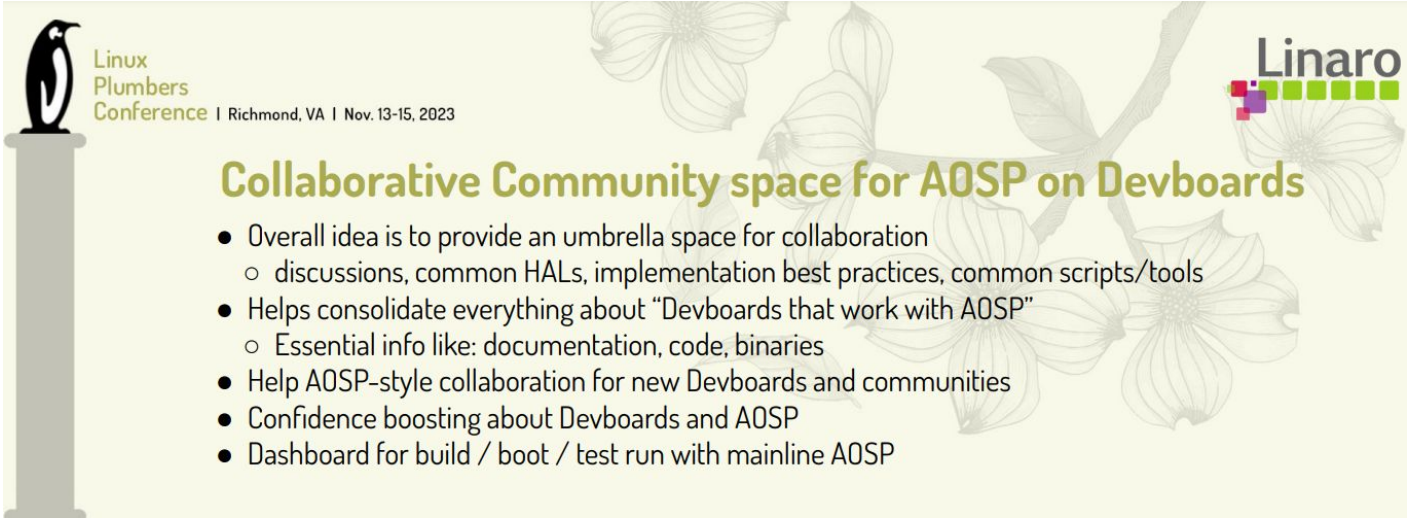
- Embedded Android™ is no different and we run into similar questions around Android development boards all the time.
  - “What devices support AOSP (Android Open Source Project) reliably, and to what extent?”

In Embedded, One Size Doesn’t Fit All!

- Devboards for an Embedded Android project can be chosen based on a number of factors like
  - Project requirements and relevance to AOSP
  - Popularity and Availability of device
  - **Upstream support**
  - **Active community and documentation**

Community Interaction and Feedback

- Introduced the project at Android MC @ Linux Plumbers Conference ‘23



Project DevboardsForAndroid

Introducing https://devboardsforandroid.linaro.org/

- Enabling a community of system developers around the AOSP development boards and devices.

- An umbrella space for collaboration and consolidation of resources about the devices that are known to support AOSP reliably
  - Can act as a staging area for devices under development
  - It will help an end-user choose the right devboard for their project

Salient Features

- AOSP-style collaboration
  - source navigation
  - gerrit-based review

- For each supported device, links are made available to the available resources, like
  - Kernel source
  - Local manifest
  - Device specific configuration files, binary blobs, and
  - Documentation

Goal

- We believe this initiative will be instrumental in sharing and co-developing AOSP features like generic HALs across multiple devices
  - And possibly enable the supported devices with LAVA (Linaro Automated Validation Architecture) CI in the future.

- IRC discussion forum at **#aosp-developers** @**OFTC**

Project Updates

Devices Supported

Hikey960

- Hikey960

RB5

- RB5

RB3 (also known as DB845c)

- RB3

VIM3

- VIM3

SM8550-HDK

- SM8550-HDK

Reference Build Target

- linaro_hikey960-userdebug as a reference build target
  - Cleaned up and removed a few upstream build configs
  - To continue development and testing on Hikey960 devboard once it hits EOL in AOSP

Staging Area for Development Devices

- Staging area for upstream focussed devices
  - SM8550-HDK
- Facilitate development of AOSP relevant devices
  - E850-96
  - Pixel 3 [Getting Started]

Staging Area for Upstream Forks & Dev Tools

- Staging area to host upstream project forks during development stage
  - For example: RB3/RB5 U-Boot port

- Hosting development tools, like
  - local_manifest project to clone devboardsforandroid projects
  - vendor-package project to host publicly available firmware binaries
  - website source to add/update device information

Git repositories on gerrit.devboardsforandroid.linaro.org

Name	Description
All-Projects	Access inherited by all other projects.
device/linaro/dragonboard	AOSP device/linaro/dragonboard fork
device/linaro/hikey960	AOSP fork (linaro_hikey960-userdebug) for Hikey960.
device/linaro/hikey960-kernel	Pre-built Hikey960 kernel binaries for linaro_hikey960-userdebug target
linaro-vendor-package	Vendor package (firmware, bootloader, etc) for Linaro supported devboards
platform/external/u-boot	AOSP external/u-boot fork
platform/manifest	local_manifests for devboardsforandroid projects
testing	testing updating description via web interface
website	website source for devboardsforandroid.linaro.org

Call for participation

- Join us at **#aosp-developers** IRC channel @ OFTC.net

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Thank you