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# EDK2 Platforms Overview

Fall 2017 UEFI Plugfest

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# OpenPlatformPkg is dead, long live EDK2-Platforms



- Existing platform support migrated from OpenPlatformPkg, now disbanded
- Platform support now adopted by TianoCore
  - <https://git.linaro.org/uefi/OpenPlatformPkg.git>
    - edk2-platforms
    - edk2-non-osi
- Remaining hardware platform support in EDK2 scheduled for migration
  - EDK2 to retain virtual platforms, industry standard drivers (e.g. \*HCI) and de-facto standards (for example Arm PrimeCells).

# EDK2 Platform Support Evolution



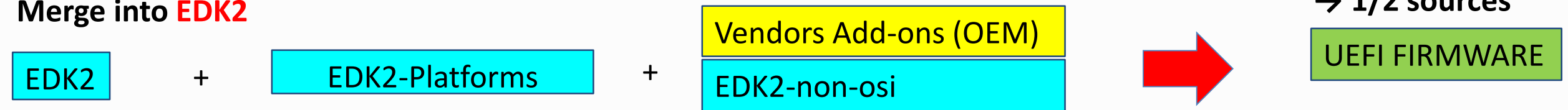
Before **OpenPlatformPkg** (< 2015)



With **OPP** (2015-2017)



Merge into **EDK2**



**Same development model & community**  
**Separate codebase for platform support**

*\*Other optional non-public drivers can be added too, raising the total number of different sources*

# EDK2-Platforms



- Official Tianocore repository to hold only open source components
  - <https://github.com/tianocore/edk2-platforms>
- `master` branch holds all platforms actively tracking `edk2 master`
- `devel` branches hold ports in the process of upstreaming (where this is expected to be a slow task)
- `stable` branches track specific UDK releases
- Also holds any new open source device drivers



# EDK2-non-osi

- OpenPlatformPkg permits inclusion of binary only components EDK2-platforms does not
  - <https://github.com/tianocore/edk2-non-osi>
- All binary-only (or dubiously licensed source code) modules confined to EDK2-non-osi
- No default license - each subtree needs to specify its own

# Practical Changes



- No prefix in configuration files like for OpenPlatformPkg
  - `PACKAGES_PATH` used to instruct `build` command of locations to scan
  - No submodules, so changes to release management required. Perhaps `mr` (<https://myrepos.branchable.com/>) or `repo` (<https://source.android.com/source/downloading>)
- Platform/driver patches to be sent to [edk2-devel@lists.01.org](mailto:edk2-devel@lists.01.org)
  - [linaro-uefi@lists.linaro.org](mailto:linaro-uefi@lists.linaro.org) will keep existing for the foreseeable future
  - Tagged as being for edk2-platforms: `--subject-prefix="PATCH edk2-platforms"`
  - ... or edk2-non-osi: `--subject-prefix="PATCH edk2-non-osi"`
- Full (hardware) platform created through combined build across multiple repositories
  - `Chips -> Silicon, Platforms -> Platform, Drivers -> Silicon`

# Platforms Already Included



## AMD Seattle

- Overdrive, Overdrive 1000,
- Cello

## Arm

- Juno, Versatile Express

## Hisilicon

- D02, D03, D05
- HiKey\*

## Marvell

- Armada 70x0

## Device drivers:

ChaosKey (USB RNG)



# Upcoming Platforms

- Existing EDK2 hardware platforms moved across
  - BeagleBoard, Vlv2, Quark, Remaining bits of Juno/Versatile Express
- Marvell Armada 80x0 (MacchiatoBin)
- Socionext SynQuacer (EVB + 96boards platform)
- Minnowboard 3





# Linaro UEFI-Tools

- <https://git.linaro.org/uefi/uefi-tools.git> updated to support new structure
  - But to avoid flag-day type changeover, the new build structure is supported by a new front-end script - `edk2-build.sh` - and a new default configuration file - `edk2-platforms.config`.
  - More flexibility with build environment, but also requires explicitly pointing out `edk2` (`-e`), `edk2-platforms` (`-p`) and `edk2-non-osi` (`-n`) directories if not present in working directory.
- `edk2-build.sh -e ../edk2 -p ../edk2-platforms -n ../edk2-non-osi juno`
- `edk2-build.sh` supports specifying target architecture as part of the build target: `chaoskey:ARM chaoskey:AARCH64`



# The Short-Short Version

- `git clone https://github.com/tianocore/edk2`
- `git clone https://github.com/tianocore/edk2-platforms`
- `git clone https://github.com/tianocore/edk2-non-os`
- `git clone https://git.linaro.org/uefi/uefi-tools.git`
- `./uefi-tools/edk2-build.sh -b DEBUG -b RELEASE all`

# TianoCore Contribution Agreement



- Updated from version 1.0 to 1.1
  - 1.0 still permitted for patch series “in flight”, but all new submissions should use 1.1
- Only real change is the explicit treatment of documentation contributions
  - Must be FreeBSD Documentation License
- The truly diligent may need to revisit existing internal approvals



# UEFI Support in U-Boot

- Rob Clarke and Alex Graf (and others) keep adding features to upstream U-Boot.
- Can now run UEFI Shell from EDK2/ShellBinPkg.
- *Nearly* have sufficient support for running UEFI SCT (FAT filesystem write support missing)

# Thanks for attending the Fall 2017 UEFI Plugfest

For more information on the UEFI  
Forum and UEFI Specifications, visit  
<http://www.uefi.org>

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