

# Linux Plumbers Conference 2024



Contribution ID: 315

Type: **not specified**

## Common git repo for hosting Boot-firmware

*Wednesday 18 September 2024 10:20 (20 minutes)*

We would like to propose a new boot-firmware repository similar to the Linux-firmware repository under the aegis of U-Boot hosting.

In addition to TI [1], it looks like many SoCs (see NXP[2] and Rockchip[3] eg.) platforms seem to require additional closed-source/open-source binaries to have a complete bootable image. Distribution rights and locations of these binaries are challenging, and there needs to be a standard for how and where they are hosted for end users.

Further, looking ahead to future architectures, we see at least 3 category of firmwares:

- **IP firmware:** “specialized controllers” and require firmware for the operation (DDR controller firmware eg.),
- **boot stage firmware:** Additional stages of the boot process involve vendor intermediate firmware, such as power configuration (SCMI or their proprietary equivalent).
- **Security enclave binaries:** Many PKA and PQC systems still require proprietary binaries for IP reasons.

Proposal is to create a boot firmware repository in Denx and/or GitHub (if financials are a hurdle, I hope we can solve it as a community).

Also define scope of the repo: what type of firmware can be hosted, licensing, size limit?, what about open source firmwares?, Workflow, ABI and integration guidelines?

Initial RFC on U-Boot list has more details and early feedback of U-Boot community members [4]

[1] <https://docs.u-boot.org/en/latest/board/ti/k3.html#software-sources>

[2] [https://docs.nxp.com/bundle/AN14093/page/topics/build\\_the\\_u-boot.html](https://docs.nxp.com/bundle/AN14093/page/topics/build_the_u-boot.html)

[3] <https://bbs.t-firefly.com/forum.php?mod=viewthread&tid=2236>

[4] <https://lore.kernel.org/u-boot/20240620213539.ftmjhphypssxp5n4@desolate/>

Regards

Vignesh / Nishanth

**Primary authors:** MENON, Nishanth (Texas Instruments, Inc); RAGHAVENDRA, Vignesh

**Presenters:** MENON, Nishanth (Texas Instruments, Inc); RAGHAVENDRA, Vignesh

**Session Classification:** System Boot and Security MC

**Track Classification:** System Boot and Security MC