



Arm Solutions at Lightspeed

DT bindings and sources shared with U-Boot: current status and ongoing work

LPC 2026 - DeviceTree MC

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The Sync

- We sync Linux DTS via git subtree
 - dts/upstream syncs with:
<https://git.kernel.org/pub/scm/linux/kernel/git/devicetree/devicetree-rebasing.git>
 - Pre-formatted repo with Linux DT for each arch, scripts, includes & Bindings
- At each U-Boot release we sync with latest Linux release
 - v2026.10 will be synced with v7.2

Killing the Local DTS

When we first imported the Linux DT, Some migrated instantly:

- Amlogic
- Qualcomm

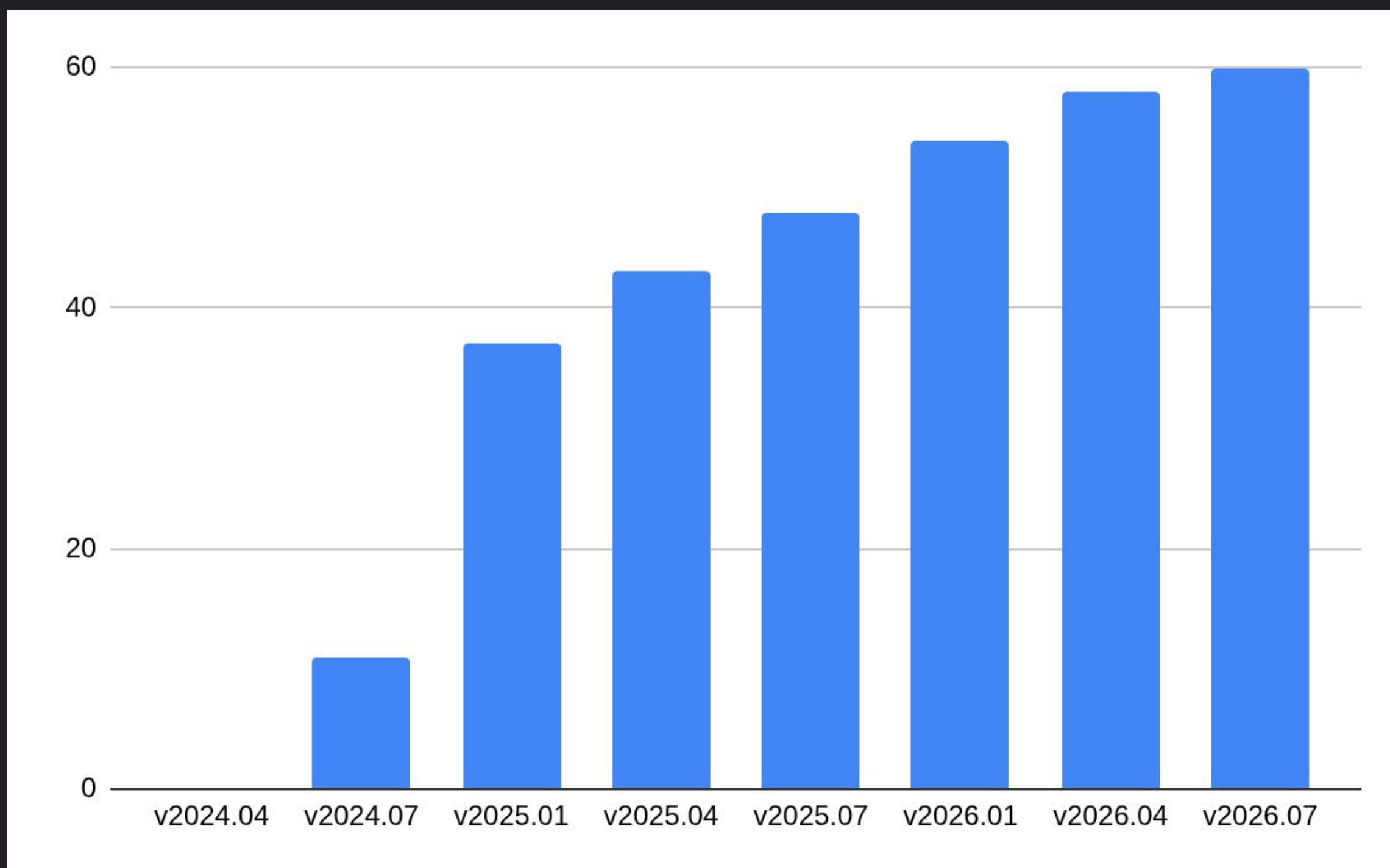
Many are stuck.

We still retained local U-Boot DTS modifications on top,

How do we eliminate those?

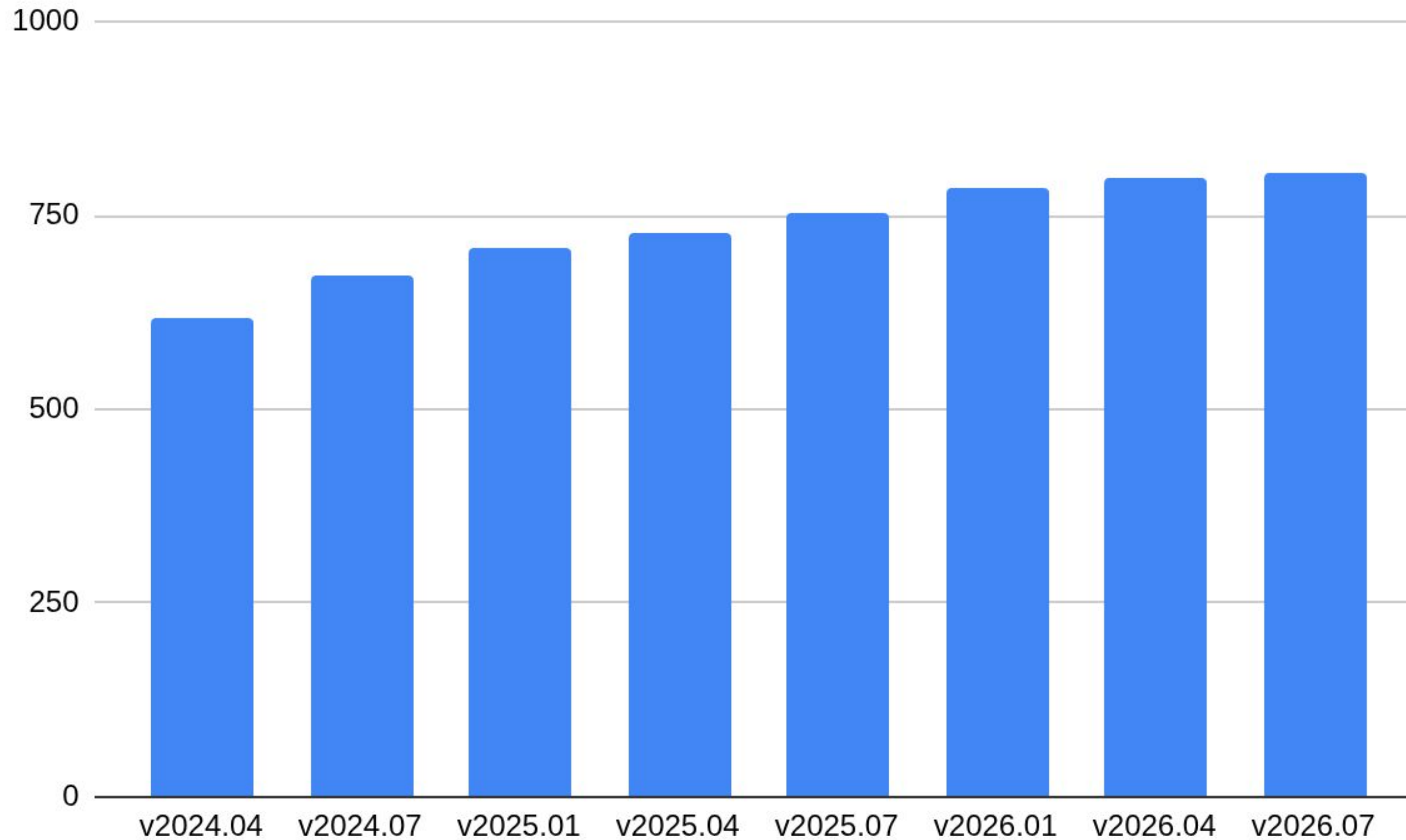
The Current Landscape

Boards using OF_UPSTREAM over time



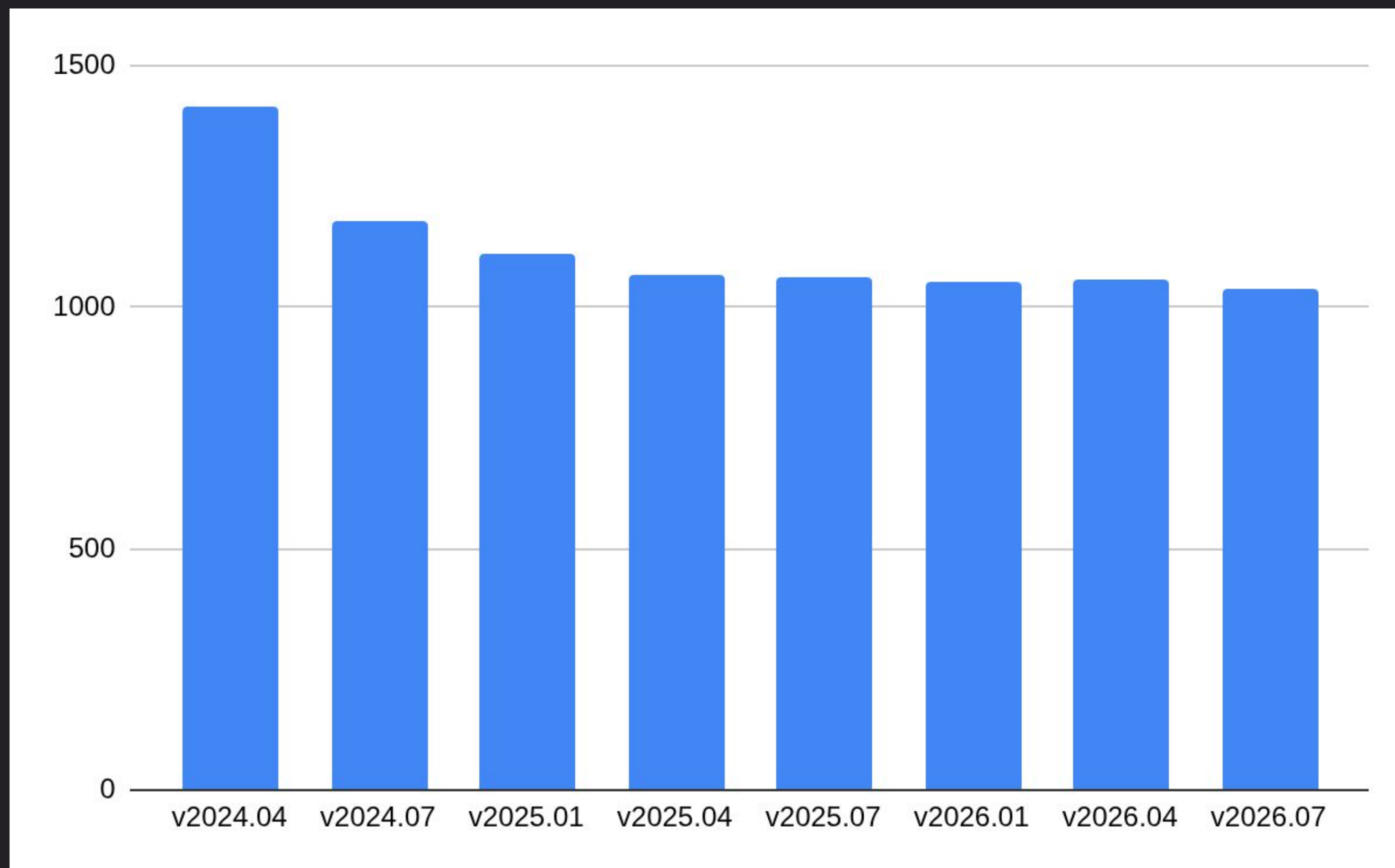
The Current Landscape

DT overrides count over time



The Current Landscape

Local DT files count over time



The Obstacles

- U-Boot specific properties:
 - Properties we need for bootloaders (e.g., bootph-all, bootph-pre-ram) that face pushback or friction in upstream Linux DTs.
 - Changes to ease U-Boot support (additional properties, naming, ...)
 - Reserved Memory entries (can we always get those from previous stages ?)
- Validation:
 - Upstream changes breaking U-Boot CI unexpectedly.
- Pacing:
 - New SoCs where U-Boot support outpaces Linux upstreaming.

Discussion Prompts

- Bootloader Properties:
 - What is the acceptable path to get U-Boot-only bootph-* properties merged directly into the Linux DTS tree without friction?
- Stale Bindings:
 - How do we handle platforms where the Linux DT is unmaintained, but U-Boot still needs modern bindings?
- Synchronization:
 - Is there a better cadence or tooling the DT maintainers recommend for U-Boot consuming the subtree to avoid breakage?



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Thank you