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San Francisco 2015

SFO15-306: ARM Kernel Collaboration: Let's Make it Happen

Presented by

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Event

SFO15

Introduction

- Scope
- Task identification
- Prioritisation
- Tasks
- Feedback

Scope

- Shared engineering - generic code
- Upstream generic changes in vendor trees
- Identify common code and factor it out
- Solve problems in kernel APIs
- NOT driver support
 - Except common IPs (eg, ARM or DesignWare)

Task identification

- Maintainer knowledge
- Member feedback
- Examining product and member kernels

Prioritisation

- Problem importance
- Engineer skills/interest
- Member interest

Tasks - in progress now

- USB charger integration
 - <http://thread.gmane.org/gmane.linux.power-management.general/64469>
- eMMC subsystem modernisation
- Deferred probe vs IOMMU
- Coprocessor communication with userspace
- Android upstreaming (LMG)

Tasks - future

- DRM/KMS (LMG)
- HDMI audio integration
- AP managed battery charging
- GPS
- Sensors
- dm-crypt large block optimisations
- Basebands (!)

Feedback

- Ongoing work in member updates
- Upstream device mainlining project
 - http://elinux.org/Kernel_areas_of_focus_for_mainlining
 - <https://lists.linuxfoundation.org/mailman/listinfo/device-mainlining>
- Articles in Core Dump, LWN & other outlets
- Reviews at Connect
- Contact me or TLEs



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