



Open Source Secure World Software

Trusted Firmware

Update May 2019

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Trusted Firmware

Open governance Community Project since October 2018

Reference implementation of Secure world software for Armv7 & Armv8 architectures (both A/M-Profiles)

Membership of the Trusted Firmware project is open to all

Everyone interested in Trusted Firmware is encouraged to join

Members (May '19)

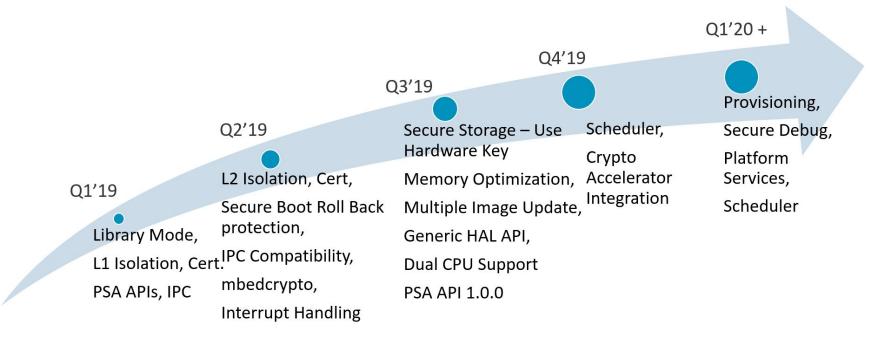
Arm
Cypress
Data I/O
Google
Linaro
Texas Instruments
STMicroelectronics



Trusted Firmware-M - May 2019 Progress

- TF-M v1.0-RC1 tag created supporting features required for PSA Level2 certification
- New features in the tag
 - * PSA Firmware Framework IPC Support
 - * Secure Storage, Crypto and Attestation Services working in IPC mode
 - * PSA Level2 Isolation
 - * mbedcrypto used in the crypto service.
 - * Rollback protection in Secure boot.
- Dual CPU enablement in progress https://git.trustedfirmware.org/trusted-firmware-m.git/?h=feature-twincpu
- Continuous Integration Testing of TF-M patches using MPS2 board https://ci.trustedfirmware.org/

TF-M Roadmap



Trusted Firmware-A – May '19 Progresses

- Architecture enablement under development
 - Armv8.3 Pointer Authentication use in Secure world (EL3 and lower S-ELs)
 - Armv8.5 Branch Target Identifier (BTI)
 - Armv8.4 Secure EL2 SPM SPCI-based
- Fixed errata for Neoverse-N1 & Cortex-A76
- New platform support: MediaTek mt8183
- Platform Security Requirements under development
 - Attestation and Measured Boot reference flow
 - Multiple Signing Domains and separate Chain of Trust
- Investigations in other areas
 - PSA for IoT A-class devices

TF-A SPM evolution

Building blocks for future use-cases Client Enterprise Auto/Embed Use-cases Architecture Secure virtualization

Legacy SP/SPM MM based

S-ELO Single
Partition for UEFI
StandaloneMM
services based
on MM Interface

Resource description

CoT update / Multiple Signing domains Armv8.4 S-EL2 virtualization extension support with reference SPM implementation SPCI-based Future architecture support

Migration path for existing Armv8.2 & v8.3 systems towards Armv8.4

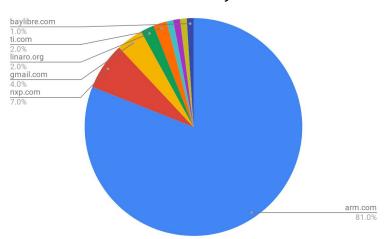
2018 2019 2020 2021+

TrustedFirmware TF-A Project Dashboard

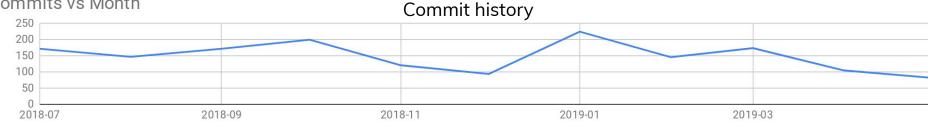
Commits by domain this month

Top Authors this month

paul.beesley	22
soby.mathew	16
john.tsichritzis	13
sandrine.bailleux	12
antonio.ninodiaz	6
leonard.crestez	5
christophm30	4
sami.mujawar	4
alexei.fedorov	4



Commits vs Month



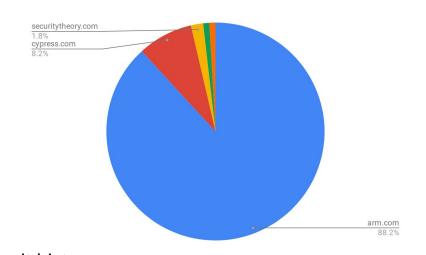
Month

TrustedFirmware TF-M Project Dashboard

Commits by domain this month

Top Authors this month

-	
edison.ai	14
tamas.ban	14
jamie.fox	13
david.vincze	10
antonio.deangelis	10
chris.brand	9
mingyang.sun	7
summer.qin	7
ashutosh.singh	5
chris.brand mingyang.sun summer.qin	7



Commits vs Month



Month

TrustedFirmware TF-A Tests Project Dashboard

Commits by domain this month

Top Authors this month

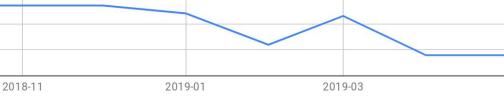
sandrine.bailleux	6
john.tsichritzis	3



Commits vs Month

30 20 10 0 2018-07 2018-09

Commit history



Month

