



# Trusted Firmware Community Project



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# Trusted Firmware

## Open Governance Community Project

Evolution of former Open Source  
Arm Trusted Firmware project

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

Membership open to all

Governance overseen by a board of  
member representatives

Technical direction overseen by TSC

~~Arm Trusted Firmware~~



Trusted Firmware  
Open Governance  
Community Project



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# Not new! Arm Trusted Firmware since 2013!

Feb 13	Conception	Arm has idea of providing reference EL3 firmware for Armv8-A to help defragment the Arm software ecosystem
Sep 13	Implementation	v0.1 binaries in Linaro AArch64 release
Oct 13	Introduction	v0.2 source code at GitHub and LCU13 announcement
Jun 14	Adoption	Early adopters port v0.4 to silicon
Aug 14	Celebration	v1.0 released, including Juno port OP-TEE support at LCU14
Feb 15	Evolution	v1.1 completes mandatory PSCI v1.0 Trusted Board Boot prototype
Dec 15	Acceleration	v1.2 provides minimally complete TBB Upstreaming of Non-Arm platforms
Oct 16	Extension	v1.3 adds AArch32 PSCI Dropped CLA, security hardening
Jun 17	Optimisation	v1.4 adds DynamIQ, GIC-600, SCMI, PSCI with OP-TEE, HiKey/HiKey960
Mar 18	Expansion	v1.5 introduces RAS & Secure Partitions, Dynamic Configuration, Armv7 support
Oct 18	Open Governance	v1.6/v2.0 – TF.org migration with TF-M



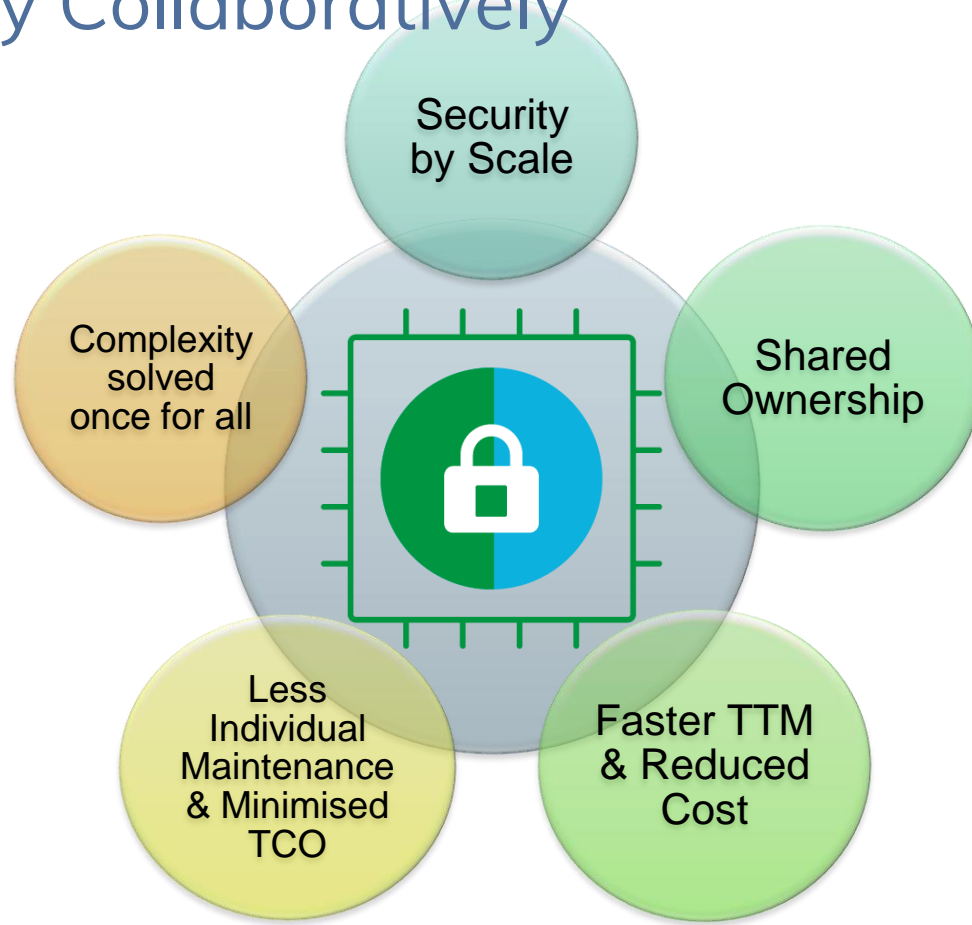
Current members

arm

**Data** iO



# Build Security Collaboratively



# All market segments

Devices

IoT/Mobile/Auto/Laptop



Embedded  
Edge



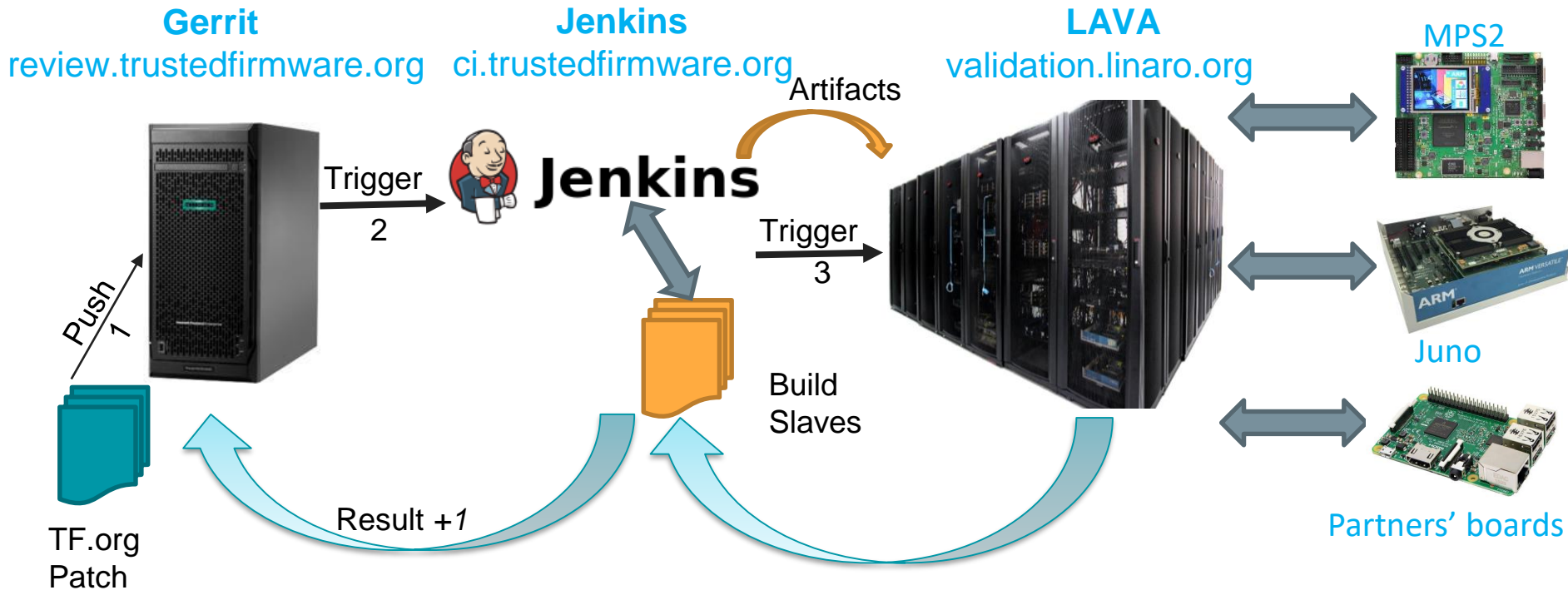
Cloud  
Server



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# Open CI & Board Farm



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# Details & Resources

- Open Source permissive **BSD 3-clause license**
- All contributions accepted under the terms of **DCO**
- Project [mailing lists](#) for technical discussions
- [Git](#) & [Gerrit](#) for open reviews
- [Monthly project status updates](#)
- [Board meeting minutes](#)
- [Project Charter](#)





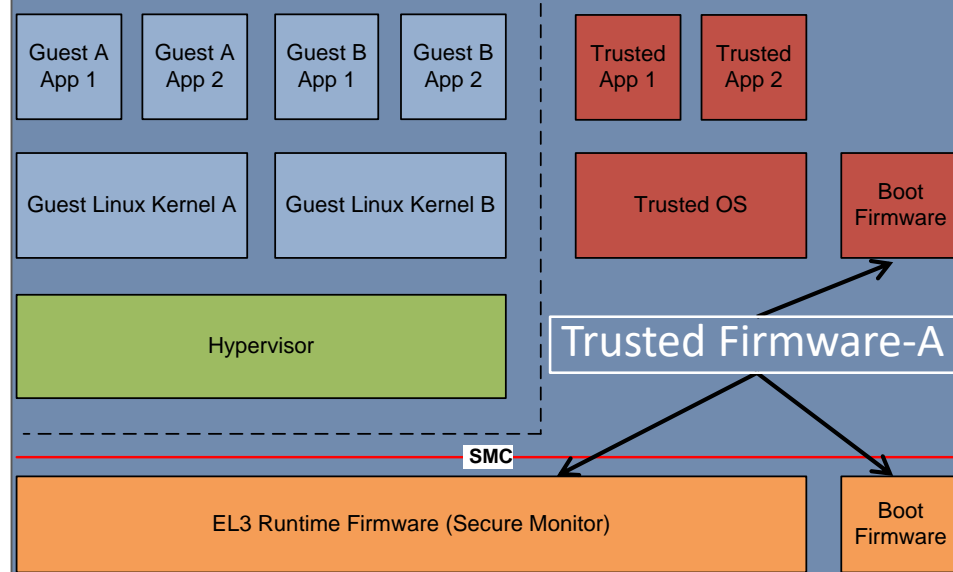
# Trusted Firmware-A

Secure world reference software for all Arm Cortex-A & Neoverse processors across all market segments.

Trusted boot flow and runtime firmware providing standard implementation of Arm specifications:

- SMCCC (SMC Calling Convention)
- TBBR (Trusted Board Boot Requirements)
- PSCI (Power State Coordination Interface)
- SCMI (System Control & Management Interface)
- SPCI (Secure Partitions Client Interface)

## Cortex-A/Neoverse

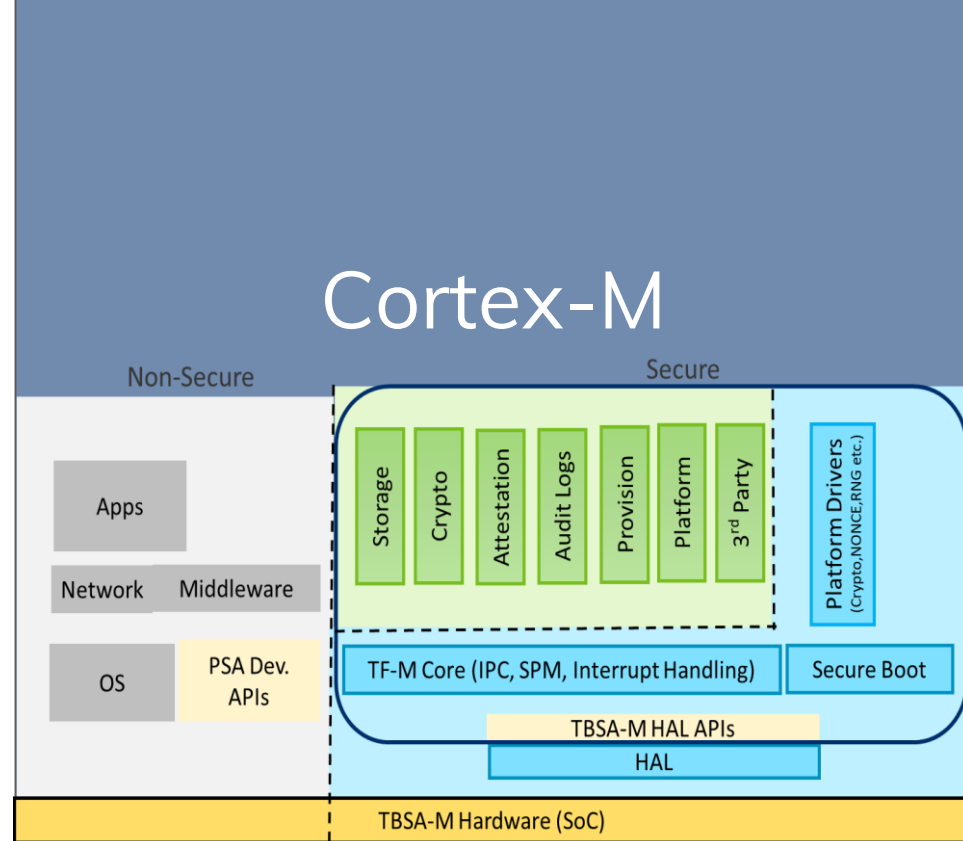


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# Trusted Firmware-M

Reference implementation of Arm Platform Security Architecture (PSA)  
It provides Trusted Execution Environment for Arm Cortex-M processors.

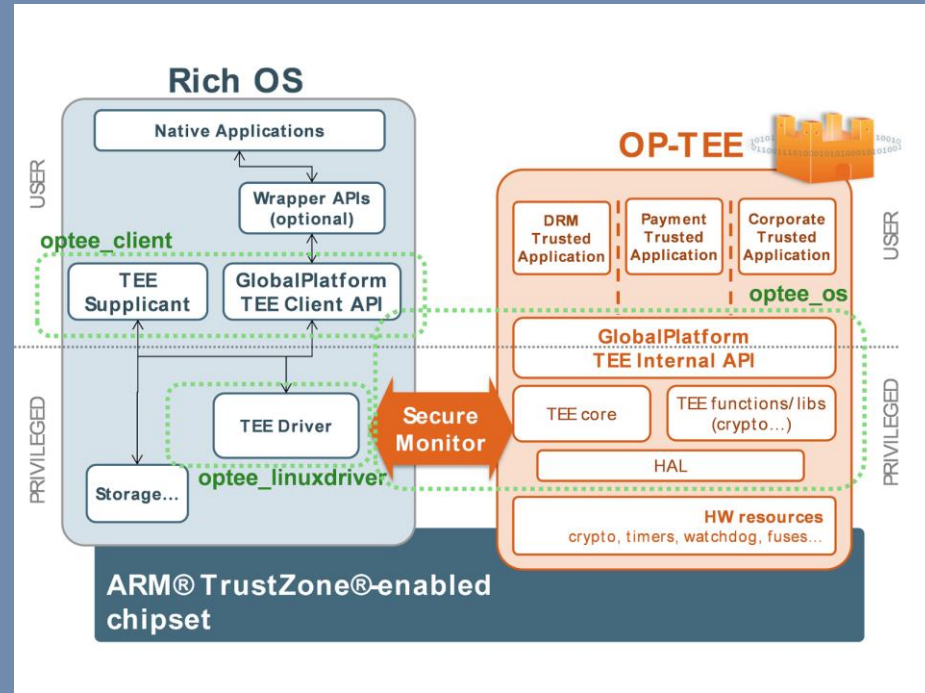
It consists of Secure Boot and a set of Secure Services such as Secure Storage, Crypto etc. for Applications accessible via PSA Developer APIs.



# OP-TEE (Ongoing migration into TF.org)

A reference implementation of a Trusted Execution Environment (TEE), designed as companion to a non-secure Linux kernel running on Arm Cortex-A cores using the TrustZone technology.

Implements [TEE Internal Core API](#) v1.1.x and the [TEE Client API](#) v1.0, as defined in the [GlobalPlatform API](#) specifications.



# How to Get Involved

Become a project member

Platinum Board members define the mission and strategy: \$50K/year

General members receive project updates, make requests to the board and have joint representation at Board meetings: \$2.5-25K\*/year

\* Fee according to company size and type

Contact:

[enquiries@TrustedFirmware.org](mailto:enquiries@TrustedFirmware.org)

for more information



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Thank you

# Adopt Trusted Firmware to build your next secure platform

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[enquiries@trustedfirmware.org](mailto:enquiries@trustedfirmware.org) for more information