Trusted Firmware Community Project

TrustedFirmware.org

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~~

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Open Governance
Community Project

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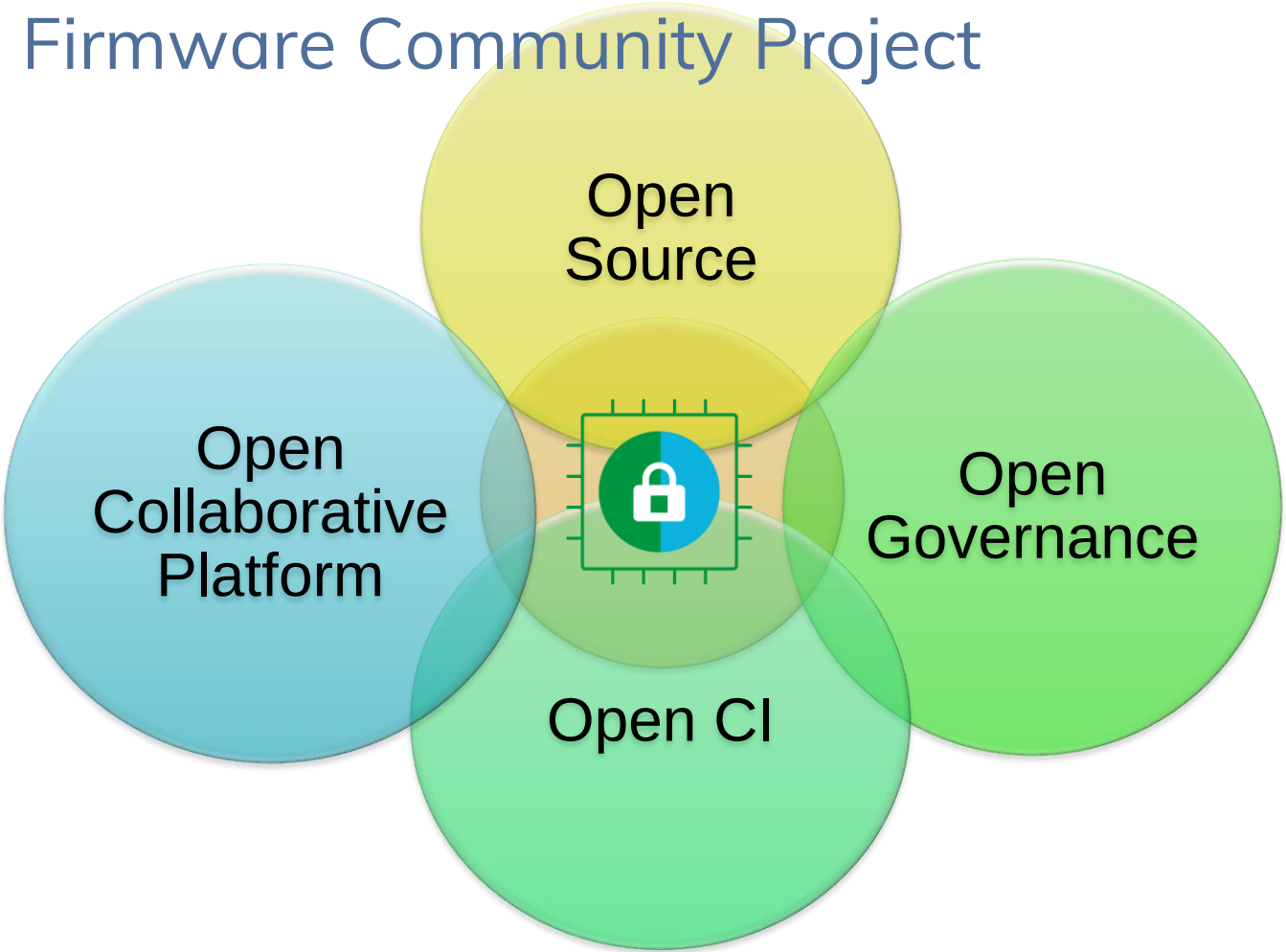
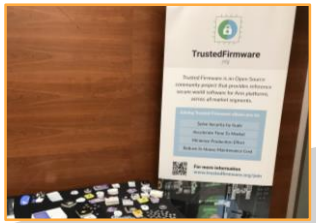
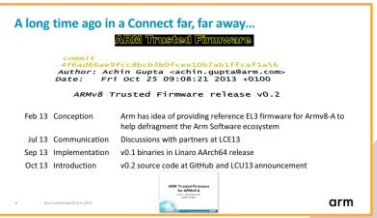


Trusted Firmware History





Sept 2019

OP-TEE joins TrustedFirmware

Oct 2018

TrustedFirmware.org

Mar 2018

Trusted Firmware-M

Trusted Firmware-A

Oct 2013

Arm Trusted Firmware

Current members

arm

Linaro

Data I/O

Google

FUTUREWEI Technologies

Texas Instruments

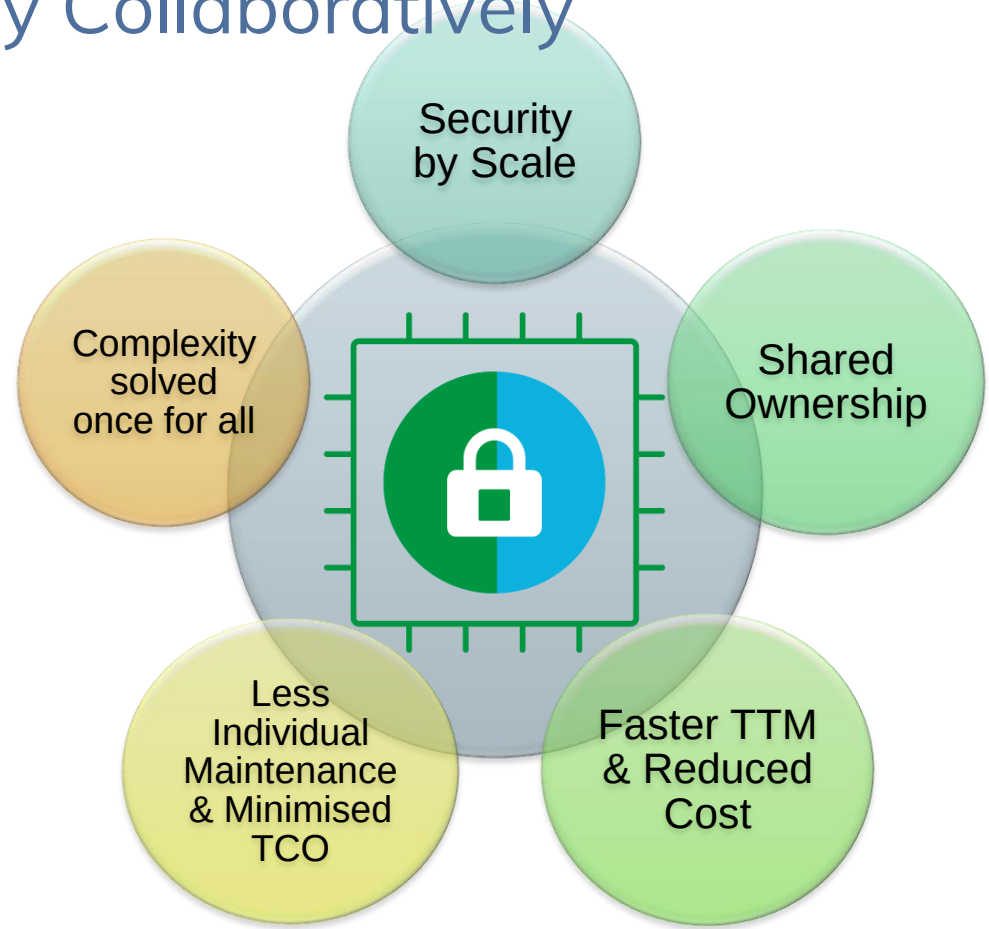
CYPRESS EMBEDDED IN TOMORROW™

life.augmented

RENESAS

NXP

Build Security Collaboratively



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All market segments

Devices

IoT/Mobile/Auto/Laptop

Embedded

Edge

Cloud

Server

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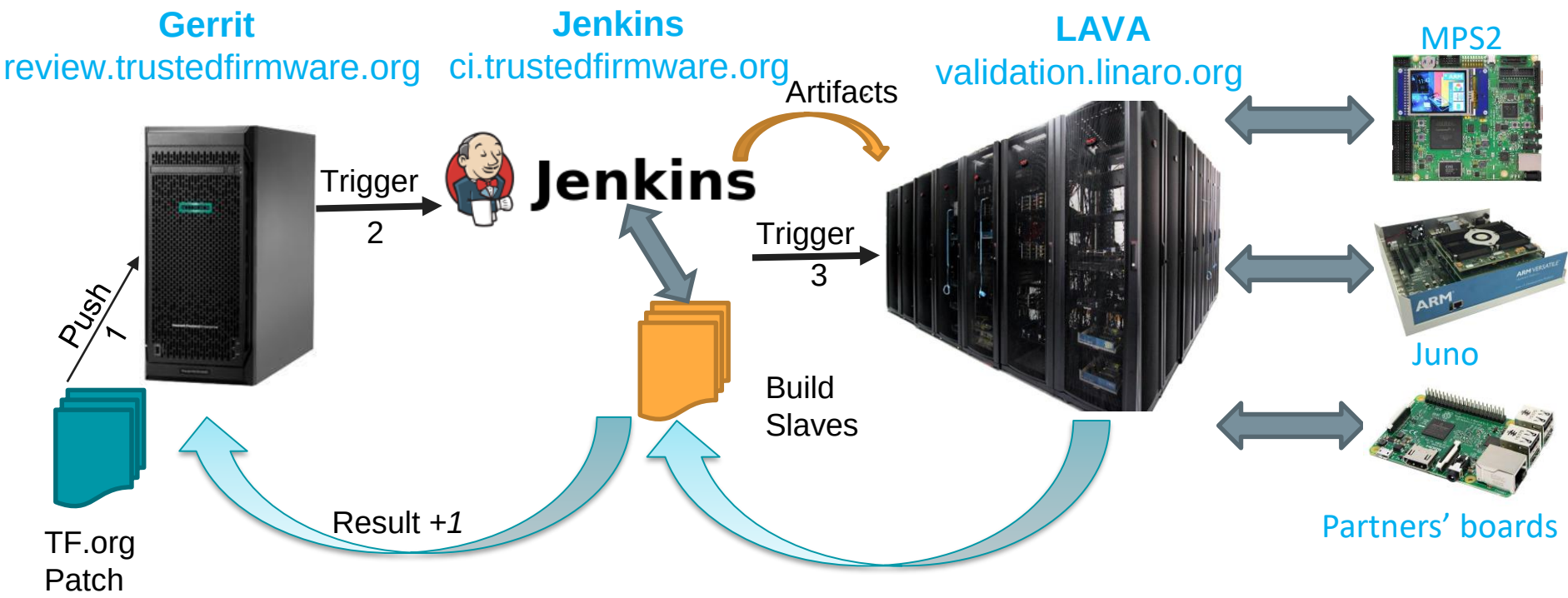
Open CI & Board Farm



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Details & Resources

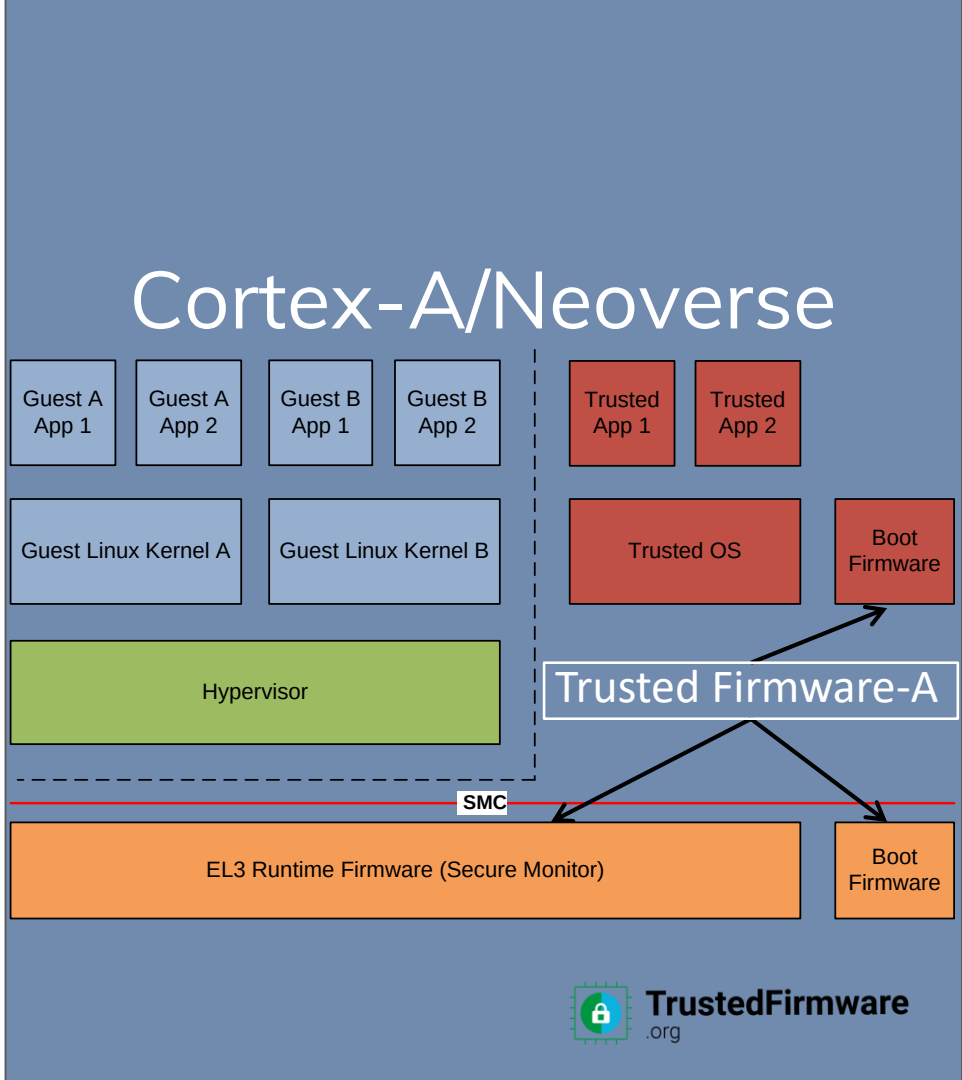
- Open Source permissive **BSD 3-clause license**
- All contributions accepted under the terms of **DCO**
- Project mailing lists for technical discussions
- Git & Gerrit for open reviews
- Monthly project status updates
- Board meeting minutes
- Project Charter

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)

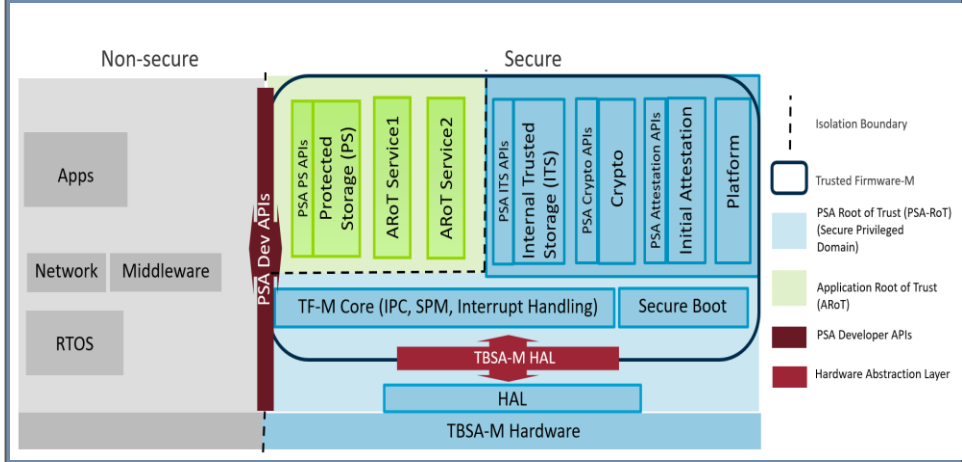


Trusted Firmware-M

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.

Cortex-M



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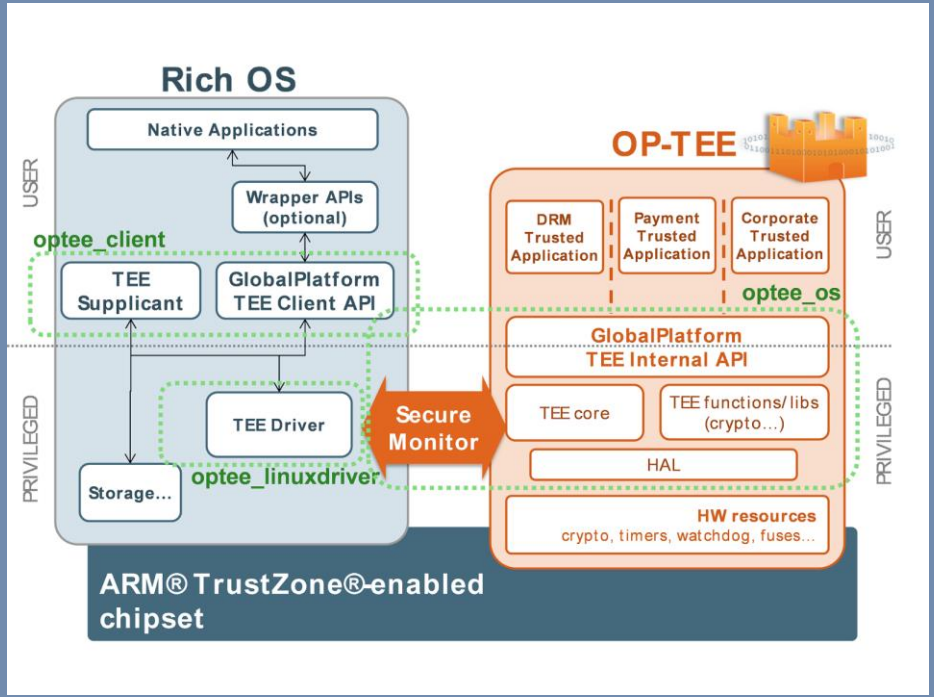
OP-TEE

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 APIv1.0, as defined in the GlobalPlatform API specifications.



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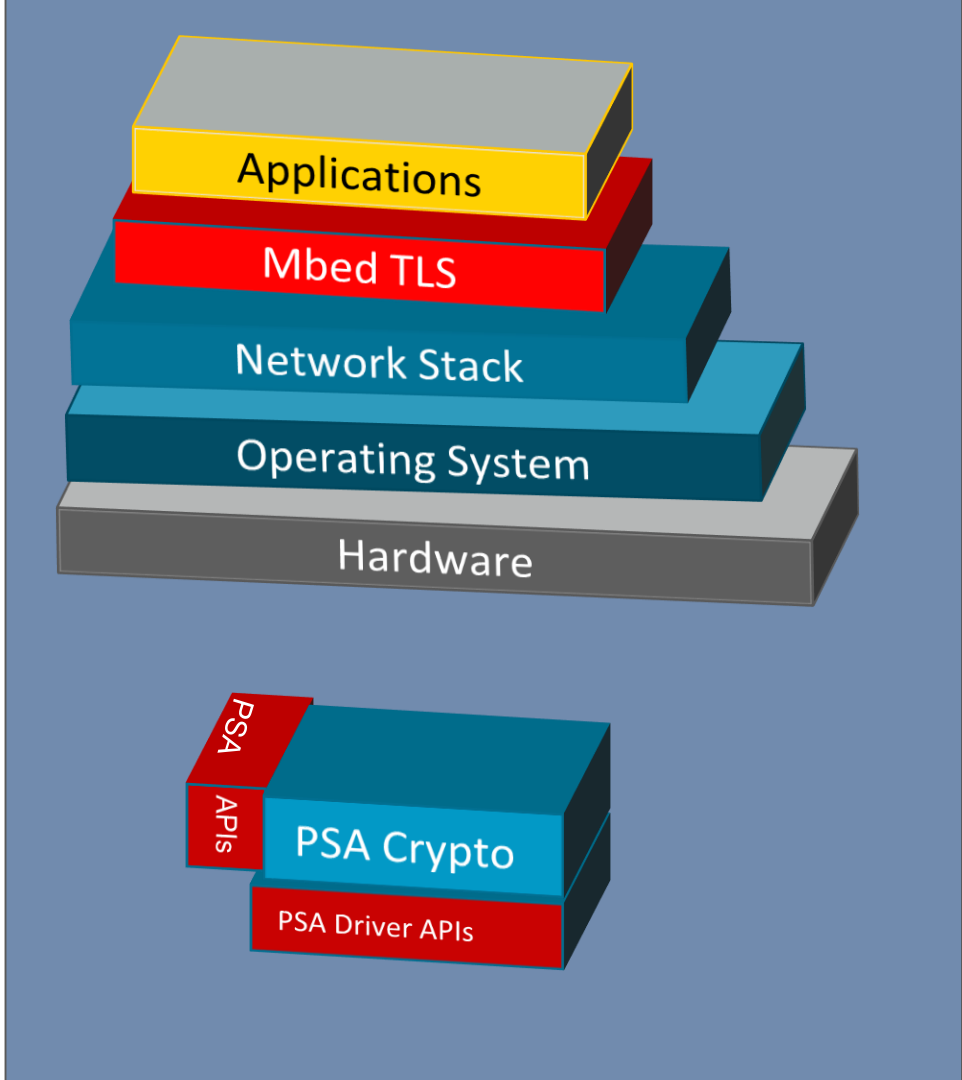
Mbed TLS & PSA Crypto

- Portable, highly modular, easy-to-use TLS and X.509 library
- Extensively used in various market segments
- Distributed under Apache2.0 License
- Components –
  - Cryptography
  - Protocol (TLS, DTLS)
  - Certificates (X.509, PKI)
- **PSA Crypto** (Mbed Crypto)**,** derived from Mbed TLS library, brings together Crypto primitives and makes them available via. PSA Crypto APIs.
- PSA Crypto library will also support driver APIs to integrate with Secure Elements and Crypto Accelerators.



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

Read the project Charter

* Fee according to company size and type

Contact:

enquiries@TrustedFirmware.org

for more information

TrustedFirmware.org

Thank you

Adopt Trusted Firmware to build your next secure platform

Visit www.TrustedFirmware.org or email enquiries@trustedfirmware.org for more information