



# TF-M Technical Forum

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# PSA Crypto driver repository

- An introduction
  - A common place for storing PSA crypto drivers
  - <https://review.trustedfirmware.org/plugins/gitiles/shared/tf-psa-crypto-drivers>
- How vendors would integrate them?
  - TBD
- What's the roadmap going forward?

# LLVM-embedded-toolchain

- Based on
  - clang + llvm
  - lld
  - picolibc, or optionally newlib(-nano) or LLVM's libc <- unused on S side.
- Supported architectures
  - Armv8-M Mainline and Baseline
  - Armv8.1-M Mainline and Baseline

- Performance

	GNUARM	ARMCLANG	LLVM
build time [s]	63.13	63.13	75.25
tfm_s.bin size	125324	131456	141676

- target: an521 profile: Large build type: Release host: WSL2
  - This is an Initial data using default settings. Optimisation will follow.
- Public github repository
  - <https://github.com/arm/arm-toolchain/arm-software/embedded>
  - <https://github.com/ARM-software/LLVM-embedded-toolchain-for-Arm> - deprecated

# Toolchain related questions

- Do we need C++ support on S side?
- CLANG/LLVM toolchain name
  - toolchain\_CLANG.cmake vs toolchain\_LLVM.cmake
- Can we drop the support of **–march –mtune** options in favor of **–mcpu** only?
- Can we limit to the earliest version to the one with **m55** support?

Toolchain	Cortex-M55 support since	Release Date
<b>Arm Development Studio</b>	Version 6.14	March 2020
<b>GNU Arm Embedded Toolchain</b>	Version 10.	December 2020
<b>LLVM Embedded Toolchain for Arm</b>	Version 11.0.0	September 2020
<b>IAR Embedded Workbench</b>	Version 8.50	November 2020

# A new TF-M maintainer

- **David Hu** has kindly agreed to rejoin the TF-M maintainer team.

arm

Merci

Danke

Gracias

Grazie

谢谢

ありがとう

Asante

**Thank You**

감사합니다

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