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**CHERI**

# CHERI-Zephyr

**Lightning Talk**

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# CHERI-Zephyr v0.3.0

Latest



<https://github.com/CHERI-Alliance/CHERI-zephyr/releases>

<https://www.thecapablehub.org/software/cherizephyr/>



- Based on upstream **Zephyr 4.1.0 (May 2025)**
- Continue **CHERI-RISCV 64-bit** (PURECAP)
- Additional **CHERI-RISCV 32-bit** Cudasip / Cambridge QEMU core
- Six new CHERI-specific boards
- CHERI support Zephyr memory allocators:  
    mem\_slabs, mem\_blocks, stack arrays
- Four new CHERI-specific samples
- CHERI-specific CI workflow (support from Capable Hub)
- Three new CHERI-specific twister test suites
- Some general enhancements / bug fixes for CHERI compatibility
- Additions to some existing Zephyr test suites for CHERI compatibility
- Improved docker flow for community experimentation/testing/dev.

**CHERI**  
  
**32/64 bit**

**CHERI-Zephyr WG:** <https://cheri-alliance.org/who-we-are/working-groups/cheri-zephyr/>