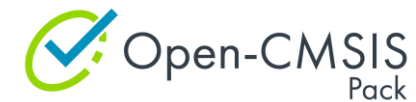# Open-CMSIS-Pack

Technical Project Meeting 2023-04-18

This meeting is recorded !

Agenda

- Welcome

- Generating CMSIS-Packs for Middleware

- Issues in discussion (for next week)

- CMSIS-Toolbox 1.6.0 (FYI)

- Wrap Up

Generating CMSIS-Packs for Middleware

How to create scalable software packs
to maximize software re-use

- https://github.com/Open-CMSIS-Pack/SW-Pack-HandsOn

Issues in discussion (not reviewed)

- [csolution] change define to key:value pair [#843](#)
- [csolution] .cdefault.yml, map file [#841](#)
- [csolution] add support `*` in `for-context` [#840](#)
- [csolution] review support for MVE instructions [#834](#)
- [csolution] add define to linker script preprocessing [#833](#)
- [csolution] add `gendirs:` node to csolution, cproject, clayer [#832](#)
- [csolution] add schema version to yaml input files [#819](#)
- [csolution] use of environment variables in yml nodes referencing path or file [#820](#)
- [csolution] simple and consistent ./out directory structure [#821](#)
- [csolution] Handling of CMSE_Lib.o in TrustZone projects [#826](#)

Specifying `contexts` (csolution, cbuild) #822

- [cbuild/csolution] command line: specifying contexts
    - drop configuration, as configuration = context without <project>
    - default: #823
        - if no context is specified use the 'first' <build-type> specified
    - multiple = *-c <contextA> -c <contextB>* #823
        - refine: options to the right may replace previously specified context(s)
    - all = *-c |--context **
    - context = <project> followed by any order of (#825)
        - *+<target-type>*
        - *.<build-type>*
- IDE *Context Manager* - multi-project build #824
    - Matrix of: selected projects
        - each project with list of selected target-types
            - each target-type with single build-type

CMSIS-Toolbox release 1.6.0

https://github.com/Open-CMSIS-Pack/cmsis-toolbox/releases/tag/1.6.0

- Build Invocation Utility (cbuild)
  - fixed: cbuild throws an error with the project having no buildType
  - added --toolchain option and wildcard configuration support
  - disable auto pack dependencies installation
  - fixed: cbuild output binaries generation path
  - extended release artifacts for darwin-arm64 & windows-arm64 configuration
  - avoid suppressing messages from cbuildgen

- Build Manager
  - updated cbuild utility v1.6.1
  - added support for Cortex-M85 for GCC toolchain
  - added tests for IAR toolchain

- Project Manager
  - added project and configuration nodes into *.cbuild-idx.yml
  - updated default output name
  - updated schema allowing '-' character in component vendor name
  - generate regions_*.h file from memory tags
  - fixed: use XDG_CACHE_HOME as default pack root for macOS
  - fixed: output access sequence
  - fixed: check file instance version before creating config base files

Wrap Up

Instances of meeting with focus on software pack's content topics

- Bi-weekly (every two weeks) pack content topics:
  - **2. May:** Structure of Device Family Packs (DFP) and Board Support Packs (BSP)
  - **16. May:** CI test process for validation of reference applications

CMSIS-Toolbox:

- [1.6.0](#) April 18th 2023 - mainly bug fixes
- 2.0.0-dev0 end of April - breaking changes
- 2.0.0-dev1 mid of May
- 2.0.0 release June 2023

Next Open-CMSIS-Pack meeting: 25th Apr. 2023 @ 16:00 CET (15:00 UK)

- About: Review of technical issues with focus on 2.0.0 issues

Thank you