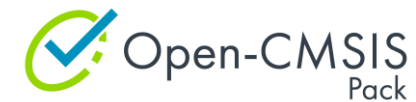


# Open-CMSIS-Pack

Technical Project Meeting 2022-11-08

This meeting is recorded !



# Agenda

- Welcome
- Priorities as we see them today
- For Review
- Change Boards
- Summary: Component selection / deselection
- CMSIS-Toolbox 1.3.0
- Wrap Up



# Priorities as we see them today

- Complete compiler agnostic work-flows
  - settings for warnings, optimization, debug
  - analyze gaps (i.e lib selection, enum/wchar sizes), impacts to generic packs such as Event Recorder
  - Create clear guidelines for compiler agnostic packs
- Complete \*.cbuild.yml generation
- Close the gaps for multi-core and TrustZone csolution-based projects
  - Output file control (binary, etc.)
  - Define how sub-projects are combined (dependency)
  - Post-Build steps with image signing
- Complete clayer work based on interface descriptions
- Extend cbuid tool orchestration (i.e. install missing packs, convert for a csolution + context)
- Resource management and linker file generation
- Conclude on “generators” integration
- Work on the aspects of Flash programming and Debug
- Use \*.cbuild.yml files as feedback lock file (input file to csolution)
- Change cbuidgen process from using \*.CPRJ to \*.cbuild.yml

Please review and provide feedback in the next TM

# Review Change Boards

- Pack Specification Change Board
  - (Scheduled) CMSIS-Pack extensions for Generator concept [#168](#)
  - (Review) [PR167](#) for `projectpath`

# For Review

- Dual-Core Example
  - [https://github.com/RobertRostohar/MultiCore/tree/main/FRDM-K32L3A6/hello\\_world](https://github.com/RobertRostohar/MultiCore/tree/main/FRDM-K32L3A6/hello_world)
- Local support in cproject.yml for build-type / target-type [#450](#)
  - ⇒ Review 'functional' example in issue
- Optional RTE creation PR [#432](#) - pending change requests - ongoing
- Add Idcflag and Idcxxflag support [#492](#) - merged
- [Proposals for layers](#):
  - Adding layer `type:` to hint search for `csolution` tool
  - Adding `variables` to avoid modifications to the `cproject.yml` when adding layers
- [Proposals for interface](#): better description of intended behaviour



# Handle component selection/removal [#466](#)

- Three types of listed components - selected by:
    - a) user
    - b) user for dependency with choice
    - c) tool for trivial dependencies
  - Tools without "automatic dependency resolution" require to list types a,b,c \*.cproject/\*.clayer.yml
  - Tools with "automatic dependency resolution" may remove components of type b) and c) if no longer "required" (with user consent)
  - Updating the packs required by the solution, can be done without meta information specifying components' origin pack.
- => e.g.: components[-choice | -auto] :                      Priority for anyone?

# CMSIS-Toolbox 1.3.0 Release

- Targeted for 14th Nov. 2022
- All tools: support for linux-arm64 host platform
- csolution:
  - PLM of config files: use *.base* instead of *.current* extension
  - Add *--export <suffix>* flag: set suffix for exporting *<context><suffix>.cprj* retaining only specified versions
  - Add *'ldcflag'* and *'ldcxxflag'* support
  - Extend cbuilder nodes
- cbuilder:
  - Compiler abstractions mappings for AC6 and GCC
  - Add *'ldcflag'* and *'ldcxxflag'* support
  - Add toolchain environment variable support
- cpackget:
  - Default CMSIS\_PACK\_ROOT location
  - signature-create and signature-verify

# Wrap Up

- Other review “asks” before finally closing issues:
  - Anything still open for “Discussion Done” items.
  - Please help to resolve tickets with label: [question](#)
  
- Next Open-CMSIS-Pack meeting: 15th Nov. 2022 @ 16:00 CET (15:00 UK)



Thank you

