

Open-CMSIS-Pack

Technical Project Meeting 2023-09-26

This meeting is recorded !



Agenda

- Welcome
- Project Boards
- Simplified Generator Proposal
- Default Linker Script handling
- Issues for Review
- Wrap Up

Boards:

- [Open-CMSIS-Pack Specification Change Board](#)
- [CMSIS-Toolbox 2.2 Project Board](#)
 - See progress and issues in scope for version 2.2.0
 - Please review and provide feedback in case you see topics missing
 - Add issues or comment on existing issues that you think should be added to 2.2.0
- [CMSIS-Toolbox 2.3 Project Board](#)

Discussion: Simplified Generator Proposal #1112

- Coexisting implementations for gpdsc and globally registered generator
- Additional dependency on generators/bridges if shipped in CMSIS-Toolbox
- CLI vs. IDE flows for generator invocation with GUI
- Status update for prototype (Daniel)
 - <https://github.com/brondani/cmsis-toolbox/releases/tag/2.2.0-extgen0>
 - Example covering the 3 project types (single-core, multi-core, trustzone):
 - <https://github.com/brondani/devtools/tree/external-generator/tools/projmgr/test/data/ExternalGenerator>
 - Example's generator global registry (to be copied into <toolbox>/etc):
 - <https://github.com/brondani/devtools/blob/external-generator/tools/projmgr/test/data/ExternalGenerator/global.generator.yml>
 - Example's generated files (golden references)
 - <https://github.com/brondani/devtools/tree/external-generator/tools/projmgr/test/data/ExternalGenerator/ref>

Discussion: Default Linker Script handling [#1134](#)

- Making further compiler support additions scalable
- Current solution: Default linker scripts ...
 - ... shipped with CMSIS-Toolbox
 - ... used implicitly during buildhas certain drawbacks.
- Proposal: Add "template" components to CMSIS base pack
 - Template C Startup Code
Could be used for any new device¹ before DFP is available.
 - Template Linker Scripts
Makes adding further compilers to CMSIS-Core scalable w/o updating 1000s of DFPs.

¹ Or for generic example projects not depending on peripherals/interrupts.

Issues to Review

- [csolution] `language-CPP:` toolchain abstraction is ignored [#74](#)
- [csolution] Disable linker related files generation for library targets [#1133](#)
- [csolution] cdefault.yml linker options - remove unused code [#1228](#) (fixed)
- [csolution] Implement *.cbuild-gen.yml - location `intdir`? [PR1129](#) (ST)
- [csolution] *.cbuild-set.yml lists all selected contexts from last invocation [#1127](#)
 - add `--toolchain`?
- [csolution] *.cbuild-idx.yml shall always list all contexts of a solution [#1125](#)
- [RTE] API version selection/resolution may be incorrect (bug) [#1124](#) (fixed)
- [csolution] gap: Support for multiple component instances [#1123](#)
- Implement <csolution-name>.cbuild-pack.yml [#1122](#) (ST)
- Add Memory Information to build information files [#1117](#) - *no comments*
- [csolution] Add `warnings:` option `all` in yml input [#974](#) - *no comments* - Tarek
- [CMakeLists Proposal](#) - leave comments and feedback in [#1044](#) - *no comments*

Wrap Up

Is anyone preparing/working on a topic to present and discuss in the coming weeks?

- Please contact Joachim.Krech@arm.com ahead of the meeting

!!! **No meeting next week**, Tuesday 2023-10-03 (public holiday in Germany) !!!

Next Open-CMSIS-Pack meeting: 10th Oct 2023 @ 16:00 CET (15:00 UK)

Thank you

