Open-CMSIS-Pack

Technical Project Meeting 2021-08-17

This meeting is recorded !

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Open-CMSIS

Agenda

Welcome and review of the agenda

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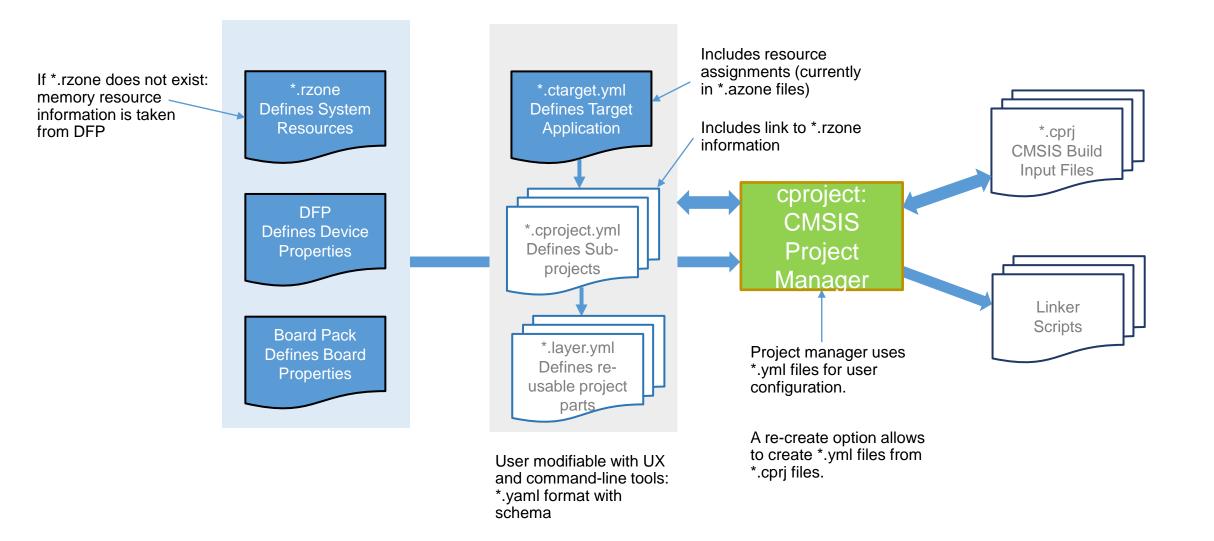
- Tools that will be published
- **Tool Flow for Project Generation**
- Generator components
- Wrap Up

Open-CMSIS-Pack: Tools that will be published

ΤοοΙ	Description	Repository	Languag e	Status
vidx2pidx	Pack infrastructure: generate flat package index file from vendor package description files	Open-CMSIS-Pack/vidx2pidx	GO	done
cpackget	Pack installer: Download, Install, Uninstall packs	Open-CMSIS-Pack/cpackget	GO	in progress
<u>cbuildgen</u>	Build manager: reads CMSIS project file and creates CMakelists.txt	Open-CMSIS-Pack/cli/tools/buildmgr	C++	e/o Aug. 2021
data model + libs	CMSIS-Pack data model and helper libraries	Open-CMSIS-Pack/cli/libs/ rtemodel, rteutils, rtefsutils xmltree, xmltreeslim, xmlreader crossplatform, errlog	C++	e/o Aug. 2021
packgen	assists in the generation of CMSIS-Pack from CMakelists	Open-CMSIS-Pack/cli/tools/packgen	C++	e/o Aug. 2021
packchk	CMSIS-Pack validation utility	Open-CMSIS-Pack/cli/tools/packchk	C++	Sep. 2021
cproject	Project manager: creates, reads and modifies CMSIS project files manipulating board, device, build options, files and components.	Open-CMSIS-Pack/cli/tools/cproject	C++	Q4 2021
svdconv	System Viewer Description validation and device header generation utility	Open-CMSIS-Pack/cli/tools/svdconv	C++	TBD

github/open-cmsis-pack/open-cmsis-pack/issues

cproject: Tool Flow for Project Generation (#12)



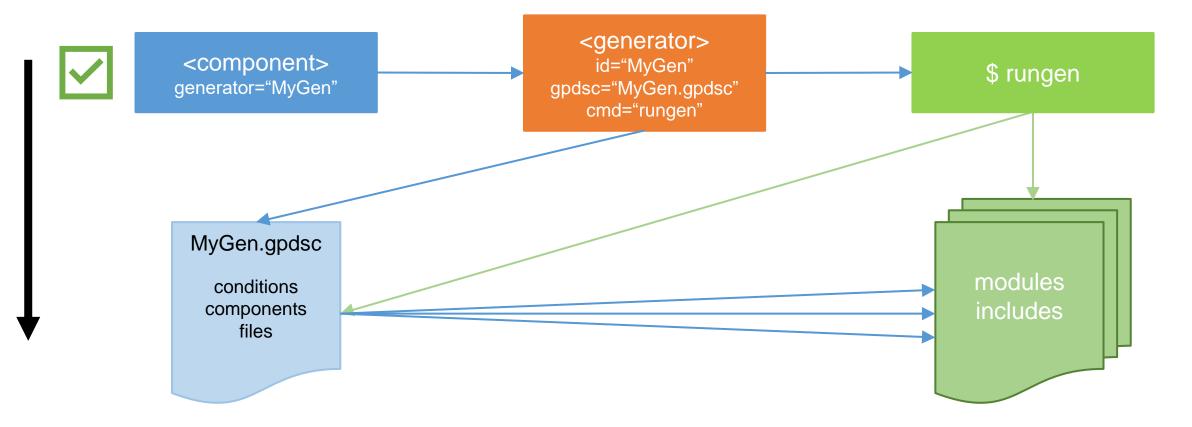
CMSIS-Pack Generator Component (<u>#20</u>)

- <u>Specification</u> (CMSIS_5)
- CMSIS-Pack component consists of:
 - read-only files located in the pack
 - application specific configuration files copied into the project
 - editable by developer
- A 'generator' is a tool that creates and configures files in the project space
 - information passed to generator via command line
 - generated files are included into project via *.gpdsc file
- <component> links to <generator> specifying a command which generates the specified gpdsc

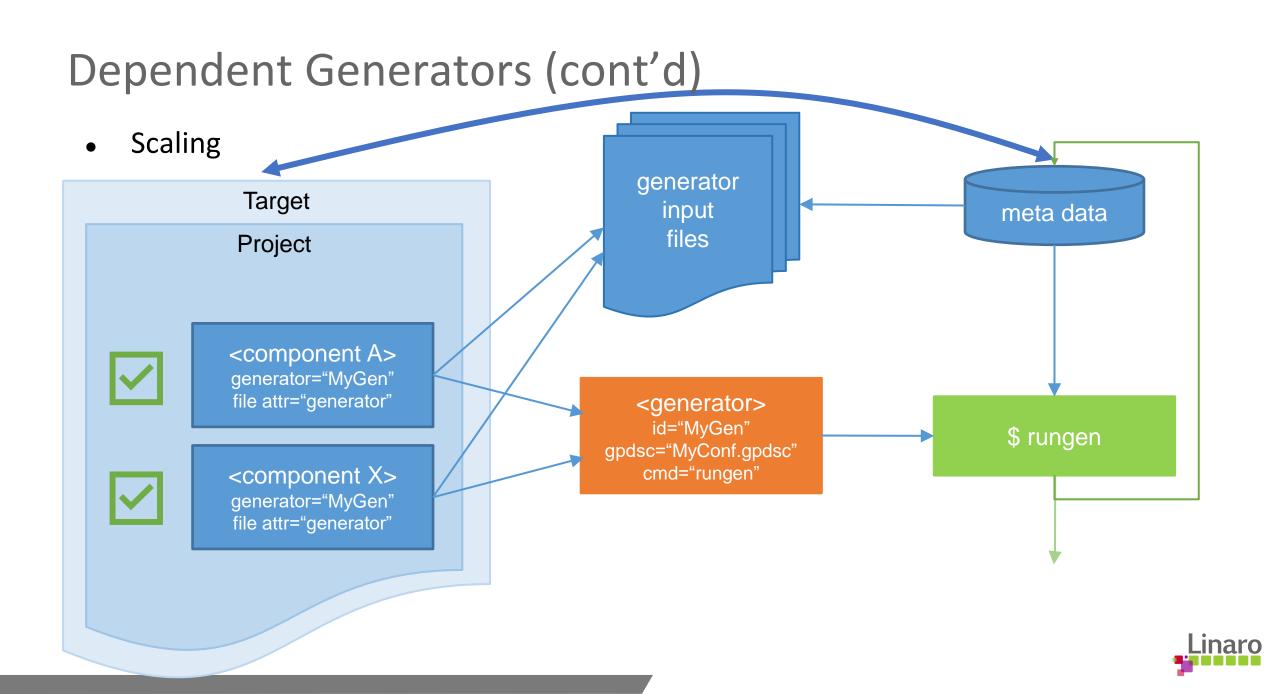


CMSIS-Pack Generator (cont'd)

• Dependency/Processing chain







Wrap Up

Issue Overview

Next week: please make suggestions to the agenda

August:

- How to cover a "corner case": expressing dependencies on features #5
- Introduction to cpackget utility (Charles, Linaro)
- Introduction to Arm contributed tools & libs (cbuildgen, packgen, rtemodel, etc.)
- Kick-off development for project creation and maintenance MVP CMSIS-12

September:

• Protecting CMSIS-Pack content from malicious tempering (TBD)

Next Meeting: Tuesday Aug. 24th 2021, 15:00 – 16:00 (UK)



Thank you

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