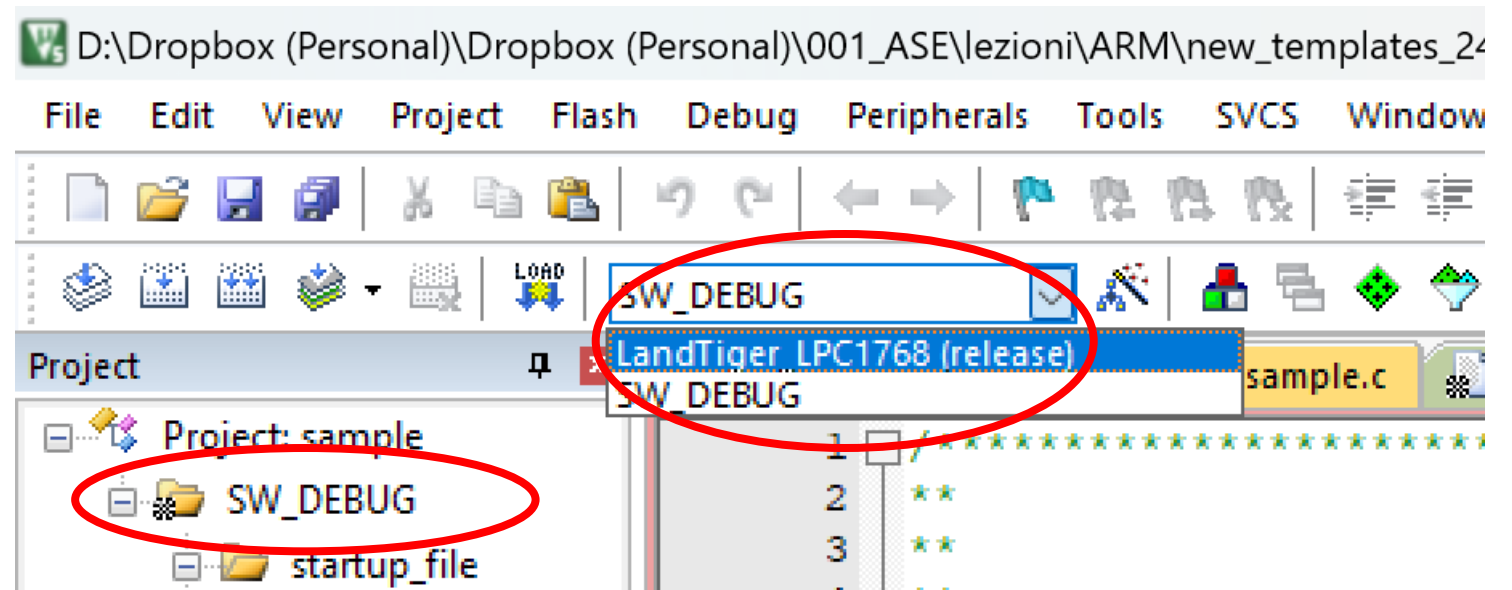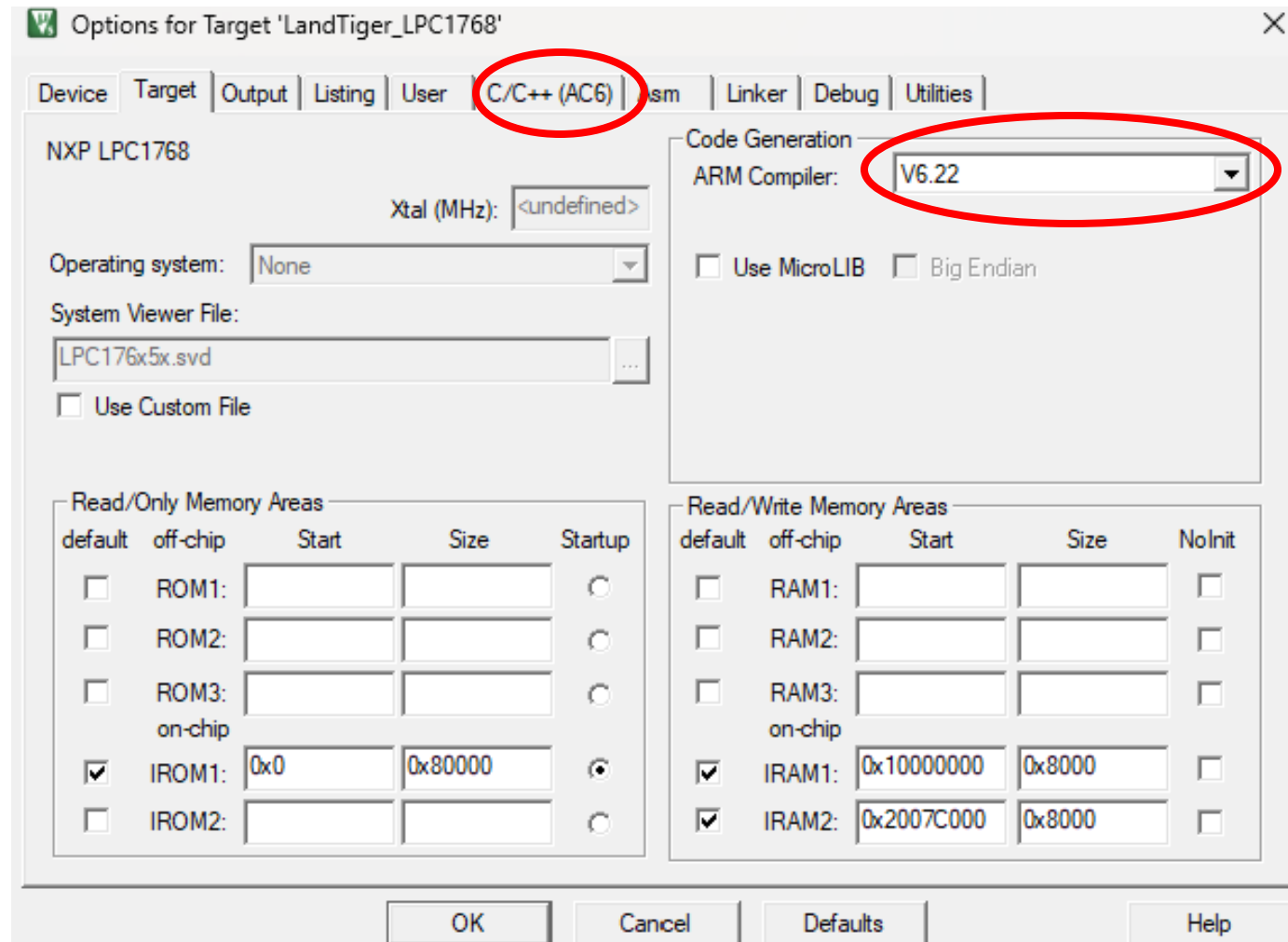# The New Keil µVision Template

What is needed

- Keil uvision v5.40 (clean installation suggested)

- ARMCLANG v6.18 (comes with Keil v5.40)

- CMSIS v6.1.0 (installed by keil pack installer when loading a project)

- LPC1768 Device Family Pack (DFP) v2.7.1 (installed by keil pack installer when loading a project)

A fast check on the template

- Targer1 is for old template!

- LandTiger_LPC1768 (release) / SW_Debug for the new template!
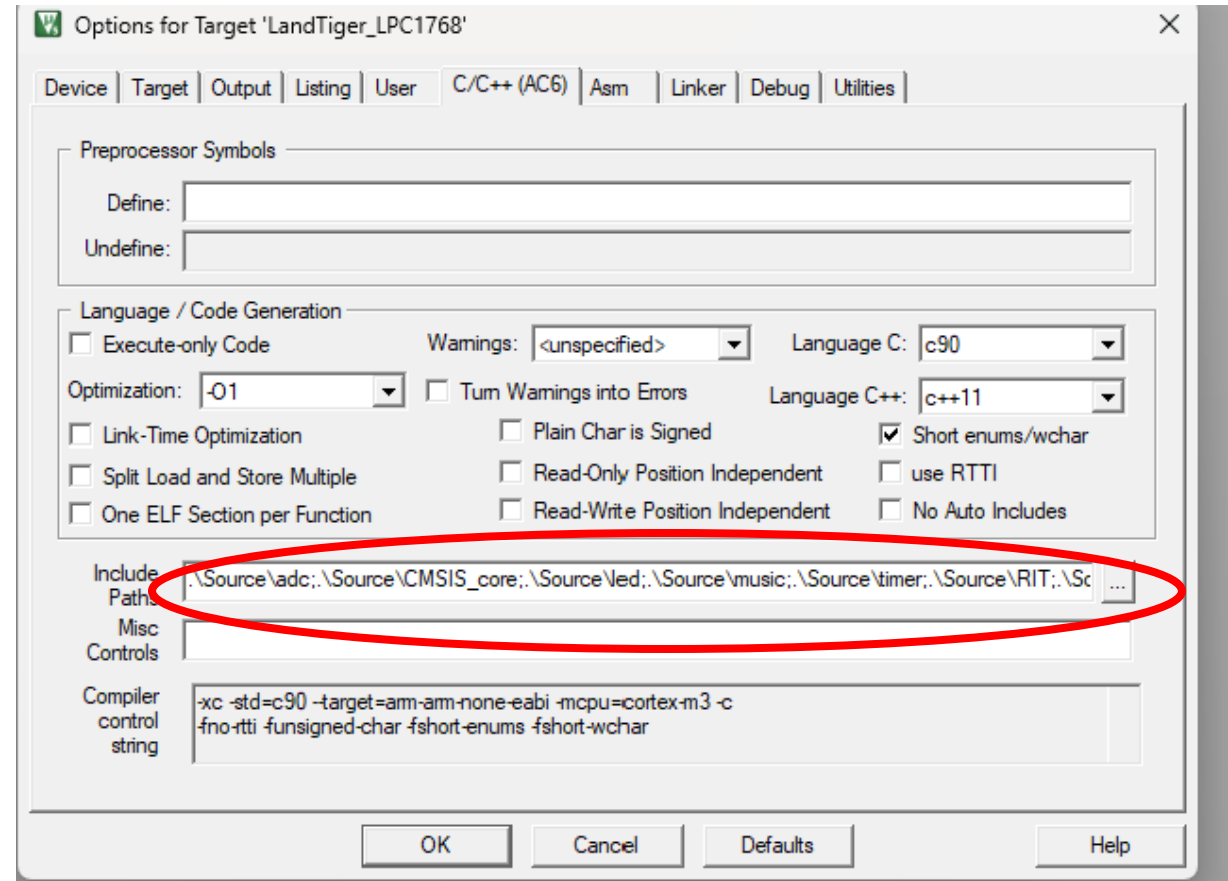
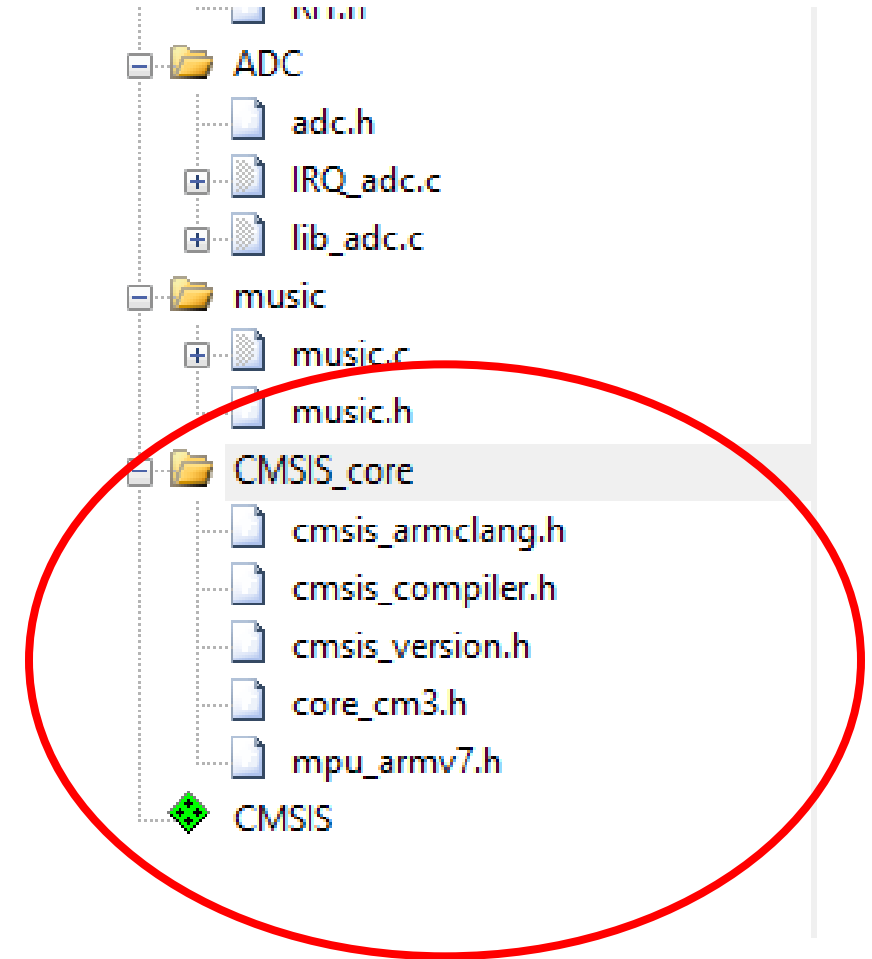- **TEMPLATES ARE NOT RETROCOMPATIBLE!**

The compiler

The compiler - Includes

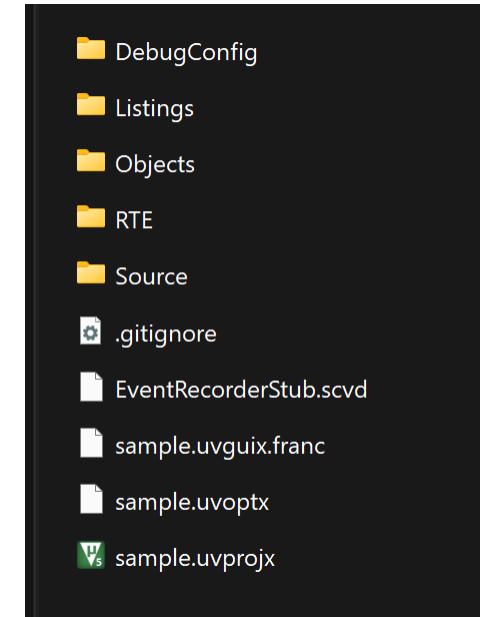- A new folder must be added in this list!

The Common Microcontroller Software Interface Standard (CMSIS)

- Included from RTE (green CMSIS)

- Verbosely included in the project file (DO NOT REMOVE THEM!)

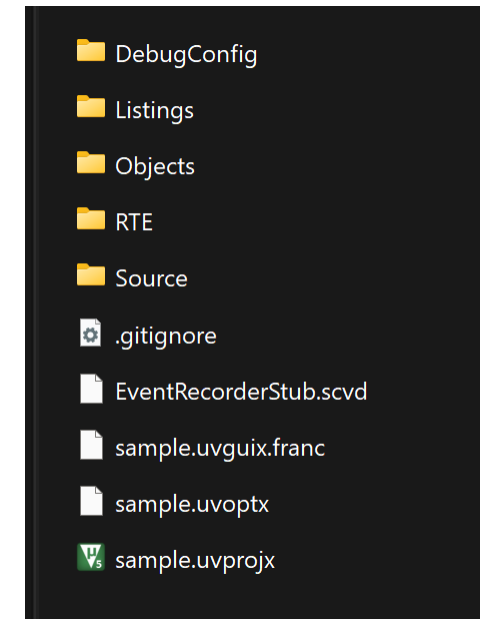- For fixing include dependencies in the DFP_LPC1768.

The project structure

- Compilation Directories: Objects, Listings
- Debug Directories: DebugConfig and *.svcd
- Runtime Environment: RTE
- Source files in <u>Source (with the old structure)</u>
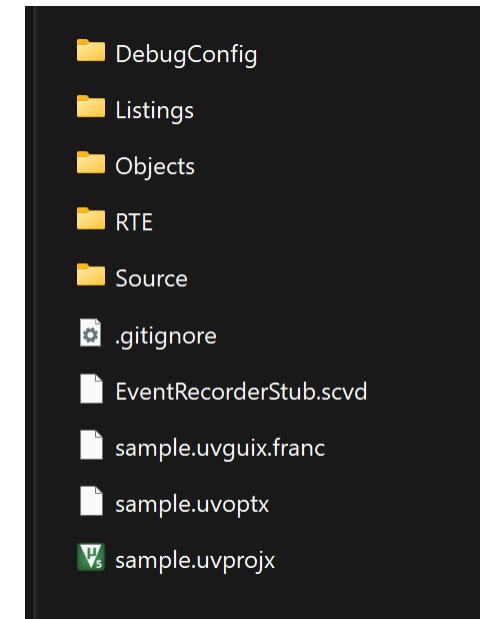- Keil projects *.uvoptx, *.uvproj

Where did the "munnezza" go?

- In Compilation Directories:
  - Objects: *.o, *.d, *.map, *.axf and other compilation outputs.
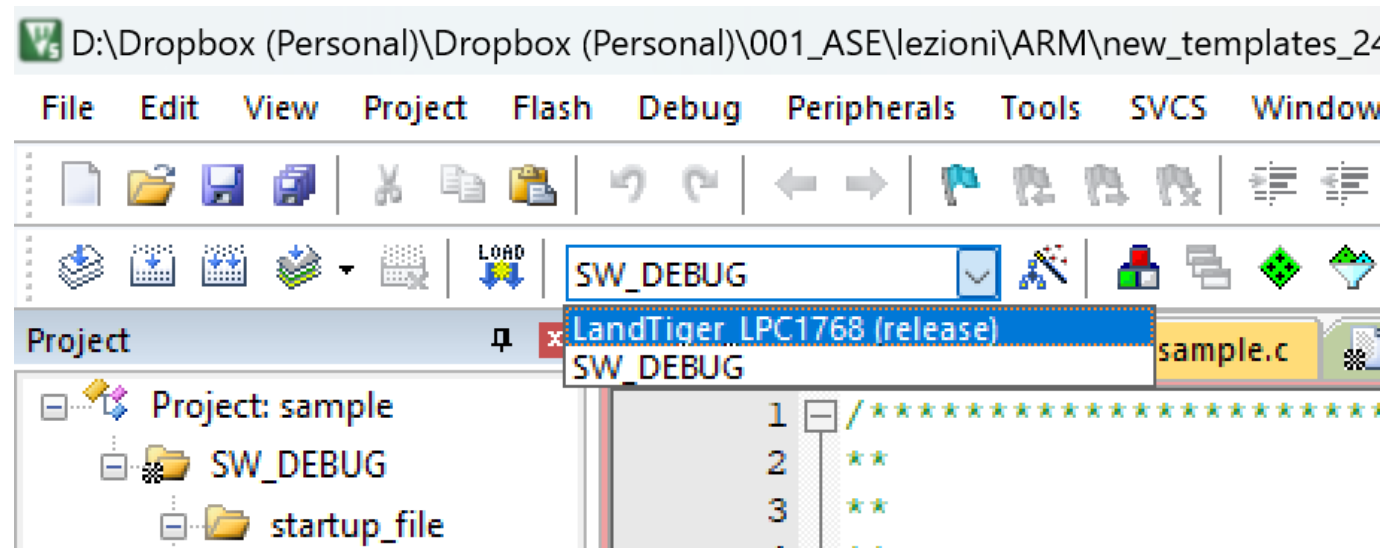 - Listings: *.dep, *.lst.

Reuse GUI configuration from another user!

- sample.uvguix.franc
- Just rename it or a new file will be created for each user GUI configuration.

Different targets for different goals

- SW Debug: run the program using the software simulator/emulator.
- LandTiger_LPC1768 (release): run the program on the **real board**.
- Select your preferred target for your needs.

TrackChanges in the code

- Moved from:
  - #include "lpc17xx.h" to #include "LPC17xx.h"
  - In sample.c #include "LPC17xx.H" to #include "LPC17xx.h"
  - in timer_lib.c init_timer function
    // **** <<< Use Configuration Wizard in Context Menu >>> ***/ to
    // <<< Use Configuration Wizard in Context Menu >>>
  - in timer_lib.c init_timer function // *** <<< end of configuration section >>> *** /
    to
    // <<< end of configuration section >>>

- For LCD, Touch panel and CAN templates:
  - Stack size increased from 0x200 to 0x400
  - Moved from O1 to O0 (otherwise it hangs), **ONLY FOR** "TouchPanel.c" and "GLCD.c" (for CAN template)