STLUX family
STNRG family

Compile and debug toolset

life.augmented

STLUX STNRG CHAIN TOOLSET

- Full Support by:

Favorite →

  - IAR Embedded IDE and ST-LINK tool (http://www.iar.com/) Free 8K code developer
  - Raisonance Ride7 and R-LINK tool (http://www.raisonance.com/) Free 2K code developer

- Support “C” or/and “ASM” source code. Compiler, Linker, Library
- Optimized for STLux chipset
- Use ST-LINKV2 on IAR or R-Link on Raisonance hardware tools to compile, program and debug. (hardware tools ~25 € or ~70 €)
- Standard Library for speed-up users application (from STM)
- Easy of use SMED configurator SW to program SMED peripherals (from STM)

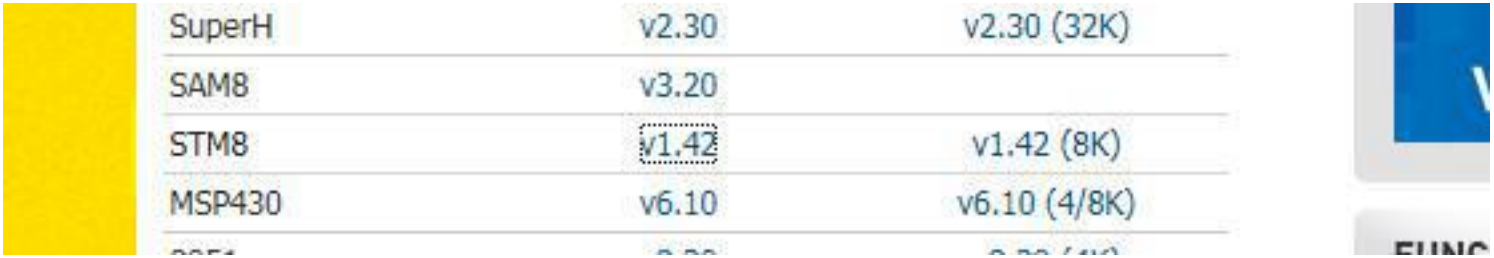
Install the STLUX Library

- The last "***STLux_library***" files and "***SMED configurator***" can be currently required directly to ST office.

- Install library and SMED configurator into your preferred directory

Install the IAR EWSTM8 tool set chain

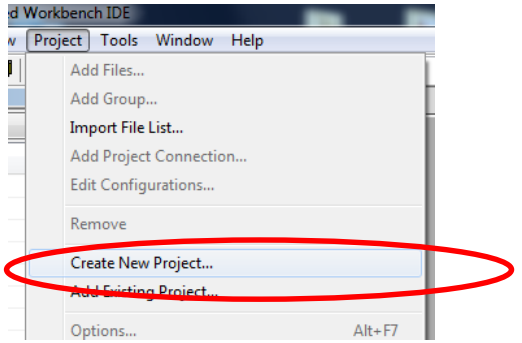
- Download latest version of IAR Embedded Workbench:
  - http://supp.iar.com/Download/SW/?item=EWSTM8-EVAL
- Install the single file as the tools set chain



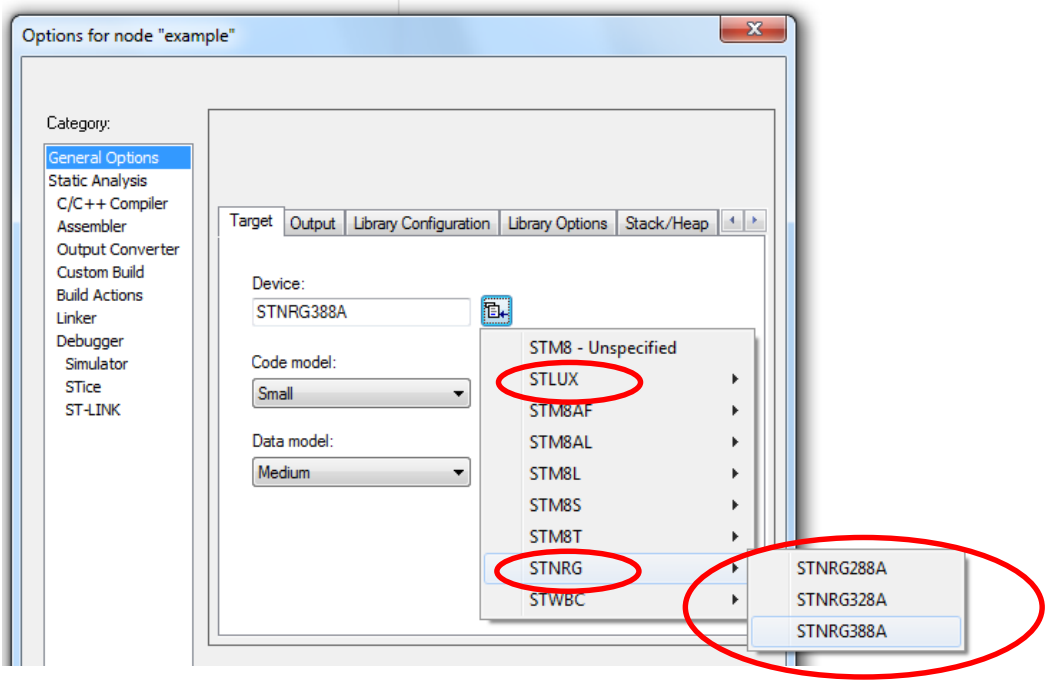
- Select the 8K “size-limited Kickstart”, or purchasing one license.
- Register your product on the IAR database to obtain a free 8K license.
  - administrator privileges and a second step registration on internet are required

Create a new project

- Create a new project using “Project-> Create New Project”
- Define your preferred directory

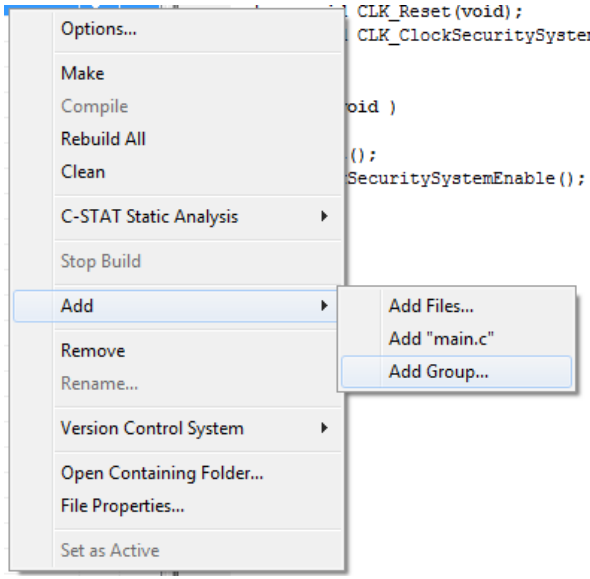


- Select your target as one of STLUX family or STNRG family chip

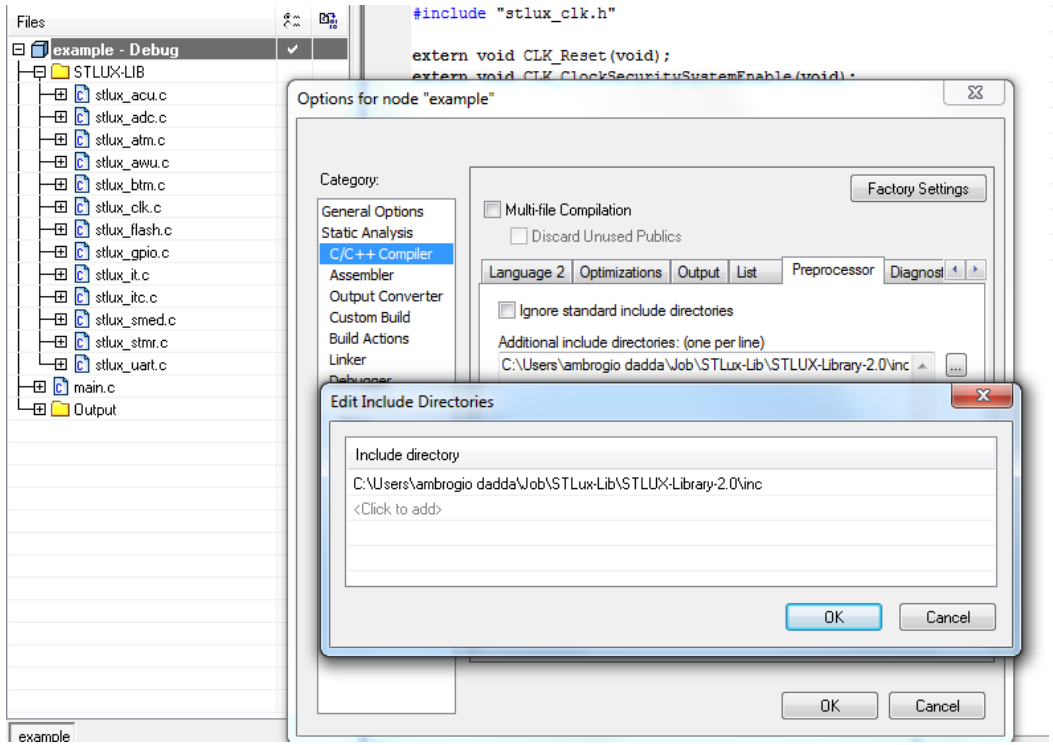


Connect the STLux Library

- Add the library source file directory on your target project
  - Add Group…
  - Add all file you needed point to the library file directory

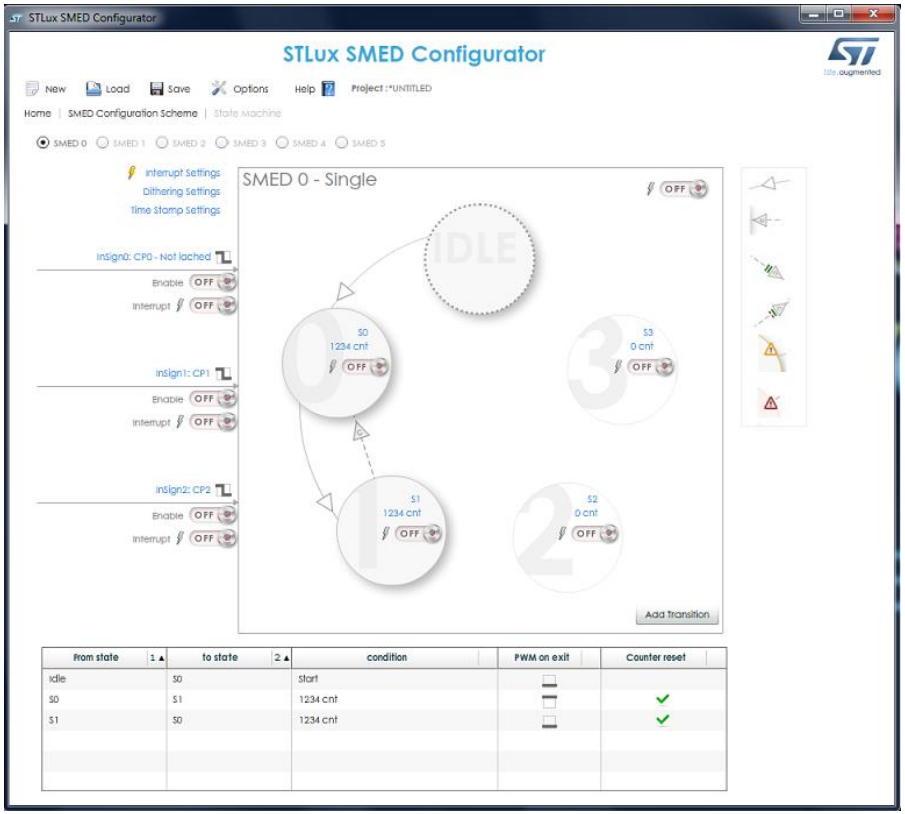


- Include STLUX “inc” file directory



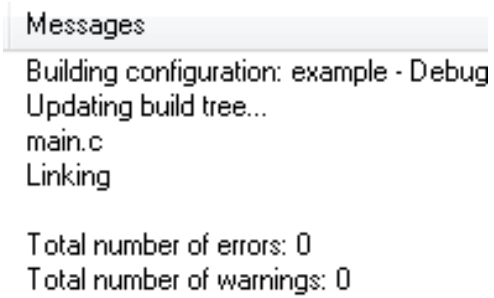
Define your SMED peripherals

- Using the SMED Configuration tools setup SMED peripherals
- Save the source code ("***Save>Save C file***" menu) into "Smed_init.c" file and insert it into your project.



Compile and debug the project

- When the main code is finish click on  icon, the compile process start, look the message widows for the result



- If you connect a ST-LINK to the PC and the SWIM cable to the SWIM interfaces of STLUX-STNRG and click on icon, the object code are loaded on the target.

- Debug, verify your code, when you leave the debugger phases the code are on the target.

Install the RIDE7 tool set chain

- Register your access on Raisonance and download these files:
  - Ride 7 - Raisonance Integrated Development Environment
  - RKit-STM8 - Raisonance Software Tool set for STM8 & ST7
  - Patch-STLux – Raisonance patch for the STLux target

  NOTE: the actual file's name is continuously updated: download the latest revision

- Install in sequence, as mentioned above, the tools set chain

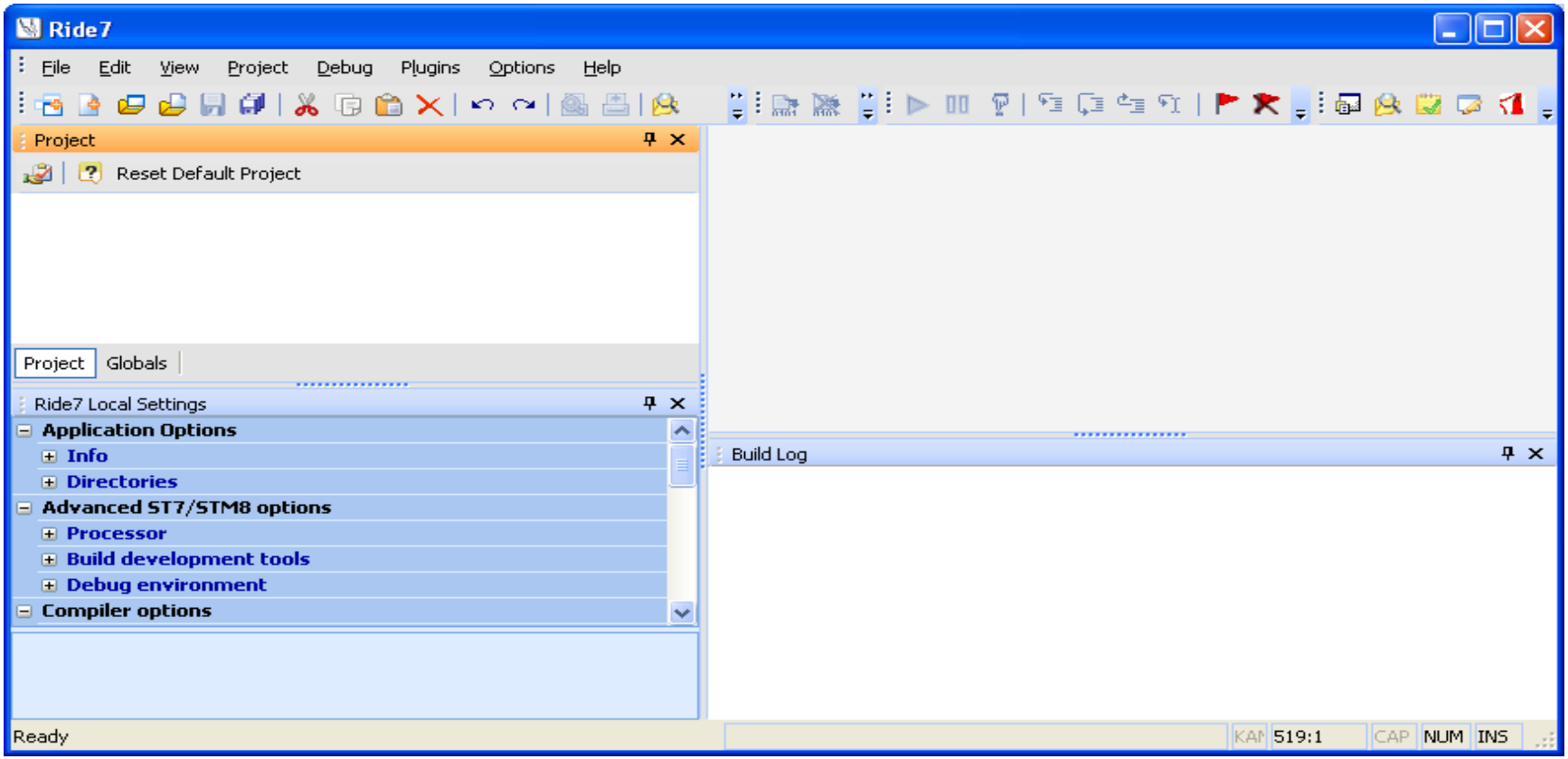
- Register your product on the Raisonance database to obtain a free 2K license or purchasing one 32K license.
  - administrator privileges and a second step registration on internet are required

Install the STLux Library

- Create a new directory on:
  "***C:\Program Files\Raisonance\Ride\inc\STLux\"***
- Copy "***stlux385.h***" and "***stm8s_type.h***" files into the created directory
  (this files are into the "inc" directory on STLux_library files and need administrator access)
- Add the "inc\STLux" directory to your IDE project

Start Raisonance Ride 7

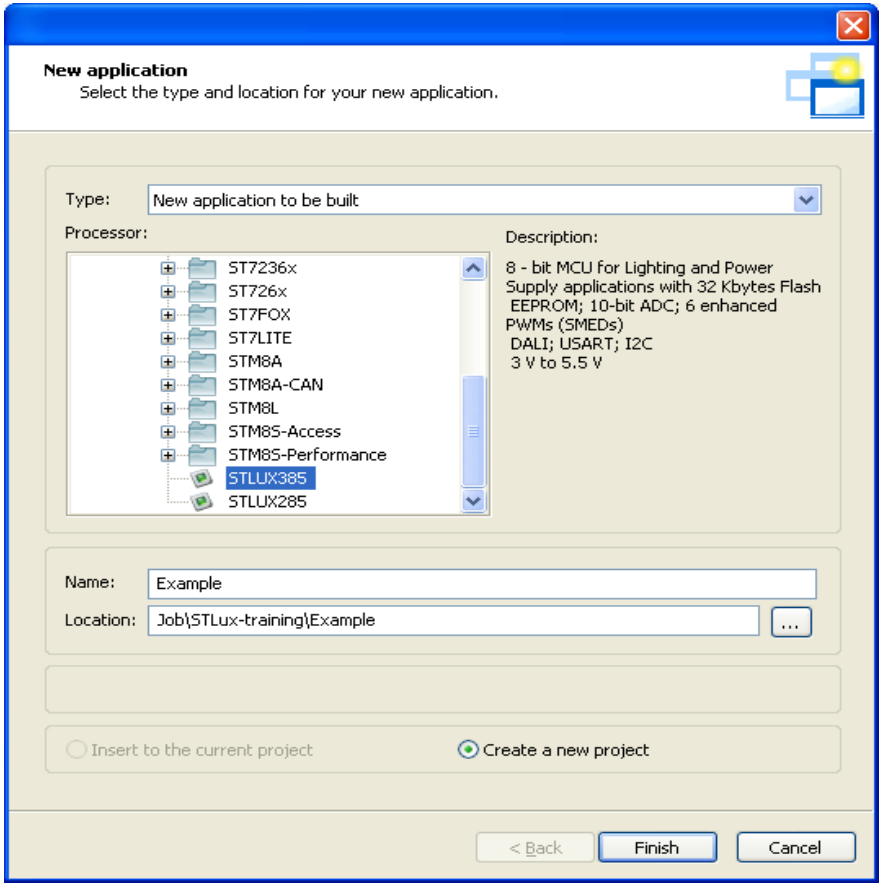
- The following screenshot shows the Ride7 program starting screen



See on help menu "***View documentation***" for a complete reference.

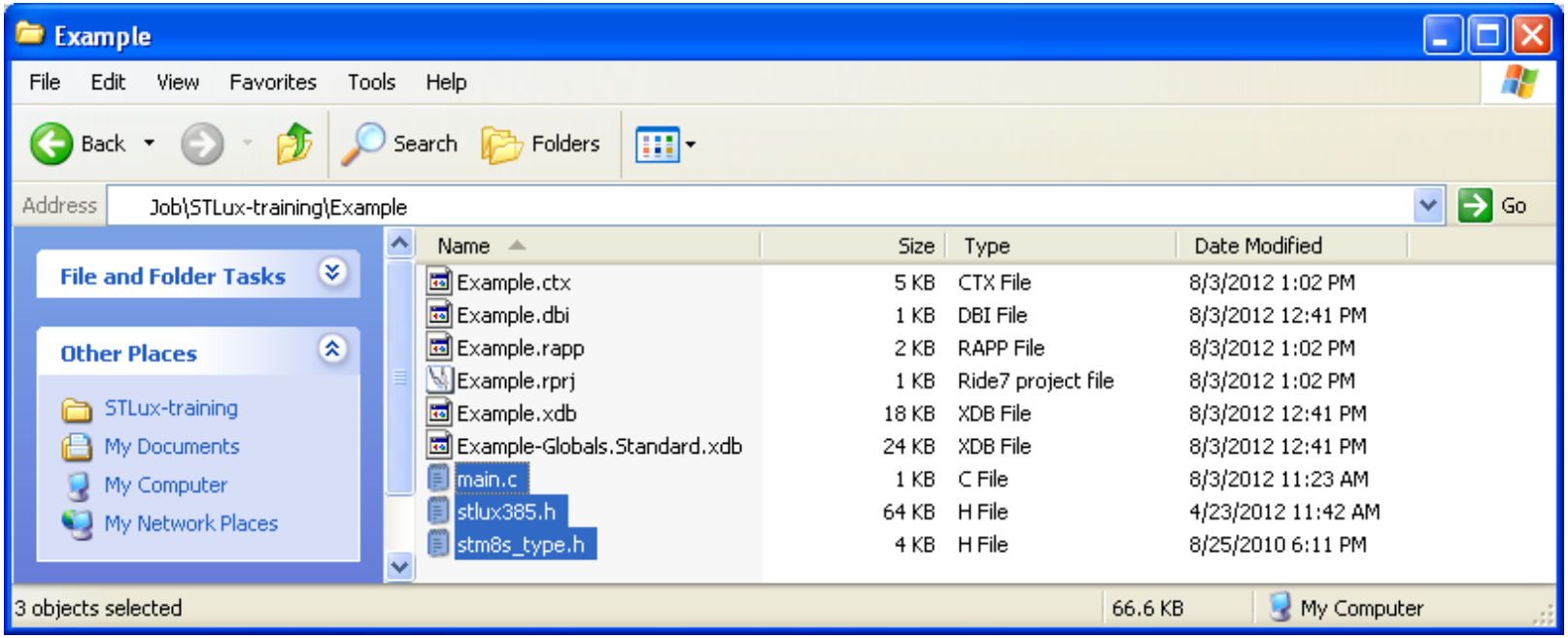
Setup your project

- Using "***Project->New Project***" menu select STLUX385 processor and define new project name / directory when store the source code.



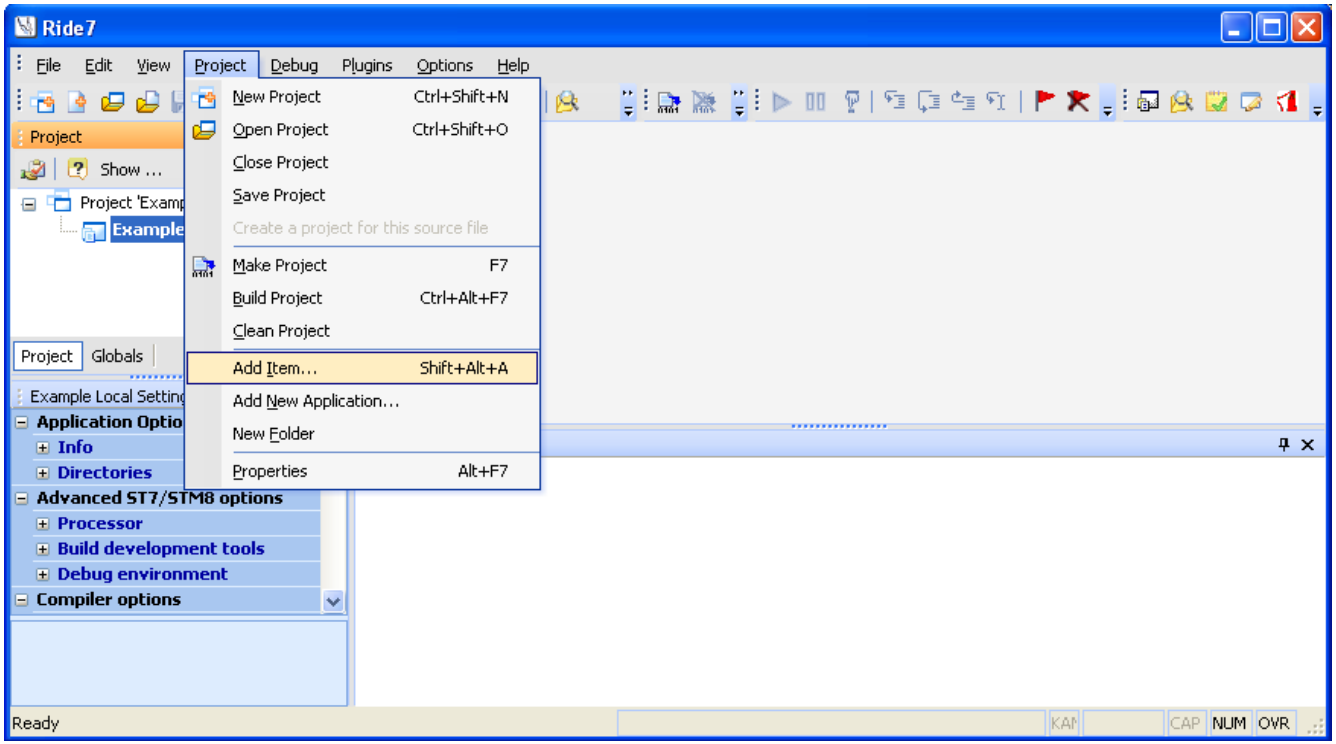
Insert standard files

- Insert into working directory the “*stm8s_type.h*”, “*stlux385.h*” files and create, with your preferred editor, the “*main.c*” file



Insert your source file

- Insert into your project the "*main.c*" files using "***Project->Add Item***" (or type "***Shift+Alt+A***" key), the result is like this.



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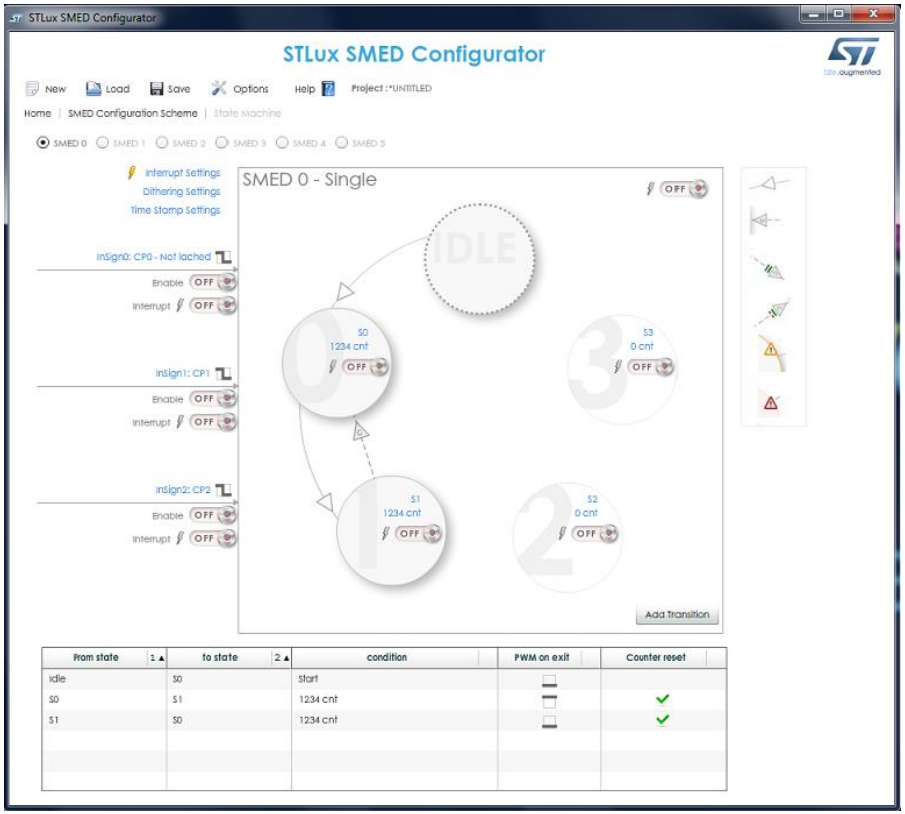
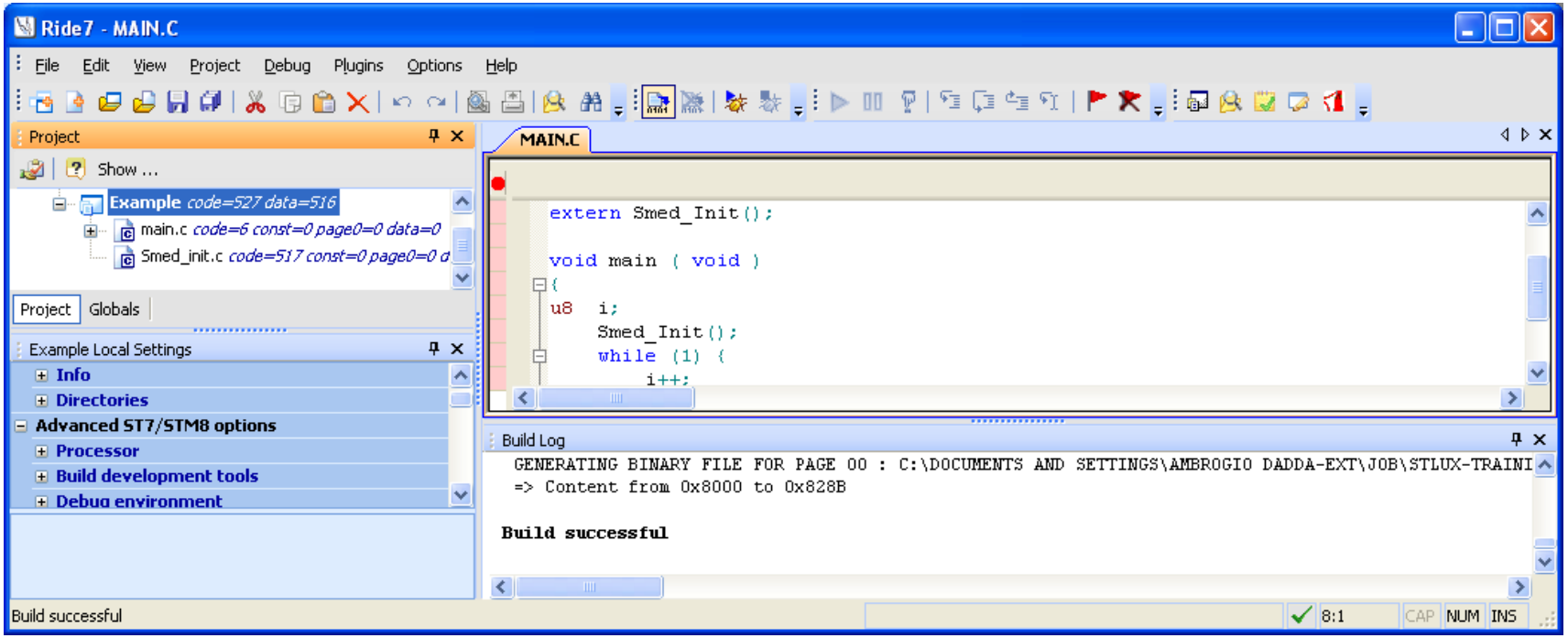


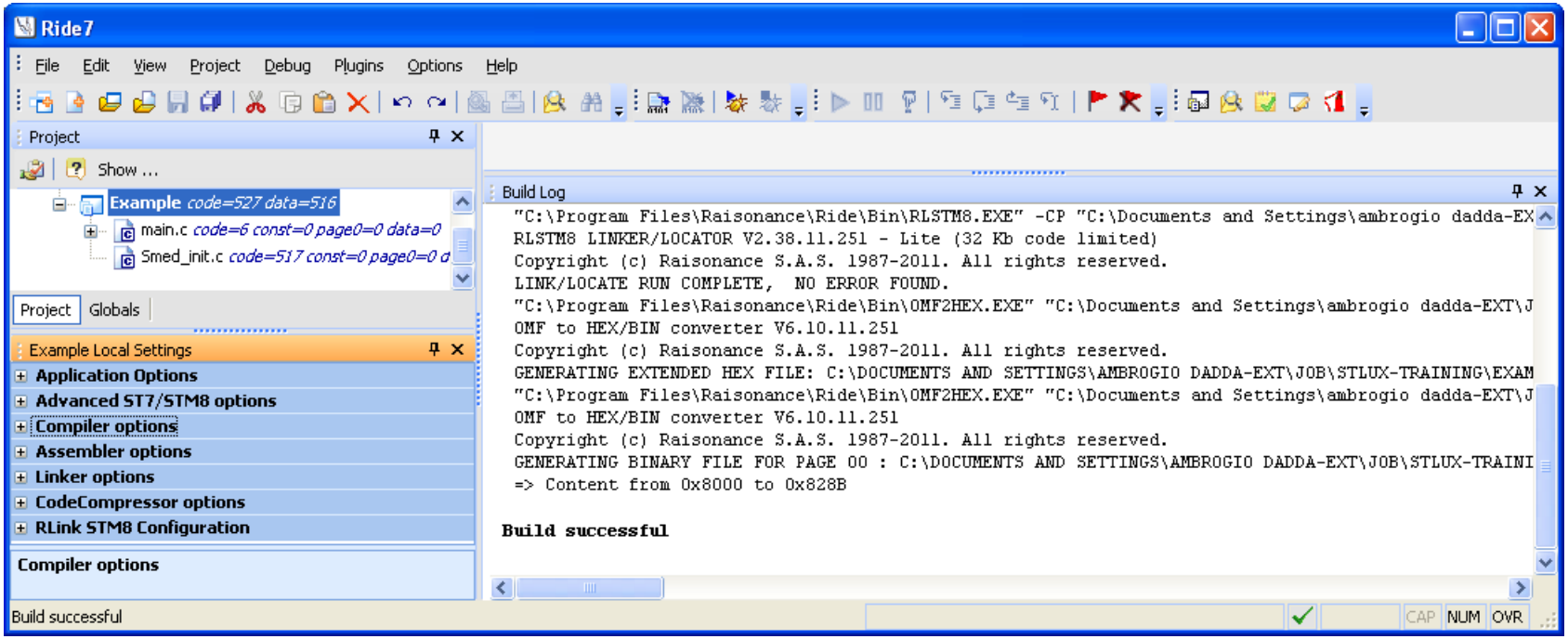
Compile the source files

- Compile your project using the proper icon , or using "***Project->Make project***" menu or type "***F7***" key.



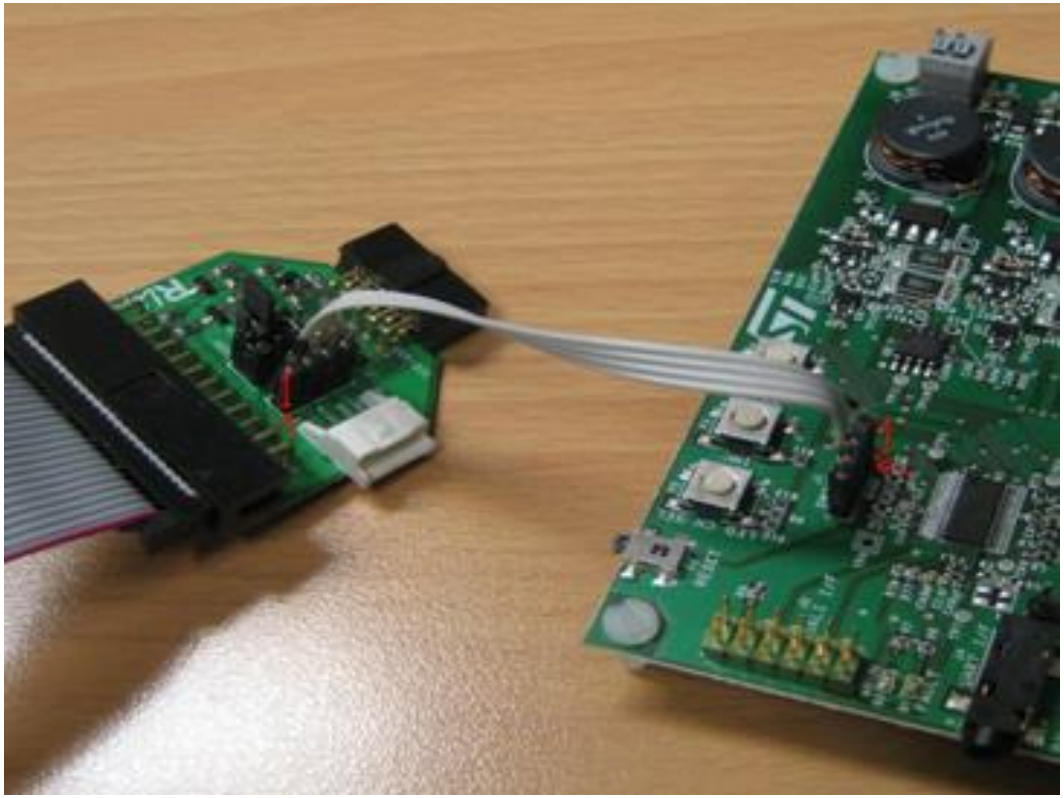
Analyze the compilation result

- The result of compilation phases is like this.
  - On "***Project"*** windows there is a code occupation summary,
  - On the "***Build log***" windows there is, if present, the error information summary or "***Build successful***" message if the compilation is correct



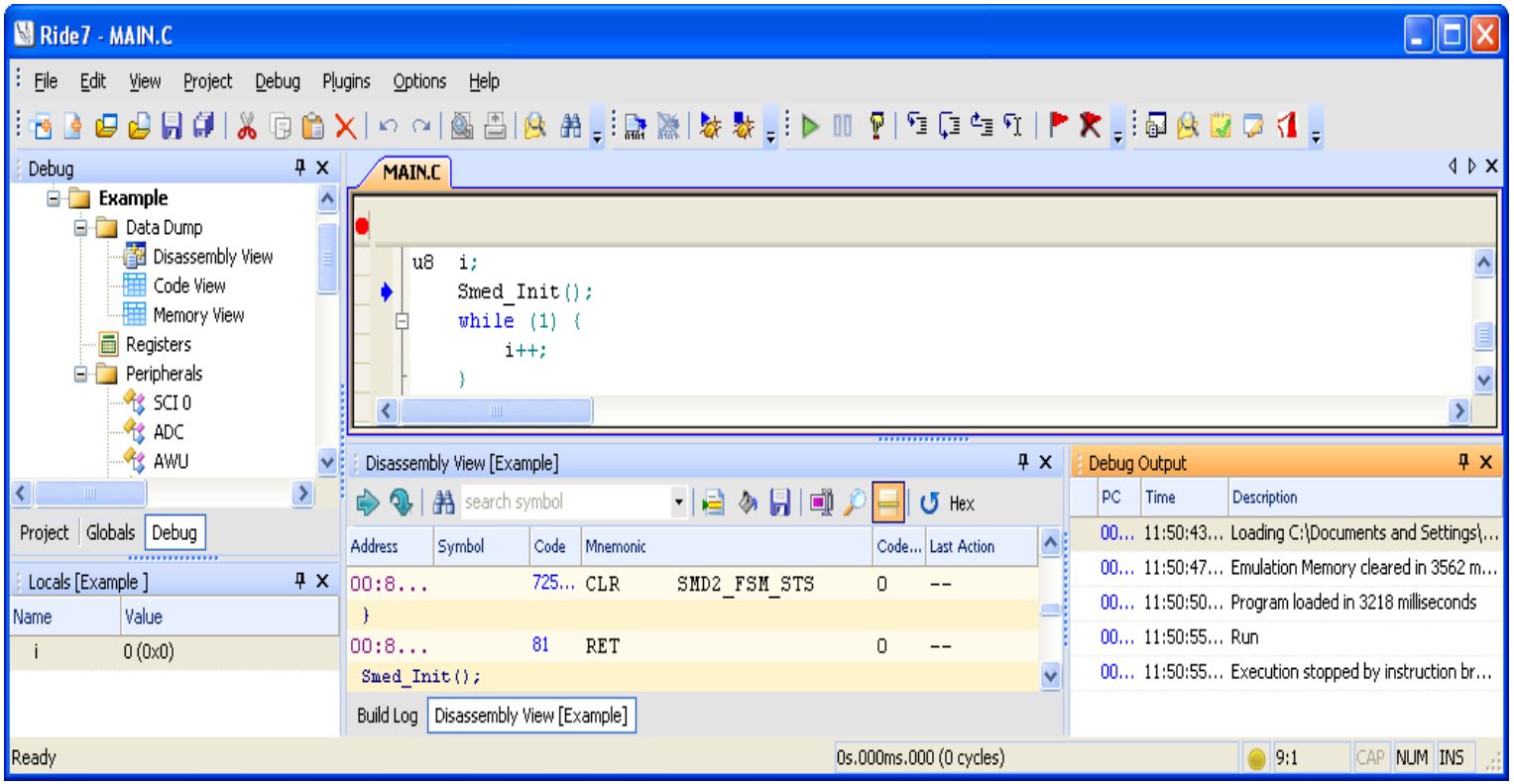
Connect Rlink on target

- Connect Rlink-USB cable on PC
- Connect SWIM cable (see figure) only when target are powered



Debug directly on source

- Using the proper icon entering into debug phases
- Run the target code by and stop execution it by icon

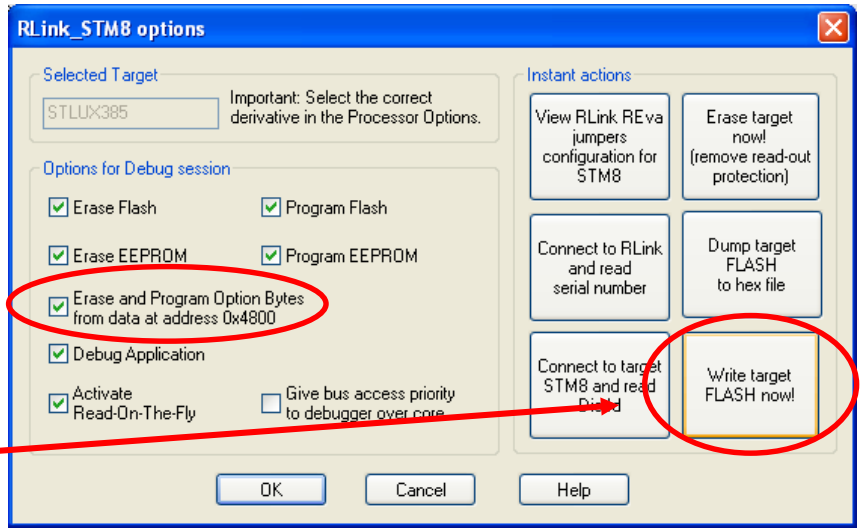


Write code into target

- Using "***Local Settings***" windows select on "***RLink STM8 configuration***" item the "***click here to open options dialog box***". The result is that's:

Remove this option if your program do not restore the option byte

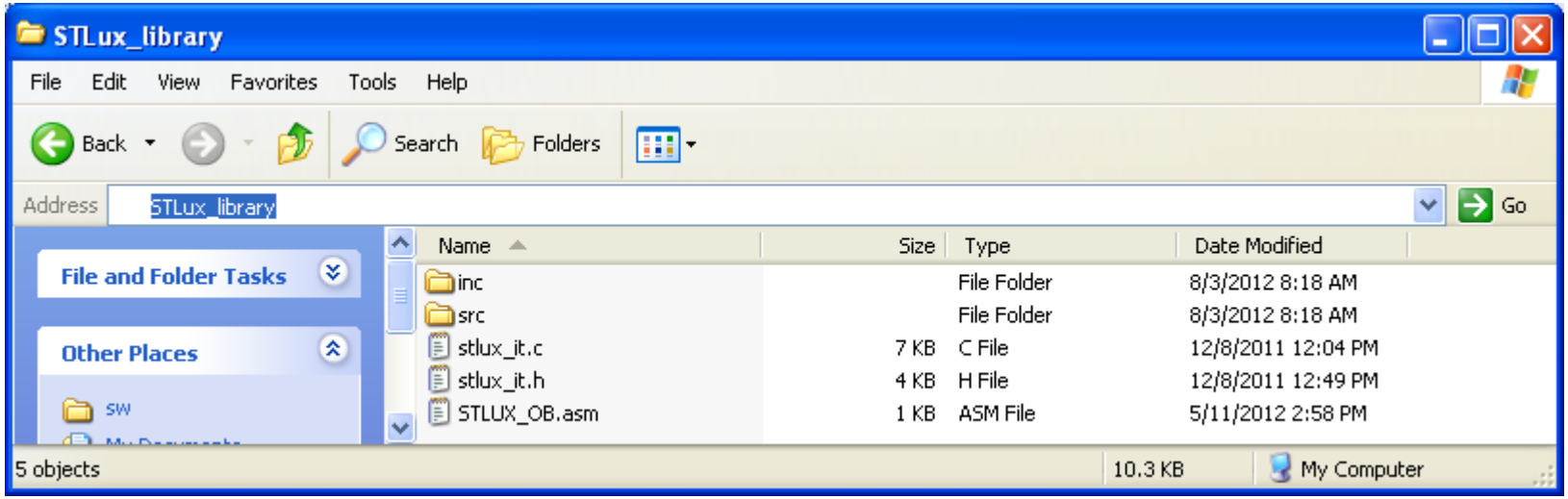
Write binary into the target



- Power your target and connect the Rlink, program it by "***Write target FLASH now***" button.
- **NOTE:** If the "***RLink STM8 configuration***" is not present, probably the simulator is active. In this case navigate into "***Local Settings***" windows and search "***Debug environment***" to enable the Rlink hardware tools
- **NOTE**: If your project do not handle the option byte please remove the "***Erase and Program Option Bytes from data at address 0x4800***" flag

The STLux Library

- The STLux library is the simple way to understand the peripheral on the STLux.
- It is free of charge: contact STM Sales people to receive it
- On "***inc\stlux.h***" files there is all reference information for STLUX and STNRG family. Use it when access to the STLUX-STNRG peripherals on your code



Thank you very much for your attention