Installing and Checking the Installation of the CLEARSY Safety Platform

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11th March 2025

Royal Academy of Engineering

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Installation

- Install **ATELIER B** 24.04 CSP EDUCATIONAL VERSION Windows (unfortunately other OS cannot be used for the session)
  - Download page: https://www.atelierb.eu/en/atelier-b-support-maintenance/download-atelier-b/
  - Direct link: https://www.atelierb.eu/wp-content/uploads/2024/09/atelierb-cssp-24.04.exe
- Execute the Atelier B installer
- Install **Python** (3.6+) if not yet installed on your computer:
  - Download page: https://apps.microsoft.com/detail/9pnrbtzxmb4z?hl=en-us&gl=US
  - Download page: https://www.python.org/downloads/windows/ (and rename python.exe as python3.exe)
- Install **Cmake**
  - Download page: https://cmake.org/download/
  - Add the cmake/bin directory to the PATH
- Install **MinGW**
  - Download page: https://winlibs.com
  - Select the latest UCRT version with the POSIX
  - Add the mingw64/bin directory to the PATH

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Troubleshooting (Python installation)

- Python is often installed several times on your computer.
- Atelier B CSSP 24.04 requires **python3.exe** and **pip3.exe** to be in the PATH

- Type in a DOS terminal: *where python3*
  - You should get C:\Users\<user>\AppData\Local\Microsoft\WindowsApps\python3.exe
- Type in a DOS terminal: *where pip3*
  - You should get C:\Users\<user>\AppData\Local\Microsoft\WindowsApps\pip3.exe

- You should get the same path
- If not, either change your PATH to point to the correct directory, or copy and rename resp. python.exe in python3.exe and pip.exe in pip3.exe

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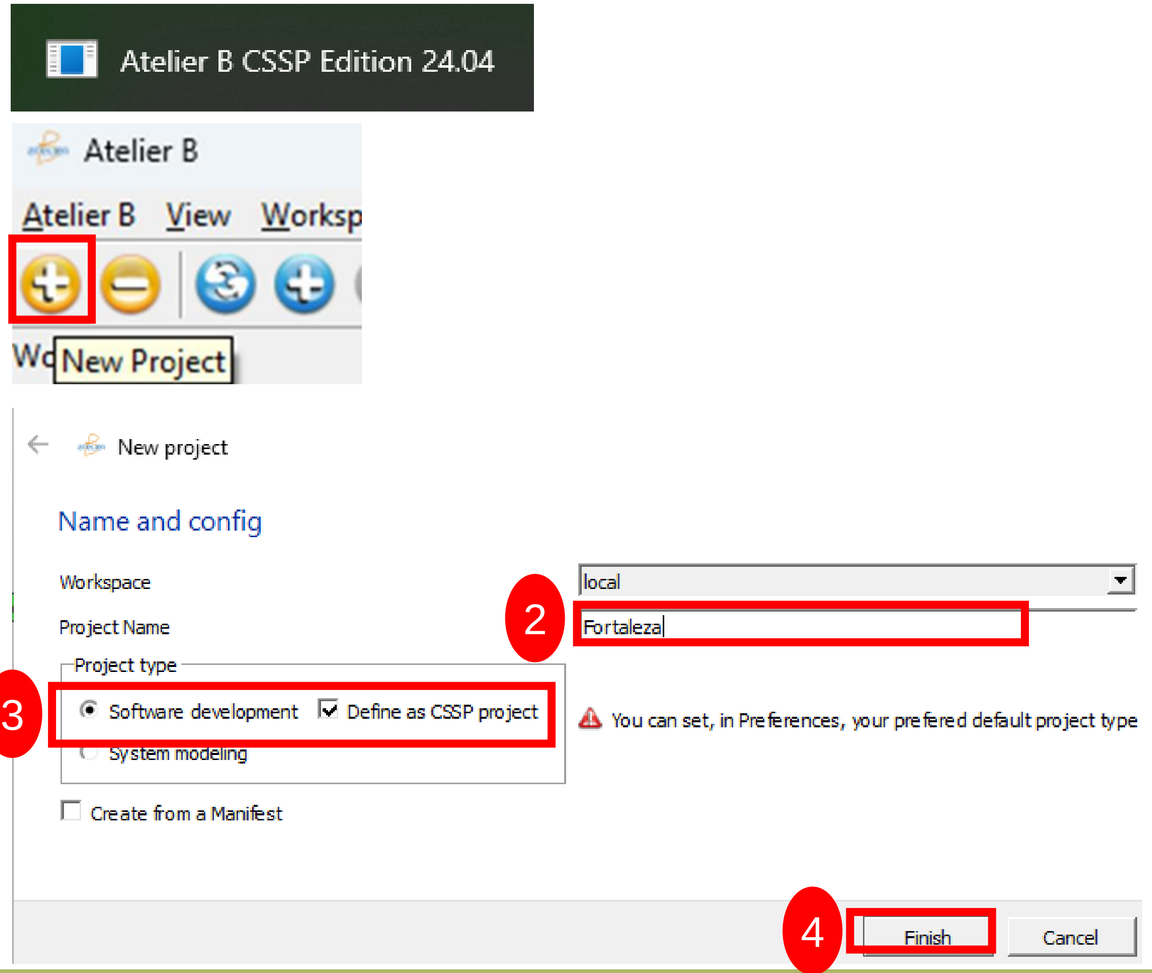
Project Creation 1/3

- Start Atelier B
- Create a new project
- Give a name and a type



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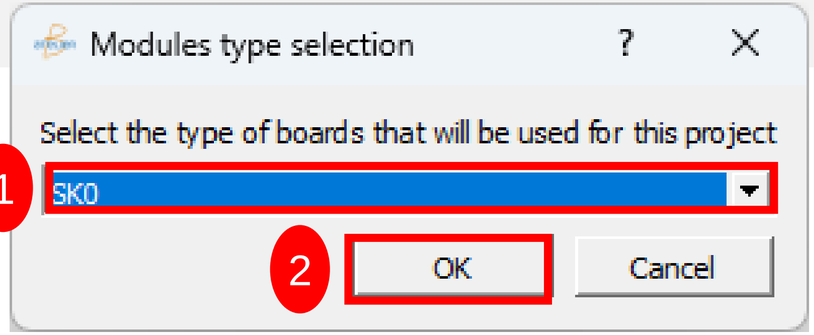
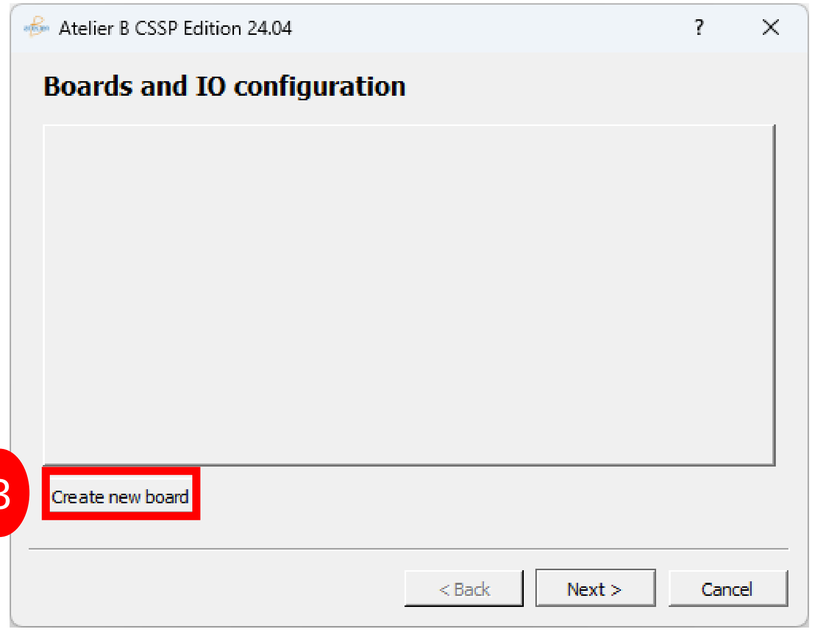
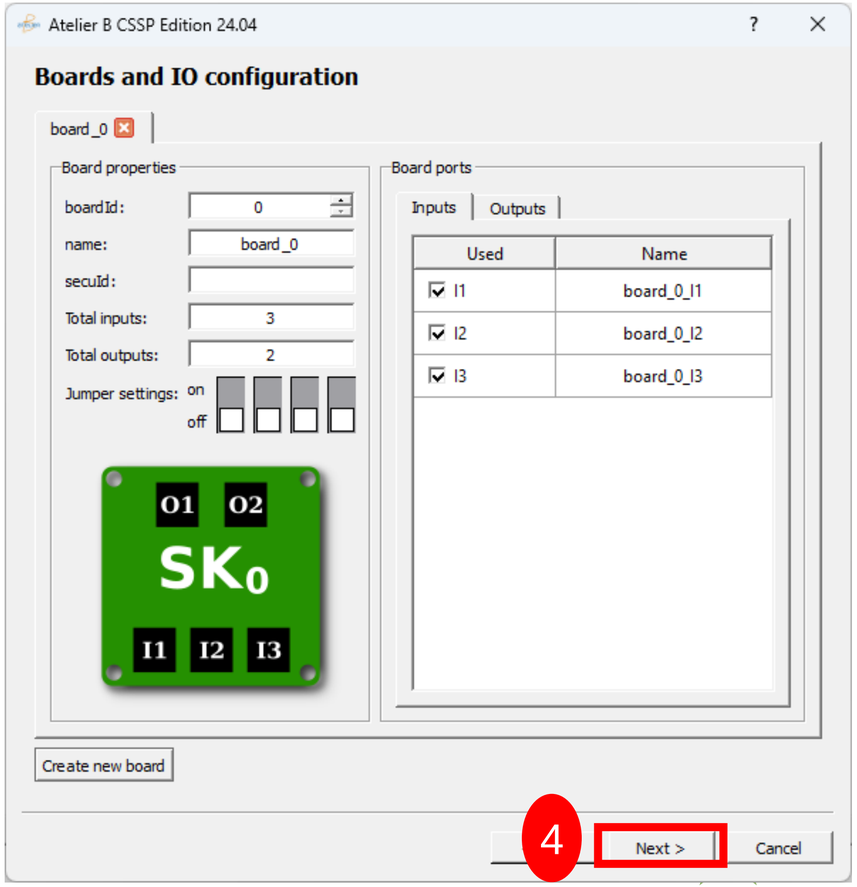
Project Creation 2/3

- Select SK0
- Create a new board







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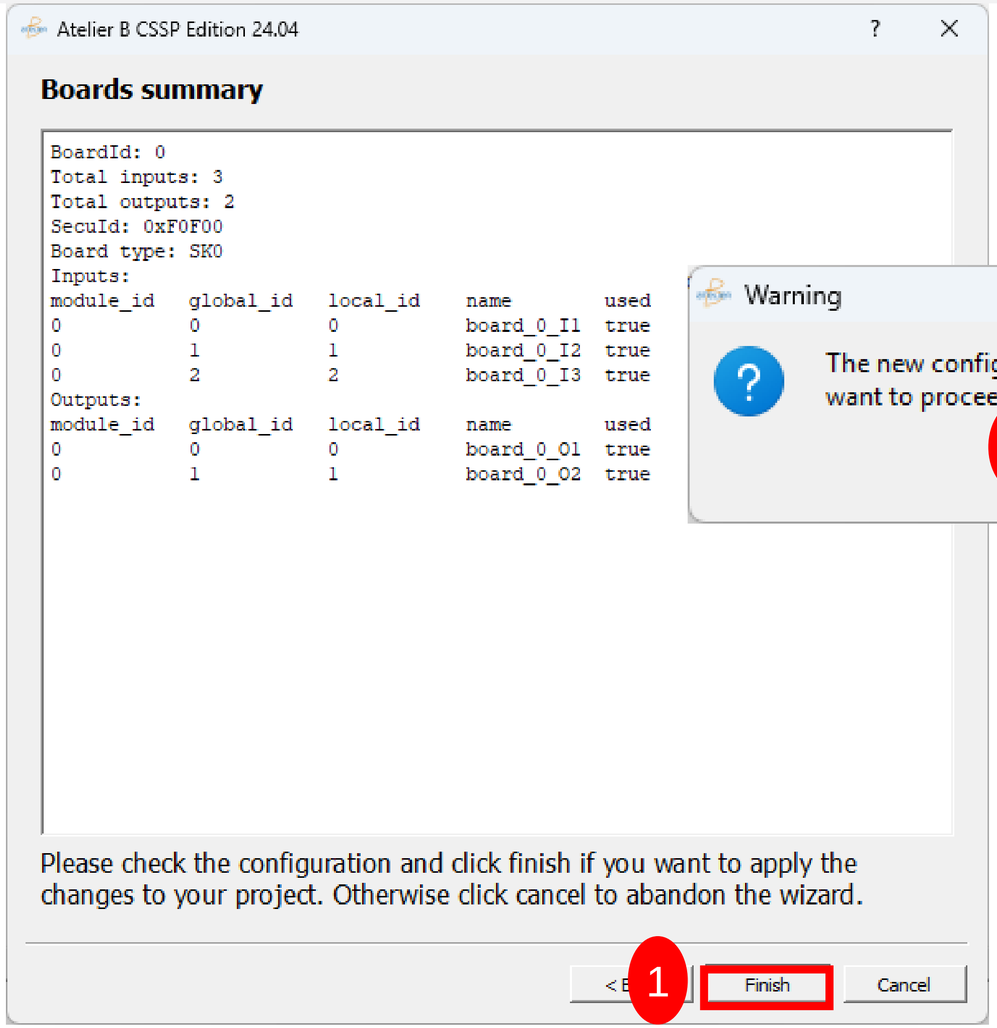
Project Creation 3/3

- Finish the creation



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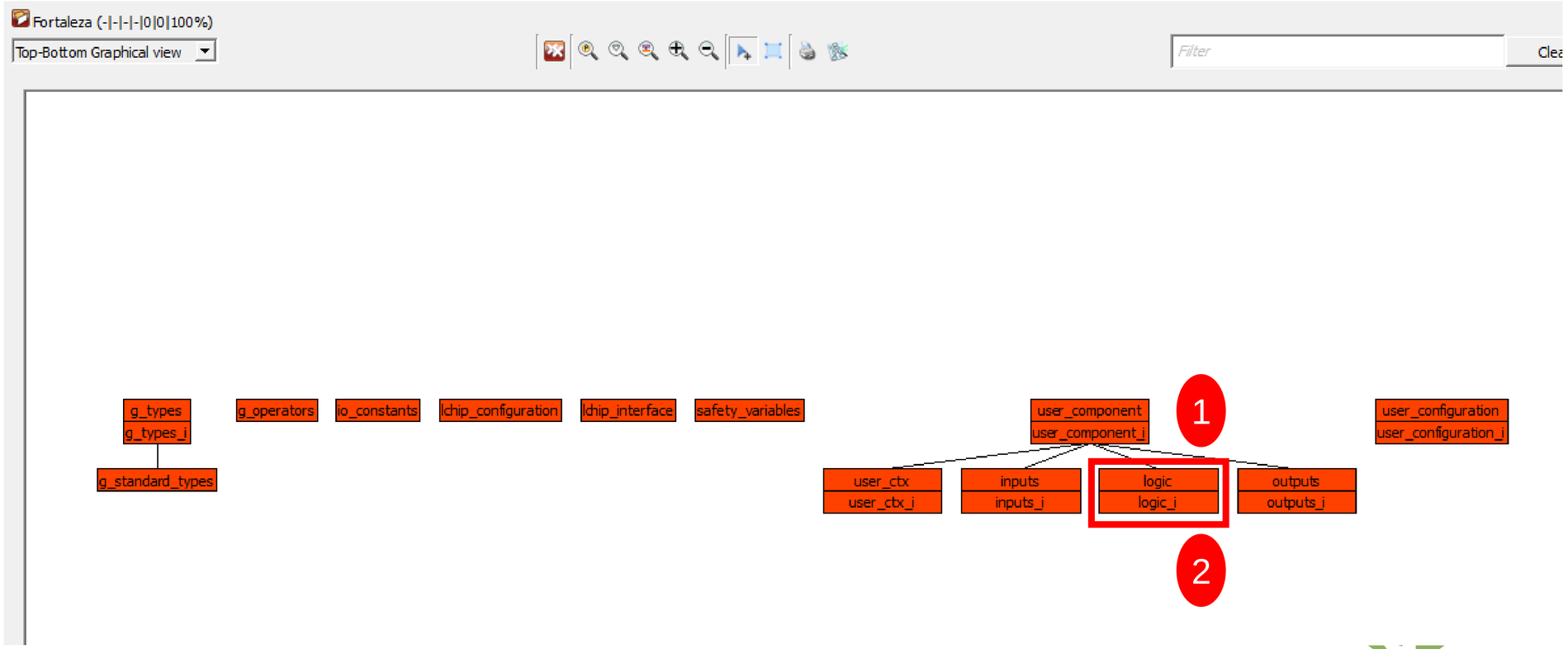
Project Created

- The view
- 2 components to modify



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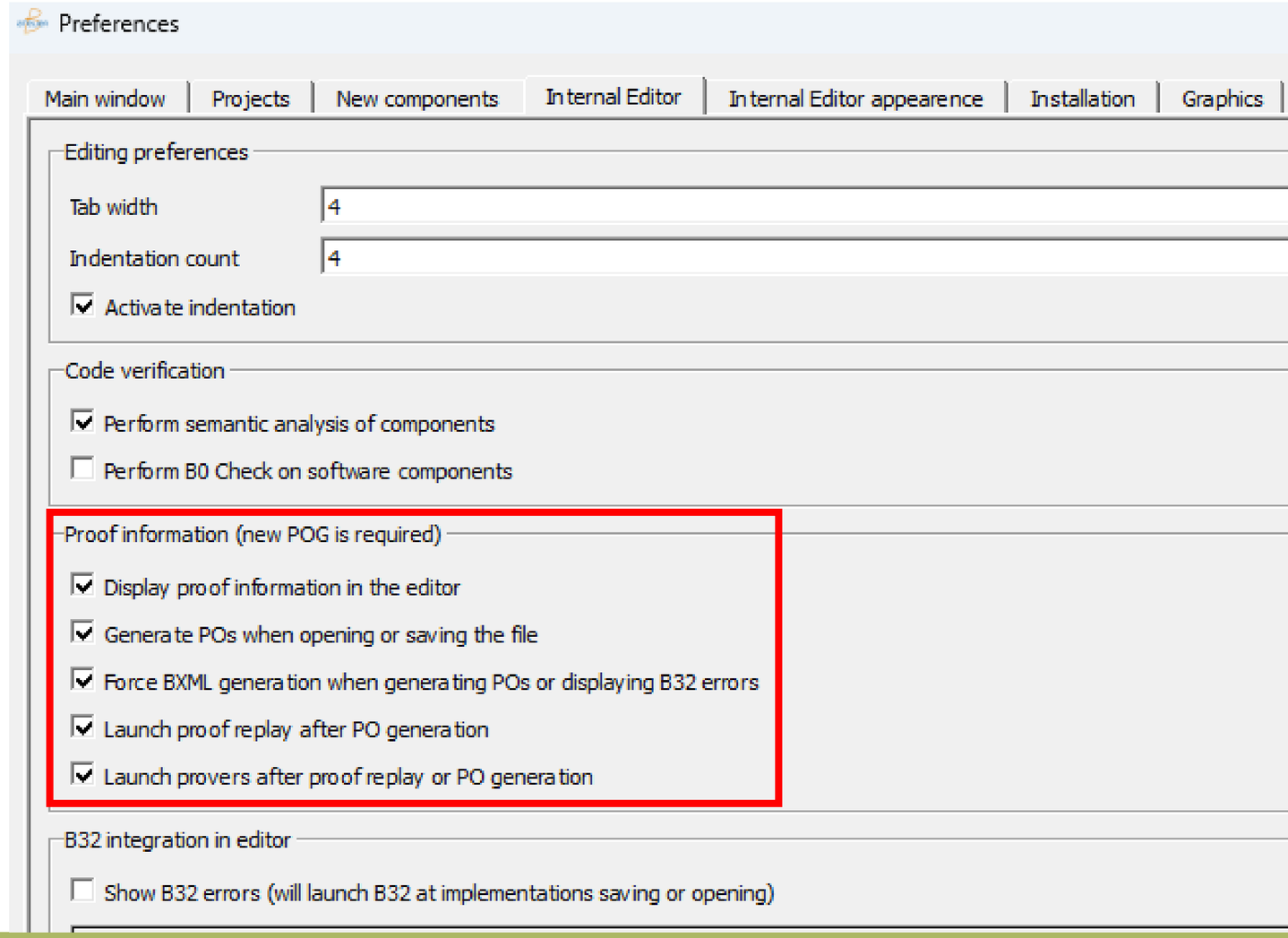
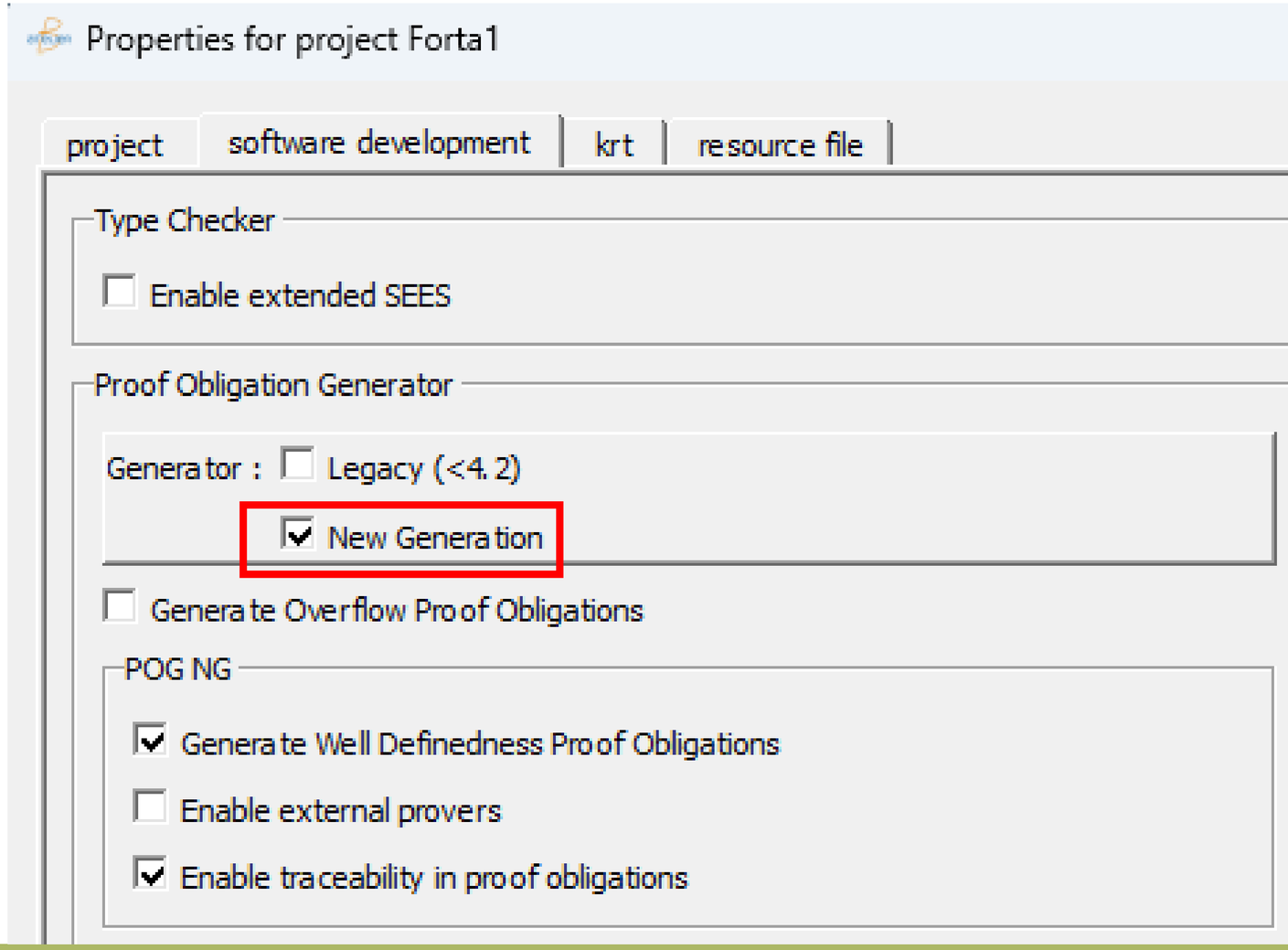
Checking Setup 1/2

- Open menu Atelier B / Preferences
- Select Internal Editor
- Ensure that Proof Information is fully checked



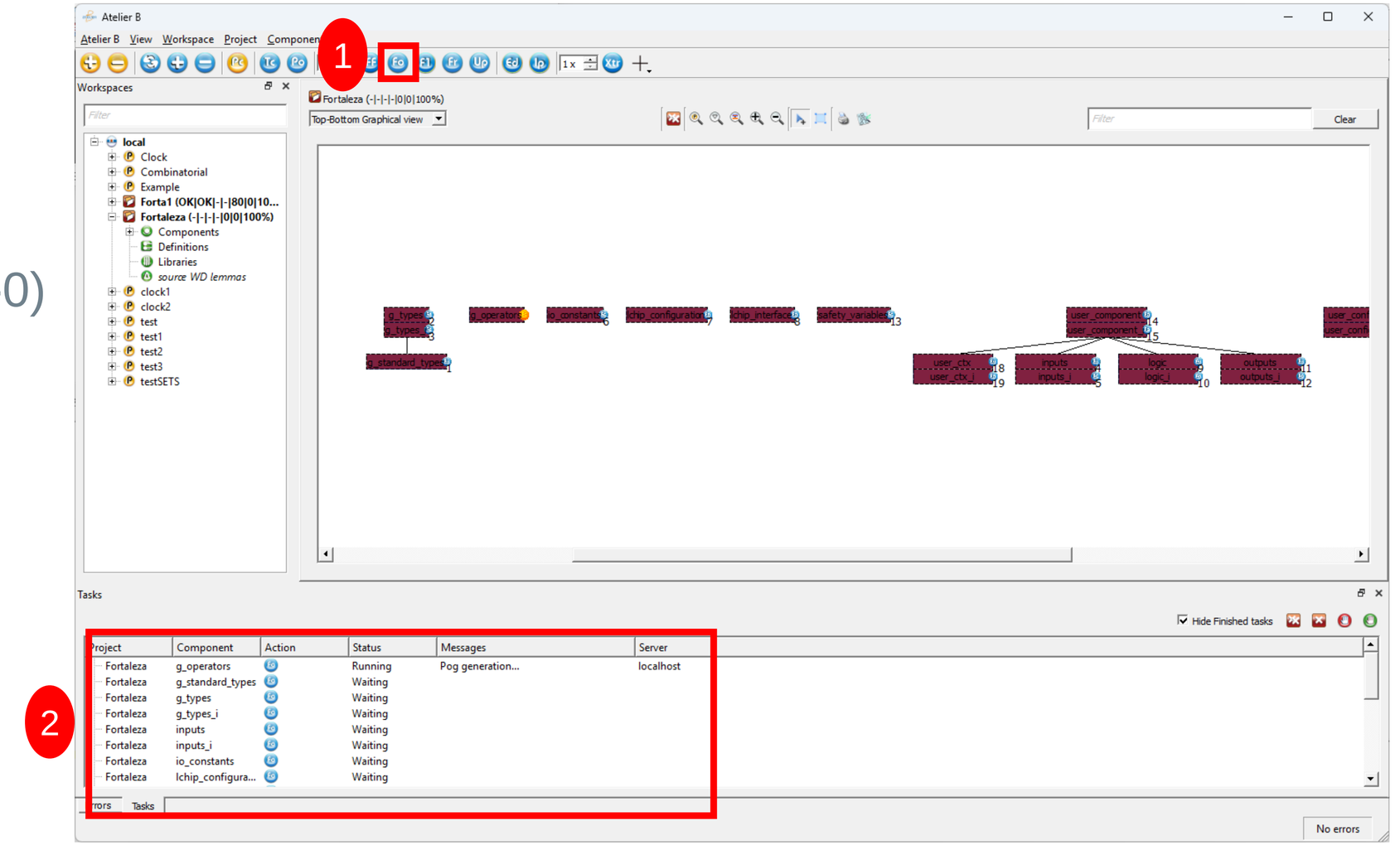
Checking Setup 2/2

- Open your project
- Open menu Project / Properties
- Select Software Development
- Ensure that New Generation is checked in Proof Obligation Generator



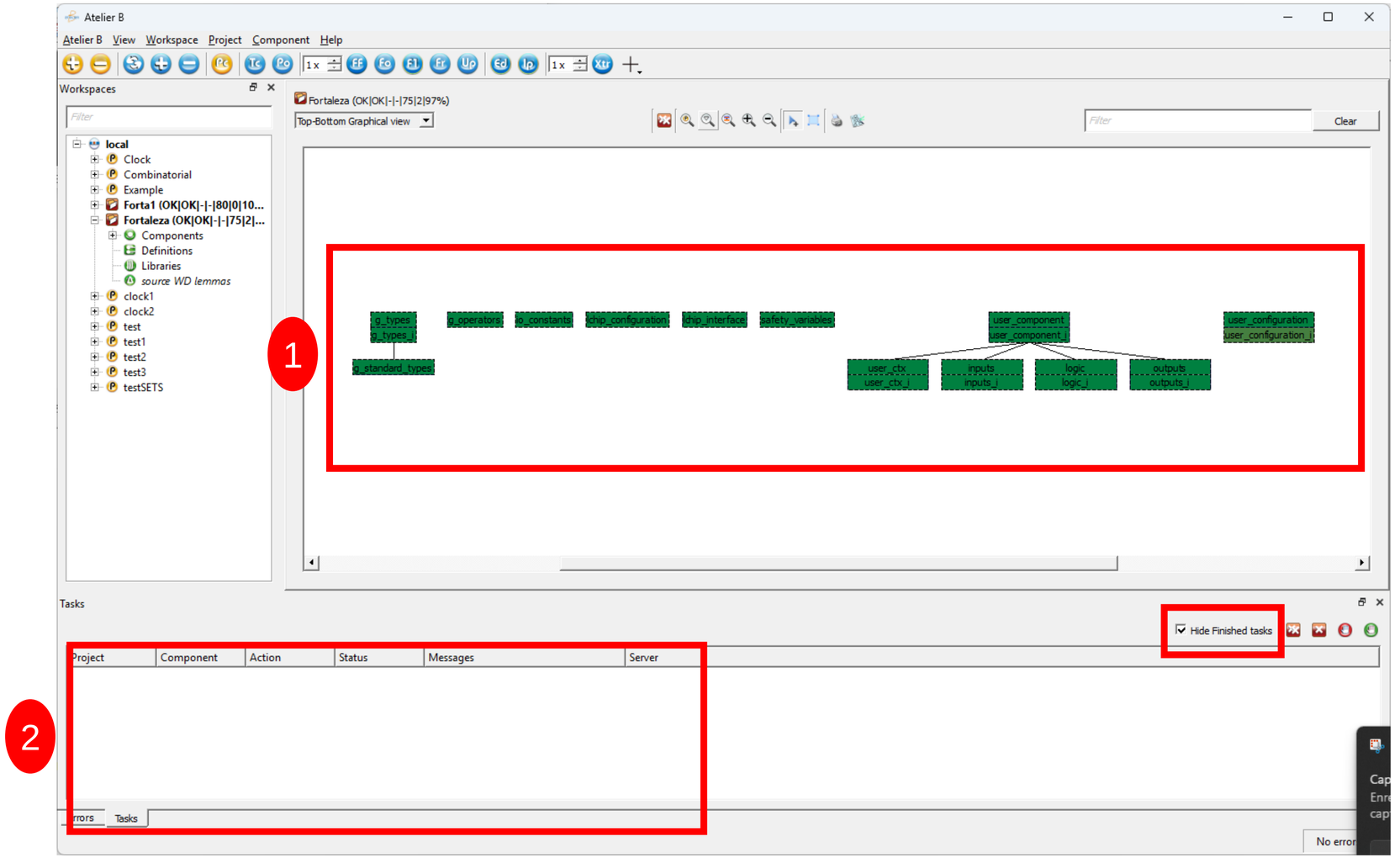
To be sure Your Environment is Operational …1/5

- Select all the components with Ctrl+A
- Start Proof Force 0 (or Ctrl-0)
- Wait for proof to complete



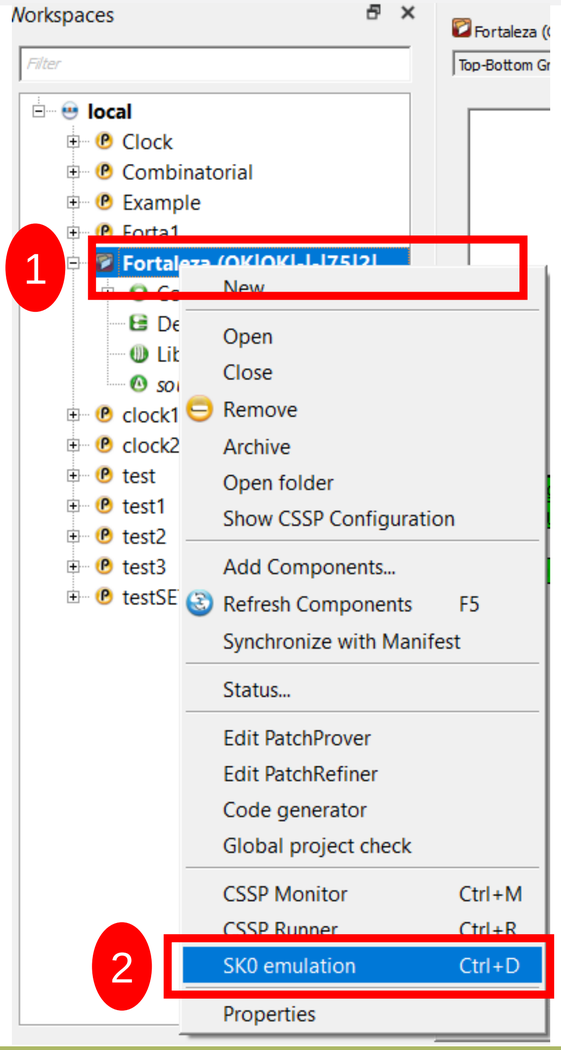
To be sure Your Environment is Operational … 2/5

- All components green
- All tasks completed (select “Hide finished tasks”)



To be sure Your Environment is Operational … 3/5

- Right click on the project
- Select “SK0 emulation” or Ctrl-D



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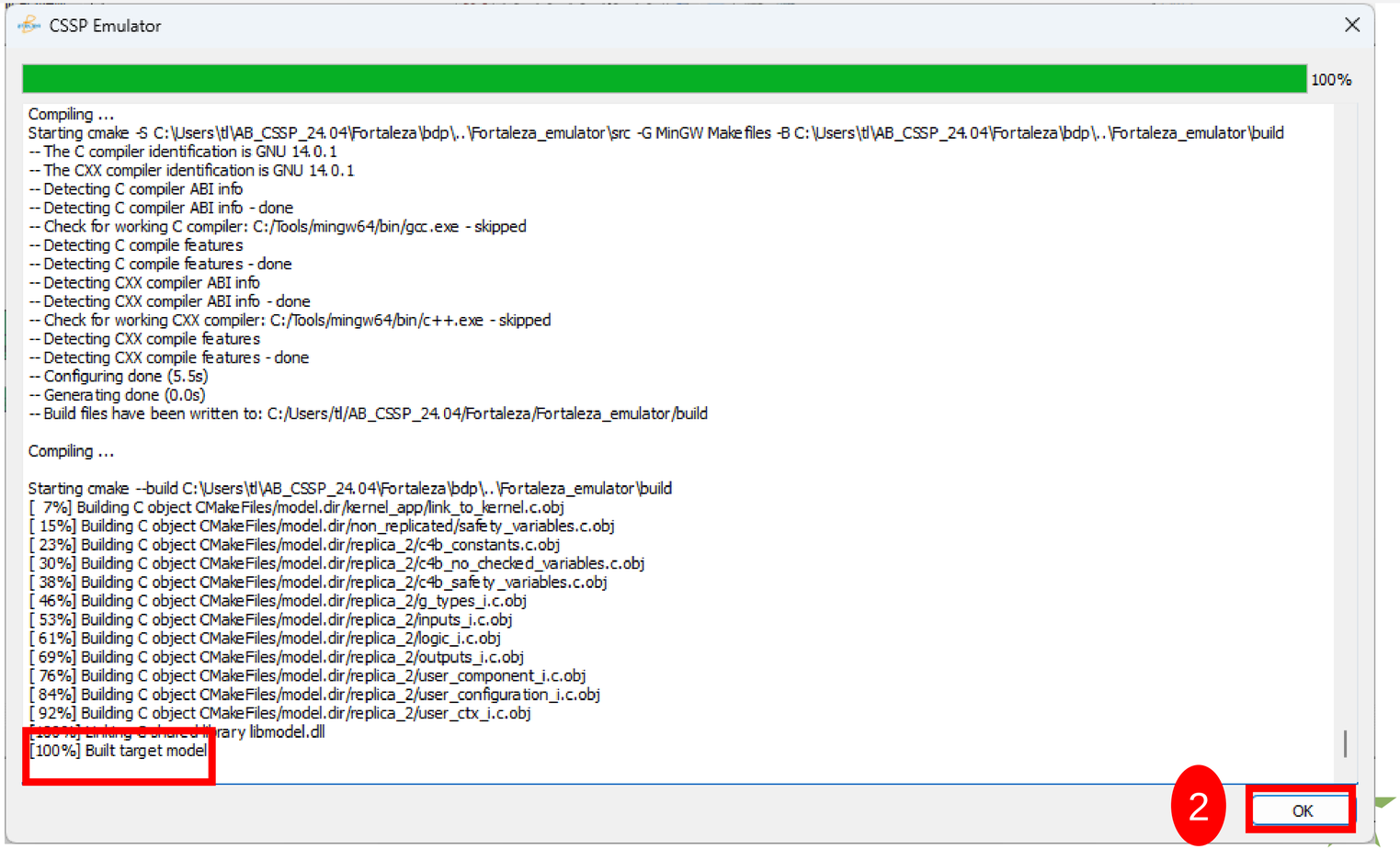
To be sure Your Environment is Operational … 4/5

- After several seconds and verbose messages …
- The process terminates with [100%] Built target model
- Click on OK



If stops before 100%, cmake / gcc installation is probably incomplete

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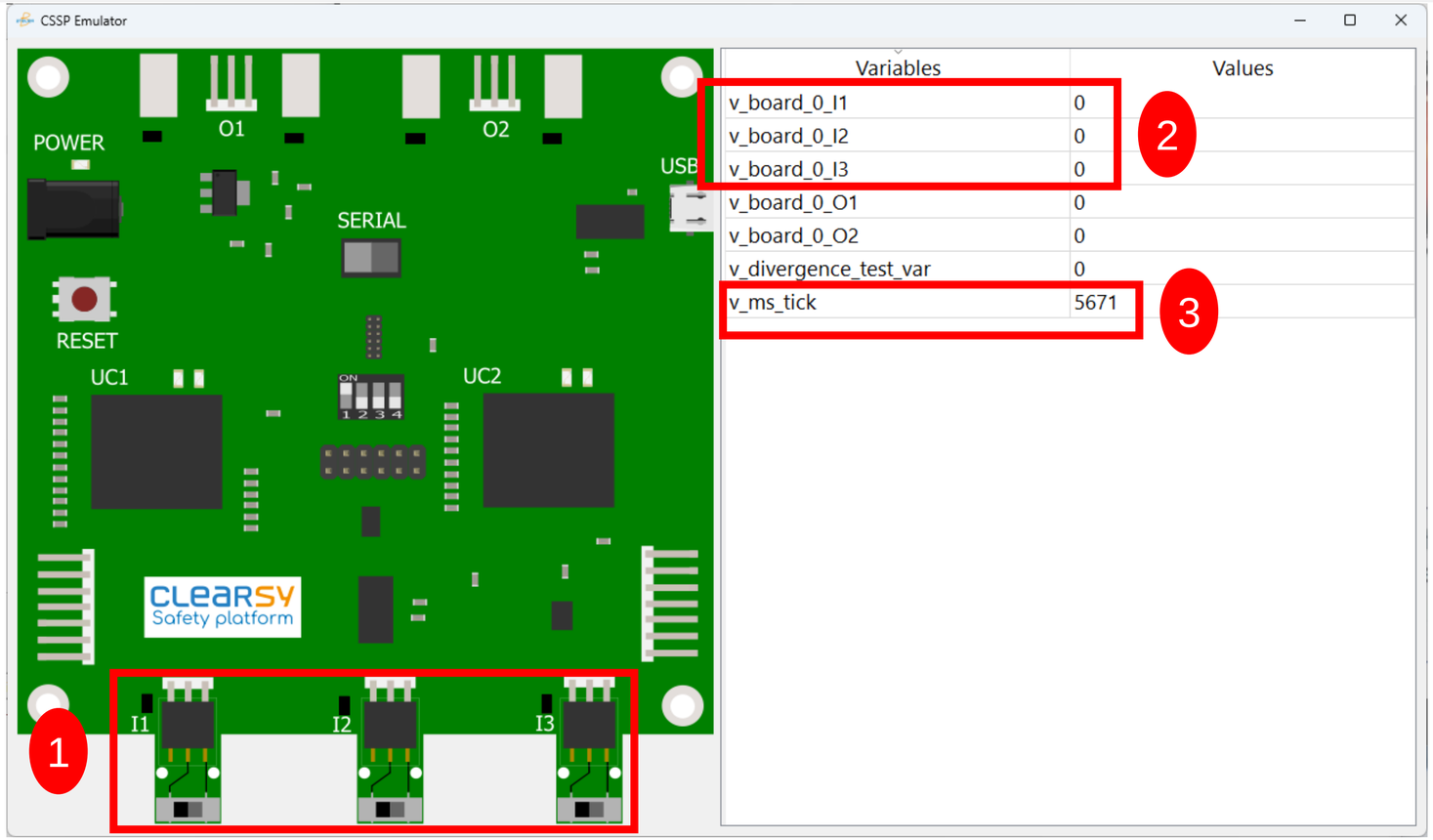
To be sure Your Environment is Operational … 5/5

- The simulator starts
- If you click on I1, I2 or I3, the v_board_0_Ix variables change
- The time flies



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