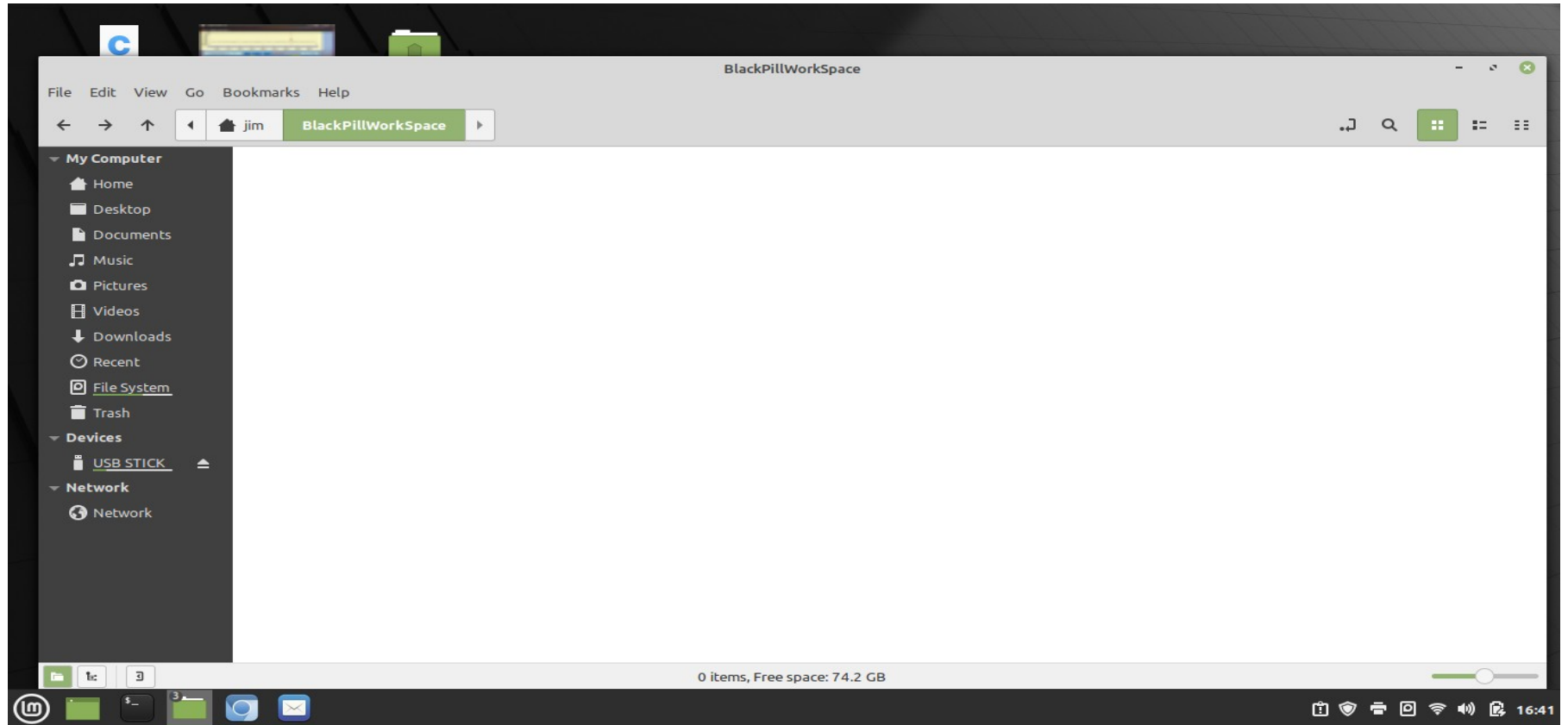


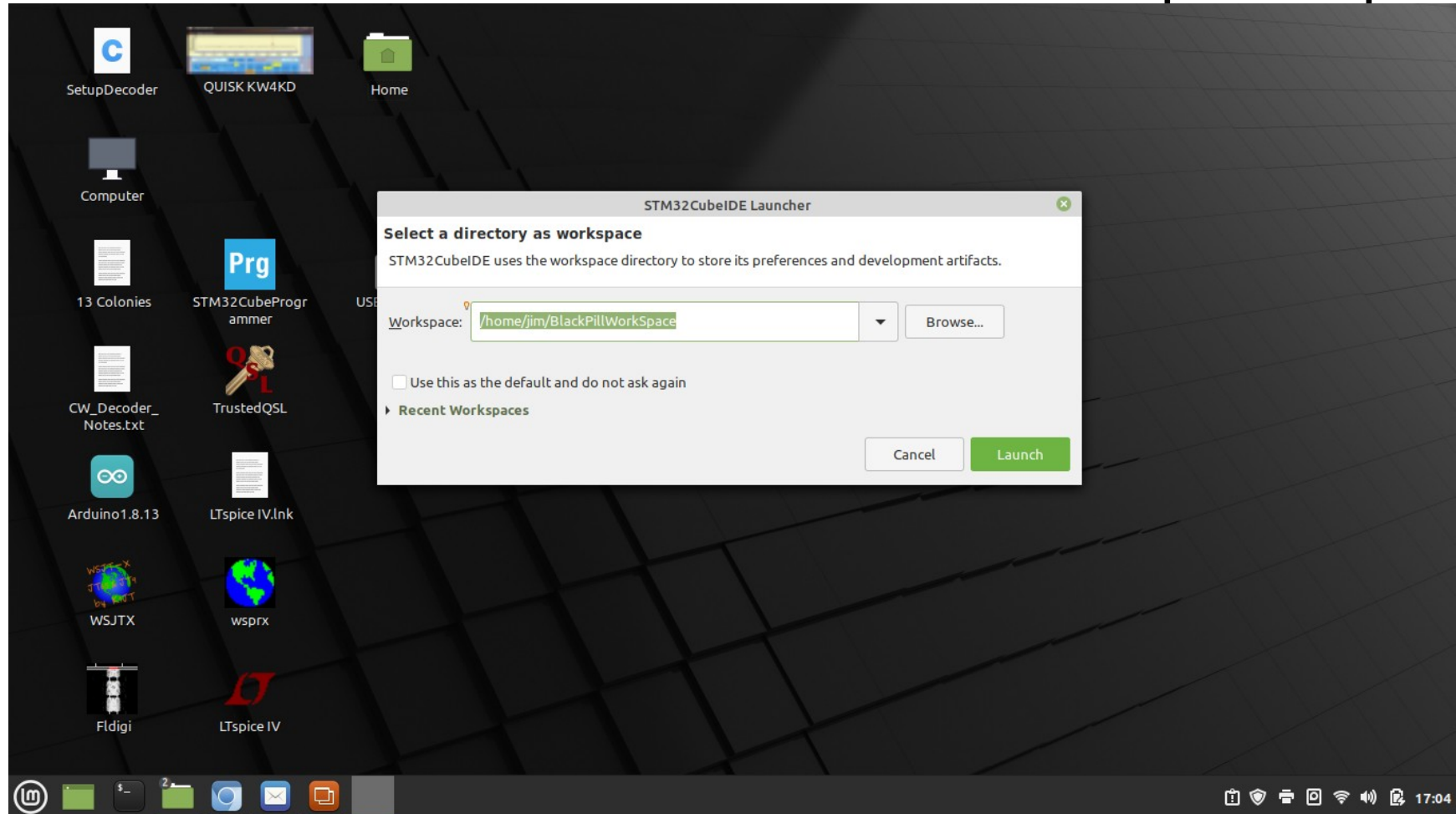
GitHub F411 CW Decoder Project

Import Steps

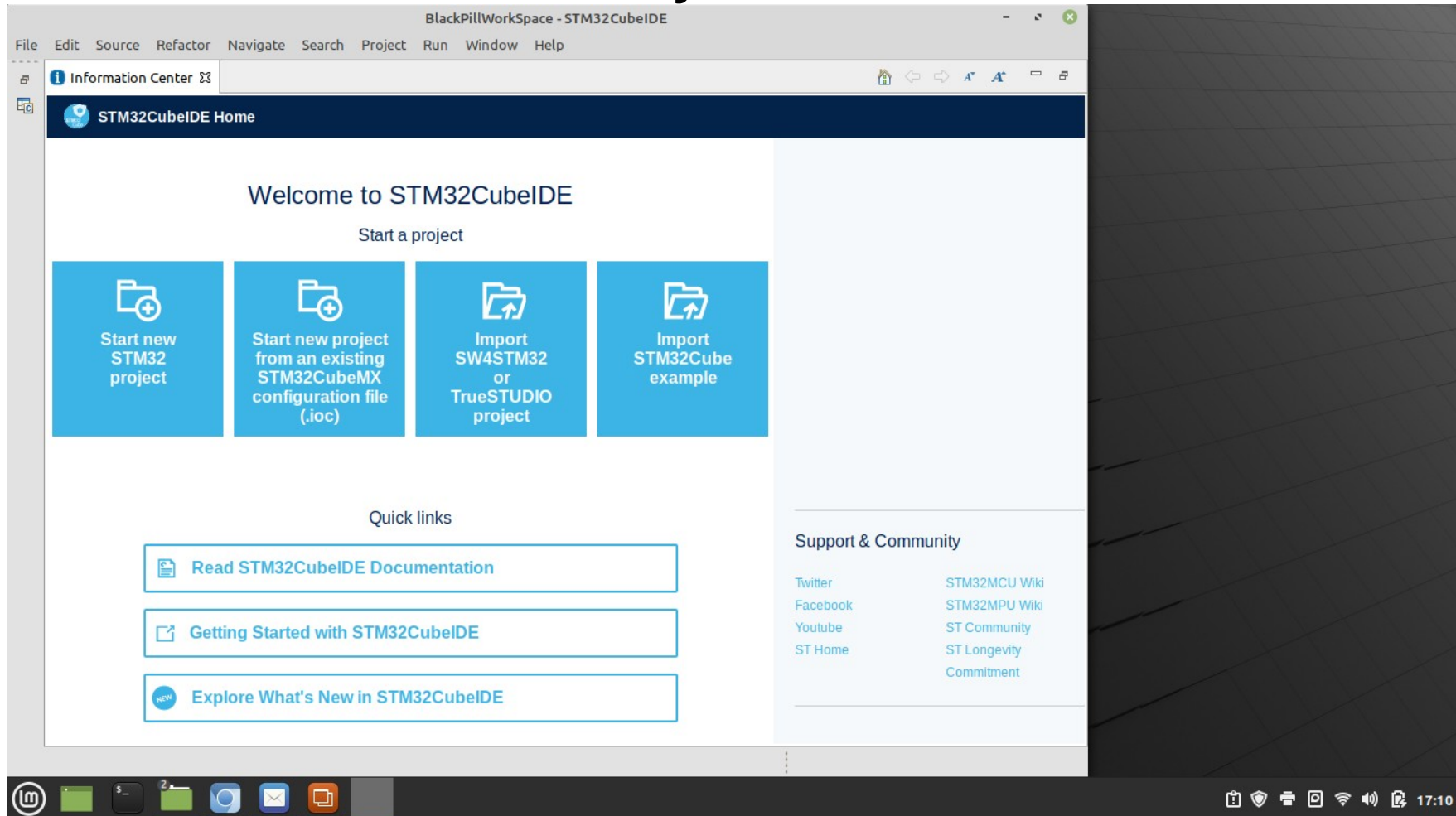
1. Using file manager, Create new blank workspace/folder



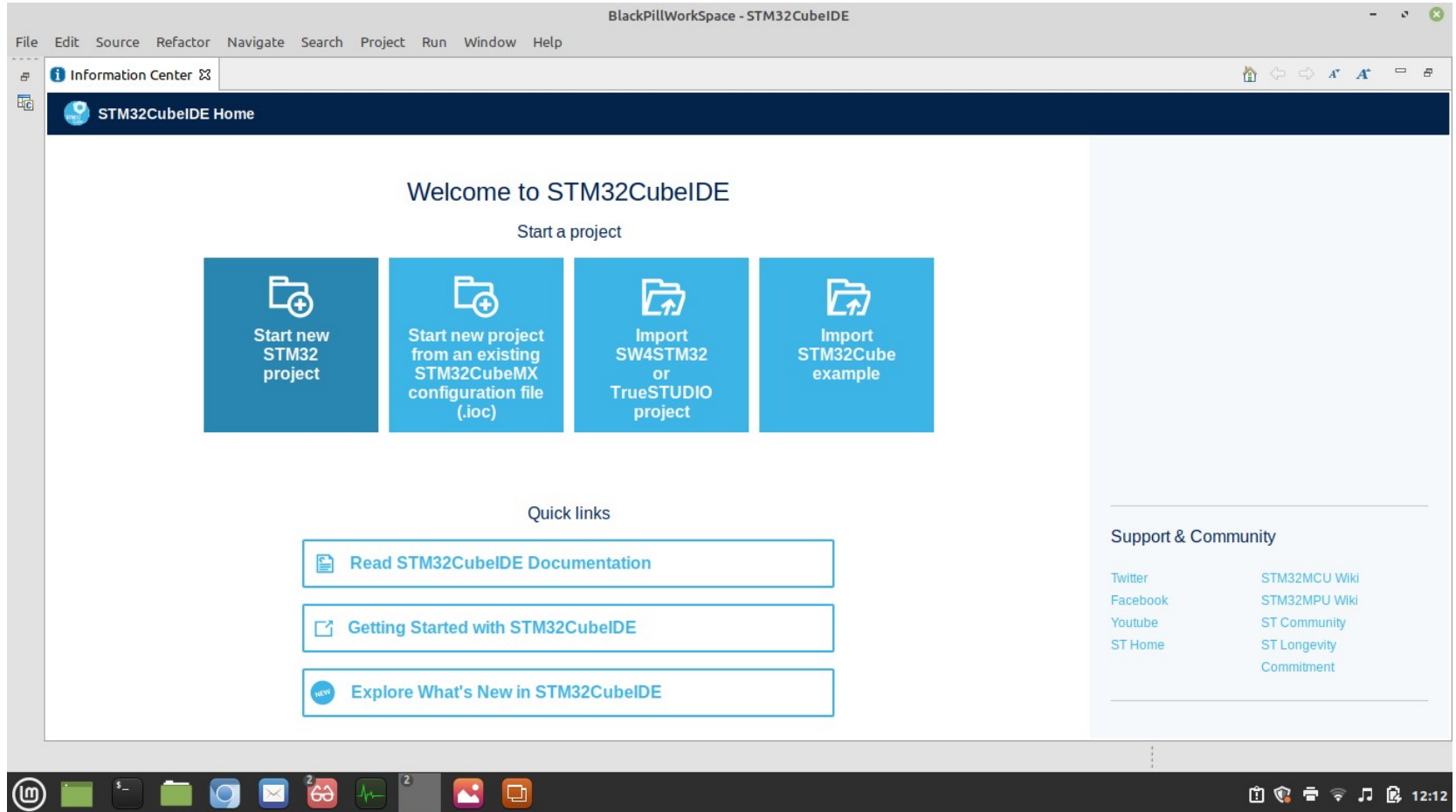
3. Start CUBEIDE & select the folder setup in step 1



4. After some moments you should see this screen:



5. Select “Start New STM32 Project”



6. After some moments you should see this:

STM32 Project

Target Selection

⚠ STM32 target or STM32Cube example selection is required

MCU/MPU Selector Board Selector Example Selector Cross Selector

MCU/MPU Filters

- ★
- 📁
- 🔍
- 🔄

Part Number

Core >

Series >

Line >

Package >

Other >

Peripheral >

Features Block Diagram Docs & Resources Datasheet Buy

★

ST MCU Finder
All STM32 & STM8
MCUs in one place

MCUs/MPUs List: 1826 items

+ Display similar items

Export

*	Part No	Reference	Marketin...	Unit Price...	Board	Package	Flash	RAM	IO	Freq.
☆	STM32F03...	STM32F03...	Active	0.597		LQFP48	32 kBytes	4 kBytes	39	48 MHz
☆	STM32F03...	STM32F03...	Active	0.722		LQFP48	64 kBytes	8 kBytes	39	48 MHz
☆	STM32F03...	STM32F03...	Active	1.1		LQFP48	256 kBytes	32 kBytes	37	48 MHz
☆	STM32F03...	STM32F03...	Active	0.424		TSSOP20	16 kBytes	4 kBytes	15	48 MHz
☆	STM32F03...	STM32F03...	Active	0.518		LQFP32	32 kBytes	4 kBytes	25	48 MHz
☆	STM32F03...	STM32F03...	Active	0.754	NUCL...STM3...	LQFP64	64 kBytes	8 kBytes	55	48 MHz

< Back Next > Cancel Finish

12:17

7. Enter “STM32F411CE” in the “Part Number” box.
Select the “UFQFPN48” Package, & click the “Next” button.

Target Selection
Select STM32 target or STM32Cube example

MCU/MPU Selector | Board Selector | Example Selector | Cross Selector

MCU/MPU Filters

- Part Number: STM32F411CE
- Core: >
- Series: >
- Line: >
- Package: >
- Other: >
- Peripheral: >

STM32F4 Series

STM32F411CE
High-performance access line, Arm Cortex-M4 core with DSP and FPU, 512 Kbytes of Flash memory, 100 MHz CPU, ART Accelerator

ACTIVE Active
Product is in mass production

Unit Price for 10kU (US\$) : 2.795

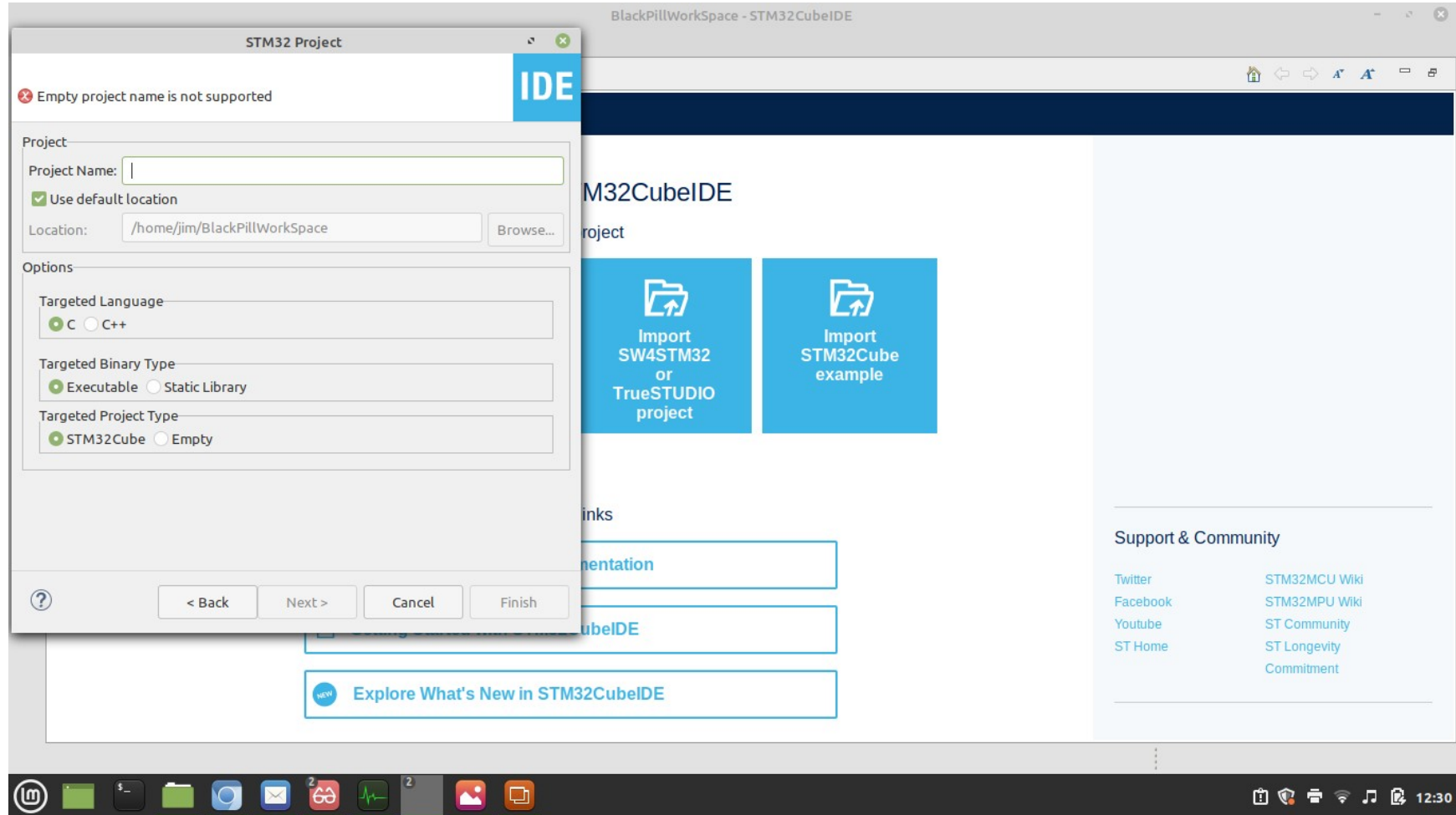
UFQFPN48

MCUs/MPUs List: 2 items

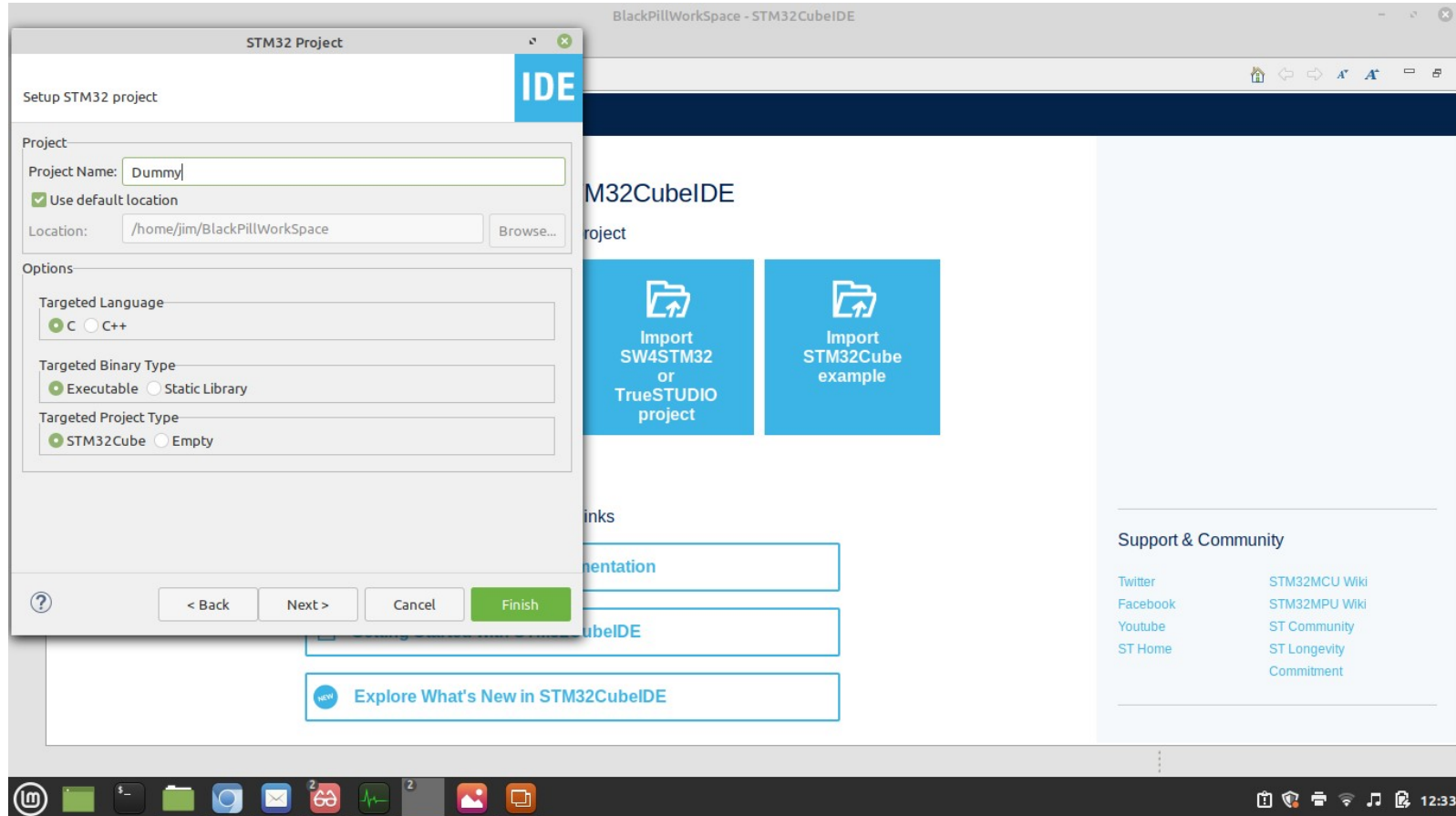
*	Part No	Reference	Marketin...	Unit Price...	Board	Package	Flash	RAM	IO	Freq.
☆	STM32F41...	STM32F41...	Active	2.795		UFQFPN48	512 kBytes	128 kBytes	36	100 MHz
☆	STM32F41...	STM32F41...	Active	2.795		WLCSP49	512 kBytes	128 kBytes	36	100 MHz

< Back | **Next >** | Cancel | Finish

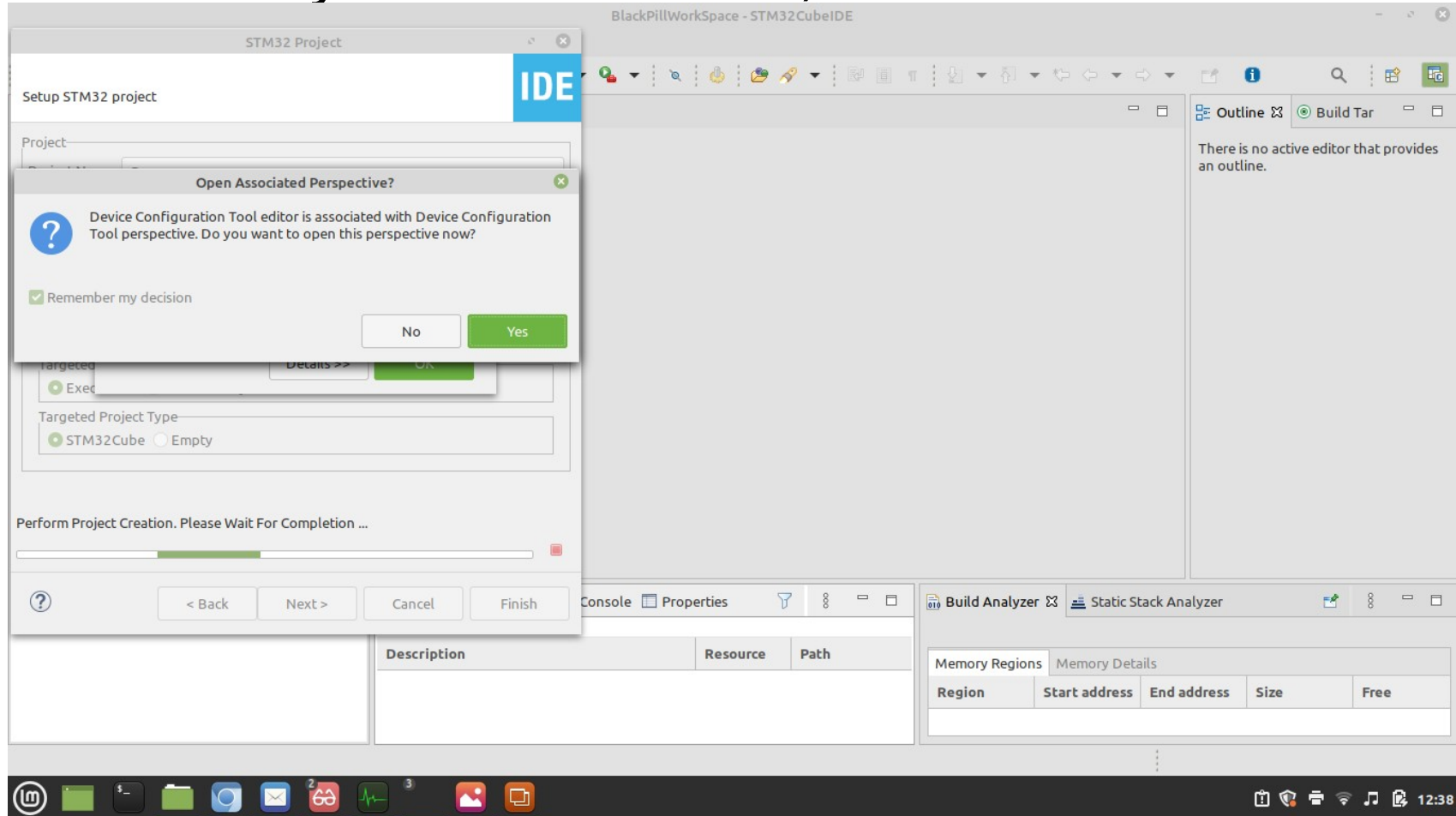
8. You should see this form.



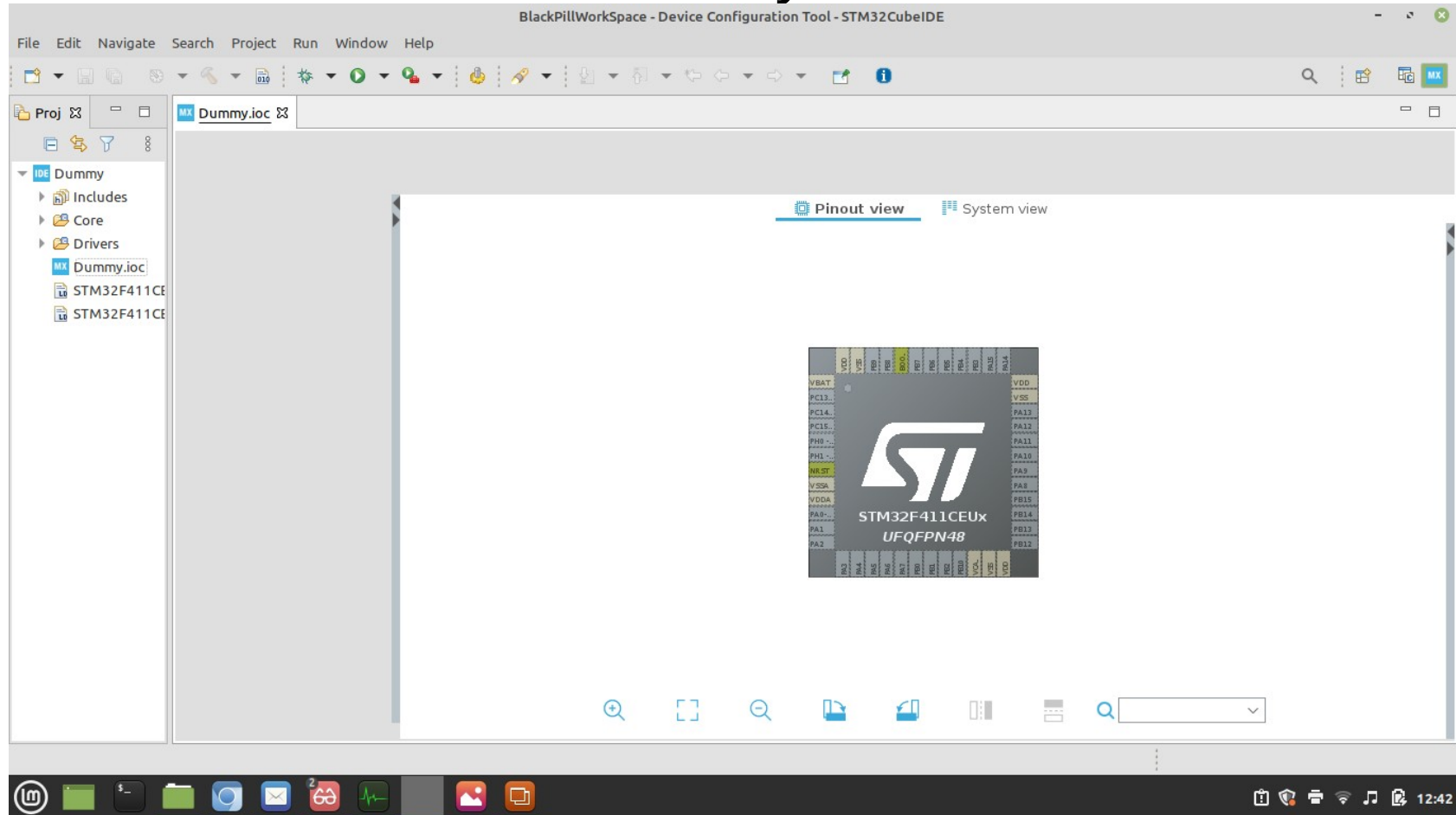
9. Enter any name in the “Project Name” box, & then click the “Finish” button.



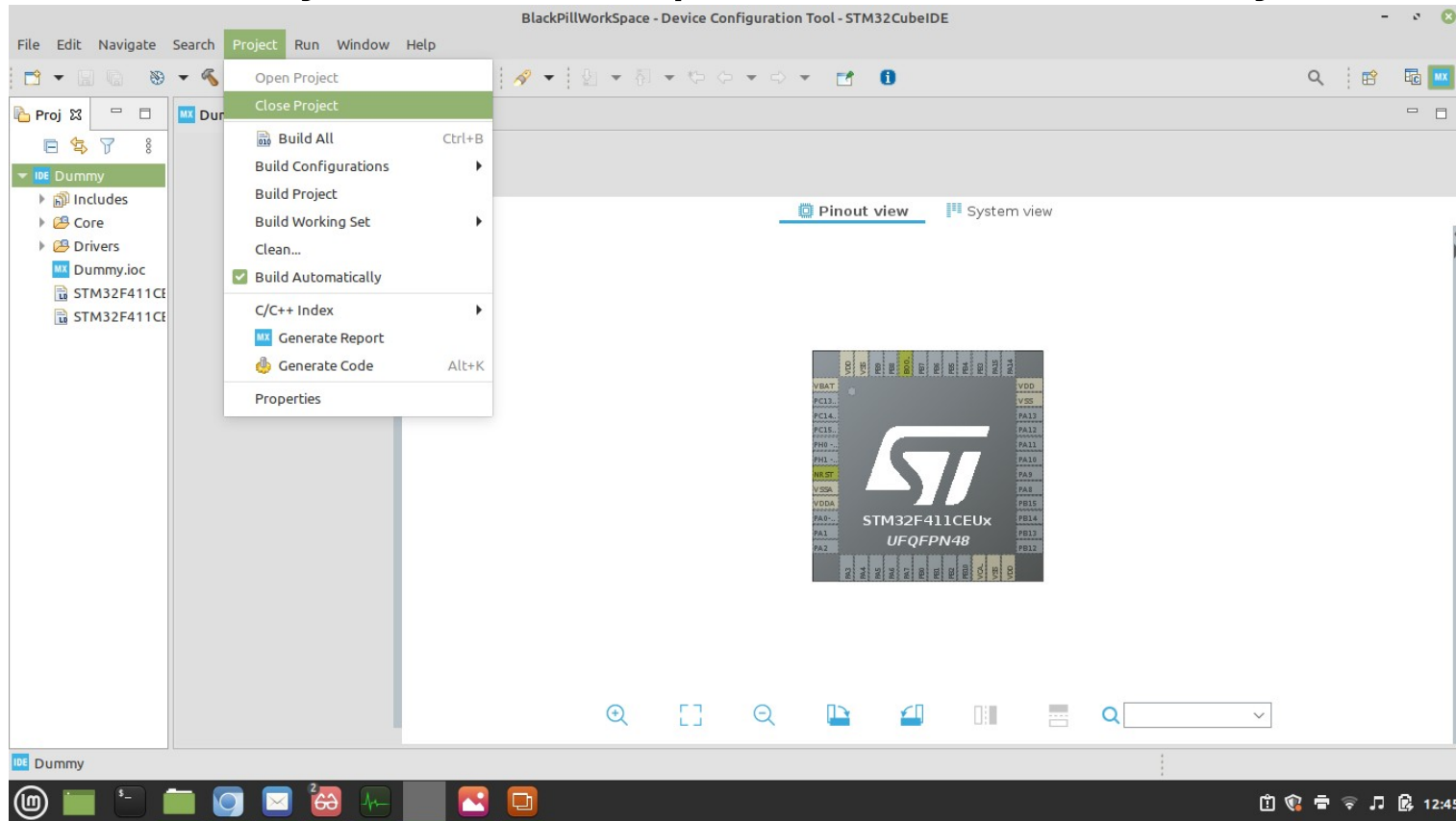
10. When you see this form, click the “Yes” button



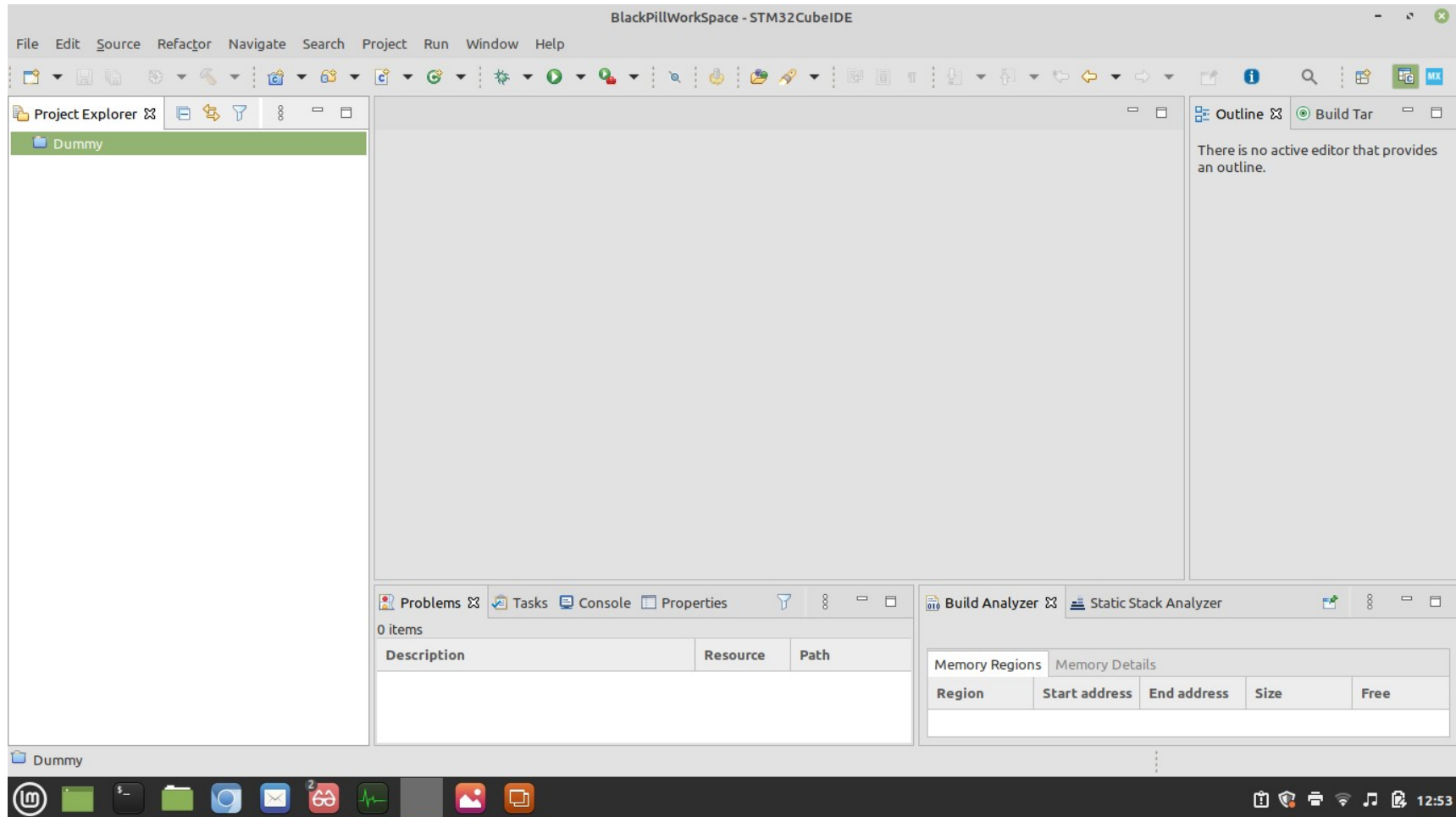
11. After some moments you should see this.



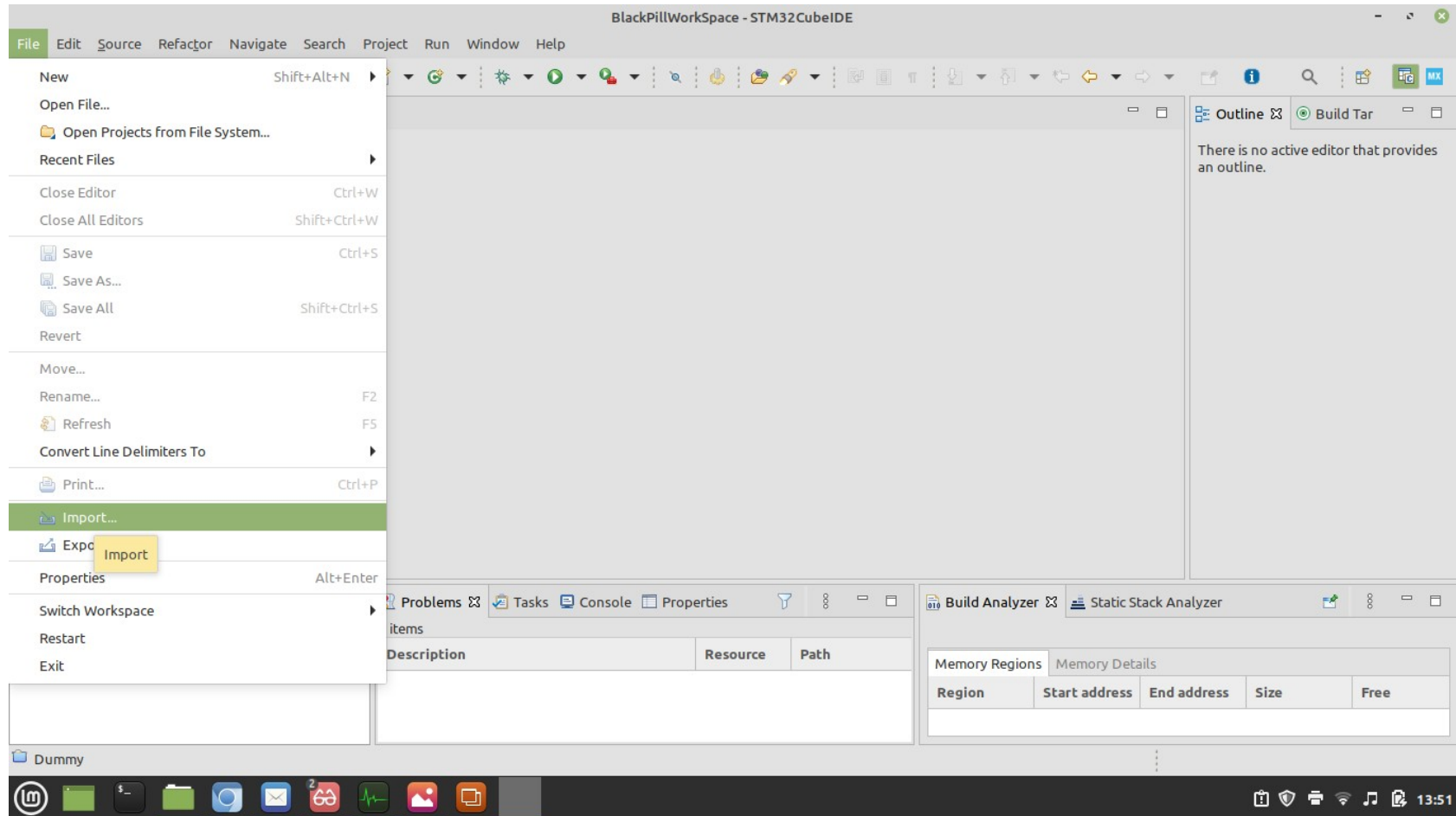
12. In the project tree select the “Dummy” project. Then use the “Project” menu options to “Close Project”



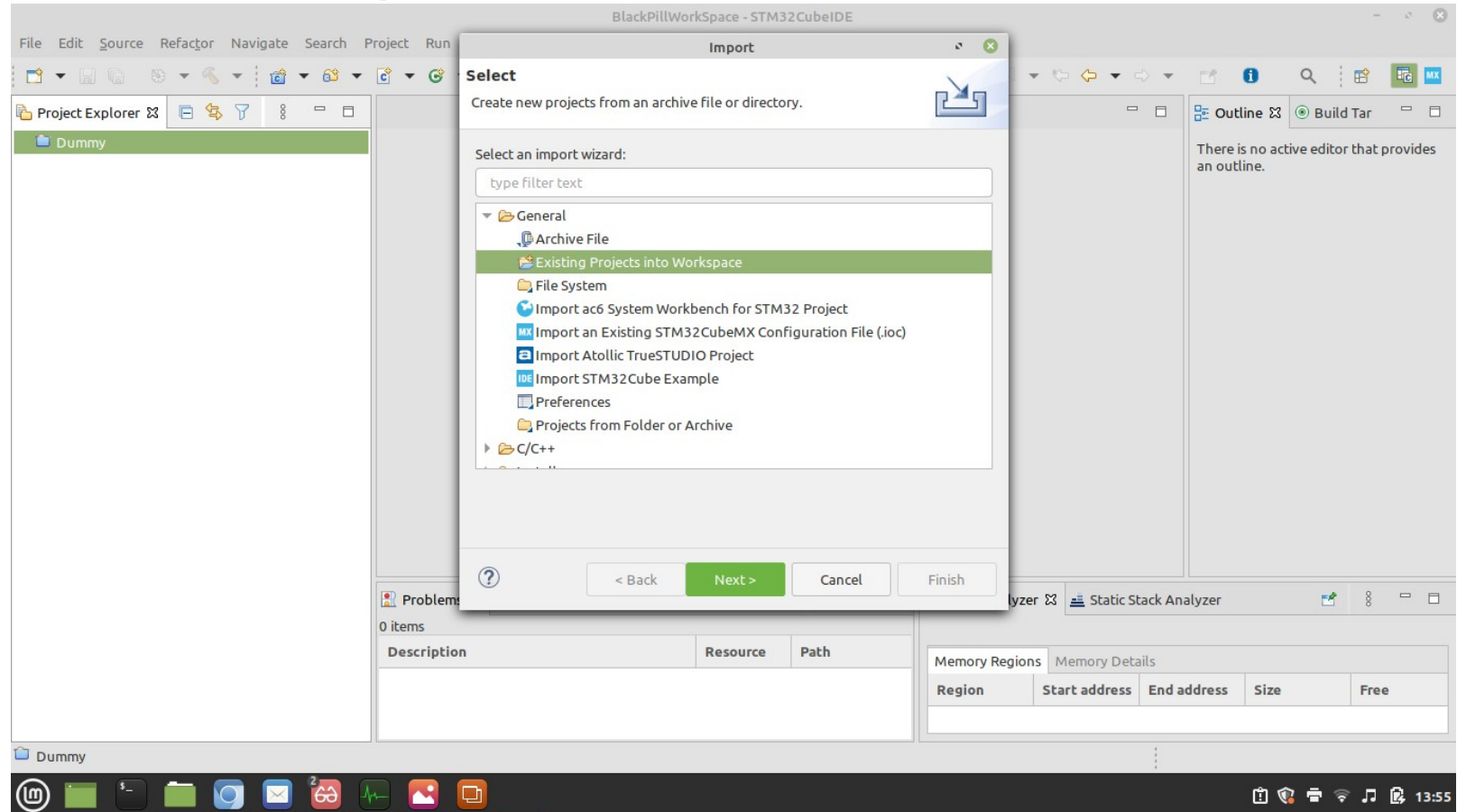
13. After some moments the CUBIDE should look like this.



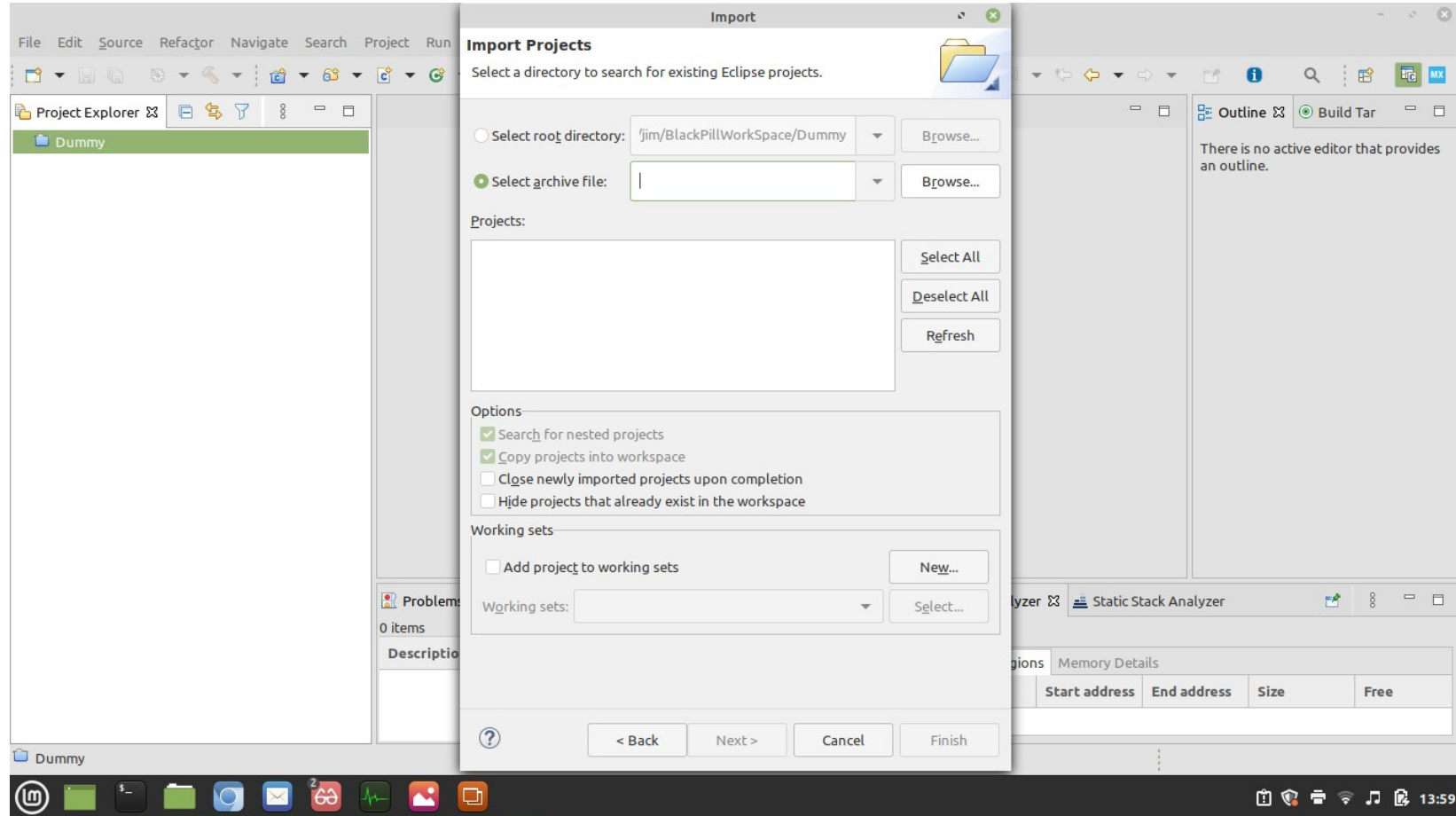
14. Use the “File” menu option “Import”



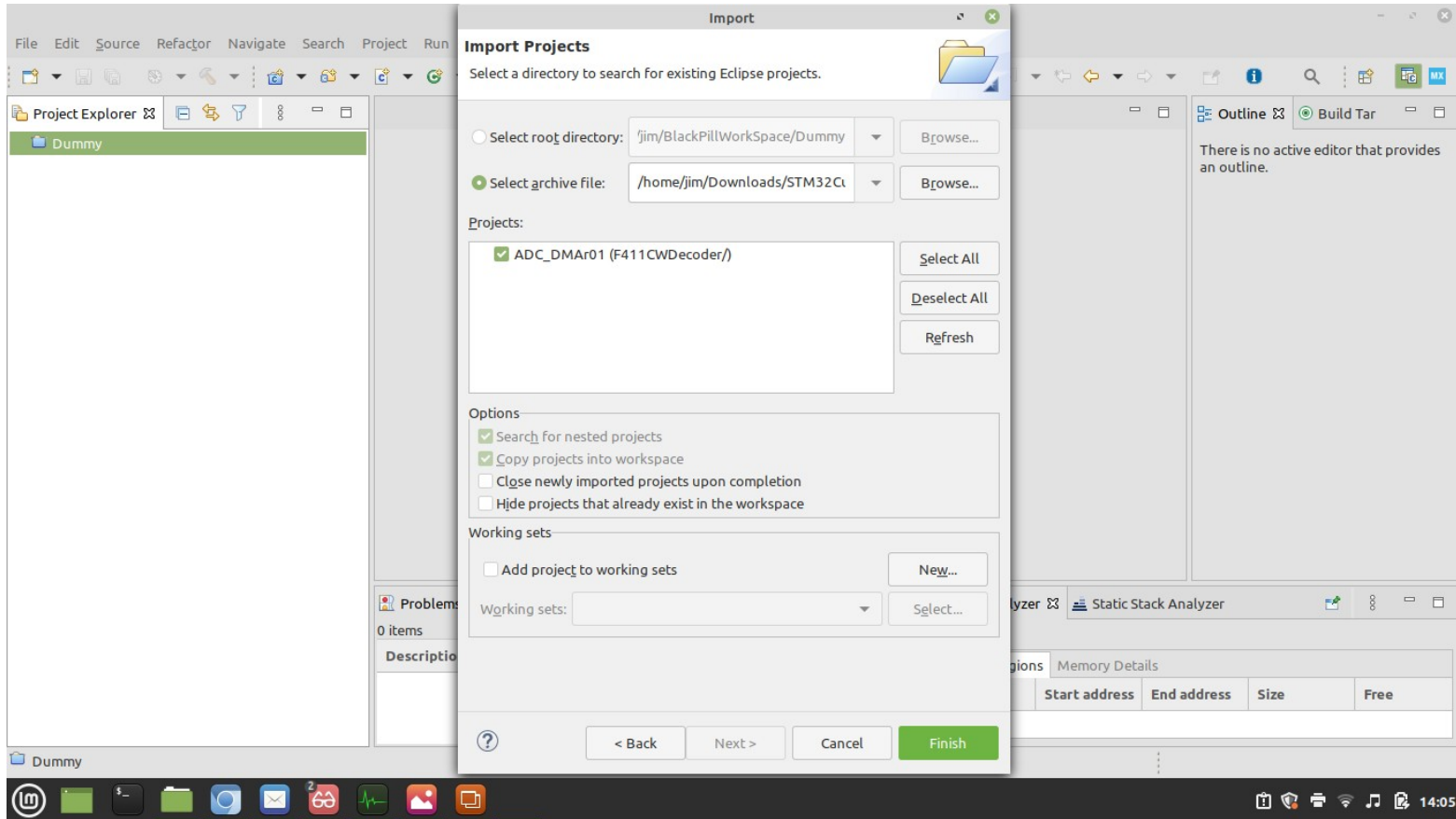
15. Expand the “General” option, & select “Existing Projects into Workspace”, & then click “Next” button



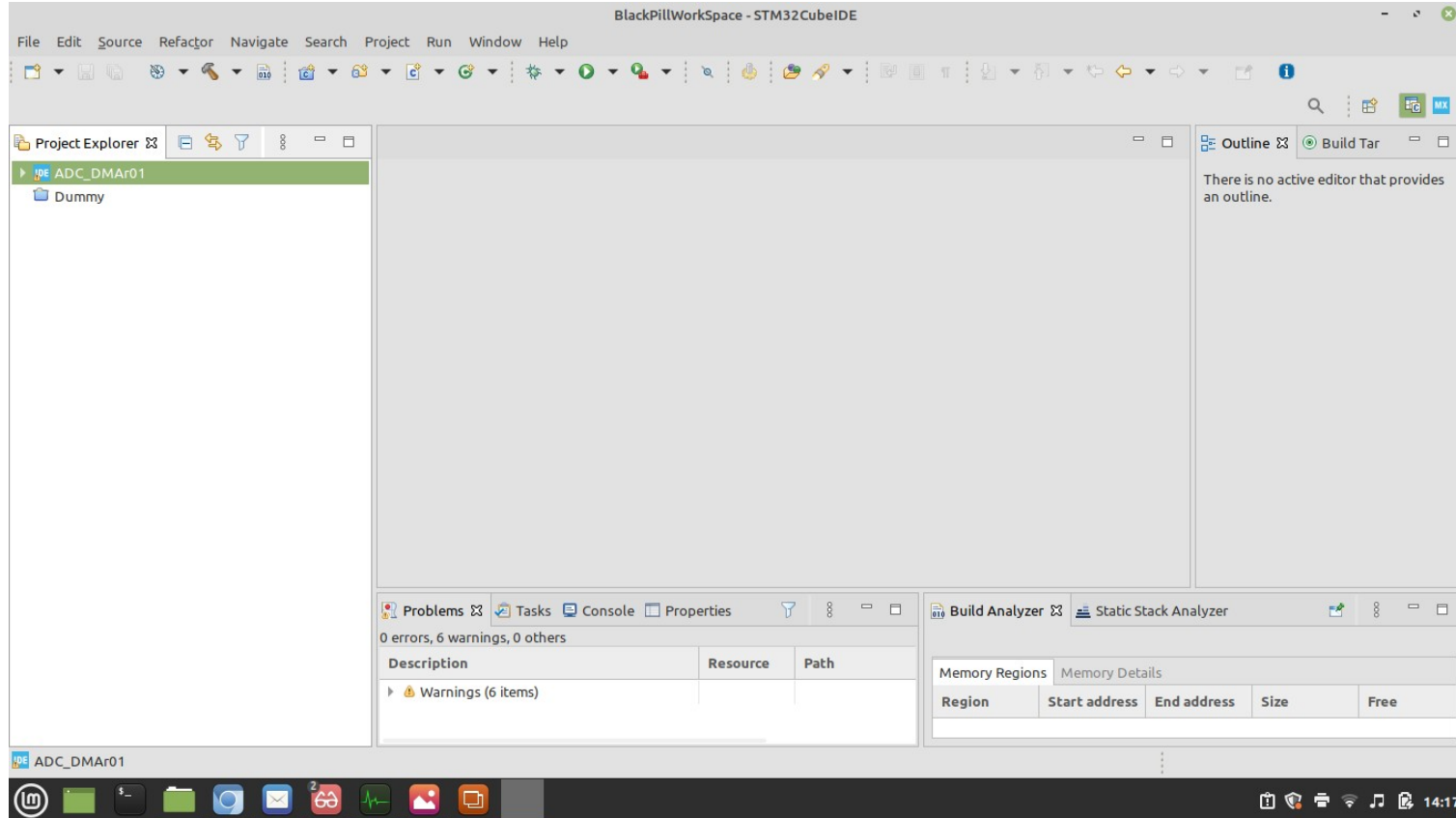
16. Select the “Select archive File”, & use the “Browse” button to navigate/select the “zip” file downloaded from GitHub



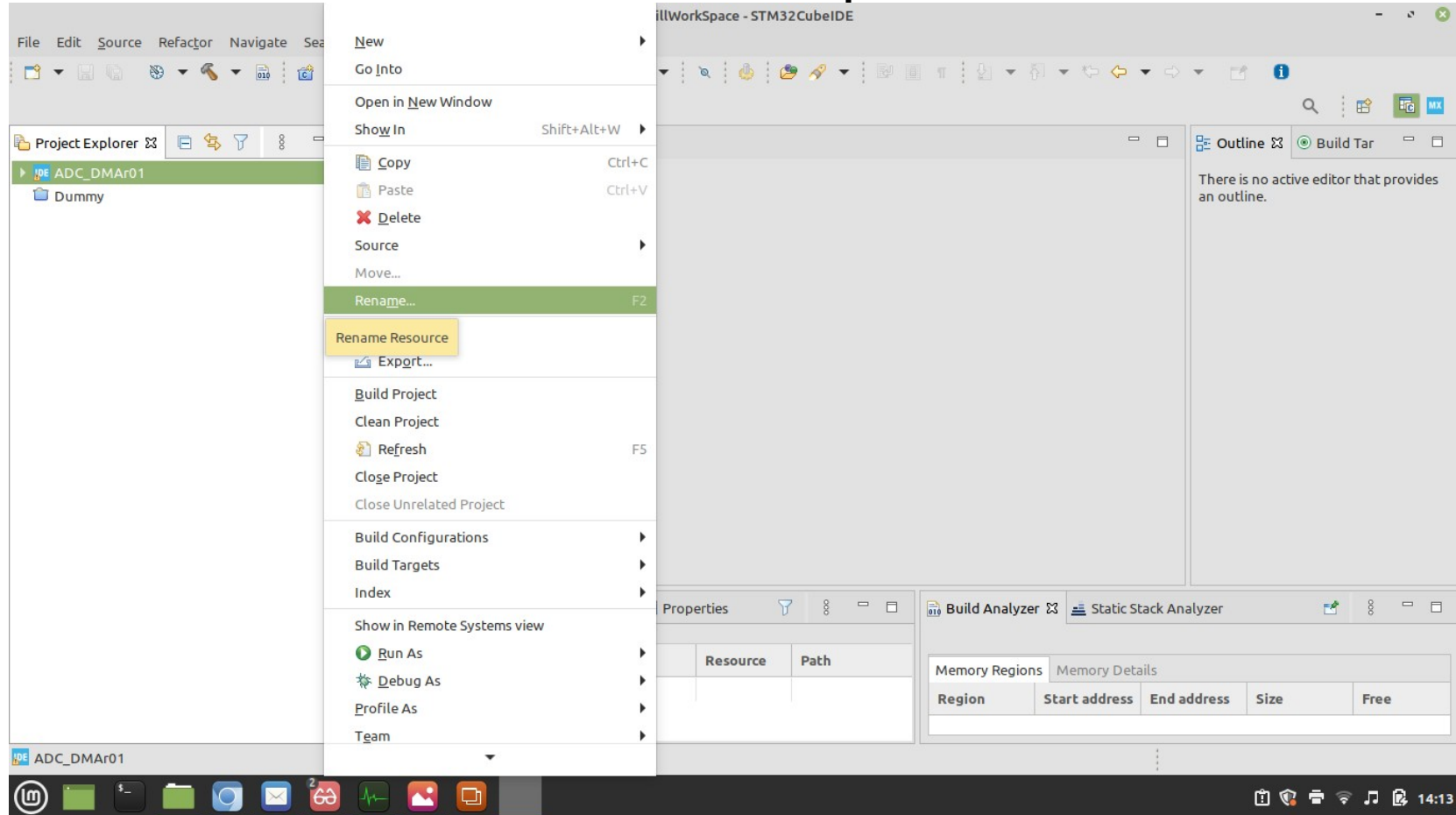
17. When the form looks like this, click the “Finish” button to import the project



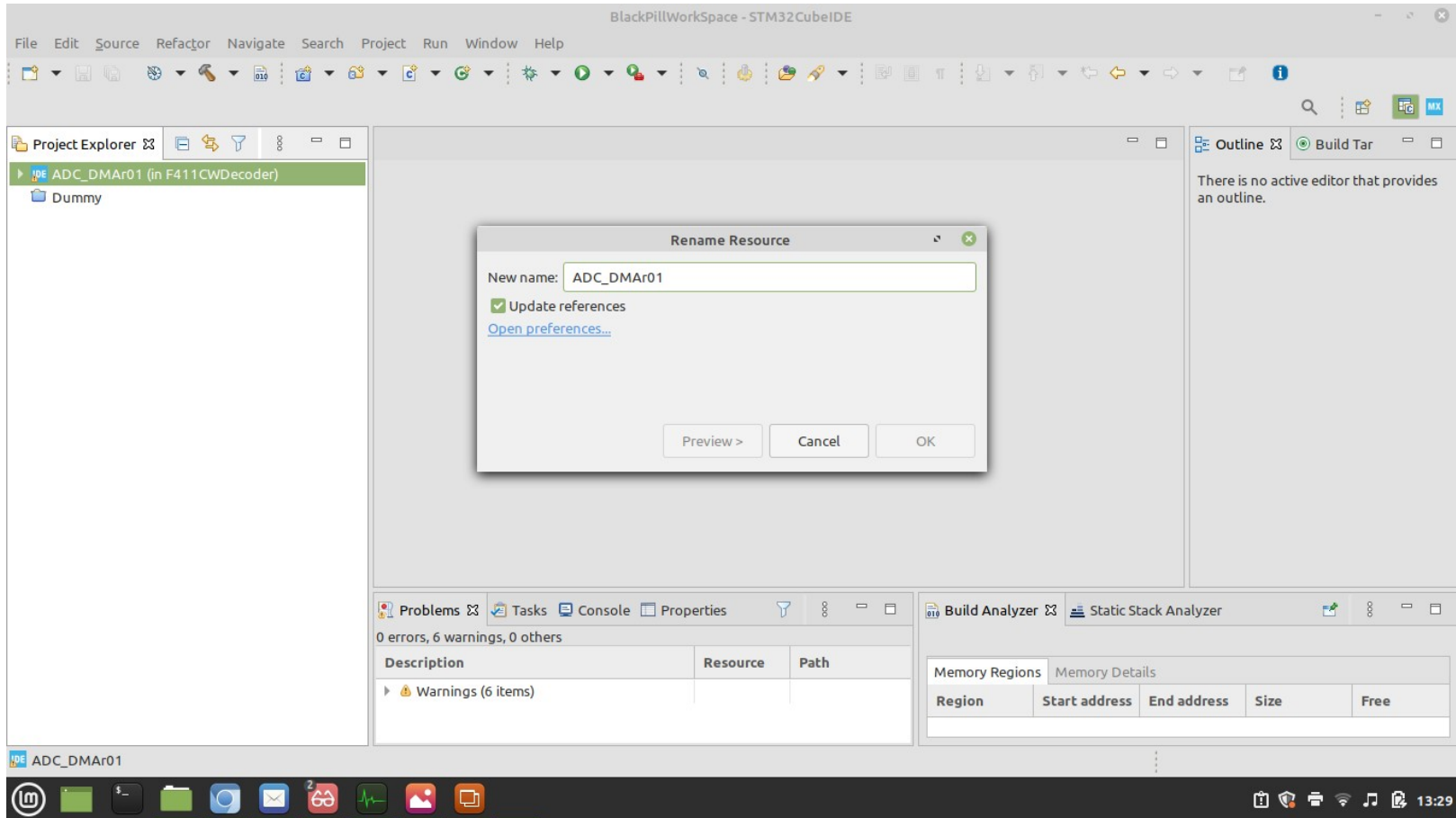
18. You should now see the imported project in the project tree. Wait for it to complete the import process before moving to the next step.



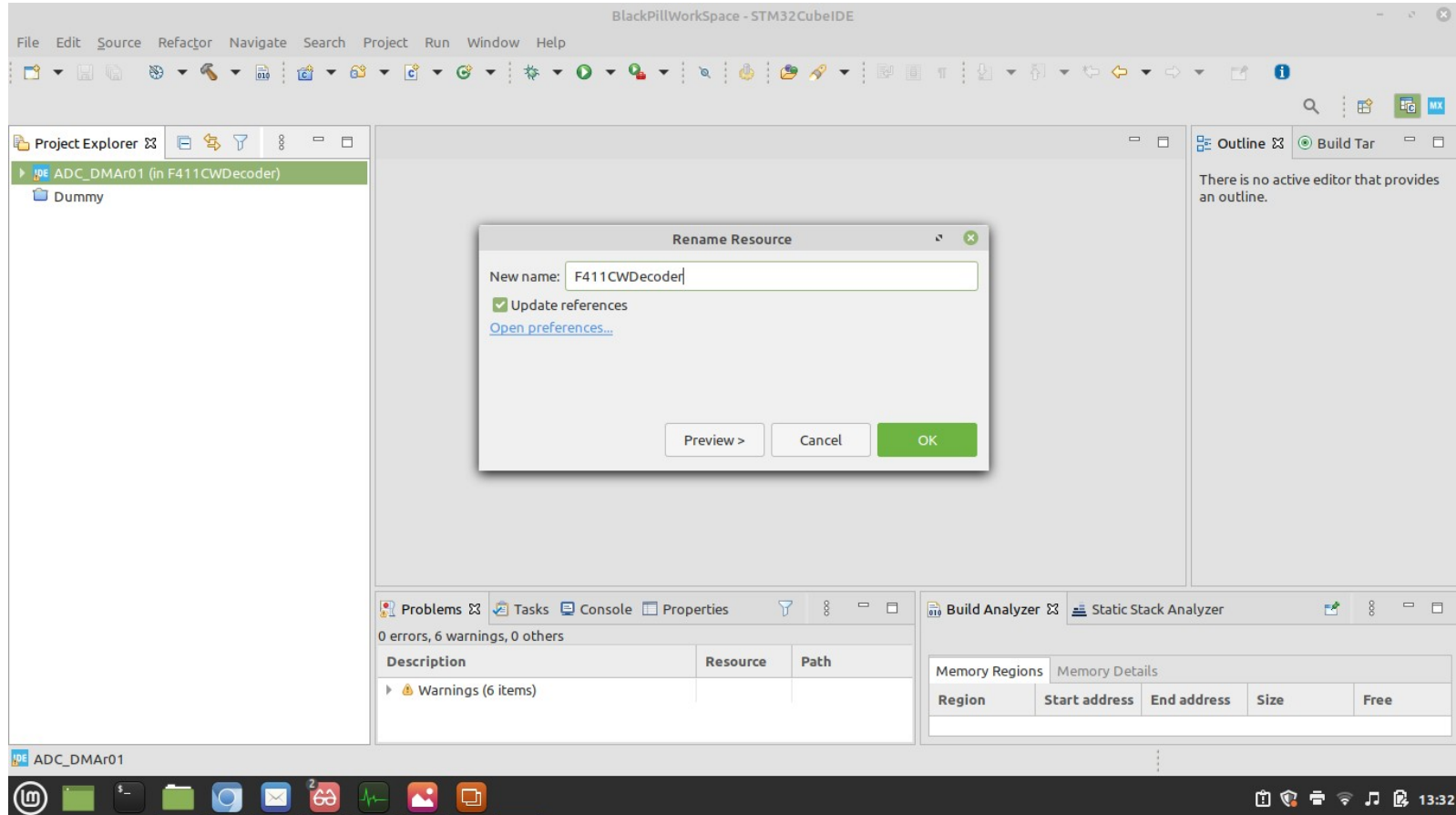
19. Highlight the new project, & right click to expose/select the “Rename” option.



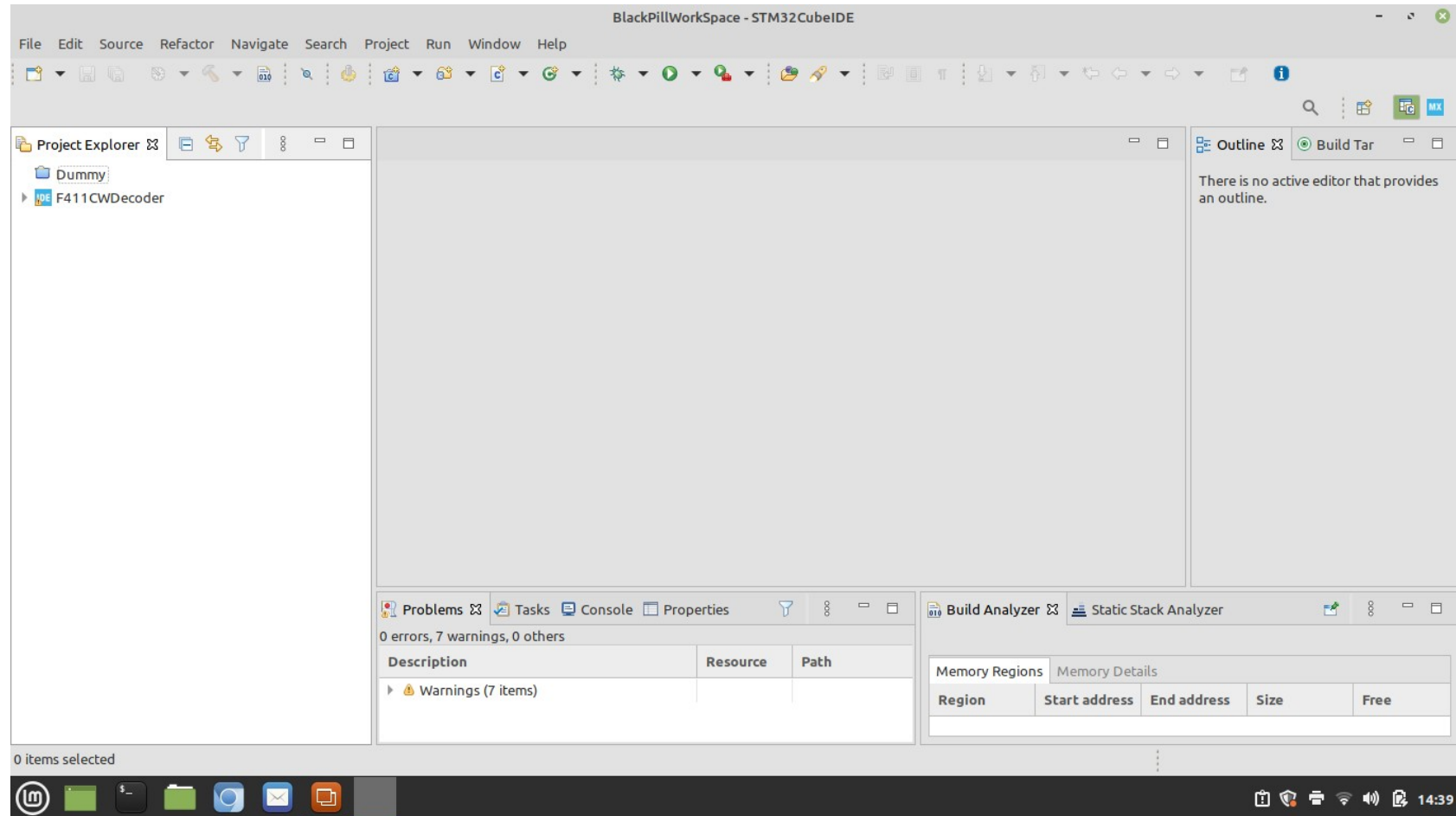
18. You should see this form.



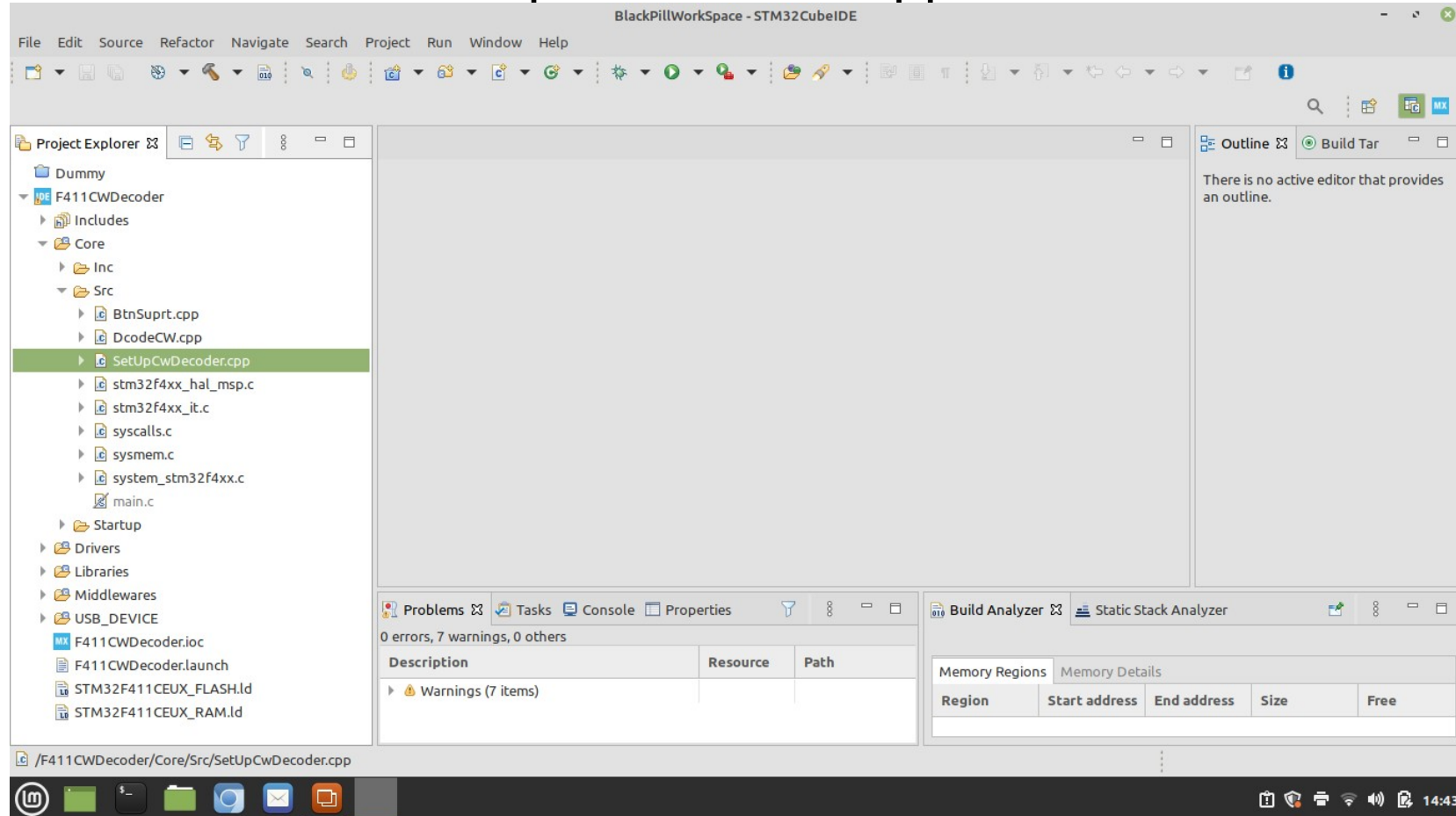
19. Replace original project Name with “F411CWDecoder”, & then click “OK” button



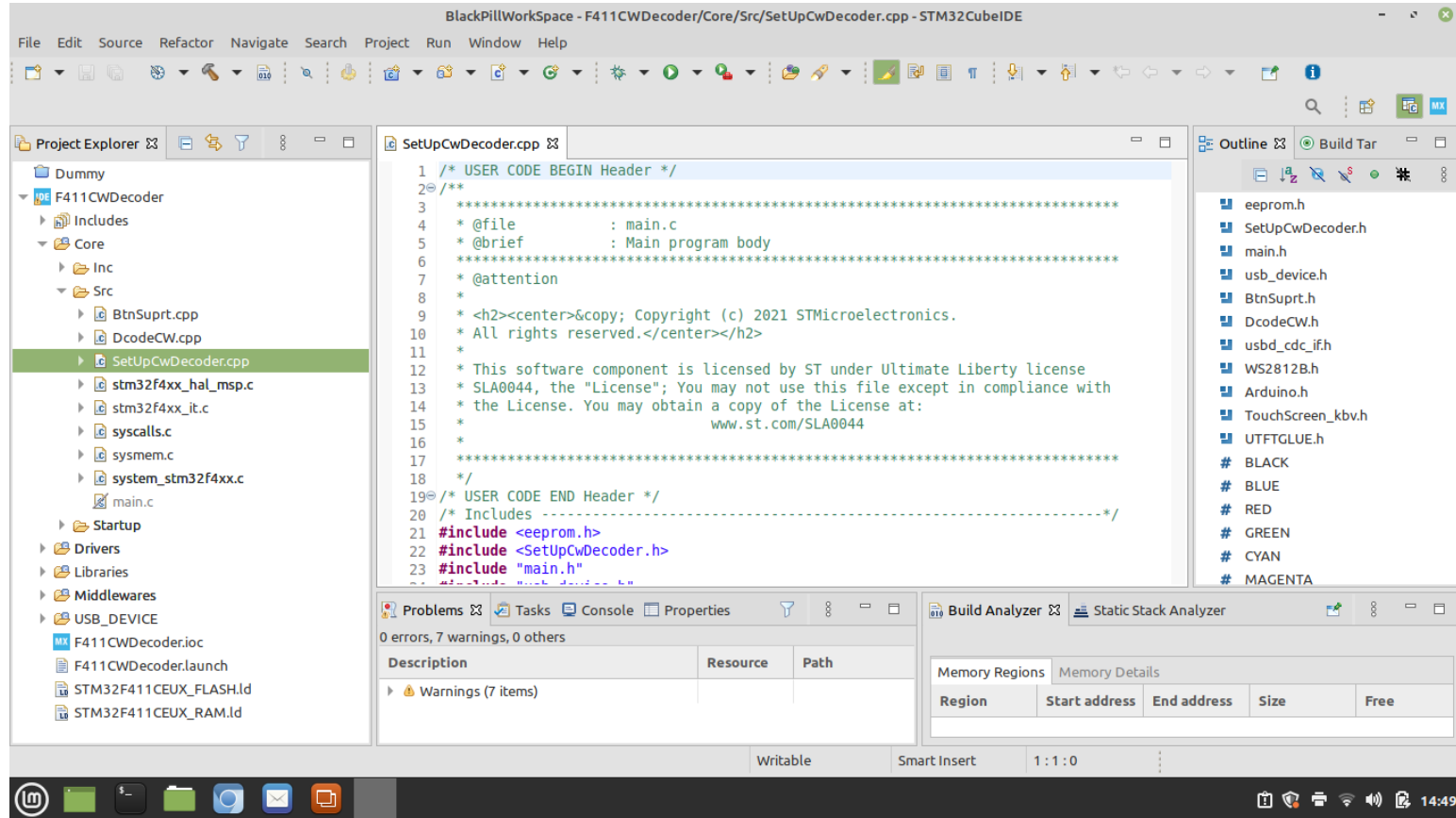
22. After some moments you should see this



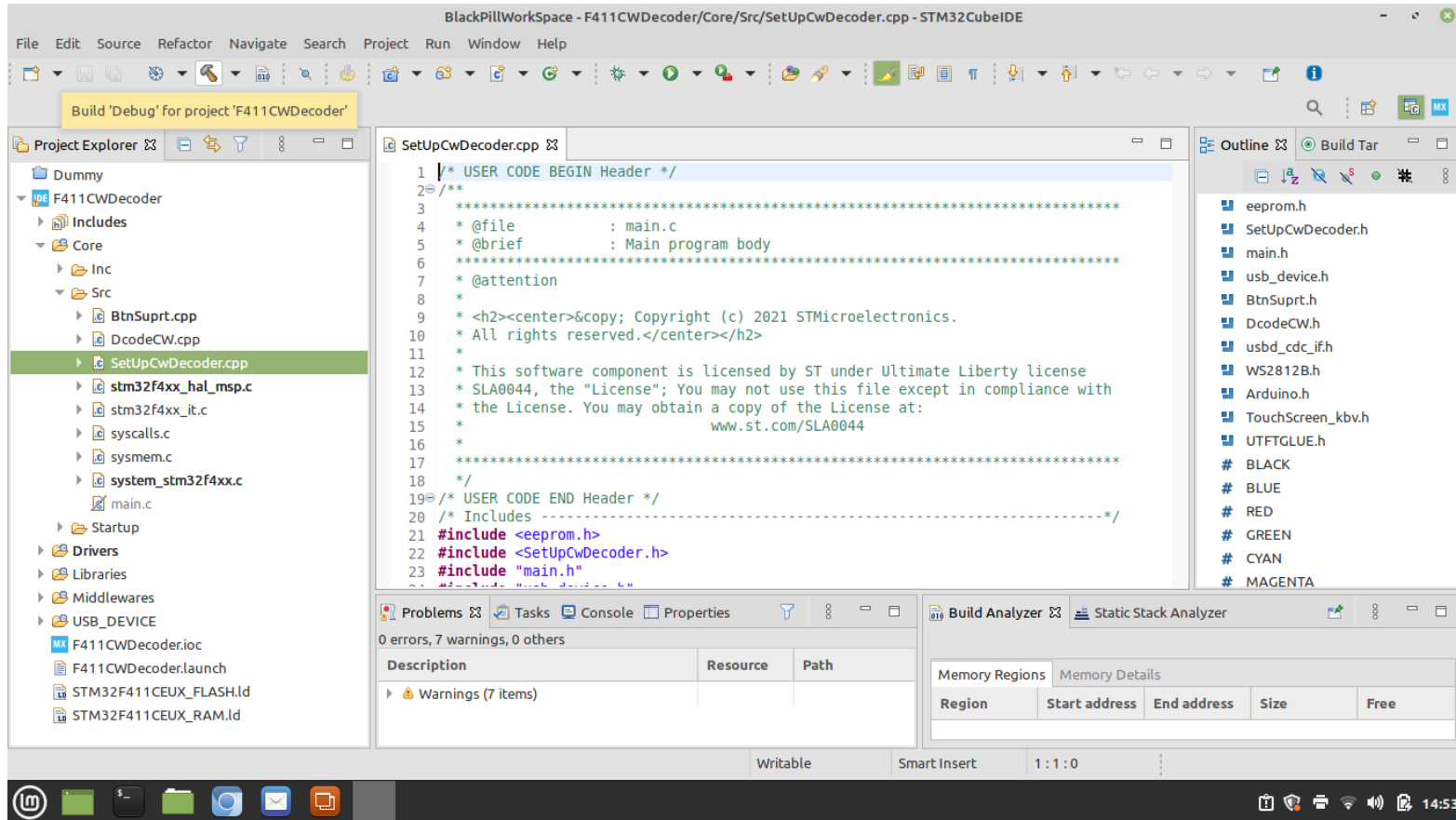
23. Select & drill down into the “F411CWDecoder” project to select “SetUpCwDecoder.cpp” file



24. Double Clicking the ““SetUpCwDecoder.cpp” entry should look like this.



25. Click the “Hammer” icon to build the project

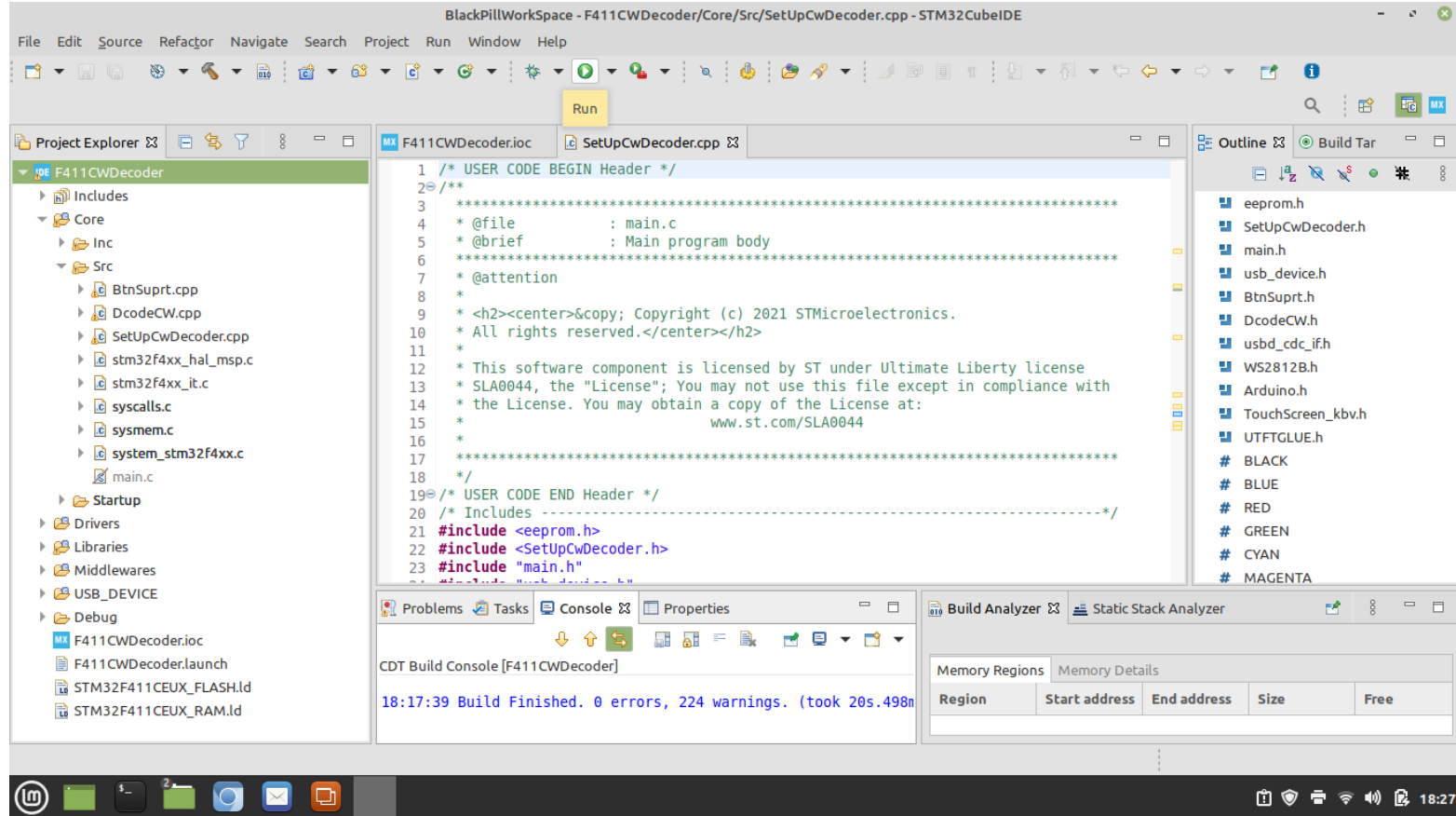


26. Note, when the “Build” process completes, the Console window reads “0 errors”

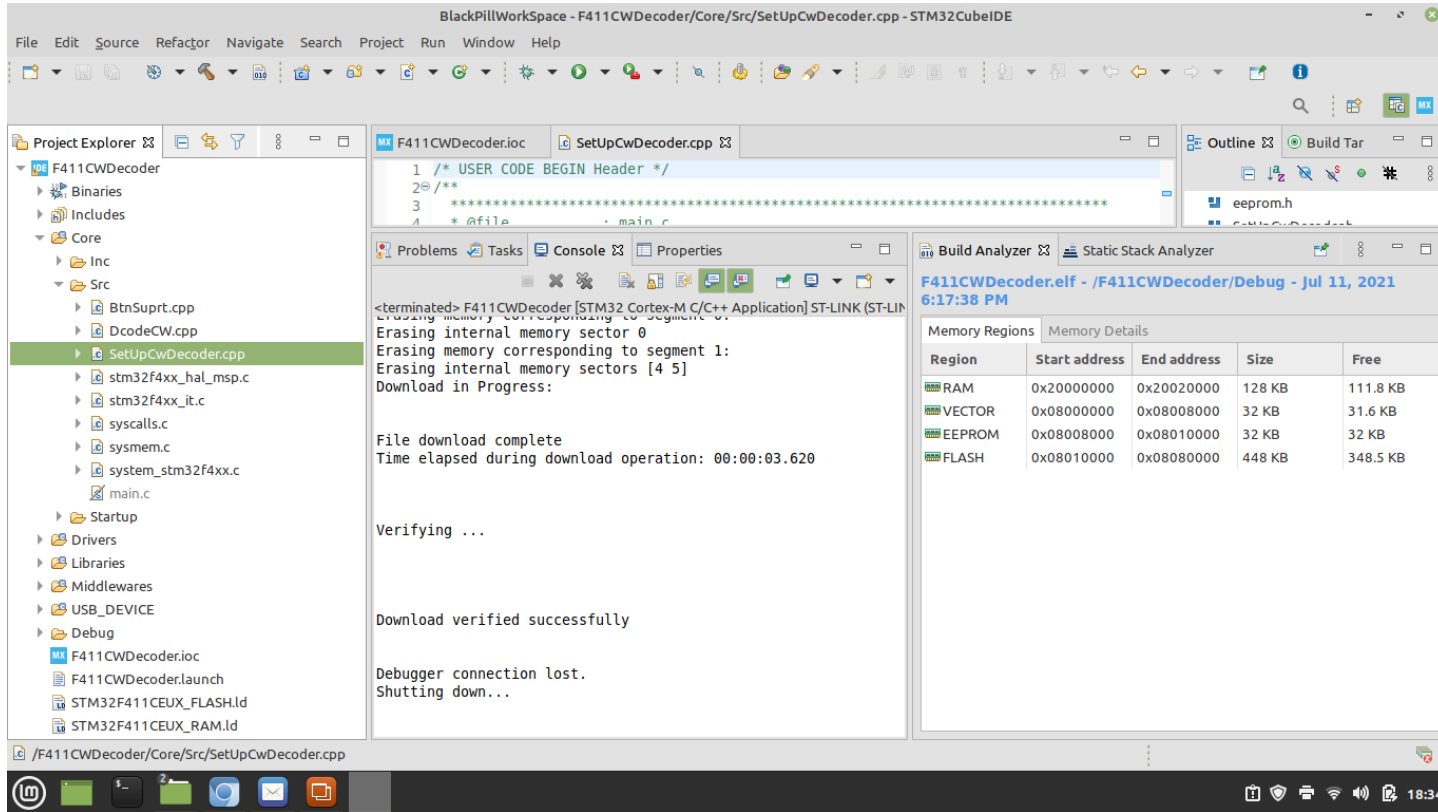
The screenshot displays the STM32CubeIDE environment for a project named 'F411CWDDecoder'. The main editor window shows the 'SetupCwDecoder.cpp' file, which contains a header section with copyright information and license details, followed by include directives for 'eeeprom.h', 'SetupCwDecoder.h', and 'main.h'. The Project Explorer on the left shows the project structure, including 'Includes', 'Core', 'Inc', 'Src', 'Startup', 'Drivers', 'Libraries', 'Middlewares', 'USB_DEVICE', and 'Debug'. The Build Console at the bottom shows the message: '18:17:39 Build Finished. 0 errors, 224 warnings. (took 20s.498s)'. The Build Analyzer window on the right shows the memory regions table.

Region	Start address	End address	Size	Free

27. Now with the Black Pill connected to the computer via the STLink dongle, click the “Run” icon:



28. When performing Step 27 you may need to simultaneously press the Black Pill's "Boot" Button. The "Console" window on a successful "load" should read as shown here:



29. If hardware is connected & working you should now have Display that looks like this:



30. On first time Startup, long press the Decoder's "Clear" button to access the "Settings" screen. Load & Save the "FACTORY VALS". Once done the decoder should be ready to decode.

