

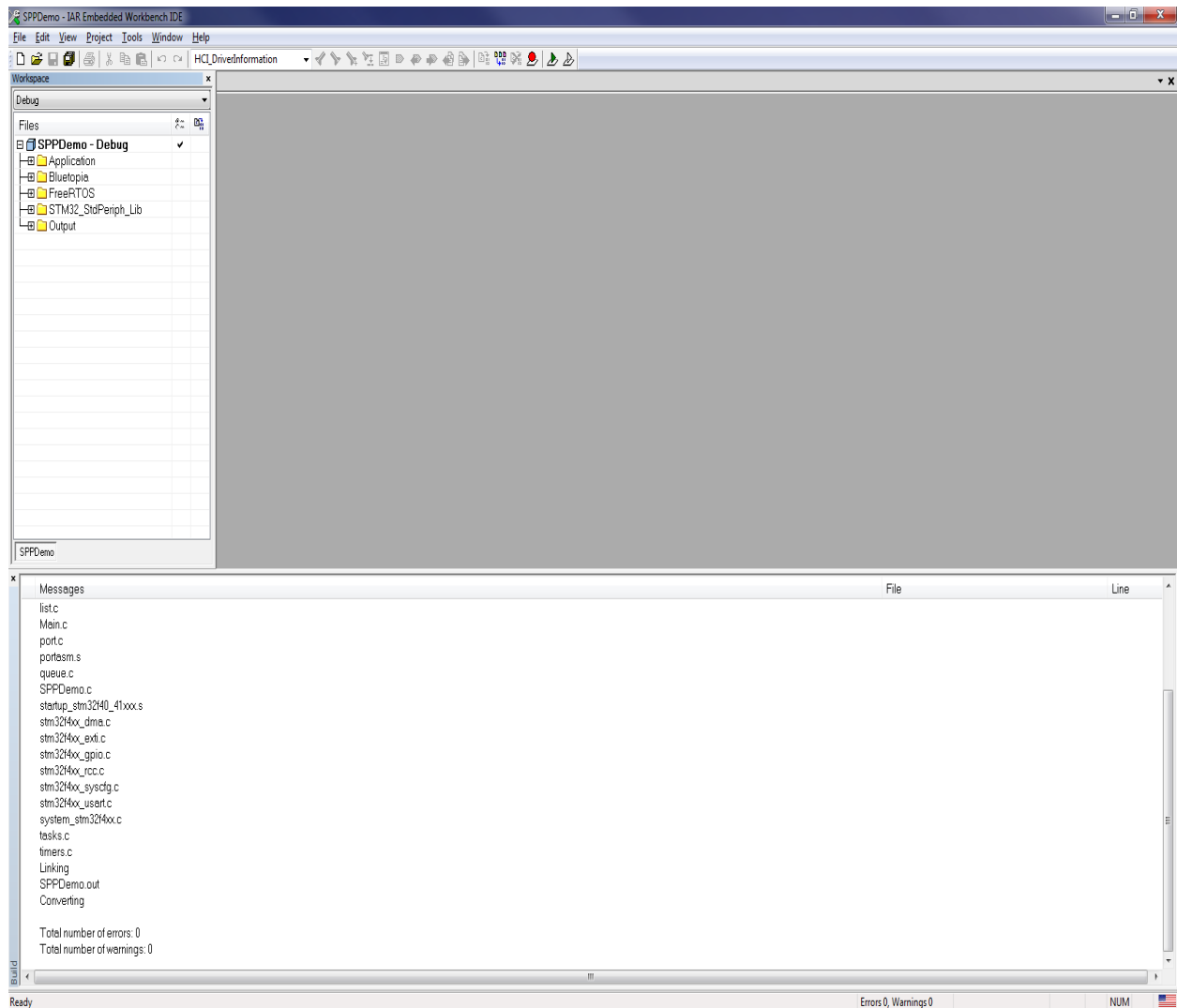


# **Enable STM32 Discovery Eval**

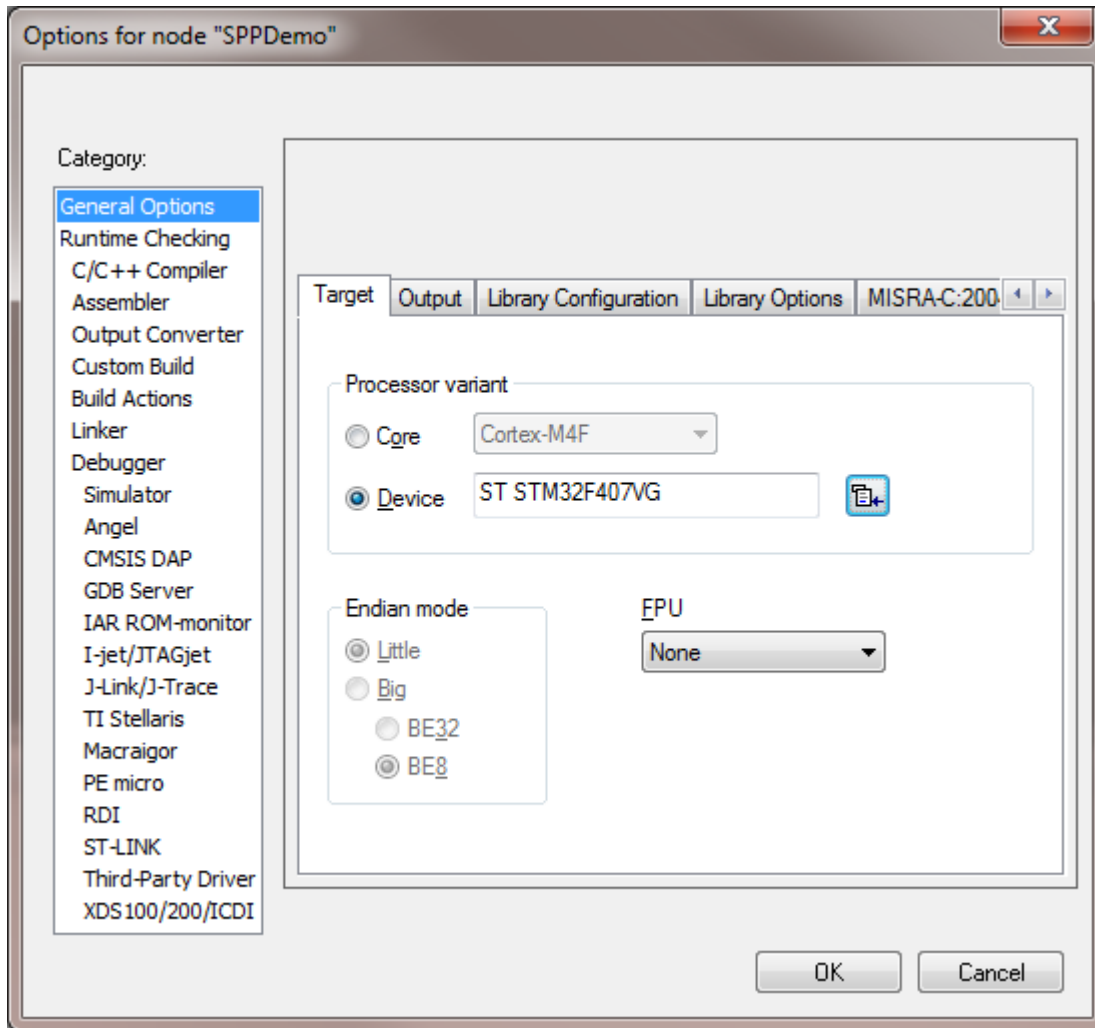
In order to activate the Demo applications on ST Discovery evaluation board, the user need to make several steps as described below, after the installation, of the STM32 release, on the user PC.

*Steps for porting:*

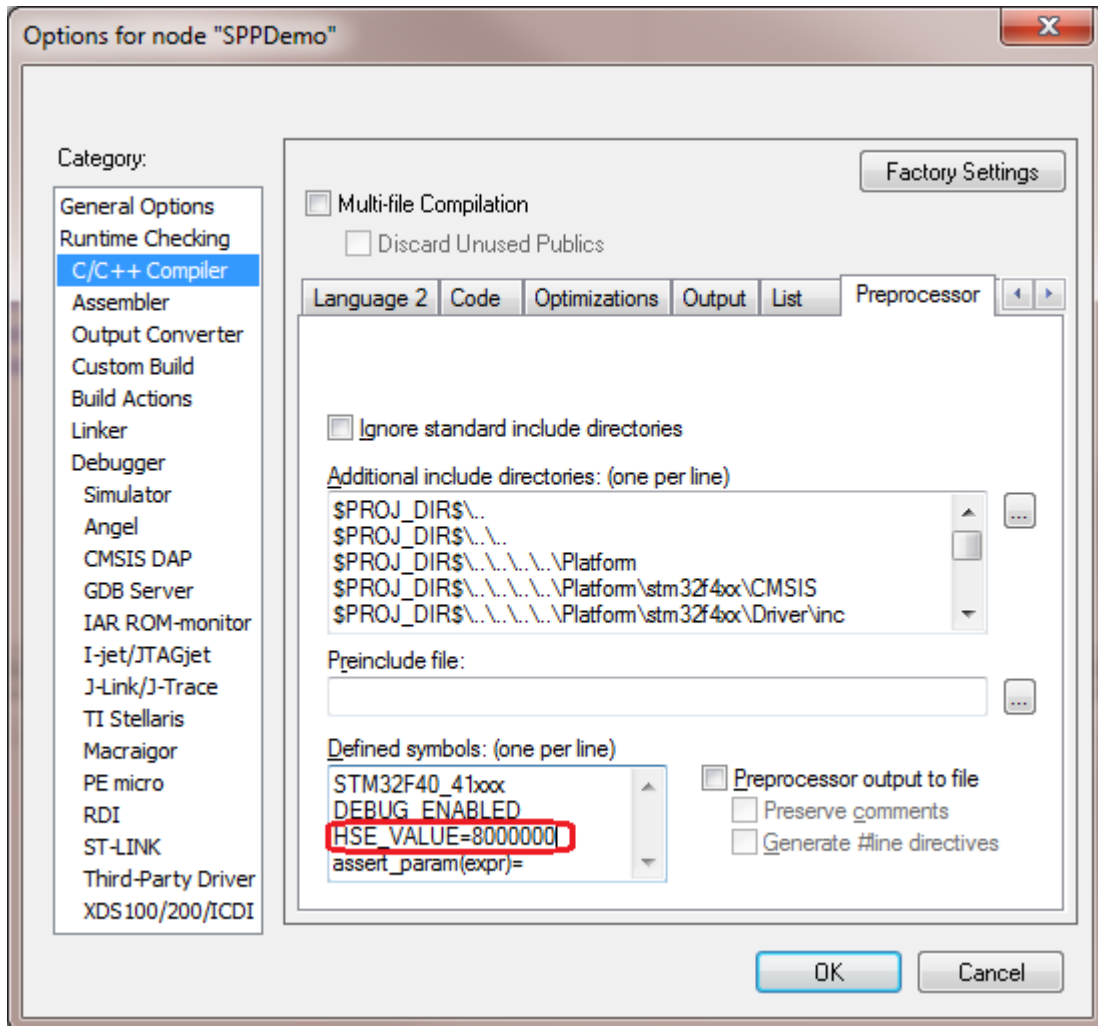
- SPPDemo as an example: open the SPPDemo application with IAR/Keil SDK.



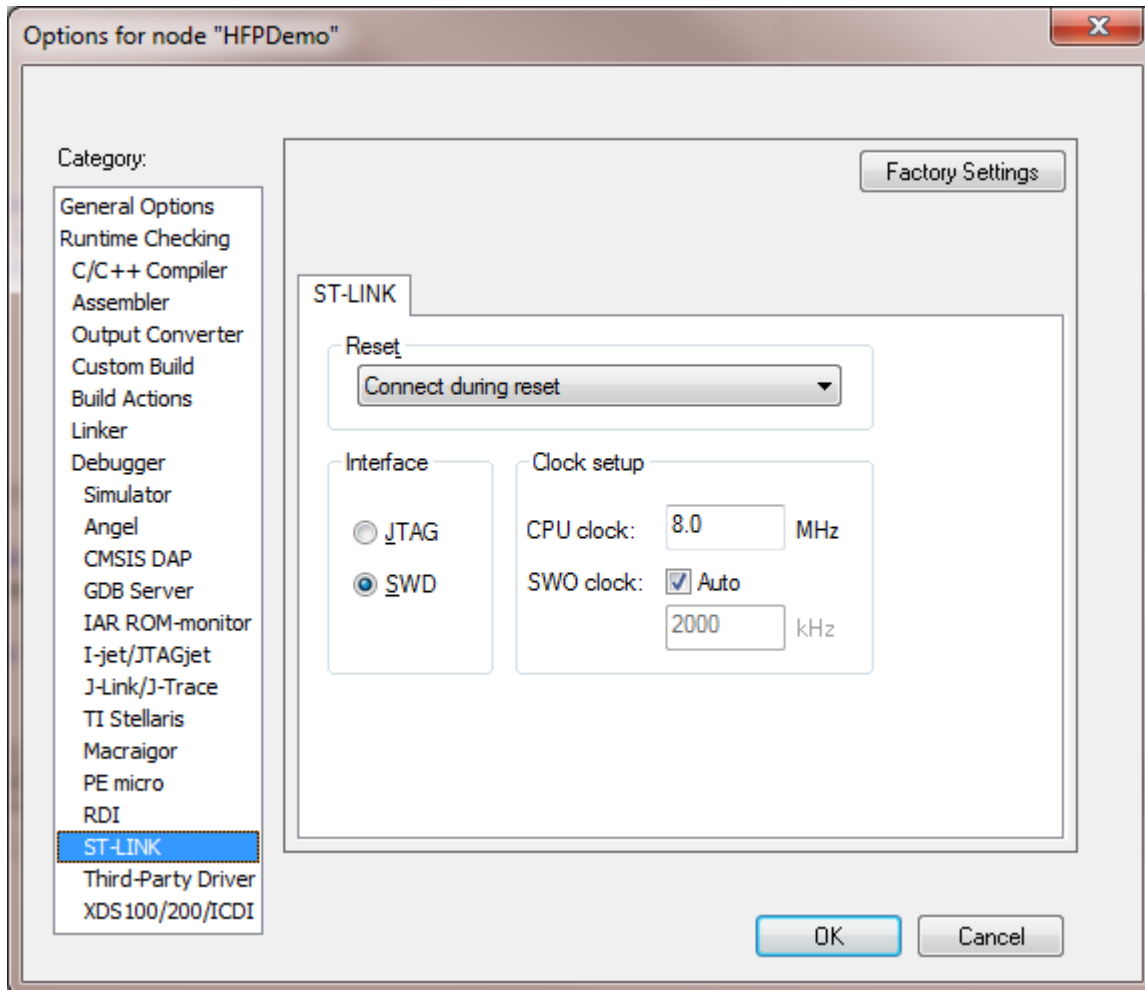
- Change In the project options (Under- General Options, Target) the Device to: ST STM32F407IG, from the ST devices, in the drop down list.



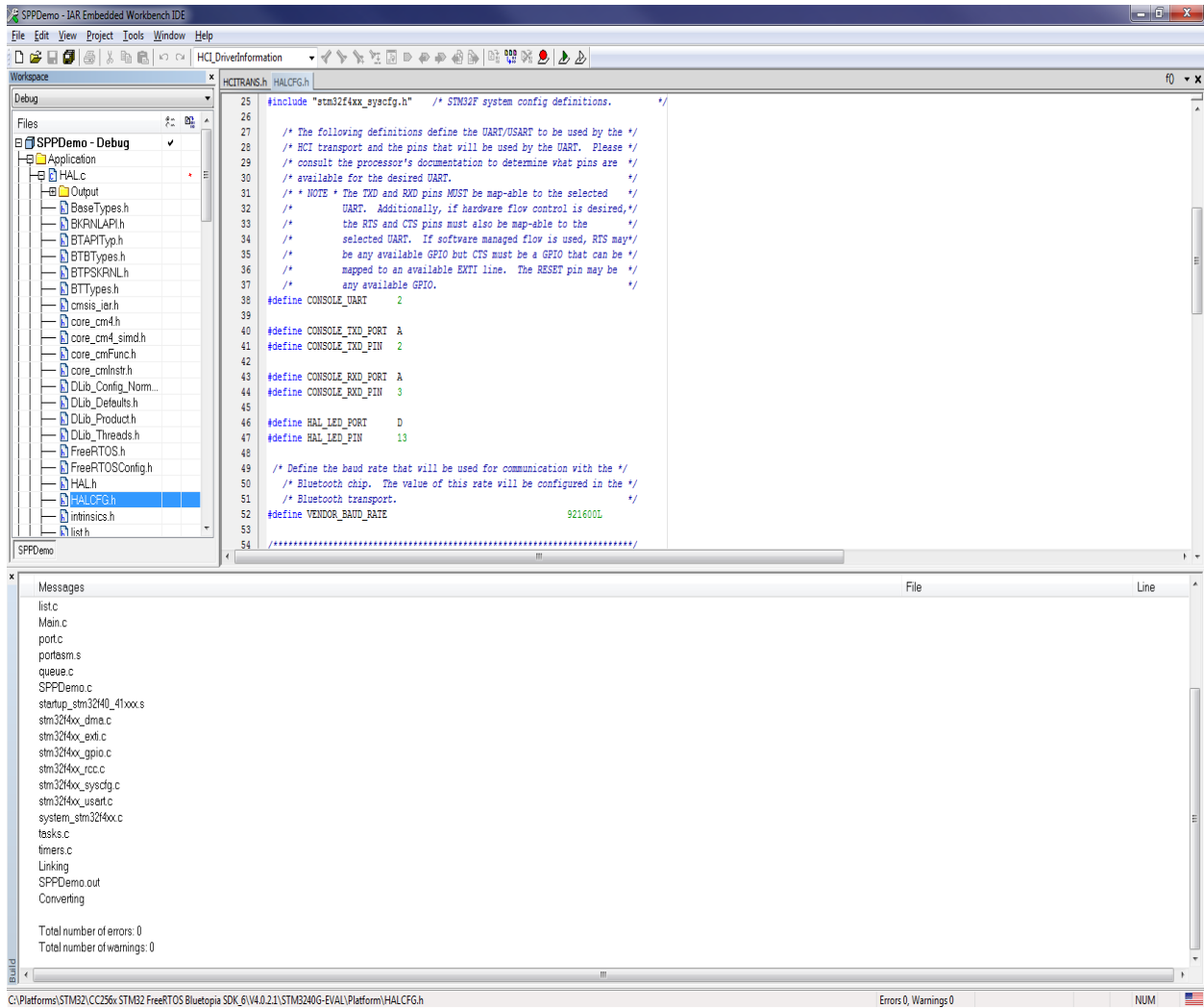
- Under C/C++ Compiler option in the Preprocessor tab change the Defined symbols, HSE\_VALUE to 8000000.



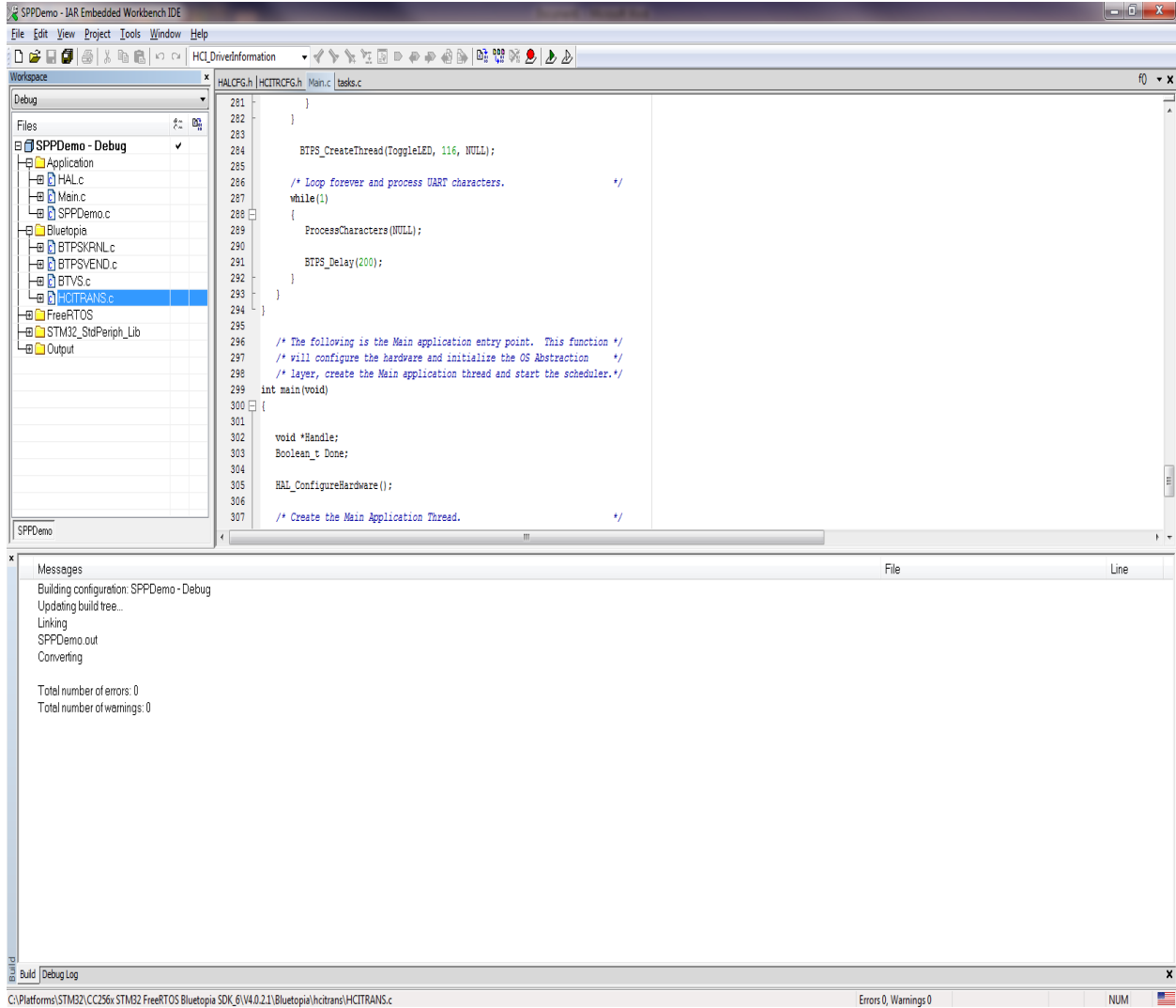
- Under the ST-LINK, in the project setting choose SWD and in the Reset drop down list choose: Connect during reset.



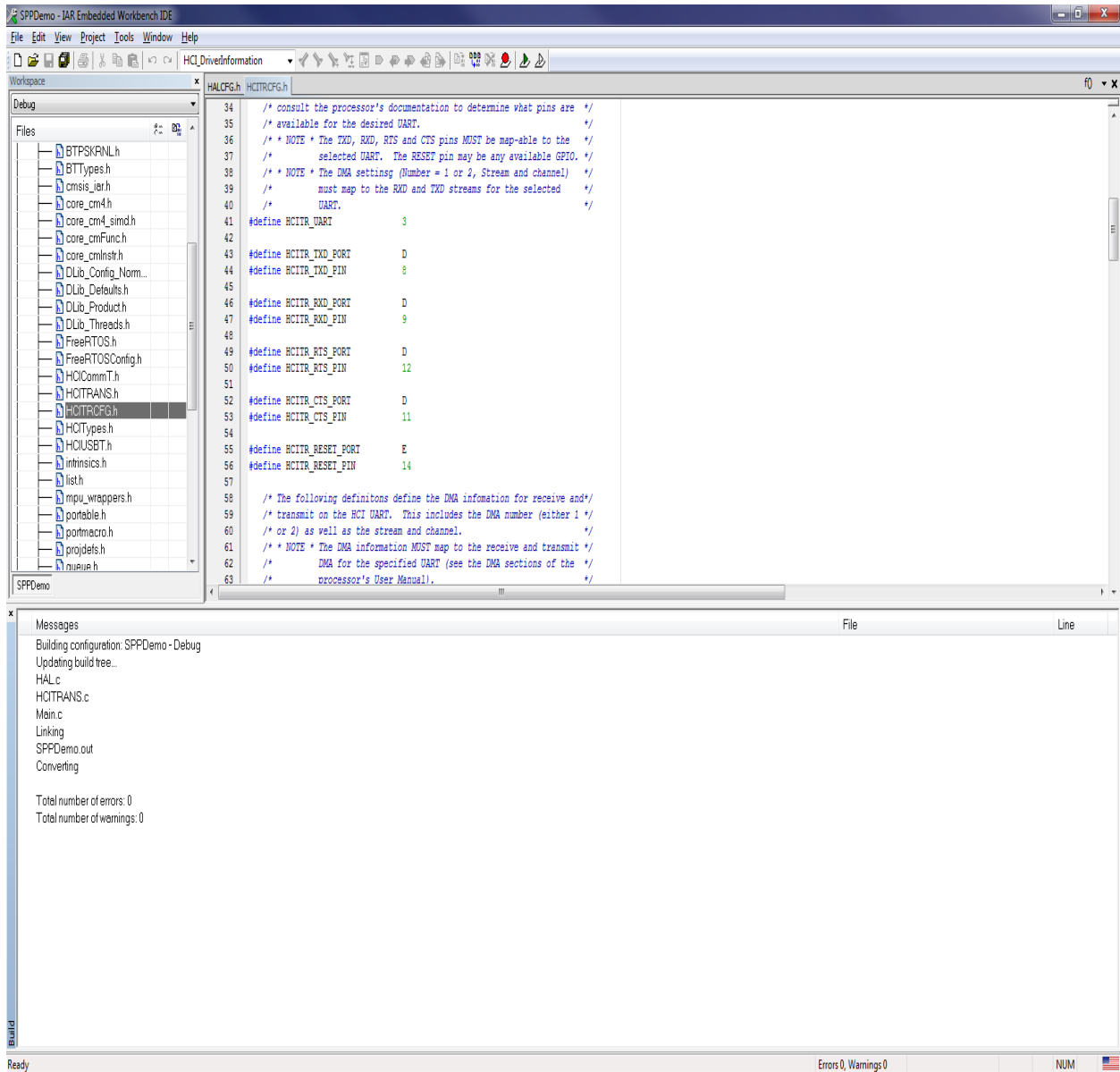
- In order to work with the UART console, change the I/O definition, in **Platform/HALCFG.h** file; to UART 2 and use PA2 as the TX and PA3 as the RX pin (The user is free to choose other free I/Os, for the UART console). Also change the LED I/O in the same file, to PD13 for the Orange LED. After the changes, the user **HALCFG.h** file needs to look like the one in the picture below.



- In order to work with the Bluetooth CC256x Adapter board via UART HCI, first change the UART to non DMA one. Remove the **HCITRANS.c** file from the Bluetopia Group. Add **Bluetopia/hcitrans/HCITRANS.c** file to the Bluetopia Group. Below a picture, with the file location in the IAR SDK workspace.



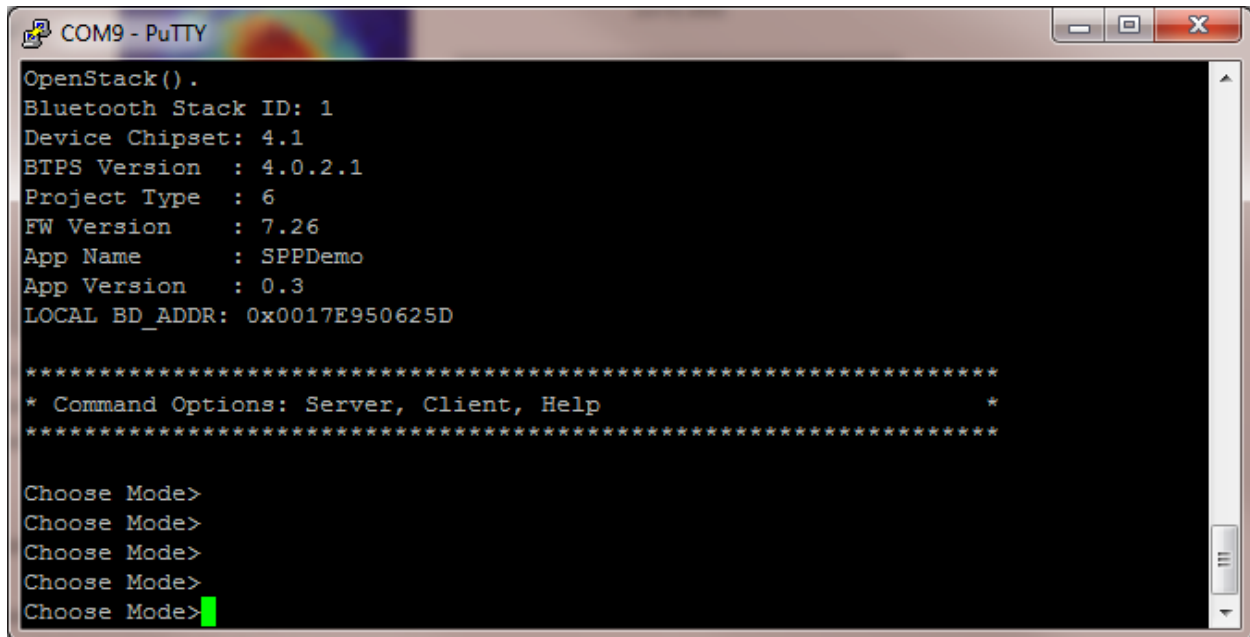
- For the Discovery HCI UART I/O definition, change the **Bluetopia/hcitrans/HCITRCFG.h** file, to UART 3 and use: PD8 as the TX, PD9 as the RX, PD12 as RTS, PD11 as CTS (The user is free to choose other free I/Os, for the UART HCI). Also change the Bluetooth RESET I/O in the same file, to PE14. After the changes, the user **HCITRCFG.h** file needs to look like the one in the picture below.



- After the project settings changed and the two files changed, rebuild the project.



- The following screen picture should be on the terminal.



```
COM9 - PuTTY
OpenStack().
Bluetooth Stack ID: 1
Device Chipset: 4.1
BTPS Version : 4.0.2.1
Project Type : 6
FW Version : 7.26
App Name : SPPDemo
App Version : 0.3
LOCAL BD_ADDR: 0x0017E950625D

*****
* Command Options: Server, Client, Help *
*****

Choose Mode>
Choose Mode>
Choose Mode>
Choose Mode>
Choose Mode>
```