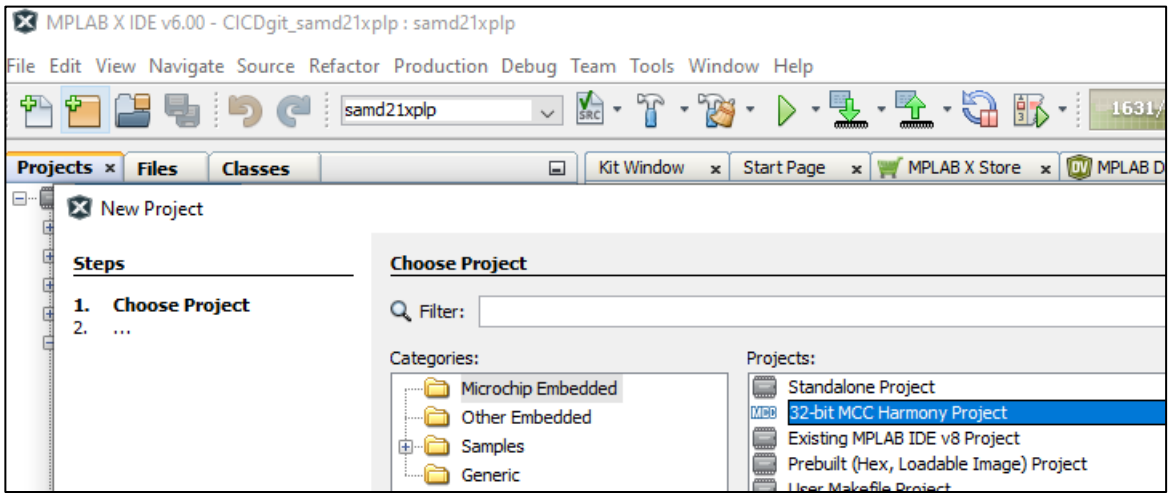
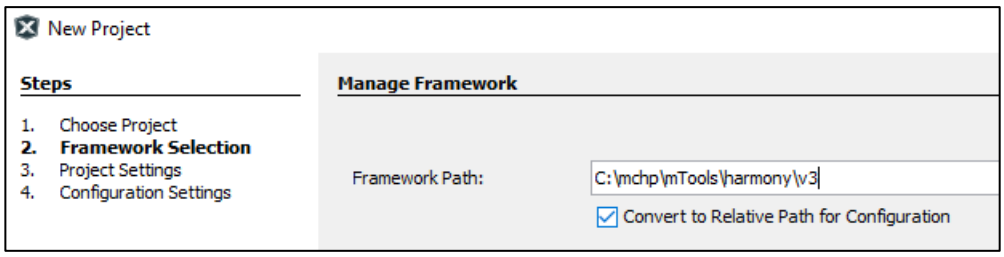
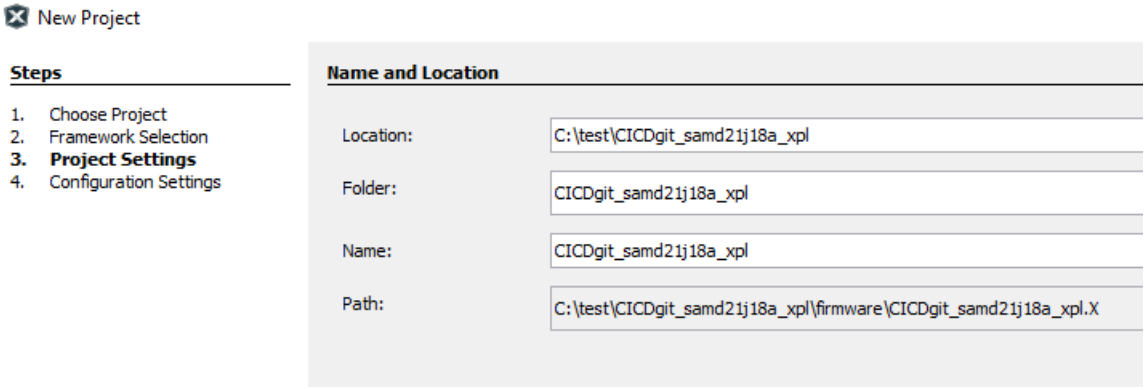
Short description on how the used H3-prj is created+config'd with Harmony3 (SL, 20.7.2022)

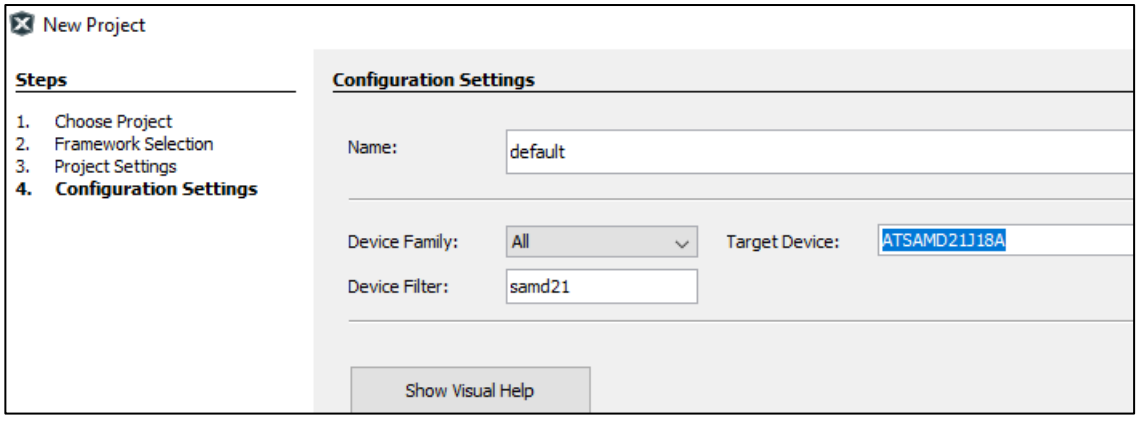
Prj-creation

Create new MCC-H3 project with MPLABX-v6.00 integrated MCC-v5.1.13-plugin

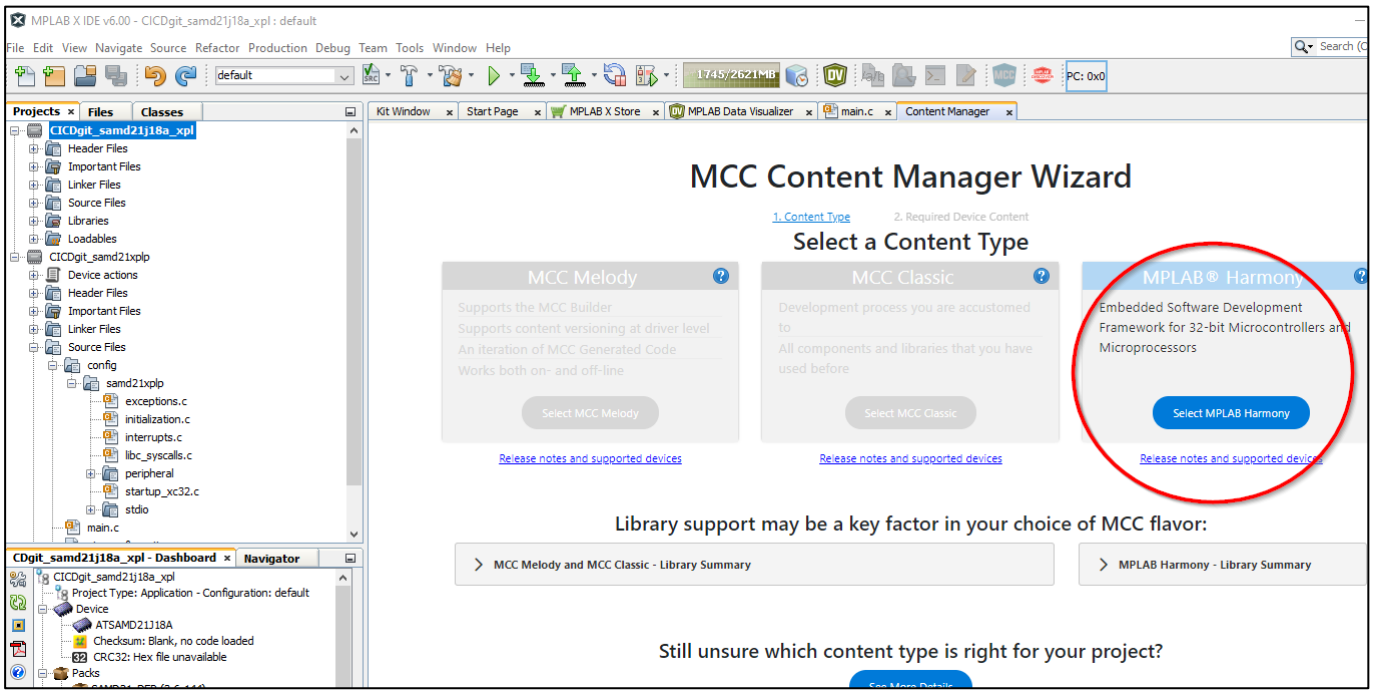




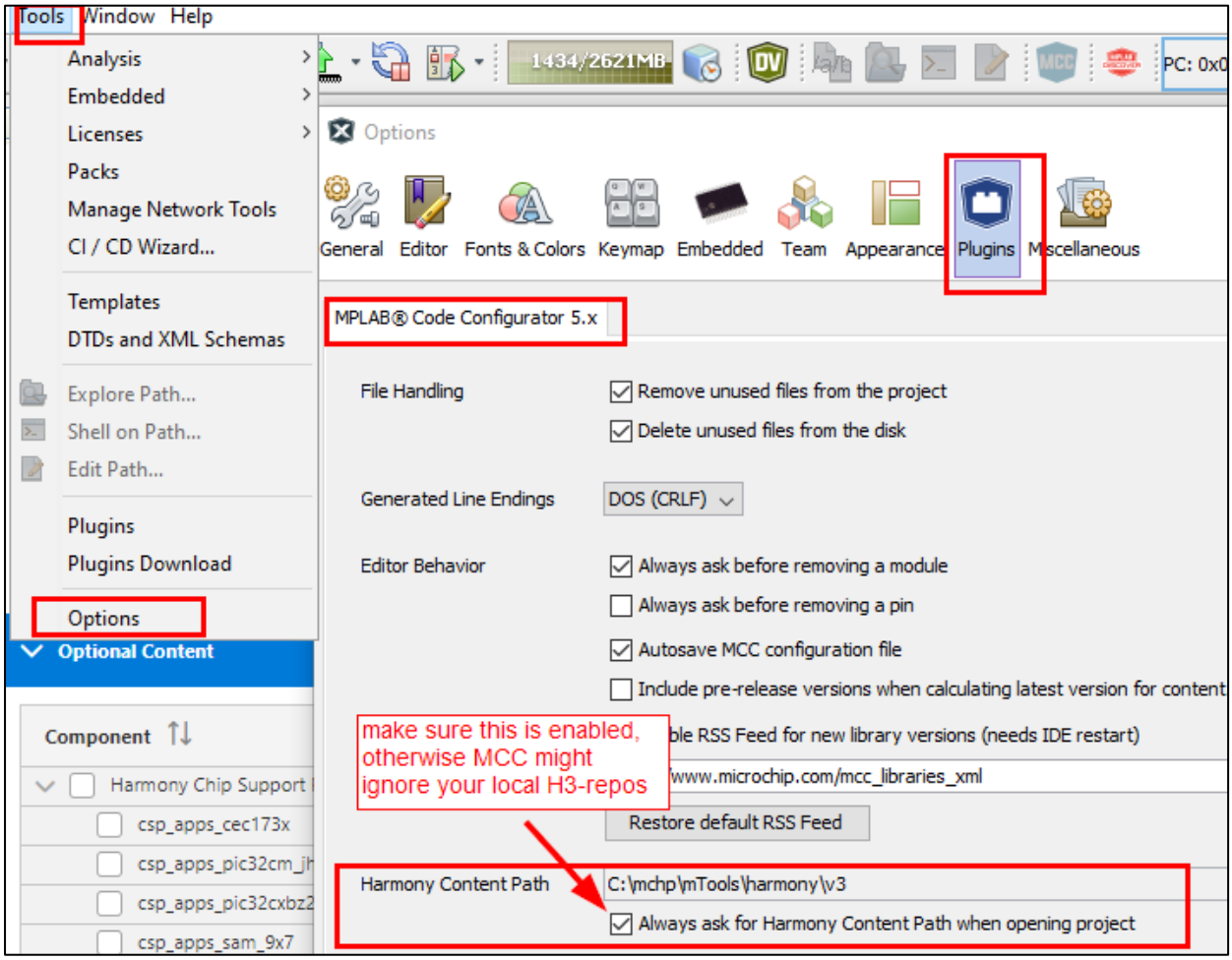




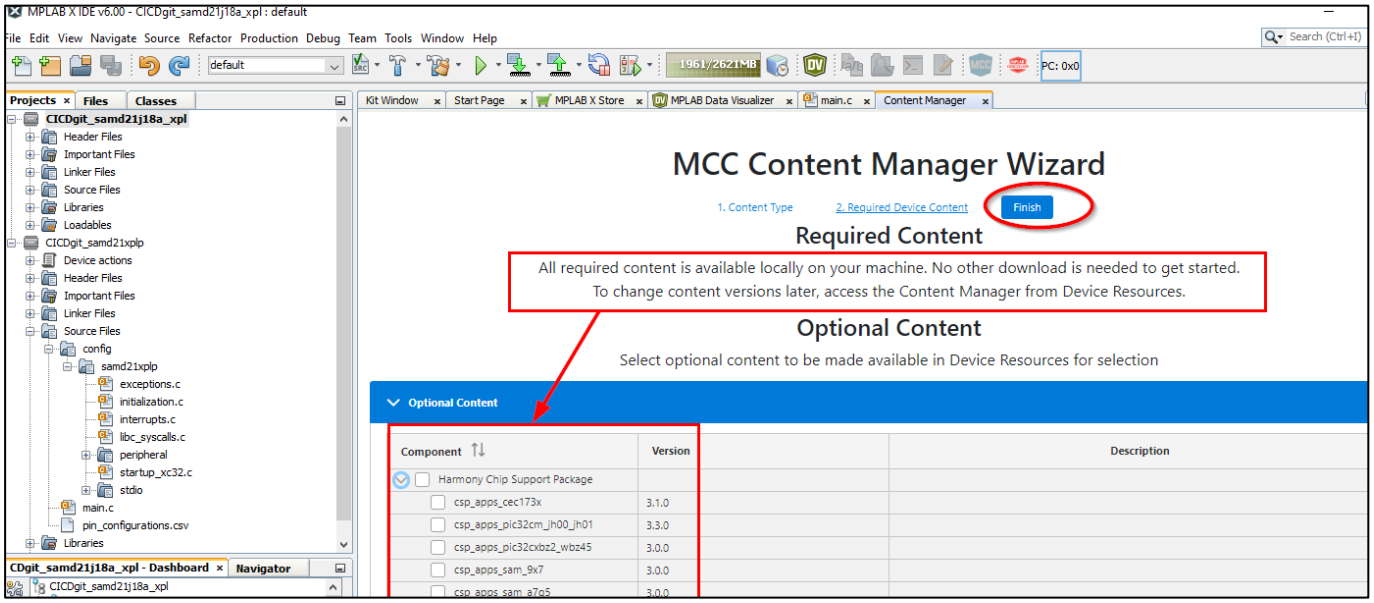
Next selection to use H3-content



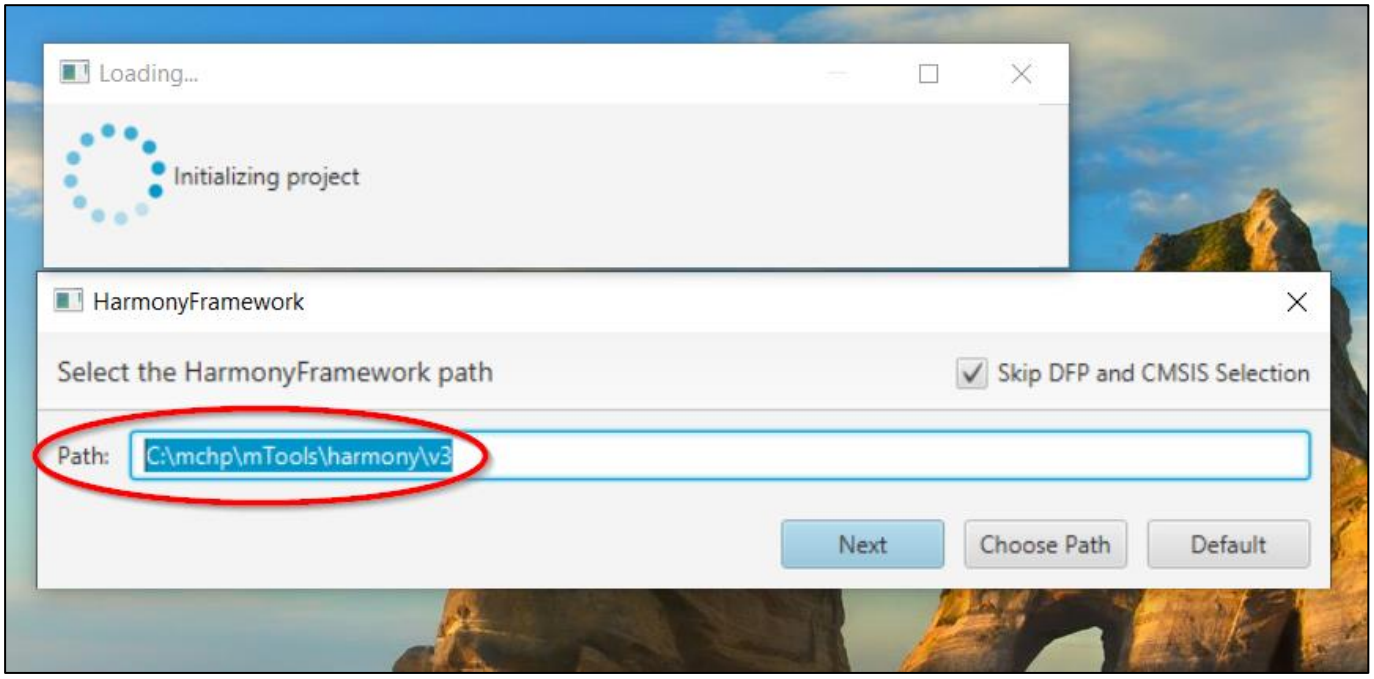
Assuming you've all required H3-repos downloaded already (->if not use the ContentManager to do so) **AND** the H3-framework path set in MPLABX-menu: tools-options-plugins-mcc/h3-path, shown here:



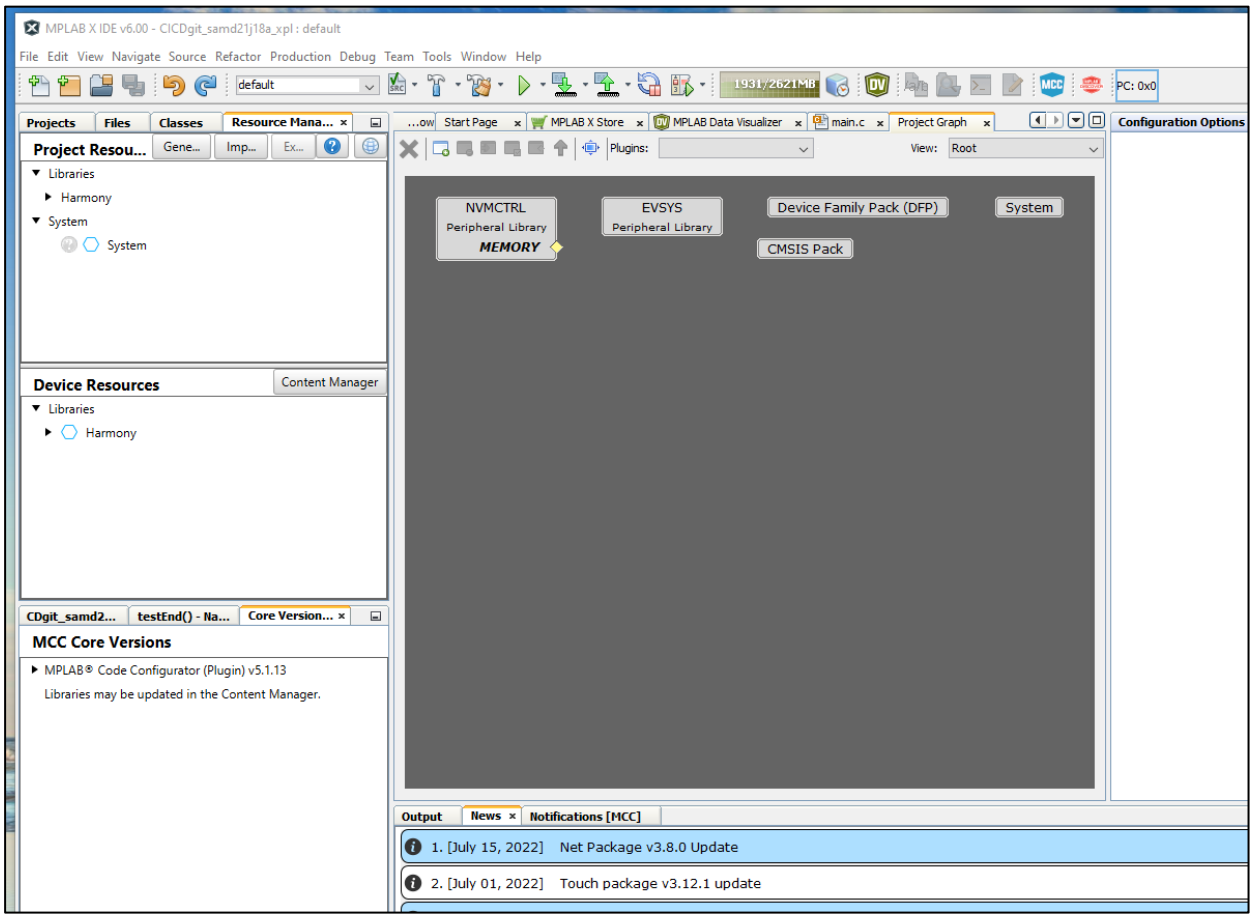
then you should see that 'all required content is available…' and you can hit 'Finish'



The path to the H3-repo should be picked up from MPLABX-settings



so continue with 'Next' and finally MHC3-UI should come up and look like this:

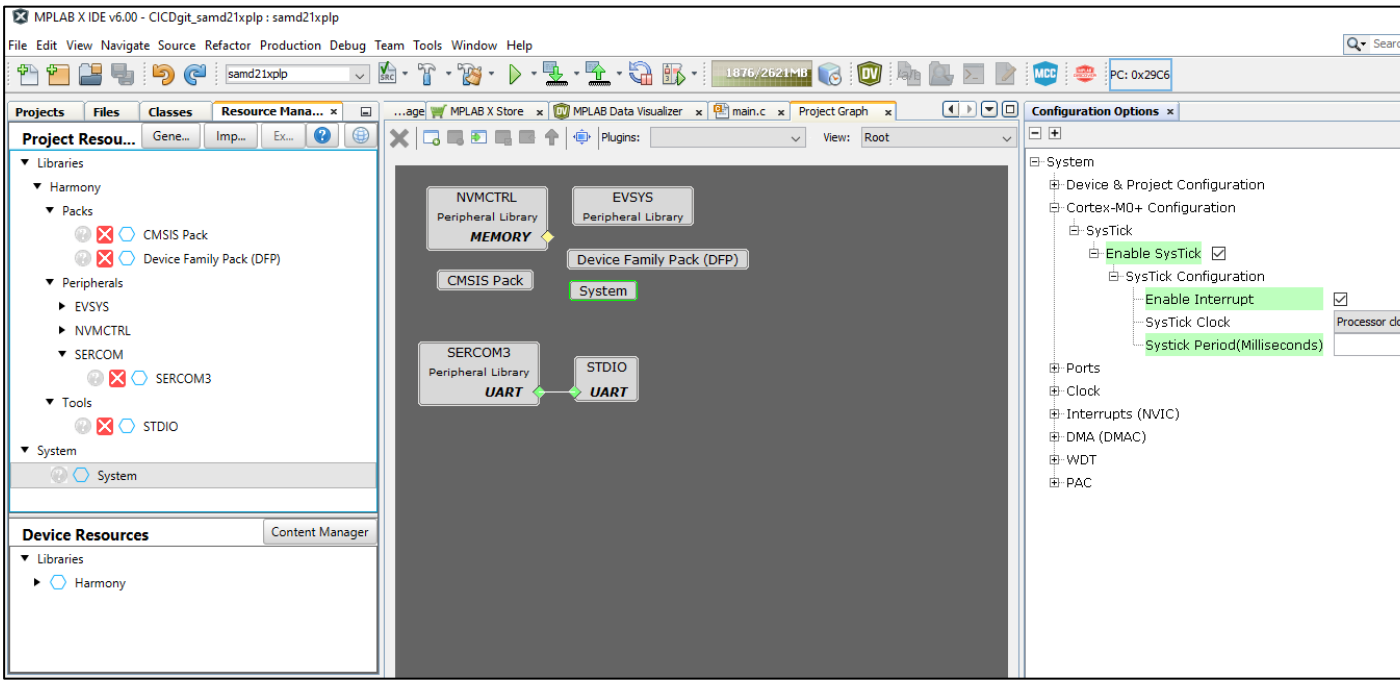


->now the prj-creation and H3-startup is done and you can continue to 'H3-configuration'

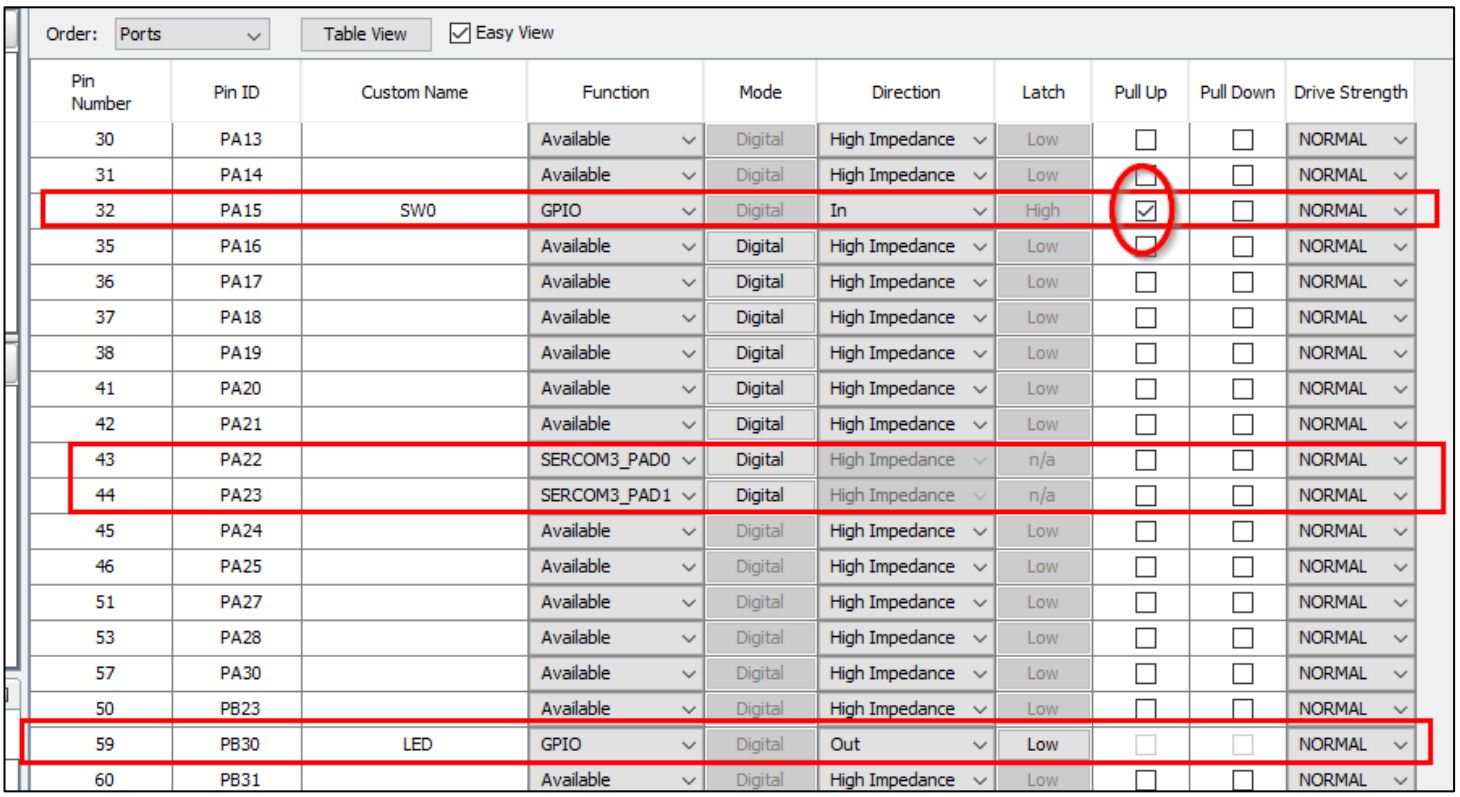
H3-configuration

Add STDIO '=printf()' and connect SERCOM3 (as onboard-EDBG-uart2usb bridge is connected to SERCOM3).

Configure SystemTick in 'system' as shown (to get a 250ms tickrate) and leave rest=default



Next assign the Pins as shown below

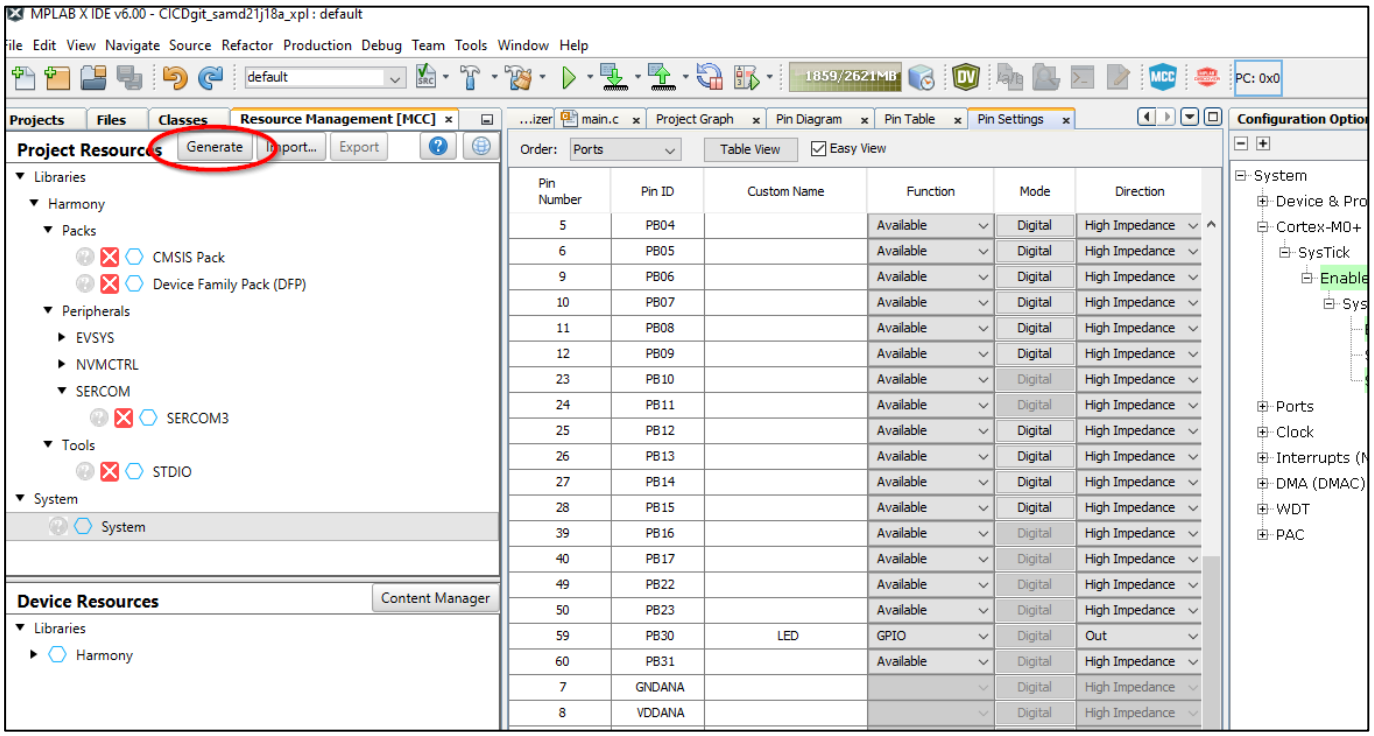


Order: Ports | Table View | Easy View

Pin Number	Pin ID	Custom Name	Function	Mode	Direction	Latch	Pull Up	Pull Down	Drive Strength
30	PA13		Available	Digital	High Impedance	Low	☐	☐	NORMAL
31	PA14		Available	Digital	High Impedance	Low	☐	☐	NORMAL
32	PA15	SW0	GPIO	Digital	In	High	☑	☐	NORMAL
35	PA16		Available	Digital	High Impedance	Low	☐	☐	NORMAL
36	PA17		Available	Digital	High Impedance	Low	☐	☐	NORMAL
37	PA18		Available	Digital	High Impedance	Low	☐	☐	NORMAL
38	PA19		Available	Digital	High Impedance	Low	☐	☐	NORMAL
41	PA20		Available	Digital	High Impedance	Low	☐	☐	NORMAL
42	PA21		Available	Digital	High Impedance	Low	☐	☐	NORMAL
43	PA22		SERCOM3_PAD0	Digital	High Impedance	n/a	☐	☐	NORMAL
44	PA23		SERCOM3_PAD1	Digital	High Impedance	n/a	☐	☐	NORMAL
45	PA24		Available	Digital	High Impedance	Low	☐	☐	NORMAL
46	PA25		Available	Digital	High Impedance	Low	☐	☐	NORMAL
51	PA27		Available	Digital	High Impedance	Low	☐	☐	NORMAL
53	PA28		Available	Digital	High Impedance	Low	☐	☐	NORMAL
57	PA30		Available	Digital	High Impedance	Low	☐	☐	NORMAL
50	PB23		Available	Digital	High Impedance	Low	☐	☐	NORMAL
59	PB30	LED	GPIO	Digital	Out	Low	☐	☐	NORMAL
60	PB31		Available	Digital	High Impedance	Low	☐	☐	NORMAL

!!don't forget the PullUp on the SW0-button, otherwise 'if (SW0=pressed)' is true right away, without even pressing the SW0!!

And finally GenerateCode



Application-code

Last create application code to do this:

- On sysTick-Wrap
  - toggleLED
  - and increment 'myCnt'
- if
  - '0<=myCnt<=5' print char 'a'
  - '5< myCnt<=10' print char 'b' && reset 'myCnt=0'
- if (SW0=pressed)
  - call 'testEnd()'
- testend() {
  - print final value of 'myCnt' and loop in while(1)

-> see 'CICDgh_samd21xplp\CICDgh_samd21xplp\firmware\src\main.c'

#eof