How to solve PE bean migration for 56F84xxx in CodeWarrior V10.3

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Troubleshooting

- There are two situations happened when using CodeWarrior V10.3 for 84xxx.

1. Q: It is failure when you try to add 56F84763 bean in 56F84789 project.

2. Q: Try to open an example project “Init_eFlexPWM” but not successful in CW V10.3.

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Use case 1

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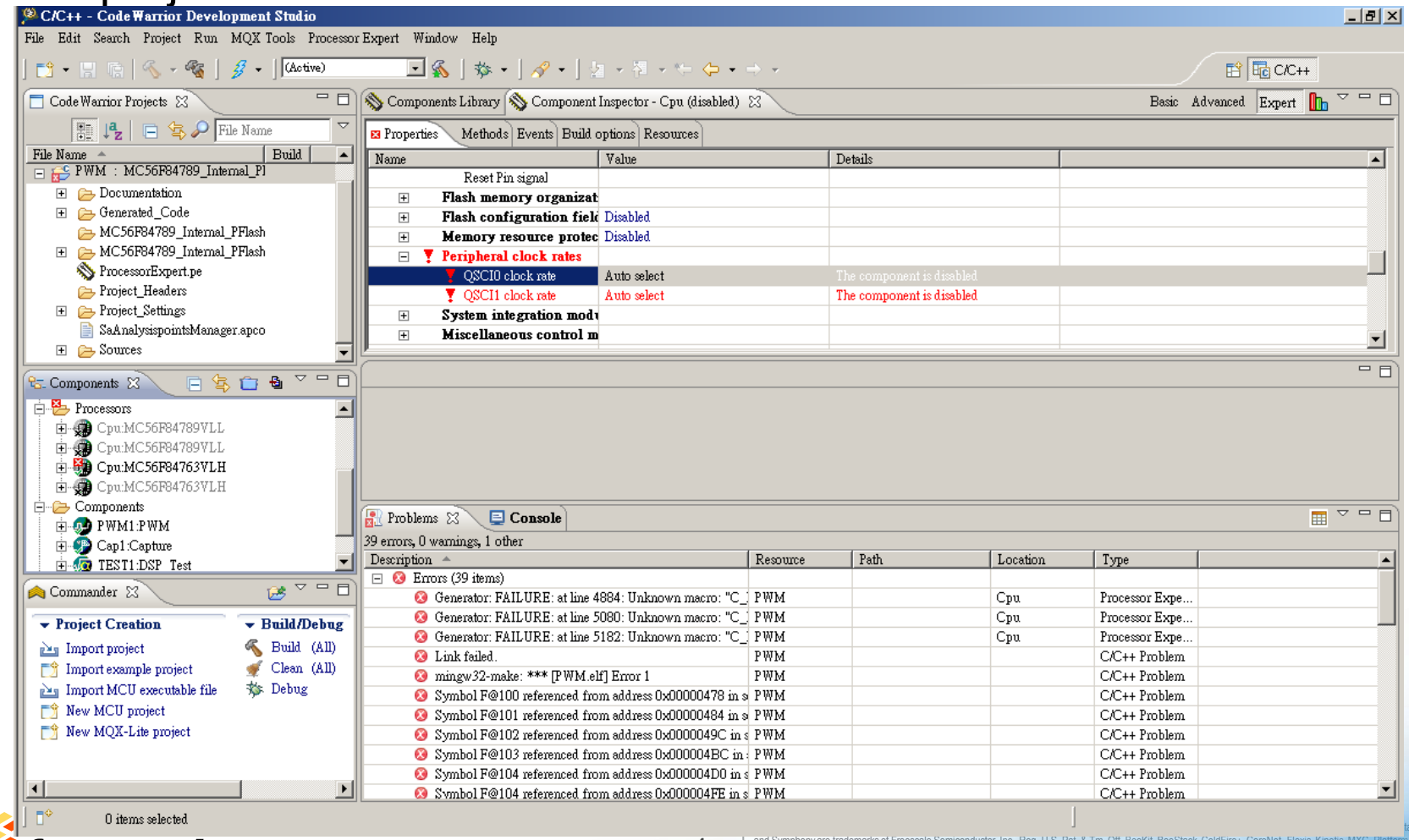
Why made this?

- It is failure when you try to add 56F84763 bean in 56F84789 project as screen shot.



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Move 56F84789 PE configuration to 56F84763

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How to change the processor (socket)

- A recommended procedure is (assuming that you are porting projects from CW 10.x, for CW classic it is different):
  1. Open the source project (in this case 56F84789 one)
  2. Export component settings from the project:
     a. In CodeWarrior Projects window (the window where project trees are showed) use right click and select Export… (Alternatively go via File/Export…)
     b. In Export dialog window, select Processor Expert/Export Component Settings
     c. In following window, select the project you want to port and select all Components used in it. Unselect rest of items (i.e. Configurations and Processors)
     d. Select output file where component settings will be stored
  3. Create project with target processor (in this case 56F84763)
  4. Import components:
     a. In CodeWarrior Projects use right click and select Import… (As alternative, go via File/Import…)
     b. In Export dialog window, select Processor Expert/Import Component Settings
     c. Select input file (it is the file created during Export)
     d. Select the project you are porting to. In right pane, all previously exported components should be visible with Add new import mode selected.

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How to change the processor (socket)

5. Click on Finish. Components are imported into the project.
6. Copy all source files from 56F84789 project Source directory into the 56F84763 Source directory.
7. In the 84789, LDM (Large Data Model) was used. Port the project as described and select the MC56F84763VLH_Internal_PFlash_LDM configuration as active.
8. If necessary, configure the CPU component (e.g. in the demo projects the Cpu_Delay100US method is often used therefore it has to be enabled in the CPU component).

- Unfortunately, you can't just add new CPU component to existing project because there is a lot of settings inside the CW itself (such as Debugger configurations or Build tools settings) which would be necessary to configure manually. In CW 10.3 these settings are made only during the New project creation. In CW 10.2 there was Change Wizard which do all this for the user, however support of this feature was cancelled in CW 10.3.

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How to change the processor (socket)

- Regarding LDM (Large Data Model) - 84xxx family has some limitations in SDM (Small Data Model) mode (e.g. byte constants are stored in memory location which is not accessible in SDM mode).
- The SDM/LDM 56F84763 problem is related to 56F84763's memory map, which differs from 56F84789. As default, PEx stores constants in data flash memory to save RAM space (this is controlled by CPU component's Build options\Generate linker file\Constants in xROM property). In case of 84789, the data flash memory area used for constants is within SDM addressable range but in case of 56F84763 it is outside. So general fix you're looking for is to disable Constants in xROM option in the CPU component.
- Putting libraries compiled for SDM into LDM project is risky.

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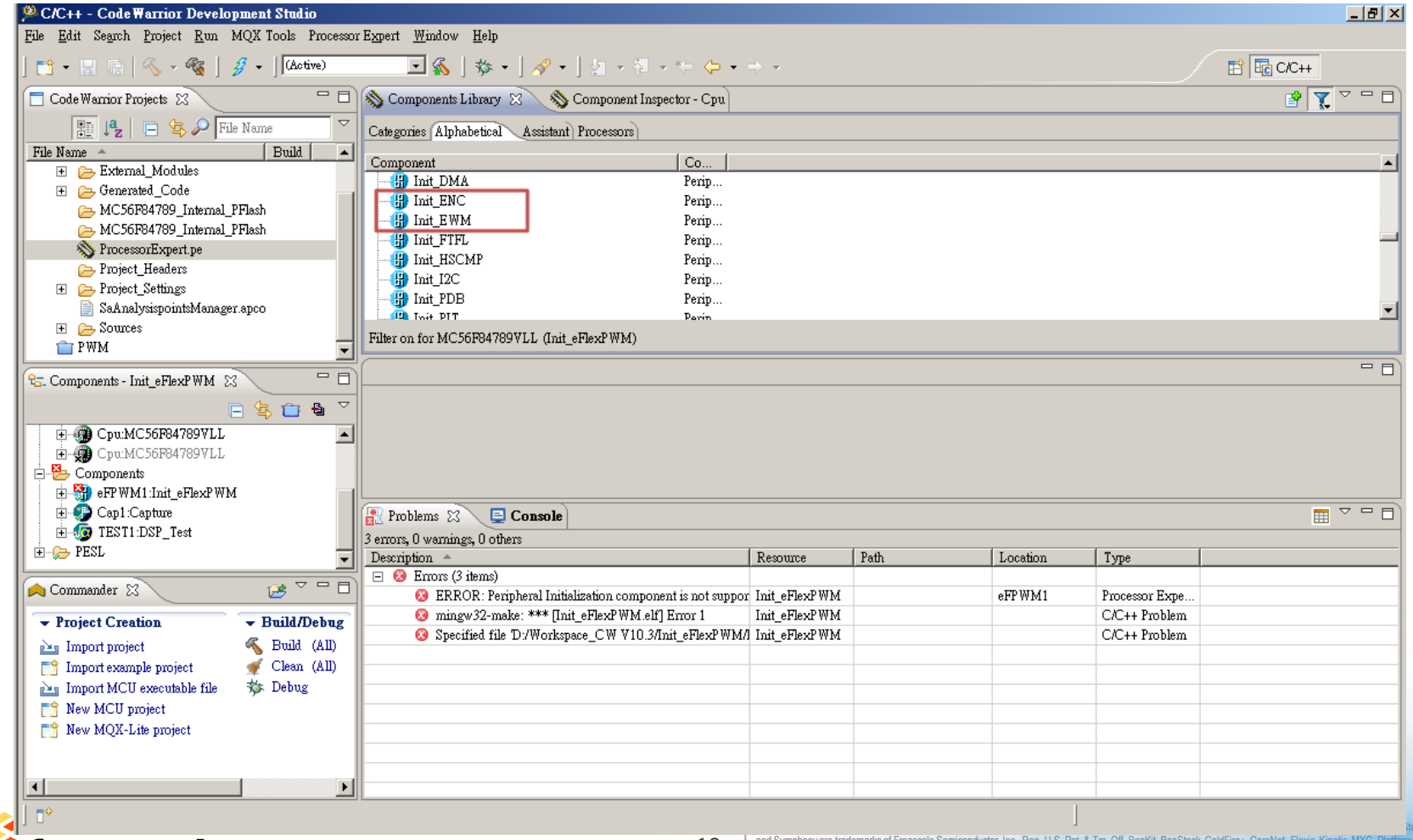

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Install UPDATE 1 for CW V10.3

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To solve some beans disappeared

- For 84xxx family projects use CW 10.3 installation, the preparation you should do:
- Need a clean CW 10.3 installation: CW_MCU_v10.3_b121211_SE_Offline.exe
- Get UPDATE 1 alpha version archive from your support window: com.freescale.mcu10_3.update.v1_0_0.zip
- Open CW IDE, perform a FILE ->RESTART to close all processes prior to installing Update 1.0.0. Users MUST NOT use CodeWarrior during the installation process of Update 1.0.0.
- Go to the Help\Install New Software. Click on Add… button and navigate to the archive location. Select DSC Support and click Next. Agree with license.

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