Switching LSM/DPM in CodeWarrior MCU 10.x - DRAFT

Tuesday, December 03, 2013 10:23 AM

• Create a new dummy MPC5643L LSM (VLE) project. The project debug configuration will be used to access the MCU.

New Bareboard Project		
Create an MCU Bareboa	rd Project	
Choose the location for th	e new project	
Project name: MPC5643L	_Switch_LSM2DPM	
Use default location		
	WORKSPACE_10_5_final\MPC5643L_Swi	Ant LONDON Proving
Location: D:\Freescale_	WORKSPACE_10_5_IINdl/WPC5045E_SWI	itch_LSM2DF Browse
?	< Back Next >	Finish Cancel
New Bareboard Project		
Specify the LSM/DPM con Specify the LSM/DPM con Content of the local second Content of the local second	SM)	
	Mode (DPM)	
The Lock-Step mode is int	ended for safety critical systems that rec	quire redundancy
		-
?	< Back Next >	Finish Cancel

Language:		
C		
© C++		
Instruction Set Op	tions:	
Ose the VL	E instruction set	
O Use the Bo	pokE instruction set	
Floating Point:		
None		
Software		
SPFP		
SPFP_Only	/	
	ort will be included in the project. This will set up your application with an t startup code (doing initialization of global variables).	*

• Import Flash Task



• Select the target task to switch mcu mode: MPC5643L_DPM_VLE to switch from LSM to DPM MPC5643L_LSM_VLE to switch from DPM to LSM

Note: there are also BOOKE alternatives which needs to be used if originally created dummy project is not VLE but BOOKE (see the first step) $% \left({\left[{{{\rm{SP}}} \right]_{\rm{sp}}} \right)_{\rm{sp}} \right)$

		ıpport ► TargetTask ► Flash_Programmer ► E		✓ ⁴ → Search E20		
Organize 🔻 New folder					≡ ▼ 🔳	(
	*	Name	Date modified	Туре	Size	
ᇘ Libraries		MPC5642A_BOOKE_INTFLASH.xml	23-Sep-13 3:50 PM	XML Document	2 KB	
Documents		MPC5642A_SHADOW_BOOKE_INTFLASH	23-Sep-13 3:50 PM	XML Document	2 KB	
👌 Music		MPC5642A_SHADOW_VLE_INTFLASH.xml	23-Sep-13 3:50 PM	XML Document	2 KB	
Pictures		MPC5642A_VLE_INTFLASH.xml	23-Sep-13 3:50 PM	XML Document	2 KB	
Subversion		MPC5643L_BOOKE_INTFLASH.xml	23-Sep-13 3:50 PM	XML Document	2 KB	
🛃 Videos		MPC5643L_BOOKE_SHADOWFLASH.xml	23-Sep-13 3:50 PM	XML Document	2 KB	
		MPC5643L_DPM_BOOKE.xml	23-Sep-13 3:50 PM	XML Document	4 KB	
Computer		MPC5643L_DPM_VLE.xml	23-Sep-13 3:50 PM	XML Document	4 KB	
🏭 Primary (C:)		MPC5643L_LSM_BOOKE.xml	23-Sep-13 3:50 PM	XML Document	2 KB	
DATA (D:)	E	MPC5643L_LSM_VLE.xml	23-Sep-13 3:50 PM	XML Document	2 KB	
DVD RW Drive (E:) EASEUS_DC		MPC5643L_VLE_INTFLASH.xml	23-Sep-13 3:50 PM	XML Document	2 KB	
Inst_pc (\\ZCZ01APP03) (I:)		MPC5643L_VLE_SHADOWFLASH.xml	23-Sep-13 3:50 PM	XML Document	2 KB	
🚍 view (\) (M:)		MPC5644A_BOOKE_INTFLASH.xml	23-Sep-13 3:50 PM	XML Document	2 KB	
🙀 Share (\\ZCZ01APP03) (S:)		MPC5644A_SHADOW_BOOKE_INTFLASH	23-Sep-13 3:50 PM	XML Document	2 KB	
		MPC5644A_SHADOW_VLE_INTFLASH.xml	23-Sep-13 3:50 PM	XML Document	2 KB	
🗣 Network	+	MPC5644A_VLE_INTFLASH.xml	23-Sep-13 3:50 PM	XML Document	2 KB	
File name: MPC56	43L_DPI	M_VLE.xml		▼ *.xml; *.ttf		

• Once the target task is imported the "Target Task" View tab is opened. Right click on the imported target task and select "Change Run Configuration". Select one of the dummy project debug configurations which matches the MCU connection you have (e.g. P&E, OSJTAG..)

			+ ©	New Task New Task Group
			•	Rename Duplicate Delete Execute Edit Task Configuration
				Change Run Configuration
📸 Target Tasks 🐹 🔗 Search 📮 Console		+ 🕞 🕻 🕷	Ŷ	Move up
	 Tasks 		₽	Move down
	Name	Task Type	2	Import
	🔞 shadw	Flash Programm	4	Export
	🔞 test1	Flash Programm		Profile As
	🔞 test_run_cfg	Flash Programm		Resource Configurations
	MPC5643L_DPM_VLE	Flash Programm	ACI	ive Debug Co

🥦 Run Configuration	<u>x</u>
Change Run Confi Associate the select	guration ed target tasks to a different Run Configuration.
Run Configuration	Active Debug Context Active Debug Context MPC5643L_Switch_LSM2DPM_RAM_PnE USB-ML-PPCNEXUS MPC5643L_Switch_LSM2DPM_FLASH_PnE USB-ML-PPCNEXUS
?	OK Cancel

• The Execute icon (green arrow) should be now enabled so the task can be executed.

Tasks Name	Execut	e
Name		and the second se
Name	Task Type	Run Configuration
🔞 shadw	Flash Programm	Active Debug Co
🔞 test1	Flash Programm	Active Debug Co
🔞 test_run_cfg	Flash Programm	Active Debug Co
MPC5643L_DPM_VLE	Flash Programm	MPC5643L_Switc

• At the end of the execution the MCU shall be switched to required mode. MCU power on reset is required.