

MPC567xK Qorivva MCU Development Board 

Qorivva



## Get to know the Qorivva MPC567xK Board





## Step-by-Step Installation Instructions

# Install Software and Tools

Install CodeWarrior Development Studio for Qorivva 55xx/56xx Architectures V2.10 or later.

# 2 Connect the USB Cable

Connect one end of the USB cable to the PC and the other end to the P&E debugger. Then connect the debugger to the JTAG (port P11) on the MPC567xK board. Allow the PC to automatically configure the USB drivers if needed.



The EVB should run straight out the box in internal VREG mode and jumper settings will not need modified.



### CodeWarrior

Download CodeWarrior V10.3 from freescale.com and follow the wizard to develop an MPC5675K project. This will include the initial configuration and startup as well as the header file.

#### 5 Open Supporting Documentation

Open the Qorivva Simple Cookbook and MPC567xK user manual from the Documentation and Training tab on the included DVD.



#### 6 Explore Further with the Qorivva Simple Cookbook: Lab Exercise

To run a demonstration using the MP567xK, follow the instructions for the lab exercise for MPC5675K in the Qorivva Simple Cookbook, located under the documentation tab on the DVD.

#### 7 Learn More About the MPC567xK

Read the release notes and documentation located on the DVD and at **freescale.com**.

- a. The Qorivva Simple Cookbook provides simple code examples for manipulating different peripherals on the MPC567xK
- b. The RAppID graphical initialization software will help you get to market faster
- c. CodeWarrior for 55xx/56xx with examples from the Simple Cookbook



## IVIPCO075KEVB257 Jumper Options

The following is a list of all the jumper options. The default installed jumper settings are listed in the second column.

Jumper Reference	Default Setting	Jump Count	Description
J77	ON	1	Has now been removed
J43	ON	1	Power on VDD_HV_IO is enabled
J59	ON	1	VDD_HV_DRAM_REF is enabled
J47	ON	1	Power on VDD_HV_FLA is enabled
J61	ON	1	Power on VDD_HV_PDI is enabled
J41	ON	1	Power on VDD_HV_OSC is enabled
J56	ON	1	Power on VDD_HV_ADV is enabled
J70	Short 1-2	1	Power on VDD_HV_ADR is 5.0 V
J60	OFF	0	Power on VDD_LV_COR is disabled
J53	ON	1	Internal power is enabled
J52	ON	1	Internal power is enabled
J71	Short 2-3	1	Internal power is enabled and 3.3 V to VDD_PMU
J48	Short 2-3	1	Internal power is enabled
J50	Short 1-2	1	VPP_TEST should be grounded
J38	OFF (place on PIN1 only)	1	POTS on ADC0 is disabled
J55	Short 2-3	1	PW_ON_RESET is enabled
J63	Short 1-2	1	MCRGM_FAB is tied to ground



Jumper Reference	Default Setting	Jump Count	Description
J34	Short 1-2	1	MCRGM_ABS0 is tied to ground
J37	Short 1-2	1	MCRGM_ABS2 is tied to ground
J40	Short 1-2	1	Use on-board 40 MHz crystal
J39	Short 1-2	1	Use on-board 40 MHz crystal
J67	OFF (place on PIN1 only)	1	Use on-board 40 MHz crystal
J68	OFF (place on PIN1 only)	1	Use on-board 10 MHz crystal
J46	ON	1	Power on Ethernet PHY is enabled
J30	ON	2	Power on CAN PHY is enabled
J31	ON	2	CANA TXD and RXD are connected to MCU
J22	ON	3	CANA control signals are on
J29	ON	2	CANB TXD and RXD are connected to MCU
J21	ON	3	CANB control signals are on
J18	Short 2-3	1	UART TXD is connected to MCU
J17	Short 2-3	1	UART RXD is connected to MCU
J19	Short 2-3	1	UART TXD is connected to MCU
J20	Short 2-3	1	UART RXD is connected to MCU
J16	ON	1	Power on LINC is enabled
J5	ON	1	LINC bus master mode is enabled
J23	ON	1	Power on LIND is enabled
J6	ON	1	LIND bus master mode is enabled

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Jumper Reference	Default Setting	Jump Count	Description
J15	ON	1	Power on SCI is enabled
J28	ON	3	Power on FlexRay is enabled
J26	ON	3	FlexRayA data signals are connected to MCU
J27	ON	4	FlexRayA control signals are on
J24	ON	3	FlexRayB data signals are connected to MCU
J25	ON	4	FlexRayB control signals are on
J13	ON	1	FlexRayA decoupling capacitor is disabled
J12	ON	1	FlexRayA decoupling capacitor is disabled
J10	ON	1	FlexRayB decoupling capacitor is disabled
J11	ON	1	FlexRayB decoupling capacitor is disabled
J78	ON	1	FLEXPWM0_B1 is disable to LED
J79	ON	1	FLEXPWM0_B0 is disable to LED
J80	ON	1	FLEXPWM0_A3 is disable to LED
J81	ON	1	FLEXPWM0_A2 is disable to LED
J82	ON	1	FLEXPWM0_X2 is disable to LED
J83	ON	1	FLEXPWM0_X3 is disable to LED
J84	ON	1	FLEXPWM0_A1 is disable to LED
J85	ON	1	FLEXPWM0_B3 is disable to LED



## ເvirບວຍ/5KEVB473 Jumper Options

The following is a list of all the jumper options. The default installed jumper settings are listed in the second column.

Jumper Reference	Default Setting	Jump Count	Description
J77	ON	1	Now been removed
J41	ON	1	Power on VDD_HV_IO is enabled
J63	Short 2-3	1	Power on VDD_HV_DRAM is 3.3 V
J58	ON	1	VDD_HV_DRAM_VTT is grounded
J55	ON	1	Power on VDD_HV_FLA is enabled
J56	ON	1	Power on VDD_HV_PDI is enabled
J40	ON	1	Power on VDD_HV_OSC is enabled
J44	ON	1	Power on VDD_HV_ADV is enabled
J78	Short 1-2	1	Power on VDD_HV_ADR is 5.0 V
J46	OFF	0	Power on VDD_LV_COR is disabled
J59	ON	1	Internal power is enabled
J57	ON	1	Internal power is enabled
J79	Short 2-3	1	Internal power is enabled and 3.3 V to VDD_PMU
J62	Short 2-3	1	Internal power is enabled
J83	Short1-2	1	VPP_TEST is tied to GND
J38	OFF (place on PIN1 only)	1	POTS on ADC0 is disabled
J61	Short 2-3	1	PW_ON_RESET is tied to ground

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Jumper Reference	Default Setting	Jump Count	Description
J64	Short 1-2	1	MCRGM_FAB is tied to ground
J34	Short 1-2	1	MCRGM_ABS0 is tied to ground
J37	Short 1-2	1	MCRGM_ABS2 is tied to ground
J43	Short 1-2	1	Use on-board 40 MHz crystal
J42	Short 1-2	1	Use on-board 40 MHz crystal
J73	OFF (place on PIN1 only)	1	Use on-board 40 MHz crystal
J74	OFF (place on PIN1 only)	1	Use on-board 40 MHz crystal
J71	Short 1-2	1	Power on PISMO_DM_VCC is 3.3 V
J72	Short 1-2	1	Power on PISMO_DM_VIO is 3.3 V
J48	ON	1	Power on Ethernet PHY is enabled
J30	ON	2	Power on CAN PHY is enabled
J31	ON	2	CANA TXD and RXD are connected to MCU
J22	ON	3	CANA control signals are on
J29	ON	2	CANB TXD and RXD are connected to MCU
J21	ON	3	CANB control signals are on
J18	Short 2-3	1	UART TXD is connected to MCU
J17	Short 2-3	1	UART RXD is connected to MCU
J19	Short 2-3	1	UART TXD is connected to MCU
J20	Short 2-3	1	UART RXD is connected to MCU
J16	ON	1	Power on LINC is enabled



Jumper Reference	Default Setting	Jump Count	Description
J5	ON	1	LINC bus master mode is enabled
J23	ON	1	Power on LIND is enabled
J6	ON	1	LIND bus master mode is enabled
J15	ON	1	Power on SCI is enabled
J28	ON	3	Power on FlexRay is enabled
J26	ON	3	FlexRayA data signals are connected to MCU
J27	ON	4	FlexRayA control signals are on
J24	ON	3	FlexRayB data signals are connected to MCU
J25	ON	4	FlexRayB control signals are on
J13	ON	1	FlexRayA decoupling capacitor is disabled
J12	ON	1	FlexRayA decoupling capacitor is disabled
J10	ON	1	FlexRayB decoupling capacitor is disabled

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Jumper Reference	Default Setting	Jump Count	Description
J11	ON	1	FlexRayB decoupling capacitor is disabled
J39	ON	1	FLEXPWM0_B1 is enabled to LED
J49	ON	1	FLEXPWM0_B0 is enabled to LED
J50	ON	1	FLEXPWM0_A3 is enabled to LED
J52	ON	1	FLEXPWM0_A2 is enabled to LED
J54	ON	1	FLEXPWM0_X2 is enabled to LED
J80	ON	1	FLEXPWM0_X3 is enabled to LED
J81	ON	1	FLEXPWM0_A1 is enabled to LED
J82	ON	1	FLEXPWM0_B3 is enabled to LED



Visit freescale.com/Qorivva for more information.

### Support

Visit **freescale.com/support** for a list of phone numbers within your region.

### Warranty

Visit **freescale.com/warranty** for complete warranty information.



#### For more information, visit freescale.com/MPC567xKEVB

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