

Release Notes for MPLAB® Code Configurator PIC10/PIC12/PIC16/PIC18 library v1.65.2

1 What is MPLAB Code Configurator PIC10/PIC12/PIC16/PIC18 library

The PIC10-PIC12-PIC16-PIC18 library enables to use newer 8bit MCU devices and its modules.

2 System Requirements

- MPLAB® X IDE 4.15 or later
- XC8 compiler v1.45 or later
- MCC Core Version 4.45 or later

3 Installing MPLAB® Code Configurator PIC10-PIC12-PIC16-PIC18_v1.65.2

Basic steps for installing MPLAB® Code Configurator needs to be installed as below.

To install the MPLAB® Code Configurator Plugin:

1. In the MPLAB® X IDE, select **Plugins** from the Tools menu
2. Select the **Available Plugins** tab
3. Check the box for the MPLAB® Code Configurator, and click on **Install**

To install the PIC10-PIC12-PIC16-PIC18_v1.65.2 (if not available with plugin)

1. Download **PIC10-PIC12-PIC16-PIC-18_v1.65.2.jar** from microchip website.
2. In the MPLAB® X IDE, select **Options** from the **Tools** menu
3. Select **MPLAB® Code Configurator 3.x** tab from **Plugins** option
4. Click on **Install Library**
5. Add **PIC10-PIC12-PIC16-PIC18_v1.65.2.jar**
6. Restart MPLAB® X IDE

To load different peripheral library version

1. Open MPLAB® Code Configurator v3 from the Tools menu
2. In Versions tab under PIC10/PIC12/PIC16/PIC18 MCUs will find the multiple library version (loaded version is indicated by the green dot)
3. Right Click on the required version of the library and select Mark for load
4. Click on Load Selected Libraries button to load the library

4 What's New

- Added new 8bit devices (Look at section 8 and section 10 for details)
- MSSP SPI Slave Interrupt supported
- The API name has been renamed for Timer0
 - o tmr0_Read8bitTimer() to tmr0_ReadTimer()
 - o tmr0_Read16bitTimer() to tmr0_ReadTimer()
 - o tmr0_Write8bitTimer() to tmr0_WriteTimer()
 - o tmr0_Write16bitTimer() to tmr0_WriteTimer()
 - o tmr0_Load8bitTimer() to tmr0_LoadTimer()
 - o tmr0_Load16bitTimer() to tmr0_LoadTimer()

5 Repairs and Enhancements

#	ID	Description	Affected Devices
1.	MCCV3XX-7199	CLC GUI	18F27K42
2.	MCCV3XX-7344	ACTCON Register missing from PIC16(L)F191xx devices in MCC	PIC16(L)F191xx
3.	MCCV3XX-6778	Bidirectional pins not functioning as expected and generated wrong register values.	8bit devices
4.	MCCV3XX-7444	CLC output enable	18F27K42
5.	MCCV3XX-7466	FVR Buffer 2 Gain in MCC	PIC18FxxK83
6.	MCCV3XX-7345	Charge Pump Bias Voltage Setting Incorrect in Easy Setup and Register views	8bit devices
7.	MCCV3XX-7214	Code configurator error	8bit devices
8.	MCCV3XX-7410	I2Cx_readDataBlock() routine has an incorrect pre-decrement statement.	8bit devices
9.	MCCV3XX-7476	MCC ECAN CIOCON no code generation	8bit devices
10.	MCCV3XX-7477	MCC ECAN missing required init step for older PIC18 devices	8bit devices
11.	MCCV3XX-7522	MCC I2C driver (PIC10/12/16...) missing semicolon!	8bit devices
12.	MCU8_CC-1695	MCC Timer 0 16bits mode configuration BUG	PIC18F45K50
13.	MCU8_CC-2181	MCC Pin Module Custom Names Invalidator	
14.	MCU8_CC-2133	MCC generated failure FLASH code	PIC18F47K42
15.	MCU8_CC-1726	MPLABX / MCC observations	PIC18F47K42
16.	MCCV3XX-7341	PWM5, PWM6 are not selectable in DSMx after included in project resource	PIC16F1768
17.	MCCV3XX-7489	COG issue	PIC16F1779

#	ID	Description	Affected Devices
18.	MCU8_CC-1238	Wrong ADPSIS bit setting	PIC18F47K40
19.	MCCV3XX-7126	Incorrect NVMADRH Register Access in memory.c	PIC18LF45K42
20.	MCCV3XX-7300	Register Settings Reset in MCC LCD Design	8bit devices
21.	MCCV3XX-7241	SF Case 00269522: Pin Manager issue in Mikro-E click library	8bit devices
22.	MCCV3XX-7240	SF Case 00270271: Wrong code generation for pin module	8bit devices
23.	MCU8_CC-1402	SF Case 00271542: No ECCP source codes is generated for PIC12F1822 device	8bit devices
24.	MCU8_CC-1662	SF Case 00275562 : Windowed function of WWDT	8bit devices
25.	MCU8_CC-1676	SF Case 00276349: MCC does not let you select LFINTOSC for Timer1	8bit devices
26.	MCU8_CC-1780	SF Case 00277670: ADC configuration	8bit devices
27.	MCU8_CC-1819	SF Case 00278093: PIC18F45K50 - Error with TIMER0 generated code in 16 bits mode	8bit devices
28.	MCCV3XX-7372	SF case 00277130: External clock frequency recommended value	8bit devices
29.	MCU8_CC-782	i2c1 improvement in 1.65.1 core for PIC10 / PIC12 / PIC16 / PIC18 MCUs ?	8bit devices
30.	MCCV3XX-6864	MCC support for PIC18FxxJ53/13	PIC18FxxJ53/13

6 Known Issues

None

7 Frequently Asked Questions

For frequently asked questions, please refer to the FAQ post on the [MCC Forum](http://www.microchip.com/forums/f293.aspx) (<http://www.microchip.com/forums/f293.aspx>)

8 Supported Families

The MCC PIC10-PIC12-PIC16-PIC18 Library 1.65.2 supports the following families.

(<http://www.microchip.com/ParamChartSearch/Chart.aspx?branchID=30048>)

The full list of devices is in Section 10.

- PIC10(L)F32x
- PIC12/16F75x
- PIC16(L)F145x
- PIC12/16(L)F150x
- PIC16(L)F151x
- PIC16(L)F152x
- PIC12/16LF155x
- PIC16(L)F156x
- PIC12/16(L)F157x
- PIC12/16(L)F161x
- PIC16F170x
- PIC16(L)F171x

- PIC16F176x
- PIC16(L)F177x
- PIC16(L)F178x
- PIC12/16(L)F182x
- PIC12/16(L)F184x
- PIC16LF190x
- PIC16(L)F193x
- PIC16(L)F194x
- PIC16(L)F153xx
- PIC16(L)F183xx
- PIC16(L)F184xx (**PIC16(L)F185x**)
- PIC16(L)F188xx
- **PIC18(L)FxxJ13**
- **PIC18(L)FxxJ53**
- PIC16(L)F191xx
- PIC18F1xK22
- PIC18F2x/4xK20
- PIC18F2x/4xK22
- PIC18(L)F6x/8xK22
- PIC18(L)F2x/4xK40
- PIC18(L)F2x/4x/5xK42
- PIC18F2x/4x/5xQ10
- PIC18F1xK50
- PIC18F2x/4xK50
- PIC18F9x/8x/6xJ60
- PIC18(L)F2x/4x/6xK80
- PIC18(L)F2x/4xK83
- PIC18(L)F6x/8xK90

9 Customer Support

9.1 The Microchip Web Site

Microchip provides online support via our web site at <http://www.microchip.com>. This web site is used as a means to make files and information easily available to customers. Accessible by using your favorite Internet browser, the web site contains the following information:

- Product Support – Data sheets and errata, application notes and sample programs, design resources, user's guides and hardware support documents, latest software releases and archived software
- General Technical Support – Frequently Asked Questions (FAQs), technical support requests, online discussion groups/forums (<http://forum.microchip.com>), Microchip consultant program member listing
- Business of Microchip – Product selector and ordering guides, latest Microchip press releases, listing of seminars and events, listings of Microchip sales offices, distributors and factory representatives

9.2 Additional Support

Users of Microchip products can receive assistance through several channels:

- Distributor or Representative
- Local Sales Office
- Field Application Engineering (FAE)
- Technical Support

Customers should contact their distributor, representative or field application engineer (FAE) for support. Local sales offices are also available to help customers. A listing of sales offices and locations is available on our web site.

Technical support is available through the web site at: <http://support.microchip.com>

10 Appendix: Supported Devices

The MCC pc10-pic12-pic16-pic18_v1.65.2 supports the following **392 Devices**. Devices shown in bold are new to this release (**20 Devices**)

General Purpose MCUs

- | | | |
|-----------------|-----------------|--------------------------|
| • PIC10(L)F320 | • PIC16(L)F1619 | • PIC16(L)F15313 |
| • PIC10(L)F322 | • PIC16(L)F1703 | • PIC16(L)F15323 |
| • PIC12F/HV752 | • PIC16(L)F1704 | • PIC16(L)F15324 |
| • PIC16F/HV753 | • PIC16(L)F1705 | • PIC16(L)F15325 |
| • PIC12(L)F1501 | • PIC16(L)F1707 | • PIC16(L)F15344 |
| • PIC12LF1552 | • PIC16(L)F1708 | • PIC16(L)F15345 |
| • PIC12(L)F1571 | • PIC16(L)F1709 | • PIC16(L)F15354 |
| • PIC12(L)F1572 | • PIC16(L)F1713 | • PIC16(L)F15355 |
| • PIC12(L)F1612 | • PIC16(L)F1716 | • PIC16(L)F15356 |
| • PIC12(L)F1822 | • PIC16(L)F1717 | • PIC16(L)F15375 |
| • PIC12(L)F1840 | • PIC16(L)F1718 | • PIC16(L)F15376 |
| • PIC16(L)F1503 | • PIC16(L)F1719 | • PIC16(L)F15385 |
| • PIC16(L)F1507 | • PIC16(L)F1764 | • PIC16(L)F15386 |
| • PIC16(L)F1508 | • PIC16(L)F1765 | • PIC16(L)F18313 |
| • PIC16(L)F1509 | • PIC16(L)F1768 | • PIC16(L)F18323 |
| • PIC16(L)F1512 | • PIC16(L)F1769 | • PIC16(L)F18324 |
| • PIC16(L)F1513 | • PIC16(L)F1773 | • PIC16(L)F18325 |
| • PIC16(L)F1516 | • PIC16(L)F1776 | • PIC16(L)F18326 |
| • PIC16(L)F1517 | • PIC16(L)F1777 | • PIC16(L)F18344 |
| • PIC16(L)F1518 | • PIC16(L)F1778 | • PIC16(L)F18345 |
| • PIC16(L)F1519 | • PIC16(L)F1779 | • PIC16(L)F18346 |
| • PIC16(L)F1526 | • PIC16(L)F1782 | • PIC16(L)F18424 |
| • PIC16(L)F1527 | • PIC16(L)F1783 | • PIC16(L)F18425 |
| • PIC16LF1554 | • PIC16(L)F1784 | • PIC16(L)F18426 |
| • PIC16LF1559 | • PIC16(L)F1786 | • PIC16(L)F18444 |
| • PIC16LF1566 | • PIC16(L)F1787 | • PIC16(L)F18445 |
| • PIC16LF1567 | • PIC16(L)F1788 | • PIC16(L)F18446 |
| • PIC16(L)F1574 | • PIC16(L)F1789 | • PIC16(L)F18455* |
| • PIC16(L)F1575 | • PIC16(L)F1823 | • PIC16(L)F18456* |
| • PIC16(L)F1578 | • PIC16(L)F1824 | • PIC16(L)F18854 |
| • PIC16(L)F1579 | • PIC16(L)F1825 | • PIC16(L)F18855 |
| • PIC16(L)F1613 | • PIC16(L)F1826 | • PIC16(L)F18856 |
| • PIC16(L)F1614 | • PIC16(L)F1827 | • PIC16(L)F18857 |
| • PIC16(L)F1615 | • PIC16(L)F1828 | • PIC16(L)F18875 |
| • PIC16(L)F1618 | • PIC16(L)F1829 | • PIC16(L)F18876 |
| | • PIC16(L)F1847 | • PIC16(L)F18877 |

- **PIC18(L)F26J13**
- **PIC18(L)F27J13**
- **PIC18(L)F46J13**
- **PIC18(L)F47J13**
- PIC18F23K20
- PIC18F24K20
- PIC18F25K20
- PIC18F26K20
- PIC18F43K20
- PIC18F44K20
- PIC18F45K20
- PIC18F46K20
- PIC18(L)F13K22
- PIC18(L)F14K22
- PIC18(L)F23K22
- PIC18(L)F24K22
- PIC18(L)F25K22
- PIC18(L)F26K22
- PIC18(L)F43K22
- PIC18(L)F44K22
- PIC18(L)F45K22
- PIC18(L)F46K22
- PIC18F65K22
- PIC18F66K22
- PIC18F67K22
- PIC18F85K22
- PIC18F86K22
- PIC18F87K22
- PIC18(L)F24K40
- PIC18(L)F25K40
- PIC18(L)F26K40
- PIC18(L)F27K40
- PIC18(L)F45K40
- PIC18(L)F46K40
- PIC18(L)F47K40
- PIC18(L)F65K40
- PIC18(L)F66K40
- PIC18(L)F67K40
- PIC18(L)F24K42
- PIC18(L)F25K42
- PIC18(L)F26K42
- PIC18(L)F27K42
- PIC18(L)F45K42
- PIC18(L)F46K42
- PIC18(L)F47K42
- PIC18(L)F55K42
- PIC18(L)F56K42
- PIC18(L)F57K42
- PIC18F24Q10
- PIC18F25Q10
- PIC18F26Q10
- PIC18F27Q10
- PIC18F45Q10
- PIC18F46Q10
- PIC18F47Q10
-
- USB MCUs**
- PIC16(L)F1454
- PIC16(L)F1455
- PIC16(L)F1459
- **PIC18(L)F26J53**
- **PIC18(L)F27J53**
- **PIC18(L)F46J53**
- **PIC18(L)F47J53**
- PIC18(L)F13K50
- PIC18(L)F14K50
- PIC18(L)F24K50
- PIC18(L)F25K50
- PIC18(L)F45K50
-
- LCD MCUs**
- PIC16LF1902
- PIC16LF1903
- PIC16LF1904
- PIC16LF1906
- PIC16LF1907
- PIC16(L)F1933
- PIC16(L)F1934
- PIC16(L)F1936
- PIC16(L)F1937
- PIC16(L)F1938
- PIC16(L)F1939
- PIC16(L)F1946
- PIC16(L)F1947
- PIC16(L)F19155
- PIC16(L)F19156
- PIC16(L)F19175
- PIC16(L)F19176
- PIC16(L)F19185
- PIC16(L)F19186
- PIC16(L)F19195
- PIC16(L)F19196
- PIC16(L)F19197
- PIC18F65K90
- PIC18F66K90
- PIC18F67K90
- PIC18F85K90
- PIC18F86K90
- PIC18F87K90
-
- CAN MCUs**
- PIC18(L)F25K80
- PIC18(L)F26K80
- PIC18(L)F45K80
- PIC18(L)F46K80
- PIC18(L)F65K80
- PIC18(L)F66K80
- PIC18(L)F25K83
- PIC18(L)F26K83
-
- Ethernet MCUs**
- PIC18F66J60
- PIC18F66J65
- PIC18F67J60
- PIC18F86J60
- PIC18F86J65
- PIC18F87J60
- PIC18F96J60
- PIC18F96J65
- PIC18F97J60

* These devices will be supported in future releases of MPLABX IDE.