Release Notes for MPLAB® Code Configurator PIC10/PIC12/PIC16/PIC18 library v1.25

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

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

2 System Requirements

- MPLAB® X IDE 3.40 or later
- XC8 compiler v1.38 or later
- MCC Version 3.25

3 Installing MPLAB® Code Configurator PIC10/PIC12/PIC16/PIC18_v1.25

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

To install the MPLAB® Code Configurator V3.25 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 v3, and click on **Install**

To install the PIC10-PIC12-PIC16-PIC18_v1.25

1. Download **PIC10-PIC12-PIC16-PIC-18_v1.25.jar** from microchip website.
2. In the MPLAB® X IDE, select **Options** from the **Tools** menu
3. Select **Plugin** tab
4. Click on **Add Library**
5. Add **PIC10-PIC12-PIC16-PIC18_v1.25.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 MSSP 5 bit address support
- External Interrupt Support for all the 8bit devices
- Added help document for each module, which can be invoked on context menu.
- New 8bit devices supported (Look at section 8 and section 10 for details)
- USB module is supported.

5 Repairs and Enhancements

#	ID	Description	Device(s)
1.	MCCV3XX-3280	ADCC Improvement for Easy Setup window	All 8bit devices
2.	MCCV3XX-4052	Discrepancy between MCC and datasheet for PIC16F1768	PIC16F1768
3.	MCCV3XX-4096	CMP C1IN1+ pin is missing from the pin manager UI.	PIC16F176x
4.	MCC3XX-4103	PLL not working in 157x devices because of incomplete update in xml files	PIC16F157x
5.	MCCV3XX-4102	WPUEN bit is missing in the generated code	All 8bit devices
6.	MCCV3XX-4100	Incorrect Device package	PIC16(L)F170x
7.	MCCV3XX-4101	Error in VSS pin description	PIC18(L)F25K80
8.	MCCV3XX-4085	Wrong package (UQFPN)	PIC16(L)F193x
9.	MCCV3XX-3337	TMR2HLT- T2IN pin should be unlocked automatically	PIC16F176x
10.	MCCV3xx- 4016	Multiple I/O macro definitions are coming for the same GPIO pin	All 8bit devices
11.	MCCV3xx- 2357	IOC - Build error due to PIN_MANAGER_IOC() function	All 8bit devices
12.	MCCV3xx- 4672	TMR1:- Build error due to TMR1_InterruptHandler	PIC17F753
13.	MCCV3xx-4580	Package Issue	PIC16(L)F1704
14.	MCCV3xx-4636	Easy Setup of CRC polynomial and seed values are ignored	All 8bit devices
15.	MCCV3xx-4635	Configure the INT Pin Interrupt	PIC16LF18323
16.	MCCV3xx-4322	Exception while ADC module is selected	PIC16F161x
17.	MCCV3xx-4263	Defined void (*TMR1_InterruptHandler)(void) variable as extern	All 8bit devices
18.	MCCV3xx-4245	IOCA registers settings are missing	PIC16(L)F1612

#	ID	Description	Device(s)
19.	MCCV3xx-4239 MCCV3xx-4228 MCCV3xx-4217	Incorrect PLL value	PIC18FxxK50, PIC16F157x
20.	MCCV3xx-4225	no default value when ADCC module is selected	All 8bit devices
21.	MCCV3xx-4207	Changes in CCPRL register not getting reflected in the UI for Enhanced PWM mode	PIC16F18xx
22.	MCCV3xx-4131	Peripheral .C files need to include all MCC definitions, ISR "Else" needs to "reset", MCC diff seems to be missing Exit??	8bit devices
23.	MCCV3xx-4118	10Bit DAC: Double buffer option UI is clearing DACLD bits in the generated API	PIC16F17xx
24.	MCCV3xx-4114	TMR1 - Notification should be updated on adding NCO module in project resources.	PIC16F188xx
25.	MCCV3xx-4113	MCC V3.15 generates wrong DACxLD bits for DAC2	PIC16F1776
26.	MCCV3xx-4102	WPUEN bit is missing in the generated code	PIC16LF190x
27.	MCCV3xx-4100	Device package information is not as per the datasheet	PIC16(L)F170x
28.	MCCV3xx-4642	PLL indication to be added for internal frequencies	PIC16F18xxx, PIC18Fxx K40, PIC16F153xx
29.	MCCV3xx-4494	MCC plugin v3.16 : PIC16F18855 issues	PIC16F18855
30.	MCCV3xx-4458	IOC RA5 pin clears interrupt enable flags	PIC16F150x
31.	MCCV3xx-4433	wrong generated MCC code for IOC	PIC16F18855
32.	MCCV3xx-4634	EPWM on PIC16F1847 Not selecting output	PIC16F1847
33.	MCCV3xx-4410	CxIN-, CxIN0+ and CxIN1+ pins not appearing properly in the UI	PIC16F1769
34.	MCCV3xx-4383	OSCILLATOR Module for PIC16F1827	PIC16F1827
35.	MCCV3xx-4366	pin manager consistent output	8 bit devices
36.	MCCV3xx-4330	MSSP SDO Pin Management Incorrectly Blocks Unassigned GPIO	8 bit devices
37.	MCCV3xx-4353	Warnings come up when functions are not visible	8bit devices

#	ID	Description	Device(s)
38.	MCCV3xx-4265	EUSART: SREN is set to 1 for Asynchornous mode. This should only be set for Synchronous mode	8bit devices
39.	MCCV3xx-4258	EUSART_Read API generated by MCC has a bug where the SREN big is set.	8bit devices
40.	MCCV3xx-4257	ADC code is not generated using MCC	PIC16F18313
41.	MCCV3xx-4230	Missing options from CWGxISM register	PIC16F18855
42.	MCCV3xx-4193	LCD driver failed to build	PIC16F1937
43.	MCCV3xx-4188	EUSART CK/TX Pin Management	8bit devices
44.	MCCV3xx-4176	No support for External Interrupt	PIC18FxxK22
45.	MCCV3xx-4175	The PEIE bit is tested in the high priority interrupt	PIC18F devices
46.	MCCV3xx-4156	System Module is updated to a new clock frequency, the timer periods do not update	8 bit devices
47.	MCCV3xx-4151	FVR multiplier is changed, the DACs that use the FVR does not update their Vref	PIC16F17xx
48.	MCCV3xx-4140	ECCP's PWM Outputs Not Enabled	PIC16F1827

6 Known Issues

#	ID	Description	Device(s)
1.	MCCV3XX-4725	Polarity Description for CVD function is ambiguous	All 8bit devices
2.	MCCV3XX-3019	Un-necessary PWM Postscaler hint	All 8bit devices
3.	MCCV3XX-2624	Incorrect MCLR pin control in Pin Manager when LVP is selected	All 8bit devices
4.	MCCV3XX-2613	OSC - CLKIN pin in Pin Manager table	All 8bit devices
5.	MCCV3XX-4091	Incorrect Pin name in the device package view	PIC16(L)F1777
6.	MCCV3XX-4064, MCCV3XX-4060	20 Pin SOIC,SSOP packages are not available in MCC pin manager grid	PIC16LF1709, PIC16LF1559
7.	MCCV3XX-4059, MCCV3xx- 4041	Mismatch in pin names	PIC16LF1847, PIC18(L)F46K22

#	ID	Description	Device(s)
8.	MCCV3xx- 4069	Resetting SPEN bit is not clearing overrun error status bit.	All 8bit devices
9.	MCCV3xx-3522	Config Issue	PIC16F18855
10.	MCCV3xx- 3166	input source is CWG1IN, and not able to find PWM6_OUT	8bit devices
11.	MCCV3xx- 4715	WIN and FP bit fields are not specified correctly	PIC18FxxK80
12.	MCCV3xx- 2476	CONFIG3H CCP2MX selection not responding properly	PIC18F25K20
13.	MCCV3xx- 2669	Incorrect Config Bit Value for ZCD	PIC16F1885
14.	MCCV3xx- 3581	PIC16F1776 improper SDI and SS input selections	PIC16F177x
15.	MCCV3xx- 4686	TMR2 - Timer period is not calculated correctly	PIC16F153xx
16.	MCCV3xx- 4631	TQFP package missing	PIC18F6xK40
17.	MCCV3xx- 4677	5BITDAC: DAC1OUT1 pin is missing in the pin manager grid view	PIC18F6xK40
18.	MCCV3xx- 4630	IOC not available in all pins of PORTG	PIC18F6xK40
19.	MCCV3xx- 4622	MSSP: SDI and SDO assigned, by default, to the same pin.	PIC16F18855
20.	MCCV3xx- 4069	Resetting SPEN bit is not clearing overrun error status bit	PIC18F66K80

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)

8 Supported Families

The MCC PIC10-PIC12-PIC16-PIC18 Library 1.25 supports the following families. The families listed in bold are new for this release.
The full list of devices is in Section Appendix: Supported Devices

1. PIC1xF75x
2. PIC16(L)F145x
3. PIC1x(L)F150x
4. PIC16(L)F151x
5. PIC16(L)F152x

6. **PIC16(L)F153xx (16(L)F15354, 16(L)F15355)**
7. PIC1xLF155x
8. PIC16(L)F156x
9. PIC1x(L)F157x
10. PIC16(L)F161x
11. PIC16F170x
12. PIC16(L)F171x
13. PIC16F176x
14. PIC16(L)F177x
15. PIC16(L)F178x
16. PIC16(L)F182x
17. PIC16(L)F184x
18. PIC16(L)F183xx
19. PIC16(L)F188xx
20. PIC16LF190x
21. PIC16(L)F193x
22. PIC16(L)F194x
23. PIC18F1xK22
24. PIC18F2x/4xK20
25. PIC18F2x/4xK22
26. PIC18F2x/4xK50
27. PIC18(L)F6x/8xK22
28. PIC18(L)xxK40 (**18(L)F24K40, 18(L)F25K40, 18(L)F27K40, 18(L)F47K40, 18(L)F65K40, 18(L)F66K40, 18(L)F67K40**)
29. PIC18(L)FxxK80
30. PIC18(L)FxxK90
31. **PIC18FxxJ6x**

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_v1.25 supports the following **282 devices**. Devices shown in bold are new to this release (**27 Devices**)

- PIC12F1501
- PIC12F1571
- PIC12F1572
- PIC12F1612
- PIC12F1822
- PIC12F1840
- PIC12F752
- PIC12HV752
- PIC12LF1501
- PIC12LF1552
- PIC12LF1571
- PIC12LF1572
- PIC12LF1612
- PIC12LF1822
- PIC12LF1840
- PIC16F1454
- PIC16F1455
- PIC16F1459
- PIC16F1503
- PIC16F1507
- PIC16F1508
- PIC16F1509
- PIC16F1512
- PIC16F1513
- PIC16F1516
- PIC16F1517
- PIC16F1518
- PIC16F1519
- PIC16F1526
- PIC16F1527
- PIC16F1574
- PIC16F1575
- PIC16F1578
- PIC16F1579
- **PIC16F15354**
- **PIC16F15355**
- PIC16F1613
- PIC16F1614
- PIC16F1615
- PIC16F1618
- PIC16F1619
- PIC16F1703
- PIC16F1704
- PIC16F1705
- PIC16F1707
- PIC16F1708
- PIC16F1709
- PIC16F1713
- PIC16F1716
- PIC16F1717
- PIC16F1718
- PIC16F1719
- PIC16F1764
- PIC16F1765
- PIC16F1768
- PIC16F1769
- PIC16F1773
- PIC16F1776
- PIC16F1777
- PIC16F1778
- PIC16F1779
- PIC16F1782
- PIC16F1783
- PIC16F1784
- PIC16F1786
- PIC16F1787
- PIC16F1788
- PIC16F1789
- PIC16F1823

- PIC16F1824
- PIC16F1825
- PIC16F1826
- PIC16F1827
- PIC16F1828
- PIC16F1829
- PIC16F18313
- PIC16F18323
- PIC16F18324
- PIC16F18325
- PIC16F18326
- PIC16F18344
- PIC16F18345
- PIC16F18346
- PIC16F1847
- PIC16F18854
- PIC16F18855
- PIC16F18856
- PIC16F18857
- PIC16F18875
- PIC16F18876
- PIC16F18877
- PIC16F1933
- PIC16F1934
- PIC16F1936
- PIC16F1937
- PIC16F1938
- PIC16F1939
- PIC16F1946
- PIC16F1947
- PIC16F753
- PIC16HV753
- PIC16LF1454
- PIC16LF1455
- PIC16LF1459
- PIC16LF1503
- PIC16LF1507
- PIC16LF1508
- PIC16LF1509
- PIC16LF1512
- PIC16LF1513
- PIC16LF1516
- PIC16LF1517
- PIC16LF1518
- PIC16LF1519
- PIC16LF1526
- PIC16LF1527
- PIC16LF1554
- PIC16LF1559
- PIC16LF1566
- PIC16LF1567
- PIC16LF1574
- PIC16LF1575
- PIC16LF1578
- PIC16LF1579
- **PIC16LF15354**
- **PIC16LF15355**
- PIC16LF1613
- PIC16LF1614
- PIC16LF1615
- PIC16LF1618
- PIC16LF1619
- PIC16LF1703
- PIC16LF1704
- PIC16LF1705
- PIC16LF1707
- PIC16LF1708
- PIC16LF1709
- PIC16LF1713
- PIC16LF1716
- PIC16LF1717
- PIC16LF1718
- PIC16LF1719
- PIC16LF1764
- PIC16LF1765
- PIC16LF1768
- PIC16LF1769
- PIC16LF1773
- PIC16LF1776
- PIC16LF1777
- PIC16LF1778
- PIC16LF1779
- PIC16LF1782
- PIC16LF1783
- PIC16LF1784
- PIC16LF1786
- PIC16LF1787
- PIC16LF1788
- PIC16LF1789
- PIC16LF1823
- PIC16LF1824
- PIC16LF1825
- PIC16LF1826
- PIC16LF1827
- PIC16LF1828
- PIC16LF1829
- PIC16LF18313
- PIC16LF18323
- PIC16LF18324
- PIC16LF18325
- PIC16LF18326
- PIC16LF18344
- PIC16LF18345
- PIC16LF18346
- PIC16LF1847
- PIC16LF18854
- PIC16LF18855
- PIC16F18856
- PIC16F18857
- PIC16LF18875
- PIC16F18876
- PIC16F18877
- PIC16LF1902
- PIC16LF1903
- PIC16LF1904
- PIC16LF1906
- PIC16LF1907
- PIC16LF1933
- PIC16LF1934
- PIC16LF1936
- PIC16LF1937
- PIC16LF1938
- PIC16LF1939

- PIC16LF1946
- PIC16LF1947
- PIC18F13K22
- PIC18F14K22
- PIC18F23K20
- PIC18F23K22
- PIC18F24K20
- PIC18F24K22
- **PIC18F24K40**
- PIC18F24K50
- PIC18F25K20
- PIC18F25K22
- **PIC18F25K40**
- PIC18F25K50
- PIC18F25K80
- PIC18F26K20
- PIC18F26K22
- PIC18F26K40
- PIC18F26K80
- **PIC18F27K40**
- PIC18F43K20
- PIC18F43K22
- PIC18F44K20
- PIC18F44K22
- PIC18F45K20
- PIC18F45K22
- PIC18F45K40
- **PIC18F47K40**
- PIC18F45K50
- PIC18F45K80
- PIC18F46K20
- PIC18F46K22
- PIC18F46K40
- PIC18F46K80
- PIC18F65K22
- **PIC18F65K40**
- PIC18F65K80
- PIC18F65K90
- PIC18F66K22
- **PIC18F66K40**
- PIC18F66K80
- PIC18F66K90
- PIC18F67K22
- **PIC18F67K40**
- PIC18F67K90
- PIC18F85K22
- PIC18F85K90
- PIC18F86K22
- PIC18F86K90
- PIC18F87K22
- PIC18F87K90
- **PIC18F66J60**
- **PIC18F66J65**
- **PIC18F67J60**
- **PIC18F86J60**
- **PIC18F86J65**
- **PIC18F87J60**
- **PIC18F96J60**
- **PIC18F96J65**
- **PIC18F97J60**
- PIC18LF13K22
- PIC18LF14K22
- PIC18LF23K22
- PIC18LF24K22
- **PIC18LF24K40**
- PIC18LF24K50
- PIC18LF25K22
- **PIC18LF25K40**
- PIC18LF25K50
- PIC18LF25K80
- PIC18LF26K22
- PIC18LF26K40
- PIC18LF26K80
- **PIC18LF27K40**
- PIC18LF43K22
- PIC18LF44K22
- PIC18LF45K22
- PIC18LF45K40
- PIC18LF45K50
- PIC18LF45K80
- PIC18LF46K22
- PIC18LF46K40
- PIC18LF46K80
- **PIC18LF47K40**
- **PIC18LF65K40**
- PIC18LF65K80
- **PIC18LF66K40**
- PIC18LF66K80
- **PIC18LF67K40**