



MPLAB® Code Configurator MikroElektronika Click Library

v1.1.3 Release Notes

What is the MPLAB® Code Configurator's MikroElektronika ClickLibrary

The MikroElektronika Click library provides software drivers for many of the Click development boards provided by MikroElektronika.

System Requirements

- MPLAB® X IDE v5.45 or later
- XC8 compiler v2.31 or later
- XC16 compiler v1.61 or later
- XC32 compiler v2.50 or later
- MCC plugin v4.0.2 or later
- PIC10/PIC12/PIC16/PIC18 MCUs device library v1.81.7 or later
- PIC24/dsPIC33/PIC32MM MCUs device library v1.170.0 or later
- Foundation Services Library v0.2.2 or later
 - The Foundation Services library must be downloaded and installed along with this library.
- LIN Library v2.2 or later
 - The LIN Library must be downloaded and installed along with this library.
- TCP/IP Lite Stack v2.2.13 or later
 - The TCP/IP Lite Stack Library must be downloaded and installed along with this library.

Installing the MPLAB® Code Configurator MikroElektronika Click Library

Basic steps for installing MPLAB® Code Configurator plugin and libraries:

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 MCC MikroElektronika Click Library v1.1.3:

1. Download **mikroEClickLibrary_v1.1.3.jar** from the Microchip website.
2. In the MPLAB® X IDE, select **Options** from the **Tools** menu (**Preferences** menu on MAC).
3. Select **Plugins** tab
4. Click on **Install Library**
5. Add **mikroEClickLibrary_v1.1.3.jar**
6. Restart MPLAB® X IDE

To load different peripheral library version:

1. Open Embedded > MPLAB® Code Configurator v4 from the **Tools** menu.
2. In the **Versions** tab under MikroElektronika Click Library, find the multiple library version (loaded version is indicated by the green check).
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.

Running the Examples

Examples are provided in each click module. To use these examples, make sure you include the example header into your main file, and then call the example function provided.

Many of these examples use printf. If the Xpress Evaluation Board is used, note that it has a CDC device implementation and will enumerate as a COM port on your machine. Follow the steps below in order to enable printf commands to write to the COM port.

1. UART Pins on Xpress Evaluation Board

The Xpress Evaluation board, which uses the PIC16F18855, is capable of writing to the serial port as long as the following settings are configured:

Figure 1. Setting the EUSART's RX and TX pins to RC1 and RC0 respectively

Package:	SOIC28	▼	Pin No:		2	3	4	5	6	7	10	9	21	22	23	24	25	26	27	28	11	12	13	14	15	16	17	18	1	
			Port A ▼									Port B ▼							Port C ▼							E ▼				
Module	Function	Direction	0	1	2	3	4	5	6	7			0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7	3	
EUSART ▼	RX	input																												
	TX	output																												
OSC	CLKOUT	output																												
Pin Module ▼	GPIO	input																												
	GPIO	output																												
RESET	MCLR	input																												

Figure 2. Redirecting STDIO to USART in the Hardware Settings tab of the EUSART module

Software Settings

☒ Redirect STDIO to USART

Software Transmit Buffer Size
8

Software Receive Buffer Size
8

2. I2C and SPI Pins on Xpress Evaluation Board

Figure 3. Setting the I2C Pins

Package:	SOIC28		Pin No:		2	3	4	5	6	7	10	9	21	22	23	24	25	26	27	28	11	12	13	14	15	16	17	18	1
					Port A ▼							Port B ▼							Port C ▼							E ▼			
Module	Function	Direction	0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7	3		
MSSP1 ▼	SCL1	in/out											?	?	?	?	?	?	?	?	?	?	?	?	?	?	?		
	SDA1	in/out											?	?	?	?	?	?	?	?	?	?	?	?	?	?	?		
OSC	CLKOUT	output								?																			
Pin Module ▼	GPIO	input	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?		
	GPIO	output	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?		
RESET	MCLR	input																											?

Figure 4. Setting the SPI Pins

Package:	SOIC28		Pin No:		2	3	4	5	6	7	10	9	21	22	23	24	25	26	27	28	11	12	13	14	15	16	17	18	1	
					Port A ▼							Port B ▼							Port C ▼							E ▼				
Module	Function	Direction	0	1	2	3	4	5	6	7			0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7	3	
MSSP1 ▼	SCK1	in/out																												
	SDI1	input																												
	SDO1	output																												
OSC	CLKOUT	output																												
Pin Module ▼	GPIO	input																												
	GPIO	output																												
RESET	MCLR	input																												

3. Analog Pin on Xpress Evaluation Board

Figure 5. Setting the Analog Pins

Package:	SOIC28	▼	Pin No:		2	3	4	5	6	7	10	9	21	22	23	24	25	26	27	28	11	12	13	14	15	16	17	18	1
			Port A ▼								Port B ▼								Port C ▼								E ▼		
Module	Function	Direction	0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7	3		
ADCC ▼	ADCACT	input																											
	ADGRDA	output																											
	ADGRDB	output																											
	ANx	input																											
	VREF+	input																											
	VREF-	input																											
CO	AN	input																											
OSC	CLKOUT	output																											
Pin Module ▼	GPIO	input																											
	GPIO	output																											
RESET	MCLR	input																											

What's New?

- 1.1.3
 - Removed support for AVR devices.
- 1.1.2
 - Compatibility update with MCC Plugin v4.0.2 and MCC Core v5.0.2
 - Fixed XC8 build failures on 8-bit devices
- 1.1.1
 - Extended the below listed MikroElektronika clicks support to AVR, PIC24/dsPIC, and PIC32MM devices
 - OLED C, Thumbstick, Accel 3, Weather, EEPROM 2, LCD mini, Heart rate, 8x8 G, and 7seg
 - Bug fixes and improvements

Repairs and Enhancements

None.

Known Issues

#	ID	Description	Device(s) Affected
1	MCC_CLICK-239	Clicks using ADC: Code generation failure after reload	All
2	MCCV3XX-8601	WiFly Click Not Working with Xpress Eval Board	All
3	MCC_CLICK-482	USB I2C click build failure	All
4	MCC_CLICK-487	GPS3 and Nano GPS clicks - Hardcoded INTCON register	PIC18FxxK42, PIC18FxxK83, PIC18FxxQ43, PIC18FxxQ83/84, PIC18FxxQ40/41

FAQ

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)

Supported Clicks

• ACCEL3 • Air Quality • Alcohol • Altitude • CO • Compass 2 • Current • Diff Pressure • Gyro • Hydrogen • HDC1000 • LPG • Methane • Noise • Ozone • Weather • Counter • EEPROM • EEPROM 2	• EEPROM 3 • FLASH 2 • RTCC 5 • Thumb stick • Touchpad • ADC • ADC2 • ADC3 • Ammeter • DAC • DAC3 • DigiPot • Relay • 4-20 mA R • 4-20 mA T • ETH • Expand • MCP2003B • RS232	• RS485 • USBI2C • USBSPI • USBUART • RN2483 – LoRa • RN2903 – Lora 2 • GPSNano • RFid • WiFi Plus • WiFly • RN4020 – BLE 2 • RN41 – Bluetooth • GPS 3 • GSM • GSM 2 • MCP25625 • CANSPI • Proximity 2 • nRFC	• LED8X8G • Thermo 5 • Fan • eInk • LCD Mini • OLED C • LED 7 Seg • AC Current • Stereo Amp • SRAM • Audio Amp • 7x10R • Line Follower • MIC24045 • RTC 6 • BT Audio • Light Ranger
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Supported Devices and Families

The MCC MikroElektronika Click Library v1.1.3 supports the following families:

- 8 bit Families
 - Devices supported by latest pic10-pic12-pic16-pic18 MCU library
- 16 bit Families
 - 16-bit devices supported by latest pic24-dspic33-pic32mm library
- 32 bit Families

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-
- PIC32MM family of devices supported by latest pic24-dspic33-pic32mm library

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