Release Notes for MPLAB® Code Configurator AVR-IoT WG Sensor Node v1.0.3

1 What is MPLAB Code Configurator AVR-IoT WG Sensor Node

AVR-IoT WG Sensor Node is a secure, Wi-Fi connected solution for an IoT node. It enables users or developers to acquire sensor data and push it to the Google Cloud Platform.

2 System Requirements

- MPLAB® X IDE v5.05 or later
- AVR GCC Compiler v5.4.0 or later
- MCC Plugin v3.65 or later
- avr8bit_v1.1.1 or later : https://www.microchip.com/mplab/mplab-code-configurator → **Current Download** → **AVR MCUs**

3 Hardware (Google Field Engagement Board)

- ATmega4808
- ATWINC1510
- ATECC608A (pre-provisioned)
- TEMT6000 light sensor
- MCP9808 temperature sensor
- MCP73871 Battery Charger
- 2x push buttons
- 4x LEDs

4 Documentation Support

1. ATmega4808 Product Page: *https://www.microchip.com/wwwproducts/en/ATMEGA4808*
2. ATWINC1500 Product Page: *https://www.microchip.com/wwwproducts/en/ATWINC1500*
3. ATECC608A Product Page: *https://www.microchip.com/wwwproducts/en/ATECC608A*
4. AVR-IoT WG Development Board Technical Summary http://ww1.microchip.com/downloads/en/DeviceDoc/AVR-IoT0WG-Technical-Summary-50002805A.pdf
5. AVR-IoT WG Development Board User Guide http://ww1.microchip.com/downloads/en/DeviceDoc/AVR-IoT-WG-User-Guide-50002809A.pdf

5 Installing MPLAB® Code Configurator avrIoT_v1.0.3

To install the MPLAB® Code Configurator Plugin:

1. In the MPLAB® X IDE click on **Tools → Plugin**
2. Click on **Available Plugins** tab
3. Check the box for the **MPLAB® Code Configurator**, and click on Install

To install avrIoT v1.0.3:

1. Download **avrIoT_v1.0.3.jar** from the Microchip website.
2. In the MPLAB® X IDE click on **Tools → Options**
3. Click on **Plugins** tab
4. Click on **Install** Library
5. Browse to the location of the **avrIoT_v1.0.3.jar**, select it and click Open

6 avr-gcc compiler in MPLAB® X IDE

1 Download **AVR 8-bit Toolchain v3.6.1 – Windows** from https://www.microchip.com/mplab/avr-support/avr-and-arm-toolchains-c-compilers under **Downloads tab**
2 In MPLAB® X IDE click on **Tools → Options → Embedded → Build Tools**
3 Under Toolchain **click on** Add
4 Navigate up to **../avr8-gnu-toolchain-win32_x86/bin → Open**
5 Version List should automatically point to AVR
6 Click Ok

7 Running the Example

1. Connect the AVR-IoT WG board to the computer using a standard micro-USB cable
2. Create new project in MPLAB® X IDE
3. Select the nEDBG Tool. Device will be already identified as ATmega4808.
4. Open MCC by clicking **Tools→ Embedded→ MPLAB® Code Configurator** or Click MCC icon 
5. In Device Resources area click on **Internet Things→ Examples→ AVR-IoT WG Sensor Node**
6. Click **Generate** button
7. Build and program to the Google Field Engagement board
8. Refer http://ww1.microchip.com/downloads/en/DeviceDoc/AVR-IoT-WG-User-Guide-50002809A.pdf for connecting with Google Cloud Platform

8 What's New

Improvement and bug fixes

9 Known Issues

Not working with XC8 2.0 compiler

10 Frequently Asked Questions

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

11 Supported Families

- megaAVR® 0-Series
  (ATMega4808, ATMega4809)

12 Customer Support

12.1 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

12.2 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