



VISUAL STUDIO CODE

And the Arduino Extension



VISUAL STUDIO CODE

- Initial release June 2015 (0.3.0)
- Current (08AUG17) is June 2017 (version 1.14)
- Active project Updates almost every month

WHAT IS VISUAL STUDIO CODE

- Visual Studio Code is a source code editor developed by Microsoft for Windows, Linux and macOS. It includes support for debugging, embedded Git control, syntax highlighting, intelligent code completion, snippets, and code refactoring.

(Visual Studio Code – Wikipedia https://en.wikipedia.org/wiki/Visual_Studio_Code)

- Beyond syntax highlighting and autocomplete with IntelliSense.
- Git commands built-in
- Debug code right from the editor.
- It is Extensible and customizable.

SUPPORTED OPERATING SYSTEMS

- Visual Studio Code
 - Windows 7 and later (32-bit and 64-bit)
 - Linux Debian, Ubuntu, Red Hat, Fedora, SUSE
 - Mac macOS 10.9 and up
- Currently the Arduino extension supports the following operating systems:
 - Windows 7 and later (32-bit and 64-bit)
 - macOS 10.10 and later
 - Ubuntu 16.04
 - The extension might work on other Linux distro as some user reported , However without guarantee.

VISUAL STUDIO CODE WITH ARDUINO EXTENSION

Here is a list of the core functionalities:

- IntelliSense and syntax highlighting for Arduino sketches
- Verify and upload your sketches in Visual Studio Code
- Built-in board and library manager
- Built-in example list
- Built-in serial monitor
- Snippets for sketches
- Automatic Arduino project scaffolding
- Command Palette (F1) integration of frequently used commands (e.g. Verify, Upload...)
- Integrated Arduino Debugging (New Limited to ARM based boards currently)

DEBUGGING ARDUINO CODE PREVIEW


- Before you start debug your Arduino code, read [this doc](#) and get to know the basic mechanism about debugging in Visual Studio Code. Also see debugging for [C++ in VSCode](#) for your reference.
- Make sure your Arduino board can work with STLink, Jlink or EDBG. The debugging support currently is fully tested with the following boards.
 - MXChip IoT Developer Kit - AZ3166
 - Arduino M0 PRO
 - Adafruit WICED WiFi Feather
 - Adafruit Feather M0
 - Arduino Zero Pro

ABOUT THE ARDUINO EXTENSION


- The project is open sourced on GitHub under MIT License, and you can participate in different ways:
 - File a bug, submit a feature request, you can find the current bug/issue list and feature requests at GitHub's issue tracker.
 - Join developers and users' discussions at chat on gitter.
 - Fork the repository, fix bugs and send pull requests
 - Fork the repository, add your new cool features and send pull requests.
 - There are detailed instructions on how to get started for developing with the source code at our GitHub repo.
 - **Initial release 14APR17 with 6 updates since last 03JUL17**

VISUAL STUDIO MARKETPLACE

<https://marketplace.visualstudio.com/items?itemName=vsciot-vscode.arduino>


 Visual Studio | Marketplace

Visual Studio Code > Languages > Arduino



Arduino

Preview

Microsoft |  23,542 installs | ★★★★★ (18)

Arduino for Visual Studio Code

Installation

Launch VS Code Quick Open (Ctrl+P), paste the following command, and press enter.

ext install vscode-arduino

Copy

| [More Info](#)

HOW TO INSTALL

- Prerequisites
 - Arduino IDE is required. You can install it from here.
<https://www.arduino.cc/en/Main/Software>
 - The supported Arduino IDE versions are 1.6.x and later.
 - *Note: The Windows Store's version of Arduino IDE is not supported because of the sandbox environment of Windows app.*
- Install Visual Studio Code
 - From: code.visualstudio.com

INSTALL THE ARDUINO EXTENSION

Select the Extension Icon

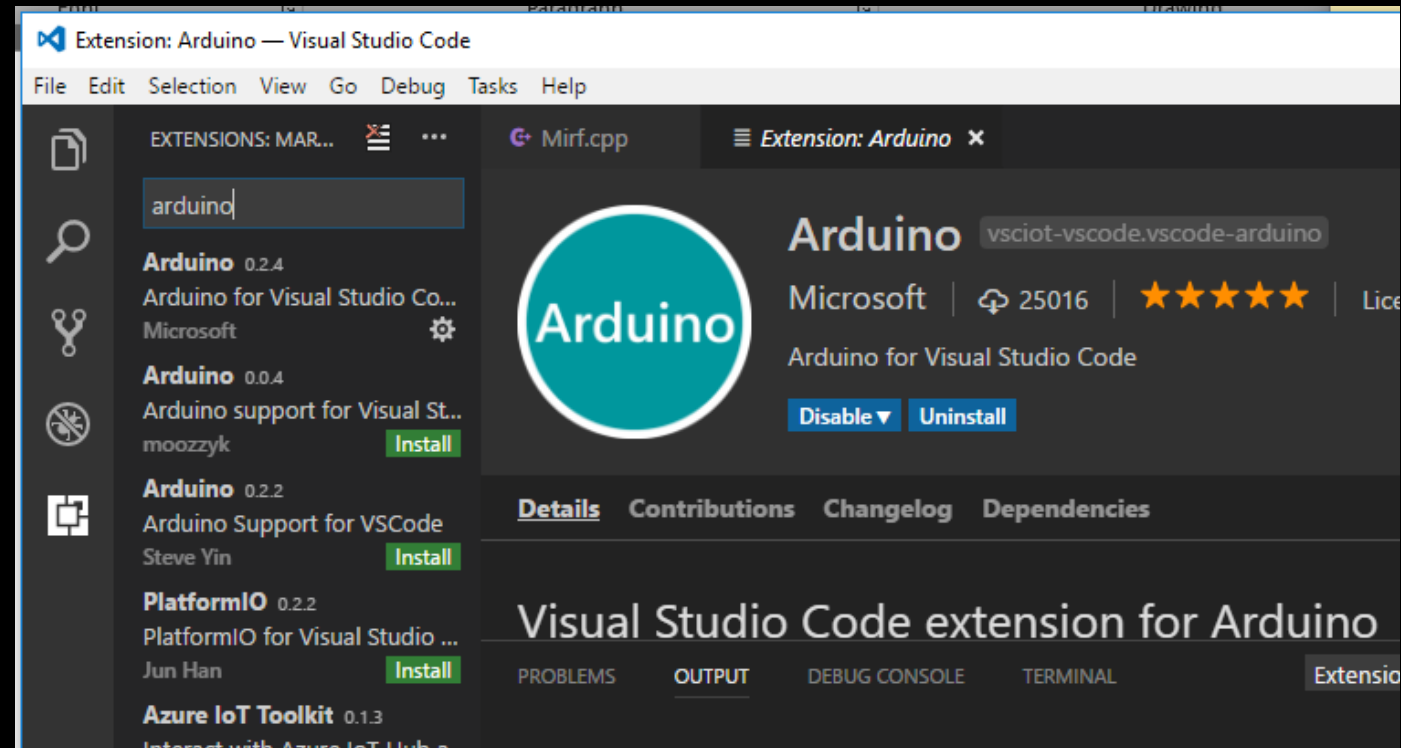


In the search box type "Arduino"

Select and install the extension
(be sure to select the one from Microsoft)

There are customizations that can be done,
However it is ready to go at this point

You can now select Boards, Examples,
Library's and more



LINKS AND REFERENCES

- <https://thestack.com/iot/2017/07/07/microsoft-open-sources-visual-studio-code-extension-for-arduino/>
- <https://code.visualstudio.com/>
- <https://marketplace.visualstudio.com/items?itemName=vsciot-vscode.vscode-arduino>
- <https://channel9.msdn.com/coding4fun/blog/Visual-Studio-Code-Your-Arduino>
- <https://buildazure.com/2017/05/19/azure-iot-devkit-preview-built-with-arduino-and-vscode/>
- <https://playground.arduino.cc/Main/DevelopmentTools>
- <https://github.com/Microsoft/vscode>
- <https://github.com/Microsoft/vscode-arduino>