MSPM0 Early Access Quick Start Guide

This guide is intended to guide early access customers to be able to bring up and evaluate the MSPM0G3507 and the MSPM0L1306. Steps 1-4 will get you setup to work with MSPM0 devices; while the remaining steps will further your evaluation.

1) Get access to MSPM0 documentation and SDK

Use the below link to request access to pre-release documentation materials and software development kit repositories through the My Secure Software (MSS) portal. Once approved, you can access these repositories through your myTI dashboard on TI.com or via ti.com/mysecuresoftware/

a) Link for MSPM0 SDK MSS request

2) Select your hardware

- a) Launchpads LP-MSPM0G3507 and LP-MSPM0L1306
 - i) Our LaunchPad development kits, feature built-in emulators for programming and debugging. Refer to each board's specific user guide within the MSS repository for details on board configurations and initial setup.
 - ii) Launchpads will be loaded with a simple program that blinks LED1 to let you know the board is alive. We will be releasing a full featured Out of Box Experience code and GUI for these Launchpads. Look for this in an upcoming MSPM0 SDK release.
- b) Custom boards
 - Please see the MSPM0 Hardware Development Guide in the MSS repository for information regarding necessary hardware requirements needed for proper startup and operation of the devices.
 - ii) An XDS110 JTAG Debug Probe is needed to program and debug the MSPM0. See the *MSPM0 Hardware Development Guide* for JTAG connection specifications. Alternatively, the MSPM0 Launchpads mentioned above, or any TI SimpleLink family Launchpad can be utilized to program your target MSPM0. Please refer to the respective LaunchPad User Guide for instructions on programming external devices.

3) Download the latest version of CCS

- a) CCS Version should be v11.1.0 or later
- b) Follow the <u>CCS installation guide found here</u>. When asked to select components you want to install (Section 3.2.3.5 of guide above), select "SimpleLink MSP432 low power + performance MCUs", or another SimpleLink product you may utilize. This will ensure the appropriate compiler, <u>TI Clang 1.3.1.LTS</u>, is installed.

4) <u>Setup Software Environment</u>

- a) Follow instructions outlined within the *MSPM0_SDK_QuickStartGuide.html* (found in MSS) to install and link the required software to CCS:
 - i) MSPM0 Support Package (Section 3),
 - ii) MSPM0 SDK (Section 4)
 - iii) Sysconfig (Section 7) optional, but recommended

5) Evaluate code example or start a new software project

- a) <u>Section 5</u> of the *MSPM0_SDK_QuickStartGuide.html* outlines how to import a code example from the SDK to start your evaluation. It is currently recommended to start with the code examples provided for early evaluation.
- b) <u>Section 6</u> of the *MSPM0_SDK_QuickStartGuide.html* outlines how to add MSPM0 DriverLib APIs to existing projects.
- c) <u>Section 7</u> outlines how to utilize the <u>Sysconfig GUI</u> in order to setup the device and peripherals for your board and application.

6) Refer to other documentation

Within the MSS repository there will also be several draft documents that will be available to you, most importantly are the datasheets and technical reference manual for the MSPM0G3607 and MSPM0L1306. Below are brief descriptions of other important documents that will help you in your evaluation of MSPM0 devices.

a) MSPM0G and MSPM0L Families: Functional Differences with Early Samples This document describes differences between the silicon you are evaluating today, and the silicon that will go into full production later.

b) MSPM0 Academies

These peripheral specific, interactive labs will guide you on how to utilize different aspects of the MSPM0 devices. These will eventually be integrated into the *MSPM0 SDK*.

7) Check for updates

Due to the nature of early access to silicon, and to its support documentation and software, it is recommended to periodically check for updates to all documentation and software being utilized. The TI MSPM0 team will be continuously updating and improving supporting documents and software. Please keep in mind that all software resources for MSPM0 are still in the development stage at this time.

8) Requesting Support and Giving Feedback

For any support request or feedback regarding MSPM0 devices, please reach out to your local TI representative (TSR or FAE). This will be the quickest path for your request or feedback to be addressed by the TI MSPM0 team. Please refrain from posting questions or feedback about MSPM0 devices to the TI E2E forum at this time.