



SSE-300 FVP CMSIS Pack User Guide

Version:	1.0
Date of Issue:	18/06/2020

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Introduction

This document is a general guide to use the SSE-300 FVP (Fixed Virtual Platform) CMSIS pack. The CMSIS pack is to be used with the Corstone-300 platform FVP model. The pack contains necessary source files, a linker script file, and a specification document to kick start development for the Corstone-300 platform. It also contains a reference secure-side Blinky example to enable a user to understand uVision project configuration. The pack also provides a System View Description (SVD) file for the platform to be used with the uVision debugger.

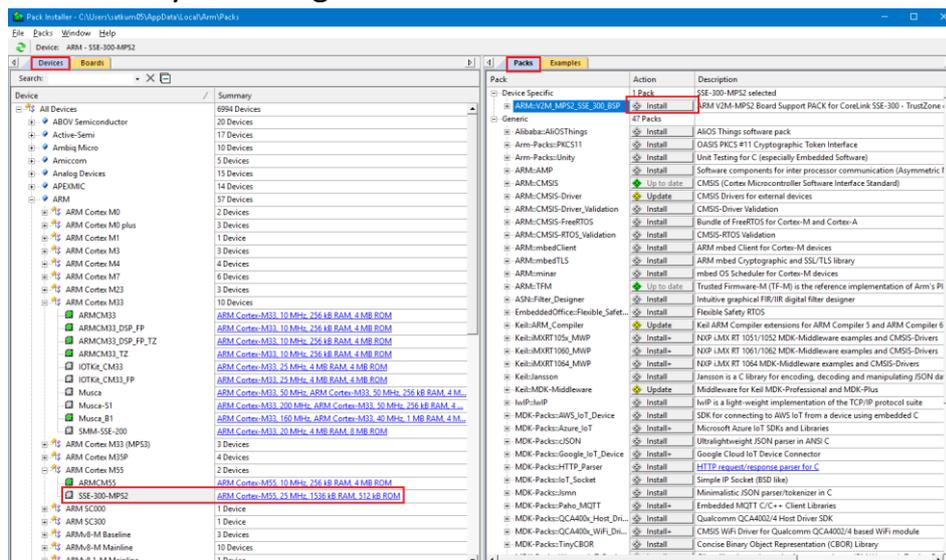
This document lists down system prerequisites and explains how to build and run the reference Blinky example on the SSE-300 FVP model.

Prerequisites

- Minimum [Keil MDK v5.30](#) as the pack requires CMSIS support for the ARM Cortex-M55.
- Download and install [Corstone SSE-300](#) FVP model.

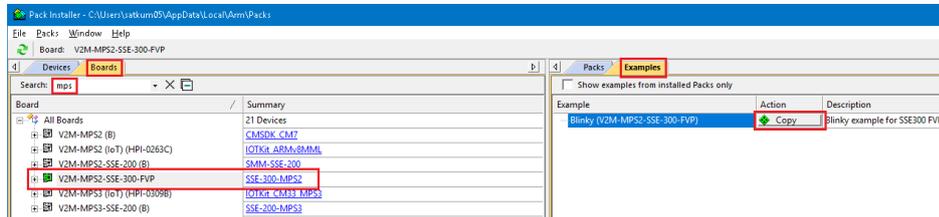
Pack Installation

Install ARM::V2M_MPS2_SSE_300_BSP using the Pack Installer. The pack can be browsed by selecting SSE-300-MPS2 device under ARM Cortex M55 devices.



Build the Blinky example project

Copy the Blinky project using the Pack Installer. The example project can be found by searching and selecting V2M-MPS2-SSE-300-FVP Board under the Boards section.



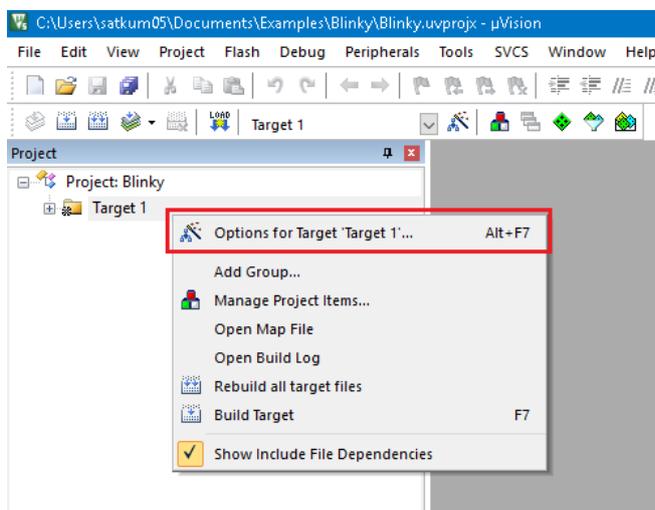
Once copied, open the Blinky project using the *uVision* and simply build the *Target1* listed inside Project Explorer.

Run and debug Blinky

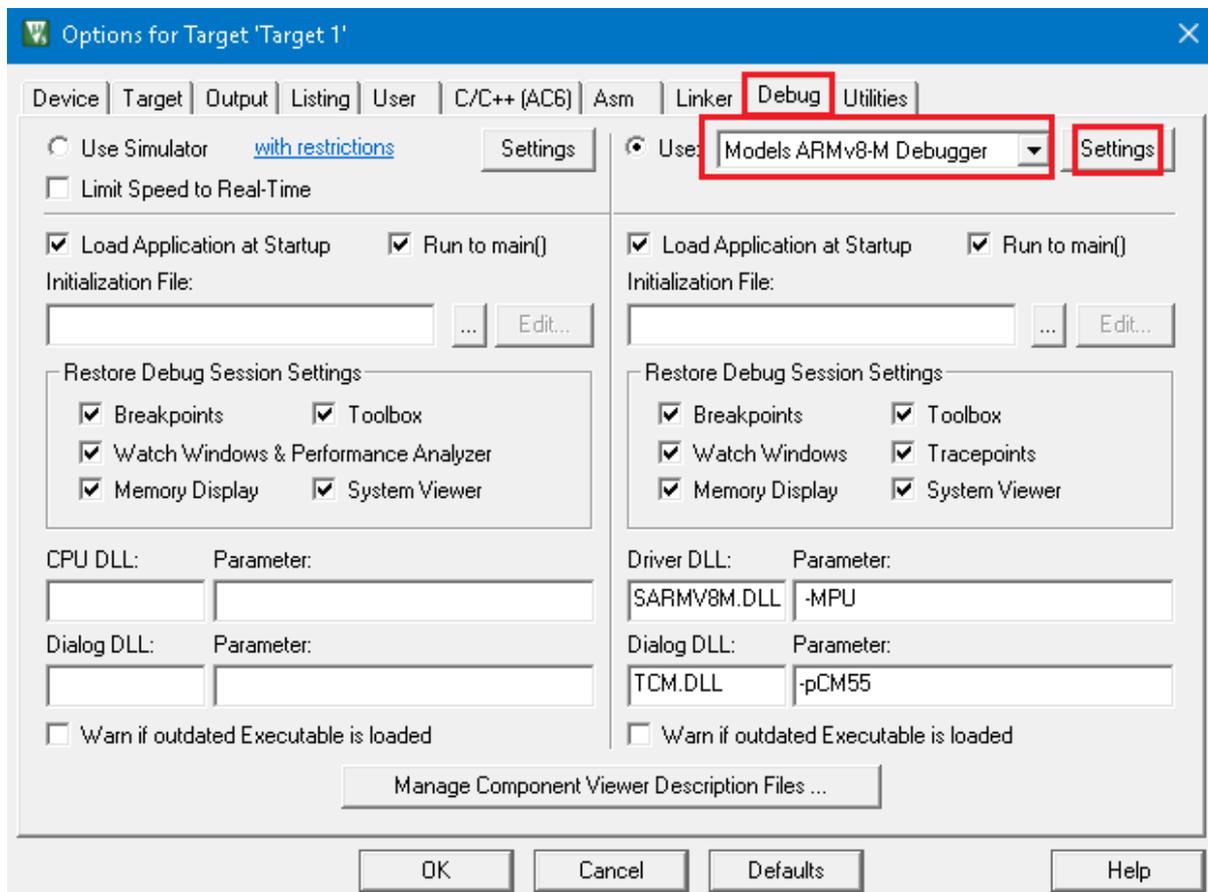
This section explains how to run the Blinky example on the Corstone SSE-300 FVP model. First, download and install the SSE-300 FVP from the link provided in the prerequisite section. Verify that the FVP model runs correctly by executing the FVP_Corstone_SSE-300 file present inside the installation folder. An FVP visual display can be seen if there is no problem. Otherwise, there is a need to resolve FVP related dependencies in the system. Once the FVP is verified, close the FVP window.

In order to run and debug the example using the FVP, follow the steps below inside the *uVision* software.

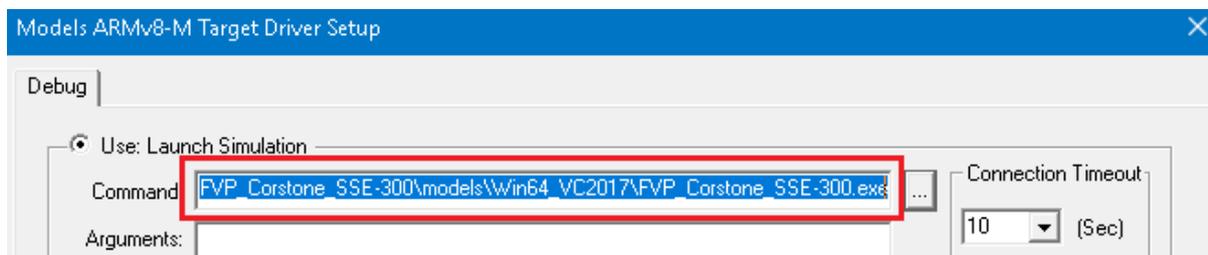
Right click on the *Target1* and click on “Options for Target ...”.



Click the *Debug* tab to open the debug settings. In the drop-down selection for the debugger, select “*Models ARMv8-M Debugger*”, then click the *Settings* button next to it.



You should have the “*Models ARMv8-M Target Driver Setup*” box open. Browse to the SSE-300 FVP executable which is present inside the installation directory.



Click OK, and save the changes.

Build the target if it is not built, and then click the debug button at the top to start a debug session.



The FVP window should pop up with code stopped at the entry breakpoint. On starting code execution, the LEDs in the FVP display can be seen to blink cyclically. You can use the debugger to stop, step, and set breakpoints inside the code.