

How to use ISSM tool

Term	Definition
IDE	Integrated Development Environment
ISSM	Intel® System Studio for Microcontrollers
ISPC	Intel® Software Platform for Curie™
SDK	Software Development Kit

1. ISSM package install

Due to file-size restrictions in github, the ISSM package has been split and uploaded as 2 files that need to be downloaded by the user and combined in to a single file for extraction.

Download the two files from *intel-ndg/iqsoftwarekit/*
(issm_ispc-linux_2016feb.tar00 and issm_ispc-linux_2016feb.tar01)

Command to combine the two files in Linux

```
$ cat issm_ispc-linux_2016feb.tar* > issm_ispc-linux_2016-02.tar.gz  
$ tar -xzf issm_ispc-linux_2016-02.tar.gz
```

2. Edit the path to where the ISPC sources is installed in your system

Use your favorite text editor and edit Line no. **46** in the script file "*iss_mcu_ide_eclipse-launcher*" to point to the root directory of the ISPC.

```
$ gedit iss_mcu_ide_eclipse-launcher  
  
//Add the path of ISPC installation (intel_iq_sdk) location in line #46  
export  
ISSM_IQ_SDK_ROOT_DIR=/Your/Path/iqsoftwarekit/v2.0.0/device_software/intel_iq_sdk
```

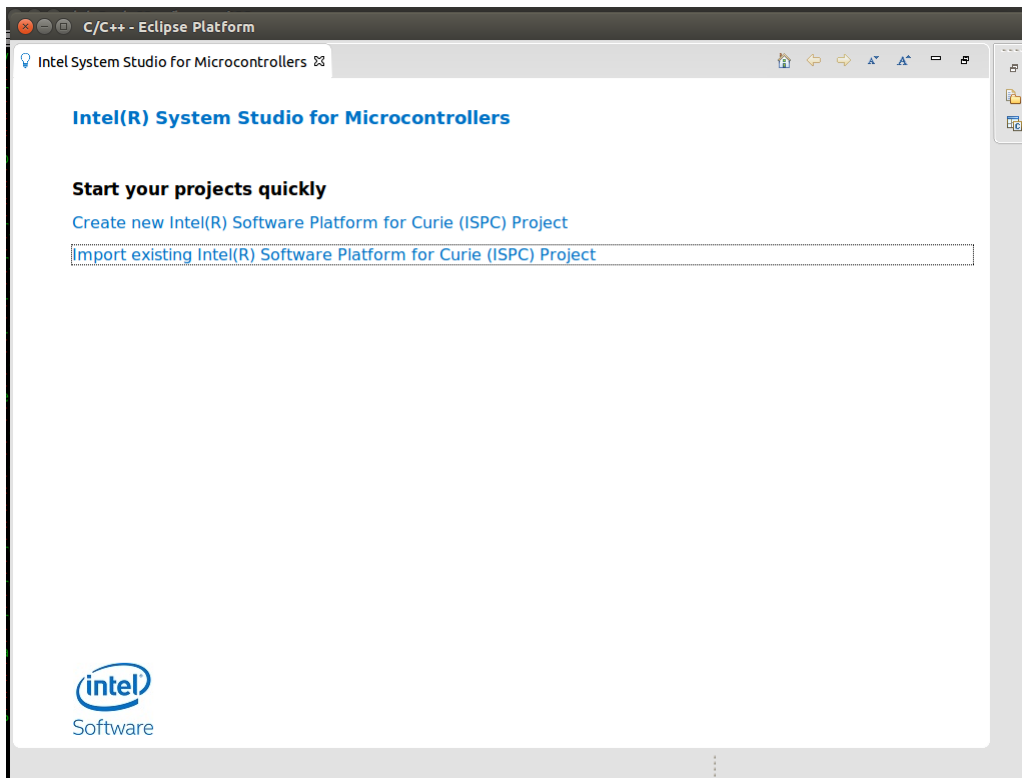
For example;
export ISSM_IQ_SDK_ROOT_DIR=\$HOME
/iqsoftwarekit/v2.0.0/device_software/intel_iq_sdk

3. Command to launch Eclipse

```
$ ./iss_mcu_ide_eclipse-launcher
```

After starting Eclipse IDE tool, user can either create a new project or import an existing

project.



Create a new Project:

File > New > Intel ISPC Project

Import an existing Project:

File > Import >> Intel(R) ISS > Thunderdome project.

Setup Build or Clean a project

Choose a build variant with the drop-down arrow icon next to the "Hammer" icon, DEBUG or RELEASE.



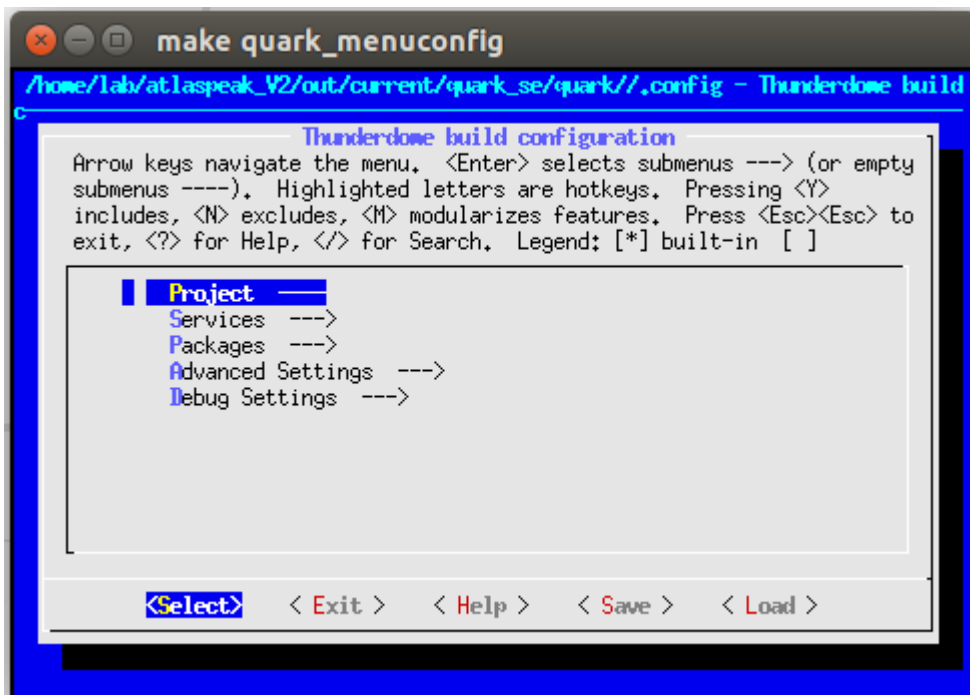
User can also right click on the created/imported project and choose "build" or "clean".

4. Custom Build Configuration

The Intel® Curie™ module's SDK exposes a set of features to be selected based on the actual hardware capabilities of each platform. The consistency of build configurations is guaranteed by rules written in the Kconfig language. 'Kbuild configuration' can be changed icon below.



User can traverse into different menus of its choice and modify the configuration options.



The configurations are written into the .config file of the respective directories:

- <intel_iq_sdk>/out/current/quark_se/quark/.config // For Intel® Quark™ module
- <intel_iq_sdk>/out/current/quark_se/arc/.config // For ARC (DSP sensor hub)
- <intel_iq_sdk>/out/current/quark_se/ble_core/.config // For BLE

5. Flashing CRB via IDE tool

Prior to start flashing operation, connect the Intel® Curie™ module and debug board and check connection of two 10-pin flat ribbon cables.

Click on the below icon to flash the firmware image:



If you want choose a specific flash configuration use the drop down arrow closed to 'Flash Target' icon and select one of below flash mode.

- jtag_x86_rom+bootloader → To flash rom and bootloader.
- usb_full → To flash applications on intel® Curie™ Platform.

Caution: You must flash with "**usb_full**" in less than 10 seconds after the first flash. If you're not sure about timing, you can push the reset button and flash with

"usb_full" configuration (within 10 seconds after the reset).

6. How to Debug via IDE

Start the OpenOCD Session to get trace log.

Select a Debug Configuration with arrow next to the "Bug" icon, and select either ARC or QUARK.

