



# Simplicity Studio Introduction

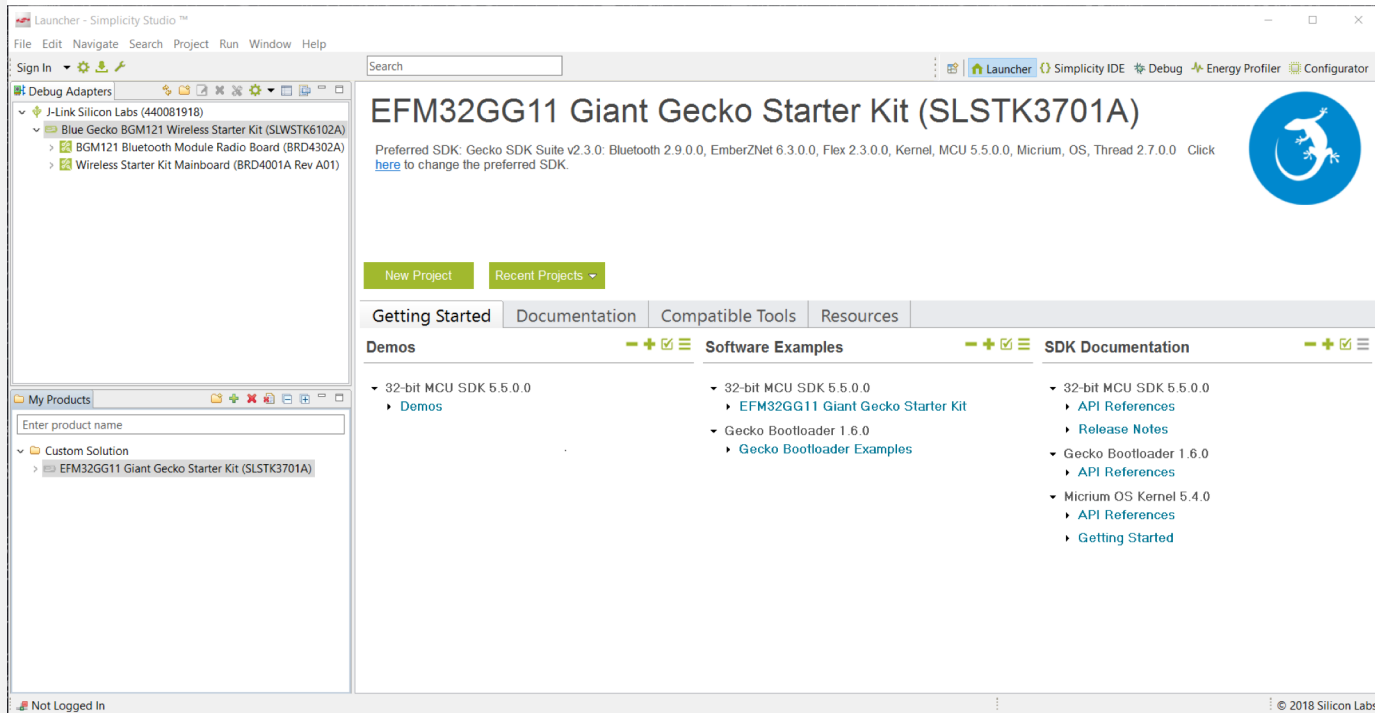
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# Course Outline

- Simplicity Studio Overview
- Simplicity Studio Installation
- Basic Navigation
- Simple Project Creation Flow Example
- Simplicity Commander Overview
- Resource List for More Advanced Simplicity Studio Topics

# Simplicity Studio Overview



- Main Software Tool for all Customers
- Quick Start with Demos and Software Examples
- Provides Software Development Environment
  - Software Development Kits (SDKs)
  - Toolchains
  - Debugger
  - Analysis: Energy Profiler, Network Analyzer
- Provides Documentation for all parts
  - Reference Manuals, Datasheets, Schematics, BOMs
  - Users Guides, Application Notes, API documentation
- Supports Windows OS, MacOS and Linux

# Simplicity Studio Installation

- Steps to get to know Simplicity Studio:

1. Watch Installation Training Video

<https://www.youtube.com/watch?v=nJfU0Mu51QU&t=0s&list=PL-awFRrdECXu4WdVgkM7eb977oRlsNge8&index=9>

1. Read through or skim through User's Guide (AN0822)

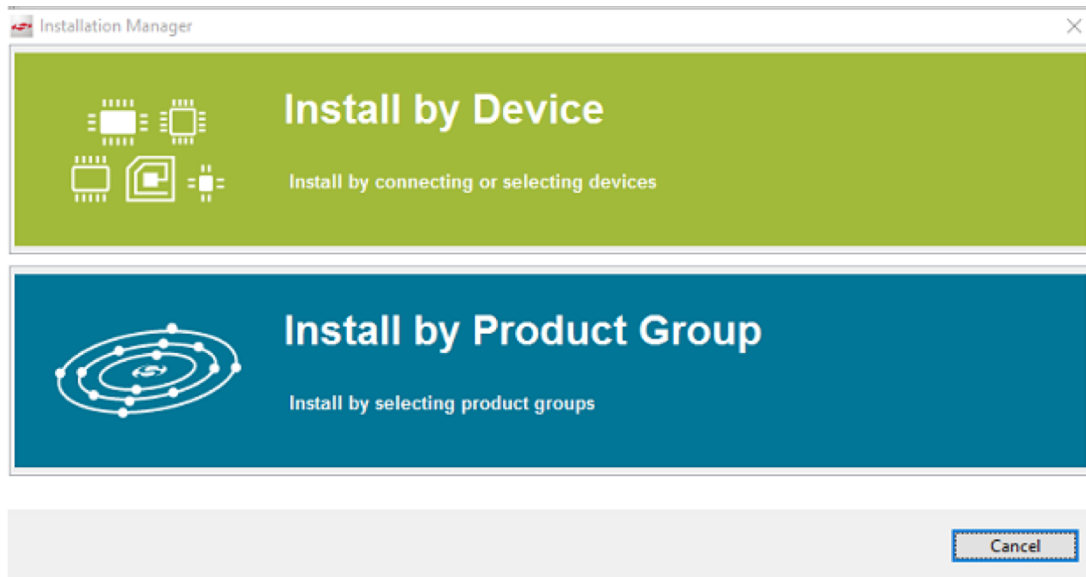
2. Install Simplicity Studio

(download installer from: <https://www.silabs.com/products/development-tools/software/simplicity-studio>)

- On Welcome screen Sign In with Silicon Labs credentials if Wireless device (EFR32 family) support is needed
- If a development kit (Starter Kit (STK) or Wireless STK - WSTK) is installed accept Device Inspector popup
- For most users the recommendation is to choose "Install by Product Group" and choose relevant group(s)


# Installation Manager

- It is recommended to select “Install by Product Group”
- Gives support for current product selection as well as future selections



# Selecting by Product Group

Select Development Options to use with your products.


☐  Wireless & RF

☐  Bluetooth


☐  Thread


☐  Zigbee

☐  Proprietary

☐  Xpress Interface

☐  8-bit Microcontrollers

☐  Sensors

☐  32-bit Microcontrollers

- There are five product groups to choose from:
- Xpress Products – These are fixed function devices such as USB bridge, USB audio parts and other configurable interface products.
- EFM8 / C8051 8-bit MCU Products
- Sensor Products – Such as magnetic, temperature and humidity sensors
- EFM32 32-bit MCU Products – non-wireless MCUs
- Wireless Products – EFR32 series and legacy wireless products for Bluetooth, Zigbee, Thread and Proprietary protocol support (can be selected as subgroups)

# Content Access Types and License Agreements

## Installation Support Options

Content access.

Your access to content is shown below. Use the links to gain access.










### Sign In for Software Access

[Sign In](#)

[Clear Credentials](#)

Sign In using your silabs.com user id for access to content.

#### Available Content

 8051 Access Granted	 32 bit MCU Access Granted
 Micrium OS <a href="#">Sign In</a>	 Apple Homekit <a href="#">Sign In</a>
 Bluetooth Mesh SDK <a href="#">Sign In</a>	 Bluetooth <a href="#">Sign In</a>
 EmberZNet (zigbee) <a href="#">Sign In</a>	 Flex <a href="#">Sign In</a>
 Thread <a href="#">Sign In</a>	

Click "Next" to skip this step.

- The Content Access screen - content types, Simplicity Studio Sign In access types
- Sign In is required for Wireless SDK access
- License agreements screen details license required for installation.
- Installation Screen – Shows Installation progress
- Training Videos can be watched during installation
- Training and other videos also available on Silicon Labs YouTube Channel:

<https://www.youtube.com/playlist?list=PL-awFRrdECXu4WdVgkM7eb977oRlsNge8>

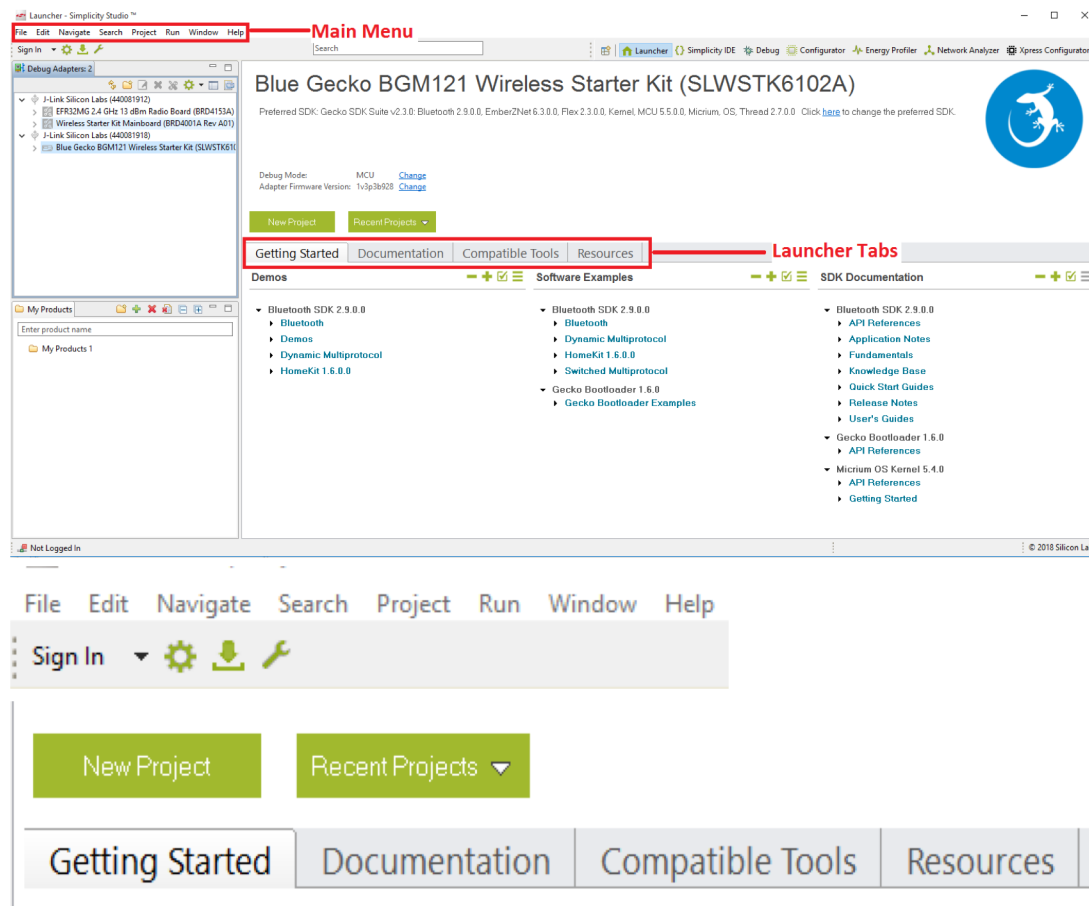
- When prompted press OK to restart Simplicity Studio
- Product Tour – gives simple steps to get started using Solutions Window.

# Simplicity Studio Navigation





# Launcher Perspective Navigation







- Launcher perspective main areas
  - Main Menu
    - Useful menu selections:
      - File (Import, Export, Switch Workspace)
      - Window (Preferences)
      - Help (Installation Details, Report Bug)
  - Launcher Tabs
    - Getting Started – Access demos and examples
    - Documentation – most selection options
    - Compatible Tools – development tool selection
    - Resources – Links to online resources
  - New Project – Gives finer control than Examples
  - Recent Projects – Quick navigation to projects in workspace

# Main Functionality

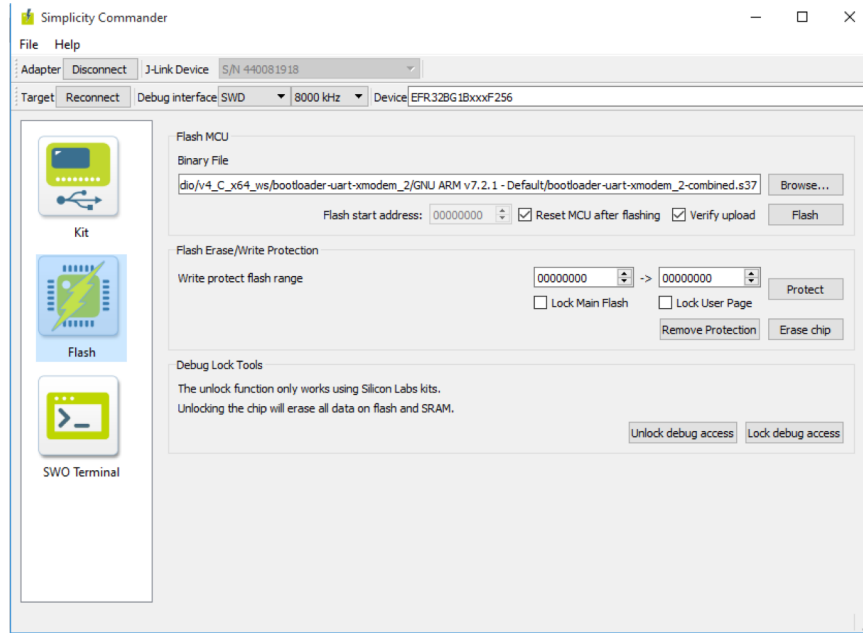
- AN0822 - Simplicity Studio User's Guide provides basic overview of major functions of Simplicity Studio
- Eclipse Based Integrated Development Environment (IDE)
- Major Sections (Perspectives):
  - Launcher – Provides information on supported products including documentation, demos, example projects
  - Simplicity IDE – Main Development window – Project Manager, Editor, Build support
  - Debugger – Allows examination of program execution and debugging
  - Application Builder – Wireless product application configuration tool
  - Energy Profiler – Analysis tool for application energy consumption, code correlation supported on 32-bit devices
  - Network Analyzer – Wireless Protocol analysis tool
  - Hardware Configurator – Pin configuration and on 8-bit parts peripheral initialization
  - Xpress Configurator – Interface part configuration tool
  - Capacitive Sense Profiler – Analysis tool for capacitive sensor inputs

# Simple Project Creation Flow Example

- Attach a Starter Kit or add one to My Products Window (example, type Pearl in My products and select EFM32PG12 Pearl Gecko Starter Kit (SLSTK3402A))
- Choose a Software Example Project (example - assuming supporting SDK is installed, expand “Pearl Gecko 3402 Starter Kit” and select SLSTK3402A\_blink)
- Build project ( Generate first. Click Build icon  ) (For Wireless projects – Generate first.)
- Launch Debugger -  then step through project, set breakpoints in source code.
- Launch Energy Profiler -  Profile as Simplicity Energy Profiler Target
- If a Wireless Project, Launch Network Analyzer -  Profile as Network Analyzer Target

# Simplicity Commander Overview

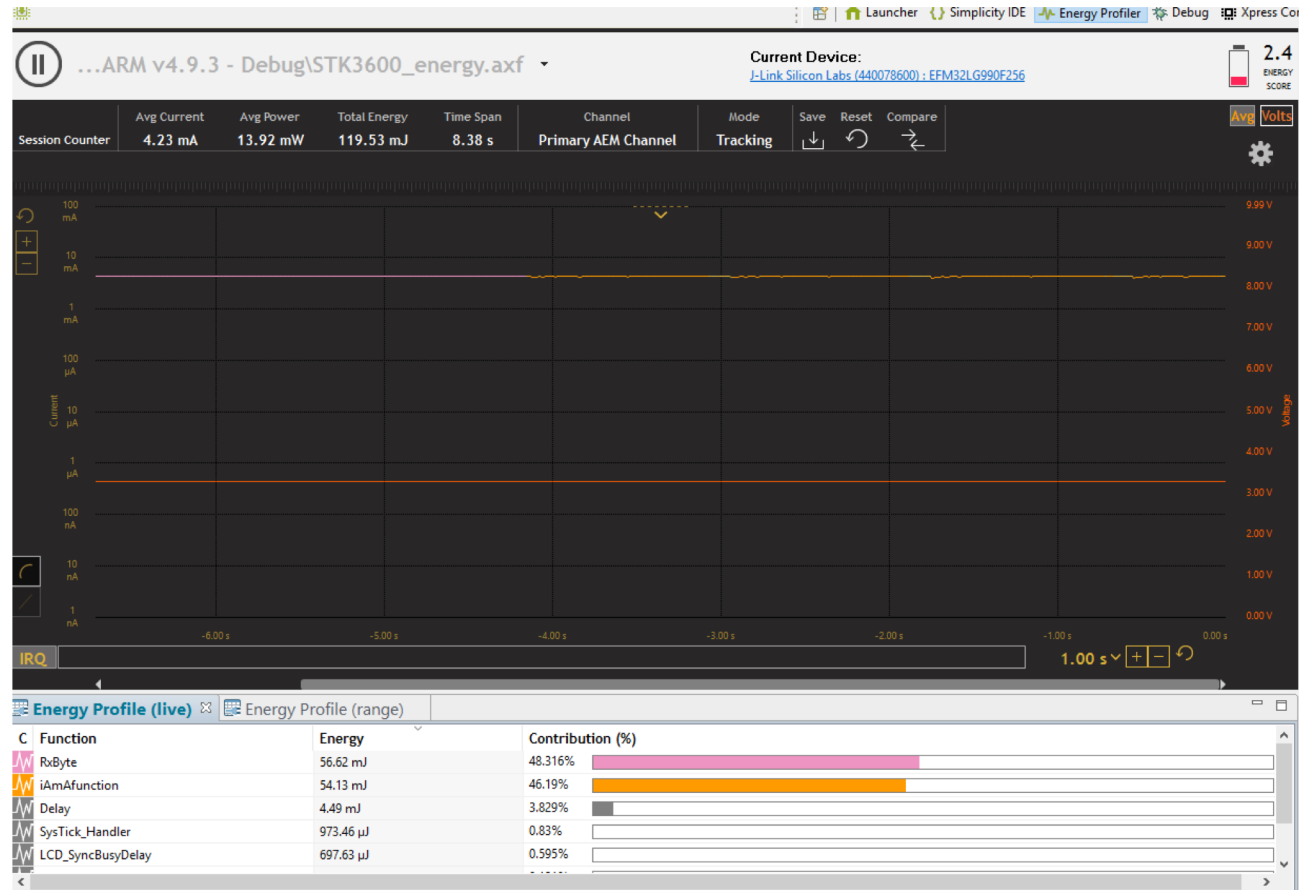
- Simplicity Commander is a tool available from within Simplicity Studio, mainly used to flash images



- Also a command line version ‘commander’ is available that is more powerful, see “UG162: Simplicity Commander Reference Guide

# Additional Resources

- User's Guide 343: Multi-Node Energy Profiler – provides details on how to use the Energy Profiler and also how to modify a software project to enable code correlation.



Thank you!

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