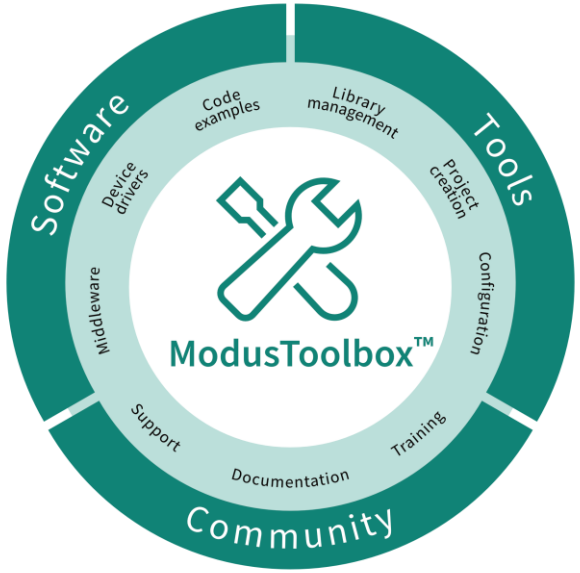


ModusToolbox™ Software

Product Presentation

public

ModusToolbox™ – Development ecosystem



- ModusToolbox™ Software is a modern, extensible development ecosystem supporting a wide range of Infineon microcontroller devices.
- Provided as collection of development tools, libraries, and embedded runtime assets architected to provide a flexible and comprehensive development experience.

Development Tools

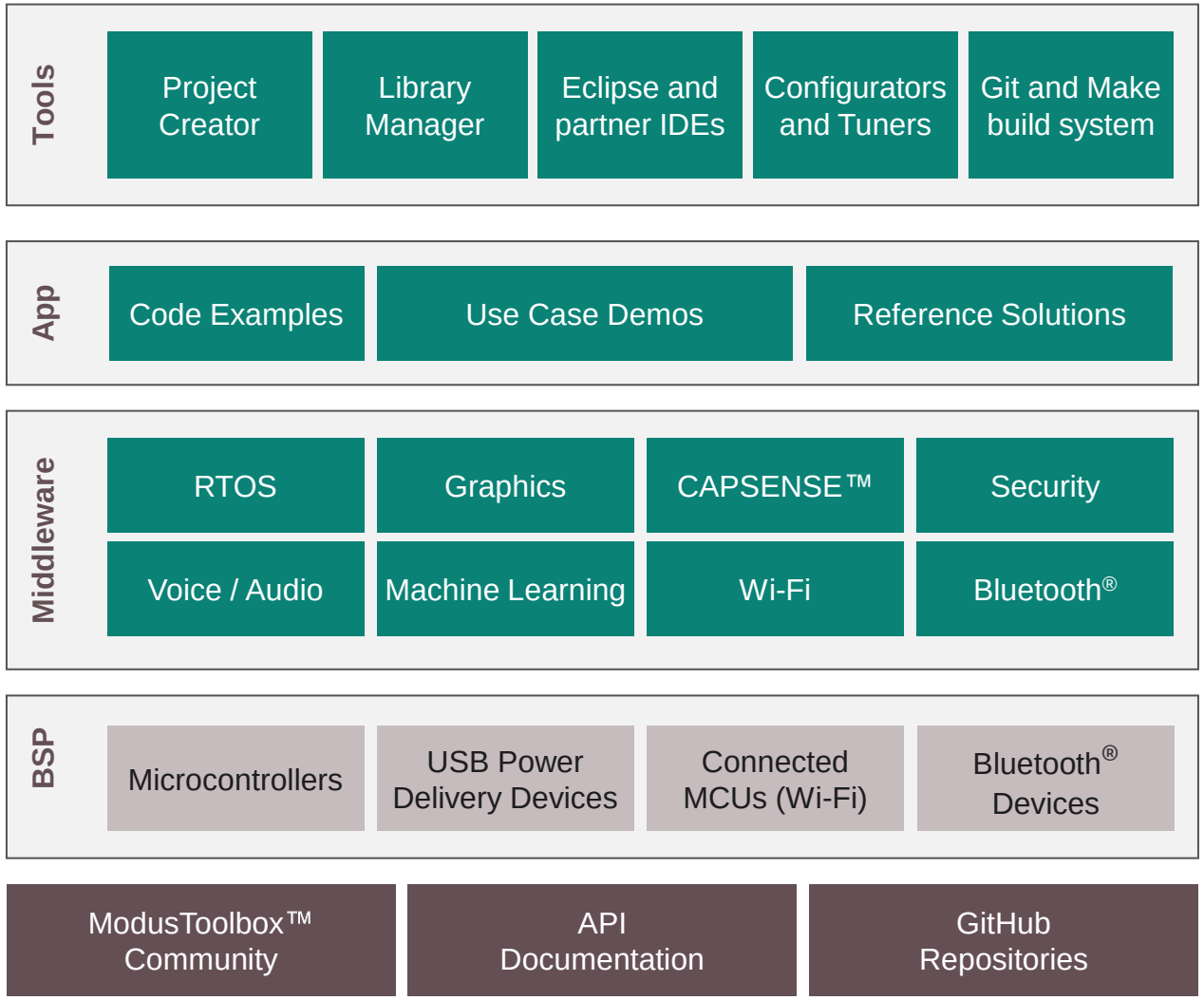
The ModusToolbox™ tools package includes desktop programs that enable the creation of new embedded applications, managing software components, configuring device peripherals and middleware, and embedded development tools for compiling, programming, and debugging.

Run-Time Software

The ModusToolbox™ software includes an extensive collection of GitHub-hosted repositories comprised of code examples, board support packages, middleware, and application support.

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ModusToolbox™ – Comprehensive collection of resources

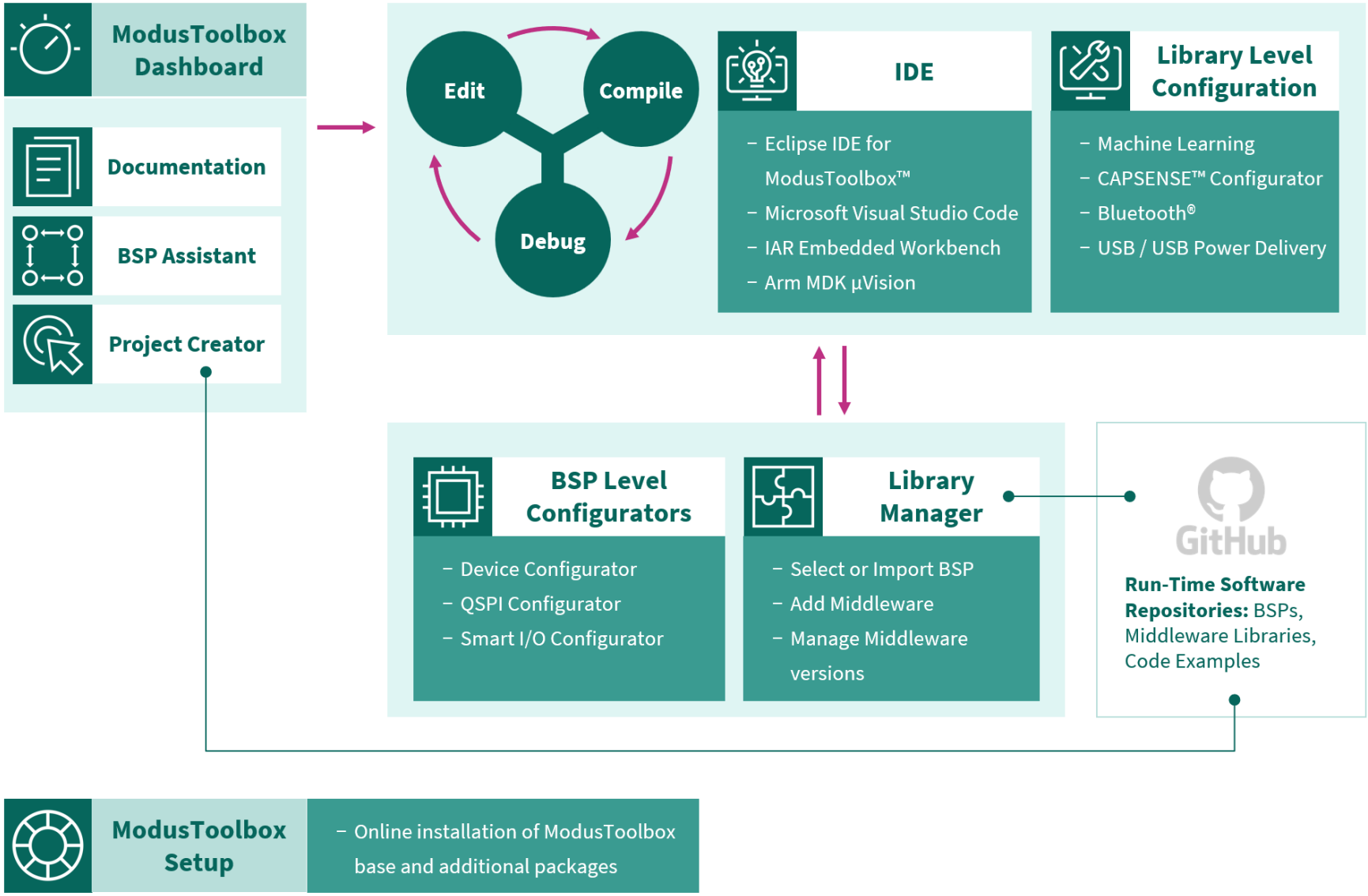


Enablement throughout the application development process

- IDEs – VS Code / IAR / Arm Keil / Eclipse
- Configurators and Code Generation
  - Device Configuration (Pins / Clocks)
  - CAPSENSE Configuration and Tuning
- Additional ModusToolbox™ Packages
  - Programming Tools
  - Edge Protect Security Suite
  - Motor Suite
- Application Development Resources
- Middleware from Infineon and the ecosystem
- Board Support Packages / Device Packages
- Support and Documentation Resources
- Training Manuals and How-To Videos

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ModusToolbox™ – “Getting Started” to final hardware



Programming Tools

- ModusToolbox™ Programmer (GUI)
- OpenOCD
- KitProg3 firmware

Motor Suite

- Graphical motor configuration
- Visual Oscilloscope / Monitoring
- Advanced Debugging / Testing

Edge Protect Security Suite

- Secure Policy Configuration
- Edge Protect Tools

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ModusToolbox™ – Fundamentals for efficient development

Development workflow

ModusToolbox™ provides an adaptable work environment with options for various IDEs, command-line tools with GUI options, and a make-based build system.

Middleware management

The middleware libraries within the ModusToolbox™ Library Manager, can be imported directly into your project structure and seamlessly incorporated into the build environment.

Functional API levels

ModusToolbox™ includes peripheral drivers and functional APIs including a HAL for maximizing portability, and a Peripheral Driver Library for maximizing code efficiency and device capabilities.

Application portability

Application portability is facilitated through the availability of HAL APIs, code generators, and Board Support Packages.

Develop the way you want to develop, with the workflow you get to define.

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Supported Devices

PSoC™ 6

- PSoC 61
- PSoC 62
- PSoC 63
- PSoC 64

PSoC™ 4

- PSoC 4000S
- PSoC 4000T
- PSoC 4100S
- PSoC 4100S Max
- PSoC 4100S Plus
- PSoC 4100S Plus 256
- PSoC 4700S

AIROC™ Bluetooth®

- 20706
- 20719
- 20721
- 20736
- 20819
- 20820
- 20829
- 20835
- 30739
- 89829

AIROC™ Connectivity

- 43012
- 43022
- 43439
- 4373
- 4373E
- 43907
- 54907
- 55513
- 55572
- 55913

XMC™

- XMC1100
- XMC1200
- XMC1300
- XMC1400
- XMC4100
- XMC4200
- XMC4300
- XMC4400
- XMC4500
- XMC4700
- XMC4800
- XMC7100
- XMC7200

TRAVEO™

- CYT2B6
- CYT2B7
- CYT2B9
- CYT2BL
- CYT3BB
- CYT4BB
- CYT4BF

PMG

- PMG1B1
- PMG1S0
- PMG1S1
- PMG1S2
- PMG1S3

USB

- CCG6DF
- CCG7D
- CCG7S
- CCG8
- PAG2S

Wireless Charging

- WLC1

New devices are regularly added to ModusToolbox™, review to the latest release notes for details

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Get Started with ModusToolbox™

Purchase your Development Kit

OPN	SoC Supported
CY8CKIT-040T	PSoC™ 4000T
CY8CPROTO-040T	PSoC™ 4000T
CYW920829M2EVK-02	AIROC™ 20829
CY8CKIT-062-WIFI-BT	PSoC™ 62
CY8CPROTO-062-4343W	PSoC™ 62
CY8CKIT-149	PSoC™ 4100S Plus
KIT_XMC13_boot_001	XMC™ 1000
CY8CPROTO-063-BLE	PSoC™ 63 BLE
KIT_XMC14_2GO	XMC1400
KIT_XMC7200_DC_V1	XMC7000
KIT_XMC72_EVK	XMC™7000
KIT_XMC7200_MC1	XMC 7000
CY8CKIT-062S2-AI	PSoC™ 62
CY8CKIT-041S-MAX	PSoC™ 4100S Max

Download ModusToolbox™

ModusToolbox™ Setup program

- Installation Guide
- Download ModusToolbox Setup (v1.1)
  - Setup program will install the latest ModusToolbox base and additional packages

ModusToolbox™ GitHub Repository

- Tools
- Code examples
- Board support packages
- Libraries

Begin your Development Journey

- **Launch ModusToolbox™ Dashboard**
  - **Access** documentation, training modules, and videos to learn more about ModusToolbox™ Software
  - **Select** your targeted IDE from the available options
    - Reference the IDE specific Getting Started Guides for details in working with your preferred IDE.
  - **Create** you application by launching into the ModusToolbox Project Creator
    - Choose your BSP and Code Example from the expansive library of available resources within ModusToolbox

Visit www.Infineon.com/modustoolbox for other kits supported

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