

# ModusToolbox™ run-time software release notes

ModusToolbox™ tools package version 3.2.0

## About this document

### Scope and purpose

With the ModusToolbox™ run-time software, you can rapidly develop applications for Infineon MCUs, as well as AIROC™ Wi-Fi and Bluetooth® devices.

This document lists the new and updated features included with this release of ModusToolbox™ run-time software. For details about these and other features and libraries, refer to the [ModusToolbox™ run-time software reference guide](#).

### Document conventions

Convention	Explanation
<b>Bold</b>	Emphasizes heading levels, column headings, menus and sub-menus
<i>Italics</i>	Denotes file names and paths
Courier New	Denotes APIs, functions, interrupt handlers, events, data types, error handlers, file/folder names, directories, command line inputs, and code snippets
<b>File &gt; New</b>	Indicates that a cascading sub-menu opens when you select a menu item

### Reference documents

Refer to the following links for more information:

- [ModusToolbox™ run-time software reference guide](#)
- [ModusToolbox™ software page on GitHub](#)
- [Code examples on GitHub](#)
- [ModusToolbox™ community webpage](#)



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## What's new/changed in this release

### 1 What's new/changed in this release

The following features and libraries have been added/changed since the previous release:

#### 1.1 Features

- Updates to class B support for XMC7000 & PSoC™ 6
- Upgrade to new BSP (2.0.0) for XMC7000
- Maintenance update to offloads on AIROC™ CYW43022
- emUSB middleware enhancements:
  - support for new audio class with sync feature
  - support for using DMA
  - support for OTG for XMC4000 devices

#### 1.2 New libraries

- ethernet-phy-driver: v1.0.0

#### 1.3 Updated libraries

- lpa: v5.4.0
- ota-update: v4.2.1
- ota-bootloader-abstraction: v1.2.1
- ethernet-connection-manager: v2.0.0
- ethernet-core-freertos-lwip-mbedtls: v2.1.0
- wifi-host-driver: v3.2.0
- mtb-pdl-cat1: v3.11.0
- mtb-stl: v2.0.0
- CY8CKIT-028-SENSE: v1.1.0

#### 1.4 New code examples

- mtb-example-ethernet-ota-mqtt v1.0.0
- mtb-example-ethernet-ota-https v1.0.0
- mtb-example-ce240064-safety-tcpwm-test v1.0.0
- mtb-example-ce240065-safety-stack-test-freertos v1.0.0
- mtb-example-ce240063-safety-analog-test v1.0.0
- mtb-example-ce239999-safety-canfd-test v1.0.0
- mtb-example-ce239833-safety-i2c-test v1.0.0
- mtb-example-ce239832-safety-spi-loopback-test v1.0.0
- cce-mtb-xmc44-usb-otg v1.0.0

#### 1.5 Updated code examples

- mtb-example-wifi-scan v4.6.0
- mtb-example-wifi-secure-tcp-client v4.7.0
- mtb-example-wifi-secure-tcp-server v4.7.0

## What's new/changed in this release

- mtb-example-wifi-wps-enrollee v3.6.0
- mtb-example-wifi-mqtt-client v6.5.1
- mtb-example-wifi-https-server v4.4.0
- mtb-example-wifi-https-client v1.2.0
- mtb-example-hal-i2c-master v3.8.0
- mtb-example-hal-i2c-slave v1.4.0
- mtb-example-empty-app v4.8.0
- mtb-example-hal-hello-world v4.9.0
- mtb-example-hal-spi-master v3.8.0
- mtb-example-hal-spi-slave v1.4.0
- mtb-example-xmc7000-multicore-empty-app v2.0.0
- mtb-example-ce239718-safety-core-test v2.0.0
- mtb-example-ce239717-safety-uart-loopback-test v1.1.0
- mtb-example-ce239682-safety-communication-test v1.1.0
- mtb-example-usb-device-audio-freertos v2.0.0
- mtb-example-usb-device-audio-recorder-freertos v2.0.0
- mtb-example-psoc6-low-power-sar-adc-thermistor-als v3.1.0
- mtb-example-hal-adc-basic v2.2.0
- mtb-example-xmc-ccu8-capture v2.2.0
- mtb-example-xmc-uart-dma v2.2.0
- mtb-example-xmc-dma-ring-buffer v2.2.0
- mtb-example-xmc-uart-shell v2.1.1
- mtb-example-psoc6-smartio-i2s v2.2.0
- mtb-example-psoc4-capsense-liquid-level-sensing v1.1.0
- mtb-example-psoc6-capsense-buttons-slider v4.5.0
- mtb-example-xmc-vadc-emux v1.1.0
- mtb-example-psoc6-tfm-freertos v1.1.0
- mtb-example-psoc6-secure-blinkyled-freertos v3.2.0
- mtb-example-ota-mqtt v7.1.0
- mtb-example-ota-https v6.1.0
- mtb-example-wlan-offloads v5.4.0

Revision history

Revision history

Revision	Date	Description
**	2020-04-30	Initial Release.
*A	2020-05-18	Added BTSTACK issue. Added bluetooth-freertos btstack libraries.
*B	2020-06-29	Updated for version 1.1.
*C	2020-08-30	Removed sentence about BTSTACK supports Bluetooth BR/EDR and BLE core protocols.
*D	2020-09-30	Updated for version 1.2.
*E	2020-12-20	Updated for version 1.3.
*F	2021-05-11	Updated for version 1.4.
*G	2021-05-24	Updated for version 1.4.1.
*H	2021-10-06	Updated for version 1.5.
*I	2021-12-15	Updated for January 2022.
*J	2022-04-01	Updated for April 2022.
*K	2022-08-05	Updated for August 2022.
*L	2022-10-19	Updated for October 2022.
*M	2022-12-20	Updated for December 2022.
*N	2023-03-31	Updated for March 2023.
*O	2023-06-30	Updated for June 2023.
*P	2023-09-25	Updated for September 2023.
*Q	2023-12-13	Updated for December 2023.
*R	2024-03-25	Updated for March 2024.
*S	2024-06-26	Updated for June 2024.

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**Do you have a question about this document?**

**Email: [erratum@infineon.com](mailto:erratum@infineon.com)**

**Document reference**

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