STM32CubeMonitor-UCPD release 1.4.0

Introduction

This release note is updated periodically to keep abreast of the STM32CubeMonitor-UCPD (STM32CubeMonUCPD) evolutions, problems, and limitations. Refer to the table below for the latest release summary.

Table 1. STM32CubeMonitor-UCPD 1.4.0 release summary

Type	Summary
Minor release	New measurement chart
	JDK update
	Bugs correction

Customer support

Check the ST support website at www.st.com/stm32softwaretools for the latest version. For more information or help concerning STM32CubeMonitor-UCPD, contact the nearest STMicroelectronics sales office. For a complete list of STMicroelectronics offices and distributors, refer to the *www.st.com* webpage.

Software updates

Software updates and all the latest documentation can be downloaded from the STMicroelectronics microcontroller support webpage at www.st.com/stm32softwaretools.

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For further information contact your local STMicroelectronics sales office.

www.st.com

1 General information

1.1 Overview

The main features of the STM32CubeMonitor-UCPD software tool are the following:

- Configures and monitors USB Type-C® Power Delivery (PD) ports of STMicroelectronics USB Type-C® PD boards.
- Sends device policy manager (DPM) messages to distant USB Type-C® PD port.

This software applies to STM32 Arm®-based microcontrollers.

Note: *Arm is a registered trademark of Arm Limited (or its subsidiaries) in the US and/or elsewhere.*

1.2 Host PC system requirements

Supported operating systems and architectures

- Windows® 10 and 11, 64 bits (x64)
- Linux®: Ubuntu® LTS 20.04 and LTS 22.04
- macOS® 13 (Ventura), macOS® 14 (Sonoma)

Note: *Windows is a trademark of the Microsoft group of companies.*

Linux® is a registered trademark of Linus Torvalds.

Ubuntu® is a registered trademark of Canonical Ltd.

macOS® is a trademark of Apple Inc., registered in the U.S. and other countries and regions.

Software requirements

- The installer requires JRE™ (Java® runtime environment) for Linux®.

Note: *Oracle and Java are registered trademarks of Oracle and/or its affiliates.*

Hardware requirements

- One free USB2 or USB3 host port
- USB Type-A or USB Type-C® to Micro-B or Mini-B cable depending on the target board
- ST target board with USB Type-C® with firmware (TRACE or GUI capable) latest version:
  – Downloaded for STM32G0 Discovery kit from STM32G071B-DISCO,
  – Downloaded for STM32G4 Evaluation board from STM32G474E-EVAL,
  – Or built through STM32CubeMX, from the sources available in firmware packages under EWARM, Keil®, and STM32CubeIDE.

1.3 ST-LINK STM32 Virtual COM port driver

Before the first connection, the ST-LINK USB driver must be downloaded from the dedicated page on *www.st.com* and installed.

1.4 Setup procedure

Refer to the user manual *STM32CubeMonitor-UCPD* (UM2468) available at the www.st.com/stm32softwaretools webpage.

1.5   Licensing

STM32CubeMonUCPD is delivered under the SLA0048 software license agreement and its Additional License Terms.

The software bundled with STM32CubeMonitor-UCPD and its licenses is listed in Table 2.

Table 2. List of software bundled with the tool

Name	Version	Copyright	License	Details
Java® SE and JavaFX	1.8.0_412	Oracle®	Copyright © 2017-2024 BellSoft, all rights reserved.	https://docs.bell-sw.com/liberica-jdk/8u412b9/legal/license-jdk8/[1]
Inno setup	6.0.2	Jordan Russell	Inno setup license	Windows installer. A copy of the license is in the "License" folder. http://www.innosetup.com[1]

1.   *This URL belongs to a third-party. It is active at document publication. However, STMicroelectronics shall not be liable for any change, move, or inactivation of the URL or the referenced material.*

2 STM32CubeMonitor-UCPD 1.4.0 release information

2.1 Solved issues in this version

The following issues are corrected in this software version:

- Crash at startup with Sonoma 14 (macOS®)
- Error in maximum operating current decoding
- Replacement of the Twitter bird logo with the X logo
- Addition of a 'save trace' button to create the .cpd file

2.2 Update

Bundle version updated from Liberica 265 to Liberica 412

3 STM32CubeMonitor-UCPD 1.3.0 release information

3.1 New features

- Decoding of EPR messages
- Decoding of BIST messages
- Text finder in the trace
- New presentation of the tool when opening
- New way of trace recording
- Recording of the directory used to store traces
- Ability to open the tool by double-clicking on a trace

4 STM32CubeMonitor-UCPD 1.2.0 release information

4.1 New features

- Save trace feature added
- GUI messages removed (Live and replay)
- Correction of decoding of Discovery_indentity ACK
- Decoding of ProductTypeUFPorCP
- Removal of trace information in the tooltip
- The name of the trace is added in the tooltip
- New presentation of Display_Configure_REQ and Display_Configure_ACK
- Decoding of IBusVBus messages
- Decoding of SRC_CAPA_EXT messages
- Decoding of no forward cable messages
- Decoding of VDM disco identity messages
- Decoding of SINK_CAPA_EXT messages
- Decoding of GET_SINK_CAPA_EXTENDED messages
- Decoding of GET_STATUS, STATUS messages
- Decoding of GET_BATTERY, BATTERY messages
- Decoding of GET_MANU_INFO and MANU_INFO messages
- Decoding of UCSI messages
- Decoding of REVISION, GET_REVISION messages
- Trace live versus replay activation
- Trace sorting

4.2 Solved issues in this version

The following issues are corrected in this software version:

- Cannot copy trace if too many debug messages
- Firmware and stack versions are inverted in the board selection window
- Cannot save parameters in flash memory because of a wrong parameter
- The default timing for measurement cannot be zero
- Graph may disappear if we zoom in or out
- Change comments and minimum PDO settings
- Wrong default value for PPS request
- Change the default parameter for the port configuration page saving
- Power request automatically sent on double-click
- Optimize the space under the measurement graph

5 STM32CubeMonitor-UCPD 1.1.1 release information

5.1 Solved issues in this version

The following issue is corrected in this software version:

- Crash of the application with the latest version of Oracle® JRE

6 STM32CubeMonitor-UCPD 1.1.0 release information

6.1 New features

- Add the possibility to send a free text in the command list
- Fill the default requested voltage for the requested power profile

6.2 Known problems and limitations

Board not detected:

- If the board is not detected after a couple of seconds, disconnect it, wait for another couple of seconds and connect it again, or click on 'Board Selection' again to refresh.

6.3 Solved issues in this version

The following issues are corrected in this software version:

- Exception raised when coming back to the "Board selection" tab from any other tab
- Traces not available
- Display issue on measurement panel
- Issues are detected when changing rapidly from one port to another
- Symantec™ does not recognize the tool as a trusted source after installation
- The time of the splash screen is not enough (disappears before the application is running)
- The tool does not respond and an exception is raised when sending some messages
- Exception raised when clicking on some messages
- The SRC/SINK capabilities tab must be removed if the imported configuration does not have SINK/SRC PDO defined
- [Internationalization] language list must not be translated
- Cannot install STM32CubeMonUCPD on Windows® 10

7 STM32CubeMonitor-UCPD 1.0.0 release information

7.1 Features

STM32CubeMonitor-UCPD has the following key features:

- Detect board with cubemon_ucpd_emb module
- Select UCPD ports available on the board
- Visualize current port status (Contract, Power role, Ibus, Vbus …)
- Visualize the capabilities of the distant device port (if any)
- Start and stop graphical monitoring of Ibus and Vbus values
- Send messages to the distant device port
- Trace debug information
- Save debug information trace into a file
- Replay previously saved debug information traces from the file
- Configure PD settings
- Configure VDM SOP
- Configure source capabilities
- Configure Sink capabilities
- Send the current configuration to the board
- Save the current configuration into the board
- Save the current USB Type-C® port configuration into a file
- Load previously saved port Type-C configuration from the file

Revision history

Table 3. Document revision history

Date	Revision	Changes
8-Nov-2018	1	Initial release.
25-Mar-2019	2	Updated title and *Table 1* switch to 1.1.0 minor revision Added *STM32CubeMonitor-UCPD 1.1.0 release information*
1-Sep-2020	3	Updated: • document title • *Table 1* switch to 1.1.1 minor revision • *Section 1.2 Host PC system requirements* • *Table 2. List of software component licenses* Added *STM32CubeMonitor-UCPD 1.1.1 release information*
15-Nov-2021	4	Updated: • Document title • *Table 1* switch to 1.2.0 major revision • *Table 2. List of software component licenses* Added: • *Table 3. List of software bundled with the tool* • *STM32CubeMonitor-UCPD 1.2.0 release information*
31-May-2023	5	Updated: • Document title • *Table 1* switch to 1.3.0 major revision • *Table 2. List of software bundled with the tool* Added *STM32CubeMonitor-UCPD 1.3.0 release information* Removed former *Table 2*
14-Nov-2024	6	Updated: • Document title • Table 1 switch to 1.4.0 minor revision • Host PC system requirements • Java$^{®}$ SE and JavaFX version in Table 2 Added STM32CubeMonitor-UCPD 1.4.0 release information

IMPORTANT NOTICE – READ CAREFULLY