



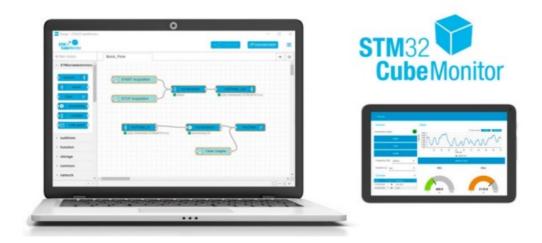
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STMicroelectronics RN0104 STM32 Cube Monitor RF



Introduction

This release note is updated periodically to keep abreast of STM32CubeMonRF

(hereunder referred to as STM32CubeMonitor-RF) evolution, problems, and limitations. Check the STMicroelectronics support website at www.st.com for the newest version. For the latest release summary, refer to Table 1.

Table 1. STM32CubeMonRF 2.18.0 release summary

Туре	Summary
Minor release	 Alignment with STM32CubeWB firmware 1.23.0 Alignment with STM32CubeWBA firmware 1.7.0 Upgrade of Java® runtime version from 17.0.10 to 21.0.04 Upgrade of supported OpenThread version to 1.4.0 API 377 Support of command-line interface (CLI) Bug fixes

Customer support

For more information or help concerning STM32CubeMonitor-RF, contact the nearest STMicroelectronics sales office or use the ST community at <u>community.st.com</u>. For a complete list of STMicroelectronics offices and distributors, refer to the <u>www.st.com</u> web page.

Software updates

Software updates and all the latest documentation can be downloaded from the STMicroelectronics support web page at www.st.com/stm32cubemonrf

General information

Overview

STM32CubeMonitor-RF is a tool provided to help designers to:

- Perform RF (radio frequency) tests of Bluetooth® LE applications
- Perform RF (radio frequency) tests of 802.15.4 applications
- Send commands to Bluetooth® LE parts to perform tests

- Configure Bluetooth® LE beacons and manage file over-the-air (OTA) transfers
- Discover Bluetooth® LE device profiles and interact with services
- Send commands to OpenThread parts to perform tests
- Visualize Thread device connections
- Sniff 802.15.4 network

This software applies to microcontrollers of the STM32WB, STM32WB0, and STM32WBA series, based on Arm®(a) cores.

Host PC system requirements

Supported operating systems and architectures

- Windows®(b) 10 and 11, 64-bit (x64)
- Linux®(c) Ubuntu®(d) LTS 22.04 and LTS 24.04
- macOS®(e) 14 (Sonoma), macOS®(e) 15 (Sequoia)

Software requirements

For Linux®, the Java®(f) runtime environment (JRE™) is required for the installer. For 802.15.4 sniffer only:

- Wireshark v2.4.6 or later is available from https://www.wireshark.org
- Python™ card v3.8 or later is available from https://www.python.org/downloads
- pySerial v3.4 or later, available from https://pypi.org/project/pyserial
- Arm is a registered trademark of Arm Limited (or its subsidiaries) in the US and/or elsewhere.
- 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.
- Oracle and Java are registered trademarks of Oracle and/or its affiliates.

Setup procedure

Windows®

Install

If an older version of STM32CubeMonitor-RF is already installed, the existing version must be uninstalled before installing the new one. The user must have administrator rights on the computer to run the installation.

- 1. Download STM32CMonRFWin.zip.
- 2. Unzip this file to a temporary location.
- 3. Launch STM32CubeMonitor-RF.exe to be guided through the setup process.

Uninstall

To uninstall STM32CubeMonitor-RF, follow the steps below:

- 1. Open the Windows Control panel.
- 2. Select Programs and Features to display the list of programs installed on the computer.
- 3. Left-click on STM32CubeMonitor-RF from the STMicroelectronics publisher and select the Uninstall function.

Linux®

Software requirements

The Java® runtime environment is required for the Linux® installer. It can be installed with the command apt-get install default-jdk or the package manager.

Install

- 1. Download STM32CMonRFLin.tar.gz.
- 2. Unzip this file to a temporary location.
- 3. Make sure you have access rights to the target installation directory.
- 4. Launch the execution of the SetupSTM32CubeMonitor-RF.jar file, or launch manually the installation with java -jar <install path>/SetupSTM32CubeMonitor-RF.jar.
- 5. An icon appears on the desktop. If the icon is not executable, edit its properties and select the option Allow executing file as program, or from Ubuntu® 19.10 onward, and choose the option Allow launching.

Information about COM port on Ubuntu®

The modemmanager process checks the COM port when the board is plugged in. Due to this activity, the COM port is busy for a few seconds, and STM32CubeMonitor-RF cannot connect.

The users need to wait for the end of the modemmanager activity before opening the COM port. If the user does not require the modemmanager, it is possible to uninstall it with the command sudo apt-get purge modemmanager.

For the sniffer mode, the modem manager must be uninstalled or disabled through the command sudo systemctl stop ModemManager.service before connecting the sniffer device.

If the modem manager cannot be disabled, it is also possible to define rules so that the modem manager ignores the sniffer device. The 10-stsniffer rules file, available in the ~/STMicroelectronics/STM32CubeMonitor-RF/sniffer directory can be copied in /etc/udev/rules.d.

Uninstall

- Launch the uninstaller.jar located in the installation directory
 /STMicroelectronics/STM32CubeMonitor-RF/Uninstaller. If the icon is not executable,
 edit its properties and select the option Allow executing file as program.
- 2. Select Force deletion... and click on the Uninstall button.

macOS®

Install

- 1. Download STM32CMonRFMac.zip.
- 2. Unzip this file to a temporary location.
- 3. Make sure you have access rights to the target installation directory.
- 4. Double-click on the installer STM32CubeMonitor-RF.dmg file.
- 5. Open the STM32CubeMonitor-RF new disk.
- 6. Drag and drop the STM32CubeMonitor-RF shortcut to the Applications shortcut.
- 7. Drag and drop the document folder to a location of your choice.

If an error with STM32CubeMonitor-RF an not be opened because it is from an

unidentified developer occurs, the command sudo spctl –master-disable must be used to disable the verification.

Uninstall

- 1. In the applications folder, select the STM32CubeMonitor-RF icon and move it to trash.
- 2. In the user's home directory, remove the folder Library/STM32CubeMonitor-RF.

If the Library folder is hidden:

- Open the Finder.
- Hold down Alt (Option) and choose Go from the drop-down menu bar at the top of the screen.
- The Library folder is listed below the Home folder.

Devices supported by STM32CubeMonitor-RF

Supported devices

The tool is tested with the STM32WB55 Nucleo and dongle boards (P-NUCLEO-WB55), the STM32WB15 Nucleo board (NUCLEO-WB15CC), the STM32WB5MM-DK Discovery kit, the STM32WBA5x Nucleo board, the STM32WBA6x Nucleo board, and the STM32WB0x Nucleo board.

The boards based on STM32WBxx are compatible if they feature:

- A connection through a USB Virtual COM port or a serial link and
- A test firmware:
 - Transparent mode for Bluetooth® LE
 - Thread Cli Cmd for Thread
 - Phy 802 15 4 Cli for 802.15.4 RF test
 - Mac 802 15 4 Sniffer.bin for sniffer

The boards based on STM32WBAxx are compatible if they feature: • A connection through a serial link and

A test firmware:

- Transparent mode for Bluetooth® LE
- Thread_Cli_Cmd for Thread
- Phy_802_15_4_Cli for 802.15.4 RF test
 The boards based on STM32WB0x are compatible if they feature:
- A connection through a serial link and
- A test firmware:
 - Transparent mode for Bluetooth® LE
 - The device connection details and firmware location are described in Section 2 of the user manual STM32CubeMonitor-RF software tool for wireless performance measurements (UM2288).

Release information

New features/enhancements

- Alignment with STM32CubeWB firmware 1.23.0
- Alignment with STM32CubeWBA firmware 1.7.0
- Upgrade of Java® runtime version from 17.0.10 to 21.0.04
- Upgrade of supported OpenThread version to 1.4.0 API 377
- Support of command-line interface (CLI)

Fixed issues

This release:

- Fixes issue 64748 Add a dialog to select the beacon file
- Fixes issue 202582 [802.15.4 Sniffer] Incorrect RSS report value
- Fixes issue 204195 Some ACI/HCI commands do not send 16-bit UUID parameter
- Fixes issue 204302 VS_HCI_C1_DEVICE_INFORMATION DBGMCU_ICODE typo –
 DBGMCU_ICODER for STM32WBA
- Fixes issue 204560 [STM32WB0] Transmission packet count is abnormal on PER test

Restrictions

- When the device under test is disconnected, the software might not immediately
 detect the disconnection. In this case, an error is reported when a new command is
 sent. If the board is not detected after the error, it is necessary to unplug it and then
 reconnect it.
- For sniffer on macOS®, the sniffer Python™ file must be set with an executable right after copy. The command is chmod+x stm32cubeMonRf_sniffer.py.
- STM32WB firmware versions before 1.16 are not supported, a more recent version is required.
- During STM32WB0x Bluetooth® LE RF tests and STM32WBAxx RX tests, RSSI measurement values are not provided.
- The Beacon and ACI Utilities panels are not functional for STM32WB05N.
- For both STM32WBxx and STM32WBAx, in Bluetooth® LE RX and PER tests, the PHY value 0x04 is proposed but not supported by the receiver. This leads to no received packet.

Licensing

STM32CubeMonRF is delivered under the SLA0048 software license agreement and its additional license terms.

STM32CubeMonitor-RF release information

STM32CubeMonitor-RF V1.5.0

Tool first version to support Bluetooth® Low Energy features of STM32WB55xx. Versions 1.x.y have only Bluetooth® Low Energy support.

STM32CubeMonitor-RF V2.1.0

Addition of OpenThread support in the tool

STM32CubeMonitor-RF V2.2.0

- Improvement of OpenThread command windows: Option to clear windows/history, details about OT commands selected in the tree
- Addition of read param and set param buttons for OT commands used to read or set parameters
- Addition of scripts for OpenThread

- It is possible to add a loop in the script (refer to the user manual for details)
- User interface update: the disabled items are now colored in gray
- Implementation of search command for threads
- Addition of the selection of Bluetooth® Low Energy PHY and modulation index
- In Bluetooth® Low Energy RF tests, the frequency can be changed when the test is running

STM32CubeMonitor-RF V2.2.1

New features/enhancements

The OTA download procedure is updated: When the target device configuration is in OTA loader mode, the target address is incremented by one. STM32CubeMonitor-RF now uses the incremented address for the download.

The list of OpenThread commands is aligned with the Thread® stack.

STM32CubeMonitor-RF V2.3.0

New features/enhancements

- Alignment with STM32WB55 cube firmware 1.0.0
- Addition of 802.15.4 RF tests
- New features in the ACI Utilities panel:
- The discovery of remote Bluetooth® Low Energy devices
- Interaction with the services of remote devices

STM32CubeMonitor-RF V2.4.0

- Alignment with STM32WB cube firmware 1.1.1
- Support the over-the-air firmware update of the wireless stack (FUOTA).
- Optimize FUOTA connection parameters to increase performance. Adds a warning if the address is below 0x6000.
- Correction of UART detection issue on Windows® 10
- The tool properly uses the write without response function to write a characteristic with

write without response permission.

- Update the device name in the device information box.
- Fix the value of HCI LE SET EVENT MASK.
- Correction of the text about the error reason description
- Fix issues with OpenThread scripts.
- Set a maximum size for graphs.
- Update some control locks to prevent wrong actions from the user.

STM32CubeMonitor-RF V2.5.0

New features/enhancements

- Network Explorer is added to a new tab of Thread® mode.
- This feature displays the connected Thread® devices and the connections between them.

STM32CubeMonitor-RF V2.6.0

New features/enhancements

RF tests are added.

In the transmitter test, the sending of MAC frames is available. The user defines the frame.

In the receiver test, the LQI, ED, and CCA tests are available and the PER test shows the decoded frames.

Fixed issues

This release:

- Updates the C1_Read_Device_Information command description,
- Disables the navigation link when the 802.15.4 receiver test is in progress,
- Updates ST logo and colors,
- Fixes the blank popup message displayed when the script detects an error,
- Disables the start button as soon as the channel list is inconsistent in the 802.15.4
 PER multichannel test.

• And includes a workaround to prevent freeze observed on a serial port with macOS®.

STM32CubeMonitor-RF V2.7.0

New features/enhancements

Updates OpenThread API with version 1.1.0. Adds the OpenThread CoAP secure API. Adds 802.15.4 sniffer mode.

Fixed issues

This release:

- Fixes the address bytes inverted in the OTA updater panel,
- Fixes the OpenThread network explore button label management,
- Fixes the behavior of the parameter field when the parameter is from the terminal and is wrong,
- Fixes the naming of Bluetooth® Low Energy commands according to the AN5270 specification,
- Fixes the connection fail behavior of the OpenThread COM port,
- Fixes Bluetooth® Low Energy tester connection fail behavior on Linux®,
- Fixes OpenThread panId hexadecimal value display,
- Improve SBSFU OTA and tests,
- Fixes ACI client characteristic configuration after reconnection.

STM32CubeMonitor-RF V2.7.1

New features/enhancements

Sniffer fixes.

Fixed issues

This release:

Fixes the error on quick Wireshark sniffer stop then start.

Removes two extra bytes in sniffed data.

STM32CubeMonitor-RF V2.8.0

New features/enhancements

OTA improvement:

- Adds an option in the OTA panel to increase the packet length (MTU) to optimize speed.
- Adds a menu to select the target. It is required to compute the number of sectors to erase for SMT32WB15xx.
- Removes the modulations not suitable for the PER test in the PER picklist.

Fixed issues

This release:

- Fixes issue 102779: Displaying offset and attribute data length is reversed for ACI GATT ATTRIBUTE MODIFIED EVENT.
- Aligns the message HCI_ATT_EXCHANGE_MTU_RESP_EVENT with AN5270.
- Fixes the attribute name in HCI_LE_DATA_LENGTH_CHANGE_EVENT.
- Improves the welcome screen layout for small screens.

Fixed issues

This release:

- Fixes issue 64425: Send command button unlocked during OTA transfer.
- Fixes issue 115533: During the OTA update, the issue in the
- ACI GAP START GENERAL DISCOVERY PROC command.
- Fixes issue 115760:
- During OTA updates, when the Optimize MTU size check box is ticked, the download stops after the MTU size exchange.
- Fixes issue 117927: change address type to public device address for OTA.
- Fixes issue 118377: wrong sector size erased before OTA transfer.
- Set OTA block size according to MTU size exchange.

New features/enhancements

- Adds compatibility with the OpenThread stack of STM32Cube_FW_V1.14.0. This stack is based on the OpenThread 1.2 stack and supports the O.T. 1.1 commands.
- Adds new Bluetooth® Low Energy commands and events. Updates some existing commands to be compatible with the release 1.14.0 of the stack.

Commands added:

- HCI LE READ TRANSMIT POWER,
- HCI_LE_SET_PRIVACY_MODE,
- · ACI GAP ADD DEVICES TO LIST,
- HCI LE READ RF PATH COMPENSATION,
- HCI LE WRITE RF PATH COMPENSATION

• Events added:

- HCI_LE_EXTENDED_ADVERTISING_REPORT_EVENT,
- HCI_LE_SCAN_TIMEOUT_EVENT,
- HCI_LE_ADVERTISING_SET_TERMINATED_EVENT,
- HCI LE SCAN REQUEST RECEIVED EVENT,
- HCI LE CHANNEL SELECTION ALGORITHM EVENT

Command removed:

ACI GAP START NAME DISCOVERY PROC

• Command updated (parameters or description):

- ACI_HAL_GET_LINK_STATUS,
- HCI_SET_CONTROLLER_TO_HOST_FLOW_CONTROL,
- HCI_HOST_BUFFER_SIZE,
- ACI_HAL_WRITE_CONFIG_DATA,
- ACI_GAP_SET_LIMITED_DISCOVERABLE,
- ACI_GAP_SET_DISCOVERABLE,
- ACI_GAP_SET_DIRECT_CONNECTABLE,
- ACI_GAP_INIT,
- ACI GAP START GENERAL CONNECTION ESTABLISH PROC,
- ACI_GAP_START_SELECTIVE_CONNECTION_ESTABLISH_PROC,
- ACI_GAP_CREATE_CONNECTION,

- ACI GAP SET BROADCAST MODE,
- ACI_GAP_START_OBSERVATION_PROC,
- ACI GAP GET OOB DATA,
- ACI GAP SET OOB DATA,
- · ACI GAP ADD DEVICES TO RESOLVING LIST,
- ACI HAL FW ERROR EVENT,
- HCI_LE_READ_ADVERTISING_PHYSICAL_CHANNEL_TX_POWER,
- HCI_LE_ENABLE_ENCRYPTION,
- HCI_LE_LONG_TERM_KEY_REQUEST_NEGATIVE_REPLY,
- HCI_LE_RECEIVER_TEST_V2,
- HCI_LE_TRANSMITTER_TEST_V2,
- ACI_HAL_WRITE_CONFIG_DATA,
- ACI_GAP_SET_DIRECT_CONNECTABLE,
- HCI_LE_SET_EVENT_MASK,
- HCI LE TRANSMITTER TEST

Updates 802.15.4 sniffer firmware for STM32WB55 Nucleo and new firmware for STM32WB55 USB dongle

Fixed issues

This release:

- Fixes issue 130999: Some packets are missed in the PER test.
- Fixes issue 110073: Some panld values cannot be set in the Network Explorer tab.

STM32CubeMonitor-RF V2.9.1

- Updates 802.15.4 sniffer firmware software.
- Fixes some issues reported on version 2.9.0.
- Fixes issue 131905: The Bluetooth® Low Energy TX LE PHY menu is not visible in RF tests.
- Fixes issue 131913: The tools do not identify some Bluetooth® Low Energy versions.

Restrictions

This version of STM32CubeMonitor-RF does not provide Extended advertising commands. For some operations (FUOTA, ACI scan), the Bluetooth® Low Energy stack with legacy advertising must be used. Refer to the user manual UM2288 to see which firmware must be used.

STM32CubeMonitor-RF V2.10.0

New features/enhancements

- Alignment with STM32CubeWB firmware 1.15.0
- OpenThread 1.3 support
- Bluetooth® Low Energy extended advertising support
- Bluetooth® Low Energy commands alignment with AN5270 Rev. 16
- New Bluetooth® Low Energy RSSI acquisition method

Fixed issues

This release:

- Fixes issue 133389: A command with variable length crashes the tool.
- Fixes issue 133695: Bluetooth® Low Energy missing
- HCI LE TRANSMITTER TEST V2 PHY input parameter.
- Fixes issue 134379: RF transmitter test, payload size is limited to 0x25.
- Fixes issue 134013: Wrong text seen after launching and stopping tests by checking the Get RSSI box.

STM32CubeMonitor-RF V2.11.0

- Support of STM32WBAxx devices except for OTA firmware update
- Continuous wave mode in the 802.15.4 transmitter test (STM32CubeWB firmware 1.11.0 and later)
- Availability to save Bluetooth® Low Energy ACI log information in a csv formatted file

- Alignment with STM32CubeWB firmware 1.16.0
- Alignment with STM32CubeWBA firmware 1.0.0
- Update of 802.15.4 sniffer firmware
- Removal of 802.15.4 RX_Start command before RX_get and Rs_get_CCA

Fixed issues

This release:

- Fixes issue 139468: Advertising test generates all advertising channels without being selected
- Fixes issue 142721: Event with the length of the next param on more than 1 byte is not managed
- Fixes issue 142814: Unable to set some command parameters with variable length
- Fixes issue 141445: VS_HCI_C1_WRITE_REGISTER ERROR found in script results
- Fixes issue 143362: The tool gets blocked when setting the variable param length to 0

Restrictions

- New issue 139237: In the ACI panel, when advertising starts before a scan is performed, the tool does not properly manage the advertising icon and state.
- New issue in ACI Utilities panel: It is not possible to launch a scan if advertising is started. Advertising must be stopped before.

STM32CubeMonitor-RF V2.12.0

- Alignment with STM32CubeWB firmware 1.17.0
- Alignment with STM32CubeWBA firmware 1.1.0
- Fix advertising issues using GAP commands instead of legacy
- Add STM32WBA OTA firmware update support
- Fix 802.15.4 sniffer issues around the Python™ script
- Upgrade Java® runtime version from 8 to 17
- Update missing Bluetooth® Low Energy parameters values and description

Fixed issues

This release:

- Fixes issues 149148 and 149147: 802.15.4 sniffer leading into negative timestamps on Wireshark
- Fixes issue 150852: Bluetooth® Low Energy OTA profile application could not be discovered on STM32WBAxx
- Fixes issue 150870: Missing parameters description in HTML wireless interface
- Fixes issue 147338: Gatt_Evt_Mask parameter must be a bit mask
- Fixes issue 147386: Missing ACI command to control antenna switching mechanism for AoA/AoD
- Fixes issue 139237: Improve the advertising mechanism

STM32CubeMonitor-RF V2.13.0

New features/enhancements

- Alignment with STM32CubeWB firmware 1.18.0
- Alignment with STM32CubeWBA firmware 1.2.0
- Add 802.15.4 support for STM32WBAxx devices
- Add OpenThread support for STM32WBAxx devices

Fixed issues

This release:

- Fixes issue 161417: Combo Box not displayed on 802.15.4 Start TX
- Fixes issue 159767: Replace the Twitter bird logo with the X logo
- Fixes issue 152865: Transfer of firmware via OTA from WB55 device connected to STM32CubeMonitor-RF to device type WBA5x not active
- Fixes issue 156240: Missing interval of parameter's possible values in tool description
- Fixes issue 95745 [802.15.4 RF]: No information displayed about the device ID connected
- Fixes issue 164784: Error using online beacon with a random address

- Fixes issues 163644 and 166039: Error using advertising with a random or public not connectable device address
- Fixes issue 69229: Scanning cannot stop when advertising is running.

STM32CubeMonitor-RF V2.14.0

New features/enhancements

- Alignment with STM32CubeWB firmware 1.19.0
- Alignment with STM32CubeWBA firmware 1.3.0
- Upgrade supported OpenThread version to 1.3.0 API 340

Fixed issues

This release:

- Fixes issues 165981 and 172847 to stabilize Linux® and macOS®, 802.15.4 sniffer behavior
- Fixes issues 165552 and 166762 to improve scan and advertising features
- Fixes issue 172471 to extend STM32WBA 802.15.4 power range

STM32CubeMonitor-RF V2.15.0

New features/enhancements

- Alignment with STM32CubeWB firmware 1.20.0
- Alignment with STM32CubeWBA firmware 1.4.0
- Add support of STM32CubeWB0 firmware 1.0.0
- Upgrade Java® runtime version from 17.0.2 to 17.0.10

Fixed issues

- This release:
- Fixes issue 174238 802.15.4 sniffer malformed packet in Wireshark

STM32CubeMonitor-RF V2.15.1

New features/enhancements

Add support of STM32WB05N firmware 1.5.1

Fixed issues

This release:

- Fixes issue 185689: The first value of power in the ACI Utilities panel is not displayed for STM32WB or STM32WBA
- Fixes issue 185753: Add STM32WB06 in STM32CubeMonitor-RF

New features/enhancements

- Alignment with STM32CubeWB firmware 1.21.0
- Alignment with STM32CubeWBA firmware 1.5.0
- Alignment with STM32CubeWB0 firmware 1.1.0
- Upgrade supported OpenThread stack to API 420 version 1.3.0
- Update 802.15.4 sniffer firmware
- Add STM32WB0X FUOTA support
- Improve path management

Fixed issues

This release:

- Fixes issue 193557 Vulnerability of commons-io
- Fixes issue 190807 FUOTA image base address management
- Fixes issue 188490 WBA PER test change to get RSSI
- Fixes issue 191135 Cannot connect to STM32WB15
- Fixes issue 190091 Connection to WB05N does not work the first time
- Fixes issue 190126 OpenThread, device information menu disabled
- Fixes issue 188719 Error in baud rate value
 - 3.23 STM32CubeMonitor-RF V2.17.0
 - 3.23.1 New features/enhancements
- Alignment with STM32CubeWB firmware 1.22.0

- Alignment with STM32CubeWBA firmware 1.6.0
- Alignment with STM32CubeWB0 firmware 1.2.0
- Support of STM32WBA6x devices

Fixed issues

This release:

- Fixes issue 185894 Support STM32WB1x BLE_Stack_light_fw upgrade
- Fixes issue 195370 ACI_GAP_SET_NON_DISCOVERABLE return Command disallowed error
- Fixes issue 196631 Could not perform RF Tests on WB05X

Revision history

Table 2. Document revision history

Date	Revisi on	Changes	
02-Mar-20 17	1	Initial release.	
25-Apr-2 017	2	Modified for release 1.2.0:— updated Section 2: Release infor mation— updated Section 2.3: Restrictions— added Section 3.2 : STM32CubeMonitor-RF V1.2.0 information	
27-Jun- 2017	3	Changed document classification to ST Restricted.Modified for release 1.3.0, hence updated document title and added Section 3.3: STM32CubeMonitor-RF V1.3.0 information.Updated Section 1.2: Host PC system requirements, Section 1.3: Setup procedure, Device configuration, Section 2.1: New features/enhancements, Section 2.2: Fixed issues, Section 2.3: Restrictions and Section 3.2: STM32CubeMonitor-RF V1.2.0 in formation.	

29-Sep- 2017	4	Modified for release 1.4.0, hence updated document title and a dded Section 3.4: STM32CubeMonitor-RF V1.4.0 information.U pdated Section 1.1: Overview, Section 1.2: Host PC system req uirements, Section 1.3.1: Windows, Section 1.4: Devices supported by STM32CubeMonitor-RF, Section 2.1: New features/enh ancements, Section 2.2: Fixed issues and Section 2.3: Restrictions.Added Section 1.3.2: Linux®, Section 1.3.3: macOS®, and Section 2.4: Licensing.Updated Table 1: STM32CubeMonitor-R F 1.4.0 release summary.
29-Jan- 2018	5	Modified for release 1.5.0, hence updated document title and a ddedSection 3.5: STM32CubeMonitor-RF V1.5.0 information.U pdated Section 1.2: Host PC system requirements, Section 1.3. 2: Linux®, Device configuration, Section 2.1: New features/enh ancements, Section 2.2: Fixed issues and Section 2.3: Restrictions.Updated Table 1: STM32CubeMonitor-RF 1.5.0 release su mmary and Table 2: List of licenses.
14-May- 2018	6	Modified for release 2.1.0, hence updated document title and a ddedSection 3.6: STM32CubeMonitor-RF V2.1.0 information.U pdated Section 1.1: Overview, Section 1.2: Host PC system req uirements, Section 2.1: New features/enhancements, Section 2 .2: Fixed issues, Section 2.3: Restrictions.Updated Table 1: ST M32CubeMonitor-RF 2.1.0 release summary and Table 2: List of licenses.
24-Aug- 2018	7	Modified for release 2.2.0, hence updated document title and a dded Section 3.7: STM32CubeMonitor-RF V2.2.0 information.U pdated Section 2.1: New features/enhancements, Section 2.2: Fixed issues, Section 2.2: Restrictions.Updated Table 1: STM3 2CubeMonitor-RF 2.3.0 release summary and Table 2: List of li censes.

Date	Revisi	Changes	
15-Oct- 2018	8	Modified for release 2.2.1, hence updated document title and a ddedSection 3.8: STM32CubeMonitor-RF V2.2.1 information.U pdated Section 1.1: Overview, Section 1.3.2: Linux®, Section 1.3.3: macOS®, Section 2.1: New features/enhancements, and Section 2.2: Restrictions.Removed former Section 2.2: Fixed is sues.	
15-Feb-2 019	9	Updated:— Title, <i>Table 1</i> , and <i>Section 2</i> switch to the 2.3.0 rele ase— <i>Section 3</i> former releases history— <i>Section 1.1: Overvie w</i> to add OpenThread and 802.15.4 RF— <i>Section 1.3: Setup pr ocedure</i> with different OS	
12-Jul-20 19	10	Updated:— Title, <i>Table 1</i> , and <i>Section 2</i> switch to the 2.4.0 rele ase— <i>Table 2</i> jSerialComm version— <i>Section 3</i> former releases history	
03-Apr-2 020	11	Updated:- Title, <i>Table 1</i> , and <i>Section 2</i> switch to the 2.5.0 rele ase- <i>Table 2</i> Inno setup version- <i>Section 3</i> former releases h istory	
13-Nov-2 020	12	Updated:— Title, <i>Table 1</i> , and <i>Section 2</i> switch to the 2.6.0 release— <i>Table 2</i> and <i>Table 3</i> details in an added copyright colum— <i>Section 3</i> former releases history	
08-Feb-2 021	13	Updated:— Title, <i>Table 1</i> , <i>Section 1</i> , and <i>Section 2</i> switch to the 2.7.0 release with new802.15.4 sniffer mode and <i>Host PC sy stem requirements— Table 3</i> Java SE and Java FX version— <i>Section 3</i> former releases history	
08-Jun-2 021	14	Updated:— Title, <i>Table 1</i> , and <i>Section 2</i> switch to the 2.7.1 rele ase with 802.15.4 sniffer fixes— <i>Section 3</i> former releases hist ory	

15-Jul-2 021	15	Updated:— Title, <i>Table 1</i> , and <i>Section 2</i> switch to the 2.8.0 rele ase with OTA speed improvement and new OTA option for ST M32WB15xx— <i>Section 1.4</i> NUCLEO-WB15CC support and tes t firmware explanation— <i>Table 2</i> with SLA0048 in <i>Licensing</i> — <i>T able 3</i> with Inno setup version— <i>Section 3</i> former releases hist ory
21-Dec-2 021	16	Updated:— Title, <i>Table 1</i> , and <i>Section 2.1</i> switch to the 2.8.1 re lease with fixes for Bluetooth® Low Energy OTA— <i>Section 3</i> for mer releases history

Date	Revisi on	Changes	
07-Jul- 2022	17	 Updated: Title, Table 1, and Section 2.1 switch to the 2.9.0 release Python™ card version in Software requirements Section 2.4: Licensing replacing tables with the suitable licen se agreement statement Section 3 former releases history 	
14-Sep-20 22	18	 Updated: Title, Table 1, and Section 2 switch to the 2.9.1 release Java FX-GTK3 conflict moved from Restrictions to Linux® In stall Section 3 former releases history 	

29-Nov-20 22	19	 Updated: Title, Table 1, and Section 2 switch to the 2.10.0 release Removed note on fixed GTK2 issue in Linux® Install Section 3 former releases history 	
03-Mar-20 23	20	 Updated: Title, <i>Table 1</i>, and <i>Section 2</i> switch to the 2.11.0 release <i>Section 3</i> former releases history 	
4-Jul- 2023	21	Updated: Title, <i>Table 1</i> , and <i>Section 2</i> switch to the 2.12.0 release Section 3 former releases history	
23-Nov-20 23	22	Updated: Title, <i>Table 1</i> , and <i>Section 2</i> switch to the 2.13.0 release Section 3 former releases history	
14-Mar-20 24	23	 Updated: Title, Table 1, and Section 2 switch to the 2.14.0 release macOS® versions in Supported operating systems and archi tectures Section 3 former releases history 	
01-Jul- 2024	24	 Updated: Title, Table 1, and Section 2 switch to the 2.15.0 release Nucleo boards in Devices supported by STM32CubeMonitor-RF Section 3 former releases history 	

12-Sep-20 24	25	Updated: Title, <i>Table 1</i> , and <i>Section 2</i> , including <i>Restrictions</i> , switch to the e 2.15.1 release <i>Section 3</i> former releases history
22-Nov-20 24	26	 Updated: Title, Table 1, and Section 2, including Restrictions, switch to the 2.16.0 release Linux® and macOS® versions in Supported operating syste ms and architectures Section 3 former releases history

Date	Revisi on	Changes
18-Feb-2 025	27	Updated: Title, Table 1, Section 1.4, Section 2.1, Section 2, including Restrictions, switch to the 2.17.0 release Section 3 former releases history
23-Jun-20 25	28	Updated: Title, <i>Table 1, Section 2,</i> including <i>Restrictions</i> , switch to the 2. 18.0 release Section 3 former releases history

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Documents / Resources



STMicroelectronics RN0104 STM32 Cube Monitor RF [pdf] User Guide RN0104 STM32 Cube Monitor RF, RN0104, STM32 Cube Monitor RF, Cube Monitor RF, Monitor RF

References

- User Manual
- STMicroelectronics
- Cube Monitor RF, Monitor RF, RN0104, RN0104 STM32 Cube Monitor RF, STM32 Cube Monitor RF, STMicroelectronics

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