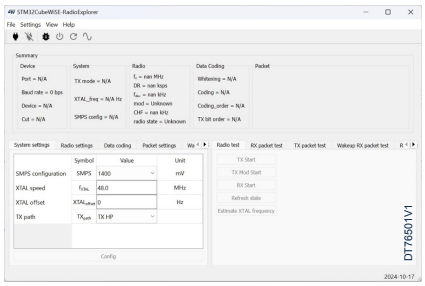
STM32CubeWiSEre

Data brief

Graphical user interface for the radio setting and performance of STM32WL3x microcontrollers



Features

- Compatible with STM32WL3x microcontrollers
- Easy-to-use graphical user interface to configure:
  - Radio and packet parameters
  - System parameters
- Intuitive menu to manage the STM32WL3x microcontroller
- Updated summary with current parameter values
- Radio test performance
- RSSI live plot
- LPAWUR section
- Load and save parameters configuration

Product status link
STM32CubeWiSEre

Description

The STM32CubeWiSE-RadioExplorer (STM32CubeWiSEre) is a graphical tool to interact with STM32WL3x microcontrollers and evaluate their radio capabilities. It can be used to perform RF tests on the device and access the whole SoC register set.

Upon launching, the STM32CubeWiSE-RadioExplorer displays a main window consisting of four sections:

- The toolbar, for quick access to such actions as connecting, disconnecting, or resetting the STM32WL3x
- The summary panel, which displays the status of the STM32WL3x with an overview of its main RF properties
- The RF parameters setting and register browser
- The RF test performance report

To use the STM32CubeWiSE-RadioExplorer, ensure that the CLI firmware is programmed onto the device.

1 General information

STM32CubeWiSEre interacts with STM32WL3x microcontrollers based on the Arm® Cortex®-M0+ processor.

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

1.1 Ordering information

STM32CubeWiSEre is available for free download from the *www.st.com* website.

1.2 What is STM32Cube?

STM32Cube is an STMicroelectronics original initiative to improve designer productivity significantly by reducing development effort, time, and cost. STM32Cube covers the whole STM32 portfolio.

STM32Cube includes:

- A set of user-friendly software development tools to cover project development from conception to realization, among which are:
  - STM32CubeMX, a graphical software configuration tool that allows the automatic generation of C initialization code using graphical wizards
  - STM32CubeIDE, an all-in-one development tool with peripheral configuration, code generation, code compilation, and debug features
  - STM32CubeCLT, an all-in-one command-line development toolset with code compilation, board programming, and debug features
  - STM32CubeProgrammer (STM32CubeProg), a programming tool available in graphical and command-line versions
  - STM32CubeMonitor (STM32CubeMonitor, STM32CubeMonPwr, STM32CubeMonRF, STM32CubeMonUCPD), powerful monitoring tools to fine-tune the behavior and performance of STM32 applications in real time
- STM32Cube MCU and MPU Packages, comprehensive embedded-software platforms specific to each microcontroller and microprocessor series (such as STM32CubeWL3 for the STM32WL3x product line), which include:
  - STM32Cube hardware abstraction layer (HAL), ensuring maximized portability across the STM32 portfolio
  - STM32Cube low-layer APIs, ensuring the best performance and footprints with a high degree of user control over hardware
  - A consistent set of middleware components such as FreeRTOS™ kernel, FatFS, and Sigfox™
  - All embedded software utilities with full sets of peripheral and applicative examples
- STM32Cube Expansion Packages, which contain embedded software components that complement the functionalities of the STM32Cube MCU and MPU Packages with:
  - Middleware extensions and applicative layers
  - Examples running on some specific STMicroelectronics development boards

2 License

STM32CubeWiSEre is delivered under the SLA0048 software license agreement and its Additional License Terms.

Revision history

Table 1. **Document revision history**

Date	Revision	Changes
15-Nov-2024	1	Initial release.

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