

Release notes

Release Information

Project	:	RTX2254 Bluetooth RF Tester
Milestone	:	None
Software Version	:	V0110
Software Life Cycle Stage	:	General Availability (GA)
Release Date	:	7 August 2018

FIRMWARE MUST BE UPDATED!!!!

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What's new – Release V0110

2018-08-07

Release for RTX2254 Bluetooth RF tester.

FIRMWARE MUST BE UPDATED!!!!

API:

- None, see RTX2254 API Specification: "BtTstInterface_V0110.pdf".

Internals:

- Improved Windows 10, update 1803 compatibility
- Improved internal thread handling to lower general CPU load
- Tester COM-port open time out changed to 2 s and DUT time out 3 s (before it was 5 s)
- Some GUI status messages updated

Tester firmware

- Improved temperature compensation for power measurements (NTP)
- Improved NVM handling and added default values to support earlier testers
- HW1, API version updated to V0110
- HW2, API version updated to V0110

Analyzer firmware

- HW1, API version updated to V0110
- HW2, API version updated to V0110

Tools:

**Firmware version can be checked in RTX2254 application and firmware can be updated.
See the RTX2254 User's Manual for more details.**

HWx refers to the hardware version of the tester. Please see the version no. on the label on the back side. V1 is HW1 and V2 is HW2.

- 'Tester' firmware must be updated to V0160: BtTst_V0160.fwu

The file is located in the folder: .\RTX\RTX2254 Bluetooth RF Tester\V0110\Tools\HWx\Tester\

- Make sure that the Portserver is started and open with the "Tester" COM port active
- Run the "Tester_Stand_Alone_Prog.bat"
- Wait for firmware to download

Note! It can be necessary to run the batch file two times due to USB enumeration sync on the PC.

- 'Analyzer' firmware must be updated to V0262: RTX_BTLE_Analyzer_V0262.bin

The file is located in the folder: .\RTX\RTX2254 Bluetooth RF Tester\V0110\Tools\HWx\ Analyzer\

- Start the tool "RTX BTLE Serial Bootloader.exe"
- Click "Port Settings" and setup the COM-port for the 'Analyzer' interface and select Baud=57600, Flow=None, Parity=None, Stop Bits=One and Data Bits=8
- Click "Select File" and select the file "RTX_BTLE_Analyzer_V0262.bin"
- Click "Erase Image" and then "Load Image"
- Wait for firmware to download and click 'OK'.
- Exit RTX BTLE Serial Bootloader

- RTX USB driver updated.

Other changes:

- See RTX2254 Quick Guide for how to get started.
- See RTX2254 User Manual for how to use the tester.

Outstanding issues

- None

Known limitations

- GUI update and mouse click responsiveness is slow when a test is active.
- Tester firmware update from the RTX2254 application 'System' page might fail due to Portserver timeout when switching the Portserver for firmware update:
 - Click 'OK' to continue if a timeout message is shown.
 - If firmware download fails - restart the RTX2254 application and run the 'Update' again. Click 'OK' to continue and click 'Update' again else do a manual update as described under 'Tools' section above or in the RTX2254 User Manual.

What's new – Release V0104

2017-12-07

Release for RTX2254 Bluetooth RF tester.

FIRMWARE MUST BE UPDATED!!!!

API:

- None, see RTX2254 API Specification: "BtTstInterface_V0104.pdf".

Internals:

- Text on GUI and other minor updates.

Tester firmware

- HW1, minor update of Rx power measurement, API version updated to V0104
- HW2, minor update of Rx power measurement, API version updated to V0104

Analyzer firmware

- HW1, API version updated to V0104
- HW2, API version updated to V0104

Tools:

**Firmware version can be checked in RTX2254 application and firmware can be updated.
See the RTX2254 User's Manual for more details.**

HWx refers to the hardware version of the tester. Please see the version no. on the label on the back side. V1 is HW1 and V2 is HW2.

- 'Tester' firmware must be updated to V0154: BtTst_V0154.fwu

The file is located in the folder: .\RTX\RTX2254 Bluetooth RF Tester\V0104\Tools\HWx\Tester\

- Make sure that the Portserver is started and open with the "Tester" COM port active
- Run the "Tester_Stand_Alone_Prog.bat"
- Wait for firmware to download

Note! It can be necessary to run the batch file two times due to USB enumeration sync on the PC.

- 'Analyzer' firmware must be updated to V0260: RTX_BTLE_Analyzer_V0260.bin

The file is located in the folder: .\RTX\RTX2254 Bluetooth RF Tester\V0104\Tools\HWx\ Analyzer\

- Start the tool "RTX BTLE Serial Bootloader.exe"
- Click "Port Settings" and setup the COM-port for the 'Analyzer' interface and select Baud=57600, Flow=None, Parity=None, Stop Bits=One and Data Bits=8
- Click "Select File" and select the file "RTX_BTLE_Analyzer_V0260.bin"
- Click "Erase Image" and then "Load Image"
- Wait for firmware to download and click 'OK'.
- Exit RTX BTLE Serial Bootloader

- RTX USB driver updated.

Other changes:

- USB driver in \Drivers\RTX\USB updated to latest RTX release.
- See RTX2254 Quick Guide for how to get started.
- See RTX2254 User Manual for how to use the tester.

Outstanding issues

- None

Known limitations

- GUI update and mouse click responsiveness is slow when a test is active.
- Tester firmware update from the RTX2254 application 'System' page might fail due to Portserver timeout when switching the Portserver for firmware update:
 - Click 'OK' to continue if a timeout message is shown.
 - If firmware download fails - restart the RTX2254 application and run the 'Update' again. Click 'OK' to continue and click 'Update' again else do a manual update as described under 'Tools' section above or in the RTX2254 User Manual.

What's new – Release V0103

2017-09-29

Release for RTX2254 Bluetooth RF tester.

FIRMWARE MUST BE UPDATED!!!!

API:

- None

See RTX2254 API Specification: "BtTstInterface_V0103.pdf".

Internals:

- Minor updates

Tester firmware

- HW1, minor update of attenuator function, API version updated to V0103
- HW2, minor update of attenuator function, API version updated to V0103

Analyzer firmware

- HW1, minor update of frequency algorithm, API version updated to V0103
- HW2, minor update of frequency algorithm, API version updated to V0103

Tools:

**Firmware version can be checked in RTX2254 application and firmware can be updated.
See the RTX2254 User's Manual for more details.**

HWx refers to the hardware version of the tester. Please see the version no. on the label on the back side. V1 is HW1 and V2 is HW2.

- 'Tester' firmware must be updated to V0152: BtTst_V0152.fwu

The file is located in the folder: .\RTX\RTX2254 Bluetooth RF Tester\V0103\Tools\HWx\Tester\

- Make sure that the Portserver is started and open with the "Tester" COM port active
- Run the "Tester_Stand_Alone_Prog.bat"
- Wait for firmware to download

Note! It can be necessary to run the batch file two times due to USB enumeration sync on the PC.

- 'Analyzer' firmware must be updated to V0259: RTX_BTLE_Analyzer_V0259.bin

The file is located in the folder: .\RTX\RTX2254 Bluetooth RF Tester\V0103\Tools\HWx\ Analyzer\

- Start the tool "RTX BTLE Serial Bootloader.exe"
- Click "Port Settings" and setup the COM-port for the 'Analyzer' interface and select Baud=57600, Flow=None, Parity=None, Stop Bits=One and Data Bits=8
- Click "Select File" and select the file "RTX_BTLE_Analyzer_V0258.bin"
- Click "Erase Image" and then "Load Image"
- Wait for firmware to download and click 'OK'.
- Exit RTX BTLE Serial Bootloader

Other changes:

- See RTX2254 Quick Guide for how to get started
- See RTX2254 User's Manual for how to use the tester

Outstanding issues

- None

Known limitations

- GUI update and mouse click responsiveness is slow when a test is active.
- Tester firmware update from the RTX2254 application 'System' tab might fail due to Portserver timeout when switching the Portserver for firmware update:
 - Click 'OK' to continue if a timeout message is shown.
 - If firmware download fails - restart the RTX2254 application and run the 'Update' again. Click 'OK' to continue and click 'Update' again else do a manual update as described under 'Tools' section above.

Release for RTX2254 Bluetooth RF tester.

FIRMWARE MUST BE UPDATED!!!!

API:

- Updated description for DutStartTx(). "transmit" instead of "receive"
- Document sub title change to "API Specification"

See RTX2254 API Specification: "BtTstInterface_V0102.pdf".

Internals:

- Minor update of tester status (red/green) indicator
- Minor update of HW flow control pin (CTS/RTS) states if HW flow control is disabled (To be compliant with some FTDI USB-UART devices).
- Main tab, the tests enabled is now locked when 'Start' is pressed. (Before enabled tests could be changed by user while running more test loops).
- Main tab, GUI updated to hold the total test time and an average channel test. Total test time now includes the user specified delay time. (Before the test delay was excluded in the total test time).

Tester firmware

- HW1, minor update of RX power measuring, API version updated to V0102
- HW2, minor update of RX power measuring, API version updated to V0102

Analyzer firmware

- HW1, API version updated to V0102
- HW2, API version updated to V0102

Tools:

Firmware version can be checked in RTX2254 application and firmware can be updated. See the RTX2254 User's Manual for more details.

HWx refers to the hardware version of the tester. Please see the version no. on the label on the back side. V1 is HW1 and V2 is HW2.

- 'Tester' firmware must be updated to V0149: BtTst_V0149.fwu

The file is located in the folder: .\RTX\RTX2254 Bluetooth RF Tester\V0102\Tools\HWx\Tester\

- Make sure that the Portserver is started and open with the "Tester" COM port active
- Run the "Tester_Stand_Alone_Prog.bat"
- Wait for firmware to download

Note! It can be necessary to run the batch file two times due to USB enumeration sync on the PC.

- 'Analyzer' firmware must be updated to V0258: RTX_BTLE_Analyzer_V0258.bin

The file is located in the folder: .\RTX\RTX2254 Bluetooth RF Tester\V0102\Tools\HWx\ Analyzer\

- Start the tool "RTX BTLE Serial Bootloader.exe"
- Click "Port Settings" and setup the COM-port for the 'Analyzer' interface and select Baud=57600, Flow=None, Parity=None, Stop Bits=One and Data Bits=8
- Click "Select File" and select the file "RTX_BTLE_Analyzer_V0258.bin"
- Click "Erase Image" and then "Load Image"
- Wait for firmware to download and click 'OK'.
- Exit RTX BTLE Serial Bootloader

Other changes:

- See RTX2254 Quick Guide for how to get started
- See RTX2254 User's Manual for how to use the tester

Outstanding issues

- None

Known limitations

- GUI update and mouse click responsiveness is slow when a test is active.
- Tester firmware update from the RTX2254 application 'System' tab might fail due to Portserver timeout when switching the Portserver for firmware update:
 - Click 'OK' to continue if a timeout message is shown.
 - If firmware download fails - restart the RTX2254 application and run the 'Update' again. Click 'OK' to continue and click 'Update' again else do a manual update as described under 'Tools' section above.

What's new – Release V0101

2017-08-01

Release for RTX2254 Bluetooth RF tester.

FIRMWARE MUST BE UPDATED!!!!

API:

- None

See API documentation: "BtTstInterface_V0101.pdf".

Internals:

- Minor update of Frequency offset and PER test
- Improved reopen of DUT interface after a tester reset

Tester firmware

- HW1, API version updated to V0101
- HW2, API version updated to V0101

Analyzer firmware

- HW1, Fixed internal reset issue. API version updated to V0101 - **UPDATE REQUIRED**
- HW2, API version updated to V0101

Tools:

**Firmware version can be checked in RTX2254 application and firmware can be updated.
See the RTX2254 User's Manual for more details.**

HWx refers to the hardware version of the tester. Please see the version no. on the label on the back side. V1 is HW1 and V2 is HW2.

- 'Tester' firmware must be updated to V0148: BtTst_V0148.fwu

The file is located in the folder: .\RTX\RTX2254 Bluetooth RF Tester\V0101\Tools\HWx\Tester\

- Make sure that the Portserver is started and open with the "Tester" COM port active
- Run the "Tester_Stand_Alone_Prog.bat"
- Wait for firmware to download

Note! It can be necessary to run the batch file two times due to USB enumeration sync on the PC.

- 'Analyzer' firmware must be updated to V0257: RTX_BTLE_Analyzer_V0257.bin

The file is located in the folder: .\RTX\RTX2254 Bluetooth RF Tester\V0101\Tools\HWx\ Analyzer\

- Start the tool "RTX BTLE Serial Bootloader.exe"
- Click "Port Settings" and setup the COM-port for the 'Analyzer' interface and select Baud=57600, Flow=None, Parity=None, Stop Bits=One and Data Bits=8
- Click "Select File" and select the file "RTX_BTLE_Analyzer_V0257.bin"
- Click "Erase Image" and then "Load Image"
- Wait for firmware to download and click 'OK'.
- Exit RTX BTLE Serial Bootloader

Other changes:

See RTX2254 Quick Guide for how to get started

See RTX2254 User's Manual for how to use the tester

Outstanding issues

- None

Known limitations

- GUI update and mouse click responsiveness is slow when a test is active.
- Tester firmware update from the RTX2254 application 'System' tab might fail due to Portserver timeout when switching the Portserver for firmware update:
 - Click 'OK' to continue if a timeout message is shown.
 - If firmware download fails - restart the RTX2254 application and run the 'Update' again. Click 'OK' to continue and click 'Update' again else do a manual update as described under 'Tools' section above.

What's new – Release V0100

2017-07-14

First release for RTX2254 Bluetooth RF tester.

FIRMWARE MUST BE UPDATED!!!!

API:

- First release

See API documentation: "BtTstInterface_V0100.pdf".

Internals:

- None

Tools:

**Firmware version can be checked in RTX2254 application and firmware can be updated.
See the RTX2254 User's Manual for more details.**

HWx refers to the hardware version of the tester. Please see the version no. on the label on the back side. V1 is HW1 and V2 is HW2.

- 'Tester' firmware must be updated to V0147: BtTst_V0147.fwu

The file is located in the folder: .\RTX\RTX2254 Bluetooth RF Tester\V0100\Tools\HWx\Tester\

- Make sure that the Portserver is started and open with the "Tester" COM port active
- Run the "Tester_Stand_Alone_Prog.bat"
- Wait for firmware to download

Note! It can be necessary to run the batch file two times due to USB enumeration sync on the PC.

- 'Analyzer' firmware must be updated to V0256: RTX_BTLE_Analyzer_V0256.bin

The file is located in the folder: .\RTX\RTX2254 Bluetooth RF Tester\V0100\Tools\HWx\ Analyzer\

- Start the tool "RTX BTLE Serial Bootloader.exe"
- Click "Port Settings" and setup the COM-port for the 'Analyzer' interface and select Baud=57600, Flow=None, Parity=None, Stop Bits=One and Data Bits=8
- Click "Select File" and select the file "RTX_BTLE_Analyzer_V0256.bin"
- Click "Erase Image" and then "Load Image"
- Wait for firmware to download and click 'OK'.
- Exit RTX BTLE Serial Bootloader

Other changes:

- None

See RTX2254 Quick Guide for how to get started

See RTX2254 User's Manual for how to use the tester

Outstanding issues

- None

Known limitations

- GUI update and mouse click responsiveness is slow when a test is active.
- Tester firmware update from the RTX2254 application 'System' tab might fail due to Portserver timeout when switching the Portserver for firmware update:
 - Click 'OK' to continue if a timeout message is shown.
 - If firmware download fails - restart the RTX2254 application and run the 'Update' again. Click 'OK' to continue and click 'Update' again else do a manual update as described under 'Tools' section above.

Appendix: RTX Standard Software Lifecycle Model

The software progresses through a series of life cycle stages as the software matures and quality is improved.

Development Stage

Releases made during the development stages are mainly for internal purposes only but can to some degree be shared with external development partners. Development software contains defects and has missing or broken features and possibly unresolved performance issues.

Alpha Stage

Alpha software is "Code Complete" thus all features are implemented for the planned feature release, integrated and functional. Alpha releases are the first releases made that enable measurement of overall product quality. Alpha software is verified against the product requirements with system testing. The alpha software contains defects but must at least live up to following conditions:

All planned features and functions are usable (no feature groups are blocked from testing)

Stability issues do not impact system testing significantly.

Beta Stage

Beta software is software that has been matured during alpha stage to a level where e.g. field testing is possible. I.e. the software is of a quality where unsupervised end-user trials can be made. System verification and defect fixing continues in the Beta stage but other trials can be commenced that verify other aspects of the product.

Release Candidate (RC)

RC software is the software delivered for e.g. product acceptance testing. It is the software that the project promotes as a candidate for the final software that fulfils the goals for this software product (for this feature revision of the product).

General Availability (GA)

RC software can be raised to General Availability (GA) software when the software has been approved by the customer.