

# LabWindows/CVI, VXIplug driver history for the R&S® RTB2000 / RTM3000 / RTA4000 Digital Oscilloscopes Driver Documentation

## Products:

| R&S® RTB2000 / RTM3000 / RTA4000



Driver history for LabWindows/CVI and VXIplug&play  
Instrument Driver for C/C++, MATLAB®, VEE, etc.

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# 1 Supported Instruments

In the following table, the supported R&S instruments and firmware versions are listed:

<b>Which instruments are supported?</b>		
<b>Current revision of instrument driver supports these instruments and firmware versions:</b>		
<b>Instrument</b>	<b>Supported Firmware</b>	<b>Remarks</b>
RTB2000	2.202	
RTM2000	6.010	
RTM3000	1.600	
RTA4000	1.600	

## 2 Getting Started

### 2.1 LabWindows/CVI driver

The Rohde & Schwarz **rsrtx** Instrument driver can be used in LabWindows/CVI 6 and later. In order to be able to compile an application it is required to add following files to your LabWindows/CVI project:

- *rsrtx.c + rsrtx.h*
- *rsrtx\_attributes.c + rsrtx\_attributes.h*
- *rsrtx\_utility.c + rsrtx\_utility.h*
- *rsidr\_core.c + rsidr\_core.h*
- *rsrtx\_callbacks.c*
- *rsrtx.fp + rsrtx.sub*

### 2.2 VXIplug&play driver in C/C++, LabWindows/CVI

In this case, the compiled source code from LabWindows/CVI driver is used. The compiled ANSI-C libraries exist for Windows XP and newer, 32-bit / 64-bit.

Add the following files to your 32-bit target project:

- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\include\rsrtx.h
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\lib\msc\rsrtx.lib (static)
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\Bin\rsrtx\_32.dll (dynamic)
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\rsrtx\rsrtx.fp (in CVI only)
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\rsrtx\rsrtx.sub (in CVI only)

Add the following files to your 64-bit target project:

- C:\Program Files\IVI Foundation\VISA\Win64\Include\rsrtx.h
- C:\Program Files\IVI Foundation\VISA\Win64\Lib\_x64\msc\rsrtx64.lib (static)
- C:\Program Files\IVI Foundation\VISA\Win64\Bin\rsrtx\_64.dll (dynamic)
- C:\Program Files\IVI Foundation\VISA\Win64\rsrtx\rsrtx.fp (in CVI only)
- C:\Program Files\IVI Foundation\VISA\Win64\rsrtx\rsrtx.sub (in CVI only)

## 2.3 VXIplug&play driver in MATLAB

MATLAB instrument driver **rsrtx.mdd** can be found in:

32-bit driver

**C:\Program Files (x86)\IVI Foundation\VISA\WinNT\rsrtx\rsrtx.mdd**

64-bit driver

**C:\Program Files\IVI Foundation\VISA\Win64\rsrtx\rsrtx.mdd**

For detailed description on how to use the driver in MATLAB please refer to the Application Note [1MA171 - How to use R&S instrument in MATLAB](#)

## 2.4 Linux and Mac OS X

To be able to use Rohde & Schwarz **rsrtx** Instrument driver in Linux or Mac OSX, the functioning VISA is required. Then, the process is the same as using LabWindows/CVI driver.

## 2.5 Additional Help

LabWindows/CVI and VXIplug&play instrument driver contains in addition the instrument driver documentation in compressed HTML format (Windows CHM help file **rsrtx\_vxi.chm**) and stored together with the driver sources or in the following folder:

32-bit driver

**C:\Program Files (x86)\IVI Foundation\VISA\WinNT\rsrtx\rsrtx\_vxi.chm**

64-bit driver

**C:\Program Files\IVI Foundation\VISA\Win64\rsrtx\rsrtx\_vxi.chm**

## 3 LabWindows/CVI and VXIplug&play driver history

rsrtx Instrument Driver		
Driver history		
Revision	Date	Note
1.4.0	04/2020	<ul style="list-style-type: none"> <li>* New Core 3.7.0</li> <li>* Added support for RTM3000 / RTA4000 FW 1.600</li> <li>* New:               <ul style="list-style-type: none"> <li>- Probe Meter (Class)</li> <li>- rsrtx_ConfigureProbeCopyToOffset</li> <li>- rsrtx_ConfigureProbeAttenuatorRTZA15Enabled</li> <li>- rsrtx_ConfigureProbeZeroAdjust</li> <li>- rsrtx_ConfigureProbeSaveZeroAdjust</li> <li>- rsrtx_ConfigureProbeInputVoltageRange</li> <li>- rsrtx_ConfigureProbeBandwidthLimit</li> <li>- rsrtx_ConfigureProbeAudibleOverrange</li> <li>- rsrtx_ConfigureProbeMeasMode</li> <li>- rsrtx_ConfigureProbeACCCoupling</li> <li>- rsrtx_ConfigureActionsOnTriggerState</li> <li>- rsrtx_ConfigureActionsOnTrigger</li> <li>- rsrtx_ConfigureAmplitudeTimeMainMeasurement</li> <li>- rsrtx_ConfigureDelayMeasurementMarkerVisible</li> <li>- rsrtx_ConfigureDelayMeasurementDirection</li> <li>- rsrtx_ConfigureAutomaticMeasurementTimeoutAuto</li> <li>- rsrtx_ConfigureAutomaticMeasurementTimeout</li> </ul> </li> </ul>
1.3.0	01/2020	<ul style="list-style-type: none"> <li>* New Core 3.6.3</li> <li>* Added support for RTB2000, FW 2.202, RTM3000, FW 1.550, RTA4000 FW 1.550</li> <li>* New:               <ul style="list-style-type: none"> <li>- Zoom (Class)</li> <li>- Gate (Class)</li> <li>- SPI (Class)</li> <li>- Mathematics Tracks (Class)</li> <li>- Spectrum Data (Class)</li> <li>- Bode Plot (Class)</li> <li>- Burst (Class)</li> <li>- PWM (Class)</li> <li>- rsrtx_ConfigureHorizontalRecordLength</li> <li>- rsrtx_QueryHorizontalRecordLength</li> <li>- rsrtx_ConfigureMemoryMode</li> </ul> </li> </ul>

rsrtx Instrument Driver		
Driver history		
Revision	Date	Note
		<ul style="list-style-type: none"> <li>- rsrtx_ConfigureRollModeAutomatic</li> <li>- rsrtx_ConfigureRollModeMinimumTimeBase</li> <li>- rsrtx_QueryNumberOfAveragesCurrent</li> <li>- rsrtx_ConfigureChannelZeroOffset</li> <li>- rsrtx_ConfigureChannelPosition</li> <li>- rsrtx_ConfigureChannelWaveformColor</li> <li>- rsrtx_ConfigureProbeDegauss</li> <li>- rsrtx_QueryProbeGain</li> <li>- rsrtx_ConfigureProbeGainUnit</li> <li>- rsrtx_ConfigureProbeGainManual</li> <li>- rsrtx_EnableDisplayDateAndTime</li> <li>- rsrtx_ConfigureHistoryChannelPlayerControlEnable</li> <li>- rsrtx_ConfigureHistoryChannelTimeTableEnable</li> <li>- rsrtx_ConfigureHistoryDigitalPlayerControlEnable</li> <li>- rsrtx_ConfigureHistoryDigitalTimeTableEnable</li> <li>- rsrtx_ConfigureHistoryMathPlayerControlEnable</li> <li>- rsrtx_ConfigureHistoryMathTimeTableEnable</li> <li>- rsrtx_ConfigureHistoryProtocolPlayerControlEnable</li> <li>- rsrtx_ConfigureHistoryProtocolTimeTableEnable</li> <li>- rsrtx_QueryHistorySpectrumAcquisitionAbsoluteTime</li> <li>- rsrtx_QueryHistorySpectrumAcquisitionRelativeTime</li> <li>- rsrtx_QueryHistorySpectrumAcquisitionDate</li> <li>- rsrtx_QueryHistorySpectrumAllDates</li> <li>- rsrtx_QueryHistorySpectrumAllTimeDifferences</li> <li>- rsrtx_QueryHistorySpectrumAllDaytimes</li> <li>- rsrtx_ConfigureHistoryLogicPlayerControlEnable</li> <li>- rsrtx_ConfigureHistoryLogicTimeTableEnable</li> <li>- rsrtx_ConfigureCursorSecondSourceSettings</li> <li>- rsrtx_ConfigureMaskSegmentCaptureMode</li> <li>- rsrtx_ConfigureProtocolUARTIdleStatePolarity</li> <li>- rsrtx_QueryProtocolUARTFrameSettings</li> <li>- rsrtx_QueryProtocolUARTRxFrameSettings</li> <li>- rsrtx_QueryProtocolUARTTxFrameSettings</li> <li>- rsrtx_CloseHardcopyDialogs</li> <li>- rsrtx_ConfigureMathWaveformLabel</li> <li>- rsrtx_ConfigureMathWaveformColor</li> <li>- rsrtx_ConfigureReferenceWaveformLabel</li> <li>- rsrtx_ConfigureReferenceWaveformColor</li> <li>- rsrtx_QueryDigitalWaveformSamplesNumber</li> <li>- rsrtx_QuerySpectrumWaveformSamples</li> <li>- rsrtx_QuerySpectrumAverageWaveformSamples</li> </ul>

rsrtx Instrument Driver		
Driver history		
Revision	Date	Note
		<ul style="list-style-type: none"> <li>- rsrtx_QuerySpectrumMaximumWaveformSamples</li> <li>- rsrtx_QuerySpectrumMinimumWaveformSamples</li> <li>- rsrtx_ConfigurePowerModulationThresholdSettings</li> <li>- rsrtx_QueryPowerSafeOperatingAreaResultAcquisitionViolation</li> <li>- rsrtx_QueryPowerSafeOperatingAreaResultTotalViolation</li> <li>- rsrtx_ConfigureSpectrumFrequencyFullSpan</li> <li>- rsrtx_QuerySpectrumReferenceMarkerFrequency</li> <li>- rsrtx_QuerySpectrumReferenceMarkerLevel</li> <li>- rsrtx_QuerySpectrumMarkerFrequency</li> <li>- rsrtx_QuerySpectrumMarkerFrequencyDelta</li> <li>- rsrtx_QuerySpectrumMarkerLevel</li> <li>- rsrtx_QuerySpectrumMarkerLevelDelta</li> <li>- rsrtx_ConfigureWaveformGeneratorArbitraryRange</li> <li>- rsrtx_ConfigureWaveformGeneratorArbitraryDisplayEnable</li> <li>- rsrtx_ConfigurePatternGeneratorExternalTriggerSlope</li> <li>- rsrtx_QueryLogicProbeConnected</li> <li>- rsrtx_ConfigureLogicPointSelection</li> <li>- rsrtx_QueryLogicWaveformDataPoints</li> <li>- rsrtx_ConfigureCounterSource</li> <li>- rsrtx_ConfigureEthernetHTTPPort</li> <li>- rsrtx_SaveInstrumentSettingsToPC</li> <li>- rsrtx_RecallInstrumentSettingsFromPC</li> <li>- rsrtx_GetAttributeRepCapName</li> <li>- rsrtx_ConfigureAutoSystemErrQuery</li> <li>- rsrtx_ConfigureMultiThreadLocking</li>   <li>* Updated:</li> <li>- rsrtx_ConfigureWaveformAcquisitionType - Acquisition Type help updated</li> <li>- rsrtx_ConfigureProbeAttenuationManual - Range limit updated</li> <li>- rsrtx_ConfigureVideoTriggerSource - Parameter Field help updated</li> <li>- rsrtx_QueryProtocolUARTWordValue - Start and End changed to ViReal64, Source upd.</li> <li>- rsrtx_QueryARINC429Status - SCPI command updated, SDI and SSM helps updated</li> <li>- rsrtx_ConfigureHardcopySettings - Filename help updated</li> <li>- rsrtx_HardcopyPrint - SCPI command updated</li> <li>- rsrtx_ConfigureReferenceWaveformSource - Range updated</li> <li>- rsrtx_ConfigurePatternGeneratorFunctionType - Range and help updated</li> <li>- rsrtx_ConfigureCounterState - Removed repeated capability from SCPI command</li> <li>- rsrtx_QueryCounterFrequency - Removed repeated capability from SCPI command</li> <li>- rsrtx_QueryCounterPeriod - Removed repeated capability from SCPI command</li> <li>- rsrtx_ConfigureEthernetIIPort - Range limits added</li> <li>- rsrtx_ConfigureEthernetVXI11Port - Range limits added, SCPI command updated</li> </ul>



rsrtx Instrument Driver		
Driver history		
Revision	Date	Note
		<ul style="list-style-type: none"> <li>- rsrtx_SetStatusRegister - Added ADC State, range limit added</li> <li>- rsrtx_GetStatusRegister - Added ADC State</li> </ul>
1.2.0	01/2018	- Added support for RTM3000 and RTA4000 instruments
1.1.0	10/2017	<ul style="list-style-type: none"> <li>* First official release</li> <li>* New Subsystems</li> <li>- Configuration &gt;&gt; Digital Channel</li> <li>- History &gt;&gt; Logic</li> <li>- Search &gt;&gt; Export</li> <li>- Protocols &gt;&gt; UART</li> <li>- Protocols &gt;&gt; MILSTD</li> <li>- Simple Mathematics (RTB)</li> <li>- Waveform Acquisition &gt;&gt; Simple Math (RTB)</li> <li>- Waveform Acquisition &gt;&gt; Digital Data</li> <li>- Waveform Acquisition &gt;&gt; Logic</li> <li>- Waveform Export</li> <li>- Generator</li> <li>- Logic</li> <li>- System</li> <li>* New</li> <li>- rsrtx_ConfigureRecordLength</li> <li>- rsrtx_ConfigureAcquireMode</li> <li>- rsrtx_ConfigurePeakDetect</li> <li>- rsrtx_ConfigureHighResolution</li> <li>- rsrtx_NumberofAveragesReset</li> <li>- rsrtx_ConfigureWaveformRateMaximum</li> <li>- rsrtx_ConfigureHorizontalReference</li> <li>- rsrtx_ConfigureProbeCMOffset</li> <li>- rsrtx_ConfigureTriggerOutMode</li> <li>- rsrtx_RuntTriggerRange</li> <li>- rsrtx_ConfigureRuntTriggerWidth</li> <li>- rsrtx_ConfigureRuntTriggerDelta</li> <li>- rsrtx_ConfigureWindowTriggerRange</li> <li>- rsrtx_ConfigureWindowTriggerWidth</li> <li>- rsrtx_ConfigureWindowTriggerTimeRange</li> <li>- rsrtx_ConfigureTimeoutTriggerTime</li> <li>- rsrtx_ConfigureDisplayLanguage</li> <li>- rsrtx_ConfigureDiagramAnnotationState</li> <li>- rsrtx_ConfigureDiagramAnnotationTrack</li> <li>- rsrtx_DisplayClearScreen</li> <li>- rsrtx_ConfigureDisplayPersistenceType</li> <li>- rsrtx_ConfigureDisplaySegmentationRecordMaximumSegments</li> </ul>

rsrtx Instrument Driver		
Driver history		
Revision	Date	Note
		<ul style="list-style-type: none"> <li>- rsrtx_QueryHistoryChannelTableMode</li> <li>- rsrtx_HistoryChannelExportSave</li> <li>- rsrtx_DigitalHistoryExportSave</li> <li>- rsrtx_HistoryMathExportSave</li> <li>- rsrtx_HistoryProtocolExportSave</li> <li>- rsrtx_ConfigureCursorMeasurementType</li> <li>- rsrtx_ConfigureCursorSource</li> <li>- rsrtx_CursorLineNextPeak</li> <li>- rsrtx_CursorLinePreviousPeak</li> <li>- rsrtx_ConfigureQuickMeasurementState</li> <li>- rsrtx_ConfigureMaskTestActionScreenshotDestination</li> <li>- rsrtx_ConfigureMaskTestActionSavesWaveformDestination</li> <li>- rsrtx_ConfigureMaskTestActionAUXOutputState</li> <li>- rsrtx_ConfigureMaskScaling</li> <li>- rsrtx_ConfigureSearchCondition</li> <li>- rsrtx_ConfigureSearchSource</li> <li>- rsrtx_ConfigureSearchTriggerWindowLevel</li> <li>- rsrtx_ConfigureSearchTriggerWindowDelta</li> <li>- rsrtx_ConfigureSearchTriggerWindowPolarity</li> <li>- rsrtx_ConfigureSearchTriggerWindowRange</li> <li>- rsrtx_ConfigureSearchTriggerWindowTimeRange</li> <li>- rsrtx_ConfigureSearchTriggerWindowWidth</li> <li>- rsrtx_ConfigureProtocolDisplayVertical</li> <li>- rsrtx_ConfigureProtocolSPICSPolarity</li> <li>- rsrtx_ConfigureSPITriggerSource</li> <li>- rsrtx_ConfigureHardcopyOutputFormat</li> <li>- rsrtx_QueryHardcopyData</li> <li>- rsrtx_ConfigureHardcopyPageSize</li> <li>- rsrtx_QueryHardcopyPageSize</li> <li>- rsrtx_ConfigureReferenceWaveformSource</li> <li>- rsrtx_InitiateAcquisitionAndWait</li> <li>- rsrtx_ConfigureAcquisitionState</li> <li>- rsrtx_PowerAnalysisAutoset</li> <li>- rsrtx_PowerAnalysisAutosetCurrent</li> <li>- rsrtx_PowerAnalysisAutosetVoltage</li> <li>- rsrtx_QueryPowerCurrentHarmonicsMeasurementDuration</li> <li>- rsrtx_QueryPowerCurrentHarmonicsMeasurementRealPowerCurrent</li> <li>- rsrtx_ReadPowerSafeOperatingAreaAcquisitionData</li> <li>- rsrtx_FetchPowerSafeOperatingAreaAcquisitionData</li> <li>- rsrtx_FetchPowerSafeOperatingAreaAcquisitionDataHeader</li> <li>- rsrtx_FetchPowerSafeOperatingAreaAcquisitionConversionData</li> </ul>

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Driver history		
Revision	Date	Note
		<ul style="list-style-type: none"> <li>- rsrtx_ConfigureSpectrumAnalysisMode</li> <li>- rsrtx_ConfigureSpectrumAnalysisFrequencyCenterSpan</li> <li>- rsrtx_SpectrumMarkerSetupCenterScreen</li> <li>- rsrtx_SpectrumMarkerSetupRangeToPeak</li> <li>- rsrtx_QuerySpectrumReferenceMarkerResults</li> <li>- rsrtx_QuerySpectrumMarkerResults</li> <li>- rsrtx_QuerySpectrumMarkerDeltaResults</li> <li>- rsrtx_QuerySpectrumMarkerAllResults</li> <li>- rsrtx_QuerySpectrumMarkerAllDeltaResults</li> <li>- rsrtx_QueryCounterFrequency</li> <li>- rsrtx_QueryCounterPeriod</li> <li>* Modified</li> <li>- rsrtx_ConfigureChannel - default for coupling changed</li> <li>- rsrtx_ConfigureTrigger - line trigger type added</li> <li>- rsrtx_ConfigureEdgeTriggerFilter - HF Reject added, low removed</li> <li>- rsrtx_ConfigureMeasurementSource - QMA source added</li> <li>- rsrtx_QuerySearchResult - more result types</li> <li>- rsrtx_QueryAllSearchResults - more result types</li> <li>- rsrtx_ConfigureHardcopySettings - new formats, control includeMenuInScreenshot is obsolete</li> <li>- rsrtx_QueryPowerConsumptionMeasurementResults - new results</li> <li>- rsrtx_PowerSafeOperatingAreaLinPointValue - Current added</li> <li>- rsrtx_PowerSafeOperatingAreaLogPointValue - Current added</li> <li>- rsrtx_ConfigureSpectrumAnalysisFrequency removed controls for center and span</li> <li>- rsrtx_ConfigureCounterState - conter range changed</li> <li>- rsrtx_ReadMainWaveformMeasurement - removed some measurement functions</li> <li>- rsrtx_FetchMainWaveformMeasurement - removed some measurement functions</li>   <li>* Deleted attributes:</li> <li>- RSRTX_ATTR_FILTER_FREQUENCY (Filter Frequency)</li> <li>- RSRTX_ATTR_WAVEFORM_RATE (Waveform Rate)</li> <li>- RSRTX_ATTR_TRIGGER_FILTER_LOW (Trigger Filter Low)</li> <li>- RSRTX_ATTR_ENVELOPE_WAVEFORM_DATA_POINTS (Envelope Waveform Data Points)</li> <li>- RSRTX_ATTR_CURSOR_VOLTAGE_INVERSE_DISTANCE_HORIZONTAL (Cursor Voltage Inverse Distance Horizontal)</li> <li>- RSRTX_ATTR_MAIN_MEASUREMENT_RESULT_TRIGGER_FREQUENCY (Main Measurement Result Trigger Frequency)</li> <li>- RSRTX_ATTR_MAIN_MEASUREMENT_RESULT_TRIGGER_PERIOD (Main Measurement Result Trigger Period)</li> <li>- RSRTX_ATTR_MAIN_MEASUREMENT_RESULT_B_TRIGGER_FREQUENCY (Main Measurement Result B Trigger Frequency)</li> <li>- RSRTX_ATTR_MAIN_MEASUREMENT_RESULT_B_TRIGGER_PERIOD (Main Measurement Result B Trigger Period)</li> </ul>

rsrtx Instrument Driver		
Driver history		
Revision	Date	Note
		<ul style="list-style-type: none"> <li>- RSRTX_ATTR_PERSISTENCE_TIME_AUTO (Persistence Time Auto)</li> <li>- RSRTX_ATTR_HARDCOPY_INCLUDE_MENU_IN_SCREENSHOT (Hardcopy Include Menu In Screenshot)</li> <li>* New attributes:</li> <li>- RSRTX_ATTR_ID_QUERY_RESPONSE (ID Query Response)</li> <li>- RSRTX_ATTR_RECORD_LENGTH_AUTOMATIC (Record Length Automatic)</li> <li>- RSRTX_ATTR_RECORD_LENGTH (Record Length)</li> <li>- RSRTX_ATTR_ACQUIRE_MODE (Acquire Mode)</li> <li>- RSRTX_ATTR_PEAK_DETECT (Peak Detect)</li> <li>- RSRTX_ATTR_HIGH_RESOLUTION (High Resolution)</li> <li>- RSRTX_ATTR_NUM_AVERAGES_RESET (Number of Averages Reset)</li> <li>- RSRTX_ATTR_WAVEFORM_RATE_MAXIMUM (Waveform Rate Maximum)</li> <li>- RSRTX_ATTR_PROBE_CM_OFFSET (Probe CM Offset)</li> <li>- RSRTX_ATTR_DIGITAL_PROBE_ENABLED (Digital Probe Enabled)</li> <li>- RSRTX_ATTR_DIGITAL_POINT_SELECTION (Digital Point Selection)</li> <li>- RSRTX_ATTR_LOGIC_STATE (Logic State)</li> <li>- RSRTX_ATTR_LOGIC_TYPE (Logic Type)</li> <li>- RSRTX_ATTR_LOGIC_THRESHOLD (Logic Threshold)</li> <li>- RSRTX_ATTR_LOGIC_THRESHOLD_USER_LEVEL (Logic Threshold User Level)</li> <li>- RSRTX_ATTR_LOGIC_HYSTERESIS (Logic Hysteresis)</li> <li>- RSRTX_ATTR_LOGIC_ARITHMETICS (Logic Arithmetics)</li> <li>- RSRTX_ATTR_LOGIC_CURRENT_MAXIMUM (Logic Current Maximum)</li> <li>- RSRTX_ATTR_LOGIC_CURRENT_MINIMUM (Logic Current Minimum)</li> <li>- RSRTX_ATTR_TRIGGER_FILTER_HF_REJECT (Trigger Filter HF Reject)</li> <li>- RSRTX_ATTR_TRIGGER_WINDOW_RANGE (Trigger Window Range)</li> <li>- RSRTX_ATTR_TRIGGER_WINDOW_WIDTH (Trigger Window Width)</li> <li>- RSRTX_ATTR_TRIGGER_WINDOW_TIME_RANGE (Trigger Window Time Range)</li> <li>- RSRTX_ATTR_RUNT_TRIGGER_WIDTH (Runt Trigger Width)</li> <li>- RSRTX_ATTR_RUNT_TRIGGER_DELTA (Runt Trigger Delta)</li> <li>- RSRTX_ATTR_RUNT_TRIGGER_RANGE (Runt Trigger Range)</li> <li>- RSRTX_ATTR_TIMEOUT_TRIGGER_TIME (Timeout Trigger Time)</li> <li>- RSRTX_ATTR_TIMEOUT_TRIGGER_RANGE (Timeout Trigger Range)</li> <li>- RSRTX_ATTR_PROTOCOL_SPI_TRIGGER_SOURCE (Protocol SPI Trigger Source)</li> <li>- RSRTX_ATTR_PROTOCOL_UART_TRIGGER_SOURCE (Protocol UART Trigger Source)</li> <li>- RSRTX_ATTR_MILSTD_TRIGGER_MODE (MILSTD Trigger Mode)</li> <li>- RSRTX_ATTR_MILSTD_TRIGGER_FRAME (MILSTD Trigger Frame)</li> <li>- RSRTX_ATTR_ACQUISITION_STATE (Acquisition State)</li> <li>- RSRTX_ATTR_WAVEFROM_EXPORT_NAME (Wavefrom Export Name)</li> <li>- RSRTX_ATTR_WAVEFORM_EXPORT_SOURCE (Waveform Export Source)</li> <li>- RSRTX_ATTR_WAVEFORM_EXPORT_SAVE (Waveform Export Save)</li> <li>- RSRTX_ATTR_SIMPLE_MATH_WAVEFORM_CONVERSION_X_START (Simple Math Waveform</li> </ul>

rsrtx Instrument Driver		
Driver history		
Revision	Date	Note
		<p>Conversion X Start)</p> <ul style="list-style-type: none"> <li>- RSRTX_ATTR_SIMPLE_MATH_WAVEFORM_CONVERSION_X_INCREMENT (Simple Math Waveform Conversion X Increment)</li> <li>- RSRTX_ATTR_SIMPLE_MATH_WAVEFORM_CONVERSION_Y_START (Simple Math Waveform Conversion Y Start)</li> <li>- RSRTX_ATTR_SIMPLE_MATH_WAVEFORM_CONVERSION_Y_INCREMENT (Simple Math Waveform Conversion Y Increment)</li> <li>- RSRTX_ATTR_SIMPLE_MATH_WAVEFORM_CONVERSION_Y_RESOLUTION (Simple Math Waveform Conversion Y Resolution)</li> <li>- RSRTX_ATTR_LOGIC_DATA_CONVERSION_X_START (Logic Data Conversion X Start)</li> <li>- RSRTX_ATTR_LOGIC_DATA_CONVERSION_X_INCREMENT (Logic Data Conversion X Increment)</li> <li>- RSRTX_ATTR_LOGIC_DATA_CONVERSION_Y_START (Logic Data Conversion Y Start)</li> <li>- RSRTX_ATTR_LOGIC_DATA_CONVERSION_Y_INCREMENT (Logic Data Conversion Y Increment)</li> <li>- RSRTX_ATTR_LOGIC_DATA_CONVERSION_Y_RESOLUTION (Logic Data Conversion Y Resolution)</li> <li>- RSRTX_ATTR_DIGITAL_DATA_CONVERSION_X_START (Digital Data Conversion X Start)</li> <li>- RSRTX_ATTR_DIGITAL_DATA_CONVERSION_X_INCREMENT (Digital Data Conversion X Increment)</li> <li>- RSRTX_ATTR_DIGITAL_DATA_CONVERSION_Y_START (Digital Data Conversion Y Start)</li> <li>- RSRTX_ATTR_DIGITAL_DATA_CONVERSION_Y_INCREMENT (Digital Data Conversion Y Increment)</li> <li>- RSRTX_ATTR_DIGITAL_DATA_CONVERSION_Y_RESOLUTION (Digital Data Conversion Y Resolution)</li> <li>- RSRTX_ATTR_CURSOR_LINE_NEXT_PEAK (Cursor Line Next Peak)</li> <li>- RSRTX_ATTR_CURSOR_LINE_PREVIOUS_PEAK (Cursor Line Previous Peak)</li> <li>- RSRTX_ATTR_QUICK_MEASUREMENT_STATE (Quick Measurement State)</li> <li>- RSRTX_ATTR_SIMPLE_MATH_WAVEFORM_ENABLED (Simple Math Waveform Enabled)</li> <li>- RSRTX_ATTR_SIMPLE_MATH_WAVEFORM_POSITION (Simple Math Waveform Position)</li> <li>- RSRTX_ATTR_SIMPLE_MATH_WAVEFORM_VERTICAL_SCALE (Simple Math Waveform Vertical Scale)</li> <li>- RSRTX_ATTR_SIMPLE_MATH_WAVEFORM_OPERATION (Simple Math Waveform Operation)</li> <li>- RSRTX_ATTR_SIMPLE_MATH_WAVEFORM_SOURCE (Simple Math Waveform Source)</li> <li>- RSRTX_ATTR_MASK_TEST_ACTION_SCREENSHOT_DESTINATION (Mask Test Action Screenshot Destination)</li> <li>- RSRTX_ATTR_MASK_TEST_ACTION_SAVES_WAVEFORM_DESTINATION (Mask Test Action Saves Waveform Destination)</li> <li>- RSRTX_ATTR_MASK_TEST_ACTION_AUX_OUTPUT_ENABLED (Mask Test Action AUX Output Enabled)</li> <li>- RSRTX_ATTR_SEARCH_TRIGGER_WINDOW_LEVEL_LOWER (Search Trigger Window Level Lower)</li> <li>- RSRTX_ATTR_SEARCH_TRIGGER_WINDOW_LEVEL_UPPER (Search Trigger Window Level Upper)</li> <li>- RSRTX_ATTR_SEARCH_TRIGGER_WINDOW_DELTA (Search Trigger Window Delta)</li> <li>- RSRTX_ATTR_SEARCH_TRIGGER_WINDOW_POLARITY (Search Trigger Window Polarity)</li> <li>- RSRTX_ATTR_SEARCH_TRIGGER_WINDOW_RANGE (Search Trigger Window Range)</li> <li>- RSRTX_ATTR_SEARCH_TRIGGER_WINDOW_TIME_RANGE (Search Trigger Window Time Range)</li> <li>- RSRTX_ATTR_SEARCH_TRIGGER_WINDOW_WIDTH (Search Trigger Window Width)</li> <li>- RSRTX_ATTR_SEARCH_EXPORT_NAME (Search Export Name)</li> </ul>

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Driver history		
Revision	Date	Note
		<ul style="list-style-type: none"> <li>- RSRTX_ATTR_SEARCH_EXPORT_SAVE (Search Export Save)</li> <li>- RSRTX_ATTR_PROTOCOL_SPI_CS_POLARITY (Protocol SPI CS Polarity)</li> <li>- RSRTX_ATTR_PROTOCOL_UART_FRAME_COUNT (Protocol UART Frame Count)</li> <li>- RSRTX_ATTR_PROTOCOL_UART_WORD_COUNT (Protocol UART Word Count)</li> <li>- RSRTX_ATTR_PROTOCOL_UART_WORD_VALUE (Protocol UART Word Value)</li> <li>- RSRTX_ATTR_PROTOCOL_UART_WORD_START (Protocol UART Word Start)</li> <li>- RSRTX_ATTR_PROTOCOL_UART_WORD_END (Protocol UART Word End)</li> <li>- RSRTX_ATTR_PROTOCOL_UART_WORD_ENABLED (Protocol UART Word Enabled)</li> <li>- RSRTX_ATTR_PROTOCOL_UART_WORD_SOURCE (Protocol UART Word Source)</li> <li>- RSRTX_ATTR_PROTOCOL_MILSTD_INTER_MESSAGE_GAP_TIME_INFINITE (Protocol MILSTD Inter Message Gap Time Infinite)</li> <li>- RSRTX_ATTR_PROTOCOL_MILSTD_INTER_MESSAGE_GAP_TIME_MINIMUM (Protocol MILSTD Inter Message Gap Time Minimum)</li> <li>- RSRTX_ATTR_PROTOCOL_MILSTD_INTER_MESSAGE_GAP_TIME_MAXIMUM (Protocol MILSTD Inter Message Gap Time Maximum)</li> <li>- RSRTX_ATTR_PROTOCOL_MILSTD_RESPONSE_TIME_INFINITE (Protocol MILSTD Response Time Infinite)</li> <li>- RSRTX_ATTR_PROTOCOL_MILSTD_RESPONSE_TIME_MINIMUM (Protocol MILSTD Response Time Minimum)</li> <li>- RSRTX_ATTR_PROTOCOL_MILSTD_RESPONSE_TIME_MAXIMUM (Protocol MILSTD Response Time Maximum)</li> <li>- RSRTX_ATTR_POWER_ANALYSIS_AUTOSET (Power Analysis Autoset)</li> <li>- RSRTX_ATTR_POWER_ANALYSIS_AUTOSET_CURRENT (Power Analysis Autoset Current)</li> <li>- RSRTX_ATTR_POWER_ANALYSIS_AUTOSET_VOLTAGE (Power Analysis Autoset Voltage)</li> <li>- RSRTX_ATTR_POWER_CONSUMPTION_MEASUREMENT_APPARENT_POWER_RESULT (Power Consumption Measurement Apparent Power Result)</li> <li>- RSRTX_ATTR_POWER_CONSUMPTION_MEASUREMENT_POWER_FACTOR_RESULT (Power Consumption Measurement Power Factor Result)</li> <li>- RSRTX_ATTR_POWER_CONSUMPTION_MEASUREMENT_PHASE_RESULT (Power Consumption Measurement Phase Result)</li> <li>- RSRTX_ATTR_POWER_CONSUMPTION_MEASUREMENT_REACTIVE_POWER_RESULT (Power Consumption Measurement Reactive Power Result)</li> <li>- RSRTX_ATTR_POWER_CURRENT_HARMONICS_MEASUREMENT_DURATION (Power Current Harmonics Measurement Duration)</li> <li>- RSRTX_ATTR_POWER_CURRENT_HARMONICS_MEASUREMENT_REAL_POWER_CURRENT (Power Current Harmonics Measurement Real Power Current)</li> <li>- RSRTX_ATTR_POWER_SAFE_OPERATING_AREA_LINEAR_POINT_CURRENT (Power Safe Operating Area Linear Point Current)</li> <li>- RSRTX_ATTR_POWER_SAFE_OPERATING_AREA_LOGARITHMIC_POINT_CURRENT (Power Safe Operating Area Logarithmic Point Current)</li> <li>-</li> <li>- RSRTX_ATTR_POWER_SAFE_OPERATING_AREA_RESULT_ACQUISITION_VOLTAGE_DATA_CONVERSION_X_START (Power Safe Operating Area Result Acquisition Voltage Data Conversion X Start)</li> <li>-</li> <li>- RSRTX_ATTR_POWER_SAFE_OPERATING_AREA_RESULT_ACQUISITION_VOLTAGE_DATA_CONVERSION_X_INCREMENT (Power Safe Operating Area Result Acquisition Voltage Data Conversion X</li> </ul>

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Revision	Date	Note
		<p>Increment)</p> <ul style="list-style-type: none"> <li>- RSRTX_ATTR_POWER_SAFE_OPERATING_AREA_RESULT_ACQUISITION_VOLTAGE_DATA_CONVERSION_Y_START (Power Safe Operating Area Result Acquisition Voltage Data Conversion Y Start)</li> <li>- RSRTX_ATTR_POWER_SAFE_OPERATING_AREA_RESULT_ACQUISITION_VOLTAGE_DATA_CONVERSION_Y_INCREMENT (Power Safe Operating Area Result Acquisition Voltage Data Conversion Y Increment)</li> <li>- RSRTX_ATTR_POWER_SAFE_OPERATING_AREA_RESULT_ACQUISITION_VOLTAGE_DATA_CONVERSION_Y_RESOLUTION (Power Safe Operating Area Result Acquisition Voltage Data Conversion Y Resolution)</li> <li>- RSRTX_ATTR_POWER_SAFE_OPERATING_AREA_RESULT_ACQUISITION_CURRENT_DATA_CONVERSION_X_START (Power Safe Operating Area Result Acquisition Current Data Conversion X Start)</li> <li>- RSRTX_ATTR_POWER_SAFE_OPERATING_AREA_RESULT_ACQUISITION_CURRENT_DATA_CONVERSION_X_INCREMENT (Power Safe Operating Area Result Acquisition Current Data Conversion X Increment)</li> <li>- RSRTX_ATTR_POWER_SAFE_OPERATING_AREA_RESULT_ACQUISITION_CURRENT_DATA_CONVERSION_Y_START (Power Safe Operating Area Result Acquisition Current Data Conversion Y Start)</li> <li>- RSRTX_ATTR_POWER_SAFE_OPERATING_AREA_RESULT_ACQUISITION_CURRENT_DATA_CONVERSION_Y_INCREMENT (Power Safe Operating Area Result Acquisition Current Data Conversion Y Increment)</li> <li>- RSRTX_ATTR_POWER_SAFE_OPERATING_AREA_RESULT_ACQUISITION_CURRENT_DATA_CONVERSION_Y_RESOLUTION (Power Safe Operating Area Result Acquisition Current Data Conversion Y Resolution)</li> <li>- RSRTX_ATTR_SPECTRUM_ANALYSIS_MODE (Spectrum Analysis Mode)</li> <li>- RSRTX_ATTR_SPECTRUM_MARKER_SETUP_CENTER_SCREEN (Spectrum Marker Setup Center Screen)</li> <li>- RSRTX_ATTR_SPECTRUM_MARKER_SETUP_RANGE_TO_PEAK (Spectrum Marker Setup Range To Peak)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_FUNCTION_TYPE (Waveform Generator Function Type)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_FREQUENCY (Waveform Generator Frequency)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_PULSE_DUTY_CYCLE (Waveform Generator Pulse Duty Cycle)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_PULSE_EDGE_TIME (Waveform Generator Pulse Edge Time)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_RAMP_POLARITY (Waveform Generator Ramp Polarity)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_EXPONENTIAL_POLARITY (Waveform Generator Exponential Polarity)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_MODULATION_ENABLED (Waveform Generator Modulation Enabled)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_MODULATION_TYPE (Waveform Generator Modulation Type)</li> </ul>

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		<ul style="list-style-type: none"> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_MODULATION_FUNCTION_TYPE (Waveform Generator Modulation Function Type)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_MODULATION_RAMP_POLARITY (Waveform Generator Modulation Ramp Polarity)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_AM_MODULATION_FREQUENCY (Waveform Generator AM Modulation Frequency)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_AM_MODULATION_DEPTH (Waveform Generator AM Modulation Depth)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_FM_MODULATION_FREQUENCY (Waveform Generator FM Modulation Frequency)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_FM_MODULATION_FREQUENCY_DEVIATION (Waveform Generator FM Modulation Frequency Deviation)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_ASK_MODULATION_FREQUENCY (Waveform Generator ASK Modulation Frequency)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_ASK_MODULATION_DEPTH (Waveform Generator ASK Modulation Depth)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_FSK_MODULATION_HOPPING_FREQUENCY (Waveform Generator FSK Modulation Hopping Frequency)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_FSK_MODULATION_RATE (Waveform Generator FSK Modulation Rate)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_SWEEP_ENABLED (Waveform Generator Sweep Enabled)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_SWEEP_TYPE (Waveform Generator Sweep Type)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_SWEEP_START_FREQUENCY (Waveform Generator Sweep Start Frequency)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_SWEEP_STOP_FREQUENCY (Waveform Generator Sweep Stop Frequency)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_SWEEP_TIME (Waveform Generator Sweep Time)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_ARBITRARY_FILE_NAME (Waveform Generator Arbitrary File Name)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_ARBITRARY_OPEN_FILE (Waveform Generator Arbitrary Open File)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_ARBITRARY_SOURCE (Waveform Generator Arbitrary Source)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_ARBITRARY_UPDATE (Waveform Generator Arbitrary Update)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_OUTPUT_ENABLED (Waveform Generator Output Enabled)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_OUTPUT_AMPLITUDE (Waveform Generator Output Amplitude)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_OUTPUT_OFFSET (Waveform Generator Output Offset)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_OUTPUT_USER_LOAD (Waveform Generator Output User Load)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_OUTPUT_DESTINATION (Waveform Generator Output Destination)</li> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_NOISE_LEVEL_PERCENT (Waveform Generator Noise Level Percent)</li> </ul>



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		<ul style="list-style-type: none"> <li>- RSRTX_ATTR_WAVEFORM_GENERATOR_NOISE_ABSOLUTE_LEVEL (Waveform Generator Noise Absolute Level)</li> <li>- RSRTX_ATTR_PATTERN_GENERATOR_ENABLED (Pattern Generator Enabled)</li> <li>- RSRTX_ATTR_PATTERN_GENERATOR_FUNCTION_TYPE (Pattern Generator Function Type)</li> <li>- RSRTX_ATTR_PATTERN_GENERATOR_FREQUENCY (Pattern Generator Frequency)</li> <li>- RSRTX_ATTR_PATTERN_GENERATOR_PERIOD (Pattern Generator Period)</li> <li>- RSRTX_ATTR_PATTERN_GENERATOR_POLARITY (Pattern Generator Polarity)</li> <li>- RSRTX_ATTR_PATTERN_GENERATOR_DUTY_CYCLE (Pattern Generator Duty Cycle)</li> <li>- RSRTX_ATTR_PATTERN_GENERATOR_SAMPLE_TIME (Pattern Generator Sample Time)</li> <li>- RSRTX_ATTR_PATTERN_GENERATOR_COUNTER_DIRECTION (Pattern Generator Counter Direction)</li> <li>- RSRTX_ATTR_PATTERN_GENERATOR_COUNTER_FREQUENCY (Pattern Generator Counter Frequency)</li> <li>- RSRTX_ATTR_PATTERN_GENERATOR_BURST_ENABLED (Pattern Generator Burst Enabled)</li> <li>- RSRTX_ATTR_PATTERN_GENERATOR_BURST_CYCLES (Pattern Generator Burst Cycles)</li> <li>- RSRTX_ATTR_PATTERN_GENERATOR_IDLE_TIME (Pattern Generator Idle Time)</li> <li>- RSRTX_ATTR_PATTERN_GENERATOR_TRIGGER_MODE (Pattern Generator Trigger Mode)</li> <li>- RSRTX_ATTR_PATTERN_GENERATOR_TRIGGER_RUN_SINGLE (Pattern Generator Trigger Run Single)</li> <li>- RSRTX_ATTR_PATTERN_GENERATOR_ARB_PATTERN_LENGTH (Pattern Generator ARB Pattern Length)</li> <li>- RSRTX_ATTR_PATTERN_GENERATOR_ARB_INDEX (Pattern Generator ARB Index)</li> <li>- RSRTX_ATTR_PATTERN_GENERATOR_MANUAL_STATE (Pattern Generator Manual State)</li> <li>- RSRTX_ATTR_DIAGRAM_ANNOTATION_ENABLED (Diagram Annotation Enabled)</li> <li>- RSRTX_ATTR_DIAGRAM_ANNOTATION_TRACK (Diagram Annotation Track)</li> <li>- RSRTX_ATTR_DISPLAY_CLEAR_SCREEN (Display Clear Screen)</li> <li>- RSRTX_ATTR_PERSISTENCE_TYPE (Persistence Type)</li> <li>- RSRTX_ATTR_HISTORY_CHANNEL_TABLE_MODE (History Channel Table Mode)</li> <li>- RSRTX_ATTR_HISTORY_CHANNEL_EXPORT_NAME (History Channel Export Name)</li> <li>- RSRTX_ATTR_HISTORY_CHANNEL_EXPORT_SAVE (History Channel Export Save)</li> <li>- RSRTX_ATTR_DIGITAL_HISTORY_EXPORT_NAME (Digital History Export Name)</li> <li>- RSRTX_ATTR_DIGITAL_HISTORY_EXPORT_SAVE (Digital History Export Save)</li> <li>- RSRTX_ATTR_HISTORY_MATH_EXPORT_NAME (History Math Export Name)</li> <li>- RSRTX_ATTR_HISTORY_MATH_EXPORT_SAVE (History Math Export Save)</li> <li>- RSRTX_ATTR_HISTORY_PROTOCOL_EXPORT_NAME (History Protocol Export Name)</li> <li>- RSRTX_ATTR_HISTORY_PROTOCOL_EXPORT_SAVE (History Protocol Export Save)</li> <li>- RSRTX_ATTR_HISTORY_LOGIC_CURRENT_ACQUISITION (History Logic Current Acquisition)</li> <li>- RSRTX_ATTR_HISTORY_LOGIC_PLAYER (History Logic Player)</li> <li>- RSRTX_ATTR_HISTORY_LOGIC_START_ACQUISITION (History Logic Start Acquisition)</li> <li>- RSRTX_ATTR_HISTORY_LOGIC_STOP_ACQUISITION (History Logic Stop Acquisition)</li> <li>- RSRTX_ATTR_HISTORY_LOGIC_PLAY_ALL (History Logic Play All)</li> <li>- RSRTX_ATTR_HISTORY_LOGIC_SPEED (History Logic Speed)</li> </ul>

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		<ul style="list-style-type: none"> <li>- RSRTX_ATTR_HISTORY_LOGIC_REPEAT (History Logic Repeat)</li> <li>- RSRTX_ATTR_HISTORY_LOGIC_ACQUISITION_RELATIVE_TIME (History Logic Acquisition Relative Time)</li> <li>- RSRTX_ATTR_HISTORY_LOGIC_ALL_DATES (History Logic All Dates)</li> <li>- RSRTX_ATTR_HISTORY_LOGIC_ALL_TIME_DIFFERENCES (History Logic All Time Differences)</li> <li>- RSRTX_ATTR_HISTORY_LOGIC_ALL_DAYTIMES (History Logic All Daytimes)</li> <li>- RSRTX_ATTR_HISTORY_LOGIC_EXPORT_NAME (History Logic Export Name)</li> <li>- RSRTX_ATTR_HISTORY_LOGIC_EXPORT_SAVE (History Logic Export Save)</li> <li>- RSRTX_ATTR_SEGMENTATION_RECORD_MAXIMUM_SEGMENTS (Segmentation Record Maximum Segments)</li> <li>- RSRTX_ATTR_HARDCOPY_OUTPUT_FORMAT (Hardcopy Output Format)</li> <li>- RSRTX_ATTR_HARDCOPY_PAGE_SIZE_X (Hardcopy Page Size X)</li> <li>- RSRTX_ATTR_HARDCOPY_PAGE_SIZE_Y (Hardcopy Page Size Y)</li> <li>- RSRTX_ATTR_DEVICE_MODE (Device Mode)</li> <li>- RSRTX_ATTR_INTERFACE_SELECT (Interface Select)</li> <li>- RSRTX_ATTR_USB_CLASS (USB Class)</li> <li>- RSRTX_ATTR_ETHERNET_DHCP (Ethernet DHCP)</li> <li>- RSRTX_ATTR_ETHERNET_IP_PORT (Ethernet IP Port)</li> <li>- RSRTX_ATTR_ETHERNET_VXI11_PORT (Ethernet VXI11 Port)</li> <li>- RSRTX_ATTR_ETHERNET_TRANSFER (Ethernet Transfer)</li> <li>- RSRTX_ATTR_ETHERNET_MAC_ADDRESS (Ethernet MAC Address)</li> <li>- RSRTX_ATTR_PRESET_EDUCATION (Preset Education)</li> <li>- RSRTX_ATTR_DEVICE_FOOTPRINT (Device Footprint)</li> </ul> <p>* Modified attributes:</p> <ul style="list-style-type: none"> <li>- RSRTX_ATTR_HORZ_DIVISIONS (Horizontal Divisions) - Data type changed.</li> <li>- RSRTX_ATTR_HORZ_REFERENCE (Horizontal Reference) - Range</li> <li>- RSRTX_ATTR_VERTICAL_COUPLING (Vertical Coupling) - Default changed.</li> <li>- RSRTX_ATTR_DIGITAL_HYSTERESIS (Digital Hysteresis) - Changed range values.</li> <li>- RSRTX_ATTR_DIGITAL_VERTICAL_CHANNEL_SIZE (Digital Vertical Channel Size) - Changed from enum to real.</li> <li>- RSRTX_ATTR_TRIGGER_LEVEL_B (Trigger Level B) - Range table removed.</li> <li>- RSRTX_ATTR_TRIGGER_COUPLING (Trigger Coupling) - Command string changed</li> <li>- RSRTX_ATTR_PROTOCOL_AUDIO_TRIGGER_RIGHT_MINIMUM (Protocol Audio Trigger Right Minimum) - Range table removed.</li> <li>- RSRTX_ATTR_PROTOCOL_AUDIO_TRIGGER_RIGHT_MAXIMUM (Protocol Audio Trigger Right Maximum) - Range table removed.</li> <li>- RSRTX_ATTR_PROTOCOL_AUDIO_TRIGGER_LEFT_MINIMUM (Protocol Audio Trigger Left Minimum) - Range table removed.</li> <li>- RSRTX_ATTR_PROTOCOL_AUDIO_TRIGGER_LEFT_MAXIMUM (Protocol Audio Trigger Left Maximum) - Range table removed.</li> <li>- RSRTX_ATTR_PROTOCOL_AUDIO_TRIGGER_CHANNEL_MINIMUM (Protocol Audio Trigger Channel Minimum) - Range table removed.</li> </ul>

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		<ul style="list-style-type: none"> <li>- RSRTX_ATTR_PROTOCOL_AUDIO_TRIGGER_CHANNEL_MAXIMUM (Protocol Audio Trigger Channel Maximum) - Range table removed.</li> <li>- RSRTX_ATTR_CURSOR_MEASUREMENT_TYPE (Cursor Measurement Type) - Horizontal/Vertical</li> <li>- RSRTX_ATTR_CURSOR_SOURCE (Cursor Source) - QMA</li> <li>- RSRTX_ATTR_MASK_VERTICAL_OFFSET (Mask Vertical Offset) - removed range</li> <li>- RSRTX_ATTR_MASK_VERTICAL_SCALING (Mask Vertical Scaling) - removed range</li> <li>- RSRTX_ATTR_MASK_VERTICAL_WIDTH (Mask Vertical Width) - Removed range</li> <li>- RSRTX_ATTR_MASK_HORIZONTAL_WIDTH (Mask Horizontal Width) - removed range.</li> <li>- RSRTX_ATTR_PROTOCOL_DISPLAY_VERTICAL (Protocol Display Vertical) - Default, range changed.</li> <li>- RSRTX_ATTR_HARDCOPY_COLOR_SCHEME (Hardcopy Color Scheme) - Short command modified.</li> </ul> <p>* Deleted Repeated Capabilities:</p> <p>* Modified Repeated Capabilities:</p> <ul style="list-style-type: none"> <li>- Counter - Identifiers ("Counter0,Counter1,Counter2", "Counter1,Counter2")</li> <li>- Counter - Command Values ("1,2", "1,2")</li> </ul> <p>* Modified Range Tables:</p> <ul style="list-style-type: none"> <li>- rsrtx_rngHorzReference - RSRTX_ATTR_HORZ_REFERENCE Range changed to &lt;8.33;91.67&gt;</li> <li>- rsrtx_rngLineNumber - RSRTX_ATTR_TV_TRIGGER_LINE_NUMBER Range changed to &lt;1;1125&gt;</li> <li>- rsrtx_rngCursorFunction - RSRTX_ATTR_CURSOR_MEASUREMENT_TYPE New items: RSRTX_VAL_CURSOR_HVER</li> <li>- rsrtx_rngWaveformParameter - RSRTX_ATTR_WAVEFORM_EXPORT_SOURCE, RSRTX_ATTR_CURSOR_SOURCE, RSRTX_ATTR_REFERENCE_WAVEFORM_SOURCE New items: RSRTX_VAL_WAV_QMA, RSRTX_VAL_WAV_XY1</li> <li>- rsrtx_rngLanguage - RSRTX_ATTR_DISPLAY_LANGUAGE New items: RSRTX_VAL_DISPLAY_ITALIAN, RSRTX_VAL_DISPLAY_PORTUGUESE, RSRTX_VAL_DISPLAY_CZECH, RSRTX_VAL_DISPLAY_POLISH</li> <li>- rsrtx_rngHardcopyDeviceLang - RSRTX_ATTR_HARDCOPY_DEVICE_LANGUAGE_OUTPUT_FORMAT New items: RSRTX_VAL_HARDCOPY_DEVICE_LANG_GDI, RSRTX_VAL_HARDCOPY_DEVICE_LANG_GIF</li> <li>- rsrtx_rngPageSize - RSRTX_ATTR_HARDCOPY_PAGE_SIZE New items: RSRTX_VAL_PAGE_LEGAL, RSRTX_VAL_PAGE_LETTER</li> <li>- rsrtx_rngTriggerCoupling.RSRTX_VAL_COUPLING_HIGHFREQ - RSRTX_ATTR_TRIGGER_COUPLING Command changed ("LFR", "HF")</li> <li>- rsrtx_rngTriggerType - RSRTX_ATTR_TRIGGER_TYPE_A New items: RSRTX_VAL_LINE_TRIGGER</li> </ul>

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		<p>- rsrtx_rngProtocolVertical - RSRTX_ATTR_PROTOCOL_DISPLAY_VERTICAL Range changed to &lt;-5;5&gt;</p> <p>- rsrtx_rngSearchCondition - RSRTX_ATTR_SEARCH_CONDITION New items: RSRTX_VAL_SEARCHCOND_WINDOW</p> <p>- rsrtx_rngSearchSource - RSRTX_ATTR_SEARCH_SOURCE, RSRTX_ATTR_SEARCH_TRIGGER_D2C_CLOCK_SOURCE New items: RSRTX_VAL_MEASUREMENT_SOURCE_QMA</p> <p>- rsrtx_rngDigitalHysteresis - RSRTX_ATTR_DIGITAL_HYSTERESIS New items: RSRTX_VAL_DIGITAL_HYSTERESIS_SMALL, RSRTX_VAL_DIGITAL_HYSTERESIS_MEDIUM, RSRTX_VAL_DIGITAL_HYSTERESIS_LARGE</p> <p>- rsrtx_rngDigitalHysteresis - RSRTX_ATTR_DIGITAL_HYSTERESIS Deleted items: RSRTX_VAL_DIGITAL_HYSTERESIS_MAX, RSRTX_VAL_DIGITAL_HYSTERESIS_ROB, RSRTX_VAL_DIGITAL_HYSTERESIS_NORM</p> <p>- rsrtx_rngTriggerOutMode - RSRTX_ATTR_TRIGGER_OUT_MODE New items: RSRTX_VAL_TRIGGER_OUT_MODE_REF, RSRTX_VAL_TRIGGER_OUT_MODE_GEN</p> <p>- rsrtx_rngMeasurementSource - New items: RSRTX_VAL_MEASUREMENT_SOURCE_QMA</p> <p>- rsrtx_rngMILSTDCodeType.RSRTX_VAL_MILSTD_CODE_TYPE_SEL - RSRTX_ATTR_MILSTD_TRIGGER_COMMAND_MODE_CODE, RSRTX_ATTR_MILSTD_SEARCH_COMMAND_MODE_CODE, RSRTX_ATTR_PROTOCOL_MILSTD_COMMAND_WORD_MODE_CODE_TYPE Command changed ("ISEL", "SEL")</p> <p>- rsrtx_rngMILSTDTriggerType - RSRTX_ATTR_MILSTD_TRIGGER_TYPE, RSRTX_ATTR_MILSTD_TRIGGER_MODE New items: RSRTX_VAL_MILSTD_TRIGGER_TYPE_CDATA</p> <p>- rsrtx_rngProbeInputImpedance.RSRTX_VAL_UNKNOWN - RSRTX_ATTR_PROBE_INPUT_IMPEDANCE Command changed ("UNKN", "UNKNown")</p> <p>- rsrtx_rngProbeInputImpedance.RSRTX_VAL_50OHM - RSRTX_ATTR_PROBE_INPUT_IMPEDANCE Command changed ("50OH", "50OHm")</p> <p>- rsrtx_rngProbeInputImpedance.RSRTX_VAL_1MOHM - RSRTX_ATTR_PROBE_INPUT_IMPEDANCE Command changed ("1MOH", "1MOHm")</p>
1.0.0	02/2017	* First Beta Version created based on the RsRtm20xx driver

### **About Rohde & Schwarz**

Rohde & Schwarz is an independent group of companies specializing in electronics. It is a leading supplier of solutions in the fields of test and measurement, broadcasting, radiomonitoring and radiolocation, as well as secure communications. Established more than 80 years ago, Rohde & Schwarz has a global presence and a dedicated service network in over 70 countries. Company headquarters are in Munich, Germany.

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- Energy-efficient products
- Continuous improvement in environmental sustainability
- ISO 14001-certified environmental management system



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