



Bluetooth® Real-Time Locating Library 3.1.1.0 GA

Gecko SDK Suite 3.1

January 27, 2021

Silicon Labs is a leading vendor in Bluetooth hardware and software technologies, used in products such as sports and fitness, consumer electronics, beacons, and smart home applications.

The Real-Time Locating (RTL) library contains features for Angle of Arrival estimation and spatial positioning. The software library comes with a C-programming language API for Windows (x86_64) and Linux (ARM Cortex A, x86_64) hosts.



KEY FEATURES

- First Generally Available release
- Azimuth and elevation calculation
- Tag X,Y,Z-position in multilocator setup

The RTL Library is released with the Bluetooth SDK. These release notes cover the following version(s):

Real-Time Locating Library 3.1.1.0 in Bluetooth SDK 3.1.1.0 released on January 27, 2021
Real-Time Locating Library 3.1.0.0 in Bluetooth SDK 3.1.0.0 released on December 9, 2020

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1 New Items

Added in release 3.1.0.0

Initial release

2 Improvements

None

3 Fixed Issues

Fixed in release 3.1.1.0

ID #	Description
656483	Fix an issue where, in some rare cases, IQ sample QA may hang in an infinite loop when calling the <code>sl_rtl_aox_process()</code> with IQ sample QA processing enabled.

4 Known Issues in the Current Release

Issues in bold were added since the previous release.

ID #	Description	Workaround
375152	In heavy multipath conditions, the line-of-sight signal is not always detected correctly. In some cases this may mean large errors in both azimuth and elevation readings.	None
408196	The Location estimator supports only one locator configuration and dimensionality mode per application.	None
653321	In certain environments, the elevation reading might get fixed to 89 degrees	None
653422	Visualization script in <code>aoa_multilocator_gui</code> is missing implementation for showing visualization lines for angles from locators	None
653412	Visualization script <code>aoa_multilocator_gui</code> may occasionally fail with "RunTimeError: dictionary changed size during iteration"	None

5 Deprecated Items

None

6 Removed Items

None

7 Using This Release

7.1 Installation and Use

For instructions on developing with the RTL library, see AN1296: Application Development with Silicon Labs' RTL Library and the API reference included with the documentation installed through Simplicity Studio in the Bluetooth SDK.

7.2 Support

Development Kit customers are eligible for training and technical support. Use the [Silicon Labs Bluetooth LE web page](#) to obtain information about all Silicon Labs Bluetooth products and services, and to sign up for product support.

Contact Silicon Laboratories support at <http://www.silabs.com/support> or through links on the [Simplicity Studio Welcome page](#).

8 Legal

8.1 Disclaimer

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