



Bluetooth[®] Real-Time Locating Library 3.2.2.0 GA

Gecko SDK Suite 3.2

September 8, 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

- General quality improvements

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

- Real-Time Locating Library 3.2.2.0 in Bluetooth SDK 3.2.2.0 released on September 8, 2021
- Real-Time Locating Library 3.2.1.0 in Bluetooth SDK 3.2.1.0 released on July 21, 2021
- Real-Time Locating Library 3.2.0.0 in Bluetooth SDK 3.2.0.0 released on June 16, 2021

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1 New Items

Added in release 3.2.0.0

Dual-Polarized antenna support for CoreHW PCB4 and PCB8 boards. The board package files need to be requested through Silicon Labs support.

2 Improvements

Changed in release 3.2.0.0

The Angle Feedback mechanism in the multi-locator algorithm is improved.

3 Fixed Issues

Fixed in release 3.2.2.0

| ID # | Description |
|--------|---|
| 720870 | Add API for locator position and orientation update |
| 715289 | Split Link Layer CTE component into two subcomponents for TX and RX. Application can only include necessary capabilities to save memory |

Fixed in release 3.2.1.0

| ID # | Description |
|--------|--|
| 712526 | Fixed an issue with CTE (AoA/AoD) where device may enter into hardfault if connectionless CTE or Silicon Labs CTE was enabled before connection creation |

Fixed in release 3.1.0.0

| ID # | Description |
|--------|--|
| 653321 | In certain environments, the elevation reading might get fixed to 89 degrees |
| 653422 | Visualization script in <code>aoa_multilocator_gui</code> is missing implementation for showing visualization lines for angles from locators |
| 653412 | Visualization script <code>aoa_multilocator_gui</code> may occasionally fail with "RunTimeError: dictionary changed size during iteration" |
| 706445 | AOA host app cannot be built on windows |
| 658208 | Fix REAL_TIME modes to also handle angle data between 179 and 180 degrees. |

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 |

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.

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Silicon Laboratories Inc.
400 West Cesar Chavez
Austin, TX 78701
USA

www.silabs.com