

RSL15

Bluetooth® 5.2 Secure Wireless MCU



Product Overview

For complete documentation, see the data sheet.

RSL15 is an ultralow power secure Arm® Cortex®M33 processorbased Bluetooth Low Energy 5.2 wireless MCU designed for connected smart devices in industrial and medical applications. With built-in power management, a wide supply voltage range, flexible GPIO and clocking scheme and an extensive set of peripherals, the RSL15 offers maximum design flexibility for high performance *and* ultra-low-power applications. The RSL15 includes 80 kB RAM and is available in 284 kB or 512 kB Flash options.

- Industry leading general-purpose microcontroller (MCU)
- Industry's Lowest Power Flash-based Secure Bluetooth Low Energy MCU
- Latest in Embedded Security with Root of Trust
- Bluetooth Low Energy 5.2 with Long Range and Localization

The comprehensive yet easy to use Software Development Kit (SDK) contains drivers, libraries, sample code, development tools and mobile apps:

- RSL15 Central for [iOS®](#) and [Android™](#)
- RSL FOTA for [iOS](#) and [Android](#)

To get started with RSL15, download the SDK components:

- RSL15 Documentation Package
- onsemi IDE Installer
- RSL15 Firmware Package

Download and unzip the RSL15 Documentation Package and open 'RSL15_documentation.htm' and navigate to the RSL15 Getting Started Guide to complete the installation and start using RSL15.





Downloads	Software Product	Description	Version	Date Updated
Download	RSL15 Documentation Package	Start here. Getting Started Guide, Developer's Guide and detailed firmware and hardware documentation	1.2	Jun 2022
Download	onsemi IDE Installer	Eclipse-based onsemi IDE	4.2	Jun 2022
Download	RSL15 Firmware Package	RSL15 CMSIS-Pack containing drivers, libraries, and sample code and SDK release notes	1.2	Jun 2022
Download	RSLSec	PC application to manage device security features, lifecycle states and the manufacturing provisioning process	1.1	Mar 2022
Download	BLE Explorer	PC application that acts as a Bluetooth central to your peripheral device (requires RSL10-USB001GEVK)	1.8	Nov 2021
Download	RF Tools	PC application to help test, tune and validate Bluetooth Low Energy RF PHY performance	1.0.2	Dec 2021

Visit the [Community Forums](#) to learn more and join the conversation.

Applications

- Industrial automation and sensing
- Connected medical sensors
- Wearables
- Asset tracking
- Electronic tags and access control

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Data Transmission Standard	Frequency Band (MHz)	Carrier Frequency (MHz)	Package Type
NCH-RSL15-284-101Q40-ACG	3.45	 	Active	Bluetooth Low Energy	2400-2480		QFN-40
NCH-RSL15-512-101Q40-ACG	3.7375	 	Active	Bluetooth Low Energy	2400-2480		QFN-40