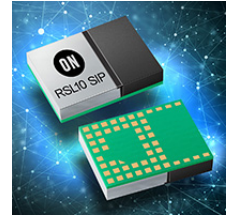


Product Overview

RSL10 SIP: System-in-Package, Bluetooth® 5 Certified, SDK 3.5

For complete documentation, see the data sheet.



The RSL10 SIP offers the easiest way to bring the industry's lowest power Bluetooth Low Energy MCU to wireless applications. Bluetooth 5 certified, and fully certified to worldwide wireless standards, the RSL10 SIP significantly reduces time to market by removing the need for any additional antenna design considerations. The ready-to-use RSL10 SIP features an integrated antenna, RSL10 Radio SoC, and all passive components in a single, miniature package. RSL10 SIP Enables Smart Healthcare Beacons. Learn more about it through the [Intelligent Locations Case Study](#). The RSL10 Software Development Kit (SDK) enables rapid development of ultra-low power Bluetooth Low Energy applications by leveraging convenient abstraction, drivers and sample applications from Blinky to complete BLE peripherals, and everything in between.

SDK key features:

- Free Eclipse®-based ON Semiconductor IDE plus support for Keil µVision® and IAR Embedded Work Bench®
- Complete Bluetooth Low Energy protocol stack
- Bluetooth Low Energy mesh networking with [iOS®](#) and [Android™](#) apps
- FOTA (Firmware Over The Air) with [Android™](#) and [iOS](#) apps
- FreeRTOS™

```
<!--
.Container {box-sizing: border-box; -moz-box-sizing: border-box; -webkit-box-sizing: border-box; padding: 10px; width:
100%;}#button1:hover{text-decoration: none !important; color: white !important;}table.Software, tr.Software, td.Software{padding:
10px; width: auto;}#Title_1_soft{font-family: "Franklin Gothic Medium"; font-size: 13px; color: black; text-align:
left;}#Button_1_soft{font-family: "Franklin Gothic Medium"; background:#54b948; box-shadow: 5px 5px 10px #999; border: 2px solid
#54b948; border-radius: 5px; color: black !important; font-size: 12px; padding: 0.4em; text-align: center; cursor: pointer; margin:
0.5em; text-decoration: none;}
-->
```

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[ON Semiconductor IDE Installer](#)

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[RSL10 LPDSP32 Software Package](#)

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[RSL10 Software Package](#)

[Download](#)

[RSL10 USB Dongle BLE Explorer](#)

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

Features

- Fully-Certified to Worldwide Regulatory Standards FCC (U.S)ISED (Canada)CE (Europe) MIC (Japan)KCC (Korea)
- Ultra-Low-Power:- Industry's lowest power consumption in Deep Sleep Mode (62.5 nW) and Rx in Receive Mode (7 mW)- Industry's best EEMBC® ULPMark™ scores (1090 ULPMark CP @ 3 V; 1260 @ 2.1 V)
- Complete Solution - Fully-integrated antenna- RSL10 Radio SoC - All passive components
- Advanced Multi-Protocol Wireless Functionality - Supports Bluetooth Low Energy and 2.4 GHz proprietary/custom protocols - Rx Sensitivity: -93 dBm - Transmitting Power: -17 to 0 dBm - Supports Firmware Over The Air (FOTA)
- Other Key Technical Features - Built-in power management- Advanced dual-core architecture - 1.1 to 3.3 Voltage Supply Range- 384 kB Flash, 76 kB Program Memory, 88 kB Data Memory- IP protection feature to secure flash contents - Configurable analog and digital sensor interfaces (GPIOs, LSADs, I2C, SPI, PCM)

Applications

- IoT Edge-Node Applications
- Wearables
- Energy Harvesting
- Automotive Applications

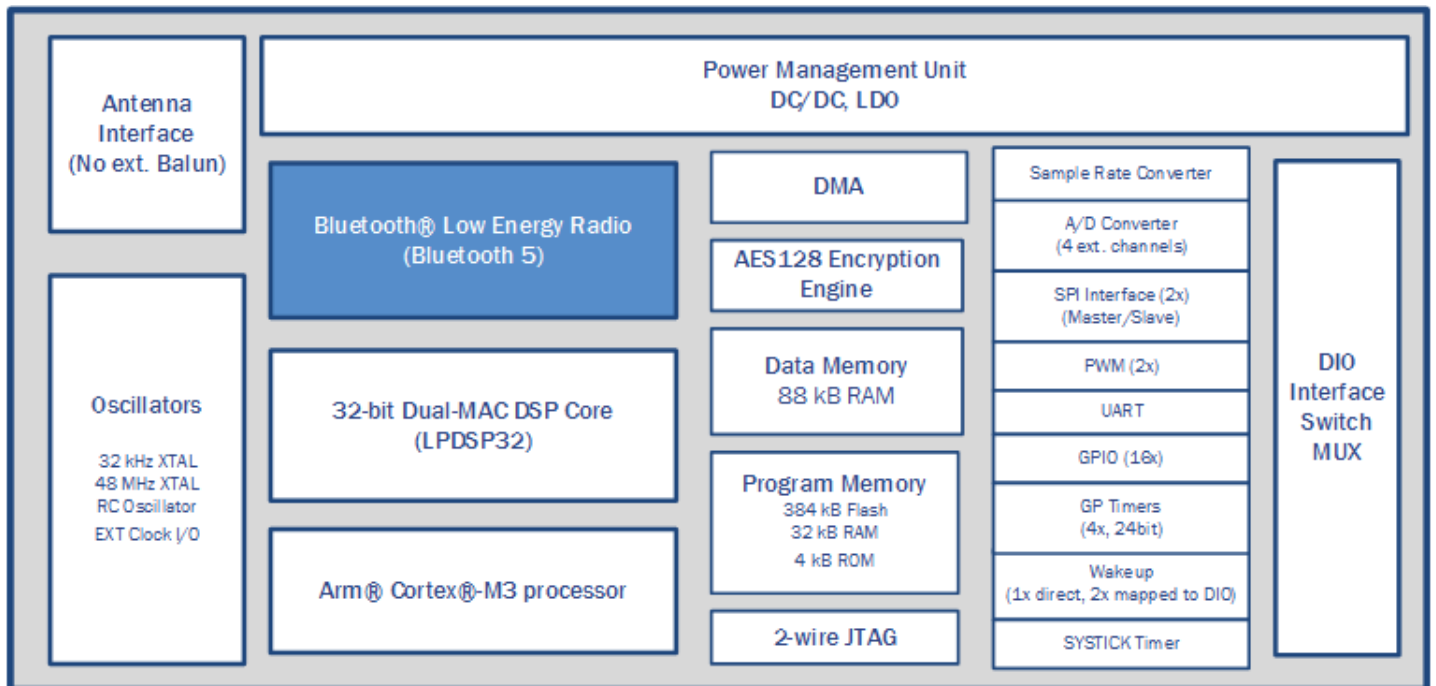
End Products

- Fitness and Trackers/ Wellness Monitors
- Smart Watches
- Smart Locks
- Connected Lighting

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Data Transmission Standard	Frequency Band (MHz)	Carrier Frequency (MHz)	Package Type
NCH-RSL10-101S51-ACG	5.5	Pb-free Halide free non AEC-Q and PPAP	Active	Bluetooth Low Energy RF	2400-2480	2400-2480	SIP-51

Application Diagram



For more information please contact your local sales support at www.onsemi.com.

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