



nRF9161 SiP

Low power cellular IoT System-in-Package with integrated LTE-M, NB-IoT, GNSS and DECT NR+ wireless modem



Overview

The nRF9161 sets a new standard for highly integrated System-in-Package (SiP) solutions, specifically designed for cellular IoT and DECT NR+ applications. Leveraging low-power LTE technology, advanced processing capabilities, and robust security features, the nRF9161 offers unparalleled performance and versatility. It offers enhanced capabilities compared to its predecessor (nRF9160), including DECT NR+ support and 3GPP release 14 LTE-M/NB-IoT support.

Main Benefits

- **Enhanced Capabilities:** The nRF9161 surpasses its predecessor, with improved features including support for DECT NR+ and 3GPP Release 14 LTE-M/NB-IoT LTE stack.
- **Global Connectivity and Power Efficiency:** The integrated modem of the nRF9161 enables global connectivity without regional limitations, and include new unique modem features for further power saving and ease of use.
- **Unleashing the Potential of DECT NR+:** Harness the capabilities of the DECT NR+ stack with the nRF9161, enabling massive mesh applications that prioritize reliability, secure connections, long range, and scalability.

Key features

- Fully integrated SiP with 64 MHz Arm Cortex-M33 and multimode LTE-M/NB-IoT modem with DECT NR+ support and GNSS
- 700-2200 MHz LTE band support
- 1.9GHz NR+ band support
- Certified for global operation
- Dedicated programmable application processor and memory
- 1 MB flash + 256 KB RAM
- Arm TrustZone + Arm CryptoCell 310

Applications

- Asset Tracking
- Smart Metering
- Smart City
- Smart Agriculture
- Predictive maintenance
- Portable Medical Devices
- Industry 4.0