

nRF52810 Product Specification



Contents

nRF52810 Product Specification 3



1. nRF52810 Product Specification

This Product Specification contains functional descriptions, register tables, and electrical specifications, and is organized into chapters based on the modules and peripherals that are available in this IC.

- [nRF52810 Product Specification v1.5](#)
- [nRF52810 Product Specification v1.4](#)
- [nRF52810 Product Specification v1.3](#)
- [nRF52810 Product Specification v1.2](#)
- [nRF52810 Product Specification v1.1](#)
- [nRF52810 Product Specification v1.0](#)

Note: The HTML rendition of the Product Specification corresponds to the latest version only. All versions are available as PDF files.

Features:

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| <ul style="list-style-type: none">• <i>Bluetooth</i> 5, 2.4 GHz transceiver<ul style="list-style-type: none">• -96 dBm sensitivity in <i>Bluetooth</i> low energy mode• Supported data rates: 1 Mbps, 2 Mbps <i>Bluetooth</i> low energy mode• -20 to +4 dBm TX power, configurable in 4 dB steps• On-chip balun (single-ended RF)• 4.6 mA peak current in TX (0 dBm)• 4.6 mA peak current in RX• RSSI (1 dB resolution)• ARM® Cortex®-M4 32-bit processor, 64 MHz<ul style="list-style-type: none">• 144 EEMBC CoreMark® score running from flash memory• 34.4 μA/MHz running CoreMark from flash memory• 32.8 μA/MHz running CoreMark from RAM memory• Serial wire debug (SWD)• Flexible power management<ul style="list-style-type: none">• 1.7 V to 3.6 V supply voltage range• Fully automatic LDO and DC/DC regulator system• Fast wake-up using 64 MHz internal oscillator• 0.3 μA at 3 V in System OFF mode, no RAM retention• 0.5 μA at 3 V in System OFF mode with full 24 kB RAM retention• 1.5 μA at 3 V in System ON mode, with full 24 kB RAM retention, wake on RTC• 1.4 μA at 3 V in System ON mode, no RAM retention, | <ul style="list-style-type: none">• 192 kB flash and 24 kB RAM• Nordic SoftDevice ready• Support for concurrent multi-protocol• 12-bit, 200 ksp/s ADC that has 8 configurable channels with programmable gain• 64 level comparator• Temperature sensor• Up to 32 general purpose I/O pins• 4-channel pulse width modulator (PWM) unit with EasyDMA• Digital microphone interface (PDM)• 3x 32-bit timer with counter mode• SPI master/slave with EasyDMA• I²C compatible two-wire master/slave• UART (CTS/RTS) with EasyDMA• Programmable peripheral interconnect (PPI)• Quadrature decoder (QDEC)• AES HW encryption with EasyDMA• 2x real-time counter (RTC)• Single crystal operation• Package variants<ul style="list-style-type: none">• QFN48 package, 6 x 6 mm• QFN32 package, 5 x 5 mm• WLCSF package, 2.482 x 2.464 mm |
|---|--|

Features:	
wake on RTC	

Applications:	
• Computer peripherals and I/O devices • Mouse • Keyboard • Mobile HID • CE remote controls • Network processor • Wearables • Virtual reality headsets	• Health and medical • Enterprise lighting • Industrial • Commercial • Retail • Beacons • Connectivity device in multi-chip solutions