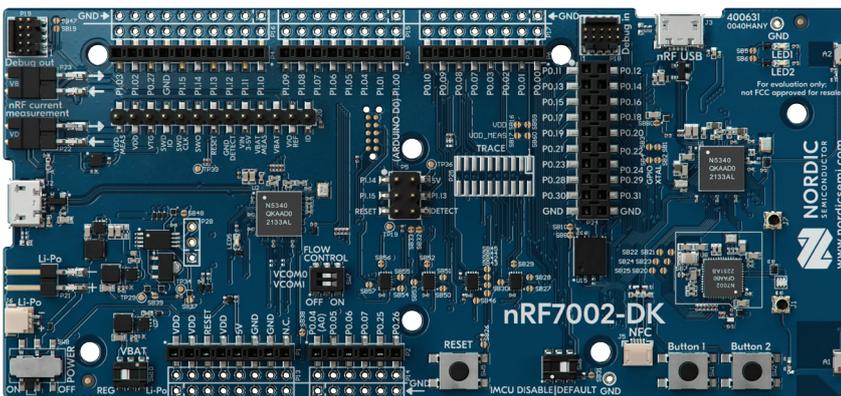


# nRF7002 DK

Development Kit for the nRF7002 Wi-Fi 6 dual-band companion IC



The nRF7002 DK is the development kit for the nRF7002 Wi-Fi 6 Companion IC. It contains everything needed to get started developing on a single board. The DK features an nRF5340 multiprotocol System-on-Chip (SoC) as a host processor for the nRF7002. The DK supports the development of low-power Wi-Fi applications and enables Wi-Fi 6 features like OFDMA, Beamforming, and Target Wake Time.

The nRF7002 Wi-Fi 6 companion IC is a highly integrated IC designed to enable the integration of Wi-Fi 6 connectivity into a wide variety of applications. The IC provides a low power and cost-effective solution for adding the latest Wi-Fi 6 technology to products, allowing them to benefit from the ultra-fast speeds, improved range, and greater reliability offered by the latest Wi-Fi standard.

The nRF7002 features a 2.4 GHz radio with low power consumption for extended battery life. The IC also features advanced security features included to help protect user data. The IC is designed to be the ideal Wi-Fi companion IC to Nordic's nRF52840, nRF5340 SoCs, and to nRF91 Series devices. Additionally, the IC supports a wide variety of host controllers and can be used with both Linux and RTOS operating systems.

Overall, the nRF7002 Wi-Fi 6 companion IC is a powerful, low-cost solution for adding the latest Wi-Fi 6 technology to products. It provides fast and reliable connectivity, with advanced security features, and is designed for easy integration into a wide range of applications.

## Key features

- nRF7002 Wi-Fi Companion IC
- nRF5340 SoC as host processor
- Arduino connectors
- Two programmable buttons
- Antennas for 2.4 and 5 GHz
- Current measurement pins
- Board support and samples in nRF Connect SDK

## nRF7002 Wi-Fi Companion IC

- 2.4 GHz and 5 GHz dual-band
- Low-power and secure Wi-Fi for the IoT
- Ideal coexistence with Bluetooth LE
- Supported in nRF Connect SDK
- Target Wake Time (TWT)
- SPI / QSPI
- Wi-Fi 6 Station (STA)
- Complies with 802.11a/b/g/n/ac/ax
- 1 Spatial Stream (SS)
- 20 MHz channel bandwidth
- 64 QAM (MCS7), 86 Mbps PHY throughput
- OFDMA (Downlink and Uplink)
- BSS coloring
- Co-existence interfaces

## nRF5340 SoC

- High performance 128 MHz Arm Cortex-M33 application core
- Ultra-low power 64 MHz Arm Cortex-M33 network core
- Multi-protocol radio supporting:
  - Bluetooth LE
  - Bluetooth mesh
  - Thread and Zigbee

## Applications

- Battery operated Wi-Fi products
- Smart city & smart agriculture
- Smart home
- Industrial sensors
- Asset tracking
- Wearables & medical