

Nordic Semiconductor

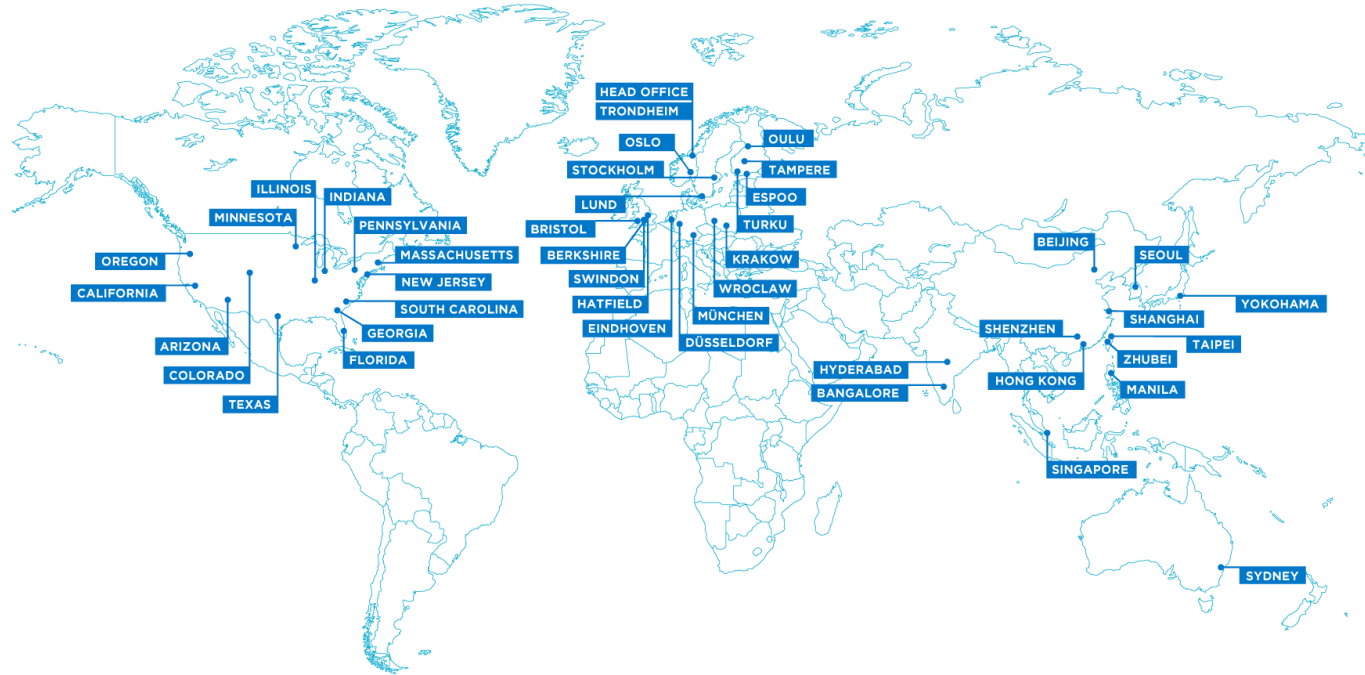
Introduction and nRF70 Series Wi-Fi 6 devices

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Nordic at a glance.....

- Nordic Semiconductor is a Norwegian fabless semiconductor company specializing in wireless communication technology that powers the Internet of Things (IoT).
- Nordic was established in 1983 and has more than 1300 employees across the globe.
- Our award-winning Bluetooth Low Energy solutions pioneered ultra-low power wireless, making us the global market leader (40+ % market share).
- Technology range supplemented by ANT+, Thread, Zigbee and Matter
- In 2018 we launched our low power, compact LTE-M/NB-IoT cellular IoT solutions to extend the penetration of the IoT.
- The Nordic portfolio was further complemented by Wi-Fi technology in 2021.
- Power Management ICs and cloud services are the latest offering from Nordic that are getting good market traction
- Nordic is a member of the ANT+ Alliance, Bluetooth SIG, Thread Group, Zigbee Alliance, Wi-Fi Alliance, IEEE and GSMA.



Specialized in **ULP wireless connectivity** and embedded processing for IoT

Leading short-range connectivity market. **Bluetooth LE, Thread, Zigbee** and **Matter**

Low-power Cellular IoT with **LTE-M** and **NB-IoT** technologies

Enabling low-power **Wi-Fi 6** IoT

Nordic Semiconductor products



Short Range

Bluetooth Low Energy
Matter
Thread/Zigbee
Proprietary



Wi-Fi

Wi-Fi 6
2.4 GHz
5 GHz



Cellular IoT

LTE-M
NB-IoT
GNSS/GPS



nRF Cloud

Cloud connectivity
Location support
SCELL/MCELL
AGPS/PGPS
Device management



PMIC / nRF21

Li-Ion charger
LDO
DC/DC buck converter
Range extenders



matter



THREAD



zigbee



Works with
Apple Find My



Works with
Apple HomeKit

amazon sidewalk



Works with
SmartThings

Strong developer community



- devzone.nordicsemi.com
 - Leading community in the industry
 - >80K developers, 2.4M annual site visits
 - Strong tech support team
 - Blogs, guides, and tutorials
- Nordic Developer Academy
- Nordic Tech Webinars
- Wireless Quarter

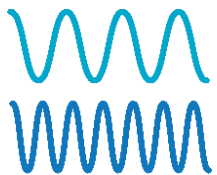


NORDIC[®]
SEMICONDUCTOR

nRF
IC
SERIES

This is the nRF70 Series

Wi-Fi 6 companion IC



Dual-band
capable



Low-power
and secure



Optimal coexistence
with Bluetooth LE



Supported in
nRF Connect SDK



Wi-Fi 6
Certified




nRF70 Series – Overview and highlights

Wi-Fi 6 companion IC with integrated RF

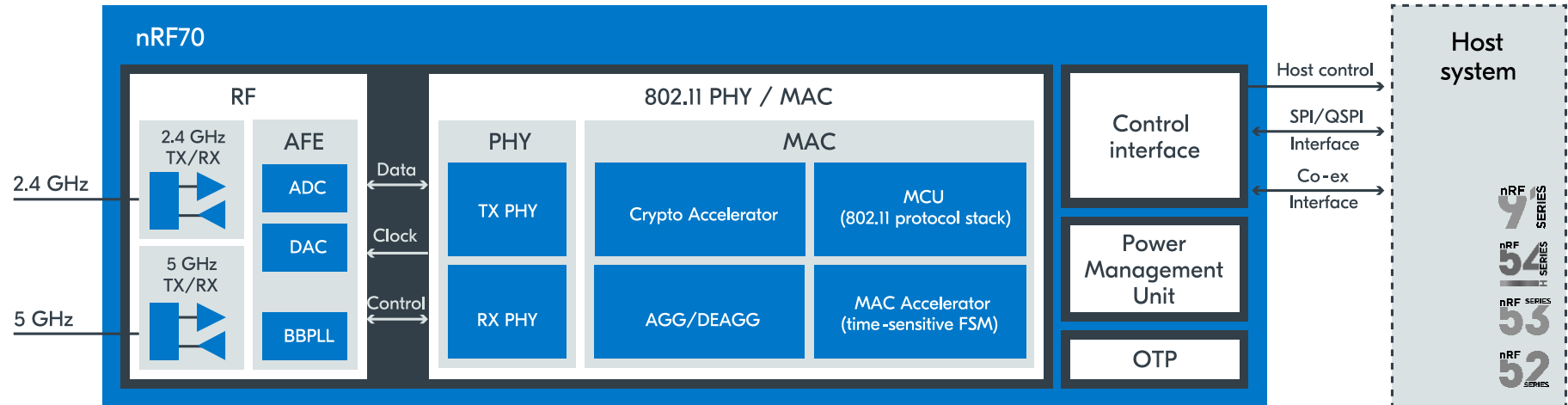
- Dual band, 2.4 GHz and 5 GHz
- Wi-Fi 6 Station (STA) Certified
 - Complies with 802.11a/b/g/n/ac/ax
 - 1 Spatial Stream (SS)
 - 20 MHz channel bandwidth
 - 64 QAM (MCS7), 86 Mbps PHY throughput
 - OFDMA (Downlink and Uplink)
 - BSS Coloring
 - TWT
- STA, Soft AP, Wi-Fi Direct, Dual-mode
- SPI / QSPI & Co-existence interfaces
- QFN 6x6mm package



nRF70 Series variants

Functionality	nRF7000	nRF7001	nRF7002
Scanning (passive & active)	✓	✓	✓
Station (STA)		✓	✓
SoftAP		✓	✓
Dual Band	✓		✓
Price			

System overview



Interop and Certification

Wi-Fi 6 companion IC with integrated RF

- All Wi-Fi Alliance pre-certification (Wi-Fi 6) complete in-house – both core and Quick Track test plans. Waiting for formal certification
- 200+ Interop devices collected over 10 years to ensure interoperability over and above what is offered via WFA certification.
- Interop testing entirely automated for each device via ethernet-switches and python/selenium framework



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THANK YOU

Please visit Nordic Booth to learn further