Product summary

NORA-B26 series

Stand-alone Bluetooth® Low Energy modules

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Standard

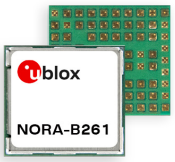
Professional

Automotive

Bluetooth LE module for ultra-low power IoT applications

- Qualified against Bluetooth® Core 6.0 including Channel Sounding for accurate ranging
- u-connectXpress software for accelerated time to market
- Designed for PSA Certified Level 3 security with tamper detection
- Small footprint and multiple antenna options
- Global certification

10.4 × 11.2 × 1.9 mm



10.4 × 14.3 × 1.9 mm

Product description

NORA-B26 is a compact, high-performing, stand-alone Bluetooth Low Energy module. The module is delivered with u-connectXpress software that provides support for u-blox Bluetooth Low Energy Serial Port Service, GATT client and server, beacons, Channel Sounding, Bluetooth long range, NFC™, and simultaneous peripheral and central roles. u-blox u-connectXpress software allows hosts to easily configure connectivity using AT commands over a UART interface.

NORA-B26 provides top-grade security, thanks to secure boot, which ensures that the modules only boot up with authenticated u-connectXpress software. Leveraging Bluetooth long range feature, NORA-B26 also offers an extended communication range with reliable connections. Key markets are industrial automation, smart cities and buildings, medical and healthcare, and telematics. Specific applications include asset tracking, indoor location, sensors, and wireless-connected and configurable equipment.

NORA-B26 comes with an internal chip antenna for ease of integration in the end-product as well as an antenna pin for use with an external antenna of choice. All variants come designed for PSA Certified Level 3 IoT security making the modules ideal for security sensitive applications like point-of-sales terminals and medical devices. NORA-B26 is globally certified for use with the internal or external antenna. This reduces time, cost, and effort for customers integrating NORA-B26 in their designs. To ensure operation in professional environments, the module is designed and manufactured according to u-blox professional grade requirements.

	NORA-B261	NORA-B266
Grade		
Automotive		
Professional	•	•
Standard		
Radio		
Chip inside	nRF54L10	nRF54L10
Qualified against Bluetooth Core	6.0	6.0
Bluetooth low energy	•	•
Bluetooth output power EIRP [dBm]	10	10
Max range [meters]	TBD	TBD
NFC	•	•
Antenna type (see footnotes)	pin	pcb
Application software		
u-connectXpress	•	•
Interfaces		
UART	2	2
GPIO pins	TBD	TBD
Features		
Maximum Bluetooth connections	TBD	TBD
Bluetooth Channel Sounding	•	•
Bluetooth long range	•	•
Low Energy Serial Port Service	•	•
Secure boot	•	•
Throughput [Mbit/s]	TBD	TBD
Simultaneous GATT server and client	•	•

pin = Antenna pin
pcb = Internal PCB antenna

NORA-B26 series

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Features

Bluetooth	Qualified against Bluetooth Core 6.0
NFC	NFC-A for pairing data
Range	Internal antenna: TBD External antenna: TBD
Max. conducted output power	7 dBm
Max radiated output power (EIRP)	Internal antenna: 10 dBm External antenna: 10 dBm
Conducted sensitivity	–98 dBm (1 Mbit/s) TBD (125 Kbit/s)

u-connectXpress software

NORA-B26 modules are pre-flashed with u-connectXpress and boot-loader software that interfaces through an AT command interpreter to control customer application software running on host MCUs.

Bluetooth	u-blox Low Energy Serial Port Service (SPS) GATT server and client using AT commands Beacons 2 Mbit/s modulation 125 Kbit/s modulation long range functionality Advertising extensions
Configuration over air	Wireless transmission of AT commands to control the module
Extended Data Mode™	For simultaneous AT commands and data, and multiple simultaneous data streams
HW interfaces	2 x UART, 19 x GPIO
Configuration	AT commands
Support tools	s-center
Operating modes	Central role Peripheral role Simultaneous central and peripheral roles LE 1M PHY LE 2M PHY LE CODED PHY Advertising extensions LE data length extension Channel Sounding
Security	Secure boot Secure Simple Pairing 128-bit AES encryption Bluetooth Low Energy secure connections
Throughput over UART	TBD

Electrical data

Power supply	1.7 V to 3.6 VDC
Power consumption (@ +7 dBm)	Active, advertising 31 bytes/s: TBD Standby, advertising 31 bytes/s: TBD Sleep: TBD

Package

Dimensions	NORA-B261: 10.4 x 11.2 x 1.9 mm NORA-B266: 10.4 x 14.3 x 1.9 mm
Weight	< 0.1 g
Mounting	Machine mountable Solder pins

Environmental data, quality, and reliability

Operating temperature	–40 °C to +85 °C
Storage temperature	–40 °C to +85 °C
Humidity	RH 5-90% non-condensing

Certifications and approvals [1]

Type approvals	Europe (RED), Great Britain (UKCA), US (FCC), Canada (ISED), Japan (MIC), South Korea (KCC), Taiwan (NCC), Australia (ACMA), New Zealand
Health and safety	EN 62479, EN 62368-1, IEC 62368-1
Bluetooth	Qualified against Bluetooth Core 6.0

1 = Certifications are pending

Support products

EVK-NORA-B261	Full-featured evaluation kit for NORA-B261 with u-connectXpress software, using the antenna pin
EVK-NORA-B266	Full-featured evaluation kit for NORA-B266 with u-connectXpress software using the internal PCB antenna

Product variants

NORA-B261	Professional grade Bluetooth low energy module with u-connectXpress software and antenna pin for external antenna
NORA-B266	Professional grade Bluetooth low energy module with u-connectXpress software and internal antenna

Further information

For contact information, see **www.u-blox.com/contact-u-blox**.

For more product details and ordering information, see the product data sheet.