

Mini BLE

Bluetooth Low Energy beacon

Data sheet



Key features

- General purpose BLE beacon
- Indoor proximity and way-finding applications
- Based on Nordic nRF52832
- Simultaneous support of iBeacon and Eddystone
- Compact enclosure
- Powered by replaceable CR2477 lithium battery

GATT and advertising

Full support for specifications Eddystone Configuration GATT Service by Google

Up to 4 slots configurable for Eddystone frame types: UID, URL, TLM, EID

Up to 4 slots configurable for the following frame types: iBeacon, Quuppa (emulation mode), Sensors

TX power	-40, -20 to 4 dBm (with 4 dB steps). Programmable for each slot
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Advertising interval	0.1 to 60 secs. Programmable for each slot
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Global configuration options	non-connectable mode, anonymous mode, programmable time period, locked/unlocked mode, change password
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Firmware update	OTA (Over-the-Air) firmware update
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Device specifications

Electrical specifications

Core module	Nordic nRF52832 SoC (MCU and radio transceiver)
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MCU core	ARM Cortex-M4 32-bit CPU
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Current consumption (25°C)	Radio TX: 7.1 mA (0 dBm TX) Radio RX: 6.5 mA Idle mode: 3 µA Idle mode with accelerometer ON: 7 µA
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Radio specifications

Standard	Bluetooth 4.2 Bluetooth Low Energy (compatible with BLE 5.x)
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Frequency band	2.402 to 2.480 GHz (according to Bluetooth 4.0 specifications)
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Advertising channels	CH37 (2.402 GHz), CH38 (2.426 GHz), CH39 (2.480 GHz) (according to Bluetooth 4.0 specifications)
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Channel spacing	2 MHz (according to Bluetooth 4.0 specifications)
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TX power	Conducted: +4 dBm (max) EIRP (Equivalent Isotropic Radiated Power): +6 dBm (max)
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Antenna	
Type	Integrated meandered planar inverted F-antenna (PIFA)
Gain	2 dB (max)
Radiation diagram	Omnidirectional
Power	
Power supply	Battery
Replaceable	Yes
Type	CR2477 (3V, lithium)
Model	Panasonic Industrial CR2477 (typical capacity 1000 mAh @ 25°C)
Sensors and interfaces	
Sensors	-
Interfaces	-
Mechanical specifications	
Material	ABS plastic
Color	White
Size	40 x 40 x 15 mm
Weight	20 gr
Fastening	Dual-adhesive
Opening	Back lid with two screws
Protection	-
Flammability	UL 94 HB
Environmental specifications	
Operating temperature	-20°C to +60°C (battery operating life sharply decreases under 0°C)
Storage temperature	+10°C to +30°C (with battery), -40°C to +85°C (without battery)
Certifications	
CE (RED)	

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