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Product Brief WIBNB Module

January 2018, v1.0

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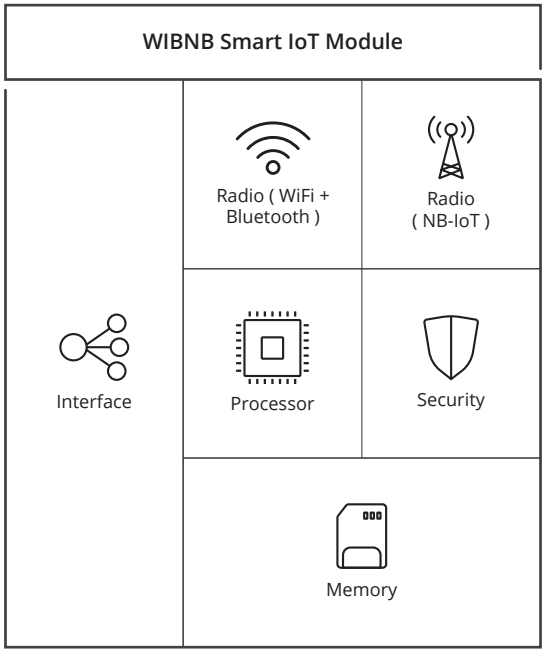
General Information

WIBNB is a Smart IoT Module that enables out-of-the-box Cloud services and data analytics to silo IoT application developers and smart product manufacturers. The module synergizes enterprise-grade, secure NB-IoT connectivity, high performance dual core processor, rich set of analog/digital/communication peripherals and robust and compact design. WIBNB is optimized for cost, ultra low power consumption and fast integration into manufacturer's products. WIBNB Smart IoT Module comes with an easy to use SDK that incorporates all of the common IoT functions such as management, security, computation, diagnostics and Cloud communication.



WIBNB Module Architecture

Key Benefits

- Low Cost
- Zero Touch Setup
- Fully Certified
- Day One Cloud Connectivity

Applications

WIBNB can be integrated into original equipment manufacturer products in areas such as;

- Industrial Equipment
- Consumer Electronics
- Medical Equipment
- HVAC Monitoring and Remote Control
- Smart City
- Agriculture

WIBNB Module

Features

Hardware Features	
Processor	
Microcontroller	240 MHz Dual Core Microcontroller with 600 DMIPS
Security Features	Secure Boot, Flash Encryption, 1024-bit OTP, Crypto-Acceleration
Radio	
Bluetooth	Classic BR/EDR and Bluetooth v4.2
WiFi	WiFi Certified 2.4GHz 802.11 b/g/n/e/i (802.11n up to 150 Mbps)
RF certification	FCC/CE/IC
NB-IoT	LTE Cat NB1 Connectivity 800MHz
Supply	
Supply	3.3V
Current Specs	500mA max, 200mA avg
Interfaces	
Digital & Analog	GPIO, PWM, ADC, DAC
Communication	UART, SPI, I2C, I2S
Auxiliary	RGB LED, Reset Button, Programmable Button
Mechanical	
Dimensions (mm)	63.25mm L x 30mm W x 6mm H
Antenna	PCB (BT & WiFi), IPEX quadband external (NB-IoT)

Software Features	
SDK	
Client Communication	UART, SPI
Client Implementation	Misra C, C++, Python
Security	
WiFi	WPA/WPA2/WPA2-Enterprise/WPS
Encryption	AES 128/192/256, RSA/ECC/HASH (SHA-2)
Connectivity	
WiFi Mode	Station/SoftAP/SoftAP+Station/P2P
Internet Protocols	IPv4, IPv6, TCP/UDP/HTTP/FTP/MQTT/CoAP
Bluetooth Stack	Bluetooth v4.2 BR / EDR and BLE
Out-of-the-Box Services	
Server Authentication	SSL, TLS or custom
Provisioning	using WiFi, BT or NB-IoT (auto)
Module OTA Update	Automatic, WiFi/NB-IoT based
Client OTA Update	On demand
Cloud	Inovatink Cloud / C2C API

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Istanbul, Turkey