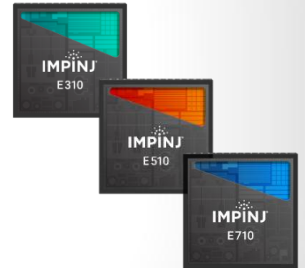




IMPINJ
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GEN2X



The Identix MB series is a powerful family of multiregional RAIN RFID System-on-Modules (SOMs) that integrate Bluetooth Low Energy (BLE), Wi-Fi, and USB connectivity into a single compact solution.

Performance Variants

MB series is available in three distinct models, each offering different levels of performance to meet a variety of application needs:

- MB300: Up to 300 tags/s read rate with -73 dBm maximum RX sensitivity
- MB500: Up to 700 tags/s read rate with -81 dBm maximum RX sensitivity
- MB700: Up to 1100 tags/s read rate with -89 dBm maximum RX sensitivity

Compact, Powerful, and Versatile

Measuring just 62 mm x 32 x 7 mm, the Identix MB series modules deliver high RFID output power and support up to four RF antenna ports. With built-in BLE, Wi-Fi, and USB, they're designed for seamless integration into a wide range of applications, including:

- High-performance handheld devices and sleds
- RFID reading stations
- Smart shelves and cabinets
- Connected refrigerators
- Fixed RFID readers

Cutting-Edge RFID Technology

Powered by the latest Impinj Ex10 RAIN RFID reader chips, the MB series delivers industry-leading performance while maintaining low power consumption. These modules offer multiregional support, making them ideal for global deployments and helping OEMs reduce costs associated with development, manufacturing, certification, and integration.

High Flexibility for Developers

Each MB module includes an embedded high-performance dual-core 32-bit microcontroller and generous onboard memory.

Outstanding Range and Power

With programmable RFID output power ranging from 0 dBm to +33 dBm (MB700), MB series modules support long-range tag reading—up to 20 meters or more, depending on the antenna and tag configuration.

Technical specifications

- RAIN RFID SOM module. EPCglobal® UHF Class 1 Gen 2 / ISO 18000-63
- RFID operating region: worldwide: FCC, ETSI, Anatel, etc. configurable via software 865-928Mhz
- Four RFID antenna ports with MMCX connectors
- Maximum TX power
 - MB300 +27dBm
 - MB500 +30dBm
 - MB700 +33dBm
- RX sensitivity (max)
 - MB300 -73dBm
 - MB500 -81dBm
 - MB700 -89dBm
- Reading performance (max)
 - MB300 -300 tags/s
 - MB500 -700 tags/s
 - MB700 -1100 tags/s
- Integrated 2.4Ghz radio with Wi-Fi 802.11n 150Mbps and BLE 5
- Communication interfaces
 - USB(1)
 - SPI(1)
 - I2C(1)
 - UART(1)
 - GPIO (5)
- Dual-core microcontroller up to 240 MHz, 8MB Flash, 4MB PSRAM, 512 KB SRAM and 384 KB ROM
- Power supply: +5VDC
- Power consumption: 9W peak while transmitting @ +33dBm
- Size: 32mm x 36mm x 4mm
- Certifications: FCC, CE and Anatel

For further information visit

idntx.com