

The uBlue transceiver is specifically designed for both PC peripherals and ultra low power applications such as sports and wellness sensors. For sensor applications, the ultra low power consumption and advanced power management enables battery lifetimes up to several years on a coin cell battery.

The ISP091201D module size measures 8 x 12 x 1.5 mm. The module integrates all the decoupling capacitors, the 16 MHz crystal and load capacitors plus the RF matching circuit and antenna in addition to the transceiver. As the module has several end applications, the antenna was designed to be compatible with several ground plane sizes including that of a USB dongle and a cell phone. The module can operate as a standalone Bluetooth sensor node with the addition of a transducer, a small external microprocessor to run application software, a 32 kHz crystal and a DC power source.

Functional Block Diagram

The module high level block diagram is shown in Figure 1 below.

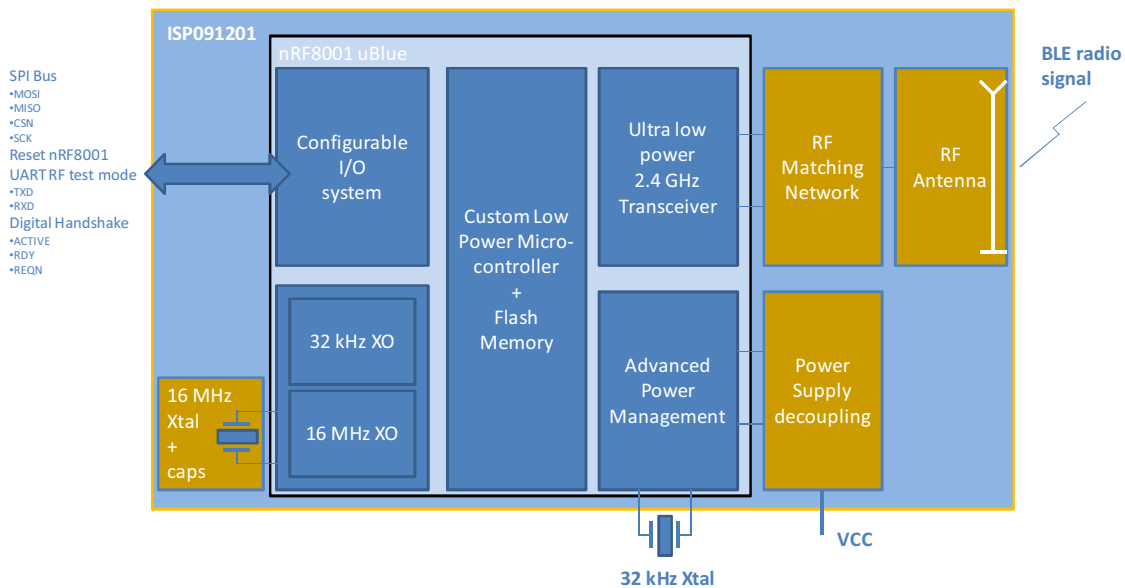


Figure 1 : Functional block of the ISP091201D