The main unit interacts with user tags (LF 125KHz passive RFID tags) to identify users and tool tags (2.4GHz active tags) to identify objects.
The object tracking device contains a 2.4GHz transceiver module (the identical transceiver operating in receive mode only appears in the main unit).
The tool tags (object tracking devices) are configured in transmit mode only, and they are transmitting short packets for tracking propose of objects. In the tool tag this transceiver (A7105) is connected to host ultra low power MCU (MSP430G2332) via SPI interface.
The module that is mounted on the main board of the main unit acts as receiver only in order to receive incoming packets from the tool tags.
The RF transceiver module (A7105) uses a 16MHz external frequency oscillator.