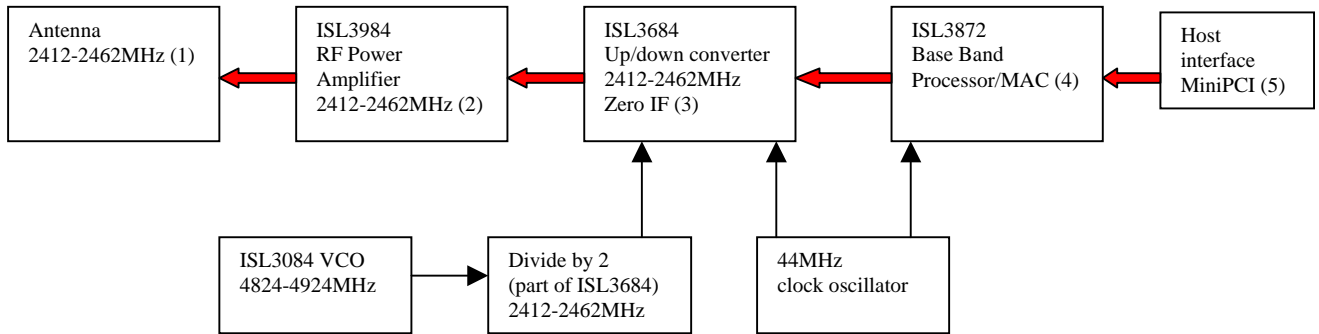


# FCC ID: OSZ37200M-10

## Intersil model ISL37200M-10

### Block diagram with Theory of operation

#### TX signal path in Red Arrows

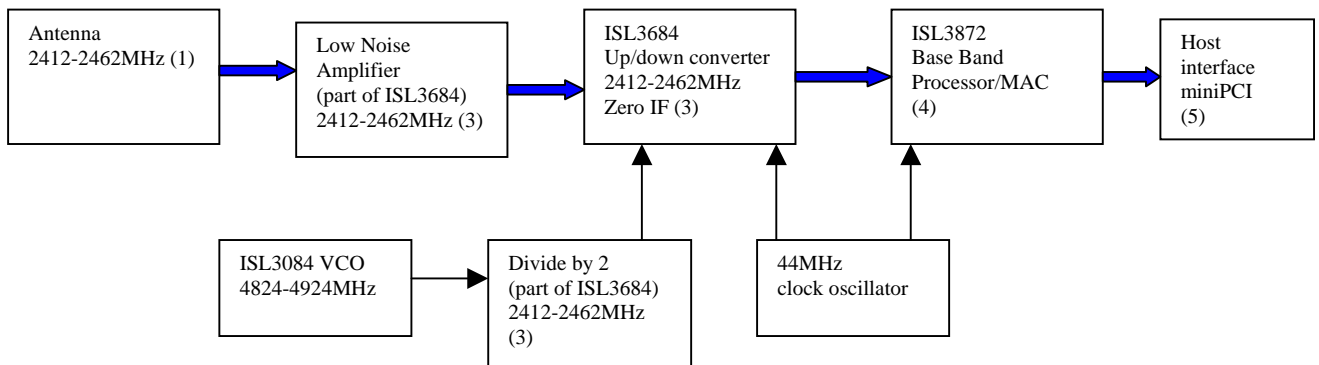


#### Transmitter Path

Data bits coming from the miniPCI Host interface (5) are processed by the Base Band Processor MAC (BBP/MAC) ISL3872 (4) on IEEE 802.11b HR protocol level, IQ modulated and then converted to 2.4 GHz RF signal by Direct up/down converter ISL3684 (3)

The 2.4GHz RF signal is then amplified by RF Power Amplifier ISL3984 (2) and then finally emitted via the antenna (1).

#### RX signal path in Blue Arrows



#### Receiver path

The 2.4GHz RF signal comes in via antennas (1) and low noise amplifier (part of ISL3684) (3) to the Direct up/down converter ISL3684 (3) where it is converted to RX IQ signals.

These IQ signals are converted into data bits by the Base Band Processor MAC (BBP/MAC) ISL3872 (4).

The data bits are processed by the Base Band Processor MAC (BBP/MAC) ISL3872 (4) on IEEE 802.11b HR protocol level. This MAC controller also provides the miniPCI interface to the Host (5).