

Both 2.4GHz and 900MHz RF link operations are very similar. The block diagram of the HS and BS RF modules are shown below:

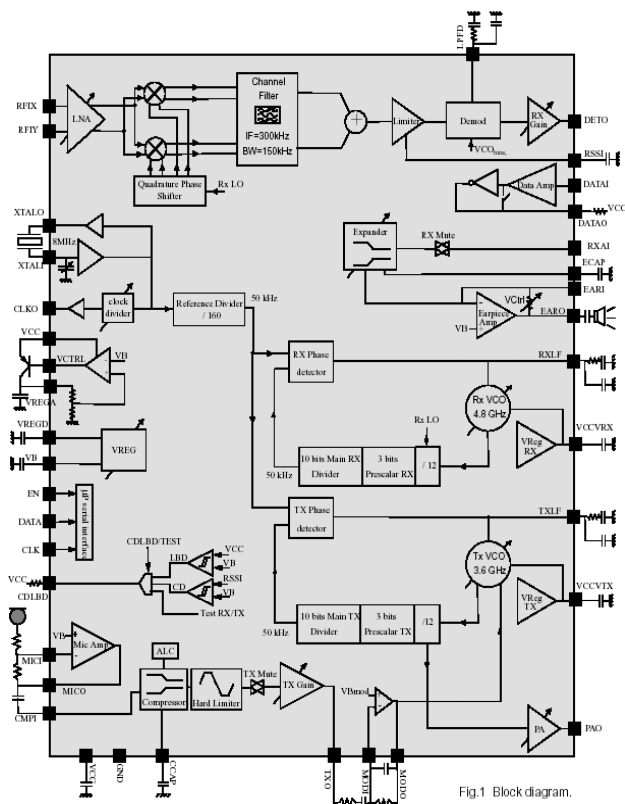


Fig.1 Block diagram.

HS RF module

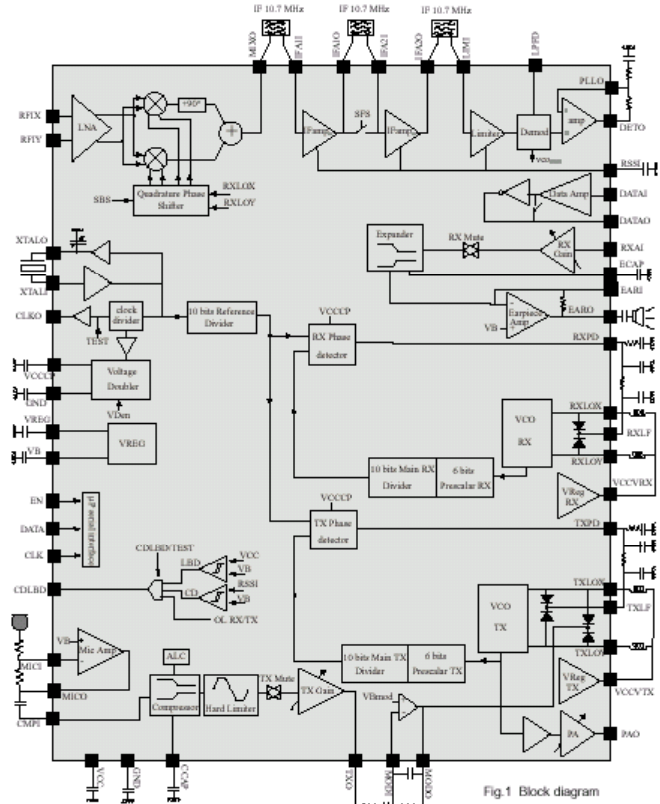


Fig.1 Block diagram

BS RF module

Figure 3. HS and BS RF module block diagram

Besides the TX and RX RF frequencies, the main difference between them is that there is no external 10.7MHz IF filters required for HS RF module. That is, the RF chip can directly down convert the carrier frequency 2.4GHz to low IF frequency 300KHz.

There are seven important input/output signals that are necessary for operation of the RF section (this does not include the separate supply lines for both Tx and Rx sections). A 8.0 MHz reference is present for use in the frequency synthesisers. The accuracy of this 8.0 MHz input will affect the accuracy of the transmit and receive frequencies. In order to ensure proper operation of the RF module, the 8.0 MHz reference signal must be at least 128mV_{p-p}