

The subjective 900MHz Digital Spread Spectrum cordless telephone for DSSS operation, two main block were provided DSSS function as below:

1. RF Transceiver (RF105)

The receive path of RF -to-baseband I & Q demodulation which includes an LNA, Double-balanced quadrature mixers, fully integrated channel selection filtes, and baseband variable-gain amplifiers.

The transmit path is a variable-gain direct conversion modulator.

There paths are shown in Figure 1.

902 – 928 MHz frequency synthesizer with on-chip VCO and resonator are also included in the IC to provide the LO frequency for both transmit and receiver modes

Use DBPSK DSS modulator / demodulator and Time Division Duplexing control.

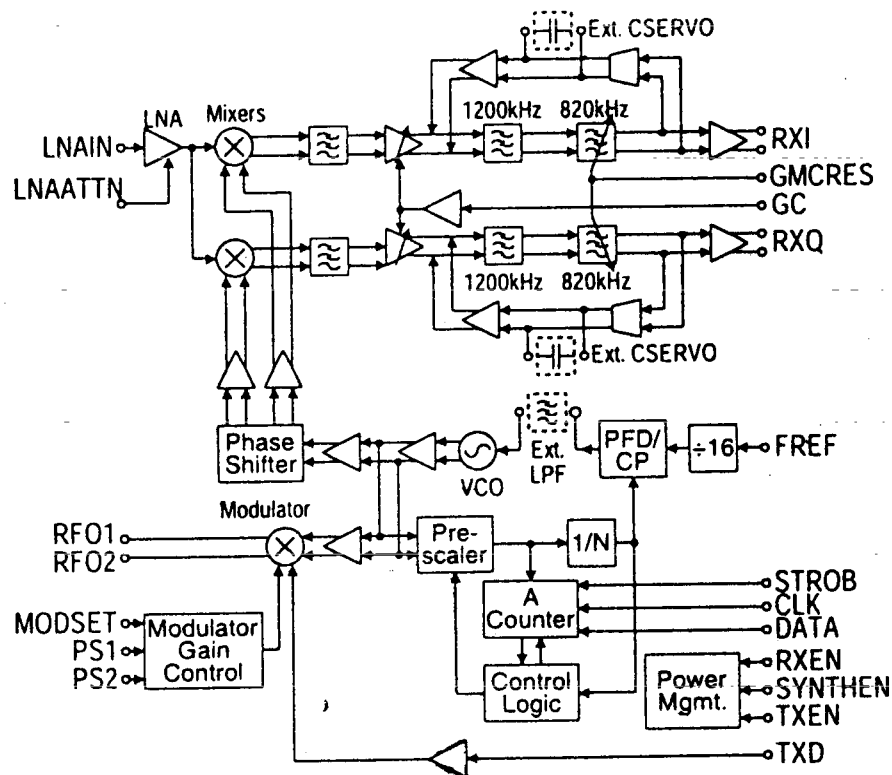


Figure 1. RF105 Block Diagram

2. RF Power Amplifier (RF106)

It is a class AB RF power amplifier for 900 MHz ISM band applications. It delivers

output power proportional to the input signal power. Figure 2 shows a block diagram for the RF106

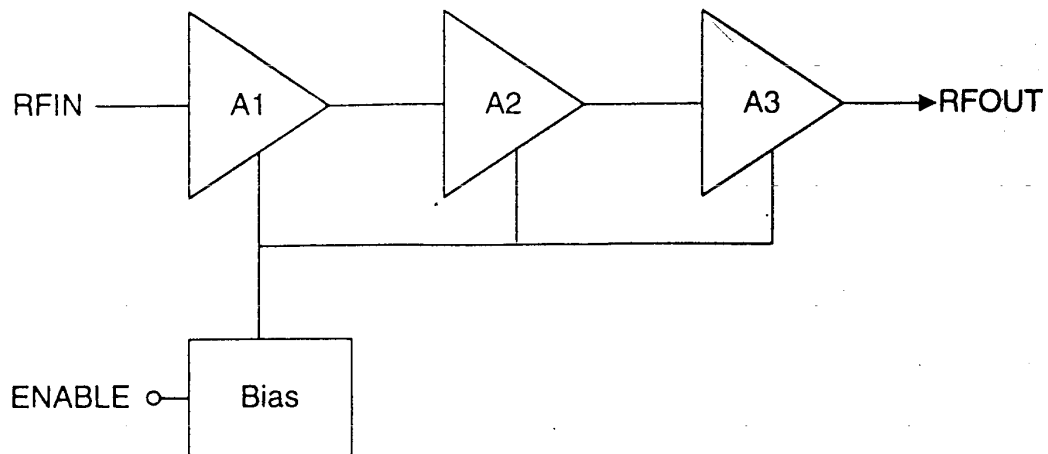


Figure 2. RF106 Block Diagram

It performs all protocol, data formatting, spread spectrum, audio processing and peripheral function for DSS in conformance with United States FCC regulation part 15.247.