

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 filters, 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.

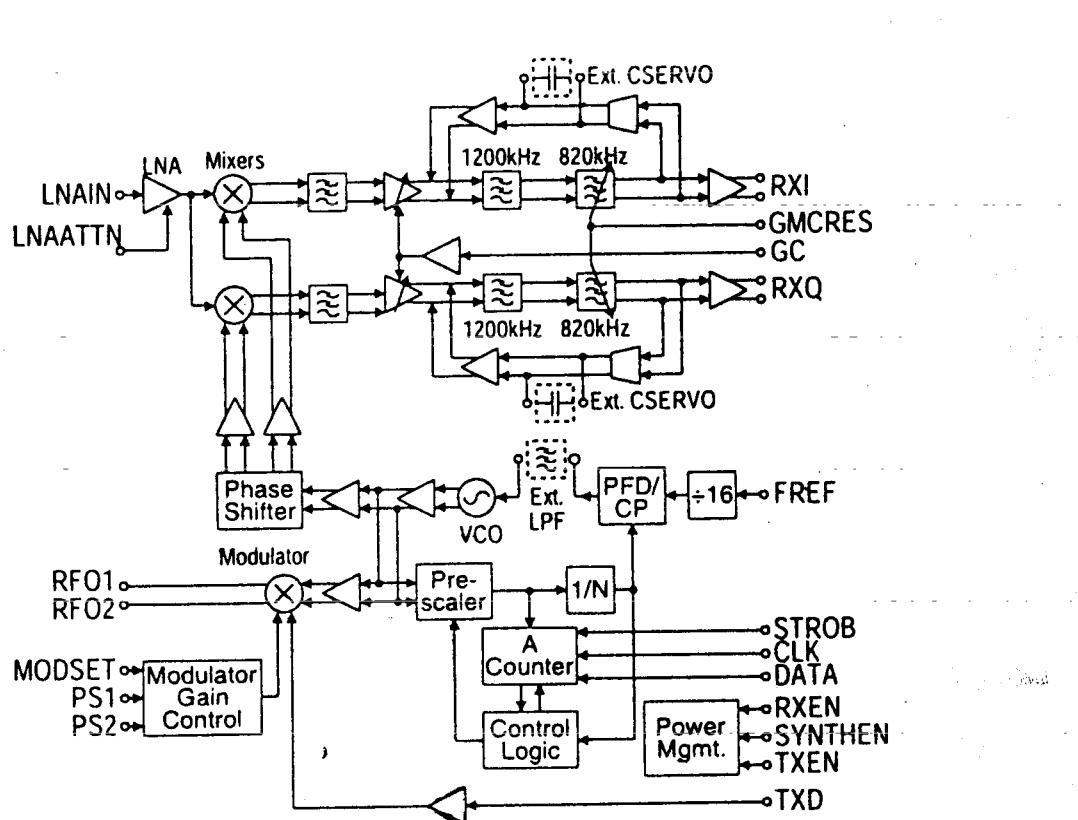
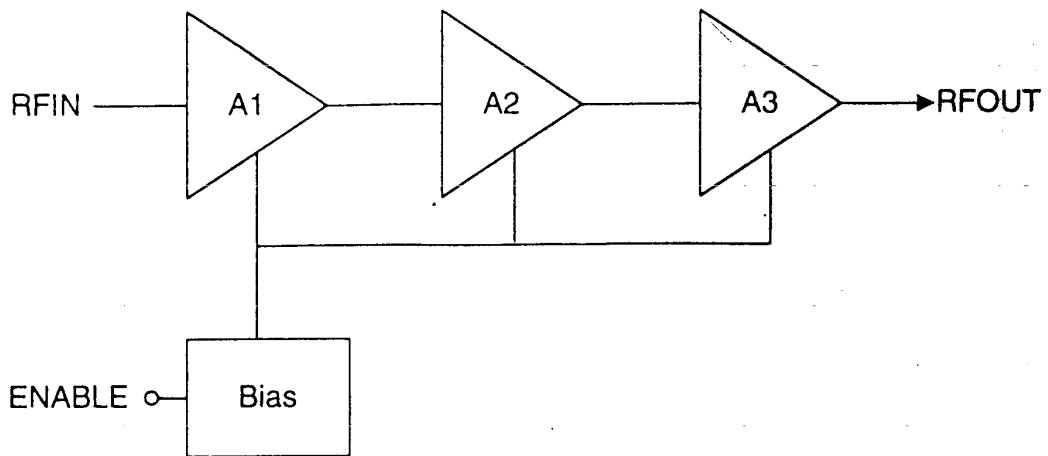


Figure 1. RF105 Block Diagram

### 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.