The subjective device contain internal PCMCIA wireless lan card for DSSS operation and inside the PCMCIA wireless lan card four main blocks were provided DSSS function as below:

1. Media Access Control(HFA3841):

   802.11b protocol and PHY support are implemented in firmware Radio Data Interface Firmware Implements the full IEEE 802.11b wireless LAN MAC protocol. PCMCIA Host Interface

2. Baseband Processor(HFA3861)

   Internal A/D and D/a for analog I and Q input and output Differential phase shift keying modulation schemes DBPSK and DQPSK Data scrambling capability along with Complementary Code Keying .

3. Quad IF (HFA 3783)

   Quadrature modulation and demodulation of "I" and "Q" baseband signal. Internal AGC Function.

4. RF/IF convert and synthesizer (HFA 3683)

   Up-converter mixer and Down-converter Mixer Low Noise Amplifier (LNA) Phase Locked Loop (PLL) These four blocks are Intersil PRISM wireless LAN Chip Set. the information sequency through HFA 3841 into baseband HFA3861, in the 1 Mbps DBPSK mode, the I and Q channels are connected together and driven with the output of the scramble and differential encoder, For the 2 Mbps DQPSK , The serial data is formed into dibits or bit pair in the differetial encoder. on of the bits from the differential encoder goes to the I channel and the other to the Q channel. The I and Q channel are then both multiplied with the 11-bit Barker word at the spread rate. This forms QPSK modulation at the symbol rate with BPSK modulation at the spread rate. The 5.5 Mbps and 11 Mbps are CCK modulation the DQPSK encode, This will take the form of rotating the whole symbol by the appropriate amount relative to the phase of the preceding symbol.

The Baseband signal into quadrature modulation and demodulation the spreading and despreading the information sequency in the IF signal, this signal through HFA 3683 that receiver chain features a low noise, gain selectable amplifier (LNA) followed by a down-converter mixer. An up-converter mixer and preamplifier compose as transmit chain