

## ABSTRACT

A wireless LAN system is proposed to provide mobility for existing data communication services. This thesis presents a design of the wireless LAN card to transmit data at frequency of 80 MHz and receive data from MAC layer. Direct sequence spread spectrum and quadrature phase shift keying (QPSK) modulation technique are used in design. Filter and amplifier are used to increase the performance of the signal and reduce the noise, and this system supports a data rate up to 2 Mbps. The spread spectrum system design along with detailed description of hardware and software simulation is presented.

