# ANALYSIS OF PROXIMITY COUPLED RECTANGULAR PATCH ANTENNA AT WIMAX FREQUENCIES

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# ABSTRACT

In this study, the simulation an analysis of proximity coupled rectangular patch antenna is evaluated. Three different frequencies namely 3.5GHz, 2.5GHz and 2.3GHz have been selected since these frequencies are primarily used in WIMAX application. The performance of the antenna was evaluated by using CST software and the simulation results were described in term of return loss, VSWR, bandwidth and farfield characteristics. From the result obtained, the computed bandwidths from the three different frequencies are 4.9%, 3.96% and 3.62% respectively. The best antenna design is at 3.5GHz operating frequency which gives better performance in form of bandwidth, antenna gain and efficiency. The specialties of proximity coupled microstrip antenna are easy to design and contribute larger bandwidth compared to others.

# LIST OF CONTENTS