

ABSTRACT

The only best solution for long-term communication technology development is antenna (LTE). Because they are smaller in size but similar to other types of antennas, microstrip antennas are often used. This study aims to optimize the microstrip antenna using proximity coupled with appropriate parameters for wireless communication. This technique can also increase antenna gain and bandwidth. Based on the analysis based on the survey results, the resonance frequency is determined. = 3.493 GHz with a value of VSWR = 1.108, return loss = -25.76 dB, bandwidth = 108 MHz, where the lower frequency = 3.437 MHz, and the upper frequency = 3.545 MHz, and Gain 7.583 dB on iteration and simulation results for antennas with proximity coupled that works at 3.493 GHz Frequency. This is due to changes in antenna parameters and benefits from proximity-coupled technology by upgrading a single substrate to improve antenna performance for LTE applications.

Keywords: Antenna; Triangular Microstrip Antenna; LTE; feedlines; Proximity Coupled;