

ABSTRACT

Antenna is one of the important thing in wireless technology, the function of antenna is for transfer and receiving electromagnetic wave in free space. The deveopment of technology and the need for information requirements are expected to grow. So antena in the future created not just for single function but it can be use for many band with just one antenna.

Many method that can be done for to get wider bandwidth with microstrip antenna. One of the method is with pertubation on patch antenna, like H – Shaped patch antena. With pertubation on patch become H shaped microstrip antenna will get wider bandwidth, because when patch pertubated , quality factor will redacted than the energy stored under patch will ony fewer or less.

In this project the writer will do design and realization an microstrip antenna rectangular patch with patch modiflicated became H Shaped, with oprating frequency on 2,1GHz – 2,4 GHz the pattern radion is directional used to UMTS (2,1GHz), 4GLTE(2,3GHz). The material of substrat is FR4-Epoxy, and VSWR < 2 in that frequency. The antenna has simulated by CST Suite Studio 2016.

Keyword : rectangular, wideband, H – Shaped, patch, CST, UMTS, 4GLTE