

ABSTRACT

Technology developed getting faster every day. In that case its necessary to increase the quality of the tools that used for that development. One of the way to increase the quality of the tools on transmission part specially is using MIMO technique on the antenna.. MIMO technique is used to increase the performance capacity from the antenna on the implemented system and already support for wireless connection such as WiFi according to 802.11N standard which is wireles connection standard.

Microstrip antenna is an antenna with many advantages, such as having a relatively small size, inexpensive for the realization process, and has flexible working frequency that make it can work in almost all working frequency range. Microstrip antenna also have components that can easily modified as needed.

In this final project, will realized MIMO 2X2 Microstrip Antenna with H-resembling slot that will work on 802.11N WiFi working frequency, which is at 5,2 GHz frequency. As a transmitting antenna on WiFi technology, it is important for this antenna to have sufficient Gain and Bandwidth, as it is related to how well this antenna can transmit WiFi signal to the users around it and on what frequency this antenna can work well. Besides that we need to make sure the large angle of WiFi emission that can be covered by this antenna. This antenna has unidirectional radiation pattern and linear polarization.