

ABSTRACT

Technology developments are more advanced and rapidly developing ,so that the needs of information that should be achieved is increased .that mean there must be technology that support it .The more the needs of information means there must be access meet in all places. Moreover there are still many areas having bad signals and the wifi power not good .

One way to improve the quality of wifi is from its antenna. Mimo technique is a technique that is used on antenna to increase the performance capacity and wireless system .With antenna mimo technique that is in this final project will be designed and realized a 2x2 MIMO antenna that can work in the 5.2 GHz frequency and can be applied in the wifi technology. In addition to the standard IEEE 802.11n which is a wireless networking standard that supports MIMO technology that can increase data rate.

The result of the fabrication 2x2 microstrip MIMO antenna has the value of VSWR ≤ 1.335 , return loss ≤ -16.608 dB, gain ≥ 3.33 dBi, nilai mutuak coupling ≤ -22.512 , has bidirectional radiation pattern, and has the circular polarization on antenna 1 and the ellipse polarization on antenna 2.

Keyword: Microstrip Antenna, MIMO, Wifi, EMC