

ABSTRACT

The rapid growth of wireless and mobile communication system in the world is faster and immeasurable, so that emerging many new standards technological and sophisticated progressively. One of them, the realization of the antenna microstrip final project on frequency 2,35 GHz for the WIMAX application.

This final project will be designed and realized array circular microstrip on the frequency (2,3-2,4) Ghz to support WIMAX technology, with calculate dimension of the antenna by theory and then with Ansoft HFSS 9.2 for the tool of simulation before fabricated process. In this simulation will be held repetition of the size of the antenna to get the best result. To get the best result, the antenna will be changed the size of the stripline with transformtor $\lambda/4$. This result, will be implementated using thick film technology with alumina substrate, the thickness of this substrate is 0,639 mm. Gain of this antenna is more than 5 dBi.

Key Word : Microstrip Antenna, WIMAX, thick film, alumina
