ABSTRAC

The communication technology development in modern wold grows faster and more various. One of them is WiMAX technology.Here in WiMAX, antenna has an important role in information receiver and transmitter as electromagnetic wave transformator whic is got through transmission channel from and to free area.

At this final project, rectangular patch microstrip array antenna is design at frequency 2300-2400MHz, to support WiMAX technology by counting arean dimension and using Ansoft HFSS 9.2 software as a simulation tool before doing the pabrication.In this simulation, carried out dimensional design of patch antenna in accordance specification of antenna design, beside that change the size of stripline based in theory where the function is transmission lines, and matching impedance using transformator λ/4 . The simulation result is implemented by using material, which is PCB with 1,66 of thickness. The Expecting gain in this final project more than 10 dBi.

Keyword: Microstrip antenna, rectangular , and WiMAX