

## **ABSTRACT**

Power Combiner used at receiver to combine some powers from module antenna receiver. This Wilkinson Power combiner can be used for combining some input signals with the same phase to one output signal because of its reciprocal character. This Power Combiner has a high isolation value because it use isolation resistor.

This final project is done by design and realization of Power Combiner microstrip with four input at frequency 2,3 GHz – 2,4 GHz. By using microstrip technology that is Epoxy (FR4). In its design using Ansoft Designer Student Version then realized.

To get information about performance and characteristic of the designed prototype, so Power Combiner is tested with Network Analyzer. The parameter that tested are Return Loss, Insertion Loss, Phase Difference, and Isolation between input port. Result of the measurement, mostly has fulfilled the specification although there is still deviation but it can be tolerated.

**Key Word : Microstrip Power Combiner, Wilkinson, Four Input**