DESIGN AND SIMULATION 2.4GHZ COUPLED PATCH MICROSTRIP ANTENNA

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ABSTRACT

A microstrip or patch antenna is a low-profile antenna that has a number of advantages over other antennas it is lightweight, inexpensive, and easy to integrate with accompanying electronics.

This paper presents the design, simulation and measurement of an electromagnetically couple patch antenna.This microstrip antenna are using the same permittivity substrates.The coupled patch microstrip antenna are designed to operate at approximately 2.4 GHz with VSWR less than 2 at the resonant frequency.

A model of this type of antenna was presented and the design limits were investigated. A substrate known as RT Duroid 5880 and RO4350B substrate, which has an effective permittivity of 2.2 and 3.4,and thickness of 1.57 mm was used in designing this antenna. The theoretical analysis was described and data were presented and compare with other theoretical and experimental results.

Then, software called MSTRIP40 was used in this project to design and to simulate the performance of the coupled patch microstrip antenna before further working were

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