

# Dual Resonance Proximity Coupled Patch Antenna

**MICANS INFOTECH**

# ABSTRACT

In this paper there are four different shape of proximity patch antennas (straight, trimmed, trapezoid and ribbon). The minimum input match achieved with the straight proximity patch antenna as  $-39.68$  dB. The maximum gain is achieved with the ribbon proximity patch antenna as  $12.1$  dB. Simulation and measurement results are presented. There is a perfect match with simulated and measured gain. The antenna is first demonstrated example of working with four different geometries, having satisfactory gain and input match.

# EXISTING SYSTEM

- The design and test of a proximity coupled patch antennas constructed from relatively high quality dielectric material.
- Two dielectric substrates are used such that the feed line is between the two substrates and the radiating patch is on top of the other substrate.
- The purpose of this work is to make a comparative study on the technique that helps to overcome the bandwidth constraint of microstrip patch antennas and to propose the better technique by taking different consideration such as the antenna gain, bandwidth and related issues.

# PROPOSED SYSTEM

- In proposed system, there are four different shape of proximity patch antennas (straight, trimmed, trapezoid and ribbon).
- Dual resonance has been achieved with the ribbon shaped proximity patch antenna.
- The maximum gain was achieved with this antenna among all four antennas. The ribbon proximity patch antenna has dual resonance with high gain.

# SYSTEM REQUIREMENTS

## HARDWARE REQUIREMENTS:

- Processor - intel core i3
- RAM - 2GB
- Hard Disk - 20 GB

## SOFTWARE REQUIREMENTS:

- Ansoft HFSS(High Frequency Structure Stimulator)

# REFERENCE

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