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## Abstract

In this paper a printed microstrip patch antenna for bands S, C, X and Parts of L, Ku is proposed. The proposed antenna consists of a beveled CPW irregular pentagonal patch on one side of dielectric substrate and c-shape independent piece in the other side, the dimension of this antenna is (33×30) mm<sup>2</sup>. Simulated results indicate that the antenna achieved bandwidth ( $S_{11} \leq -10\text{dB}$ ) ranges from 1.48-14.2 GHz and give gain varying from 0dBi to 4.3dBi. The proposed antenna exhibits a good characteristics performance. The proposed antenna is fabricated and tested practically and found good agreement between the simulation and measured. This antenna is suitable for the applications that operate in these bands.

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### Index Terms

Computer Science

Wireless

### Keywords

Wide-Band Antenna, Return Loss, Voltage Standing Wave Ratio, Radiation Pattern, Group Delay.