Application of Coplanar Antenna on Wireless Local Area Network and World Interoperability for Microwave Access

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ABSTRACT

This thesis discusses the resonance mechanism of coplanar waveguide antenna. We change the antenna geometry and use EM software to simulate and discuss the results. The antenna printed on cheap FR4 printed circuit board consists a rectangular aperture ground plane and a T-shaped exciting stub. The simulated results are simular with the experimental results. The bandwidth is 5.1 GHz(2.2 GHz-7.3 GHz).The frequency bandwidth can apply effectively in WLAN and WiMAX. The wild bandwidth will have the EMC problems. This thesis also discusses the band-notch design for suppressing the un-used band and reducing EMC problems.

Keywords : coplanar waveguide、WLAN、WiMAX

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