Abstract

The characteristics of the proposed antennas have been investigated through computer simulation for Ultra wideband (UWB) application. The proposed antenna has achieved good impedance matching, consistent gain, stable radiation patterns and consistent group delay over operating frequency band. A coplanar waveguide (CPW)-fed ultra wide band antenna is presented. The UWB antenna consists of a rectangular patch, which is etched onto an FR4 printed circuit board(PCB) with an overall size of 30mmX35mmX1mm. The simulation shows that the UWB antenna achieves good impedance matching, consistent of gain, and enhancing the operating bandwidth. The correlation between the mode-based field distributions is discussed. Extended from the UWB antenna, three notch designs are also presented as a desirable feature for UWB application at 8.7&10.2GHz.

References

1. Ying-Ying Yang, Qing-Xin Chu, and Zhi-An Zheng “Time Domain Characteristics of


Index Terms

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Keywords

Band-notched characteristics, CPW-fed UWB antennas, Return loss, PCB, Slot, Y-parameters, z-parameters.