

Design of a Compact Microstrip Patch Antenna for LTE Applications by Applying FDSC Model

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Abstract : In this paper, a compact microstrip patch antenna is designed for mobile LTE applications by applying the frequency-dependent Smith-Chart (FDSC) model. The FDSC model is adopted in this research to reduce the error on the frequency-dependent characteristics. The Ansoft HFSS and various techniques is applied to meet frequency and size requirements. The proposed method within this research is suitable for use in computer-aided microstrip antenna design and RF integrated circuit (RFIC) design.

Keywords : frequency-dependent, smith-chart, microstrip, antenna, LTE, CAD

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