Design of 4G Antenna for Mobile Handset

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Abstract

A compact multiband planar antenna is designed for mobile phone applications in this paper. A planar monopole antenna into distributed radiating elements has designed to obtain good antenna performance. The proposed antenna is combined of a chopped circular radiator with a meander line and an L-strip coupled element which is an extension of the ground plane. A chopped circular patch and L-shaped coupling strip generates lower band and separate radiator and meander lines generates upper band. A planar structure has dimensions as 17.6 × 56 mm. Such a planar structure has printed on circuit board. Antenna covers wireless communication bands as LTE 750, GSM 850, GSM 900, DCS 1700, UMTS-2110, and UWB 3100. The designed antenna performance has checked with the help of IE3D simulation software. The proposed antenna has designed and tested practically.

References

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**Index Terms**

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