Abstract

A small antenna which works in ten bands for slim and wide screen internal smartphone application is proposed here. It consists of a feeding strip, a coupling strip and shorting strip, which can be easily printed on the FR4 substrate. In this scheme three chip inductors and a chip capacitor are loaded on the strips. A parallel resonant circuit is introduced in the design in order to enhance the bandwidth of lower bands. This antenna has a size of 5x40mm and a height of 2mm which is promising for slim and wide screen smartphones. The proposed antenna can operate in GSM850/DCS/PCS/UMTS2100/LTE2300/2500/2690, WiMAX-3100/3500, Amateur radio and Bluetooth frequency bands. The design considerations
and the antenna parameters are explained in detail.

References


Index Terms

Computer Science

Communication
Keywords
Low-profile  Parallel Resonant Circuit  Ten Band Antenna.