Abstract

Continuous researches are carried out on different identification technologies. The Radio Frequency IDentification (RFID) is the well-known one. The most RFID systems used are the passive systems based on backscattering modulation. In this paper, analysis and design of a Dual IFA (Inverted F Antenna) Tag antenna are proposed for UHF RFID applications. The antenna is designed to operate at 0.4 GHz and 2.4 GHz; it is fabricated on the FR4 substrate with dielectric constant of 4.4. The antenna fundamental parameters such as return loss, radiation pattern and current distribution are presented. Simulation tool, based on the FIT (Finite Integration technique), (CST Micro Wave Studio) has been used to analyze the antenna. The proposed dipole antenna is simple and robust in design.

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Index Terms

Computer Science Wireless

Keywords

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