Abstract

Wireless communication system and technology opened a new horizon around the world through electromagnetic spectrum. As the technology evolving demand for high and continuous data connectivity in satellite and radar communication has been growing faster, researchers are facing challenges to integrate cost efficient, miniature size and multiband operating antenna in wireless devices. Microstrip Patch Antenna can fulfill all requirements but there is always a trade-off between the performance and design. In this paper modified slots with reconfigured E shapes Microstrip Patch antenna is designed and analyzed for multiband wireless application. The probe feeding technique and design structure provides the antenna to operate in five different frequencies. The antenna resonates at 7.81 GHz in C band, 8.31 GHz, 9.65 GHz and 11.86 GHz in X band, and 13.2 GHz and 14.79 GHz in Ku band with return loss of -19.26 dB, -24.82 dB, -13.18 dB, -33.61 dB, -12.46 dB and -12.04 dB respectively of proposed antenna have been examined and discussed.
- Razin Ahmed, Md. Fokrul Islam, "E shaped Microstrip Patch Antenna for Ku band," Published in International Journal of Computer Applications Volume 80, No. 6, October 2013

Index Terms

Computer Science  Communications

Keywords

Microstrip Patch Antenna (MPA)  Rectangular Microstrip Patch Antenna (RMPA)
Electromagnetic (EM)