{tag} {/tag}

IJCA Proceedings on National Conference on Advances in Technology and Applied Sciences

NCATAS - Number 2

Year of Publication: 2014

Authors:
Ashish Mathur

Geetika Mathur

Harsh Dutt Mathur

{bibtex}NCATAS1612.bib{/bibtex}

Abstract

In this paper, the radiation performance of a monopole inverted T shape patch antenna designed on glass epoxy FR4 substrate. The proposed design is capable of providing enhanced bandwidth to cover Wi MAX, Wi Fi , WBAN and Bluetooth operations at Absolute Bandwidth (GHz) Below -10 dB is 2. 4GHz to 3. 8 GHz = 1. 4 GHz Second 5. 2 GHz to 6 GHz = 0. 8 GHz and Third 7 GHz to 8. 6 GHz =1. 6 GHz allotted by IEEE 802. 16 working group for Wi

MAX applications. The performance of proposed antenna is optimized considering at different conditions to obtain an antenna with dual band and high bandwidth performance. The Simulated results for various parameters like radiation patterns, total field gain, return loss, VSWR, input impedance and radiation efficiency of proposed antennas are also calculated with high frequency structure simulator HFSS. The value of return loss, VSWR and input impedance are measured using VNA.

Refer ences

- Ashish Mathur ,Deepak Sharma,Geetika Mathur "Design and Simulation of Dual Band Patch Antenna for Ultra Wide Band (UWB) Applications Using HFSS, ICMARS2012- Jodhpur, Volume 1, Issue 1 pp. 771-774, December 11-15, 2012
- Ashish Mathur ,Deepak Sharma,Geetika Mathur "Design and Simulation of Rectangular and Half Ring Patch Antenna for Ultra Wide Band (UWB) Applications Using HFSS, ICMARS2012- Jodhpur, Volume 1, Issue 1 pp. 296-300, December 11-15, 2012
- Ashish Mathur ,Deepak Sharma,Geetika Mathur "Design and Simulation of Dual Band Patch Antenna for ISM, WI-MAX and C-Band Rejection Using HFSS" in International Conference in Advancement on Information Technology (ICAIT), Souvenir March 22-23, 2013.
- Prof. P. S. Ashtankar and Dr. C. G. Dethe "Design and Modification of Circular Monopole UWB Antenna for WPAN Application Computer Engineering and Intelligent Systems ISSN 2222-1719 (Paper) ISSN 2222-2863 (Online) Vol 3, No. 5, 2012
- C. Balanis, Antenna Theory: Analysis and Design, New York, John Wiley & Sons, Inc. , 1997.
- Shelly Chawla, Jagtar Singh, Paras Chawla "Single to Multiband Frequency Technique for Wireless and Telecomm Microstrip Antenna Design" International Journal of Soft Computing and Engineering (IJSCE) ISSN: 2231-2307, Volume-2, Issue-5, November 2012. [7 Radouane Karli and Hassan Ammor "Design of Microstrip Patch Antenna for 3. 6 GHz WIMAX Applications " European Journal of Scientific Research ISSN 1450-216X Vol. 88 No 4, pp. 556-564, October, 2012.
- Priya Upadhyay, Richa Sharma "Design and Implementation of Series Micro Strip Patch Antenna Array For Wireless Communication" Int. J. Computer Technology & Applications, Vol 3 (5), 1769-1774 ISSN: 2229-6093 Sept-Oct 2012
- K. Naga Mallik, Ch. Radhika, D. Ujwala, H. M. Ramesh, A. Gowtham Kumar, P. Karthik "A Compact Microstrip Patch Antenna with Triangular Snipped Slot for Wireless Applications" International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-1, Issue-4, April 2012.
- Swapnil Thorat Raj Kumar "Design of Rectangular-Cut Circular Disc UWB Antenna with Band-Notched Characteristics" International Journal of Engineering Science and Technology (IJEST) ISSN: 0975-5462 Vol. 4 No. 04 April 2012.
- J. V. Suresh, N. Anand Ratnesh, Siva Rama Krishna. K, L. Yogesh, B. Anil Babu, K. V. V. Kumar "Design of Far-Field Focusing Circular Patch Antenna at 5. 8GHZ for RFID Applications " International Journal of Engineering Research and Applications (IJERA) ISSN: 2248-9622 www. ijera. com Vol. 2, Issue 2, pp. 640-644, Mar-Apr 2012.

Index Terms

Computer Science Communications

Keywords

Ultra-wide Band Multiband Band Patch Antenna