



International Journal on Recent Researches In Science, Engineering & Technology

A Journal Established in early 2000 and upgraded to International journal in 2013 and is in existence for the last 10 years. It is run by Retired Professors from NIT, Trichy.
It is an absolutely free (No processing charge No publishing charge etc) Journal Indexed in DIIF and SJIF.

Research Paper

Available online at: www.jrrset.com

**Chief Editor : 1. Dr. M.Narayana Rao, Rtd. Professor, NIT, Trichy.
(Engg.&Technology division)**

**2. Dr. N.Sandyanani, Ph.D., Professor,
Chennai based Engg.College, (Science division)**

ISSN (Print) : 2347-6729
ISSN (Online) : 2348-3105

**Volume 1, Issue 9,
September 2013**

**DIIF IF :1.46
SJIF IF: 1.329**

Analysis of MIMO- OFDM System For Ultra Wide Band

N. Gomathi

Abstract - Literature review revealed that multiple-input multiple-output (MIMO) systems hold the potential to drastically improve the spectral efficiency and link reliability in future wireless communication systems. The multi-input multi-output (MIMO) Orthogonal Frequency Division Multiplexing (OFDM)based Ultra –Wire band (UWB) systems are set to revolutionize consumer electronics, in the near future. With low power consumption, high data rates up to 480 Mbps, large spatial capacity and low interference with other wireless services due to low power spectral density, MIMO-OFDM based UWB systems are the most sought after for wireless communications. The application targeted by this design was the band 1 of 'band group 1' based UWB system with a center frequency of 3.432 GHz and a bandwidth of 528 MHz.