Abstract

In modern short range wireless applications, RF, Bluetooth and UWB communication schemes are recommended with respect to power consumption, low/high data rates and location capability. Though special bandwidth is not allocated to UWB, coexistence of such signal in the available RF environment is a critical issue and hence analysis of UWB signal with respect to interference is very much required in dedicated WPAN networks. In this paper, effect of UWB interference for existing systems such as GPS, FWA, UMTS, DCS1800 is analyzed. Communication path distance is directly proportional to the UWB signal pulse width. To correctly define the UWB signal this functionality is realized by composing UWB signal and results are simulated using MATLAB.

Reference


**Index Terms**

Electronics

Communication Systems

**Key words**

wireless applications

UWB

WPAN