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**A STUDY OF MODELLING OF ULTRA HIGH BANDWIDTH AT
LOW POWER CONSUMPTION**

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ABSTRACT

Ultra-wideband technology is a new wireless technology. The advantages of ultra wideband technology are high bandwidth, high data rate, and low cost and low power consumption. A conventional type of UWB communication is impulse radio and other different types of UWB systems are available. They act as an overlay system with other existing narrowband (NB) radio systems overlapping with their bands. The issue of coexistence and interference of UWB systems with current indoor wireless systems must be considered for a robust communication link. Designing of an optimized interference mitigation technique for UWB channel is main concern here. As a part of this goal here we are presenting detail study of UWB pulse in time and frequency domain along with the simulated model of UWB channel.

***Keywords: Ultra-Wideband Technology, High Bandwidth, High Data Rate, Low Cost,
Low Power Consumption***