World Academy of Science, Engineering and Technology International Journal of Electrical and Information Engineering Vol:9, No:08, 2015

Investigation of Design Process of an Impedance Matching in the Specific Frequency for Radio Frequency Application

Authors: H. Nabaei, M. Joghataie

Abstract: In this article, we study the design methods of matched filter with commercial software including CST Studio and ADS in specific frequency: 900 MHz. At first, we select two amounts of impedance for studying matching of them. Then, using by matched filter utility tool in ADS software, we simulate and deviate the elements of matched filters. In the following, we implement matched filter in CST STUDIO software. The simulated results show the great conformity in this field. Also, we peruse scattering and Impedance parameters in the Derivative structure. Finally, the layout of matched filter is obtained by the schematic tool of CST STUDIO. In fact, here, we present the design process of matched filters in the specific frequency.

Keywords: impedance matching, lumped element, transmission line, maximum power transmission, 3D layout

Conference Title: ICEEN 2015: International Conference on Electrical Energy and Networks

Conference Location: Kuala Lumpur, Malaysia

Conference Dates: August 24-25, 2015