

ABSTRACT

A maximum power transfer is a must, in order an information signal is able to be transferred from a particular transmitter to a particular receiver. In a certain condition, an unmatched impedance between transmission medium side with the transmitter or the receiver side is a constraint, to deal with that an additional device is needed which is called matching impedance. In order to design this device, we faced a complex calculation which involving real and imaginer numbers. Thus, with an assistance of a software, which can be use to facilitate the process, is needed. In this final project, I made matching impedance software using single and double stub whether it's serial or parallel in pair, and with the edge of the lines is open or short from the loss lines point of view, as an enhancement from the earlier project. The software will be facilitated with smith chart visualization and equal visualization of transmission line design and a simplified program appearance. Software performance is adequate and reliable.

Key Word: Matching Impedance, real & imaginer numbers, single stub, double stub and loss lines.