Motivation

Designing EMI filter is a very challenging job because in an electronic circuit generation of emission is very much obvious. An EMI filter minimizes these emissions or removes these emissions. Generally there are lots of filter that filter out noises from a device. Most of them can be made by regular paracytic components like caps, inductors etc. but in Emi filter we specially removes the common mode noise. It is act like a low pass filter. For this reason

In the linear simulation I can predict the voltages at the output and I can do it in nonlinear simulation and it match.