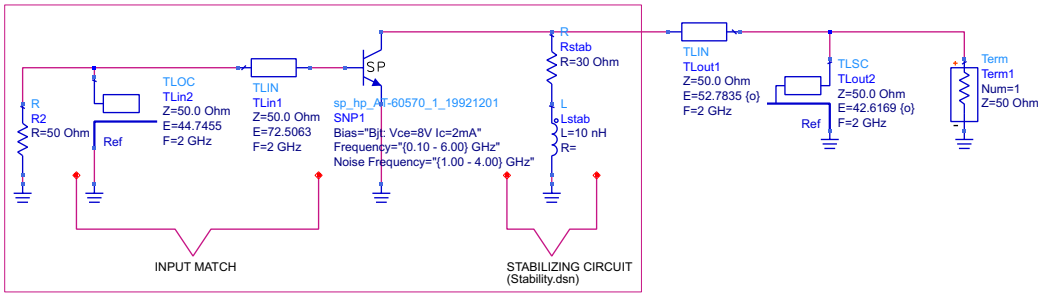

CREATE OUTPUT MATCHING NETWORK USING TLs

With the input matching network in place, the output of the amplifier is matched to 50 Ohms.

1) The input reflection of "S1" is set to the complex conjugate of the impedance to be matched to 50Ohms (in this case, "Opt", the optimum noise match).

2) The TLout1 and TLout2 lengths are optimized until the a perfect matching happens between load and the matching network i.e. untill mag(S(1,1))=0.

SIMULATIONS

S-PARAMETERS

S_Param
SP1
Freq=2 GHz

S-parameter simulation is run at a single frequency (2GHz).

OPTIM

Optim
Optim1
OptimType=Gradient
ErrorForm=L2
MaxIters=25
DesiredError=0.0
StatusLevel=2
FinalAnalysis="None"
NormalizeGoals=no
SetBestValues=yes
SaveSolns=yes
SaveGoals=yes
SaveOptimVars=yes
UpdateDataset=yes
SaveNominal=yes
SaveAllIterations=no
UseAllOptVars=yes
UseAllGoals=yes
SaveCurrentEF=no
EnableCockpit=yes
SaveAllTrials=no

GOAL

Goal
Gamma_out_Goal
Expr="mag(S(1,1))"
SimInstanceName="SP1"
Weight=1
LimitName[1]="mag_S11"
LimitType[1]="Inside"
LimitMin[1]=0
LimitMax[1]=0.0001
LimitWeight[1]=1