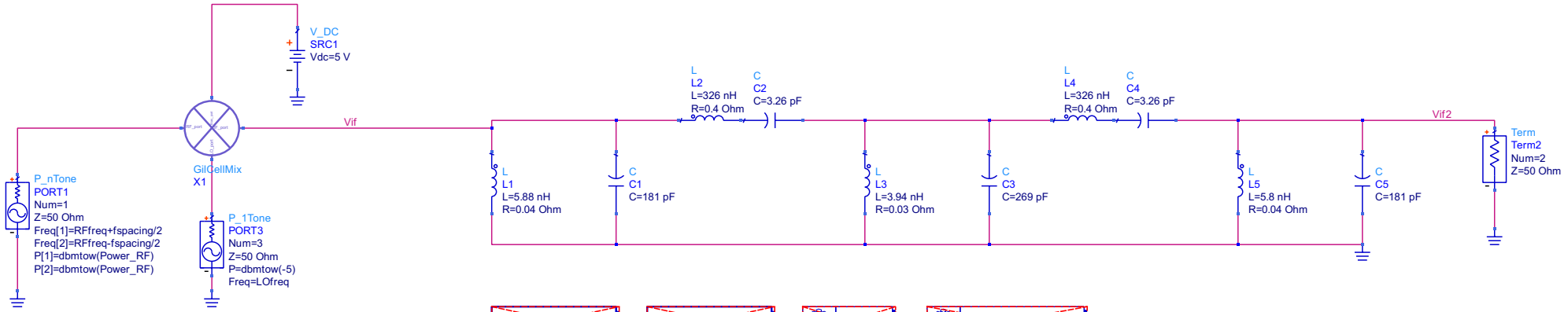

MeasEqn
Meas1
IP3output=ip3_out(Vif,{-1,1,0},{-1,2,-1},50)
VifTone=dBm(mix(Vif,{-1,1,0}))
ConvGain=VifTone-Power_RF[0]
IP3input=IP3output-ConvGain

VAR
VAR1
RFfreq=1.55 GHz
LOfreq=1.4 GHz
IFfreq=RFfreq-LOfreq
fspacing=100 kHz
Power_RF= -50 _dBm

OPTIONS
Options
Options1
Temp=16.85
TopologyCheck=yes
V_RelTol=1e-6
I_RelTol=1e-6
GiveAllWarnings=yes
MaxWarnings=10

GOAL
Goal
OptimGoal1
Expr="dBm(S(1,1))"
SimInstanceName="SP1"
Weight=1.0

GOAL
Goal
OptimGoal2
Expr="dBm(S(2,2))"
SimInstanceName="SP1"
Weight=1.0

OPTIM
Optim
Optim1
OptimType=Gradient
MaxIters=2000
SaveAllTrials=no

S-PARAMETERS
S_Param
SP1
Start=0.1 MHz
Stop=500 MHz
Step=100 kHz

HARMONIC BALANCE
HarmonicBalance
HB1
Freq[1]=LOfreq
Freq[2]=RFfreq+fspacing/2
Freq[3]=RFfreq-fspacing/2
Order[1]=5
Order[2]=3
Order[3]=3
UseKrylov=yes
Other=OutVar="Power_RF"