



Optim

Optim1

OptimType=Gradient

ErrorForm=L2

MaxIters=1000

P=2

DesiredError=0.0

StatusLevel=2

FinalAnalysis="None"

NormalizeGoals=no

SetBestValues=yes

Seed=

SaveSolns=yes

SaveGoals=yes

SaveOptimVars=yes

UpdateDataset=yes

SaveNominal=yes

SaveAllIterations=no

UseAllOptVars=yes

UseAllGoals=yes

SaveCurrentEF=no

EnableCockpit=yes

SaveAllTrails=no

Set "SaveSolns"="yes" to see values of VCE, ICE

for each iteration.

Set "SaveOptimVars" = "yes" to see values of RB1, RB2 and RC1 for each iteration.

Set "SaveGoals" to "yes" to see optimized values of VCE and ICE in data set. (The default is "no").

Results are saved in Bias_network.dds.

If SaveSolns, SaveGoals, and SaveOptimVars are all set to no, then only data in MeasEqns (measurement equations) will be output to the dataset. This will minimize dataset size.

GOAL

Goal

VCE_Goal

Expr="VCE"

SimInstanceName="DC1"

Weight=1

LimitName[1]="Limit1"

LimitMin[1]=7.99

LimitMax[1]=8.01

LimitWeight[1]=1

GOAL

Goal

ICE_Goal

Expr="ICE.i"

SimInstanceName="DC1"

Weight=1

LimitType[1]="Inside"

LimitMin[1]=1.99 mA

LimitMax[1]=2.01 mA

LimitWeight[1]=500

The "Goal" component must specify which simulation it refers to (in case the schematic contains more than one simulation control).

Note that VCE_Goal specifies a target of about 8V, while ICE_Goal specifies a target of about 2mA. Because of the units of the two goals, a weight is applied to the collector current goal so the voltage goal does not dominate the optimization.