

# RF Simulation Accuracy Comparison Between HiSIM and BSIM4 as Implemented in SmartSpice-RF

## Low Noise Amplifier Schematic as Accuracy Comparison Vehicle

Gateway - [N:\Systems\Desktop\PKD\_Tutorial\examples\lma\_single\_ended\_hnet.schlr Sheet 1]

File Edit View Draw Sheet Tools Simulation Window Help

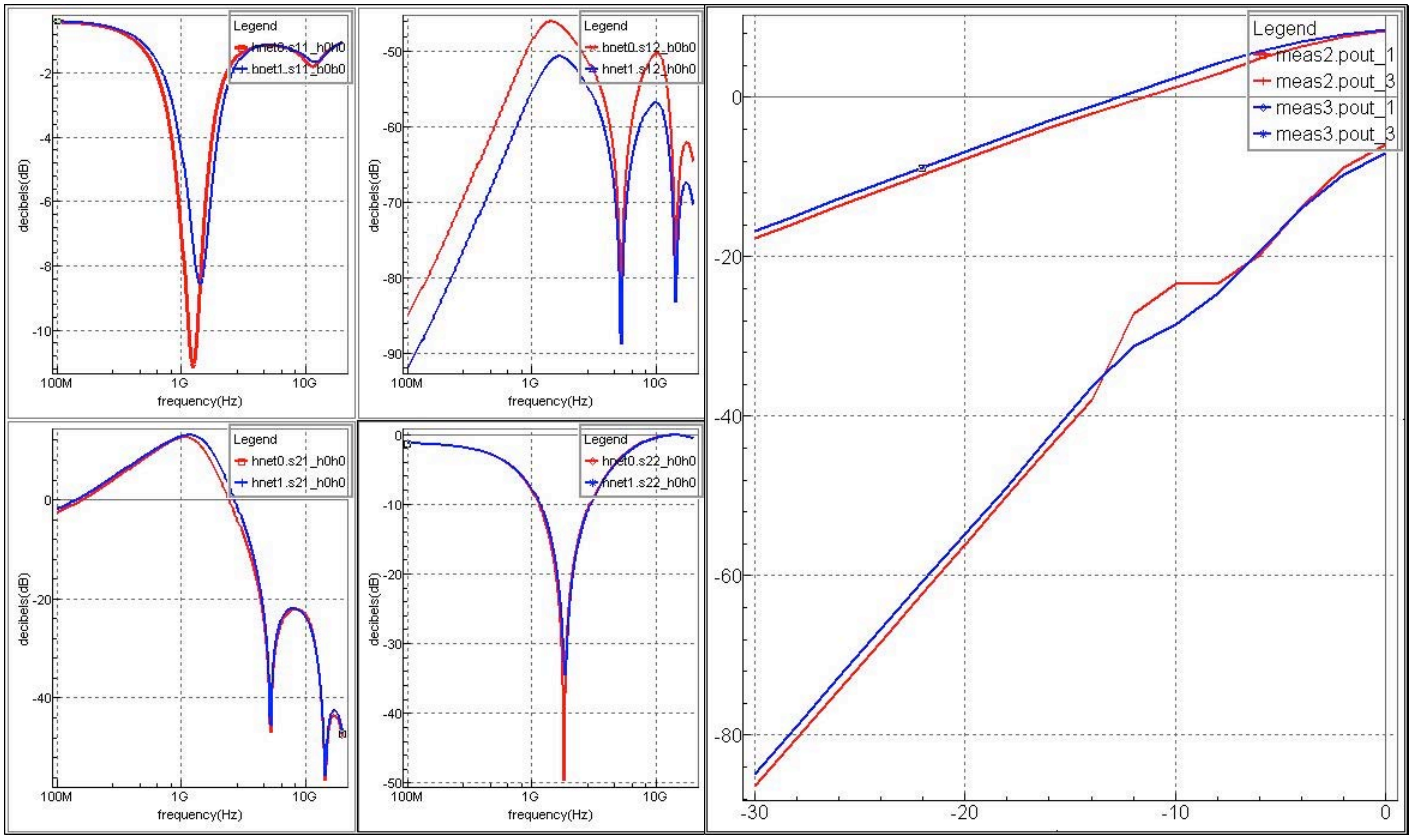
Libraries: RF, spicelib, subcircuit, TSMC\_cm018

PARAM PRF = -10

GATEWAY Schematic Editor 2.2.8.R (Thu Dec 16 11:16:45 PST 2004)  
Copyright © 1999-2004 SILVACO International Inc.  
Using communications server on 'jelutong.silvacocorp.com [localhost]'  
Finding all body files in workspace...  
Found all body files in workspace.  
The workspace <N:\Systems\Desktop\PKD\_Tutorial\examples\tsmc\_cm018.sws> was read in.  
Reading Drawing N:\Systems\Desktop\PKD\_Tutorial\examples\lma\_single\_ended\_hnet.schlr  
Finished reading in drawing.

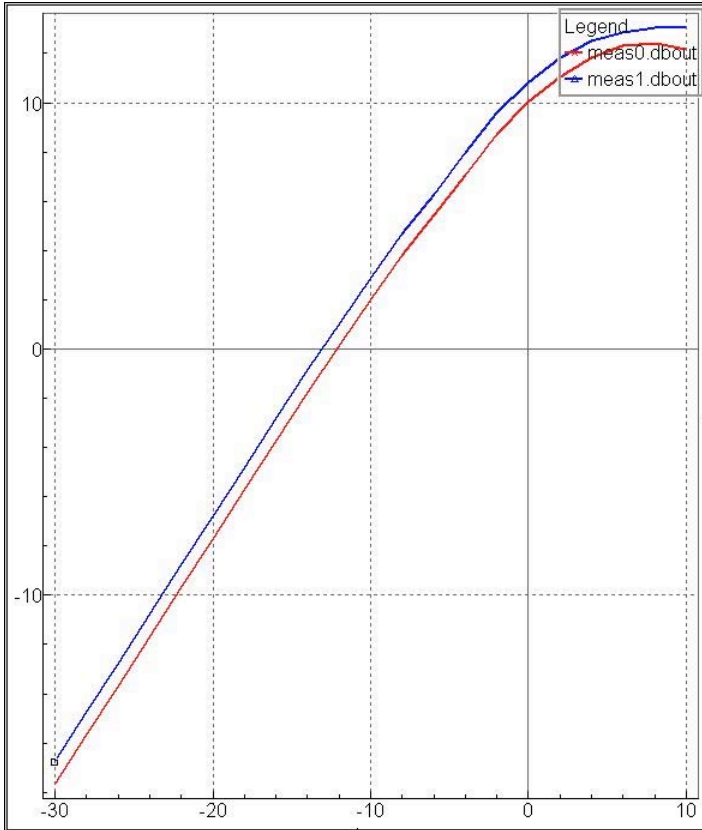
Output Cross Probes

Gateway 2.2.8.R © Silvaco 2004



S-Parameter Values

3<sup>rd</sup> order Intercept Point (IP3)



1dB Compression Point