

PSP102: Problem with Body-Effects in Native Device

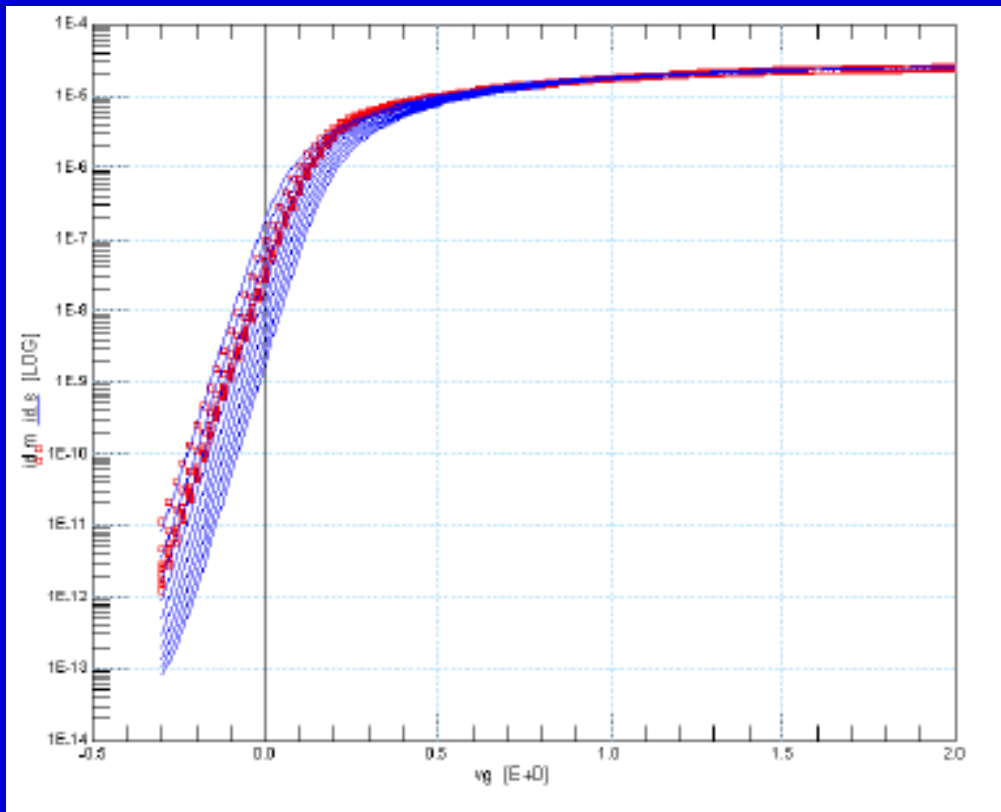
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Device Modeling
Maxim Integrated Products

PSP102 Modeling of Native's VT vs VBS

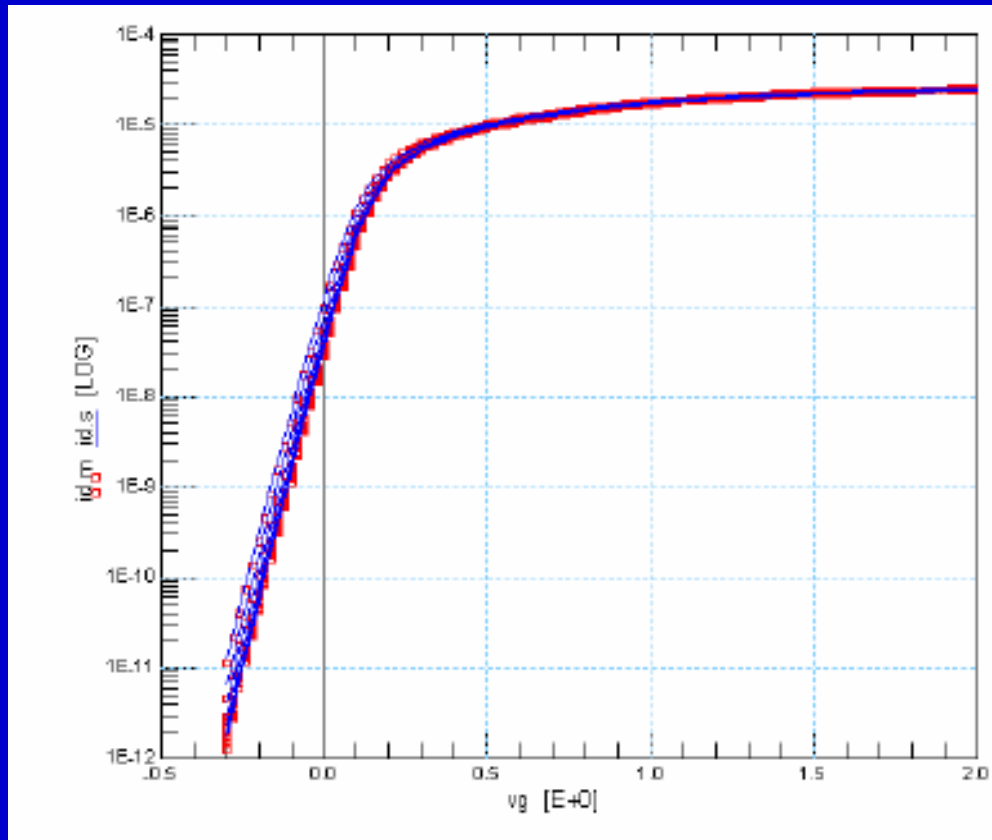
- Maybe it is because we are new at PSP102, we are not able to do better than below:
→ Perhaps related to the problem NXP discussed in Oct.



VBS=0 → -1.8

BSIM3 Modeling of Native's VT vs VBS

- BSIM3 could handle this set of VT vs VBS curves.



VBS=0 → -1.8

Summary

1. **We see particular PSP102 problem in fitting Native device's VT vs VBS behavior.**
2. **This problem could ultimately be the same problem NXP reported in Oct 2006, in Maastricht.**
3. **BSIM3 was able to fit this kind of VT vs VBS.**