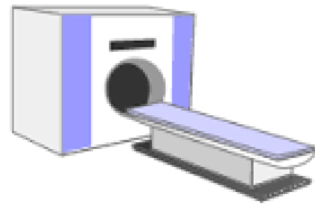
P087

1st International Symposium of Gunma University Medical Innovation and
6th International Conference on Advanced Micro-Device Engineering
(**GUMI&AMDE 2014**)

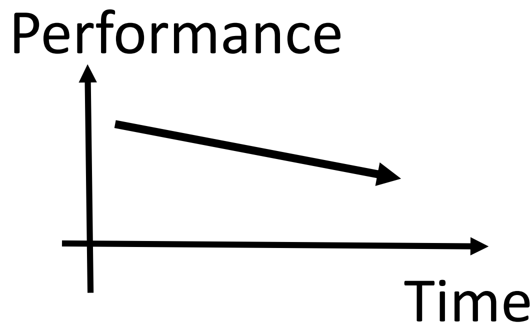
Reliability Modeling on 90 nm n-channel MOSFETs with BSIM4 Dedicated to HCI Mechanisms

Takuya Totsuka, Hitoshi Aoki, Fumitaka Abe, Khatami Ramin, Yukiko Arai,
Shunichiro Todoroki, Masaki Kazumi, Wang Taifeng, Haruo Kobayashi
Division of Electronics and Informatics, Gunma University, JAPAN



- Long time use
- Harsh environment

Unreliable



Same circuit density with smaller size

Probability to break ⬆

This research presents reliability modeling and simulation of advanced MOSFETs.