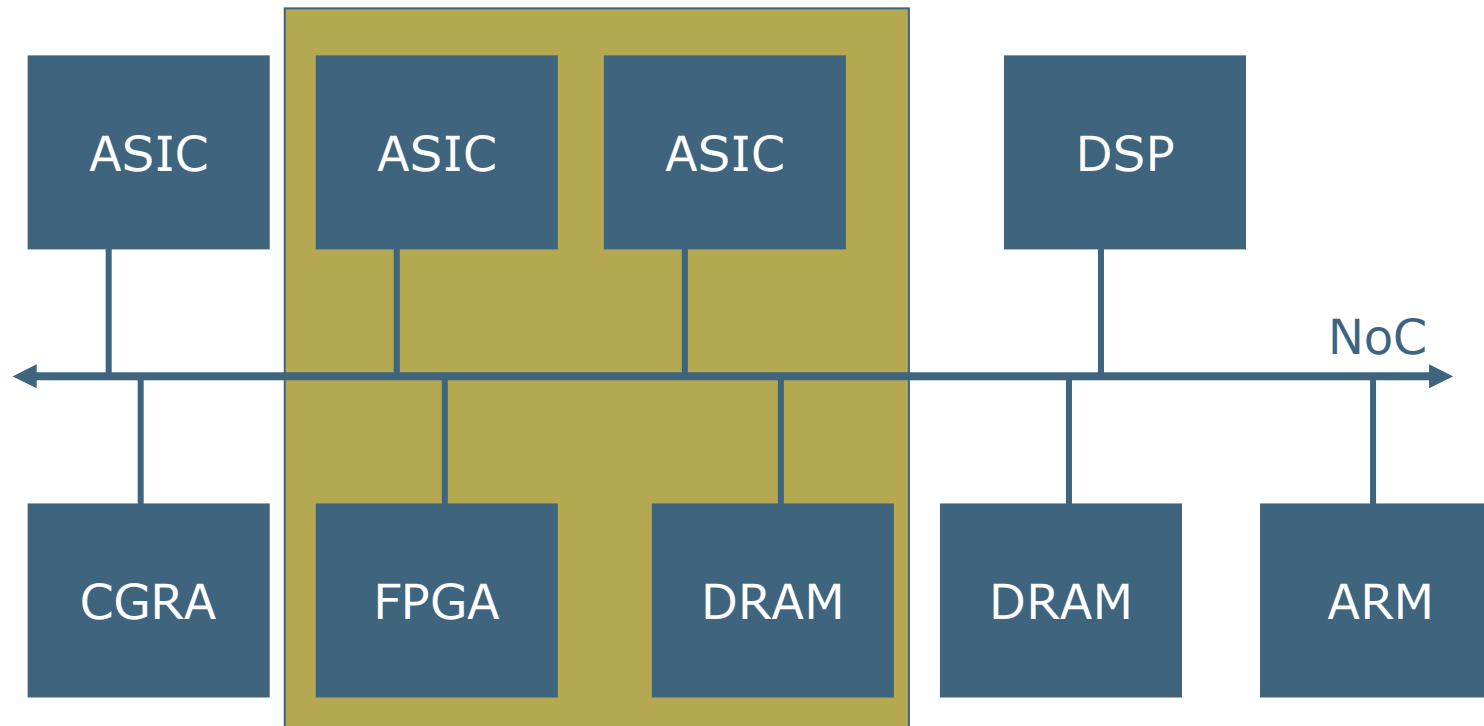


Technology-aware Virtualisation

Bjorn De Sutter



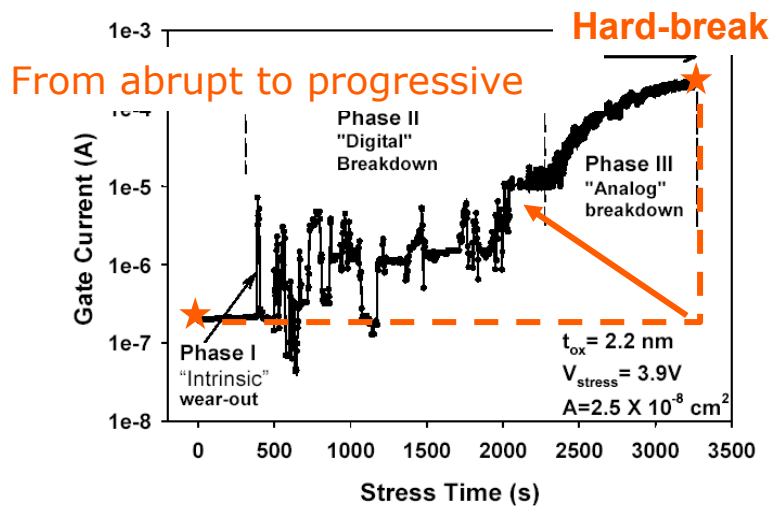
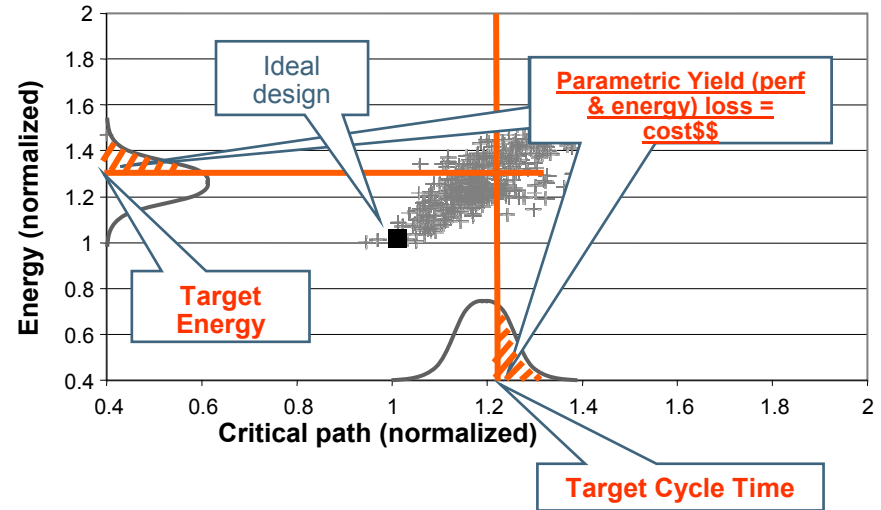
MPSoC design & virtualisation



- **Composability**
 - virtualize resources
 - virtualize application requirements
 - meta-data

Variability/Reliability brick wall: process uncertainty affects system yield and reliability guarantees

- Virtualize variability
 - need to pass run-time information to run-time manager
 - need to virtualize the information
 - on variability between MPSoC chips
 - on variability over time because of wear-out and degradation



Wear-out and breakdown model for dielectric breaks

