

Advantages of using TRADICA in design framework

... as compared to geometry pre-processor in circuit simulator or in subcircuit

- updates and new device configurations/structures outside of simulator
 - far easier and faster **implementation** and **testing**
 - only have to **maintain single source** of scaling, predictive, statistical code
 - works with **any circuit simulator** $\Rightarrow$ allows modular integration
- no limitation of script language constructs ($\Rightarrow$ higher flexibility and functionality)
 - **fast semi-numerical solution** of heat equation, substrate coupling, parasitic elements ...
 - **predictive** and **statistical** model equations (incl. **correlation between devices**)
- satisfies different design needs
 - easy generation of **compact model hierarchy** (topology changes, model compaction)
 - **automated generation** of other models from reference model
 - allows sophisticated **device sizing** methodologies aiding **circuit synthesis**
 - device simulator coupling **supports process development** and concurrent engineering
- expertise pooling and development continuity (especially as a product)
 - significant **cost savings** for development and maintenance