

#### Agilent EEsof EDA

## Device Modeling Services

# **RF Test Structure Design Service**



Leverage the expertise of Agilent EEsof EDA's Device Modeling Services to make your job easier and get your products to market faster and more economically.

Agilent EEsof EDA provides design services of on-wafer RF test-structures, one of the initial critical steps in electronic device modeling. Good RF test structures enable consistent model parameter extractions and are needed for RF parasitic characterization and de-embedding. Proper RF test structures address the issues of scalable modeling efforts and are also crucial for optimum device design. These test structures also generate layout out of passive/active devices for accurate characterization and model parameter extraction at DC, as well as RF frequencies. Agilent EEsof EDA generates the test structure layouts of passive/active devices for accurate characterization and model parameter extraction at RF/microwave frequencies and outputs industry-standard file formats such as GDS-II.

With the test structures in place, semiconductor foundries can efficiently model their devices.

Agilent EEsof EDA also has the expertise to accurately extract the models and implement a design kit, which enables easy access of the foundries' processes to high frequency IC designers.

### **Capabilities At a Glance**

- Layout of various individual transistors, capacitors, varactors, resistors and inductors for the development of models or as part of process characterization.
- Test structure designs that effectively minimize parasitics, which are associated with inter-connect metal lines and probe pads, for accurate device characterization and modeling.
- Appropriate test structures and standards, which enable the employment of up-todate calibration and de-embedding techniques for accurate RF/microwave measurements.
- Test structure design files are in industry formats, such as GDSII.

### **Other Modeling Services**

- Bipolar Transistor Modeling
- Noise Characterization (1/f and Noise Figure)
- RF CMOS Modeling
- Passive Component Modeling
- MESFET/HEMT Modeling
- IC Package Modeling
- Statistical/Corner Modeling
- Semiconductor RF Characterization



Contact your Agilent EEsof EDA field sales engineer for more information about Device Modeling Services.

For more information about EEsof's support and services offerings visit: http://eesof.tm.agilent.com/support

For more information about Agilent EEsof EDA, visit: www.agilent.com/find/eesof

For more assistance with your test and measurement needs visit: www.agilent.com/find/contactus

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