

1/f Noise Testing

Modelithics provides 1/f noise characterization services for on-wafer and packaged transistors and diodes. Measurements are performed in a screen room to minimize local electromagnetic interference and solutions to problems such as biasing filter networks and load resistances are provided.

The system provides a wide frequency response in order to determine corner frequencies for various devices like SiGe HBT, BJT, GaAs MESFET, pHEMT, HJFET. The measurement capability over temperature and over broad frequency ranges enables great versatility in solving your testing requirements. Modelithics can also provide non-linear transistor and diode models with 1/f noise fitting to address requirements such as improved phase noise predictions in oscillator designs.

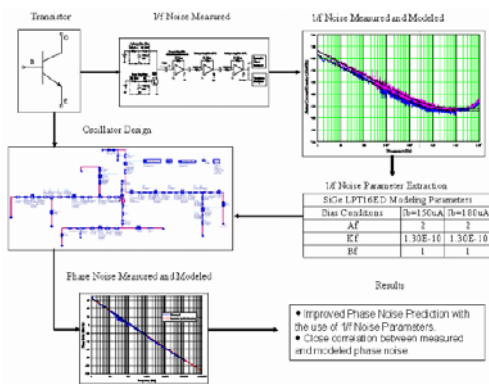
Contact us today to learn more about our noise testing services. Custom hardware and software solutions can be provided to ensure that all your specifications are addressed in the most time- and cost-efficient manner possible.

Our quality of service, customer response, and reliable delivery are reasons we can list many of the world's major electronic innovators are among our customers. So whether you need just 1/f noise testing or both testing and modeling services combined, we look forward to the opportunity to provide similar high-quality data and services to you and your company.

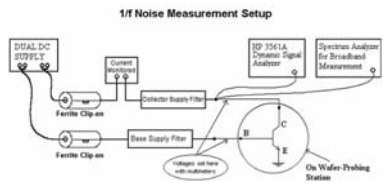
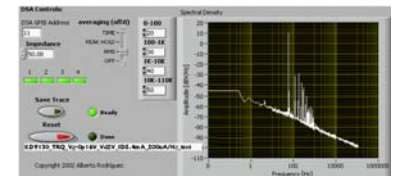
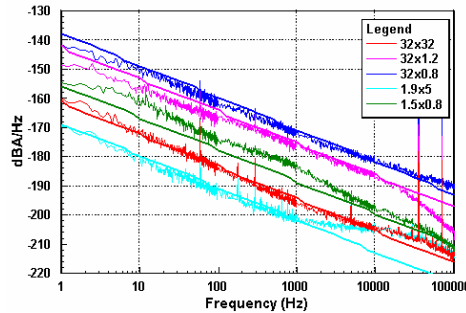


- Standard noise testing to 100kHz
- Broad-band service to 1MHz also available.
- On-Wafer Probing Station & Temperature Controller: 25°C to +90°C
- Low Noise Current Pre-Amplifier, bias filtering and battery supply operation—as required.

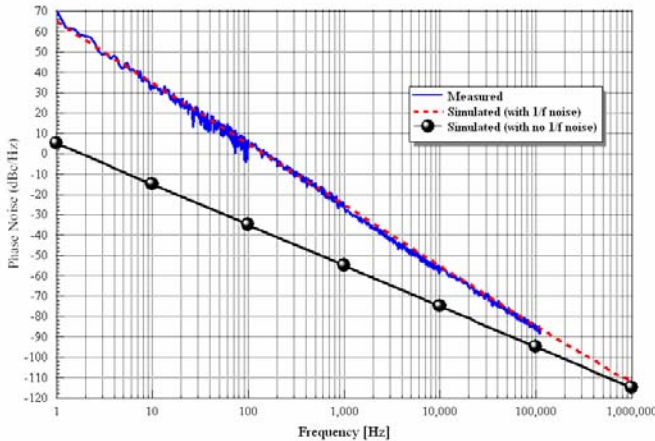
Example: Including 1/f noise in simulations



Example: Scalable NMOS BSIM3 models versus measured data



Improved Phase Noise Prediction with the use of 1/f Noise Modeling Parameters



Example: Various devices measured using the same DC Output Bias

