Parameter extraction services

Parameter extraction services XMOD has achieved successfully a large number of parameter extraction projects for a wide variety of processes, ranging from HiCUM scalable model development for the most advanced SiGe BiCMOS processes (with fT up to 200 GHz) to BSIM re-modelling of low cost foundry CMOS technologies. Whatever is the process you wish to use, depending on cost, performance or manufacturer, we can model it and provide you the best quality models. Single Parameter extraction methods are available

Model parameter extraction (SPICE-GP, HICUM, VBIC) for single geometry transistors. This solution is ideal for a limited number of devices used, e.g., for model evaluation for a given process or in special design applications.

Scalable parameter extractionGeometry scalable parameter extraction and generation (SPICE-GP and HICUM) and consulting for specific test structures and test chip design are available.This solution is preferred by most IC designers since it offers flexibility regarding circuit optimization as well as statistical design features.

High / Low temperature Models Your company has specific needs in very low or very high temperature designs (77 °K up to 250°C) well beyond the standard temperature range covered by your foundry of choice: XMOD can extend the design kit models to the range you need. We design the required test chips, measure the components and furnish new models for your prefered simulator. Low cost processes re-modelling You have identified a low cost foundry process which idealy match your designs requirements while providing the best cost reduction, but you don't trust the actual foundry models? XMOD can generate new physics based models for you, thus closing the gap between CAD and process technology.