

EASY MIGRATION

from TMA TSUPREM-4 and Medici TCAD Tools to SILVACO ATHENA and ATLAS

SILVACO and TMA-based TCAD process and device simulators share a common legacy from Stanford University. SILVACO and TMA-based tools are very similar in syntax, inputs, outputs and behavior because over the last 20 years SILVACO worked hard to ensure that our tools have TMA capability and compatibility. As TMA-based tools are no longer the focus of continued development at Synopsys, customers are left with expensive TCAD tools which are not maintained and have limited support. SILVACO has continued to develop ATHENA and ATLAS, our Stanford-based TCAD tools process and device simulators. SILVACO has continued to add new materials and new physical models to our tools to provide a solution for the latest semiconductor technologies. SILVACO software can do everything TMA-based tools can do that has a value today, plus a lot more. Buying SILVACO software is like buying a superset of TSUPREM-4 and Medici. Switching to SILVACO TCAD is simple and easy. TMA users who switch to SILVACO TCAD can preserve their legacy of work without having to recalibrate their model coefficients or learn new software.

ATHENA/TSUPREM-4 Compatibility Features

- Parser syntax for keywords, parameters
- if/else, loop/l.modify, assign control statements
- Physical models
- Material parameter defaults
- TSUPREM-4 mask file support
- TSUPREM-4 default or user-defined implant table support

ATLAS/Medici Compatibility Features

- Parser syntax for keywords, parameters
- if/else, loop/l.modify, assign control statements
- Physical models
- Material parameter defaults
- Application modules
- TMA ASCII TIF file and dopant profile import compatibility

Key Benefits of SILVACO's TMA Compatibility

- Supports all the same:
 - Physics
 - Syntax
 - Import file formats
- Existing TSUPREM-4/Medici input decks can be reused "as is" in ATHENA/ATLAS allowing straightforward transfer of years of know-how and calibration
- Compatibility features have been tested for years with existing TMA-based TCAD users