

ON THE ROAD TOWARDS SLASH

SMASH 6.7 significantly improves the speed and the accuracy of SPICE simulations, and makes the installation easier thanks to a new installer.

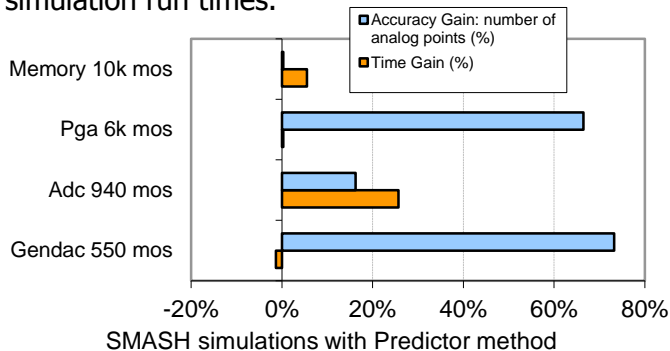
SLASH, merging SLED with SMASH, will provide an integrated user experience with a unified user interface for schematic driven simulation.

TIME STEP IMPROVEMENT

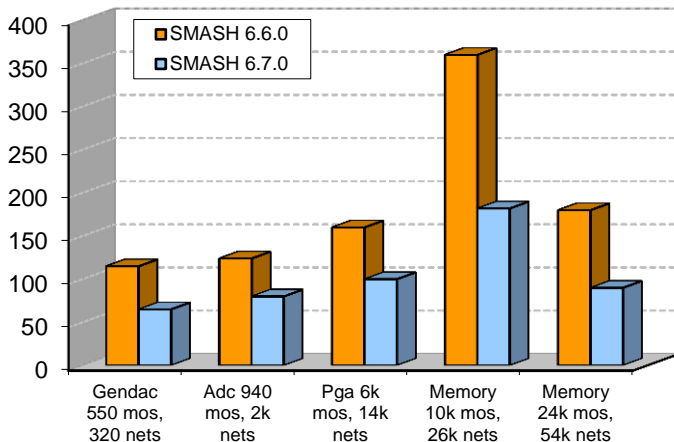
Thanks to the improvement of the LTE (Local Truncation Error) method used to manage the time step of transient analyses for analog designs, SMASH 6.7 is now twice as fast without any loss of accuracy.

ACCURACY IMPROVEMENT

The "Predictor" method has been adapted to all types of analog simulations (SPICE, Verilog-A, VHDL-AMS and ABCD) to increase accuracy of transient analog simulations without increasing simulation run times.



Run time (s)

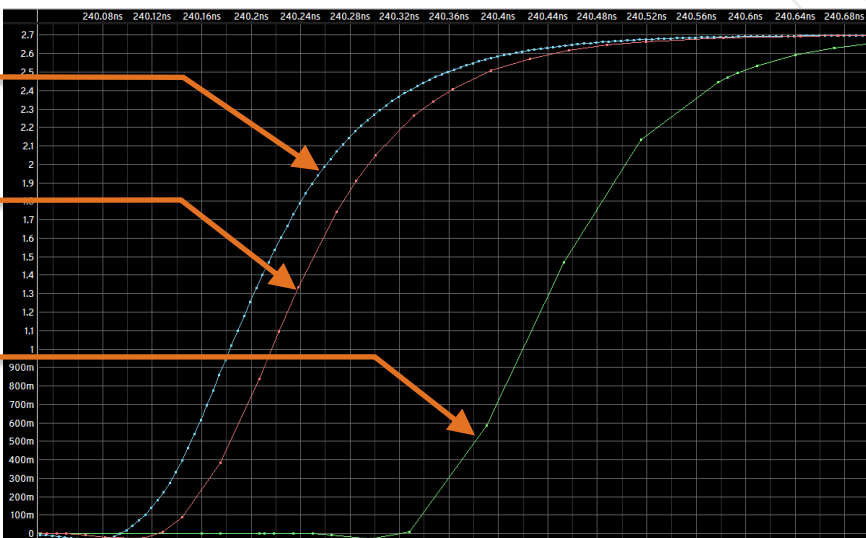


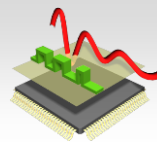
SMASH simulation run time with LTE checks

SPICE MODEL UPDATES

- Update of MOS transistors used with latest technology nodes:
 - BSIM-IMG v102.7
 - BSIM-CMG 110.0
 - BSIM6 v6.1.1
- Support of "DTEMP" parameter for almost all SPICE models.
- VFILE improvement to support Monte-Carlo and Sweep analysis.

- Reference (10 times slower)
- SMASH 6.7 with the predictor method (default setting)
- SMASH 6.6 (default setting)

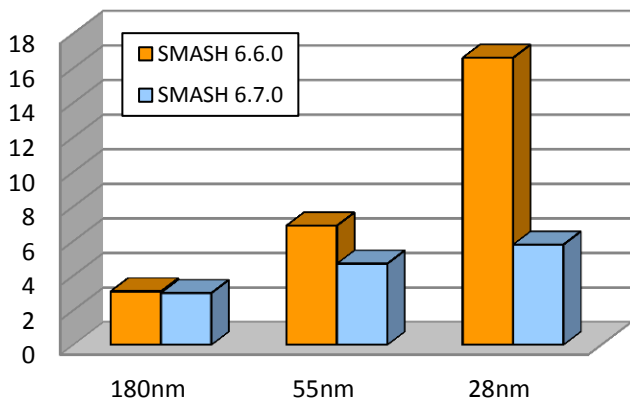




SPEED-UP OF CIRCUIT LOADING

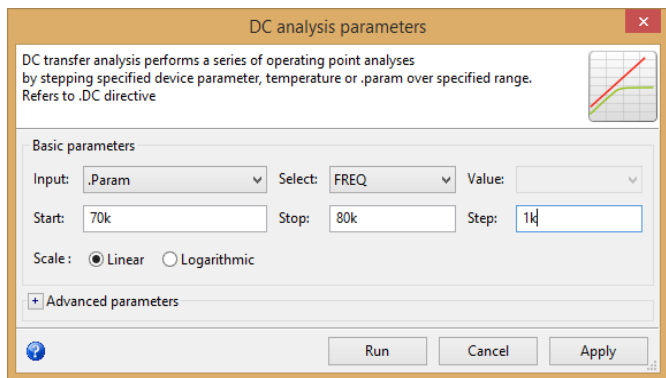
Improved evaluation of SPICE parameters to speed-up loading of SPICE netlists by a factor of 3 for advanced process nodes.

Loading time



DC ANALYSIS ON PARAMETERS

DC analysis on SPICE parameters (.param) is now available in SMASH to facilitate circuit analysis.



ON THE ROAD TOWARDS 64 BITS

The next spring version of SMASH for Windows and Linux will be a 64-bit version to provide performance gains for users with 64-bit systems. To partake in the SMASH 64-bit beta test, do not hesitate to contact us.



LOGIC DESIGN IMPROVEMENTS

- Speed-up of transient analysis for gate-level designs.
- Enhanced SystemVerilog compliance with the support of ports with unpacked dimensions.

IDE

- Optimized handling of temporary disk space used by the waveform viewer.
- Improved stability of the graphic user interface for enhanced user experience.

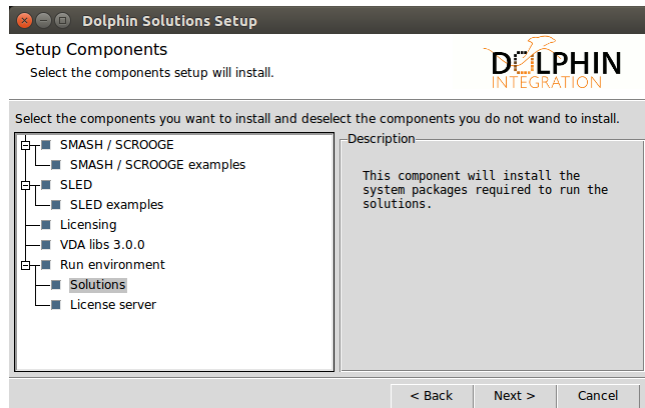
INSTALLER IMPROVEMENTS

Linux:

- Ability to install the required system packages for the most common Linux distributions.
- Smaller installer file for easier download.
- Detection of required disk space and permissions in the target folder, with improved error messages.
- Less temporary disk space required to run the installer.

Windows:

- Take into account the Start screen tiles of Windows 8 and later.



YOUR FEEDBACK MATTERS

SMASH is known as one of the best high speed mixed-signal simulators. To contribute suggestions and requests, please provide feedback on your user experience to **support@dolphin-integration.com**.