

# CIRCUIT RUBBERBAND



## INDUSTRY FIRST Real-time Circuit Rubberband Capability

The screenshot displays the SmartSpice MultiCore software interface. The main window shows a circuit schematic. Overlaid on this are several windows:

- Rubberband Optimization**: A window showing a table of parameters for optimization. The table has columns for Type, Name, Parameter, Value, Min, and Max. Parameters include 'af', 'alpha', 'b1', 'b2', 'bex', 'expli', 'fc', 'fex', 'gammm', 'gdsnoi', 'geo', 'hdif', 'irat', 'pmus', 'pmuz', 'prn0', 'prnb', 'weta', 'welamm', 'xi', and 'xl'.
- SmartSpice MultiCore**: The main simulation window, showing a summary table with columns: AN, PHASE, TRAN, DCOP, time, totiter, totstep, CONrej, and DEVI.
- Transient Analysis**: A window showing two plots of voltage (V) versus time (s). The top plot shows a smooth sinusoidal wave labeled 'trans v(n)'. The bottom plot shows a more complex, stepped waveform labeled 'trans v(sample\_h)'. Both plots have a time axis from 0 to 1.2 microseconds.

## ANALOG DESIGN MADE EASY

- Increase Circuit Design Productivity
- Debug your circuits interactively in real time
- VERY USER FRIENDLY and INTUITIVE
- Run via INTERACTIVE GUI either with SmartSpice or with Gateway
- Rubberband on any combination of Model or Instance Parameters  
No restriction on number of parameters to Rubberband
- Convenient navigation through device and model hierarchy
- Save and Reuse setups for future applications

**SILVACO**