Expert is a high performance hierarchical IC layout editor with full editing features, large capacity and fast layout viewing. Expert provides high level of design assistance with Netlist Driven Layout and parameterized cells (Pcells).

- Productive layout environment for analog, mixed-signal, RF, and digital layouts with integrated DRC/LVS/LPE and parasitic extraction
- ExpertViews is functionally the same product as Expert except for editing capability
- Fast GDSII file loading, editing, and viewing of extremely large databases
- Offers powerful scripting capability and C++ API for design automation
- Integrated with Calibre Interactive and Calibre RVE for physical verification using industry standard formats
- Expert Node Probing offers node highlighting for connectivity visualization. It highlights all layout objects electrically connected with the object you click
- Silvaco’s strong encryption is available to protect valuable customer and third party intellectual property
Fully customizable hotkeys, macros, toolbars, layers, colors, and stipples can be directly imported from Virtuoso to give layout designers familiar and productive working environment.

- Fast loading of GDSII databases in excess of 10 Giga bytes in a matter of minutes – not hours
- Rapid pan and zoom with multiple windows through multi-level hierarchy – with bookmarks for tracking
- Seamless integration with Guardian DRC/LVS/LPE for real-time, online, or batch verification
- Real-time DRC rapidly validates layout “on the fly”
- Productive layout environment for analog, RF, microwave and digital circuits in CMOS, Bipolar, BiCMOS, SiGe, GaAs, InP and other unique processes
- Multi-window editing of full hierarchy with edit in place, grouping, search, and fast navigation with fewer mouse clicks
- Ideal for reticle creation and mask touch up
- Customizable hotkeys menu and command line for convenience of command invocation

Easy to Adopt and Use

- Customizable hotkeys, macros, and toolbars emulate may be set to the look and feel of Virtuoso environment for layout designers
- Process Design Kits (PDKs) from foundries enable quick start-up of new design environments
- Informative, easily accessible online help for all menus and icons
- Linux and Windows availability enables wide deployment on economy workstations
- Simple installation process does not require consultants to set up environment
- Cross-platform floating license system available
- Drives wide selection of printers and plotters with multi-page tiling based on paper size
Versatile editor creates all-angle polygons for analog, RF, and microwave circuit elements, including inductors and power devices in CMOS, Bipolar, BiCMOS, SiGe, GaAs, SiC, InP, TFT, and other process technologies.

**Interoperable with Popular Design Flows**
- Supports Dracula and Diva DRC/LVS/LPE rule decks
- Directly reads Calibre error reports for Result Viewing Environment (RVE)
- Technology file import from Virtuoso for layers, colors, stipples, customizable hotkeys, macros, and toolbars
- Imports legacy designs with GDSII and CIF data
- Available on Redhat Linux, and Windows with consistent, familiar interface

**Powerful Layout Editor Functionality**
- Create parameterized cells (Pcells) with Javascript and Lisa scripting graphical support
- Powerful C++ API can access all editing functions
- Check-in, check-out library manager enables designers to simultaneously work on the same project across a network
- Autoscaling and resize feature minimize process migration efforts

**All-Angle Features**
- Wires and devices at 90 degrees, 45 degrees, or any angle
- Any angle rulers for accurate measurement
- Supports derived layers
- Command line input for all commands
- Supports edit-in-place, exploded view, and flattened data
- Data safety option maintains running log for undo

**RealTimeDRC**
- Fully integrated real-time Guardian DRC used through Expert
- DRC violations are flagged interactively while editing the layout
- Corrections are made during layout thereby greatly reducing final DRC verification
- Same ruleset as Guardian DRC
High Capacity: Expert loads large designs in excess of 10 giga bytes in minutes – not hours. Enables fast panning and zooming of extremely large databases. Ideal for mask preparation and router touch up.