

Cadence Virtuoso L

CUSTOM DESIGN PLATFORM

VIRTUOSO SCHEMATIC EDITOR L

Design Composition

- Complete design hierarchy support
- Simplified automatic generation of an HDL template
- Support of multi-sheet schematics
- User-configurable command bindkeys and label display
- Dynamic highlighting for easy design correction
- Automated interactive connection router
- User-configurable selection with filtering
- Comprehensive symbol creation and editing features
- User-configurable undo/redo levels
- Move, copy, stretch, rotate, and delete editing options
- Search and replace features
- Customizable tool environment using Cadence SKILL
- Online help using HTML-formatted publications

Design Checking

- Schematic or symbol cellviews checked individually
- Entire design hierarchy with one command
- Connectivity and consistency across pages and hierarchy
- Schematic rules checker (SRC) makes both logical and physical checks

Design Inputs

- EDIF 2 0 0 netlist
- Circuit design language (CDL)
- SPICE
- VHDL IEEE 1076-1993
- Verilog IEEE1364
- OpenAccess data objects

Design Outputs

- EDIF 2 0 0 netlist
- CDL
- SPICE
- OA

VIRTUOSO ANALOG DESIGN ENVIRONMENT L

Interactive Simulation Environment

- Reuse of simulation set-ups
- Cross-probing support for both schematics and layouts
- Design variable support
- Auto-plotting and printing of simulation data
- Batch scripting
- Schematic annotation of node voltages and device information

Waveform Display

- Support for multiple Y-axes, strip plots and Smith Charts
- Built-in waveform calculator
- Independent sub-window displays
- Horizontal and vertical measurement markers
- Independent pan and zoom capability
- User-defined labels and titles
- Color and line style controls
- Signal browser

Distributed Processing

- Distribution of multiple simulations
- Efficient use of existing computer farms
- Built-in basic load balancing or interface to other LSF load balancing tools
- Job monitoring and controlling functions
- Graphical user interfaces for setup and viewing status

Design Inputs

- OpenAccess data objects
- Circuit design language (CDL)
- SPICE

Design Outputs

- SPICE
- PSF waveform format
- SST2 waveform format
- Cadence SKILL

VIRTUOSO LAYOUT SUITE L

Layout Creation and Editing

- Menu-driven QCell or SKILL programmable automated device generation
- Design-rule-driven editing with realtime notification or enforcement of process rules
- Dynamic measurement
- Point-to-point interactive router
- Automated alignment feature
- Mark Net continuity checking and highlighting
- Graphical library browser
- Unlimited design hierarchy support
- Multi-window editing supporting on the same or different design data
- Pre- and post-selection modes
- Create and edit polygons, paths, rectangles, circles, ellipses, donuts, pins, and contacts in layout cell views
- Comprehensive search and replace features
- Pcell support for changing the size, shape, or contents of each cell instance without changing the original cell
- Customizable tool environment using Cadence SKILL programming language
- World viewer

Design Inputs

- SKILL
- STREAM format
- OpenAccess database

Design Outputs

- SKILL
- STREAM format
- OpenAccess database

THIRD-party support

- Process design kits
- Virtuoso Analog Design Environment: Interfaces to commercial circuit simulators are available, including Synopsys Hspice, Mentor Graphics Eldo, Silvaco SmartSpice and Agilent ADS. In addition, software is available to integrate proprietary circuit simulators
- Virtuoso Layout Suite and Virtuoso Schematic Editor: SKILL-based and OpenAccess tools and functions

VIRTUOSO CUSTOM DESIGN PLATFORM L FEATURES

	Virtuoso Schematic Editor L	Virtuoso Analog Design Environment L	Virtuoso Layout Suite L
New Common Cockpit	X	X	X
New Icon Style	X	X	X
Multi-Tab Support	X	X	X
Bookmarks & History	X	X	X
Updated Pulldown Menus	X	X	X
Window Config Support	X	X	X
World View Assistant	X	X	X
Search Assistant	X	X	X
Property Editor Assistant	X		X
Navigator assistant	X		
Single Testbench		X	
Simple Parametric Analysis		X	
Device Checking		X	
Global Variable Support		X	
Updated Wavescan		X	
New Calculator		X	
Simulation Support: Virtuoso		X	
Multi-Mode Simulation, HSPICE			
Basic Polygon Editing			X
QCells			X
DRD Editing			X
Constraint Browser			X
Search Assistant			X
Property Editor Assistant			X