

# WaveView Analyzer

## High-Performance Analog/Mixed-Signal Waveform Analysis

### Display Functions

Transient	Analog/digital plot, eye diagram
Sweep signals	2D/3D sweep display with trace filter
RF	Smith chart, polar plot, pole-zero plot
AC small signals	Log/db/linear scale, complex, spectrum
Special	Histogram, arbitrary X-Y plot

### Supported Simulators

Cadence	Spectre®, PSPICE®, UltraSim®, Verilog®, AMS Designer
Synopsys	HSPICE®, TimeMill®, PowerMill®, NanoSim®, Star-SimXT™, HSI™, HANEX™
Mentor Graphics	Eldo, ModelSim®, ADVance MS™, ADi™
Others	Agilent ADS, Legend MSIM®, raw, fsdb, IBIS/.Lib®/scope data (DT option), TI-punch, SDIF, text data
Sandwork WDF	Supported by HSI™/NanoSim®/UltraSim®

### Waveform Loading

- Unlimited waveform files, automatic type detection
- Hierarchical signal browser, name sorting/alias/filtering
- Incremental waveform update for concurrent simulation
- Partial loading by time range
- File grouping with multiple groups support
- Signal finder by name pattern/design scope/signal type

### Waveform Viewing

- Unlimited windows, docked or floating
- Time-synchronized stack or standalone display
- Interactive waveform placement with drag-n-drop
- X/Y/XY zoom, fast panning, unlimited undo/redo stack
- Grid/markers/PWC/PWL/bar/dual Y-axes display options
- Signal alias/filtering, floating/anchored text annotation
- Session save/restore

### Export Formats

- Level 3 PostScript (white background), Windows EMF
- Installed print devices on Windows platforms
- Direct screen capture in JPEG/PNG/Windows-Clipboard
- Export in VCD/Text-data/SPIICE PWL/Sandwork WDF

### Measurements

Cursors	Multiple cursors (horizontal or vertical) with auto search for min/max/crossing
Analog monitors	Cursor-value, derivative, cursor-difference, max, min, peak-to-peak, average, rms
Digital monitors	Binary, octal, decimal, hex-decimal, ASCII
Dynamic meters	Width, frequency, difference, rise/fall, duty-cycle, vertical-difference, Y-range, data(x,y), frequency-vs-time, jitter

### Post Processing

- Mixed-signal equation builder with built-in math/complex/RF/logic/waveform/measurement functions
- Direct HSPICE® .MEASURE onto simulation results
- ADC Toolbox with INL/DNL/SNR/THD/ENOB analysis
- Clock jitter measurement with jitter vs. time display
- Histogram conversion for Monte Carlo analysis
- FFT/DFT with window functions
- Single/multi-bit A/D D/A conversion
- Waveform data point reduction tool

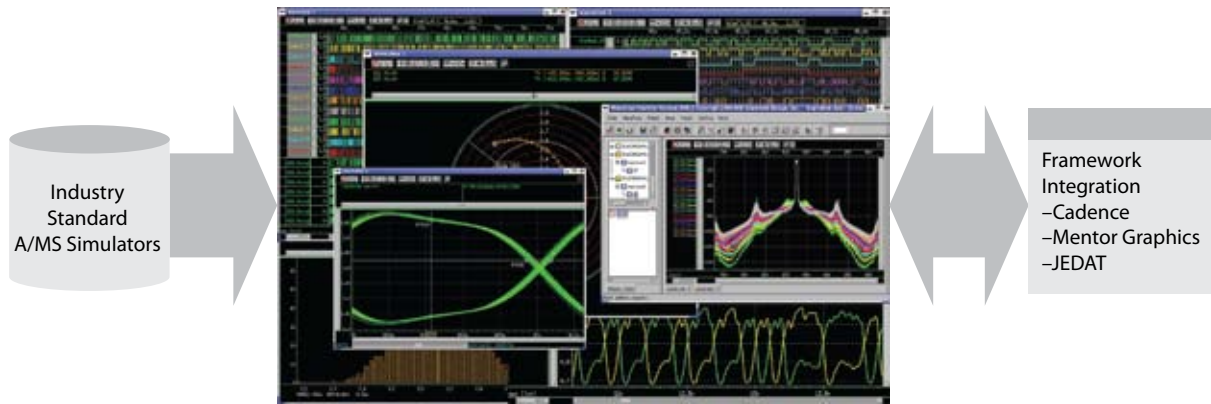


Figure 1: Multiple domain design result visualization.

### Customization and Automation

- Analysis Command Environment (ACE) for Tcl/Perl based programming capability
- Preference settings for GUI customization
- Bind keys / Waveform color customization
- Menu customization for user-defined ACE functions

### Tool Integration

SPIICE Explorer	Fully embedded in Sandwork's transistor-level debugging tool
Cadence	Schematic cross-probing in Virtuoso® environment, for both pre- and post-layout simulation results (SX-CDS link option)
Mentor Graphics	Schematic cross-probing from Design Architect IC (SX-DAIC link option)
JEDAT	Schematic cross-probing from JEDAT schematic environment (SX-JEDAT link option)
Silicon Canvas	Schematic cross-probing from Laker-ADP™

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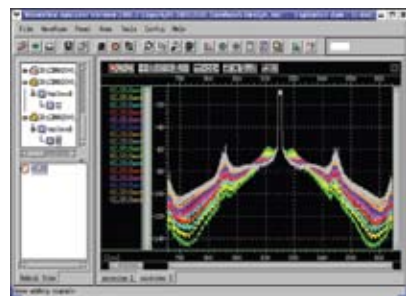


Figure 2: Frequency domain.

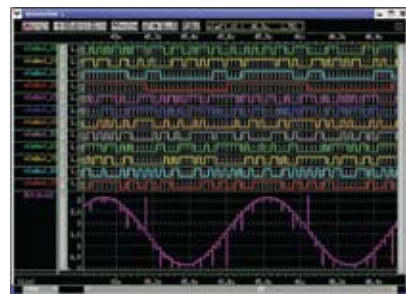


Figure 3: Big A Little D View.

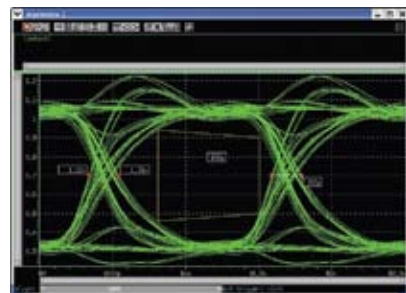


Figure 4: Eye Chart with specification.

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