

Missing EDA Links

SMASH 6.1

Efficient Waveform Viewer

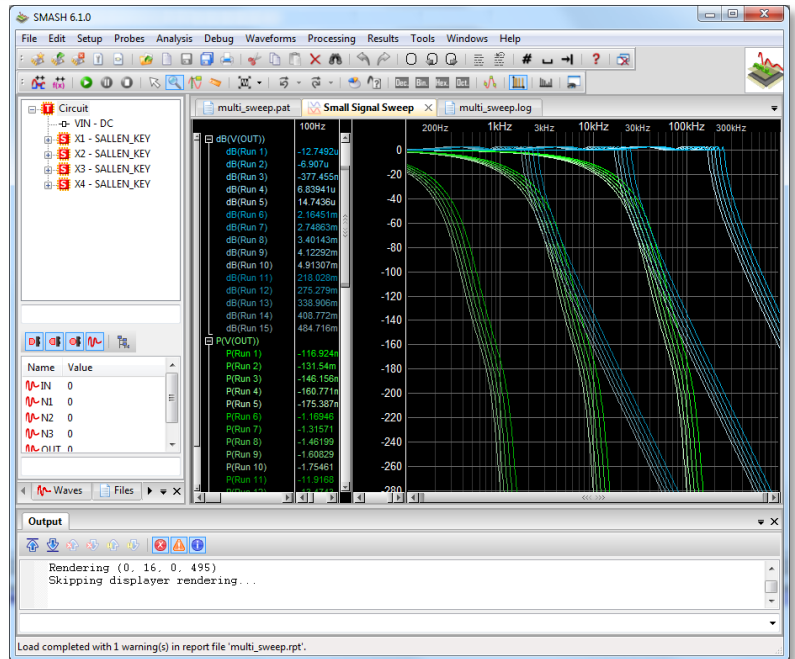
Modern User Interface

DOLPHIN INTEGRATION

SMASH 6 provides a brand-new and efficient waveform viewer, for analysis of mixed-signal simulation results, as well as a new styled user interface enabling users to access and configure more easily the powerful analyses provided by the mixed-signal simulator SMASH.

Key Enhancements of the Mixed-Signal Simulator SMASH 6.1

- Improve Imbalance Locate analysis to use dispersion data in foundry models
- Enhanced Sweep dialog for multiple parameter sweeping
- Improved optimizer for multiple analysis optimizations
- Accelerated transient noise simulations with integrated transistor level multi-threading
- Improved back-annotation file for schematic editors to output the same information as for the operating-point file



Sweep analysis parameters

Sweep analysis allows you to run a series of simulations while varying a parameter. Refers to .STEP directive

Type: LIST

Parameters	Parameter #1	Parameter #2	Parameter #3	Parameter #4
Run #1	COEFC	COEFR	SUPPLY	TEMP
Run #1	1	1	1.8	27
Run #2	0.9	0.9	1.62	-40
Run #3	1.1	0.9	1.62	-40
Run #4	0.9	1.1	1.62	-40
Run #5	1.1	1.1	1.62	-40
Run #6	0.9	0.9	1.98	-40
Run #7	1.1	0.9	1.98	-40
Run #8	0.9	1.1	1.98	-40
Run #9	1.1	1.1	1.98	-40
Run #10	0.9	0.9	1.62	85
Run #11	1.1	0.9	1.62	85
Run #12	0.9	1.1	1.62	85
Run #13	1.1	1.1	1.62	85
Run #14	0.9	0.9	1.98	85
Run #15	1.1	0.9	1.98	85
Run #16	0.9	1.1	1.98	85
Run #17	1.1	1.1	1.98	85

archi

alias

architecture

array

assert

attribute

block

break

breakw

case

caseuse

component

Ctrl+Alt+Space

```
architecture $name$ of $$ is
begin
  $$
end architecture $name$;
```

"i" Ctrl+Alt+Space

```
architecture i of |$$ is
begin
  $$
end architecture i;
```

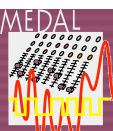
- Language aware source file editor with auto-completion for HDL languages based on templates
- Integrated help with tooltip display of expected values and parameters for Verilog functions

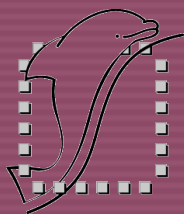
```
zi_zd( expr,
       [ zeros ], [ denominator coefficients ], sampling period [ , transition time [ , time of the first transition ] ] )
```

```
white_noise(
  white_noise ( power [ , name ] )
```

```
pow(x, max(a,
  max ( x, y )
```

SMASH is available identically under Linux and Windows





Missing EDA Links

SMASH 6.1

Powerful Waveform Viewer Swave

DOLPHIN INTEGRATION

Advanced Features

- Use of vertical cursors to perform measurements and computations between signals relative to a reference cursor
- Measure pane to manage and report graphic measurements and export results to spreadsheets
- Statistics pane to show statistics of analog signals at a glance, including functionalities to filter and export results to spreadsheets
- Capability to apply PSL assertions by post-processing logic waveforms from any simulator

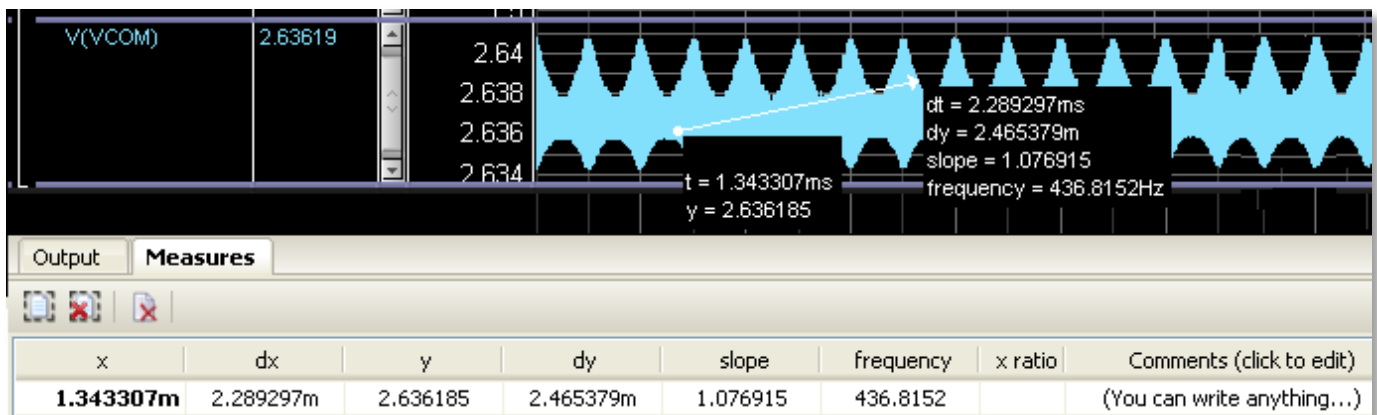
Name	Range	Min	Min at X	Max	Max at X
Transient					
V(in)	[0 - 100u]	0	10u	5	0
Transient MonteCarlo					
V(x)					
Run 1	[0 - 200u]	35.2922m	50u	4.285714	4.355443u
Run 2	[0 - 200u]	36.81306m	50u	4.221761	0
Run 3	[0 - 200u]	20.80419m	50u	4.321444	5u
Run 4	[0 - 200u]	63.56591m	50u	4.185188	0
V(in)					
Run 1	[0 - 200u]	0	10u	5	0

User-Friendly Interface

- Extended preferences management (colors, font, cursor size...)
- Resize graphs, scroll, zoom by resizing the scrollbar thumb, zoom to area (in & out)...
- Resize, move, hide, add and delete columns
- Easy selection of analog or logic graphs when adding integer or real logic traces
- Possibility to jump to or highlight transitions for logic signals filtered by sensitivity (0→1 , 1→0...)

Easy Management of Waveforms

- Duplication, more explicit names, customization, use of aliases...
- Drag and drop of waveforms (inside a view, to another view)
- Creation of a hierarchy of waveform groups
- Quick graphic measurements between two points such as delta X or Y, frequency and slope
- Capability to expand buses and multiple runs of Monte Carlo and Sweep analyses



SMASH is available identically under Linux and Windows

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