

SigWave Command Reference

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Commands: File

File – New

Clears the SigWave Waveform window and spreadsheet. Removes existing markers and traces from the Waveform window.

To open a new SigWave file

- Choose *File – New*.

The SigWave Waveform window and spreadsheet clear.

File – Open

Displays a browser that enables you to select and open a single SigWave waveform simulation (.sim, .cim) file or Touchstone (*.s?p) file. Waveforms contained in the file can then be displayed and analyzed in the Waveform window.

The browser also enables you to load a SigWave workspace (.sww) file that restores previously saved SigWave environment settings. For details on saving a workspace file, see [File – Save As](#).

Dialog Box

| Option | Description |
|----------------------|---|
| <i>Look in</i> | Drop-down box for selecting the folder or drive in which the file resides |
| <i>File name</i> | Field in which the name of the selected file appears |
| <i>Files of type</i> | Drop-down box for selecting the type of file to open |
| <i>Open</i> | Click to display the selected file |
| <i>Cancel</i> | Click to abort and close the dialog box |

To open an existing simulation waveform or Touchstone file

1. Choose *File – Open*.

The Open file dialog box appears.

2. Select a .sim, or .cim file from a Signoise .run/case/waveforms subdirectory or a *.s?p file from another location.

SigWave adds the waveform as a folder in the SigWave waveform library.

Note: SigWave also closes all other simulation files and removes them from the waveform library tree. To add a SigWave file to the waveform library for display and keep open other simulation files, choose *File – Import – SigWave file (.sim)*.

3. Click the plus sign icon next to the Waveform Library to expand it.
4. Double click the .sim file to display the waveform.

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Commands: File

To load a previously saved workspace file

1. Choose *File – Open*.

The Open file dialog box appears.

2. Select a workspace (*.sww*) file.
3. Click *OK*.

SigWave reads the specified workspace file and restores waveform annotation and settings accordingly. SigWave reads the specified workspace file and restores waveform annotation and settings accordingly. Very large *.sim* files configured to display multiple waveforms activate a progress bar in the status area of the SigWave GUI.

Note: SigWave supports two *.sim* formats. The newer of the two, introduced in release 16.01, directs the file to either hide or display individual waveforms based on header information contained in the file. (The older format displays all waveforms by default; the new format *hides* all waveforms by default.) Older format files that you open and save are updated to the new format.

For additional information on these file formats, see *Opening a File* in the SigWave User Guide.

File – Save As

Displays a browser that enables you to specify the file name, file type, and directory in which to save a new simulation waveform (.sim) file.

The browser also enables you to save a SigWave workspace (.sww) file. By saving a workspace file, you can save all of the custom annotations you have added to a simulation file such as markers, text notes, color highlights, etc. You can then restore them in a subsequent SigWave session using the *File – Open* command.

For details on annotation and settings that are saved in a workspace file, see the [SigWave User Guide](#).

Dialog Box

| Option | Description |
|---------------------|--|
| <i>Save in</i> | Drop down box for selecting the drive and folder in which to save the file |
| <i>File name</i> | Field in which to type the file name |
| <i>Save as type</i> | Drop down box for selecting the file-type for saving |
| <i>Save</i> | Click to store the file |
| <i>Cancel</i> | Click to abort and close the dialog box |

To save a new simulation waveform file

1. Choose *File – Save As*.

The Save As dialog box appears.

2. In the *File name* field, type the new name for the file.
3. In the *Save as type* field, make sure *Simulation Files (*.sim)* is selected.
4. In the *Save in* field, specify the directory to save the file into.
5. Click *Save*.

The waveform file is saved to the specified directory.

SigWave Command Reference

Commands: File

To save a workspace file

1. Choose *File – Save As*.

The Save As dialog box appears.

2. In the *File name* field, type the new name for the file.
3. In the *Save as type* field, make sure *Workspace Files (*.sww)* is selected.
4. In the *Save in* field, specify the directory to save the file into.
5. Click *Save*.

The workspace file is saved to the specified directory.

File – Import

Adds a waveform simulation file to the waveform library for display in SigWave.

Use this option to display several waveform files, by adding a waveform file while keeping others open, ready for display.

For native SigWave waveform simulation (.sim) files, opens a browser set to display simulation files *.sim.

If the waveform is a foreign file, SigWave opens a browser set to display the selected type of foreign files. Converts the selected foreign file to the SigWave file type (.sim). SigWave allows import of these files:

- HSPICE (*.lis)
- Quad (*.dat)
- Agilent/HP Scope (*.txt)
- TEK Scope (*.dat)
- LeCroy (*.txt)
- Berkeley SPICE (*.lis)
- Spectre PSF ASCII (*.tran)

Cadence provides Perl files to convert each of these files to the .sim file format. To include additional conversion programs in this menu, choose Tools – Custom Import.

SigWave Command Reference

Commands: File

Dialog Box

| Option | Description |
|----------------------|---|
| <i>Look in</i> | Drop down box for selecting the folder or drive in which the file for importing resides |
| <i>File name</i> | Field in which the name of the selected file appears |
| <i>Files of type</i> | Drop down box for selecting the type of file to import |
| <i>Open</i> | Click to import the selected file |
| <i>Cancel</i> | Click to abort and close the dialog box |

Procedure

To import a SigWave .sim file

1. Choose *File – Import – SigWave .sim file*.

The Open dialog box appears

2. In the *Look in* field, use the drop-down arrow to select the area of the system from which you will import the file.

A selection of files appears.

3. Click on a file to select it.

4. Click *Open*.

The new waveform displays.

File – Export

Image — Saves the waveform graphics window to one of these file formats:

- BMP - Windows Device Independent Bitmap (*.bmp)
- JPEG - Joint Photographic Experts Group (*.jpg)
- Targa Bitmap (*.tga)
- TIFF - Tagged Image File Format (*.tif)

Spreadsheet Tabbed Text - Opens a dialog box in which you can save the spreadsheet data in a text file (*.txt) in tab-delimited format. Spreadsheet programs such as Excel can import this format.

Dialog Box

| Option | Description |
|---------------------|--|
| <i>Save in</i> | Drop down box for selecting the drive and folder in which to save the file |
| <i>File name</i> | Field in which to type the file name |
| <i>Save as type</i> | Drop down box for selecting the file-type for saving |
| <i>Save</i> | Click to export the file |
| <i>Cancel</i> | Click to abort and close the dialog box |

Procedure

To export spreadsheet tabbed text

1. Choose *File – Export – Spreadsheet Tabbed Text*.

The Save As dialog box appears

2. In the *File name* field, type the name of the file.
3. In the *Save as type* field, make sure *Spreadsheet Tabbed Text (.txt)* is selected.
4. Use the *Save in* file drop-down arrow to select an area of the system for storage.
5. Click *Save*.

File – Print

Prints the waveform when the Waveform window is selected. Prints the spreadsheet when the Spreadsheet window is selected.

Dialog Box

| Option | Description |
|-------------------|---|
| <i>Name</i> | Drop down box for selecting a printer |
| <i>Properties</i> | Click to open a new dialog box for choosing layout and paper attributes |
| <i>OK</i> | Click to begin the print function |
| <i>Cancel</i> | Click to abort and close the dialog box |

To print the waveform

1. Click the Waveform window to select it.
2. Choose *File – Print*.
The Print dialog box appears.
3. If necessary, modify printer properties and print selections.
4. Click *OK*.

File – Print Preview

Displays the waveform image as it will print.

Dialog Box

| Option | Description |
|-----------------|--|
| <i>Print</i> | Click to open the print dialog box |
| <i>Next</i> | Click to display a preview of the next page |
| <i>Previous</i> | Click to display a preview of the previous page |
| <i>Two Page</i> | Click to display two pages simultaneously |
| <i>Zoom In</i> | Click to magnify the preview |
| <i>Zoom Out</i> | Click to zoom out from the preview |
| <i>Close</i> | Click to close the dialog box and return to the waveform display |

To display the waveform image before printing

1. Click in the Waveform window to select it.
2. Choose *File – Print Preview*.

The Print Preview dialog box appears. You can examine the image more closely by clicking the *Zoom in* button. You can examine sequential pages by clicking the *Next Page* button.

3. Click *Close*.

The Print Preview dialog box closes.

File – Print Setup

Specifies common printer parameters.

Dialog Box

| Option | Description |
|--------------------|---|
| <i>Name</i> | Drop-down box for selecting a printer |
| <i>Size</i> | Drop-down box for selecting paper size |
| <i>Source</i> | Drop-down box for selecting paper source |
| <i>Orientation</i> | Click to choose portrait or landscape mode |
| <i>Properties</i> | Click to open a new dialog box for choosing layout and paper attributes |
| <i>OK</i> | Click to accept the setup attributes |
| <i>Cancel</i> | Click to abort and close the dialog box |

To perform a print setup

1. Choose *File – Print Setup*

The Print Setup dialog box appears

2. Modify printer properties and print selections, as necessary.

3. Click *OK*.

The Print Setup dialog box closes.

File – <selected filename>

Opens the recently opened .sim file that you select.

To open a recent file

- Choose *File – <selected filename>*

File – Exit

Closes the SigWave window.

To close the SigWave window

- Choose *File – Close*.

The SigWave window closes.

Commands: Edit

Edit – Copy

Copies the specified cells in the Spreadsheet window.

To copy cells

1. Choose *View – Spreadsheet*.

The spreadsheet opens in the lower portion of the SigWave window.

2. Click and hold.

3. Drag the pointer over the cells to be copied from the spreadsheet.

The selected cells highlight.

4. Choose *Edit – Copy*.

The contents of the selected cells store in memory.

Edit – Paste

Pastes data into specified cells of the spreadsheet or other areas of the document.

To paste copied cells to a specified area

1. Make sure cells have been selected and copied using *Edit – Copy*.
2. Open the document into which you will paste the contents.
3. Select the cells or place the cursor in another area of the document into which you will paste the contents.
4. Choose *Edit – Paste*.

The contents appear in the specified location.

Edit – Delete

Deletes the selected item from the Waveform window.

To delete a selected item from the Waveform window

1. Choose *Edit – Delete*.

The item is deleted from the Waveform window.

Commands: Zoom

Zoom – Fit

When the Waveform window is selected, changes the display so that the waveform fills the Waveform window. When the Spreadsheet window is selected, zooms the spreadsheet to its default size.

To fill the Waveform window with the waveform display

1. Click the waveform display to select it.
2. Choose *Zoom – Fit*.

The waveform display adjusts to fill the Waveform window.

To adjust the Spreadsheet window to its default size

1. Choose *View – Spreadsheet*.

The spreadsheet appears in the lower portion of the Sigwave window.

2. Click the spreadsheet to select it.
3. Choose *Zoom – Fit*.

The spreadsheet adjusts to its default size.

Zoom – Out

When the Waveform window is selected, shrinks the display so that the waveform is smaller and more of it can be displayed. When the Spreadsheet window is selected, shrinks the spreadsheet.

To shrink the waveform display

1. Click on the waveform display to select it.
2. Choose *Zoom – Out*.

The waveform display decreases in size.

To shrink the spreadsheet

1. Choose *View – Spreadsheet*.

The spreadsheet appears in the lower portion of the SigWave window.

2. Click on the spreadsheet to select it.
3. Choose *Zoom – Out*.

The spreadsheet decreases in size.

Zoom – In

Magnifies the display so that the waveform is larger and a smaller section appears.

To magnify the waveform display

1. Click on the waveform display to select it.

2. Choose *Zoom – In*.

The waveform display increases in size.

To magnify the spreadsheet

1. Choose *View – Spreadsheet*.

The spreadsheet appears in the lower portion of the SigWave window.

2. Click on the spreadsheet to select it.

3. Choose *Zoom – In*.

The spreadsheet increases in size.

Zoom – In Horizontally

Magnifies the waveform display in the horizontal direction.

To magnify the waveform display in the horizontal direction

1. Click on the waveform display to select it.
2. Choose *Zoom – In Horizontally*.
A box attaches to the pointer.
3. Click and hold.
4. Drag the pointer over the waveform display to select the area for viewing.
5. Release to accept the selected area.

The horizontal waveform display view modifies.

Note: You can return the waveform display to its original view by choosing *Zoom – Fit*.

Zoom – In Vertically

Magnifies the display in the vertical direction.

To magnify the waveform display in the vertical direction

1. Click the waveform display to select it.
2. Choose *Zoom – In Vertically*.
A box attaches to the pointer.
3. Click and hold.
4. Drag the pointer over the waveform display to select the area for viewing.
5. Release to accept the selected area.

The vertical waveform display view modifies.

Note: You can return the waveform display to its original view by choosing *Zoom – Fit*.

Zoom – In Region

Magnifies the display so that the specified, bounded region expands to fill the Waveform window. Click the mouse to locate the top left corner of the bounding region. Grab the bottom right corner of the rectangle and expand it to describe the region to be magnified.

To magnify a specified region of the waveform display

1. Click on the waveform to select it.
2. Choose *Zoom – In Region*.
A box attaches to the pointer.
3. Click and hold.
4. Drag the pointer over the waveform display to select the area for viewing.
5. Release to accept the selected area.

The waveform display view modifies to expand the selected region.

Note: You can return the waveform display to its original view by choosing *Zoom – Fit*.

Zoom – Specific Size

Magnifies the display so that the specified region expands to fill the Waveform window. Enter the coordinates of the bounding rectangle in the Zoom Specific Size dialog box.

Dialog Box

| Option | Description |
|------------------|--|
| <i>Minimum X</i> | Defines the minimum value for the X axis |
| <i>Minimum Y</i> | Defines the minimum value for the Y axis |
| <i>Maximum X</i> | Defines the maximum value for the X axis |
| <i>Maximum Y</i> | Defines the maximum value for the Y axis |
| <i>OK</i> | Click to accept the values |
| <i>Cancel</i> | Click to abort and close the dialog box |

To magnify the display of a specific region

1. Click the waveform display to select it.

2. Choose *Zoom – Specific Size*

The Specific Size dialog box appears. This window accepts the minimum and maximum values for the X and Y dimensions of the waveform display.

3. Enter minimum and maximum values for the X and Y axis.

4. Click *OK*.

The display modifies to the new size.

Zoom – To Previous

Recalls the most recent display of the Waveform window.

To recall the most recent display of the Waveform window

- Choose *Zoom – To Previous*

The Waveform window returns to its most recent display.

Note: Use the *Zoom – To Previous* command to toggle between the two most recent displays of the Waveform window.

Commands: Graph

Graph – Waveform Edits

Displays the Waveform Edits pull-down menu for selecting whether to allow select and drag for waveforms.

- None - Does not allow waveform editing.
- Allow Drag - Allows select and drag of waveforms.

To select and drag a waveform

1. Choose *Graph – Waveform Edits – Allow Drag*.
A checkmark appears next to Allow Drag confirming it is enabled.
2. Click the waveform to select it.
3. Place the pointer on the waveform so that it becomes a move icon.
4. Click and hold.
5. Drag the waveform.
6. Release to relocate the waveform in its new position.

Graph – Grid

Displays the Grid dialog box for adjusting gridline and graph style.

Dialog Box

| Option | Description |
|--------------------------|--|
| <i>Major Gridlines X</i> | Displays gridlines along the major segment points of the X axis using the specified style. |
| <i>Major Gridlines Y</i> | Displays gridlines along the major segment points of the Y axis using the specified style. |
| <i>Minor Gridlines X</i> | Displays gridlines along the minor segment points of the X axis using the specified style. |
| <i>Minor Gridlines Y</i> | Displays gridlines along the minor segment points of the Y axis using the specified style. |
| <i>Scaling X</i> | Displays the X axis grid scale using the specified scaling mode. |
| <i>Scaling Y</i> | Displays the Y axis grid scale using the specified scaling mode. |
| <i>Apply To</i> | Applies the gridline and graph style changes to one or more selected modes. You can click the <i>All</i> button to select all modes at once. Note: The mode selected in the list box when you display the dialog box is the active mode. Other modes appear in the list box once they have been enabled in the current session. |

Procedures

To display gridlines

1. Select *Graph – Grid*.
The Gridlines dialog box appears.
2. Click to select the style for major and minor gridlines.
3. In the *Apply To* list box, select the modes to apply the gridline style changes to.

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Commands: Graph

4. Click *OK*.

The waveform display updates to show major and minor gridlines in the selected style.

To display the graph scale

1. Choose *Graph – Grid*.

The Grid dialog box appears.

2. Click to select the graph style for the X and Y axes.
3. In the *Apply To* list box, select the modes to apply the graph style changes to.
4. Click *OK*.

The waveform display updates to show the X and Y scales in the selected graph style.

Graph – Cartesian Mode

Displays time values in the horizontal scale. This is the default display.

To display the waveform in Cartesian mode

- Choose *Graph – Cartesian Mode*

Because it is the default display, *Cartesian Mode* may already be selected with a checkmark. If not, the waveform display updates to show time values.

Graph – Bus Mode

Displays time values in a logic analyzer display.

To display the waveform in bus mode

- Choose *Graph – Bus Mode*

The waveform display updates to show time values in a logic analyzer display.

Graph – Smith Chart Mode

Displays a Smith chart graphical representation of an S-Parameter Touchstone file only.

Use the Smith charts to display the results of S-Parameter simulations. Smith charts in SigWave support impedance, admittance, and polar views. The default view is Impedance.

To display the waveform in Smith chart mode

- Choose *Graph – Smith Chart Mode*

A Smith chart opens, displaying a graphical representation of the S-Parameter waveform.

To change the view

1. Right click in a blank area of the chart.
2. In the pop-up menu, select an alternate view.

Note: If the current view is *Polar*, the *Impedance/Admittance* options are inactive.

Graph – FFT Mode

Displays frequency values in the horizontal scale.

To display the waveform in FFT mode

- Choose *Graph – FFT Mode*

The waveform display updates to show frequency values in the horizontal scale.

Graph – Eye Diagram Mode

Displays periodic waveforms overlapping on themselves.

Use the Eye Diagram Preferences dialog box to specify parameters for the display of waveforms in Eye Diagram mode.

To display the waveform in FFT mode

- Choose *Graph – Eye Diagram Mode*

The waveform display updates to show an eye diagram.

Graph – FFT Preferences

Displays the FFT Preferences dialog box where you can set parameters that SigWave uses in the Fast Fourier Transform operation.

Fast Fourier Transform (FFT) is a fast version of the Discrete Fourier Transform (DFT). FFT takes as input a time domain signal and converts it to its frequency domain representation. SigWave automatically performs FFT unless you specify not to.

FFT Preferences Dialog Box

| Option | Description |
|------------------------|--|
| <i>Window Function</i> | <p>A window_function to be applied to the time domain data before SigWave performs FFT. Available window functions include:</p> <ul style="list-style-type: none">RectangularBartlettHanningHammingBlackmanBlackman-Harris |
| <i>Window Extents</i> | <p>Parameters for cropping the time domain data before FFT is applied.</p> <ul style="list-style-type: none">Full - Specifies full extent, that is, no cropping.User Defined - Allows you to specify the minimum and maximum values of the time domain data. <p>For more information, see About Window Extents.</p> |

SigWave Command Reference

Commands: Graph

| Option | Description |
|-------------------|---|
| <i>FFT Points</i> | <p>The number of FFT points determines the size of the Fast Fourier Transform that SigWave performs.</p> <p>Automatic - Specifies that SigWave automatically chooses the number of FFT points for you.</p> <p>User Defined - Allows you to specify the number of FFT points.</p> <p>No FFT - Specifies that no FFT be performed.</p> <p>You can use this option to show the effect of the window function on the time domain data.</p> |
| <i>Scaling</i> | <p>The type of scaling to apply to the resulting FFT points.</p> <p>Magnitude - Specifies a scaling of the square root of the real point squared plus the imaginary point squared.</p> <p>20 log() - Specifies a 20 log() scale of the magnitude.</p> <p>10 log() - Specifies a 10 log() scale of the magnitude.</p> <p>Mask DC - Click to mask the 0 frequency value.</p> <p>For waveforms with large DC components, SigWave does include the DC value in scaling.</p> |

Procedure

To perform a Fast Fourier Transform (FFT)

1. Choose *Graph – FFT Preferences*.
2. In the dialog box, choose the *Window Function*, *Window Extents*, *Scaling*, and *FFT Points*.
3. Click *OK* to set the preferences.
4. Choose *Graph – Frequency Domain*.

SigWave converts the time domain signal to its frequency domain representation and displays it.

Graph – Eye Diagram Preferences

Displays the Eye Diagram Preferences dialog box where you can specify parameters for the display of waveforms in Eye Diagram mode.

Dialog Box

| Option | Description |
|---------------------------|---|
| <i>Clock Freq(ueency)</i> | Lets you set a value that represents the clock frequency setting established in the custom stimulus controls in SigXplorer. The default is 50 MHz (except when the simulation has originated in a current session of SigXplorer). |
| <i>No. of Eyes</i> | Sets the number of eyes you want to display. |
| <i>Clock Offset</i> | Defines the amount of time by which the eye diagram view is shifted. |
| <i>Clock Start</i> | Enables you to define the point in time where the eye pattern data should start. Data points before this point are removed for display purposes. |

To create an eye diagram

1. Choose *Graph – Eye Diagram Preferences*.
2. Enter the values for clock frequency, number of eyes, clock offset and clock start.
3. Click *OK* to set the preferences and close the dialog box.
4. In the SigWave user interface, choose *Graph – Eye Diagram Mode*.

The display updates to show waveforms in Eye Diagram mode using the specified parameters.

SigWave Command Reference
Commands: Graph

Commands: Tools

Tools – Custom Import

Displays the Custom Import dialog box where you can specify a program for converting simulation files to SigWave simulation format (`.sim`) and add it to the *File – Import* pull-down menu.

Custom Import Dialog Box

Use this dialog box to specify a program to convert a foreign file format to the SigWave.`sim` format.

| Option | Description |
|----------------------|--|
| <i>Menu Contents</i> | Specifies the items listed on the SigWave <i>File – Import</i> menu. |
| <i>Menu</i> | Specifies the name of the menu item. |
| <i>Command</i> | Specifies the program to execute to convert the file. (This program is usually in the Perl language.) |
| <i>Script</i> | Specifies the first argument that SigWave sends to the conversion program. If you use the Perl language to perform the conversion, this argument is a Perl script. |
| <i>Arguments</i> | Any additional program arguments. Note: SigWave replaces <code>\$infile</code> with the name of the file to convert and <code>\$outfile</code> with the name of the file after conversion. |
| <i>File Filter</i> | The filter—usually a file extension—that SigWave uses to narrow the list of files and help you browse for files to convert. |
| <i>Add</i> | Adds a generic item (Custom Import) to the Menu Contents list and the Menu field. You can edit the item’s name in the Menu field and specify the command, script, and arguments. When you click <i>OK</i> , SigWave adds the menu item from the <i>Custom Import</i> menu. |

SigWave Command Reference

Commands: Tools

| Option | Description |
|------------------|--|
| <i>Remove</i> | Removes a menu item from the Menu Contents list. When you click <i>OK</i> , SigWave removes the menu item from the Custom Import menu. |
| <i>Move Up</i> | Moves a selected item up on the Menu Contents list. |
| <i>Move Down</i> | Moves a selected item down on the Menu Contents list. |

Procedure

To specify a program for conversion

1. Choose *Tools – Custom Import*.

The Custom Import dialog box appears.

2. In the Menu Contents window, select the type of file for custom import.

3. Click *Add*.

Custom Import displays in the Menu Contents window.

4. In the Menu window, rename the file.

The file name changes in the Menu Contents window.

5. In the *Command* field, click the *Ellipsis* button to specify a program for file conversion.

6. In the *Script* field, click the *Ellipsis* button to specify the first argument to send to the conversion program.

7. Add any additional arguments in the *Arguments* field.

8. Click *OK*.

Tools – Preferences

Displays the Display Preferences dialog box where you can specify colors, line width, style, and text fonts for the SigWave display.

SigWave stores these preferences in your `pcbenv` directory and uses them the next time you invoke SigWave.

Display Preferences Dialog Box

| Option | Description |
|-------------------------|---|
| <i>Color Palette</i> | The colors in which SigWave displays traces. For each trace displayed, SigWave chooses a different color from the palette, starting with Color 0. |
| <i>General Text</i> | The font type, style, and size of general text (text that is not a title, subtitle, or label); for example a note. |
| <i>Foreground color</i> | The color of gridlines, titles, subtitles, and labels of the waveform display. |
| <i>Background color</i> | The background color of the waveform display. |
| <i>Trace</i> | The line style or width of all traces. |
| <i>User View</i> | The font type, style, and size of the title, subtitle, X and Y axis titles, and the X and Y axis labels. |

Procedures

To set characteristics permanently

1. Choose *Tools – Preferences*.

SigWave displays the Display Preferences dialog box.

2. In the hierarchy tree of items, select the item you want to change.
3. Click-right to display a dialog box.
4. Choose the characteristic you want.
5. When you finish making changes, click *OK*.

SigWave Command Reference

Commands: Tools

To set characteristics dynamically (until you exit SigWave):

1. Click to select the object, either in the waveform display or the hierarchy tree area.
2. Click-right to display a dialog box.
3. Choose the characteristic you want to set.
4. SigWave displays a second dialog box.
5. Make the choices you want and click *OK*.

Tools – Customize

Displays the Customize dialog box where you can customize the SigWave toolbars.

Dialog Box

Use this dialog box to customize the look of the standard toolbars or to create your own custom toolbars. To display this dialog box, choose *Tools – Customize* from the menu bar.

| Option- Toolbars Tab | Description |
|----------------------|---|
| <i>Toolbars</i> | Toggles the visibility of the standard (excluding the Menu Bar) and user-defined toolbars. Also enables you to select a toolbar for command customization using the Commands tab. |
| <i>Toolbar name</i> | Displays the name of the selected toolbar and also enables you to edit the name of a user-defined toolbar. |
| <i>Show Tooltips</i> | Enables or disables the display of ToolTips on the toolbars. |
| <i>Cool Look</i> | Enables or disables the Cool Look style for the toolbars. |
| <i>Large Buttons</i> | Enables or disables large buttons for the toolbars. |
| <i>New</i> | Displays the New Toolbar dialog box enabling you to name and create a user-defined toolbar. |
| <i>Reset</i> | Resets the standard toolbars to their default command configuration. |
| <i>Apply</i> | Applies toolbar changes without closing the dialog box. |

| Option- Commands Tab | Description |
|----------------------|---|
| <i>Categories</i> | Enables you to select a command category for available toolbar commands. |
| <i>Buttons</i> | Displays and enables you to select the commands in the selected command category. |
| <i>Description</i> | Displays a functional description of the selected command. |

Procedure

To modify the toolbar

1. Choose *Tools – Customize*.

The customize dialog box appears.

2. Select the Toolbars tab.

3. Select the options.

A checkmark next to an option indicates that it is active. The toolbar reconfigures during the selection process.

4. Click *OK*.

The dialog box closes.

Commands: View

View – Toolbar

Toggles the display of the toolbar.

To display the toolbar

- Choose *View – Toolbar*.

The menu reconfigures to display the toolbar.

View – Status Bar

Toggles the display of the status bar.

To display the status bar

- Choose *View – Status Bar*.

The menu reconfigures to display the status bar.

View – Spread Sheet

Toggles the display of the spreadsheet and SKILL command windows.

Use *View – Spread Sheet* to toggle the display of the SigWave spreadsheet on and off. When open, the Waveforms tab of the Spreadsheet window provides access to datapoint information for traces displayed in the Waveform window.

The Spreadsheet window also has a Command tab where you can view command output and enter commands.

You can select one or more columns in the Waveforms tab, then use *Edit – Copy* to cut and paste the values into a text editor or the cells of a spreadsheet program. You can also paste text from a spreadsheet program to SigWave.

Values you modify in the Spreadsheet window will immediately take effect in the Waveform window.

To display the spreadsheet

- Choose *View – Spread Sheet*.

The window reconfigures to display the spreadsheet.

View – Pan Overview

Displays a navigation window showing the entire waveform. Within this navigation window is a rectangular box that bounds the portion of the waveform that is currently visible in the Waveform window.

When you are zoomed in to a segment of the waveform, you can use the Pan Overview window to pan the zoomed view.

To pan a zoomed view

1. Use the Zoom In icon to zoom in to a segment of the waveform display.

2. Choose *View – Pan Overview*.

The Pan Overview window appears. A box inside the window represents the zoomed-in view.

3. Click and hold down the left mouse button to drag the box in the Pan Overview window.

The view of the waveform changes accordingly.

Commands: Help

Help – What’s New

Displays the High-speed Interconnect Design product notes for the current software release via the Cadence Documentation Viewer. New product features and enhancements are documented here.

To display the product notes:

- Choose *Help – What’s New*.

The product notes display via the viewer.

Help – Known Problems and Solutions

Displays the High-speed Interconnect Design Known Problems and Solutions document for the current product release via the Cadence Documentation Viewer. Specific problems with suggested solutions known at the time of release are documented here.

To display the Known Problems and Solutions documents:

- Choose *Help – Known Problems and Solutions*.

The Known Problems and Solutions web page displays via the viewer.

Help – Migration Guide

Displays the Migration Guide for Allegro PCB and Package products for the current release via the Cadence Documentation Viewer. Important information related to migrating designs from prior software releases to the current release is documented here.

To display the Migration Guide

- Choose *Help – Migration Guide*.

The Migration Guide displays via the viewer.

Help – Web Resources

Enables you to link to additional resources on the Word Wide Web related to SigWave.

Available resources include:

- Cadence Customer Online Support
- Software Updates
- Cadence Education Services
- Cadence PCB High-speed Design Communities
- cadence.com

To access the web resources pages:

1. Choose *Help – Web Resources*.
2. Select the resource link.

The web resource page displays via the viewer.

Help – Documentation

Enables you to access SigWave online manuals and other related documents via the Cadence Documentation Viewer.

To access SigWave online manuals

1. Choose *Help – Documentation*.

A menu appears displaying titles of related online documentation.

2. Click on the manual you wish to access.

The selected manual displays via the viewer.

Help – About SigWave

Displays information regarding the version of SigWave.

To display the version information:

- Choose *Help – About SigWave*.

The *About* window appears.