Product Version 16.6 October 2012 © 1996–2012 Cadence Design Systems, Inc. All rights reserved.

Portions © Apache Software Foundation, Sun Microsystems, Free Software Foundation, Inc., Regents of the University of California, Massachusetts Institute of Technology, University of Florida. Used by permission. Printed in the United States of America.

Cadence Design Systems, Inc. (Cadence), 2655 Seely Ave., San Jose, CA 95134, USA.

OrCAD Capture contains technology licensed from, and copyrighted by: Apache Software Foundation, 1901 Munsey Drive Forest Hill, MD 21050, USA © 2000-2005, Apache Software Foundation. Sun Microsystems, 4150 Network Circle, Santa Clara, CA 95054 USA © 1994-2007, Sun Microsystems, Inc. Free Software Foundation, 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA © 1989, 1991, Free Software Foundation, Inc. Regents of the University of California, Sun Microsystems, Inc., Scriptics Corporation, © 2001, Regents of the University of California. Daniel Stenberg, © 1996 - 2006, Daniel Stenberg. UMFPACK © 2005, Timothy A. Davis, University of Florida, (davis@cise.ulf.edu). Ken Martin, Will Schroeder, Bill Lorensen © 1993-2002, Ken Martin, Will Schroeder, Bill Lorensen. Massachusetts Institute of Technology, 77 Massachusetts Avenue, Cambridge, Massachusetts, USA © 2003, the Board of Trustees of Massachusetts Institute of Technology, vtkQt, © 2000-2005, Matthias Koenig. All rights reserved.

**Trademarks**: Trademarks and service marks of Cadence Design Systems, Inc. contained in this document are attributed to Cadence with the appropriate symbol. For queries regarding Cadence's trademarks, contact the corporate legal department at the address shown above or call 800.862.4522.

Open SystemC, Open SystemC Initiative, OSCI, SystemC, and SystemC Initiative are trademarks or registered trademarks of Open SystemC Initiative, Inc. in the United States and other countries and are used with permission.

All other trademarks are the property of their respective holders.

**Restricted Permission:** This publication is protected by copyright law and international treaties and contains trade secrets and proprietary information owned by Cadence. Unauthorized reproduction or distribution of this publication, or any portion of it, may result in civil and criminal penalties. Except as specified in this permission statement, this publication may not be copied, reproduced, modified, published, uploaded, posted, transmitted, or distributed in any way, without prior written permission from Cadence. Unless otherwise agreed to by Cadence in writing, this statement grants Cadence customers permission to print one (1) hard copy of this publication subject to the following conditions:

- 1. The publication may be used only in accordance with a written agreement between Cadence and its customer.
- 2. The publication may not be modified in any way.
- 3. Any authorized copy of the publication or portion thereof must include all original copyright, trademark, and other proprietary notices and this permission statement.
- 4. The information contained in this document cannot be used in the development of like products or software, whether for internal or external use, and shall not be used for the benefit of any other party, whether or not for consideration.

**Disclaimer:** Information in this publication is subject to change without notice and does not represent a commitment on the part of Cadence. Except as may be explicitly set forth in such agreement, Cadence does not make, and expressly disclaims, any representations or warranties as to the completeness, accuracy or usefulness of the information contained in this document. Cadence does not warrant that use of such information will not infringe any third party rights, nor does Cadence assume any liability for damages or costs of any kind that may result from use of such information.

**Restricted Rights:** Use, duplication, or disclosure by the Government is subject to restrictions as set forth in FAR52.227-14 and DFAR252.227-7013 et seq. or its successor.

### **Contents**

Shortcut Keys
Capture Command Line Arguments & Switches
Capture.ini Variables1
Capture Toolbar 2
<u>Draw Toolbar</u> 2
PSpice Toolbar 3
FPGA Toolbar 3
Part Manager Toolbar з
Search Toolbar 3
SI Analysis Toolbar 3
Footprint Viewer Toolbar4

October 2012 4 Product Version 16.6

1

### **Shortcut Keys**

In addition to providing menu access keys for menu commands, Capture provides shortcut keys for miscellaneous actions, such as scrolling across an editor's window. An example of an access key is ALT, E, T for the Cut command on the Edit menu. Shortcut keys include CTRL keys (like CTRL+DELETE to delete), Single letter keys (like P to place a part), and function keys (like F4 to repeat a command).

**Note:** The description of each menu command includes keyboard, mouse, and other shortcuts.

Many shortcuts are available while you use another command. For example, you can use I and O to zoom in and out while you move and place objects.

You can run PSpice simulations from your Capture environment by pressing the F11 function key. Also, you can view the simulation results for the currently active profile by pressing the F12 function key.

**Note:** You can select a product suite from which to open Capture without having to exit the tool by choosing the File – Change Product menu command (ALT, F, C). Also, you can select the Use as default check box to set the default product suite from which Capture should check out a license each time you start the tool.

#### **All Capture windows**

Key	Mouse click equivalent
ALT+F4	Exit
ALT, F, X	Exit

Shortcut Keys

ALT, SPACEBAR, C Exit
F1 Help

Ctrl + F8 Switch Capture to Full Screen mode

(Click Close Full Screen button or press Escape

key to exit Full Screen mode)

#### **Text editor**

Key Mouse click equivalent

CTRL+F4 If you attach a VHDL file to a hierarchical block

and descend the hierarchy, you will end up within the VHDL file. Use this shortcut to close the file and return to the top level of the schematic

#### Schematic page editor

Key Mouse click equivalent

CTRL+A Select All

A Ascend hierarchy
D Descend hierarchy

B Place bus

E Place bus entry

F Place power

G Place ground

J Place junction

N Place net alias

P Place part
T Place text

W Place wire

Shortcut Keys

Y Place polyline

X Place No connect symbol

Z Place Database Part

F7 Record macro

F8 Play macro

F9 Configure macro

CTRL+SHIFT+A Add part(s) to group

CTRL+SHIFT+R Remove part(s) from group

CTRL+SHIFT+W Select entire net

CTRL+I Opens the Selection Filter dialog box where you

can specify the objects that should be selected when the mouse pointer is dragged diagonally

across the schematic page.

CTRL+SHIFT+Left Click Lock component

CTRL+U Ungroup objects

CTRL+G Center the view on a specific location, grid

references, or bookmark.

SHIFT+B Create test bench

SHIFT+M Find differences and merge test benches

CTRL+F4 Close Place Part dialog

Note: To use this shortcut, the Place Part dialog

must be currently selected.

**Note:** Select a component on the schematic page and press SHIFT+S to place components directly from your Capture schematic design to Allegro PCB Editor.

#### Part editor

Key Mouse click equivalent

CTRL+B Previous part

CTRL+N Next part

## OrCAD Capture Quick Reference Shortcut Keys

### **Property editor**

Key	Mouse click equivalent
CTRL+B	Gives focus to the Filter by drop-down list
CTRL+D	Open the Display Properties dialog box to edit properties for a selected cell
CTRL+E	Edit properties
CTRL+F	Find a character or search string
CTRL+K	Open Propagation Delay dialog box
CTRL+L	Delete a property (cell value)
CTRL+N	Add a new column or row
CTRL+P	Apply changes
DELETE	Delete a character
CTRL+Z	Undo
CTRL+C	Сору
CTRL+V	Paste
CTRL+X	Cut
Page-Up/CTRL+ <up arrow=""></up>	Go to the first cell in a column
Page-Down/CTRL+ <down Arrow&gt;</down 	Go to the last cell in a column
CTRL+ <left arrow=""></left>	Go to the first cell in a row
CTRL+ <right arrow=""></right>	Go to the last cell in a row
Esc	Undo edit in the selected cell
SHIFT+ <arrow key=""></arrow>	Select
CTRL+Home	Go to the beginning (top left corner) of the spreadsheet
CTRL+End	Go to the end (bottom right corner) of the spreadsheet
CTRL+F2	Select the contents of a cell
CTRL+F4	Close the spreadsheet

Shortcut Keys

CTRL+F6 Switch to the other open windows (Works like

CTRL+Tab)

CTRL+U Opens the Propagation Delay dialog box or the

Relative Propagation Delay dialog box depending on the property being edited in the Property Editor

window.

For example, if you select the grid corresponding to the Propagation Delay property and press CTRL+U, the Propagation Delay dialog box

appears.

#### Schematic page and part editors

Key	Mouse click equivalent
-----	------------------------

CTRL+C Copy

CTRL+E Edit properties

CTRL+F Find
CTRL+G Go to
CTRL+P Print
CTRL+S Save

CTRL+T Cursor snap to grid (identical to the Preferences

dialog box Grid display tab option).

CTRL+V Paste
CTRL+X Cut
CTRL+Y Redo
CTRL+Z Undo
F4 Repeat

DEL Delete (Design and Edit menus)

DELETE Delete (Design and Edit menus)

BACKSPACE Delete (Design and Edit menus)

ENTER Double-click left mouse button

**Shortcut Keys** 

ESCAPE Deselect all and switch to selection tool (arrow

pointer)

SPACE Click left mouse button

UP ARROW Move 1 grid up (grid on) or 0.1 grid up (grid off)

DOWN ARROW Move 1 grid down (grid on) or 0.1 grid down (grid

off)

LEFT ARROW Move 1 grid left (grid on) or 0.1 grid left (grid off)

RIGHT ARROW Move 1 grid right (grid on) or 0.1 grid right (grid

off)

CTRL+UP ARROW Snap pointer to nearest grid and then move 5

grids up

CTRL+DOWN ARROW Snap pointer to nearest grid and then move 5

grids down

CTRL+LEFT ARROW Snap pointer to nearest grid and then move 5

grids left

CTRL+RIGHT ARROW Snap pointer to nearest grid and then move 5

arids right

PAGE UP Pan up

PAGE DOWN Pan down

CTRL+PAGE UP Pan left

CTRL+PAGE DOWN Pan right

F5 Redraw

C Center the view at the pointer's current position

H Mirror horizontally

I Zoom in
O Zoom out
R Rotate

V Mirror vertically

B Begin a wire, bus, or polyline (corresponding tool

active)

End a wire, bus, or polyline (corresponding tool

active)

Shortcut Keys

#### **Session Log**

Key Mouse click equivalent

CTRL+DEL Clear session log
CTRL+DELETE Clear session log

**Note:** When an error or warning message displays in the session log, you can find the help topic for that particular error or warning by putting your cursor in the line containing the error/warning and pressing the F1 key.

#### **Text boxes**

Kev	Mouse	click	equivalen <sup>3</sup>	t
	1110000	011011	oquitato::	

BACKSPACE Delete selected text

DEL Delete selected text

DELETE Delete selected text

CTRL+C Copy selected text to Clipboard

CTRL+V Paste Clipboard contents

CTRL+X Cut selected text to Clipboard

CTRL+Z Undo last edit

DOUBLE CLICK Select word and any following space

SHIFT+CLICK Extend selection from insertion point to cursor

CTRL+RIGHT ARROW Jump right one word

CTRL+LEFT ARROW Jump left one word

HOME Jump to beginning of line

END Jump to end of line

CTRL+HOME Jump to beginning of text box
CTRL+END Jump to end of the text box

**Shortcut Keys** 

SHIFT+HOME Extend selection from insertion point to beginning

of multiple-line text box

SHIFT+END Extend selection from insertion point to end of

multiple-line text box

#### **Browse spreadsheet editor**

Key Mouse click equivalent

CTRL+C Copy value from a cell in the Browse spreadsheet

editor

CTRL+V Paste Clipboard contents onto another cell in

Browse spreadsheet editor

CTRL+INSERT Copy value from a cell in the Browse spreadsheet

editor and paste it onto a cell in Microsoft Excel

worksheet

SHIFT+INSERT Paste value copied from Microsoft Excel onto a

cell in the Browse spreadsheet editor

#### **Fisheye View**

#### Key Mouse click equivalent

SHIFT+F11 Set Fisheye focus on selected component

SHIFT+CTRL+F11 Reset Fisheye focus

Q Start Fisheye dynamic focus mode

2

# **Capture Command Line Arguments & Switches**

You can invoke OrCAD Capture directly from the command line with specific arguments and switches.

#### **Syntax**

capture [-i <capture.ini location>] [dsn name] [tcl script name]

Switch / Argument Description

-i <capture.ini The location of the capture.ini to be used with the current

location> instance of Capture.

dsn name Name and location of the dsn to be opened in the current

instance of Capture.

tcl script name Name and location of the tcl file to be executed at startup.

#### Note:

- All the arguments are optional.
- ☐ The **dsn name** and **captcl name** arguments cannot be used in conjunction with each other.

OrCAD Capture Quick Reference
Capture Command Line Arguments & Switches

### Capture.ini Variables

When Capture starts up, it uses a pre-defined set of default values for the application settings. These default values are defined in the Capture.ini file. This file is placed in the HOME directory (%HOME%\cdssetup\OrCAD\_Capture) in your system. However, you can specify another location for this file by using the -i switch when invoking Capture. See <u>Capture</u> <u>Command Line Arguments & Switches</u> section of this guide for details.

The Capture.ini file contains a large set of initialization variables used by Capture. This section defines a set of these variables that alter the Capture start-up behavior.

#### **Important**

The Capture.ini file is used by Capture during start-up. Incorrect or corrupt information in this file can cause unexpected behavior in Capture. Before making any changes to this file, you are advised to first make a backup of your installed Capture.ini. Also, this chapter covers only a selected list of ini sections and only selected variables within these sections. It is advised that you work with only these variables.

**Note:** The Capture.ini file is a text-based file. This implies that you can use any Text editor to open and edit this file.

This chapter covers initialization variables in the following sections:

- □ <u>SearchToolBarSetting</u> on page 16
- □ Docking on page 17
- □ Print Settings on page 17
- □ Preferences on page 17
- □ <u>Footprint Viewer Type</u> on page 18
- □ Allegro Footprints on page 19
- □ Part Management on page 19
- □ Frame view options in CIS Explorer window on page 20

Capture.ini Variables

□ ConvertDialog on page 21

#### SearchToolBarSetting

This ini section includes the variables that control the selection of the Search toolbar options. You can set a Search toolbar option as selected or un-selected by settings the variable values in this section.

Use 1 to set an option as selected.

Use 0 (zero) to set an option as un-selected.

Search Toolk	bar Options:
--------------	--------------

Parts
OffPage
BookMark
CommentText
Nets
FlatNets
HierPorts
DRC
TitleBlock
PowerSymbol
HierPins
PartsPins
VariantParts
MatchCase
Highlight

October 2012 16 Product Version 16.6

Capture.ini Variables

#### **Docking**

The variables in this section allow you to set the docked window status and visibility of Capture CIS windows.

#### session docked

Set the value to 1 to dock the session log window.

Set the value to 0 (zero) to specify the session log as an MDI window.

#### session\_show

Set the value to 1 to ensure the session log window is visible on start-up.

Set the value to 0 (zero) to ensure the session log window is hidden on start-up. To display the session log if it is hidden, choose the Session Log option in the Capture CIS Window menu.

#### **Print Settings**

Use the variables in this section to define the print settings in Capture CIS.

#### InstanceMode

Set the value to 1 ensure that the default selected Print option in the Print dialog box is set to Inst. Mode (Instance Mode).

Set the value to 0 (zero) to ensure that the default selected Print option in the Print dialog box is set to Occ. Mode (Occurrence Mode).

#### **Preferences**

The Preferences section in the ini contains variables that provide access to the settings in the Capture CIS Preference dialog box.

Capture.ini Variables

#### **DockingPlacePart**

Set the value to FALSE to ensure that the Place Part user interface available in Capture CIS versions prior to version 16.2 displays.

Set the value to TRUE to ensure that the Capture CIS 16.2 and later Place Part user interface displays.

#### SearchToolBar

Set the value to FALSE to ensure that the Find dialog box available in Capture CIS versions prior to version 16.2 displays.

Set the value to TRUE to ensure that the Capture CIS 16.2 and later Search Toolbar displays.

#### **EnableITC**

Set the value to TRUE to Enable Intertool Communication in Capture CIS.

Set the value to FALSE to disable Intertool Communication in Capture CIS.

#### **Footprint Viewer Type**

The variables in this section describe the type of footprints that will be displayed in the CIS Explorer footprint window. The section is also linked to the Layout Footprints and the Allegro Footprints sections that are then used to define the directory location for the footprint (psm) files.

#### type

This variable defines the type of footprints to display.

Set the value to Allegro to use Allegro files for footprints.

Set the value to Layout to use Layout files for footprints.

**Note:** Use the **dir0** variable in the **Layout Footprints** section to define the directory location containing the footprint files to use if the footprint type is defined as **Layout**. Or use the **dir0** variable in the **Allegro Footprints** section to define the directory location containing the footprint files to use if the footprint type is defined as **Allegro**.

Capture.ini Variables

#### **Allegro Footprints**

The variable (or variables) in this section define the directory location (or locations) for the psm and pad files used by the PCB Editor 3D Footprint Viewer to display a footprint. A psm file is used by the PCB Editor 3D Footprint Viewer to display the 3D footprint. A pad file is used by the Viewer to display the pin information in the viewer.

You can define any number of paths that contain the psm and pad files. If you define multiple paths, Capture CIS will search the directories, for the footprint files, in the order in which they are defined in this section.

**Note:** If the footprint information (corresponding psm file) is not found in any of the paths defined by the variables in this, Capture CIS will display an error message in the Session log window.

#### Example:

```
[Allegro Footprints]
```

Dir1=D:\cadence163\share\pcb\pcb\_lib\symbols

Dir2=D:\SPB162\tools\fsp\examples\libraries\footprints\allegro

#### **Part Management**

The variables in this section define paths to the database configuration file used in the Capture CIS flow. The configuration file identifies the ODBC data source to use, Part properties that are transferred to your design and the relationship across the tables in your preferred parts database.

**Note:** If this section is missing or the configuration file paths are incorrect, you will experience errors in any CIS database operations.

#### **Configuration File**

Use this variable to define the path for the database configuration file if you are using the Licensed version of Capture CIS.

#### Example:

```
Configuration
```

File=D:\Cadence\_10Nov\SPB\_16.3\tools\Capture\Samples\BENCHACC.DBC

Capture.ini Variables

#### **DemoConfiguration File**

Use this variable to define the path for the database configuration file if you are using the Lite version of Capture CIS.

#### Example:

D:\Cadence\_Demo\SPB\_16.3\tools\Capture\Samples\DemoBENCHACC.DBC

#### Frame view options in CIS Explorer window

The following sections allow you to toggle the visibility of the corresponding frames in Local Part Database and ICA tabs of the Capture CIS Explorer window.

Visibility Frame

This section defines the variables of the visibility frame in CIS Explorer.

Schematic Part Frame

This section defines the variables of the schematic part frame in CIS Explorer.

□ FootPrint Frame

This section defines the variables of the footprint frame in CIS Explorer.

Relational Table Frame

This section defines the variables of the relational table frame in CIS Explorer.

Each of the above sections has two variables that define the frame visibility in the Local Part Database and ICA tabs in the Capture CIS Explorer window.

#### **Visible**

Set the value to 1 to ensure the corresponding frame is visible in the Local Part Database tab.

Set the value to 0 (zero) to ensure the corresponding frame is hidden in the Local Part Database tab.

#### Visible In ICA Mode

Set the value to 1 to ensure the corresponding frame is visible in the ICA tab.

Set the value to 0 (zero) to ensure the corresponding frame is hidden in the ICA tab.

Capture.ini Variables

#### ConvertDialog

The variables in this section define the default behavior of the Save Converted Libraries and Designs dialog box. This dialog box appears when you exit Capture if you have you included a configured library or a referenced design from a version of Capture prior to 16.3 in design that is based on a 16.3 or later version of Capture.

#### Choice

Set this variable to Save All to ensure that all displayed libraries or designs are saved to the upgraded version.

Set this variable to NO All to ensure that none of the displays libraries or designs are saved to the upgraded version.

#### Do Not Ask

Set this variable to 1 to ensure that the dialog box will not be displayed every time you close Capture in the upgrade library and design mode. Capture will use the option that is set for the Choice in this section.

**Note:** This option applies to referred libraries only. These are libraries that are included in a project through the Add Library command on the Place Part dialog. In addition, when you close an older version library directly opened in Capture or when you exit Capture after opening an older version library, the application always prompts you to upgrade the library.

Set this variable to 0 to ensure that the dialog box will appear every time you close Capture in the upgrade library and design mode.

## OrCAD Capture Quick Reference Capture.ini Variables

### **Capture Toolbar**



The Capture toolbar provides shortcuts for many of the most frequently used commands. The following table describes the icons on the toolbar.

Icon	Name	Description
	New document	Creates a new document based on the active document. Equivalent to the New command on the File menu.
	Open document	Opens an existing document based on the active document. Equivalent to the Open command on the File menu.
	Save document	Saves the active schematic page or part. Equivalent to the Save command on the File menu.
	Print	Prints the active schematic page or part. Equivalent to the Print command on the File menu.
8	Cut to clipboard	Removes the selected object and places it on the Clipboard. Equivalent to the Cut command on the Edit menu.

## OrCAD Capture Quick Reference Capture Toolbar

	Copy to clipboard	Copies the selected object to the Clipboard. Equivalent to the Copy command on the Edit menu.
	Paste from clipboard	Pastes the contents of the Clipboard at the cursor. Equivalent to the Paste command on the Edit menu.
9	Undo	Undoes the last command performed. Equivalent to the Undo command on the Edit menu.
Ø.	Redo	Redoes the last command performed. Equivalent to the Redo command on the Edit menu.
74S133	Most recently used	Displays the most recently placed part name in the drop- down list. Capture automatically adds part names as you select them from the Place Part dialog box. Select from the list to place parts again later.
Q	Zoom in	Zooms in to present a closer, enlarged view. Equivalent to the In command on the Zoom menu (on the View menu).
Q	Zoom out	Zooms out to present more of your document. Equivalent to the Out command on the Zoom menu (on the View menu).
	Zoom to region	Specifies an area of the schematic page or part to enlarge to fill the entire window. Equivalent to the Area command on the Zoom menu (on the View menu).
•	Fisheye	Toggles the Fisheye mode on and off.
@	Zoom to all	Views the entire document. Equivalent to the All command on the Zoom menu (on the View menu).
U?	Annotate	Assigns part references to parts on the selected schematic pages. Equivalent to the Annotate command on the Tools menu.

## OrCAD Capture Quick Reference Capture Toolbar

49	Back annotate	Back annotates the selected schematic pages. Equivalent to the Back Annotate command on the Tools menu.
	Design rules check	Checks for design rules violations in the selected schematic pages. Equivalent to the Design Rules Check command on the Tools menu.
M	Create netlist	Creates a netlist from the selected design. Equivalent to the Create Netlist command on the Tools menu.
	Cross reference	Creates a cross reference report of the selected schematic pages. Equivalent to the Cross Reference command on the Tools menu.
	Bill of materials	Creates a bill of materials report from the selected schematic pages. Equivalent to the Bill of Materials command on the Tools menu.
	Snap to grid	When Snap to Grid is turned on automatically aligns all objects as you place or move them on the page, by snapping them to the page grid.
		When Snap to Grid is turned off , then Capture allows you to place or move objects anywhere on the page.

October 2012 25 Product Version 16.6

## OrCAD Capture Quick Reference Capture Toolbar

	Area Select - Fully Enclosed Vs Intersecting	If the button is in the Intersecting mode state objects are selected when the selection area border intersects them.  If the button is in the Fully Enclosed state objects are selected only when they are completely enclosed in the selection area.  This is equivalent to selecting the Area Select options under the Select tab in the Preferences dialog box.  Note: If the button is in the Enclosed mode state, ensure that the object along with its name and number are enclosed in the selection area. Otherwise, the object does not get selected.
IQ.	Drag connected object	If the button is in the state then Capture allows to drag and place objects on the schematic, even if the connectivity changes.  If the button is in the state then the selected object attaches to the cursor and does not get placed on the schematic, if it changes the connectivity.
€;	Project manager	Displays a project manager window for the active document, providing an overview of project contents.
3	Help	Displays the online help. Equivalent to the Help Topics command on the Help menu.

### **Draw Toolbar**



The Draw Toolbar provides shortcuts for commands to place components, pins, wires, bus, and drawing objects, such as arcs, polyline, ellipse, and text. The following table describes the icons on the toolbar.

Tool	Name	Description
B	Select	Selects objects. This is the normal mode.
10	Place part	Selects parts from a library for placement. Equivalent to the Part command on the Place menu.
1	Place wire	Draws wires. SHIFT allows any angle drawing. Equivalent to the Wire command on the Place menu.
*	Auto Connect two points	Switches the Schematic page editor into the Auto connect mode and allows you to connect two points on the page.
<b>3</b>	Auto Connect multi points	Switches the Schematic page editor into the Auto connect mode and allows you to connect multiple points on the page.

## OrCAD Capture Quick Reference Draw Toolbar

*	Auto Connect multi points	Switches the Schematic page editor into the Auto connect mode and allows you to connect points to a bus.
abc	Place net alias	Places aliases on wires and buses. Equivalent to the Net Alias command on the Place menu.
7	Place bus	Draws buses. SHIFT allows any angle drawing. Equivalent to the Bus command on the Place menu.
-	Place junction	Places or deletes junctions. Equivalent to the Junction command on the Place menu.
1	Place bus entry	Draws bus entries. Equivalent to the Bus Entry command on the Place menu.
<u>\</u>	Place power	Places power symbols. Equivalent to the Power command on the Place menu.
-	Place ground	Places ground symbols. Equivalent to the Ground command on the Place menu.
•	Place hierarchical block	Places hierarchical blocks. Equivalent to the Hierarchical Block command on the Place menu.
0	Place port	Places hierarchical ports on schematic pages. Equivalent to the Hierarchical Port command on the Place menu.
<b>⊕</b>	Place pin	Places hierarchical pins in the selected hierarchical block. Equivalent to the Hierarchical Pin command on the Place menu.
t.	Place off- page connector	Places off-page connectors. Equivalent to the Off-Page Connector command on the Place menu.
X	Place no connect	Places no-connect symbols on pins. Equivalent to the No Connect command on the Place menu.

## OrCAD Capture Quick Reference Draw Toolbar

13	Place line	Draws lines. Equivalent to the Line command on the Place menu.
43	Place polyline	Draws polylines. SHIFT allows any angle drawing. Equivalent to the Polyline command on the Place menu.
4	Place rectangle	Draws rectangles. SHIFT constrains the shape to a square. Equivalent to the Rectangle command on the Place menu.
G.	Place ellipse	Draws ellipses. SHIFT constrains the shape to a circle. Equivalent to the Ellipse command on the Place menu.
B	Place arc	Draws arcs. Equivalent to the Arc command on the Place menu.
B	Place elliptical arc	Draws elliptical arcs. Equivalent to the Elliptical Arc command on the Place menu.
NA	Place bezier curve	Draws bezier curves. Equivalent to the Bezier Curve command on the Place menu.
abc •	Place text	Places text. Equivalent to the Text command on the Place menu.
•	Place IEEE Symbol	Places IEEE symbols. Equivalent to the IEEE Symbol command on the Place menu. This command is available in the Part Editor.
<b>]</b> ;}	Place Pin Array	Places pin arrays. Equivalent to the Pin Array command on the Place menu. This command is available in the Part Editor.
	Place Bundle	Opens the Bundle dialog box that allows you to create, modify, delete bus bundles. You can also import Xml bundle definitions into the current design.

## OrCAD Capture Quick Reference Draw Toolbar

6

### **PSpice Toolbar**



The PSpice toolbar provides shortcuts for many of the most frequently used PSpice commands. This toolbar appears only if you have PSpice license and open a project that uses PSpice. The following table describes the icons on the toolbar.

Tool	Name	Description
~	New simulation profile	Creates a new simulation profile. Equivalent to the New Simulation Profile command on the Pspice menu.
N	Edit simulation profile	Opens simulation profile for editing. Equivalent to the Edit Simulation Profile command on the Pspice menu.
	Run PSpice	Runs PSpice simulation for active profile. Equivalent to the Run Pspice command on the Pspice menu.
<b>₹</b>	View simulation results	Shows simulation results for the active profile. Equivalent to the View Simulation Results command on the Pspice menu.
18	Place voltage marker	Places voltage/digital level markers. Equivalent to the Voltage Level command on the Markers sub-menu of the Pspice menu.

## OrCAD Capture Quick Reference PSpice Toolbar

R	Place differential marker	Places voltage differential marker. Equivalent to the Voltage Differential command on the Markers sub-menu of the Pspice menu.
B	Place current marker	Places marker showing current into a pin. Equivalent to the Current Into Pin command on the Markers sub-menu of the Pspice menu.
18	Place power marker	Places marker showing power dissipation of a device. Equivalent to the Power Dissipation command on the Markers sub-menu of the Pspice menu.
V	Enable bias voltage display	Enables display of bias voltages. Equivalent to the Enable Bias Voltage Display command on the Bias Points sub-menu of the Pspice menu.
1v	Toggle bias voltage display	Toggles display of voltage bias point value for selection. Equivalent to the Toggle Selected Bias Voltage Display command on the Bias Points sub-menu of the Pspice menu.
1	Enable bias current display	Enables display of bias currents. Equivalent to the Enable bias current display command on the Bias Points sub-menu of the Pspice menu.
I	Toggle bias current	Toggles display of current bias point value for selection. Equivalent to the Toggle Selected Bias Current Display command on the Bias Points sub-menu of the Pspice menu.
W	Enable bias power display	Enables display of bias point quiescent power. Equivalent to the Enable bias power display command on the Bias Points sub-menu of the Pspice menu.
- Wax	Toggle bias power	Toggles display of bias point quiescent power for selection. Equivalent to the Toggle bias power command on the Bias Points sub-menu of the Pspice menu.

7

### **FPGA Toolbar**



The FPGA toolbar offers a quick and easy way to simulate, synthesize, and compile vendor library projects. This toolbar is active only when you open a project of type Programmable Logic Design. The following table describes the icons on the toolbar.

Tool	Name	Description
ê un.	Simulate	Initiates setup for simulation of FPGA design.
<u>₹</u> 3	Synthesize	Initiates setup for synthesis of FPGA design.
PR	P&R	Starts the place-and-route tool specific to the target vendor of the programmable logic design.
<b>\$</b>	Compile vendor libraries	Initiate compilation of the vendor simulation models.

## OrCAD Capture Quick Reference FPGA Toolbar

### **Part Manager Toolbar**



The Part Manager toolbar offers a quick and easy way to perform common tasks. This toolbar is active only when you open OrCAD Capture CIS. The following table describes the icons on the toolbar.

Tool	Name	Description
	Link database part	Links a part from the database to a schematic part. Equivalent to the Link Database command on the Tools menu.
	Update All Part Status	Checks all parts against the parts database. Equivalent to the Update All Part Status command on the Tools menu.
	Bill of materials	Creates a bill of materials. Equivalent to the Standard command on the CIS Bill of Materials sub-menu of the Reports menu.
<b>□</b>	Crystal Reports bill of materials	Generates bill of materials using Crystal Reports interface. Equivalent to the Crystal Reports command on the CIS Bill of Materials sub-menu of the Reports menu.
UR	Variant report	Generates a variant report. Equivalent to the Variant command on the Reports menu.

## OrCAD Capture Quick Reference Part Manager Toolbar

	Expand/ collapse tree item	Expands or collapses the tree view. Equivalent to the Expand/collapse tree item command on the View menu.
÷€;	Show/Hide tree view	Shows or hides the tree view. Equivalent to the Show/Hide tree view command on the View menu.
2	Resolve ambiguity	Resolves ambiguity for selected item. Equivalent to the Resolve ambiguity command on the Tools menu.

### **Search Toolbar**



The Search toolbar offers a quick and easy way to perform common search tasks in Capture. This toolbar is active only when you open OrCAD Capture CIS. The following table describes the icons on the toolbar.

Tool	Name	Description
44	Find	Searches for items based on the selection in the Project Manager and the options selected from the Search Options list. You can search at any level of the project hierarchy from design down to page.  You can use the * (star) and ! (exclamation mark) wildcard characters.
•	Search Options	Narrows the search filter down on various parameters such as match case and schematic component types.
	Previous	Searches the previous instance of the last search hit.
	Next	Searches the next instance of the last search hit.

## OrCAD Capture Quick Reference Search Toolbar

10

### **SI Analysis Toolbar**



The SI Analysis toolbar for SI Analysis tasks provides shortcuts for many of the most frequently used SI Analysis commands. The following table describes the icons on the toolbar.

Tool	Name	Description
990	Auto Assign Discrete SI Models	Assigns discrete SI models to the design parts.
	Validate SI Model Assignments	Validates the SI model assignments.
	Export SI Models Used	Exports the SI models used in the design into a DML library file.
<b>*</b>	SI Library Setup	Opens the Library Setup (SI Analysis) window to set the DML libraries.
	SI Model Integrity	Opens Model Integrity with the DML file for the devices.

## OrCAD Capture Quick Reference SI Analysis Toolbar

	Export Electrical Constraint sets	Opens the Export Electrical Csets from design window. You can export a topology file that can then be updated using SigXPlorer offline in a distributed design environment.
	Import Electrical Csets	Opens the Select Directory window where you can specify the directory from where you want to import an Electrical Cset.  This allows you to import topology files that have been updated offline in a distributed design environment.
***	Validate Electrical Cset Assignments	Opens the Validate ECSets in design window where you can selectively validate Electrical Csets in the design.
<b>*</b>	Remove SI Model Assignments	Removes SI model assignments.
~ <b>*</b>	Remove Electrical Cset Assignments	Opens the Remove ECSets from design window where you can selectively remove existing Electrical Csets from the design.
27	Assign SI Model	Opens the SI Model Assignment window where you can assign models from the listed libraries. You can also autogenerate models
<b>™</b> B⇔l	Explore Signal	Opens SigXplorer to explore the signal.
<b>•</b>	Associate Electrical Cset	Associates an Electrical Csets using a topology file.

October 2012 40 Product Version 16.6

### **Footprint Viewer Toolbar**



The Footprint Viewer toolbar offers a quick and easy ways to view the footprint on the canvas in various different angles. It also provides access to the measure tool and the different zoom options in the footprint viewer. The following table describes the icons on the toolbar.

Tool	Name	Description
	Show Footprint Viewer	Toggle (show or hide) the 3-D Footprint Viewer display
	Show Top	Show top view of the PCB Footprint in the Viewer.
	Show Bottom	Show bottom view of the PCB Footprint in the Viewer.
	Show Front	Show front view of the PCB Footprint in the Viewer.
	Show Back	Show back view of the PCB Footprint in the Viewer.

## OrCAD Capture Quick Reference Footprint Viewer Toolbar

	Show Left	Show left view of the PCB Footprint in the Viewer.
	Show Right	Show left view of the PCB Footprint in the Viewer.
	Show Isometric View	Show isometric view of the PCB Footprint in the Viewer.
X	Show Axis	Toggle (show or hide) the display of the axis in the Footprint Viewer.
123	Show Measure Tool	Toggle (show or hide) the display of the Footprint Viewer Measure Tool
•	Zoom In	Zoom in to the view on the canvas
Q	Zoom Out	Zoom out of the view on the canvas
Q	Zoom Fit	Zoom to fit the PCB footprint on the canvas

October 2012 42 Product Version 16.6