

CADENCE SPB/OrCAD RELEASE 16.5 README -- Windows Version

Installation Guide

You can find the *Cadence SPB/OrCAD 16.5 Release Installation Guide for Windows, Version 16.5* (pcbInstall.pdf) in the Documents folder of the Disk 1 folder of the Cadence Product DVD.

Migration Information

Important migration information is contained in the *Migration Guide for Allegro® Platform Products Release 16.5*, which is available when you install this software or on Cadence Online Support (<http://support.cadence.com>).

NOTE: OrCAD customers need to contact Cadence Channel Partners. Cadence Channel Partners are listed at: http://www.cadence.com/Alliances/channel_partner/pages/default.aspx.

System Requirements

Information about minimum and recommended system requirements can be found in the Documents folder of the Disk 1 folder in the *Allegro Platform System Requirements* document (pcbsystemreqs.pdf) or on Cadence Online Support (<http://support.cadence.com>).

NOTE: OrCAD customers need to contact Cadence Channel Partners. Cadence Channel Partners are listed at: http://www.cadence.com/Alliances/channel_partner/pages/default.aspx.

What's New

Product release notes are available at:

<http://support.cadence.com/wps/mypoc/cos?uri=deeplinkmin:DocumentViewer;src=pubs;q=landing/spb165/prodList.html>

KPNS

The Known Problems and Solutions (KPNS) document is located at:

<http://support.cadence.com/wps/mypoc/cos?uri=deeplinkmin:DocumentViewer;src=pubs;q=landing/spb165/kpnsList.html>

Custom Environments

Customers using custom batch files or scripts to set up their environments must add the following to their path. There is the potential that some Allegro products may not launch without this setting.

%CDSROOT%\OpenAccess\bin\win32\opt

Allegro® /SigXplorer® ABIML Libraries for Default Trace Models with Surface Roughness Effect

The Allegro /SigXplorer ABIML Library includes ABIML libraries for SigXplorer default trace models with surface roughness effect. It is designed to provide accurate trace models in Allegro /SigXplorer without time consuming EMS2D solver runs. The Library is installed if you select to install Allegro /SigXplorer.

Downloading and installing SPB Software

Cadence software can be downloaded from:

<http://downloads.cadence.com>

NOTE: OrCAD customers can contact Cadence Channel Partners to obtain their software.
Cadence Channel Partners are listed at:

http://www.cadence.com/Alliances/channel_partner/pages/default.aspx.

Download Disks 1 through 3 and then extract the zip files into a temporary directory such as cdnstemp. This will leave you with a directory structure that looks like:

```
Disk1 folder  
Disk2 folder  
Disk3 folder  
autorun.inf  
setup.exe  
setup.ini
```

Complete the installation by running `setup.exe` from the temporary directory or consult the installation guide for more detailed information.

WARNING: The installer will automatically add the programs in this release to the Windows Firewall Exceptions list for Windows XP and Service Pack 2 at the end of the installation process. If you do NOT want the installer to do this, you must run `setup.exe` from a DOS command prompt window with the following switch:

```
setup.exe -nofirewallexceptions
```

When the license manager installation is complete, continue by installing the Cadence products.

NOTE: If you are prompted to reboot, reboot the machine and log in with the administrator privileges login id to successfully complete the installation.

List of Fixed CCRs

- [Enhancement CCRs](#)
- [Bug CCRs](#)

Enhancement CCRs:

CCR ID	Description
19714	Associative Dimensioning is needed in Allegro.
177164	Request to assign MAX_VIA_COUNT to members of Xnet
185227	Fill pad using detail
225535	Max_via rule problem with XNETS
265409	Request to assign MAX_VIA_COUNT to members of Xnet
271018	Purge unused spacing and physical rule sets
298635	Dimensioned values should be associated with db objects
326263	Export Moden Cross Section Data into Excel/Text File
326480	Enhance Skill for determining the drill tolerance on design
345384	Purge the constraint set
359308	Request to replace padstacks in dra file by clicking pins
366939	Cannot attach refdes on silk subclass with add text
373422	Dimensioning Auto update when making a change to outline.
383852	Change command cannot move dimension to the subclass other than Dimension
391156	Mouse selection to replace padstack
404112	Request Group Editing of Padstacks in dra file.
405488	Associative Dimensioning is needed in Allegro.
460884	axIPolyOperation returns nil by mistake.
613174	Add associative dimensioning feature for documenting designs
613342	Add associative dimensioning feature for documenting designs.
636351	Need ability to assign different MAX_VIA values to nets within an Xnet.
647670	Need the ability to copy HDI stacked vias
658109	void oblong for multi-drill
658139	Please keep the setting of Waive DRC.
688150	Enhance Skill for determining the padstack drill tolerance on design
693825	Intelligent dimensioning needed in Allegro
709452	Provide 'Stick' function in the title bar of Show Element form
769062	Help for user created menus.
805252	Enh: Balloon Leader with rectangle as a shape
810975	Support placement replication for RF circuits
814767	Dimensioning Auto update when making a change to outline.
841103	Mouse wheel support in list boxes
845258	HARD_LOCATION property is required to Skip Character while renaming refdes.
855015	The rats are NOT connecting to the ends of the clines like they should be.
855804	Warning message should let users know they can not assign constraints.
859746	enhance request for compose shape
865561	Request the ability to select a ratsnest when creating a shape to assign the net.
866194	Dangling vias are actually not dangling but have NET_SHORT property assigned.
866306	Documentation for adding region names needs updated
867785	Allegro reset Active Class and subclass for Layer Priority
867912	axITransformObject does not seem to work for line segments
868378	add more instructional messages to the command window in swap FPGA mode
870992	Opening a 16.2/16.01 board file in 16.3 should provide a warning message
873564	Request Group Editing of Padstacks in Package Symbol Editor
876690	gloss area highlight needs better docs
878507	Restore the Hide button in the Place Manual form
880273	Suppress Drill hole size is equal or larger than smallest pad size warning
882644	PCB Place Replicate Function automatically match Enhancement
885644	Improve error message when unable to delete a layer.

886001	file association for cpm in the switchrelease
886155	Enhancement request for Select/Clear All on Export Libraries form.
888517	The "Net Single Pin and No Pin" report is missing the reference designator
893431	Request SKILL function to get a list of property definitions.
881723	Via Labels feature is available with Free Viewer but not with Design L or Viewer Plus.
239288	Router improvements for package breakout pattern
605023	Need rats by layer function for Free Viewer
648987	Cannot Gerber out Bondwires for documentaion in 16.x SW.
184204	Crashing IO planner window should deregister from APD
860989	Add details to Cap_Ug.pdf
861538	Document should me more prescribe about "footprint to display in the viewer" in CAP_UG
873838	Option to change the DRC Warnings to Error Messages.
848526	Query columns sort setting is not saved
876978	The order of properties in QUERY window and EXLORE window of CIS should be same
659148	Add the mapping info for sizeable pins to physical pin number and signal name
848573	PDF Publisher documentation improvements request
859134	Include description on how to assign MECH_PART1 in BOM Template Customization
612642	Modify SI design Audit to Screen for Bad Dielectric Constants on Conductor/Plane Layers
886516	Users must not be required to be an administrator to use SPB Switch Release.
746435	Why UC1846 model from controller.lib showing incorrect result?
804240	Problem in simulation result for a multi-section split part.
804588	Problem in simulation result for a multi-section split part
866839	The 8.4 version of the tclsh.exe program should be provided in Cadence hierarchy
7627	Ability to run the Setup Advisor on just one net.
8709	Database Setup Advisor insufficient for CLASS and PINUSE
194070	Enhance SI audit to report coupled neighbors
283676	Model Selector usage request
593221	Two pins of same net can have different pinuse. Is it makes sense electrically?
718793	Adding basic shape editing to PCB-SI
844667	Create List of Nets window go to behind of allegro window during opening close dialog.
861991	How to eliminate no-installed components from the topology?
862821	On launching Model Editor from the "SI Model Browser" form, selected model is reset.
864110	SI Design Setup: want to change the dialog of "Create Dafult Models For All Discretes"
866009	Net with Pull-up/down should not be used for Diff-pair.
867046	Modify Padstack Command for PCB SI.
878594	Model Mapping with PCB Editor should look for ESpice/Ibis models from
862002	Need the ability to set the DIE attachment type on a Die Component using Skill.
862137	SPB 16.3 SiP Logic - Derive assignment is unable to resolve connectivity of shapes
867607	SiP Layout enhancement to autobond die pads to exsiting bond fingers on all 4 sides.
868291	BGA generator will not allow a 40 by 40 staggered pitch
874550	Associate a t-point to a bondfinger
888706	Need the ability to add more than 18 characters to Subclass names.

Bug CCRs:

CCR ID	Description
227717	Dynamic shape not voiding properly.
407233	Static Shape not voiding correcting on this MCM design.
554151	zcopy creates shape which is not same as original shape
594210	Shape gets OOD after editing the boundry can't update to smooth after this
624327	Shape not cross hatching completely.
732473	Shape void problem - void running horizontally across the board.
747853	zcopy does not create void properly
793265	Split_plane_make_stange_shape_void
828501	Dynamic shape for GND Net is not filling correctly on TOP Layer.
835108	Dynamic shape for GND_POWER net not filling correctly on TOP Layer
840460	Cross Probing with capture causes nets to lose custom colors
846462	Documentation for axlShapeMerge is incorrect
848147	Place replicate ratsnest display issue
856306	Modifying pad instance corrupts db
856899	Ground plane does not import from PADS
860815	Place Replicate apply function maps RF components, copies shapes on top and creates drcs
861979	Heads_Up_Display does not appear for Net's constraint
862980	When sliding a via the potential DRC behaviour is inconsistent.
864223	The Allegro 3D viwer zoom size is changed when we reopen a minimized window.
864245	Cross Probing with capture causes nets to lose custom colors
864985	File > Script > Browse > Cancel crash.
867223	Shape fill disappears when Negative shape is converted to Positive in Cross Section
868939	Moving a group does not move few shapes which are part of group
869494	Plotting using pdf as the output does not fill the sheet contents
869496	The Find Filter will allow Fingers to be deleted when set to Via's only.
869630	Support additional dielectric layers above the top conductor layer for flex designs.
869746	Shape can't fill in some area of board
870145	With Manual Void, assign Net is allowed, but it is not working.
871546	Unable to fill out a dynamic shapes
873560	Bug: SWAP_INFO deleted on board side when forward annotating
874400	Flip mode issue with move command
875709	Film area report generated incorrect data at 11
878276	Allegro odd angle void in dynamic shape
881845	Delete island deletes complete shape
882281	shape_rki_autoclip does not re-clip dynamic shape to route keepin and shows drc
883631	Canceling the Polar command without any data: Error "E- Expecting +/- or numerical data"
883683	When selecting only Clines to delete, the tool still deletes the Wirebonds.
885849	Silkscreen Audit cannot find Solder mask for the text string
886090	Add Arc w/Radius does not snap to grid
888179	Screenshot for max parallel constraint misleading
889222	Allegro freezes/hangs when adding shape as Polygon with OpenGL ON.
893348	f_DoLogicalOperation failing in metal usage report for layer TC2 in this design
273302	Shape voiding causing DRCs
286451	Shape is generated unproperly
527265	Dynamic shape fill result incorrect.
877912	Shape to Shape DRC behaving inconsistently above 90 um spacing on mcm database.
887442	Copper pour of Dynamic shapes on Top layer containing many existing signal traces fails.
715071	Wrong field is edited before hit OK
758812	False DRC ERROR [DRC0039] reported in the design
833274	Crash after using "forgetproperty" in [Mapper] section of edif2cap.cfg
847660	All chapters in the CIS User Guide are 3
862394	"Bus Bundle" needs to be changed to "Net Group"
868225	Shortcut Key to select entire net "CTRL+SHIFT+W" needs to be documented

765574	3D footprint viewer picks Instance value and not occurrence value
802257	"Show Footprint" should read the Occurrence Footprint value
856204	FUNCTION change after Import Logic causes incorrect group prop.
861616	Need proper documentation for generating reports from Constraint Manager
869674	-a option of bomhdl batch command
695603	Invalid character in part_name creates incomplete schematic
877237	forces any pin to be marked as do not connect during schgen
877246	symbol path cannot be empty message shouldn't appear for parts not being generated
849344	Installer is not saving proper pspice.ini file.
865821	PCB SI crashes on selecting Close button and then Exit button in PDN Analysis
867057	Mounted Inductance was not included in Plot result.
867401	PDN: Display Current doesn't exist in Pop-up menu during Display TempRise
867406	PDN: the displayed value should be cleared when the display type changed.
871399	PDN: The Sort function on the Voltage column seems not to work correctly.
871516	The Arc and diagonal slit part seem not be meshed correctly.
868238	Pspice demo crashes while placing Plot > Label > Line
870712	Power symbols don't contain signal name
875537	TCL script will assign signal names improperly
881054	The option "use regular expressions in filter" works in opposite way.
824309	Help doc doesn't open from SigXP View Trace Model Parameters window.
860495	Sigxp does not use the env journal_prefix variable.
867969	Invalid pin when diff pair signal model is associate with a model selector statement
872003	TDR simulation results were different between 15.7 and 16.3.
277743	Audit should identify incorrect devices class of connector
864079	Cancel of Analysis Preferences
864176	Help in SigNoise Errors/Warnings cause Allegro crash.
865307	Analysis Preferences: Cancel button seems not to work correctly in the OATS tab
868825	DRC becomes "Out of Date" after saving and exiting the database.
869931	DML Library Management rewrites library longer than 512 characters into multiple lines.
874010	PCB SI crashes when the Xnet is extracted with VARIANT_TO_IGNORE property.
882567	PCB SI crash if boolean type prop was specified to VARIANT env.
885634	Fix an EMS3D model re-use problem
885996	Effect of sn_maxwidthlimit is not seen in cross section impedance calculations
869098	auto assign net to die abstract DIE crashes SIP
888679	Can't create the Dynamic shape on layer M1_sig without unwanted horizontal openings appearing.