

ADIVA Quick Check Cadence/Orcad

Notice

Representations in this User Guide are meant as an overview and quick reference. Full details can be found in the On-Line manuals located at the *ADIVA Corporation* website - www.adiva.com

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ADIVA Quick Check

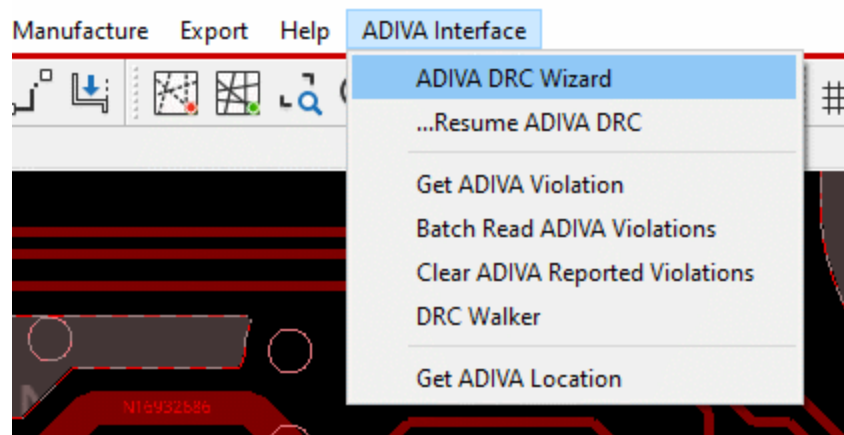
Running ADIVA Quick Check is a simple, automatic process of selecting a Quick Check command file and letting it complete the defined checking process. The Quick Check process is designed to find critical physical and connectivity issues quickly. Items that are more manufacturability issues in nature should be addressed through a standard DRC analysis using manufacturability rule sets.

When checks are complete, a **Violation Checklist** will automatically appear reporting all checks that were run and their results.

All **Violation Checklist** functionality is available as defined in the **Adiva DRC Check User Guide**.

ADIVA Quick Check

In the main Cadence/Orcad menu bar, select **ADIVA Interface** > **ADIVA DRC Wizard**



ADIVA Quick Check

Once the **Layer Assignment** dialog appears, verify layer assignments as usual.

Check the box...

Select and Run Custom DRC Commands

Then select **Continue**...

Allegro to ADIVA Layer Assignment

ADIVA Version Artwork Type GERBER_RS274X

include	Film Name	Layer Usage	Layer Number
<input type="checkbox"/>	drill	None	-1
<input checked="" type="checkbox"/>	TOP	Top Circuit	1
<input checked="" type="checkbox"/>	IN1	Inner Circuit	2
<input checked="" type="checkbox"/>	GND	Plane	3
<input checked="" type="checkbox"/>	VCC	Plane	4
<input checked="" type="checkbox"/>	IN2	Inner Circuit	5
<input checked="" type="checkbox"/>	BOTTOM	Bottom Circuit	6
<input checked="" type="checkbox"/>	silktop	Top Marking	51
<input checked="" type="checkbox"/>	silkbot	Bottom Marking	52
<input checked="" type="checkbox"/>	pastetop	Top Paste	53
<input checked="" type="checkbox"/>	pastebot	Bottom Paste	54
<input checked="" type="checkbox"/>	masktop	Top Mask	55
<input checked="" type="checkbox"/>	maskbot	Bottom Mask	56
	Plated Thru Holes from TOP to BOTTOM		61
	Non Plated Holes from TOP to BOTTOM		62
	Buried Vias from TOP to IN1		63
	Buried Vias from IN2 to BOTTOM		64

Enable All Films Disable All Films

Select and Load Master DRC Rule File

Select and Run Custom DRC Commands

Continue Cancel

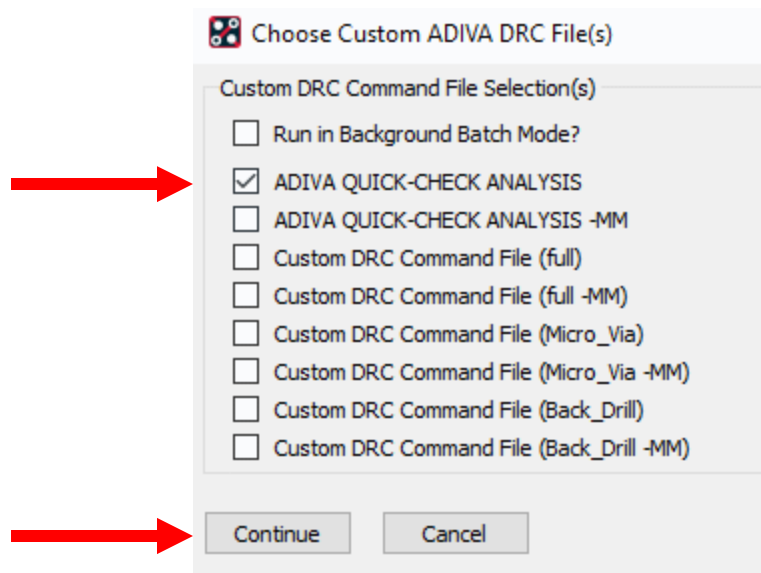
ADIVA Quick Check

The next dialog allows the user to choose their **Custom DRC Command** file. In this case, choose...

ADIVA QUICK-CHECK ANALYSIS

-or-

ADIVA QUICK-CHECK ANALYSIS -MM if checking a metric data set...



Then select **Continue**...

ADIVA Quick Check

The Cadence/Orcad to Adiva conversion and build will begin automatically performing the Netlist Compare and the ADIVA Quick Check.

When it completes, the **Violation Checklist** will appear listing any critical violation found.

The screenshot shows a window titled "Violation Checklist Report". At the top left is a button "Adjust Violation Range". To its right is a text field "Violation File:" followed by a "Save Violation File", "Read Violation File", and "Browse" button. Below this is a section "Choose Violations to View..." with three radio buttons: "Critical" (selected), "Concern", and "Tol".

<input type="checkbox"/>	Critical	<input type="checkbox"/>	Concern	<input type="checkbox"/>	Tol	Accepted	Param	Layer	Seq	Violation Type	Comment
<input type="checkbox"/>	2	<input type="checkbox"/>	0	<input type="checkbox"/>	0	0	0.01300	1	5	Annular Ring - Pin-Thru Hole	0.056000 - 0.250000
<input type="checkbox"/>	2	<input type="checkbox"/>	0	<input type="checkbox"/>	0	0	0.01300	6	6	Annular Ring - Pin-Thru Hole	0.056000 - 0.250000
<input type="checkbox"/>	92	<input type="checkbox"/>	2	<input type="checkbox"/>	0	0	0.00600	1	7	Annular Ring - Via Hole	0.000000 - 0.009000
<input type="checkbox"/>	19	<input type="checkbox"/>	0	<input type="checkbox"/>	0	0	0.00600	6	8	Annular Ring - Via Hole	0.000000 - 0.009000
<input type="checkbox"/>	704	<input type="checkbox"/>	0	<input type="checkbox"/>	0	0	0.00600	1	9	Annular Ring - Via Hole	0.010000 - 0.010000
<input type="checkbox"/>	695	<input type="checkbox"/>	5	<input type="checkbox"/>	1	0	0.00600	6	10	Annular Ring - Via Hole	0.010000 - 0.010000
<input type="checkbox"/>	4	<input type="checkbox"/>	0	<input type="checkbox"/>	0	0	0.00600	1	11	Annular Ring - Via Hole	0.011000 - 0.250000
<input type="checkbox"/>	3	<input type="checkbox"/>	0	<input type="checkbox"/>	0	0	0.00600	6	12	Annular Ring - Via Hole	0.011000 - 0.250000
<input type="checkbox"/>	0	<input type="checkbox"/>	0	<input type="checkbox"/>	0	0	0.01500	1	13	Annular Ring - Other	0.000000 - 0.042000

At the bottom of the window are four buttons: "Delete Selected Violations", "Clear Accepted Violation File", "Close Violation Checklist", and "Save Violation Summary Report".

Viewing Individual ADIVA Violations in Cadence/Orcad

(See ADIVA's DRC User Guide for further details about running checks and viewing results)

Choose a violation type to review in ADIVA...

	Critical	Concern	Tol	Accepted	Param	Layer	Seq	Violation Type	Comment
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00500	4	18	Annular Ring - Via Hole	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00500	7	20	Annular Ring - Via Hole	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4.00000	5	35	Thermal Leg Connection - Min Qty	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00500	5	19	Annular Ring -	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00500	2	21	Annular Ring -	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00500	4	22	Annular Ring -	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00500	7	24	Annular Ring -	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00500	5	23	Annular Ring -	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00500	1	1	Annular Ring -	

Violation Object

ViolXY: 7.250000, 3.160000

Description: Annular Ring - Via Hole

Parameter: 0.005000

Amount: 0.000000

Net: [6814]

Ref-Desg:

Viol Seen: 2 / 4

Accept Violation(s) Accept Remaining

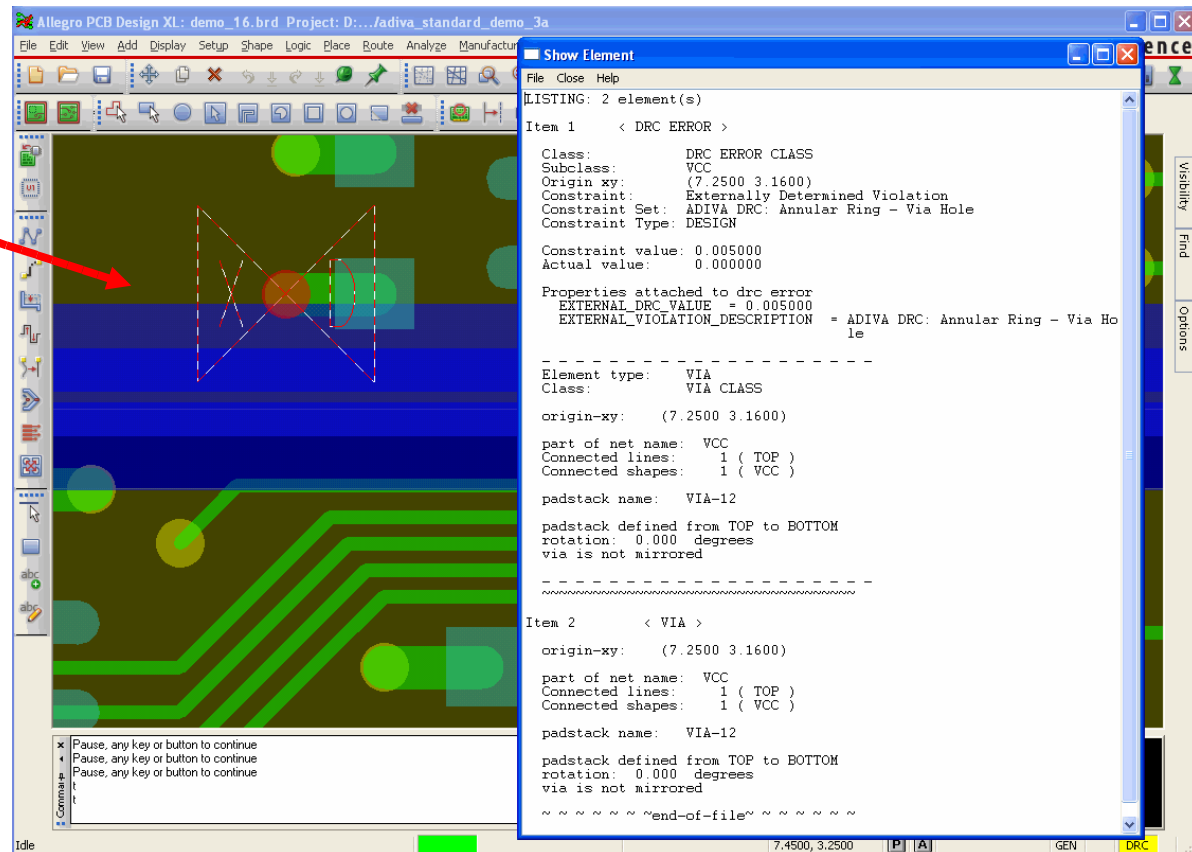
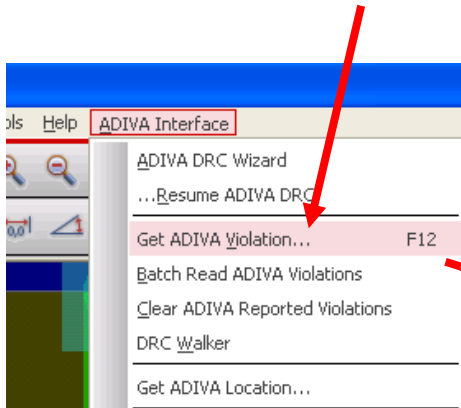
Fix Violation(s) Fix Remaining

Viol Seek Viol Delete

...and select **Viol Seek** to see the violations in ADIVA

Viewing Individual ADIVA Violations in Cadence/Orcad

Then, for any given violation in ADIVA, select in Cadence/Orcad the **ADIVA Interface** menu and choose **Get ADIVA Violation...**



This will zoom the Cadence/Orcad screen and place a marker on the violation location.

It will also display the **Show Element** dialog describing the ADIVA violation.

Continue viewing more violations in ADIVA and for each violation seen, choose **Get ADIVA Violation...** to see the violation in Allegro.

END

ADIVA Quick Check

Cadence/Orcad