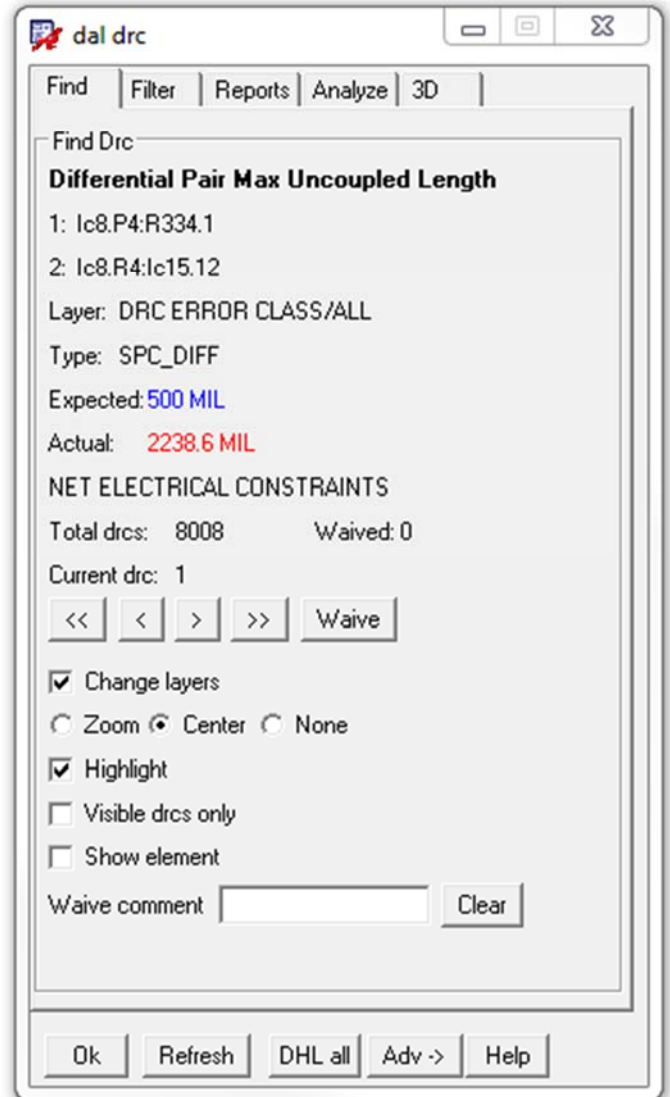


Drc

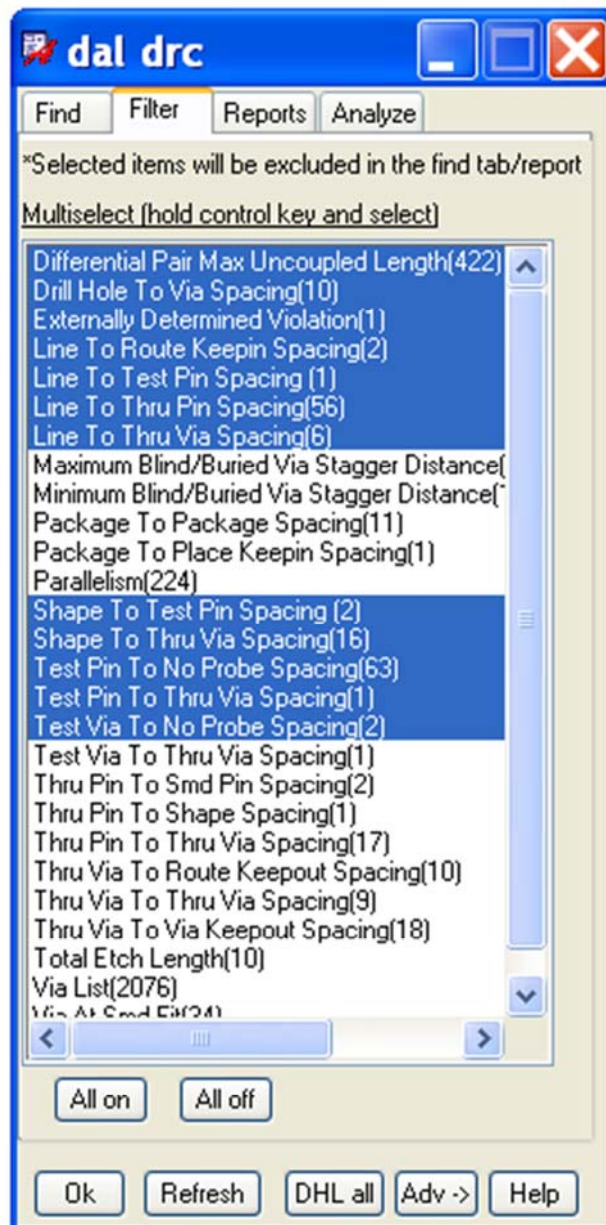
Facilitates the quick and easy identification and removal of DRC's. Also includes a 3D copper to copper clearance check for high voltage to low voltage nets.

Features:

- Walks through each DRC in worst to better order.
- Automatically changes layers, zooms and highlights each DRC.
- Filter feature to isolate certain types of DRCs.
- Add comments and explanations to waived DRCs
- Drill to drill minimum drc checks for plated and non-plated holes.
- 3D High voltage clearance checks.

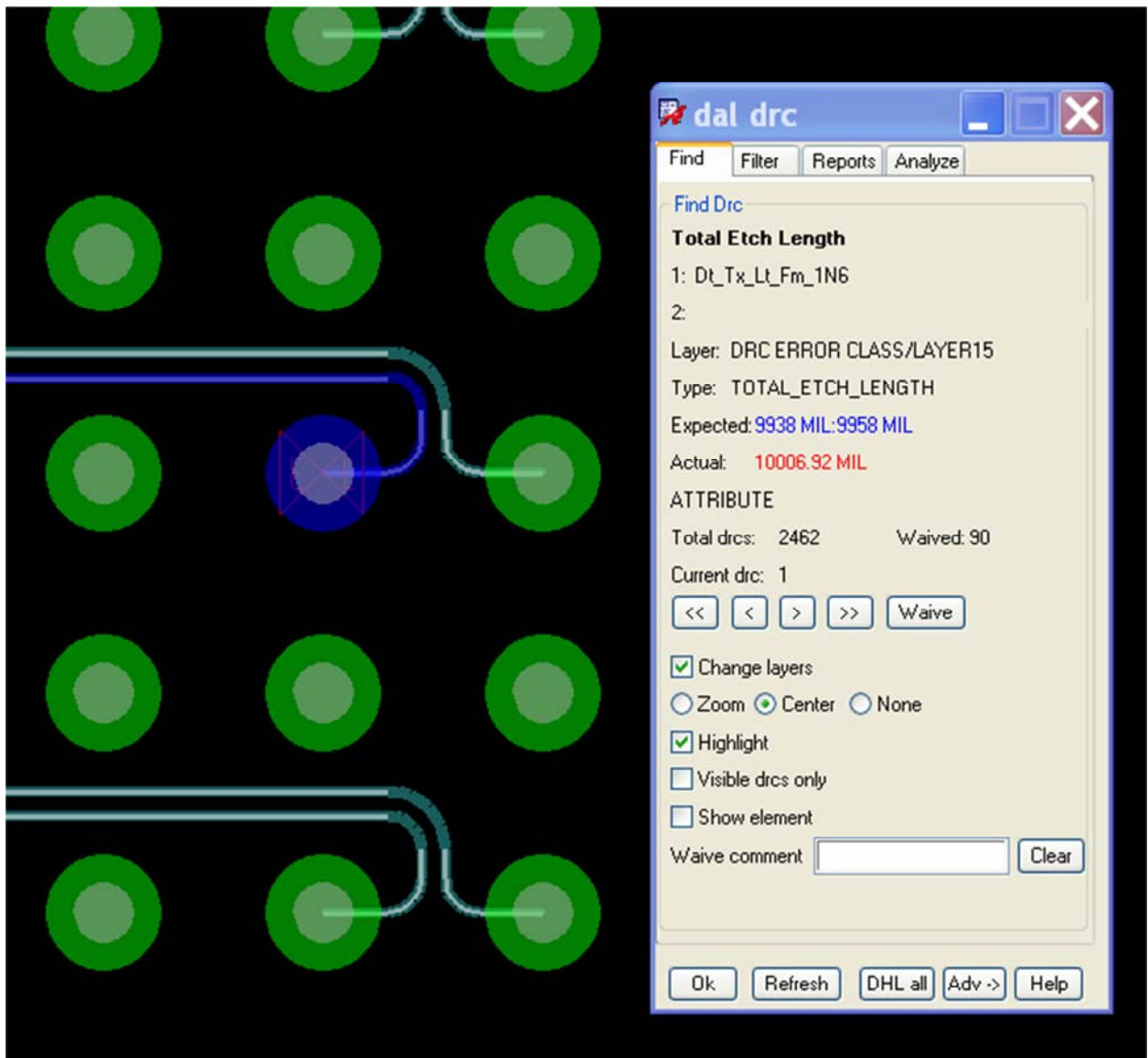


Filter



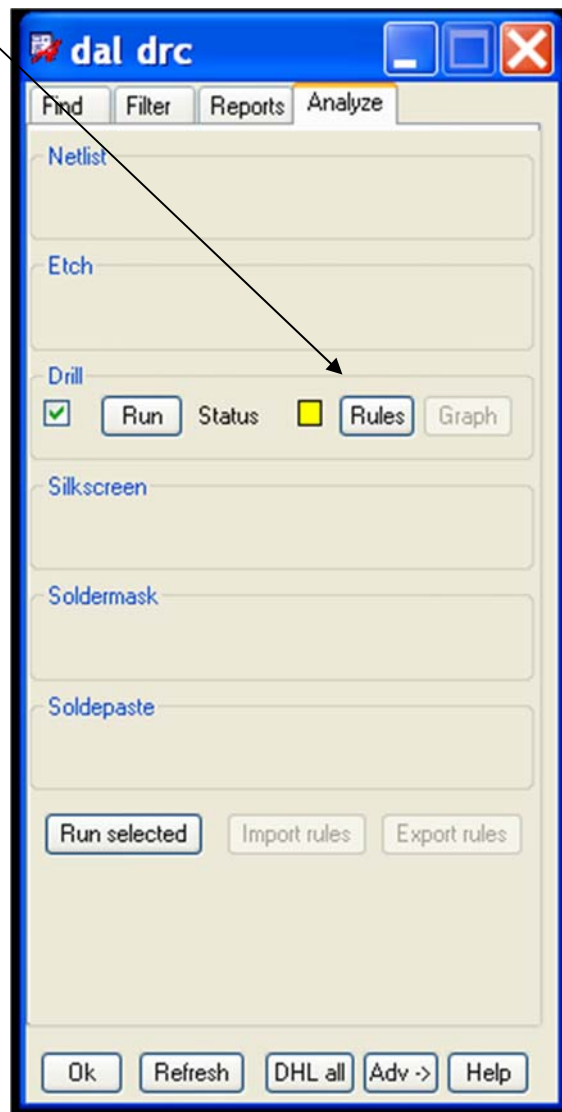
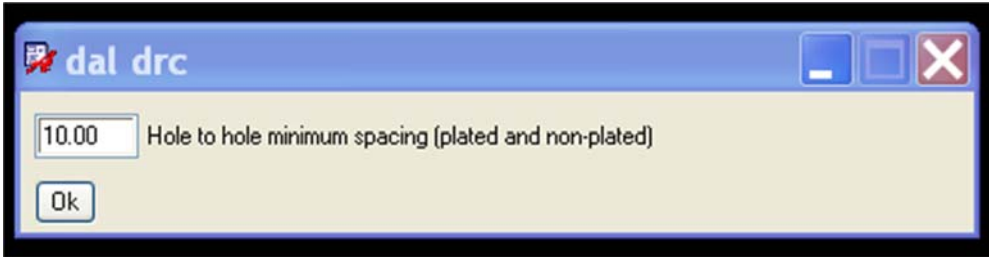
[Selected drc types are excluded on the find tab](#)

Example

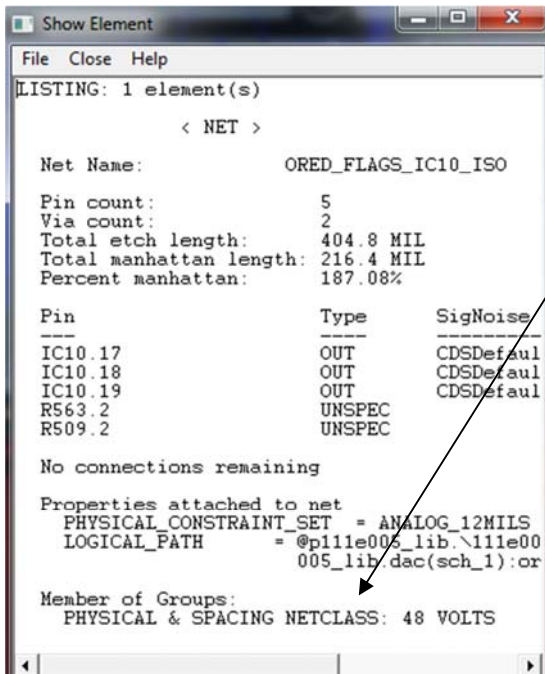
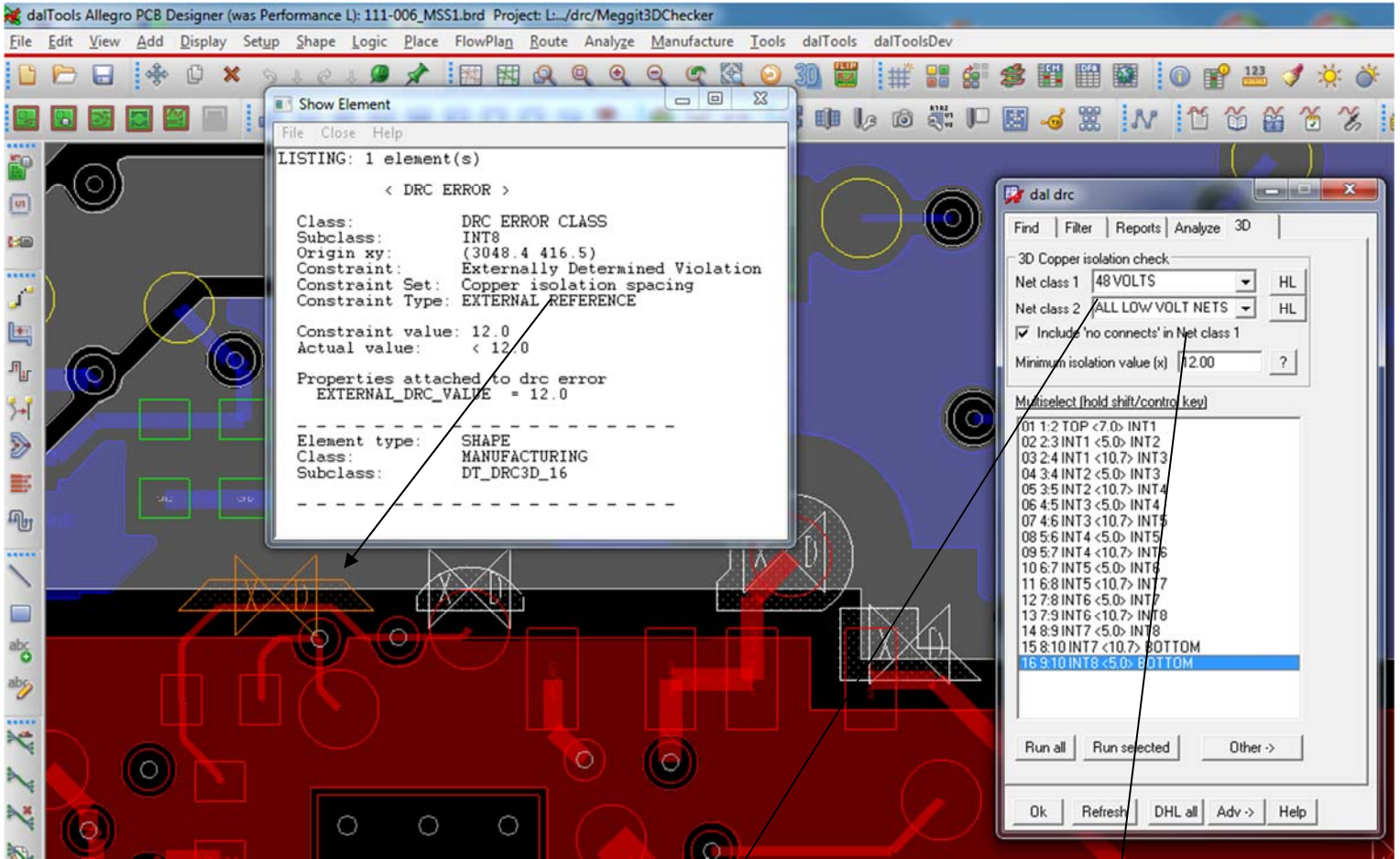


The layers are changed, the display is centered, and the DRC is highlighted along with the affected items

Analyze



3D High Voltage Isolation DRC Checks

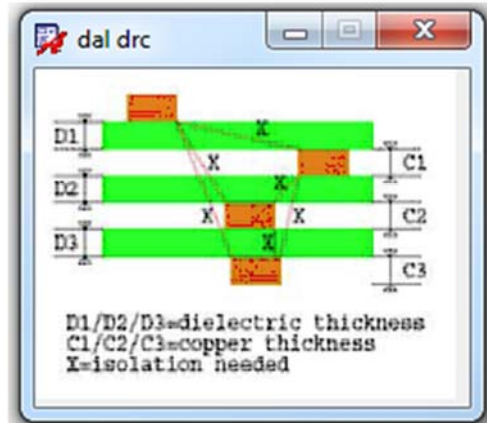


J4.7 UNSPEC
 J16.7 UNSPEC
 J16.6 UNSPEC

No connections remaining

Properties attached to net
 PHYSICAL_CONSTRAINT_SET = POWER
 LOGICAL_PATH = @p111e005_lib.g1b1(\111e005_cfg_pac
 VIA_LIST = VIA20:VIA20TP:VIA30:VIA30TP:VIA18_5
 VOLTAGE = 0.000000 V

Member of Groups:
 PHYSICAL & SPACING NETCLASS: ALL LOW VOLT NETS



3D High Voltage Isolation DRC Checks (Cont)

Allegro Constraint Manager (connected to Allegro PCB Designer (was Performance L) 16.6) [16_6MasterDemo] - [Spacing: Net Class-Classes: All Layers [16_6Mast]

File Edit Objects Column View Analyze Audit Tools Window Help

Worksheet selector: 16_6MasterDemo

Electrical
Physical
Spacing

Spacing Constraint Set

- All Layers
- Net
 - All Layers
 - Net Class-Class
 - All Layers
 - Line
 - Pins
 - Vias
 - Shape
 - Bond Finger
 - Hole
 - BB Via Gap
 - Region
 - All Layers

Objects	Referenced Spacing C Set	Line To									
		Line	Thru Pin	SMD Pin	Test Pin	Thru Via	BB Via	Test Via	Shape	Bond Finger	Hole
Type	Name	mil	mil	mil	mil	mil	mil	mil	mil	mil	mil
Dsn	16_6MasterDemo	DEFAULT	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
NCIs	ALL LOW VOLT NETS	DEFAULT	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
CCIs	ALL LOW VOLT NETS	DEFAULT	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
CCIs	48 VOLTS	ATEX_ISO_2...	38.0:12...	38.0:12...	38.0:12...	38.0:12...	38.0:12...	38.0:12...	38.0:12...	38.0:12:0:12...	38.0:12...
NCIs	48 VOLTS (2)	ATEX_ISO_2...	38.0:12...	38.0:12...	38.0:12...	38.0:12...	38.0:12...	38.0:12...	38.0:12...	38.0:12:0:12...	38.0:12...
CCIs	ALL LOW VOLT NETS	ATEX_ISO_2...	38.0:12...	38.0:12...	38.0:12...	38.0:12...	38.0:12...	38.0:12...	38.0:12...	38.0:12:0:12...	38.0:12...
CCIs	48 VOLTS	DEFAULT	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Net Class Membership for 48 VOLTS

Net:

Current Members: 59

All Nets	Net Class	XNet	Name	Type	Net Class
+1V_REF	ALL LO...		+5V_REF_ISO	Net	48 VOLTS
+1V8_DSI	ALL LO...		+12V_CONN	Net	48 VOLTS
+3V3_REF	ALL LO...		-12V_CONN	Net	48 VOLTS
+5V_REF_ISO	48 VOLTS		AC_DC_FILT_1_ISO	Net	48 VOLTS
+5V5_CONN	ALL LO...		AC_DC_FILT_2_ISO	Net	48 VOLTS
+12V_CONN	48 VOLTS		AC_DC_OUT1_ISO	Net	48 VOLTS
-12V_CONN	48 VOLTS		AC_DC_OUT2_ISO	Net	48 VOLTS
AC_DC_FILT_1_ISO	48 VOLTS		AC_FILT_1_ISO	Net	48 VOLTS
AC_DC_FILT_2_ISO	48 VOLTS		AC_FILT_2_ISO	Net	48 VOLTS
AC_DC_OUT1_ISO	48 VOLTS		ANALOG_OUT1	Net	48 VOLTS
AC_DC_OUT2_ISO	48 VOLTS		ANALOG_OUT2	Net	48 VOLTS
AC_FILT_1_ISO	48 VOLTS		A0V_ISO	Net	48 VOLTS


Filter:

OK Apply Reset Cancel Help

Instructions: Create two spacing net classes. One with the high voltage nets as members and another net class with all other nets. The program will check the clearances between these two net classes through the stackup. DRC errors will be displayed if there are violations along with a shape outline of the areas in violation.

Help

1.0_015 06-11-2014



Help

Command: dal Drc

Purpose: Facilitates the quick and easy identification and removal of DRC's. Also includes other "Valor like" checks for example, netlist, etch, drill, silkscreen, soldermask and soldermask analysis.

Find->

- Display of the drc properties.
- << >> - Cycles through the list of drcs.
- Waive - When selected the current drc number is waived.
- Change layers - When checked the display changes to the layers affected by the drc.
- Zoom, Center and None - Zooms or centers the display to the drc location.
- Highlight - When checked the objects affected by the drc are highlighted.
- Visible drcs only - When checked restricts the list of drcs to only those that are currently displayed.
- Show element - When checked the show element window opens for the current drc number.
- Waive comment - Allows the addition of a comment or explanation to a waived. Comments can be view in the report tab.

Refresh - Refreshes the display after a drc is removed or added.

DHL all - Dehighlights everything.

Adv->

- Display all drcs - Displays all drc layers
- Display no drcs - Turns off all drc layers
- Display only drcs - Turns off everything except drc layers
- Show all waived - Displays waived drcs.
- Blank all waived - Hides waived drcs.
- Restore all waived - Restores all waived drcs back to normal drcs.
- Delete external drcs - Remove all external drcs.

Filter->

Displays and allows the filtering of different types of drcs by name.

All on - Turns all types on. : All off - Turns off all types.

Reports->

- Drc report - Reports the details of each drc.
- Waived drc report - Reports the details of each waived drc.

Analyze->

- Runs "Valor type" drc checks.
- Drill - Checks drill to drill clearances etc.
- The standard built in DRC checker does NOT check plated hole to plated hole clearances as required for instance in the Telcordia specification.

3D->

- Provides a 3D Z axis copper to copper isolation check.
- Net class "High voltage" members are checked against Net class "Low voltage" members for z axis clearances specified in the minimum isolation value setting.

Visit our website: www.daltools.com More Documentation (PDF) Web Demonstration

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Ok