IGI EXT

Automated Netlist & Test Point Generation

Is electrical test a bottle-neck for productivity? EXT maximizes your prober efficiency without sacrificing test accuracy. Speed up testing AND assure 100% test of your product with EXT.

Read it… Easily

Drag and drop input. A wide variety of inputs are supported, including RS-274X, RS-274D, ODB++, DPF, Drill, DXF.

Extract it… Accurately

Generate a netlist from your design data. Calculate adjacency, buried resistance and circuit resistance to include with output.

Test it… Quickly

Your test has to be quick and complete. EXT eliminates unnecessary test points without sacrificing a complete test. Maximize your prober efficiency with these EXT features:

- Line of Sight adjacency offers the most efficient method of reducing the number of probe hits, and still gives you control over testing tolerances.
- Eliminate unneeded test points on plane layers while assuring 100% test.
- Include all the components and vias, components only, or end points of the nets.
- Avoid recalculating test points for unchanged circuits during revision cycles by saving and restoring the test point database.

Save time and scrap with the proven reliability of EXT's netlist extract, ability to compare nets between revisions, and graphical viewing of nets, test points, and data.

Ship it… Now!

Output to standard formats such as IPC-D-356A, MicroCraft, ATG, ECT, Probot, as well as RapiTrim Resistor Trimmer.
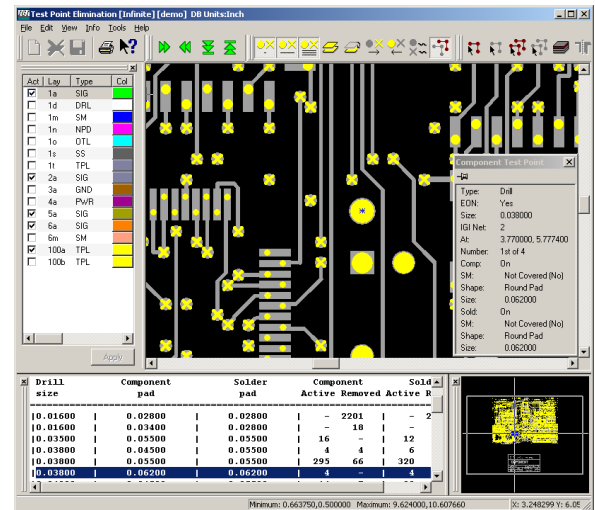
EXT Features

- Easy input
- Set the desired level of processes to run automatically
- Netlist Extract
- Netlist Comparison
- Buried Resistor Calculation
- Circuit Resistance Calculation
- Adjacency Calculation, including Line-of-Sight and Layer-to-Layer options
- Test Point Elimination for the fastest test cycle
- Automatic double and triple test point staggering
- Save, restore, and compare the test point database
- Step and repeat for net panel testing
- Fully featured Graphical Editor.

Netlist Extraction Features

- Automatic split plane recognition
- Extract from merged layers
- Output verification database (net profile report)
- Compare netlists to original CAD generated netlists
- Graphically view opens and shorts.

Testing Features

- Flying probe testers
- Adjacency calculation
  - Line of Sight
  - Layer to Layer
- Automatic elimination of test points covered by soldermask
- End point testing, including end of nets, end of copper and barrel midpoints
- Loop net optimization
- Graphic mode for viewing and manual elimination of test points
- Eliminate test points for a given drill configuration
- Test point elimination can be based on annular ring analysis
- Save multiple test point configurations
- Save, restore, and compare test point database for quick test point generation during revision cycles.

Buried Resistor

- Calculates buried resistor values
- For buried resistor nets without accessible test points near-by, circuit resistance can be added to the buried resistor value.

Circuit Resistance

- Calculates circuit resistance
- Uses (+/-) tolerances
- Calculations include material type, thickness, and etch factors
- Factors applied by layer.

Viewing/Editing

- Graphically compare layers, or compare against archived or original data
- Graphic display of problem areas by net and layer
- Display layers independently and in separate colors for the layers the network resides on.

Output

- Direct output to all major flying probe testers
- Direct output to RapiTrim Resistor Trimming
- Acts as a front end for fixtured testing systems.
- Netlist outputs include IPC-D-356A, MicroCraft, ATG, ECT, Probot, Mania, RapiTrim Resistor Trimmer, and more.
- Many other output formats available, including RS-274X, RS-274D, ODB++.