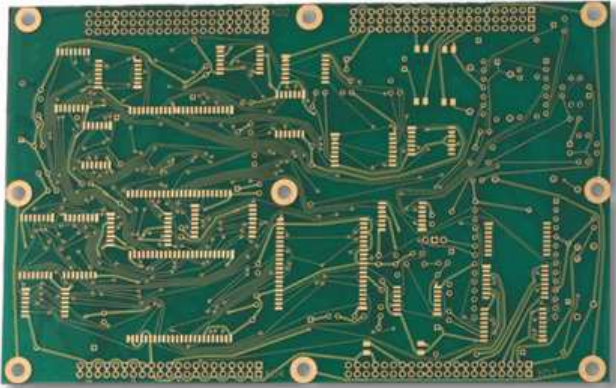
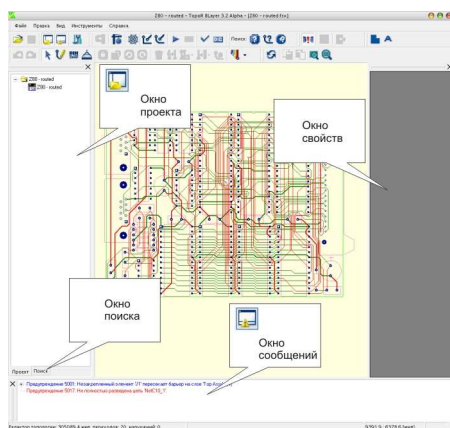




Topological Router

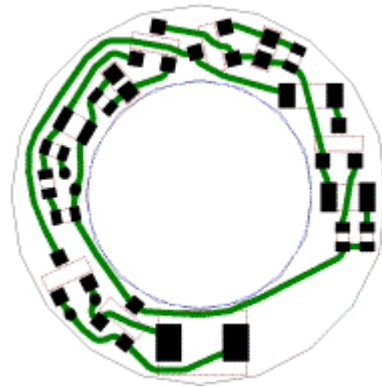


TopoR is a brand new PCB router based on an exclusive mathematic model. The only thing you need is to open your priory drawn file of any widely used standards such as PCAD ASCII PCB, PADS ASCII PCB or DSN.

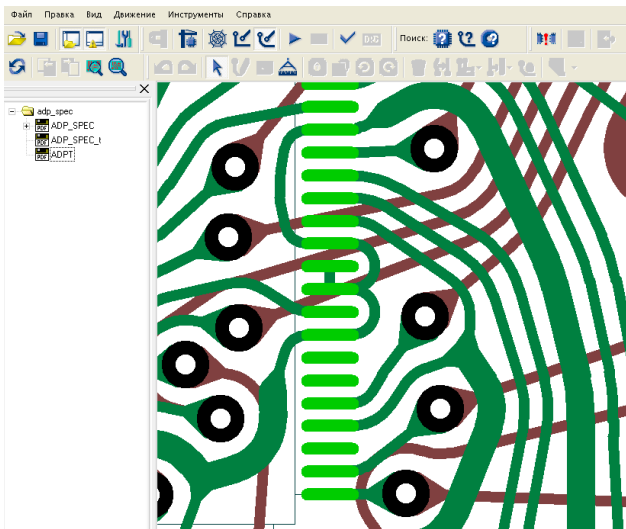


System Capabilities:

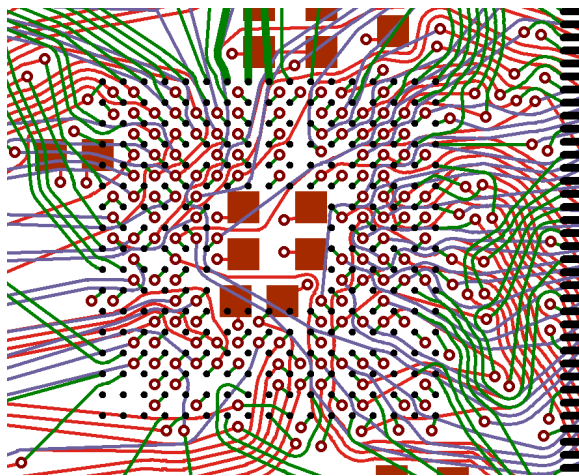
- Flexible automotive routing in any directions, based on a topology model. There are no such limitations as the only 90 or 45 degrees directions.
- Multi-parameter topology optimization within metal traces re-layout process. This process gives the following benefits – irregularity elimination, metal traces length shortening, inter-layer bridges quantity reduction and minimization of places with narrow gad.
- Topological optimization fits both – one-layer and multi-layer extra efficient routing.



- Up-to 32 layers to trace!
- Undo function for manual operations.
- Parallel routes optimization with various values of the parameters which are subjects to optimize. User then can chose the best variant which fully fits to technological or electronic preconditions.
- There are no strict fixing of metal traces geometry model. Program is using to make an best selection on stage route determination as well as route optimization. In fact this allows to reduce overall traces length and minimize the quantity of inter-layers bridges.
- There is exclusive automatic calculation of each trace shape for each calculated topology.
- There is automatic optimization algorithm for positioning of traces branching points and inter-layer bridges.
- There are unique technologies to manage automatically metal trace width such as trace end part's width reduction to be same width of narrow contact or partial trace width reduction for passing among fixed component's contacts.
- There is automatic rotation of components' contacts which are similar function. Plus to that you can chose to rotate traces among similar contacts in manual mode, same as in automatic mode.
- There is automatic DRC control for predefined technological limitations. It works both for automatic routing and manual editing. There is also control through outgoing DRC file.
- There is automatic generation of teardrops style metal traces connections and contact parts of traces.



- Example of the effective automating routing for area of BGA mounting.



- **TopoR** allows to move elements over already routed printed board with keeping traces integrity and maintaining gap values given in configuration.
- **TopoR** can use two modes of routing – Automatic and Half-Automatic. The last one gives an opportunity to put in more traces among unfixed components with consideration that after while will be performed area extension.
- **TopoR** includes unique feature of automatic local re-tracing when moving components.
- **TopoR** is available with corporate license for Network installation as well as for single PC.
- **TopoR** can be upgraded through Internet.

Tools and functionality :

- The Style Editor which allows to input general constructive limitations such as metal trace width, gap among metal traces, shape of contact areas and so on. There is one competitive benefit in our system that for each chain you can input not only minimal gap value but also input desirable value.
- The Placement Editor with convenient highlighting of links among components.
- There are two modes of topology editing available. The First one is a classic drawing editor. The second one is intelligent mode for moving components with automatic calculations of chain integrity and metal traces shape.
- There are several tools for quick components placing are integrated in the program.
- There is abroad compatibility with a lot of PCB CAD systems of third vendors by using the following standards - PCAD, DSN and PADS ASCII PCB.
- There is quality output in DXF and GERBER files.

Free DEMO version is available at:

www.EREMEX.com