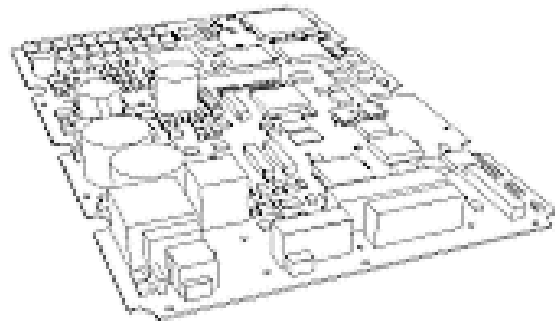
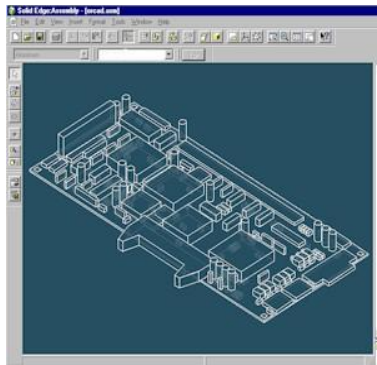


Product Update: New Release **PCBto3D™** Version 6 (Runs with SE ST)

PCBto3D™ is a software tool that bridges the gap between your electrical and mechanical worlds. **PCBto3D** does this by passing the board design back and forth between your PCB design software and Siemens Solid Edge design software.

PCBto3D™ Version 6 is now available



Prerequisite - Solid Edge ST (older versions supported as well - please inquire)

Support for Vista and XP

Significant error checking on valid input geometry in particular illegal profiles
Support for IDF version 3 and its new features - Ownership, notes
Unique filter option - Filter out features not desired for placement
More robust PADS ASCII support
New "Notes" command
New "Hole Properties" command
New "Find Undefined" command
Support for multiple finished component paths.
Resizable dialogs
Multiple region types can be defined for a single part.

PCBto3D™ is used by companies around the world including:

Boeing, IBM Europe, Micron, NVision, Ericsson, Bosch AG, Liebert, Intel, Hill Rom, Tag Electronics, Siemens AG and many others.

About **PCBto3D™**

Starting with your board as designed using your PCB layout software; **PCBto3D™** automatically creates a Solid Edge solid model assembly of the board and components. Once the board design is in Solid Edge you can use it

like any other Solid Edge assembly and incorporate it as a subassembly into your mechanical designs. Some typical uses for wanting an accurate 3D-assembly model of the completed circuit board are:

- 3D Interference Analysis
- Visualization Studies
- Thermal Analysis
- Technical Illustrations
- General Engineering Studies

Backannotation

In addition to creating a Solid Edge model of a board design, **PCBto3D™** also allows you begin a board design in Solid Edge and pass the design to your PCB layout software. This allows you to define the shape of the board and position holes and key components in the context of the entire mechanical assembly, allowing you to avoid costly changes and errors that usually don't show up until later in the design process. (This back annotation capability is not supported for PADS ASCII files.)

IDF and ASCII Input

PCBto3D™ utilizes one of two file formats as a means of passing the PCB data between the electrical and mechanical designs. The first, and most widely used, of these formats is the Intermediate Data Format (IDF). IDF is a standard originally developed by Mentor Graphics to allow integration between electrical and mechanical CAD systems. If you are using a PCB design package that can write and read an IDF file, you can use **PCBto3D** to create 3D Assembly models. IDF is an open standard and many electrical CAD vendors have chosen to support it, including Cadence, Mentor Graphics, OrCAD, Veribest (now Mentor), Zuken-Redac, and others.

The second format is the PADS ASCII format. This is a proprietary format of PADS software and is supported by PADS PowerPCB. PADS also supports the IDF file format.

PCBto3D reads either the IDF or PADS ASCII file and uses Solid Edge to create the corresponding 3D solid assembly. If you're using the IDF format, you can make changes to the board design in Solid Edge. This can be done using standard Solid Edge editing commands to modify the solid geometry and reposition parts and you can use PCB specific commands that are added to Solid Edge when **PCBto3D™** is installed.

To enable the close integration that **PCBto3D™** provides, TLD Inc. is a member of the Premium partner in the Solid Edge Voyager program.

Ease of Use

PCBto3D™ uses a wizard interface to guide you through the few steps to create a 3D assembly model from the PCB design. Even though the process is simplified through the use of the wizard interface you still have complete control of what regions and placements are used in the 3D model.

In addition to an easy to use interface, **PCBto3D™** is delivered with a

comprehensive User's Guide and sample files, that lead you through the various ways to use **PCBto3D™** using three step-by-step tutorials.