

Wow! Was it this easy?!

Tool for Real-Time Thermal Simulation of Printed Circuit Boards



MSC Software Company

PICLS PICLS Lite

www.cradle-cfd.com/picls/

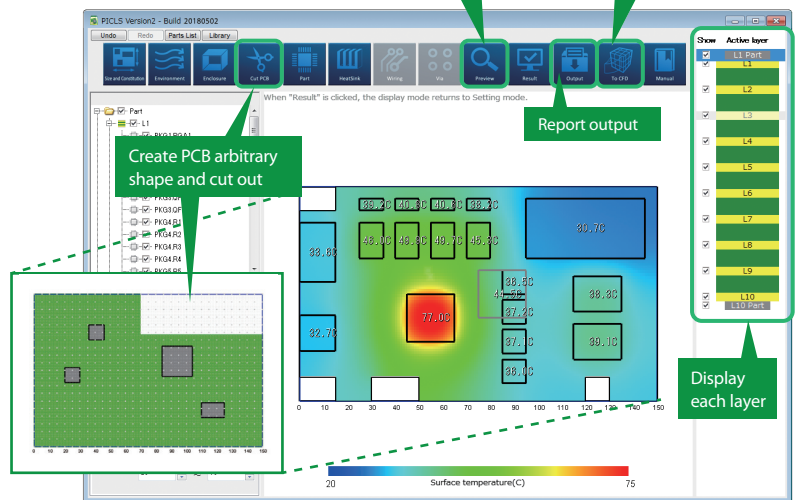
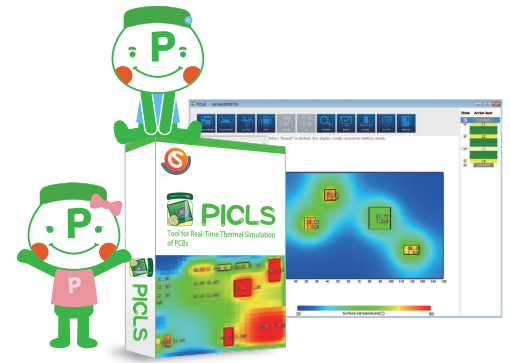
Non-experts can start thermal analysis right away with easy operation in 2D and real-time results

Advantages

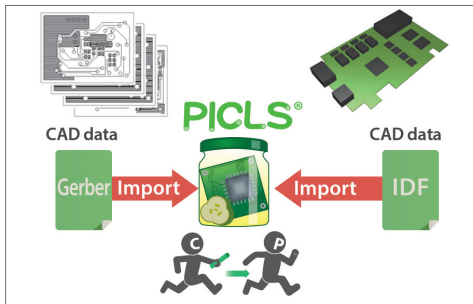
- Easy to use (Operation in 2D, integrated GUI for pre- and post-processing)
- Inexpensive
- Capable of real-time analysis

Thermal countermeasures using PICLS

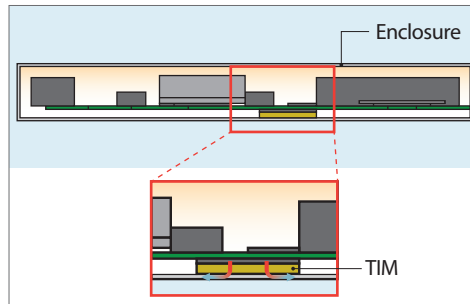
- Checking the layout of components to avoid interference of heat between them
- Troubleshooting thermal issues of current products
- Considering heat release depending on a wiring pattern (coverage ratio)
- Examining the location and the number of thermal vias
- Examining the performance of a heatsink
- Examining the size of a PCB
- Examining the number of layers and the thickness of copper foil
- Considering natural/forced air cooling
- Considering radiant heat
- Considering heatsinks (number of fins, size)
- Examining heat dissipation performances by connection to enclosure
- Considering PCB mounting environment



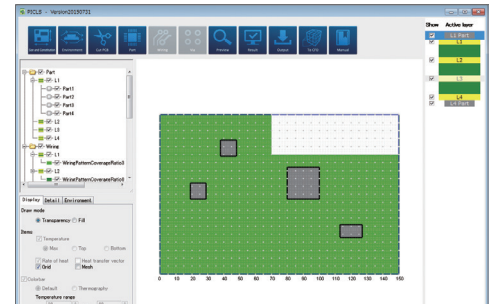
Main features of PICLS and PICLS Lite



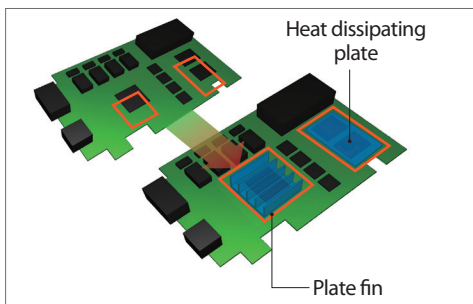
External file interface (PICLS)
You can import IDF 3.0 and Gerber data



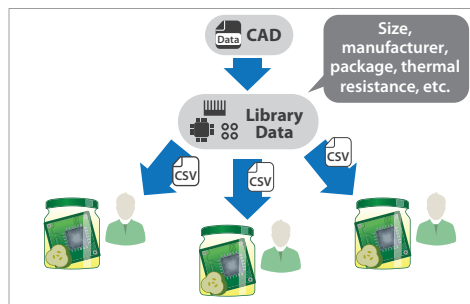
Consideration of simple enclosure (PICLS)
You can consider heat dissipation by connection to enclosure



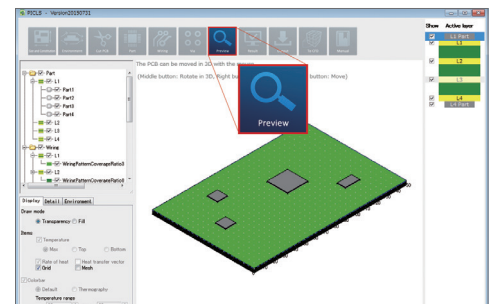
Cutting out a PCB (PICLS, PICLS Lite)
You can create a PCB of arbitrary shape using cut-out function



Heatsink (PICLS)
You can allocate and display parts such as plate fins and heat dissipation plates



Library (PICLS)
You can register and reuse created parts to the library



Preview (PICLS, PICLS Lite)
You can check the layout of components in the 3D image