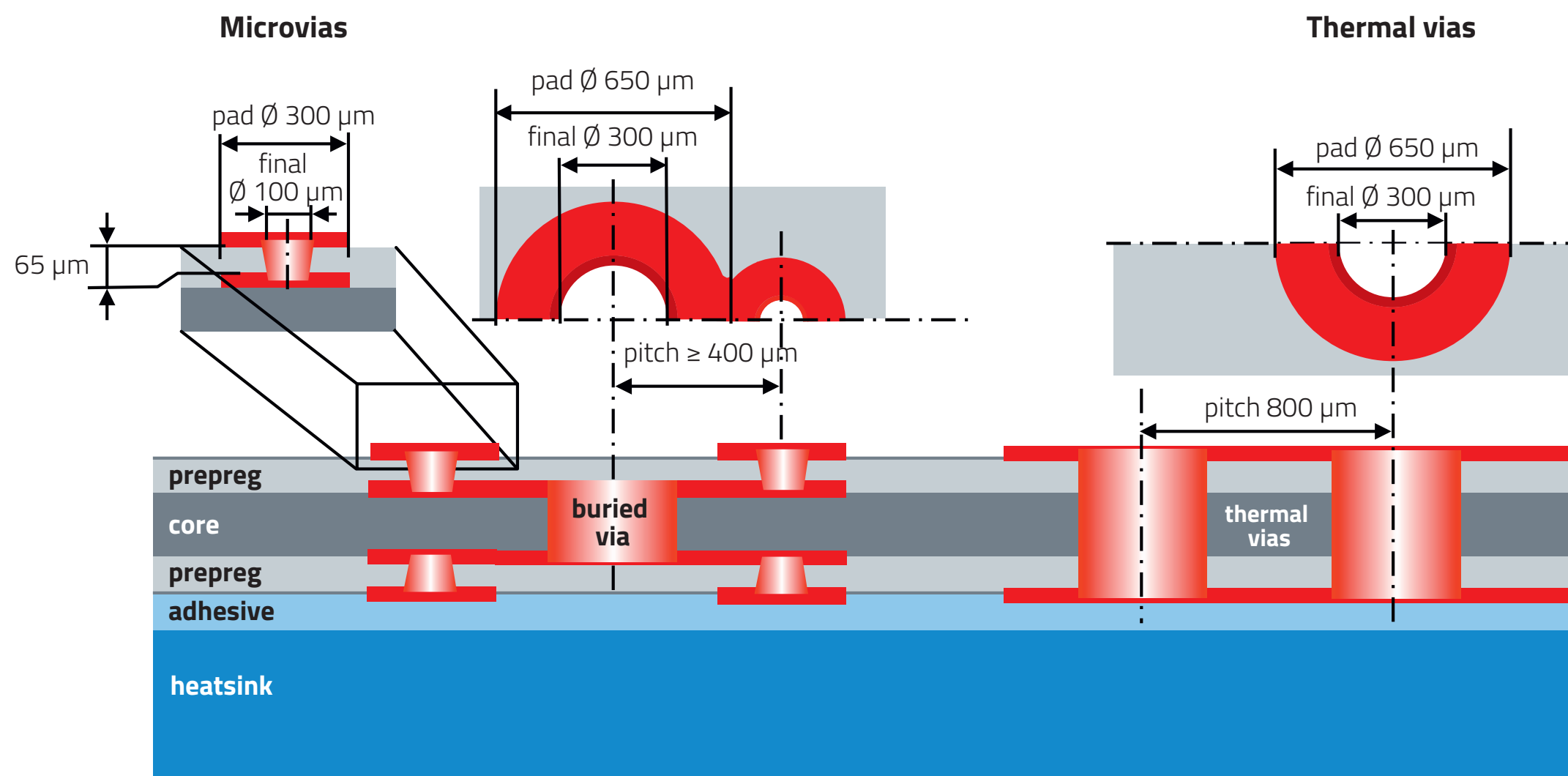


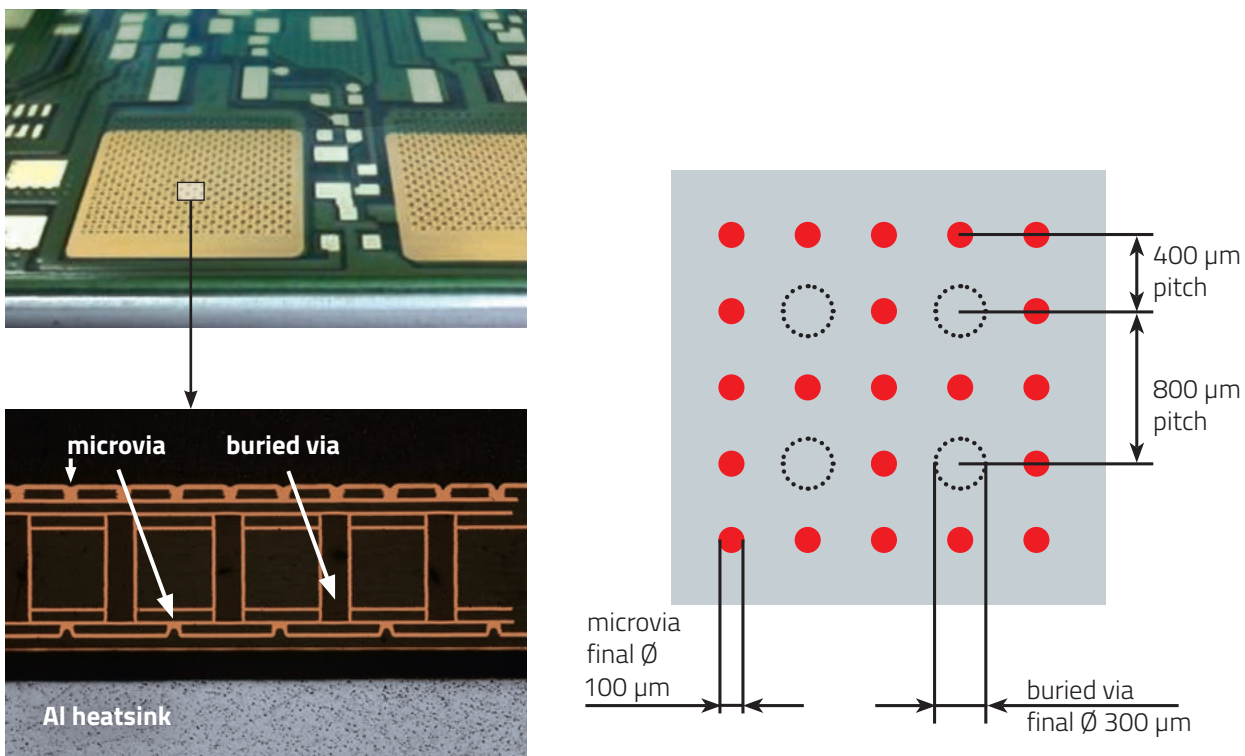


# THERMAL MANAGEMENT

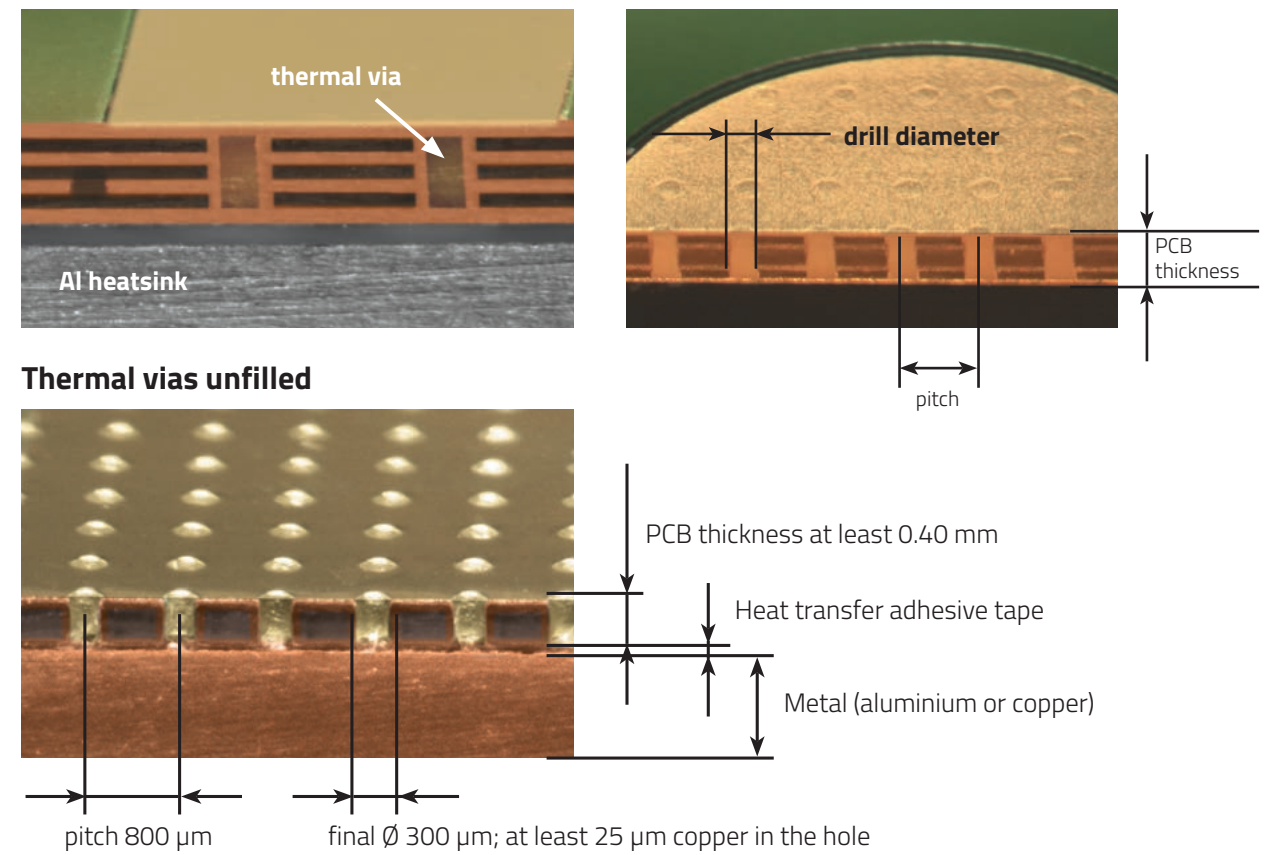
## Standard Design Rules



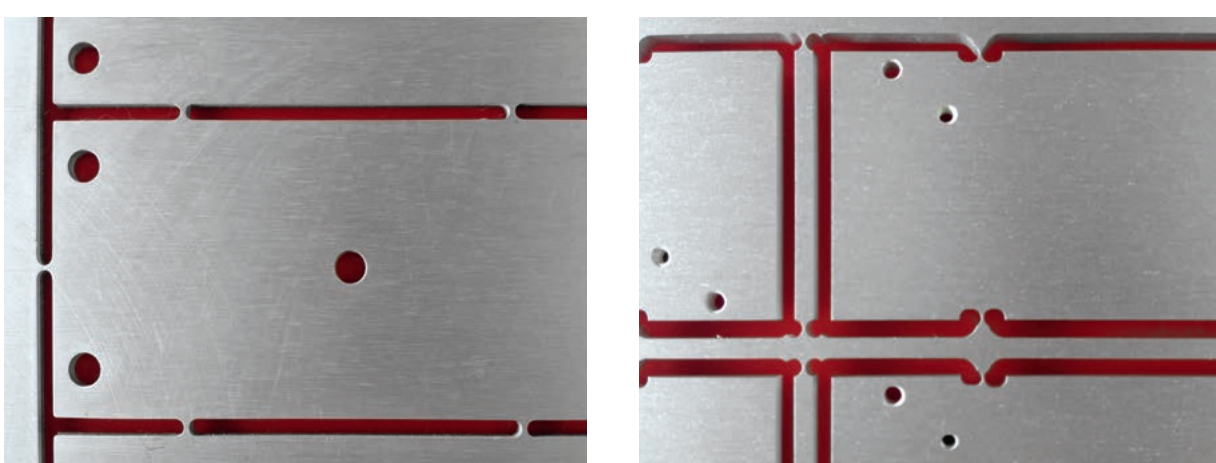
## Combination microvia, buried via as thermal vias



## Thermal vias filled (filled & capped via, IPC-4761, Type VII)



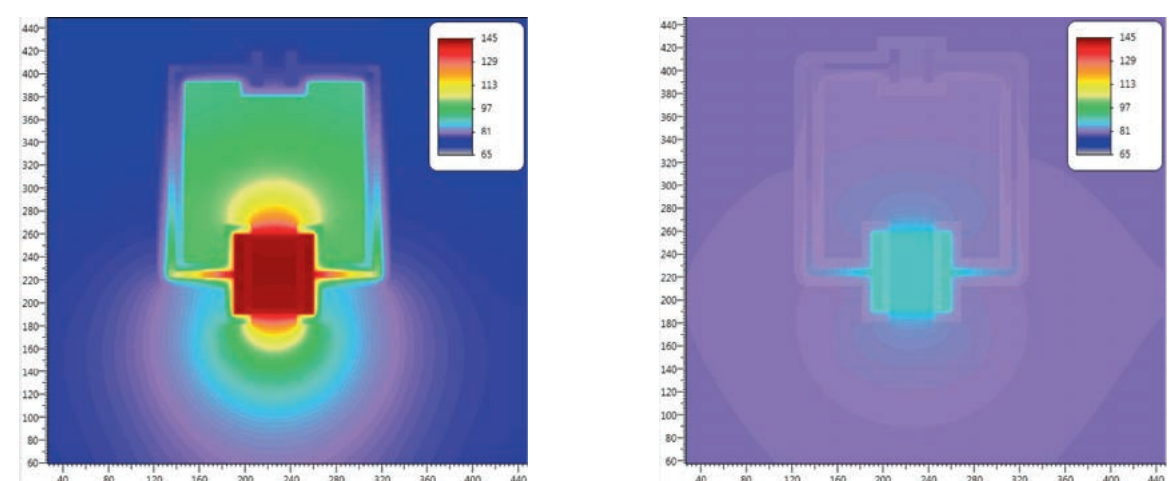
## Heatsink breaking points



**Positive micro edges**  
The breaking point is located in the rout path outside the PCB outline.

**Negative micro edges**  
Breaking point inside the PCB outline. To ensure stability of the panel additional ribs are required.

## Thermal simulation



Printed circuit board 2 layer, 1,6 mm, improved layout, without thermal vias

Printed circuit board 2 layer, with heat sink, 1,6 mm, improved layout, with thermal vias

Thermal simulation of the printed circuit board can help to select the best printed circuit board construction and the optimal layout.