

# Copper pour

Copper pours is a very essential technique or concept in PCB design. It's all about making an area filled with copper named polygon in the CAD tools. We can see this important technique in almost every PCB. Now let's get to why is it so crucial to use copper pours in your design? Copper pours provide high rates of heat dissipation which is our first use case "high current traces". Traces that carry high current like these in power supplying PCBs or motor drivers cannot withstand such high currents that reach up to 30A or evenmore. To handle such currents you have to use copper pours along with power planes so that you ensure maximum heat dissipation. Our second use case is found in high speed PCBs which requires very low impedance across power rails and signal traces and this can be done by using coplanar ground copper pour which in turn will enhance the signal and power integrity. Usually copper pours are found in the internal layers playing the role of power planes and ground planes.