Generate a groundplane

A groundplane having the same dimensions like the layout can easily be created by the use of the groundplane assistant, please see layoutmenu "**Actions**":

	PCB Outline Wizard		🖉 🦎 😰 📧 💷
	Front panel	- • F	
	Measure and dimensioning [u]		
	Trim lines		
	Load bitmap into rectangle		
	Reorganisation [Strg]+[F12]	-	
	Project test [CTRL]+[F1]		
	Concatenate a schematic and a pcb		
	Realtime design rule check	- K	
	Pad Swap		
1	Ground planes	•	Generate ground plane
	Teardrops	•	Spacing to PCB edge
	Create a slider track		Thermal-Pads
	Push Onto the Grid		Define starshaped signals
	Component Names and Values Extra	T	(<u>)</u>
	Launch Alignment Assistant		
	Launch Autoplacer		——————————————————————————————————————
	Compute Air Wires (Ratsnest) [Ctrl]+[w]		
	Define Vias as Padstacks		
_	Autorouter	- N	
	Start EMC Check		
	Testpoints		
	Set PCBs as a panel		
	Dimension PCB		
	Show lengths of signals		
	Edit signal classes		

The opening dialog explains that a groundplane in TARGET 3001! is made out of a set of three layers: "copper", "area" and "deletion". The shape of the groundplane is defined on the "area" layer. The "deletion" layer defines the spacings between the groundplane and the non GND-leading tracks. The layer "copper" at least is the one which carries the groundplane and the tracks in copper at the very end. The following example is a groundplane on "copper bottom":

Create rectangular ground plane	Convert ground plane to lines Retrieve ground plane			
Plane -			Sandwich	
Layer 0 Area bottom	Layer 1 Deletion bottom This co	Layer 2 Copper bottom	Layers 0+1+2 ovided with a ground plane. Only these re a corresponding deletion layer and a	
Signal GND	This signal is connected to the ground plane, its tracks receive no			
Aura: 0,300000 mm	All pad	s, tracks and vias rece I plane (The tracks and	eive this aura, which is the distance to the d vias of the selected signal are excluded	
Spacing to PCB edge: 0,500000 mm	Spacin	ng of the ground plane	to the PCB edge	
🕅 Pads 🛛 📝 Vias	Conne	ct pins or vias complet	ely in the ground plane (without an aura)	

Please confirm the Standard settings and reach the following:

LED_red_5	mm
	01
5 🙆 Š	27 🧟 X3

The GND leading track in the south of the layout is embedded completely into the groundplane. Use the hash key (#) for having an x-ray view of the layout. So you can see...



...that the pads seem to be connected correctly. Ant that's the fact (layer ,,21, Position print", has been faded out = the colored field at layer 21 is unticked).

The generation of thermal pads is managed by highlighting the complete layout and choose menu "Actions/Ground planes/Thermal Pads/Create Thermal Pads". Pads whose signal tracks are embedded to the ground plane, receive two or three further ligaments. Result:



The groundplane can also be transferred to a grid. Please again open the ground plane assistant (menu "Actions/Ground planes/Generating a ground plane") and choose the tab in the middle:



After pressing the "Start"-button, we receive:

