

Steps for producing a PCB in the



CircuitCAM (big buttons work like a wizard)

- Import Gerber files into correct layer:
 - TopLayer (gtl), BottomLayer (gbl), BoardOutline (gm1), DrillPlated (txt)
- Contour Routing
 - Select automatic break-outs to avoid next step
- Define Breakout Tabs
- Define Rubout Areas
 - Small area around all solder pads ONLY!
- Insulate all Layers
 - Calculates machine paths
- Export Files
 - LMD & CAM

Initialize System

- Load LMD file onto host PC
- Turn power on S100
- Start BoardMaster
 - **Check** that no tool is in holder before beginning homing procedure.
 - Make sure vacuum system is in AUTO mode.
- Do a scratch test
 - Trace should be 8mil wide (use microscope)

Configure Job

- Open a new job file
 - 1 or 2 Sided + ProConduct (2x sided board)
 - 1 or 2 Sided (single sided board)
- Define usable work area on stage
 - Bottom Left & Top Right
 - Avoid collisions with alignment pins
 - Avoid overlapping used up areas on blank
- Import LMD File
 - Move / rotate to desired location
- Import Feducial.lmd (located on desktop)
 - Duplicate into 2x2 grid
 - Move feducials so that they surround board (best accuracy)
- Save job file

Execute Job

- Load material
- Select Phase
 - Marking Drill is usually first one
- Select all
- Start
 - Press a number of times
- When phase ends, select next phase and repeat until done.

Clean Up

- Move machine to Park position
- Vacuum metal scrap from table
- Shut down BoardMaster software
 - Machine will retract table
- Turn power off on machine
- Vacuum metal scrap now that table is out of the way
- Close the lid