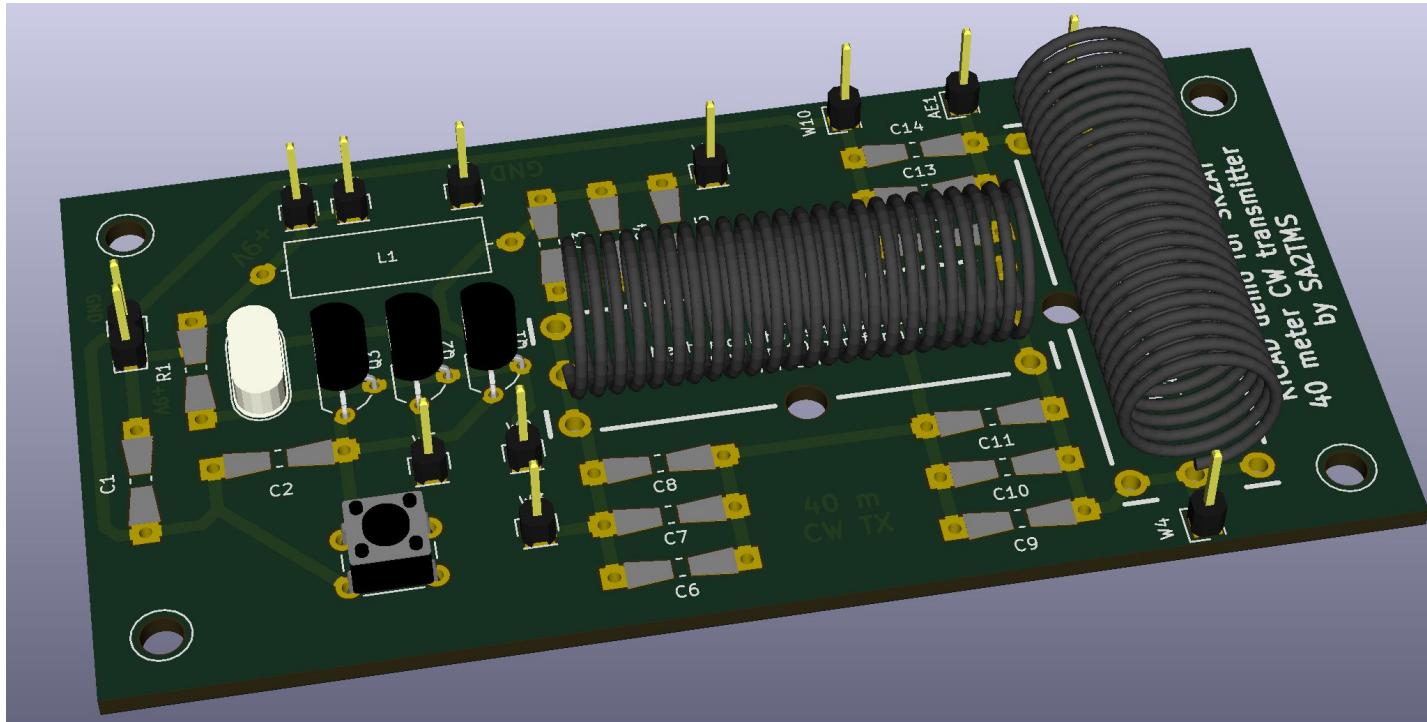


# **Kretskortstillverkning med CNC-fräs**

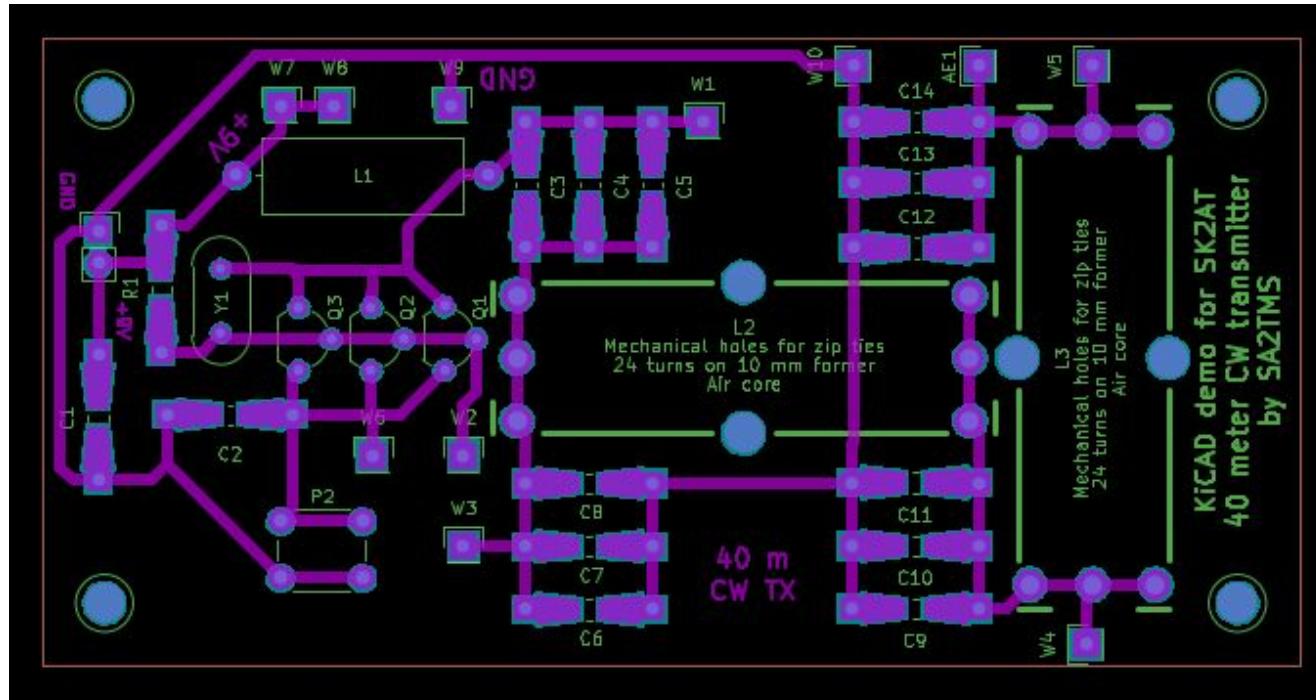
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SK2AT/FURA, 2018-09-20  
Magnus/SA2BRJ

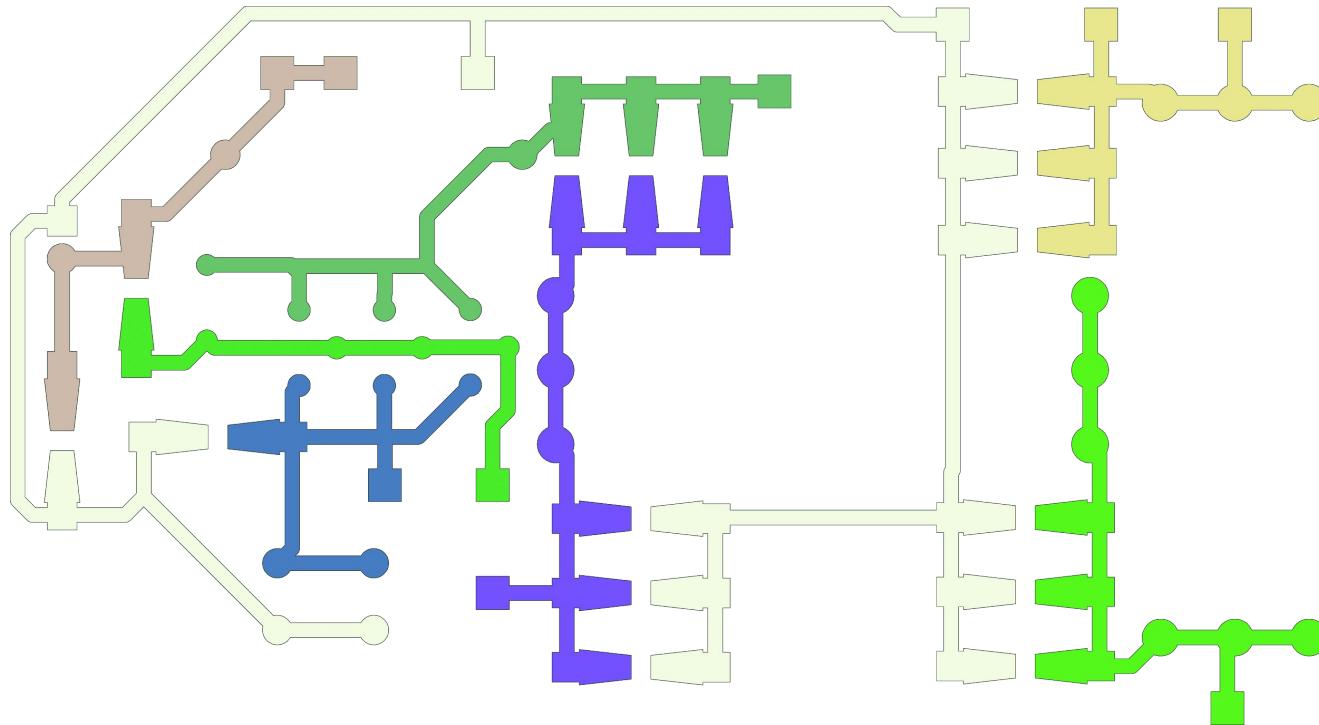
# KiCad “Output”



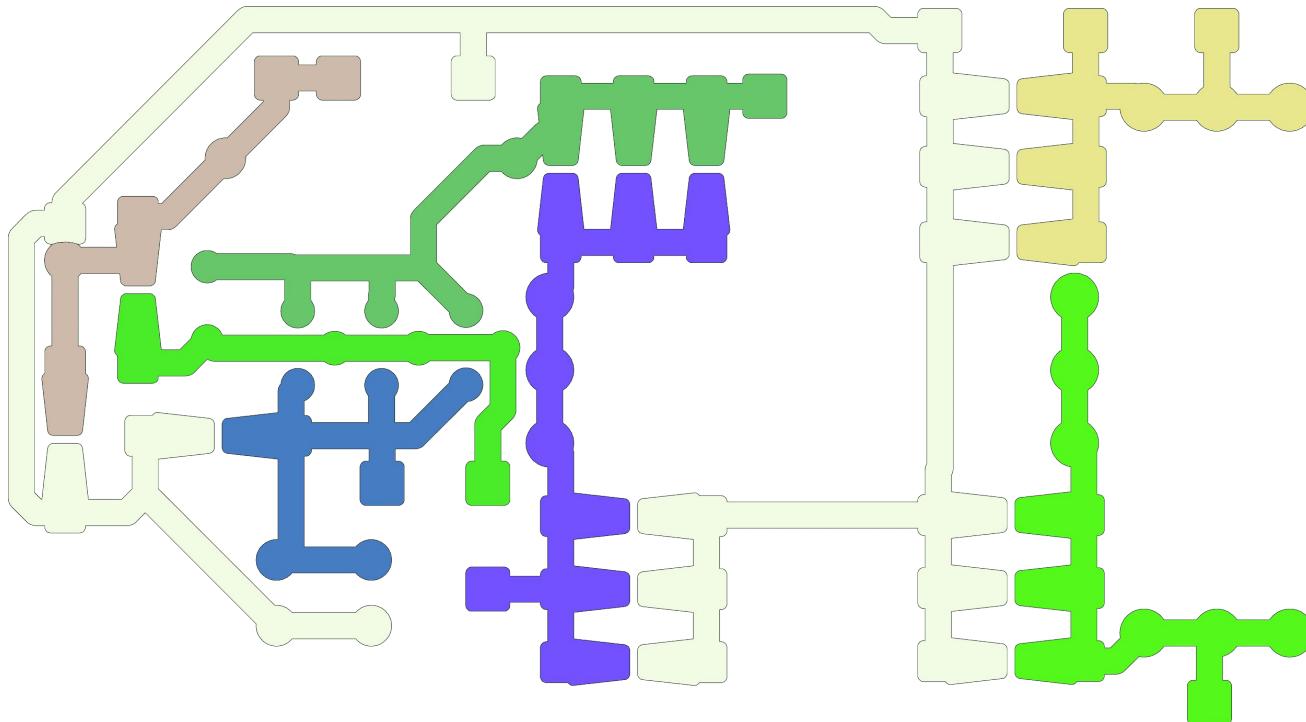
# Gerber (RS-274X) & Excellon (hål)



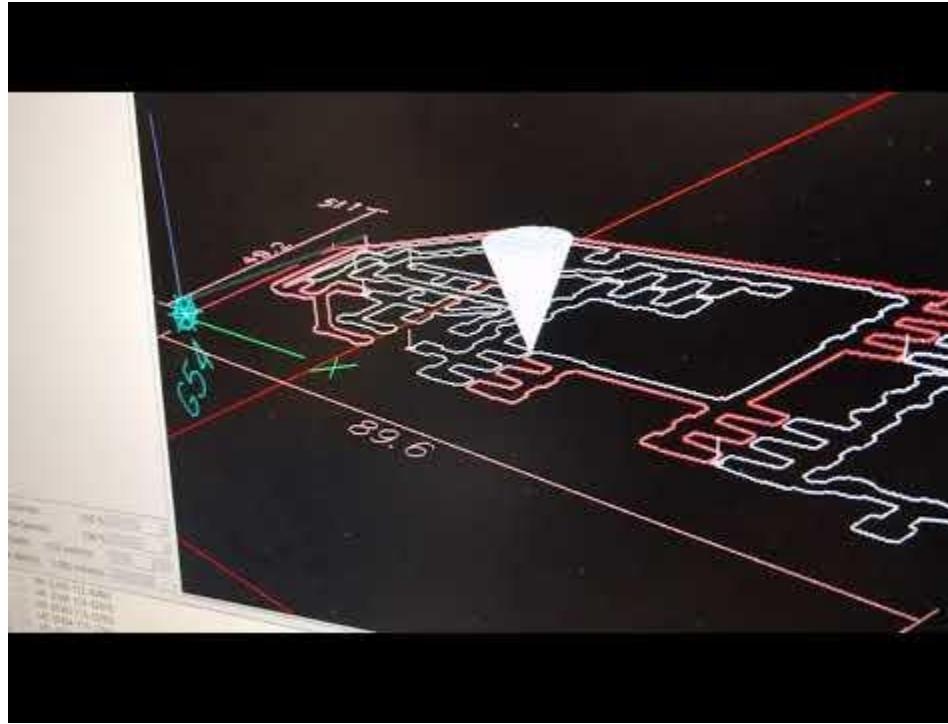
# Koppar (ovansidan)



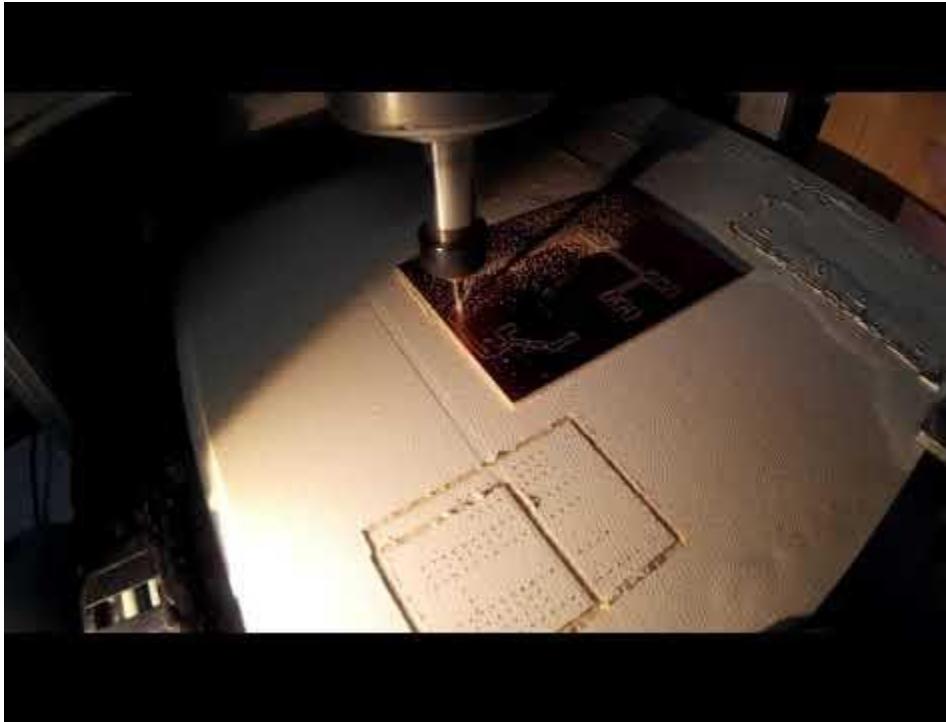
# Koppar (som den kommer fräsa)



# LinuxCNC



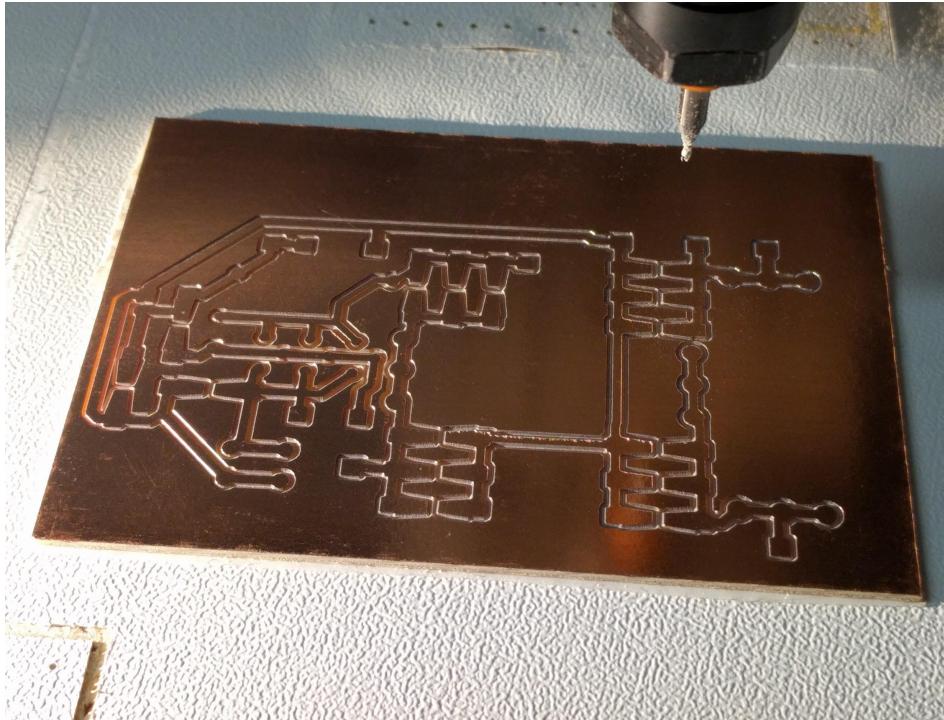
# Fräsning



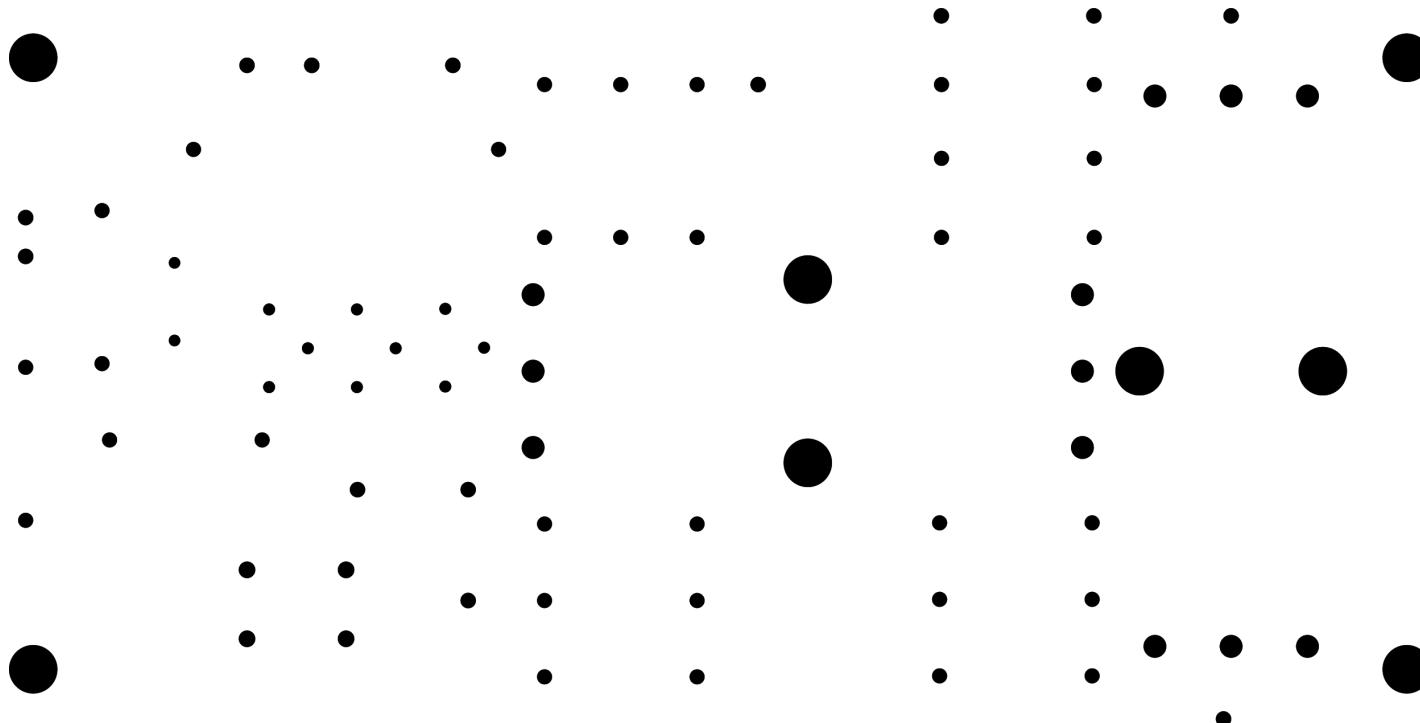
# Fräsning (6 gånger så fort)



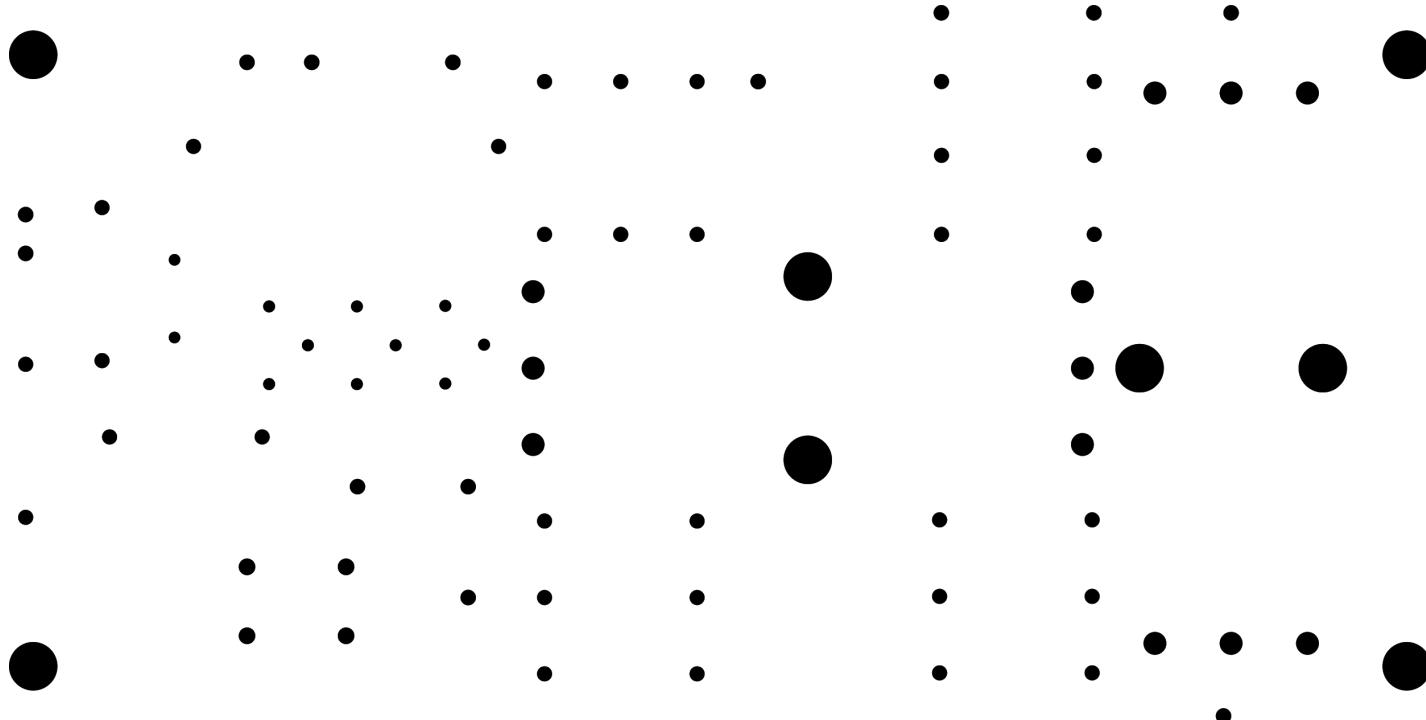
# Färdig kort?



# Vad kan det här vara?



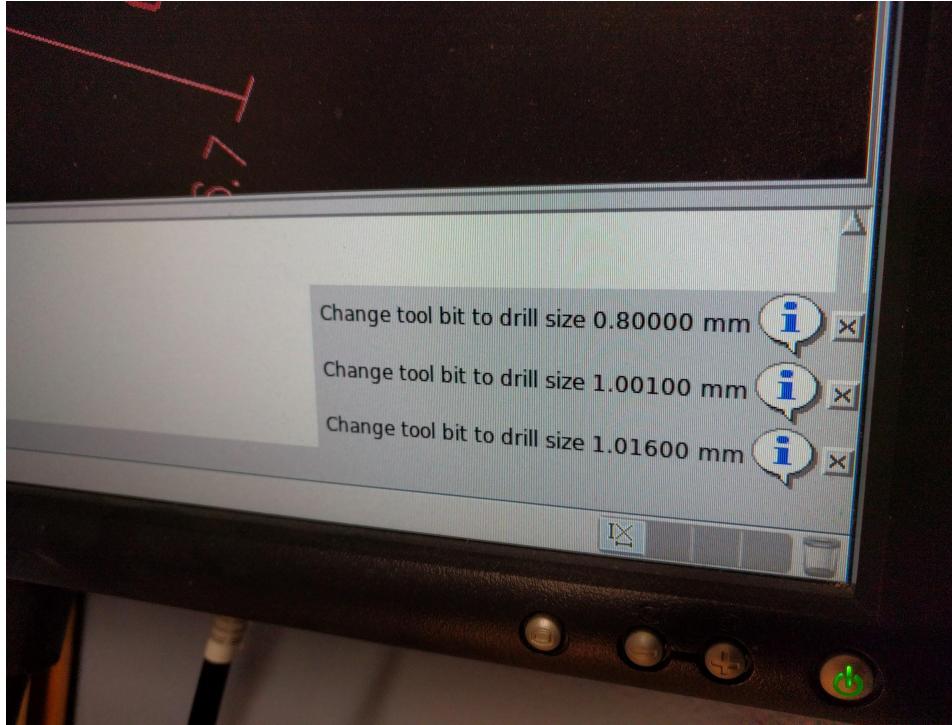
# Hål



# Borrning

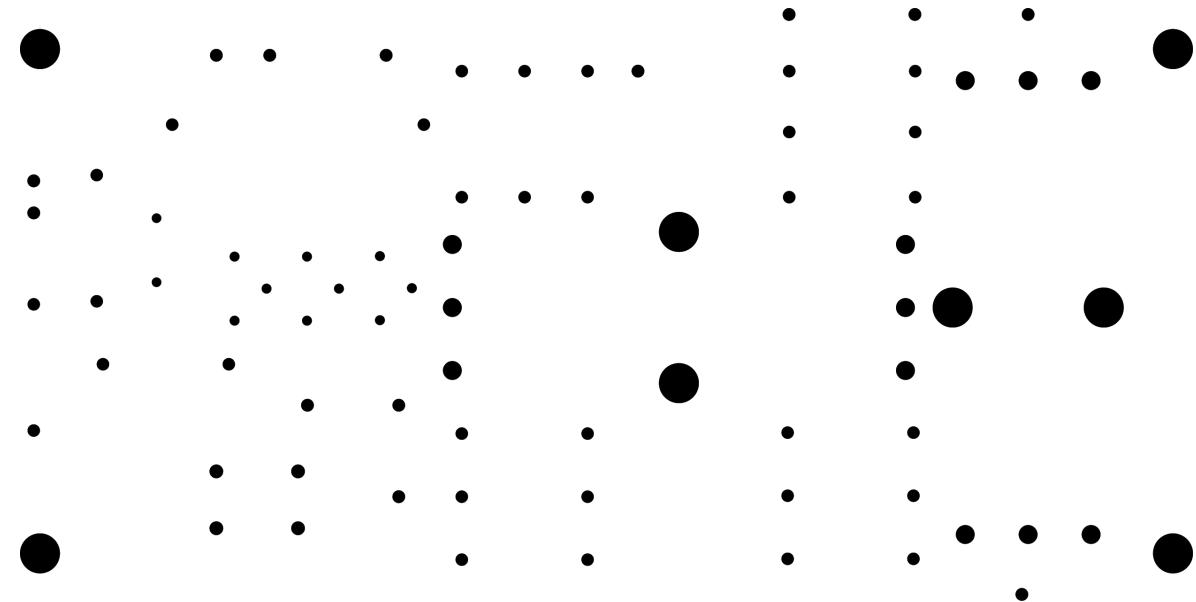


# Borrstorlekar?



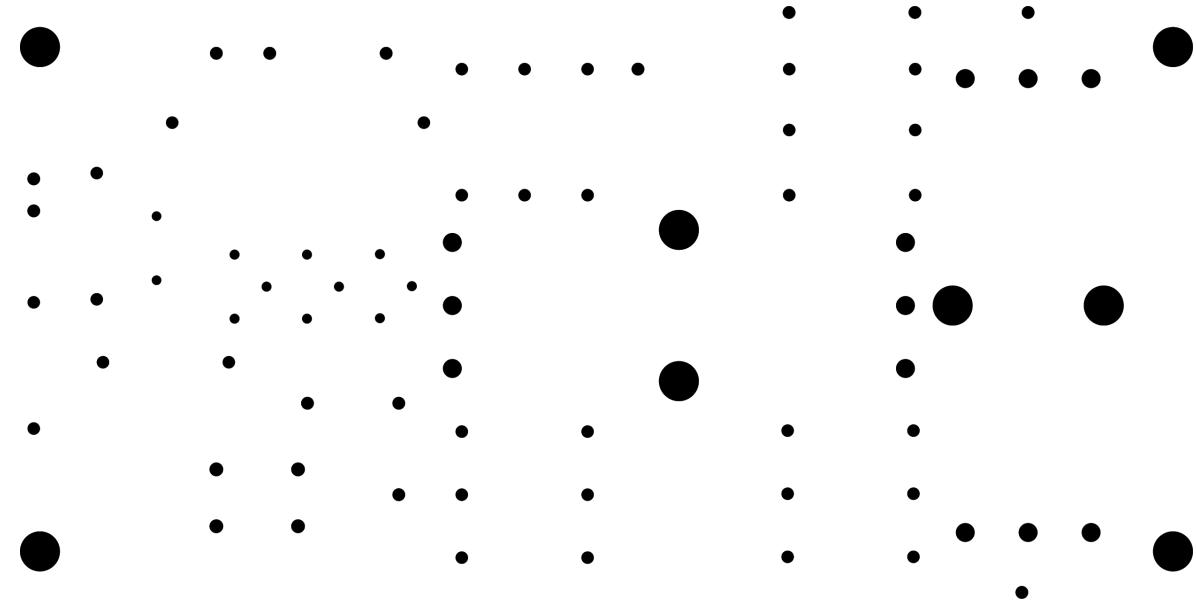
# Hålstorlekar

- 0,762mm
- 0,8mm
- 1,001mm
- 1,016mm
- 1,1mm
- 1,5mm
- 3,2mm



# Använda borrar

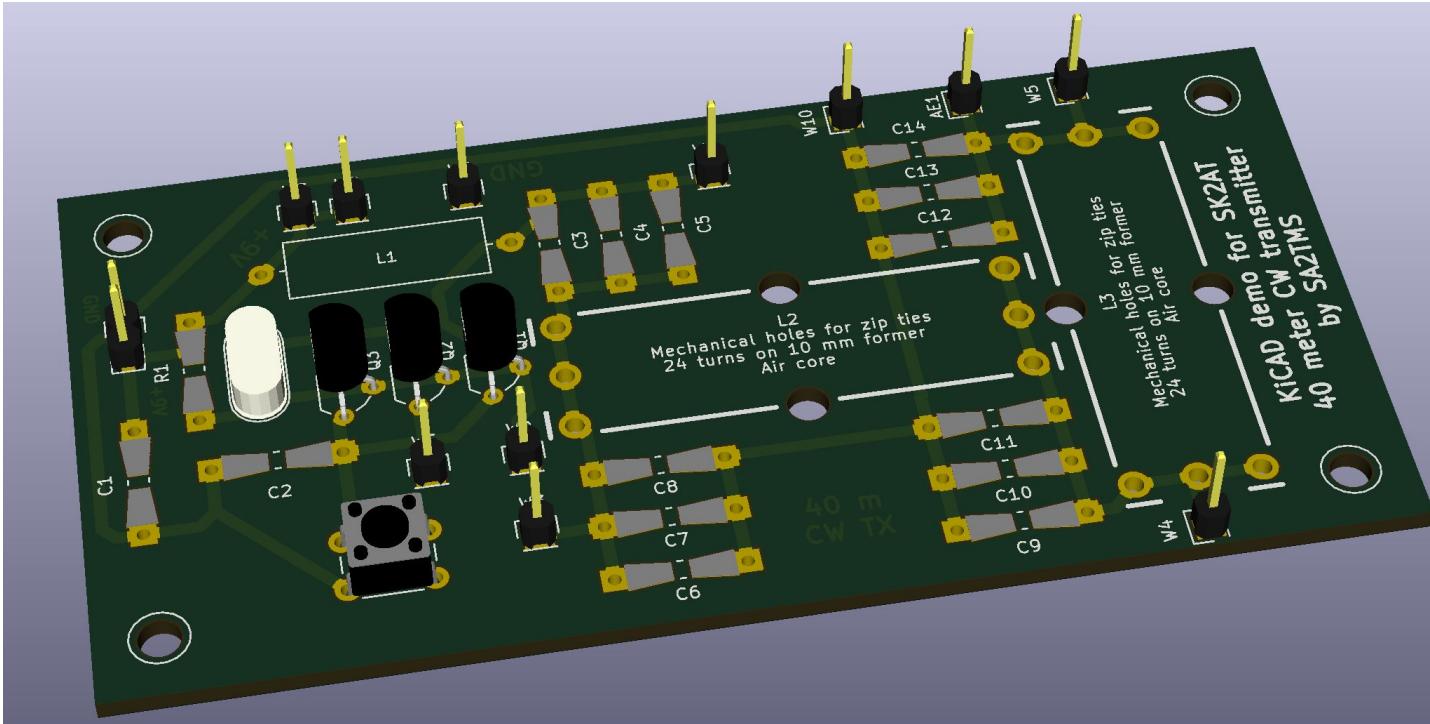
- 0,8mm
  - 0,762mm, 0,8mm
- 1,0mm
  - 1,001mm, 1,016mm
- 1,1mm
  - 1,1mm
- 1,2mm
  - 1,5mm
- 3,17mm
  - 3,2mm



# kontur



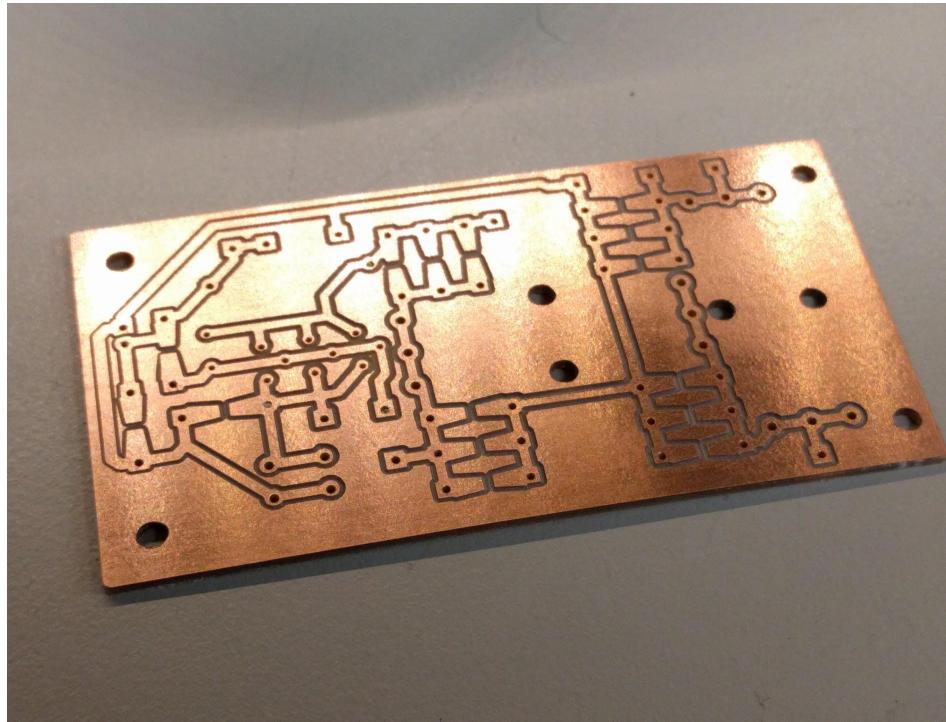
# Så här var det tänkt, blev det så?



# Färdigt kort



# Färdigt kort



# Fräsen



# Fräsen



# Länkar

- [https://www.youtube.com/playlist?list=PLATjjqj-LlaflbYBHYN1Gt9rG\\_9bCnBov](https://www.youtube.com/playlist?list=PLATjjqj-LlaflbYBHYN1Gt9rG_9bCnBov)
- <http://kicad-pcb.org/>
- <https://github.com/pcb2gcode/pcb2gcode>
- <http://linuxcnc.org/>
- [https://github.com/Tjoppen/kicad\\_demo](https://github.com/Tjoppen/kicad_demo)