# Meeting notes

## 3/10/24

* Feedback on presentation
  + People perhaps didn’t know enough about PCB and how they are made
  + Focused more on solution than the problem
* Documentation
  + Make sure to keep documenting well along with the files uploaded to github
* Background report
  + Discuss what current PCB manufacturers do
    - What might you get from a factory in China
  + Discuss the process of designing a PCB
  + Make a functional decomposition
    - Block diagram
    - Add more functional requirements
* Decision matrix after functional decomposition

## 10/10/24

* Functional decomposition
  + Replace PCB machine block
  + Change arrows for energy and material inputs etc
* General discussion
  + Vias might be difficult
    - Brass inserts?
  + Focus on 1 sided PCB first
* Design brief
  + Background research
    - What’s relevant
    - Combine common themes
    - Discuss what we are going to do in the context of the shortcomings of existing solutions
    - **Convince the reader about what we are doing**
  + Functional decomposition
    - Put everything on there and the subsystems
    - Can say that something is hard and that we will prioritize basics first
* 2 weeks from now
  + Functional decomposition
    - Go back and look at everything again and brainstorm each part
  + Design brief
    - Make it nice
  + Decision matrix
    - Go back and actually make sure that it makes sense
      * Go back and make sure weighting is okay
      * Make sure we looking at the right things
  + Design process

## 31/10/24

* Submit design brief
* Lock down design more before cad
  + Functional diagram becomes block diagram
  + Break things down more
* Do force calculations for gantry
* Safety plan
  + Mechanical safety
    - Might need some enclosure for final product
  + Hazardous materials
  + Fire hazards
* Get better at presenting
  + Discuss motivations and then intro x
  + Finding good graphics for how to make a PCB
* **What is the main figure in our report?**

## 31/10/24

* Important figures
  + Accuracy
    - How will we measure this?
    - Accuracy of gantry
    - Accuracy while actively milling
  + Rosen’s recommendation
    - PCB figure from CAD vs from mill
* Fix calculations for cutting forces
* Walk through procedure for the manufacturing process
  + E.g load fr4 board, homing, cutting
* Start on the gantry design
* Safety solutions
  + Enclosure
  + Mineral oil