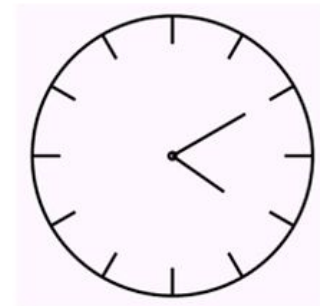# Why are we here?

Hello World! Printed Circuit Board

In one hour, we will:
- Design a simple circuit board.
- Select and source parts.
- Submit board for manufacture.

Who Am I?

SIGMADESIGN

KEN OLSEN
Electrical Engineering Technician

By day: Mild Mannered Technican

By night and weekends:
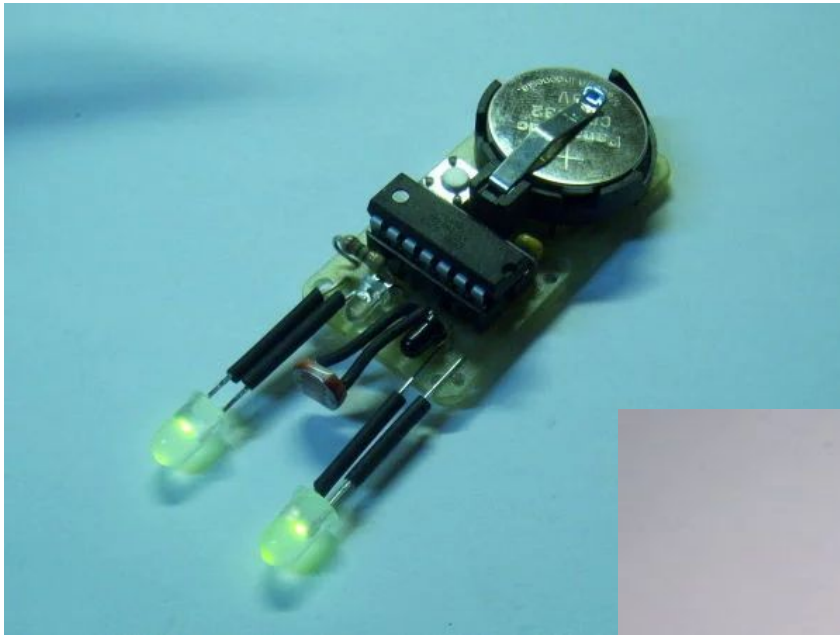Mild Mannered Maker

Why PCB?

Because breadboarding is hard and error prone!
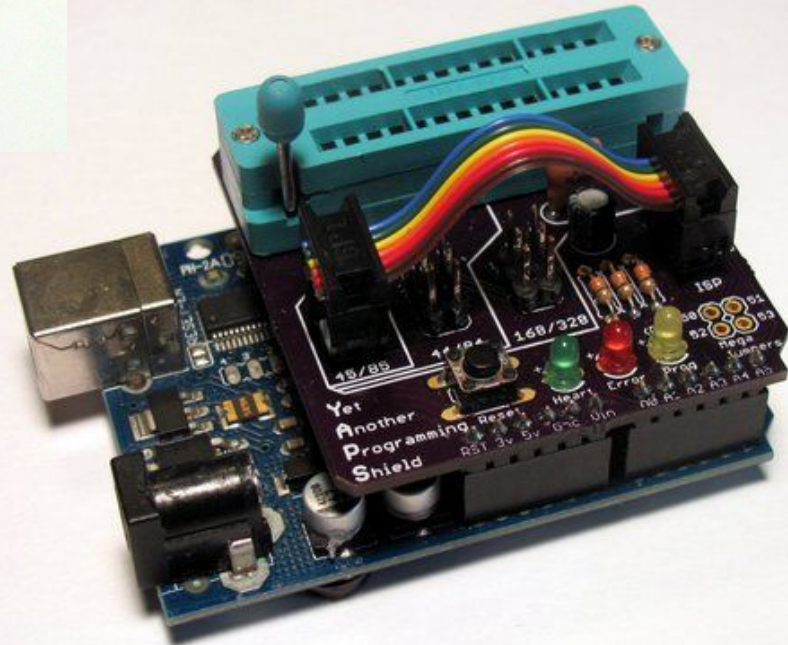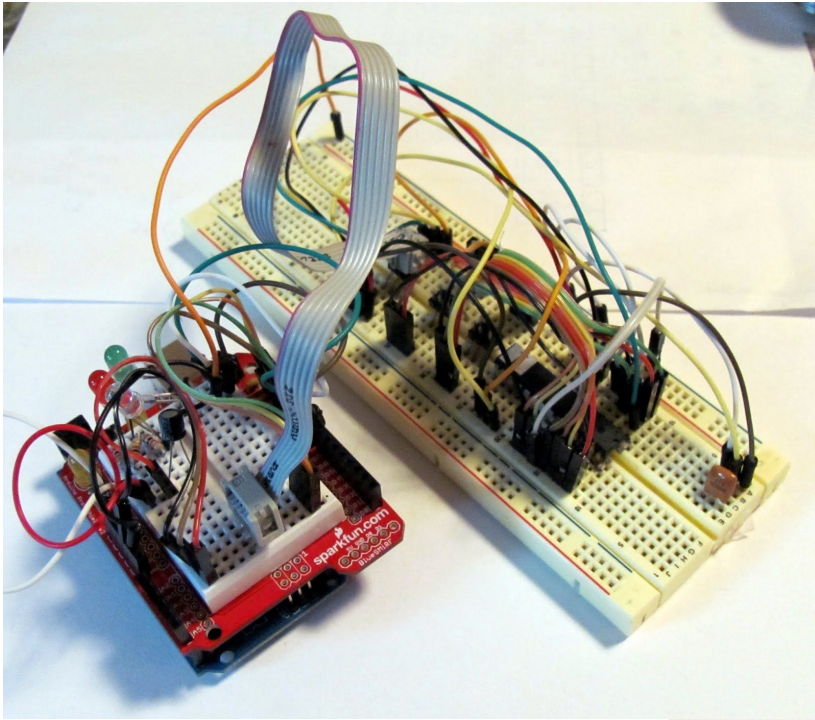
First Try

CIRCA 2008

Toner transfer method +
nasty chemicals.

Core (12.6mil)
Top Layer
Bottom Layer

KiCad

KiCad

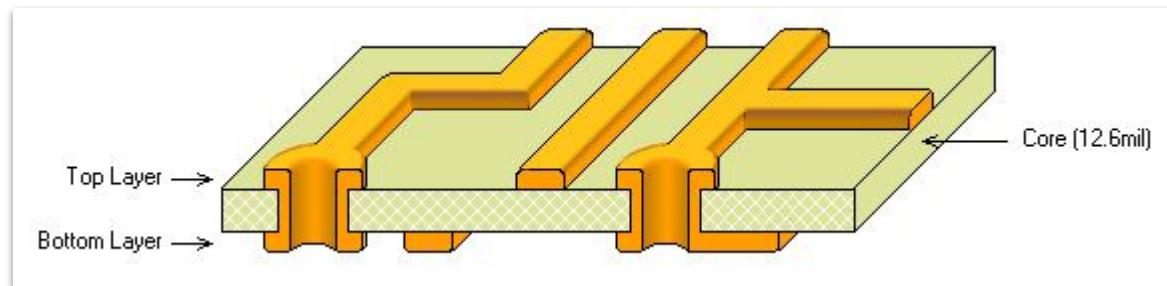Choose your side
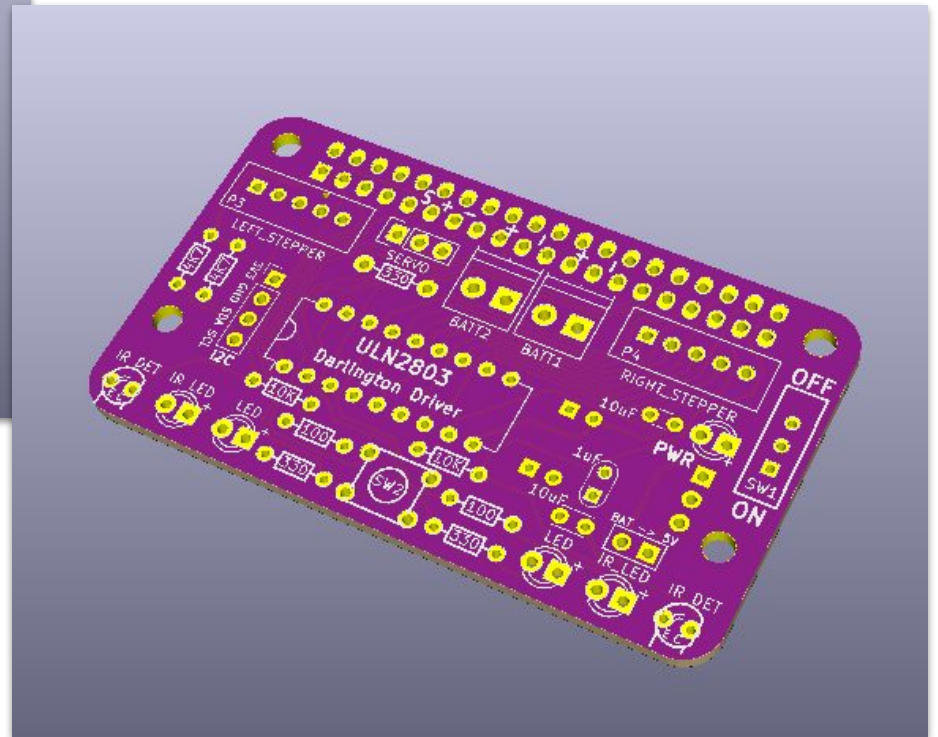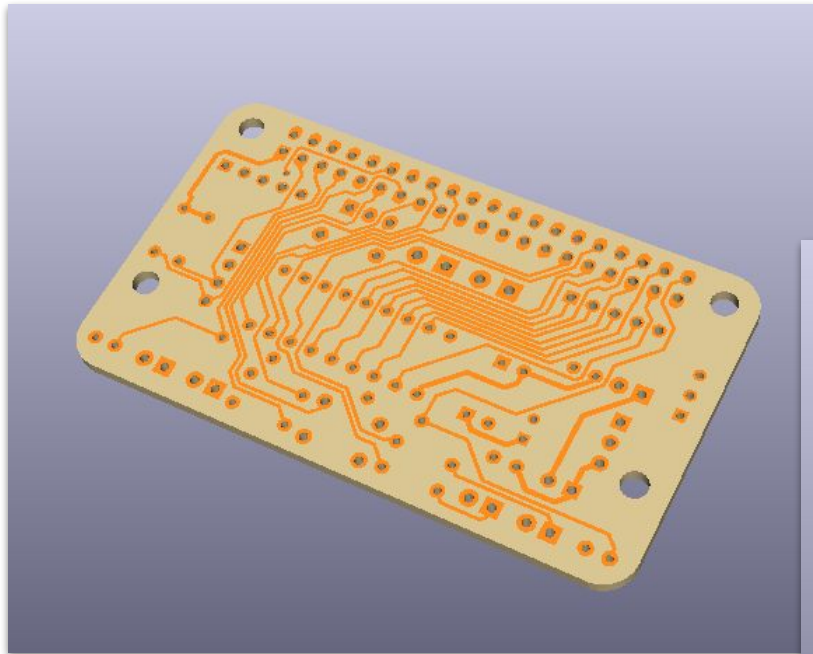
"Ki"?

"OSH"?

OSH Park

Perfect   Prompt   Purple   PCBs

Workflow:

- Schematic
- Components & Footprints
- Component placement
- Routing
- Bill of Materials
- Submit for manufacture