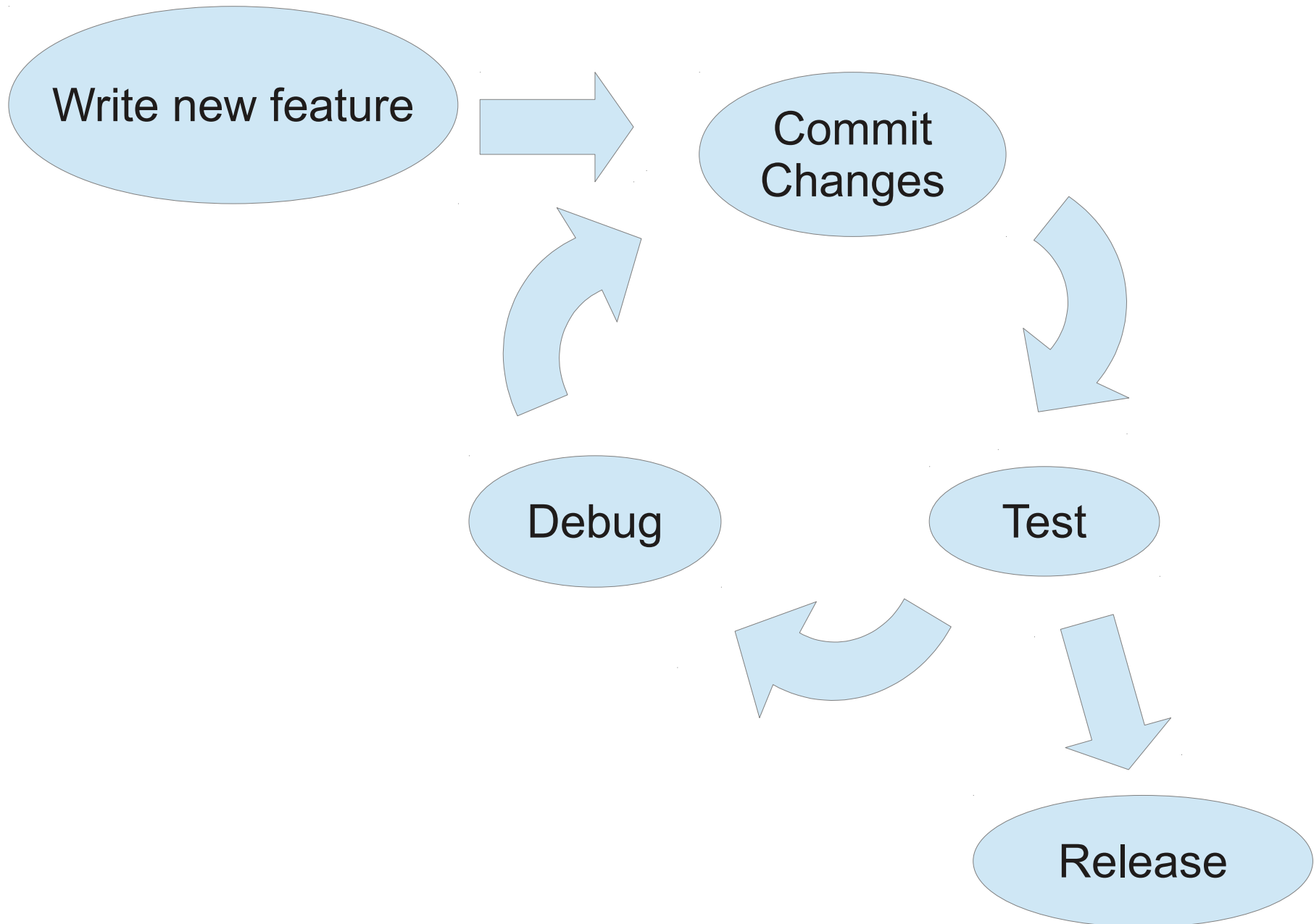


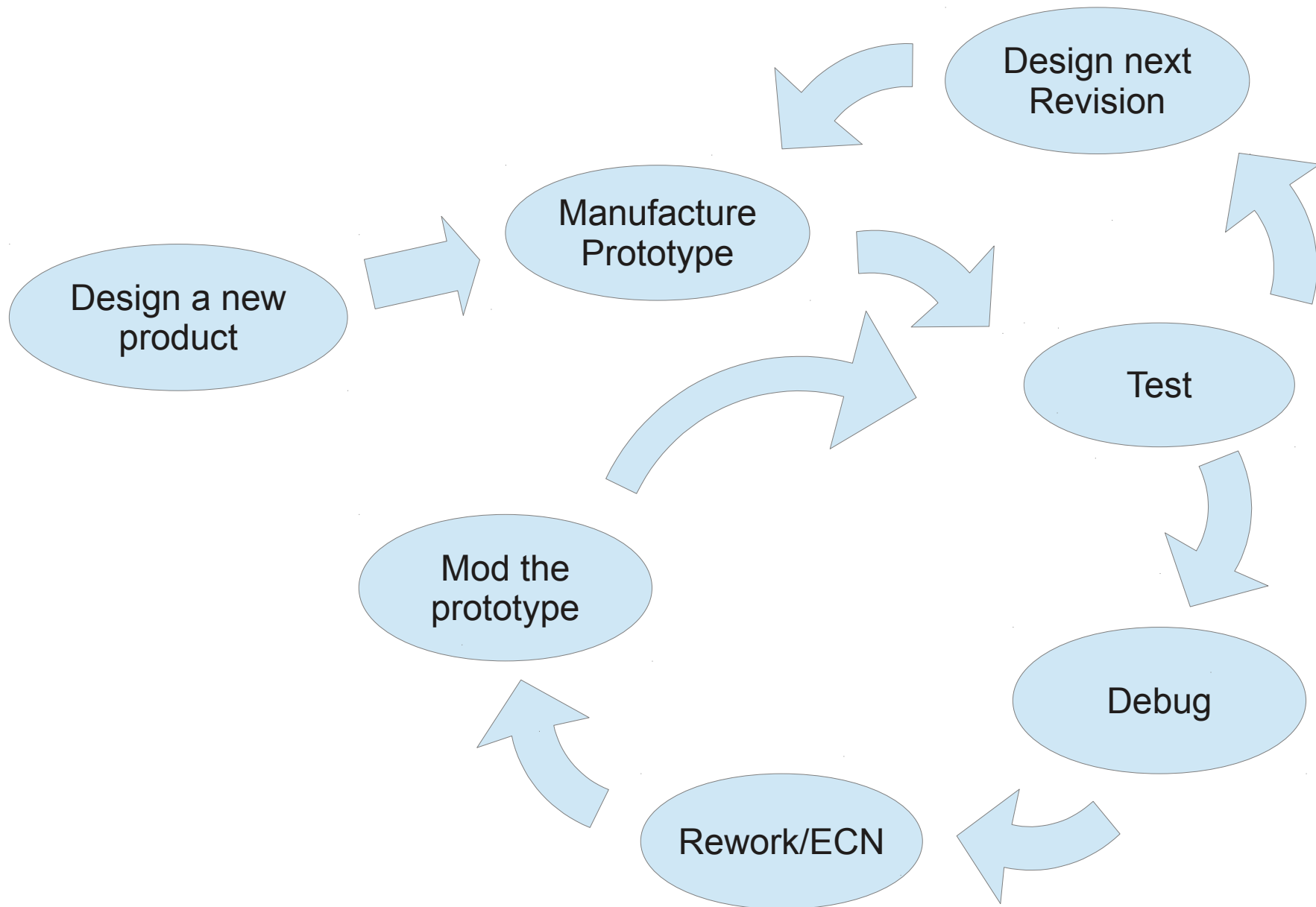
Forking Hardware!

Using Git to Manage
Hardware Projects

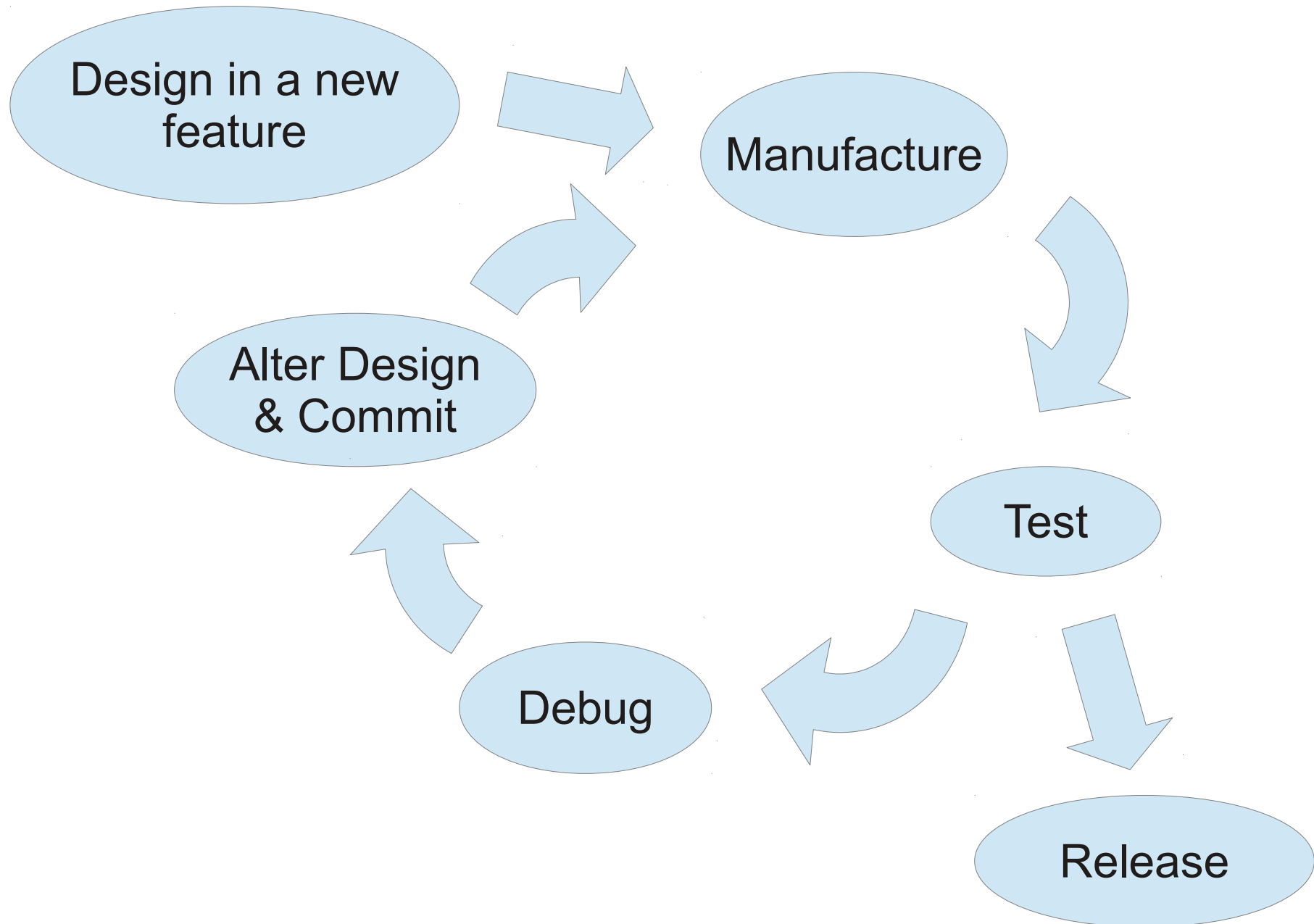
A Software Development Work-flow



A Hardware Development Work-flow



An Alternative Hardware Development Work-flow



Why Bother?

- Keep up to date on different machines
- Share your progress
- Easier to keep track of than a bunch of folders
- Digital designs are harder to track than hardcopy

Git for Beginners

- <http://git-scm.com/documentation>
- `git init`
- `git add <filename>`
- `git commit -a`
- `git push`
- `git pull`
- Bare repositories – for servers

When do I commit?

- Distributed version control = lots of commits
- Before committing!
- Big re-works
- Before you forget what you changed

Compromises

- Source repository and downloads
- Some hardware files are just binary blobs
- Preview versions (PDF)

History for [oggbbox](#) / [src](#) / [sch](#) / [oggbbox.sch](#)

Aug 03, 2013



Ready to order the Rev C PCBs.

hairymnstr authored 2 months ago

95d63b7c92 +

[Browse code](#) ➔

Jul 24, 2013



Oggbox Rev C almost ready to order!

hairymnstr authored 3 months ago

47cce7752a +

[Browse code](#) ➔

Feb 26, 2013



Made some more schematic revisions for the Rev C

hairymnstr authored 8 months ago

808880e417 +

[Browse code](#) ➔

Feb 25, 2013



Started laying out the Rev C board

hairymnstr authored 8 months ago

6d1cff0154 +

[Browse code](#) ➔

Feb 22, 2013



Started the Rev C schematic, just changed the battery voltage check s... ...

hairymnstr authored 8 months ago

cadce11ee8 +

[Browse code](#) ➔

Sep 24, 2012



Added extra decoupling and updated silkscreen

hairymnstr authored a year ago

b495dee9f6 +

[Browse code](#) ➔



Moving stuff around to try and shift the SD socket

hairymnstr authored a year ago

6f43ed11d5 +

[Browse code](#) ➔

Sep 23, 2012



Changed the footprint of the RTC crystal to an SMD part

hairymnstr authored a year ago

1ecc6410a9 +

[Browse code](#) ➔



Routed the new volume switches

b0b760a700 +



Specific Ideas

- Use text based formats (e.g. CSV)
- Make sure you only commit the essentials
- Make use of tagging for major milestones (e.g. board manufacture)
- Learn about sub-modules



This repository ▾

Search or type a command 🔍

[Explore](#) [Gist](#) [Blog](#) [Help](#)



hairymnstr



PUBLIC



hairymnstr / oggbox

Unwatch ▾

2

★ Unstar

6

Fork

1

branch: master ▾

oggbox / cad / oggbox_front.stl



hairymnstr 9 days ago Massive heap of new code to do with database creation

1 contributor



file | 27177 lines (27176 sloc) | 694.397 kb

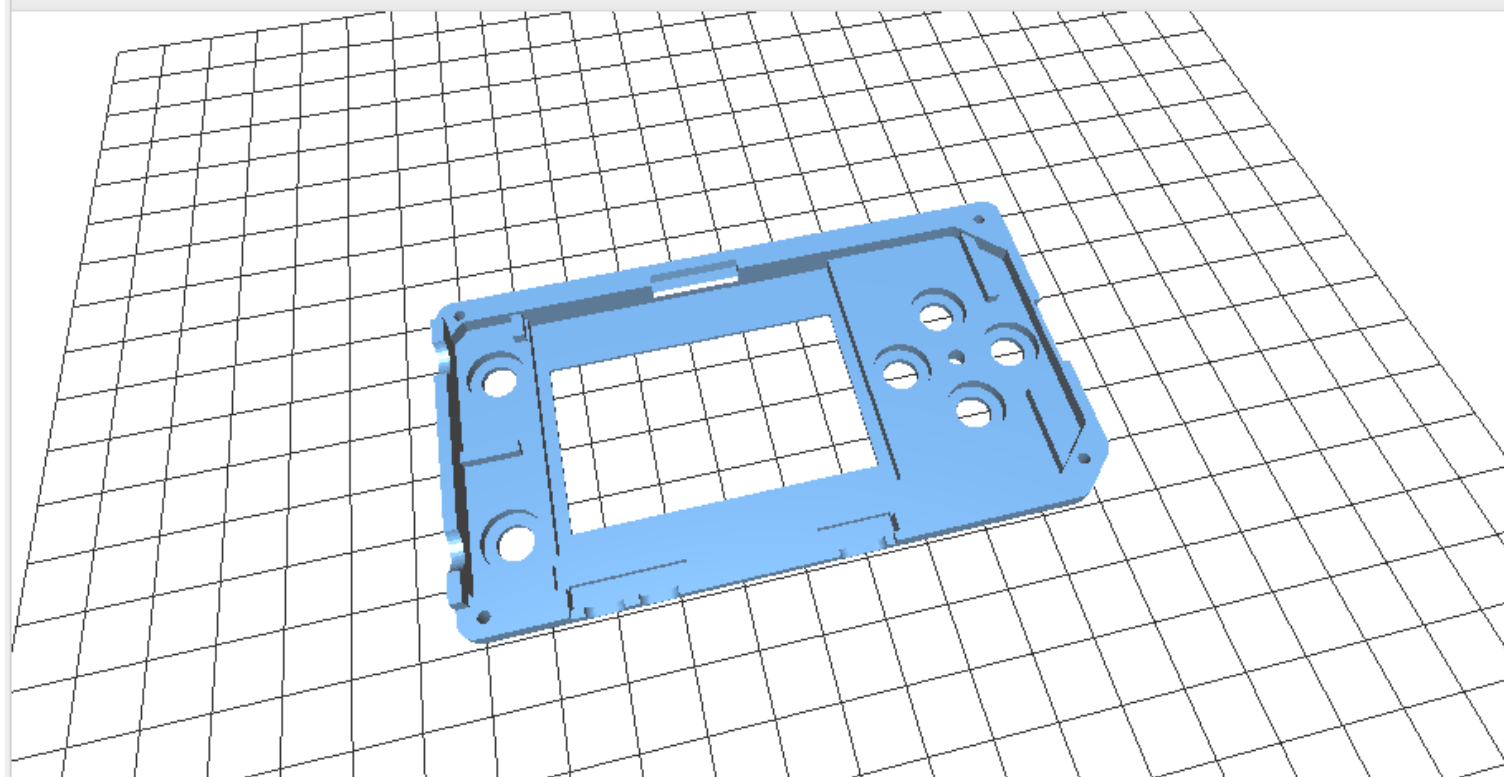
Edit

Raw

Blame

History

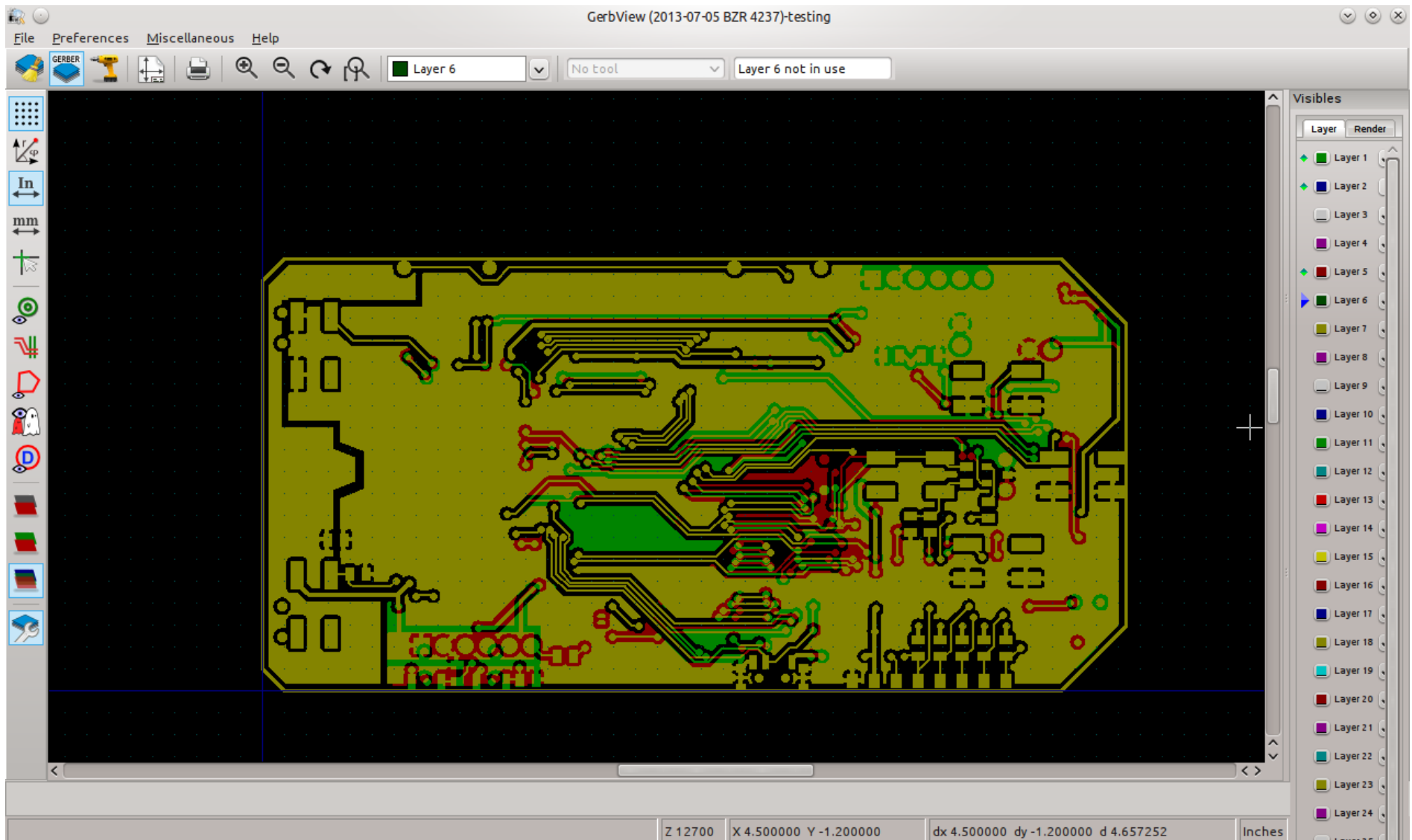
Delete



Wireframe | Surface Angle | Solid



Diffing PCB Designs



Where next?

- Visual diffs?
- Drawing numbers as revision numbers
- Collaborative design e.g. merge options
- Automated ECN generation

Summary

- Use Git for storing your hardware designs
- Commit little, commit often
- Make sure you describe why you made changes – like in an ECN

<http://www.nathandumont.com/node/282>