

Logic for Kids

Hardware is cool!

Logic Gates Basics

- And $A \wedge B$
- Or $A + B$
- Everything can be converted to NAND only
- Larger components build on smaller ones

The Plan

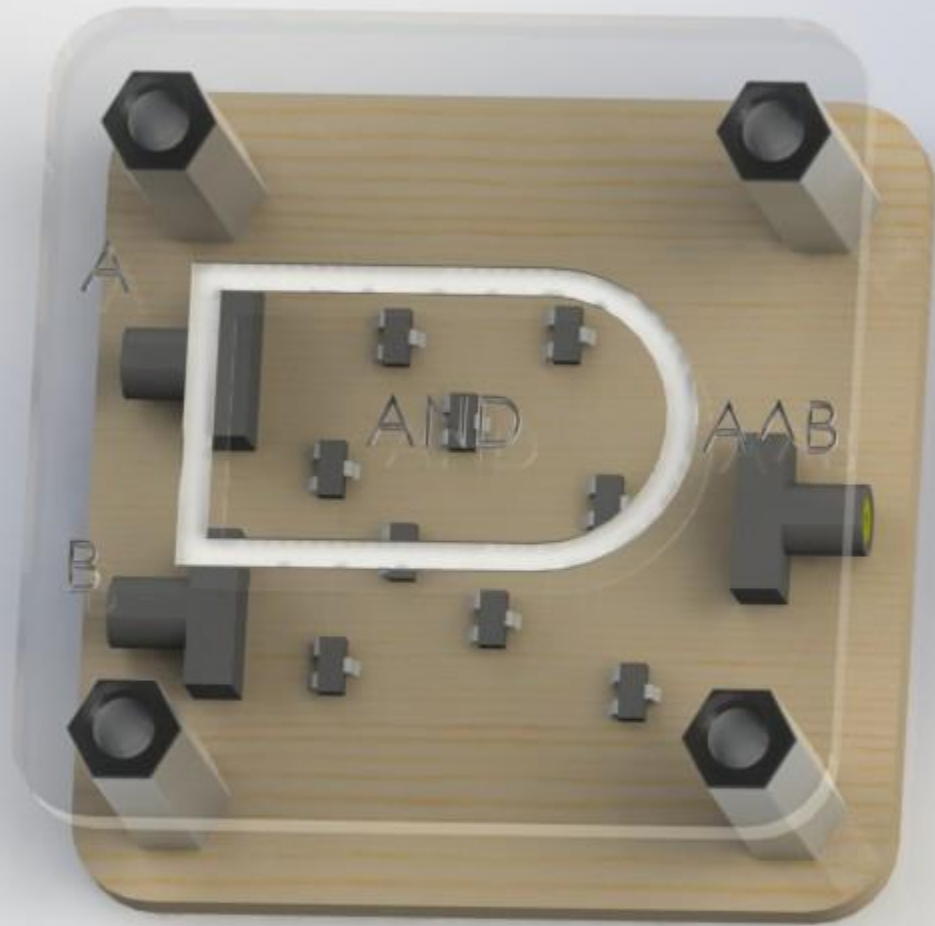
- 2 AND
- 2 OR
- 1 XOR
- 11 NAND
- 1 Half Adder
- 4 Full Adders
- Propagation Delays and Pretty Lights

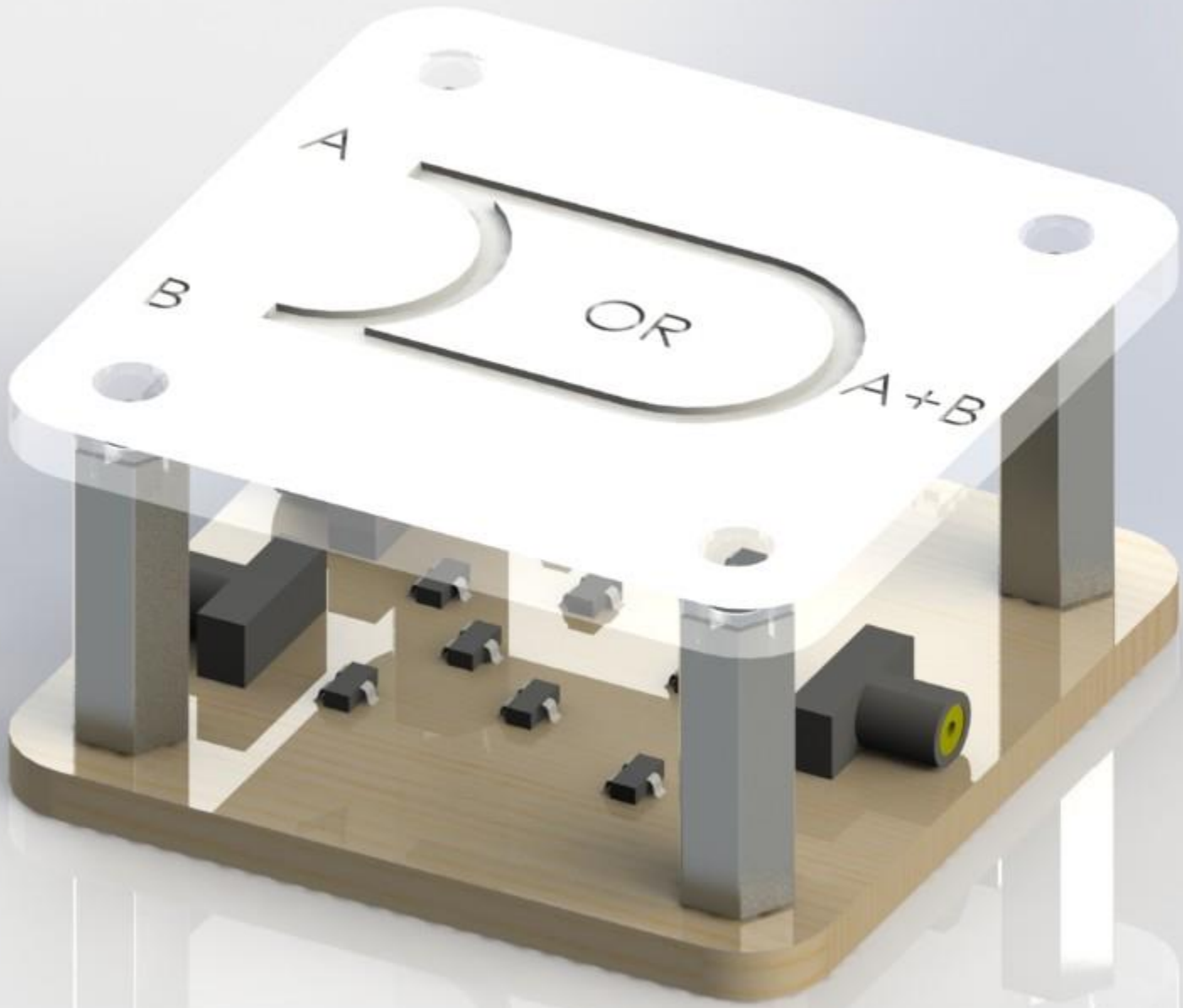
Where I'm At

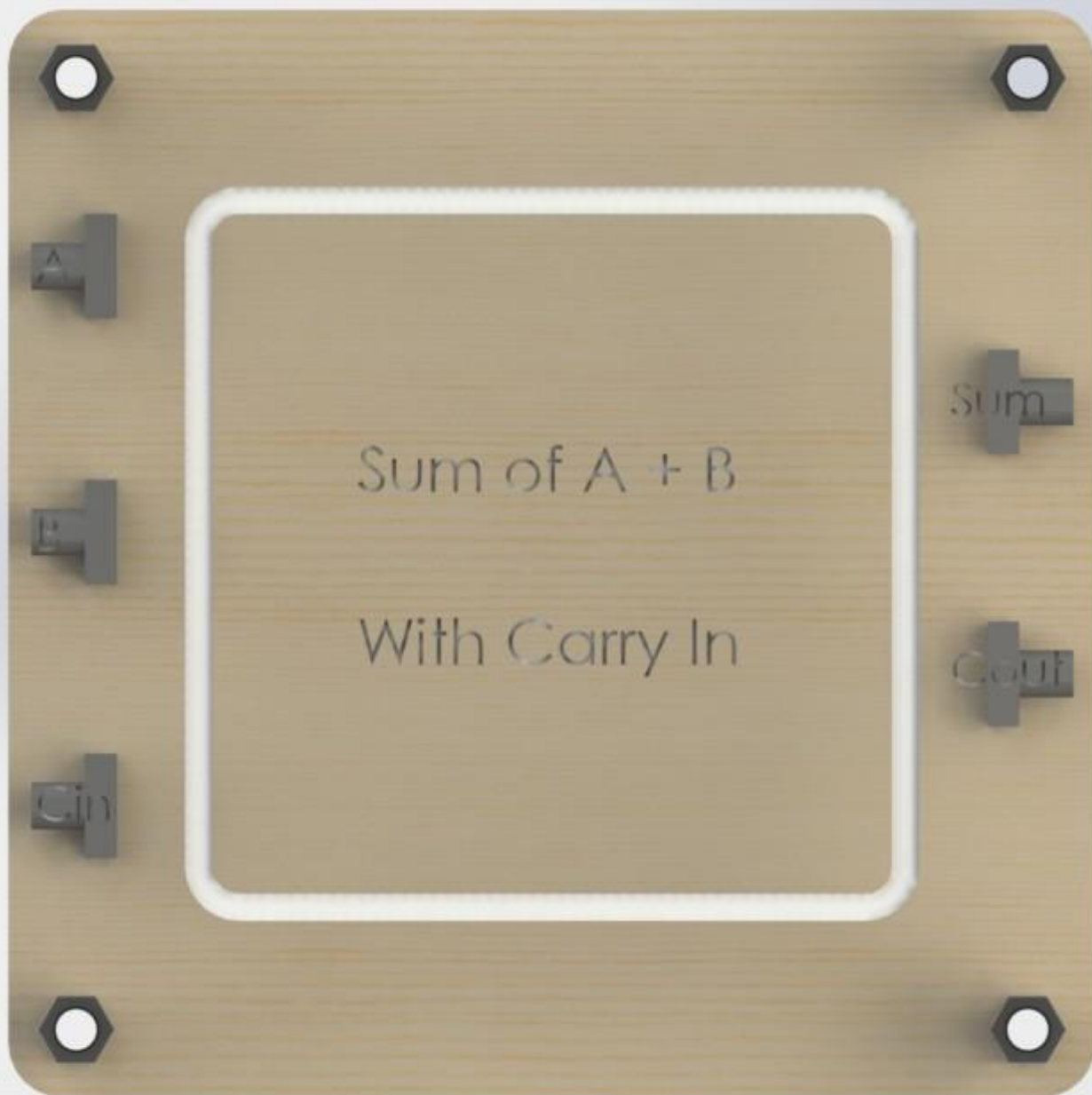
(Demo Time!)

Where I'm Headed

(Make Pretty!)







Sum of A + B

With Carry In

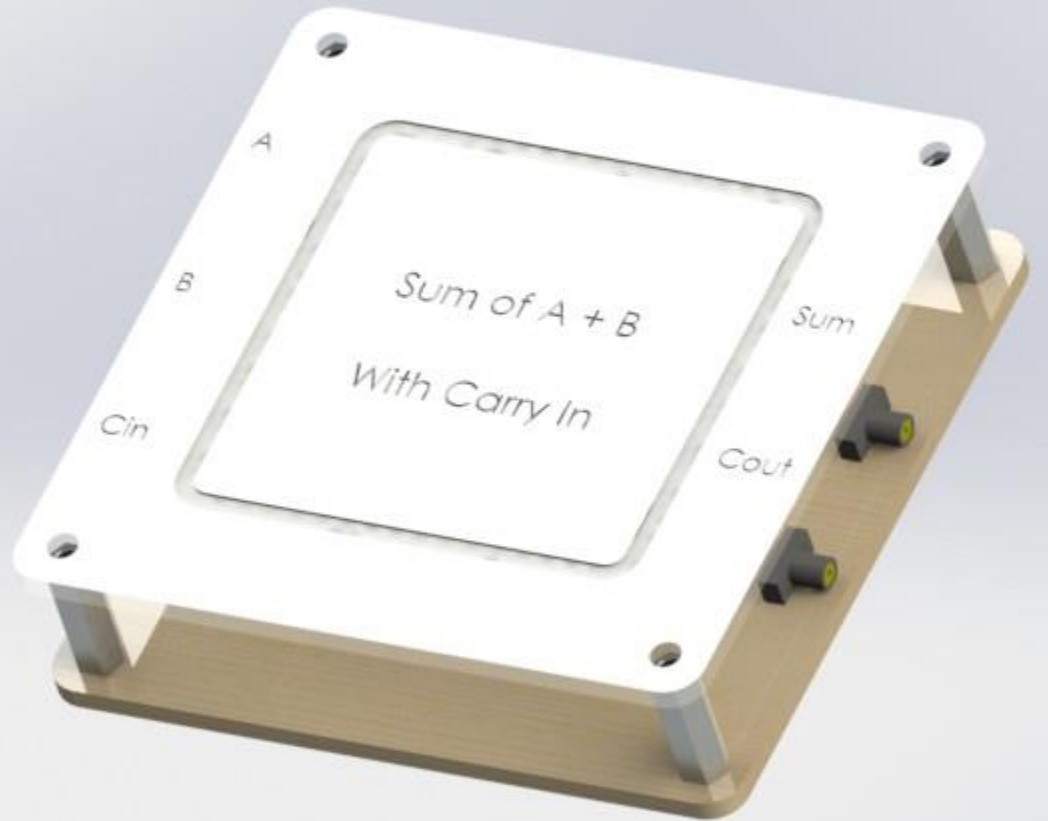
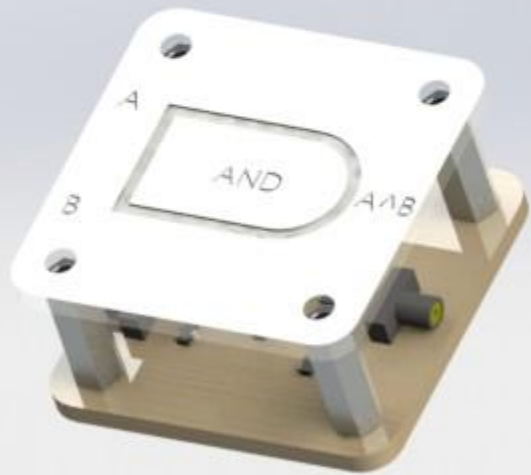
A

B

Cin

Sum

Cout



Thoughts? Feedback?