

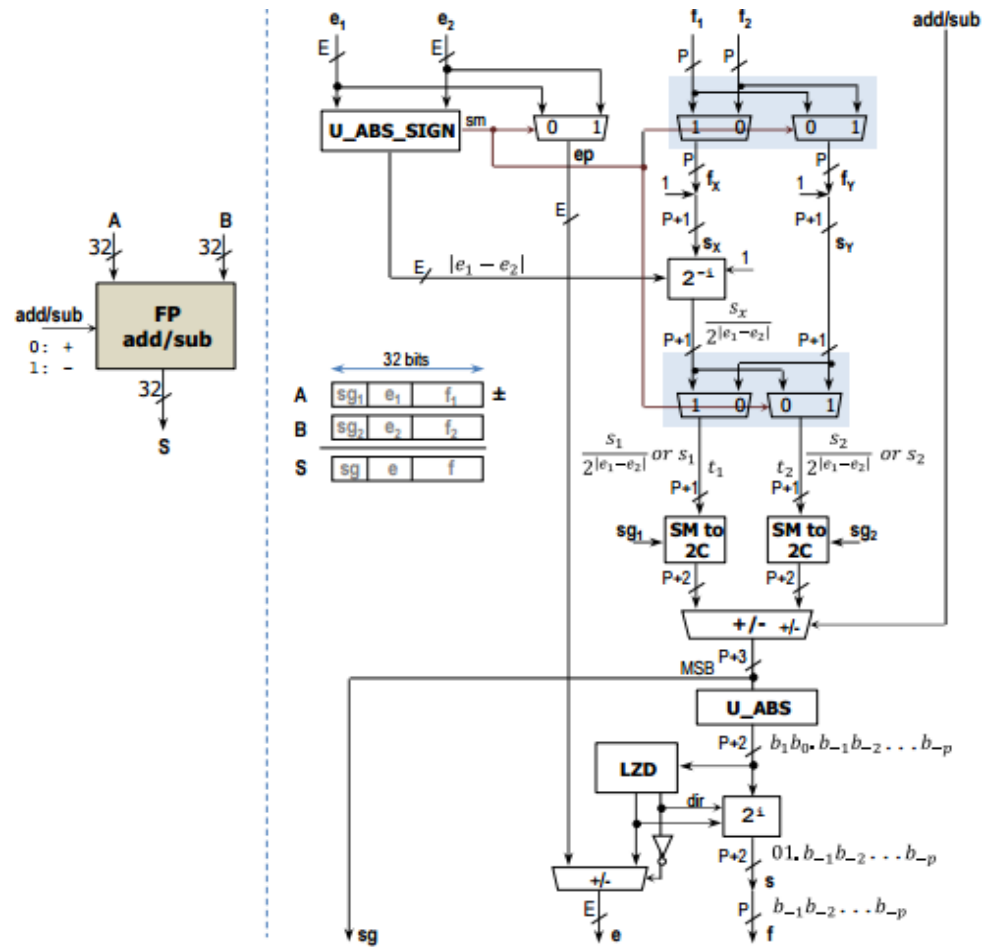
Floating Point Calculator

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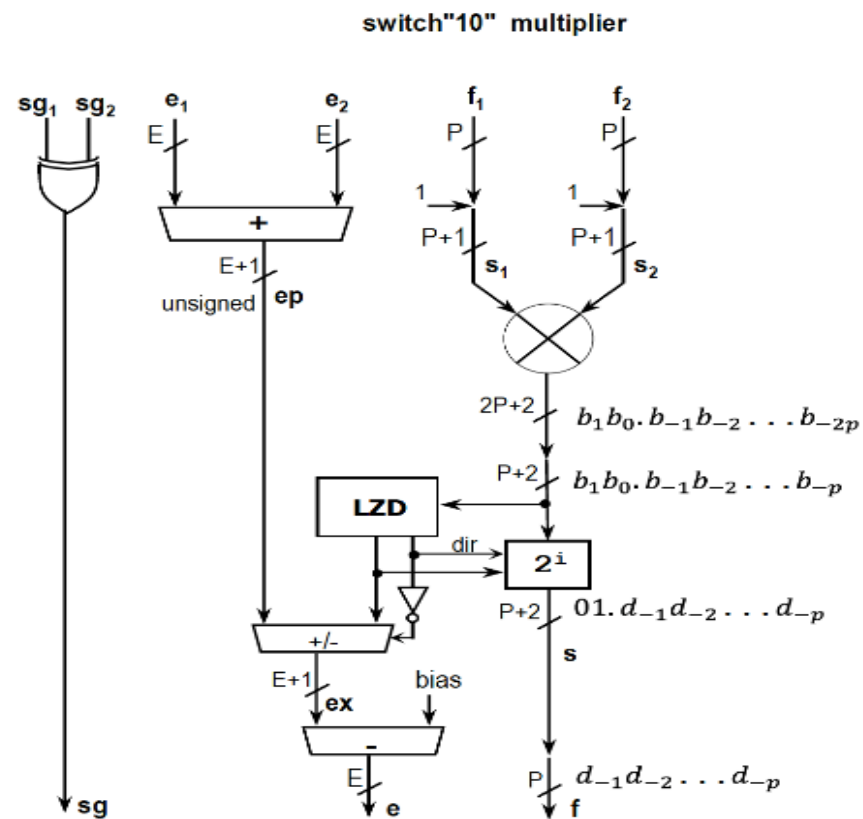


Design Process

► Adder and Subtractor

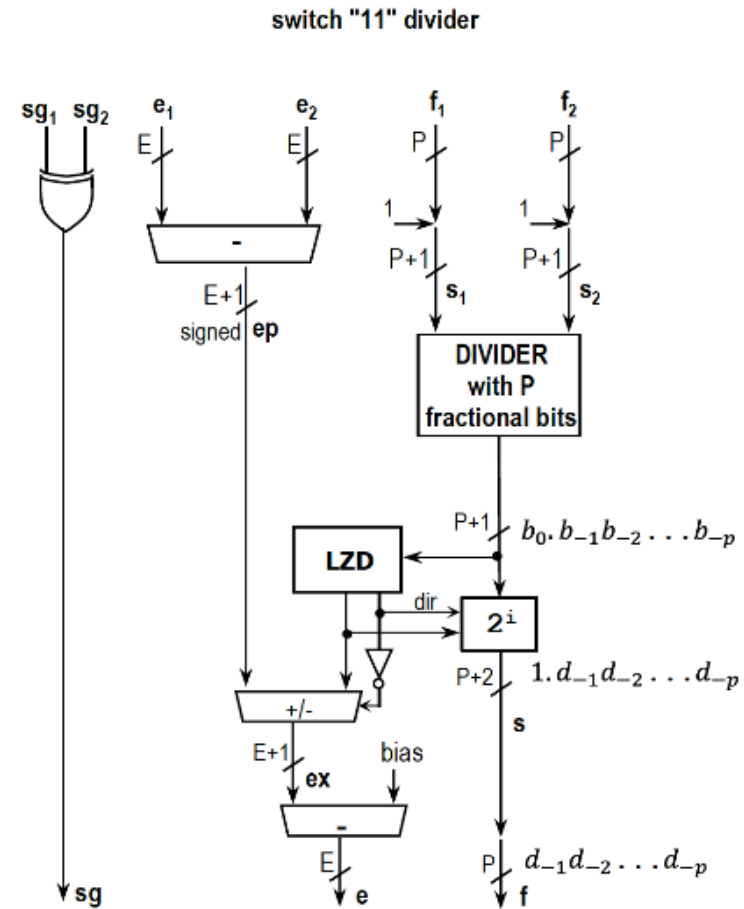


► Multiplier



Design Process

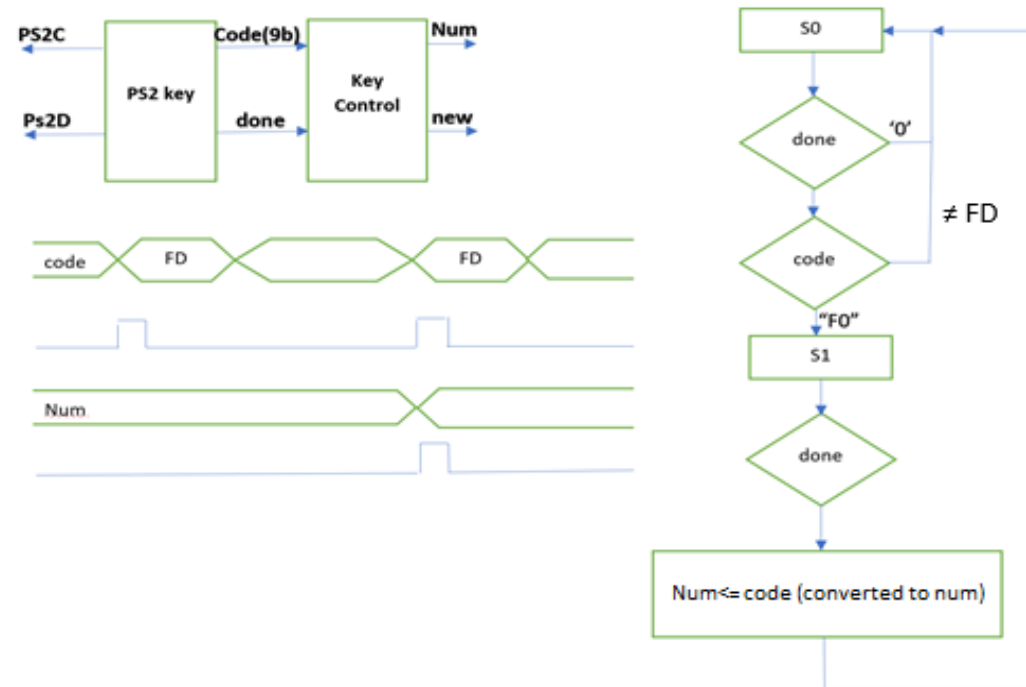
► Divider



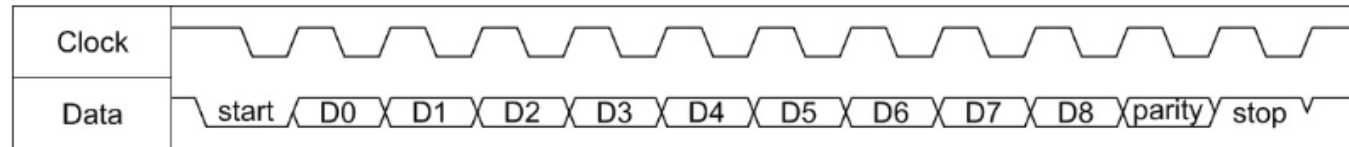
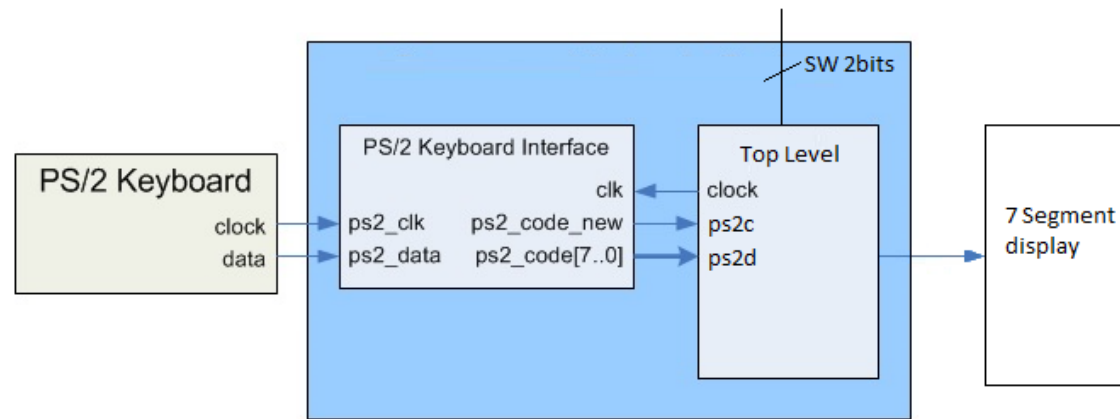
Design Process



- Keyboard
 - input the numbers.



Top Level



Design Process

- 7 segment Display.
 - Display the result of the calculator.

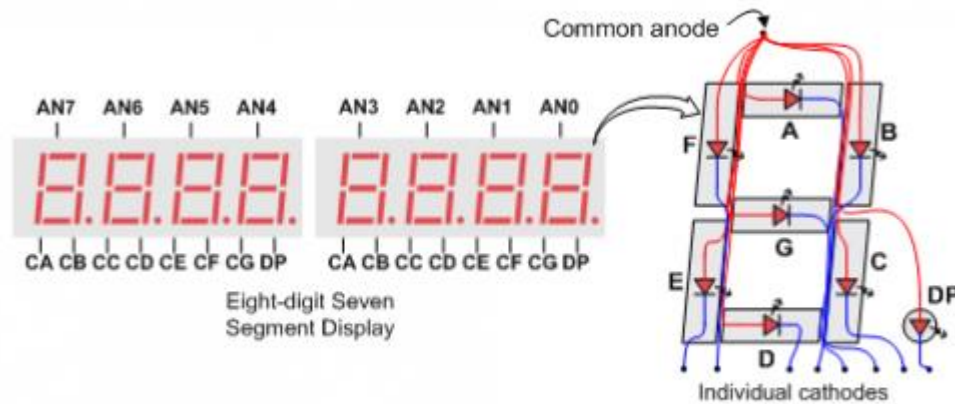


Figure 18. Common anode circuit node.

Design Challenges

- ▶ Multiplier and Divider
 - ▶ Coding
- ▶ Top Level
 - ▶ Connecting all circuits
- ▶ Keyboard
 - ▶ Glitches

Test Bench

- ▶ $60A10000 + C2F97000 = 60A10000$
- ▶ $10DAD000 - 90FAD000 = 116AD000$
- ▶ $7A09D300 * 0BEEF000 = 4680A35F$
- ▶ $7B390000 / C8C00000 = F1F00000$