Slight Recap (with more detail)

Note that the user has no access to the Instruction Register, the Memory Bus Register, and the Memory Address Register.

A.L.U. Arithmetic Logic Unit

Arithmetic Operators

- Addition
- Subtraction
- Increment
- Decrement

Modern ALU.s have many more!

Logic Operators

- AND
- OR
- NOT
- EXOR
- CLEAR (or zeroes the bits)

More here - he's going too fast to take it down

Well-constructed computers can perform an instruction in the time it would take light to travel the length of your fingernail.

Clock

slower divisions

Sometimes we need ~~██████~~ of the clock tick. E.g. for the mouse. If we feed the clock into successive flip-flops, the output slows by powers of two, and we can get clocks at different rates.

The clock is a crystal in which the lattice structure has a regular oscillation. The oscillation is amplified and sensed to drive the clock.