

CPU:

- ALU ✓
- Control Unit (Sends commands to *Memory Management Unit* and the *ALU*, reads from/writes to *RAM Unit*, and writes to *Registers* for temporary program storage)
 - 28 bits of Program Counter command memory
- Registers
- Memory Management Unit
- Clock ✓

RAM:

- Writing ✓
- Reading ✓
- Unit ✓

Program Reader/Counter:

- Pointer (Program Reader/Counter will output what it reads into the *Control Unit*)
- Set to start of program
- Reset to start of program

Input:

- Input Buffer
 - Reserve a cell that can be typed in and will be read at the *last character in the cell* when Program Counter reaches a `Read Input` instruction
 - > use in OS dev
 - > possibly also game dev?
 - "read input" instruction will keep a copy of the cell before an input to check if an input happened, will update upon reading a new input
 - Add a `clear cell` *VBA macro* that clears the *Input Buffer* (the cell where inputs happen) when the clear command is given by the *Program Counter* to the *Command Unit* (*might be cheating*)

Output:

- Screen (Gets inputs from *Control Unit*)

ROM:

- Writing ✓
- Reading ✓
- Unit

Assembly/BF:

- Parser
 - Instruction set
 - `>>` -> Push to stack
 - `<<` -> Pop from stack
 - `%` -> Alias call
 - Jump to memory address of Alias
 - `$` -> System call
 - Pass as a Control Unit command and not a Program Counter command
 - `DPND`
 - Pulls another program into the Registers for use as a function
 - `END`
 - Signal the end of a program
- Compiler
 - eBF instructions -> 4-bit numbers
 - Byte-sized parameters (8-bit numbers)
 - 3 parameters max