

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)
- 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
 - BF tokens as 4-bit numbers for storage in ROM/Registers
 - Add in `DPND` instruction
 - Pulls another program into the Registers for use as a function
 - `END` token to signal the end of a program
- Compiler
 - BF instructions -> 4-bit numbers