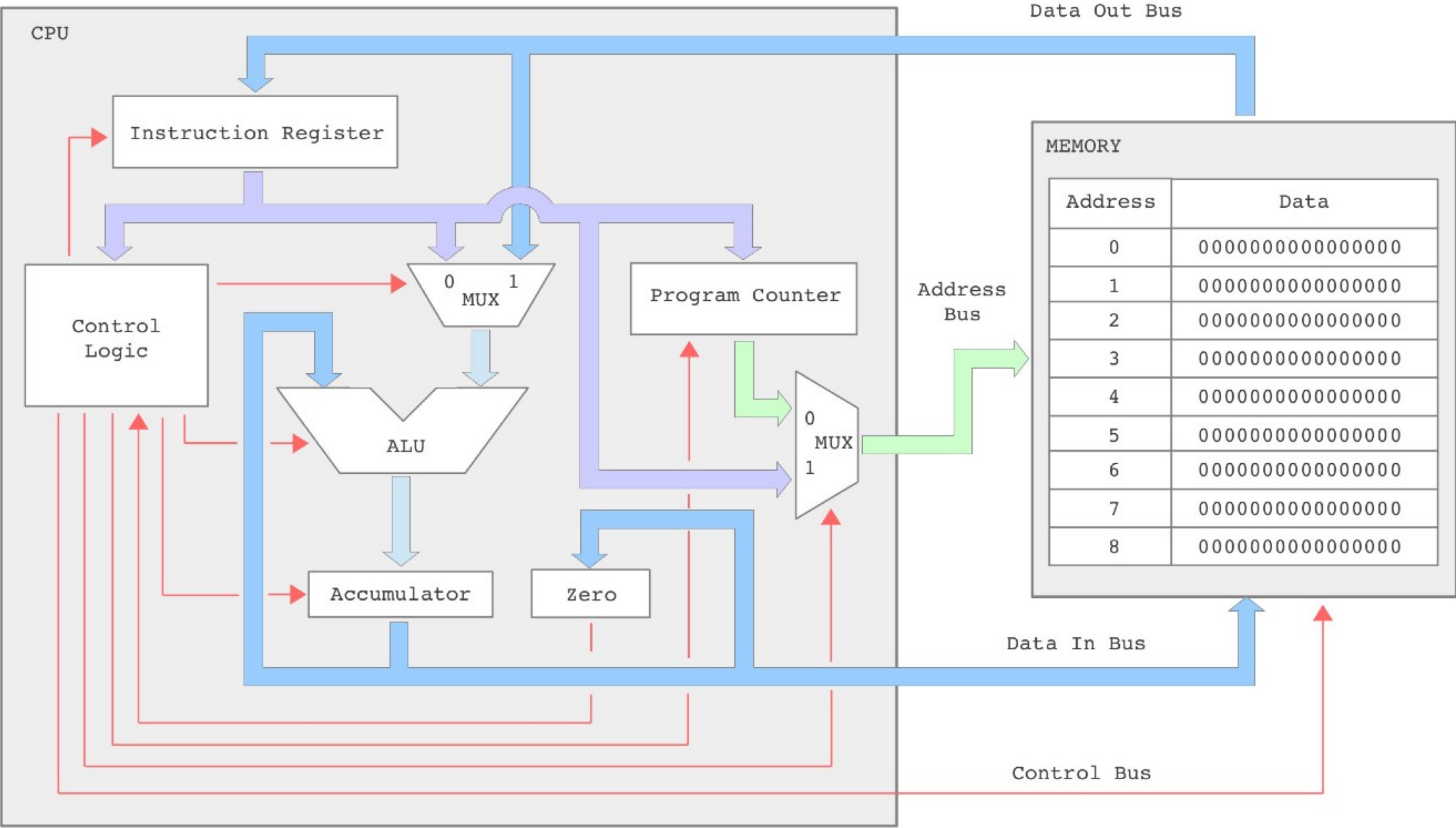


CPU schematic (simplified)



Parts of the CPU

- Have already seen: ALU, MUX, register file, RAM
- New parts:
 - Instruction register: Instructions are stored in RAM, and loaded into a special instruction register, before being split to be read by other CPU parts
 - Control logic: uses the opcode (sequence of bits in the instruction that specifies "which function to call") to tell other parts how to behave
 - Program counter: keeps track of the address of the instruction the CPU should read next
 - Bus: "data highway" used by components inside and outside of the CPU