

## CPU Registers

- **Memory Address Register (MAR)**

- is used to store the address to access

- **Program Counter (PC)**

- Is connected to the internal address bus, it holds the address in memory of the next program instruction.
- Notice that it doesn't connect directly to the memory, but must go via the MAR. (The PC is special in that it is both a register and a counter. More later.)

- **Stack Pointer (SP)**

- is connected to the internal address bus and is used to hold the address of a special chunk of main memory used for temporary storage during program execution.

