**register (processor register, CPU register)**

A **processor register** is a quickly accessible location available to a computer's [processor](https://en.wikipedia.org/wiki/Processor_(computing)).

A processor register (CPU register) [is one of a small set of data holding places](https://www.techtarget.com/searchstorage/post/Storage-Processors-to-Unleash-the-Full-Potential-of-Flash-Storage) that are part of the computer [processor](https://www.techtarget.com/whatis/definition/processor).

A register may hold an [instruction](https://www.techtarget.com/whatis/definition/instruction), a storage address, or any kind of data (such as a bit sequence or individual characters). Some instructions specify registers as part of the instruction. For example, an instruction may specify that the contents of two defined registers be added together and then placed in a specified register.

A register must be large enough to hold an instruction - for example, in a [64-bit computer](https://www.techtarget.com/searchdatacenter/definition/64-bit-processor), a register must be 64 [bits](https://www.techtarget.com/whatis/definition/bit-binary-digit) in length. In some computer designs, there are smaller registers - for example, *half-registers* - for shorter instructions. Depending on the processor design and language rules, registers may be numbered or have arbitrary names.