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## RAM: Difference between 2x32 and 2x36 SIMMs (8/95)

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Security: Everyone

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TOPIC -----

I want to upgrade the random-access memory (RAM) in my Macintosh. I know I need to buy a 72-pin Single Inline Memory Module (SIMM), 80 nanoseconds (ns) or faster. While shopping for memory I have found two different types of SIMMs — those composed of a 2x32 chip set and those composed of a 2x36 chip set. What type of SIMM should I use in my Macintosh computer?

DISCUSSION -----

SIMMs composed of a 2x32 chip set have two chips representing 32 bits each. This totals 64 bits, which, divided by 8, results in 8 planar levels. This is the type of memory for which your computer is designed.

SIMMs composed of a 2x36 chip set have two chips representing 36 bits each. This totals 72 bits, which, divided by 8, results in 9 planar levels, indicating that the chip is a parity SIMM. This type of SIMM may also be used in your computer, but the extra bit offers no advantages.

Some older computers used the extra bit to verify the integrity of data transfer. This type of error checking is no longer widely used. The last Macintosh computer to use any type of parity memory was the Macintosh IIfx.

If you use parity RAM, your computer does not perform any differently. Your computer ignores the ninth bit.

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