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## Macintosh: Parity Checking Not Needed By Average Users

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TOPIC -----

What is the difference between a plain Macintosh IIci and a Macintosh IIci with parity?

DISCUSSION -----

The only difference is that one machine has parity checking and the other does not. RAM parity detects single-bit errors in RAM and prevents operation with damaged data or instructions. This type of error checking detects "soft errors" and intermittent "hard errors". Most soft errors are caused by atmospheric conditions, but the reliability of current DRAM is high enough that these conditions are VERY rare. Bad RAM chips are almost always found during Macintosh startup without using parity checking.

Apple has never used ECC (Error Correction Code) schemes to detect errors in System RAM. The Macintosh IIci and Macintosh IIfx (parity models) are the first Macintosh computers to use any kind of memory error checking during normal operation.

Apple implemented parity checking as an option for the Macintosh IIci and Macintosh IIfx as a result of government requirements. Average users won't need parity checking.

For more information, search under "Parity Checking".

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