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## Macintosh IIci: The Price of Progress

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TOPIC -----

The Macintosh IIci represented one of the most significant steps forward in the evolution of the Macintosh architecture since the introduction of the original Macintosh II. Whenever a product with as many significant architectural enhancements as the Macintosh IIci is introduced, incompatibilities are bound to be revealed.

DISCUSSION -----

The Macintosh IIci was not only the first Macintosh with a higher clockspeed and built-in video, it was also the first system with 32 bit QuickDraw in ROM and the first system to utilize non-contiguous memory and the PMMU for memory addressing. These were all significant internal modifications, intended to strengthen the Macintosh architecture and provide even greater flexibility for future hardware and software developments.

The majority of the modifications that third-party developers had to make to support the Macintosh IIci were changes that were necessary to support future CPUs and future versions of the Macintosh operating system.

- Addressing changes necessary to support non-contiguous memory and the utilization of the PMMU were changes that would be required to run correctly with VM in System 7.0.
- 32-bit QuickDraw will be built into all future ROM's which offer color support.
- The Built-in video monitor identification scheme will be built into future CPUs and is also part of our new video cards.

- Changes to the ADB manager and the video configuration (i.e. gamma correction table) will both be included in future systems.
- And, the fact that Apple will design systems that run at greater than 16Mhz is obvious.

For more information, see the four-part article on Macintosh IIcx compatibility problems.

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