



# Tech Info Library

## Centris 610 and 650: Floating-Point Unit Upgrades (7/94)

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TOPIC -----

Neither the Macintosh Centris 610 nor the Centris 650 4/80 configuration come with an FPU. Can I upgrade these Centris models with an FPU? Are there any compatibility problems if my Centris doesn't have an FPU?

Some configurations of the Quadra 650 have an FPU standard, those that do not can be upgraded as per below. The Quadra 610 is the same as the Centris 610.

DISCUSSION -----

### FPU Upgrades

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You can upgrade the Macintosh Centris 610 or 650 with an FPU, but Apple doesn't provide or support such an upgrade. You must rely on third-party companies who can remove the 68LC040 from its socket and replace it with a 68RC040. Since Apple doesn't intend to offer an upgrade, we can't guarantee that the processor will remain a socketed component.

### Compatibility without an FPU

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There aren't very many compatibility problems with non-FPU systems. While the addition of an FPU allows certain types of applications to execute faster, these applications tend to be more technical in nature. Business applications -- such as spreadsheets, databases and word processors -- don't require an FPU to run.

Most applications check to see if there's an FPU present. If one doesn't exist, they emulate the floating point instructions in software. There are a few applications that expect or require an FPU. These applications will present problems and we anticipate most software developers will revise these products.

### Article Change History:

28 Jul 1994 - Added Quadra 610 to aid in searching.

12 Aug 1993 - Clarified which model configurations do not have an FPU.

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