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Macintosh IIX: 4MB SIMM RAM Upgrades (8/93)

Revised: 8/10/93
Security: Everyone

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Article Created: 6 August 1993

TOPIC -----

We are trying to upgrade a Macintosh IIX to 20MB of RAM. We can't find any information about Apple selling the special 4MB SIMMs that are required for this upgrade.

Also, when I upgrade the RAM on the IIX, do I need to add a PMMU chip, as with the Macintosh II?

DISCUSSION -----

The Macintosh IIX has a 68030 microprocessor which has a PMMU built into it.

Apple does not sell 4MB SIMMs with PAL chips, as needed by the Macintosh IIX. You will need to contact a third-party memory vendor to obtain the proper SIMMs.

Standard 4MB SIMMs won't work on the Macintosh IIX because JEDEC, the committee overseeing the standardization of new solid-state devices, added an additional built-in test mode to high-density DRAMs. The test mode is invoked by a sequence of electrical signals which was ignored by earlier-generation DRAM. This specification for 4MB SIMMs was changed after the Macintosh IIX was developed. At the time the Macintosh IIX was developed, in theory, 4MB SIMMs should have worked. It wasn't known at the time that the specification would be changed.

The result is that standard 4MB SIMMs won't work on the Macintosh IIX. The special 4MB SIMMs available from third-party vendors have a PAL chip and can be used in either the Macintosh II or IIX.

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Tech Info Library Article Number:12918