Quadra 900, 950: Problem with RAM Disk and 256MB RAM (3/94)

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TOPIC ---

A Quadra 950 with 256MB of RAM will not let me use a RAM Disk. A clean install of software didn't help. The computer has no other hardware connected. With the RAM disk turned on, the computer locks up at startup. It will only start up if all extensions are turned off by holding down the shift key. Under System 7.0.1, using the shift key at startup will disable the RAM disk feature. Thus allowing you to boot the machine. Under System 7.1, using the shift key at startup will NOT disable the RAM disk feature. Using either version of System Software, you can turn the RAM disk off by zapping PRAM (hold down the command–option-P-R keys while restarting).

DISCUSSION ---

The problem exists only when you install 256MB of RAM in a Quadra 900 or 950 and try to turn the RAM disk on. With less than 256MB of RAM, everything will work fine. The maximum RAM size that the built-in RAM disk will work with is 224MB, using twelve 16MB SIMMs and four 8MB SIMMs. The MMU page table was limited to 256K, and when the machine is loaded with 256MB of RAM, it grows a little too much, and overwrites the RAM disk portion of memory. Therefore, if they were to take out four of the 16MB SIMMs, it would work correctly.

Apple does not support 16MB SIMMs in a Quadra, although in most situations they work fine. (Apple does support 16MB SIMMs on the Macintosh IIvx, the Performa 600, and the newer Macintosh systems that use 32-bit SIMMs.)

Third-party solutions such as Maxima from Connectix work with 256MB RAM on the Macintosh Quadra 900 and 950. They also have more features than the built-in RAM disk.

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Support Information Services

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