

## LaserWriter SIMMs

The LaserWriter uses SIMMs to store information about fonts, to hold the image it is going to print, and to work as a buffer in accepting data from the Macintosh. The buffer allows the Mac to send a large stream of data faster than the rate the printer can print, and then send another stream when the first one is almost used up.

It is usually the reason why you can go back to working even before your document has come out of the printer. Adding RAM to a LaserWriter increases the space available to store fonts and can also speed up printing in many cases.

The Personal LaserWriter LS comes with 512K and the LaserWriter II NT comes with 2MB. These two printers cannot be expanded further.

The LaserWriter II NTX has three RAM expansion banks, each of which has 4 sockets. It ships with 2MB in the form of eight 256K SIMMs located in Banks 0 and 1. Larger configurations can be achieved as follows:

3MB: Add four 256K SIMMs to Bank 2.

5MB: Replace the four 256K SIMMs in Bank 0 with 1MB SIMMs Leave four 256K SIMMs in Bank 1.

6MB: Oddly, not possible, (putting 4 256K SIMMs in Bank 2 won't work).

8MB: Place eight 1MB SIMMs into Banks 0 and 1.

9MB: Take the 8MB setup and add four 256K SIMMs to Bank 2.

12MB: (Largest possible) Place twelve 1MB SIMMs into Banks 0, 1 and 2.

LaserWriter II NTX SIMMs have 64 connectors just like a IIfx and, in fact, you can use the RAM interchangeably. However, the IIfx requires 80ns RAM, while the LaserWriter only needs 100ns.

The LaserWriter IIf and IIg both have 8 sockets in two banks of four. They use standard SIMMs. The IIf comes with 2MB: eight 256K SIMMs installed. It requires 100ns SIMMs or faster. The IIg comes with 5MB: four 1MB SIMMs and four 256K SIMMs installed. It also requires 100ns SIMMs or faster. Both systems are upgradeable to as much as 32MB (8 4MB) using standard SIMMs.

The Personal LaserWriter NTR comes with 2MB of RAM soldered in and has a single socket that holds an additional 72-pin 1MB SIMM. This is a standard PS/2 SIMM which can be replaced with a 72-pin 2MB PS/2 SIMM to create a total of 4MB of memory. The Hewlett-Packard Laser Jet series have 2MB of built in RAM, expandable to 4MB. The Texas Instruments microLaser has 1MB of RAM, no expansion slots.