

## Quadra 700

4MB soldered on. 4 SIMM sockets in one bank. 80ns standard SIMMs or faster. Virtual memory, 32-bit addressing, video RAM.

Standard Memory: Up to 8MB can be installed using 1MB SIMMs. 256K and 512K SIMMs will not work. The bank may either be empty, or filled with four SIMMs which must all be of the same size.

Virtual Memory: The 68040 CPU in the Quadra 700 has a built-in Memory Management Unit. Therefore, the Quadra 700 can run virtual memory without requiring any additional hardware. In 24-bit mode, the Quadra 700 can address up to 13MB of VM, and in 32-bit mode, it can address up to 1024MB. Use of virtual memory may increase 68040 compatibility problems.

High Memory: Up to 68MB could be installed using four low profile 16MB SIMMs. However, the placement of the SIMM slots underneath the hard drive means that standard composite 16MB SIMMs will not fit. To address large amounts of RAM, use System 7 standard 32-bit addressing.

Video RAM: 512K soldered-in (enough to support 8-bit color on a 13" monitor). 6 additional sockets in 3 banks for a maximum of 2MB. The sockets are for special 68-pin 256K (only) SIMMs. Many people add one pair of 256K video SIMMs to have enough memory to support 24-bit color on a 12" monitor. These 256K SIMMs are the same video SIMMs that are factory installed on the LC. The 700 can use 100ns or faster video RAM.

## Quadra 800

8MB soldered on. 4 SIMM sockets in one bank. 80ns standard SIMMs or faster. Virtual memory, 32-bit addressing, video RAM.

Standard Memory: 8MB soldered on. The 800 uses a 72-pin SIMM that is different from the standard used in previous Mac models.

Virtual Memory: The 68040 CPU in the Quadra 800 has a built-in Memory Management Unit. Therefore, the Quadra 800 can run virtual memory without requiring any additional hardware. In 24-bit mode, the Quadra 800 can address up to 13MB of VM, and in 32-bit mode, it can address up to 1024MB. Use of virtual memory may increase 68040 compatibility problems.

High Memory: Up to 136MB could be installed using four 32MB SIMMs. The SIMM slots accept 4, 8, 16, or 32MB SIMMs. The 800 uses a 72-pin SIMM that is different from the standard used in previous Quadra models. To address large amounts of RAM, use

System 7 standard 32-bit addressing.

Video RAM: 512K soldered-in (enough to support 8-bit color on a 13" monitor). Two expansion slots are available for a maximum of 1MB video RAM. The 800 can use 80ns or faster video RAM.

#### Quadra 840av

4 SIMM sockets in one bank. 60ns standard SIMMs or faster. Virtual memory, 32-bit addressing, video RAM.

Standard Memory: One or two 8MB SIMMs. The 840av uses a 72-pin SIMM that is different from the standard used in previous Mac models.

Virtual Memory: The 68040 CPU in the Quadra 840av has a built-in Memory Management Unit. Therefore, the Quadra 840av can run virtual memory without requiring any additional hardware. In 32-bit mode, it can address up to 1024MB. Use of virtual memory may increase 68040 compatibility problems.

High Memory: Up to 128MB could be installed using four 32MB SIMMs. The SIMM slots accept 4, 8, 16, or 32MB SIMMs.

Video RAM: 1MB soldered-in. Four expansion slots are available for a maximum of 2MB video RAM. The 840av can use 80ns or faster video RAM.

#### Quadra 900/950

16 SIMM sockets in 4 banks of 4 each. The 900 comes with four 1MB SIMMs in the first bank. In most markets (except parts of Europe) the 950 comes with 8 1MB SIMMs installed. 80 ns or faster standard SIMMs required. All SIMMs in all banks must be the same speed. The layout of the banks is unusual: Bank A is the left two sockets of the upper row of 8 sockets plus the left two sockets of the lower row of 8, similarly for B, C, and D. 256K, 512K and 2MB SIMMs will not work. Virtual memory, 32-bit addressing, video RAM. The Quadra 900 and 950 have almost identical memory configurations (see video RAM).

Standard Memory: Uses only 1MB SIMMs. Up to 16MB can be installed using 1MB SIMMs. To address more than 8MB, 32-bit addressing must be On. Using a Quadra 900 with less than 16MB is somewhat unusual.

Virtual Memory: The 68040 CPU in the Quadra 900 has a built-in Memory Management Unit. Therefore, the Quadra 900 can run virtual memory without requiring any additional hardware. In 24-bit mode, the Quadra 900 can address up to 13MB of VM, and in 32-bit mode, it can address up to 1024MB. Use of virtual memory may increase 68040

compatibility problems.

**High Memory:** Up to 256MB can be installed using 16MB SIMMs. If composite 16MB SIMMs are used, special low-profile versions are required at least for the lower two sockets of Bank D (motherboard clearance space limitation). Use System 7 standard 32-bit addressing. Some 16MB SIMMs that are compatible with the 900 may not work properly on the 950.

**Video RAM:** The 900 and 950 have identical hardware, but the 950 uses a more sophisticated interleaving technique, which allows it to get more out of the same amount of video RAM. For example, the standard 1MB soldered on the 900, is enough to support 24-bit color on a 12" monitor but it gives 24-bit color on a 13" monitor on the 950. There are four sockets in two banks of two each. Sockets are for special 68-pin 256K (only) SIMMs. These are the same video SIMMs that are factory-installed on the LC. The 900 can use 100ns video RAM, but the 950 requires 80ns.

### Centris 610

4MB soldered on. 2 SIMM sockets in one bank. 80ns standard SIMMs or faster. Virtual memory, 32-bit addressing, video RAM.

**Standard Memory:** 4MB soldered on. Up to 8MB can be installed using 2MB SIMMs. 256K and 512K SIMMs will not work. The 610 uses a 72-pin SIMM that is different from the standard used in previous Mac models.

**Virtual Memory:** The 68040 CPU in the Centris 610 has a built-in Memory Management Unit. Therefore, the Centris 610 can run virtual memory without requiring any additional hardware. In 24-bit mode, the Centris 610 can address up to 13MB of VM, and in 32-bit mode, it can address up to 1024MB. Use of virtual memory may increase 68040 compatibility problems.

**High Memory:** Up to 68MB could be installed using two 32MB SIMMs. The SIMM slots accept 4, 8, 16, or 32MB SIMMs. To address large amounts of RAM, use System 7 standard 32-bit addressing.

**Video RAM:** 512K soldered-in (enough to support 8-bit color on a 13" monitor). Two expansion slots are available for a maximum of 1MB video RAM. The 610 can use 100ns or faster video RAM.

### Centris 650

8MB soldered on. 4 SIMM sockets in one bank. 80ns standard SIMMs or faster. Virtual memory, 32-bit addressing, video RAM.

**Standard Memory:** The 650 is available with 8MB soldered on. Up to 12MB can be installed using four 1MB SIMMs. The 650 uses a 72-pin SIMM that is different from the standard used in previous Mac models.

**Virtual Memory:** The 68040 CPU in the Centris 650 has a built-in Memory Management Unit. Therefore, the Centris 650 can run virtual memory without requiring any additional hardware. In 24-bit mode, the Centris 650 can address up to 13MB of VM, and in 32-bit mode, it can address up to 1024MB. Use of virtual memory may increase 68040 compatibility problems.

**High Memory:** Up to 136MB could be installed using four 32MB SIMMs. The SIMM slots accept 1, 2, 4, 8, 16, or 32MB SIMMs. To address large amounts of RAM, use System 7 standard 32-bit addressing.

**Video RAM:** 512K soldered-in (enough to support 8-bit color on a 13" monitor). Two expansion slots are available for a maximum of 1MB video RAM. The 650 can use 80ns or faster video RAM.

#### Centris 660av

4MB soldered on. 2 SIMM sockets in one bank. 70ns standard SIMMs or faster. Virtual memory, 32-bit addressing, video RAM.

**Standard Memory:** 4MB soldered on and one 4MB SIMM. Up to 8MB can be installed using 2MB SIMMs. 256K and 512K SIMMs will not work. The 660av uses a 72-pin SIMM that is different from the standard used in previous Mac models.

**Virtual Memory:** The 68040 CPU in the Centris 660av has a built-in Memory Management Unit. Therefore, the Centris 610 can run virtual memory without requiring any additional hardware. In 32-bit mode, it can address up to 1024MB. Use of virtual memory may increase 68040 compatibility problems.

**High Memory:** Up to 68MB could be installed using two 32MB SIMMs. The SIMM slots accept 4, 8, 16, or 32MB SIMMs. .

**Video RAM:** 1MB soldered-in.