

General Description

Newport Digital's memory for the HP R-Class Server consists of two 72-pin ECC memory cards. The sets can be configured with 64, 128, 256, or 512 megabytes dynamic rams (drams). The access speed of the drams can be 50 or 60 nanosecond, and the type of dram can be fast page (FP) mode or extended data out (EDO). The R380 and R390 systems support the slightly faster cycle and access times when all the cards installed in the system use 50 nanosecond drams. If any of the cards use 60 nanosecond drams, all of the cards will default to the slightly slower cycle and access times. In addition, the EDO drams provide a slight increase in performance if all of the cards in the system use EDO drams and the system has the processor dependent code (PDC) that supports EDO (see HP documentation for more information).

System Compatibility

The memory is fully compatible with the HP 9000 R-Class Server: R380 and R390.

Maximum System Memory

The maximum system memory for the R-Class is 3 GB.

Installation Procedure

The installation procedure is quick and easy. Power the system down. Remove the top cover from the system. Add the memory card to the motherboard using the appropriate guidelines. Place the top cover back onto the system. Power the system up. Verify that the system has the expected RAM size.

Power Requirements

64 Megabytes	1.40 Amps Max	1.00 Amps Typical
128 Megabytes	1.50 Amps Max	1.00 Amps Typical
256 Megabytes	1.40 Amps Max	1.00 Amps Typical
512 Megabytes	1.50 Amps Max	1.00 Amps Typical

Cycle and Access Times

The memory cycle and access times for the 11-17-0xxx cards are identical to those of the HP A4209A, A4208A, and A4177A memory cards. The memory cycle and access times for the 11-23-0xxx cards are identical to those of the HPA4515A, HP A4516A, A4517A, and A3737A memory cards.

Operating Limits

Operating Temperature:	0-70 degrees Centigrade
Operating Humidity:	0-95 percent with no condensation

HP Documentation

HP 9000 Models R380 and R390 Owner's Guide.

Product Warranty

The memory has an unconditional lifetime warranty.

Ordering Information

<u>Product Description</u>	<u>HP Equivalent</u>	<u>Newport Digital Part Number</u>
HP R380/R390 Memory – 64MB (60ns / FP)	A4209A	11-17-0064
HP R380/R390 Memory – 128MB (60ns / FP)	A4208A	11-17-0128
HP R380/R390 Memory – 256MB (60ns / EDO)	A4177A	11-17-0256
HP R380/R390 Memory – 64MB (50ns / EDO)	A4515A	11-23-0064
HP R380/R390 Memory – 128MB (50ns / EDO)	A4516A	11-23-0512
HP R380/R390 Memory – 256MB (50ns / EDO)	A4517A	11-23-0256
HP R380/R390 Memory – 512MB (50ns / EDO)	A3737A	11-23-0512

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