
Concurrent Computer Corporation Series 8000: Product Profile

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System Overview

The 8000 Series of high-performance computer systems feature MIPS R3000/3010 microprocessors and RTU, a realtime UNIX operating system. Three models—the 8300, 8400, and 8500—make up Concurrent's 8000 product line. The systems are targeted at the simulation and OLTP markets.

Vendor

Concurrent Computer Corp.
106 Apple Street
Tinton Falls, NJ 08736
(201) 758-7000

Price

Basic configuration prices range from \$85,195 to \$192,595.

GSA Schedule

Yes.

Competition

The 8000 Series competes with a variety of midrange systems, including systems from Digital Equipment, Encore, Harris, Data General, and Hewlett-Packard.

Table 1. System Comparison

Model	8300	8400	8500
System Characteristics			
Min./Max. Memory (bytes)	8-64M	8-64M	8-256M
Min./Max. Storage (bytes)	300M/29G	300M/29G	300M/29G
Number of Processors	1-2	1-2	1-2
Number of Terminals			
Direct Connect/Shared Access	12/1,064	12/1,064	16/1,064
Max./Recommended No. of Users	64/64	64/64	128/128
Date First Installed	3Q 1990	April 1990	June 1990
Central Processing Unit & Memory			
Computer Type (bits)	32	32	32
Processor Model	R3000	R3000	R3000
Memory Type	ECC	ECC	ECC
Floating-Point Co-Processor	R3010	R3010	R3010
Cache Memory (bytes)	128K-384K	128K-384K	384K
Performance Characteristics			
Multiprocessing Capability (Yes/No)	Yes	Yes	Yes
MIPS	20-40	20-40	40-160
Proc. Clock Speed (MHz)	25	25	25
I/O Transfer Rate (bytes/sec.)	12M	12M	12-24M
Purchase Price (basic configuration) (\$)	85,195	122,795	192,595
Memory/Storage Included (bytes)	8M/300M	8M/300M	16M/1049M

Characteristics

See Table 1 for a comparison of the system characteristics of the 8000 models.

Specifications

Main Memory

The 8000 Series offers up to 256 megabytes of main memory. On all systems, main memory can be added in 8-megabyte increments. All models support from 128K to 384K bytes of cache memory, depending on the model.

Processing Components

All 8000 Series models employ a tightly coupled, shared memory multiprocessor architecture that uses the MIPS R3000 RISC processor and the

R3010 floating-point chip. The R3000/R3010 chip set provides the 8000 Series with clock speeds of 25MHz.

Peripherals

Peripherals communicate with 8000 Series models through a Small Computer System Interface (SCSI), VMEbus, and Ethernet.

Mass Storage

See Table 2 for specifications of mass storage devices.

Tape Drives

Available tape drives for 8000 Series systems include the Model TD-150S ¼-inch cartridge tape drive with a storage capacity of 150 megabytes and the Model ST-4S ½-inch reel-to-reel tape unit with a storage capacity of 180 megabytes.

Terminals/Workstations

Both ASCII terminals and graphics monitors are available for 8000 Series computers.

Table 2. Mass Storage Devices

Model	SD-21V	SD-18V	SD-22I	SD-20
Size (inches)	5.25	5.25	8	8
Formatted capacity (bytes)	300M	663M	848M	1049M
Interface/controller	SCSI/integrated	SCSI/integrated	SCSI/integrated	SCSI/integrated
Average access time (ms.)	16.5	15.5	15.0	16.0
Data transfer rate (bytes/second)	1.2M	1.9M	6-12M	3M
Purchase price (\$)	5,000	9,000	—	23,000

Note: A dash (—) in a column indicates that the information is unavailable from the vendor.

Communications

Protocols Supported: TCP/IP and NFS.

Network Applications Supported: DECnet.

LANs Supported: Ethernet.

Operating Environment

The physical specifications of the Concurrent 8000 Series are listed in the following table.

Physical Specifications				
Model	Height (in.)	Width (in.)	Depth (in.)	Weight (lb.)
8300	29	13.0	24	200
8400	50	23.5	33	350
8500	50	23.5	33	800

Software

Operating System

Concurrent's RTU Version 6.0 is SVID compliant and also adheres to the POSIX 1003.1 operating system interface standard. In addition, RTU contains many Berkeley 4.2 BSD features, a 100-millisecond response time, frequency-based scheduling, and file system environments.

Other Software

The X Window System provides a customizable window facility and a windowing programming library. Data presentation software allows graphics preparation using a subroutine library or high-level commands.

Sample Configuration Pricing

Sample 8000 configurations and prices are outlined in the following tables.

Entry-Level System: Model 8300-1-P4

Description	Product ID	Price (\$)
CPU	One R3000/R3010	55,900
Main Memory	8MB ECC	Bundled
Console	Included with GA 1500 graphics	Bundled
I/O Ports	Ethernet, two RS-232	Bundled
Disk Controller	SCSI	Bundled
Disk Drive	300MB	5,000
Tape Controller	SCSI	Bundled
Tape Drive	150MB ¼" cartridge	2,100
Workstation Controller	GA 1500	9,995
Printer	LP300B band	10,200
Workstation Display	16" color CRT	Included with GA 1500
Total Hardware	—	82,695
Monthly Maintenance	—	915
Operating System	RTU (two-user license)	Bundled
Languages	C (included with RTU), Fortran 77	2,500
DBMS		
Total		85,195

Intermediate-Level System: Model 8400-2-C4

Description	Product ID	Price (\$)
CPU	Two R3000/R3010	34,900
Main Memory	8MB ECC	Bundled
Console	Included with GA 1500	Bundled
I/O Ports	Ethernet, four RS-232	Bundled
Disk Controller	SCSI	Bundled
Disk Drive	663MB 5.25"	9,000
Tape Controller	SCSI	Bundled
Tape Drive	150MB cartridge tape	2,100
Workstation Controller	One GA 1500 (1,024 x 768)	9,995
Printer	LP600B	14,300
Workstation Display	16" color CRT	Included with GA 1500
Total Hardware	—	120,295
Monthly Maintenance	—	1,205
Operating System	RTU (two-user license)	Bundled
Languages	C (included with RTU), Fortran 77	2,500
DBMS		
Total		122,795

Large System: Model 8500-4-C4

Description	Product ID	Price (\$)
CPU	Four R300/3010	134,000
Main Memory	16MB ECC	Bundled
Console	Included with GA 1500	Bundled
I/O Ports	Ethernet, eight RS-232	Bundled
Disk Controller	Included with disk	Bundled
Disk Drive	1,049MB 8"	9,000
Tape Controller	SCSI	Bundled
Tape Drive	150MB cartridge tape	2,100
Workstation Controller	One GA 1500 (1,024 x 768)	9,995
Printer	LP1000B	21,000
Workstation Display	16" color CRT	Included with GA 1500
Total Hardware	—	190,095
Monthly Maintenance	—	1,845
Operating System	RTU (two-user license)	Bundled
Languages	C (included with RTU), Fortran 77	2,500
DBMS		
Total		192,595

