

Bull DPX/2 Systems

Product Enhancement

Bull has expanded its DPX/2 Family of UNIX computers with the introduction of four new models which redefine the entry point and high end of the line.

The new systems include the DPX/2 100 Model 110, an Intel-based desktop system; DPX/2 200 Model 220; DPX/2 300 Model 360, the new high end of the 300 Family; and DPX/2 500 Model 510, a RISC-based system that becomes the new high end of the entire DPX/2 line. The DPX/2 Series is now built around four product families: DPX/2 100, 200, 300, and 500.

All of the new systems run the Bull Open Software (BOS) Environment operating system and are fully source code compatible with the rest of the DPX/2 Series.

Product Definition

Bull offers a full range of UNIX systems, including Intel-, Motorola-, and MIPS-based computers. The latest announcement added models across the board. The current DPX/2 product line comprises the DPX/2 100 Family (Models 100 and 600ix), the DPX/2 200 Family (Models 210 and 220), the DPX/2 300 Family (Models 320, 340, and 360), and the DPX/2 500 Family (Model 510).

The Model 110 is the new entry point to the DPX/2 Series. A compact desktop system, Model 110 offers up to 8M bytes of main memory and 160M bytes of storage.

Model 220 offers increased performance over the Model 210 within the 200 Family. Suitable for larger networks, it is offered as a field upgrade to the Model 210.

Model 360 is the new high end of the 300 Family. Based on a 68040 chip, it offers increased performance and double the main memory of the previous high-end Model 340. Like the Model 340, it can support up to four processors and up to 23G bytes of mass storage.

The new DPX/2 500 Family introduces RISC-based computing to the DPX/2 Series. Model 510, the highest performance system in the series, uses a 60MHz RISC chip and supports over 500 users. It provides up to 416M bytes of main memory and 40G bytes of mass storage.

A comparison of the new Models 110, 220, 360, and 510 appears in Table 1.

Analysis

Bull is beginning to round out its new DPX/2 product line. The line

Table 1. System Comparison

Model	DPX/2 100 Model 110	DPX/2 200 Model 220	DPX/2 300 Model 360	DPX/2 500 Models 510, 510/CS
System Characteristics				
Date of introduction	May 1990	May 1990	May 1990	May 1990
Processor type	Intel 80386SX	Motorola 68030	Motorola 68040	MIPS R6000
Processor speed (MHz)	16	25	25	60
Number of processors	1	1	1-4	1
Floating-point co-processor	80387 opt.	68882 opt.	68882	R6010 opt.
Operating system	BOS	BOS	BOS	BOS
Upgradable from	Not applicable	DPX/2 210	DPX/2 340	Not applicable
Upgradable to	Not applicable	Not applicable	Not applicable	Not applicable
Number of serial/parallel I/O ports	—	—	—	—
Memory				
Minimum capacity (bytes)	4M	4M	16M	32M
Maximum capacity (bytes)	8M	16M	576M	416M
Disk Storage				
Minimum capacity (bytes)	80M	155M	388M	675M
Maximum capacity (bytes)	160M	3G	23G	40G
Number of Active Users (max.)	8	88	384	512
Communications Protocols				
	IEEE 802.3 TCP/IP Ethernet	IEEE 802.3 TCP/IP Ethernet, VIP, TTY, BSC 3270, SNA/SDLC 3270/3770, X.25, Kermit, VIP PC	IEEE 802.3 TCP/IP Ethernet, VIP, TTY, BSC 3270, SNA/SDLC 3270/3770, X.25, Kermit, VIP PC	IEEE 802.3 TCP/IP Ethernet, VIP, TTY, BSC 3270, SNA/SDLC 3270/3770, X.25, Kermit, VIP PC
Purchase Price (\$) (basic entry system)	From 6,000	From 11,100	From 36,000	From 170,000

remains fragmented, with Intel-based systems at the low end, a Motorola-based midrange, and a new MIPS-based RISC high end, but the offerings within each level have been enhanced. Bull is committed to ensuring source code compatibility throughout the DPX/2 product line.

Bull cannot yet claim any technological advances over its competitors' systems, but it does offer comparable systems at competitive prices.

System Features

The DPX/2 Series provides a range of performance levels achieved through designs featuring:

- Intel, Motorola, and MIPS chips
- RISC architecture in the DPX/2 500 Family
- Optional floating-point co-processors

System Configurations

The DPX/2 100 Model 110 is configured as follows:

- 32-bit Intel 80386SX microprocessor running at 16MHz; 4K-byte cache memory; standard AT bus; 4M bytes of memory; two

serial ports and one parallel port; 1.44M-byte, 3.5-inch diskette; 80M-byte hard disk; 101-key keyboard; VGA controller.

The DPX/2 200 Model 220 is configured as follows:

- 32-bit Motorola 60030 microprocessor running at 25MHz; 68882 floating-point processor running at 25MHz; 64K-byte cache memory; local bus supports 32-bit access; Multibus II provides three slots; 4M bytes of memory; two synchronous, eight asynchronous, and one parallel port; SCSI interface supports 5.25-inch streaming tape; 720K-byte or 1.2M-byte, 5.25-inch diskette; 155M-byte hard disk; diagnostic modem.

The DPX/2 300 Model 360 is configured as follows:

- 32-bit Motorola 68040 microprocessor running at 25MHz; 64K-byte cache memory; Multibus II system and I/O bus provide 17 expansion slots; 16M bytes of memory; asynchronous communications processor with support for 1 parallel printer port and

16 RS-232-C, RS-422-A, or military standard 118/114A asynchronous ports; dual-port SCSI controller supports hard disks and tape devices; 338M-byte hard disk; 720K-byte or 1.2M-byte, 5.25-inch diskette; 150M-byte, 1/4-inch streaming tape; diagnostic modem.

The DPX/2 500 Model 510 is configured as follows:

—MIPS Computer Systems, Inc., R6000 RISC microprocessor running at 60MHz; R6010 floating-point unit; 266M bytes per second system bus; expansion bus adapter provides access to one standard VME bus with three slots for expansion; 32M bytes of memory; serial I/O controller with 16 ports and 1 parallel printer port; SCSI controller supports disk and streamer tape devices; 675M-byte or 1050M-byte hard disk; 150M-byte, 1/4-inch streaming tape.

The Series 800 Model 832S comes with an SPU containing the following:

- One central processor with 128K bytes of cache memory and a floating-point co-processor.
- 16M bytes of main storage.
- High-capacity backup with 1.3G-byte digital audiotape.

- One asynchronous six-channel multiplexer.
- One HP-IB interface.

The Series 800 Models 845S and 845SE configure as follows:

- One central processor with 256K bytes of cache memory and a floating-point co-processor.
- 16M bytes (32M bytes on Model 845SE) of main storage.
- Battery backup system (optional on Model 845S).
- One asynchronous six-channel multiplexer.
- One HP-IB interface.

Availability

Shipments of the new models are scheduled to begin in the third or fourth quarter of 1990.

Base Configuration Pricing

Model 110: Ranges from \$6,000 to \$10,000.

Model 220: Ranges from \$11,100 to \$35,000.

Model 360: Ranges from \$36,000 to \$300,000.

Model 510: Ranges from \$170,000 to \$600,000. ■