Honeywell DPS 6

New Product Announcement

Honeywell's new family of small computers is comprised of ten models ranging in size from four 16-bit "entry level" systems to two 32-bit "super-minis." Included in the new DPS 6 family are four 16-bit models which are field upgradeable to full 32-bit systems. The DPS 6 line extends the Megabus-based architecture of the Level 6 to provide hardware and software flexibility and improved price/performance ratios.

The low-end DPS 6/30, 6/32, and 6/34 have the same base configuration: a 5-slot Megabus, 128K bytes of memory, two workstation ports, and a 30-inch cabinet. The model differences involve storage capacities and disk models. The 6/30 includes a 10-megabyte cartridge disk as part of its system package. The 6/32 comes with a 26-megabyte cartridge disk (13-megabytes fixed and 13-megabytes removable). Each of these models can support eight communication lines and 256K bytes of main memory. Honeywell plans to upgrade the memory capacity of these models to 512K bytes in 1982.

The DPS 6/38 is the last of the non-upgradeable 16-bit systems. It does not have a standard disk configuration but rather provides the user with an increase in system capability. The 6/38 packs a 10-slot Megabus in the same 30-inch cabinet used by the smaller systems. This allows the 6/38 to extend its memory to a maximum of 768K bytes and to support 24 communication lines.

Each of the low-end models, the DPS 6/30, 6/32, 6/34, and 6/38 have a single board processor which includes a Commercial Instruction Set and a Memory Management Unit. Honeywell states that this design provides about twice the CPU performance as that of a Level 6 Model 23 with even greater improvement in heavy COBOL-oriented systems.

The "upgradeable" models include the DPS 6/48, 6/54, 6/74, and 6/76. Each may be modified to provide full 32-bit performance. All four models support the optional Scientific Instruction Processor. The 6/48 and 6/54 both include a 20-slot Megabus, 256K bytes of memory, and a 60-inch cabinet. The Megabus is expandable to a 32-bit data path to support the DPS 6/92 and 6/94. The 6/48 can support up to 32 communications lines while the 6/54 handles up to 40. Both systems have a total memory capacity of up to 1 megabyte. Honeywell calculates the 6/48 performance level to be 30 to 100 percent higher than a Level 6 Model 33 while the 6/54 comes in with a 20 to 100 percent improvement over a Level 6 Model 43. These figures place an emphasis on COBOL processing. The 6/54 features a two board CPU with a Commercial Instruction Set and a Memory Management Unit.

The DPS 6/74 has the same base configuration as the 6/54 with the following exceptions: 512K bytes of main memory and a fast cache memory are standard. This is accomplished via a three board CPU including a Memory Management Unit, Commercial Instruction Processor, and cache memory. The 6/76 includes a 30-slot Megabus to accommodate 64 communications lines and a maximum memory of two megabytes. The 6/74 and 6/76 are said to be 30 to 100 percent faster than the Level 6 Models 43 and 47, respectively. The upgrade options for these systems are outlined in the System Capability Chart.

The DPS 6/92 consists of a 20-slot, 32-bit Megabus and one megabyte of main memory. The 6/92 supports 64 communications lines and a maximum memory of four million bytes. The DPS 6/96 includes a 40-slot, 32-bit Megabus with the capability to handle 112 communication lines and a maximum memory of 16 megabytes. The base configuration includes one megabyte of memory. There is a third 32-bit CPU that is not considered by Honeywell to be a model. The DPS 6/94 is only available as an upgrade from a 6/76. It has the same I/O capabilities as the 6/96 but can only support a main memory of 6 megabytes.

The full 32-bit processors are comprised of a separate subsystem chassis which includes a 32-bit high-speed bus, cache memory management, CPU, Commercial Instruction Processor, Scientific Instruction Processor, and an extended Megabus connector. The full range of the DPS family is outlined below. All 16-bit models of the DPS 6 line are scheduled for general shipment in the first quarter of 1981 and the 32-bit models are planned for the fourth quarter 1981.

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SYSTEM CAPABILITY CHART

DPS 6 System	Memory (KB) Min-Max	No. of Comm/WS Ports	Disk	Tape	Multiple Device Controller	Scientific Instruction Processor	Relative CPU Performance	Upgrade
6/30	128-256[1]	2-8	1	0	0-2	No	1.0	No
6/32	128-256[1]	2-8	1	0	0-2	No	1.0	No
6/34	128-256[1]	2-8	1	0	0-2	No	1.0	No
6/38	256-768	2-24	2-4	0	2-6	No	1.0	No
6/48	256-1024	2-32	2-4	0-4	2-6	Opt	1.0	To 54, 74
6/54	256-1024	2-40	2-4	0-4	2-6	Opt	1.25	To 74
6/74	512-1024	2-40	2-4	0-4	2-6	Opt	2.0	To 76, 92
6/76	512-2048	2-64	2-8	0-4	2-6	Opt	2.0	To 94
6/92	1024-4096	2-64	2-8	0-4	2-6	Std	5.0	No
6/94[2]	1024-6144	2-112	2-12	0-4	2-6	Std	5.0	No
6/96	1024-16K	2-112	2-12	0-4	2-6	Std	5.0	No

[1]512KB in 1Q82.
[2]DPS 6/94—Available only as result of field upgrade.

To complement the DPS family, Honeywell has announced a Word Processing Application Facility to integrate word processing, data processing, and communications. Word Processing 6 will run under GCOS 6 MOD 200 and MOD 400 on any DPS 6 computer or installed Level 6 system (Model 43 and above). Honeywell's new Administrative Facility combines multi-terminal word processing with document distribution capabilities. The Administrative System 4 requires a DPS 6/30 or 6/32 and will support up to four workstations, two printers plus 10 or 26 megabytes of disk storage. The Administrative System 16 moves to a DPS 6/38 or 6/48 and handles 16 workstations, six printers and up to one billion bytes of disk storage. Also announced was a new release of the GCOS 6 MOD 400 operating system. Release 2.1 offers such enhancements as a checkpoint restart, an alternate index (multi-key) and a record locking facility.

The Word Processing and Administrative software are scheduled for availability in the first quarter of 1981. The Release 2.1 of MOD 400 is expected for January 1981 delivery.

Pricing for the central subsystems and software systems follows:

CENTRAL SUBSYSTEMS

Marketing ID	System	System Configuration Includes						Purchase Price	Maint. /Month
		Memory KB	Disk MB	Ports					
				Disk	Printer	Work-station			
CPX9630	DPS 6/30	128	10	—	0	2	21,000	260
CPX9632	DPS 6/32	128	26	—	0	2	25,000	285
CPX9634	DPS 6/34	128	80	—	0	2	28,000	326
CPX9638	DPS 6/38	256	—	2	1	2	24,000	232
CPX9648	DPS 6/48	256	—	2	1	2	30,000	257
CPX9654	DPS 6/54	256	—	2	1	2	35,000	330
CPX9674	DPS 6/74	512	—	2	1	2	60,000	596
CPX9676	DPS 6/76	512	—	2	1	2	70,000	620
CPX9692	DPS 6/92	1024	—	2	1	2	100,000	940
N/A[a]	DPS 6/94	1024	—	2	1	2	N/A	N/A
CPX9696	DPS 6/96	1024	—	2	1	2	120,000	980

[a]DPS 6/94 available only as field upgrade of DPS 6/76.

SOFTWARE

		Initial License Fee	Annual Software Support
SHS921	GCOS6 MOD 400 Executive Revision 2.1	$4,500	$2,500
AHP020/40	Word Processing 6 under MOD 200 Rev. 1.2/MOD 400 Rev. 2.0	5,000	1,350
SHS933	Word Processing 6 Administrative System/4	3,000	810
SHS934	Word Processing 6 Administrative System/16	5,500	1,485