Honeywell Series 60 Level 64

New Product Announcement

The DPS-330 is the latest entry in the Honeywell family of products designed for a distributed systems environment (DSE). The new processor effectively replaces the DPS-320 and DPS-350, announced during March 1979, eclipsing these systems in both performance and pricing. With the two optional power modules, DPS-330 is rated about 10 percent more powerful than the DPS-350. The DPS-330, like other members of the Level 64 product line, is built in France. The new processor is built on the design of the DPS-320 and DPS-350, offering enhancements in memory and firmware. Memory in the DPS-330 is built from 16K-bit chips and features single bit error correct and double bit error detection. Memory has a read cycle time of 630 nanoseconds for four bytes and a write cycle of 770 nanoseconds for the same number of bytes. Control store is extensively utilized in the DPS-330 with automatic dispatching and synchronization occurring under firmware control. Firmware can also be configured to allow direct execution of both Level 64 programs and other system architectures such as the H 200/2000 and GE-100 series. Control store is bipolar with an access time of 100 nanoseconds for a four byte word. Honeywell claims that up to five microinstructions can be executed in parallel by the logic subunit in a total of 315 nanoseconds.

The DPS-330 employs automatic virtual memory management with variable length segments. Remote diagnostics, maintenance and support is provided via the RMS/64 module and TAC (technical assistance) center. A 15-level priority interrupt system is standard.

Other DPS-330 features include:

- Eight separate asynchronous units grouped together to form the logic unit.
- A maximum throughput rate of 5.2 million bytes per second.
- Up to 12 I/O channels (2 standard); each channel with an I/O rate of 1,250,000 bytes per second.
- A channel buffering unit for I/O control.
- Duplicate arithmetic circuitry.
- Parity bit on all data I/O.
- Standard 195-member instruction set.
- Optional 26-member floating point instruction set.
- Constant error testing on all I/O control units.
- Four byte wide processor data path.
- Two power modules designed to increase instruction execution speed of the basic system 1.53 and 2.3 times.

A basic DPS-330 includes a central processor with 512K bytes of error correcting memory expandable to 2 megabytes, an integrated mass storage processor with addressing for two disk units (utilizes one standard channel), an integrated unit record processor (utilizes one standard channel), a 15-line communications controller, and a free standing console with CRT and keyboard. The system may be expanded with up to two additional mass storage processors, two magnetic tape processors, a second unit record processor, and two additional communications controllers. A fully configured system can handle up to 4.8 billion bytes of on-line disk storage, 16 magnetic tape drives and 45 communications lines. A total of 32 terminals can be attached to each communications line. Automatic features of the communications subsystem include terminal polling and transmission error detection and retry.

DPS-330 operates under an enhanced version of Level 64 GCOS. Enhancements include virtual memory techniques for support of up to 64 jobs; immediate step activation, designed to provide for the interactive execution of COBOL, FORTRAN, and RPG language processors, the linker and user object programs; an interactive program checkout facility for interactive program debugging from a terminal; preforms, for creating, modifying and storing format for the VIP7700 and VIP7760 Visual Display Terminals; and multiple logic data store, an indexed access method for transition from the IBM System/3 to the Level 64/DPS. The Level 64 GCOS Basic Operating System is provided under a standard no-separate-charge license. All other systems software is licensed at a monthly fee.

EQUIPMENT PRICES

		Purchase Price	Monthly Maint.	Lease* 1-Year	Lease* 3-Year	Lease* 5-Year
PROCESSORS		-				
CPS4250	DPS-330 Central Processor	\$79,675	\$226	\$2,433	\$2,265	\$2,014
PROCESSOR OPTIONS						
CPF4955	Power Upgrade; 1.5xDPS-330	35.730	70	1,033	959	850