

## National CSS Inc. NCSS 3200 System

► The VPS Operating System carries a warranty provision specifying that when delivered and installed by NCSS, VPS will perform in accordance with the VPS Operating Manual.

National CSS offers 3200 system users a back-up service in which the company will, for a fee, maintain current data files and user identifications on its time-sharing facilities. The service is useful as a backup measure or to provide relief from overflow situations. The current price to maintain up to 30 identification and passwords, updated once weekly, at one NCSS data center is \$50 per month. Users can also

maintain one disk pack with correct file allocation and data, updated once a week, for \$50.

The NCSS Installation Services Package includes up to four man-weeks of education, at either the customer site or one of NCSS's branch offices, and up to 10 sets of user documentation and one set of operator documentation.

NCSS also offers contract services which provide consulting, programming, system design, and project management services. ■

### EQUIPMENT PRICES

	<u>Purchase Price</u>	<u>Monthly Maint.</u>
<b>PROCESSORS AND MAIN MEMORY</b>		
3200/Host III Processor with VPS/Host Operating System; does not include memory, console, or channels	\$ 52,000	\$ 481
3200/Host III Processor without VPS/Host	52,000	331
3200/Server III Processor without system package	42,000	155
With system package; includes VPS/Server network and interprocessor communications software, console printer, 1024K bytes of main memory, byte multiplexer channel, selector channel, Server/Host interface equipment, integrated disk controller and 200-megabyte disk drive	121,900	1,049
3200/Remote III Processor without system package	42,000	280
With system package; includes VPS/Remote and packet switched network software, console printer, 768K bytes of main memory, byte multiplexer channel, selector channel, 80-megabyte disk drive and controller, 45-ips tape drive and controller, and 16 communications lines	127,500	1,569
768K bytes of main memory; required by 3200/Host III Processor	18,300	120
256K-byte main memory increment; for all 3200 Processors	6,100	40
<b>PROCESSOR OPTIONS</b>		
Peripheral Switch	9,500	14
Backup Peripheral Attachment	24,950	39
Byte Multiplexer Channel	8,600	69
Selector Channel	7,900	63
Console CRT	2,200	16
Console Printer	3,600	27
Expansion Unit; required on all 3200 processors for maximum complement of memory, channels, or communications lines	14,900	55
<b>MASS STORAGE</b>		
Disk Controller	10,100	80
Disk Drive, 80 megabytes	9,800	150
Disk Drive, 200 megabytes	19,800	200
<b>INPUT/OUTPUT UNITS</b>		
3200 Tape Controller	7,500	60
9-Track Tape Drive, 800/1600 bpi, 45 ips	8,900	85
9-Track Tape Drive, 800/1600 bpi, 125 ips	14,600	147
3200 Printer Controller	1,400	18
Printer, 300 lpm	10,000	185
Printer, 600 lpm	16,000	220
Printer, 1000 lpm	20,000	320
<b>COMMUNICATIONS</b>		
3200 Communications Controller, 8 lines	9,500	28
Line Expansion; provides 8 additional lines; maximum of 3 per system	7,500	23
Starter Kit	2,500	—
4-Line Speed-Distance Attachment	3,600	19
Multiple Server/Host Attachment	24,900	49
Direct Server/Host Communications Lines	5,400	19
50K-byte Server/Host Communications Lines	19,900	49
Multiple Host/Remote Attachment	9,900	19

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SOFTWARE PRICES

	<u>Purchase Price</u>	<u>Monthly Maint.</u>
VPS/Host Operating System; includes context editor, disk/tape utilities, CSS file system, interactive terminal support, machine language debug, CSS data generator, linkage editor, OS tape label processing, relocatable and core image loaders, CSS command language, exec language, exec command processor, VP user directory for controlling system resources, VP operator facilities	—	150
System Accounting	\$ 900	30
Performance Monitor	400	5
Info and Help	200	5
Tape/Disk Library	400	5
Line Number Editor	600	5
ISAM Access Method	600	10
VSAM Access Method	600	10
CSS Batch	1,000	40
CSS Script	500	5
COBOL Debug*	2,000	17
FORTTRAN Debug*	2,000	17
Assembler Debug*	2,000	17
NOMAD/Host DBMS	35,000	150
NOMAD/Host Report Writer	15,000	70
NOMAD/Server DBMS	8,750	38
NOMAD/Server Report Writer	3,750	18
NOMAD/Remote DBMS	7,700	33
NOMAD/Remote Report Writer	3,300	15
HASP	2,400	25
RSVP	2,400	25
2780	2,400	25
Network; packet switched	12,500	87
Network; spooling	5,000	50
Interprocessor Communications	5,000	30
Screen Formatter	2,500	25
Voice Response	1,800	70

\*NCSS-developed language compilers.

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**New Product Announcement**

In a move designed to provide increased functionality and improved distributed processing capabilities, National CSS has introduced two new versions of its 3200 Series, renamed and cut the price of the original 3200 processor (now called the 3200/Host III), and partially unbundled the system software.

**3200/REMOTE III AND 3200/SERVER III:** These new processors are basically the original 3200 with combined hardware/software modifications that equip them to perform specialized tasks.

The 3200/Remote III is a communications-oriented processor running under a modified version of VPS, the National CSS proprietary operating system. The 3200/Remote III operates under the direction of the 3200/Host III computer running under VPS. It can execute application programs but cannot compile them. The main memory of the 3200/Remote III is expandable from 768K bytes to 1.5 megabytes in increments of 256K bytes. One byte multiplexer channel and one selector channel are a standard part of the Remote Systems Package, which also includes a console printer, 768K bytes of main memory, an 80-megabyte disk drive and controller, a 45-ips tape drive and controller, 16 communications lines, the VPS/Remote Operating System, and packet-switched network software. Every 3200/Remote III requires the Remote Systems Package. The 3200/Remote III can access data or programs running on a 3200/Server III through the host.

The 3200/Server III is a back-end processor which can also be used to off-load particularly time-consuming jobs from the host processor. Like the 3200/Remote III, the 3200/Server III uses a modified version of VPS and operates under the direction of the 3200/Host III running under VPS. The main memory of the 3200/Server III is expandable from one megabyte to four megabytes in increments of 256K bytes. One byte multiplexer channel and one selector channel are standard, with expansion to five channels in any combination. Up to 32 disk controllers and up to 128 disk drives of either 750 or 200 megabytes are allowed. The disk controllers may optionally have two-channel switches.

Every 3200/Server III requires the Server System Package, which includes VPS/Server, the network and interprocessor communications software, a console printer, one megabyte of memory, the Server-Host interface equipment, an integrated disk controller, and a 200-megabyte disk drive.

The purchase price of the 3200/Host III (i.e., the original 3200 processor) has been reduced to \$70,300 for a processor with 768K bytes of memory, operator's console, and VPS. A typical 3200/Host III configuration will now cost around \$250,000.

Delivery of the 3200/Host III and 3200/Server III is 60 to 90 days ARO, while the 3200/Remote III will be available in October 1979.

NCSS states that an upgrade system for 3200 users will be offered by the end of 1979. The upgrade will offer a 370/148-level processor in these configurations: 3200/Host V, 3200/Remote V, and 3200/Server V.

**SOFTWARE:** With the announcement of the 3200/Server III and Remote III processors, National CSS introduced two new versions of its NOMAD data base management system. NOMAD/Server and NOMAD/Remote run on the 3200/Server III processor and the 3200/Remote III processor, respectively. These versions of NOMAD are designed to fit the specialized requirements of the communications-oriented and back-end processors.

National CSS makes the VPS/Host Operating System available with a purchased 3200/Host III at no additional purchase charge. However, VPS/Host carries a monthly maintenance charge that is assessed to all purchasers. Selected elements of VPS are unbundled and offered at specified purchase prices and monthly maintenance charges. VPS/Server and VPS/Remote are available only as part of the Server and Remote System Packages, respectively. Monthly maintenance charges for VPS/Server and VPS/Remote are not stated separately from the hardware maintenance charges for the Server and Remote System Packages.

Pricing for the new products is included in the updated Equipment Price List which precedes this New Product Announcement. □