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FOR IMMEDIATE RELEASE

THREE-PROCESSOR LISP MACHINE SETS NEW STANDARD IN VERSATILITY FOR DEVELOPMENT WORKSTATIONS

Los Angeles, CA.....A LISP Machine that can support the development or execution of LISP, PROLOG and UNIX software simultaneously on three independent, concurrently-executing processors is now available from LISP Machine Inc. (LMI), a leading supplier of hardware and software for artificial intelligence (AI) research and applications. Featuring two LISP processors and a 68010 processor, the Lambda 2X2/PLUS is supplied with two high-resolution displays and AI keyboards, and a 474-megabyte Winchester disk. Software supplied with the system includes ZETALISP-PLUS™, a very powerful and productive programming environment, which executes on the LISP processors, and UNIX (V.7 now, System V with virtual memory by August) for the 68010, an industry-standard multi-user environment that supports C, Pascal, Fortran-77 and other traditional languages. Optional 8 and 16-port RS-232 terminal interfaces are available for multi-user UNIX operation. Also included is LMI's exclusive Extended-STREAMS™ Interface, which allows high-speed (37.5 megabytes/second) communication between programs on any or all of the three

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processors in the 2X2/PLUS during parallel operation. The Lambda 2X2/PLUS, with four megabytes of memory is priced at $140,000 (domestic), with quantity discounts as low as $112,000, and the LMI Leasing Corporation will lease the machine to qualified purchasers with current rates as low as $2900/month. The 2X2/PLUS is completely software-compatible with any of LMI's Lambda machines, and any rack-mount Lambda can be field-upgraded to a 2X2/PLUS. Upgrades start at $30,000 (from the Lambda 2X2). Shipments will begin in July.

"The LMI Lambda systems are the only LISP Machines that support multiple concurrent computational environments, rather than requiring everything to be done by a single unit LISP processor, so users can choose the optimal language and processor for their application," says Kenneth M. Johnson, LMI's vice-president of marketing and sales. "And...with our optional LM-PROLOG software package, which permits the development of logic programming applications in the highly productive ZETALISP-PLUS LISP environment, a Lambda 2X2/PLUS can support software development projects in three state-of-the-art programming environments simultaneously: LISP, PROLOG and UNIX. This greatly lowers the hardware-dependent costs of developing new programs, and the powerful programming tools supplied with these environments greatly increase programmer productivity."

The optional LM-PROLOG package executes on LMI's proprietary LISP processor, fully integrated into the ZETALISP-PLUS environment. It permits the use of LISP and PROLOG constructs within the same program, as well as the development and execution of pure PROLOG programs. Thus, either (or both) of the LISP processors in the Lambda 2X2/PLUS can be used for LISP and/or PROLOG programming, without requiring special reconfiguration.

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The two LISP processors in the Lambda 2X2/PLUS are the same highly-specialized microprogrammable processors supplied with all of LMI's LISP Machines. This processor features a 32-bit tagged architecture, a 4K-word write-through cache and extensive hardware support for LISP-specific operations. The LISP processor's architecture is byte-oriented for easy I/O interfacing. The 68010 processor in the Lambda/PLUS systems operates at 10 MHz and is capable of peak speeds of 1 MIPS. Its demand-paged virtual-memory implementation generates 24-bit virtual addresses, resulting in a 16-megabyte virtual address space. The 68010 processor also features a 4K-byte write-through cache, 32-bit arithmetic and byte addressability.

LMI's Lambda systems are advanced, next-generation LISP Machines that can be configured with up to three co-processors on a high-speed, multi-processor bus. This configuration, unique in the industry, enables the processors to execute in parallel, communicating with each other through LMI's exclusive Extended-STREAMS Interface. The Lambda's multiprocessor design offers users the ability to add intelligence to an existing, traditional software package (operating in UNIX) by placing it under the supervision of an evolving LISP program, or to add the high-speed data acquisition and numeric-processing capabilities of the 68010 to the symbolic processing abilities of the LISP processor, for real-time AI applications. Another LMI exclusive, the LMI Lambda LISP processor's virtual control store with optional microcompiler, allows the machine's architecture to be rapidly and easily conformed to the requirements of a specific application, for increased efficiency and speed. The LMI Lambda series also features an integral MULTIBUS™, which allows system engineers a wide choice of lower-cost third party peripherals for con-

figuring the system, and an optional ETHERNET-II™ interface for communication with other computers.

LISP Machine Inc. was formed in 1980 to develop and manufacture LISP-based computers and software for use in artificial intelligence research and applications. Its computers are used worldwide to advance the science of artificial intelligence and to bring the benefits of this advanced technology to the commercial marketplace. The company has its corporate headquarters in Los Angeles, CA, and its R&D and Systems Test facility in Cambridge, MA, with sales offices in both those locations plus Sunnyvale, CA (near San Francisco), Austin, TX, Dallas, TX and Vienna, VA (Washington, D.C.). LISP Machine Inc. derives its name from LISP, a versatile and powerful symbolic programming language that has become the language of choice in many AI laboratories, as well as gaining recognition in the commercial marketplace as a highly productive programming environment.

For further sales information, contact Kenneth M. Johnson at LISP Machine Inc., 6033 West Century Boulevard, Los Angeles, CA 90045. Phone: (213) 642-1116.

Please address all editorial inquiries to Dave Trowbridge at KPR, Inc., (818) 886-6544.

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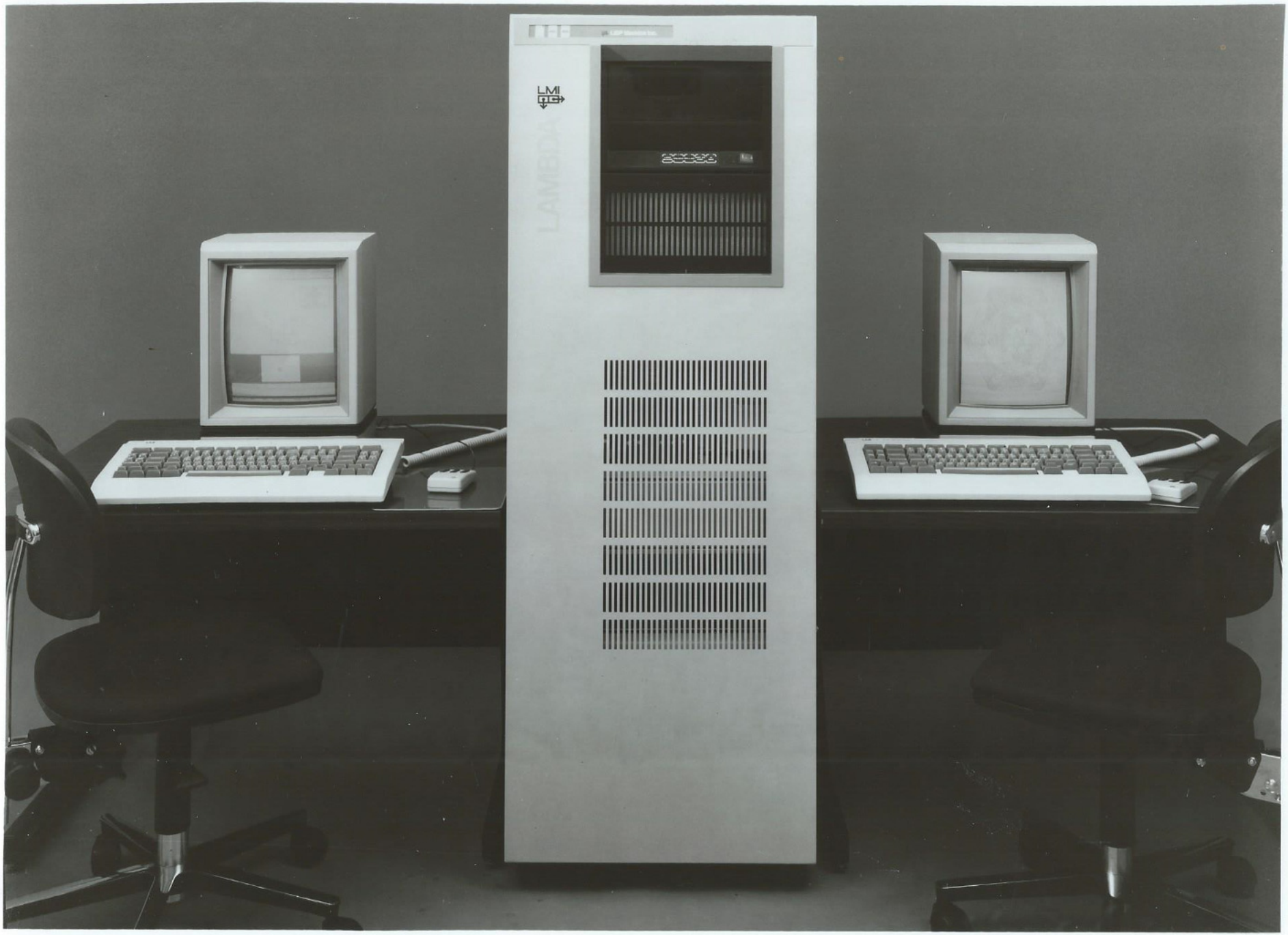

The LMI Lambda 2X2/PLUS, from LISP Machine Inc., is a three-processor LISP Machine that can support LISP, PROLOG, and UNIX software development and execution environments simultaneously. Programs on the three processors (two LISP and one 68010/UNIX) execute independently and concurrently, but can communicate with each other via LMI's exclusive Extended-STREAMS Interface.