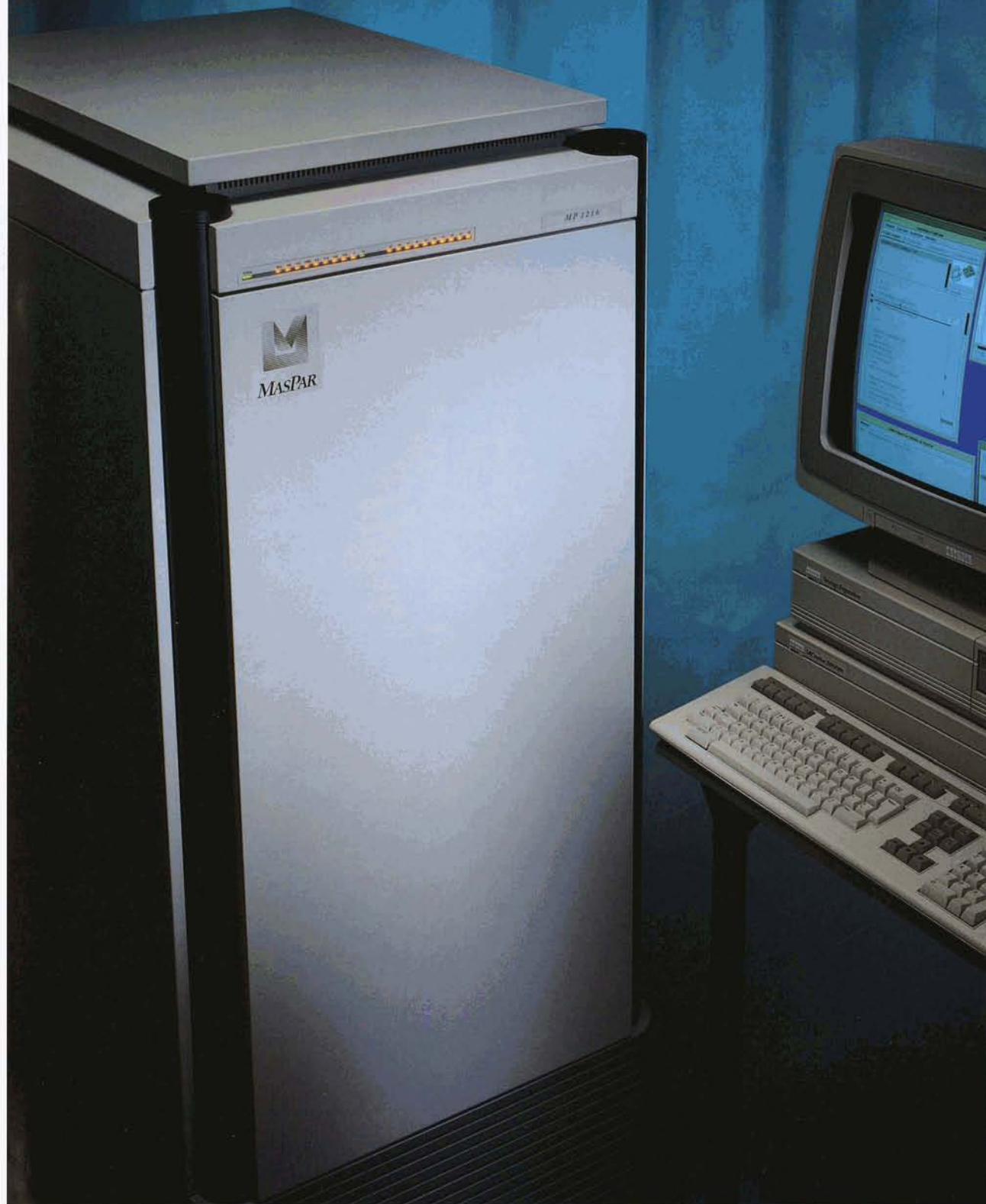


# MP-1

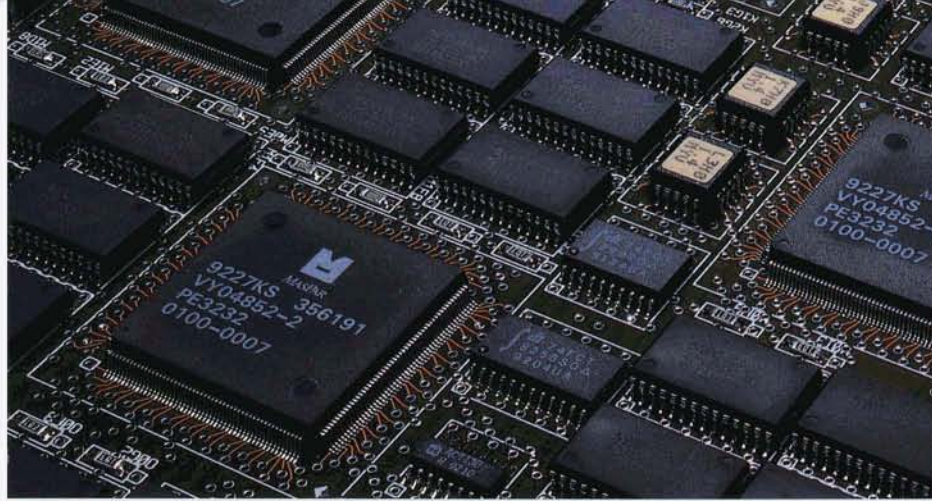


**MASPAR**

**The Solutions Leader in Massively Parallel Computing**



# MP-1



## Processor Array

	MP-1101 MP-1201	MP-1102 MP-1202	MP-1104 MP-1204	MP-1208	MP-1216
<b>Number of Processors</b>	1,024	2,048	4,096	8,192	16,384
<b>Peak System Performance</b>					
■ 32-Bit Integer MIPS	1,600	3,200	6,400	13,000	26,000
■ 64-Bit Integer MIPS	800	1,600	3,200	6,400	13,000
■ 32-Bit Floating Point MFLOPS	75	150	300	600	1,200
■ 64-Bit Floating Point MFLOPS	34	69	138	275	550
<b>Memory</b>					
■ Capacity (MBytes)	16 or 64	32 or 128	64 or 256	128 or 512	256 or 1,024
■ Bandwidth: Direct (MBytes/sec)	690	1,380	2,760	5,500	11,000
■ Bandwidth: Indirect (MBytes/sec)	250	500	1,000	2,000	4,000
<b>Registers</b>					
■ Capacity (64-Bit Registers)	20,480	40,960	81,920	163,840	327,680
■ Bandwidth (GBytes/sec)	6.4	12.8	25.6	51.2	102.4
<b>2D Torus Grid w/8 Way Nearest Neighbor Communication</b>					
■ Bandwidth (MBytes/sec)	1,400	2,850	5,700	11,500	23,000
<b>Global Router</b>					
■ Connect Time (μ sec)	3	3	3	3	3
■ Bandwidth: Send (MBytes/sec)	80	160	320	640	1,300
■ Bandwidth: Fetch (MBytes/sec)	80	160	320	640	1,300

## Input/Output Subsystem

■ I/O Controller Capacity (MBytes)	8
■ PE-I/O Controller BW Peak (MBytes/sec)	64
■ Maximum IORAM Capacity (MBytes) 1100/1200	384/1,024
■ Maximum PE-IORAM BW Peak (MBytes/sec)	64 to 1,024
■ MasPar I/O Channel Peak Speed (MBytes/sec)	200
■ MasPar Parallel VME Peak Speed (MBytes/sec)	16
■ Number of I/O Slots 1100/1200	4/14

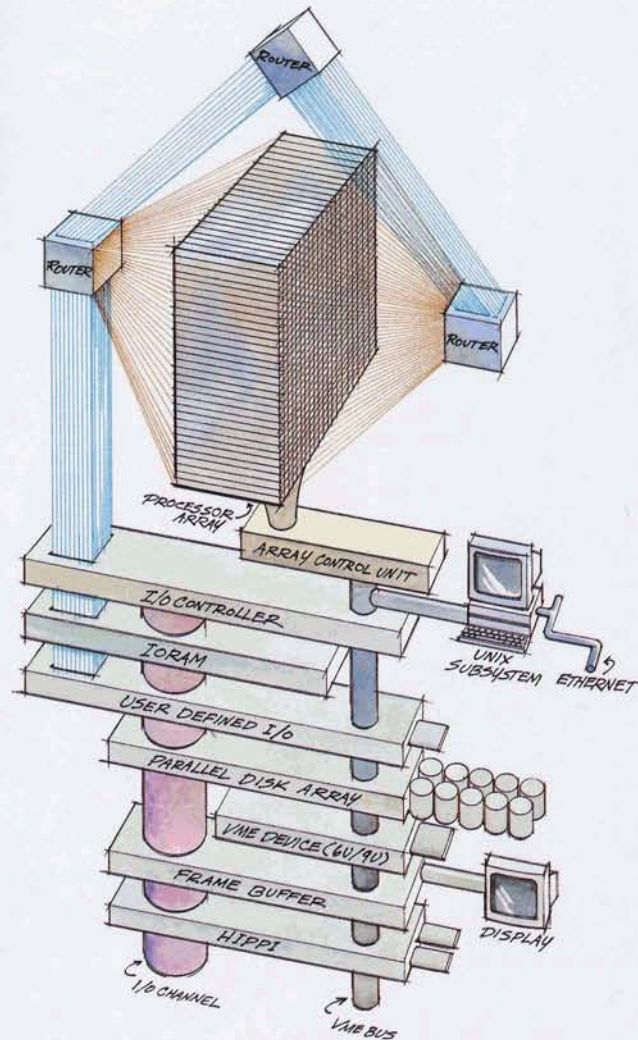
## Front End

DECstation 5000/240HX	
■ 32-bit integer MIPS	42.9
■ Specmarks	32.4
■ 32-Bit Floating Point MFLOPS	10.8
■ 64-Bit Floating Point MFLOPS	6.0
■ Memory Standard (MBytes)	24/32
■ Memory Maximum (MBytes)	480
■ Disk Standard (MBytes)	665
■ CD ROM Drive (MBytes)	600

## Disk Array

	DA-4004A	DA-4108A	DA-4116A	DA-4124A	DA-4216A
■ Capacity Formatted (GBytes)	5.5	11.0	22.0	33.0	22.0
■ Number of Data Disks	4	8	16	24	16
■ Parity Disks Included	1	1	2	3	2
■ Optional Hot Standby Disks	1	1	1	1	2
<b>Data Transfer Rate</b>					
■ Peak (MBytes/sec)	9.8	18.0	18.0	18.0	36.0
■ Sustained (MBytes/sec)	5.5	12.0	12.0	12.0	24.0
■ Maximum Number of Cabinets	1	4	4	4	2

Maximum System Capacity: 132 GBytes



## MP-1 ENVIRONMENTAL SPECIFICATIONS

- Enclosures
  - 1100 Series: 42" h x 18.5" w x 32.5" d - <500lbs.
  - 1200 Series: 57.75" h x 23.5" w x 32.5" d - <800lbs.
- Power Requirements
  - 1100 Series: 110V/220V 60 or 50Hz 15/10A
  - 1200 Series: 220V 60 or 50Hz 30A
- Operating Temperature
  - 50-104° F (10-40° C)
- Remote Service Access: Integrated Teletbit Trailblazer T9000 Modem with automatic error correction to 19,200bps for remote login and uucp access.
- Integrated Software: ULTRIX Operating System, MasPar Programming Environment & Programming Language (ANSI C w/parallel extensions).
- Optional Software: MasPar FORTRAN Compiler, MasPar VAST-2, MasPar Mathematics & Image Processing Libraries.

## The Solutions Leader in Massively Parallel Computing

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