

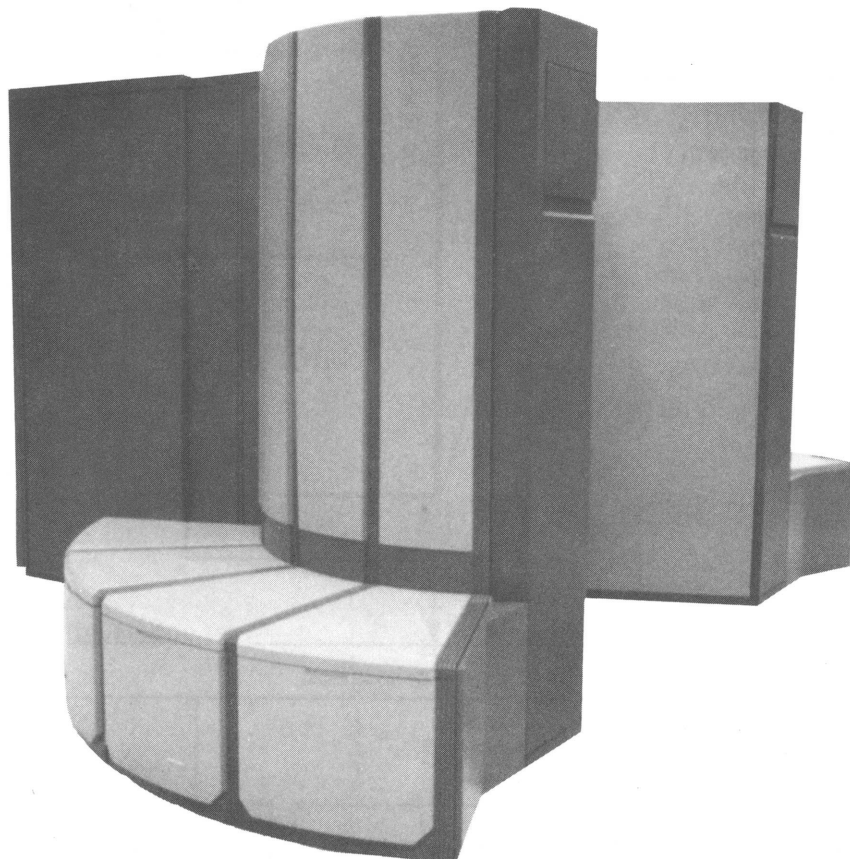
CRAY Y-MP4 COMPUTER SYSTEM

Model Numbers

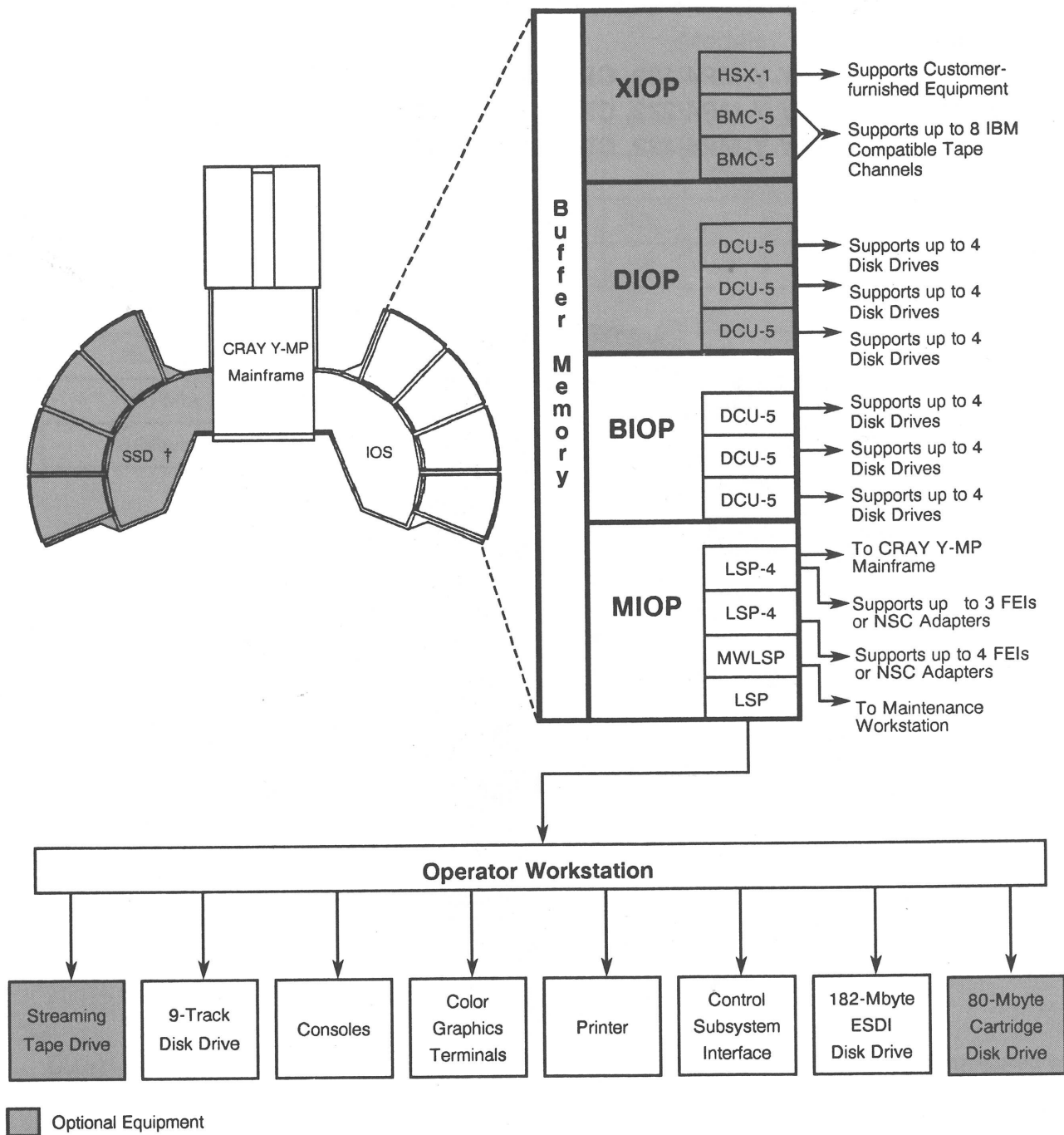
CRAY Y-MP4/116, CRAY Y-MP4/132, CRAY Y-MP4/164

CRAY Y-MP4/216, CRAY Y-MP4/232, CRAY Y-MP4/264

CRAY Y-MP4/416, CRAY Y-MP4/432, CRAY Y-MP4/464



Specification Sheet
HR-04005-0B1



† Optional equipment. (The CRAY Y-MP4 computer system may be configured with the following model numbers: SSD-3I, SSD-5I, SSD-5, SSD-6, and SSD-7. If the system is configured with an SSD-3I or SSD-5I, an IOS/integrated SSD chassis will replace the SSD footprint shown above.)

CRAY Y-MP4 Computer System Maximum Configuration

CRAY Y-MP4 SPECIFICATIONS

CRAY Y-MP4 MAINFRAME FEATURES

System Clock

Speed 6.0 ns

CPU Specifications

Number of CPUs 1, 2, 4

Number of registers per CPU:

- Address (A) registers, 32 bits each 8
- Intermediate address (B) registers, 32 bits each 64
- Scalar (S) registers, 64 bits each 8
- Intermediate scalar (T) registers, 64 bits each 64
- Vector (V) registers, 64 bits per element, 64 elements per register 8

Number of functional units per CPU:

- Address addition 1
- Address multiplication 1
- Scalar addition 1
- Scalar shift 1
- Scalar logical 1
- Scalar population/parity leading zero 1
- Vector addition 1
- Vector shift 1
- Full vector logical 1
- 2nd vector logical 1
- Floating-point addition 1
- Floating-point multiplication 1
- Floating-point reciprocal approximation 1

Shared Resources

Central memory:

- Word width 64 bits
- SECDED error correction 8 bits
- Memory size 16, 32, 64 Mwords
- Number of banks 128
- Number of modules 16
- Number of ports per CPU 4

Shared Resources (continued)

I/O section:

- 1000-Mbyte/s channels 0, 1, 2
- 100-Mbyte/s channels 1, 2, 4
- 6-Mbyte/s channels 1, 2, 4

Number of clusters 7

Number of shared registers contained in each cluster:

- Shared address (SB) registers, 32 bits each (Y-mode), 24 bits each (X-mode) 8
- Shared scalar (ST) registers, 64 bits each 8
- Semaphore (SM) registers, 1 bit each 32

Real-time clock (64 bits) 1

PHYSICAL DESCRIPTION

Floor space 16 ft² (1.5 m²)
 Weight 5,400 lbs (2,450 kg)
 Height 6.4 ft (1.9 m)

SUPPORT EQUIPMENT

Refrigeration condensing unit 1
 Motor-generator sets 1-2
 Operator workstation 1
 Maintenance workstation 1
 Heat exchanger unit 1

For individual CRAY Y-MP4 model specifications, refer to the table on the following page.

CRAY Y-MP4 MODEL SPECIFICATIONS

Specifications	Models								
	416	432	464	216	232	264	116	132	164
Number of CPUs	4	4	4	2	2	2	1	1	1
Number of Clusters	7	7	7	7	7	7	7	7	7
Memory Size (Mwords)	16	32	64	16	32	64	16	32	64
Number of I/O Channels:									
1000-Mbyte/s Channels	2	2	2	1	1	1	0	0	0
100-Mbyte/s Channels	4	4	4	2	2	2	1	1	1
6-Mbyte/s Channels	4	4	4	2	2	2	1	1	1

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