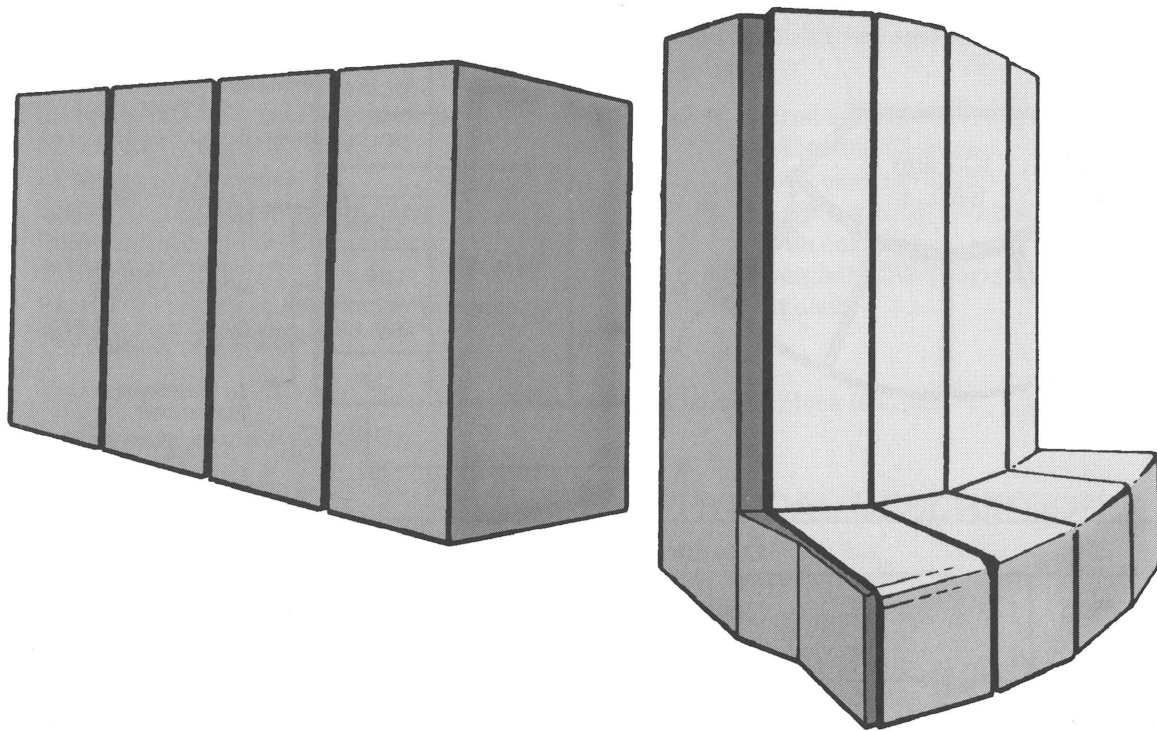


# CRAY Y-MP2 COMPUTER SYSTEM

Model Numbers

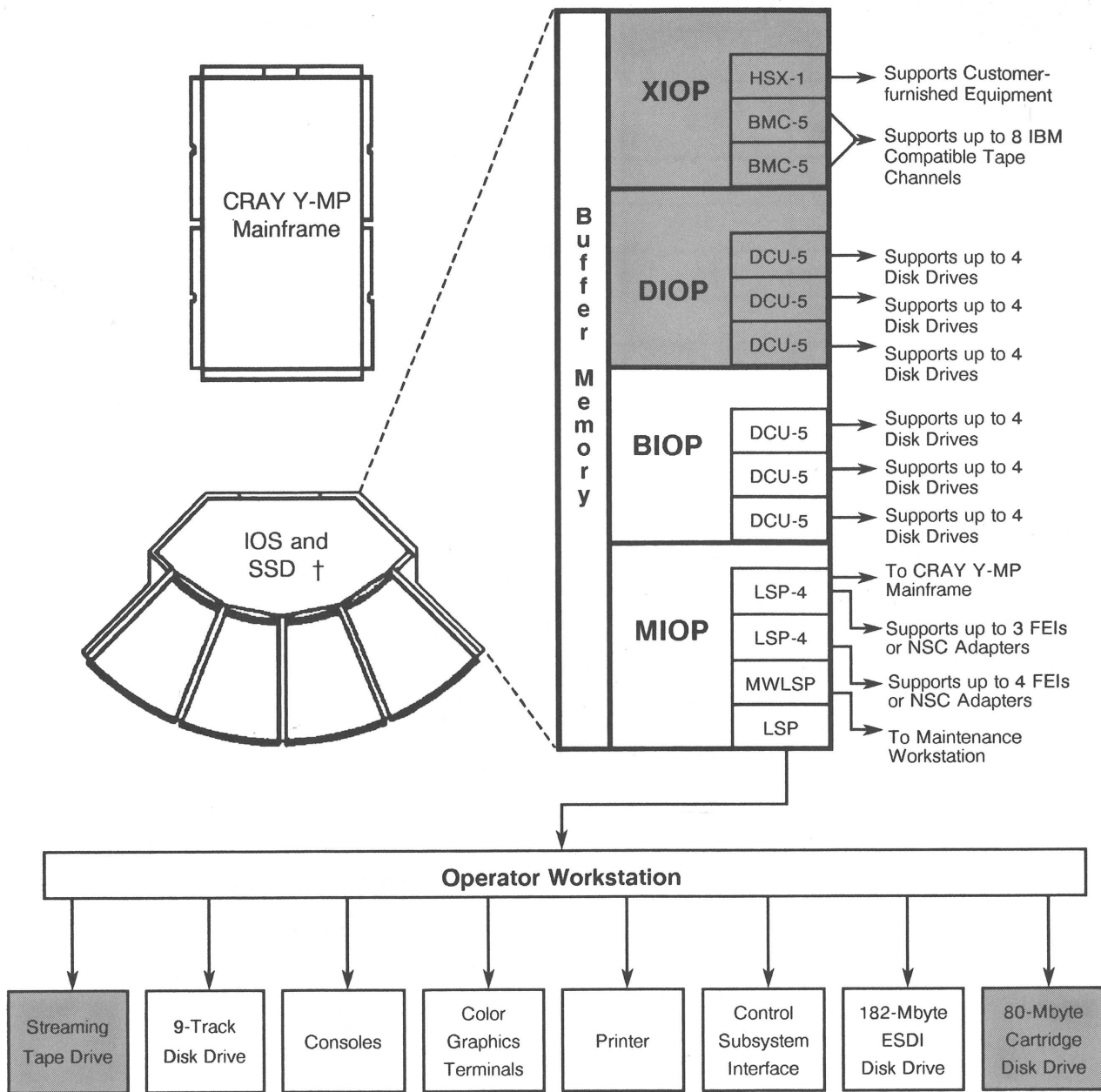
CRAY Y-MP2/116

CRAY Y-MP2/216



**CRAY**  
RESEARCH, INC.

**Specification Sheet**  
**HR-4006**



† The SSD is optional. The CRAY Y-MP2 computer system may be configured with the following model numbers: SSD-3I and SSD-5I.

### CRAY Y-MP2 Computer System Maximum Configuration

# CRAY Y-MP2 SPECIFICATIONS

## CRAY Y-MP2 MAINFRAME FEATURES

### System Clock

Speed ..... 6.0 ns

### CPU Specifications

Number of CPUs ..... 1, 2

#### Number of registers per CPU:

- Address (A) registers, 32 bits each (Y-mode), 24 bits each (X-mode) ..... 8
- Intermediate address (B) registers, 32 bits each (Y-mode), 24 bits each (X-mode) ..... 8
- 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

#### I/O section:

- 1000-Mbyte/s channel ..... 1
- 100-Mbyte/s channels ..... 1, 2
- 6-Mbyte/s channels ..... 1, 2

### Shared Resources (continued)

#### Central memory:

- Word width ..... 64 bits
- SECDED error correction ..... 8 bits
- Memory size ..... 16 Mwords
- Number of banks ..... 64
- Number of modules ..... 8
- Number of ports per CPU ..... 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 ..... 13.7 ft<sup>2</sup> (1.3 m<sup>2</sup>)  
 Weight ..... 2,500 lbs (1,100 kg)  
 Height ..... 6.4 ft (1.9 m)

## SUPPORT EQUIPMENT

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

For individual CRAY Y-MP2 model specifications, refer to the table on the following page.

# CRAY Y-MP2 MODEL DESCRIPTIONS

| CRAY Y-MP2 Model Descriptions | CRAY Y-MP2 Models |     |
|-------------------------------|-------------------|-----|
|                               | 216               | 116 |
| Number of CPUs                | 2                 | 1   |
| Number of Clusters            | 7                 | 7   |
| Memory Size (Mwords)          | 16                | 16  |
| Number of I/O Channels:       |                   |     |
| 1000-Mbyte/s Channels         | 1                 | 1   |
| 100-Mbyte/s Channels          | 2                 | 1   |
| 6-Mbyte/s Channels            | 2                 | 1   |

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