PRODUCT DATA SHEET

2200
MODEL 2280
DISK MULTIPLEXER

DISK MULTIPLEXER OPERATION

The Model 2280MUX "star" type disk multiplexer permits any combination of two or three 2200VP or 2200MVP CPUs to share a Model 2280 disk drive or combination of 2280 disk drives (e.g., 2280 and 2280N).

The multiplexer board allocates disk time to multiple systems in a manner which enables all systems to have virtually concurrent access to the disk. Participating systems are sequentially polled on an equal priority basis until one of the systems attempts to access the disk. At that point, control of the disk is passed to the inquiring system, which is permitted to execute a single disk statement or command. (Multisector transfers may be made by a single statement.) When execution of the single disk operation is completed, disk control reverts to the multiplexer, which resumes its sequential polling of the systems.

Some disk operations, such as the on-line updating of a commonly shared file, require that one system have a period of exclusive and uninterrupted access to the disk. For such operations, the $OPEN statement from the Wang BASIC-2 language should be used. In this mode of operation, one system temporarily monopolizes the disk, locking out all other systems. Critical file maintenance operations may then be carried out by the privileged system without fear of interruption.
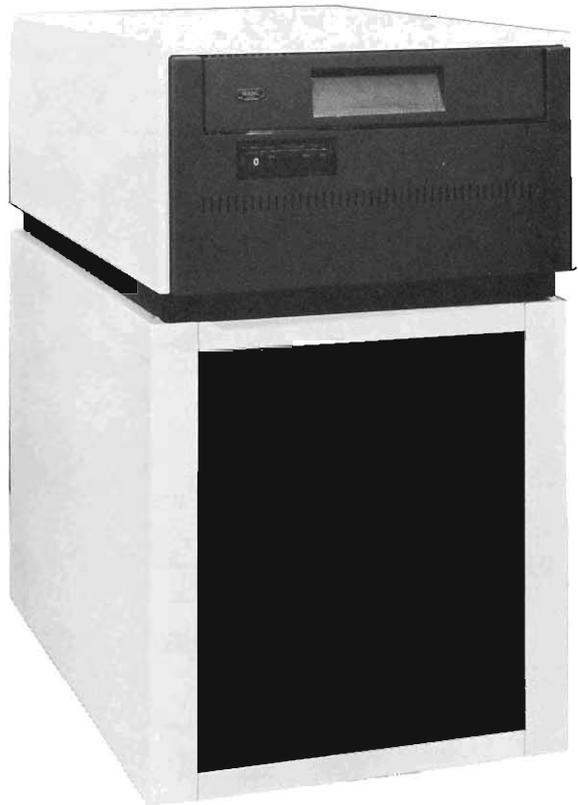
DISK MULTIPLEXER CONFIGURATION

The Model 2280 Disk Multiplexer configuration consists of the multiplexer board and individual connector cables to each of up to three CPUs. The Model 2280MUX multiplexer installs directly into a 2280 Disk Processing Unit (DPU) and contains the polling circuitry, disk processor interface, and three ports for cable connection to the systems. Each participating system must have a Model 22C80 controller installed in its I/O bus. Extension cables are available to extend the distance between the multiplexer and a CPU. Figure 1 illustrates a typical three-system configuration.

- Up to Three CPUs Can Share Disk
- Distance Between CPUs and Disk-Up to 1012 Feet
- Supports Exclusive Use of Disk Drive by Individual Systems

EXTENSION CABLES

Standard 12-foot connector cables are provided with each Model 22C80 controller board. Additionally, extension cables are available in lengths of 25, 50, 100, 250, 500, 750, and 1000 feet. The extension cable is coupled with a standard connector cable to permit an increased distance between the DPU and the systems. Extension cables may be coupled together; however, the maximum distance between the DPU and a system is 1012 feet.

SPECIFICATIONS

Required Equipment

One 2280MUX Multiplexer board. One 22C80 controller and one 12-foot (3.7 m) connector cable.

Optional Equipment

Additional 22C80 controllers and 12-foot cables. Extension cables of 25, 50, 100, 250, 500, 750, and 1000 feet (7.6, 15.3, 30.5, 76, 153, 228, and 305 meters).

Power Requirements

Multiplexer board operates off DPU power supply. 22C80 operates off CPU power supply.

System Compatibility

2200VP and MVP systems. Model 2280 and 2280N disk drives.

Operating Environment

50°F to 95°F (10°C to 35°C). 20% to 80% relative humidity, non condensing.

ORDERING SPECIFICATIONS

A disk multiplexer capable of allocating Model 2280 disk time to several independent 2200VP, or MVP systems. The multiplexer must be capable of interfacing a maximum of three separate systems to the same disk. Extension cables must be available in lengths of 25, 50, 100, 250, 500, 750, and 1000 feet (7.6, 15.3, 30.5, 76, 153, 228, and 305 meters) to provide distances from the multiplexer of up to 1012 feet.
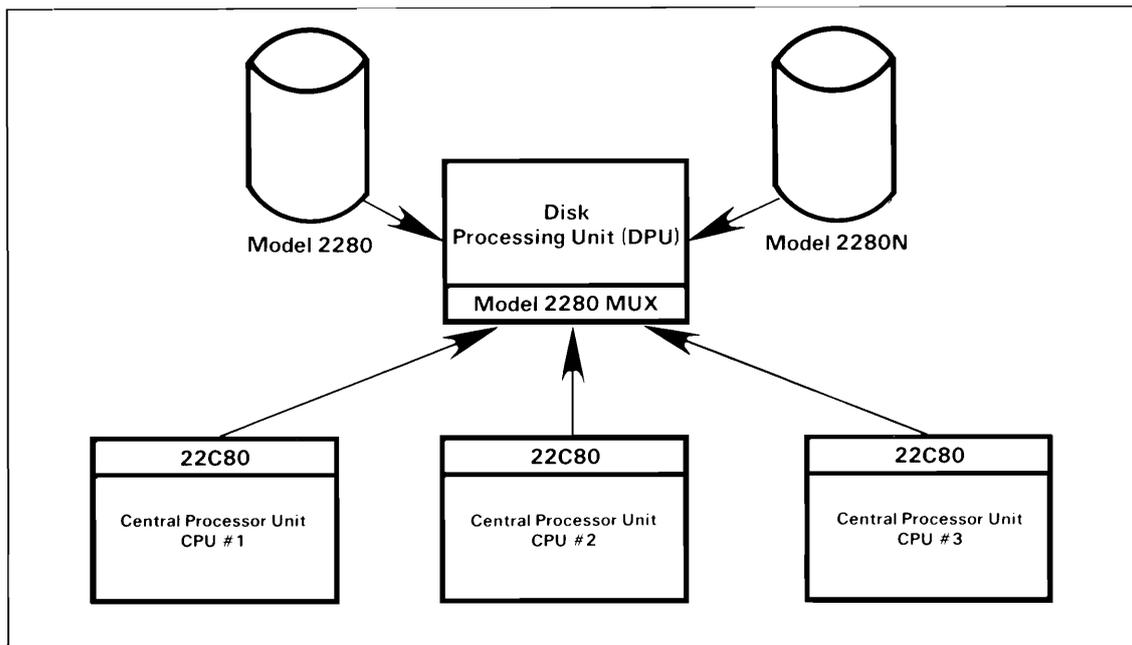

Standard Warranty Applies

Figure 1. Typical 2280 Disk Multiplexer Configuration