

## POINT 4'S MIGHTY MUX: EFFICIENT MULTI-USER SUPPORT

The essential characteristic of a multi-user business computer system is its ability to handle a large number of workstations. POINT 4 Data Corporation's Mighty MUX\* DMA multiplexer combines that ability with speed and flexibility to achieve a high degree of efficiency. POINT 4's Mighty MUX is the cornerstone of a cost-effective business data processing system.

The role of a multiplexer is to act as a traffic cop in managing the flow of information between the central processing unit and the many users of the system at their workstations. The key to the effectiveness of the Mighty MUX is its ability to relieve the central processor of the burden of managing this chore. This frees the processor to concentrate on its primary purpose: processing data to yield results in the form of vital business information.

### MIGHTY MUX FEATURES

- Direct memory access (DMA) results in maximum performance
- Expandable from 8 to 128 ports
- Handles individual line speeds up to 19,200 bits per second
- Supports character-at-a-time or block mode transmission
- Line characteristics under software control
- EIA RS-232C (CCITT V.24) or 20, 40 or 60 mA current loop compatible
- Compatible with virtually any POINT 4 or other NOVA\*-type computer system
- Connects to a broad spectrum of industry-standard video display workstations and serial printers

### HIGH PERFORMANCE

The speed and efficiency of the Mighty MUX are a result of its direct memory access architecture.

With DMA, the Mighty MUX manages the communications overhead of the system then transfers data directly to and from the computer's memory. This allows the central processor to continue with its function in parallel and simultaneous with the communications flow.

### FLEXIBILITY

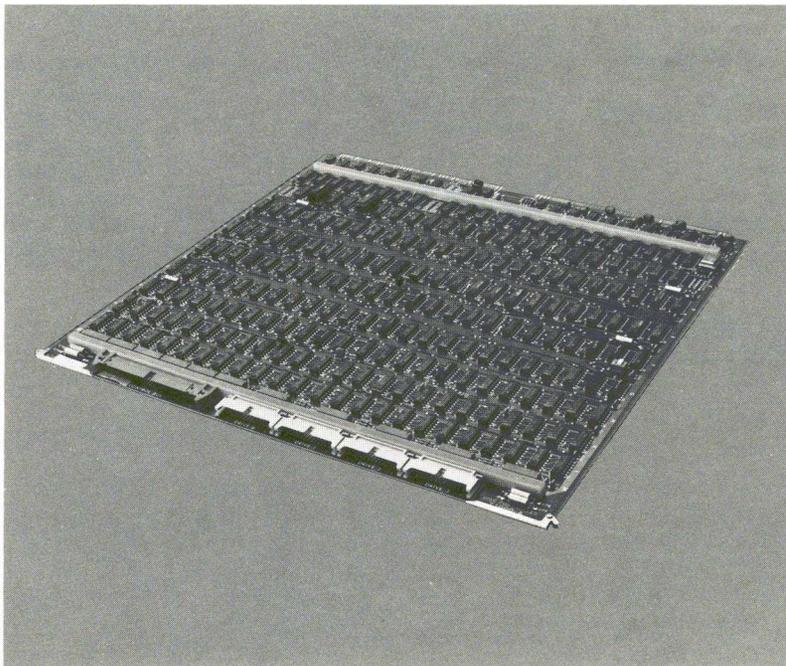
The basic Mighty MUX handles eight asynchronous workstations or printer ports each at speeds up to 19,200 bits per second. And it is compatible with a very broad range of industry-compatible video terminals and serial printers to provide the user with the flexibility to configure a system more precisely to his requirements. In particular, it supports POINT 4's Electronic WorkStations.

### EXPANDABILITY AND COMPATIBILITY

The basic Mighty MUX supporting 8 ports can be expanded easily to handle up to 128 ports through the addition of one or more 8-, 16-, or 24-port expansion modules. The Mighty MUX and its companion expansion modules are packaged on 15-inch square printed circuit boards. These industry-standard designs allow them to be integrated with members of POINT 4's family of multi-user computers or virtually any NOVA-compatible system. This offers the value-added reseller and user alike the opportunity to expand the effectiveness of a business system by adding ports and users in easy, economical increments.

### EFFICIENCY

The inherent high performance in the DMA design of the Mighty MUX is further enhanced



# MULTI-USER SYSTEMS DESIGNED WITH YOUR NEEDS IN MIND

by its block mode of operation. Instead of interrupting the system in order to deliver each and every character, as do conventional multiplexers, it assembles data into blocks of characters and delivers an entire block to memory. The Mighty MUX increases the efficiency of a business system regardless of the number of users it supports.

## SPECIFICATIONS

### PERFORMANCE

#### *Transmission Type:*

Asynchronous

#### *Line Types:*

Full duplex, half duplex

#### *Line Speeds:*

Up to 19,200 baud, under software control

#### *Line Interfaces:*

EIA RS-232C (CCITT V.24), current loop (20, 40 or 60 mA)

#### *Number of Ports:*

128 maximum per multiplexer

#### *Real-Time Clock:*

100 Hz (period equals 10 ms)

#### *Modem Control:*

Supports Bell 103, 200 and 300 data sets or equivalent

#### *Master Terminal Mode*

#### *(Device Code 10/11):*

Switch-selectable baud rate, up to 19,200 baud

## PROGRAMMING

All important port parameters are under program control on a port-by-port basis. Features that are software controllable include:

- I/O buffer size and location
- Character size (5, 6, 7 or 8 bits)
- Parity (odd, even or none)
- Baud rate (a user can sign onto the system at one baud rate and switch to any other standard baud rate from his terminal)
- Auto echo
- Interrupt conditions (interrupt on selected control characters or not)

## CURRENT REQUIREMENTS (maximum):

Model	at +5VDC	Power
310	4.0a	20w
301	3.5a	18w

## DIMENSIONS

#### *310, 301 Boards:*

15 x 15 inches

#### *Junction Panel:*

19" wide, 3<sup>15</sup>/<sub>32</sub>" high,

2<sup>1</sup>/<sub>2</sub>" deep

#### *Power Supply:*

19" wide, 3<sup>3</sup>/<sub>8</sub>" high, 14<sup>1</sup>/<sub>2</sub>" deep

## OPERATING ENVIRONMENT

#### *Operating Temperature:*

0° to 55°C (32° to 112°F)

#### *Relative Humidity:*

0 to 90% noncondensing

## POINT 4: RESPONSIVE TO OUR CUSTOMERS' NEEDS

At POINT 4 Data Corporation, our business is multi-user systems with a personal touch. We design and manufacture computer systems, distribute them through a worldwide network of value-added resellers and support those resellers with personal service.

POINT 4 computer systems are flexible, cost-efficient, expandable and upward compatible. And we're working for the future, developing new and better products and planning more and better ways to support our customers.

*The materials contained herein are intended for general information. Details and specifications concerning the use and operation of POINT 4 Data Corporation's equipment and software are contained in the applicable technical manuals, available through local sales representatives.*

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