OPTO 22

DATA SHEET

Form 739-010126

Part Number	Description
B6	16-Channel Analog Brain Pamux

Description

The Pamux® B6 is an addressable analog brain board that can control up to 16 input and output points in distributed I/O applications. The B6 is designed for use with Opto 22 mounting racks, including the PB4AH (four points of analog I/O), PB8AH (eight points), and PB16AH (16 points).

Up to 32 B6 brain boards may be linked on a single Pamux bus to control up to 512 points of analog I/O. Each B6 requires 5 VDC ±0.1 V @ 0.5 A (plus an additional 0.5 A if a terminator board is installed).

The B6 includes an on-board microprocessor that continually scans all I/O points on the mounting rack, performs necessary conversions, and then updates dual-port RAM. The host computer transfers data along the Pamux bus by reading from or writing to the dual-port RAM.

This document illustrates how to install the B6 analog I/O brain board on a compatible mounting rack. It discusses all B6 configuration issues, including how to set jumpers for the address, watchdog, and reset line. It also explains how to install a terminator board when a B6 station is at the end of a Pamux system.

Opto 22 form #726, the *Pamux User's Guide*, contains complete information about the Pamux system and can be downloaded free from our Web site at www.opto22.com.

The B6 brain board measures 6.40 by 4.75 inches. It includes a 50-pin female connector to attach to an analog I/O mounting rack. At the top of the brain board are two 50-pin male header connectors used to link the brain board to the Pamux bus. For the last brain board on a Pamux bus, one of these connectors holds the terminator board.

NOTE: If you have older B6 brain boards, you may notice that the latest version looks different. Functionally it is the same as previous versions; the difference in appearance is because we now use surface-mount technology to produce the boards.

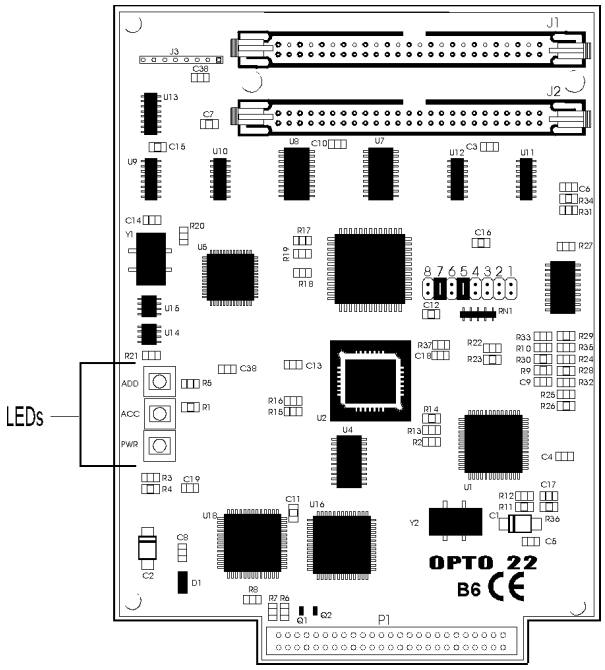

Figure 1: B6 Brain Board

LED Indicators

The B6 brain board includes the following LEDs:

- **ADD**—The Address LED is on whenever the brain board is addressed (read from or written to) on the Pamux bus. It is off otherwise. For each operation, the LED stays on for about 250 milliseconds, so if the bus is very active the LED may appear constantly on.
- **ACC**—The Access LED is on whenever access has been granted to the dual-port RAM. It remains on until access is released. (See Chapter 4 of the *Pamux User's Guide* for details on getting and releasing access.)
- **PWR**—The Power LED is on whenever power is connected to the board. It is off otherwise. It does not indicate whether voltage is within specifications.

Detailed Drawing and Dimensions

Figure 2 shows the B6 and its dimensions.

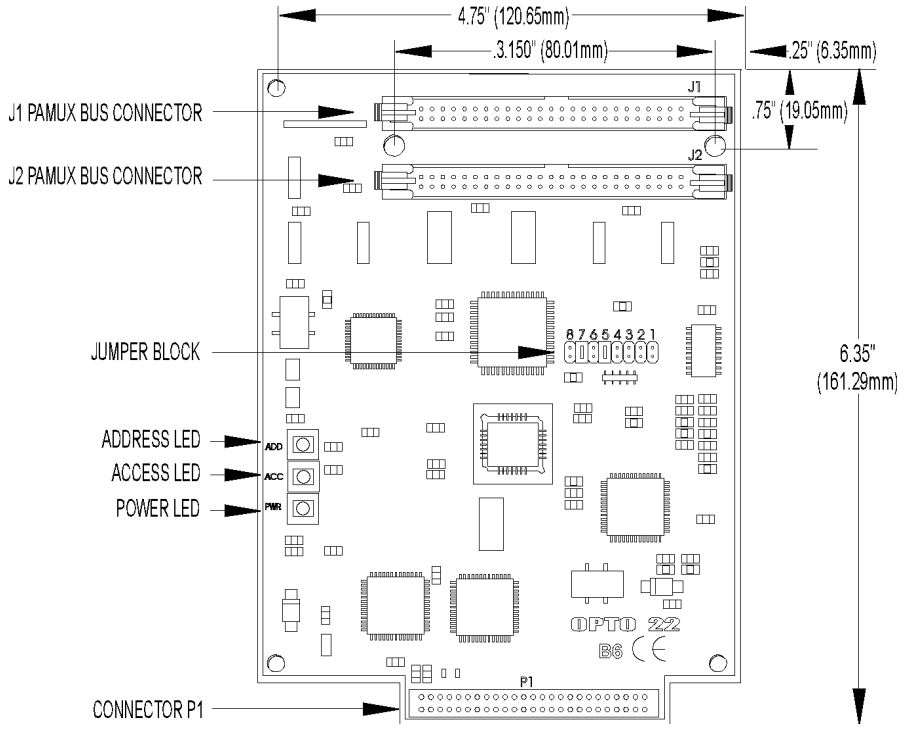

Figure 2: Dimensions of the B6 Brain Board

Installing the B6 on a Mounting Rack

Three I/O mounting racks are available for the Pamux B6 brain board:

- PB4AH—4 channels of single-point standard analog I/O
- PB8AH—8 channels of single-point standard analog I/O
- PB16AH—16 channels of single-point standard analog I/O

Each mounting rack accommodates any combination of analog input and output modules and connects to the Pamux B6 brain board via a 50-pin header connection. The mounting rack includes a fuse for the 5-volt power line.

Figures 3 through 5 show the mounting dimensions of these racks with the B6 brain board installed.