



1. DESCRIPTION

1.1.FUNCTIONAL DESCRIPTION

The Model V288 HIGH SPEED (H.S.)CAENET VME CONTROLLER has been designed to control an H.S. CAENET network through the VME bus. It houses an H.S. CAENET Node and a Control Logic (microprocessor based) which integrates the functions of Node controller and Network error handler.

Standard VME cycles allow the user to easily control the serial communication on the H.S. CAENET network according to the typical MASTER/SLAVE communication protocol, where the VME controller assumes the MASTER function.

It is composed of a collection of registers, for the operation control, and two memory buffers for the data packet transmitted and received, arranged in a FIFO logic 16 bit wide 256 word deep.

In the memory buffer for the received data are also stored error messages generated by the on-board Control logic when the H.S. CAENET operation has failed

The Module is an A24 D16 VME Slave; Its Base Address is programmable through dip switches located on the Board.

The module operations can be software controlled in polling mode or can be handled via interrupt facility. It houses a VME ROAK INTERRUPTER [1] that generates a VME interrupt (if enabled) as soon as the data packet (or the error message) is stored in the receive buffer.

The communication line uses a simple 50 ohm coaxial cable as physical medium.

The data transfer rate is 1 MBaud.

(A functional block diagram is shown in Fig. 1.1.)

2. SPECIFICATION

2.1. PACKAGING

1-unit wide VME module.

2.2. EXTERNAL COMPONENTS

(refer to Fig. 2.1).

CONNECTORS

- No. 1 "SERIAL LINE" LEMO 00 type, 50 Ohm connector;
connector for the H.S. CAENET communication line.

LEDs

- No.1 "DATA",red LED;
is On when the H.S. CAENET Node is active.

SWITCHES

- No.1 "RESET"push button;
by pushing this button the V288 enters in restart mode; this causes the following operations:

- the buffers are cleared;
- every VME interrupt pending is cleared;
- every data transfer is aborted;
- the V288 does not accept any command.

It remains in this status for about 3 msec.

2.3. INTERNAL COMPONENTS

SWITCHES

- No.3 dip-switches SW2,SW5,SW6;
These dip-switches allow the selection of the VME Base address.
- No.2 dip-switches SW3,SW4;
These dip-switches allow the selection of the VME interrupt level.

2.4.POWER REQUIREMENTS

+ 5V 2 A

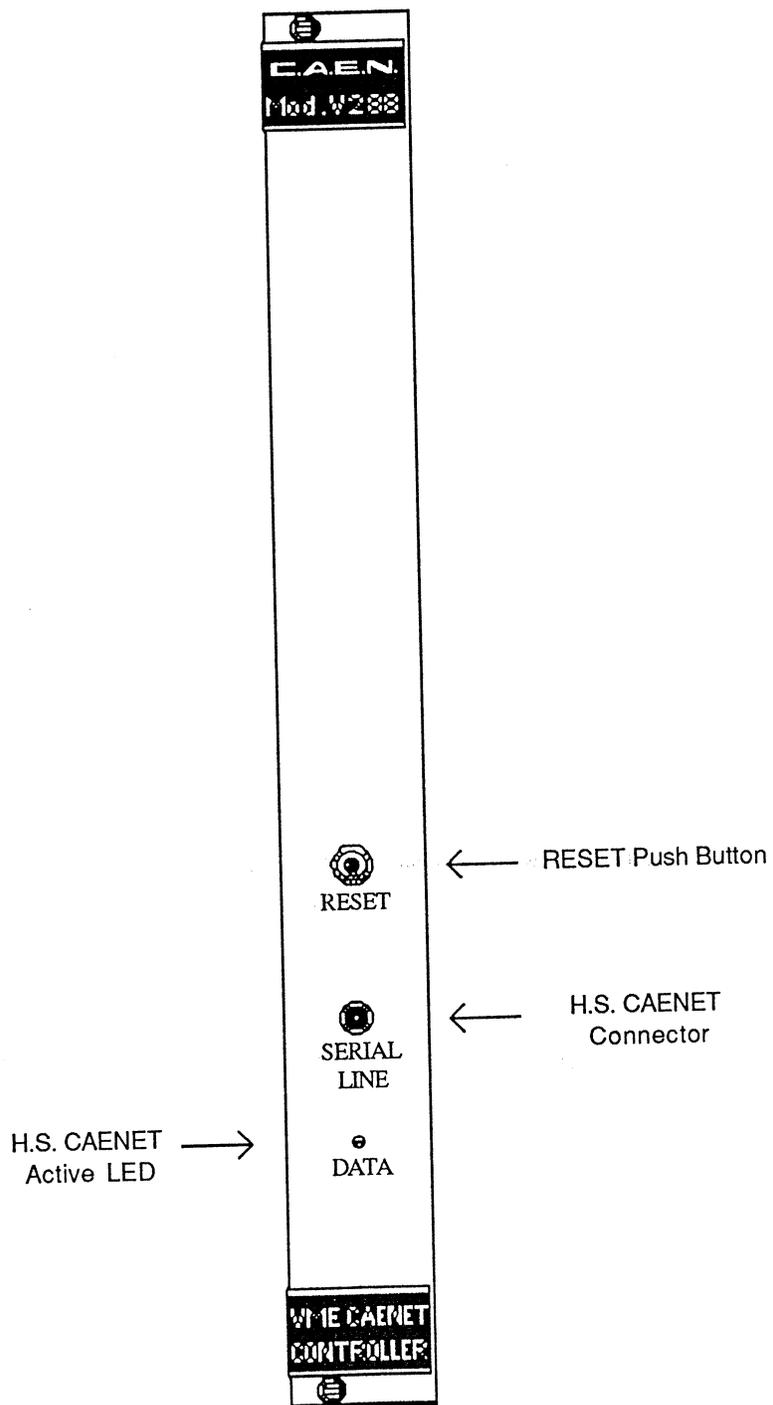


Fig 2.1 Mod. V288 Front Panel