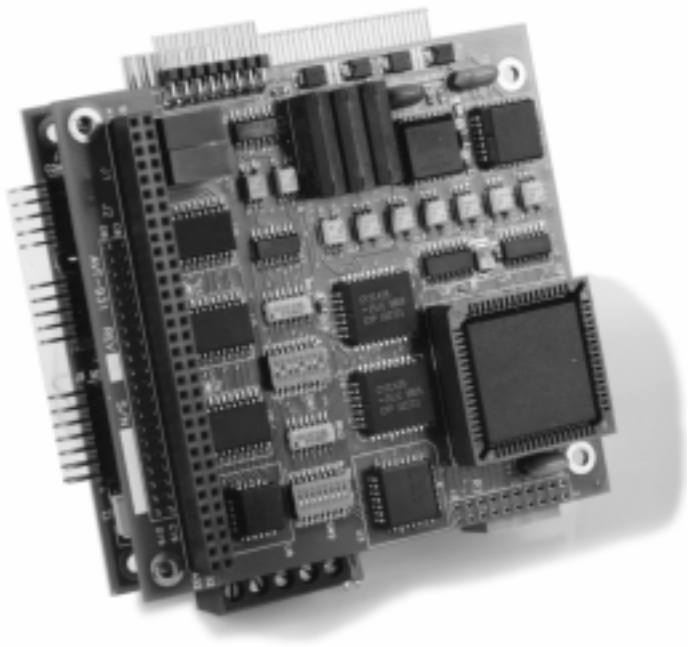


# AVT-932

## J1850 to Ethernet Interface



### J1850 Vehicle Networks

SAE standard J1850 specifies two versions of a multiplex network for vehicle applications. These networks support computer communications between the various electronic modules now found in production cars and light trucks. With the advent of these networks, engineers, technicians, and others need to be able to test, monitor, and communicate with a J1850 network.

Complicating this issue is the fact that a J1850 network may be implemented in either of two incompatible versions: Variable Pulse Width (VPW) or Pulse Width Modulation (PWM).

### The AVT Solution

The AVT-932 J1850 to Ethernet Interface is a PC/104 form factor board set. The board set consists of the AVT-931 Dual J1850 Interface and a commercial single board computer with an Ethernet interface.

The user's application, running on a PC, communicates with a vehicle's J1850 network through the AVT-932 to monitor network traffic, log network activity, analyze communications, simulate a network node, and perform any number of other network or node functions.

### AVT-932 Hardware

The AVT-932 board set provides an electrically isolated interface between the Ethernet network (to the host computer) and the J1850 network (vehicle under test).

The AVT-932 J1850 to Ethernet Interface consists of two PC/104 boards.

The bottom board is a single board computer running dedicated software implementing a server type function. It provides the Ethernet interface and uses the AVT-931 as a hardware peripheral.

The top board is the AVT-931 Dual J1850 Interface.

SAE standard J1850 specifies a Variable Pulse Width (VPW) version with a bit rate of 10.4 kbits/sec. The standard also specifies a Pulse Width Modulation (PWM) version with a bit rate of 41.6 kbits/sec. Though these two protocols are standards, they are not compatible. (Please refer to AVT-931 product information for more technical details about operations and capabilities.)

Available separately is a cable set that allows the AVT-932 to be connected directly to the vehicle under test through the OBD-II connector (J1962) now found in nearly all vehicles sold in the U.S.

All AVT equipment is warranted for one year from date of purchase. Free firmware upgrades are available for one year from date of purchase. Prompt technical support (telephone or e-mail) is always available.

### Specifications

Size: ..... 4.0 x 4.2 x 1.3 inches

Weight: ..... 7 ounces

Voltage: ..... +5 VDC and +12 VDC (from external source)

Power: ..... 2.5 watts (nominal)

Host interface: ..... 10Base-T Ethernet

Connectors: ..... 8-bit stackthrough (931 only)  
8-bit end (single board computer)  
16 pin header to the vehicle OBD-II connector

Microcontroller: ..... HCL1KA2, 4 MHz (Motorola)

Microprocessor: ..... 80C188 at 12 MHz

### Information

Refer to our Web Site for the most up-to-date information including technical manuals, application notes, unit Commands and Responses, hardware and firmware revision status, and more.

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**AVT-932 J1850 to Ethernet Interface****Ordering Information**

The AVT-932 board set, 15-conductor ribbon cable, sample network software, and documentation.

**Order # 932-002.**

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**Accessories****Ordering Information**

OBD-II cable.

**Order # 101-002**

Ribbon cable, 15 conductor.

**Order # 101-003**

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**Engineering Support Services**

We provide engineering support services and custom engineering. These services are also available at your site (travel and related expenses are billed at actual costs).

**Ordering Information**

Engineering Support

**Order # 101-007**