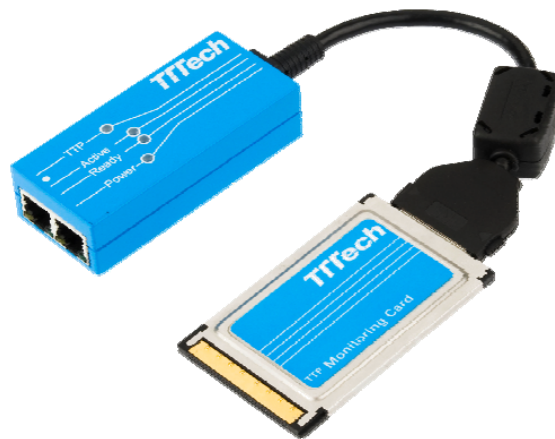


# TTP Monitoring Card

*The Compact TTP Interface Solution*



TTP Monitoring Card provides a compact interface between the PC or laptop and the TTP<sup>®</sup> bus. Based on austriamicrosystems AS8202NF TTP controller, it provides powerful facilities for monitoring and downloading in a TTP network. The synchronous and asynchronous interfaces in the controller card are connected to the TTP network through a bus interface module, which is built into a rugged housing.

## TTP Interface Solution

TTP Monitoring Card plugs into a PCMCIA slot and allows a high-speed 32-Bit CardBus connection to the PC or laptop, where TTP Load, the download tool, and TTP View, the real-time monitoring tool, are installed. Both TTP Load and TTP View communicate with the embedded software of the TTP Monitoring Card via the standard TCP/IP internet protocol.

## Bus Interface Module

The bus interface is implemented as a separate module, and has rugged full-aluminum housing. Bus interface modules are available in two variants in order to allow connecting the TTP Monitoring Card to different TTP physical layers:

- For 25 Mbit/s – using the IEEE 802.3 100BASE-TX physical layer (MII)
- For up to 5 Mbit/s – with MFM/Manchester coding using the RS 485 physical layer.

## KEY FEATURES/BENEFITS

- Monitoring of TTP traffic
- Downloading of the TTP communication configuration data
- Downloading of the TTP applications to the whole network
- PCMCIA Interface
- Windows XP driver

## Firmware Based on Real-time Linux

The TTP Monitoring Card uses an embedded real-time Linux variant and can therefore be specifically adapted for customer applications. A 32-bit PowerPC architecture based on the Freescale MPC855T PowerQUICC™ integrated communications processor delivers the processing capacity required for real-time monitoring and fast download.

## TTP Load – The TTP Download Tool

TTP Load provides comprehensive facilities for download of configuration and application data from the computer to TTP nodes. The complete runtime software, including application and operating system, can be automatically downloaded into the cluster in one simple step via a user-friendly graphical interface.

### **TTPView - The Real-Time Monitoring Tool**

TTPView is a comprehensive PC software tool for high-speed bus monitoring. A broad range of flexible and configurable visualization instruments enables the user to build specific views of the monitored cluster. An easy-to-use graphical user interface allows on-line tracing, data logging, and playing back of recorded TTP traffic on the PC. Real-time triggers, export of recorded data, and a powerful scripting language to automate tasks and process message data make TTPView the first choice for TTP monitoring.

### **Microprocessor Control Unit (MCU)**

- Freescale MPC855T PowerQUICC™ integrated communications processor running at 80 MHz, 32-bit PowerPC® core
- 16 MB SDRAM memory (4 M x 32 bit)
- 8 MB Flash memory (2 M x 32 bit)

### **Interfaces**

- TTP interface based on austriamicrosystems AS8202NF TTP controller fully available on TTP Monitoring Card
- Readily available bus interface modules
- MII (synchronous 25 Mbit/s, allows connection to systems with star architecture) MFM (asynchronous RS485 compatible physical layer for data rates up to 5 Mbit/s)/ Manchester (transformer coupled asynchronous physical layer for data rates up to 5 Mbit/s)
- Communication and application status LEDs on bus interface module

### **Related Products**

- TTP Load is a software tool that provides the capability to download software applications, configuration and other data to a TTP network, using the TTP Monitoring Card.
- TTPView is a tool for monitoring and analysis of messages and frames sent among modules in a TTP network.

### **Specifications**

- PCMCIA: C-Card Type II, 32 Bit CardBus Interface, 3.3 V only
- Dimensions of controller card: 86 x 54 x 5 (in mm)
- Dimensions of bus interface module: 90 x 40 x 22 (in mm)
- Operating temperature: 0 °C to +70 °C
- Storage temperature: -40 °C to +85 °C
- Housing of controller card: stainless steel
- Housing of bus interface module: aluminum
- Power supply of controller card: host computer
- Power supply of bus interface module: controller card
- Power requirements: approx 2.8 Watt
- The TTP Monitoring Card complies with the standards CE, FCC and UL

### **System Requirements**

- Standard PC with Windows XP; 1 GHz or above; 512 MB RAM or above
- PC interface with PCMCIA form factor

### **Order Number**

- H02.05.2: Monitoring Card with MFM/Manchester adapter
- H02.06.2: Monitoring Card with MII adapter

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