



## CommView® Helps Dallas Semiconductor/MAXIM in Hardware Tests

### Case Study

#### Hardware Testing Challenge

Dallas Semiconductor/MAXIM manufactures a broad range of hardware products including data converters, interface circuits, microprocessor supervisors, operational amplifiers, power supplies, multiplexers, switches, RF wireless circuits, fiber optic transceivers, sensors, etc.

The development and testing process involves the use of an advanced network analyzer for the monitoring and generation of Ethernet packets. Dallas had to find a reliable, software-based solution that they could use for these purposes in-house and recommend to those customers who integrate Dallas' hardware in their telecommunication products.

#### CommView Meets the Need

While Dallas had tools for performing packet analysis tasks, the existing solution was not ideal. Expensive, hardware-based network analyzers could not be recommended to a broad range of customers due to the cost involved. Very few software-based analyzers could send frames, as most of them were focused on monitoring only. Additionally, many software-based analyzers were also expensive.

After testing CommView, Steve Scully, Systems Development Engineer at Dallas, decided to use this product in testing Ethernet Extension products. The factors that influenced his decision were CommView's ability to "inject" arbitrary packets into the wire and monitor the response received from the hardware. The Packet Generator tool in CommView allows manual crafting of Ethernet packets. Every parameter of the packet can be easily adjusted. Steve Scully explains his choice: "Ordinary Ethernet traffic was insufficient for test purposes, as we needed to specify many of the packet parameters, such as the MAC address. Also, ordinary Ethernet traffic (like ping) was inadvisable, as this traffic invites the operating system's contribution. For example, the ping command will not send its packet if the ARP cache is out of date. Here, CommView works nicely – its traffic generation is very straightforward and free of confounding elements (like the OS TCP/IP stack)."

Easy packet generation was not the only factor that made Dallas select CommView. CommView's clear and precise charting features were also vital for successful testing. According to Steve Scully, "Our system converts Ethernet to lower bandwidth TDM streams such as T1/E1 or T3/E3. At some point, our system will begin sending pause frames to regulate the traffic. Here, CommView's traffic rate charts can be seen to agree with the maximum line rate of the TDM stream."

The documentation that comes with the Dallas' Ethernet transport-over-serial link devices provides customers with a series of instructions and tests that use CommView.

## **About CommView**

CommView is a powerful network monitor and analyzer for Ethernet networks. Loaded with many user-friendly features, CommView combines performance and flexibility with an ease of use unmatched in the industry.

## **About TamoSoft**

TamoSoft develops cutting-edge security and network monitoring software for the Internet and Local Area Networks, providing clients with the ability and confidence to meet the challenges of tomorrow's technology. Keeping pace with industry trends, TamoSoft offers professional tools that support the latest standards, protocols, software, and hardware in both wired and wireless networks.