

NetSeminar Q&A for Debugging IP Router Subsystems Logic Analysis Tools for POS, Gigabit Ethernet and ATM

The following questions pertain toward using the Agilent 16700 Series Logic Analyzer and post-processing software.

Q: Can you do packet triggering on Gigabit Ethernet buses?

A: For a 10-bit interface in Gigabit Ethernet, we can trigger on a start of a packet with the N4212A. If you are using the GMII bus in Gigabit Ethernet, we can do the full complete packet triggering with the B4640B, which allows you to trigger on fields, specific values in fields and multiple layers of protocol.

Q: How much are the datacomm software toolsets?

A: For the B4640B, the U.S. list price is \$3,000. For the N4212A, N4214A, and N4206A, the U.S. list price is \$4,900. Prices will vary worldwide, so please consult your local Agilent sales office for local pricing.

Q: Do you support XGMII for 10 Gigabit Ethernet?

A: Not at present. We are certainly looking into it and would appreciate it if we could share some example data with a customer. If anybody is interested in partnering with us, they can get in touch with Scott Ferguson via email at scott_ferguson@agilent.com.

Q: Do you support SPI-5 or POS-PHY 5?

A: We're looking at these buses too. Again, we're looking for a customer that is interested in working with us to co-develop a solution. All of the packet debugging tools have come from a partnership with a customer where they take the software, beta test it, send some data back and annotate where certain things are happening and helping debug the software. We're always on the lookout for customers willing to work with us.

Q: Does the 8B/10B decoding software support both running disparate and non-running disparity modes?

A: This is something we have not considered. I haven't seen non-running disparity. We do a disparity analysis and can flag whether the running disparity was correct or not. As long as the 10-bit code is a valid code we will decode it. If non-running disparity means we don't care whether or not the disparity is flipping, we should be able to decode data that is like that. You just probably wouldn't want to look at the disparity analysis piece of the output.

Q: What are the plans for testing the XAUI interface?

A: We don't have anything definite so far. If we can find a customer who is really excited about it, we have got some probing systems that work with Infiniband interfaces and Infiniband is also a 2.5 Gigabit 10-bit encoded serial lines, there may be something we could do. We need to work with customers to develop a product.

Q: Do you have any support for Frame Relay buses?

A: Not really. We probably could do them but it seems that most product development energy is going into packet over SONET and Gigabit Ethernet areas. That is where we are putting most of our effort, but whenever there is customer demand, we aim to please. If someone is interested they should feel free to contact us and we can talk about it.

Q: What's the status of the CSIX capture analysis card?

A: We don't have a specific analysis card for CSIX, but we do have cards that are capable of capturing those buses. The piece that's missing right now is the protocol decode and that's just waiting for some customer data to come in and for us to spend a little time on it. CSIX at 10 Gb/s is 64 bits, 200 megahertz with HSTL signals, that we can capture that with the 1675X family. If you have a CSIX bus that you are ready to plug a logic analyzer into, we would be glad to work with them to create the rest of the solution. Contact Scott Ferguson via email at scott_ferguson@agilent.com