

To: T10 Technical Committee  
 From: Rob Elliott, HP (elliott@hp.com)  
 Date: 24 May 2005  
 Subject: 05-196r2 SAS-2 Physical WG agenda May 25-26

### **Hotel**

#### **Hilton Garden Inn**

7979 Willow Chase Boulevard, Houston, Texas, United States 77070  
 Tel: 1-832-912-1000 Fax: 1-832-912-1025  
 Tel: 1-877-STAYHGI (1-877-782-9444)  
<http://www.houstonnorthwest.gardeninn.com>

Group Name: HP T10 Ad Hoc 6G

Room: \$99.00

Reservation Cut off Date: May 18, 2005

Extra Person Charge: \$10.00

All reservations must be guaranteed to a credit card or to company (if approved for billing). Those reservations not canceled by 6:00PM (24 hours prior to arrival) will be billed accordingly.

### **Driving Directions**

Exit Bush IAH Airport on JFK Blvd (3.4 miles)

Turn right on Beltway 8/Sam Houston Parkway (westbound, toward I-45)(4.5 miles)

Sam Houston Parkway becomes Sam Houston Tollway (\$1.25 for toll, or use the feeder/frontage road) (5.7 miles)

Take Highway 249 North

Exit F.M. 1960

Proceed north on Highway 249 feeder/frontage road

Hilton Garden Inn is on the right (East) behind Sam's Club across the street from Methodist Hospital

### **References**

<http://www.ieee802.org/3> - **Ethernet**

<http://www.ieee802.org/3/ab> - Gigabit Ethernet over Cat-5 (10GBASE-T)

<http://www.ieee802.org/3/ae> - 10 Gigabit Ethernet (10GBASE-SR, -SW, -LR, -LW, -ER, -EW, -LX4)

<http://www.ieee802.org/3/ak> - Gigabit Ethernet over InfiniBand cables (10GBASE-CX4)

<http://www.ieee802.org/3/an> - 10 Gigabit Ethernet over Cat-6 (10GBASE-T)

<http://www.ieee802.org/3/ap> - Backplane Ethernet

<http://www.ieee802.org/3/aq> - 10 Gigabit Ethernet over long reach multimode fiber (10GBASE-LRM)

<http://www.oiforum.com/public/link-layer.html> - **Optical Interconnect Forum (OIF) Common Electrical I/O (CEI) Physical and Link Layer (PLL) Working Group**. See OIF-CEI-6G-LR and OIF-CEI-11G-LR.

<http://www.t11.org> - INCITS T11 **Fibre Channel**. See FC-PI-2, FC-PI-3, FC-PI-4, and FC-MJSQ.

<http://www.rapidio.org> - **Rapid I/O** Trade Association

<http://www.stateye.org> - **StatEye**

<http://www.sata-io.org> - **Serial ATA** International Organization

<http://www.eecg.toronto.edu/~johns/nobots/courses/ece1392/equalization2.pdf> - Prof. David Johns (Univ Toronto) Slides on Equalization, including DFE

[http://bwrc.eecs.berkeley.edu/Classes/EE290C\\_S04/](http://bwrc.eecs.berkeley.edu/Classes/EE290C_S04/) - Borivoje Nikolic Jared Zerbe course on high-speed electrical interfaces, including DFE background

<http://www.edn.com/article/CA468426.html> and <http://www.sigcon.com/Pubs/edn/ThePerfectProbe.htm> - Howard Johnson article on digital sampling scope logic in a receiver

[http://www.xilinx.com/publications/xcellonline/xcell\\_53/xcell\\_equalizer53.htm](http://www.xilinx.com/publications/xcellonline/xcell_53/xcell_equalizer53.htm) - Howard Johnson article on Xilinx transceivers with DFE

### **Map**

The map is not at all to scale, but shows the restaurants and major stores near the hotel.

Table 1 — Agenda for SAS physical WG 25-26 May 2005

Time	Topic (times are just estimates)
<b>Wednesday 25 May 2005</b>	
<b>Background on other high-speed serial technologies</b>	
9:00 am	05-___r0 Survey of high-speed serial technologies [Yuriy Greshishev, PMC-Sierra]
10:00 am	05-___r0 IEEE 802.3ab (Gigabit Ethernet: 1000BASE-T) and IEEE 802.3an (10 Gigabit Ethernet: 10GBASE-T) [Nick Van Bavel, Vitesse]
10:30 am	05-202r0 IEEE 802.3aq Overview (10 Gigabit Ethernet on FDDI-grade MMF cable: 10GBASE-LRM) [Kevin Witt, Vitesse]
11:00 am	05-___r0 IEEE 802.3ap (Backplane Ethernet) 1 Gbps/10 Gbps [Ali Ghiasi, Broadcom]
11:45 am	Lunch
12:45 pm	05-208r0 INCITS T11 Fibre Channel Signal Specification Architecture - application to higher speeds [Bill Ham, HP]
1:45 pm	05-200r0 Overview of OIF CEI [Mike Lerer, Rapid Prototypes] 05-210r0 OIF-CEI-6G overview [Yuriy Greshishev, PMC-Sierra]
3:45 pm	05-199r0 Next Gen Serial Rapid I/O (SRIO) PHY Preliminary 5.0/6.25 Gbps Electrical Spec Status [Mike Lerer, Rapid Prototypes]
<b>Tutorials</b>	
4:30 pm	05-198r0 Channel Compliance Testing Utilizing Novel Statistical Eye Methodology (StatEye) [Harvey Newman, Infineon]
6:00 pm	Adjourn
<b>Thursday 26 May 2005</b>	
<b>6 Gbps test chip results</b>	
8:00 am	05-204r0 SAS-2 6Gbps Test Results [Kevin Witt, Vitesse]
8:30 am	05-211r0 PMC-Sierra QuadPHY 6G device [Yuriy Greshishev, PMC-Sierra]
9:15 am	05-___r0 6G Data over Legacy Backplanes [Mike Jenkins, LSI Logic]
10:00 am	05-___r0 OIF backplane at 6 Gbps and 11 Gbps [Galen Fromm, Molex]
<b>Proposals</b>	
10:45 am	05-___r0 SAS 6 Gbps proposal based on OIF CEI 6G-LR [Mike Jenkins, LSI Logic]
11:45 am	05-204r0 Towards a SAS-2 Physical Layer Specification [Kevin Witt, Vitesse]
12:00 pm	Lunch
<b>Considerations</b>	
1:00 pm	05-___r0 Mini SAS 4i/4x connector performance at 6 Gbps [Galen Fromm, Molex]
2:00 pm	05-___r0 Problems with PAM4, linear equalization, PR2, PR4, etc. [Mike Jenkins, LSI Logic]
3:00 pm	05-209r0 SAS OOB challenges: scale or not to scale [Yuriy Greshishev, PMC-Sierra]
3:30 pm	05-212r0 SAS-2 System design considerations [Barry Olawsky, HP]
5:00 pm	Adjourn

