

Attendance:

Mr. Bernhard Laschinsky	Agere Systems
Mr. Jesse Jaramillo	Amphenol
Mr. Greg McSorley	Amphenol
Mr. Barry Olawsky	Hewlett Packard Co.
Mr. Dan Colegrove	HGST
Mr. George O. Penokie	IBM Corp.
Mr. Harvey Newman	Infineon Technologies
Dr. Mark Seidel	Intel Corp.
Mr. Michael Jenkins	LSI Logic Corp.
Mr. Gabriel Romero	LSI Logic Corp.
Mr. John Lohmeyer	LSI Logic Corp.
Mr. Galen Fromm	Molex Inc.
Mr. Hock Seow	NEC Electronics America, Inc.
Mr. Tim Symons	PMC-Sierra
Mr. Rick Hernandez	PMC-Sierra
Mr. Alvin Cox	Seagate Technology
Mr. Benoit Mercier	STMicroelectronics
Mr. Stephen Finch	STMicroelectronics
Mr. Doug Loree	Toshiba
Mr. Adrian Robinson	Vitesse Semiconductor
Mr. Kevin Witt	Vitesse Semiconductor
Mr. Mahbubul Bari	Vitesse Semiconductor
Mr. Larry McMillan	WDC

23 in attendance

Agenda:

1. 07-045r0, Type 1 Vs. 2 [Newman]
<http://www.t10.org/ftp/t10/document.07/07-045r0.pdf>

The discussion indicated that a type 1 filter as currently called out in SAS is not sufficient for measuring jitter in an SSC signal. A type 2 filter appears to be required and may need to be defined. The corner frequency of $f_{\text{baud}}/1667$ may not be correct. We need to see data to determine if the 1667 needs to be a smaller number and what actual filter requirements are necessary.

De-emphasis will increase the D_j measurement. Use of a clock pattern can help the measurement. It is possible that maybe random jitter measurement should be the focus rather than be too concerned about D_j .

Kevin Witt to investigate measurement technique.

How do we specify the receiver jitter tolerance with the eye closure? Testing may require that an equalization function be applied to the test signal to verify it contains the proper amount of jitter to be applied at the compliance point.

2. New items.

SSC during OOB. Steve Finch to propose something on this topic. As we move ahead, SSC is currently not allowed to be on during OOB, SNW-1 and SNW-2. Steve is not so concerned about the SNW-x as the OOB when we get to a point in the future where SNW-1 and SNW-2 will not be active (Possibly a G5 device.) I also voiced the concern that I wouldn't mind having SSC enabled

during SNW-1 and SNW-2 until after the SNW-3 window is completed since a dual-port drive typically has a single transmit clock for both ports and would have to shut off SSC to perform OOB after one port has negotiated and the second one was reset or received an OOB signal. We further discussed the fact that spec currently allows a drive to shut off SSC and not violate specification. This topic was discussed during the original OOB work. One concern is that a graceful turn off of SSC is not required by the specification. This could actually be a by-product of a maximum SSC rate change limit (which Al Kramer has desired to specify for some time).

10/07-058r0 SAS-2 OOB and SSC [Finch]

<http://ftp.t10.org/t10/document.07/07-058r0.pdf>

Next conference call February 1, 2007

Weekly teleconferences scheduled for Thursdays at 10 am CST:

PARTICIPANT INFORMATION:

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Webex information:

<https://seagate.webex.com/seagate>

Topic: SAS-2 PHY WG

Date: Thursday

Time: 10:00 am, Central Standard Time

Meeting number: 826 515 680

Meeting password: 6gbpsSAS