IEEE 1149.4 Mixed-Signal Test Bus Working Group
Meeting Minutes

for

April 8th, 2008
8:00 – 9:00 AM PDT

Meeting Agenda:

Time	Topic	Responsibility
8:00 – 9:00 AM	1. Review meeting minutes for March 28th, 2008	All
	2. Review standard draft	All
	3. Update on ABSDL parser development	All
	4. Other issues.	All
9:00 AM	Meeting adjourned	Bambang

Meeting Attendees:

Name	Company
Adam Ley	Asset-Intertech
Ken Parker	Agilent Technologies
Heiko Ehrenberg	Goepel Electronics LLC
Steve Sunter	Logicvision
Bambang Suparjo	Mentor Graphics

1. Review meeting minutes for March 28th, 2008.

a. In minute 3a(i), R_{S1} and R_{S2} are not only related to protection circuitry. Refine the 2nd bullet to "R_{S1}, R_{S2} and R_{PROT} are typically related to protection circuitry".

b. The meeting minutes for March 28th, 2008 have been approved with the above correction, suggested by Heiko and seconded by Adam Ley.

2. Review Standard Draft

a. Issue on Rcom

   i. The text and Figure 39 in clause 9.3.2 have been reviewed.

   The output driver and the input receiver in Figure 39 are associated to the core. There could be an implementation where switches for V_H, V_L and V_G are located in the output driver. By considering that possible implementation, it is more appropriate to connect the driver close to R_3.

So, there is no change in the existing diagram, but the text needs to be refined. Refer to the appendix for the detail.

  ii. Figure 53 has been reviewed.

- With the existing diagram, R_3 and R_6 will not affect the external component measurement. However, the values should not be too large so that they will not limit the current flow driven from AB1.

- Further review on 10.3.2 is needed.

 b. The fixed items below have been validated:

  i. Item #6 – Clause 9.5.2.7 on incorrect Figure 48 and Figure 49.
  ii. Item #8 – Clause 9.2 on Rsw1.

3. **Update on ABSDL parser development**

There is no update on the parser.

4. **Other issues**

The next meeting will be on April 16th, 2008 at 8 AM PDT.

5. The meeting adjourned at 9:00 AM PDT

Appendix – Minute 2a(i) .

1. Text above the diagram

Original:
This may introduce some resistances into the AB1 and AB2 paths, as shown in Figure 39. Often, when designing an integrated circuit, a relatively large resistance (R2) is placed between a bonding pad and its associated input buffer; the input buffer's capacitance is very small, and even 1 kΩ typically adds less than 100 ps delay. For an output driver, only much smaller resistance (R1) is tolerable between the pad and the buffer to minimize the effect on the output impedance or delay (when driving large off-chip capacitances). Then, there may be impedance common to both the AB1 and AB2 paths to the device pin, labeled Rcom in Figure 39.

Edit to:
This may introduce some resistances into the AB1 and AB2 paths, as shown in Figure 39. There may be impedance common to both the AB1 and AB2 paths to the device pin, labeled Rcom in Figure 39.

2. Text below the diagram

Original:
By appropriately connecting the ABM switches to the analog function pin's bonding pad, the value of the series ESD-protection resistances R1 and R2 can be cancelled:

Edit to:
By appropriately connecting the ABM switches to the analog function pin's bonding pad, the value of the series resistances R1 and R2 (that may be from ESD-protection) can be cancelled: