

IEEE 1149.4 Mixed-Signal Test Bus Working Group Meeting Minutes

for
June 26th, 2007

7:30 AM – 8:55 AM PDT

Meeting Agenda:

Time	Topic	Responsibility
7:30-8:55 AM	1. Review the meeting minutes for May 22 nd , 2007 2. Update/Review on ABSDL for: <ol style="list-style-type: none"> a. Straw Dog example. b. STA400 chip. 3. Update/Review on action items for ABSDL documentation draft. <ol style="list-style-type: none"> a. Review rules 10.4.4.5.2d and 10.4.4.5.2f and their relationship with 10.4.4.5.2c. b. Review the last sentence of the introduction for section 10.4 - BSDL Documentation. c. Boundary-scan circuitry diagram for section 10.4.5. d. Attribute BOUNDARY_REGISTER for the example in Figure 57. e. Statement on Errata Bulletin - page 8 line 29. 4. Identify a date for the special meeting to review the draft. 5. Other issues.	 Adam Ley Bambang All Adam Ley Bambang Bambang All All
8:55 AM	Meeting adjourned	Bambang

Meeting Attendees:

Name	Company
Adam Ley	Asset-Intertech
Adam Cron	Synopsys
Ken Parker	Agilent Technologies
Heiko Ehrenberg	Goepel Electronics LLC
Zafar Quadri	Solectron Corp.
Bambang Suparjo	Mentor Graphics

1. Review the Meeting Minutes for May 22nd, 2007

The meeting minutes for May 22nd, 2007 have been approved, suggested by Zafar and seconded by Adam Cron.

2. Update/Review on ABSDL for:

- a. Straw Dog example.

The status is still pending.

- b. STA400 chip.

The status is still pending.

3. Update/Review on action items for ABSDL documentation draft.

- a. Review rules 10.4.4.5.2d and 10.4.4.5.2f and their relationship with 10.4.4.5.2c.

Rule 10.4.4.5.2c will not be removed but rules 10.4.4.5.2d and 10.4.4.5.2f need to be revised. The updated 10.4.4.5.2d and 10.4.4.5.2f rules are shown below:

- i. 10.4.4.5.2d.

If an <MST twin group type> equals **DIFFERENTIAL_DIGITAL**, the value of each member of all <MST differential capture cell list> elements within all corresponding <MST twin group entry> shall not also be a value contained in the <MST ABM statement>.

- iii. 10.4.4.5.2f.

If an <MST twin group type> equals **DIFFERENTIAL_ANALOG**, the value of each member of all <MST differential capture cell list> elements within all corresponding <MST twin group entry> shall be a value that is also contained in the <MST ABM statement>.

- b. Review the last sentence of the introduction for section 10.4 - BSDL Documentation.

The status is still pending.

- c. Boundary-scan circuitry diagram for section 10.4.5.

The status is still pending.

- d. Attribute BOUNDARY_REGISTER for the example in Figure 57.

The attribute BOUNDARY_REGISTER proposed by Bambang is shown below:

```
attribute PORT_GROUPING of MSTDEV : entity is
    "Differential_Voltage ((D2, D2N))";

attribute BOUNDARY_REGISTER of MSTDEV : entity is
    "25 (BC_4, D2, observe_only, x), " &
    "26 (BC_4, D2N, observe_only, x), " &
    "27 (BC_1, D2, input, x), " & -- captures D2 value
    "28 (BC_1, D2, input, x)" ; -- captures D2 value

attribute MST_PORT_GROUPING of MSTDEV : entity is
    "Differential_Digital ((D2, D2N) : 27, 28))" ;
    -- cells 27 and 28 capture D2 value
```

The two BC_1 cells at the output of differential digital in Figure 57 are based on a signal that to be distributed to multiple fanouts as shown in Figure 11.10 in the IEEE Std. 1149.1 documentation. According to Adam Ley, such implementation may have difficulty to be described in BSDL. Ken will check this multiple fanouts case using BSDL parser.

- e. Statement on Errata Bulletin - page 8 line 29.

The Errata Bulletin mentioned in Note 3 is not being published. Adam Ley will review the note.

4. Identify a date for the special meeting to review the draft

The special meeting (using teleconference) will be held on August 22nd and 23rd.

5. Other Issues

- a. The next meeting will be on July 23rd, 2007 at 7:30 AM PDT.
- b. The tentative date for the group meeting at ITC is October 23rd, 4-6 PM.

- 6. The meeting adjourned at 8:55 AM PDT.