

Accredited Standards Committee*
INCITS, Information Technology



Doc. No.: T11/04-047v0
Date: December 08, 2003
Project: FC0 FC-MJSQ ad hoc
Reply to: Dennis Petrich
Allen Kramer
Bill Ham

To: Membership of T11.2

From: Dennis Petrich, chair FC-MJSQ working group
Allen Kramer, vice chair FC-MJSQ working group
Bill Ham, secy FC-MJSQ working group

Subject: Approved minutes of T11.2 FC0 FC-MJSQ working group on
October 06, 2003

Agenda

1. Opening remarks and introductions
2. Attendance and membership
3. Approve agenda
4. Document distribution
5. Review minutes of previous meeting
6. Review old action items
7. Call for patents
8. Liaison reports
 - 8.1 T10 (SAS), Ham
9. New discussions/presentations
10. Old discussions / presentations
11. Editing of MJSQ sections
 - 11.1 General status, Ham
12. Old Business
 - 12.1 Strategy for completing MJSQ
 - 12.2 Additional topics for future consideration (MJSQ-2)
13. New Business
 - 13.1 Comments resolution on the T11 letter ballot
 - 13.2 MJSQ-2 project proposal
14. Review action items
 - 14.1 Old action items from past meetings
 - 14.2 New action items from this meeting
15. Next meetings
16. Adjourn

Results of Meeting

1. Opening remarks and introductions

Al Kramer, vice-chair, led the meeting. Al opened the meeting at 9:00 AM and thanked the host, Mike Fitzpatrick of Fujitsu, for hosting the meeting. Bill Ham, secy, took these minutes.

2. Attendance and membership

Attendance at plenary meetings does count toward minimum attendance requirements for T11.2 membership. Working group meetings are open to any person or organization directly and materially affected by T11.2's scope of work but do not count toward minimum attendance for T11.2 membership.

The following people attended the meeting:

Name	Company	Tel
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The attendance is not available for this meeting due to the attendance sheet being misplaced.

3. Approve agenda

Ham moved that the agenda as shown above be approved. The motion passed without objection.

4. Document distribution

This section describes the availability of draft documents that are intended to be published as a result of work by the MJSQ committee.

Document distribution is now being done over the web. Documents relating to MJSQ work can be found on the T11 web site (www.t11.org) by going to "documents" and searching on the key words "jitter" and/or "MJSQ".

The only active document in this working group is the MJSQ technical report presently at rev 12.0.

A summary of the presently active policy to document distribution is included for reference.

All presentations are posted electronically at the approved ftp within two weeks after the meeting. Format must be an approved electronic file format. While we are still paper based, a paper copy must also be given to the secretary at the working group meeting.

(Presentations are defined as material shown publicly in the Plenary or authorized working group meetings.)

Submission of Documents for T11 Document Numbers:

A online system is now available to provide document numbers and accept the submission of documents. The system is accessed via the t11 web page at <http://www.t11.org>. Follow the "docs" link in the left-hand frame, or at the bottom, and fill in a form giving details about the document. In order to complete the form, it will be necessary to enter a password. The password is given out at T11 meetings, or can be obtained from the T11 Chair. Instructions will then be given about uploading the file to the ftp site at <ftp.t11.org>.

We now use all electronic document distribution.

A T11.2 reflector is operational over the T11 site.

The committee forms its agenda by the following:

1. A call (reminder) for presentations by the chair 3 weeks in advance
2. Those wanting to be on the agenda submit request including:
title
presenter
time required
abstract
3. Chair creates agenda and posts 2 weeks in advance of the meeting
4. At the meeting it is the chair's discretion to allow additional presentations

5. Review minutes of previous meeting

The minutes of the last MJSQ working group were reviewed with some minor editorial changes. Motion Ham/McSorley that the minutes as modified be accepted. Motion passed without objection. The amended minutes will be posted to the ftp site.

Action item: Ham will get the document number and do the posting.

6. Review old action items

The old action items were reviewed and the status was updated.

7. Call for patents

Below is the formal call for patents which was issued by Dennis at the meeting:

PATENTS

- *A call is hereby issued for the existence of patents required to implement the results of any & all T11 projects to be disclosed*

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*Operating under the procedures of The American National Standards Institute.
INCITS Secretariat, Information Technology Industry Council (ITI)
1250 Eye Street NW, Suite 200, Washington, DC 20005-3922
Email: incits@itic.org Telephone: 202-737-8888 FAX: 202-638-4922

It is necessary for the holders to agree to license those patents in conformance with the ANSI patent policy if the project on which they read is to proceed

T11.2 is not involved in this process @ all!

- ❑ *The contact @ ANSI is the General Counsel, Ms. Amy Marasco -(212)642-4954 or amarasco@ansi.org*
- ❑ *Patent policy description @ www.ansi.org/proctbl.html, section 1.2.11*
- ❑ *IBM has declared that it has patents which apply to the practice of FC & SBCON. The contact is:
Tom Slattery, Program Director, IBM Corporation, North Castle Drive, Armonk, New York 10504
Tel: (914) 765-4351, Fax: (914) 765-4390, Email: tmslatt@us.ibm.com
Thanks to Stuart Berman of Vixel for tracking down this new contact*

There was some discussion about whether this call for patents needs to be made in ad hoc groups. It was noted that formal statements of specific patent policy compliance issues from individual companies are to made at the T11 (main) plenary, not working groups, or sub plenary groups (i.e. T11.2).

Discussions on cross licensing pricing are not appropriate at any level. See T11 web site for more details.

Technical discussions are acceptable.

There was no response to this call for patents.

8. Liaison reports

8.1 T10 (SAS), Ham

Bill noted that the activity in SAS related to physical issues revolved around a proposal to change the external connector pinout so that the transmitter/receiver cross over occurs in the external cable assembly. This change was requested by the SATA group to move this cross over to the cable assembly so that the cross over would not have to be done in the printed circuit board. Doing the cross over in the printed circuit board increases the cost of the circuit board (maybe).

The SAS spec has completed its third public review and has been stable in the subject area for a number of months. As a result, there was no action taken at the SAS meeting to change the external pin out. SAS is presently compatible with FC 10 gig (FC-PI-2), EN CX-4, and Infiniband. It was reported by Jay Neer that the SATA committee is considering adding an option to its specification that has the crossover in the external cable (SATA presently has no external cable spec) so this option would be incompatible with SAS and would create the need for an additional hardware adapter to make SAS and SATA compatible. This activity has little bearing on MJSQ except in the location of the interoperability points.

8.2 Labeling project in SFF committee, Ham

The SFF project SFF-8082 (Ham editor) that addresses labeling of interconnect assemblies and ports has a major new revision published. This project may affect the way that interoperability points are identified in specific applications

9. New discussions/presentations

10. Old discussions / presentations

11. Editing of MJSQ sections

11.1 General status, Ham

The next version of the MJSQ document will be rev 13 that captures the comments resolutions from the T11 letter ballot. Revisions that incorporate part of the comments resolutions will be numbered 12.n.

Rev 13 will be completed along with the completed comments resolution document so that it may be verified that the comments have indeed been resolved.

This process allows examination of the completed document prior to forwarding to INCITS (which is the last step since technical reports have no public review.)

12. Old Business

12.1 Strategy for completing MJSQ

The present strategy is to complete the T11 letter ballot comments resolutions via aggressivetelecoms. With approximately 500 comments (mostly editorial) this is expected to require a couple of meeting to complete.

12.2 Additional topics for future consideration (MJSQ-2)

[no changes to this list at this meeting]

Phase noise vs. Jitter

ref clock standard and specification

jitter distribution issues

further detail concerning compensation issues

speed agility issues

low population DJ (scrambling, 64/66 etc.)

receiver bandwidth specifications
more implementation examples
receiver tolerance roadmaps
compliance interconnect extensions (active, non-linear)
common mode
parallel-serial issues
cross talk issues
resonance issues
test sample design

Improved compliance testing methods of FC systems
Enhancements to MJSQ to include interactions of:
 signal/noise
 slew rate
 receiver sensitivity
 component bandwidth
 transmission reflections

Additional methodologies as may be proposed

13. New Business

13.1 Comments resolution on the T11 letter ballot

This meeting was entirely consumed with attempting to resolve technical comments against MJSQ rev 12 from the T11 letter ballot. Good progress was made but there is still a LONG way to go.

13.2 MJSQ-2 project proposal

With the heavy load of getting the comments resolved there was no need to proceed with this proposal at this meeting. This topic is deferred to December.

14. Review action items

[Note: the following material describes the practice being used in the MJSQ-2 minutes for presenting and reporting status on the action items.]

This section contains the action items agreed during the meeting. Only action items with identified people who are responsible to do the action are recorded. Once an action item has been created there are two ways to get an action item removed from this list: (1) complete the action item - preferred method - and (2) the action item has become no longer relevant or appropriate because events have changed since the action item was created. It is possible for an action item to be transferred to another person but that will not remove it from the list and the new owner will be listed along with the record that the ownership has changed.

There are two divisions under this item: (1) old action items which were created in earlier meetings and (2) new action items which were created

during this meeting. There is no tracking of the meeting where the action item was originally created (other than by looking back at previous minutes.)

All action items that were completed by the time the action items were reviewed are given the designation "done". The done action items will remain on the list in the draft and approved minutes for the meeting in which the action item was reported to have been completed. This is to ensure that the person responsible for the action item get the credit/blame for the work. Action items that were reported done in one meeting will be removed from the list for the minutes of the next meeting.

14.1 Old action items from past meetings

Status as of this meeting is shown:

Bill Ham to post the minutes to the web site.
Status: done

Dean Vermeersch to investigate methods for accounting for test artifacts using TDW (formerly VTD) approaches.
Status: carried over to MJSQ-2

Ali Ghaisi to post his presentation on 10 Gb/s measurements.
Status: done - 02-626v0

Mark Marlett: to do network analyzer sweeps on instruments, use a third method eg. Spectrum analyzer, and determine if test equipment used a differential input
Status: carried over

Ham to create rev 12 and post 03-317v3
Status: done

Dennis to make the motion for forwarding MJSQ to T11 in the T11.2 plenary
Status: done

14.2 New action items from this meeting

Ham to request 4 telecons to continue work on the T11 letter ballot comments
Status: new

15. Next meetings

The next working group meeting will be requested for Monday December 08, 2003, in Paradise Island, Bahamas, from 9 AM to 5:30 PM.

16. Adjourn

Motion Kramer/Ham to adjourn. Passes unanimously.

The meeting adjourned at 5:30PM.