

Minutes
T11.3 FC-LS-4 ad hoc work group regular meeting
06 February 2019 – 1:30 PM to 5:45 PM CT
Fort Worth, TX, USA

The FC-LS-4 ad hoc work group of the Fibre Channel Protocol (T11.3) Task Group held a regular meeting at Fort Worth, TX, USA on 06 February 2019, hosted by Teledyne LeCroy. Attendance was 13 people from 10 organizations and is tabulated at the end of this document.

Minutes were taken by Jason Rusch (Viavi Solutions) (jason.rusch@viavisolutions.com). Please report any corrections by email to the T11.3 reflector at T11_3@mail.T11.org.

1 Opening Remarks and Introductions

Chairperson Patty Driever (IBM) opened the regular meeting on Wednesday, 06 February 2019 at 1:30 PM CT. She led a round of introductions and thanked our host organization, Teledyne LeCroy.

1.1 Attendance and Membership

The chair explained that attendance is recorded electronically at <http://www.incits.org>, and explained the procedure. Attendance at this meeting does not count toward attendance at the plenaries of T11 and its task groups (i.e., being here will not get you out or keep you out of membership jeopardy). The chair stated that all persons present are considered members of this meeting and may vote on questions, limited to one vote per company present. She advised that although T11 does not limit participation in the activities of its work groups to representatives of T11 member organizations, it requires nonmembers to identify themselves as such. Nonmembers that expect they may participate in the activities of T11 regularly were encouraged to become members.

1.2 Patents

The chair indicated that among the rules and policies under which this working group operates are the ANSI intellectual property policies as specified in slides 1-3 of http://www.incits.org/patent_slides.pdf. She displayed these pages without comment or explanation and directed that questions about the policy should be referred to the questioner's legal counsel or the ANSI General Counsel.

1.3 Antitrust

The chair indicated that among the rules and policies under which this working group operates are the INCITS Antitrust Guidelines. Any member of the meeting is responsible for objecting if she believes discussion in the meeting violates those guidelines. As examples, there should never be discussion of the following topics at any INCITS or INCITS subgroup meeting:

- *Any company's prices or pricing policies;*
- Specific R&D, sales and marketing plans;
- Any company's confidential product, product development or production strategies;
- Whether certain suppliers or customers will be served;
- Prices paid to input sources; or
- Complaints about individual firms or other actions that might tend to hinder a competitor in any market.

If such discussion is not immediately terminated, it is the chairperson's responsibility to terminate the meeting. The INCITS Antitrust Guidelines are available at <http://www.incits.org/standards-information/legal-info>.

2.0 Approval of Agenda

An agenda for the FC-LS-4 ad hoc work group regular meeting 06 February 2019 was posted as T11-2019-00039-v000.

Howard Johnson (Broadcom) moved and Mike Blair (Cisco) seconded to accept T11-2019-00039-v000 as the agenda for this regular meeting. Approved by acclamation.

3.0 Review of Past Business

3.1 Review of Minutes

Minutes for the FC-LS-4 ad hoc work group regular meeting 05 December 2018 have been posted as T11-2018-00337-v001.

Howard Johnson (Broadcom) moved and Mike Blair (Cisco) seconded to accept T11-2018-00337-v001 as the official minutes for the regular meeting on 05 December 2018. Approved by acclamation.

3.2 Review of Old Action Items

Action items carried forward from prior meetings:

1810-02 Editor to incorporate T11-2018-00164-v0002 into FC-LS-4. **(COMPLETE)**

New action items from last meeting:

1812-01 Dave Peterson (Broadcom) to create FC-LS-5 project proposal. **(COMPLETE)**

1812-02 FC-LS-4 editor to post FC-LS-4 revision 4.03 (T11-2018-00259-v001). **(COMPLETE)**

1812-03 FC-LS-4 chair to take the RFC letter ballot recommendation to T11.3. **(COMPLETE)**

4 Old Business

None.

5 New Business

5.1 FC-LS-5: Project Proposal

[T11-2019-00006-v000] Peterson (Broadcom)

Dave reviewed the FC-LS-5 Project Proposal with the group. There were no comments on the proposal. The proposal will remain on the agenda for the April FC-LS-4 meeting, where it is anticipated to be voted on for forwarding to T11.3.

5.2 FC-LS-5: Fabric Notification – Is There Anybody Out There?

[T11-2019-00017-v000] Johnson (Broadcom)

Howard introduced a presentation which utilizes fabric notifications to report traffic congestion and fabric performance throughout the fabric, continuing a discussion that began in FC-SW-7. The notifications would be provided in RSCN fashion, with registration capabilities for specific notifications. It is proposed to expand on the existing Exchange Diagnostic Capabilities ELS, as well as introducing a Register Diagnostic Functions ELS and Fabric Performance Impact Notification ELS.

The group provided feedback on the concept, which Howard will use to expand on the proposal at the next meeting cycle, where he will present additional details on the proposed Extended Link Services and the signaling behavior.

5.3 FC-LS-4: RFC Comment Resolution

Carlson (Marvell)

The FC-LS-4 editor led the RFC comment resolution, beginning with technical comments. Most of the technical comments were addressed, and it is anticipated that comment resolution will complete during the next meeting cycle.

6 Unscheduled Business

None.

7 Project Schedule

Milestone	Expected Date
Last technical input	August 2018
RFC Ballot	December 2018
T11 Letter Ballot	April 2019
Forward to INCITS	June 2019

8 Review of Action Items

Action items carried from prior meetings:

None.

New action items:

None.

9 Meeting Schedule

9.1 Next Plenary Week

Request 3 hours for FC-LS-4 at the T11 plenary week in Boca Raton, FL, April 8-11, 2019.

10 Adjournment

Howard Johnson (Broadcom) moved and Mike Blair (Cisco) seconded to adjourn. Approved by acclamation.

The regular meeting was adjourned at 5:45 PM CT on 06 February 2019.

11 Attendance

Organization	Representative	Member Company
Amphenol Corporation	Chris Lyon	Member
Broadcom Inc	David Baldwin	Member
Broadcom Inc	David Peterson	Member
Broadcom Inc	Steven Wilson	Member
Cisco Systems Inc	Mike Blair	Member
Dell Inc	Alan Rajapa	Member
Fujitsu America Inc	Mark Malcolm	Member
Hewlett Packard Enterprise	Barry Maskas	Member
IBM Corporation	Patty Driever	Group Chair
IBM Corporation	Roger Hathorn	Member
Marvell Semiconductor Inc	Craig Carlson	Member
NetApp Inc	Frederick Knight	Member
Viavi Solutions Inc	Jason Rusch	Secretary