

Minutes
T11.3 FC-LS-4 ad hoc work group regular meeting
04 April 2018 – 9:50AM to 11:25AM EST
Deerfield Beach, FL, USA

The FC-LS-4 ad hoc work group of the Fibre Channel Protocol (T11.3) Task Group held a regular meeting at Deerfield Beach, Florida, USA on 04 April 2018, hosted by Molex. Attendance was 12 people from 8 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, 04 April 2018 at 09:50 AM EST. She led a round of introductions and thanked our host organization, Molex.

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 he 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 04 April 2018 was posted as T11-2018-00119-v000.

Howard Johnson (Broadcom) moved and Mike Blair (Cisco) seconded to accept T11-2018-00119-v000 as modified 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 06 February 2018 have been posted as T11-2018-00043-v000.

Howard Johnson (Broadcom) moved and Mike Blair (Cisco) seconded to accept T11-2018-00043-v000 as the official minutes for the regular meeting on 06 February 2018. Approved by acclamation.

3.2 Review of Old Action Items

Action items carried forward from prior meetings:

1710-02 Editor to incorporate 2017-00095-v004 into FC-LS-4. **(CARRY)**

New action items from last meeting:

1802-01 Dave Peterson to investigate the correct location (standard) to document that priority shall be reflected for all frames of all sequences of exchange. **(CARRY)**

4 Old Business

4.1 How Bad Is It? - (2018-00025-v001), Text - (2018-00096-v000)

Johnson (Broadcom)

Howard presented the text changes to support the Exchange Diagnostic Capabilities (EDC) ELS. The changes include instructions for the editor to correct issues with clause numbering and associated references in this area of the standard.

The group discussed the implications of requiring login (Table 9) for this ELS, and then reviewed the differing behaviors if the destination of the EDC was an N_Port or the F_Port Controller. It was determined that existing footnote b could be applied, requiring login if the destination is an N_Port. Howard will review the other ELS Commands to determine which (if any) are also addressable to the F_Port Controller, and if the footnote has been properly applied.

The new clause text for the Exchange Diagnostic Capabilities ELS was also presented. The proposed payload formats for the Request and Accept were reviewed in detail. There was discussion to determine if Reserved words should be added to the Request payload to match the size of the Accept payload, as well as restricting the size of the descriptor lengths to accommodate a payload of less than 256 bytes. It was agreed to leave the request payload definition as is. The group also requested additional text describing the Port Speed Descriptor and associated fields.

Howard will revise the text as needed, and present an updated version for inclusion in the latest revision of FC-LS-4 during the next meeting cycle.

4.2 Port Congestion Descriptor - (2018-00036-v001)

Blair (Cisco)

Mike presented an updated version of the Port Congestion Descriptor, now proposed to be defined within the Read Diagnostic Parameters as discussed at the previous meeting. He gave an overview of the usage and definitions for the proposed Port Congestion Descriptor fields. The group provided feedback on the use and definition of the Validity Mask fields, and noted that the Interval valid bits are implied, and do not need a validity bit. Also discussed was the behavior of the counters, and when they should be reset.

Mike will take the feedback from this discussion and provide proposed text for the Port Congestion Descriptor at a future meeting.

4.3 Fabric_Name in FLOGI LS_ACC - (2018-00121-v000)

Peterson (Broadcom)

This presentation was deferred to a future meeting.

5 New Business

None.

6 Unscheduled Business

None.

7 Project Schedule

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

8 Review of Action Items

Action items carried from prior meetings:

- 1710-02** Editor to incorporate 2017-00095-v004 into FC-LS-4.
- 1802-01** Dave Peterson to investigate the correct location (standard) to document that priority shall be reflected for all frames of all sequences of exchange.

New action items:

None.

9 Meeting Schedule

9.1 Next Plenary Week

Request 2 hours for FC-LS-4 at the T11 plenary week in Santa Fe, NM, 04 - 08 June 2018.

10 Adjournment

Jason Rusch (Viavi) moved and Mark Malcolm (Fujitsu) seconded to adjourn. Approved by acclamation.

The regular meeting was adjourned at 11:25 AM EST on 04 April 2018.

11 Attendance

Organization	Representative	Member Company
Broadcom Limited	David Baldwin	Member
Broadcom Limited	Steven Wilson	Member
Broadcom Limited	Howard Johnson	Member
Cisco Systems Inc	Mike Blair	Member
Cisco Systems Inc	J Metz	Member
Fujitsu America Inc	Mark Malcolm	Member
Hewlett Packard Enterprise	Krishna Babu Puttagunta	Member
IBM Corporation	Patty Driever	Secretary
IBM Corporation	Roger Hathorn	Member
NetApp Inc	Frederick Knight	Member
QLogic Corporation	Craig Carlson	Group Chair
Viavi Solutions Inc	Jason Rusch	Member