

Minutes

T11.3 FC-FS-7 ad hoc work group regular meeting

07 February 2024 – 11:00AM – 12:00PM EST

Tampa, FL (Hybrid)

The FC-FS-7 ad hoc work group of the Fibre Channel Protocol (T11.3) Task Group held a regular meeting in Tampa, FL hosted by SNIA/SFF along with virtual conferencing facilities using the Zoom platform on 07 February 2024. Attendance was 12 people from 7 organizations and is tabulated at the end of this document.

Notes were taken by Patty Driever (IBM) (pgd@us.ibm.com). Corrections may be requested either before the subsequent meeting by email to pgd@us.ibm.com or at the subsequent meeting in person.

1 Opening remarks & Introductions

Chairperson Raul Oteyza (Marvell) opened the regular meeting Wednesday, 07 February 2024 at 11:00 AM EST. He thanked our in-person host organization, SNIA/SFF, and then led a round of introductions.

1.1 Attendance and Membership

The chair explained that attendance is recorded electronically at 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. He 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 Code of Conduct

The chair referenced the INCITS Code of Conduct and suggested everyone become familiar with its content. It can be found on the INCITS website at the following link: [INCITS Code of Conduct](#).

It will be reviewed at the plenary meetings and referenced in all Expert Group meetings.

1.3 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 pages 1-3 of http://www.incits.org/pat_slides.pdf. He 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.

1.4 Antitrust

The chair indicated that among the rules and policies under which this working group operates are the INCITS Antitrust Guidelines.

The INCITS Antitrust Guidelines are available at <http://www.incits.org/inatrust.htm>.

2 Approval of Agenda

An agenda for the FC-FS-7 ad hoc work group regular meeting 07 February 2024 has been posted as T11-2024-00010-v001. Some adjustments were made based on the discussion.

T11-2024-00010-v001 as modified was accepted as the agenda for this regular meeting by unanimous consent.

3 Review of Past Business

3.1 Review of Notes

Notes from the FC-FS-7 ad hoc work group regular meeting 06 December 2023 have been posted as T11/2023-00404-v000.

T11/2023-00404-v000 was accepted by unanimous consent as accurate notes of FC-FS-7 ad hoc work group meeting on 06 December 2023.

3.2 Review of Old Action Items

Action Items Carried Forward:

None

New Action Items Identified Last Meeting:

None

4 Old Business

4.1 Obsolete Loop (T11-2024-00009-v002) Peterson (Broadcom)

Dave reviewed text changes he suggests we make to obsolete arbitrated loop. A couple of required changes were noted and accounted for.

Dave recommended that we incorporate this document, as modified, into FC-FS-7. A straw poll resulted in unanimous consent.

4.2 Single Lane 256GFC Link Speed Negotiation (T11-2023-00385-v005) Oteyza (Marvell)

Deferred until next meeting cycle.

4.3 Remove Clock Synchronization (overview – T11-2024-00020-v001) Peterson (Broadcom)

Dave reviewed this overview and then moved on to the specific text changes proposed in the next section.

4.4 Remove Clock Synchronization (text – T11-2024-00021-v001) Peterson (Broadcom)

Dave suggested that we remove text in Clause 24 Clock Synchronization, Annex G (informative) and associated text. He presented proposed text changes in T1-2024-00021-v001.

Dave recommended that we incorporate these changes into FC-FS-7. No concerns or objections were raised.

5.0 New Business

5.1 Development Plan For FC-FS-7 (T11-2024-00026) Oteyza (Marvell)

Deferred until next meeting cycle.

5.2 Speed Negotiation algorithm updates (T11-2024-00022-v000) Peterson (Broadcom)

Dave went through this document to review his suggested changes. We had previously agreed to remove the optional `slow_wait` stage in the speed negotiation algorithm—that's what this document does.

Anil, Howard and Dave have reviewed the new state diagram already. Also Figure 54 has a flow diagram that was modified. Additional proposed text changes were also included (mostly deletion of existing text related to `slow_wait`). Much of `slow_wait` is tied to loop, so at times the text affected both.

Dave recommended that we incorporate these changes related into FC-FS-7. These changes (the ones in T11-2024-00022-v000) are also included in T11-2024-00009-v002.

5.3 Single Lane 256FC support (T11-2024-00027-v000) Oteyza (Marvell)

Deferred to next meeting

6 Unscheduled Business

6.1

7 Project Schedule

Milestone	Expected Date
Last technical input	June 2025
RFC Ballot	December 2025
T11 Letter Ballot	August 2026
Forward to INCITS	October 2026

8 Review of Action Items

Action Items Carried Forward:

None

New Action Items:

- 0201 Editor to incorporate T11-2024-00021-v001 into FC-FS-7.
- 0202 Dave to post T11-2024-00009-v003
- 0202 Editor to incorporate T11-2024-00009-v003 into FC-FS-7

9 Meeting Schedule

9.1 Next Plenary Week

Request 2 hours for FC-FS-7 at the hybrid face-to-face/virtual T11 plenary week 01 April – 05 April 2024 in Savannah, GA (to be voted on).

10 Adjournment

The regular meeting was adjourned at 12:04 PM EST on 07 February 2024.

11 Attendance

Organization **Representative** **T11.3 Member Company**

BROADCOM LIMITED	Howard Johnson	Y
BROADCOM LIMITED	David Peterson	Y
BROADCOM LIMITED	James Smart	Y
CISCO SYSTEMS INC	Harsha Bharadwaj	Y
CISCO SYSTEMS INC	Mike Blair	Y
CISCO SYSTEMS INC	Ed Mazurek	Y
DELL INC	David Brown	Y
IBM	Patty Driever	Y
IBM	Roger Hathorn	Y
MARVELL SEMICONDUCTOR	Raul Oteyza	Y
NETAPP INC	Madhu Pai	Y
VIAVI SOLUTIONS INC	Jason Rusch	Y