T11-2024-00060-v001

Minutes Fibre Channel Protocol
(T11.3) Task Group plenary meeting #156
2024 February 08 – 10:30AM to 11:30AM EST
Tampa, FL + Virtual Meeting

1 Opening remarks and introductions

The Chair convened plenary meeting #156 of the Fibre Channel Protocol (T11.3) Task Group on 2024 February 08 at 10:33 EST. He introduced himself as Roger Hathorn (IBM), and the group thanked SNIA/SFF for the hotel arrangements. The role of the Vice-Chair was vacant, but has appointed Mike Blair to that role . Patty Driever (IBM) introduced herself as secretary. Members present and on Zoom introduced themselves.

.

2   Approval of the Agenda

An electronic version of the agenda, **T11-2024-00003-v001**, and supporting documents were made available among the documents for this meeting. The agenda was in HTML format with links to the appropriate supporting documents. The chair presented the agenda and made a call for any new agenda items. No new items were requested.

David Peterson (Broadcom) moved and Ed Mazurek (Cisco) seconded that **T11-2024-00003-v001** be approved as posted as the agenda for this meeting. The motion passed unanimously.

3   Administrative Matters

3.1 T11.3 Admin Is Trivia

The Chair, Roger Hathorn (IBM), stated that T11.3 administrative information is available among the documents for this meeting: Starting with the web page
https://standards.incits.org/apps/org/workgroup/t11.3/
links lead to contact information for T11.3 officers, membership rules, project information, procedures and operating rules, patent rules, and internet resources. The chair recommended that members

familiarize with these rules so the business of the Task Group may be conducted expeditiously. Members were advised to see any of the officers if they require additional assistance.

The Chair also noted that we are inside a 30-day review period for revised INCITS policies and procedures, so people should review them and supply any comments back to the Chair for forwarding to INCITS.

3.2 Document Distribution

The Chair instructed those present how to access meeting documents via the INCITS T11 Web Site Center page https://standards.incits.org/apps/org/workgroup/t11/documents.php The chair uploaded a zip file document containing all documents reviewed at this meeting: **T11-2024-00070-v000**.

3.3 Other matters of grave concern

The Chair instructed those present how to register using the electronic attendance list for this meeting. He reminded those present that the electronic attendance list would become the only formal record of attendance at this meeting.

4 Code of Conduct

The Vice-Chair reminded everyone that we are operating under the INCITS Code of Conduct (found at https://www.incits.org/standards-information/policies).

5 Antitrust Policies

The Vice-Chair noted that the INCITS Antitrust Guidelines applied to this task group meeting. The chair further noted that it was the responsibility of all attendees, and not just the officers, to ensure that the Guidelines are followed, and to terminate discussions if they are not.
The INCITS Antitrust Guidelines are available on the INCITS web site (http://www.incits.org/standards-information/legal-info).
.

6 Patents

The Vice-Chair presented an overview of INCITS patent policies and guidelines, as found in INCITS Policies and Guidelines (http://www.incits.org/standards-information/legal-info). sub clause 8.4. In accordance with those policies, the chair made a call for patents that related to the standards being developed by this task group. Those companies wishing to file a patent declaration should send it to the chair of TC T11, with copies to Lynn Barra at INCITS (lbarra@itic.org).

7 Attendance and Membership

7.1 Current membership list

The Vice-Chair encouraged those who attend T11 meetings regularly or intend to attend T11 meetings regularly and are not T11 members to consider joining the organization.

Information on how membership is gained, maintained, and lost in any INCITS Technical Committee or Task Group may be found in INCITS Organization and Procedures (**http://www.incits.org/standards-information/policies**) sub clause 3.8. An overview of these requirements was introduced by the chair and was available to all attendees in the electronically distributed meeting documents.

The Vice-chair presented the current list of members and representatives, and invited corrections. The membership effective for this meeting, as adjusted for changes introduced at this meeting, is shown in Annex A. Attendance for this meeting is shown in Annex B.

7.2 Roll Call of Members in Jeopardy; Jeopardy Letter (Non-Attendance and Letter Ballots)

NetApp is in jeopardy for this meeting cycle for lack of attendance at 2 of the last 3 plenary meetings (did not attend August 2023 or December 2023 plenary meetings). NetApp was present so is no longer in jeopardy.

No company is in jeopardy for failure to vote on 2 of the last 3 letter ballots.

7.3 Announcement of New Members & Membership List Update

7.3.1 Changes in representation since last meeting

Wenchao Cui, Wenhua Liu and Ahmad Tawil have been added as Alternate members for Broadcom, Inc., moving over after the Broadcom acquisition of VMWare. All other representation for Broadcom remains unchanged and the remainder of the VMWare representation has been removed (Neil MacLean and Murali Rajagopal).

Alan Spalding has been removed as Alternate member for Marvell Semiconductor, Inc. All other representation for Marvell remains the same.

7.3.2 New voting memberships

 No new voting memberships were granted at this meeting.   CommScope was present at this and the last meeting and expressed interest in obtaining voting membership. Since they have been present at 2 consecutive meetings voting membership was granted.

7.3.3 Voting memberships changed for other reasons

No changes to voting memberships were made at this meeting.

7.3.4 Changes in advisory membership

VMWare was removed as a separate member company as they are now a part of Broadcom.

7.3.5 Changes in emeritus membership

None

7.3.6 Call for Guests

The Chair called for guests and received no responses.

7.4 Call for Quorum

7.4.1 Membership for this meeting and call for quorum

Task Group T11.3 had 10 voting members at the previous T11.3 plenary meeting (December 07, 2023). At this meeting, February 08, 2024:

1 new voting member organizations (see 7.3.2);
0 reinstated voting member organization (see 7.3.3);
0 voting member organization losing voting membership for not attending the required number of meetings (see 7.2); and
0 voting member organizations losing voting membership for other reasons, the voting membership of T11.3 is now at 11 members.

7.4.2 Quorum Call

11 voting members responded to the call for quorum. A quorum of one third of the voting membership for this meeting requires at least 4 voting members present. The number 11 exceeds or equals one third of the voting membership for this meeting and also exceeds or equals 4. A quorum is therefore present for this meeting.

8 Approval of Minutes - Meetings #155

The prior plenary meeting of the Fibre Channel Protocol (T11.3) Task Group was #155 on 2023 December 07. The draft minutes of that meeting were posted as document **T11-2023-00405-v000**.

You may review the T11.3 minutes by reviewing the version that is posted on the web site and requesting corrections either before the subsequent meeting using the Internet mail reflector (fc_protocol@standards.incits.org) or at the subsequent meeting in person. Non-editorial and/or substantial requests for corrections will be noted in detail at the next plenary meeting prior to the plenary body voting on the minutes. Until approved by the plenary body, these minutes are unofficial draft minutes only.

Dave Peterson (Broadcom) moved and DJ Brown (Dell) seconded to accept at this meeting **T11-2023-00405-v000** as the minutes of T11.3 meeting #155 on 2023 December 07. The motion passed unanimously.

See Action Item 24-001.

9   Review of Old Action Items

ACTION 23-018	T11.3 secretary to post **T11-2023-00343-v001** as the approved minutes of T11.3 meeting #154.
ACTION 23-019	T11.3 secretary to post **T11-2023-00405-v000** as the draft minutes of T11.3 meeting #155.
ACTION 23-020	Chair to forward FC-GS-9 draft standard Rev. 12.07 contained in T11-2023-00117-v003 to T11 to request initiation of a letter ballot.
ACTION 23-021	T11 Chair to discuss with INCITS Secretariat what we need to do in order to terminate the Profile Review Expert Group.
ACTION 23-022	Chair to forward votes of Maintenance and Stabilization motions to INCITS for further processing.

All of the above action items were completed.

10 Liaison Reports

10.1 TC T11 and INCITS

T11 chair Howard Johnson (Broadcom) has posted the T11 TC report to other committees (posted as **T11-2023-00441-v000** along with the INCITS Report to T11 posted as **T11-2024-00002-v000.** Since these will be reviewed in the T11 plenary we did not review them during this meeting but they are available online for review.

10.2 Other liaison reports

No other liaison reports were presented.

11 Project Status

11.1 FC-FS-7

Raul Oteyza (Marvell) presented the information posted as **T11-2024-00076-v000** about FC-FS-7 ad hoc activity since the last plenary meeting of this Task Group.

11.2 FC-GS-9

Dave Peterson (Broadcom) presented the information posted as **T11-2024-00069-v000** about FC-GS-9 ad hoc activity since the last plenary meeting of this Task Group. Motion was seconded by Jason Rusch (Viavi)

Request T11.3 accept T11-2024-00008-v001 as Letter Ballot comment resolution and forward GS-9 draft standard Rev. 12.08 contained in T11-2024-00064-v000 to T11 for Public Review. Motion Passed: In Favor – 11, Opposed – 0, Abstain – 0.

See Action Item .

11.3 FC-LS-5

Patty Driever (IBM) presented the information posted as **T11-2024-00080-v000** about FC-LS-5 ad hoc activity since the last plenary meeting of this Task Group.

Patty Driever (IBM) made a motion to request that T11.3 accept T11-2023-00040-v010 as RFC comment resolution and forward FC-LS-5 draft standard Rev. 5.23 contained in T11-2023-00373-v002 to T11 to initiate a letter ballot. Motion was seconded by Jason Rusch (Viavi). Motion passed In Favor – 11, Opposed – 0, Abstain – 0.

See Action Item .

11.4 FC-NVMe-3

Dave Peterson (Broadcom) presented the information posted as **T11-2024-00071-v001** about FC-NVMe-3 ad hoc activity since the last plenary meeting of this Task Group.

11.5 FC-RDMA

Dave Peterson (Broadcom) presented the information posted as **T11-2024-00072-v001** about FC-RDMA ad hoc activity since the last plenary meeting of this Task Group.

11.6 FC-SP-3

Roger Hathorn (IBM) presented the information posted as **T11-2024-00031-v000** about FC-SP-3 ad hoc activity since the last plenary meeting of this Task Group.

11.7 FC-SW-8

Dave Peterson (Broadcom) presented the information posted as **T11-2024-00066-v000** about FC-SW-8 activity since the last plenary meeting of this Task Group.

11.8 Profile Review Expert Group Status

There has been no meeting of the Profile Review Expert Group for several meeting cycles. This item is no longer being pursued.

Chair made a motion to terminate this Profile Review Expert Group due to lack of interest to perform any profile updates. Motion was seconded by Dave Peterson (Broadcom). Motion passed: In Favor - 11, Opposed – 0, Abstain – 0.

See Action Item .

12 Other Business and Technical Items.

12.1 Nomination of Dean Wallace for Emeritus Member of Fibre Channel (*T11-2024-00039-v000*)

We want to recognize Dean Wallace's many contributions to Fibre Channel and its Task Groups.

The Chair made a motion that the Fibre Channel Interconnection Schemes (T11.3) TG requests that the Fibre Channel (T11) TC recommend Dean Wallace to be appointed as Emeritus Member of the Fibre Channel Interconnection Schemes TG. Motion was seconded by Arun Gopalakrishnan(Marvell). Motion passed: In Favor -11, Opposed – 0, Abstain – 0.

See Action Item 24-006.

13 Review T11.3 Project Status

The current project status is available among the electronically distributed meeting documents as well as on the INCITS web site Project Status.   The chair asked that if the facilitators or anyone else finds errors that they inform him.

14 Future Meeting Schedule

14.1 Plan for the next meeting week

The next meeting cycle will be a hybrid of both face-to-face in Savannah, GA (to be voted on at T11 plenary) and virtual via Zoom the week of 01 April – 05 April 2024. More discussion on this will occur at the T11 plenary meeting. Amphenol will host the face-to-face portion and INCITS will continue to provide the Zoom virtual meeting capability.

Refer to the INCITS T11 meeting web site page for the meeting announcement, which will always contain the latest information on future T11.3 plenary meetings.

PLEASE NOTE: If there is any conflict between the website schedule database, and the single ASCII sheet, the database is to be considered correct.

14.2 Ad-hoc meetings

Refer to the INCITS T11 meeting web site page for further details. This URL will always contain the latest announcements of pending work group interim meetings and teleconferences.

15 Action Items

ACTION 24-001	T11.3 secretary to post **T11-2023-00405-v001** as the approved minutes of T11.3 meeting #155.

ACTION 24-002	T11.3 secretary to post **T11-2024-00060-v000** as the draft minutes of T11.3 meeting #156.
ACTION 24-003	Chair to forward FC-GS-9 draft standard Rev. 12.08 contained in T11-2024-00064-v000 to T11 for initiation of an INCITS Public Review.
ACTION 24-004	Chair to forward FC-LS-5 draft standard Rev. 5.23 contained in T11-2023-00373-v002 to T11 to request initiation of a letter ballot.
ACTION 24-005	T11.3 Chair to inform INCITS Secretariat that the Profile Review Expert Group has been terminated.
ACTION 24-006	T11.3 Chair to request that the Fibre Channel (T11) TC recommend Dean Wallace to be appointed as Emeritus Member of the Fibre Channel Interconnection Schemes (T11.3) TG.

16 Final Attendance Notice/Check

The chair reviewed the electronically registered attendance list, advised that the list was about to close, and reminded those who had not registered that the list would then become the only formal record of attendance at this meeting.

Chair also reminded everyone that physical presence at the meeting (via Face-to-Face or dial-in during the meeting) is required in order to count towards membership requirements. If you sign in but are not physically present (or logged in at the meeting for hybrid meetings), the sign-in will be discarded by INCITS.

17 Adjournment

David Peterson (Broadcom) moved to adjourn at 2024 February 08 11:11 AM EST.
The motion passed unanimously.

A Membership

Reflecting the changes at this meeting, the voting membership of T11.3 for this meeting is:

Organization	Name	Principal/ Alternate
Amphenol Corporation	Chris Lyon	Principal
	Paul Coddington	Alternate
	Fan Fu	Alternate
	Isaac Horn	Alternate
	Lei Huang	Alternate
	Sam Kocsis	Alternate
	Hu Silver	Alternate
Broadcom Inc	David Peterson	Principal
	Ben Chu	Alternate
	Wenchao Cui	Alternate
	Howard Johnson	Alternate
	Mark Jones	Alternate
	Wenhua Liu	Alternate
	Dr. Ramana Murty	Alternate

	James Smart	Alternate
	Ahmad Tawil	Alternate
	Anil Veerabhadrappa	Alternate
		Alternate
Cisco Systems, Inc.	Mike Blair	Principal
	Harsha Bharadwaj	Alternate
	Dhiraj Kashyap	Alternate
	Fabio Maino	Alternate
	Edward Mazurek	Alternate
	Mark Nowell	Alternate
	Prashant Pathak	Alternate
	Sai Pavan	Alternate
	Kiran Ranabhor	Alternate
	Christian Schmutzer	Alternate
	Ramesh Sivakolundu	Alternate
	Yi Tang	Alternate
	Sujith V R	Alternate
	Xiaohong Wu	Alternate
	Xiaokang Zhu	Alternate
CommScope	Earl Parsons	Principal
Dell	David Brown	Principal
	Jai Bansai	Alternate
	David Black	Alternate
	Vinay Sawal	Alternate
	Bill Sears	Alternate
	Erik Smith	Alternate
	Joseph White	Alternate
Hewlett Packard Enterprise	Barry Maskas	Principal
	Rupin Mohan	Alternate
	Krishna Babu Puttagunta	Alternate
IBM Corporation	Roger Hathorn	Principal
	Patty Driever	Alternate
	Stephen Guendert	Alternate
Marvell Semiconductor Inc	Raul Oteyza	Principal
	Andrew Joy	Alternate
	Dean Wallace	Alternate
NetApp Inc	Madhu Pai	Principal
	Sridhar Balasubramanian	Alternate
Teledyne LeCroy Corporation	Henry Poelstra	Principal
	Amit Bakshi	Alternate
	Craig Foster	Alternate
	Tom Friend	Alternate

	Rakesh Kathiresan Natarajan	Alternate
		Alternate
	Nick Kriczky	Alternate
	Douglas Lee	Alternate
	Srikant Tadigadapa	Alternate
	Jim Yasueda	Alternate
Viavi Solutions Inc.	Jason Rusch	Principal
	Scott Baxter	Alternate
	George Bullis	Alternate
	Paul Gentieu	Alternate

Reflecting the changes at this meeting, the advisory (i.e., nonvoting) membership of T11.3 for this meeting is:

Organization	Name	Principal/ Alternate
Coherent Inc	Roberto Rodes	Principal
Credo Semiconductor	Phil Sun	Principal
	Dr. Fang Cai	Alternate
	Yasuo Hidaka	Alternate
Futurewei Technologies Inc	Victor Cao	Principal
	Timothy Jeffries	Alternate
MediaTek USA Inc	Tamer Ali	Principal
	Pei-Rong Li	Alternate
	YC Lin	Alternate
	Henry Park	Alternate
	Mau-Lin Wu	Alternate
TE Connectivity	Daniel Gorenc	Principal
	Dwayne Crawford	Alternate
Unisys Corporation	Jeffrey Dremann	Principal
	Phil Shelton	Alternate

Reflecting the changes at this meeting, these people have been granted Emeritus membership in INCITS Fibre Channel (T11) Technical Committee, recognizing their many years of skilled leadership and high quality technical contribution:

Dr. William Ham
Mr. Robert Kembel
Mr. Joseph Mathis
Mr. Gary Stephens
Mr. Horst Truestedt
Mr. Steven Wilson

B Attendance

The following table lists those persons who electronically recorded their attendance at this plenary meeting. This includes representatives from voting member companies and may include representatives from non-voting advisory companies, as well as non-voting emeritus members and visitors.

Sequence	Affiliation	Name	In Person
1	AMPHENOL CORP	Paul Coddington	Y
2	BROADCOM INC	Howard Johnson	Y
3	BROADCOM INC	David Peterson	Y
4	CISCO SYSTEMS INC	Mike Blair	N
5	CISCO SYSTEMS INC	Edward Mazurek	Y
6	CISCO SYSTEMS INC	Ramesh Sivakolundu	Y
7	COMMSCOPE	Earl Parsons	N
8	DELL INC	David Brown	Y
9	HEWLETT PACKARD ENTERPRISE	Barry Maskas	N
10	IBM CORPORATION	Patty Driever	Y
11	IBM CORPORATION	Roger Hathorn	Y
12	MARVELL SEMICONDUCTOR INC	Arun Gopalakrishnan	Y
13	MARVELL SEMICONDUCTOR INC	Raul Oteyza	Y

14	NETAPP INC	Madhu Pai	N
15	TELEDYNE LECROY CORP	Henry Poelstra	N
16	VIAVI SOLUTIONS INC	Jason Rusch	Y

This table also records the affiliations claimed by those who registered their attendance. The presence of a company or organization in the affiliation column does not imply that it is a member of T11.3, nor does it imply that the person in attendance is a representative of that company or organization.

See "Section A: Membership" above for a complete list of voting members of T11.3 as well as a list of non-voting advisory companies and emeritus members.

C Attendance at Ad Hoc Meetings

C.1 FC-NVMe-3

Organization	Representative	Member Company
Broadcom Inc	Howard Johnson	Y
Broadcom Inc	David Peterson	Y
Broadcom Inc	James Smart	Y
Cisco Systems Inc	Harsha Bharadwaj	Y
Cisco Systems Inc	Edward Mazurek	Y
Dell Inc	David Brown	Y
IBM Corporation	Patty Driever	Y
IBM Corporation	Roger Hathorn	Y
Marvell Semiconductor Inc	Raul Oteyza	Y
NetApp Inc	Madhu Pai	Y
Viavi Solutions Inc	Jason Rusch	Y

C.2   FC-LS-5

Organization	Representative	Member Company
Broadcom Inc	Howard Johnson	Y
Broadcom Inc	David Peterson	Y
Broadcom Inc	James Smart	Y
Cisco Systems Inc	Harsha Bharadwaj	Y
Cisco Systems Inc	Edward Mazurek	Y
Dell Inc	David Brown	Y
IBM Corporation	Patty Driever	Y
IBM Corporation	Roger Hathorn	Y
Marvell Semiconductor Inc	Raul Oteyza	Y
NetApp Inc	Madhu Pai	Y
Viavi Solutions Inc	Jason Rusch	Y

C.3   FC-FS-7

Organization	Representative	Member Company
Broadcom Inc	Howard Johnson	Y
Broadcom Inc	David Peterson	Y
Broadcom Inc	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 Corporation	Patty Driever	Y
IBM Corporation	Roger Hathorn	Y
Marvell Semiconductor Inc	Raul Oteyza	Y
NetApp Inc	Madhu Pai	Y
Viavi Solutions	Jason Rusch	Y

C.4 FC-SW-8

Organization	Representative	Member Company
Broadcom Inc	Howard Johnson	Y
Broadcom Inc	David Peterson	Y
Broadcom Inc	James Smart	Y
Cisco Systems Inc	Mike Blair	Y
Cisco Systems Inc	Edward Mazurek	Y
Dell Inc	David Brown	Y
IBM Corporation	Roger Hathorn	Y

NetApp Inc	Madhu Pai	Y

C.5 FC-RDMA

Organization	Representative	Member Company
Broadcom Inc	Howard Johnson	Y
Broadcom Inc	David Peterson	Y
Broadcom Inc	James Smart	Y
Cisco Systems Inc	Harsha Bharadwaj	Y
Cisco Systems Inc	Mike Blair	Y
Cisco Systems Inc	Edward Mazurek	Y
Dell Inc	David Brown	Y
IBM Corporation	Patty Driever	Y
IBM Corporation	Roger Hathorn	Y
Marvell Semiconductor Inc	Raul Oteyza	Y
NetApp Inc	Madhu Pai	Y
Viavi Solutions Inc	Jason Rusch	Y

C.6 FC-GS-9

Organization	Representative	Member Company
Broadcom Inc	David Peterson	Y
Broadcom Inc	James Smart	Y
Cisco Systems Inc	Mike Blair	Y
Cisco Systems Inc	Edward Mazurek	Y
Dell Inc	David Brown	Y
IBM Corporation	Roger Hathorn	Y
Marvell Semiconductor Inc	Raul Oteyza	Y
NetApp Inc	Madhu Pai	Y
Viavi Solutions Inc	Jason Rusch	Y

C.7 FC-SP-3

Organization	Representative	Member Company
Broadcom Inc	Howard Johnson	Y
Broadcom Inc	David Peterson	Y
Broadcom Inc	James Smart	Y
Cisco Systems Inc	Mike Blair	Y
Cisco Systems Inc	Edward Mazurek	Y

Organization	Representative	Member Company
Dell Inc	David Brown	Y
Hewlett Packard Enterprise	Barry Maskas	Y
IBM Corporation	Patty Driever	Y
IBM Corporation	Roger Hathorn	Y
Marvell Semiconductor	Arun Gopalakrishnan	Y
Marvell Semiconductor	Raul Oteyza	Y
NetApp Inc	Madhu Pai	Y
Viavi Solutions Inc	Jason Rusch	Y

C.8 Joint T11.2/T11.3

Organization	Representative	Member Company
Amphenol Corporation	Paul Coddington	Y
Broadcom Inc	Howard Johnson	Y
Broadcom Inc	Anil Mehta	Y
Broadcom Inc	David Peterson	Y
Broadcom Inc	Ben Chu	Y
Cisco Systems Inc	Mike Blair	Y
Cisco Systems Inc	Edward Mazurek	Y
Cisco Systems Inc	Ramesh Sivakolundu	Y
Cisco Systems Inc	Xiaohong Wu	Y
Coherent Inc	Vera Koleva	Y
Dell Inc	David Piehler	Y
Hewlett Packard Enterprise	Barry Maskas	Y
IBM Corporation	Patty Driever	Y
IBM Corporation	Roger Hathorn	Y
Macom	Thomas Palkert	Y
Marvell Semiconductor Inc	Mike Dudek	Y
Marvell Semiconductor Inc	Arun Gopalakrishnan	Y
Marvell Semiconductor Inc	Raul Oteyza	Y
Molex Inc	Egide Murisa	Y
NetApp Inc	Madhu Pai	Y
OFS Fitel LLC	Mabud Choudhury	Y
TE Connectivity	Daniel Gorenc	Y