



InterNational Committee for Information Technology Standards (INCITS)

Secretariat: Information Technology Industry Council (ITI)

700 K Street NW, Suite 600, Washington, DC 20001

www.INCITS.org



T11-2020-00227-v001

**Minutes Fibre Channel Protocol
(T11.3) Task Group plenary meeting #136
2020 October 08 – 11:30 to 12:00 CDT
Virtual Meeting**

1 Opening remarks and introductions

The chair convened plenary meeting #136 of the Fibre Channel Protocol (T11.3) Task Group on 2020 October 08 at 11:30 CDT. He introduced himself as Craig Carlson (Marvell), and the group thanked Marvell for the virtual meeting facility. Roger Hathorn introduced himself as Vice-Chair and Patty Driever (IBM) introduced herself as secretary. Members then introduced themselves.

2 Approval of the Agenda

An electronic version of the agenda, [T11-2020-00211-v000](#), 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 Mark Malcolm (Fujitsu) seconded that [T11-2020-00211-v000](#) 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, Craig Carlson (Marvell), 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.

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: [T11-2020-00243-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 Patents

The 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).

5 Antitrust Policies

The 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. 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.

The INCITS Antitrust Guidelines are available on the INCITS web site (<http://www.incits.org/standards-information/legal-info>).

6 Attendance and Membership

6.1 Current membership list

The 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.

6.2 Voting memberships in jeopardy

No company was in jeopardy for this meeting cycle.

6.3 Changes in Membership

6.3.1 Changes in representation since last meeting

Michael Klempa and Sam Kocsis were added as Alternates for Amphenol, Corp. Other representation for Amphenol remains the same.

Anil Veerabhadrappe was added as Alternate for Broadcom, Inc. Other representation for Broadcom remains the same.

Ramesh Sivakolundu was added as Alternate for Cisco Systems, Inc. Other representation for Cisco remains the same.

Vinay Sawal was added as Alternate for Dell, Inc. Other representation for Dell remains the same.

6.3.2 New voting memberships

No new voting memberships were granted at this meeting.

6.3.3 Voting memberships changed for other reasons

No changes to voting memberships were made at this meeting.

6.3.4 Changes in advisory membership

No changes to advisory memberships were made at this meeting.

6.3.5 Changes in emeritus membership

None

6.3.6 Membership for this meeting and call for quorum

Task Group T11.3 had 11 voting members at the previous T11.3 plenary meeting (August 13, 2020). At this meeting, October 08, 2020:

- 0 new voting member organizations (see 6.3.2);
- 0 reinstated voting member organization (see 6.3.3)
- 0 voting member organizations losing voting membership for not attending the required number of meetings (see 6.2); and
- 0 voting member organizations losing voting membership for other reasons (see 6.3.3), the voting membership of T11.3 remains at 11 members.

6.3.7 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.

7 Approval of Minutes - Meetings #135

The prior plenary meeting of the Fibre Channel Protocol (T11.3) Task Group was #135 on 2020 August 13. The draft minutes of that meeting were posted as document [T11-2019-00179-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 Roger Hathorn (IBM) seconded to accept at this meeting [T11-2020-00179-v000](#) as posted as the minutes of T11.3 meeting #135 on 2020 August 13. The motion passed unanimously.

See Action Item [20-010](#).

8 Review of Old Action Items

ACTION 20-007	T11.3 secretary to post T11-2020-00128-v001 as the approved minutes of T11.3 meeting #134.
ACTION 20-008	T11.3 secretary to post T11-2020-00179-v000 as the draft minutes of T11.3 meeting #135.
ACTION 20-009	T11.3 chair to forward project proposal for FC-PM (Persistent Memory over Fibre Channel) as documented in T11-2020-00162-v000 to T11 for further processing.

All of the above action items were completed.

9 Liaison Reports

9.1 TC T11 and INCITS

T11 chair Steve Wilson (Brocade) has posted the T11 TC report to other committees (posted as [T11-2020-00198-v000](#) along with the INCITS Report to T11 posted as [T11-2020-00214-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.

9.2 Other liaison reports

No other liaison reports were presented.

10 Project Status

10.1 FC-FS-6

[Dave Peterson \(Broadcom\)](#) presented the information posted as [T11-2020-00203-v000](#) about FC-FS-6 ad hoc activity since the last plenary meeting of this Task Group.

10.2 FC-GS-9

[Dave Peterson \(Broadcom\)](#) presented the information posted as [T11-2020-00205-v000](#) about FC-GS-9 ad hoc activity since the last plenary meeting of this Task Group.

10.3 FC-LS-5

[Patty Driever \(IBM\)](#) presented the information posted as [T11-2020-00237-v000](#) about FC-LS-5 ad hoc activity since the last plenary meeting of this Task Group.

10.4 FC-PM

[Craig Carlson \(Marvell\)](#) presented the information posted as [T11-2020-00239-v000](#) about FC-GS-9 ad hoc activity since the last plenary meeting of this Task Group.

10.5 FC-SW-8

[Craig Carlson \(Marvell\)](#) presented the information posted as [T11-2020-00238-v000](#) about FC-SW-8 ad hoc activity since the last plenary meeting of this Task Group.

10.6 FCP-5

Dave Peterson (Broadcom) presented the information posted as [T11-2020-00219-v000](#) about FCP-5 ad hoc activity since the last plenary meeting of this Task Group.

10.7 Joint T11.2/T11.3

Craig Carlson (Marvell) presented the information posted as [T11-2020-00234-v000](#) about Joint T11.2/T11.3 activity since the last plenary meeting of this Task Group.

11 Other Business and Technical Items.

12 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

(https://standards.incits.org/apps/org/workgroup/portal/projects.php?end_in_year= never &page=1).

The chair asked that if the facilitators or anyone else finds errors that they inform him.

13 Future Meeting Schedule

13.1 *Plan for the next meeting week*

Marvell will host the next T11 meeting on 2020 December 10 as a Zoom virtual meeting.

Refer to the INCITS T11 meeting web site page

(https://standards.incits.org/apps/org/workgroup/t11/documents.php?folder_id=2213) 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.

13.2 *Ad-hoc meetings*

Refer to the INCITS T11 meeting web site page for further details.

(https://standards.incits.org/apps/org/workgroup/t11/documents.php?folder_id=2202). This URL will always contain the latest announcements of pending work group interim meetings and teleconferences.

14 Action Items

Dell	Erik Smith David Black David Brown Gaurav Chawla Vinay Sawal Joseph White	Principal Alternate Alternate Alternate Alternate Alternate
Fujitsu	Mark Malcolm Kun Katsumata Gene Owens	Principal Alternate Alternate
Hewlett Packard Enterprise	Barry Maskas Rupin Mohan Krishna Babu Puttagunta	Principal Alternate Alternate
IBM Corporation	Roger Hathorn Patty Driever Stephen Guendert	Principal Alternate Alternate
Marvell Semiconductor Inc	Craig W. Carlson Raul Oteyza Alan Spalding Dean Wallace	Principal Alternate Alternate Alternate
NetApp Inc	Frederick Knight	Principal
Teledyne LeCroy Corporation	David Rodgers Amit Bakshi Rakesh Kathiresan Natarajan Douglas Lee Henry Poelstra Srikant Tadigadapa	Principal Alternate Alternate Alternate Alternate Alternate
Viavi Solutions Inc.	Jason Rusch Scott Baxter George Bullis Paul Gentieu	Principal Alternate Alternate Alternate

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

Organization	Name	Principal/ Alternate
Futurewei Technologies Inc	Timothy Jeffries Lei Wang	Principal Alternate
MediaTek USA	Tamer Ali	Principal

Inc	Yan-Bin Luo Mau-Lin Wu	Alternate Alternate
TE Connectivity	Matt Schumacher	Principal
Unisys Corporation	Jeffrey Dremann Phil Shelton	Principal Alternate
VMware Inc	Neil MacLean Wenchao Cui Wenhua Liu Murali Rajagopal Ahmad Tawil	Principal Alternate Alternate Alternate 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. Gary Stephens
- Mr. James Coomes
- Mr. Robert Kembel
- Mr. Joseph Mathis
- Mr. Horst Truestedt

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.

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.

Sequence	Affiliation	Name
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1	AMPHENOL CORP	Chris Lyon
2	BROADCOM INC	David Peterson
3	BROADCOM INC	Steven L. Wilson
4	CISCO SYSTEMS INC	Ramesh Sivakolundu
5	DELL INC	David Brown
6	DELL INC	Vinay Sawal
7	DELL INC	Erik Smith
8	FUJITSU AMERICA INC	Mark Malcolm
9	HEWLETT PACKARD ENTERPRISE	Barry Maskas
10	IBM CORPORATION	Patty Driever
11	IBM CORPORATION	Roger Hathorn
12	MARVELL SEMICONDUCTOR INC	Craig W. Carlson
13	NETAPP INC	Frederick Knight
14	TELEDYNE LECROY CORP	Henry Poelstra
15	VIAVI SOLUTIONS	Jason Rusch

C Attendance at Ad Hoc Meetings

C.1 FC-NVMe-2

This working group was not active during this meeting cycle.

Organization	Representative	Member Company
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C.2 FC-LS-5

Organization	Representative	Member Company
Broadcom Inc	Howard Johnson	Y
Broadcom Inc	David Peterson	Y
Broadcom Inc	James Smart	Y
Broadcom Inc	Anil Veerabhadrapa	Y
Cisco Systems Inc	Harsha Bharadwaj	Y
Cisco Systems Inc	Mike Blair	Y
CommScope	Gary Gibbs	N
Dell Inc	Vinay Sawal	Y
Fujitsu America Inc	Mark Malcolm	Y
Hewlett-Packard Enterprise	Barry Maskas	Y
IBM Corporation	Patty Driever	Y
IBM Corporation	Roger Hathorn	Y
Marvell Semiconductor Inc	Craig Carlson	Y
NetApp Inc	Frederick Knight	Y
Viavi Solutions Inc	Jason Rusch	Y

C.3 FC-FS-6

Organization	Representative	Member Company
Amphenol Corp	Michael Klempa	Y
Broadcom Inc	David Peterson	Y
Broadcom Inc	Howard Johnson	Y
Broadcom Inc	James Smart	Y
Broadcom Inc	Anil Veerabhadrapa	Y
Broadcom Inc	Steven Wilson	Y
Cisco Systems Inc	Mike Blair	Y
Dell Inc	DJ Brown	Y

Dell Inc	Vinay Sawal	Y
Fujitsu America Inc	Mark Malcolm	Y
Hewlett Packard Enterprise	Barry Maskas	Y
IBM Corporation	Patty Driever	Y
IBM Corporation	Roger Hathorn	Y
Marvell Semiconductor Inc	Craig W. Carlson	Y
Marvell Semiconductor Inc	Raul Oteyza	Y
NetApp Inc	Frederick Knight	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
Broadcom Inc	Anil Veerabhadrapa	Y
Broadcom Inc	Steven Wilson	Y
Cisco Systems Inc	Harsha Bharadwaj	Y
Cisco Systems Inc	Ramesh Sivakolundu	Y
Data Center Systems	Steve Eisele	Y
Fujitsu America Inc	Mark Malcolm	Y
Hewlett-Packard Enterprise	Barry Maskas	Y
IBM Corporation	Patty Driever	Y
IBM Corporation	Roger Hathorn	Y
NetApp Inc	Frederick Knight	Y

C.5 FC-PM

Organization	Representative	Member Company
Amphenol Corporation	Michael Klempa	Y
Broadcom Inc	Howard Johnson	Y
Broadcom Inc	David Peterson	Y
Broadcom Inc	James Smart	Y
Broadcom Inc	Anil Veerabhadrapa	Y
Broadcom Inc	Steven Wilson	Y
Cisco Systems Inc	Mike Blair	Y
Dell Inc	David Brown	Y
Dell Inc	Vinay Sawal	Y
Fujitsu America Inc	Mark Malcolm	Y
Hewlett Packard Enterprise	Barry Maskas	Y

IBM Corporation	Patty Driever	Y
IBM Corporation	Roger Hathorn	Y
Marvell Semiconductor Inc	Craig Carlson	Y
Marvell Semiconductor Inc	Raul Oteyza	Y
NetApp Inc	Frederick Knight	Y

C.6 FC-GS-9

Organization	Representative	Member Company
Broadcom Inc	Howard Johnson	Y
Broadcom Inc	David Peterson	Y
Broadcom Inc	Anil Veerabhadrapa	Y
Cisco Systems Inc	Mike Blair	Y
Fujitsu America Inc	Mark Malcolm	Y
Hewlett-Packard Enterprise	Barry Maskas	Y
IBM Corporation	Roger Hathorn	Y
NetApp Inc	Frederick Knight	Y

C.7 Joint T11.2/T11.3

Organization	Representative	Member Company
Amphenol Corporation	Michael Klempa	Y
Broadcom Inc	Ben Chu	Y
Broadcom Inc	Howard Johnson	Y
Broadcom Inc	David Peterson	Y
Broadcom Inc	Anil Veerabhadrapa	Y
Broadcom Inc	Steven Wilson	Y
Cisco Systems Inc	Mike Blair	Y
CommScope	Gary Gibbs	Y
Data Center Systems	Steve Eisele	Y
Dell Inc	Vinay Sawal	Y
Fujitsu America Inc	Mark Malcolm	Y
Hewlett Packard Enterprise	Barry Maskas	Y
IBM Corporation	Patty Driever	Y
IBM Corporation	Roger Hathorn	Y
II-VI Inc	Vera Koleva	Y
Marvell Semiconductor Inc	Craig Carlson	Y
Marvell Semiconductor Inc	Raul Oteyza	Y
NetApp Inc	Frederick Knight	Y
OFS Fitel LLC	Mabud Choudhury	Y
Teledyne LeCroy Corporation	Henry Poelstra	Y