T11-2022-00131-v000

**Draft Minutes
INCITS Fibre Channel (T11) Technical Committee
Regular Meeting #170
07 April 2022 – 1 PM to 3 PM CDT
New Orleans, LA (Hybrid Meeting)**

1 Opening Remarks and Introductions

1.1 Introductory Remarks

TC T11 chair Steve Wilson (Broadcom) convened regular meeting #170 of the INCITS Fibre Channel (T11) Technical Committee on Thursday, 07 April 2022 at 1:02 PM CDT. He introduced himself and thanked our hosts Broadcom for the physical meeting facilities and Marvell for the virtual meeting facilities.

He next introduced Vice-Chair Craig Carlson (Marvell) and Patty Driever (IBM) as secretary.

1.2 Self-introductions

The chair then asked those present in the room to introduce themselves.

1.3 Operating under INCITS Procedures

1.3.1 Patent Information

The chair indicated that among the rules and policies under which this Technical Committee operates are the ANSI intellectual property policies as specified in pages 1-3 of INCITS patent policy slides available from http://www.incits.org/standards-information/legal-info.
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.

1.3.2 Antitrust Guidelines

The chair indicated that among the rules and policies under which this Technical Committee operates are the INCITS Antitrust Guidelines as specified in http://www.incits.org/standards-information/legal-info. Any person present at the meeting is responsible for objecting if he believes discussion in the meeting violates those guide- lines. 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.

1.3.3 Code of Conduct
The chair reminded everyone that we are operating under the INCITS Code of Conduct (found at https://www.incits.org/standards-information/policies). The General Principles of this code include:
- Respect others
- Behave ethically
- Escalate and resolve disputes
- Work for the net benefit of the community
- Uphold consensus and governance
- Agree to a clear purpose and scope
- Participate actively and manage effective participation

1.3.4 Public access rules

The chair indicated that among the rules and policies under which this Technical Committee operates are the INCITS rules for operating in Public Access Mode, as specified in Section

3.11 of INCITS Organization, Policies, and Procedures (found at http://www.incits.org).

The chair encouraged those nonmembers who attend T11 meetings regularly or intend to attend T11 meetings regularly to join the organization. He further advised that nonmembers, by remaining in this meeting, acknowledge that they understand and agree to the policies of this meeting.

1.4 Attendance

The chair instructed those present how to register using the electronic attendance list for this meeting, found via the URL http://standards.incits.org/login. He reminded those present that both the electronic attendance list and physical presence at the meeting will be required to qualify as attendance for formal records of this meeting.

2 Approval of the Agenda

An electronic version of the agenda was posted as T11-2022-00094-v002. The chair presented the agenda with final updates as T11-2022-00094-v003 and made a call for any changes and new agenda items. No changes or new items were requested.

Roger Hathorn (IBM) moved and Dave Peterson (Broadcom) seconded that T11-2022-00094-v003 as presented at this meeting be approved as the agenda for this meeting. The motion passed by acclamation.

3 Attendance and Membership

3.1 Gaining and Losing Voting Membership

Information on how membership is gained, maintained, and lost in any INCITS Technical Committee or Task Group may be found in the INCITS Organization, Policies, and Procedures found at http://www.incits.org. An overview of these requirements was introduced by the chair and was available to all attendees among 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.1. Attendance for this meeting is shown in annex A.2. Attendance for the ad hoc meetings is shown in annex A.3.

3.2 Changes in Representation Since the Last Meeting

The following changes in representation have been made since the last meeting:

Yi Tang was added as an Alternate for Cisco Systems, Inc. All other representation for Cisco remains the same.
Daniel Gorenc was added as an Alternate for TE Connectivity. All other representation for

TE Connectivity remains the same.
David Rodgers was removed as Alternate for Teledyne LeCroy Corporation. All other representation for Teledyne LeCroy remains the same.

3.3 New Voting Memberships

- No additional companies answered the vice-chair's call so none were granted voting membership at this meeting.

3.4 Voting memberships in jeopardy for attendance

- Data Center Systems was in jeopardy due to lack of attendance at 2 of the last 3 plenary meetings. No one from DCS was present at this meeting, so DCS loses voting membership and becomes an Advisory member.

3.5 Voting memberships in jeopardy for non-payment of dues

- There were no companies in membership jeopardy for non-payment of dues.

3.6 Voting memberships in jeopardy for letter ballot performance

- CommScope is in membership jeopardy for letter ballot performance for not having voted on two of last three T11 letter ballots.

3.7 Membership for this meeting

Technical Committee T11 had 17 voting members at the T11 regular meeting 10 February 2022. With one member losing voting privileges, and no members gaining voting privileges the voting membership of T11 changes to 16 for this meeting.

Reflecting the above changes, the voting membership of T11 for this meeting is recorded in annex A.1.2.

Reflecting the above changes, the advisory (i.e., nonvoting) membership of T11 for this meeting is recorded in annex A.1.3.

3.8 Call for members of the press and journalists

The chair requested members of the press and journalists to introduce themselves. No person attending the meeting made such an introduction.

3.9 Call for Quorum

The total voting membership for this meeting is 16. One third of the total membership for this meeting is 6. The number of member organizations that responded to the call for quorum was 16. This exceeds or equals one third of the total membership for this meeting and also exceeds or equals 6. A quorum is therefore present for this meeting.
It should be noted that of the 16 (voting and non-voting) member companies present at this plenary meeting, 8 were in attendance in-person during this plenary meeting and 8 member companies had representatives present during the week at the ad-hoc meetings.

3.10 Call for Guests

The chair requested those associated with organizations that are not members of T11 to introduce themselves. No one responded.

4 Document Distribution

The chair described the process for T11 document distribution via http://standards.incits.org.

5 Approval of Minutes - Meeting #169

The prior regular meeting of the INCITS Fibre Channel (T11) Technical Committee was #169 on 10 February 2022. The draft Minutes of that meeting were posted as document T11/2022-00043-v000.

T11 minutes are reviewed as posted on the T11 web site. Corrections may be requested either before the subsequent meeting by email to the T11 secretary (pgd@us.ibm.com) or at the subsequent meeting in person.

Roger Hathorn (IBM) moved and Dave Peterson (Broadcom) seconded to accept T11/2022-00043-v000 as the Minutes of T11 meeting #169 on 10 February 2022. The motion passed by acclamation.

See action item 22-004.

6 Review of Old Action Items

21-019	Roger Hathorn to update Letter to Travel Rep on Hotel Rates in order to reflect a more current date. Completed by posting T11/2022-00091-v000 on March 03, 2022.
22-001	T11 secretary to post approved Minutes of T11 meeting #168 as agreed at T11 meeting #169. (See clause 5). Completed by posting T11/2022-00080-v000 on April 04, 2022.
22-002	Chair to inform INCITs of the result of the votes regarding standards to be reaffirmed and standards to be stabilized. Completed by email to Rachel Port and posting T11/2022-00083-v000 on February 23, 2022.
22-003	Chair to inform INCITs of the vote regarding standards to continue as stabilized. Completed by email to Rachel Porter and posting T11/2022-00084-v000 on February 23, 2022.

7 Review of T11 Project and Proposal Status

7.1 Project Proposals
7.1.1
There were no new project proposals during this meeting cycle.

7.2 Project Status Review

The T11 Project status sheet was displayed (see annex B.1). The current version can be viewed at any time at http://standards.incits.org, in the "T11 Projects" folder in the documents section.

The chair reminded all TG chairs to assure the project status sheet is maintained to reflect changes in status of their projects.

8 Results of non-ISO Letter Ballots

8.1 No Ballots

9 Old Business

No old business was reopened.

10 Task Group T11.2 - Physical Interfaces

10.1 Report to T11 Plenary (T11-2022-00157-v000)

Task Group Chair Tom Palkert (Macom) gave the report posted as T11-2022-00157-v000 on activity at T11.2.

10.2 Actions

10.2.1 There were no actions

10.3 Other Items

No other items were presented for TG T11.2.

11 Task Group T11.3 - Interconnection Schemes

11.1 Report to T11 Plenary (**T11-2022-00158-v000**)

Task Group Chair Craig Carlson (Marvell) presented the information posted as T11-2022-00158-v000 on activity at T11.3.

11.2 Actions

11.2.1 Craig Carlson (Marvell) moved to accept the revised FC-NVMe-3 project proposal as documented in T11-2022-00085-v001 and forward it to INCITS for further processing.
Motion seconded by David Peterson (Broadcom).
Motion carried: In Favor – 16, Opposed – 0, Abstain - 0.

See action item 22-005.

11.3 Other Items

No other items were presented for TG T11.3.

12 Joint TG T11.2 / T11.3 Items

12.1 Report to T11 Plenary

There was no meeting of the Joint T11.2/T11.3 Task Group during this meeting cycle.

12.2 Actions

12.2.1 There were no actions.

12.3 Other Items

No other items were presented for Joint T11.2/T11.3.

13 T11 project activities

None for this meeting cycle.

14 Review of International Activity

14.1 INCITS Computer Systems Interconnect (SC 25 / WG4 TAG) Status Report (T11-2022-00134-v000)

Dave Peterson (Broadcom) presented the information posted as T11-2022-00134-v000 on INCITS Computer Systems Interconnect (SC 25 / WG4 TAG) project status (see annex B.2).

15 T11 New Business

15.1 Liaison Review (T11-2022-00104-v000)
INCITS has asked that all TCs and TGs review their liaisons and identify the origination dates of each of these relationships. The Chair worked with members and compiled a list of current active liaisons and the origination date for each.
He presented this info contained in the above referenced document and as documented below:

Liaison Organization	Origination Date
T10	1994
FCIA	2000
SNIA	2000

CS1	2008
NVMe	2014
IEEE 802.3	1999
SFF/Transceivers	1999
ISO WG3/TIA	No longer active
OIF	2008

Steve Wilson (Broadcom) moved to approve the liaison list and origination dates as documented in T11-2022-00104-v000 (and above) and forward to INCITS as a response to their inquiry. Motion seconded by Fred Knight (NetApp).

Motion carried: In Favor-16, Opposed-0, Abstain-0.

See action item 22-006.

15.2 Scope of Work Review (T11-2022-00125-v000)
INCITS has asked each technical committee to review the Statement of Work that is published on their committee website. The Chair presented the current Statement of Work along with a proposed revision, as contained in document T11/2022-00125-v000. Group made a couple of minor edits. The final version reads as follows:

The INCITS/Fibre Channel Technical Committee is responsible for the development of the Fibre Channel (FC) standards. These standards specify the following:

Physical variants and interfaces;
Framing, signaling, and link services;
Upper level protocol mappings;
Switch models and protocols;
Management functions and protocols;
Other technical work deemed necessary for the Fibre Channel industry.

INCITS/Fibre Channel serves as the parent committee of the FC Physical Variants and FC Interconnection Schemes Task Groups.

Note: This Technical Committee was formerly known as INCITS/T11 until January 2022. The T11 nomenclature is still used by other industry organizations and member companies to designate Fibre Channel technologies.

Steve Wilson (Broadcom) moved to approve the wording for the Fibre Channel Technical Committee Statement of Work as documented above and forward to INCITS for approval and posting. Motion seconded by Roger Hathorn (IBM).

Motion carried: In Favor-16, Opposed-0, Abstain-0.

See action item 22-007.

16 Call for Patents

16.1 Call for Patents

16.1.1 Patent Information Overview

The chair reminded the meeting that among the rules and policies under which T11 operates are the INCITS intellectual property policies. An overview of patent information relevant to T11 may be found in the INCITS patent policy, which is publicly available at INCITS Patent Policy.

16.1.2 INCITS/ISO patent disclosure form

A template form for a patent declaration that is satisfactory to both INCITS and ISO can be found in INCITS Patent Declaration Form.

No company responded to the call for patents.

17 Liaison Reports

17.1 T11 report (T11-2022-00081-v000), INCITS Liaison report (T11-2022-00118-v000)

Steve Wilson (Broadcom) presented the information posted as T11-2022-00081-v000 on activity at T11 as reported to other organizations, and the information posted as T11-2022-00118-v000 on activity at INCITS other than T11 project status.

17.2 TC T10 (T11-2022-00141-v000)

Fred Knight (NetApp) gave report T11-2022-00141 on activity at T10.

17.3 FCIA (T11-2022-00144-v000)

Mark Jones (Broadcom) gave report T11-2022-00144-v000 on activity at FCIA.

17.4 IEEE 802.3 (T11-2022-00147-v000)

Tom Palkert (Macom) and Mabud Choudhury (OFS) gave report T11-2022-00147-v000 on activity at IEEE 802.3.

17.5 INCITS TC CS1 (None)

17.6 SNIA and SFF (T11-2022-00143-v000)

Fred Knight (NetApp) discussed report T11-2022-00143-v000 on SNIA activities.

17.7 NVMe (verbal)

Craig Carlson (Marvell) gave a brief verbal report on recent NVMe activities.

18 Administrative Matters

18.1 Officer Appointments

Officers of this Technical Committee and its Task Groups are:

T11 Chairman	Steve Wilson (Broadcom)
T11 International Representative	David Peterson (Broadcom)
T11 Vice Chairman	Craig Carlson (Marvell)
T11 Secretary	Patty Driever (IBM)
T11.2 Chairman	Tom Palkert (Macom)
T11.2 Vice-Chairman	Dean Wallace (Marvell)
T11.2 Secretary	Jason Rusch (Viavi)
T11.3 Chairman	Craig Carlson (Marvell)
T11.3 Vice-chairman	Roger Hathorn (IBM)

T11.3 Secretary	Patty Driever (IBM)

19 Future Meeting Schedule

19.1 Authorization of adhoc meetings

The chair directed members to the ICMS T11 calendar located at the T11 section of the web site http://standards.incits.org the latest announcements of pending work group interim meetings and teleconferences. He advised that authorization of ad hoc work group meetings is delegated to the appropriate TG, if any.

The vice chair will account for these requests in the schedule for the T11 plenary week hosted by Marvell in Duluth, MN and by Marvell via Zoom hybrid conference 13-17 June 2022.

19.2 Guidelines for hosting T11 meetings (T11-2017-00151-v000)

For members who are considering hosting future plenary meetings, the chair directed their attention to "Guidelines for hosting T11 Plenary Weeks" T11-2017-00151-v000. This information includes guidelines for hosting a T11 meeting week and room night histories of past meeting weeks. This is required reading for those who are considering hosting because it summarizes the needs of the committee for meeting facilities and gives considerations that may reduce costs for the host.

Groups arranging to meet with T11 were strongly advised to confirm with the host any changes in their needs for meeting space well before the meeting. Failure to do so could easily cause serious inconvenience to the host and/or the group.

19.3 Request for hosts and 2022–2023 meeting schedule

The chair announced the following schedule for 2022-2023.

Date	Location	Host Organization	Host Person
February 7-11, 2022	Raleigh, NC	FCIA	Chris Lyon
April 4-8, 2022	New Orleans, LA	Broadcom	Steve Wilson
June 6-10, 2022	Duluth, MN	Marvell	Craig Carlson

August 8-12, 2022	tbd	tbd	tbd
October 3-7, 2022	tbd	tbd	tbd
December 5-9, 2022	Deerfield Beach, FL	SNIA/SFF	Paul Coddington
February 6-10, 2023	tbd	tbd	tbd
April 3-7, 2023	tbd	tbd	tbd
June 5-9, 2023	tbd	tbd	tbd
August 7-11, 2023	tbd	tbd	tbd
October 2-6, 2023	tbd	tbd	tbd
December 4-8, 2023	tbd	tbd	tbd

19.4 Approval of Meeting Venues

19.4.1 August 2022

The chair indicated that Cisco is looking to host in August 2022. We will know more in the coming weeks if this will materialize and more details.
SFF has indicated a willingness to host in October.

Chair will update meeting calendar to reflect SFF as the host for October.

See action item 22-008.

19.5 Next meeting information

The chair reminded the membership that the next T11 plenary week, June 13-17, is planned to be a hybrid meeting with the face-to-face meeting in Duluth, MN hosted by Marvell and the virtual meeting will be using Marvell Zoom facilities. Room rate is $175 at the Holiday Inn & Suites Duluth Downtown.

19.6 Letter to travel representatives on hotel rates (T11-2022-00091-v000)

The chair reminded the membership that

- T11 plenary meetings are hosted by volunteer organizations;
- A plenary host receives no reimbursement from T11 or INCITS for any expenses of hosting;
- A plenary host may depend on agreements with the meeting hotel in order to reduce the expenses of the host and also possibly, though not necessarily, reduced the room rates for the members; and
- A hotel may charge punitive extra fees to a host if the meeting does not achieve an agreed number of room nights identified with group members.

Therefore, T11 expects those attending meetings during a plenary week to stay at the meeting hotel and identify themselves as members of the T11 group, even though less expensive lodging may be found in the area, or even at the same hotel. Document T11-2022-00091-v000 has been posted which contains a letter to those with budget responsibilities for member organizations justifying this obligation.

19.7 Plenary week meeting map for April 2022 T11 meetings

The vice chair Craig Carlson (Marvell) created and the chair presented the tentative meeting map of the next T11 meeting week. He advised members for the most recent meeting map of the next T11 regular meeting to go to the INCITS website, search the T11 Meeting Information folder under June 2022.

20 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 source of attendance for formal records of this meeting.

Final registered attendance for T11 regular meeting #170 is shown in annex A.2. 29 people from 18 member (16 voting) organizations were in attendance.

21 Review of Action Items

22-004	T11 secretary to post approved Minutes of T11 meeting #169 as agreed at T11 meeting #170. (See clause 5)

22-005	T11 Chair to forward new project proposal for FC-NVMe-3 as documented in T11-2022-00085-v001 to INCITs for further processing.
22-006	T11 Chair to forward Liaison list with Origination Dates to INCITS Secretariat
22-007	Chair to inform INCITs of the revised Statement of Work for the INCITS/Fibre Channel (T11) technical committee.
22-008	Chair to update the 2022 meeting schedule to reflect the October 2022 meeting as being hosted by SFF.

22 Adjournment

Dave Peterson (Broadcom) moved to adjourn at 2:26 PM CDT. The motion passed by acclamation.

Annex A Membership and Attendance

A.1 Membership for this meeting

A.1.1 Emeritus Members

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. Bob Nixon

Mr. Schelto Van Doorn

A.1.2 Voting Members

The following is the list of organizations that are voting members of record for regular meeting #170 of the INCITS Fibre Channel (T11) Technical Committee, including the recognized representatives of each member organization:

Organization	Representative Type	Representative
Amphenol	Principal	Chris Lyon
	Alternate	Brad Brubaker
	Alternate	Paul Coddington
	Alternate	Daniel Dillow
	Alternate	Michael Klempa
	Alternate	Sam Kocsis
	Alternate	Alex Persaud
	Alternate	Hu Silver
	Alternate	Michael Wingard
Broadcom	Principal	Steven L. Wilson
	Alternate	Evan Beauprez

	Alternate	Ben Chu
	Alternate	Robert Hannah
	Alternate	Adam Healey
	Alternate	Howard Johnson
	Alternate	Mark Jones
	Alternate	Anil Mehta
	Alternate	David Peterson
	Alternate	James Smart
	Alternate	Anil Veerabhadrappa
Cisco	Principal	Mike Blair
	Alternate	Harsha Bharadwaj
	Alternate	Rajesh L.G.
	Alternate	Fabio Maino
	Alternate	Edward Mazurek
	Alternate	Mark Nowell
	Alternate	Sai Pavan
	Alternate	Kiran Ranabhor
	Alternate	Shalom Shefa
	Alternate	Sumanth Sindiri
	Alternate	Ramesh Sivakolundu
	Alternate	Yi Tang
	Alternate	Xiaohong Wu
Commscope	Principal	Yang (Sunny) Xu
	Alternate	Gary Gibbs
Corning	Principal	David Kozischek
	Alternate	Steven E. Swanson
Dell	Principal	Erik Smith
	Alternate	Jai Bansai
	Alternate	David Black
	Alternate	David Brown
	Alternate	Doug Farley

	Alternate	David Piehler
	Alternate	Vinay Sawal
	Alternate	Joseph White
Hewlett Packard Enterprise	Principal	Barry Maskas
	Alternate	Curtis Ballard
	Alternate	Rupin Mohan
	Alternate	Krishna Babu Puttagunta
IBM	Principal	Roger Hathorn
	Alternate	Patty Driever
	Alternate	Stephen Guendert
II-VI Inc	Principal	Vipul Bhatt
	Alternate	Vera Koleva
	Alternate	Lance Thompson
Keysight Technologies	Principal	Stephen Didde
	Alternate	Joachim Vobis
Macom	Principal	Thomas Palkert
Marvell Semiconductor Inc	Principal	Craig W. Carlson
	Alternate	Anshul Agarwal
	Alternate	Sanjaya Anand
	Alternate	Qian Banglong
	Alternate	Girish Basrur
	Alternate	Kathy Caballero
	Alternate	Mike Dudek
	Alternate	Arun Easi
	Alternate	Robert Friend
	Alternate	Duane Grigsby
	Alternate	Anil Gurumurthy
	Alternate	James Hamada
	Alternate	Andrew Joy
	Alternate	Ali Khwaja
	Alternate	Stephen Lam

	Alternate	Ray Leung
	Alternate	Raymond Liang
	Alternate	Akinori Maeda
	Alternate	Praveen Midhag
	Alternate	Trinh Nguyen
	Alternate	Raul Oteyza
	Alternate	Arun Patil
	Alternate	Eddy Soetjahja
	Alternate	Alan Spalding
	Alternate	Gourangadoss Sundar
	Alternate	Andrew Vasquez
	Alternate	Dean Wallace
NetApp	Principal	Frederick Knight
OFS	Principal	Roman Shubochkin
	Alternate	Mabud Choudhury
Teledyne LeCroy	Principal	Henry Poelstra
	Alternate	Amit Bakshi
	Alternate	Rakesh Kathiresan Natarajan
	Alternate	Nick Kriczky
	Alternate	Douglas Lee
	Alternate	Srikant Tadigadapa
	Alternate	Jim Yasueda
Viavi	Principal	Jason Rusch
	Alternate	Scott Baxter
	Alternate	George Bullis
	Alternate	Paul Gentieu

A.1.3 Advisory Members

The following is the list of organizations that are advisory (i.e., nonvoting) members of record for regular meeting #170 of the INCITS Fibre Channel (T11) Technical Committee, including the recognized representatives of each member organization:

Organization	Representative Type	Representative
Anritsu	Principal	Tadanori Nishikobara
	Alternate	Yuji Sekine
Ciena	Principal	Stephen Shew
	Alternate	Sebastien Gareau
Credo Semiconductor	Principal	Phil Sun
	Alternate	Dr. Fang Cai
	Alternate	Yasuo Hidaka
DCS	Principal	Steve Eisele
	Alternate	Rodney Jacks
Futurewei	Principal	Timothy Jeffries
	Alternate	Victor Cao
Lumentum Operations	Principal	David Lewis
MediaTek	Principal	Tamer Ali
	Alternate	Chihlong Dai
	Alternate	Herbert Wang
	Alternate	Mau-Lin Wu
Molex	Principal	Alexandra Haser
	Alternate	Scott Sommers
Panduit	Principal	Jose Castro
	Alternate	Bulent Kose
	Alternate	Robert Reid
TE Connectivity	Principal	Nathan Tracy
	Alternate	Daniel Gorenc
	Alternate	Jeff Mason
	Alternate	Matt Schumacher
Unisys	Principal	Jeffrey Dremann
	Alternate	Phil Shelton
VMWare	Principal	Neil MacLean
	Alternate	Wenchao Cui
	Alternate	Wenhua Liu

	Alternate	Murali Rajagopal
	Alternate	Ahmad Tawil

A.2 Attendance at this meeting

A.2.1 Member organizations

The following is the list of member organizations and their representatives recorded in the online attendance registry as attending regular meeting #170 of the INCITS Fibre Channel (T11) Technical Committee:

Organization	Representative(s)	In Person
AMPHENOL CORP	Paul Coddington	Y
BROADCOM INC	Ben Chu	N
	Mark Jones	Y
	David Peterson	Y
	Steven L. Wilson	Y
CISCO SYSTEMS INC	Mike Blair	Y
	Ramesh Sivakolundu	Y
	Xiaohong Wu	N
COMMSCOPE	Sunny Xu	N
CORNING	David Kozischek	N
DELL INC	David Brown	N
	Erik Smith	N
HEWLETT PACKARD ENTERPRISE	Barry Maskas	N
	Krishna Babu Puntagunta	N
IBM CORP	Patty Driever	Y
	Roger Hathorn	Y
II-VI INC	Vera Koleva	N
	Lance Thompson	N
KEYSIGHT TECHNOLOGIES INC	Stephen Didde	N
MACOM	Thomas Palkert	Y
MARVELL SEMICONDUCTOR	Craig Carlson	Y

	Dean Wallace	Y
NETAPP INC	Frederick Knight	Y
OFS FITEL LLC	Mabud Choudhury	N
PANDUIT CORPORATION	Jose Castro	N
TE CONNECTIVITY	Daniel Gorenc	N
TELEDYNE LECROY CORPORATION	Henry Poelstra	N
	Jim Yasueda	Y
VIAVI SOLUTIONS INC	Jason Rusch	N

Rupin Mohan and Ed Mazurek, while not in attendance at the plenary, did attend ad-hoc meetings throughout the week in-person.

A.2.2 Ad hoc meeting attendance

FC-SW-8 ad hoc, members

Organization	Representative(s)
BROADCOM INC	Howard Johnson
	David Peterson
	James Smart
CISCO SYSTEMS INC	Harsha Bharadwaj
	Mike Blair
	Edward Mazurek
HEWLETT PACKARD ENTERPRISE	Barry Maskas
IBM CORP	Patty Driever
	Roger Hathorn
MARVELL SEMICONDUCTOR INC	Craig Carlson
NETAPP INC	Frederick Knight

FC-PI-8 ad hoc, members

Organization	Representative(s)

Organization	Representative(s)
AMPHENOL CORPORATION	Paul Coddington
	Michael Klempa
BROADCOM INC	Anil Mehta
	Steven Wilson
CISCO SYSTEMS INC	Mark Nowell
	Sai Pavan
	Kiran Ranabhor
	Ramesh Sivakolundu
	Xiaohong Wu
COMMSCOPE	Sunny Xu
CORNING INC	David Kozischek
CREDO SEMICONDUCTOR	Phil Sun
DATA CENTER SYSTEMS	Steve Eisele
DELL TECHNOLOGIES INC	David Piehler
II-VI INC	Vera Koleva
	Lance Thompson
KEYSIGHT TECHNOLOGIES INC	Stephen Didde
MACOM	Thomas Palkert
MARVELL SEMICONDUCTOR INC	Raul Oteyza
	Dean Wallace
OFS FITEL LLC	Mabud Choudhury
PANDUIT CORPORATION	Jose Castro
TELEDYNE LECROY CORPORATION	Henry Poelstra
VIAVI SOLUTIONS INC	Jason Rusch

FC-GS-9 ad hoc, members

Organization	Representative(s)
BROADCOM INC	Howard Johnson
	David Peterson
CISCO SYSTEMS INC	Mike Blair

	Edward Mazurek
HEWLETT PACKARD ENTERPRISE	Barry Maskas
IBM CORPORATION	Patty Driever
	Roger Hathorn
NETAPP INC	Frederick Knight
VIAVI SOLUTIONS INC	Jason Rusch

FC-LS-5 ad hoc, members

Organization	Representative(s)
BROADCOM INC	Howard Johnson
	Dave Peterson
	James Smart
CISCO SYSTEMS INC	Harsha Bharadwaj
	Mike Blair
	Edward Mazurek
HEWLETT PACKARD ENTERPRISE	Barry Maskas
IBM CORP	Patty Driever
	Roger Hathorn
MARVELL SEMICONDUCTOR INC	Craig Carlson
NETAPP INC	Frederick Knight
VIAVI SOLUTIONS INC	Jason Rusch

FC-FS-6 ad hoc, members

Organization	Representative(s)
BROADCOM	Howard Johnson
	David Peterson
CISCO SYSTEMS INC	Mike Blair
	Ed Mazurek
HEWLET PACKARD ENTERPRISE	Barry Maskas

IBM	Patty Driever
	Roger Hathorn
MARVELL SEMICONDUCTOR INC	Craig Carlson
	Raul Oteyza
NETAPP INC	Frederick Knight

FC-RDMA ad hoc, members

Organization	Representative(s)
BROADCOM INC	Howard Johnson
	David Peterson
	James Smart
CISCO SYSTEMS INC	Harsha Bharadwaj
	Mike Blair
	Edward Mazurek
HEWLETT PACKARD ENTERPRISE	Barry Maskas
IBM CORPORATION	Patty Driever
	Roger Hathorn
MARVELL SEMICONDUCTOR INC	Craig Carlson
NETAPP INC	Frederick Knight

FC-NVMe-3 ad hoc, members

Organization	Representative(s)
BROADCOM INC	Howard Johnson
	David Peterson
	James Smart
CISCO SYSTEMS INC	Harsha Bharadwaj
	Mike Blair
	Edward Mazurek

HEWLETT PACKARD ENTERPRISE	Barry Maskas
IBM CORPORATION	Patty Driever
	Roger Hathorn
KEYSIGHT TECHNOLOGIES	Stephen Didde
MARVELL SEMICONDUCTOR INC	Craig Carlson
NETAPP INC	Frederick Knight
VIAVI SOLUTIONS INC	Jason Rusch

FC-SP-2/AM2 ad hoc, members

Organization	Representative(s)
BROADCOM INC	Howard Johnson
	David Peterson
	James Smart
	Anil Veerabhadrappa
CISCO SYSTEMS INC	Mike Blair
	Edward Mazurek
HEWLETT PACKARD ENTERPRISE	Barry Maskas
IBM CORPORATION	Patty Driever
	Roger Hathorn
MARVELL SEMICONDUCTOR INC	Craig Carlson
NETAPP INC	Frederick Knight

Joint T11.2/T11.3 ad hoc, members

Organization	Representative(s)

Annex B Supporting Documents

B.1 T11 Project Status

The following table indicates the status of all active T11 projects. It reflects the official status as reported on the T11 web site as of the T11 regular meeting #170 held on 07 April 2022.

Standard	Status	Action	Target or Reaffirm Date	Editor	Ad Hoc Chair	Secretary
Projects in Development Stage						
FC-FS-6	In dev.	To T11	Jun-22	Carlson	Peterson	Driever
FC-GS-9	In dev.	To T11	Jun-22	Rusch	Peterson	Johnson
FC-LS-5	In dev.	To T11	Jun-22	Carlson	Driever	Rusch
FC-MSQS-3	In dev.	To T11	Jun-22	Castro	Wallace	Wallace
FC-PI-8	In dev.	ToT11	Oct-22	Rusch	Wallace	Wallace
FC-RDMA	In dev.	To T11.	Jun.22	Peterson	Carlson	Peterson
FC-SW-8	In dev	ToT11	Jun 22	Peterson	Carlson	Peterson
FC-NVMe-3	In dev.	ToT11	Dec 22	Peterson	Carlson	Hathorn
FC-SP-2/AM2	In dev	ToT11	Dec 22	Peterson	Hathorn	Peterson
Projects in Approval Stage						

B.2 INCITS SC 25 / WG4 project status

The following tables indicates the status of all active INCITS SC 25 / WG4 TAG projects. It reflects the official status as reported at the Fibre Channel (T11) regular meeting #170, 07 April 2022 in document T11-2022-00134-v000. The SC 25/WG 4 TAG project database is available in document sc25-wg4-2018-00011-TAG-Project-Database.

B.2.1 Active Fibre Channel (T11) Computer Systems Interconnection (SC25 WG4 TAG) Projects

	ISO/IEC # (T11 allocated)	Status
FC-SP-2+AM1 NWIP	14165-432	Submitted in July 2018. Resubmission email from INCITS/TIA on January 18, 2019 Feb 22 – email from Juergen indicates IEC project was started JTC1-SC25/2860/NP ballot opened 3/1/2019 and closed 05/24/2019 – Stage: ACD – Approved for CD 9/16/19 – CD circulated on 9/13/19 - International (comments) due date: 12/06/2019 - TAG (comments) Deadline: 11/06/2019 Stage: PCC – Preparation of CC 1/28/20 – No comments requesting changes received, with request for Word source 6/03/20 – Received request for Word source again 🙁 DIS text was submitted to IEC for further processing. FDIS ballot should be issued shortly. 12/7/20 – Sent email requesting status 12/11/20 – Submitted CDV 5/28/21 – Comments received from ISO-IEC Central Office. - Had two con calls to discuss 7 remaining open items 11/29/21 – Sent final FDIS PDF to ISO/IEC Central Office 02/04/22 – Sent final PDF to ISO/IEC Central Office for Publishing