



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



T11-2022-00043-v000

Draft Minutes
INCITS Fibre Channel (T11) Technical Committee
Regular Meeting #169
10 February 2022 – 1 PM to 3 PM EST
Raleigh, NC (Hybrid Meeting)

1 Opening Remarks and Introductions

1.1 Introductory Remarks

TC T11 chair Steve Wilson (Broadcom) convened regular meeting #169 of the INCITS Fibre Channel (T11) Technical Committee on Thursday, 10 February 2022 at 1:00 PM EST. He introduced himself and thanked our hosts FCIA 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 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.

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 T11-2022-00008-v001. The chair presented the agenda with final updates as T11-2022-00008-v002 and made a call for any changes and new agenda items. No changes or new items were requested.

Chris Lyon (Amphenol) moved and Tom Palkert (Macom) seconded that T11-2022-00008-v002 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:

John Meneghini was removed as Alternate for NetApp Inc. All other representation for NetApp remains the same.

Henry Poelstra was moved to Principal member and David Rodgers was moved to an

Alternate member role for Teledyne LeCroy Corporation. Nick Kriczky and Jim Yasueda were also added as an Alternate members for Teledyne LeCroy. All other representation for Teledyne LeCroy remains the same.

Greg McSorley was removed as an Alternate for Amphenol Corporation. All other representation for Amphenol 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

- No company is in membership jeopardy for non-attendance during this meeting cycle. Following this meeting Data Center Systems will be in jeopardy due to lack of attendance at 2 of the last 3 plenary meetings.

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 09 December 2021. With no members losing voting privileges, and no members gaining voting privileges the voting membership of T11 remains at 17 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 17. 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 17 (voting and non-voting) member companies present at this plenary meeting, 7 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 #168

The prior regular meeting of the INCITS Fibre Channel (T11) Technical Committee was #168 on 09 December 2021. The draft Minutes of that meeting were posted as document T11/2021-00350-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.

Tom Palkert (Macom) moved and Dave Peterson (Broadcom) seconded to accept T11/2021-00350-v000 as the Minutes of T11 meeting #168 on 09 December 2021. The motion passed by acclamation.

See action item [22-001](#).

6 Review of Old Action Items

21-016	T11 secretary to post approved Minutes of T11 meeting #167 as agreed at T11 meeting #168. Completed by posting T11/2021-00374-v000 on December 10, 2021.
21-017	T11 Chair to forward new project proposal for FC-RDMA as documented in T11-2021-00317-v000 to INCITS for further processing. Complete. INCITS EB approved INCITS 564 on January 21, 2022
21-018	T11 chair to update T11 Future Meeting Schedule to reflect current 2022 hosting plans as well as 2023 meeting dates. Completed by Chair posting new schedule on ICMS on 20 December 2021.
21-019	Roger Hathorn to update Letter to Travel Rep on Hotel Rates in order to reflect a more current date. Carry over.

7 Review of T11 Project and Proposal Status

7.1 Project Proposals

7.1.1 FC-RDMA

This project proposal was accepted by INCITS and is now project INCITS 564.

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 ([T11-2022-00075-v000](#))

Task Group Chair Tom Palkert (Macom) gave the report posted as T11-2022-000075-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 ([T11-2022-00078-v000](#))

Task Group Chair Craig Carlson (Marvell) presented the information posted as T11-2022-00078-v000 on activity at T11.3.

11.2 Actions

11.2.1 There were no actions.

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 SC 25 / WG4 TAG Status Report ([T11-2022-00060-v000](#))

Dave Peterson (Broadcom) presented the information posted as T11-2022-00060-v000 on INCITS SC 25 / WG4 TAG project status (see [annex B.2](#)).

15 T11 New Business

15.1 Liaison Review

INCITS has asked that all TCs and TGs review their liaisons. We have begun this work in the T11.2 plenary meeting. We need to ensure these liaisons are still active and what the origination date for each was.

Steve still needs some help from those more closely involved with some of the groups, so he will be in touch with liaison reps to try to pull this together.

15.2 National Maintenance 2022 Review (eb-2021-00928), ([T11-2022-00011-v000](#))

The T11 community was informed of the 2022 National Maintenance review by INCITS following the December 2021 T11 plenary meeting. The Chair proposed that the following standards/technical reports be either stabilized, reaffirmed, or withdrawn according to the following motions.

Steve Wilson (Broadcom) moved and Mike Klempa (Amphenol) seconded to recommend to INCITS that the following standards be Stabilized (2/3 Meeting). The rationale for stabilization is that the standards have ongoing validity and effectiveness, but they are mature and unlikely to require maintenance of any sort.

INCITS 483-2012[R2017]	Information Technology – Virtualization Management Specification
INCITS 495-2012[R2017]	Information Technology – Platform Management Specification, Volumes 1 and 2
INCITS 496-2012[R2017]	Information Technology - Fibre Channel - Security Protocols - 2 (FC-SP-2)
INCITS 498-2012[R2017]	Information technology – CIM Representations of Management Specification

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

Steve Wilson (Broadcom) moved and Tom Palkert (Macom) seconded to recommend to INCITS that the following standards/technical reports be Reaffirmed (2/3 Meeting):

INCITS 510-2017	Information technology - Fibre Channel – Generic Services – 7 (FC-GS-7)
INCITS/TR-42-2007[R2017]	INCITS Technical Report for Information Technology - Fibre Channel – Avionics Environment - Upper Layer Protocol (FC-AE-1553)
INCITS/TR-47-2012[R2017]	INCITS Technical Report for Information Technology - Fibre Channel – Simplified Configuration and Management Specification (FC-SCM)
INCITS/TR-48-2012[R2017]	INCITS Technical Report for Information Technology - Fibre Channel – Methodologies for Interconnects - 3 (FC-MI-3)
INCITS/TR-49-2012[R2017]	INCITS Technical Report for Information Technology - Fibre Channel - Device Attach - 2 (FC-DA-2)
INCITS/TR-24-1999[R2017]	Information Technology - Tape and Tape Medium Changers (FC-TAPE), a Technical Report prepared by INCITS and registered with ANSI
INCITS/TR-46-2011[R2017]	Information technology - Fibre Channel - Methodologies for Signal Quality Specification

	(FC-MSQS), a Technical Report prepared by INCITS and registered with ANSI
--	---

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

15.3 2022 Continued Stabilized Review (eb2022-00027), ([T11-2022-00012-v000](#))

The T11 community was informed of the 2022 Continued Stabilization review by INCITS following the December 2021 T11 plenary meeting. A vote is taking place at the February 2022 T11 plenary meeting to address the review request.

Steve Wilson (Broadcom) moved and Fred Knight (NetApp) seconded to recommend to INCITS that the following standards continue their stabilized status for another 10-year cycle.

INCITS 222-1997[S2012]	Information technology - High-Performance Parallel Interface - Switch Control (HIPPI-SC)
INCITS 296-1997[S2012]	Information technology - Single Byte Command Code Sets CONnection (SBCON)
INCITS 300-1997[S2012]	Information technology - High-Performance Parallel Interface - Serial Specification (HIPPI-Serial)
INCITS 356-2002[S2012]	Information technology -Fibre Channel - Audio Video (FC-AV)
INCITS 357-2002[S2012]	Information Technology - Fibre Channel - Virtual Interface Architecture Mapping Protocol (FC-VI)

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

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 ([T11-2021-00309-v000](#)), INCITS Liaison report ([T11-2021-00327-v000](#))

Steve Wilson (Broadcom) presented the information posted as T11-2021-00309-v000 on activity at T11 as reported to other organizations, and the information posted as T11-2021-00327-v000 on activity at INCITS other than T11 project status.

17.2 TC T10 ([T11-2022-00064-v000](#))

Fred Knight (NetApp) gave report T11-2022-00064 on activity at T10.

17.3 FCIA ([T11-2022-00065-v000](#))

Mark Jones (Broadcom) gave report T11-2022-00065-v000 on activity at FCIA.

17.4 IEEE 802.3 ([T11-2022-00071-v002](#))

Tom Palkert (Macom) and Mabud Choudhury (OFS) gave report T11-2022-00071-v002 on activity at IEEE 802.3.

17.5 INCITS TC CS1 (None)

17.6 SNIA and SFF ([T11-2022-00077-v000](#))

Fred Knight (NetApp) discussed report T11-2022-00077-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 Broadcom in New Orleans, LA and by Marvell via Zoom hybrid conference 04-08 April 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

19.5 Next meeting information

The chair reminded the membership that the next T11 plenary week, April 04-08, is planned to be a hybrid meeting with the face-to-face meeting in New Orleans, LA hosted by Broadcom and the virtual meeting will be using Marvell Zoom facilities.

19.6 Letter to travel representatives on hotel rates ([T11-2017-00150-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 T11-2017-00150-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 April 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 #169 is shown in annex A.2. 34 people from 17 member (16 voting) organizations were in attendance.

21 Review of Action Items

21-019	Roger Hathorn to update Letter to Travel Rep on Hotel Rates in order to reflect a more current date. Carry over.
22-001	T11 secretary to post approved Minutes of T11 meeting #168 as agreed at T11 meeting #169. (See clause 5)
22-002	Chair to inform INCITs of the result of the votes regarding standards to be reaffirmed and standards to be stabilized.
22-003	Chair to inform INCITs of the vote regarding standards to continue as stabilized.

22 Adjournment

Chris Lyon (Amphenol) moved to adjourn at 2:55 PM EST. 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 #169 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 Veerabhadrappe
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
Commscope	Principal	Yang (Sunny) Xu
	Alternate	Gary Gibbs
Corning	Principal	David Kozischek
	Alternate	Steven E. Swanson
DCS	Principal	Steve Eisele
	Alternate	Rodney Jacks
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
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	David Rodgers
	Alternate	Srikant Tadigadapa
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 #169 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
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	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 #169 of the INCITS Fibre Channel (T11) Technical Committee:

Organization	Representative(s)	In Person
AMPHENOL CORP	Paul Coddington	N
	Michael Klemper	Y
	Chris Lyon	Y
BROADCOM INC	Ben Chu	N
	Howard Johnson	N
	David Peterson	Y
	James Smart	N
	Steven L. Wilson	Y
CISCO SYSTEMS INC	Mike Blair	N
	Kiran Ranabhor	Y
	Ramesh Sivakolundu	Y
	Xiaohong Wu	N
COMMSCOPE	Gary Gibbs	N
	Sunny Xu	N
CORNING	David Kozischek	N
DELL INC	David Brown	N
	David Piehler	N
	Erik Smith	N
HEWLETT PACKARD ENTERPRISE	Barry Maskas	N
	Krishna Babu Puntagunta	N
IBM CORP	Patty Driever	Y
	Roger Hathorn	N
II-VI INC	Lance Thompson	N

KEYSIGHT TECHNOLOGIES INC	Stephen Didde	N
MACOM	Thomas Palkert	Y
MARVELL SEMICONDUCTOR	Craig Carlson	Y
	Raul Oteyza	N
	Dean Wallace	Y
NETAPP INC	Frederick Knight	Y
OFS FITEL LLC	Mabud Choudhury	N
PANDUIT CORPORATION	Jose Castro	N
TELEDYNE LECROY CORPORATION	Henry Poelstra	N
	Jim Yasueda	Y
VIAVI SOLUTIONS INC	Jason Rusch	N

Rupin Mohan, Mike Dudek, 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
	Anil Veerabhadrapa
CISCO SYSTEMS INC	Harsha Bharadwaj
	Mike Blair
	Edward Mazurek
DELL TECHNOLOGIES	David Brown
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)
AMPHENOL CORPORATION	Paul Coddington
	Michael Klempa
BROADCOM INC	Ben Chu
	Anil Mehta
	James Smart
CISCO SYSTEMS INC	Sai Pavan
	Ramesh Sivakolundu
	Xiaohong Wu
COMMSCOPE	Gary Gibbs
	Sunny Xu
CORNING INC	David Kozischek
DELL TECHNOLOGIES INC	David Piehler
II-VI INC	Lance Thompson
KEYSIGHT TECHNOLOGIES INC	Stephen Didde
MACOM	Thomas Palkert
MARVELL SEMICONDUCTOR INC	Mike Dudek
	Raul Oteyza
	Dean Wallace
OFS FITEL LLC	Mabud Choudhury
PANDUIT CORPORATION	Jose Castro

FC-GS-9 ad hoc, members

Organization	Representative(s)
BROADCOM INC	Howard Johnson
	David Peterson

	James Smart
	Anil Veerabhadrapa
CISCO SYSTEMS INC	Harsha Bharadwaj
	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
	Anil Veerabhadrapa
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
	James Smart
CISCO SYSTEMS INC	Mike Blair
	Ed Mazurek
HEWLET PACKARD ENTERPRISE	Barry Maskas
	Krishna Babu Puttagunta
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
	Mark Jones
	David Peterson
	James Smart
	Anil Veerabhadrappa
CISCO SYSTEMS INC	Harsha Bharadwaj
	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
	Anil Veerabhadrapa
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
	Mark Jones
	David Peterson
	James Smart
	Anil Veerabhadrapa
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 #169 held on 10 February 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	Feb-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 T11 regular meeting #169, 10 February 2022 in document T11-2022-00060-v000. The SC 25/WG 4 TAG project database is available in document [sc25-wg4-2018-00011-TAG-Project-Database](#).

B.2.1 Active T11 SC25 WG4 TAG Projects

	ISO/IEC # (T11 allocated)	Status
FC-SP-2+AM1 NWIP	14165-432	<p>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</p> <ul style="list-style-type: none"> - International (comments) due date: 12/06/2019 - TAG (comments) Deadline: 11/06/2019 <p>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.</p> <ul style="list-style-type: none"> - Had two con calls to discuss 7 remaining open items <p>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</p>