T11-2017-00400-v001

Draft Minutes
INCITS Fibre Channel (T11) Technical Committee
Regular Meeting #144
7 December 2017 – 1 PM to 4 PM PDT
Santa Rosa, CA

1 Opening Remarks and Introductions

1.1 Introductory Remarks

TC T11 chair Steve Wilson (Broadcom) convened regular meeting #144 of the INCITS Fibre Channel (T11) Technical Committee on Thursday, 7 December 2017 at 1:00 PM PST. He introduced himself, and thanked our host Broadcom for the meeting facilities and amenities.

He next introduced Craig Carlson (QLogic / Cavium) as vice chair and Richard Johnson (Finisar) as secretary.

1.2 Self-introductions

The chair requested those present to introduce themselves, with identification of the organizations they represent.

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 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 T11-2017-00351-v001. The chair presented the agenda with final updates as T11-2017-00351-v002 and made a call for any changes and new agenda items. No changes or new items were requested.

Jay Neer (Molex) moved and Dave Peterson (Broadcom) seconded that T11-2017-00351-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:

- **Brocade:** loses membership due to acquisition by Broadcom.
- **Cisco:** Harsha Bharadwaj is added as a new Alternate.
- **Keysight:** regains voting membership with Stephen Didde as Principal, Steve Sekel and Joachim Vobis as Alternates.
- **Semtech Canada Corporation:** Francois Tremblay is removed from the membership list.

3.3 New Voting Memberships

- None for this meeting cycle.

3.4 Voting memberships in jeopardy for attendance

- **Oracle** loses voting membership for lack of attendance.

3.5 Voting memberships in jeopardy for non-payment of dues

- No member is in jeopardy for non-payment of dues.

3.6 Voting memberships in jeopardy for letter ballot performance

- Molex is in jeopardy for letter ballot performance.

3.7 Membership for this meeting

Technical Committee T11 had 22 voting members at the T11 regular meeting 5 October 2017. With one member regaining voting membership and two members losing voting membership, the voting membership of T11 becomes 21 effective 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 membership for this meeting is 20. One third of the total membership for this meeting is 7. The number of member organizations that responded to the call for quorum was 20. This exceeds or equals one third of the total membership for this meeting and also exceeds or equals 4. A quorum is therefore present for this meeting.

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 #143

The prior regular meeting of the INCITS Fibre Channel (T11) Technical Committee was #143 on 5 October 2017. The draft Minutes of that meeting were posted as document T11/2017-00318-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 (richard.johnson@finisar.com) or at the subsequent meeting in person. No corrections were requested.

Dave Peterson (Broadcom) moved and Tom Palkert (Macom) seconded to accept T11/2017-00318-v000 as the Minutes of T11 meeting #143 on 5 October 2017. The motion passed by acclamation.

See action item 17-022.

6 Review of Old Action Items

17-016	T11 vice-chair to change Keysight membership. Completed by Craig Carlson on December 6, 2017.
17-017	T11 secretary to post approved Minutes of T11 meeting #142 as agreed at T11 meeting #143. Completed by posting T11-2017-00344-v000 on October 23, 2017.
17-018	T11 chair to send FC-PI-7P project proposal to INCITS for further processing. Completed by email to Rachel Porter on October 23, 2017 (T11-2017-00346-v000).
17-019	T11 chair to send FC-NVMe to INCITS for further processing. Completed by email to Rachel Porter on October 18, 2017 (T11-2017-00343-v000).
17-020	T11 International representative to INCITS of our vote recommending FC-GS-4 stabilization. Completed by email to Rachel Porter on October 10, 2017.
17-021	T11 chair to update meeting schedule showing revised dates for August 2018. Completed by posting updated meeting schedule on December 2, 2017.

7 Review of T11 Project and Proposal Status

7.1 Project Proposals

FC-PI-7 (INCITS 559-201x) has been approved by INCITS.

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

There were no non-ISO letter ballots held during this reporting period.

9 Old Business

No old business was reopened.

10 Task Group T11.2 - Physical Interfaces

10.1 Report to T11 Plenary (T11-2017-00413-v000)

Task Group chair Tom Palkert (Macom) gave the report posted as T11-2017-00413-v000 on activity at T11.2.

10.2 Actions

10.2.1 FC-PI-7 RFC Ballot

TG T11.2 requests that the T11 chair issue FC-PI-7 document T11-2017-00156-v004 as modified by accepted comments and motions to document T11-2017-00156-v005 go to RFC ballot.

See action item 17-023.

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 (T11-2017-00415-v000)

Task Group chair Craig Carlson (QLogic / Cavium) presented the information posted as T11-2017-00415-v000 on activity at T11.3.

11.2 Actions

11.2.1 FC-FS-5 RFC Ballot

TG T11.3 requests that the T11 chair issue an RFC ballot on FC-FS-5 rev. 0.3 T11-2017-00083-v001 when it becomes available.

See action item 17-024.

11.2.2 FC-EE TR Letter Ballot

TG T11.3 requests that the T11 chair issue a letter ballot on FC-EE TR T11-2017-00356-v000 and forward to INCITS for further processing.

See action item 17-025.

11.3 Other Items

No other items were presented for TG T11.3.

12 Joint TG T11.2 / T11.3 Items

The joint TG T11.2 / T11.3 meeting report was presented as part of the Task Group T11.2 report and not repeated at the T11 plenary.

13 T11 project activities

13.1 FC-EE Update

See 11.3 report for details.

14 Review of International Activity

14.1 ISO Status Report (T11-2017-00360-v000)

T11 International Representative Dave Peterson (Broadcom) presented the information posted as T11-2017-00360-v000 on project status at ISO (see annex B.2).

14.2 ISO Motions

14.2.1 FC-BB-3 stabilization

Dave Peterson (Broadcom) moved and Fred Knight (NetApp) seconded the following motion:

INCITS TC T11 recommends to stabilize and adopt as national standard:

ISO / IEC 14165-243:2012, Information technology – Fibre Channel – Part 243: Backbone 3 (FC-BB-3)

The answers to the US systematic review questions are provided in T11-2017-00388-v000.

A show-of-hands vote was taken, with 20 affirming, 0 opposing, and 0 abstaining.

See action item 17-026.

14.2.2 FC-VI Stabilization

Dave Peterson (Broadcom) moved and Fred Knight (NetApp) seconded the following motion:

INCITS TC T11 recommends to stabilize:

ISO / IEC 14165-331:2007 (vers 2), Information technology – Fibre Channel – Part 331: Virtual Interface (FC-VI).

Voting members were asked if any wanted to change the vote from 14.2.1. Hearing no response, motion passes with 20 affirming, 0 opposing, and 0 abstaining.

See action item 17-027.

15 T11 New Business

15.1 Xilinx late comment on FC-FS-5

Xilinx had issued a late comment against FC-FS-5.

Steve Wilson (Broadcom) moved and Joachim Vobis (Keysight) seconded a motion to have

the T11 chair issue a letter to Xilinx explaining T11's position, and welcoming Xilinx to attend a future T11 meeting to explain their concern.

Voting members were asked if any wanted to change the vote from 14.2.1. Hearing no response, motion passes with 20 affirming, 0 opposing, and 0 abstaining.

See action item 17-028.

16 Call for Patents

16.1 Patent information registry

The chair indicated that the current record of responses to prior calls for patents can be found in the T11 web site at <http://www.t11.org/t11/docreg.nsf/v2t?openForm&ent=35>.

16.2 Call for Patents

16.2.1 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 T11-2010-008v0.

16.2.2 INCITS/ISO patent disclosure form

A template form for a patent declaration that is satisfactory to both INCITS and ISO can be found in http://www.incits.org/standards-information/legal-info.

No company responded to the call for patents.

17 Liaison Reports

17.1 T11 report (T11-2017-00347-v000), INCITS Liaison report (T11-2017-00369-v000)

Steve Wilson (Broadcom) presented the information posted as T11-2017-00347-v000 on activity at T11 as reported to other organizations, and the information posted as T11-2017-00369-v000 on activity at INCITS other than T11 project status.

17.2 TC T10 (T11-2017-00389-v000)

Fred Knight (NetApp) reviewed report T11-2017-00389-v000 on activity at INCITS Technical Committee T10.

17.3 FCIA (T11-2017-00391-v000)

Chris Lyon (Amphenol) gave report T11-2017-00391-v000 on activity at FCIA.

17.4 IEEE 802.3 (T11-2017-00402-v000)

Tom Palkert (Macom) presented his IEEE liaison report T11-2017-00402-v000 at the T11.2 plenary and did not repeat it at the T11 plenary.

17.5 INCITS TC CS1 (none)

No report on INCITS TC CS1 activity was given during this plenary meeting cycle.

17.6 SNIA and DMTF (T11-2017-00377-v000)

Fred Knight (NetApp) discussed report T11-2017-00377-v000 on SNIA and DMTF activities.

17.7 NVMe (verbal)

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

17.8 COBO (T11-2017-00411-v000)

Steve Wilson presented Brad Booth's COBO liaison letter T11-2017-00411-v000 offering their current draft specification of COBO's Data Center Networking (DCN) working group.

See action item 17-029.

18 Administrative Matters

18.1 Officer Appointments

Officers of this Technical Committee and its Task Groups are:

T11 Chair	Steve Wilson (Broadcom)
T11 International Representative	David Peterson (Broadcom)
T11 Vice Chair	Craig Carlson (QLogic / Cavium)
T11 Secretary	Richard Johnson (Finisar)
T11.2 Chair	Tom Palkert (Macom)
T11.2 Vice-Chair	Dean Wallace (QLogic / Cavium)
T11.2 Secretary	Richard Johnson (Finisar)
T11.3 Chair	Craig Carlson (QLogic / Cavium)
T11.3 Vice-chair	Roger Hathorn (IBM)
T11.3 Secretary	Patty Driever (IBM)

18.2 T11 Information Technology

18.2.1 Website status

The website status was given in the INCITS report.

19 Future Meeting Schedule

19.1 Authorization of adhoc meetings

The chair directed members to the ICMS T11.2 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 Data Center Systems (DCS) and Zach Nason in Fort Worth, TX, 5-9 February 2018.

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 –2018 future meeting plans

The chair announced the following schedule for 2018.

Date	Location	Host Organization	Host Person
February 5-9, 2018	Fort Worth, TX	DCS	Zach Nason
April 2-6, 2018	Deerfield Beach, FL	Molex	Tom Palkert
June 4-8, 2018	Santa Fe, NM	QLogic	Craig Carlson
August 6-10, 2018*	(tbd)	Amphenol	Chris Lyon
October 1-5, 2018	New Orleans, LA	FCIA	Susan Crolla
December 3-7, 2018	(tbd)	SFF	Greg McSorley

* Date subject to change.

19.4 Approval of Meeting Venues

19.4.2 Proposed 2019 meeting dates

Greg McSorley (Amphenol) moved and Dave Rogers (Teledyne LeCroy) seconded to approve the following meeting schedule for 2019:

- February 4-8
- April 8-12
- June 3-7
- August 12-16
- October 7-11
- December 2-6

A show-of-hands vote was taken, with 20 affirming, 0 opposing, and 0 abstaining.

See action item 17-029.

19.5 Next meeting information

The chair reminded the membership that the next T11 plenary week is hosted by Data Center Systems (DCS) and Zach Nason in Fort Worth, TX, 5-9 February 2018. He noted that detailed information about the hotel and the locale can be found on the INCITS website in the T11 Meeting Information folder under February 2018.

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 February 2018 T11 meetings

The vice chair Craig Carlson (Cavium) 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 February 2018.

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 #143 is shown in annex A.2. 27 people from 22 member organizations were in attendance.

21 Review of Action Items

17-022	T11 secretary to post approved Minutes of T11 meeting #143 as agreed at T11 meeting #144. (See clause 5)
17-023	T11 chair to set up RFC ballot for FC-PI-7. (See clause 10.2.1)
17-024	T11 chair to set up RFC ballot for FC-FS-5. (See clause 11.2.1)
17-025	T11 chair to set up letter ballot for FC-EE TR. (See clause 11.2.2)
17-026	T11 international representative to inform INCITS of stabilization vote for FC-BB-3. (See clause 14.2.1)
17-027	T11 international representative to inform INCITS of stabilization vote for FC-VI. (See clause 14.2.2)
17-028	T11 chair to draft a letter to Xilinx, with a copy to Lynn, concerning their FC-FS-5 comment, and inviting them to one of the next meetings to present their case. (See clause 15.1)
17-029	T11 chair to upload COBO's DCN draft specification. (See clause 17.8)
17-030	T11 vice chair to update the meeting schedule for 2019. (See clause 19.4.2)

22 Adjournment

Greg McSorley (Amphenol) moved to adjourn at 2:09 PM. 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:

Mr. James Coomes

Dr. William Ham

Mr. Robert Kembel

Mr. Joseph Mathis

Mr. Bob Nixon

Mr. Gary Stephens

Mr. Horst Truestedt

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 #143 of the INCITS Fibre Channel (T11) Technical Committee, including the recognized representatives of each member organization:

Organization	Representative Type	Representative
Amphenol	Principal	Gregory McSorley
	Alternate	Brad Brubaker
	Alternate	Mike Davis
	Alternate	Daniel Dillow

	Alternate	Chris Lyon
	Alternate	Alex Persaud
	Alternate	Michael Wingard
Broadcom Limited	Principal	Steven L. Wilson
	Alternate	David Baldwin
	Alternate	Evan Beauprez
	Alternate	Ben Chu
	Alternate	Adam Healey
	Alternate	Howard Johnson
	Alternate	Mark Jones
	Alternate	Scott Kipp
	Alternate	Anil Mehta
	Alternate	David Peterson
	Alternate	Rob Peterson
	Alternate	Gautam Shiroor
	Alternate	James Smart
Cisco	Principal	Mike Blair
	Alternate	Harsha Bharadwaj
	Alternate	Fabio Maino
	Alternate	J Metz
	Alternate	Landon Noll
	Alternate	Joe Pelissier
Commscope	Principal	Yang (Sunny) Xu
	Alternate	Gary Gibbs
	Alternate	Gary Irwin
	Alternate	Paul Kolesar
Corning	Principal	Doug Coleman
	Alternate	Steven E. Swanson
DCS	Principal	Kevin Ehringer
	Alternate	Zach Nason

	Alternate	Todd Wheeler
Dell	Principal	Louis Ricci
	Alternate	David Black
	Alternate	Gaurav Chawla
	Alternate	Alan Rajapa
	Alternate	Erik Smith
	Alternate	Joseph White
	Alternate	Jeff Young
Finisar	Principal	Chris Yien
	Alternate	Richard Johnson
Foxconn Interconnect Technologies	Principal	John Petrilla
	Alternate	Randy Clark
	Alternate	Fred Fons
	Alternate	Glenn Moore
	Alternate	William Peters
Fujitsu	Principal	Mark Malcolm
	Alternate	Kun Katsumata
	Alternate	Osamu Kimura
	Alternate	Eugene Owens
Global Foundries	Principal	Adrian Butter
	Alternate	John Ewen
Hewlett Packard Enterprise	Principal	Barry Maskas
	Alternate	Rupin Mohan
	Alternate	Krishna Babu Puttagunta
IBM	Principal	Roger Hathorn
	Alternate	Patty Driever
Keysight Technologies	Principal	Stephen Didde
	Alternate	Steve Sekel
	Alternate	Joachim Vobis
Macom	Principal	Tom Palkert

	Principal	Jay Neer
Molex	Alternate	Alex Haser
	Alternate	Scott Sommers
NetApp	Principal	Frederick Knight
	Alternate	John Meneghini
	Alternate	Urmi Misra
OFS	Principal	Roman Shubochkin
	Alternate	Mabud Choudhury
	Principal	Craig W. Carlson
	Alternate	Anshul Agarwal
	Alternate	Girish Basrur
	Alternate	Kathy Caballero
	Alternate	Robert Friend
	Alternate	Duane Grigsby
	Alternate	Ali Khwaja
	Alternate	Stephen Lam
QLogic	Alternate	Ray Leung
	Alternate	Praveen Midha
	Alternate	Trinh Nguyen
	Alternate	Raul Oteyza
	Alternate	Alan Spalding
	Alternate	Gourangadoss Sundar
	Alternate	Darren Trap
	Alternate	Andrew Vasquez
	Alternate	Dean Wallace
	Principal	Nathan Tracy
TE Connectivity	Alternate	Melissa Knox
	Alternate	Jeff Mason
	Alternate	Andy Nowak
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 #143 of the INCITS Fibre Channel (T11) Technical Committee, including the recognized representatives of each member organization:

Organization	Representative Type	Representative
Anritsu	Principal	Ken Mochizuki
Ciena	Principal	Stephen Shew
	Alternate	Sebastien Gareau
Futurewei	Principal	Philip Kufeldt
	Alternate	Victor Gissen
	Alternate	Yang Liu
	Alternate	Xu Qi Ming
	Alternate	Liu Qing
	Alternate	Xin Qiu
	Alternate	Eddy Zhou
Hitachi Vantara	Principal	Eric Hibbard
	Alternate	Vincent Franceschini
	Alternate	Michael Hay
	Alternate	Akinobu Shimada
	Alternate	Ken Wood
Lumentum	Principal	Dave Lewis
MediaTek	Principal	Tamir Ali
Microsoft	Principal	Lee Prewitt
	Alternate	Paul Luber
	Alternate	Steve Olsson

Oclaro	Principal	Kohichi Tamura
Oracle	Principal	Doug Meyers
	Alternate	Joe Chen
	Alternate	Matt Gaffney
	Alternate	Hyon Kim
Panduit	Principal	Jose Castro
	Alternate	Bulent Kose
	Alternate	Robert Reid
	Alternate	Steve Skiest
Semtech Canada	Principal	David Brown
	Alternate	Ed Frlan
SmartDV	Principal	Deepak Kumar Tala
Teledyne LeCroy	Principal	David Rodgers
	Alternate	Henry Poelstra
Unisys	Principal	Jeffrey Dremann
	Alternate	Phil Shelton
VMWare	Principal	Neil MacLean
	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 #143 of the INCITS Fibre Channel (T11) Technical Committee:

Organization	Representative(s)
AMPHENOL INTERCONNECT	Chris Lyon
	Greg McSorley
BROADCOM	David Peterson
	Steven L. Wilson
CISCO	Harsha Bharadwaj
COMMSCOPE	Gary Irwin
CORNING	Doug Coleman
DCS	Zach Nason
	Todd Wheeler
DELL	Alan Rajapa
FINISAR CORPORATION	Richard Johnson
FOXCONN INTERCONNECT TECH	John Petrilla
GLOBALFOUNDRIES	Adrian Butter
HEWLETT PACKARD ENTERPRISE	Krishna Puttagunta
IBM	Patty Driever
KEYSIGHT	Joachim Vobis
MACOM	Tom Palkert
MOLEX	Jay Neer
NETAPP	Frederick Knight
OFS	Mabud Choudhury
PANDUIT	Jose Castro
QLOGIC	Craig W. Carlson
	Dean Wallace

TE CONNECTIVITY	Jeff Mason
TELEDYNE LECROY CORP	Henry Poelstra
	David Rogers
VIAVI	Jason Rusch

A.2.2 Ad hoc meeting attendance

FC-NVMe ad hoc, members

Organization	Representative(s)
AMPHENOL	Chris Lyon
BROADCOM LIMITED	Howard Johnson
	David Peterson
	Gautam Shiroor
	James Smart
	Steven L. Wilson
CISCO	J Metz
DELL	David Black
	Alan Rajapan
GLOBALFOUNDRIES	Adrian Butter
HEWLETT PACKARD ENTERPRISE	Krishna Babu Puttagunta
IBM	Patty Driever
	Roger Hathorn
NETAPP	Frederick Knight
QLOGIC	Craig Carlson
	Raul Oteyza
VIAVI	Jason Rusch

FC-SW-7 ad hoc, members

Organization	Representative(s)
BROADCOM	Howard Johnson
	David Peterson
	Gautam Shiroor
	Steven L. Wilson
CISCO	J Metz
DELL	Alan Rajapa
HEWLETT PACKARD ENTERPRISE	Krishna Babu Puttagunta
IBM	Patty Driever
	Roger Hathorn
QLOGIC	Craig W. Carlson
	Raul Oteyza
VIAVI	Jason Rusch

FC-PI-7 ad hoc, members

Organization	Representative(s)
AMPHENOL	Greg McSorley
BROADCOM LIMITED	Ben Chu
	Scott Kipp
COMMSCOPE	Gary Irwin
CORNING	Doug Coleman
DCS	Zach Nason
	Todd Wheeler
DELL	Alan Rajapa
FINISAR	Richard Johnson
FOXCONN INTERCONNECT	John Petrilla
GLOBALFOUNDRIES	Adrian Butter
KEYSIGHT	Stephen Didde
	Steve Sekel

	Joachim Vobis
LUMENTUM	Dave Lewis
OFS	G. Mabud Choudhury
TE CONNECTIVITY	Jeff Mason
TELEDYNE LECROY	Henry Poelstra

FC-GS-8 ad hoc, members

Organization	Representative(s)
BROADCOM LIMITED	Howard Johnson
	Gautam Shiroor
	Steve Wilson
DELL	Alan Rajapa
HEWLETT PACKARD	Krishna Babu Puttagunta
IBM	Roger Hathorn
	Patty Driever
VIAVI	Jason Rusch

FC-LS-4 ad hoc, members

Organization	Representative(s)
BROADCOM	Howard Johnson
	Dave Peterson
	James Smart
	Steve Wilson
CISCO	Harsha Bharadwaj
DELL	Alan Rajapa
HEWLETT PACKARD	Krishna Babu Puttagunta
IBM	Roger Hathorn
	Patty Driever
PANDUIT	Jose Castro
QLOGIC	Craig Carlson

VIAVI	Jason Rusch

FC-FS-5 ad hoc, members

Organization	Representative(s)
BROADCOM	Howard Johnson
	Gautam Shiroor
	Steve Wilson
CISCO	J Metz
GLOBALFOUNDRIES	Adrian Butter
IBM	Roger Hathorn
	Patty Driever
QLOGIC	Raul Oteyza
	Craig Carlson
TELEDYNE LECROY	Henry Poelstra
VIAVI	Jason Rusch

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

BROADCOM LIMITED	Howard Johnson
	David Peterson
	Gautam Shiroor
	Steve Wilson
COMMSCOPE	Gary Irwin
DCS	Zach Nason
	Todd Wheeler
DELL	Alan Rajapa
FINISAR	Richard Johnson
FOXCONN INTERCONNECT	John Petrilla
GLOBALFOUNDRIES	Adrian Butter
HEWLETT PACKARD ENTERRPISES	Krishna Babu Puttagunta
IBM	Patty Driever

	Roger Hathorn
OFS FITEL	Mabud Choudhury
QLOGIC	Craig Carlson
VIAVI	Jason Rusch

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 #141 held on 8 June 2017.

Standard	Status	Action	Target or Reaffirm Date	Editor	Ad Hoc Chair	Secretary
Projects in Development Stage						
FC-EE	At T11	To T11	Jun-18		Wallace	
FC-FS-5	In dev.	To T11.3	Feb-18	Carlson	Peterson	Driever
FC-GS-8	In dev.	To T11.3	Aug-18	Rusch	Ricci	Dickerson
FC-LS-4	In dev.	To T11	Feb-18	Carlson	Ricci	Driever
FC-PI-7	In dev.	To T11.2	Dec-17	Castro	Wallace	Wallace
FC-SW-7	In dev.	To T11.3	Aug-18	Peterson	Carlson	Peterson
FC-MSQS-3	In dev.	ToT11.2	Feb-18	Castro	Wallace	Wallace
FC-NVMe-2	In dev.	ToT11	Jun-18	Peterson	Carlson	Hathorn
Projects in Approval Stage						
FC-LS-3	At INCITS	End 1st PR	Feb-18	Carlson	Peterson	Driever
FC-SB-6	At INCITS	End 1st PR	Feb-18	Driever	Hathorn	Dickerson
FC-NVMe	At INCITS	1st PR	Feb-18	Peterson		

B.2 T11 project status at ISO

The following tables indicates the status of all active T11 projects at ISO. It reflects the official status as reported at the T11 regular meeting #141, 8 June 2017 in document T11-2017-00181-v000.

B.2.1 Active T11 SC25 WG4 Projects

Document	ISO/IEC # (T11 allocated)	Step	Status
FC-BaseT	14165-151	60.60	Published by ISO / IEC on Nov. 29, 2017.
FC-SP-2+AM1	14165-432	10.98	Resurrecting project.
FC-BB-6	14165-246	00.60	Resurrecting project.
FC-SB-5	14165-225	00.60	Resurrecting project.

B.2.2 Active Miscellaneous WG4 Projects

JTC1/SC25 Project Num	Document	ISO/IEC # (T11 allocated)	Step	Status

B.2.3 Published WG4 Projects

Document	ISO/IEC #	Step	Status	Maintenance
FC-BaseT	14165-151	60.60	Published	
SMI-S v1.5	24775:2012	60.60	Published	
FC-AE-ASM	14165-313	60.60	Published	
FC-AE-RDMA	14165-314	60.60	Published	

FC-BB-3	14165-243	60.60	Published	Stabilize – Dec 2017
Server Management Command Line Protocol (SM-CLP)	13187	60.60	Published	Confirm – Aug 2016
Storage Management	24775	60.60	Published	
FC-MI-2	14165-372	60.60	Published	
iSCSI Management API (IMA)	11989	60.60	Published	Confirm-Jun15
FC-SW-3	14165-133	60.60	Published	Confirm – Apr15
FC-AV	14165-321	60.60	Published.	Confirm-Dec14
FC-AE-1553	14165-312	60.60	Published.	
FAIS	14165-521	60.60	Published.	Confirm-Feb14
FC-GS-4	14165-414	60.60	Published	Stabilize – Oct 2017
FC-FS	14165-251	60.60	Published	Withdrawn - Feb. 2013
FC-VI	14165-331	60.60	Published	Stabilize – Dec 2017
10GFC	14165-116	60.60	Published	Stabilize - Apr 2016
MJSQ	14165-117	60.60	Published	
RL	24740	60.60	Published	
SMS (was SMI-S)	24775	60.60	Published	
SNIA MMA	11002	60.60	Published	Confirm - Aug. 2013
10GFC-Amend-ment 1	14165-116-1	60.60	Published	
FC-AL-2-1	14165-122	60.60	Published.	
FC-AL-2-2	14165-122	60.60	Published	

B.2.4 ISO step codes

The following explains the ISO step codes (ISC), which are two numbers separated by a dot. The first number is described in the table. The second part is percent complete.

Stage	NWIP	Convert to ISO	FCD	Edit/DoC	FDIS	Edit/DoC	Publish
Ballot Time	2 months		4 months		2 months		
first number of ISC	10	20	40		50	60	60.60