



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](http://www.INCITS.org)



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T11-2024-00086-v000

**Approved Minutes  
INCITS Fibre Channel (T11) Technical Committee  
Regular Meeting #180  
07 December 2023 – 1 PM to 3 PM EST  
Deerfield Beach, FL (Hybrid Meeting)**

## **1 Opening Remarks and Introductions**

### **1.1 Introductory Remarks**

TC T11 chair Howard Johnson (Broadcom) convened regular meeting #180 of the INCITS Fibre Channel (T11) Technical Committee on Thursday, 07 December 2023 at 1:00 PM EST. He introduced himself and thanked our host Amphenol for the physical meeting facilities.

He next thanked Dean Wallace (Marvell) for his many years of service to the organization as well as his many contributions to Fibre Channel.

He then introduced Patty Driever (IBM) as the new Vice-Chair and Chris Lyon (Amphenol) who has graciously agreed to serve as secretary going forward.

### **1.2 Introductions**

As partially noted above, there have been some changes in the Slate of officers for T11 and T11.2 and T11.3.

#### **1.2.1 Officer appointments (Officers)**

The chair introduced the officers of T11, T11.2 and T11.3. The list of officers can be found on the INCITS website at this [link](#).

Officers of this Technical Committee and its Task Groups are:

T11 Chairman	Howard Johnson (Broadcom)
T11 International Representative	David Peterson (Broadcom)
T11 Vice Chairman	Patty Driever (IBM)
T11 Secretary	Chris Lyon (Amphenol)
T11.2 Chairman	Tom Palkert (Macom)
T11.2 Vice-Chairman	Anil Mehta (Broadcom)
T11.2 Secretary	Jason Rusch (Viavi)
T11.3 Chairman	Roger Hathorn (IBM)
T11.3 Vice-chairman	(Vacant)
T11.3 Secretary	Patty Driever (IBM)

### **1.2.2 Self-introductions**

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

### **1.2.3 Call for guests and journalists**

The chair requested members of the press and journalists and those associated with organizations that are not members of T11 to introduce themselves. No one responded to this call.

## **1.3 Operating under INCITS Procedures (<https://www.incits.org/standards-information/policies>)**

### **1.3.1 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.

The chair indicated that documents are distributed electronically (<http://www.incits.org>) and described the process for T11 document distribution via <http://standards.incits.org>.

### **1.3.2 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>).

### **1.3.3 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.

If such discussion is not immediately terminated, it is the chairperson's responsibility to terminate the meeting.

### **1.3.4 Patent Policy Information**

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](#).

The chair indicated that among the rules and policies under which this Technical Committee operates are the 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.

The Chair also pointed to the [INCITS Patent Registry](#) located on the INCITS website.

### **1.3.5 Call for Patents**

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.

## **2 Attendance and Membership**

### **2.1 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 a description of the Organization and Structure/Categories of Membership/TCs, TGs, and SGs is contained in [INCITS Organization, Policies and Procedures](#).

As an active participant you are encouraged to become a member.

### **2.2 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.

### **2.3 Membership for this meeting**

Technical Committee T11 had 23 voting members at the T11 regular meeting 05 October 2023. With 1 member losing voting privileges (see 2.3.1.2), membership of T11 is now at 22 for this meeting.

#### **2.3.1 Changes in Representation Since the Last Meeting**

Michael Wingard has been removed as an Alternate member for Amphenol Corporation. All other representation for Amphenol remains unchanged.

Alex Hong has been removed as an Alternate member for Broadcom, Inc. and Karl Muth has been added as an Alternate member for Broadcom, Inc. All other representation for Broadcom remains unchanged.

Yang (Sunny) Xu and Gary Gibbs have been removed as Principal and Alternate members (respectively) for CommScope. Dr. Earl Parsons is the new Principal member for CommScope.

Bill Sears has been added as an Alternate member for Dell, Inc. All other representation for Dell remains unchanged.

### **2.3.1.1 New Voting Memberships**

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

### **2.3.1.2 Voting memberships in jeopardy for attendance, for non-payment of dues, or not voting on letter ballots**

- MediaTek is in jeopardy for lack of attendance at 2 of the last 3 plenary meetings. MediaTek was not present at this meeting and therefore has lost voting privileges. Data Center Systems (DCS) is also in jeopardy for lack of attendance at 2 of the last 3 plenary meetings. DCS was present today but remains in attendance jeopardy. There are currently no other companies in jeopardy for lack of attendance.
- There were no companies in membership jeopardy for non-payment of dues.
- Corning Inc. and Lumentum Operations are in membership jeopardy for letter ballot performance for not having voted on two of last three T11 letter ballots.

### **2.3.2 T11 Voting and Advisory memberships for this meeting**

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.

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](#).

## **2.4 Call for Quorum**

The total voting membership for this meeting is 22. One third of the total membership for this meeting is 8. The number of member organizations that responded to the call for quorum was 21. This exceeds or equals one third of the total membership for this meeting and also exceeds or equals 8. A quorum is therefore present for this meeting.

## **3 Approval of the Agenda**

An electronic version of the agenda was posted as [T11-2023-00375-v002](#). The chair presented the agenda with final updates as T11-2023-00375-v003 and made a call for any changes and new agenda items. No changes or new items were requested.

Chris Lyon (Amphenol) moved and David Peterson (Broadcom) seconded that T11-2023-00375-v003 as presented at this meeting be approved as the agenda for this meeting. The motion passed by acclamation.

## 4 Minutes of the Previous Meeting

### 4.1 Review of Old Action Items

<a href="#">23-028</a>	T11 secretary to post approved Minutes of T11 meeting #177 as agreed at T11 meeting #178. Completed by posting T11/2023-00363-v000 on October 09, 2023.
<a href="#">23-029</a>	Chair to forward results of votes of Maintenance and Stabilization motions to INCITS for further processing. Completed by chair (posted at T11-2023-00365-v000 and T11-2023-00366-v000) on October 25, 2023.
<a href="#">23-030</a>	Chair to add Study Group interim meeting to calendar. Completed by Dean Wallace.

### 4.2 Approval of Minutes - Meeting #179

The prior regular meeting of the INCITS Fibre Channel (T11) Technical Committee was #179 on 05 October 2023. The draft Minutes of that meeting were posted as document T11/2023-00359-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](mailto:pgd@us.ibm.com)) or at the subsequent meeting in person.

David Peterson (Broadcom) moved and Chris Lyon (Amphenol) seconded to accept T11/2023-00359-v000 as the Minutes of T11 meeting #179 on 05 October 2023. The motion passed by acclamation.

See action item [23-031](#).

## 5 Technical Committee and Task Group Reports

### 5.1 Review of T11 Project and Proposal Status



### **5.1.1 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. The chair will review Expert Group meeting minutes for any changes required to dates as well as update the file with the current Chairs/Editors/Secretaries.

See action item [23-032](#).

### **5.1.2 National Project Status Report**

The Chair also shared information from INCITS the National Project Status Report. The Chair will post [this information](#) in the “T11 Projects” folder in the documents section.

### **5.1.3 T11 Project Activity**

#### **5.1.3.1 FC-FS-6 Public Review ([T11-2023-00296-v000](#))**

TC submission done to initiate public review.

Information technology - Fibre Channel – Framing and Signaling - 6 (FC-FS-6) (new standard)

Submission of BSR-8 form to ANSI to initiate the 60-day public review and commend period.

Start Date: 2023-11-03

End Date: 2024-01-02

### **5.1.4 Project Proposals**

No new project proposals during this meeting cycle.

## **5.2 T11 Letter Ballot Results**

No new letter ballots during this meeting cycle.

## **5.3 Task Group T11.2 - Physical Interfaces**

### **5.3.1 Report to T11 Plenary ([T11-2023-00428-v000](#))**

Task Group Chair Tom Palkert (Macom) gave the report posted as T11-2023-00428-v000 on activity at T11.2.

### **5.3.2 Actions**

**5.3.2.1** There were no actions this meeting cycle.

### **5.3.3 Other Items**

No other items were presented for TG T11.2.

## **5.4 Task Group T11.3 - Interconnection Schemes**

### **5.4.1 Report to T11 Plenary ([T11-2023-00411-v001](#))**

Task Group Chair Roger Hathorn (IBM) presented the information posted as T11-2023-00411-v001 on activity at T11.3.

**5.4.2 Actions** Roger Hathorn (IBM) made a request to the Chair to accept T11-2023-00181-v004 as RFC ballot comment resolution and forward FC-GS-9 draft standard Rev. 12.07 contained in T11-2023-00117-v003 to INCITS to initiate a letter ballot.

See action item [23-033](#).

### **5.4.3 Other Items**

No other items were presented for TG T11.3.

## **5.5 Joint TG T11.2 / T11.3 Items**

### **5.5.1 Report to T11 Plenary ([T11-2023-00420-v000](#))**

T11.2 Task Group Chair Dean Wallace (Marvell) gave the report posted as T11-2023-00420-v000 on activity at the joint T11.2/T11.3 expert working group.

### **5.5.2 Actions**

**5.5.2.1** There were no actions.

### **5.5.3 Other Items**

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

## **5.6 Review of International Activity**

### **5.6.1 INCITS Computer Systems Interconnect (SC 25 / WG4 TAG) Status Report ([T11-2023-00426-v000](#))**

Dave Peterson (Broadcom) presented the information posted as T11-2023-00426-v000 on INCITS Computer Systems Interconnect (SC 25 / WG4 TAG) project status (see [annex B.2](#)).

## **6 Liaison Reports**

### **6.1 T11 report ([T11-2023-00367-v000](#))**

Howard Johnson (Broadcom) presented the information posted as T11-2023-00367-v000 on activity at T11 as reported to other organizations.

### **6.2 INCITS Liaison report ([T11-2023-00370-v001](#))**

Howard Johnson (Broadcom) presented the information posted as T11-2023-00370-v001 on activity at INCITS other than T11 project status.

### **6.3 TC T10 ([T11-2023-00423-v000](#))**

Chair presented the information posted as T1-2023-00423-v000 on activity at T10 provided by Bill Martin, Chair of T10.

### **6.4 FCIA ([T11-2023-00422-v000](#))**

Mark Jones presented the information posted as T11-2023-00422-v000 on activity at FCIA.

### **6.5 IEEE 802.3 ([T11-2023-00435-v000](#))**

Tom Palkert (Macom) and Mabud Choudhury (OFS) gave report T11-2023-00435-v000 on activity at IEEE 802.3.

### **6.6 SNIA Report ([T11-2023-00421-v000](#))**

Roger Hathorn gave report T11-2023-00421-v000 on activity at SNIA.

### **6.7 NVMe (verbal)**

There was no report on recent NVMe activities during this meeting cycle.

## **7 Old Business**

### **7.1 T11 Project Organization on ICMS ([T11-2023-00007-v003](#))**

#### **7.1.1 Guidelines for Expert Groups ([T11-2023-00434-v000](#))**

Dave Peterson (Broadcom) is working with the Chair on creating guidelines in terms of expectations for chairs/editors/secretaries as well as many 'how to' descriptions. He asked the group to look at this and provide feedback.

## **7.2 Meeting Attendance and Hosting**

### **7.2.1 Study Group Report ([T11-2023-00381-v002](#))**

Chair shared on the results of the Study Group formed to discuss issues experienced with meeting hosting and attendance. He asked the group to look it over closer and provide feedback at the February plenary meeting.

### **7.2.2 INCITS EB notice on remote access requirements**

The Chair indicated that INCITS has made a change and is allowing each TC and TG to decide if it will continue to provide remote access to its meetings.

## **8 Fibre Channel (T11) New Business**

### **8.1 Members review company rosters (TC, TG, and EG)**

The Chair asked TG and EG chairs to go out and make sure they're group rosters are accurate. Company Principal members should do the same.

### **8.2 Draft Revised INCITS Organization Policies and Procedures 30-day comment period (eb-2023-00186-001)**

The Chair indicated that INCITS has issued an update to the organizational policies and procedures. Folk are encourage to read through it and provide any comments they have back to the Chair.

### **8.3 Base rate for hotel rooms**

The Chair indicated that the policy for the max base rate for hotel rooms has been \$180 since 2012, and the total pre-tax max room cost was set at \$250. The Chair made a suggestion that we consider increasing these limits as it's already incredibly difficult to hold to them. Kiran Ranabhor (Cisco) made a motion that we raise the total pre-tax max room cost per night (including meeting costs) from \$250 to \$295. Seconded by Dave Peterson (Broadcom). Vote passed: In Favor – 20, Opposed – 0, Abstain – 1 (HPE).

## **9 Future Meeting Schedule**

### **9.1 Approval of meeting schedule, venues, and hosts**

The chair announced the following schedule for 2023-2024.

<b>Date</b>	<b>Location</b>	<b>Host Organization</b>	<b>Host Person</b>
February 6-10, 2023	Tucson, AZ	FCIA	Chris Lyon
April 3-7, 2023	Coeur d’Alene, ID	Broadcom	Howard Johnson
June 5-9, 2023	Palm Beach Gardens, FL	Marvell	Craig Carlson
July 31 - August 3, 2023	Albuquerque, NM	Cisco	Kiran Ranabhor
October 2-6, 2023	Galveston, TX	SNIA/SFF	Paul Coddington
December 4-8, 2023	Deerfield Beach, FL	Amphenol	Chris Lyon
February 5-9, 2024	Tampa, FL (see below)	SNIA/SFF	Paul Coddington
April 1-5, 2024	(tbd)	FCIA	Chris Lyon
June 3-7, 2024	(tbd)	Broadcom	Dave Peterson
August 5-9, 2024	(tbd)	Cisco	Kiran Ranabhor
October 7-11, 2024	(tbd)	(tbd)	(tbd)
December 2-6, 2024	Deerfield Beach, FL	Amphenol	Chris Lyon

The Chair encouraged the member companies to consider sponsoring the 2024 October meeting.

**9.1.1 Approval of February, April, June 2024 meeting venues**

Paul Coddington (SNIA/SFF) will be hosting the February 2024 meeting at the Hilton Tampa Airport Westshore in Tampa, Florida. Members are encouraged to make their reservations soon. Chris Lyon made a motion to approve this meeting venue. Motion was seconded by Dave Peterson (Broadcom). Passed by acclamation.

FCIA would like to host the April 2024 meeting in Nashville, TN and Broadcom would like to host the June 2024 meeting in Boseman, Montana. DJ Brown (Dell) made a motion to approve these 2 meeting venues. Motion was seconded by Raul Oteyza (Marvell). Passed by acclamation.

**9.1.2 Approval of 2025-2026 meeting schedule (Hybrid, [2025-2026 meeting schedule](#))**

The Chair pointed everyone to the proposed 2025-2026 meeting dates. Dave Peterson (Broadcom) made a motion to approve the schedule as posted. Seconded by DJ Brown (Dell). Motion passed by acclamation.

See action item [23-034](#).

**9.2 Next Meeting**

**9.2.1 February 2024 meeting information (Hybrid, [February 2024](#))**

The Chair pointed everyone to the February meeting information regarding hotel reservations in Tampa Bay, Florida at the Hilton Garden Inn.

**9.2.2 February 2024 meeting map ([February 2024 Meeting Map](#))**

The Vice-Chair Patty Driever (IBM) created and the chair presented the tentative meeting map of the next T11 meeting week. She advised members for the most recent meeting map of the next Fibre Channel regular meeting to go to the INCITS website, search the Fibre Channel Meeting Information folder under February 2024.

Chris Lyon (Amphenol) made a motion to accept the meeting map as presented. Dean Wallace (Marvell) seconded the motion. Motion passed by acclamation.

**9.3 Request for hosts**

**9.3.1 Current Meeting Venues and Schedule (2023-2024 Meeting Schedule)**

The chair announced the following schedule for 2023-2024.

Date	Location	Host Organization	Host Person
February 6-10, 2023	Tucson, AZ	FCIA	Chris Lyon
April 3-7, 2023	Coeur d'Alene, ID	Broadcom	Howard Johnson
June 5-9, 2023	Palm Beach Gardens, FL	Marvell	Craig Carlson
July 31 - August 3, 2023	Albuquerque, NM	Cisco	Kiran Ranabhor
October 2-6, 2023	Galveston, TX	SNIA/SFF	Paul Coddington

December 4-8, 2023	Deerfield Beach, FL	Amphenol	Chris Lyon
February 5-9, 2024	Tampa Bay, FL	SNIA/SFF	Paul Coddington
April 1-5, 2024	Nashville, TN	FCIA	Chris Lyon
June 3-7, 2024	Boseman, Montana	Broadcom	Dave Peterson
August 5-9, 2024	(tbd)	Cisco	Kiran Ranabhor
October 7-11, 2024	(tbd)	(tbd)	(tbd)
December 2-6, 2024	Deerfield Beach, FL	Amphenol	Chris Lyon

**9.3.2 Guidelines for hosting ([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.

**9.3.3 Letter to travel representatives on hotel rates ([T11-2023-00011-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 T11-2023-00011-v000



has been posted which contains a letter to those with budget responsibilities for member organizations justifying this obligation.

#### 9.4 Authorization of adhoc groups, expert groups, and meetings

The chair directed members to the ICMS Fibre Channel calendar located at the Fibre Channel 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.

#### 10 Review of Action Items

23-031	T11 secretary to post approved Minutes of T11 meeting #179 as agreed at T11 meeting #180. (See <a href="#">clause 4.2</a> )
23-032	Chair to review Expert Group minutes looking for changes to the project schedules and committee chairs/editors/secretaries
23-033	Chair to forward FC-GS-9 draft standard Rev. 12.07 contained in T11-2023-00117-v003 to INCITS to initiate a letter ballot
23-034	Chair to update meeting location file with February/April/June 2024 meeting locations. See <a href="#">9.1</a> .

#### 11 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 #180 is shown in annex A.2. 32 people from 21 member (21 voting) organizations were in attendance.

#### 12 Adjournment

Dean Wallace (Marvell) moved to adjourn at 3:01 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**

**Mr. Roger Cummings**

**Mr. Steven Wilson**

#### **A.1.2 Voting Members**

The following is the list of organizations that are voting members of record for regular meeting #180 of the INCITS Fibre Channel (T11) Technical Committee, including the recognized representatives of each member organization:

<b>Organization</b>	<b>Representative Type</b>	<b>Representative</b>
Amphenol	Principal	Chris Lyon
	Alternate	Brad Brubaker
	Alternate	Paul Coddington
	Alternate	Daniel Dillow
	Alternate	Fan Fu
	Alternate	Isaac Horn
	Alternate	Lie Huang

	Alternate	Sam Kocsis
	Alternate	Alex Persaud
	Alternate	Hu Silver
Broadcom	Principal	Howard Johnson
	Alternate	Evan Beauprez
	Alternate	Ben Chu
	Alternate	Robert Hannah
	Alternate	Adam Healey
	Alternate	Mark Jones
	Alternate	Anil Mehta
	Alternate	Dr. Ramana Murty
	Alternate	Karl Muth
	Alternate	David Peterson
	Alternate	James Smart
	Alternate	Anil Veerabhadrapa
	Cisco	Principal
Alternate		Harsha Bharadwaj
Alternate		Dhiraj Kashyap
Alternate		Rajesh L.G.
Alternate		Fabio Maino
Alternate		Edward Mazurek
Alternate		Mark Nowell
Alternate		Prashant Pathak
Alternate		Sai Pavan
Alternate		Kiran Ranabhor
Alternate		Christian Schmutzer
Alternate		Shalom Shefa
Alternate		Sumanth Sindiri
Alternate		Ramesh Sivakolundu
Alternate		Yi Tang
Alternate	Sujith V. R.	

	Alternate	Xiaohong Wu
	Alternate	Xiaokang Zhu
Coherent Inc	Principal	Vipul Bhatt
	Alternate	Vera Koleva
	Alternate	Roberto Rodes
	Alternate	Lance Thompson
CommScope	Principal	Earl Parsons
Corning	Principal	David Kozischek
Credo Semiconductor	Principal	Phil Sun
	Alternate	Dr. Fang Cai
	Alternate	Yasuo Hidaka
	Alternate	Furui Li
Data Center Systems	Principal	Steve Eisele
	Alternate	Eddie Taylor
Dell	Principal	David Brown
	Alternate	Jai Bansai
	Alternate	David Black
	Alternate	Doug Farley
	Alternate	David Piehler
	Alternate	Vinay Sawal
	Alternate	Bill Sears
	Alternate	Erik Smith
Hewlett Packard Enterprise	Principal	Joseph White
	Principal	Barry Maskas
	Alternate	Curtis Ballard
	Alternate	Rupin Mohan
IBM	Alternate	Krishna Babu Puttagunta
	Principal	Roger Hathorn
	Alternate	Patty Driever
Keysight Technologies	Alternate	Stephen Guendert
	Principal	Stephen Didde

	Alternate	Joachim Vobis
Lumentum Operations	Principal	Ernest Muhigana
Macom	Principal	Thomas Palkert
Marvell Semiconductor Inc	Principal	Raul Oteyza
	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	Arun Patil
	Alternate	Eddy Soetjahja
	Alternate	Alan Spalding
Alternate	Gourangadoss Sundar	
Alternate	Andrew Vasquez	
Alternate	Dean Wallace	
Molex	Principal	Scott Sommers
	Alternate	Egide Murisa

NetApp	Principal	Madhu Pai
	Alternate	Sridhar Balasubramanian
OFS Fitel LLC	Principal	Roman Shubochkin
	Alternate	Mabud Choudhury
Panduit	Principal	Jose Castro
	Alternate	Bulent Kose
	Alternate	Robert Reid
TE Connectivity	Principal	Nathan Tracy
	Alternate	Dwayne Crawford
	Alternate	Daniel Gorenc
	Alternate	Jeff Mason
Teledyne LeCroy	Principal	Henry Poelstra
	Alternate	Amit Bakshi
	Alternate	Craig Foster
	Alternate	Tom Friend
	Alternate	Rakesh Kathiresan Natarajan
	Alternate	Nick Kriczky
	Alternate	Douglas Lee
	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 #180 of the INCITS Fibre Channel (T11) Technical Committee, including the recognized representatives of each member organization:

<b>Organization</b>	<b>Representative Type</b>	<b>Representative</b>
Anritsu	Principal	Tadanori Nishikobara

	Alternate	Yuji Sekine
Ciena	Principal	Stephen Shew
	Alternate	Sebastien Gareau
Futurewei	Principal	Timothy Jeffries
	Alternate	Victor Cao
MediaTek	Principal	Tamer Ali
	Alternate	Chihlong Dai
	Alternate	Pei-Rong Li
	Alternate	YC Lin
	Alternate	Henry Park
	Alternate	Herbert Wang
	Alternate	Mau-Lin Wu
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 #180 of the INCITS Fibre Channel (T11) Technical Committee:

Organization	Representative(s)	In Person
AMPHENOL CORP	Chris Lyon	Y
BROADCOM INC	Howard Johnson	Y
	Mark Jones	Y
	Anil Mehta	Y



	Ramana Murty	N
	Dave Peterson	Y
CISCO SYSTEMS INC	Harsha Bharadwaj	Y
	Mike Blair	N
	Edward Mazurek	Y
	Kiran Ranabhor	Y
	Ramesh Sivakolundu	Y
	Xiaohong Wu	Y
COHERENT INC	Vera Koleva	N
COMMSCOPE	Earl Parsons	N
CORNING INC	David Kozischek	N
CREDO SEMICONDUCTOR	Fang Cai	N
DATA CENTER SYSTEMS	Steve Eisele	N
DELL INC	David Brown	Y
HEWLETT PACKARD ENTERPRISE	Barry Maskas	N
IBM CORP	Patty Driever	Y
	Roger Hathorn	Y
KEYSIGHT TECHNOLOGIES INC	Stephen Didde	Y
MACOM	Thomas Palkert	N
MARVELL SEMICONDUCTOR	Raul Oteyza	Y
	Dean Wallace	Y
MOLEX INC	Egide Murisa	N
NETAPP INC	Madhu Pai	N
OFS FITEL LLC	Mabud Choudhury	N
PANDUIT CORPORATION	Jose Castro	N
TE CONNECTIVITY	Daniel Gorenc	N
TELEDYNE LECROY CORPORATION	Henry Poelstra	N
VIAMI SOLUTIONS INC	Jason Rusch	Y

**A.2.2 Ad hoc meeting attendance**

FC-SW-8 expert group, members

<b>Organization</b>	<b>Representative(s)</b>
BROADCOM INC	Howard Johnson
	David Peterson
	James Smart
CISCO SYSTEMS INC	Harsha Bharadwaj
	Ed Mazurek
DELL INC	David Brown
HEWLETT PACKARD ENTERPRISE	Barry Maskas
IBM CORP	Patty Driever
	Roger Hathorn

FC-PI-9 expert group, members

<b>Organization</b>	<b>Representative(s)</b>
AMPHENOL CORPORATION	Lei Huang
BROADCOM INC	Ben Chu
	Anil Mehta
CISCO SYSTEMS INC	Ramesh Sivakolundu
	Xiaohong Wu
COHERENT INC	Vera Koleva
CORNING INC	David Kozischek
CREDO SEMICONDUCTOR	Fang Cai
KEYSIGHT TECHNOLOGIES INC	Stephen Didde
	Greg Le Cheminant
LUMENTUM OPERATIONS	Ernest Muhigana
MACOM	Thomas Palkert
MARVELL SEMICONDUCTOR INC	Mike Dudek
	Raul Oteyza

	Dean Wallace
MEDIATEK USA INC	Tobey Li
	Henry Park
OFS FITEL LLC	Mabud Choudhury
PANDUIT CORPORATION	Jose Castro
TELEDYNE LECROY CORPORATION	Henry Poelstra

FC-GS-9 expert group, members

Organization	Representative(s)
BROADCOM INC	David Peterson
	James Smart
CISCO SYSTEMS INC	Harsha Bharadwaj
	Mike Blair
	Edward Mazurek
DELL INC	David Brown
HEWLETT PACKARD ENTERPRISE	Barry Maskas
IBM CORPORATION	Roger Hathorn

FC-LS-5 expert group, members

Organization	Representative(s)
BROADCOM INC	Howard Johnson
	David Peterson
	James Smart
CISCO SYSTEMS INC	Harsha Bharadwaj
	Harsha Bharadwaj
	Edward Mazurek
DELL INC	David Brown
HEWLETT PACKARD ENTERPRISE	Barry Maskas
IBM CORP	Patty Driever
	Roger Hathorn

MARVELL SEMICONDUCTOR INC	Raul Oteyza
VIAVI SOLUTIONS INC	Jason Rusch

FC-FS-7 expert group, members

Organization	Representative(s)
BROADCOM	Howard Johnson
	David Peterson
	James Smart
CISCO SYSTEMS INC	Harsha Bharadwaj
	Edward Mazurek
DELL INC	David Brown
HEWLET PACKARD ENTERPRISE	Barry Maskas
IBM	Patty Driever
	Roger Hathorn
MARVELL SEMICONDUCTOR INC	Raul Oteyza
VIAVI SOLUTIONS INC	Jason Rusch

FC-RDMA expert group, members

Organization	Representative(s)
BROADCOM INC	Dave Peterson
	James Smart
CISCO SYSTEMS INC	Harsha Bharadwaj
	Edward Mazurek
DELL INC	David Brown
IBM CORPORATION	Roger Hathorn
VIAVI SOLUTIONS INC	Jason Rusch

FC-NVMe-3 expert group, members

<b>Organization</b>	<b>Representative(s)</b>
BROADCOM INC	Howard Johnson
	David Peterson
	James Smart
CISCO SYSTEMS INC	Harsha Bharadwaj
	Edward Mazurek
DELL INC	David Brown
HEWLETT PACKARD ENTERPRISE	Barry Maskas
IBM CORPORATION	Patty Driever
	Roger Hathorn
MARVELL SEMICONDUCTOR INC	Raul Oteyza

FC-SP-3 expert group, members

<b>Organization</b>	<b>Representative(s)</b>
BROADCOM INC	Howard Johnson
	David Peterson
	James Smart
CISCO SYSTEMS INC	Harsha Bharadwaj
	Edward Mazurek
DELL INC	David Brown
HEWLETT PACKARD ENTERPRISE	Barry Maskas
IBM CORPORATION	Patty Driever
	Roger Hathorn
VIAVI SOLUTIONS INC	Jason Rusch

Joint T11.2/T11.3 expert group, members

<b>Organization</b>	<b>Representative(s)</b>
Broadcom Inc	Howard Johnson
Broadcom Inc	Anil Mehta
Broadcom Inc	David Peterson
Broadcom Inc	James Smart
Cisco Systems Inc	Harsha Bharadwaj
Cisco Systems Inc	Edward Mazurek
Cisco Systems Inc	Ramesh Sivakolundu
Cisco Systems Inc	Xiaohong Wu
CommScope	Earl Parsons
IBM Corporation	Patty Driever
IBM Corporation	Roger Hathorn
Macom	Thomas Palkert
Marvell Semiconductor Inc	Mike Dudek
Marvell Semiconductor Inc	Dean Wallace
OFS Fitel LLC	Mabud Choudhury

## 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 #179 held on 05 October 2023.

Standard  ( <a href="#">document link</a> )	Expert Group Officers			Current Activity		Schedule			
	Chair	Editor	Secretary	Phase	Next Action	Last Technical Input	RFC Ballot	Letter Ballot	Forward to INCITS

<b>FC-FS-7</b>  (Project Proposal)	<a href="#">Oteyza</a>	<a href="#">Peterson</a>  (acting editor)	<a href="#">Driever</a>	WG	RFC	Oct 2025	Dec 2025	Feb 2026	June 2026
<b>FC-GS-9</b>  (Latest draft)	<a href="#">Peterson</a>	<a href="#">Rusch</a>	<a href="#">Blair</a>	RFC	T11 LB	Jun 2022	Apr 2023	Oct 2023	Feb 2024
<b>FC-LS-5</b>  (Latest draft)	<a href="#">Driever</a>	<a href="#">Peterson</a>  (acting editor)	<a href="#">Rusch</a>	RFC	T11 LB	Oct 2020	Dec 2022	Feb 2024	April 2024
<b>FC-MSQS-3</b>  (Latest draft)	<a href="#">Wallace</a>	<a href="#">Castro</a>	<a href="#">Wallace</a>	WG	TBD				
<b>FC-NVMe-3</b>  (Latest draft)	<a href="#">Peterson</a>  (acting chair)	<a href="#">Peterson</a>	<a href="#">Hathorn</a>	WG	RFC	Jun 2024	Oct 2024	Feb 2025	Jun 2025
<b>FC-PI-9</b>  (Project proposal)	<a href="#">Wallace</a>	<a href="#">Rusch</a>	<a href="#">Wallace</a>	WG	RFC	Apr 2025	Jun 2025	Dec 2025	Apr 2026
<b>FC-RDMA</b>  (Latest draft)	<a href="#">Brown</a>	<a href="#">Peterson</a>	<a href="#">Hathorn</a>	WG	RFC	Dec 2024	Jun 2025	Dec 2025	Jun 2026
<b>FC-SP-3</b>  (Latest draft)	<a href="#">Hathorn</a>	<a href="#">Peterson</a>	<a href="#">Peterson</a>	WG	RFC	Jun 2024	Oct 2024	Apr 2025	Jun 2025
<b>FC-SW-8</b>  (Latest draft)	<a href="#">Peterson</a>  (acting chair)	<a href="#">Peterson</a>	<a href="#">Peterson</a>	WG	RFC	Aug 2023	Oct 2023	Feb 2024	Apr 2024
<i>Projects in Approval</i>									
<b>FC-FS-6</b>  (Latest draft)	<a href="#">Peterson</a>	<a href="#">Carlson</a>	<a href="#">Driever</a>	RFC	T11 LB	Aug 2022	Oct 2022	Jun 2023	Oct 2023
<b>FC-PI-8</b>  (Last draft)	<a href="#">Wallace</a>	<a href="#">Rusch</a>	<a href="#">Wallace</a>	PR	PUB		Apr 2022	Aug 2022	Oct 2022
<b>FC-SP-2/AM2</b>  (Last draft)	<a href="#">Hathorn</a>	<a href="#">Peterson</a>	<a href="#">Peterson</a>	PR	PUB	Apr 2022	Aug 2022	Oct 2022	Oct 2022

## B.2 INCITS Computer Systems Interconnect (SC 25 / WG4) project status

The following tables indicates the status of all active INCITS Computer Systems Interconnect (SC 25 / WG4) TAG projects. It reflects the official status as reported at the Fibre Channel (T11) regular meeting #180, 07 December 2023 in document T11-2023-00426-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
None at this time		
Potential Items: - FC-PI-8 - FC-FS-6 - FC-LS-5 - FC-GS-9 - FC-SW-8 - FC-SP-3		