

---

**T11-2020-00240-v000**

**Draft Minutes  
INCITS Fibre Channel (T11) Technical Committee  
Regular Meeting #161  
08 October 2020 – 1 PM to 3 PM CDT  
Virtual Meeting**

## **1 Opening Remarks and Introductions**

### **1.1 Introductory Remarks**

TC T11 chair Steve Wilson (Broadcom) convened regular meeting #161 of the INCITS Fibre Channel (T11) Technical Committee on Thursday, 08 October 2020 at 1:01 PM CDT. He introduced himself and thanked our host Marvell for the virtual meeting facilities.

He next introduced Craig Carlson (Marvell) as vice chair and Patty Driever (IBM) 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 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 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 T11-2020-00201-v001. The chair presented the agenda with final updates as T11-2020-00201-v002 and made a call for any changes and new agenda items. No changes or new items were requested.

Greg McSorley (Amphenol) moved and David Peterson (Broadcom) seconded that T11-2020-00201-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:

Finisar Corporation is now II-VI Inc. Representation for II-VI, Inc. remains the same as prior Finisar representation.

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

Anil Veerabhadrapa was added as Alternate for Broadcom, Inc. John Petrilla was removed as an Alternate for Broadcom, Inc. Other representation for Broadcom remains the same.

Ramesh Sivakolundu and Sumanth Sindiri were added as Alternates for Cisco Systems, Inc. Other representation for Cisco remains the same.

Hiroyasu Uchiyama was added as an Alternate for Fujitsu America, Inc. Other representation for Fujitsu remains the same.

Rick Hicksted, Jr. was removed as an Alternate for Marvell Semiconductor, Inc. Other representation for Marvell remains the same.

Vijay Rao was removed as an Alternate for NetApp Inc. Other representation for NetApp remains the same.

Tom Palkert was removed as an Alternate for Molex Inc. Other representation for Molex remains the same.

### **3.3 New Voting Memberships**

- ☐ No additional companies were granted voting membership at this meeting.

### **3.4 Voting memberships in jeopardy for attendance**

- ☐ There were no companies in membership jeopardy for non-attendance during this meeting cycle.

### **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**

- ☐ There were no companies in jeopardy for letter ballot performance for not having voted

on two of last 3 T11 letter ballots.

### **3.7 Membership for this meeting**

Technical Committee T11 had 18 voting members at the T11 regular meeting 13 August 2020. With no members losing voting privileges, and no members gaining voting privileges the voting membership of T11 remains at 18 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 membership for this meeting is 18. One third of the total membership for this meeting is 6. The number of member organizations that responded to the call for quorum was 15. 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.

### 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 #160

The prior regular meeting of the INCITS Fibre Channel (T11) Technical Committee was #160 on 13 August 2020. The draft Minutes of that meeting were posted as document T11/2020-00185-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 Greg McSorley (Amphenol) seconded to accept T11/2020-00185-v000 as the Minutes of T11 meeting #160 on 13 August 2020. The motion passed by acclamation.

See action item [20-013](#).

## 6 Review of Old Action Items

|        |   |
|--------|---|
| 20-010 | T11 secretary to post approved Minutes of T11 meeting #159 as agreed at T11 meeting #160. (See <a href="#">clause 5</a> ). Completed by posting <a href="#">T11-2020-00195-v000</a> on August 05, 2020. |
|--------|---|

|        |  |
|--------|--|
| 20-011 | T11 chair to forward project proposal for FC-PM as documented in <a href="#">T11-2020-00162-v000</a> to INCITS for further processing. Completed by email to Rachel Porter on August 25, 2020 and posted as <a href="#">T11-2020-00196-v000</a> .. |
| 20-012 | T11 chair to update T11 Secretariat with our plan to host the February 2021 meeting as a virtual meeting and the April 2021 meeting as face-to-face if conditions allow. Completed by Chair by posting new meeting schedule on Sept. 08, 2020.     |

## **7 Review of T11 Project and Proposal Status**

### **7.1 Project Proposals**

**7.1.1** FC-PM received approval from INCITS, 564-202x.

### **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** There were no letter ballots since the last meeting cycle.

## **9 Old Business**

No old business was reopened.

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

## **10.1 Report to T11 Plenary ([T11-2020-00245-v000](#))**

Task Group chair Tom Palkert (Macom) gave the report posted as T11-2020-00245-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 ([T11-2020-00244-v000](#))**

Task Group chair Craig Carlson (Marvell) presented the information posted as T11-2020-00244-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 ([T11-2020-00234-v000](#))**

The chair referred everyone to the information posted as T11-2020-00234 on activity at the Joint T11.2/T11.3 working group, but since both groups were a part of the meeting and it was reviewed in both the T11.2 and T11.3 plenaries, it was left to people to review the content posted.



## **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 ([T11-2020-00208-v000](#))**

Dave Peterson (Broadcom) presented the information posted as T11-2020-00208-v000 on INCITS SC 25 / WG4 TAG project status (see [annex B.2](#)).

## **15 T11 New Business**

**15.1** No new business was raised at this meeting.

## **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 ([T11-2020-00198-v000](#)), INCITS Liaison report ([T11-2020-00214-v000](#))**

Steve Wilson (Broadcom) presented the information posted as T11-2020-00198-v000 on activity at T11 as reported to other organizations, and the information posted as T11-2020-00214-v000 on activity at INCITS other than T11 project status.

### **17.2 TC T10 ([T11-2020-00222-v000](#))**

Fred Knight (NetApp) gave report T11-2020-00222 on activity at T10.

### **17.3 FCIA ([T11-2020-00236-v000](#))**

Chris Lyon (Amphenol) gave report T11-2020-00236-v000 on activity at FCIA.

### **17.4 IEEE 802.3 ([T11-2020-00242-v000](#))**

Tom Palkert (Macom) and Mabud Choudhury (OFS) gave report T11-2020-00242-v000 on activity at IEEE 802.3.

### **17.5 INCITS TC CS1 (None)**

### **17.6 SNIA and DMTF ([T11-2020-00233-v000](#))**

Fred Knight (NetApp) discussed report T11-2020-00233-v000 on SNIA and DMTF activities.

### **17.7 NVMe (verbal)**

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

## **18 Administrative Matters**

### **18.1 Officer Appointments**

Officers of this Technical Committee and its Task Groups are:

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

## **19 Future Meeting Schedule**

### **19.1 Authorization of adhoc meetings**

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

The vice chair will account for these requests in the schedule for the T11 plenary week hosted by Marvell via Zoom virtual conference 07-11 December 2020.

## **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 2020–2021 meeting schedule**

The chair announced the following schedule for 2020-2021.

| <b>Date</b>         | <b>Location</b> | <b>Host Organization</b> | <b>Host Person</b> |
|---------------------|-----------------|--------------------------|--------------------|
| February 3-7, 2020  | Fort Worth, TX  | DCS                      | Todd Wheeler       |
| April 6-10, 2020    | Virtual Meeting |                          |                    |
| June 1-5, 2020      | Virtual Meeting |                          |                    |
| August 10-14, 2020  | Virtual Meeting |                          |                    |
| October 5-9, 2020   | Virtual Meeting |                          |                    |
| December 7-11, 2020 | Virtual Meeting |                          |                    |
| February 1-5, 2021  | Virtual Meeting |                          |                    |
| April 5-9, 2021     | tbd             |                          |                    |
| June 7-12, 2021     | Duluth, MN      | Marvell                  | Craig Carlson      |
| August 16-20, 2021  | Sante Fe, NM    | Broadcom                 | Steve Wilson       |
| October 4-8, 2021   |                 |                          |                    |

|                     |  |  |  |
|---------------------|--|--|--|
| December 6-10, 2021 |  |  |  |
|---------------------|--|--|--|

## 19.4 Approval of Meeting Venues

**19.4.1** Chris Lyon (Amphenol) moved, and Roger Hathorn (IBM) seconded to support having Chris try to arrange the December 2021 meeting as a face-to-face event hosted by Amphenol in Deerfield Beach, FL, as a replacement date for the December 2020 meeting originally planned in the same location. Motion carried In Favor-15, Abstain-0, Opposed- 0.

As noted at the last meeting, Chris is also pursuing Couer d'Alene for the April 2021 meeting, with a fallback date of October 2021 if face-to-face meetings have not resumed by April.

The chair will update the meeting information on the website.

See action item [20-014](#).

## 19.5 Next meeting information

The chair reminded the membership that the next T11 plenary week will be a virtual meeting hosted by Marvell via Zoom December 07-11, 2020.

## 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 December 2020 T11 meetings**

The vice chair Craig Carlson (Marvell) 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 December 2020.

### **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 #161 is shown in annex A.2. 28 people from 16 member (15 voting) organizations were in attendance.

### **21 Review of Action Items**

|        |   |
|--------|---|
| 20-013 | T11 secretary to post approved Minutes of T11 meeting #160 as agreed at T11 meeting #161. (See <a href="#">clause 5</a> )     |
| 20-014 | T11 chair to update T11 Future Meeting Schedule with Couer d'Alene as the April 2021 venue. See <a href="#">Clause 19.4</a> . |

### **22 Adjournment**

Greg McSorley (Amphenol) moved to adjourn at 1:57 PM CDT. The motion passed by acclamation.

## **Annex A Membership and Attendance**

### **A.1 Membership for this meeting**

#### **A.1.1 Emeritus Members**

These people have been granted Emeritus membership in INCITS Fibre Channel (T11) Technical Committee, recognizing their many years of skilled leadership and high quality technical contribution:

**Mr. James Coomes**

**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 #161 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                  | Gregory McSorley      |
|                     | Alternate                  | Brad Brubaker         |
|                     | Alternate                  | Daniel Dillow         |
|                     | Alternate                  | Michael Klempa        |
|                     | Alternate                  | Sam Kocsis            |
|                     | Alternate                  | Chris Lyon            |
|                     | Alternate                  | Alex Persaud          |
|                     | Alternate                  | Hu Silver             |
|                     | Alternate                  | Michael Wingard       |

|           |           |                    |
|-----------|-----------|--------------------|
| Broadcom  | Principal | Steven L. Wilson   |
|           | Alternate | Evan Beauprez      |
|           | Alternate | Ben Chu            |
|           | Alternate | Adam Healey        |
|           | Alternate | Howard Johnson     |
|           | Alternate | Mark Jones         |
|           | Alternate | Anil Mehta         |
|           | Alternate | David Peterson     |
|           | Alternate | Rob Peterson       |
|           | Alternate | James Smart        |
|           | Alternate | Anil Veerabhadrapa |
| Cisco     | Principal | Mike Blair         |
|           | Alternate | Mark Allen         |
|           | Alternate | Harsha Bharadwaj   |
|           | Alternate | Fabio Maino        |
|           | Alternate | Mark Nowell        |
|           | Alternate | Sai Pavan          |
|           | Alternate | Joe Pelissier      |
|           | Alternate | Kiran Ranabhor     |
|           | Alternate | Sumanth Sindiri    |
|           | Alternate | Ramesh Sivakolundu |
|           | Alternate | Xiaohong Wu        |
| Commscope | Principal | Yang (Sunny) Xu    |
|           | Alternate | Gary Gibbs         |
| Corning   | Principal | David Kozischek    |
|           | Alternate | Steven E. Swanson  |
| DCS       | Principal | Steve Eisele       |
|           | Alternate | Rodney Jack        |
| Dell      | Principal | Erik Smith         |
|           | Alternate | David Black        |
|           | Alternate | David Brown        |



|                            |           |                         |
|----------------------------|-----------|-------------------------|
|                            | Alternate | Gaurav Chawla           |
|                            | Alternate | Doug Farley             |
|                            | Alternate | David Piehler           |
|                            | Alternate | Vinay Sawal             |
|                            | Alternate | Joseph White            |
| Fujitsu America Inc        | Principal | Mark Malcolm            |
|                            | Alternate | Kun Katsumata           |
|                            | Alternate | Osamu Kimura            |
|                            | Alternate | Gene Owens              |
| 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 | Steve Sekel             |
|                            | Alternate | Joachim Vobis           |
| Macom                      | Principal | Thomas Palkert          |
| Marvell Semiconductor Inc  | Principal | Craig W. Carlson        |
|                            | Alternate | Anshul Agarwal          |
|                            | Alternate | Sanjaya Anand           |
|                            | Alternate | Girish Basrur           |
|                            | Alternate | Kathy Caballero         |
|                            | Alternate | Michael Dudek           |
|                            | Alternate | Arun Easi               |
|                            | Alternate | Robert Friend           |

|                 |           |                             |
|-----------------|-----------|-----------------------------|
|                 | Alternate | Duane Grigsby               |
|                 | Alternate | Rick Hicksted Jr.           |
|                 | Alternate | Ali Khwaja                  |
|                 | Alternate | Stephen Lam                 |
|                 | Alternate | Ray Leung                   |
|                 | Alternate | Akinori Maeda               |
|                 | Alternate | Praveen Midha               |
|                 | Alternate | Trinh Nguyen                |
|                 | Alternate | Raul Oteyza                 |
|                 | Alternate | Eddy Soetjahja              |
|                 | Alternate | Alan Spalding               |
|                 | Alternate | Gourangadoss Sundar         |
|                 | Alternate | Andrew Vasquez              |
|                 | Alternate | Dean Wallace                |
| NetApp          | Principal | Frederick Knight            |
|                 | Alternate | John Meneghini              |
|                 | Alternate | Vijay Rao                   |
| OFS             | Principal | Roman Shubochkin            |
|                 | Alternate | Mabud Choudhury             |
| Teledyne LeCroy | Principal | David Rodgers               |
|                 | Alternate | Amit Bakshi                 |
|                 | Alternate | Rakesh Kathiresan Natarajan |
|                 | Alternate | Douglas Lee                 |
|                 | Alternate | Henry Poelstra              |
|                 | 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 #161 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                  | Lei Wang              |
| Lumentum Operations | Principal                  | David Lewis           |
| MediaTek            | Principal                  | Tamer Ali             |
|                     | Alternate                  | Yan-Bin Luo           |
|                     | 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 #161 of the INCITS Fibre Channel (T11) Technical Committee:

| Organization               | Representative(s)  |
|----------------------------|--------------------|
| AMPHENOL CORP              | Michael Klempa     |
|                            | Chris Lyon         |
|                            | Greg McSorley      |
| BROADCOM INC               | Ben Chu            |
|                            | David Peterson     |
|                            | Steven L. Wilson   |
| CISCO SYSTEMS INC          | Mike Blair         |
|                            | Ramesh Sivakolundu |
| COMMSCOPE                  | Gary Gibbs         |
| DELL INC                   | David Brown        |
|                            | David Piehler      |
|                            | Vinay Sawal        |
|                            | Erik Smith         |
| FUJITSU AMERICA INC        | Mark Malcolm       |
| HEWLETT PACKARD ENTERPRISE | Barry Maskas       |
| IBM CORP                   | Patty Driever      |
|                            | Roger Hathorn      |
| II-VI Inc                  | Vera Koleva        |
|                            | Lance Thompson     |
| MACOM                      | Thomas Palkert     |
| MARVELL SEMICONDUCTOR INC  | Craig W. Carlson   |
|                            | Raul Oteyza        |

|                             |                  |
|-----------------------------|------------------|
| NETAPP INC                  | Frederick Knight |
| OFS FITEL LLC               | Mabud Choudhury  |
| PANDUIT CORPORATION         | Jose Castro      |
| TELEDYNE LECROY CORPORATION | Henry Poelstra   |
|                             | David Rodgers    |
| VIAVI SOLUTIONS INC         | Jason Rusch      |

## A.2.2 Ad hoc meeting attendance

FC-NVMe-2 ad hoc, members

| Organization | Representative(s) |
|--------------|-------------------|
|--------------|-------------------|

FC-SW-8 ad hoc, members

| Organization               | Representative(s)  |
|----------------------------|--------------------|
| BROADCOM INC               | Howard Johnson     |
|                            | David Peterson     |
|                            | James Smart        |
|                            | Anil Veerabhadrapa |
|                            | Steven Wilson      |
| CISCO SYSTEMS INC          | Harsha Bharadwaj   |
|                            | Ramesh Sivakolundu |
| DATA CENTER SYSTEMS        | Steve Eisele       |
| FUJITSU AMERICA INC        | Mark Malcolm       |
| HEWLETT PACKARD ENTERPRISE | Barry Maskas       |
| IBM CORP                   | Patty Driever      |
|                            | Roger Hathorn      |
| NETAPP INC                 | Frederick Knight   |

FC-PI-8 ad hoc, members

| Organization | Representative(s) |
|--------------|-------------------|
|--------------|-------------------|

|                             |                  |
|-----------------------------|------------------|
| AMPHENOL CORPORATION        | Michael Klempa   |
|                             | Gregory McSorley |
| BROADCOM INC                | Ben Chu          |
| CISCO SYSTEMS INC           | Xiaohong Wu      |
| COMMSCOPE                   | Gary Gibbs       |
| DATA CENTER SYSTEMS         | Steve Eisele     |
| DELL INC                    | David Piehler    |
| HEWLETT PACKARD ENTERPRISE  | Barry Maskas     |
| II-VI INC                   | Vera Koleva      |
|                             | Lance Thompson   |
| KEYSIGHT TECHNOLOGIIES INC  | Stephen Didde    |
| MACOM                       | Thomas Palkert   |
| MARVELL SEMICONDUCTOR INC   | Raul Oteyza      |
| OFS FITEL LLC               | Mabud Choudhury  |
| PANDUIT CORP                | Jose Castro      |
| TELEDYNE LECROY CORPORATION | Henry Poelstra   |

FC-GS-9 ad hoc, members

| Organization               | Representative(s)  |
|----------------------------|--------------------|
| BROADCOM INC               | Howard Johnson     |
|                            | David Peterson     |
|                            | Anil Veerabhadrapa |
| CISCO SYSTEMS INC          | Mike Blair         |
| FUJITSU AMERICA INC        | Mark Malcolm       |
| HEWLETT PACKARD ENTERPRISE | Barry Maskas       |
| IBM CORP                   | Roger Hathorn      |
| NETAPP INC                 | Frederick Knight   |

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         |
| COMMSCOPE                  | Gary Gibbs         |
| DELL INC                   | Vinay Sawal        |
| FUJITSU AMERICA INC        | Mark Malcolm       |
| HEWLETT PACKARD ENTERPRISE | Barry Maskas       |
| IBM CORP                   | Patty Driever      |
|                            | Roger Hathorn      |
| MARVELL SEMICONDUCTOR INC  | Craig Carlson      |
| NETAPP INC                 | Frederick Knight   |
| VIAVI SOLUTIONS            | Jason Rusch        |

FC-FS-6 ad hoc, members

| Organization  | Representative(s)  |
|---------------|--------------------|
| AMPHENOL CORP | Michael Klempa     |
| BROADCOM      | David Peterson     |
|               | Howard Johnson     |
|               | James Smart        |
|               | Anil Veerabhadrapa |
|               | Steven Wilson      |
| CISCO         | Mike Blair         |
| DELL INC      | DJ Brown           |

|                            |                  |
|----------------------------|------------------|
|                            | Vinay Sawal      |
| FUJITSU AMERICA INC        | Mark Malcolm     |
| HEWLETT PACKARD ENTERPRISE | Barry Maskas     |
| IBM                        | Patty Driever    |
|                            | Roger Hathorn    |
| MARVELL SEMICONDUCTOR INC  | Craig Carlson    |
|                            | Raul Oteyza      |
| NETAPP INC                 | Frederick Knight |

FC-RDMA ad hoc, members

| Organization               | Representative(s)  |
|----------------------------|--------------------|
| AMPHENOL CORPORATION       | Michael Klempa     |
| BROADCOM INC               | Howard Johnson     |
|                            | David Peterson     |
|                            | James Smart        |
|                            | Anil Veerabhadrapa |
|                            | Steven Wilson      |
| CISCO SYSTEMS INC          | Mike Blair         |
| DELL INC                   | David Brown        |
|                            | Vinay Sawal        |
| FUJITSU AMERICA INC        | Mark Malcolm       |
| HEWLETT PACKARD ENTERPRISE | Barry Maskas       |
| IBM CORPORATION            | Patty Driever      |
|                            | Roger Hathorn      |
| MARVELL SEMICONDUCTOR INC  | Craig Carlson      |
|                            | Raul Oteyza        |
| NETAPP INC                 | Frederick Knight   |



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

| <b>Organization</b>         | <b>Representative(s)</b> |
|-----------------------------|--------------------------|
| AMPHENOL CORPORATION        | Michael Klempa           |
| BROADCOM INC                | Ben Chu                  |
|                             | Howard Johnson           |
|                             | David Peterson           |
|                             | Anil Veerabhadrapa       |
|                             | Steven Wilson            |
| CISCO SYSTEMS INC           | Mike Blair               |
| COMMSCOPE                   | Gary Gibbs               |
| DATA CENTER SYSTEMS         | Steve Eisele             |
| DELL INC                    | Vinay Sawal              |
| FUJITSU AMERICA INC         | Mark Malcolm             |
| HEWLETT PACKARD ENTERPRISE  | Barry Maskas             |
| IBM CORPORATION             | Patty Driever            |
|                             | Roger Hathorn            |
| II-VI INC                   | Vera Koleva              |
| MARVELL SEMICONDUCTOR INC   | Craig Carlson            |
|                             | Raul Oteyza              |
| NETAPP INC                  | Frederick Knight         |
| OFS FITEL LLC               | Mabud Choudhury          |
| TELEDYNE LECROY CORPORATION | Henry Poelstra           |

## **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 #161 held on 08 October 2020.

| Standard                      | Status    | Action  | Target or Reaffirm Date | Editor   | Ad Hoc Chair | Secretary |
|-------------------------------|-----------|---------|-------------------------|----------|--------------|-----------|
| Projects in Development Stage |           |         |                         |          |              |           |
| FC-FS-6                       | In dev.   | To T11  | Dec-20                  | Carlson  | Peterson     | Driever   |
| FC-GS-9                       | In dev.   | To T11  | Dec-20                  | Rusch    | Peterson     | Driever   |
| FC-LS-5                       | In dev.   | To T11  | Dec - 20                | Carlson  | Driever      | Rusch     |
| FC-PI-8                       | In dev.   | ToT11   | Dec-20                  | Rusch    | Wallace      | Wallace   |
| FC-MSQS-3                     | In dev.   | To T11  | Dec-20                  | Castro   | Wallace      | Wallace   |
| FC-PM                         | In dev.   | To T11. | Oct.21                  | Peterson | Carlson      | Peterson  |
| FC-SW-8                       | In dev    | ToT11   | Dec 20                  | Peterson | Carlson      | Peterson  |
| Projects in Approval Stage    |           |         |                         |          |              |           |
| FC-PI-7P                      | At INCITS | MR      | Dec-20                  | Rusch    | Wallace      | Wallace   |

## 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 #161, 08 October 2020 in document T11-2020-00160-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 #<br>(T11 allocated) | Status   |
|---------------------|------------------------------|--|
| FC-SP-2+AM1<br>NWIP | 14165-432                    | Submitted in July 2018.<br>Resubmission email from<br>INCITS/TIA on January 18, 2019<br>Feb 22 – email from Juergen<br>indicates IEC project was started<br>JTC1-SC25/2860/NP ballot opened<br>3/1/2019 and closed 05/24/2019 –<br>Stage: ACD – Approved for CD<br>9/16/19 – CD circulated on 9/13/19<br>- International (comments) due<br>date: 12/06/2019<br>- TAG (comments) Deadline:<br>11/06/2019<br>Stage: PCC – Preparation of CC<br>1/28/20 – No comments requesting<br>changes received, with request for<br>Word source<br>6/03/20 – Received request for<br>Word source again 😞<br>DIS text was submitted to IEC for<br>further processing. FDIS ballot<br>should be issued shortly. |
| FC-PI-7             | 14165-147                    | JTC 1 fast track ballot opens June 5<br>and closes August 28, 2020. The<br>Executive Board default position is<br>to approve the project and<br>objections are due by July 24, 2020<br>- Summary states Approval   |