
T11-2019-00125-v000

**Draft Minutes
INCITS Fibre Channel TG T11.2 Plenary Meeting #131
11 April 2019 – 9:05 AM to 10:05 AM (EDT)
Boca Raton, FL**

1 Opening remarks and introductions

1.1 Introductory Remarks

TC T11.2 chair Tom Palkert (Molex) convened regular meeting #131 of the INCITS Fibre Channel (T11.2) Technical Committee on Thursday, 11 April 2019 at 9:05 AM (EDT). He introduced himself as chair and thanked our host Amphenol for the meeting facilities.

The chair next introduced Dean Wallace (Marvell) as vice-chair and Jason Rusch (VIAVI Solutions) as the T11.2 secretary.

1.2 Self-introductions

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

1.3 Meeting guidelines (Anti-Trust and IPR)

The chair stated that the meeting was operating under INCITS procedures and called attention to the INCITS patent policy by showing the INCITS Patent Policy Slides. The advice on the slides was provided and there was no discussion. For reference the slide set is available to T11 members as T11/08-406v0.

The chair noted that the INCITS Antitrust Guidelines applied to this committee meeting and that it was the responsibility of all attendees, and not just the Officers, to ensure that the Guidelines are followed, and to terminate discussions if they are not.

See <http://www.incits.org/standards-information/legal-info>.

1.4 Electronic 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>, and informed those present of the necessary password. He reminded those present that the electronic attendance list would become the only source of attendance for formal records of this meeting.

2 Approval of the Agenda

An electronic version of the agenda was posted as T11-2019-00082-v000 and supporting documents were accessible via the TC web site. The chair made a call for any changes and new agenda items.

Sunny Xu (CommScope) moved and Chris Lyon (Amphenol) seconded to accept that T11-2019-00082-v000 as presented at this meeting be approved as the agenda for this meeting. The agenda 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 the INCITS Organization, Policies, and Procedures found at INCITS/RD-2 at www.incits.org. An overview of these requirements was presented by the chair and was distributed to all attendees.

The chair presented the current list of members and representatives, and invited corrections. The membership effective for this meeting, as adjusted for changes introduces at this meeting, is shown in subclause 3.6 below. Attendance for this meeting is shown in clause 14 below.

3.2 Roll Call of Members in Jeopardy for Non-Attendance

- Keysight Technologies Inc and Macom were in jeopardy for non-attendance. A representative from Macom was present and signed in. Keysight Technologies Inc did not have representation at this meeting and will lose voting rights.

3.3 Jeopardy / Membership Loss for Not Voting in T11.2 Letter Ballots

- No company lost membership for not voting on T11.2 letter ballots.

3.4 Members in Jeopardy for Non-Payment of Fees

- No company lost membership for non-payment of fees.

3.5 Membership Changes and Announcement of New Members

- Keysight Technologies Inc lost voting rights at this meeting.

3.6 T11.2 Voting Memberships for this meeting

Technical Committee T11.2 had 20 voting members at the T11.2 regular meeting #131, 11 April 2019.

Organization	Representative	Participant Class (P, A)
Amphenol	Greg McSorley	P
	Brad Brubaker	A
	Mike Davis	A
	Daniel Dillow	A
	Chris Lyon	A
	Alex Persaud	A
	Hu Silver	A
	Michael Wingard	A
Broadcom, Inc	Ben Chu	P
	David Baldwin	A
	Evan Beauprez	A
	Adam Healey	A
	Howard Johnson	A
	Dave Peterson	A
	James Smart	A
	Steve Wilson	A
Cisco	Mike Blair	P
	Ziad Chaine	A
	J Metz	A
CommScope	Yang (Sunny) Xu	P
	Gary Gibbs	A
	Gary Irwin	A
	Paul Kolesar	A

Corning Inc.	Doug Coleman	P
	Steven Swanson	A
DCS	Kevin Ehringer	P
	Todd Wheeler	A
Dell	Louis Ricci	P
	David Black	A
	Gaurav Chawla	A
	Alan Rajapa	A
	Erik Smith	A
	Joseph White	A
Finisar	Jeff Young	A
	Vipul Bhatt	P
	Jonathan King	A
	Vera Koleva	A
Foxconn Interconnect Tech	John Petrilla	P
	Eric Chu	A
	Glenn Moore	A
	William Peters	A
Fujitsu	Mark Malcolm	P
	Kun Katsumata	A
	Gene Owens	A
GlobalFoundries	Adrian Butter	P
	John Ewen	A
	Jon Garlett	A
HPE	Barry Maskas	P
	Rupin Mohan	A
	Krishna Babu Puttagunta	A
IBM	Roger Hathorn	P
	Patty Driever	A
Macom	Tom Palkert	P
Marvell Semiconductor	Dean Wallace	P
	Anshul Agarwal	A
	Girish Basrur	A
	Craig Carlson	A
	Mike Dudek	A
	Ali Khwaja	A
	Stephen Lam	A
	Akinori Maeda	A
	Alan Spalding	A
	Darren Trapp	A
Molex	Alex Haser	P
	Jay H. Neer	A
	Scott Sommers	A
NetApp	Fred Knight	P
OFS	Roman Shubochkin	P
	Mabud Choudhury	A
Panduit	Jose Castro	P
	Bulent Kose	A
	Robert Reid	A
	Steve Skiest	A
Viavi Solutions	Jason Rusch	P

The following is a list of advisory members:

Organization	Representative	Participant Class (P, A)
Anritsu	Ken Mochizuki	P
Futurewei	Xu Qi ming	P
	Eddy Zhou	A
Lumentum	Dave Lewis	P
MediaTek USA	Tamer Ali	P
	Mau-Lin Wu	A
SmartDV Technologies	Deepak Kumar Tala	P
TE Connectivity	Nathan Tracy	P
	Melissa Knox	A
	Jeff Mason	A
	Andy Nowak	A

The following is a list of emeritus members:

James Coomes
William Ham
Schelto van Doorn

4 Anti-Trust Policies

The chair noted that among the rules and policies under which T11.2 TG operates are the INCITS Antitrust Guidelines as specified in <http://www.incits.org/standards-information/legal-info>. Any member of the meeting is responsible for objecting if he believes discussion in the meeting violates these 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.

5 Document Distribution

The chair reviewed T11.2 document distribution which is available from <http://standards.incits.org>.

6 Approval of the Minutes of February 2019 Plenary Meeting #130

The prior regular meeting of the INCITS Fibre Channel T11.2 Technical Group was #130 on 07 February 2019. The draft minutes of that meeting were posted as document T11-2019-00060-v000.

T11.2 minutes were reviewed as posted on the T11 web site. Corrections may be requested either before the subsequent meeting by email to jason.rusch@viavisolutions.com or at the subsequent meeting in person.

Sunny Xu (CommScope) moved and Patty Driever (IBM) seconded to accept T11/2019-00060-v000 as the minutes of T11.2 meeting #130 on 07 February 2019. The motion passed by acclamation.

7 Review of Old Action Items

- T11.2 Chair to request IEEE liaison with T11 for P 802.3cm, 802.3ck **[CARRY]**
- T11.2 Chair to request SFF-DD liaison **[CARRY]**
- T11.2 chair to liaison Anil Mehta's (Broadcom, Inc) presentation T11-2019-00030-v001 to the OIF **[CARRY]**

8 Review of T11.2 Projects

8.1 Project Status Review

The chair reviewed project status of activities in the T11.2 TG.

8.2 FC-PI-8 Ad Hoc Working Group (T11-2019-00046-v000)

The FC-PI-8 ad hoc chair Dean Wallace (Marvell) presented meeting report T11-2019-00105-v001. Seven presentations were given:

- 128GFC chip to chip (C2C) channels, Mehta (Broadcom, Inc), T11-2019-00084-v000
- FEC for 128GFC, Mehta (Broadcom, Inc), T11-2019-00085-v001
- Clock content in PAM4 data streams for FC protocol, Mehta (Broadcom, Inc), T11-2019-00031-v001
- 64GFC baseline wander of PRBS58, Joy (Marvell), T11-2019-00093-v000
- Errata for equation 11 in FC-PI-7, Dudek (Marvell), T11-2019-00094-v001
- 128GFC MMF solutions, Xu (CommScope), Choudhury (OFS), T11-2019-00033-v000
- Fibre Channel MRD response, T11-2019-00111-v000

8.3 Joint T11.2 / T11.3 Ad Hoc Working Group

The Joint T11.2 / T11.3 ad hoc chair Dean Wallace (Marvell) presented meeting report T11-2019-00110-v000. Two presentations were given:

- 128GFC speed negotiation, Mehta (Broadcom, Inc), T11-2019-00022-v001
- FEC for 128GFC, Mehta (Broadcom, Inc), T11-2019-00085-v001

9 Letter Ballots

No open letter ballots.

10 Old Business

There was no old business to be reviewed for this meeting cycle.

11 Review of International Activity

None were given for this meeting cycle.

12 New Business and New Technical Items

None for this meeting cycle.

13 Call for Patents

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

No member responded.

14 List of Meeting Attendees

The electronic attendance record for this T11.2 plenary meeting showed 20 attendees representing 17 voting companies:

Organization	Representative	Role
Amphenol Corporation	Chris Lyon	Member
Amphenol Corporation	Gregory McSorley	Member
Broadcom, Inc	Ben Chu	Member
Broadcom, Inc	Steven Wilson	Member
Cisco Systems Inc	Mike Blair	Member
CommScope	Sunny Xu	Member
Corning Inc	Doug Coleman	Member
Dell Inc	Alan Rajapa	Member
Finisar Corporation	Vera Koleva	Member
Foxconn Interconnect Technology Ltd (FIT)	John Petrilla	Member
Fujitsu America Inc	Mark Malcolm	Member
GlobalFoundries US2 LLC	Adrian Butter	Member
IBM Corporation	Patty Driever	Member
Macom	Thomas Palkert	Group Chair
Marvell Semiconductor Inc	Craig Carlson	Member
Marvell Semiconductor Inc	Dean Wallace	Vice Chair
NetApp Inc	Frederick Knight	Member
OFS Fitel LLC	Mabud Choudhury	Member
Teledyne LeCroy Corporation	Henry Poelstra	Member
Viavi Solutions Inc	Jason Rusch	Secretary

The electronic attendance for the FC-PI-8 ad hoc meeting showed 12 attendees representing 11 member companies:

Organization	Representative	Role
Amphenol Corporation	Gregory McSorley	Member
Broadcom, Inc	Ben Chu	Member
CommScope	Sunny Xu	Member
Corning Inc	Doug Coleman	Member
Finisar Corporation	Vera Koleva	Member
Foxconn Interconnect Technology Ltd (FIT)	John Petrilla	Member
GlobalFoundries US2 LLC	Adrian Butter	Member
Marvell Semiconductor Inc	Raul Oteyza	Member
Marvell Semiconductor Inc	Dean Wallace	Group Chair
OFS Fitel LLC	Mabud Choudhury	Member
Panduit Corporation	Jose Castro	Member
Teledyne LeCroy Corporation	David Rodgers	Member

15 Liaison Reports

15.1 INCITS and T11 Liaison reports

T11 chair Steve Wilson (Broadcom, Inc) gave T11-2019-00101-v000 "INCITS report to T11" and T11-2018-00061-v000 "T11 report to INCITS."

15.2 SFF Transceiver liaison

No report was given at this meeting cycle.

15.3 IEEE

Tom Palkert (Molex) gave a verbal report on IEEE 802.3ck. Mabud Choudhury (OFS) presented T11-2019-00120-v000 on 802.3cm.

15.4 OIF

No report was given at this meeting cycle.

16 Future Meeting Schedule

The next plenary meeting will be held in La Jolla, CA on June 4-6, 2019.

Dean Wallace (Marvell) moves and Jason Rusch (VIAVI) seconds the following motions:

Authorization of Ad Hoc groups and study groups for the plenary week:

- FC-PI-8 ad hoc requests Tuesday 6/4/19 9:00 to 6:00 and Wednesday 6/5/19 from 9:00 to 12:00.
- Joint T11.2/T11.3 ad hoc requests Wednesday 6/5/19 from 1:30 to 2:30.

Authorization of Telephone Conference Calls:

- Request two conference calls for FC-PI-8.
- Request two conference calls for Joint T11.2/T11.3.

All motions passed by acclamation.

17 Action Items

Action items carried from prior meetings:

- Mabud Choudhury (OFS) to request IEEE liaison with T11 for P 802.3cm, 802.3ck.
- T11.2 chair to request SFF-DD liaison.
- T11.2 chair to liaison Anil Mehta's (Broadcom, Inc) presentation T11-2019-00030-v001 to the OIF.

New action items:

- Dave Peterson (Broadcom, Inc) to forward the latest FC-PI-7 edits to the FC-PI-7 editor.
- FC-PI-7 editor to review the existing FC-PI-7 document and compare against the version provided by Dave Peterson (Broadcom, Inc)
- FCIA (Craig Carlson) to schedule roadmap conference calls to review the FC-PI-8 MRD.
- Dean Wallace (Marvel) to post the FC-PI-7 Amendment Project Proposal.

18 Adjournment

Sunny Xu (CommScope) moved to adjourn at 10:05 AM. The motion passed by unanimous consent.