

Approved Minutes
INCITS Fibre Channel TG T11.2 Plenary Meeting #123
7 December 2017 – 9 AM to 10:30 AM (PST)
Santa Rosa, CA

1 Opening remarks and introductions

1.1 Introductory Remarks

TC T11.2 chair Tom Palkert (Macom) convened regular meeting #123 of the INCITS Fibre Channel (T11.2) Technical Committee on Thursday, 7 December 2017 at 9:00 AM Pacific standard time. He introduced himself as chair and thanked our host Brocade and Steve Wilson for the meeting facilities.

The chair next introduced Dean Wallace (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 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 T11-2017-00401-v000 and supporting documents were accessible via the TC web site. The chair made a call for any changes and new agenda items.

Chris Lyon (Amphenol) moved and Zach Nason (DCS) seconded to accept that T11-2017-00401-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 introduced 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

- No members were mentioned during the meeting.
- Keysight can regain voting membership if present at the next plenary meeting.

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

- Broadcom has completed purchase of Brocade.

3.6 T11.2 Voting Memberships for this meeting

The following is the list of organizations that are voting members of record for regular meeting #122 of the INCITS Fibre Channel (T11.2) Technical Committee, including the recognized representatives of each member organization, and including any membership changes as listed above.

Based on the above information, the total voting membership becomes 20 effective at the start of this meeting.

Organization	Representative	Membership Class (P, A, L, E, XO, FoC, Etc.)
Amphenol	Greg McSorley	P
	Brad Brubaker	A
	Mike Davis	A
	Daniel Dillow	A
	Chris Lyon	A
	Alex Persaud	A
	Michael Wingard	A
Broadcom Limited	Ben Chu	P
	David Baldwin	A
	Evan Beauprez	A
	Adam Healey	A
	Howard Johnson	A
	Scott Kipp	A
	Dave Peterson	A
	Gautam Shiroor	A
	James Smart	A
	Steve Wilson	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
	Zach Nason	A
	Todd Wheeler	A
Dell	Louis Ricci	P
	David Black	A

	Gaurav Chawla	A
	Alan Rajapa	A
	Erik Smith	A
	Joseph White	A
	Jeff Young	A
Finisar	Chris Yien	P
	Richard Johnson	A
Foxconn Interconnect Tech	John Petrilla	P
	Randy Clark	A
	Glenn Moore	A
	William Peters	A
Fujitsu	Mark Malcolm	P
	Kun Katsumata	A
	Gene Owens	A
GlobalFoundries	Adrian Butter	P
	John Ewen	A
HPE	Barry Maskas	P
	Rupin Mohan	A
	Krishna Babu Puttagunta	A
IBM	Roger Hathorn	P
	Patty Driever	A
Macom	Tom Palkert	P
Molex	Jay H. Neer	P
	Alex Haser	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
QLogic / Cavium	Dean Wallace	P
	Anshul Agarwal	A
	Girish Barur	A
	Craig Carlson	A
	Mike Dudek	A
	Ali Khwaja	A
	Stephen Lam	A
	Alan Spalding	A
	Darren Trapp	A
TE Connectivity	Nathan Tracy	P
	Melissa Knox	A
	Jeff Mason	A
	Andy Nowak	A
Viavi Solutions	Jason Rusch	P

The following is a list of advisory members:

Organization	Representative	Membership Class (P, A, L, E, XO, FoC, Etc.)
Anritsu	Ken Mochizuki	P
Cisco	Mike Blair	P
	Ziad Chaine	A
	J Metz	A
Futurewei	Xu Qi ming	P
	Eddy Zhou	A
Keysight	Joachim Vobis	P
	Stephen Didde	A
	Steve Sekel	A
Lumentum	Dave Lewis	P
MediaTek USA	Tamer Ali	P
Oclaro	Kohichi Tamura	P
Semtech	Bharat Tailor	P
	Ed Frlan	A
	Francois Tremblay	A
SmartDV Technologies	Deepak Kumar Tala	P
Teledyne LeCroy	David Rogers	P
	Henry Poelstra	A

The following is a list of emeritus members:

James Coomes
William Ham
Horst Truedstedt
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 October 2017 Plenary Meeting #122

The prior regular meeting of the INCITS Fibre Channel T11.2 Technical Group was #122 on 5 October 2017. The draft minutes of that meeting were posted as document T11-2017-00317-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 the T11.2 secretary (richard.johnson@finisar.com) or at the subsequent meeting in

person.

Roger Hathorn (IBM) moved and seconded by Greg McSorley (Amphenol) to accept T11/2017-00317-v000 as the Minutes of T11.2 meeting #122 on 5 October 2017. The motion passed by acclamation.

7 Review of Old Action Items

- T11.2 Chair to request IEEE liaison with T11. Carried over.

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-7 Ad Hoc Working Group (T11-2017-00390-v001)

The FC-PI-7 ad hoc chair Dean Wallace (Qlogic / Cavium) presented meeting report T11-2017-00390-v001. Twelve presentations were given:

- Scott Kipp (Broadcom / Brocade) presented “64GFC loss budgets” T11-2017-00365-v001;
- John Petrilla (Foxconn Optical Interconnect) discussed “64GFC delta point electrical simulations” T11-2017-00363-v000;
- Dean Wallace (Qlogic / Cavium) gave Mike Dudek’s (Qlogic / Cavium) “64GFC electrical variant update to accommodate lower channel loss” T11-2017-00379-v000;
- Ben Chu (Broadcom) presented “64GFC transceiver compliance codes” T11-2017-00357-v000;
- Jonathan King (Finisar) reviewed “Comment action item response” T11-2017-00383-v000;
- Jose Castro (Panduit) led the group in “Review latest FC-PI-7 document, confirm comments implemented per resolution” T11-2017-00156-v004;
- Jonathan King (Finisar) discussed “PAM-4 VCSEL early results” T11-2017-00384-v000;
- Scott Kipp (Broadcom / Brocade) presented “Why 128GFC” T11-2017-00367-v000;
- Dean Wallace (Qlogic / Cavium) reviewed “FC-PI-8 project proposal” T11-2017-00359-v000;
- Scott Kipp (Broadcom / Brocade) gave “SFP-DD to the rescue” T11-2017-00366-v000;
- Doug Coleman (Corning) reviewed “High density connectivity” T11-2017-00382-v000; and
- Anil Mehta and Scott Kipp (Broadcom / Brocade) presented “QSFP speed negotiation” T11-2017-00372-v000.

8.3 Joint T11.2 / T11.3 Ad Hoc Working Group (T11-2017-00392-v000)

The joint T11.2 / T11.3 ad hoc chair Dean Wallace (QLogic / Cavium) reviewed meeting report T11-2017-00392-v000. Two presentations were given:

- Adrian Butter (GlobalFoundries) presented “FC-EE (or not) for 64/256GFC” T11-2017-00361-v001; and
- Craig Carlson (QLogic / Cavium) reviewed “FC-EE technical report”.

9 Letter Ballots

None for this plenary cycle.

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

12.1 FC-PI-7 RFC Ballot

Dean Wallace (Cavium/QLogic) moves and Greg McSorley (Amphenol) seconds the following motion:

T11.2 recommends to T11 that FC-PI-7 document T11-2017-00156-v004 as modified per accepted comments and motions to document T11-2017-00156-v005 go to RFC ballot.

A show-of-hands vote was taken, with 19 affirming, 0 opposing, and 0 abstaining.

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 29 attendees representing 23 member companies and 19 voting companies:

Amphenol Interconnect	Chris Lyon
	Greg McSorley
Broadcom Limited	Ben Chu
	Gautam Shiroom
	Steve L. Wilson
Cisco	J. Metz
Commscope	Gary Irwin
Corning	Doug Coleman
DCS	Zach Nason
	Todd Wheeler
Dell	Alan Rajapa
Finisar	Richard Johnson
Foxconn Interconnect Technologies	John Petrilla
GlobalFoundries	Adrian Butter
HPE	Krishna Babu Puttagunta
IBM	Patty Driever
	Roger Hathorn
Keysight	Steve Sekel
	Joachim Vobis
Macom	Tom Palkert
Molex	Jay Neer
NetApp	Fred Knight
OFS	Mabud Choudhury
Panduit	Jose Castro
Qlogic	Craig Carlson
	Dean Wallace
TE Connectivity	Jeff Mason
Teledyne LeCroy	Henry Poelstra
Viavi	Jason Rusch

The electronic attendance for the FC-PI-7 ad hoc meeting showed 18 attendees representing 14 member companies:

Amphenol	Greg McSorley
Broadcom Limited	Ben Chu
	Scott Kipp
CommScope	Gary Irwin
Corning	Doug Coleman
DCS	Zach Nason
	Todd Wheeler
Dell	Alan Rajapan
Finisar	Richard Johnson
Foxconn Interconnect	John Petrilla
GlobalFoundries	Adrian Butter
Keysight	Stephen Didde
	Steve Sekel
	Joachim Vobis
Lumentum	Dave Lewis
OFS	Mabud Choudhury
TE Connectivity	Jeff Mason
Teledyne LeCroy	Henry Poelstra

15 Liaison Reports

15.1 INCITS and T11 Liaison reports

T11 chair Steve Wilson (Brocade) gave T11-2017-00369-v000 "INCITS report to T11" and T11-2017-00347-v000 "T11 report to INCITS."

15.2 SFF Transceiver liaison

Tom Palkert (Macom) presented "SFF TA TWG Transceiver" meeting liaison report (verbal report).

15.3 IEEE

Tom Palkert (Macom) presented "IEEE 802.3 Liaison Report" T11-2017-00402-v000.

15.4 OIF

Tom Palkert (Macom) gave a report on OIF liaison letter to T11.2 and on the OIF CEI contribution that he had uploaded into the INCITS documents folder (T11-2017-00403-v000 through 00406-v000).

16 Future Meeting Schedule

The next plenary meeting will be held in Fort Worth, TX, on February 8.

Joachim Vobis (Keysight) moves and John Petrilla (Foxconn Interconnect Technology) seconds the following motions:

Plenary week schedule

FC-PI-7 Ad Hoc requests 9:00 AM to 4:00 PM Tuesday, February 6

and 9:00 AM to 12:00 PM Wednesday, February 7.

The joint T11.2 / T11.3 Ad Hoc requests 1:30 PM to 2:30 PM Wednesday, February 7.

Authorization of Ad Hoc groups & study groups No requests were made for this meeting cycle. Authorization of

Telephone Conference Calls

The FC-PI-7 Ad Hoc requests two telephone conference calls. The first call is scheduled for December 21, from 9 AM to 11 AM PST.

All motions passed by acclamation.

17 Action Items

- T11.2 Chair to request IEEE liaison with T11.

18 Adjournment

Greg McSorley (Amphenol) moved to adjourn at 10:07 AM. The motion passed by unanimous consent.