

Minutes
T10 FCP-5 ad hoc work group regular meeting
17 August 2021 – 10:00AM – 12:00PM MDT
Santa Fe, New Mexico (Hybrid Meeting)

Document: T10-21-091r0/T11-2021-00213-v000

Attendance was 13 people from 7 organizations and is tabulated at the end of this document.

1 Opening remarks & Introductions

Dave Peterson (Broadcom) opened the regular meeting Tuesday, 17 August 2020 at 10:00 AM MDT. He thanked our host organization, Broadcom, for the hotel along with Marvell for providing the Zoom facilities and led a round of introductions.

1.1 Attendance and Membership

The chair stated that all persons present are considered members of this meeting and may vote on questions, limited to one vote per company present. He advised that although T11 does not limit participation in the activities of its work groups to representatives of T11 member organizations, it requires nonmembers to identify themselves as such. Nonmembers that expect they may participate in the activities of T11 regularly were encouraged to become members.

1.2 Code of Conduct

The chair referenced the INCITS Code of Conduct and suggested everyone become familiar with its content. It can be found on the INCITS website at the following link: [eb-2020-00772-INCITS Code of Conduct.pdf](https://www.incits.org/standards-information/legal-info/eb-2020-00772-INCITS-Code-of-Conduct.pdf).

It will be reviewed at the plenary meetings later this week, and then subsequently in all Ad Hoc meetings as well.

1.3 Patents

The chair explained that this is a regular agenda item to identify any potential patent issues with developing standards and technical reports. For additional information on ANSI procedures and patent policy, please see INCITS web page at <http://www.incits.org/standards-information/legal-info>. Questions about this policy should be referred to the questioner's legal counsel or the ANSI General Counsel.

1.4 Antitrust

The Chair stated that the meeting was operating under INCITS procedures, and called special attention to the ANSI patent policies and the INCITS antitrust policies (<http://www.incits.org/standards-information/legal-info>). 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.

2 Approval of Agenda

An agenda for the FCP-5 ad hoc work group regular meeting 17 August 2021 has been posted as T11 document T11-2021-00187-v000 and T10 document T10/21-090r0.

Ed Mazurek (Cisco) moved and DJ Brown (Dell) seconded to accept T11-2021-00187-v000 and T10/21-090r0 as the agenda for this regular meeting. Approved unanimously.

3 Review of Past Business

3.1 Review of Minutes

Minutes for the FCP-5 ad hoc work group meeting of 07 June 2021 have been posted as T10-21-079r0/T11-2021-00143-v000. Minutes of the interim meeting of 29 June 2021 have been posted as T10-21-087r0/T11-2021-00185-v000

Howard Johnson (Broadcom) moved and DJ Brown (Dell) seconded to accept T10-21-079r0/T11-2021-00143-v000 as the minutes of the FCP-5 ad hoc work group meeting on 07 June 2021 and T10-21-087r0/T11-2021-00185-v000 as the minutes of the FCP-5 ad hoc work group interim meeting on 29 June 2021. Approved unanimously.

3.2 Review of Old Action Items

Action Items Carried Forward From Prior Meetings:

None

New Action Items Identified Last Meeting:

2106-01 Editor to post update to RFC ballot comment resolution as T10/21-029r3 and T11-2021-00068-v003). (**COMPLETE**)

4 Old Business

4.1 FCP-5 Draft Standard Rev 03 (T10-fcp5r03) (T11-2021-00019-v002) Peterson (Broadcom)

Dave hasn't built a new level yet with the comment resolutions incorporated. More to come.

4.2 RFC Ballot Resolution (T10/21-029r4) (T11-2021-00068-v004) Peterson (Broadcom)

Dave Peterson (Broadcom) continued the RFC ballot comment resolution effort and addressed the following comments in some fashion:

CSCO-HB002	Dave has proposal in T11-2021-00132-v000 for resolving this comment. Harsha accepts this as resolution (which ELSs are mandatory and which are optional). And FLUSH-based error detection and recovery includes RED--there is no separate bit. When FLUSH support is set in PRLI it implicitly implies support for RED (and other things)
CSCO-EM003	Agreed to remove the phrase 'corrupted and' from the text

CSCO-MB006	Agreed to remove the whole paragraph in question.
IBM-rh038	See CSCO-HB005 – Dave has action to review this text already
IBM-rh040	Agreed that text should indicate that initiator ports need to be capable of receiving ABTS-LS
IBM-rh041	Agreed on changing ‘shall’ to ‘should’, along with a clarification phrase of ‘If FLUSH-based recovery has not been negotiated...’
IBM-rh042	Withdrawn
IBM-rh049	Agreed to delete the sentence
CSCO-MB007	Rejected
CSCO-MB008	Since FLUSH is on same exchange as normal I/O, there is no Reject defined....so comment was rejected.
CSCO-EM004	Rejected
CSCO-HB012	Rejected
CSCO-HB003	Rejected
IBM-rh047	Agreed to delete reference to ‘08’---not supported in FCP
BCM-dp068	Agreed to delete the sentence
BCM-dp070	Instead of ABTS Sequence it should be ABTS Exchange. This likely applies in most places, but perhaps it’s not quite that simple in all. Dave to investigate all the use cases further.
BCM- SH003	Accepted
CSCO-EM006	Covered by previously accepted proposal T11-2021-00xxx
CSCO-EM005	Accepted – Dave proposed text

5.0 Scheduled Business

5.1

6 Unscheduled Business

7 Project Schedule

Milestone	Expected Date
Last technical input	June 2020
RFC Letter Ballot for T10 and T11	February 2021
T10 Letter Ballot	September 2021

8 Review of Action Items

Action Items Carried Forward:

None

New Action Items:

2108-01 Editor to post update to RFC ballot comment resolution as T10/21-029r5 and T11-2021-00068-v005.

9 Meeting Schedule

9.1 Next Plenary Week

Request 2 hours for FCP-5 at the T11 plenary week hybrid meeting 04 October - 08 October 2021 in Coeur d'Alene, ID.

Next T10 is the week of September 13th – 17th in Longmont, CO.

10 Adjournment

DJ Brown (Dell) moved and Roger Hathorn (IBM) seconded to adjourn. Approved unanimously. The regular meeting was adjourned at 12:03 PM MDT on 17 August 2021.

11 Attendance

Organization

Representative

T11.3 Member Company

BROADCOM LIMITED	Howard Johnson	Y
BROADCOM LIMITED	David Peterson	Y
BROADCOM LIMITED	James Smart	Y
BROADCOM LIMITED	Anil Veerabhadrapa	Y
CISCO SYSTEMS INC	Harsha Bharadwaj	Y
CISCO SYSTEMS INC	Mike Blair	Y
CISCO SYSTEMS INC	Ed Mazurek	Y
DELL INC	David Brown	Y
IBM	Patty Driever	Y
IBM	Roger Hathorn	Y
MARVELL SEMICONDUCTOR	Craig Carlson	Y
NETAPP	Frederick Knight	Y
VIAVI SOLUTIONS	Jason Rusch	Y