

Minutes

T10 FCP-5 ad hoc work group regular meeting

10 August 2020 – 1:00PM – 2:30PM CDT

Virtual Meeting

Document: T10-20-086r0/T11-2020-00177-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 Monday, 10 August 2020 at 01:06 PM CDT. He thanked our host organization, Marvell, for 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 T10 does not limit participation in the activities of its work groups to representatives of T10 member organizations, it requires nonmembers to identify themselves as such. Nonmembers that expect they may participate in the activities of T10 regularly were encouraged to become members.

1.2 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.

1.3 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 10 August 2020 has been posted as T11 document T11-2020-00161-v000 and T10 document T10/20-083r0.

Fred Knight (NetApp) moved and Craig Carlson (Marvell) seconded to accept T11-2020-00161-v000/T10-20-083r0 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 04 February 2020 have been posted as T10-20-021r0/T11-2020-00055-v000.

Fred Knight (NetApp) moved and Craig Carlson (Marvell) seconded to accept T10-20-021r0/ T11-2020-00055-v000 as the minutes of the FCP-5 ad hoc work group meeting on 04 February 2020. Approved unanimously.

3.2 Review of Old Action Items

Action Items Carried Forward From Prior Meetings:

None

New Action Items Identified Last Meeting:

None

4 Old Business

4.1 FCP-5 Draft Standard Rev 1 (T10-fcp5r01) (T11-2019-00355-v000) Peterson (Broadcom)

Dave reported that this is the latest draft standard and it is available on T11 INCITS website under this document number.

4.2 Sequence Level Error Recovery (T11-2020-00020-v003) Peterson (Broadcom)

Dave proposed making changes to collapse clauses 12 and 13 into one, with common error recovery sections up front, and then a separate 12.x section for REC-based SLER and another 12.x for FLUSH-based SLER.

Section 4.8 will remain as Task Retry Identification (a different name than was used in FC-NVMe-2, but that's okay). But the contents of this section did have some significant changes, so everyone should review.

There was a request made to change the contents of Table 6 to text as was done in FC-NVMe-2. Same for Table 11. But that raised the question of what we should then do with Table 12? We agreed to leave it alone.

Dave then reviewed Table 14, where we will add bit to indicate support for FLUSH-based SLER to the Service Parameters Word 3. However much discussion and disagreement over whether the word FLUSH should be in the name. Dave to ponder.

We had specific text in FC-NVMe-2 that talked about transfer byte counting. Do we want similar text here also? Since retry can start in the middle, consensus was that we do indeed need such text here. Dave will look and add some back in here. Similarly for bi-directional commands we should probably add text.

There is some concern that since we didn't have to address tape in NVMe-2, there may be some wrinkles related to tape in what we're doing here. Dave has been in conversation with the tape folk in T10 and so far nothing has been identified. But we need to keep this in the forefront as we progress this doc.

5.0 Scheduled Business

5.1

6 Unscheduled Business

7 Project Schedule

Milestone	Expected Date
Last technical input	June 2020
RFC Letter Ballot	February 2021

8 Review of Action Items

Action Items Carried Forward:

None

New Action Items:

2008-01 Dave to post the next FCP-5 meeting on the T10 and T11 calendars appropriately.

9 Meeting Schedule

9.1 Next Plenary Week

Request 2 hours for FCP-5 at the T11 plenary week virtual meeting 05 October - 09 October 2020

Next T10 is the week of September 14th.

10 Adjournment

Dave Peterson (Broadcom) moved and Fred Knight (NetApp) seconded to adjourn. Approved unanimously.

The regular meeting was adjourned at 02:14 PM CDT on 10 August 2020.

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	Steve Wilson	Y
DELL INC	D J Brown	Y
DELL INC	Vinay Sawal	Y
FUJITSU AMERICA	Mark Malcolm	Y
HEWLETT PACKARD ENTERPRISE	Barry Maskas	Y
IBM	Patty Driever	Y
IBM	Roger Hathorn	Y
MARVELL SEMICONDUCTOR	Craig Carlson	Y
MARVELL SEMICONDUCTOR	Raul Oteyza	Y
NETAPP	Frederick Knight	Y