

# Minutes

## T11.3 FC-FS-6 ad hoc work group regular meeting 05 October 2020 – 03:00PM – 05:00PM CDT Virtual Conference

The FC-FS-6 ad hoc work group of the Fibre Channel Protocol (T11.3) Task Group held a regular meeting via virtual conferencing using the Zoom platform on 05 October 2020, hosted by Marvell. Attendance was 16 people from 9 organizations and is tabulated at the end of this document.

Minutes were taken by Patty Driever (IBM) (pgd@us.ibm.com). Corrections may be requested either before the subsequent meeting by email to pgd@us.ibm.com or at the subsequent meeting in person.

### **1 Opening remarks & Introductions**

Chairperson Dave Peterson (Broadcom) opened the regular meeting Monday, 05 October 2020 at 03:30 PM CDT. He thanked our host organization, Marvell, for setting up the Zoom meeting and led a round of introductions.

#### **1.1 Attendance and Membership**

The chair explained that attendance is recorded electronically at [www.incits.org](http://www.incits.org) and explained the procedure. Attendance at this meeting does not count toward attendance at the plenaries of T11 and its task groups (i.e., being here will not get you out or keep you out of membership jeopardy). 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 Patents**

The chair indicated that among the rules and policies under which this working group operates are the ANSI intellectual property policies as specified in pages 1-3 of [http://www.incits.org/pat\\_slides.pdf](http://www.incits.org/pat_slides.pdf). 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 Antitrust**

The chair indicated that among the rules and policies under which this working group operates are the INCITS Antitrust Guidelines. Any member of 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. The INCITS Antitrust Guidelines are available at <http://www.incits.org/inatrust.htm>.

## 2 Approval of Agenda

An agenda for the FC-FS-6 ad hoc work group regular meeting 05 October 2020 has been posted as T11-2020-00202-v000.

Howard Johnson (Broadcom) moved and Mark Malcolm (Fujitsu) seconded to accept T11-2020-00202-v000 as the agenda for this regular meeting. Approved unanimously.

## 3 Review of Past Business

### 3.1 Review of Minutes

Minutes for the FC-FS-6 ad hoc work group regular meeting 10 August 2020 have been posted as T11/2020-00173-v000.

Howard Johnson (Broadcom) moved and Mark Malcolm (Fujitsu) seconded to accept T11/2020-00173-v000 as the minutes of the FC-FS-6 ad hoc work group meeting on 10 August 2020. Approved unanimously.

### 3.2 Review of Old Action Items

#### Action Items Carried Forward:

- 1910-01 Editor to remove Annex J and any references to it from the next draft version of FC-FS-6 (**CARRY**)
- 1910-02 Dave Peterson to work with Howard Johnson on best means to craft diagrams to ensure they can be incorporated by the editor using FrameMaker (**CARRY**)

#### New Action Items Identified Last Meeting:

- 2008-01 Editor to incorporate changes noted in 2020-00167-v000 (to mark as obsoleted two well-known addresses) (**CARRY**)
- 2008-02 Chair to request T11.3 approve the project proposal containing a name change of FC\_RDMA to FC-PM (Persistent Memory) as documented in T11-2020-00162-v000, and forward to T11 for further processing. (**COMPLETE**)

## 4 Old Business

### 4.1 A Beautiful Day in the Neighborhood (2020-00011-v004 and 2020-00012-v004) Howard Johnson (Broadcom)

Howard reviewed the modifications from last session to see if they're ready for incorporation. Changes were in Annex N. Most were associated with the Congestion Monitoring diagram where signals are based on bandwidth, where 70% of the bandwidth is maintained for 50% of the period causes a warning and 90% of the bandwidth is maintained for 50% of the time causes an alarm signal.

Howard, of course, received more feedback on suggested text edits. He'll bring back a revised copy for incorporation next time.

## 5.0 New Business

### 5.1 Single Lane 128GFC (2020-00210-v000) Oteyza (Marvell)

Discussion have been occurring about which Reed Solomon algorithm to use for 128GFC. One is the same for 664GFC and the second is an interleaved encoder. It was decided that either one can be used, and the choice will be negotiated during transmitter training.

Raul reviewed the added/changed text to cover the Interleaved RS encoder being added. He received numerous suggested text edits, so he will incorporate those and return next time for another review.

## 6 Unscheduled Business

### 7 Project Schedule

Milestone	Expected Date
Last technical input	TBD
T11 Letter Ballot	TBD
Forward to INCITS	TBD

Once the physical layer work progresses, we will have a better sense of how to set realistic dates for this.

## 8 Review of Action Items

### Action Items Carried Forward:

- 1910-01** Editor to remove Annex J and any references to it from the next draft version of FC-FS-6.
- 1910-02** Dave Peterson to work with Howard Johnson on best means to craft diagrams to ensure they can be incorporated by the editor using FrameMaker.
- 2008-01** Editor to incorporate changes noted in 2020-00167-v000 (to mark as obsoleted two well-known addresses)

### New Action Items:

None.

## 9 Meeting Schedule

### 9.1 Next Plenary Week

Request 3 hours for FC-FS-6 at the virtual T11 plenary week 07 December – 11 December 2020.

## 10 Adjournment

Roger Hathorn (IBM) moved and Howard Johnson (Broadcom) seconded to adjourn. Approved unanimously.

The regular meeting was adjourned at 04:48 PM CDT on 05 October 2020.

## 11 Attendance

Organization	Representative	T11.3 Member Company
AMPHENOL CORP	Michael Klempa	Y
BROADCOM LIMITED	Howard Johnson	Y
BROADCOM LIMITED	David Peterson	Y
BROADCOM LIMITED	James Smart	Y
BROADCOM LIMITED	Anil Veerabhadrapa	Y
BROADCOM LIMITED	Steven Wilson	Y
CISCO SYSTEMS INC	Mike Blair	Y
DELL INC	DJ Brown	Y
DELL INC	Vinay Sawal	Y
FUJITSU AMERICA INC	Mark Malcolm	Y
HEWLETT PACKARD ENTERPRISE	Barry Maskas	Y
IBM	Patty Driever	Y
IBM	Roger Hathorn	Y
MARVELL SEMICONDUCTOR	Craig W. Carlson	Y
MARVELL SEMICONDUCTOR	Raul Oteyza	Y
NETAPP INC	Frederick Knight	Y