

**Minutes**  
**T11.3 FC-RDMA ad hoc work group regular meeting**  
**15 Jun, 2022 – 9:00AM-10:00AM EDT**  
**Duluth, MN**

The FC-RDMA ad hoc work group of the Fibre Channel Protocol (T11.3) Task Group held a regular meeting on 15 Jun, 2022, hosted by Marvell. Attendance was 10 people from 7 organizations and is tabulated at the end of this document.

Roger Hathorn (IBM) (rhathorn@us.ibm.com) took minutes. Please report any corrections by email at [fc\\_protocol@standards.incits.org](mailto:fc_protocol@standards.incits.org)

## **1 Opening Remarks**

### ***Introductions***

Chairperson Craig Carlson (Marvell) opened the regular meeting on 15 Jun, 2022 at 09:10 AM CST and led a round of introductions and thanked the host (FCIA) for providing the meeting facilities.

## **2 Meeting Policy**

### ***2.1 Attendance and Membership***

The chair explained that attendance is recorded electronically at <https://standards.incits.org/apps/org/workgroup/t11>, 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.

### ***2.2 Code of Conduct***

The chair indicated that among the rules and policies under which this working group operates is the INCITS Code of Conduct policy:  
[https://standards.incits.org/apps/group\\_public/download.php/124850/INCITS-CodeOfConduct.pdf](https://standards.incits.org/apps/group_public/download.php/124850/INCITS-CodeOfConduct.pdf).

## **2.3 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.

## **2.4 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>

## **3 Administrivia**

### **3.1 Approval of Agenda**

An agenda for the FC-RDMA ad hoc work group regular meeting 15 Jun, 2022 was posted as T11/2022-00206-v000.

*Motion: Davis Peterson (Broadcom) moved and Patty Driever (IBM) seconded to accept T11/2022-00206-v000 as the agenda for this regular meeting.*

Approved by acclamation.

### **3.2 Review of Minutes**

*Motion: Davis Peterson (Broadcom) moved, and Patty Driever (IBM) seconded to accept the following document as the official minutes for the previous regular meeting*  
*Approved by acclamation.*

T11-2022-00138-v000.pdf

FC-RDMA April 06, 2022 Ad-hoc Meeting Minutes

## 4 Review of Old Action Items

### Action items carried forward from prior meetings:

None

### New action items from this meeting:

None

### Completed action items from prior meetings:

2021-1: David Peterson to forward project proposal for FC-RDMA name change to T11 for further processing. - Closed

## 5. Old business

### ***FC-RDMA Draft Standard Development T11/2022-00039-v002 Peterson (Broadcom)***

David presented an update to his charts that outline the scope of work for the development of the standard.

Wire protocol based on Infiniband Architecture Release 1.5 vol 1 is the basis for the protocol to be mapped to FC transport.

– General specifications RFC 5040, 5041 can be used as the input material to this work effort and again reminded attendees to learn from them if they want to help.

Some design points discussed included

- A List Service Types
- Base Transport Header content
- Extended Transport Headers
- Communication management Datagrams proposed to use RDMA\_LS (FC-4 Link services)
- RDMA Acks – keep off the wire, handle internally.

There was a long discussion on the IP Address/WWPN association. What is the IP address used for in connection management? Where does it come from? How does it relate to what we need to communicate in a connection request. Do we call it something else? These questions and more to be answered in coming meetings.

No motions or action items were recorded.

## 6. Scheduled business

None

## 7. Unscheduled business

### ***7.1 FC-RDMA: Base Draft standard proposed text T11/2022-00205-v000 Peterson (Broadcom)***

Dave presented an outline for the standard specification. It was too soon to go over in detail until we understand the big picture. Plus, we ran out of time.

## 8 Project Schedule

A project schedule was discussed, and results follow.

<b>Milestone</b>	<b>Expected Date</b>
Last technical input	TBD
T11 RFC	TBD
Forward to INCITS	TBD

## 9 Review of Action Items

See 4, Review of Action Items.

## 10 Meeting Schedule

The chair will request 2 hour at the T11 plenary week for FC-RDMA in Chicago, IL Aug, 2022.

No interim conference calls will be scheduled.

## 11 Attendance Check and Adjournment

<b>Company</b> 	<b>Name</b>	<b>Role</b>
Broadcom Inc	Howard Johnson	Member
Broadcom Inc	David Peterson	Member
Cisco Systems Inc	Harsha Bharadwaj	Member
Cisco Systems Inc	Edward Mazurek	Member

Dell Inc	David Brown	Member
IBM Corporation	Patty Driever	Member
IBM Corporation	Roger Hathorn	Member
Marvell Semiconductor Inc	Craig Carlson	Group Chair
NetApp Inc	Frederick Knight	Member
Viavi Solutions Inc	Jason Rusch	Member

***Motion:***

***Howard Johnson (Broadcom) moved Patty Driever (IBM) seconded to adjourn.  
Approved by acclamation.***

The regular meeting was adjourned at 9:59AM CST on 15 Jun, 2022.