

# Draft Minutes

## T11.3 FC-FS-2 ad hoc work group meeting

### 3 April 2006 - 9 AM to 2 PM

### Santa Fe NM

The FC-FS-2 ad hoc work group of INCITS Technical Committee T11 Task Group T11.3 held a meeting at Santa Fe NM on 3 April 2006, hosted by Brocade. Attendance was 19 people from 16 companies and is tabulated at the end of this document.

Minutes were taken by Bob Nixon (bob.nixon@emulex.com). Please report any corrections by email to the T11.3 reflector at T11\_3@mail.T11.org.

#### 1 Opening remarks and introductions

Chairperson Bill Martin opened the meeting Monday, 3 April 2006 at 9:05 AM. He thanked our host company, Brocade, and led a round of introductions. He then explained the process for electronic attendance registration.

#### 2 Review of Past Business

##### 2.1 Review of Minutes

Minutes for the FC-FS-2 ad hoc work group meeting 6 February 2006 have been posted as T11/06-125v1. Minutes for the FC-FS-2 ad hoc work group teleconference 14 March 2006 have been posted as T11/06-212v0.

***It was moved by Bill Martin and seconded by Jim Coomes to accept T11/06-125v1 as the minutes of the FC-FS-2 ad hoc work group meeting on 6 February 2006 and to accept T11/06-212v0 as the minutes of the FC-FS-2 ad hoc work group teleconference on 14 March 2006. Approved unanimously.***

#### 3 Approval of Agenda

An agenda for the FC-FS-2 ad hoc work group meeting 3 April 2006 has been posted as T11/06-223v1.

A presentation, T11/06-257v0, by QLogic was added. It was placed just before the letter ballot comment resolution.

The agenda topic for IEEE Tutorial letter ballot comment resolution was removed, since it was closed at the February meeting.

***It was moved by Bill Martin and seconded by SEC to accept T11/06-223v1 with the changes noted above as the agenda for this meeting. Approved unanimously.***

##### 3.1 Review of Old Action Items

AI 114      Bob Nixon to propose clarifications to the description of segmentation and reassembly (Emulex-4 and Emulex-020).  
(Opened 3 October 2005) (CLOSED by T11/06-218v0)

- AI 123 FC-FS-2 editor to incorporate the the Fibre Channel tutorial contained in a new document based on 05-802v1 into FC-FS-2.  
(Opened 5 December 2005) (CLOSED by T11/06-085v1)
- AI 128 Bob Nixon to publish a new document, incorporating T11/05-802v1 and the comment resolutions contained in T11/06-054v2.  
(Opened 6 February 2006) (CLOSED by T11/06-143v0)
- AI 129 Bill Martin to publish T11/06-054v2, incorporating T11/06-054v1 and the agreements at the FC-FS-2 ad hoc work group meeting 6 February 2006.  
(Opened 6 February 2006) (CLOSED by T11/06-054v2)
- AI 130 FC-FS-2 chair to recommend to T11.3 to recommend to T11 to accept T11/06-054v2, incorporating T11/06-054v1 and the agreements at the FC-FS-2 ad hoc work group meeting 6 February 2006, as containing the resolution of all letter ballot comments against the IEEE tutorial, and to forward a new document, incorporating T11/05-802v1 and the comment resolutions contained in T11/06-054v2, to IEEE as the Fibre Channel OUI tutorial.  
(Opened 6 February 2006) (CLOSED at T11.3 Plenary meeting 9 February 2006)
- AI 131 Bob Nixon to inform the chair of FC-LS work group that the specifications for Class 4 service will be removed from FC-FS-2 and that the FC-LS work group is advised to do likewise.  
(Opened 6 February 2006) (CLOSED at FC-LS meeting 6 February 2006)
- AI 132 Bob Nixon to publish a new document for review, instructing the FC-FS-2 editor how to remove Class 4 service from FC-FS-2 (Editor-Late-002).  
(Opened 6 February 2006) (CLOSED by T11/06-207v0)
- AI 133 Bob Nixon to publish T11/06-045v1 into FC-FS-2, reflecting T11/06-045v0 and the agreements at the FC-FS-2 ad hoc work group meeting 6 February 2006.  
(Opened 6 February 2006) (CLOSED by T11/06-045v1)
- AI 134 FC-FS-2 editor to incorporate T11/06-045v1 into FC-FS-2, reflecting T11/06-045v0 and the agreements at the FC-FS-2 ad hoc work group meeting 6 February 2006, into FC-FS-2.  
(Opened 6 February 2006) (CLOSED by T11/06-085v1)
- AI 135 Bill Martin to incorporate the issues raised in T11/06-055v0 into the FC-FS-2 letter ballot comment database.  
(Opened 6 February 2006) (CLOSED by T11/06-004v3)
- AI 136 Bill Martin to publish T11/06-078v1, reflecting T11/06-078v0 and the agreements at the FC-FS-2 ad hoc work group meeting 6 February 2006.  
(Opened 6 February 2006) (CLOSED by T11/06-078v1)
- AI 137 FC-FS-2 editor to incorporate T11/06-078v1, reflecting T11/06-078v0 and the agreements at the FC-FS-2 ad hoc work group meeting 6 February 2006, into FC-FS-2.  
(Opened 6 February 2006) (CLOSED by T11/06-085v1)
- AI 138 Bill Martin to set up an FC-FS-2 teleconference Tuesday March 14 noon to 2 PM PST.  
(Opened 6 February 2006) (CLOSED by online meeting calendar 7 February 2006)

AI 139 Bob Nixon to publish 06-206v1 reflecting 06-206v0 with the changes requested at the FC-FS-2 teleconference 14 March 2006.  
(Opened 14 March 2006) (CLOSED by T11/06-206v1)

AI 140 Bob Nixon to publish 06-207v1 reflecting 06-207v0 with the changes requested at the FC-FS-2 teleconference 14 March 2006.  
(Opened 14 March 2006) (CLOSED by T11/06-207v1)

## **4 Meeting Policies**

### **4.1 Attendance and Membership**

Bill Martin stated that all persons present are considered members of this meeting and may vote on questions, limited to one vote per company present. He explained that attendance is recorded electronically, 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).

### **4.2 Patents**

Bill Martin indicated that among the rules and policies under which this working group operates are the INCITS patent policies. He requested persons wishing to make statements or ask questions relevant to this policy not to do so at this work group meeting, but instead to do so at the T11.3 or T11 plenary meeting.

The INCITS patent policies are specified in subclause 8.4 of RD-1, "Policies and Guidelines", available at

[http://www.incits.org/sd9\\_rev1c.htm#p8-4](http://www.incits.org/sd9_rev1c.htm#p8-4)

### **4.3 Antitrust**

Bill Martin 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. 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>

## **5 FC-AL-2 Business**

No FC-AL-2 business was presented.

## **6 FC-FS-2 Business**

### **6.1 Eliminate Class 4 from FC-FS-2**

**T11/06-206v1, T11/06-207v1 Nixon/Emulex**

T11/06-206v1 is a copy of FC-FS-2 with changes marked for removal of Class 4, per letter ballot comment Editor-late-002. T11/06-207v1 is a list of editorial instructions for the changes. An earlier version of the changes had been exhaustively reviewed at a teleconference on 14 March 2006, and this version includes all changes requested at the teleconference. A few modifications were agreed and captured by the presenter as notes in the

proposal. As T11/06-206 (the marked up standard) was the preferred review medium, the presenter was excused from updating T11/06-207.

*It was moved by Bob Nixon and seconded by Jim Coomes to accept T11/06-206v2, reflecting T11/06-206v1 and the agreements at the FC-FS-2 ad hoc work group meeting 3 April 2006, as resolution of FC-FS-2 letter ballot comment Editor-Late-002. Approved 12Y, 0N, 1A.*

**ACTION:** Bob Nixon to publish T11/06-206v2, reflecting T11/06-206v1 and the agreements at the FC-FS-2 ad hoc work group meeting 3 April 2006.

**ACTION:** FC-FS-2 editor to incorporate T11/06-206v1 into FC-FS-2.

## **6.2 Segmentation and Reassembly Clarification      T11/06-218v0      Nixon/Emulex**

This presentation proposes clarifications to the description of segmentation and reassembly as resolution to FC-FS-2 letter ballot comments Agilent-009, Emulex-4, and Emulex-020.

*It was moved by Bob Nixon and seconded by Bill Martin to accept T11/06-218v1, reflecting T11/06-218v0 and the agreements at the FC-FS-2 ad hoc work group meeting 3 April 2006, as resolution to FC-FS-2 letter ballot comments Agilent-009, Emulex-4, and Emulex-020. Approved unanimously.*

**ACTION:** Bob Nixon to publish T11/06-218v1, reflecting T11/06-218v0 and the agreements at the FC-FS-2 ad hoc work group meeting 3 April 2006.

**ACTION:** FC-FS-2 editor to incorporate T11/06-218v0 into FC-FS-2.

## **6.3 Additional Letter Ballot Comments      06-257v0      Carlson/QLogic**

*It was moved by Craig Carlson and seconded by Bill Martin to incorporate the two comments identified in T11/06-257v0 into the FC-FS-2 letter ballot comment data base. Approved 14Y, 0N, 1A.*

## **6.4 FC-FS-2 Letter Ballot Comments      06-004v5      Martin/Sierra Logic**

### **6.4.1 General**

The reference version of FC-FS-2 for letter ballot comments is revision 0.90, T11/05-190v3. Should there be any conflict between the records of comment resolutions at this meeting in these minutes and the comment resolution document, the comment resolution document is definitive.

### **6.4.2 Emulex-004**

Accept. See T11/06-218v1.

### **6.4.3 Smiths-Late-001**

Accept.

### **6.4.4 SPC-007**

Accept modified resolution.

### **6.4.5 FC-LS-Late-005**

Accept.

#### 6.4.6 Emulex-020

Accept. See T11/06-218v1.

#### 6.4.7 FC-LS-Late-003

Accept.

#### 6.4.8 Editor-Late-002

Accept. See T11/06-206v2.

#### 6.4.9 Agilent-009

Accept. See T11/06-218v1.

#### 6.4.10 Editor-Late-003

Accept.

#### 6.4.11 FC-LS-Late-004

Accept.

#### 6.4.12 QLogic-Late-001

Accept. The resolution was contentious at first. A straw poll approved removing requirements on routers, leaving requirements on the values in the fields, 8 in favor and 0 opposed. An acceptable rewording of the specification of the IFR\_Header was worked out by the group.

#### 6.4.13 QLogic-Late-002

Accept. See QLogic-Late-001.

#### 6.4.14 Status of comment resolution

All comments on the request to forward FC-FS-2 to INCITS for further processing have been resolved to the satisfaction of the work group.

**ACTION:** Bill Martin to publish T11/06-004v6, reflecting T11/06-004v5 and the agreements at the FC-FS-2 ad hoc work group meeting 3 April 2006.

**ACTION:** FC-FS-2 editor to publish revision 1.00 of FC-FS-2 reflecting FC-FS-2 revision 0.90 and the accepted letter ballot comment resolutions recorded in T11/06-004v6.

*It was moved by Bill Martin and seconded by Bob Nixon to accept T11/06-004v6, incorporating T11/06-004v5 and the agreements at the FC-FS-2 ad hoc work group meeting 3 April 2006, as containing the resolution of all letter ballot comments against FC-FS-2 version 0.90, and to recommend to T11.3 to recommend to T11 to accept T11/06-004v6 as the resolution of all letter ballot comments against FC-FS-2*

*version 0.90 and forward FC-FS-2 version 1.00 (T11/06-085v2) to INCITS for further processing. Approved 13Y, 0N, 1A.*

**ACTION:** FC-FS-2 chair to recommend to T11.3 to recommend to T11 to accept T11/06-004v6 as the resolution of all letter ballot comments against FC-FS-2 version 0.90 and forward FC-FS-2 version 1.00 (T11/06-085v2) to INCITS for further processing.

## 7 Project Schedule

Milestone	Expected date
Final new technical input	Completed April 2005
Letter Ballot	Completed September 2005
INCITS First PR	May 2006

## 8 Review of Action Items

- AI 141 Bob Nixon to publish T11/06-206v2, reflecting T11/06-206v1 and the agreements at the FC-FS-2 ad hoc work group meeting 3 April 2006.  
(Opened 3 April 2006) (CLOSED by T11/06-206v2)
- AI 141 FC-FS-2 editor to incorporate T11/06-206v2 into FC-FS-2.  
(Opened 3 April 2006) (CLOSED by T11/06-085v2)
- AI 141 Bob Nixon to publish T11/06-218v1, reflecting T11/06-218v0 and the agreements at the FC-FS-2 ad hoc work group meeting 3 April 2006.  
(Opened 3 April 2006) (CLOSED by T11/06-218v1)
- AI 141 FC-FS-2 editor to incorporate T11/06-218v1 into FC-FS-2.  
(Opened 3 April 2006) (CLOSED by T11/06-085v2)
- AI 141 Bill Martin to publish T11/06-004v6, reflecting T11/06-004v5 and the agreements at the FC-FS-2 ad hoc work group meeting 3 April 2006.  
(Opened 3 April 2006) (CLOSED by T11/06-004v6)
- AI 141 FC-FS-2 editor to publish revision 1.00 of FC-FS-2 reflecting FC-FS-2 revision 0.90 and the accepted letter ballot comment resolutions recorded in T11/06-004v6.  
(Opened 3 April 2006) (CLOSED by T11/06-085v2)
- AI 141 FC-FS-2 chair to recommend to T11.3 to recommend to T11 to accept T11/06-004v6 as the resolution of all letter ballot comments against FC-FS-2 version 0.90 and forward FC-FS-2 version 1.00 (T11/06-085v2) to INCITS for further processing.

## 9 Meeting Schedule

### 9.1 Next Plenary Week

No time will be requested at the T11 plenary week hosted by Emulex in Anchorage AK, 11-16 June 2006.

## 10 Adjournment

*It was moved by Bill Martin and seconded by Claudio DeSanti to adjourn. Approved unanimously.*

The meeting was adjourned at 12:10 PM on 3 April 2006.

## 11 Status of Open Proposals

Document Title	Number	Disposition
FC-FS-2 with Class 4 removed	06-206	Close. Accepted version T11/06-206v2.
Editor instructions for removing Class 4	06-207	Close. Accepted version T11/06-207v2.
Segmentation and Reassembly Clarification	06-218	Close. Accepted version 06-218v1.

## 12 Attendance

Organization	Representative
BROCADE COMMUNICATIONS	Robert Snively
CISCO SYSTEMS	Claudio DeSanti
EMULEX	Bob Nixon
ENDL TEXAS	Ralph Weber
FSI CONSULTING SVCS	Gary Stephens
IBM	Scott Carlson
IBM	Roger Hathorn
LSI LOGIC	David Weber
MCDATA	David Peterson
MCDATA	Joe Pelissier
PACKETLIGHT	Eyal Gabay
PMC-SIERRA	Roy Elsbernd
QLOGIC	Craig Carlson
SEAGATE TECHNOLOGY	James Coomes
SIERRA LOGIC	William R. Martin
SOLUTION TECHNOLOGY	Robert Kembel
SUN MICROSYSTEMS	Matt Gaffney
SUN MICROSYSTEMS	Michael Roy
TRUE FOCUS	Horst Truedstedt