

**Minutes of T11 Plenary Session #24**  
**December 11, 1997**  
**Radisson Hotel Orlando Airport, Orlando FL**

**1 Opening Remarks and Introductions**

The Chairman of T11, Roger Cummings, opened the meeting at 9:00 a.m. Bob Snively of Sun Microsystems thanked Roger and DPT, for hosting this meeting week. Roger then led a round of introductions.

Roger Cummings stated that the deadline for the next T11 mailing would be December 17, 1997. The documents are to be in Ed Grivna's hands by this date. Roger also noted that to avoid problems with copiers, the material should already be double-sided and should never have been stapled. The mailing address is:

Ed Grivna

Cypress Semiconductor,

2401 E. 86th St., Bloomington, MN 55425

Telephone (612)851-5046, fax (612) 851-5087, elg@cypress.com.

**2 Approval of the Agenda**

A draft agenda was included in the mailing. The following items were added:

10.2.1 Revised HIPPI-FP - Approval of Comment responses and forwarding for 1PR

10.2.2 LB Comments in Electronic form

11.2.1. FC-PI'98 Project Proposal

11.2.2 MJS-2 Project Proposal

It was moved by Don Tolmie of Los Alamos and seconded by Carl Zeitler of Compaq to approve the agenda as modified. The amended agenda was approved unanimously.

**3 Attendance and Membership**

**3.1 Roll Call of Members in Jeopardy (Non-attendance and Letter Ballots)**

The membership of T11 stood at 84 prior to the meeting.

The following member organizations are in jeopardy for failure to attend meetings:

Amdahl

Arcxel

Ciprico

Corning

Cray Research

Lucent Technologies

Orca Systems

SGS-Thomson Microelectronics

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Vitesse Semiconductor

Corning was not present and so loses membership

No member organizations were in jeopardy for failure to return Letter Ballots at the last meeting

The following member organizations are NOW in jeopardy for failure to return letter ballots, and will lose their membership in T11 unless they return at least one letter ballot from the next mailing:

AMCC

Arcxel

Cray Research

Molex

Panasonic

Qlogic

Technitrol

### **New members**

None

### **Resignations**

Corning resigns its membership in T11

### **Changes**

Scott Carlson becomes the Alternate Representative for Amdahl, replacing Jeff Connell. Steve Wilson remains the Principal Representative.

Bill Mable becomes the Alternate Representative for Amphenol. Mike Wingard remains the Principal Representative.

Jeff Stai becomes the Principal Representative for Brocade Communications replacing Kumar Malavalli. Kumar Malavalli becomes the Alternate Representative replacing Jeff Stai.

Joe Golio becomes the Alternate Representative for Cray Research, replacing Mark Kelley. Jeff Young remains the Principal Representative.

Mike Fitzpatrick becomes the Principal Representative for Fujitsu America, replacing Mike Chenery. Chris Nieves remains the Alternate Representative

Roland Lee becomes the Alternate Representative for G2 Networks, replacing Trevor Pearman. Rich Taborek remains the Principal Representative.

Ian Philp becomes the Alternate Representative for Los Alamos National Lab, replacing Richard Thomsen.

Louise Bryant becomes the Principal Representative for Lucent Technologies (from Additional Alternate representative), replacing Irfan Ahmed. Farrukh Latif remains the Alternate Representative.

Rick Allison becomes the Alternate Representative for Northrop Grumman. Jim Nelson remains the Principal Representative.

With a gain of 0 members and a loss of 1 member, the membership now stands at 83 organizations.

## **4. Document Distribution**

### **4.1 Distribution of Approved Standards**

None

## 4.2 Maintenance Copies

None

## 4.3 Other Documents and Presentation Materials

Current working papers appropriate for this meeting were distributed at the meeting.

T11/97-441 Comment resolution for HIPPI-FP, Rev 4.7 .....	D. Tolmie
T11/97-444 HIPPI-FP Rev 4.8 .....	D. Tolmie
T11/97-449 Modified FC-PH'98 Proposal.....	R. Cummings
T11/97-450 FC-AL-3 Project Proposal.....	R. Cummings
T11/97-455 Comment resolution for FC-SW .....	J. Stai
T11/97-482 T11 Project Status Summary .....	R. Cummings
T11/97-483 T11 Membership 12/17/97 .....	R. Cummings
T11/97-503 Meeting Announcement for February T11 Meetings...	S. Jones
T11/97-515 T11.2 Membership.....	R. Cummings
T11/97-516 HIPPI Letter Ballot Tallies.....	E. Grivna
T11/97-520 CD Access.....	D. Allen
T11/97-521 Meeting Map for February 98 T11 Meetings .....	E. Grivna
T11/97-522 1998-1999 Meeting Schedule .....	E. Grivna

## 5 Approval of Minutes- T11 Meeting #23, Tucson, AZ

The minutes of meeting #23, October 9, 1997, were reviewed. The following changes were made:

10.3 should read T11.1 items, rather than T11.2.

12.7 should read "in the hands of the secretariat..".

P.25 Bob Snively's name misspelled.

13.8 The GS in the text should read Gary Stephens.

Bob Kembel's name misspelled in some places.

It was moved by Kumar Malavalli of Brocade and seconded by Horst Truustedt of ENDL that the minutes as modified be accepted. The motion was carried unanimously.

It was moved by Bob Snively of Sun Microsystems and seconded by Schelto van Doorn of Siemens that the minutes as modified be approved. This was passed without objection.

## 6 Review of old Action Items

40. Steve Joiner to meet with Sonet jitter specification group and report on their activities at the next meeting.  
referred to T11.2

41. Don Tolmie to produce ISO editor's report for IS 11518-6:1996

Carryover

43. Roger Cummings to provide (electronic & paper) draft of FC-LE to the IR for further processing.

Carryover

44. Mike Foster, to provide abstract of FC-AE to IR.

Carryover

45. Rich Taborek to provide comment resolution schedule for FC-SB to IR.

Carryover

46. Don Tolmie to provide comment resolution schedule for FC-FP to IR.

Carryover

48. Roger Cummings to provide comment resolution schedule for FC-PH-2 to IR.

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### Carryover

51. Roger Cummings to forward the comment responses for FC-PH-3 to the commentors; they have 20 days to respond to the proposed responses; there should be a final draft of the document at the next meeting.

Complete

63. All document editors to provide binary source of their documents to Roger Cummings.

Complete

64. Volunteer editors for FC-XX projects (FC-PH restructure) to commit to Roger by September 4.

Overtaken by events

67. Tom Harrington of LSI Logic to provide information about which standard(s) the two patents read against, and whether they are required for implementation of that standard.

None are required for implementation of any standard.

68. Chair to forward 10KCR project proposal to NCITS Secretariat for further processing.

Complete

69. Jim Tatum of Honeywell to bring SG Transceiver spec to next meeting (December).

Complete

70. Chair to forward comment resolution on FC-PH-3 to commentors.

Complete

71. Chair to forward FC-PH-3 rev 9.3, which is 9.2 + approved change to appendix f, as final draft for project 1119d to NCITS for OMC management review and final approval.

Overtaken by events.

72. Chair to forward comment resolution on PLDA to commentors.

Complete

73. Chair to forward PLDA as final draft for project 1119d to NCITS for OMC management review and final approval.

Complete

74. Chair to forward comment resolution on FC-FLA to commentors.

Complete

75. Chair to forward FC-FLA revision as final draft for project 1119d to NCITS for OMC management review and final approval.

Overtaken by events

76. All to find editors for FC-PH-4, FC-PI'98, and restructure documents.

Overtaken by events

77. Chair to write Network Systems, thanking them for their past support of the reflectors, and trusting that their new support arrangements will be successful in continuing a high level of service in the future.

Carryover

78. Chair to add notice on letter ballots indicating voting rules, including non-disclosure of votes.

Carryover

## **7 Liaison Reports**

### **7.1 NCITS Report**

Roger Cummings, Chair of T11, made the following report:

1. *NCITS met 10/16-17 in Washington, DC*
  2. *2nd Call for T11 IR issued, closed on 10/31/97 with only one candidate having applied*
  3. *Letter Ballots for Final Approval of IPI-3 Disk Revised and IPI-3 Tape Revised closed on 10/17 and passed.*  
*Documents are now @ BSR for final approval*
  4. *Call for Chairs of TG T11.1 & T11.2 closed on 12/5 with only one candidate for each post having applied*
  5. *NCITS Letter Ballots for the final approval of TR-19 (FC-PLDA) & TR-20 (FC-FLA) will close on 12/29*
  6. *NCITS meets 3/??*

### **7.2 OMC LIAISON REPORT**

Roger Cummings, T11 chair, made the following report:

1. *OMC met 11/18-20 in Nashua, NH*
  1. *Draft Minutes of this meeting & previous attached*
  2. *Management Reviews of PLDA & FLA TRs took place successfully*
  3. *FC-10KCR Project Proposal recommended for approval*
2. *OMC meets 1/8-9 in San Francisco, CA*
  1. *Mailing date for this meeting is 12/19*
3. *NCITS has apparently agreed that OMC will be disbanded after the 3/98 meeting*
  1. *NCITS will assume the program of work of OMC*
  2. *T11 scheduled to present its Annual Report @ the meeting on 9/23-25/98 in Denver, CO*

### **7.3 T10 Report**

John Lohmeyer, Chair of T10, provided the following presentation:

*T10 met in Palm Springs, CA NH Thursday November 6, 1997 with 57 people present. Membership is now at 52 voting organizations.*

*T10 voted to forward a project proposal for the SCSI-3 Parallel Interface (SPI-3) to NCITS. This project will likely double the SCSI data rate to 80 Mega-transfers per second (160 Mbyte/sec on a wide bus). It also plans to address protocol overhead reductions.*

*T10 voted to forward a project proposal for the SCSI Enclosure Profile (SEP) Technical Report to NCITS. This project intends to provide guidance on using the SCSI Enclosure Services and SCSI Controller Commands - 2 draft standards.*

*An eleventh-hour editorial correction was made to SCSI-3 Block Commands (SBC) in the LOCK/UNLOCK CACHE CDB to make the logical block address field 4 bytes instead of 5. SBC Rev 8c should now be at NCITS letter ballot.*

*The letter ballot comments on the SCSI-3 Stream Commands (SSC) were resolved and T10 agreed to forward Rev*

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*12 to NCITS for 1PR.*

*The letter ballot comments on the SCSI-3 Controller Commands - 2 (SCC-2) were resolved and T10 agreed to forward Rev 4 to NCITS for 1PR.*

*T10 has open letter ballots on forwarding the Serial Bus Protocol - 2 (SBP-2) Rev 3 and the SCSI Parallel Interface - 2 (SPI-2) to NCITS for 1PR. Both ballots close on January 12th.*

*An ad hoc meeting is planned for Tuesday evening March 17th to consider how T10 should deal with international standards. Two matters to be discussed are should we use the "fast track" method more often and should T10, T11, and T12 consider forming a T14 TC to deal with international issues on our behalf. T11 and T12 members are obviously invited to participate.*

*The next plenary meeting of T10 will be March 19, 1998 in San Diego, CA at the Hyatt Islandia Hotel (619-224-1234), hosted by QLogic. The meeting will begin at 9:00 a.m. Several ad hoc meetings are also scheduled earlier that week. Interim Ad Hoc meetings were also scheduled as follows:*

*Event Date(s) Location/contact*

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*MMC-2 1/8-9/98 Placerville, CA / Roberts*

*RBC 2/9/98 Salt Lake City, UT / Iomega*

*RBC/MMC-2 2/10/98 Salt Lake City, UT / Iomega*

*MMC-2 2/11/98 Salt Lake City, UT / Iomega*

*SPI-2 Edit 12/3/97 Irvine, CA / QLogic*

*SPI-3 Protocol 12/4/97 Irvine, CA / QLogic*

*SPI-3 Physical 1/21/98 Irvine, CA / QLogic*

*SPI-2 LB Res 1/22/98 Irvine, CA / QLogic*

### **7.4 IEEE Liaison Report**

Roger Cummings, T11 Chair, made the following report:

*No drafts received by T11 Chair for coordination this month*

*Following drafts received by Secretariat for coordination:*

*1) 1362 V.3 Recirculation - Guide for Information Technology - System Definition - Concept of Operation Document (Deadline for Comments 11/11/97)*

*2) 1278.4/D2 Recirculation - Recommended Practice for Distributed Interactive Simulation - Verification, Validation, and Accreditation (Deadline for Comments - 11/26/97)*

*3) 802.12c/D4 REV Standard for Local and Metropolitan Area Networks -- Supplement to Demand-Priority Access Method, Physical Layer and Repeater Specifications for 100 Mb/s Operation: Full Duplex Operation: Full Duplex Operation (Deadline for Comments - 12/04/97)*

*4) 1005/D2 REV Draft Standard for Definitions, symbols and Characteristics of Floating Gate Memory Arrays (Deadline for Comments - 12/05/97)*

*5) 802.10/D2 REV Standard for Interoperable LAN/MAN Security (SILS) (Deadline for Comments - 12/10/97)*

*People wishing to obtain a copy of the drafts listed above for the purpose of submitting a technical contribution should contact Deborah Donovan at 202-626-5746.*

## **7.5 802.3Z**

Wayne Rickard of Gadzoox reported that the draft was complete, and that this would be his last report. Rich Taborek of G2 Networks indicated that the ballot closes January 28.

Roger Cummings indicated that this would be removed from future agendas.

## **7.6 VITA Liaison Report**

There was no report.

## **7.7 SMPTE PT20.04 Liaison Report**

Bob Edge of Tektronix reported that SMPTE is meeting during this week (12/8/97) in San Francisco. He indicated that there was interest in QOS control if ATM was being used and Class 4 if FC was being used.

## **7.8 FCA**

Mike Hoard of Boeing made the following report:

*FCA had board meeting in Reno 16-17 with T11/FCLC - joint tech steering committee Thurs PM kickoff. Put together a group of folks who will commit to delivery of speaker panel, documentation, review of documents, participation with strategic planning.*

*Annual Summit Jan 21, 22 in Irvine CA. Bring forth the strategic plan for FCA and joint activities with FCLC. Marketing to meet in Irvine Dec 16.*

## **7.9 FCLC Liaison**

Mike Fitzpatrick of Fujitsu made the following presentation:

*FCLC Happenings Since Last Report to T11 (Aug. 97)*

- *Elected FCLC Board of Directors (Mike Fitzpatrick, Howey Chin, Jay Kramer, Skip Jones and Walt Krysiak)*
- *The FCA and FCLC participated in the Fall N+I show. Had two areas, the Hot Spot area and the Shared area. Good response considering turnout.*
- *Participated in Fall Comdex.*
- + *Held in a 5,000 sq. ft. room*
- + *Had 53 exhibit stands representing 50 companies*
- + *Held press event*
- + *Held lecture series*
- + *Had FC link between one station in the room and a station at the Novell exhibit area (2.5K to 3K foot distance).*
- *FCLC Board has been meeting with the FCA Board.*
- *Upcoming Events*
- + *Interoperability Testing Jan. 12-16 at Interphase in Dallas, TX*
- + *Participating in NAB, WinHEC, Spring N+I*

## **7.10 Other Liaison Reports**

## **8 Review of International Activity**

### **8.1 ISO Status Report**

Gene Milligan of Seagate provided the following report:

*T11 projects with pending T11 ISO action:*

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496 IPI 3R Disk; 505 IPI 3R Tape; 702 HIPPI FP; 755 FC PH:DAM2; 954 FC Mapping to HIPPI-FP; 958 FC Fabric Generic Requirements; 959 FC SWITCH FABRIC; 960 FC-AL; 1119 FC PH 3; 1133 FC AL 2; 1213 HIPPI64 PH; 1231 HIPPI64 SC.

*T11 projects which need action at the 12/97 T11 plenary:*

*CD 14165-141 which is T11 project 958 FC Fabric Generic*

*Requirements revision 3.5 may be received with a closing date too soon for the February plenary. A T11 vote to approve revision 3.5 for a JTC 1 DIS ballot is needed. (Requires roll-call or LB with two-thirds)*

*Project ISO STATUS*

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*T11 HIPPI ST Project proposed N/A*

*T11 370 IPI 1PH Withdrawal Canceled DIS9318-1 25.13.10.06*

*T11 467 IPI 2 Disk Withdrawal N/A*

*T11 496 IPI 3R Disk Prog Canceled to be fast tracked upon ANS pub X3.291 IS 9318-3 25:13:10:08*

*T11 505 IPI 3R Tape Prog Canceled to be fast tracked upon ANS pub X3.290 IS 9318-4 25.13.10.09*

*T11 702 HIPPI FP Revision Published IS - Revision decision needed. IS 11518-2 25.13.12.02*

*T11 755 FC PH:DAM2 Resolving letter ballot comments Needs to be part of DIS14165- 111 ballot 25:13:13:01*

*T11 790 EIPI 1PH Withdrawal Canceled due to no editor. WG 4 Req publish Tech Report CD9318-6 25.13.10.14*

*T11 954 FC Mapping to HIPPI-FP Awaiting resolution of 25N380 comments CD14165-211 25.13.13.04*

*T11 958 FC Fabric Generic Req Secretariat issuing CD14165-141 25.13.13.05*

*T11 959 FC SWITCH FABRIC Awaiting CD contribution 14165-131 25:13:12*

*T11 960 FC-AL Awaiting resolution of 25N376 comments CD 14165-121 25.13.13.06*

*T11 1118 10 bit IF TR N/A*

*Project ISO STATUS*

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*T11 1119 FC PH 3 SC25N379 resolving CD comments CD14165-113 25:13:16*

*T11 1133 FC AL 2 Contribution decision upon LB Resolution approval*

*T11 1134 FC GS 2 N/A*

*T11 1135 FC CU TR N/A*

*T11 1162 FC PLDA N/A*

*T11 1163 HIPPI AC Withdrawal N/A*

*T11 1213 HIPPI64 PH Decision needed upon LB resolution*

*T11 1214 HIPPI MP N/A*

*T11 1230 Jitter Method TR N/A*



*T11 1231 HIPPI64 SC Decision needed after LB resolution*

*T11 1232 FC SL N/A*

*T11 1235 FC FLA TR N/A*

*T11 1237 FC AV Abstract distributed*

*T11 1238 FC BB Abstract distributed*

*T11 1239 FC SB Rev N/A*

*T11 1245 ST N/A*

*T11 1249 HIPPI64-OPT N/A*

*T11 2009 FC AE Abstract distributed*

It was moved by Roger Cummings of DPT and seconded by Don Tolmie of Los Alamos to approve the submission of Revision 3.5 of FC-FG, which is equivalent to the published ANSI standard, to JTC 1 as a contribution for a DIS Letter Ballot.

The results of the roll call were as follows (US-domiciled companies only):

3M	Y
Adaptec	Y
Alcoa-Fujikura	NV
AMCC	NV
Amdahl	Y
AMP	NV
Amphenol	Y
Ancor Communications	NV
Ancot Corporation	Y
Arcxel	Y
Berg	NV
Boeing	NV
Brocade	Y
Ciprico, Inc.	Y
Clariion	NV
CNT	Y
Compaq	Y
Computing Devices	Y
Connectivity Solutions	NV
Cray Research	Y
Crossroads Systems	Y
Cypress Semiconductor	Y
Digital Equipment Corp	Y
DPT	Y
EMF Associates	Y
Emulex	Y
Exabyte	Y
FCI	Y
FSI Consulting	Y
Fujikura America	NV

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Fujitsu	Y
G2 Networks	Y
Gadzoox	Y
Gore	NV
Hirose	NV
Hitachi	Y
Hitachi Cable Manchester	Y
Honeywell	Y
HP	Y
IBM	Y
Interphase	Y
Jaycor	NV
Los Alamos National Lab	Y
LSI Logic	Y
Lucent Tech	Y
Madison Cable	Y
McData	NV
Methode Electronics	Y
Mitre	Y
Molex	Y
NCR	NV
Northrop-Grumman	Y
Ophidian Designs	N
Optivision	Y
Orca	Y
Panasonic	NV
Prisa	Y
QLogic	Y
Quantum	Y
Raytheon	Y
Rockwell-Collins	Y
Seagate Technology	Y
SGS-Thomson	NE
Siecor	Y
Siemens	NV
Solution Technology	Y
Sony	NV
SRB	Y
StorageTek	Y
Sun Microsystems	Y
Symbios Logic	Y
Systran Corp	Y
Technitrol	Y
Tektronix	Y
Tensolite	NV
Texas Instruments	Y
TRW	Y
Unisys	Y

Vitesse	NV
Vixel	NV
VLSI Technology	Y
Western Digital	Y
Xyratex	NE

The motion carried 60 For, 1 Opposed, with 20 Not Voting. This meets the two-thirds rule.

## 8.2 Other ISO Items

None.

## 9 Call for Patents

1.A call is hereby issued for the existence of patents required to implement any & all T11 standards to be disclosed:

1.It is necessary for the holders to agree to license those patents in conformance with the ANSI patent policy if the project on which they read is to proceed.

2.T11 is not involved in this process at all !

2.The contact @ ANSI is the General Counsel, Ms. Amy Marasco - (212)642-4954 or amarasco@ansi.org

3.Patent policy description @ [www.ansi.org/proctbl.html](http://www.ansi.org/proctbl.html), section 1.2.11

4.IBM has declared that it has patents which apply to the practice of FC & SBCON. The contact is:

Mr. Walter Willigan, IBM Corp., 500 Columbus Ave., Thornwood, N.Y. 10594

## 10 Task Group T11.1 HIPPI

### 10.1 HIPPI meetings report

*Don Tolmie, T11.1 acting Chairman, reported that HIPPI ad hoc working group meetings were held November 4, 1997 in Phoenix, (OFC, 5 attendees), November 5-6, 1997 in Albuquerque, NM, (12 attendees), and December 9-10, in Orlando (30 attendees). The December 10, T11.1 Plenary had 10 attendees; T11.1 has 10 member companies.*

*T11 letter ballots passed by votes of:*

*HIPPI-6400-PH, Rev 1.9 : 68-0-16, comments from 3*

*HIPPI-6400-SC, Rev 1.7 : 69-0-15, comments from 2*

*HIPPI-FP revised, Rev 4.7 : 69-0-15, comments from 2*

*The HIPPI working group resolved the comments, and updated the documents. The HIPPI-6400-PH and -SC documents are being held to allow further testing of physical implementations before forwarding. By a vote of 7-0-3, the HIPPI-FP comment resolutions were accepted and Rev 4.8 was forwarded to T11 for further processing.*

*Work continues on Scheduled Transfer, mainly to improve the text and make it consistent.*

*We continue to work with T11.2 to develop HIPPI-6400-OPT (6400 Mbit/s parallel optical). The 1300-nm proposal by Optobahn has been included in the draft document. Work on OFC continues.*

*The HIPPI documents are in the web page at <http://www.cic-5.lanl.gov/~det/>.*

*Interim meetings have been authorized for:*

*January 13-14, Mountain View, CA*

*February 10-11, San Diego, CA*

Don indicated that HIPPI-6400-OPT was using 12 parallel 1 GigaBaud links.

## 10.2 Actions

### 10.2.1 HIPPI-FP Revised forwarding

*In T11.1, by a vote of 7-0-3, the HIPPI-FP comment resolutions were accepted and Rev 4.8 was forwarded to T11 for further processing.*

Don Tolmie moved, on behalf of T11.1, that HIPPI-FP Rev. 4.8 be forwarded for further processing, including an OMC Compliance Review and a first Public Review.

The results of the roll call were as follows:

3M	Y
Adaptec	Y
Alcoa-Fujikura	NV
AMCC	NV
Amdahl	Y
AMP	NV
Amphenol	Y
Ancor Communications	NV
Ancot Corporation	NV
Arcxel	NV
Berg	NV
Boeing	Y
Brocade	Y
Ciprico, Inc.	Y
Clariion	Y
CNT	Y
Compaq	Y
Computing Devices	Y
Connectivity Solutions	NV
Cray Research	Y
Crossroads Systems	Y
Cypress Semiconductor	Y
Digital Equipment Corp	Y
DPT	Y
EMF Associates	Y
Emulex	Y
Exabyte	Y
FCI	Y
FSI Consulting	Y
Fujikura America	NV
Fujitsu	Y
G2 Networks	Y
Gadzoos	Y
Gore	NV
Hirose	NV
Hitachi	Y
Hitachi Cable Manchester	Y
Honeywell	Y
HP	Y
IBM	Y

Interphase	Y
Jaycor	NV
Los Alamos National Lab	Y
LSI Logic	Y
Lucent Tech	Y
Madison Cable	Y
McData	NV
Methode Electronics	Y
Mitre	Y
Molex	Y
NCR	NV
Northrop-Grumman	Y
Ophidian Designs	Y
Optivision	Y
Orca	Y
Panasonic	NV
Prisa	Y
QLogic	Y
Quantum	Y
Raytheon	Y
Rockwell-Collins	Y
Seagate Technology	Y
SGS-Thomson	Y
Siecor	Y
Siemens	NV
Solution Technology	Y
Sony	NV
SRB	Y
StorageTek	Y
Sun Microsystems	Y
Symbios Logic	Y
Systran Corp	Y
Technitrol	Y
Tektronix	NV
Tensolite	NV
Texas Instruments	NV
TRW	Y
Unisys	Y
Vitesse	NV
Vixel	NV
VLSI Technology	Y
Western Digital	Y
Xyratex	Y

The motion carried 61 For, 0 Opposed, with 22 Not Voting. This meets the two-thirds rule.

#### **10.2.2 LB Comments in Electronic Form**

Don Tolmie of Los Alamos moved and Rich Taborek of G2 Networks seconded that comments on letter ballots be made in electronic form to the vice-chair with the Letter Ballot, and that the Letter Ballot instructions be changed to indicate this. This motion carried unanimously.

### **10.3 Other T11.2 Items**

None.

### **11.Task Group T11.2 Physical Variants**

#### **11.1 T11.2 Plenary meeting report**

Ed Grivna of Cypress Semiconductor made the following report on behalf of Schelto van Doorn of Siemens:

#### *T11.2 Status Report*

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*Chairman - Nominations closed, Shelto Van Doorn the only nominee*

*Membership sits at 39 organizations*

*26 present at this meeting*

*SD3 for MJS-2 to be presented at T11 plenary*

#### **LIAISON REPORTS**

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#### *TIA FO-6.3 Fiber Optic Interconnecting Devices*

- *Request for access to TIA document relevant to NCITS developments*
  - *Requires letter from T11.2 requesting access*
- *TIA 604-7 (FOCIS 7): Type SG connector definition standard*
  - *First review complete*
  - *Comment resolution in progress*
  - *Expect comments to be cleared by January 1998*
  - *Included unification of multimode and singlemode with common APC fiber mating*

#### *MBI - Modal Bandwidth Investigation (MBI) status presented*

- *802.3z presentation to be posted to Schelto's web site*

#### **SFF**

- *HSSDC now being supported by four manufacturers*
- *SCA-2 comments resolved*
- *High-speed study testing methods being investigated*
- *Mini-MT is active program*

#### **Other**

*No progress on Liaison to SONET jitter group*

#### **FC-0 Optical Work Group**

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*Wrote letter to IEC 86B US National Committee requesting standardization of the SG connector type.*

*Letter sent to TIA requesting access to TIA soft documents necessary for development of NCITS standards. TIA requested detail on the need for same.*

*-Response authorized, S. Joiner to write letter.*

*Reviewed 10k Low-cost draft standard*

- All issues resolved*
- Final review in February 1998*

*Detailed test data on the SG was presented*

- Included data on 8 degree APC for improved return loss*
- 36 mfgrs have indicated interest in licensing connector*
- 4 mfgrs stated intent to supply xcvs*
- new dwgs presented for inclusion in PI'98*

*Presentation made on reduced electrical signal levels for 2/4GB*

- May improve EMI, reduce power, improve board designs*
- Motion approved to generate SD3 for improved electrical interface*

*Letter authorized to TIA accepting a -26dBm limit for back reflection*

*30km link white-paper proposed for long-haul fault -tolerant support*

*Copper Work Group Status*

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*23 in attendance*

*Distributed PDF for rev 0.3 of CU-TR.*

*Reviewed submittal status.*

*- Still looking for authors for clauses:*

*10, 23, 34, 35, 36*

*- Waiting for first inputs for clauses:*

*12, 13, 15, 17, 19, 20, 22,*

*24, 25, 26, 28, 29, 30, 31, 32, 33*

*Discussed low-voltage signaling proposal from Sun Microsystems.*

- Primarily internal specifications*
- Effects*

*Methodologies for Jitter Specifications*

-----  
*29 people attended*

## T11 Minutes, December 11, 1997

### *Presentations on performance of probes and discontinuities*

#### *MJS-TR*

- Rev 1.2 distributed
- Annex reviews completed
- Expect to forward in February 1998

#### *T11.2 Plenary Actions*

##### *MJS-2 SD3 approved for forwarding*

##### *All members to investigate needs/requirements for 30km links*

Steve Joiner indicated that discussion of a white paper on single-mode had been turned down by the committee as not being a good use of their time. Members were to investigate the business need for 30 km links; this would be pursued if there was a business need.

Bob Snively indicated that there were extenders running at 30 KM on commercial fibers. It was further indicated that there may or may not be a need for T11 to standardize this.

##### *All members requested to investigate needs and requirements for backwards compatibility for 2G/4G links*

##### *Topic to be introduced at T11 for discussion*

#### **ACTION ITEMS**

-----

*Letter authorized to be sent to TIA TR-41-8-1 for continued documenting of the SG connector*

*Letter authorized to be sent to TIA to allow NCITS access to TIA documents relevant to NCITS standards developments*

*Letter authorized to be sent to TIA accepting -26dBm back reflection limit*

*Steve Joiner directed to post electronic procedures*

#### **11.2 T11.2 Actions**

##### **11.2.1. FC-PI'98 Project Proposal**

Ed Grivna of Cypress Semiconductor moved on behalf of T11.2 that the FC-PI'98 Project Proposal, as amended in T11.2 and distributed at the meeting, forwarded for further processing. This motion carried 54 For, 0 Opposed, and 28 Not Voting.

##### **11.2.2 MJS-2 Project Proposal**

Steve Joiner presented on behalf of the working group, indicating that the group would like to continue their work, and that they would like to forward the MJS-2 Project Proposal at a subsequent meeting.

#### **11.3 Other T11.2 Items**

None

#### **12 Review of T11 Project Proposals in Approval Phase**

##### **12.1 FC-10KCR Project Proposal**

Roger Cummings reported that this would begin NCITS Letter Ballot in January, 1998.

#### **13 Review of T11 Projects and actions in Approval Phase**

##### **13. 1 Revised IPI-3 Disk -- Status of approval process**



Roger Cummings reported that this had completed NCITS Letter Ballot and was at BSR for final review, anticipated completion January 1998.

### **13.2 Revised IPI-3 Tape -- Status off approval process**

Roger Cummings reported that this had completed NCITS Letter Ballot and was at BSR for final review, anticipated completion January 1998.

### **13.3 Non-Reaffirmation of X3.129-1986[R1992], X3.201-1992, A/I 9318-2:1992**

Roger Cummings reported that the non-reaffirmation of these has been approved by BSR, and they have been withdrawn.

### **13.4 FC-PH-3 -- Approval of responses to 1PR comments and Final Approval**

Roger Cummings made a motion "to accept the responses to the First Public Review comments as documented in T11/97-432, to accept FC-PH-3 revision 9.4 as the final draft for Project 1119-D, and to request that the changes to the draft resulting from the letter ballot comments be considered non-substantive." The motion was second by Neil Wanamaker of Crossroads Systems.

The results of the roll call were as follows:

3M	Y
Adaptec	Y
Alcoa-Fujikura	Y
AMCC	NV
Amdahl	Y
AMP	NV
Amphenol	Y
Ancor Communications	Y
Ancot Corporation	Y
Arcxel	Y
Berg	NV
Boeing	Y
Brocade	Y
Ciprico, Inc.	Y
Clariion	Y
CNT	Y
Compaq	Y
Computing Devices	Y
Connectivity Solutions	NV
Cray Research	NV
Crossroads Systems	Y
Cypress Semiconductor	Y
Digital Equipment Corp	Y
DPT	Y
EMF Associates	Y
Emulex	Y
Exabyte	Y
FCI	Y
FSI Consulting	Y
Fujikura America	NV
Fujitsu	Y
G2 Networks	Y

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Gadzoox	Y
Gore	NV
Hirose	NV
Hitachi	NV
Hitachi Cable Manchester	NV
Honeywell	NV
HP	Y
IBM	Y
Interphase	Y
Jaycor	NV
Los Alamos National Lab	Y
LSI Logic	Y
Lucent Tech	Y
Madison Cable	Y
McData	NV
Methode Electronics	Y
Mitre	Y
Molex	NV
NCR	NV
Northrop-Grumman	Y
Ophidian Designs	Y
Optivision	Y
Orca	NV
Panasonic	NV
Prisa	Y
QLogic	Y
Quantum	Y
Raytheon	Y
Rockwell-Collins	Y
Seagate Technology	Y
SGS-Thomson	NV
Siecor	Y
Siemens	NV
Solution Technology	Y
Sony	NV
SRB	Y
StorageTek	Y
Sun Microsystems	NV
Symbios Logic	Y
Systran Corp	Y
Technitrol	Y
Tektronix	Y
Tensolite	NV
Texas Instruments	Y
TRW	Y
Unisys	Y
Vitesse	Y
Vixel	NV

VLSI Technology	Y
Western Digital	Y
Xyratex	Y

The motion carried 60 For, 0 Opposed, with 23 Not Voting. This meets the two-thirds rule.

### **13.5 FC Private Loop Direct Attach TR -- Status of Publication Process**

Roger Cummings reported that this was in NCITS Letter Ballot, due to close December 29, 1997.

### **13.6 FC-FLA -- Status of Publication Process**

Roger Cummings reported that this was in NCITS Letter Ballot, due to close December 29, 1997.

### **13.7 10 bit Interface Technical Report -- Status of Publication Process**

Roger Cummings reported that this was now in the hands of the printers.

### **13.8 HIPPI-FP -- Results of T11 Letter Ballot**

The T11 Letter Ballot for HIPPI-FP revised, Rev 4.7 carried 69 For, 0 Opposed, with 15 Not Voting. There were comments accompanying 2 Yes votes. See 10.2.1 for the disposition of this.

### **13.9 HIPPI-6400-PH -- Results of T11 Letter Ballot**

The T11 Letter Ballot for HIPPI-6400-PH, Rev 1.9 carried 68 For, 0 Opposed, with 16 Not Voting. There were comments accompanying 3 Yes votes.

Despite the T11 Letter Ballot having met the 2/3rds rule for approval, T11.1 requested that the draft be retained in T11.1 while resolution of the comments is attempted. This was unanimously accepted by T11.

### **13.10 HIPPI-6400-SC -- Results of T11 Letter Ballot**

The T11 Letter Ballot for HIPPI-6400-SC, Rev 1.7 carried 69 For, 0 Opposed, with 15 Not Voting. There were comments accompanying 2 Yes votes.

Despite the T11 Letter Ballot having met the 2/3rds rule for approval, T11.1 requested that the draft be retained in T11.1 while resolution of the comments is attempted. This was unanimously accepted by T11.

### **13.11 Other items related to projects in Approval Phase**

None

## **14 Review of other projects in development**

### **14.1 Report from FC-AL-2 Ad Hoc and FCL and FCW Study Group**

Fibre Channel Working Group

*The T10 week working group was devoted to reviewing a selection of FC-AL-2 comments which editor Horst Truustedt considered the most difficult ones to resolve. A document listing the resolution of these comments was posted several days ago. The discussions on tape did not make any progress.*

*Earlier this week the time devoted to FC-AL-3 objectives reaffirmed the validity of those set in November 1996. An extensive discussion on whether it was desirable to add 2 GHz operation to the list did not result in its inclusion. Horst Truustedt's proposal on a means to transition between legacy FC-AL operation, FC-SL, and any future modes was well-received.*

*Subsequent debate on what was desirable to include in an FC-AL-3 draft was spirited, with opinions ranging from doing nothing to reinstating Torn, and from requirements to transition between FC-AL, FC-SL and FC-AL-3 operation to no coexistence of different modes on the same loop. A series of votes helped assess areas where it was felt proposals should be encouraged. The only losing item listed was the suggestion that backwards compatibility and interoperability with legacy devices be an optional function.*

*At the joint get-together with FC-0, it was recommended that the 1 GHz rate not be included in the investigation of lower power operation for intra-cabinet links and that extended distance 30 KM single mode lasers not be considered as a high interest item.*

*A new proposal for Class 3 operation of tape was presented, along with re-packaging of a previous Class 3 proposal in the style of PLDA-2. A first draft of PLDA-2 is anticipated for the January working group. If both are included, then a decision will be made on which to proceed with.*

*A number of volunteers agreed to pursue management approval to be editors on PH-98. The plan is for John Scheible to act as senior editor, to co-ordinate the efforts of co-editors Bob Kembel, Dave Peterson, Jeff Stai and Neil Wanamaker. PH-98 will not be a 'delta' draft, it will be based on the FCLC integration of FC-PH-1/2/3.*

*Lingering issues in FC-AL-2 that were addressed include:*

*- ARB(F7) went back to the reserves, and sibling ARB(FF) was adopted as an optional Idle-substitute under circumstances which do no impact existing operation. This use of ARB(FF) should reduce EMI. - Refinements to clock skew management were accepted for inclusion. - Preliminary agreement was reached on a description of power on behavior which will be documented for consideration as an information annex. - The changes made to LIP in 5.7 were re-examined, and a variation was agreed to. - Energetic discussion on the minimum decision criteria with respect to primitives resulted in general agreement, though some items cannot be decided upon until January.*

*There is no T10 meeting in January, but a working group will be hosted by Adaptec at the Sheraton in Milpitas. Any proposals received on FC-AL-3 will have time allocated to hear them. The priorities set for FC-AL-2 are:*

*1. Review resolution of the remaining comments on Rev 5.7*

*2. Loop initialization*

*3. ARB processing criteria*

*1/13 1330-1800 Tuesday FC-AL-x*

*1/14 0900-1200 Wednesday FC-AL-x 1330-1800 Tape*

*1/15 0900-1200 Thursday FC-AL-x 1330-1800 FC-AL-x*

#### **14. 2 FC-PH Amendment #2 -- Forwarding for First Public Review**

Roger Cummings reported that there had been no activity.

#### **14.3 FC-AL-2 (2nd generation Arbitrated Loop) -- Forwarding for First Public Review**

Horst Truestedt of ENDL reported that there was to be a January meeting to work out differences. The plan is to get all comment resolution as Rev. 5.8 by Christmas and resolve differences in January.

#### **14.4 FC-SW -- Approval of Comment Resolution and Forwarding for First Public Review**

Jeff Stai of Brocade moved and Virginia Haydu of Mitre seconded "to accept the responses to the T11 Letter Ballot comments, and to forward FC-SW Revision 3.3 (T11/97-376) for further processing including an OMC Compliance Review and a first Public Review".

The results of the roll call were as follows:

3M	Y
Adaptec	Y
Alcoa-Fujikura	Y
AMCC	NV
Amdahl	Y
AMP	NV

Amphenol	Y
Ancor Communications	Y
Ancot Corporation	Y
Arcxel	Y
Berg	NV
Boeing	Y
Brocade	Y
Ciprico, Inc.	Y
Clariion	Y
CNT	Y
Compaq	Y
Computing Devices	Y
Connectivity Solutions	NV
Cray Research	NV
Crossroads Systems	Y
Cypress Semiconductor	Y
Digital Equipment Corp	Y
DPT	Y
EMF Associates	Y
Emulex	Y
Exabyte	Y
FCI	Y
FSI Consulting	Y
Fujikura America	NV
Fujitsu	Y
G2 Networks	Y
Gadzoox	Y
Gore	NV
Hirose	NV
Hitachi	NV
Hitachi Cable Manchester	NV
Honeywell	NV
HP	Y
IBM	Y
Interphase	Y
Jaycor	NV
Los Alamos National Lab	Y
LSI Logic	Y
Lucent Tech	Y
Madison Cable	Y
McData	NV
Methode Electronics	Y
Mitre	Y
Molex	NV
NCR	NV
Northrop-Grumman	Y
Ophidian Designs	Y
Optivision	Y

Orca	NV
Panasonic	NV
Prisa	Y
QLogic	Y
Quantum	Y
Raytheon	Y
Rockwell-Collins	Y
Seagate Technology	Y
SGS-Thomson	NV
Siecor	Y
Siemens	NV
Solution Technology	Y
Sony	NV
SRB	Y
StorageTek	Y
Sun Microsystems	NV
Symbios Logic	Y
Systran Corp	Y
Technitrol	Y
Tektronix	Y
Tensolite	NV
Texas Instruments	Y
TRW	Y
Unisys	Y
Vitesse	Y
Vixel	NV
VLSI Technology	Y
Western Digital	Y
Xyratex	Y

The motion carried 60 For, 0 Opposed, with 23 Not Voting. This meets the two-thirds rule.

#### **14.5 FC-AE & FC-SL -- Reports from recent Ad Hoc meetings**

Mike Hoard of Boeing made the following presentation on FC-AE:

*Real Time Fabric, Mike Foster, Boeing Defense and Space*

*presented initial material for fabric profile definition in Tucson*

*First draft fabric profile anticipated January '98*

*Boeing-Seattle continuing fabric hardware development*

*Real Time FC-AL, Michael Hoard, Boeing Defense and Space*

*Presented Real Time FC-AL performance specification*

*.....private loop 1553 Bus Mapping Profile*

*.....Fibre Channel Configurable Switch (FCS)*

*.....Fibre Channel Subsystem Data (FSD) Interface*

*.....Fibre Channel Video Data (FVD) Interface*

*FC-AE Documents: ftp.dpt.com/t11/pub/fc/ae*

*FC-AE operational profile will not include FC-SL.*

Scott Darnell of Raytheon E-systems presented on FC-SL:

*Rev 4.0 on FTP site*

*Talked with customers interested in putting FC-AL -type RAID subsystems into their applications.*

*Strawman for mapping AL into SL.*

*Strawman for larger address space*

*Working on FC-SL state machine.*

#### **14.6 FC-AV -- Reports from recent Ad Hoc meetings**

Bob Edge of Tektronix reported that there had not been a meeting since the last plenary, but they were still on course.

#### **14.7 FC-BB -- Reports from recent Ad Hoc meetings**

Presentation by Wayne Rickard of Gadzoox:

*Held working group meeting Wednesday evening 12/10.*

*Reviewed October 97 (Tucson +) revision of FC-BB*

*Re-visited scope of work, with focus on requirements for WAN model - should we limit WAN connections to trivial case of P-P virtual E-Port? We decided to pursue the Fabric Element model (multiple BBW=1 Fabric element), and define in detail the inter-element messages required.*

*4. Discussed muxing and reverse muxing of connections to optimize BW*

*5) Modified Address Assignment model to treat BB elements as Fabric elements which acquire their Domain address consistent with FC-SW*

*6. Impact of retransmit window size on BER and delay was discussed.*

*7. Jeff Stai contributed new work-in-progress clarifying ATM AAL5 CPCS-PDU encoding and a common header proposal.*

*8. Mike Griffin reviewed open issues for BBL-FDDI.*

*Next steps:*

*New draft to be reviewed at interim Working group meeting*

*Interim meeting currently scheduled for Jan 20-21 in Southern California.*

The interim ad-hoc meeting Jan 20-21 in Southern California was approved by acclamation.

#### **14.8 FC-GS-2**

It was moved by Jeff Stai of Brocade and seconded by Bob Cornelius of Ancor to direct the editor to remove the X.500 directory services from FC-GS-2 (Sections 5,6,7,8 + Annexes B,C). The motion carried 43 For, 0 Opposed, with 7 Abstaining and 33 Not Voting.

#### **14.9 Other items related to projects in development**

None.

## **15 New business and new technical items**

### **15.1FC-PLDA-2 Project Proposal**

Ed Grivna reported that the project proposal was in the mailing.

It was moved by Jeff Stai of Brocade and seconded by Bob Snively of Sun Microsystems that "Private" be removed from the title and text of the project proposal. Dal Allan requested that this be returned to the WG in the absence of the editor.

It was moved by Rich Taborek of G2 and seconded by Dal Allan of ENDL to postpone until the next meeting.

The motion to postpone carried 22 For, 8 Opposed, with 18 Abstaining and 35 Not Voting. This motion will appear on the February agenda.

No motion to forward the project proposal was forthcoming, and so this will appear on the February agenda.

### **15.2 FC-AL-3 PP**

It was moved by Norm Harris and seconded by Dave Ford of Clariion to forward the FC-AL-3 Project Proposal to OMC for further processing.

The motion carried 54 For, 0 Opposed, with 29 Not Voting.

Jeff Williams of Western Digital has volunteered to be project editor, pending management approval.

### **15.3 FC-PH'98 PP**

There was some discussion of the name and the desire to remove the '98. The chair expressed concern about PH, now that PI had been removed from it.

There was a recommendation by Bob Snively to remove the last sentence from the need and add it to the scope.

The chair noted that the only editors we could find were for PI'98 and this document.

It was moved by Don Tolmie of Los Alamos and seconded by Roger Cummings of DPT to forward the FC-PH'98 Project Proposal to OMC for further processing.

It was moved by Skip Jones of QLogic and seconded by John Scheible to change the name to FC-SF.

It was moved by Dal Allan of ENDL and seconded by Bob Cornelius of Ancor to postpone the name change motion until February. This carried without objection.

Bob Snively contended that scope of project proposal was not satisfactory. He wrote a new sample text. It was moved by Bob Snively and seconded by Bill Martin of Gadzoox to modify 2.2 of the project proposal draft as follows:

- 1) The consolidation of the relevant text from FC-PH, FC-PH-2, and FC-PH-3 and associated errata and annexes into a single encompassing document.
- 2) The deletion or obsoleting of outdated functions and features from those documents.
- 3) The inclusion of additional link services in support of new functions defined by the FC family of documents.
- 4) The inclusion of improvements and clarifications to the definitions of existing service definitions as...(from 3)
- 5) Other capabilities which will improve the performance of existing FC products and fit those products for new applications.

The motion carried 44 For, 2 Opposed, with 9 Abstaining and 28 Not Voting.



Roger Cummings called the two-week rule on the main motion. This will appear on the February Agenda.

#### **15.4 FC-SW-2 PP**

Jeff Stai spoke on what the goals of this project were:

Finish job of bringing up a fabric from set of switches.

It was moved by Jeff Stai and seconded by Bob Cornelius to forward the FC-SW-2 Project Proposal. The motion carried 58 for, 0 Opposed, with 25 Not Voting.

#### **15.5 Other New Business**

None

#### **16 Review of ANSI Project Status Sheet**

The ANSI Project Status Sheet was reviewed, the only change being to the target date for the FC-10KCR Project Proposal.

#### **17 Administrative Matters**

##### **17.1 Officer appointments**

Roger Cummings of DPT made the following report:

- 1.Call for Chairs of TGs T11.1 and T11.2 closed on 12/5/97 with only one candidate for each post having applied*
  - 1.Not sure if a NCITS Letter Ballot is required or not !*
  - 2.Call for T11 International Representative closed on 10/31/97 with only one candidate having applied*

##### **17.2 Reorganization**

Roger Cummings of DPT made the following report:

- 1.First meeting of TGs T11.1 & T11.2 successfully held in August*
  - 2.Original reorganization proposal involved additional TGs T11.3 (Interconnection Schemes) and T11.4 (Protocols)*
  - 3.Motions to request formation of T11.3 & T11.4 were postponed @ the 10/97 T11 Plenary to this meeting*
  - 4.Following people have agreed to act as interim officers for these TGs:*
    - 1.T11.3 - Rich Taborek (G2 Networks) as Chair & Jeff Stai (Brocade Communications) as Vice Chair*
    - 2.T11.4 - Ed Lee of EMF Associates as Chair*
  - 5.Once the groups have been formed, the Secretariat will issue an "official" Call for Volunteers*
- 1.Mapping additional protocols is key to increasing FC penetration into specific profitable niche markets*
  - 1.With assistance of FCA & FCLC choose situations which play to the strengths of FC*
  - 2.Provide configuration advice and examples along with the mapping*
- 2.Suggestions for new "mapping" projects are:*
  - 1.Clustering (Wolfpack or VIA or both)*
  - 2.High-definition imaging (medical x-ray, graphic prepress)*
  - 3.CAD/CAM (multilayer graphics and shading)*
  - 4.Insurance !! (100% data availability !!!)*

*3. Use FC-AV as the (very successful) model*

*1. Enlarge the SCSI storage market @ the same time !*

*4. T11.4 will act as the focus for this work*

*1. Existing projects have little visibility, even within T11*

### **17.2.1. Consideration of Postponed Motion to request formation of TG T11.3**

At the October meeting Roger Cummings of DPT moved and Mike Griffin of 3M seconded that "T11 requests that Task Group T11.3 "FC Interconnection Schemes" be established, and assigned the FC-SW, FC-AL-2, FC-AL-3, & FC-SL projects." This was tabled at that meeting.

The motion carried 46 For, 2 Opposed, with 8 Abstaining and 27 Not Voting.

### **17.2.2 Consideration of Postponed Motion to request formation of TG T11.4**

At the October meeting Roger Cummings of DPT moved and Mike Griffin of 3M seconded that "T11 requests that Task Group T11.4 "Protocol Mappings" be established, and assigned the FC-AE, FC-AV, FC-BB, and FC-GS-2 projects." This was tabled at that meeting.

The motion carried 49 For, 2 Opposed, with 8 Abstaining and 24 Not Voting.

### **17.3 FTP and Web Site**

Roger Cummings of DPT made the following report:

*1. t11.org domain has been obtained:*

*1. www.t11.org takes you directly to the t11 home page*

*2. ftp.t11.org/t11 takes you to the ftp site (/t11 still needed because of a restriction in the ftp server)*

*2. Structure of the ftp site has been changed anticipating the electronic mailings*

*1. Admin has been moved to a 1st level directory under t11 from /pub/admin*

*2. Latest has been moved to a 1st level directory under t11 from /pub/admin/latest*

*3. Chair has spent most of the past 2 months converting the document, status and attendance databases to Lotus Notes format, doing some programming, and setting up a Domino Server*

*1. And upgrading his company's network significantly in the process (don't ask about the cost !)*

*4. Do many of you find access is slow to the t11 home page ?*

*1. The long-dormant "members only" link from the T11 home page will come to life this weekend. Links will be provided to:*

*1. Online document register with a twistie-driven display starting from years and hundreds of documents, and with a button to submit a document for numbering 1 2 3*

*2. Online people database a twistie-driven display starting from the initial letter of the surname, and with a button to change address and other details 1 2 3 4*

*3. Online ballot database to support web balloting (in future to change Ps & As online as well)*

*4. Online meeting database with buttons to create ad hoc meeting notice and plenary week meeting announcements*

*2. All of the above is interlinked to support "instant" updates without any administrative overhead*

*3. Intention is that as of 1/1/98 this provides the basis for all of t11 operation*

*4. Need you ALL to try it over the next two weeks, and report on problems*

#### **17.4 Electronic Mailings**

Roger Cummings of DPT made the following report:

*1. To support the goals of the electronic mailing, the procedures of T11 need to be revised:*

- 1. New document submission procedure via web form and file upload by ftp to allow the mailings to be created "automatically"*
- 2. New procedure for letter ballots via a web form*
- 3. New procedure to change company representatives via web form*

*2. In order to make the creation of the electronic mailing at all practical, it is essential that we all follow the new procedures*

- 1. The Chair is struggling already with the bandwidth necessary to support the web site*

*1. The Chair is struggling already with the bandwidth necessary to support the web site*

#### **DOCUMENT SUBMISSION PROCEDURE**

*1. Form accessed via the "members only" link which requires the following information:*

- 1. Associated Project from pulldown list*
- 2. Meeting @ which to be presented from pulldown list*
- 3. Title, Author Name and E-Mail*
- 4. Number of document to be replaced*
- 5. File Name (without extension), & size in kilobytes of PDF, PS, ZIP & Binary versions*
- 6. Submitter name and e-mail*

*2. Result of submitting the form is an e-mail is returned to submitter with a document number and instructions for submitting*

*the actual file:*

- 1. Currently file will be uploaded to ftp.t11.org/t11/member/incoming using the t11member UserID.*
- 1. File will then be automatically copied to the subdirectory for the correct project*

#### **WEB "LETTER" BALLOTS**

*1. Ballot will be issued via the t11m reflector (currently t11m @dpt.com) with all of the information on the existing paper*

*ballot plus the following:*

- 1. A link to a file on ftp.t11.org for the document under consideration*
- 2. Information about two new voting methods:*
  - 1. Online via a web form on www.t11.org under the "members only" link with comments in a form on the field, as a file attachment, or sent separately via e-mail (not recommended)*
  - 2. Via e-mail to the T11 Vice Chair*

*3.Password needed for vote to be accepted*

*2.On voting, a confirmation e-mail is sent to the voter, with an information e-mail to other company representatives*

*3.Multiple votes before the ballot deadline will be accepted with one restriction*

*1.Alternate vote is bounced if a principal vote already exists*

#### *OTHER ONLINE FACILITIES*

*1.Representative change*

*1.Names cannot be deleted, but role (P, A, A#) can be changed and new name can be added*

*2.Update address, phone, fax, e-mail*

*3.Forms for T11 Plenary week hosts to create meeting notices and Ad Hoc facilitators to schedule ad hoc meetings or*

*telecons*

*1.Ad Hocs allow multiple "sessions" - 1 session per day, each can have a separate subject*

#### *GENERAL PRINCIPLES RE DATABASES*

*1.Password is required to submit any information:*

*1.For document numbering, use the t11member password*

*2.For updating personal address, e-mail etc., or for company representatives, need to know NCITS invoice number*

*2.Submitter name also required to be in attendance database:*

*1.Exact match to BOTH e-mail address and name is required*

*2.Needs to have ad hoc facilitator role to be able to create meetings*

*3.Needs to have host role to be able to generate meeting notices*

*3.Separate passwords for meeting notices & other things*

*1.Still stops short of issuing everybody their own password*

#### *DOCUMENT NUMBERING SCHEME*

*1.Many requests to adopted a number scheme incorporating revisions as per T10*

*1.Will do this from 1/1/98 with the condition that document numbers do not cross years*

*2.Document Submission scheme allows you to identify a document number to be replaced, which will allow the same number to be kept and the rev to be bumped only*

*2.Ftp site supports long file names, and the document submission form supports the use of such file names:*

*1.Chair believes this is the right approach going forward*

*2.Don't intend to restrict the site to 8.3 names (its a Unix box)*

*3.Do we need a rev number policy to allow people to use the document number as a file name on their own systems*

*(i.e. restrict rev to a single character 0-9, a-z) ?*

*4.Does it make sense to use "v" to distinguish from T10 i.e. 98-xxxv1 ?*

### **17.5 Reflectors**

*1.t11\_2 and fc-av reflectors have been established @ DPT*

*2.t11m & t11pe reflectors will be moved to DPT to allow easier management & to better support the electronic process*

*3.Problem with the t11 reflector recently was that the alias which routes "t11" to "x3t11" was inadvertently disabled*

*4.Please note that the size limit for all the reflectors @ Network Systems & @ DPT is 40 kilobytes*

*1.For documents beyond this limit, upload them to ftp.t11.org/t11/member/incoming using the "t11member" user ID,*

*and then announce the location via the reflector*

*2.The directory can be read via normal anonymous access (do not disclose the user ID & password)*

### **17.6 Electronic Mailings**

*1.Secretariat agreed in 10/97 to supply cd-rom mailings for T11 starting with the March 1998 mailing (1st of 1998 invoice), but last week they changed the rules:*

*1.Cost will now be \$300 for the cd mailing, \$480 for ENDL's CD Access, or \$1000 for a paper mailing !*

*2.The reason for the high price of the paper mailing is that ITI no longer wants us to supply them with a paper master*

*3.Complaints about this change should be addressed to the Secretariat, not to the Chair !*

*2.On the basis of the online database work, we should be ready to support the electronic mailings starting 1/1/98*

*3.As a late CHRISTMAS PRESENT, anyone who sends the Chair a new Recordable 650 MB CD in January 1998 will receive a copy of the entire T11 FTP & web site*

### **17.6 Sanctions**

Roger Cummings of DPT made the following report:

*1.Once again recently an organization revealed its vote on the reflector during a Letter Ballot*

*1.This is very serious in that it calls into question the legality of T11 approval*

*2.Chair has reluctantly come to the conclusion that sanctions are necessary to discourage this practice*

*1.On a first offence, the vote of that organization will be disregarded (as in a spoilt ballot)*

*2.On a second offence, T11 membership will be terminated*

### **18 Future meeting schedule**

#### **18.1 Meeting Plan for February Plenary Week**

The February, 1998 ASC-T11 Technical Committee meetings will be held the week of February 9-13 at the Hyatt Islandia, 1441 Quivira Road, San Diego, CA 92109. The room rate is \$123.00 (single) or \$143.00 (double), plus 10.5% tax. The group name is American National Standards Institute. The hotel may be contacted at (619)224-1234, fax (619)224-0348. The cut-off date for reservations is January 9, 1998. The host contact is Skip Jones (714)668-5058, sk\_jones@qlc.com, or Jill Huffman (714)668-5059, j\_huffman@qlc.com.

The following is a tentative schedule for travel planning purposes:

T11 PLENARY WEEK - February 8-12, 1998

Version 12/11/97

Monday, 1/09

```

      8   9   10  11  12  1   2   3   4   5   6   7   8   9
      +-----+
35      |               FC-AL3               |
      +-----+
35      |               T11.2-MJS               |
      +-----+
Tuesday, 1/10
      8   9   10  11  12  1   2   3   4   5   6   7   8   9
      +-----+
70/35   |   FC-AL2/3   |   Tape   |   joint   |****FCLC***|
      +-----+
40      |               T11.2-OPTICAL               |   FC-AE   |
      +-----+
30      |               HIPPI               |HIPPI OPT. |
      +-----+
Wednesday, 1/11
      8   9   10  11  12  1   2   3   4   5   6   7   8   9
      +-----+
70/10   |               FC-AL2/PH98   |Editors Mtg|
      +-----+
50      | T11.2-CU   |///|   T11.2-PLENARY               |
      +-----+
20      |               HIPPI               |   T11.1   |
      +-----+
15      |               |               FC-AE               |
      +-----+
15      |               |               FC-BB               |
      +-----+
Thursday, 1/12  PLENARY
      9   10  11  12  1   2   3   4   5   6   7   8   9
      +-----+
110/25  |   T11  PLENARY               |FCA/FCLC|
      |   (HIPPI,IPI,FC, SBCON)               |**JOINT*|
      +-----+
Friday, 1/13
      8   9   10  11  12  1   2   3   4   5   6   7   8   9
      +-----+
25      |               FC-AV               |
      +-----+

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**\*\*NOT A T11 MEETING\*\***

## 18.2 Future meeting plans

### 1998 DATES

FEBRUARY 9-13 ..... San Diego            QLogic  
 APRIL 20-24                    Palm Springs, CA   Brocade  
 JUNE 8-12 ..... St. Petersburg Beach, FL AMP  
 AUGUST 10-14 ..... Portsmouth, UK    Xyratex  
 OCTOBER 5-9 ..... Ft. Lauderdale,FL   Adaptec  
 DECEMBER 14-18 ..... Tuscon, AZ        FSI

### 1999 PROPOSED DATES

FEBRUARY 8-12 ..... San Diego            QLogic

APRIL 5-9 ..... Palm Springs, CA Brocade  
JUNE 7-11 ..... Minneapolis, MN (?)ANCOR  
AUGUST 2-6 ..... Rochester, MN (?) ENDL  
OCTOBER 4-8 ..... Ft. Lauderdale, FL Adaptec  
DECEMBER 6-10 ..... Lake Tahoe, CA (?) Solution Tech

### **18.3 Request for hosts for 1999**

Prospective hosts are requested to contact Ed Grivna at Cypress Semiconductor, 2401 E. 86th St., Bloomington, MN 55425, telephone (612)851-5046, fax (612) 851-5087, elg@cypress.com.

### **19 Review of action items**

40. Steve Joiner to meet with Sonet jitter specification group and report on their activities at the next meeting.
41. Don Tolmie to produce ISO editor's report for IS 11518-6:1996
43. Roger Cummings to provide (electronic & paper) draft of FC-LE to the IR for further processing.
44. Mike Foster, to provide abstract of FC-AE to IR.
45. Rich Taborek to provide comment resolution schedule for FC-SB to IR.
46. Don Tolmie to provide comment resolution schedule for FC-FP to IR.
48. Roger Cummings to provide comment resolution schedule for FC-PH-2 to IR.
77. Chair to write Network Systems, thanking them for their past support of the reflectors, and trusting that their new support arrangements will be successful in continuing a high level of service in the future.
78. Chair to add notice on letter ballots indicating voting rules, including non-disclosure of votes.
79. Chair to forward FC-FG to IR as a contribution for DIS letter ballot.
80. Chair to forward HIPPI-FP revision to OMC for further processing.
81. Chair to modify letter ballot form, indicating the manner in which comments are to be submitted electronically.
82. Chair to forward FC-PI'98 project proposal to OMC for further processing.
83. Chair to forward FC-PH-3 revision 9.4, which includes the comment resolution to the Public Review comments, as the final draft for project 1119-D, the changes being non-substantive.
84. Chair to forward FC-SW revision 3.30, which includes the comment resolution to the T11 Letter ballot, to OMC for further processing
85. Chair to forward FC-AL-3 project proposal to OMC for further processing.
- 87 Chair to forward FC-SW-2 project proposal to OMC for further processing
88. Chair to forward request to form T11.3 to OMC.
- 89 Chair to forward request to form T11.4 to OMC.

### **20 Adjournment**

It was moved by Ed Grivna of Cypress Semiconductor and seconded by Rich Taborek of G2 Networks to adjourn. The motion was carried unanimously, and the meeting was adjourned at 3:44.

## 12/97 T11 Plenary Attendance

Ronald Bossard	3M CO .....	O
Michael E. Griffin	3M CO. ....	P
Tad Szostak	3M CO. ....	A
Norman H. Harris	ADAPTEC .....	P
Ronald J. Kleckowski	ALCOA-FUJIKURA LTD.....	P
Scott Carlson	AMDAHL.....	A
Bill Mable	AMPHENOL INTERCONNECT PRODUCTS .....	A
Terry Anderson	ANCOR COMMUNICATIONS .....	P
Robert Cornelius	ANCOR COMMUNICATIONS .....	A
Jan V. Dedek	ANCOT CORP. ....	P
Stuart Berman	ARCXEL TECHNOLOGIES INC.....	P
Michael Hoard	BOEING.....	O
Mike Dorsett	BOEING DEFENSE AND SPACE .....	A
Kumar Malavalli	BROCADE COMMUNICATIONS.....	A
Jeffrey Stai	BROCADE COMMUNICATIONS.....	P
Kurt Witte	CIPRICO INC.....	P
Dave Ford	CLARIION.....	P
Stephen O'Neil	CMD TECHNOLOGY .....	O
Bill Galloway	COMPAQ COMPUTER CORP. ....	P
Carl Zeitler	COMPAQ COMPUTER CORP. ....	A
Bret Ketchum	COMPUTER NETWORK TECHNOLOGY.....	P
Robert K. Pedersen	COMPUTING DEVICES INTERNATIONAL .....	P
Jeff Young	CRAY RESEARCH INC. ....	P
Neil T. Wanamaker	CROSSROADS SYSTEMS .....	A
Edward L. Grivna	CYPRESS SEMICONDUCTOR.....	P
Michael Pugh	DIGITAL ACOUSTICS .....	A
Douglas Hagerman	DIGITAL EQUIPMENT CORP. ....	P
David Hyer	DIGITAL EQUIPMENT CORP. ....	O
Sid Snyder	DIGITAL EQUIPMENT CORP. ....	O
Roger Cummings	DISTRIBUTED PROCESSING TECHNOLOGY .....	P
Mark Lippitt	EMC CORPORATION.....	O
Edward M. Frymoyer	EMF ASSOCIATES.....	P
Edwin S. Lee III	EMF ASSOCIATES.....	A
David Baldwin	EMULEX .....	P
Dal Allan	ENDL.....	A
Horst L. Truestedt	ENDL ASSOCIATES.....	O
Jim Jones	EXABYTE CORP. ....	P
J. J. Dumont	FCI .....	A
Gary R. Stephens	FSI CONSULTING .....	P
Mike Fitzpatrick	FUJITSU COMPUTER PRODUCTS OF AMERICA .....	P
Rich Taborek	G2 NETWORKS INC.....	P
Wayne Rickard	GADZOOX.....	A
William R. Martin	GADZOOX NETWORKS .....	P



Larry Perkins	HARRIS .....	O
Steve Joiner	HEWLETT PACKARD .....	A
Matt Wakeley	HEWLETT PACKARD .....	P
Ron Caplette	HITACHI CABLE .....	A
Paul R. Boulay	HITACHI COMPUTER PRODUCTS -HICAM.....	P
Jim Tatum	HONEYWELL .....	P
John Scheible	IBM AUSTIN .....	P
Ravi Anantharaman	INTERPHASE .....	A
Charles Bazaar	JAYCOR NETWORKS INC. ....	A
Rick Allison	LOCKHEED MARTIN .....	A
Tom Gaska	LOCKHEED MARTIN FEDERAL SYSTEMS .....	O
Scott Hilliker	LOCKHEED MARTIN FEDERAL SYSTEMS .....	O
Don Tolmie	LOS ALAMOS NATIONAL LAB.....	P
Curtis A. Ridgeway	LSI LOGIC .....	P
Louise Bryant	LUCENT TECHNOLOGIES.....	A
Ron Crouch	MADISON CABLE.....	P
Vince Melendy	METHODE ELECTRONICS .....	P
Virginia F. Haydu	MITRE .....	P
Jay H. Neer	MOLEX .....	A
Colin L. Schaffer	MYLEX .....	O
David Peterson	NETWORK SYSTEMS CORP. ....	A
Edward A. Gardner	OPHIDIAN DESIGNS.....	P
Joe Parker	OPTIVISION INC. ....	P
Alan Langerman	ORCA SYSTEMS.....	A
Fred Van Roessel	PANASONIC BROADCAST TV SYSTEMS .....	O
Skip Jones	QLOGIC.....	P
Pak Seto	QUANTUM CORP.....	P
Scott Darnell	RAYTHEON E-SYSTEMS .....	A
Roger Ronald	RAYTHEON E-SYSTEMS.....	P
Earl E. Rydell	ROCKWELL-COLLINS.....	P
James Coomes	SEAGATE TECHNOLOGY.....	P
Colin Whitby-Strevens	SGS-THOMSON MICROELECTRONICS.....	P
Todd Hudson	SIECOR.....	P
Schelto Van Doorn	SIEMENS FIBER OPTIC COMPONENTS .....	P
David Deming	SOLUTION TECHNOLOGY .....	P
Gary Warden	SRB CONSULTING .....	P
Dale LaFollette	STORAGETEK .....	P
Brad Stamas	STORAGETEK .....	O
Robert N. Snively	SUN MICROSYSTEMS.....	P
Charles Binford	SYMBIOS INC. ....	P
John Lohmeyer	SYMBIOS INC. ....	A
Graeme Weston-Lewis	SYMBIOS INC. ....	O
Tom Bohman	SYSTRAN CORP.....	P
David Camacho	TASC INC. (JASA).....	O
Keith Conroy	TECHNITROL INC.....	A

Bob Edge	TEKTRONIX .....	P
Richard M. Prentice	TEXAS INSTRUMENTS.....	P
David F. Hepner	TRW SIG .....	P
Edward Chang	UNISYS .....	O
Arlan Stone	UNISYS .....	P
John Keese	US CONEC .....	O
Bob Rumer	VITESSE SEMICONDUCTOR.....	P
Frank Story	VLSI TECHNOLOGY INC. ....	P
Ryuji Yonemoto	VLSI TECHNOLOGY INC. ....	A
Christine Foster	W. L. GORE AND ASSOCIATES .....	P
Jeffrey L. Williams	WESTERN DIGITAL CORP. ....	P
David E. Instone	XYRATEX .....	A
Total of 100 attenders		