# INCITS T11.2 Activities Report Mike Dudek JDSU Terry Cobb Systimax

IEEE 802.3 Plenary Denver, CO July 14 2008

### Present status of FC-PI4

- FC-PI4 has completed T11 ballot and has been forwarded to INCITS for public review. (Rev 8.0).
  - Expectation is that there will be no further technical changes.



### New content in FC-PI4.

- FC-PI4 contains the following new 8G Fibre Channel variants (8.5Gb/s)
  - 150m on OM3 limiting variant (850nm)
  - 300m on OM3 linear variant (850nm)
  - 1.4km SMF variant (1300nm)
  - 10km SMF variant (1300nm)
  - Beta point (disc drive interface)
  - Epsilon point (Blade server interface. Backplane)
  - Informative annex for Passive copper cables using the same interface as the optical modules.
  - Informative annexes showing the trade off possible between additional connector loss and shorter distances for multimode systems and between OM3 and OM2 mixed fiber plant distances.
- In addition OM3 specifications and distances have been made normative for 1GFC, 2GFC and 4GFC.



### **16G FC**

- At the June meeting the first technical discussions and presentations were made on 16G FC.
  - Presentations showed 850nm VCSEL performance, and suggested that both limiting (maybe including CDR in the module) and linear variants should be defined for multimode fiber.
  - Initial channel models for copper channels were discussed.
  - Discussions were also started on whether the coding scheme should stay 8B10B or whether a more efficient code (64B/66B) should be used instead.



## 16G FC requirements.

 The Fibre Channel Industry Association (FCIA) has provided marketing requirements for 16GFC. (See below) FC-PI4 refers to 8GFC FC-PI5 refers to 16GFC

PI-4 and proposed PI-5 distances FIBRE CHANNEL INDUSTRY ASSOCIATION

Description	PI-4	PI-4	PI-5	Units
	Variant	distance	target	
OM1	SN/SA	21/40	None	m
OM2	SN/SA	50/100	50	m
ОМЗ	SN/SA	150/300	100-150	m
OM4	none	none	150-300	m
Passive copper	Direct attach	5	3.1415927	m



### Other Items of interest

- The MSQS ad-hoc is re-starting with a purpose to improve modeling and test procedure definition for Fibre Channel systems.
- The FC-PI3 ad-hoc is re-starting to complete the work on the 10GFC electrical specification. This is based on XFI, but improvements (relaxations) have been suggested.



# **Upcoming Meetings**

August 4-8 2008 Seattle, WA

October 6-10 2008 Providence, RI

- For additional information see
  - http://www.t11.org/index.html

