

# **INCITS T11.2 Activities Report**

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# FC-PI-4

- Fibre Channel Physical Interfaces 4
  - Adds operation at 8.5 Gb/s (8GFC) to existing 1/2/4GFC family
  - Optical, SFP+ ( $\gamma$  and  $\delta$  interoperability points)
  - Disk array, blade server backplane ( $\beta$  and  $\varepsilon$  interoperability points)
  - SFP+ direct attach copper cabling
- Considering a variation of TWDP algorithm employed by IEEE 802.3aq-2006
  - For  $\beta$  and  $\varepsilon$  variants, adds examination of horizontal eye opening to tie methodology to both amplitude and timing budgets
- T11 letter ballot (Draft 7.00) closed October 31 (Passed)
  - Comment resolution underway

# FCIA Roadmap

Base2\*

Product Naming	Throughput (MBps)	Line Rate (GBaud)	T11 Spec. Technically Completed (Year)‡	Market Availability (Year)‡
1GFC	200	1.0625	1996	1997
2GFC	400	2.125	2000	2001
4GFC	800	4.25	2003	2005
<b>8GFC</b>	<b>1600</b>	<b>8.5</b>	<b>2006</b>	<b>2008</b>
<b>16GFC</b>	<b>3200</b>	<b>17</b>	<b>2009</b>	<b>2011</b>
32GFC	6400	34	2012	Market Demand
64GFC	12800	68	2016	Market Demand
128GFC	25600	136	2020	Market Demand

**Base2:** Used throughout all applications for Fibre Channel infrastructure and devices. Each speed maintains backward compatibility at least two previous generations (i.e., 8GFC backward compatible to 4GFC and 2GFC)

**‡Dates:** Future dates estimated

Source: <http://www.fibrechannel.org/OVERVIEW/Roadmap.html> (currently under revision)

# 16GFC

- Expectations...
  - Backwards compatible to 8GFC and 4GFC
  - 17 GBaud, 8B10B encoding
  - Optical
  - Backplane
- Technical committee work expected to begin shortly

## SFP+ (SFF-8431)

- Electrical interface between SFP+ module and host board
  - Power, management
  - High-speed for 10 Gigabit Ethernet
  - High-speed for 8GFC addressed by FC-PI-4
- Draft 2.1
  - Comment resolution underway

# Upcoming meetings

- November 26 and 27, 2007, Carlsbad, CA
- December 3 to 7, 2007, Lake Mary, FL
  
- For additional information, refer to:
  - <http://www.t11.org/index.html>