

INCITS T11 Report to 802.3

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T11 has meet twice since the last Plenary of 802.3:

- **Aug 2-6, 2010 in Chicago, IL.**
 - **This was the 100th T11 meeting.**
- **Oct 18-22, 2010 in Bellevue, WA.**
 - **Co-located with a JTC 1/SC 25 meeting.**

FC-PI-5

- **16GFC uses a 64b/66b encoding instead of the 8b/4GFC and 8GFC which lowers the line baud rate but doubling of the data rate from 8GFC.**
- **OM1 was removed from the main document which only includes OM2, OM3, and OM4.**
- **Only the SC and LC connectors are specified.**
- **The linear variants were removed from the main document.**
- **FC-PI-5 was approved in a T11 Ballot in July and has been forwarded to INICITS for first public review.**

FC-PI-5

Fibre Channel allows distance trade off with connection loss:

Table B.3 – 1600-SN max operating distance & loss budget for different connection losses

Distance (m) / Loss Budget (dB)					
Fiber Type	Connection Loss				
	3.0 dB	2.4 dB	2.0 dB	1.5 dB	1.0 dB
M5F (OM4)	NA	50 / 2.58	100 / 2.36	125 / 1.95	150 / 1.54
M5E (OM3)		40 / 2.54	75 / 2.27	100 / 1.86	120 / 1.43
M5 (OM2)		NA	25 / 2.09	35 / 1.63	40 / 1.14

Fibre Channel Speed Roadmap

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
8GFC	1600	8.5	2006	2008
16GFC	3200	14.025	2009	2011
32GFC	6400	28.05	2012	2014
64GFC	12800	TBD	2015	Market Demand
128GFC	25600	TBD	2018	Market Demand
256GFC	12800	TBD	2021	Market Demand
512GFC	25600	TBD	2024	Market Demand

FC-PI-6

- **FC-PI-6 was approved as a project by T11 in June 2010.**
- **It will include 32GFC along with 16GFC and 8GFC.**
- **It will continue to be a single lane serial variant.**
- **Started initial discussions on the link budget.**
- **First proposal was 50 meters on OM3 and 75 meters on OM4. The minimum requirement is for 75 meters.**
- **OM2 will probably be removed (?) from the main body of the document because of distance limitations and put in an Annex leaving only OM3 and OM4.**

Upcoming Meetings

- **Dec 6-10, 2010 in Jacksonville, FL**
- **Feb 7-11, 2011 in Charleston, SC**
- **For additional information**
 - **<http://www.t11.org/index.html>**

Conclusion

- **When Fibre Channel held its 100th meeting.**
- **One of the most interesting presentations was how past experts predicted that Fibre Channel was doomed.**
- **Fibre Channel is still going strong.**