



---

**FCIA Update to T11**  
*Thursday, August 5, 2010*  
**Skip Jones**  
**10-378v0**

# What's Happening at FCIA?

- **5<sup>th</sup> FCoE Plugfest**

- November 1 – 5 at UNH-IOL
- NDA deadline is Sept. 10
- Calls already in progress: next call on Aug. 17

University of New Hampshire  
**InterOperability Laboratory**

- **SNW Fall 2010**

- Starting demo planning calls on August 19 at 11 AM pacific
- Companies committed or highly interested: Amphenol, Brocade, Cisco, Emulex, HP, LSI, NetApp & Tyco
- Also: FCoE panel & FC Update presentation



FIBRE CHANNEL INDUSTRY ASSOCIATION

## What's Coming Up?

---

- **Press release: T11 100th Meeting Awards & New Board of Directors SDC (August)**
- **SDC (Santa Clara, Sept.)**
- **16GFC Press Release (early Oct.)**
- **SNW Europe (Germany, Oct.)**
- **FC Solutions Guide** content being written now for fall distribution



## Roadmap Committee

---

- **New Roadmap v13**
  - **Extended Speeds**
  - **Changed some names**
  - **Filled in some TBDs**
  - **Added/changed some footnotes**
  
- **Next call 9/25/10, 10AM PDT**



---

# FCIA Official Roadmap v13

**2010**  
Page 1 of 4

# Fibre Channel Speed Roadmap - v13 Draft-2

## (Page 2 of 4)



FC

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” used throughout all applications for Fibre Channel infrastructure and devices, including edge and ISL interconnects. Each speed maintains backward compatibility at least two previous generations (i.e., 8GFC backward compatible to 4GFC and 2GFC)

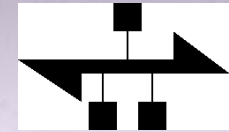
†Line Rate: All “FC” speeds are single-lane serial stream

‡Dates: Future dates estimated



# Fibre Channel Speed Roadmap - v13 Draft-2

## (Page 3 of 4)



### ISL (Inter-Switch Link)

Product Naming	Throughput (MBps)	Equivalent Line Rate (GBaud)†	Spec Technically Completed (Year) ‡	Market Availability (Year)
10GFC	2400	10.52	2003	2004
20GFC	4800	21.04	TBD	2008‡
40GFC/FCoE	9600	41.225	2010	Market Demand‡
100GFC/FCoE	24000	103.125	2010	Market Demand
400GFC/FCoE	96000	TBD	TBD	Market Demand
1TFC/FCoE	240000	TBD	TBD	Market Demand

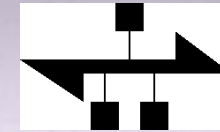
ISLs are used for non-edge, core connections, and other high speed applications demanding maximum bandwidth. Except for 100GFC (which follow Ethernet),

†Equivalent Line Rate: Rates listed are equivalent data rates for serial stream methodologies.

‡ Some solutions are Pre-Standard Solutions: There are several methods used in the industry to aggregate and/or "trunk" 2 or more ports and/or data stream lines to achieve the core bandwidth necessary for the application. Some solutions follow Ethernet standards and compatibility guidelines. Refer to the FCoE page 4 for 40GFCoE and 100GFCoE.

# Fibre Channel Speed Roadmap - v13 Draft-2

## (Page 4 of 4)



### FCoE

Product Naming	Throughput (MBps)	Equivalent Line Rate (GBaud)†	Spec Technically Completed (Year)‡	Market Availability (Year)‡
10GFCoE	2400	10.3125	2008	2009
40GFCoE	9600	41.225	2010*	Market Demand
100GFCoE	24000	103.125	2010*	Market Demand

Fibre Channel over Ethernet tunnels FC through Ethernet. For compatibility all 10GFCoE FCFs and CNAs are expected to use SFP+ devices, allowing the use of all standard and non standard optical technologies and additionally allowing the use of direct connect cables using the SFP+ electrical interface. FCoE ports otherwise follow Ethernet standards and compatibility guidelines.

‡Dates: Future dates estimated

\* It is expected that 40GFCoE and 100GFCoE based on 2010 standards will be used exclusively for Inter-Switch Link cores, thereby maintaining 10GFCoE as the predominant FCoE edge connection