Market Requirement for FCoE Applications

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- ''Skyrocketing shipments of Fibre Channel over Ethernet (FCoE)-capable switches and 16G Fibre Channel products pushed the storage networking equipment market to new heights in the 2nd quarter*, passing $1.5 billion,'' notes Sam Barnett, directing analyst for data center and cloud at Infonetics Research. ''And there's no end in sight.....

  *2012

  Source: IEEE Communications Society website

- FCoE encapsulation standards activity took place in the Fibre Channel T11.3 committee (not in IEEE802.3)

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♦ **Broad Market Potential**

A standards project authorized by IEEE 802 LMSC shall have a broad market potential.

Specifically, it shall have the potential for:

a)Broad sets of applicability.

b)Multiple vendors and numerous users.

c)Balanced costs (LAN versus attached stations). [Removed from IEEE 802 5 criteria 11/12]

- Consolidates network I/O ports

  - Ethernet, Fibre Channel & Infiniband

- CNA reduces number of cables and density

- Ethernet is ubiquitous

- Reduces overall CAPEX and OPEX

- Broadens accessible market for Ethernet

♦ The IEEE 802.3bq task force should consider FCoE applications as part of ongoing investigative work

♦ If agreed, what further work needs to be done if any at all?

♦ Should we be liaising with Fibre Channel standards committees?

♦ Latency

♦ Packet Loss

♦ Noise

♦ Retransmits

♦ Fast Retrain

- ♦ Immunity to noise (internal and external RFI)

- ♦ Reduced echo

- ♦ Signal Integrity PHY SNR and cabling channel ACR limits?

- ♦ Eliminate the need for PBO and fast retrain?

- ♦ DCB standards

- ♦ FC-BB-5 & FC-BB-6

- A 40GBASE-T standard that will enable FCoE applications will greatly enhance 'Broad Market Appeal'

  - Accelerate uptake and market share

- Possible consequences if it doesn't support FCoE

  - Restrict uptake

  - Lose market share to other non BASE-T solutions