

8 Gb in the Fabric

“What QLogic Thinks”

Skip Jones



- 10 Gb and 8 Gb Marketplace
- 10 Gb Advantages & Outlook
- 8 Gb Advantages & Outlook
- Availability
- Summary

10 Gb and 8 Gb Marketplace



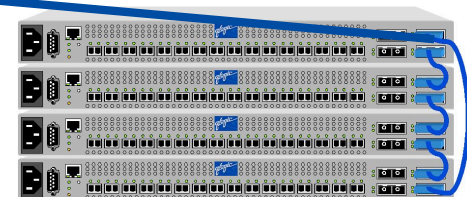
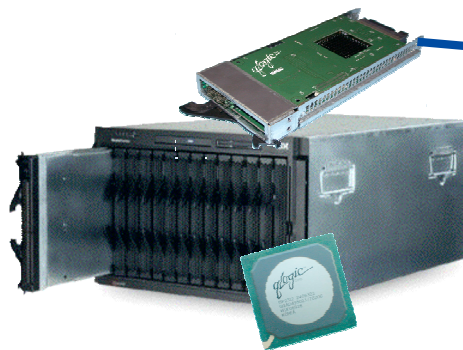
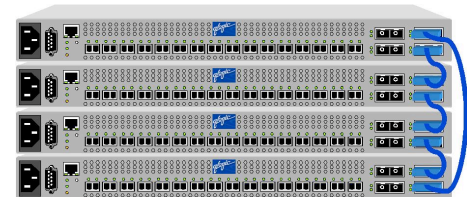
10Gb - For Inter Switch Links (ISLs)

Multi-port fabric edge switches

16 _ 64 ports; rack-and-stack

10Gb ISL' s ideal for switch interconnect

SANbox 5200 Switch Series



Blade Servers

Embedded switch inside blade server

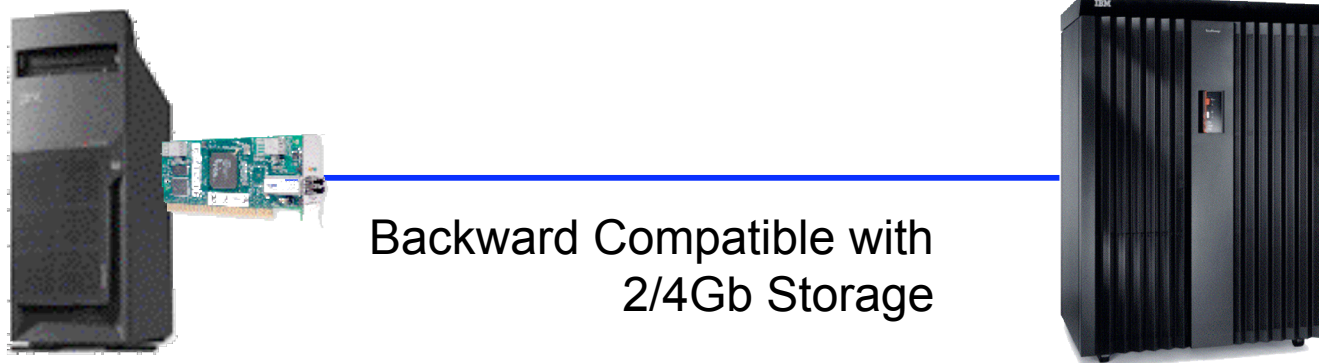
10Gb ISL' s ideal for connecting to external switch

SANbox Switch “Switch on a Blade” chip set

10 Gb and 8 Gb Marketplace



8Gb - For Investment Protection



- **Very high performance**
 - Technology shipping today on FC and Ethernet
 - Inter Switch Link (ISL)
 - Blade Server switch connection
- **Matches top Ethernet speeds**
- **Need the performance to maintain the trend to ever increasing I/Os**

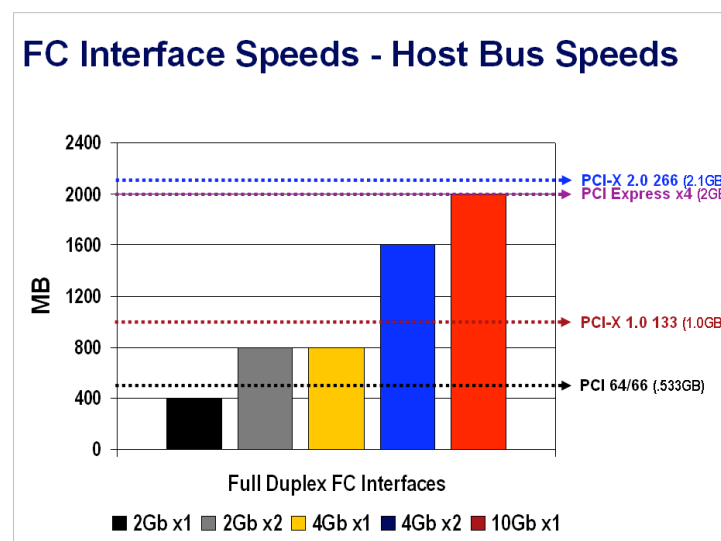
- 10 Gb may only be an ISL technology
- 10 Gb will never entirely replace lower speeds
 - Lack of backward compatibility
- 10 Gb Optics modules will be expensive
 - ~\$500-\$1000

10Gb essential, but adoption outside ISLs could be slow

■ 8G and 10Gb FC Adoption Considerations

- Servers won't be ready for 8Gb or 10Gb until 2005+
- **Requires > PCI-X 1.0 host bus**
 - PCI-X 133 is 1.0GB bandwidth
 - Full duplex 10Gb requires 2.0GB host bus bandwidth
 - **PCI-X 2.0 266** or **PCI Express X4** needed

- 8 and 10 have similar issues
- 8G backward compatible
- 10G in market longer
- *Place your bets!*

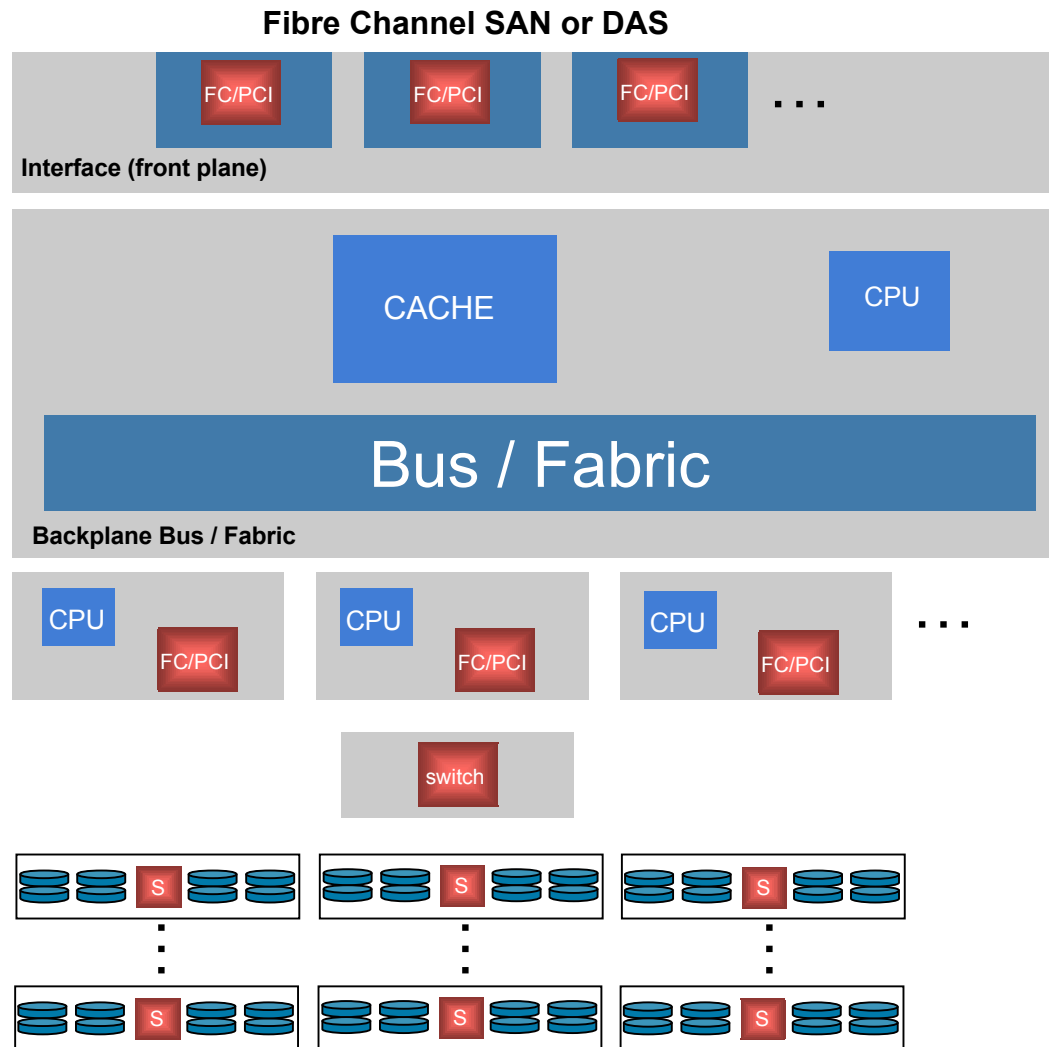
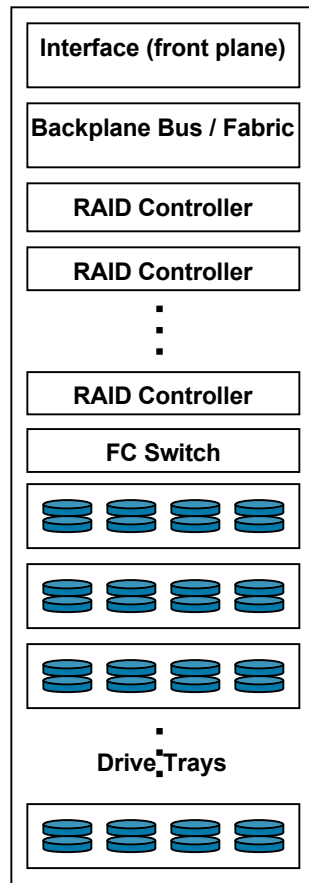


Advantages of 8 Gb



- Leverages 8 Gb disk drives
- Backward compatible with 2 and 4 Gb ports
- Follows traditional speed doubling upgrade history of storage I/O
- Need the performance to maintain the trend to ever increasing I/Os

8 Gb disk drives and infrastructure

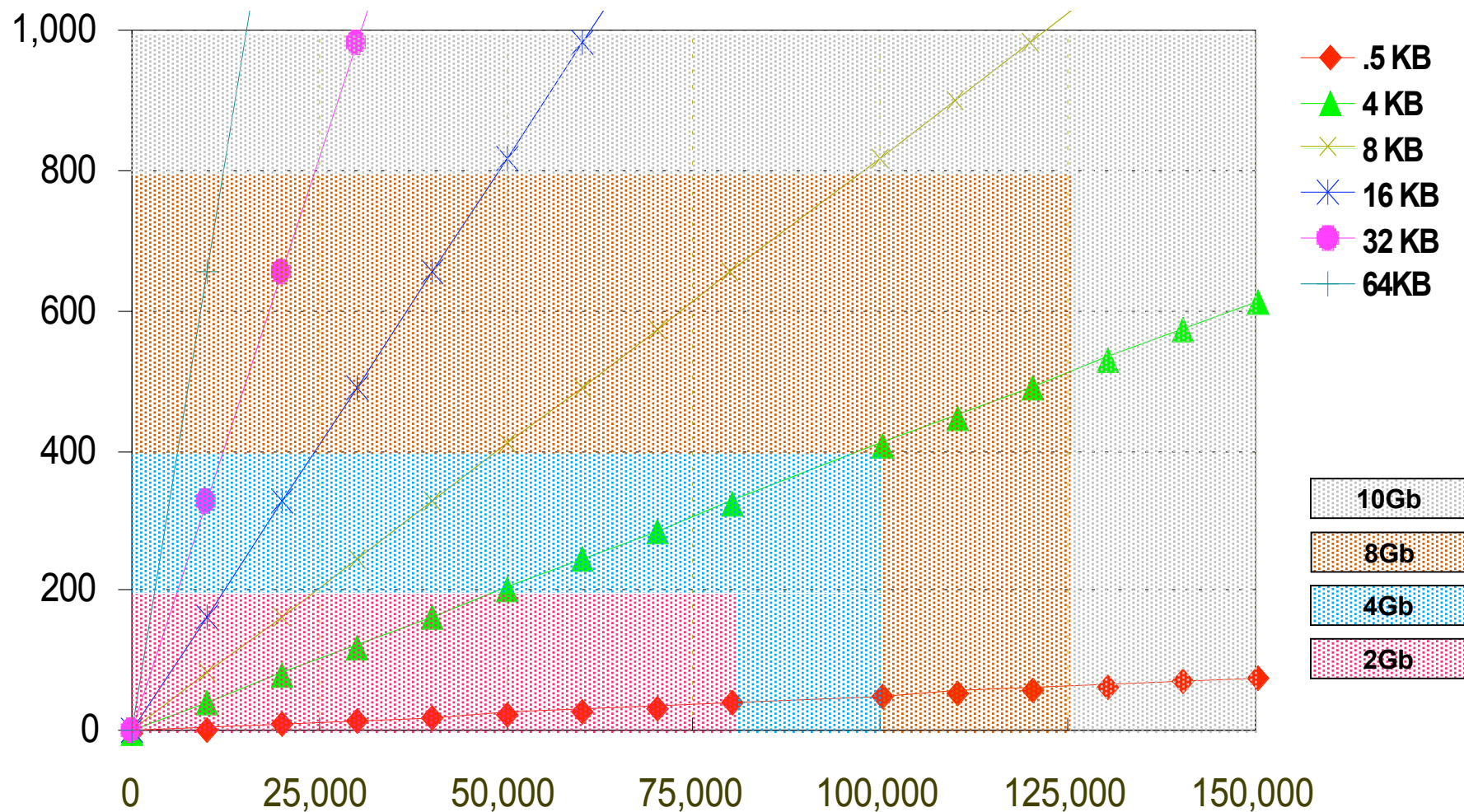


2/4/8/10 Gb
Optical

1/2/4/8 Gb
Copper &
Optical

The components are the same....front or back side

IOPs versus Bandwidth



10 Gb and 8 Gb QLogic Availability



- 10 Gb Switch port in production since January
- 8 Gb products in planning for 2006
 - FC ASICs
 - HBAs
 - Switches
 - HDC
 - Tape I/O Controllers
- In-step with other vendor roadmaps
 - Optics
 - Disk drives

Conclusion

8Gb FC Value Proposition is very strong



■ Investment protection

- Complete 8/4/2 Gb compatibility
- All 8Gb components backward compatible
- Future-proof technology

10-8 is our direction

