WIRELESS USB
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• Universal serial bus (USB) technology has been a popular connection type for PCs.

• Migrating into consumer electronic (CE) and mobile devices.
PERIPHERALS

- Mouse, Keyboards, and Other Human Interface Devices
- Digital Cameras
- Printers
- Cameras
- Hard Drives
Advantages of Using a Wireless USB Hub

• **Ease of Moving**: move from place to place

• **Less Mess**: number of physical connections

• **Increased Range**: no restriction in size of devices
WUSB Topology
MUSB Topology

• Host initiates all the data traffic among devices
• Allots time slots and data band widths to each devices
• Relationships are known as clusters
• Connections are point to point and directed between WUSB host and WUSB devices
Design Considerations

• WUSB must be backwards compatible with wired USB
• Provide a bridge to wired USB devices
• Low-cost implementation of WUSB will also be important to the successful integration of the technology
• Reduce development time
• Preserve the low-cost, easy-to-use model
Security and Device Association

• Same level of security as wired USB

• Wireless interconnect is easy to install and use

• Wired connections provide the user with implied expectations
WUSB in the Future

• The first Wireless USB implementations are in the form of discrete silicon
• This include add-in cards and dongles
• To support the technology's introduction and subsequent rapid ramp up
• Wireless future will arrive once WUSB, along with the common ultra wideband platform
Advantages

• First high-speed wireless personal interconnect technology
• Meet the needs of multimedia consumer electronics, PC peripherals, and mobile devices
• This preserves the functionality of wired USB
• Performance is targeted at 480Mbps at 3 meters and 110Mbps at 10 meters.
Conclusion

• Wireless USB is a technically-superior interface technology
• The quality of a Wireless USB implementation will depend on the ability to successfully balance high throughput and power
• A poor Wireless USB implementation will repeatedly retransmit as a result of data errors
Conclusion

• Protocol analyzers are used for detecting and highlighting errors
• Help developers during initial prototyping stages
• Providing productivity-enhancing high-level decode views
• Ensure that performance tradeoffs have been successfully implemented.
THANK YOU