Question	Answer
In plain English, what is USB 3.0, exactly?	SuperSpeed USB (USB 3.0) is the next advancement in USB technology. It is similar to earlier versions of USB as it supports data transfer between a host computer and devices. It offers data transfer rates up to 10 times faster than Hi-Speed USB, backward compatibility with previous generations of USB, optimized power efficiency and increased power delivery.
Why is there a need for faster USB speeds?	Consumers today are using rich media and large digital files that need to be transferred quickly and easily between PCs and devices. SuperSpeed USB meets the needs of everyone from the tech-savvy executive to the average home user. For example, downloading a 25GB HD movie from your home server to your notebook to take on your trip takes 15 minutes over Hi-Speed USB today. That same transaction end to end with SuperSpeed USB will only take 60 seconds. It's this type of fast sync-and-go capability the consumer is expecting technology to deliver.
How does SuperSpeed USB deliver the higher performance?	SuperSpeed USB achieves higher performance through several technical advancements. SuperSpeed USB adds five wires for a total of nine wires in the connectors and cabling. SuperSpeed USB utilizes a bi-directional data interface rather than Hi-Speed USB's half-duplex arrangement, where data can only flow in a single direction at a time.
Does SuperSpeed USB offer anything more than faster speeds?	In addition to delivering transfer rates up to 10 times faster than Hi-Speed USB, SuperSpeed USB brings additional performance enhancements to the popular USB standard while remaining backward compatible with billions of USB-enabled computers and devices currently in use. SuperSpeed USB is optimized to be remarkably power efficient, especially when devices are idle, extending the battery life of the host. In addition, we have improved power delivery for SuperSpeed USB devices, allowing those devices to utilize more power when needed for faster charging or to power a hard drive.
Do you need a special cable or can you use a USB 2.0 cable?	To achieve the data throughput of SuperSpeed USB, a user must have the following items: a SuperSpeed USB capable host, SuperSpeed USB capable device and a SuperSpeed USB cable. The SuperSpeed USB cable contains five new wires that are used for SuperSpeed USB communication. USB 3.0 is backward compatible with USB 2.0, allowing consumers to continue to utilize their existing peripherals with a SuperSpeed USB enabled computer and SuperSpeed USB devices with a legacy computer. Note: Data throughput will be at Hi-Speed USB (USB 2.0) rates when connecting with a legacy host, device or cable.

Characteristic	USB 2.0 (High-speed USB)	USB 3.0 (SuperSpeed USB)
Data Rate	low-speed (1.5 Mbps), full-speed (12 Mbps), and high-speed (480 Mbps)	SuperSpeed (4.8 Gbps or 4800 Mbps)
Compatibility	fully forward & backward compatibility with USB 1.1 devices	fully forward & backward compatibility with USB 2.0 devices
Contacts	4-pins for Type A & Type B;5-pin for mini USBs and micro USBs	9-pins for Type A & Type B;10-pin for micro USBs
Insertion Rate	Standard (Type A, Type B)=1.5K; micro USB=10K	Standard (Type A, Type B)=1.5K, micro USB=10K; High Durability (Type A, Type B)=5K, micro USB=10K
Micro USB width	6.86mm	12.25mm
Data Interface	4 wires (power, ground, and a pair for differential data). Results= Half-duplex arrangement, unidirectional data flow	adds 4 more wires for 2 pairs of differential signals (receive and transmit) for a combined total of 8 connections in connectors and cabling. Results=Full Duplex arrangement, simultaneous bi-directional data flow
Bus Power	support for low/high bus powered devices with lower power limits for un-configured and suspended devices	same as for USB 2.0 with 50% increased power provided for un-configured or suspended devices (150mA from 100mA), and 80% more power is available for configured devices (900mA up from 500mA). Results=power-hungry devices could be bus powered faster, while battery powered devices using bus power could charge quickly
Cables	maximum length = 5M (16.4 feet)	maximum length = 3M (9.8 feet)