

USB 3.0 FREQUENTLY ASKED QUESTIONS

What is USB 3.0?

USB 3.0, also known as SuperSpeed™ USB, is the latest generation of USB (Universal Serial Bus) technology, which has standardized peripheral connectivity since 1996. It operates at speeds up to 5 Gbps.

How fast is USB 3.0 compared to USB 2.0 and other technologies?

USB 3.0 is 10x faster than USB 2.0 technology. It is 67% faster than eSATA and 25x faster than standard WiFi.

What are the main benefits of USB 3.0 compared to USB 2.0?

USB 3.0 offers 3 major benefits over USB 2.0:

1. USB 3.0 transfers data ten times faster, resulting in greater productivity and user satisfaction.
2. USB 3.0 has improved power efficiency, which delivers longer battery life for laptops, tablets and peripherals connected via USB 3.0.
3. USB 3.0 has increased power output, which lets users power and charge more devices, more quickly, without the need for an external power source.

What are the major technical changes that enable these benefits?

The increased data throughput speed is achieved through the addition of two wires to the bus, enabling bi-directional data transfer and the ability to read and write data simultaneously. Additionally, a new interrupt-based data signaling method replaces device polling for a further boost in speed.

This interrupt-based data signaling also eliminates the power drain associated with USB 2.0, delivering enhanced power efficiency and a preservation of battery life for laptops, tablets and virtually any peripheral connected via USB 3.0. Legacy 2.0 devices also benefit from this feature, which is backward compatible with USB 2.0 devices.

Will current USB 2.0 products work with the new USB 3.0 ports?

Yes, the ports are compatible; however, the devices will connect at the lower USB 2.0 speed of 480 Mbps.

Is USB 3.0 available in laptops today?

Yes, most major brands of laptop computers (HP, Dell, Lenovo, etc.) are now shipping products with integrated USB 3.0.

How do I know which ports on a laptop are USB 3.0?

USB 3.0 ports are usually highlighted by a blue plastic tab and/or a SuperSpeed logo.

Why will my customers want or need USB 3.0 products?

Today's high-bandwidth applications and peripherals will get a notable boost in speed with USB 3.0 connectivity, offering your customers greater productivity and user satisfaction. Additionally, as the majority of new laptops and other devices are equipped with USB 3.0, customers will increasingly need corresponding USB 3.0 accessories that can accommodate and benefit from the performance demands of these devices.

Are there other market trends driving the adoption of USB 3.0 and the need for USB 3.0 products?

Yes. There are 4 major trends driving the need for USB 3.0:

1. The reliance on virtual workforces and shared workspaces (also known as "Hot Desking" or "Hoteling") is increasing. Products such as USB 3.0 docking stations and hubs increase the speed and efficiency of these practices.
2. Enterprises are more frequently supporting two or more laptop standards. In addition, the increase in the "Bring-Your-Own-PC" (BYOPC) trend allows users to choose their own laptop. In these scenarios, enterprise efficiency calls for USB 3.0 docking stations, universal charging and USB 3.0 hubs for quick connectivity of peripherals and enhanced productivity.
3. The emergence of Ultrabooks in 2012 means a growing number of systems with limited ports, no optical drive and no available OEM docking stations. USB 3.0 peripheral devices, docking stations and hubs efficiently bridge this gap, while offering the benefits of enhanced speed and power output.
4. Many IT organizations face a mandate to lower TCO and improve productivity. USB 3.0 products address this demand with SuperSpeed data and video transfer rates 10x faster than current USB 2.0 technology. Additionally, USB 3.0 video adapters add one or two monitors for increased worker productivity of up to 50%.

What peripheral products are available today using USB 3.0?

Most major brands of flash (thumb) drives, hard drives and USB hubs offer USB 3.0 products to take advantage of the fast data transfer. Additional available products include USB 3.0 docking stations and video adapters.

Does a USB 3.0 docking station offer comparable video performance to an OEM docking station?

Yes. USB 3.0 docking stations provide full 1080p video to dual screens. The majority of OEM products only support one external monitor.

Do USB 3.0 docking stations charge the laptop?

Currently, most USB 3.0 docking stations do not charge the laptop; as of February 2012, the Targus ACP71USZ is the only docking station which delivers notebook or Ultrabook charging capabilities, with power up to 90W.

What USB 3.0 products does Targus offer?

Targus currently offers one of the widest assortments of USB 3.0 products including: two USB 3.0 Docking Stations, two USB 3.0 hubs, two video adapters, and three USB 3.0 upgrade cards.

What are the benefits of the Targus USB 3.0 upgrade cards?

Targus USB 3.0 Adapter Cards allow users to retrofit existing computers with SuperSpeed USB 3.0 ports, cost-effectively enabling systems with SuperSpeed USB 3.0 without the need to purchase new laptops/PCs. These products are PC/Ultrabook compatible.

- 34 mm ExpressCard, \$39.99, model number ACA34USZ
- ATX powered PCIe Card, \$39.99, model number ACA35USZ
- SATA powered PCIe Card, \$39.99, model number ACA36USZ

What are the benefits of the Targus USB 3.0 hubs?

Targus USB 3.0 hubs enable users to quickly and easily expand their number of available USB 3.0 ports, delivering instant access to a wider range of USB 3.0 peripherals.

What are the differences between the two Targus USB 3.0 hubs?

Both hubs connect to the user's laptop/PC via an existing USB 3.0 port. The 4-Port USB 3.0 Hub gives the user 4 additional USB 3.0 ports and includes a 4 amp AC adapter. The 7-Port USB 3.0 Combo Hub provides users with 3 USB 3.0 SuperSpeed ports plus 4 four cost-effective legacy Hi-Speed USB 2.0 ports. It also includes a 6 amp AC adapter. Both hubs include a 5-foot cable (USB A to Micro-B) and are PC/Ultrabook compatible.

- 4-Port USB 3.0 SuperSpeed™ Hub, \$59.99, model number ACH119US
- 7-Port USB 3.0 Combo Hub, \$79.99, model number ACH120USZ

What are the benefits of the Targus USB 3.0 docking stations?

Targus USB 3.0 docking stations deliver a fast, one-touch interface for creating a desktop environment from a laptop with 2 USB 3.0 ports and 4 USB 2.0 ports. Both versions include dual video ports, which enable the use of two monitors, delivering up to 50% greater productivity. Additional specs for both include:

- 6–6.15 amp AC adapter and 3-foot USB 3.0 cable
- Gigabit Ethernet port
- Audio In/Out ports
- Security lock slot
- PC/Ultrabook compatibility

What are the differences between the two Targus USB 3.0 docking stations?

The Targus USB 3.0 SuperSpeed Dual Video Docking Station with Power offers universal charging for a guaranteed fit with any PC laptop or Ultrabook (up to 90 watts), with 8 included power tips. Other specifications include:

- Dual video ports (1x DVI-I, 1x HDMI)
- 1x DVI-I to VGA and 1x HDMI to DVI-D adapter
- Integrated power tip storage
- USB 3.0 SuperSpeed Dual Video Docking Station with Power, \$249.99, model number ACP71USZ

The Targus USB 3.0 SuperSpeed Dual Video Docking Station provides a convenient dock (without charging capabilities) that delivers:

- Dual video ports (1x DVI-I, 1x HDMI)
- 1x DVI to VGA adapter
- 1x HDMI to DVI adapter
- USB 3.0 SuperSpeed Dual Video Docking Station, \$199.99, model number ACP70USZ

What are the benefits of the Targus USB 3.0 Dual Video Adapter?

The Targus USB 3.0 Dual Video Adapter instantly adds one or two monitors to a laptop, for an up to 50% increase in productivity. Triple screen setup options include extending your desktop onto the additional monitors, mirroring your laptop screen or switching off the laptop screen to focus on your larger views. Specifications include:

- Dual video ports (1x DVI-I, 1x HDMI)
- Supports up to 2048 x 1152 (1080p) resolution
- Includes DVI-I to VGA & HDMI to DVI-D adapter
- Driver CD included
- PC/Ultrabook compatible
- USB 3.0 SuperSpeed Dual Video Adapter, \$99.99, model number ACA039US

What are the benefits of the Targus USB 3.0 Video Adapter?

The Targus USB 3.0 Video Adapter quickly and easily adds an extra monitor to laptops for multiple viewing options and up to 26% greater productivity. Users can choose between expanding their desktop across both monitors, mirroring the laptop screen, or switching off laptop screen for a single, larger view. Specifications include:

- Connects one DVI or VGA monitor
- Supports up to 2048 x 1152 (1080P) resolution
- Includes DVI to VGA adapter
- Driver CD included
- PC/Ultrabook compatible
- USB 3.0 SuperSpeed Video Adapter, \$79.99, model number ACA038US