Computer connection: Light Peak optical cable

Light Peak is a high-speed fiber optic technology, designed and designed by Intel to connect electronic devices. Currently, Light Peak bandwidth reaches 10Gb / s but may reach 100Gb / s in the future. At the current 10Gb / s speed, in theory a Blu-ray movie can be transmitted in less than 30 seconds, 64GB of MP3 in 1 minute.

The future of 2011 is promising with Light Peak fiber connection application on personal computers.

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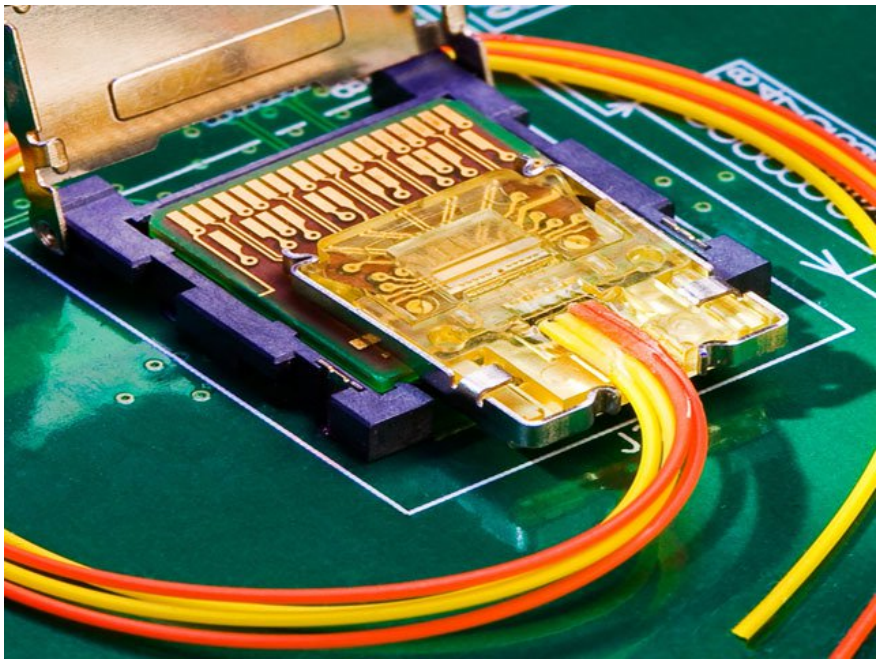

Commonly used cables in current computing devices are transmitted by electric current, so they have limits on speed, length due to effects of attenuators, noise . These problems are completely absent with cable technology. Optical used in data centers, telecommunications systems because they use light instead of electricity. Bringing fiber optic technology to deploy to the universal computer market, consumer electronics equipment is a law of development and also a way to take advantage of investment and research costs.

Fiber optic technology not only allows for shrinking cables, connectors, **Light Peak is** also suitable for many different protocols, so it is possible to use cables to connect peripheral devices, display devices, hard drives. communication **light** . **Light Peak** has been performed in real time at the Intel 2010 Developer Exhibition (IDF 2010) and Intel hopes to bring this communication to PC and peripheral devices in 2011. also raised many concerns about the future of USB 3.0 interface.

Structure

Light Peak consists of two components: the control chip (provided by Intel) and the optical module that converts electrical signals to light signals (and vice versa). Laser used in **Light Peak** called **VCSEL** (Vertical Cavity, Surface Emitting Laser) and limited to the section of 250x250 microns, twice as thick as human hair.

Use Light Peak to connect HD studio software to the WD head and hard disk.

Optical modules include miniature laser lights and light sensors. The control chip has the ability to change the flexible protocol so it is possible to share a cable for many different protocols, methods or connection purposes. **Light Peak** connection also allows for the connection of different devices in a chain fashion.

For example, you can use the same **Light Peak** cable to connect a computer to a monitor, or a computer with a storage device (no need to change the cable as it is now).

Evaluate

Most companies in the field of multimedia, external storage and computer design appreciate **Light Peak** technology. Avid Technology believes that **Light Peak** will provide laptops, mobile devices with the power, the ability to create audio and video content that is equivalent to the current workstation (desktop). Lacie cooperates with Intel to prepare a generation of external storage devices with faster, higher capacity. **Light Peak** contributes to changing the style of computers and mobile devices in a smaller, simpler connection. This has been Compal shown through some actual sample products.

Reference: www.intel.com/go/lightpeak