

UWB Technology: Promising future

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Like other mainstream technologies, UWB targets home users. Users can wirelessly connect home devices with high speed and much faster than IrDA and Bluetooth wireless technologies.

Basically, UWB is developed to serve communication between users' home devices. The future of wireless networks between home devices will be UWB with the ability to share digital photos, music, videos, data, and voices. For example, you can watch videos on your PC or other devices. Other electronic devices such as video cameras, DVD players, HD-TV (high-definition television) via UWB wireless connection.

UWB with short wavelength is very suitable for WPAN (wireless personal area networks) home networks. This is considered a cheap, energy-saving and high-bandwidth technology. Currently, UWB allows devices to "talk" within a range of 10m.

Previous wireless networking technologies such as Bluetooth and IrDA were also used for WPAN networks. So what is UWB really different from these technologies?

IrDA technology

First of all, IrDA is a connection network that uses infrared. Developed by a group of manufacturers since the 1990s. They have developed technology to peer across laptops within a narrow range. Next, IrDA is built on other products, which are perhaps best known as mobile phones.

The IrDA interface has a disadvantage: devices need to see each other. Leaving the infrared ports visible to each other between laptops is not easy. Because of this weakness, IrDA technology has gradually been replaced by Bluetooth technology.

Bluetooth technology

Bluetooth was born to break the limits of IrDA. First, Bluetooth is used for the purpose of communicating between mobile phones and headsets. Later, technology developed and used to connect many different devices. Now, Bluetooth is present in most consumer devices. Mobile phones, cars or household devices such as refrigerators, washing machines and microwave ovens have become important networking points in the network.

Currently, Bluetooth grows very quickly, popular with other devices that use other protocols and software. Although Bluetooth is more powerful and attractive than IrDA, Bluetooth still faces limitations. In essence, Bluetooth is still considered a wireless link technology between mobile devices and headsets and speaker systems.

UWB promising technology

When UWB entered, like other mainstream technologies. UWB targets home users. But unlike Bluetooth, UWB can connect family entertainment devices together perfectly and have a high connection speed.

Behind your computer, there are many kinds of wires that connect the mouse, keyboard, monitor, USB connection. They are annoying and cumbersome! Vendors believe that someday, UWB will replace the entire wires behind your PC.

Not only that, UWB will move to transfer large files between PCs and mobile devices such as MP3 players and digital cameras. Currently, UWB can transfer data at up to 252 Mbps. And in the future, the possibility may be up to 480 Mbps in a distance not too far. Therefore, the idea of transmitting large files is entirely possible.

Although everything seems to be very beautiful with this new technology, UWB will face two major obstacles that IrDA and Bluetooth do not encounter: really immature and unified technology between suppliers remains. not yet available. These elements are quickly removed, UWB will truly be a wireless revolution in short distances.

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