

What is Bluetooth technology?

Bluetooth® technology is the global wireless standard enabling, convenient, secure connectivity for an expanding range of devices and services. It is an essential element for bringing everyday objects into the connected world.

Created by Ericsson in 1994, Bluetooth wireless technology was originally conceived as a wireless alternative to RS-232 data cables. Bluetooth technology exchanges data over short distances using radio transmissions. Bluetooth technology operates in the unlicensed industrial, scientific and medical (ISM) band at 2.4 to 2.485 GHz, using a spread spectrum, frequency hopping, full-duplex signal at a nominal rate of 1600 hops/sec. The 2.4 GHz ISM band is available and unlicensed in most countries.

What is Bluetooth used for?

Bluetooth wireless technology is built into billions of products, from cars and mobile phones to medical devices and computers and even forks and toothbrushes. Bluetooth technology allows you to share voice, data, music, photos, videos and other information wirelessly between paired devices.

When was Bluetooth technology invented?

In 1994 a group of engineers at Ericsson, a Swedish company, invented a wireless communication technology, later called Bluetooth. In 1998, the original group of Promoter companies—Ericsson, Intel, Nokia, Toshiba and IBM—came together to form the Bluetooth Special Interest Group (SIG). Since no single company owns the technology, the SIG member companies work together to preserve, educate, and further Bluetooth technology as a means to bring devices into the connected world.

Where does the name Bluetooth come from?

The name "Bluetooth" comes from the 10th century Danish King Harald Blåtand or Harold Bluetooth in English. King Blåtand helped unite warring factions in parts of what are now Norway, Sweden and Denmark. Similarly, Bluetooth technology was created as an open standard to allow connectivity and collaboration between disparate products and industries.

How does Bluetooth technology differ from other radio technologies?

Mobile phones, FM radio and television all use radio waves to send information wirelessly. And while Bluetooth technology also uses radio waves, it transmits them over a shorter distance.

Radios and TV broadcasts over many miles or kilometers. Bluetooth technology sends information within your Personal Area Network or "PAN" (aka your own personal space) at distances up to 100 meters (328 feet)—depending upon device implementation. Bluetooth technology operates in the unlicensed industrial, scientific and medical (ISM) band at 2.4 to 2.485 GHz, using a spread spectrum, frequency hopping, full-duplex signal at a nominal rate of 1600 hops/sec.

Is Bluetooth technology hardware or software?

It's a combination of both. When someone says a product contains Bluetooth that means it includes a small computer chip containing the Bluetooth radio. But it also needs software to connect, via Bluetooth wireless technology, to other products.

What else can Bluetooth technology do?

Originally intended to be a wireless replacement for cables on phones, headsets, keyboards and mice, Bluetooth technology now goes way beyond that. Bluetooth technology is bringing everyday devices into a digital and connected world. In the health and fitness market, the use cases vary widely — from sensors that monitor activity levels to medical and wellness devices that monitor healthcare, like a glucometer, inhaler or toothbrush. The top-selling

Smartphones, PCs and tablets all support Bluetooth technology. In-vehicle systems give the ability to make phone calls, send texts, and even make dinner reservations. The Bluetooth SIG is also seeing developments where drivers will monitor important information like vehicle diagnostics, traffic, even driver health — all in real time. Bluetooth technology is creating opportunities for companies to develop solutions that make a consumer's life better.