Bluetooth Low Energy

1. What is Bluetooth Low Energy (BLE)?

Bluetooth low energy is a brand-new technology that has been designed as both a complementary technology to classic Bluetooth as well as the lowest possible power wireless technology that can be designed and built. Although it uses the Bluetooth brand and borrows a lot of technology from its parent, Bluetooth low energy should be considered a different technology, addressing different design goals and different market segments.

Bluetooth Low Energy is the next major evolution of the Bluetooth technology. It specifies requirements for devices to have ultra-low power consumption. This is a radical change from the direction in which the technology was evolving through previous versions. While the focus of previous versions was either feature enhancements or increase in the throughput, LE focused in an entirely new direction—how to cut down the power consumption drastically? LE technology is fully optimized from the ground up to ensure that the power consumption is kept to a minimum. This meant a complete redesign of several key components to ensure that all steps are taken to reduce the power requirements.

1. How does BLE works?
2. Typical Applications for BLE
3. Why use BLE?