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Spread Spectrum Communication Technology

Since this is the basic technology of the code division multiple access (CDMA) system adopted in third generation mobile phone systems, and has high interference resistance, it has been a high-reliability, high-speed, broadband wireless communication system adopted for the IEEE802.11 standard wireless LAN system using the 2.4 GHz band. Most wireless LAN systems also use spread spectrum communication.

CDMA: Code Division Multiple Access

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Advancement of Digital Mobile Radio Technology

From 2000 to 2010, due to the increase in subscriber capacity and the advancement of mobile radio by the effective use of radio frequency which is a finite resource, digital mobile radio technology that combines efficiency, versatility, and expandability, research and development of basic technologies that contribute to the advancement of digital mobile radio communication have been promoted: adaptive modulation method, software defined radio/cognitive radio technology, signal processing antenna and adaptive spatial signal processing technology, UWB technology, MIMO technology, ad hoc network/wireless mesh networks, etc. A technical base has been established to maximize the effective use of frequencies by flexibly changing the communication method, signal processing, and modulation method according to each frequency band, purpose of use, and environment.

UWB: Ultra Wide Band

MIMO: Multi Input Multi Output