

What is bluetooth technology:

One of the best functional based embedded system in our daily life is Bluetooth headphones. We can say it's a networked embedded system since it can be connected to other devices and portable.

Well-established technology like Bluetooth is used to provide wireless connectivity from wireless headphones to mobile phones, laptops & mice of the wireless computer to a lot of other devices which need a short-range of connectivity. This technology has developed & expanded drastically to provide not only the fixed short-range audio streaming in the applications of M2M communications and mesh connectivity of IoT. This technology provides better flexibility, very fast speed & far more capability.

9 technologies present in bluetooth earphones:

1. speakers
2. audio codecs
3. bluetooth
4. system on a chip or soc
5. printed circuit board or pcb
6. accelerometers
7. lithium ion battery
8. MEMS Microphones
9. Noise cancellation.

Codec is a piece of software for coding and decoding the audio, compressing and decompressing the signal or data. codec converts the digital data to analog. Audio codecs can also do the reverse process. Compression is done while downloading the file from web decompressing is done while watching the video.

Advantages:

1. Portable
2. Easy to use

Disadvantages:

1. Battery life
2. Can be hacked

ALTIMETER

For every 30 feet you go up in height the pressure drops approximately 1 hectopascal hPa. QNH

QNH gives pressure setting. QNH different between different airports, transition altitude, standard QNH 1013.5 hPa. 10000 feet vertical separation from each aircraft.