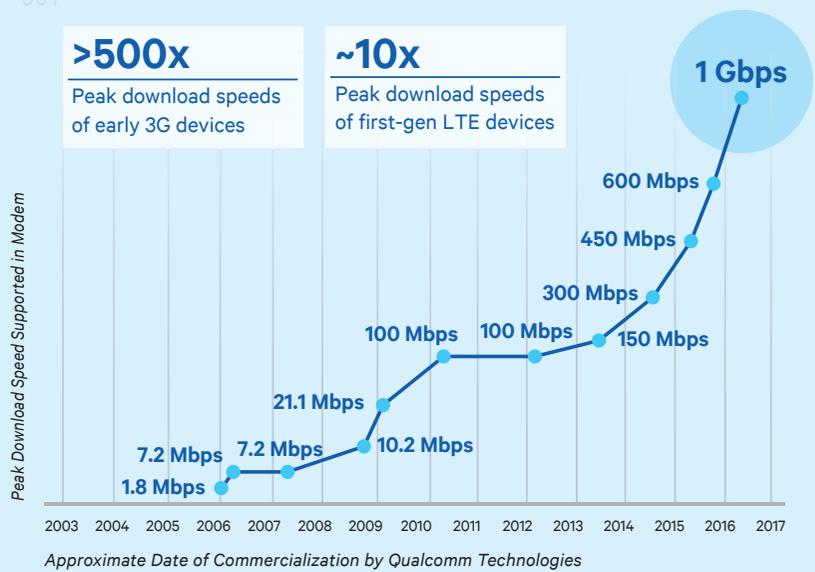


Six inventions iPhones use everyday

Qualcomm's R&D has produced inventions that power GPS navigation, mobile video, secure and seamless app store purchases, Wi-Fi connectivity, media streaming, the high-speed data transmission that makes it all possible and much more. But there are crucial if little-known breakthroughs like the technologies covered by the patents described below that help make the rest of the inventions work in a hand-held, user-friendly device like the iPhone. Powerful mobile broadband itself consumes a lot of power, and it's the **finely engineered conservation of battery life that helped produce data transmission rates that climbed more than 2,500% over a decade and a half.**



Improving performance while prolonging battery life

The six Qualcomm patents asserted in Qualcomm's ITC complaint against Apple, while not required for any industry standard, cover technologies that play integral roles enabling both high-speed performance and extended battery life. Apple's iPhones employ these technologies – along with tens of thousands of additional patented technologies from Qualcomm – for media streaming, social media interaction, basic communications and much more to provide unparalleled performance.

US Patent No. 8,698,558

Extends battery life by building intelligence into the system so the antenna is always using just the right amount of battery power to transmit, whether it be video, text, or voice. (Issued 2014)

US Patent No. 8,633,936

Enables high performance and rich visual graphics for games while increasing a mobile device's battery life. (Issued 2014)

US Patent No. 9,608,675

Enables a mobile device to send high speed data such as live video from your phone by combining many lanes of traffic into a data super-highway while prolonging battery life. (Issued 2017)

US Patent No. 8,838,949

Enables "flashless boot" which allows your smartphone to connect to the internet quickly after being powered on, while extending battery life and reducing memory size. (Issued 2014)

US Patent No. 9,535,490

Enables the applications on your smartphone to get their data to and from the internet quickly and efficiently by acting as a smart "traffic cop" between the apps processor and the modem. (Issued 2017)

US Patent No. 8,487,658

Maximizes smartphone performance while extending battery life by connecting high voltage circuits and low voltage circuits with efficient interfaces. (Issued 2013)

Three more facts about these patents...



Important technologies not required for any industry standard



All 6 patents issued in last four years



Apple uses these technologies in its devices but is not paying for them