*** 北米連携センター定期報告***

2014 年 11 月 20 日

●クアルコムの次世代LTEモデム、売りは上り速度

【GigaOM, 2014/11/20】

クアルコムは今週、同社の次世代 LTE モデムを発表した。

この新製品「Gobi 9x45」は、理論的に下り通信速度が最大 450Mbps となるが、同社が目玉としているのは最大 100Mbps という上り通信速度。

6 年前に LTE の第 1 世代が登場して以来、上り速度が 50Mbps を超えたことはなく、ほとんどのネットワークは実際にはこれをはるかに下回る上り速度で運用されている。

これは、動画やアプリのダウンロードといった場面では、下り速度に比べると、上り速度の重要度が低かったことが理由の 1 つだが、クラウド・サービスや動画チャットなど双方向で高速な通信を要求するアプリケーションが増加するに伴い、上り側も重要度を増しつつある。

クアルコムが今回発表した製品は、「10 LTE」をサポートし、異なる 2 つの周波数を使ってデータを発信できるキャリア・アグリゲーションという LTE-Advanced の技術を利用することが可能となっている。

（参考）本件報道記事

The next generation of LTE chips are all about the upload

Kevin Fitchard

Nov. 20, 2014 - 2:54 PM PST

This week Qualcomm unveiled its next generation LTE modem, which boasts another big theoretical boost in download speeds up to 450 Mbps. But in this announcement Qualcomm made special note of a feature that has long been ignored in 4G: upload speeds.

Qualcomm's new Gobi 9×45 modem actually doubles the possible uplink bandwidth between a device to 100 Mbps. Ever since the first LTE networks came online six years ago, uplink speeds have never crossed the 50-Mbps threshold (and in reality, most networks see much slower real world speeds).

Why? In an interview earlier this year, Intel chief wireless technologist Ken Stewart explained that the upstream component of the network was never the

biggest priority when LTE standards because the use cases the industry envisioned were things like video and app downloads. But as we move toward cloud services, video chat and many more applications that require symmetric bandwidth, the uplink has taken on new importance, Stewart said.

Consequently, the radio chipmakers are looking to leap over several iterations of the LTE standard to get to devices that have beefier uplink capabilities. The chip Qualcomm just announced — in standards-speak — supports category 10 LTE, which means it can use an LTE-Advanced technique called carrier aggregation to send data to the tower over two separate transmissions on different frequencies.

We're already starting to see carrier aggregation used in the downlink in Asia and Europe (and we'll soon see it here in the U.S.). As the standards progress, carrier aggregation will get more sophisticated. Category 10 devices will be able to bond three downlink channels together as well as two uplink channels. Eventually we'll arrive at a point at which a smartphone or tablet can simultaneously send and receive over every frequency a carrier has access to, giving us some truly impressive bandwidths.

https://gigaom.com/2014/11/20/the-next-generation-of-lte-chips-are-all-about-the-upload/

以　上