## QUALCOMM SNAPDRAGON 820 MOBILE PROCESSOR

Designed to deliver high performance, rich connectivity and deeply immersive user experiences for premium mobile devices.



**PURPOSE-BUILT TO DELIVER IMMERSIVE AND MORE INTUITIVE EXPERIENCES**, the Qualcomm® Snapdragon™ 820 processor has been further optimized and enhanced for high performance and long battery life plus rich connectivity for fast, reliable network access that is designed to deliver a full day of dependable service with features and innovation that define a premium mobile experience.



## **IMMERSIVE & INTELLIGENT**

The Snapdragon 820's heterogeneous architecture enables the GPU, ISP and DSP to work together seamlessly alongside video, display and audio processors to create a new level of user immersion.

- The Adreno GPU, Qualcomm Spectra ISP, Hexagon DSP and VPU/DPU all benefit from heterogeneous computing to improve quality, enhance editing and speed rendering
- 3D positional audio with low latency, Hi-Fi surround sound with ANC, and Fluence™ noise filtering provide enhanced audio for virtual reality and gaming
- Qualcomm® TruPalette™ display color enhancements and Qualcomm® EcoPix™ compression features enhance visual quality while simultaneously boosting performance and reducing power



The Snapdragon 820 Qualcomm® Kryo™ CPU is a return to a complete custom processor, tightly integrated for peak performance and optimized for mobile.

- Qualcomm® Kryo™ CPU delivers up to 2X performance and 2X power efficiency, as compared to the previous generation
- Adreno 530 GPU is designed for up to 40% performance improvements and 40% power reduction, as compared to the previous generations
- Hexagon 680 DSP offers substantially improved integration with Hexagon Vector eXtensions for heterogeneous compute and Snapdragon Sensor Core for always-on application support, and delivers up to 3X performance increase and 10X power efficiency



## **COVERED COMPLETELY**

Offering our most advanced connectivity features available, Snapdragon 820 allows users to connect seamlessly virtually anywhere, so they can take their experiences with them wherever they go.

- Cat 12/13 LTE supports download speeds of up to 600Mbps
- 11ac 2x2 MU-MIMO and 11ad support Wi-Fi download speeds of up to 4.6Gbps
- Snapdragon 820 even offers LTE/Wi-Fi convergence allowing users to combine services and connectivity, improving quality, speeds and reliability