QUALCOMM® SNAPDRAGON™

808

PROCESSOR

The "Streamlined Connected Mobile Computing Processor"

The Snapdragon 808 processor offers many advantages:

+ Integrated X10 LTE
  - LTE Advanced with up to 3x20 MHz Carrier Aggregation
  - Support for Category 9 speeds of up to 450 Mbps download, 50 Mbps upload

+ 64-bit CPUs designed to support improved user experiences and optimal power consumption

+ ARMv8-A ISA supports improved instruction set efficiency

+ Dual image signal processors (ISPs) support 1.2GP/s throughput and image sensors up to 21MP/13MP

+ Next-generation Qualcomm® Adreno™ 418 GPU supports advanced graphics and console quality gaming

+ HEVC H.265 Video with hardware decoding for bandwidth and power efficiency

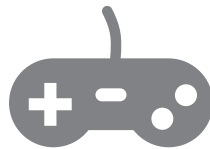+ Highly efficient SoC components tightly integrated and optimized for superior performance and power efficiency

To learn more visit:
snapdragon.com

USER EXPERIENCES SUPPORTED

Capture and share higher quality, sharper images

Dual image signal processors with X10 LTE and 802.11ac MU-MIMO connectivity support quickly sending higher quality photos

Immersive 3D gaming at QHD resolution

Next-generation Adreno 400-series GPU includes premium features like hardware tessellation and FlexRender™ technology

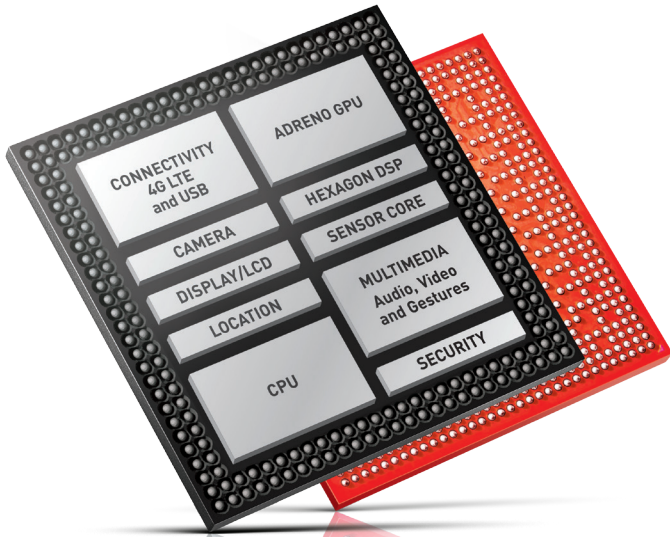### Stream higher quality video using less bandwidth

Support for hardware based HEVC playback at 4K resolution supports power efficient 4K streaming and output to 4K televisions

All day battery life and easier, faster charging

Highly efficient processor integration and support for Qualcomm® Quick Charge™ 2.0 technology and Qualcomm® WiPower™ technology

Qualcomm® snapdragon

When you need premium tier mobile computing capability, the Snapdragon 808 processor offers highly advanced features, performance and power-efficient design.

FEATURES & SPECIFICATIONS[4]

CPU

+ 2x4 64 bit CPU

GPU

+ Adreno 418 GPU: OpenGL ES 3.1[1], OpenCL1.2 Full, DX11.2, content security, plus hardware tessellation, geometry shaders, programmable blending and decreased power consumption[3]

DSP

+ Qualcomm® Hexagon™ QDSP V56 DSP

Display

+ QHD (2560x1440) @60fps primary display + 4K external display with HDMI or wireless 1080p@60fps with Miracast

+ Up to 4K external displays supported

+ 3:1 Frame Buffer Compression ratio

Security

+ Qualcomm® SecureMSM™ technology and Qualcomm® Snapdragon StudioAccess™ content protection

Modem

+ Integrated X10 LTE, with Global Mode supporting LTE FDD, LTE TDD, WCDMA (DC-HSPA+, DC-HSUPA), CDMA1x, EV-DO, TD-SCDMA and GSM/EDGE

+ Support for Cat 9 speeds of up to 450 Mbps with support for up to 3x20 MHz carrier aggregation on LTE FDD and LTE TDD

+ Support for LTE Broadcast, LTE multimode dual SIM (DSDS and DSDA) and VoLTE with HD Voice and SRVCC

RF

+ 4th gen power efficient LTE multimode transceiver (WTR3925) with Qualcomm Technologies, Inc.'s integrated and system optimized Qualcomm RF360™ front end solution for world mode bands and low power

Sensor Core

+ Supports more accurate, low-power, always on sensors

Memory

+ LPDDR3 2x32@933MHz

+ eMMC 5.0

Multimedia

+ Hardware HEVC decode and software encode

+ Next Gen codec (WCD9330) support for Low Power Snapdragon Voice Activation

+ 11.1 surround sound with Dolby and DTS

Camera

+ Combined dual ISPs can support 1.2GP/s throughput and image sensors up to 21MP/8MP

Connectivity

+ Qualcomm® VIVE™ 2-stream 802.11n/ac technology with Multi-user MIMO technology

+ Qualcomm® IZat™ location services Gen8C

+ USB 3.0/2.0

+ BT4.1