

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 dual ARM® Cortex®-A57 and quad Cortex®-A53 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

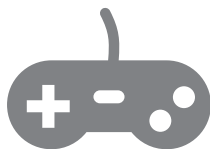
To learn more visit:  
[snapdragon.com](http://snapdragon.com)

## 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

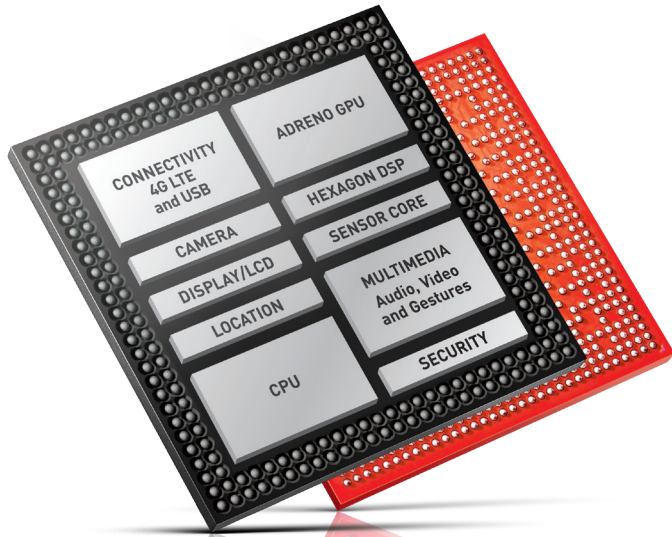
Support for hardware based HEVC playback at 4K resolution supports power efficient 4K streaming and output to 4K televisions



### 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<sup>4</sup>

### CPU

- + Dual ARM® Cortex®-A57 and quad Cortex-A53 cores with 64-bit processing and ARMv8-A ISA support

### GPU

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

### 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



<sup>1</sup> Product is based on a published Khronos specification and is expected to pass the Khronos Conformance Testing Process when available. Current conformance status can be found at [www.khronos.org/conformance](http://www.khronos.org/conformance).

<sup>3</sup> As compared to its predecessor, the Adreno 420 GPU in the Snapdragon 805 processor

<sup>4</sup> Certain optional features available subject to Carrier and OEM selection for an additional fee