

QUALCOMM® SNAPDRAGON™ 805 PROCESSOR

The Snapdragon 805 “Ultra HD” processor is the first mobile processor to enable a truly comprehensive Ultra HD (4K) solution, bringing the ultimate in high-resolution mobile video, imaging and gaming to smartphones and tablets.

BREAKTHROUGH USER EXPERIENCES

Enjoy Ultra HD movies, photos and graphics, right on your mobile device and on your Ultra HD TV



- + The Snapdragon 805 processor is the first mobile processor to support on-device Ultra HD resolution display, enabling Ultra HD user interface, imaging, video capture and playback on Ultra HD-capable devices
- + Ultra HD on-device display concurrent with Ultra HD output to HDTV
- + Featuring advanced display capabilities like sunlight readability and prosumer level color controls

Record and play back Ultra HD video content on your smartphone or tablet or via your Ultra HD TV



- + Featuring Hollywood Quality Video™ (HQV) advanced post-processing for enhanced video
- + First mobile SoC to deliver native HEVC (H.265) decode for extremely low power HD video playback
- + Optimized 2-stream 802.11ac for wireless Ultra HD video streaming and faster media downloads

Enjoy smooth, sharp UIs and 3D images for gaming at up to Ultra HD resolution



- + First Ultra HD gaming with the Qualcomm® Adreno™ 420 GPU
- + Support for OpenGL ES 2.0 and 3.0, OpenCL
- + GPU acceleration of RenderScript Compute
- + Support for hardware tessellation and geometry shading extensions for Android OS

Shoot and edit sharper, higher quality photos, even in low light conditions

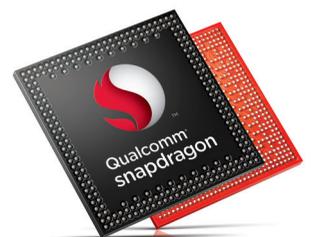


- + First announced 1GPixel/s (Giga-pixel per second) ISP (image signal processor) packs a large increase in ISP and CPP (camera postprocessor) speed and throughput
- + Mobile industry's first dual ISP to support resolutions up to 42 megapixels
- + First mobile processor to support four cameras
- + First mobile processor to offer pre-frame control
- + FastCV™ for accelerated computer vision

The highest performance Snapdragon processor to date makes multi-tasking a breeze



- + Quad core Krait 450 CPU at up to 2.7 GHz for advanced multi-tasking and multithreaded application support
- + Updated Adreno 420 GPU delivers up to 40% increase in graphics and compute performance¹
- + Qualcomm® Hexagon™ DSP provides low-power co-processing as part of Qualcomm Technologies' heterogeneous compute architecture
- + 2x the memory bandwidth of its predecessor, and support for high speed LP-DDR3 memory for high performance and low latency



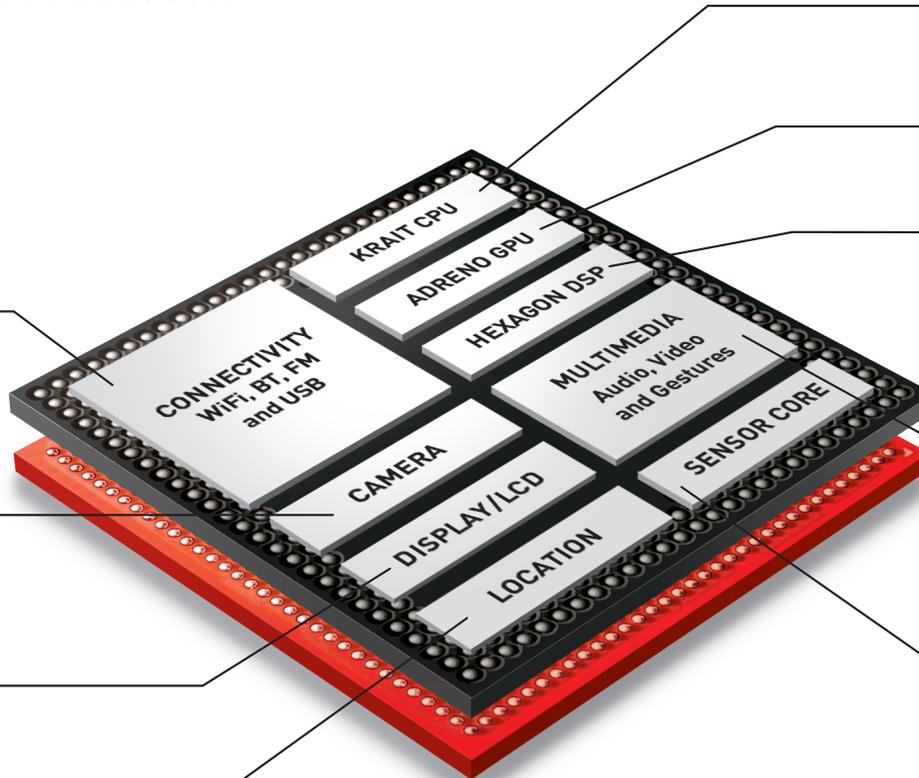
SNAPDRAGON 805 PROCESSOR

Stay connected and stream large files fast with industry leading connectivity, including the world's most advanced 4G LTE and Qualcomm® VIVE™ 2-stream 802.11ac Wi-Fi

Capture sharper photos, even in low light, with the mobile industry's first dual ISP

Enjoy Ultra HD resolution content on Ultra HD-capable mobile devices and Ultra HD TVs with the Snapdragon Display Processor

Find your way outdoors and indoors with Qualcomm® IZat™ GNSS with support for GPS, Glonass and BeiDou constellations



Faster performance and more multitasking with Krait 450 CPU at up to 2.7 GHz

Console quality gaming with new generation Adreno 420 GPU

More power-efficient apps and system processing with the Hexagon DSP

Capture and play back Ultra HD video and enjoy 7.1 surround sound on the go or at home with advanced video and audio engines

Get more use and greater accuracy from sensor-intensive apps with the dedicated Snapdragon Sensor Engine

SPECIFICATIONS

System

- + 28nm HPM quad core Krait 450 CPU at up to 2.7GHz per core for advanced multitasking and multithreaded application support
- + New generation Adreno 420 GPU delivers up to 40% increase in graphics and compute performance¹
- + Hexagon DSP delivers low-power offloading as part of Qualcomm Technologies' heterogeneous compute architecture
- + 2x the memory bandwidth of its Snapdragon predecessors, support for high speed LP-DDR3 memory for high performance and low latency

Connectivity

- + CAT6 (up to 300Mbps) modem support²
- + USB 3.0
- + Bluetooth (BT) 4.1 + Integrated digital core
- + VIVE 2-stream 802.11ac via QCA6174 for faster media streaming and downloads
- + IZat location with support for GPS, Glonass and BeiDou constellations

To learn more visit snapdragon.com or mydragonboard.org

¹ Compared to its predecessor, the Adreno 330 GPU in the Snapdragon 800 processor

² Available only when paired with Gobi 9X35 modem

³ As compared to devices without fast charge technology

Multimedia

- + Video: Support for Ultra HD video capture & playback, support for Hollywood quality video (HQV), native HEVC (H.265) playback
- + Camera: ~1GPixel/s dual ISP with temporal noise reduction & hardware post processing
- + Display: Enabling 4096x2160 primary DSI display + concurrent 4Kx2K@24Hz external
- + Audio: Support for HD multichannel sound with DTS-HD and Dolby Digital Plus

Power Management

- + Energy efficient High Performance for Mobile (HPM) technology
- + aSMP dynamic CPU power control for sustained peak performance
- + Qualcomm® Quick Charge™ 2.0 integrated for up to 75% faster battery charging³

Qualcomm®
snapdragon 

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