

QUALCOMM®
SNAPDRAGON™

805

PROCESSOR

The “4K Ultra HD Processor”

The Snapdragon 805 processor offers many advantages:

- + 4G LTE Advanced Category 6 World Mode modem with speeds of up to 300 Mbps¹
- + Support for LTE-Broadcast, and LTE multimode dual SIM (DSDS and DSDA)¹
- + Fast performance and more multitasking with quad-core Qualcomm® Krait™ 450 CPU at up to 2.7 GHz per core
- + 4K Ultra HD video with HEVC (H.265) playback and H.264 capture for bandwidth and power efficiency
- + Dual image signal processors (ISPs) support 1GP/s throughput and image sensors up to 55 MP
- + New Qualcomm® Adreno™ 420 GPU delivers up to 40% increase in graphics and compute performance²
- + Tight system integration and optimization for superior performance and power efficiency
- + Access to more of the latest, high-resolution movies with Qualcomm® Snapdragon StudioAccess™ technology

To learn more visit:

snapdragon.com or mydragonboard.org

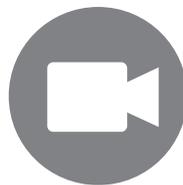
¹ When paired with Qualcomm® Gobi™ 3rd or 4th generation LTE modem
² As compared to its predecessor, the Adreno 330 GPU in the Snapdragon 800 processor

USER EXPERIENCES SUPPORTED



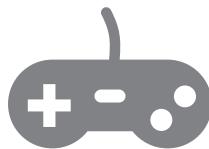
First mobile processor to support 4K on-device display

4K Ultra HD on-device display concurrent with 4K Ultra HD output to HDTV



Capture and playback 4K video on-the-go

Featuring Hollywood Quality Video™ (HQV) advanced post-processing for enhanced video



Console-quality 3D gaming on your device & on your TV

New Adreno 420 GPU is designed to deliver eye-popping graphics virtually everywhere you are



Shoot and edit sharp photos, even in low light

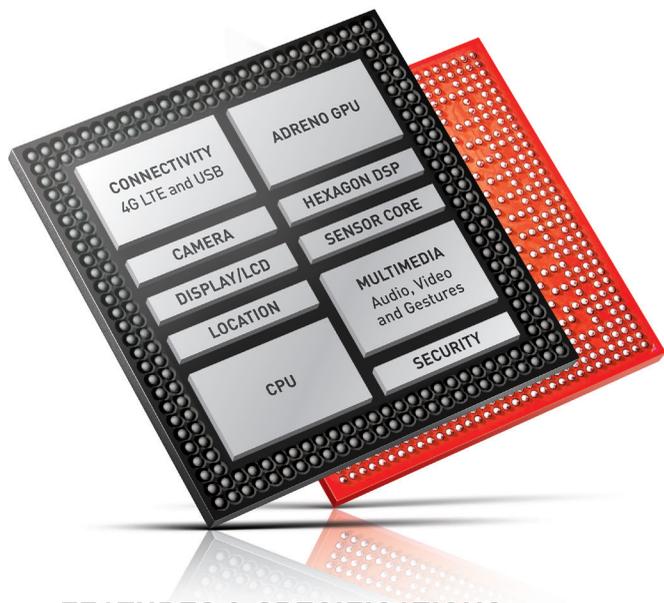
First announced 1GPixel/sec ISP delivers higher speed and throughput



Access more of the latest high-resolution movies

Integrated Qualcomm® SecureMSM™ technology and Snapdragon StudioAccess technologies

Qualcomm®
snapdragon 



When you need premium tier mobile computing with full 4K capabilities, the Snapdragon 805 processor offers the required performance, features and power-efficient design.

FEATURES & SPECIFICATIONS

CPU

- + 28nm HPM quad-core Krait 450 CPU at up to 2.7GHz per core

GPU

- + Adreno 420 GPU: OpenGL ES 3.1, OpenCL 1.2 Full Profile, DX11.2, content security, plus hardware tessellation, geometry shaders, programmable blending and decreased power consumption²

DSP

- + Qualcomm® Hexagon™ DSP V50

Display

- + Enabling 4096x2160 primary DSI display + concurrent 4Kx2K@24Hz external with HDMI 1.4a or wireless 1080p@30fps with Miracast
- + Display Frame Buffer Compression

Memory

- + LPDDR3 2x64@800MHz
- + eMMC 5.0 ratio

Modem

- + 4G LTE Advanced World Mode, supporting LTE FDD, LTE TDD, WCDMA (DC-HSPA+, DC-HSUPA), CDMA1x, EV-DO Rev. B, TD-SCDMA and GSM/EDGE¹
- + Cat 6 speeds of up to 300 Mbps¹
- + LTE-Broadcast, and LTE multimode dual SIM (DSDS and DSDA)¹

RF

- + 4th gen power efficient LTE multimode transceiver (WTR3925) with Qualcomm Technologies' system optimized Qualcomm RF360™ front end solution for world mode bands and lower power¹

Sensor Core

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

Security

- + SecureMSM and Snapdragon StudioAccess technologies

Multimedia

- + 4K@30fps, 1080p@120fps
- + Hardware HEVC decode, H.264 encode
- + Hardware-based Hollywood Quality Video (HQV)
- + DASH support
- + Hi-Fi audio with 24bit/192kHz playback support
- + Snapdragon Voice Activation tool
- + 11.1 surround sound with Dolby and DTS

Camera

- + Dual image signal processors (ISPs) support -1GP/s throughput and image sensors up to 55 MP

Connectivity

- + Qualcomm® VIVE™ 2-stream 802.11n/ac with MU-MIMO
- + Qualcomm® IZat™ location services Gen8B
- + USB 3.0/2.0
- + BT4.1

¹ When paired with Qualcomm® Gobi™ 3rd or 4th generation LTE modem

² As compared to its predecessor, the Adreno 330 GPU in the Snapdragon 800 processor