

QUALCOMM®
SNAPDRAGON™

616

PROCESSOR

First Commercial 64-bit Dual Quad-core Chipset with Integrated X5 LTE

The Snapdragon 616 processor offers many advantages:

- + 64-bit processing
- + Integrated X5 LTE
 - Support for Category 4 speeds up to 150 Mbps download, and up to 50 Mbps upload
- + Support for LTE dual SIM, dual standby (DSDS) and Qualcomm® RF360™ solution

- + Software and pin compatibility with the Snapdragon 410 processor
- + Integrated Qualcomm® Adreno™ 405 GPU brings premium tier graphics quality to the Snapdragon high tier
- + HEVC H.265 hardware decoding for bandwidth and power efficiency
- + High-performance ISP (image signal processor) offers support for up to 21MP image sensors

To learn more visit:

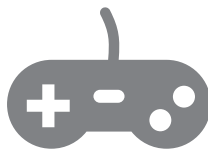
snapdragon.com or mydragonboard.org

USER EXPERIENCES SUPPORTED



Capture and edit HD 1080p video more efficiently

Multi-core processing and advanced video codec offer high-res video capturing and editing using less battery power



Surprisingly realistic graphics and gaming

Integrated Adreno 405 GPU brings premium tier graphics quality and capabilities to the Snapdragon high tier



Stay connected and get faster downloads

Integrated X5 LTE with support for Cat 4 speeds up to 150 Mbps download, and up to 50 Mbps upload



Capture and send sharp camera images quickly

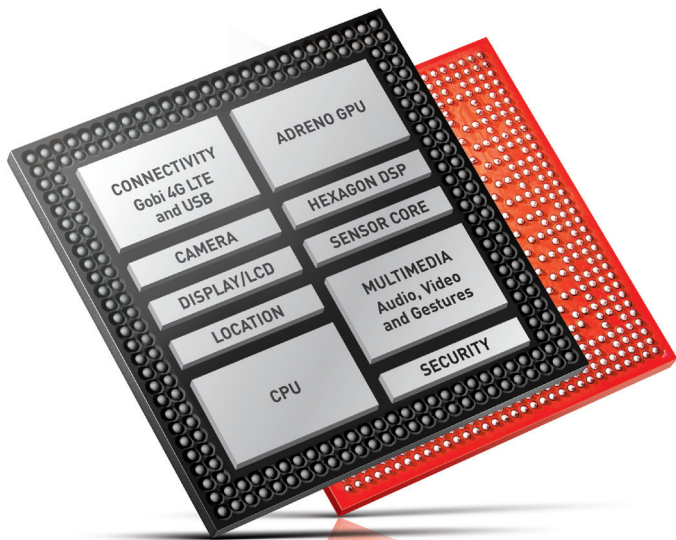
Support for up to 21 megapixel photos and super-fast connectivity, from 4G LTE to WiFi



Efficient, high-quality video streaming

Embedded HEVC H.265 hardware decoder and integrated Qualcomm® VIVE™ 802.11ac WiFi and Bluetooth 4.0 solutions

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The Snapdragon 616 processor sets the standard for high-tier mobile device design with the mobile industry's first dual quad-core 64 bit capable CPU architecture with integrated X5 LTE.

FEATURES & SPECIFICATIONS

CPU

- + 4 Performance cores, up to 1.7 GHz + 4 Efficiency cores, up to 1.2GHz

GPU

- + Adreno 405 GPU: OpenGL ES 3.1, DirectX 11.2, OpenCL Full Profile, plus hardware tessellation and geometry shading

DSP

- + Qualcomm® Hexagon™ V50 DSP

Display

- + Full HD@60fps primary display
- + Full HD@60fps external display, wireless 1080p@60fps with Miracast
- + 3:1 Frame Buffer Compression ratio

Memory

- + Single channel LPDDR3 800MHz
- + eMMC 4.51 ratio

Camera

- + ISP can support up to 600MP/sec throughput and image sensors up to 21MP

Modem

- + Integrated X5 LTE Global Mode modem, supporting LTE FDD, LTE TDD, WCDMA (3C-HSDPA, DC-HSUPA), CDMA1x, EV-DO Rev. B, TD-SCDMA and GSM/EDGE
- + Cat 4 LTE download speeds up to 150 Mbps, and upload speeds up to 50Mbps
- + Support for next-generation calling and messaging, including VoLTE with SRVCC, HD voice, native video calling, Wi-Fi calling with call continuity to LTE, and advanced messaging with Rich Communication Service (RCS)
- + LTE Broadcast and LTE multimode dual SIM, dual standby (DSDS).

RF

- + 3rd gen power efficient LTE multimode transceiver with Qualcomm Technologies' integrated and system optimized Qualcomm® RF360 front end solution for 7-mode bands, lower power and PCB reduction

Security

- + Qualcomm® SecureMSM™ foundation
- + Qualcomm® Snapdragon StudioAccess™ technology

Multimedia

- + 1080p@60fps playback, 1080p@30fps capture
- + Hardware HEVC H.265 decode
- + DASH support
- + Support for Low Power Snapdragon Voice Activation
- + 5.1 surround sound with Dolby and DTS

Connectivity

- + VIVE 1-stream 802.11n/ac
- + Qualcomm® IZat™ location services Gen8C
- + USB 2.0
- + Bluetooth Smart v4.0



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