

QUALCOMM®  
SNAPDRAGON™

610

PROCESSOR

## The “64-bit Connected Multimedia” Processor

**The Snapdragon 610 processor offers many advantages:**

- + 64-bit processing
- + Quad 1.7GHz ARM® Cortex™ A53 CPU
- + Integrated Qualcomm® Gobi 4G LTE modem, supporting Cat 4 data speeds
- + Support for LTE-Broadcast, LTE multimode multi-SIM and Qualcomm RF360™ front end solution
- + Integrated 3G technologies, including HSPA+ (up to 42Mbps), CDMA, and TD-SCDMA
- + 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
- + Tight system integration and optimization for superior performance and power efficiency

**To learn more visit:**

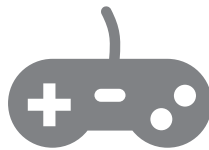
[snapdragon.com](http://snapdragon.com) or [mydragonboard.org](http://mydragonboard.org)

## 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 Gobi 4G LTE and Cat 4 allow download speeds of up to 150 Mbps



### Capture and send sharp camera images quickly

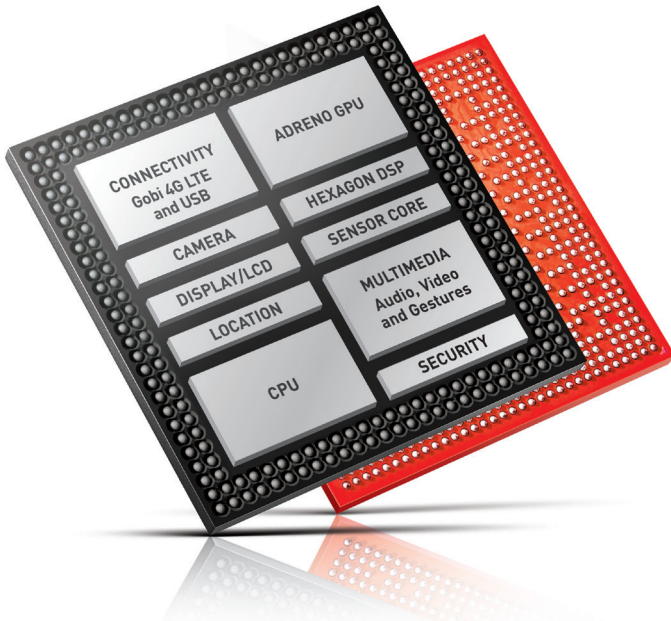
Support for up to 21 megapixel photos and super-fast connectivity, from 4G LTE to WiFi



### 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 610 processor raises the bar for high-tier mobile device design with 64-bit capable quad-core CPU architecture, integrated 4G LTE and advanced multimedia capabilities.

## FEATURES & SPECIFICATIONS

### CPU

- + Quad 1.7GHz ARM® Cortex™ A53 CPU

### GPU

- + Adreno 405 GPU: OpenGL ES 3.0, 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

### Modem

- + Integrated Gobi 4G LTE World Mode, supporting LTE FDD, LTE TDD, WCDMA (DC-HSPA+, DC-HSUPA), CDMA1x, EV-DO Rev. B, TD-SCDMA and GSM/EDGE
- + Cat 4 speeds of up to 150 Mbps
- + LTE-Broadcast and LTE multimode multi-SIM (TSTS, DSDA and DSDS)

### RF

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

### Security

- + Qualcomm® Snapdragon StudioAccess™ technology and SecureMSM™ digital rights management portal

### 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

### Camera

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

### Connectivity

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

