QUALCOMM® SNAPDRAGON™ 652 PROCESSOR

Redefining the Snapdragon 600 tier with better performance, multimedia, gaming and connectivity

The Snapdragon 652 processor offers many advantages:

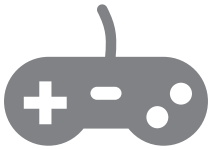
+ 4K video capture and playback
+ 64-bit quad ARM® Cortex™-A72 CPU and quad Cortex-A53 CPU
+ Integrated X8 LTE
  - LTE Advanced Carrier Aggregation up to 2x20 MHz in the downlink and uplink
  - Cat 7 with support for peak speeds of 300 Mbps download/100 Mbps upload
+ Next generation Qualcomm® Adreno™ 510 GPU makes high-tier graphics and gaming more immersive than ever
+ Quad HD (2K) displays and wireless streaming full HD
+ Dual ISP (image signal processor) offers support for up to 21MP zero shutter lag (ZSL) photos at 24fps
+ Tight system integration and optimization for superior performance and power efficiency

To learn more visit:
snapdragon.com or **mydragonboard.org**

USER EXPERIENCES SUPPORTED

Shoot and play back 4K Ultra HD video

Bringing the most advanced video capabilities from the Snapdragon premium tier to the high tier



Play immersive 3D games at home and on the go

Next generation Adreno 510 GPU provides the efficient processing power needed for amazing visual detail and longer battery life

Stay connected and get faster downloads

Make better use of your time with X8 LTE with data speeds of up to 300 Mbps download/100 Mbps upload

Capture and send sharp camera images quickly

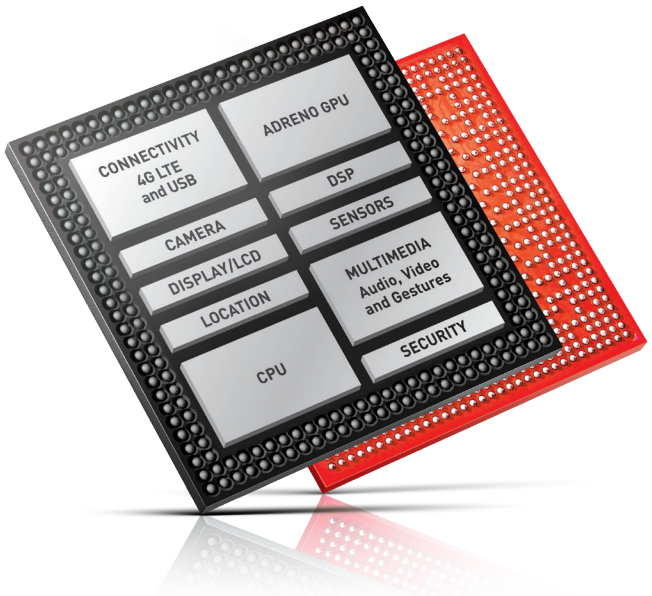
Support for up to 21 megapixel ZSL photo capture @ 24fps and super-fast connectivity, from 4G LTE to 802.11ac WiFi

Efficient, high-quality video streaming

Embedded HEVC H.265 hardware decoder and integrated Qualcomm® VIVE™ 802.11ac WiFi and Bluetooth 4.1 solutions

Qualcomm® snapdragon™

Qualcomm Snapdragon and Qualcomm Adreno are products of Qualcomm Technologies, Inc. Qualcomm VIVE is a product of Qualcomm Atheros, Inc.



The Snapdragon 652 processor integrates superior user experiences for high-tier mobile devices, while maintaining industry-leading battery performance.

FEATURES & SPECIFICATIONS[1]

CPU

+ Quad 1.8GHz ARM® Cortex™ A72 + Quad 1.2GHz Cortex A53 CPU

GPU

+ Next generation Adreno 510 GPU with support for the latest graphics APIs, hardware tessellation and geometry shading

DSP

+ Qualcomm® Hexagon™ V56 DSP

Memory

+ Dual channel LPDDR3 (933MHz)

Security

+ Robust Security with Qualcomm® Security Solutions, including:
+ Qualcomm® Snapdragon Studio Access™ technology

  Content Protection
+ Qualcomm® SafeSwitch™ Technology
+ All based in proven Qualcomm® SecureMSM™ hardware and software foundation

Modem

+ Integrated X8 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 7 speeds of up to 300 Mbps down/100 Mbps up via 2x20 MHz carrier aggregation in the downlink and uplink on LTE FDD and LTE TDD
+ Qualcomm RF360™ front end solution
+ Support for LTE Broadcast, LTE multimode dual SIM and VoLTE with HD Voice and SRVCC

Connectivity

+ Qualcomm® VIVE™ 1-stream 802.11ac
+ Qualcomm® IZat™ location services
+ USB 2.0
+ Bluetooth Smart 4.1

Fast Charging

+ Qualcomm® Quick Charge™ 3.0

Display

+ Primary Quad HD 2560x1600
+ Miracast™ support for up to 1080p wireless display

Video

+ 4K@30fps capture, 1080p@120fps capture
+ Hardware HEVC (H.265) encode and decode

Audio

+ Qualcomm® Immersive Audio
+ Hi-Fi 192kHz/24bit music playback
+ Low power Snapdragon Voice Activation

Camera

+ Dual ISPs can support up to 21MP ZSL @ 24fps and 930MP/sec throughput
+ Local tone mapping
+ Enhanced AF

Qualcomm® snapdragon™

[1]Certain optional features available subject to Carrier and OEM selection for an additional fee.

Qualcomm Hexagon, Qualcomm Security Solutions, Qualcomm Snapdragon Studio Access, Qualcomm SafeSwitch, Qualcomm SecureMSM, Qualcomm RF360, Qualcomm Quick Charge are products of Qualcomm Technologies, Inc. Qualcomm VIVE and Qualcomm IZat are products of Qualcomm Atheros, Inc.

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