

QUALCOMM®
SNAPDRAGON™

835

PROCESSOR

Snapdragon 835 mobile platform advancements:

- + Snapdragon X16 LTE modem: leading mobile connectivity with LTE download speeds up to 1 Gbps, multi-gigabit 802.11ad, and integrated 2x2 802.11ac Wi-Fi with MU-MIMO
- + Qualcomm® Quick Charge™ 4 technology: 20% faster, 30% more efficient than previous generation, charge from zero to 50% in 15 minutes²
- + Qualcomm® Adreno™ 540 Visual Processing Subsystem: Advanced 3-D graphics rendering and up to 60X more colors help deliver life-like visuals for the most immersive experiences¹
- + Qualcomm Spectra™ 180 Camera ISP: Dual 14-bit ISPs support up to 32MP single or dual 16MP cameras for the ultimate photography and videography experience
- + Qualcomm® Hexagon™ 682 DSP: Support for latest Machine Learning frameworks and image processing. Includes Hexagon Vector eXtensions and Qualcomm All-Ways Aware™ technology utilizing connectivity and sensors
- + Qualcomm® Kryo™ 280 CPU: Manufactured in 10nm FinFET to deliver our most power-efficient architecture to date

To learn more visit: snapdragon.com

FEATURING THE LATEST IN MOBILE TECHNOLOGY

More power to power users



The Snapdragon 835 processor is 35% smaller and uses 25% less power than previous designs, providing maximum performance, long battery life and super fast charging for today's power users.

Putting the “real” in virtual reality



Experience superior virtual and augmented reality with immersive visuals, heightened 3D sounds, and intuitive interactions—with less of the lag or latency that causes motion sickness.

Capture the world as you see it



With support for optical zoom for smooth close-ups, fast autofocus and cutting edge lowlight technology, you can now capture life almost as accurately and quickly as your eyes do.

Fiber-optic Internet speeds, wirelessly



Stream highly-immersive VR videos, get lightning-fast access to your files in the cloud, and enjoy the convenience of Instant Apps.

Comprehensive security from the inside out

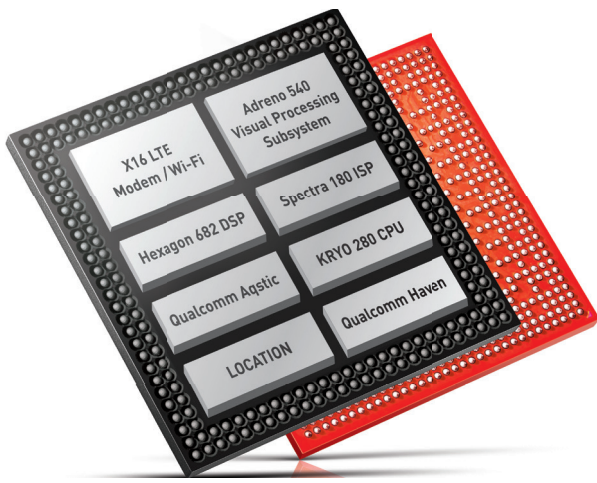


Help protect yourself with authentication technologies such as fingerprint, iris scanning, facial recognition and voice print, plus other security features that are designed to safeguard your personal information.

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snapdragon 

¹As compared to the Adreno 530 GPU in the Snapdragon 820 processor.

²Quick Charge is designed to increase the battery charge of a device by up to 50% in 15 minutes. Actual results may vary depending on device design.



Snapdragon 835 processors. Supporting a cutting-edge connected, immersive and intelligent all-day experience.

FEATURES & SPECIFICATIONS³

GPU

- + Adreno 540 GPU
- + OpenGL ES 3.2, OpenCL 2.0 full, Vulkan, DX12

DSP

- + Hexagon 682 DSP with Hexagon Vector eXTensions and Qualcomm All-Ways Aware technology
- + TensorFlow and Halide support
- + Snapdragon Neural Processing Engine (NPE) SDK

Display

- + UltraHD Premium-ready
- + 4K Ultra HD, 60 FPS
- + 10-bit color depth
- + DisplayPort, HDMI, and USB Type-C support

Memory

- + LPDDR4x, dual channel
- + UFS2.1 Gear3 2L
- + SD 3.0 (UHS-I)

CPU

- + 8x Kryo 280 CPU
- + Up to 2.45 GHz
- + 10nm FinFET process technology

Camera

- + Qualcomm Spectra 180 ISP
- + Dual 14-bit ISPs
- + Up to 16 MP dual camera
- + Up to 32 MP single camera
- + Qualcomm® Clear Sight™ camera features, Hybrid Autofocus, Optical Zoom, hardware-accelerated Face Detection, HDR Video Recording

Video

- + Up to 4K UltraHD capture @ 30 fps
- + Up to 4K UltraHD playback @ 60 fps
- + H.264 (AVC), H.265 (HEVC), VP9

Audio

- + Qualcomm Aqstic™ audio codec and speaker amplifier
- + Qualcomm® aptX™ audio playback support: aptX Classic, aptX HD

Charging

- + Quick Charge 4 technology
- + Qualcomm® WiPower™ technology

Connectivity

- + Qualcomm® Wi-Fi
- + 802.11ad Multi-gigabit
- + Integrated 802.11ac 2x2 with MU-MIMO
- + 2.4 GHz, 5 GHz and 60 GHz
- + Bluetooth 5.0

Security

- + Qualcomm® SecureMSM™ technology, Qualcomm Haven™ security suite, Qualcomm® Snapdragon StudioAccess™ content protection

Modem

- + Integrated X16 LTE modem
- + Downlink: LTE Cat 16 up to 1 Gbps, 4x20 MHz carrier aggregation, up to 256-QAM
- + Uplink: LTE Cat 13 up to 150 Mbps, Qualcomm® Snapdragon™ Upload+ (2x20 MHz carrier aggregation, up to 64-QAM, uplink data compression)
- + Snapdragon All Mode with support for all seven cellular modes plus LTE-U and LAA
- + Support for VoLTE with SRVCC to 3G and 2G, HD and Ultra HD Voice (EVS), CSFB to 3G and 2G
- + Support for Qualcomm® TruSignal™ with carrier aggregation

Location

- + Qualcomm® Location
- + Supports GPS, Glonass, BeiDou, Galileo, and QZSS systems content protection



³ Certain optional features available subject to Carrier and OEM selection for an additional fee.

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