SNAPDRAGON® 782G MOBILE PLATFORM

The Snapdragon 782G Mobile Platform strikes the perfect balance of amplified performance and captivating experience—with on-device boosts that fuel effortless AI, triple-threat capture, and smooth connectivity.

Amplified performance

Power and efficiency take flight with our enhanced Qualcomm® Kryo™ CPU and Qualcomm® Adreno™ GPU. Immerse yourself in truly global 5G gaming, vivid HDR entertainment, and crystal-clear calls. Plus, get back to the action in a flash with Qualcomm® Quick Charge™ 4+ Technology, fueling devices from 0-50% in a mere 15 minutes.

- Kryo CPU delivers over 5% improved performance*
- Adreno GPU offers up to 10% improved performance*
- Select Snapdragon Elite Gaming™ Features include Variable Rate Shading and Qualcomm® Game Quick Touch for full immersion and real-time responsiveness

Effortless AI

Harnessing our Qualcomm® AI Engine, infuse intelligence into photography, communication, and beyond. Capture intuitively with best-in-class AI camera features, including low light video, smooth zoom, and autofocus. Video chat with colleagues in any environment with intelligent audio background blur, plus automatic mic switching and volume adjustment—so you're always seen and heard clearly.

- Always-aware Qualcomm® Sensing Hub processes at <1 mA for increased efficiency and intelligent features that maximize productivity
- Qualcomm® Hexagon™ Processor packs fused AI accelerator architecture for faster computing without compromising battery life
- Integrated Audio Analytics with contextual awareness of your surroundings for optimal sound quality

Triple-threat capture

Chronicle life exactly as it unfolds with our Qualcomm Spectra™ ISP, packing 14-bit triple ISPs for concurrent capture from three cameras at astonishing gigapixel speeds. Photos brim with vibrant detail with support for 200 MP photo capture, while 4K HDR video astounds with incredible contrast, peak brightness, and deep blacks.

- Capture at up to 2 Gigapixels per Second
- Up to 22 MP triple camera @ 30 FPS with Zero Shutter Lag
- 4K HDR Video Capture @ 30 FPS
- Rec. 2020 color gamut photo and video capture

Smooth connectivity

Lose yourself in low-latency gaming, streaming, video calling, and more—no matter where you are. The Snapdragon® X53 5G Modem-RF System delivers lightning-fast, truly global 5G in both remote and urban areas for lag-free experiences on-the-go. Additionally, the Qualcomm® FastConnect™ 6700 System offers industry-leading Wi-Fi 6/6E, supporting multiple devices on one network with impressive multi-gig speeds.

- Support for mmWave and Sub-6 GHz frequencies, NSA and SA modes, plus TDD, FDD, and DSS
- Up to 2.9 Gbps Wi-Fi speeds with tri-band 4K QAM & 160 MHz channel support, as well as increased capacity over the 6 GHz spectrum

SPECIFICATIONS & FEATURES

Artificial Intelligence

Qualcomm® AI Engine

Qualcomm® Adreno™ GPU

Qualcomm® Kryo™CPU

Qualcomm® Hexagon™ Processor

- Fused AI Accelerator architecture
- Hexagon Tensor Accelerator
- Hexagon Vector eXtensions
- Hexagon Scalar Accelerator

Qualcomm® Sensing Hub

Ultra-low power hub for audio, voice, and sensors

Supports AI algorithms at low power

Background processing for sensors, Wi-Fi, Location, Mobile, BLE

Support for fusing contextual data streams, including sensors, audio, and voice

Supports multiple hardware accelerated always-on voice assistants

Multi-mic far-field detection and echo cancellation

5G Modem-RF System

Snapdragon X53 5G Modem-RF System

- 5G mmWave and Sub-6 GHz, standalone (SA) and non-standalone (NSA) modes, FDD, TDD
- Dynamic Spectrum Sharing
- mmWave: 400 MHz, 2x2 MIMO
- Sub-6 GHz: 120 MHz bandwidth, 4x4 MIMO
- Qualcomm® 5G PowerSave
- Qualcomm® Smart Transmit™ technology
- Qualcomm® Wideband Envelope Tracking
- Qualcomm® AI-Enhanced Signal Boost
- Global 5G multi-SIM

Downlink: Up to 3.7 Gbps

Uplink: Up to 1.6 Gbps

Multimode support: 5G NR, LTE including CBRS, WCDMA, HSPA, CDMA 1x, EV-DO, GSM/EDGE

Wi-Fi & Bluetooth®

Qualcomm® FastConnect™ 6700 System

- Generation: Wi-Fi 6/6E
- Wi-Fi Standards: 802.11ax (802.11ac, 802.11a/b/g/n)
- Wi-Fi Spectral Bands: 2.4 GHz, 5 GHz, 6 GHz
- Peak speed: 2.9 Gbps
- Channel Utilization: 20/40/80/160 MHz
- 8-stream sounding (for 8x8 MU-MIMO)
- MIMO Configuration: 2x2 (2-stream)
- MU-MIMO (Uplink & Downlink)
- 4K QAM
- OFDMA (Uplink & Downlink)
- Wi-Fi Security: WPA3-Enterprise, WPA3-Enhanced Open, WPA3 Easy Connect, WPA3-Personal

Integrated Bluetooth

- Bluetooth Version: Bluetooth 5.2
- Bluetooth features: Dual Bluetooth antennas, LE Audio Features (one-to-many broadcast)
- Qualcomm® aptX™ suite
- Bluetooth audio: Snapdragon Sound™ Technology with 24-bit 96-kHz music streaming, Ultra-low latency <90 milliseconds, 32-kHz Super wideband Voice

Camera

Qualcomm Spectra™ Image Signal Processor

- Triple 14-bit ISPs
- Up to 2 Gigapixels per Second
- Up to 22 MP triple camera @ 30 FPS with Zero Shutter Lag and Multi-Frame Noise Reduction
- Up to 36+22 MP dual camera @ 30 FPS with Zero Shutter Lag and Multi-Frame Noise Reduction
- Up to 64 MP single camera @ 30 FPS with Zero Shutter Lag and Multi-Frame Noise Reduction
- Up to 200 MP Photo Capture

Rec. 2020 color gamut photo and video capture

Up to 10-bit color depth photo and video capture

10-bit HDR HEIF photo capture

4K Video Capture + 36 MP Photo

Slow-mo video capture at 720p @ 240 FPS

HEIF: HEIC photo capture, HEVC video capture

Video Capture Formats: HDR10+, HDR10, HLG

4K Video Capture

4K HDR Video Capture with Portrait Mode (Bokeh)

Staggered HDR sensor support

AI-based auto-focus and auto-exposure

Audio

Dedicated HW AI Acceleration for always-on, low-power processing

Qualcomm® AI-based Echo Cancellation and Noise Suppression

Snapdragon® Voice Activation

Snapdragon Sound Technology

- Total Harmonic Distortion + Noise (THD+N),
- Playback: -108dB
- Hi-Fi Audio with up to 384 kHz/32-bit

Qualcomm Aqstic™ smart speaker amplifier

Qualcomm Aqstic™ audio codec

Display

On-Device Display Support

- FHD+ @ 144 Hz

Maximum External Display Support

- Up to 4K @ 60 Hz
- 10-bit color depth, Rec. 2020 color gamut
- HDR10 and HDR10+

CPU

Kryo CPU

- Up to 2.7 GHz
- 64-bit Architecture

Visual Subsystem

Adreno GPU

- API Support: OpenGL® ES 3.2, OpenCL™ 2.0 FP,Vulkan 1.1
- Physically Based Rendering, Variable Rate Shading (VRS)
- HDR gaming (10-bit color depth, Rec. 2020 color gamut)
- Hardware-accelerated H.265 and VP9 decoder
- HDR Playback Codec support for HDR10+, HDR10, HLG

Security

Platform Security Foundations: Secure Boot, Debug Security, HW Crypto Cores, HW/SW Key

Management, HW/SW storage security, Peripherals Security

Trusted Execution Environment and Services

- Qualcomm® Type-1 Hypervisor, Qualcomm
- Trusted Execution Environment (TEE), DSP Secure domain
- Qualcomm® Content Protection (Widevine™ V16),
- Camera Security Framework, Trusted UI Framework

Qualcomm® wireless edge services (WES)

- Chip-to-Cloud services to establish and maintain device trust
- Qualcomm® WES Attestation Service,
- Qualcomm® WES Provisioning Service

Charging

Qualcomm® Quick Charge™ 4+ Technology

Location

GPS, Glonass, BeiDou, Galileo, QZSS, NavIC capable

Dual Frequency Support (L1/L5)

Sidewalk/lane-level Navigation

Sensor-Assisted Positioning

Memory

Support for LP-DDR5 memory up to 3200 MHz

Memory Density: up to 16 GB

General Specifications

Select Snapdragon Elite Gaming Features

6nm Process Technology

USB Version 3.1; USB Type-C Support

Part Number: SM7325-AF