SNAPDRAGON® X75 5G MODEM-RF SYSTEM



Snapdragon® X75 5G Modem-RF System is the world's first modem-RF system ready for 5G Advanced – boosted with AI hardware acceleration and designed to drive the future of 5G in mobile and beyond. Powered by a new modem-to-antenna architecture, new software suite and several world's first features, Snapdragon X75 is built future-ready for breakthrough 5G performance.

Al hardware acceleration for superior 5G performance

Equipped with Qualcomm* 5G AI Processor Gen 2, Snapdragon* X75 is the world's first Modem-RF System with a dedicated AI tensor accelerator. With 2.5X improved AI performance over Gen 1, Snapdragon X75 is designed for superior 5G performance.

5G Advanced-ready with next-gen modem-RF architecture

Snapdragon* X75 5G Modem-RF System is future-ready with an architecture designed to pioneer 5G Advanced in mobile and beyond.

Breakthrough 5G performance with unmatched spectrum flexibility

Snapdragon* X75 5G Modem-RF System further pushes the boundaries of 5G performance and spectrum flexibility with 10-carrier aggregation for mmWave, 5X carrier aggregation for sub-6 bands, and 5G uplink MIMO.



Features

Qualcomm[®] 5G Al Suite Gen 2 includes:

- $\bullet \ \, {\sf Sensor\text{-}modem\text{-}RF} \, {\sf solution} \, {\sf for} \, {\sf mmWave} \, \, {\sf beam} \, {\sf management}$
- · Al-enhanced channel state feedback (CSF)
- · Al-enhanced antenna tuning
- · Al-enhanced GNSS Location Gen 2

Qualcomm[®] 5G AI Processor Gen 2 with dedicated tensor hardware accelerator

Converged mmWave-sub6 Transceiver

3GPP Release 17 and Release 18 support

Qualcomm® QTM565 mmWave module

Qualcomm® Advanced Modem-RF Software Suite includes:

- Qualcomm® Smart Network Selection Gen 2
- Qualcomm® DSDA Gen 2 (Dual Data)
- Advanced Interference Cancelation

Qualcomm[®] 5G PowerSave Gen 4

Qualcomm[®] Smart Transmit[™] Gen 4 technology with Snapdragon[®] Satellite support

Qualcomm® Power RF Efficiency Suite

Qualcomm® RF Downlink Boost

Specifications

5G Chipset: Snapdragon X75 Modem-RF System

5G Spectrum: mmWave-sub6 aggregation, sub-6 carrier aggregation (FDD-TDD, FDD-FDD, TDD-TDD), FDD-TDD support for uplink-CA, Dynamic Spectrum Sharing (DSS)

5G Modes: FDD, TDD, SA (standalone), NSA (non-standalone)

Up to 10CC aggregation in mmWave, up to 5CC aggregation in 5G sub-6GHz

5G Bandwidth up to 1000 MHz

5G Peak Download Speed: 10 Gbps

5G Peak Upload Speed: 3.5 Gbps

Dual-SIM support - Qualcomm® DSDA Gen 2 (Dual Data)

Cellular Technology: 5G NR, LTE, LAA, WCDMA, GSM/ Edge, CBRS, Dynamic Spectrum Sharing (DSS), EN-DC, NR-DC, mmWave, sub-6 GHz

