Snapdragon® X35 5G Modem-RF System is the world’s 1st 5G NR-light modem-RF system, featuring a streamlined design to achieve lower cost, reduced complexity, higher power efficiency, and a smaller form factor, fueling 5G ecosystem expansion to new use cases, from premium wearables to connected industries.

World’s first 5G NR-Light modem-RF
Snapdragon X35 is the world’s first release 17 NR-Light modem, ushering in a new era of 5G and expanding into a wide spectrum of use cases, including smartwatches, AR glasses, entry-level broadband, and more. Striking the ideal balance between robust capability and low complexity, Snapdragon X35 unites power efficiency, advanced performance, and a streamlined footprint—enabling OEMs to create compact devices that harness and expand the 5G ecosystem.

Breakthrough performance at low power consumption
Harnessing impressive battery efficiency, enhanced 5G coverage, and incredible location accuracy, Snapdragon X35 enables compact 5G devices to work longer and from more places across the globe. Plus, boosted uplink speeds with low latency offer real-time experiences in a fast-paced, rapidly changing world.

Bringing 5G to more people, places, and industries
Snapdragon X35 expands the 5G ecosystem by powering new 5G use cases while working seamlessly with existing devices and networks. This optimized design and rapid scaling of 5G services ultimately allows for a faster and more future-proof migration from LTE CAT 4+ devices to a unified 5G network.

Snapdragon® X35 5G MODEM-RF SYSTEM

Features
- 220 Mbps peak DL \ 100 Mbps peak UL
- Multi-Mode NR Sub-6 GHz SA, LTE Cat4
- Support of 20 MHz bandwidth, 1RX/2RX, 1TX in both TDD and FDD bands
- Global support to VoNR and VoLTE
- Support of dual-frequency GNSS (L1+L5)

Advanced Technologies:
- Qualcomm® QET5100 Envelope Tracking
- Qualcomm® Smart Transmit™ Technology
- Qualcomm® 5G Ultra-Low Latency Suite
- Qualcomm® 5G PowerSave Gen 4

Specifications
- 5G Chipset: Snapdragon X35 5G Modem-RF System
- Max. Data rate: DL - 220Mbps, UL - 100Mbps
- Bandwidth FR1: 20MHz and support for BWP =< 20Mhz
- Number of Rx Antennas: 1 or 2
- Number of Tx Antennas: 1
- Band supported: TDD, FDD, and Half Duplex FDD (HD-FDD)
- Mobility: Support of idle and connected mode mobility
- Voice Calling: VoNR \ VoLTE

Modulation
- DL 256 QAM
- UL 64 QAM

Coverage Enhancement
- Support for uplink slot aggregation

Power Saving
- Qualcomm® QET5100 Envelope Tracking
- Qualcomm® Smart Transmit™ Technology
- Qualcomm® 5G PowerSave Gen 4

Coexistence
- Compatible with legacy 5G and 4G networks

©2023 Qualcomm Technologies, Inc. and/or its affiliated companies. All Rights Reserved. Qualcomm and Snapdragon are trademarks or registered trademarks of Qualcomm Incorporated. Other products and brand names may be trademarks or registered trademarks of their respective owners.