

Qualcomm Dragonwing™ Mobile Broadband (MBB) Platform Gen 1



The Dragonwing MBB Platform Gen 1, featuring the Snapdragon® X55 5G Modem-RF, is designed to bring 5G to all connected devices.

Dragonwing MBB Platform Gen 1 features the Snapdragon X55 5G Modem-RF, supporting global spectrum bands and deployment modes. It also delivers Wi-Fi 6 features and Bluetooth® 5.1 technology, enabling OEMs to build versatile 5G devices for mobile hotspots, routers, and connected devices.

The Snapdragon X55 5G Modem-RF supports a wide range of spectrum bands and/or modes: 5G mmWave and Sub-6GHz, standalone and non-standalone modes, TDD and FDD, spectrum sharing, LTE, and legacy modes (3G, 2G). This is designed to enable OEMs to bring blazing-fast, connected devices to global networks in a wide range of form factors.

Features

- Integrated 5G to 2G multi-mode support
- Supports virtually any available spectrum band, mode, or combination
- 5G/4G spectrum sharing
- Enhanced network capacity with full-dimension MIMO (FD-MIMO) support
- Multi-antenna mmWave beamforming architecture support

Related Products

The [Snapdragon X55 5G Modem-RF](#) is a 5G modem with integrated multimode support, designed to deliver breakthrough wireless performance and accelerate global 5G rollout.

To learn more visit: [qualcomm.com](https://www.qualcomm.com)



Materials are subject to change without notice.
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Highlights

UNPRECEDENTED FLEXIBILITY

Native support for 5G mmWave and Sub-6GHz, FDD and TDD, standalone and non-standalone, and 5G/4G spectrum sharing, to allow operators to flexibly maximize spectrum assets to deliver the best possible experience.



COMPREHENSIVE 5G SOLUTION

Paired with Qualcomm Technologies' mmWave antenna module and comprehensive RF front-end portfolio, Snapdragon X55 5G Modem-RF is at the heart of a 5G NR modem-to-antenna solution that allows OEMs to rapidly develop 5G devices for global networks.



UP TO 7.5 GBPS

The Snapdragon X55 5G Modem-RF can provide a blazing-fast connection between the user and the cloud.



Specifications

Modem	• Snapdragon X55 5G Modem-RF
Cellular	• Modem-RF specs: 7x 20MHz carrier aggregation (LTE DL), 200MHz bandwidth (Sub-6GHz), 8 carriers (mmWave), 3x 20MHz carrier aggregation (LTE UL), 800MHz bandwidth (mmWave) • Technology: LTE Broadcast, TD-SCDMA, GSM/EDGE, LAA, 5G NR, 5G/4G spectrum sharing, LTE FDD, SA (standalone), NSA (non-standalone), CDMA 1x, 5G NR TDD, NSA, WCDMA (DC-HSUPA), EV-DO, 5G NR FDD, Sub-6GHz, WCDMA (DB-DC-HSDPA), TDD, LTE TDD support for CBRS, FDD, mmWave, LTE TDD • Features: 3GPP Release 15, 256 QAM Sub-6 • Multi SIM: 5G Dual SIM
Peak 5G DL/UL	• Download: 7.5 Gbps • Upload: 3 Gbps
Wi-Fi/Bluetooth	• Wi-Fi 6-ready • 2x2 MU-MIMO • Peak Wi-Fi DL/UL: 1.8 Gbps / 1.2 Gbps • Bluetooth 5.1