

Qualcomm Dragonwing™

Mobile Broadband (MBB) Platform Gen 2



Dragonwing MBB Gen 2 brings 5G broadband to homes and businesses with unmatched flexibility. Featuring the Snapdragon® X65 5G Modem-RF, it supports 10 Gbps peak speeds, extended-range mmWave, and sub-6GHz with 8 RX antennas. Its Wi-Fi 6 capabilities include advanced MU-MIMO and WPA3 security, making it ideal for mobile hotspots, routers, and other connected device deployments.

The Dragonwing MBB Platform Gen 2 features the Snapdragon X65 5G Modem-RF and enables mobile operators to offer fixed broadband services using existing 5G network infrastructure.

The Snapdragon X65 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.

Related Products

The [Snapdragon X65 5G Modem-RF](#) is a 3GPP Release 16 modem-to-antenna solution, designed with an upgradeable architecture to rapidly commercialize 5G Release 16.

Highlights

MASSIVE CAPACITY

The Dragonwing MBB Platform Gen 2 is designed to deliver unprecedented 10 Gbps peak download speeds to enable new use cases and possibilities.



EXTENDED COVERAGE

This platform features the second-generation, extended-range Qualcomm® QTM547 mmWave antenna module, extended-range and high-power Sub-6GHz support, and Sub-6GHz support with eight receiver (Rx) antennas, which can help network operators expand their coverage across urban, suburban, and rural environments.



SPECTRUM FLEXIBILITY

The Dragonwing MBB Platform Gen 2 extends the flexibility offered to operators to increase attainable 5G fixed internet speeds and improve capacity with available spectrum. It offers advanced spectrum aggregation and dual connectivity capabilities such as mmWave-Sub6 aggregation and unprecedented bandwidth aggregation for downlink and uplink.



TRULY GLOBAL

With its high configurability and global 5G band support, including the n259, n53, and n70, the Dragonwing MBB Platform Gen 2 is a truly global solution that accommodates the requirements of every major region around the world.



Features

- 10 Gigabit 5G
- 4 nm 5G baseband
- Sub-6GHz with 8 receiver antennas support for 5G MBB
- Second-generation, extended-range mmWave antenna module
- Extended-range, high-power Sub-6GHz
- Qualcomm® Dynamic Antenna Steering Technology
- Superior carrier aggregation and dual connectivity support
- Global 5G band support, including the n259 (41GHz), n70, and n53

Specifications

Modem	<ul style="list-style-type: none">▪ Snapdragon X65 5G Modem-RF▪ mmWave: QTM547
Cellular	<ul style="list-style-type: none">▪ Modem-RF specs: 800MHz bandwidth (mmWave), 8 carriers (mmWave), >200MHz▪ Performance Enhancement Technologies: Qualcomm Dynamic Antenna Steering, Dual-layer polarization in downlink and uplink (mmWave), Beam tracking (mmWave), Beam steering (mmWave), Beam forming (mmWave)▪ Technology: LTE Broadcast, TD-SCDMA, Sub-6 carrier aggregation (FDD-FDD), GSM/EDGE, Sub-6 carrier aggregation (TDD-TDD), 5G FDD, 5G NR, LAA, 5G TDD, Sub-6 carrier aggregation (FDD-TDD), SA (standalone), NSA (non-standalone), CDMA 1x, NSA, mmWave-Sub6 aggregation, WCDMA (DC-HSUPA), EV-DO, Sub-6GHz, WCDMA (DB-DC-HSDPA), TDD, LTE, LTE TDD support for CBRS, FDD, mmWave, LTE TDD
Peak 5G DL/UL	<ul style="list-style-type: none">▪ Download: 10 Gbps▪ Upload: 3 Gbps
Wi-Fi/Bluetooth®	<ul style="list-style-type: none">▪ Generation: Wi-Fi 6▪ 8x8 MU-MIMO Sounding▪ Peak Wi-Fi DL/UL: 2.9 Gbps / 2.3 Gbps▪ 160MHz channels, WPA3▪ Bluetooth 5.1

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