Qualcomm Dragonwing™
N6 Platform

Dragonwing N6 Platform is a dual-band, up-to-6-stream, Wi-Fi 6 networking platform to power next generation home networking experiences.

The successor to our groundbreaking mesh networking platforms, Dragonwing N Series Platforms are designed with a novel modular architecture, advanced network packet processing, and Wi-Fi 6 designed to deliver Gigabit-speed wireless performance to virtually every room in the home with devices that fit in the palm of the hand.

Up to 4x4 Wi-Fi 6 configuration in the 5GHz band delivers enhanced performance, range, and/or client count for the Dragonwing N6 Platform.

Plus, advanced Qualcomm® Multi-User Traffic Management technologies balance and support the Wi-Fi connected devices in a modern smart home while high-performance Bluetooth® integration supports seamless onboarding and integration of advanced applications leveraging either connectivity technology.

Ordering Information

Product / Part Number
Dragonwing N6 Platform / IPQ5018

Highlights

HIGH-PERFORMANCE WI-FI 6

Experience up to 6 spatial streams supporting our differentiated Wi-Fi 6 feature portfolio, including Qualcomm Multi-User Traffic Management with algorithmic optimizations leveraging OFDMA in both the uplink and downlink across the 2.4 and 5GHz bands, delivering corner-to-corner gigabit-class connectivity.

ADVANCED INTELLIGENCE

The Dragonwing N6 Platform delivers our signature network intelligence for powerful local computing and connectivity coexistence, centralizing smart home interfaces like voice assistance and emergent technologies like RF sensing to finally deliver a truly immersive smart home experience.

APPLICATION OPTIMIZATION

Utilizing innovative modular platform architecture, this platform is built to be small enough to go unnoticed, scalable in design to deploy densely for every size home, and powerful enough to support the demands of today's smart home network.

Dragonwing N6 Platform

Features

- Qualcomm Multi-User Traffic Management provides advanced scheduling algorithms and buffering with universal uplink data support.

- Qualcomm® Wi-Fi Security Suite offers the most comprehensive WPA3 implementation coupled with state-of-the-art embedded accelerators designed to provide secure transactions across a full range of Wi-Fi data touchpoints.

- Carrier-grade enhancements with open API porting for multi-source development.

- Mesh Wi-Fi options include Qualcomm® Wi-Fi SON, the Wi-Fi Alliance's Wi-Fi CERTIFIED EasyMesh™ standard, and the OpenSync™ open-source software.

- Advanced powerful local computing using dual-core processors paired with powerful network accelerators.

Specifications

CPU	**Cores:** Dual-core
	Clock Speed: Up to 1 GHz*
Wi-Fi	**Peak PHY Rate:** Up to 5.4 Gbps
	Generation: Wi-Fi 6, Wi-Fi 5, Wi-Fi 4
	Standards: 802.11ax/ac/n/g/b/a
	Spectral Bands: 5GHz, 2.4GHz
	Channels: 160MHz, 80MHz, 40MHz, 20MHz
	Maximum Band Configuration: Dual-band
	Spatial Streams: Up to 6
	Encryption: AES-CCMP, AES-GCMP
	Security: WPA3 Personal, WPA3 Enterprise, WPA3 Enhanced Open, WPA3 Easy Connect, PRNG, TKIP, WPS, WPA2
	Wi-Fi Features: TxBF, MU-MIMO, OFDMA, Target Wake Time, Wi-Fi Alliance's Wi-Fi CERTIFIED EasyMesh, Qualcomm Wi-Fi SON
Flash	**Type:** NOR, NAND
	Interface: SPI
Interfaces	**Platform Extensions:** Bluetooth, 4G/5G FWA

* Maximum CPU speed will vary based on platform version. Consult OEM specifications for device CPU speed.

To learn more visit: qualcomm.com