

# Qualcomm® Networking Pro 1620 Platform

**Quad-Band Wi-Fi 7 networking platform with a 16-stream configuration. Ideal architecture for highly-congested venues, large enterprises and premium home mesh systems.**

The Qualcomm Networking Pro 1620 Platform sets new Wi-Fi 7 and networking platform performance benchmarks for premium tier networking. It is designed to enable 33 Gbps\* peak speeds for massive capacity even in congested environments such as large public venues and enterprises.

The Qualcomm Networking Pro 1620 Platform delivers next-gen Wi-Fi 7 features today, including support for wide 320MHz channels to surge peak speeds, Multi-Link operation to maximize spectrum efficiency and low-latency performance, and 4K QAM to provide a throughput boost via advanced modulation.

The Qualcomm Networking Pro 1620 Platform includes Qualcomm® Multi-User Traffic Management with advanced algorithmic scheduling of bi-directional data using MU-MIMO and OFDMA on all 16 streams and up to 2000 client devices. This platform features powerful computing and an architectural design built for the most challenging infrastructure environments, and supports Qualcomm® Automated Frequency Coordination (AFC) Service<sup>1</sup>—enabling higher power operation in the 6GHz band for greater performance and longer range, in regions where available.

<sup>1</sup> Pending regulatory approvals.

## Highlights

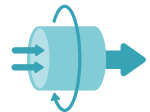
### Superior Wi-Fi 7 Connectivity

Experience advanced Wi-Fi 7 features like 320MHz channel support, Multi-Link operation, 4K QAM, and more.



### Intelligent Multi-Link Management

Expert implementation of Multi-Link technology realizes massive performance gains and enables customer traffic to dynamically aggregate or alternate bands to deliver high capacity and deterministic, predictable low latency, while Adaptive Interference Puncturing maximizes channel utilization in the presence of interference.



### Peak Performance

Designed to enable 33 Gbps\* peak aggregate wireless system capacity with reliable, secure connections that scale from prosumer use to large event venue coverage with incredibly low latency even in congested networks.



### Qualcomm® Max User Architecture

Architecture to leverage Wi-Fi 7 features, with a unique and differentiated design developed for extreme high-density deployments, able to associate and maintain stable connectivity and ideal throughput to up to 2000 clients simultaneously.



\* Speed claims refer to maximum physical layer (PHY) rate.

# Qualcomm Networking Pro 1620 Platform

The Qualcomm Networking Pro 1620 Platform is designed to deliver advanced Wi-Fi connectivity features supporting premier enterprise and large venue demands.

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## Features

- Massively expanded range of Wi-Fi channels in the 6GHz spectrum, and simultaneous operation in 2.4, 5, and 6GHz spectrum bands
- 320MHz channel support in the 6GHz band, where available, for max throughput and low latency applications
- 240MHz channel support, key for regions without 6GHz spectrum availability
- Support for 4K QAM
- Qualcomm Multi-User Traffic Management provides advanced scheduling algorithms and buffering with bi-directional data support, up to 37-user OFDMA support per channel and spatial multiplexing 4-user UL/DL MU-MIMO support per channel
- Qualcomm Max User Architecture offers network stability and sustained throughput for up to 2000 users, and flexibility based on memory configuration
- Qualcomm® Wi-Fi Security Suite offers the most comprehensive WPA3 implementation coupled with state-of-the-art embedded crypto accelerators designed to provide secure transactions across a full range of Wi-Fi data touchpoints
- Advanced network interfaces for 10GbE WAN and LAN standard networking protocols and PCIe interfaces for platform extensions
- Ordering part number: IPQ9574

## Specifications

<b>CPU Clock Speed</b>	2.2GHz
<b>CPU Cores</b>	Quad-core Cortex-A73 Arm
<b>Process Technology</b>	14nm
<b>Wi-Fi Standards</b>	802.11be, 802.11ax, 802.11ac, 802.11n, 802.11a/b/g
<b>Wi-Fi Generations</b>	Wi-Fi 7, Wi-Fi 6E, Wi-Fi 6, Wi-Fi 5, Wi-Fi 4
<b>Wi-Fi Spectral Bands</b>	6GHz, 5GHz, 2.4GHz
<b>Spatial Streams</b>	16 streams
<b>Channel Support</b>	320MHz, 240MHz, 160MHz, 80MHz, 40MHz, 20MHz
<b>Peak Speed</b>	33 Gbps (PHY Rate)
<b>Max Band Config</b>	Quad-Band
<b>Wi-Fi Features</b>	Simultaneous and Alternating Multi-Link modes Adaptive Interference Puncturing 4K QAM UL/DL OFDMA, 37 users UL/DL MU-MIMO, 4 users Up to 2000 users TxBF 802.11be QoS Qualcomm AFC Service
<b>Wi-Fi Security</b>	WPA3 Personal, WPA3 Enterprise, WPA3 Enhanced Open, WPA3 Easy Connect, WPA2, WPS, 802.11i security, AES-CCMP, AES-GCMP, PRNG, TKIP, WAPI2, WAPI1, WEP
<b>Flash</b>	eMMC, NAND, Serial NOR
<b>Memory Type</b>	DDR3L, DDR4 Bit width 16/32
<b>Platform Extensions</b>	Bluetooth®, 802.15.4 (Zigbee/Thread), 4G/5G FWA
<b>Packet Processing</b>	WAN tunnel offload engine, integrated Ethernet switch, enhanced security processor, high performance QoS/TM
<b>6 Port Integrated Ethernet Switch</b>	4 x 2.5 GE + 5 GE + 10 GE
<b>Supported OS</b>	Openwrt, Linux Kernel 5.4
<b>Supported Interfaces</b>	4x PCIe 3.0 controllers, PTA Coex, I <sup>2</sup> S, I <sup>2</sup> C, 2x USXGMII, 1x USXGMII-M, SD/eMMC, SDIO, SPI, UART, USB 3.0

Qualcomm Wi-Fi Security Suite is a product of Qualcomm Technologies, Inc. and/or its subsidiaries.

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

