# Qualcomm
# Qualcomm Networking Pro 600 Platform

## 6-stream Wi-Fi 6 networking platform ideal for densely congested infrastructure applications

The Qualcomm® Networking Pro 600 platform is a broad market Wi-Fi 6 (802.11ax) network solution, supporting up to 6 spatial streams of Wi-Fi 6 connectivity, and designed to meet the growing demands of increasingly crowded and dense Wi-Fi environments.

It is the ideal architecture for retail routers, two-radio mesh networking systems, broadband gateways, as well as enterprise and carrier-class applications.

## Highlights

### Superior Connectivity

Up to 6 spatial streams of Wi-Fi 6 connectivity across both 5 and 2.4 GHz bands, with multi-user scheduling across downlink and uplink MU-MIMO and OFDMA to simultaneously manage up to 1000 users.
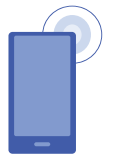
### Powerful Computing

A 64-bit quad-core CPU gives this platform computing power, and, when combined with our superior design architecture, offers additional capabilities for dynamic data processing and management.

### Advanced Data Management

Our deep packet buffer capabilities allow for better data management in densely congested environments.

### Powerful Networking Acceleration

Programmable network acceleration for complex and secure data transfer and Wi-Fi driver offload for all 6 streams to free up CPU subsystem. Advanced networking interfaces for 10 GbE WAN and LAN, as well as 5G CPE delivering fixed wireless access.

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## Features

- Up to 6 spatial streams for delivery of maximum Wi-Fi 6 capacity

- Multi-user scheduling architecture uses advanced algorithms and deep packet buffer for a deterministic approach to resource allocation

- Downlink/Uplink MU-MIMO supports 6 streams of Wi-Fi to simultaneously connect to MU-MIMO capable clients

- Downlink/Uplink OFDMA across all 6 spatial streams to provide efficient use of spectrum for small data packets supporting up to 37 users

- 1024 QAM support

- Up to 512 users per radio, flexible based on memory configuration

- Multi-Band Simultaneous Wi-Fi configurations for improved data rate efficiency across all bands of Wi-Fi

- Advanced network interfaces for 10 GbE WAN and LAN standard networking protocols and PCIe interface for platform extensions

## Specifications

| CPU | |
|---|---|
| CPU Clock Speed: | Up to 1.0 GHz |
| CPU Cores: | 4x ARM Cortex A53 |
| | |
| **Process** | |
| Process Technology: | 14 nm FinFET |
| | |
| **Wi-Fi** | |
| Wi-Fi Standards: | 802.11ax, 802.11ac, 802.11a/b/g, 802.11n |
| Wi-Fi Spectral Bands: | 2.4 GHz, 5 GHz |
| Spatial Streams: | Up to 6 |
| Peak speed: | 1.7 Gbps |
| Wi-Fi Features: | 1024 QAM, Advanced QoS, MU-MIMO, |
| | OFDMA, Uplink scheduling, TxBF, |
| | Qualcomm® Wi-Fi SON |
| | |
| **Security Support** | |
| Wi-Fi Security: | WPA3, WPA2, WPS, 802.11i security, AES-CCMP, |
| | AES-GCMP, PRNG, TKIP, WAPI, WEP |
| WPA3 Security: | Personal, Enterprise, Enhanced Open, Easy Connect |
| | |
| **Memory** | |
| Flash: | eMMC, NAND, Serial NOR |
| Memory Type: | DDR3L, DDR4 |
| | |
| **Interface** | |
| platform extensions: | Bluetooth, 4G/5G FWA, 15.4 |
| Supported Interfaces: | PCIe 3.0, PTA Coex, I²S, I²C, Ethernet, PCIe 2.0, PCM |
| | SD/eMMC, SDIO, SPI, UART, USB 3.0 |
| | |
| **Package** | |
| Package Type: | FCBGA |
| Package Size: | 21 x 21 mm |
| | |
| Part Number: | IPQ8070, IPQ8071 |

**For additional Qualcomm product information go to:**
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