



Qualcomm® FastConnect™ C7700

Tailored for mainstream consumer electronics and compute applications and built with high-performance Wi-Fi 7 and advanced proximity capabilities.

The FastConnect C7700 Connectivity System is a highly-integrated, cost-effective 14 nm 2x2 Wi-Fi and qualified against Bluetooth® Core 6.0 system with flexible interfaces such as PCIe, SDIO, and USB. It is designed to deliver ultra-high speeds (up to a peak speed of 5.8 Gbps*) with 320MHz channels and premium Bluetooth features.

FastConnect C7700 packs in core Wi-Fi 7 features, including wide 320MHz channels, 4K QAM, and Multi-Link Operation (MLO) for fast speeds and low latency.

FastConnect C7700 also brings advanced proximity capabilities through Wi-Fi Ranging and Bluetooth Channel Sounding, where users can unlock seamless new ways to interact with nearby capable devices.

Related Products

Qualcomm® QCC2076 is a tri-band 2x2 MIMO DBS/HBS Wi-Fi 7 and Bluetooth 5.4 system for consumer electronics.

[FastConnect 7800 Mobile Connectivity System](#) is a leading Wi-Fi 7 and Bluetooth 5.4 system for mobile, compute, and XR experiences.

Highlights

Designed for compute and consumer electronics

FastConnect C7700 is a highly integrated, cost-effective solution for mainstream compute and consumer electronics. It integrates PAs and LNAs as well as a variety of interface connections, including PCIe, USB, and SDIO for flexible application design.



Multi-gigabit performance

Bring Wi-Fi 7 into the mainstream with blazing-fast speeds up to 5.8 Gbps and advanced features, such as 4K QAM and MLO. Enjoy performance at range and low latency thanks to ultra-wide 320MHz channels.



Proximity capabilities

Easily find your Wi-Fi and Bluetooth-enabled devices with FastConnect C7700 proximity capabilities. By using Wi-Fi Ranging and Bluetooth Channel Sounding, users unlock seamless new ways to interact with nearby capable devices.



Improved power efficiency

Architectural improvements boost power efficiency for both Wi-Fi and Bluetooth.



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

Materials are subject to change without notice.
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FastConnect delivers advanced Wi-Fi and Bluetooth connectivity features supporting compute and consumer electronic applications.



COMPUTE

Bring high-performance connectivity to mobile compute applications, including PCs, laptops, and tablets with FastConnect C7700.

CONSUMER ELECTRONICS

Level up your favorite consumer electronic devices in the home or on the go with FastConnect C7700.

Features

- Built for Wi-Fi 7 Certification
- 6GHz, 5GHz, and 2.4GHz support
- Up to a peak speed of 5.8 Gbps data rate using 4K QAM modulation and 320MHz channel bandwidth*
- Premium Wi-Fi 7 experience when paired with a compatible AP
- Bluetooth Core Specification 6.0, Bluetooth Channel Sounding, LE Audio, and LE Long Range
- Snapdragon Sound technology

Ordering Information

Product / Part Number
Qualcomm FastConnect C7700 / QCC2072

Specifications

Category	Label	Specifications
Wi-Fi	Peak Speed	5.8 Gbps
	Standards	Wi-Fi 7
	Wi-Fi Spectral Bands	2.4GHz, 5GHz, 6GHz
	Peak QAM	4K QAM
	Wi-Fi Features	320MHz, Multi-Link Operation (MLO), Wi-Fi Aux Radio, Wi-Fi Location (802.11az), Channel State Information (CSI) Capture, Wi-Fi Aware, Wi-Fi Direct, Miracast, Wi-Fi QoS Management, TDLS, 8x8 Sounding
	Security Support	Protected Management Frames, WPA3-Enterprise, WPA3-Personal, Enhanced Open, Wi-Fi Easy Connect, WPA2, 802.1x
Bluetooth	Bluetooth Specification Version	Bluetooth 6.0 2x2, Tx Beamforming + MRC BLE Long Range (Coded PHY)
Audio	Audio Technology	Snapdragon Sound, LE Audio, Qualcomm® aptX™ Lossless (CD-quality audio), low-latency gaming mode with voice back-channel, Stereo Recording, Qualcomm TrueWireless™ Technology, Qualcomm TrueWireless Stereo Plus technology
	aptX Audio Playback Support	aptX Lossless (CD-quality audio), aptX Adaptive, aptX Voice

To learn more visit: qualcomm.com



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