

## QT10GU-AX

# Baseband Chip DBDC, WiFi 6, 4x4 in 2.4 GHz and 8x8 in 5 GHz

The QT10GU-AX is a dualband dual concurrent WiFi 6 baseband chip that supports the 802.11ax/ac/n/a/g/b standards. QT10GU-AX is the first chip in the industry to support the 8x8 with 8 streams and MU-MIMO.

Multi-User MIMO (MU-MIMO) provides an alternative use of the spatial multiplexing that is provided by MIMO. MIMO enables the transmission of multiple independent streams between a transmitter and a receiver with multiple antennas. However, without MU-MIMO, the spatial multiplexing gain is limited by the number of antennas at the client devices (typically one or two), leaving a lot of spatial diversity unused. MU-MIMO extends the MIMO concept to the case with one transmitter and multiple receivers (Downlink MU-MIMO) or to the case with one receiver and multiple transmitters (Uplink MU-MIMO), allowing the full use of the spatial diversity provided by the channel.

- Dual-Band Dual-Concurrent Modem- ViSiON Cloud managed- Up to 8x8 5 GHz + 4x4 2.4 GHz
- 5 GHz Modem- Industry's Highest Performance 802.11ax/ac/n/a/g/b WiFi 6 DBDC Baseband Chip- Up to 8 Streams in 8x8 MIMO Configuration
- 2.4 GHz Modem- Support for 802.11ax/n/g/b- Up to 4 Streams in 4x4 MIMO Configuration
- Embedded Processors- DSP Processors- Support for Minimum Burden on the Host CPU
- Hardware Datapath- Layer 2/3 Switching Supported, Including Full HW VLAN Support- Layer 3 Stream Identification
- World's First 8x8 WiFi 6 Solution
- Multimedia Home Gateways
- Data Residential Gateways
- Access Point
- Mesh Nodes
- WiFi Router
- Access Point
- WiFi Extender
- Mesh Repeater

	Pricing (\$/Unit)	Compliance	Status	Wi-Fi Standard	MIMO	Band Support (GHz)	Application	Chipset	Package Type
QT10GU-AX			Active	WiFi 6	4x4 / 8x8	2.4 / 5	DBDC Gateway, AP, Repeater	QCS-AX-D12	FCBGA-546