
# 6 GHz Wi-Fi is Critical for Wireless Broadband

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**February 7, 2021**

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# **Broadcom** Semiconductor Markets and Products

***Datacenter***

***Broadband***

***Wireless***

***Industrial and Automotive***

Switching Silicon

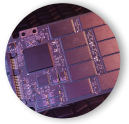
Routing Silicon

Ethernet controllers

Ethernet PHYs

Optical components

Custom ASICs



SSD Controllers

WiFi Routers

DSL/PON SoCs

Cable Modem SoCs

FC HBAs/Switches

CMTS

LTE/Cellular Filters

Wi-Fi/Bluetooth

GNSS Receiver

Touch Controller

Optical Isolation

LED Solutions

Optical Sensing

Industrial Fiber Optics

Storage Connectivity

Set-top Box SoCs

Industrial solutions

Automotive Ethernet

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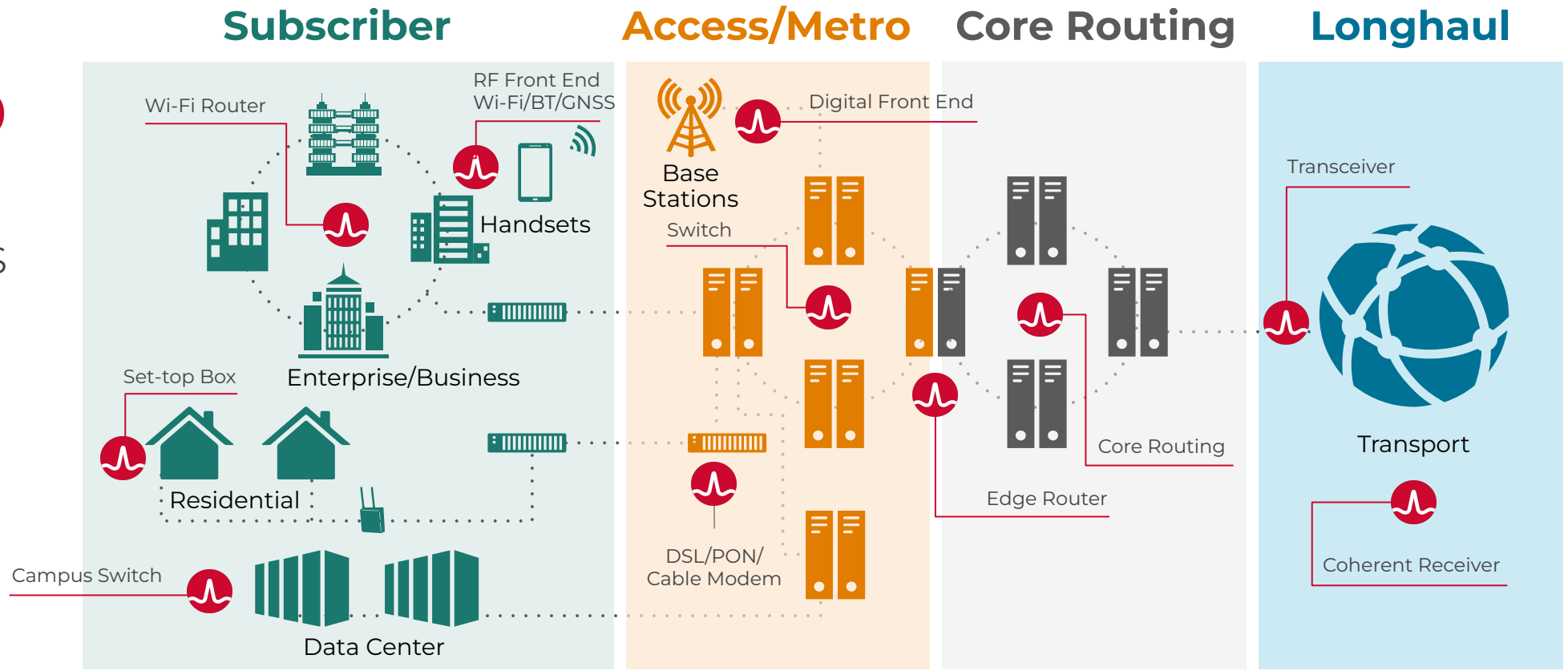
# **Broadcom:** Connecting Everything®

**99.9%**

of All Internet Traffic Crosses at Least One Broadcom Chip



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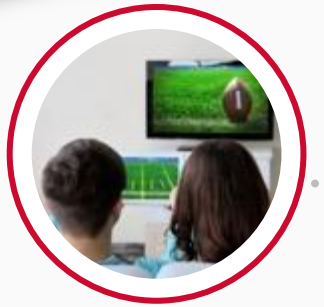
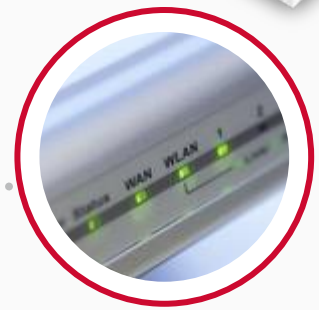
# Broadband Investments based on Backhaul + **Wireless**

## Connected Devices



Wi-Fi

## Customer Premise



DSL CPE

PON CPE (ONU/GW)

DSL

PON

P2P Ethernet

## Service Provider

DSLAM

PON OLT

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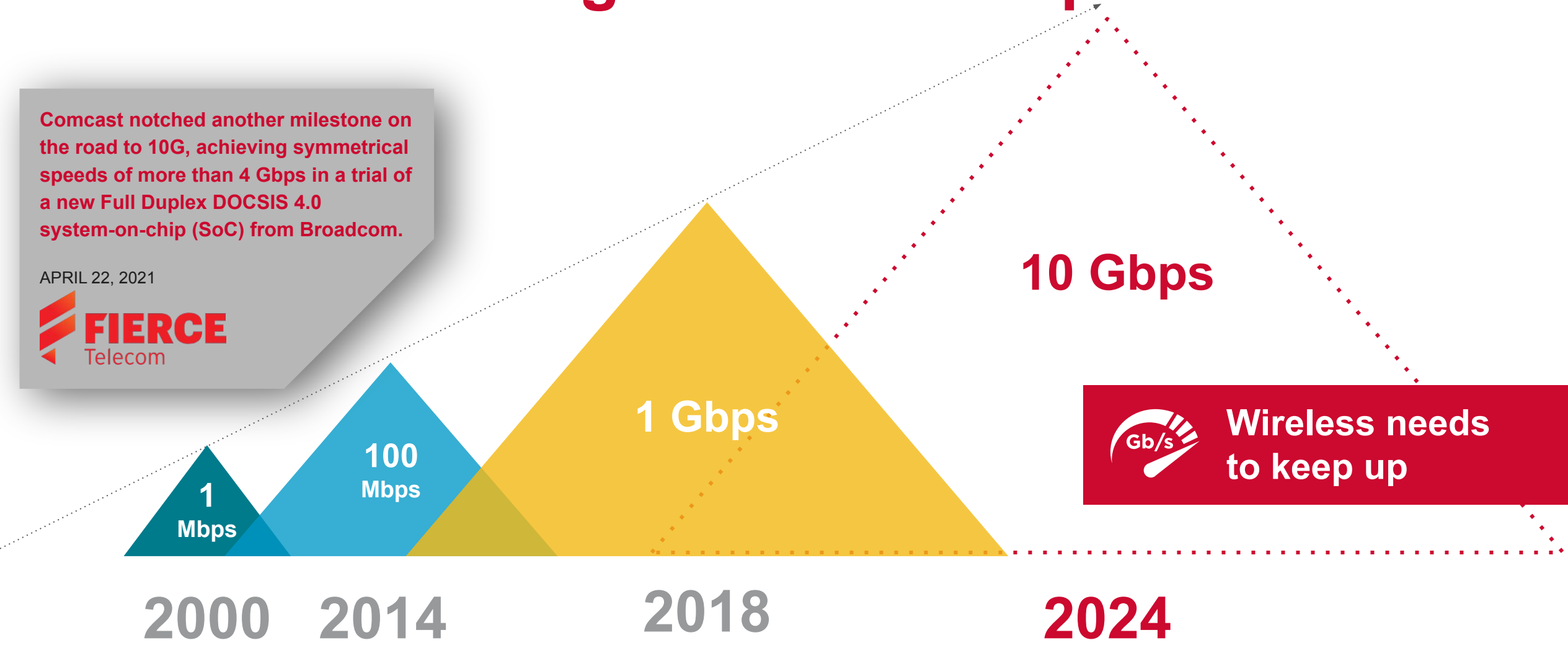
# As broadband migrates to 10 Gbps...

**Comcast notched another milestone on the road to 10G, achieving symmetrical speeds of more than 4 Gbps in a trial of a new Full Duplex DOCSIS 4.0 system-on-chip (SoC) from Broadcom.**

APRIL 22, 2021

FIERCE Telecom




**Wireless needs to keep up**

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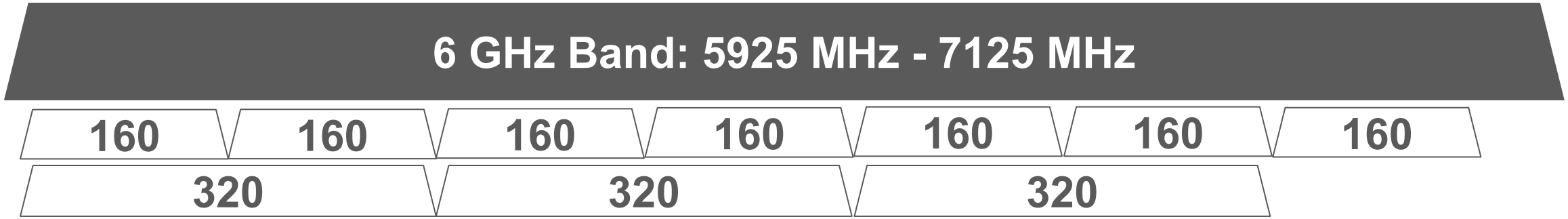
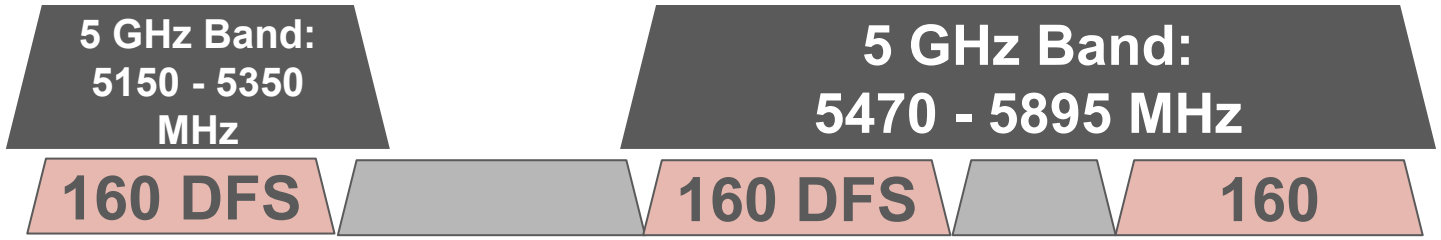
# 1200 MHz enables wide channels

## Wi-Fi 6E/7 are specially designed to take advantage of the entire 6 GHz band




**Unencumbered 160 and 320 MHz channels**




**Brings wide channels to enterprises, venues, and dense environments**

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# 2+ Gbps in the palm of your hand

**Go immersive with Wi-Fi 6E**

**World's-Fastest, Cleanest Wi-Fi**

**No lag, no delay**

 

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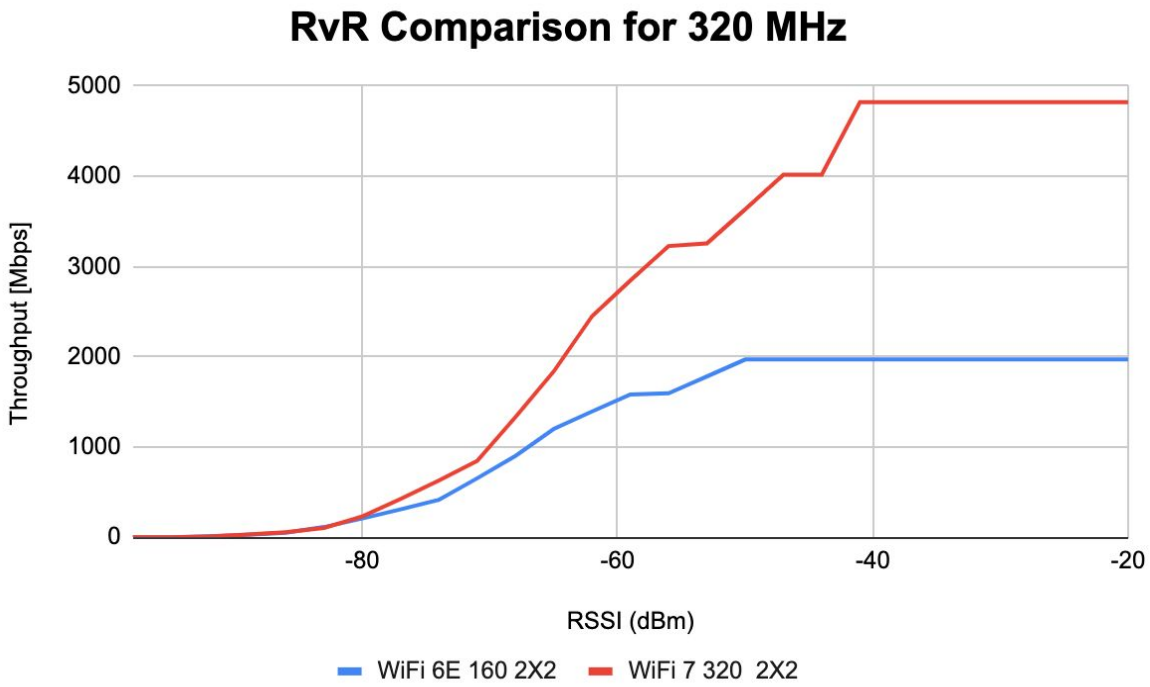
# 320 MHz channels bring high speeds and wide coverage




- 2x2 peak OTA throughput: **5 Gbps**
- Significant coverage improvement: **multi-Gigabit whole home Wi-Fi**

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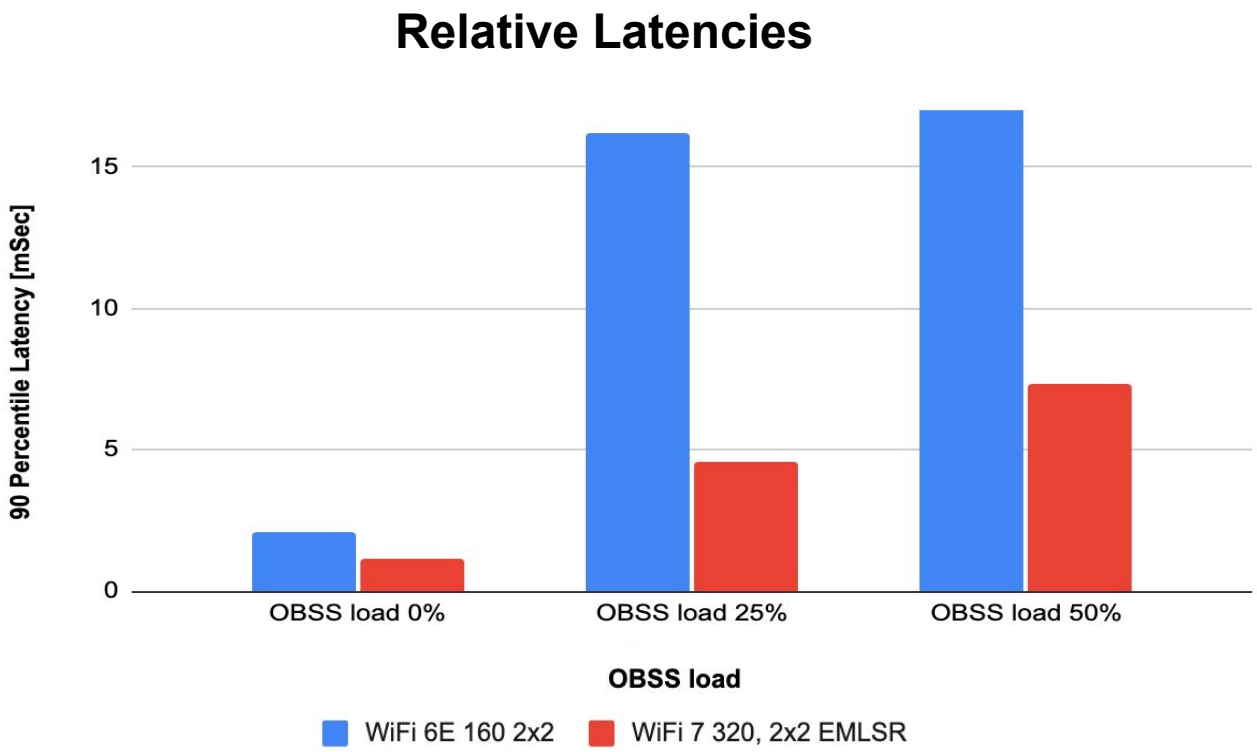
# Wi-Fi 7: Reliable Low Latency




- Wider bandwidth MLO access diversity **lowers latency** by scheduling each packet on the first available channel

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# Why the full 6 GHz band?

- Equipment on the market is already designed to operate **over the entire band**
- Enterprises and dense urban environments **require more channels** to work effectively
- Citizens in countries that have **allocated the full band** will have a superior wireless broadband experience
- This will realize benefit of **broadband investment**
- Alternatives are **speculative**

 

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