Qualcomm

Diversifying Bluetooth audio experiences in the truly wireless age

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The next era of truly wireless audio

Era**1**

Music listening
Calls

→

Era**2**

Longer use times
Smaller form factors
Improved audio quality
Noise cancellation

Truly wireless age

75%
interested in truly wireless earbuds globally

Workout	Productivity	Travel	Gaming	Live conversations

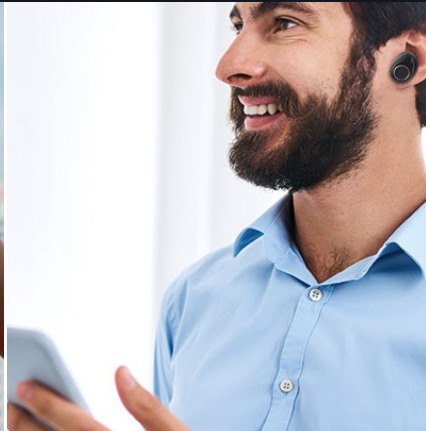**70%**
interested in noise cancellation with leak-through

#2
voice calls second most popular truly wireless use case

Critical
ear-comfort and battery life now equal #3 as purchase drivers

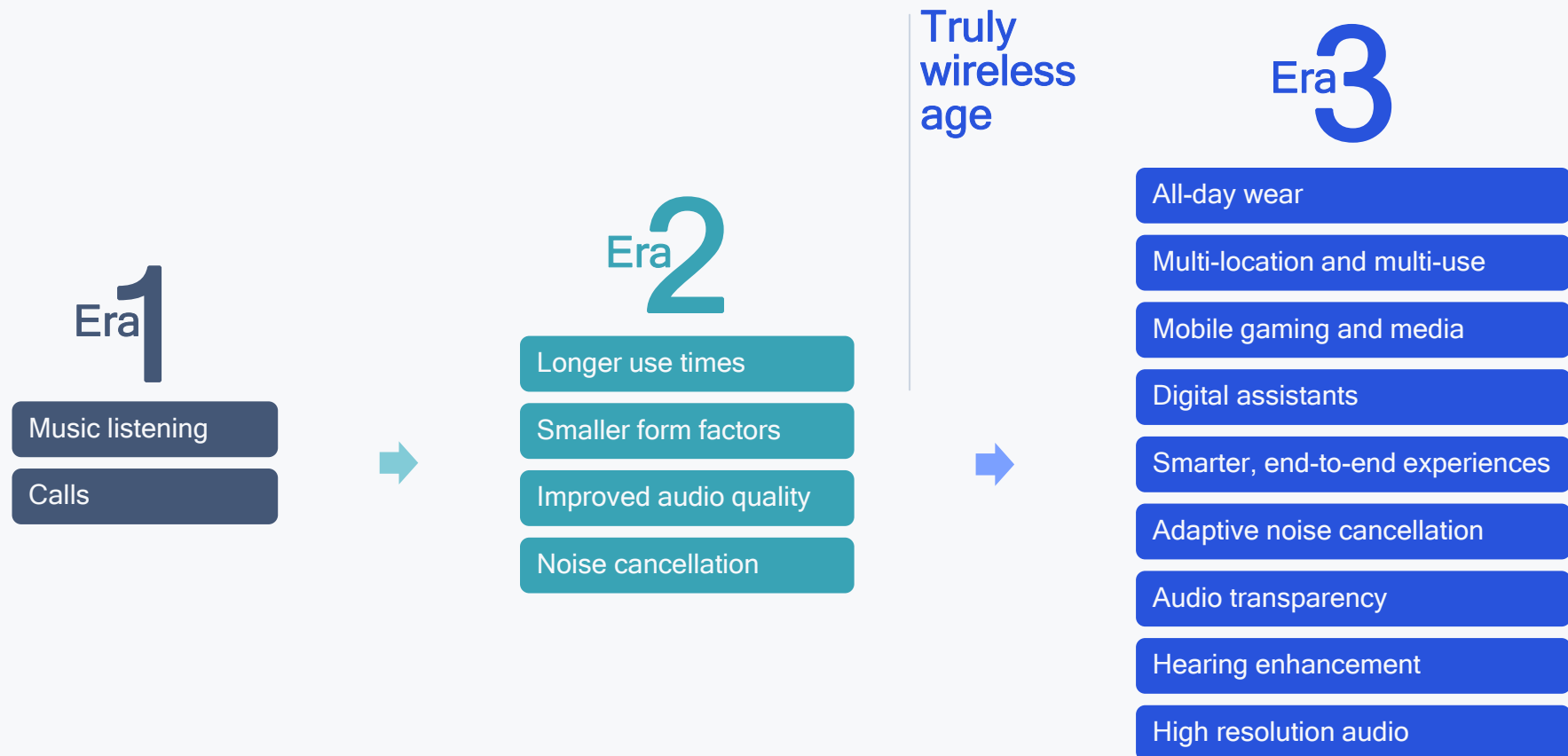**Almost 50%**
use wireless audio while gaming

40%
interested in hearing enhancement

Usage diversifying among all sorts of consumers

The next era of truly wireless audio

Era 1

- Music listening
- Calls

Era 2

- Longer use times
- Smaller form factors
- Improved audio quality
- Noise cancellation

Truly wireless age

Era 3

- All-day wear
- Multi-location and multi-use
- Mobile gaming and media
- Digital assistants
- Smarter, end-to-end experiences
- Adaptive noise cancellation
- Audio transparency
- Hearing enhancement
- High resolution audio

These trends will further increase the need for

More processing power

New connectivity solutions

Even-longer battery life

That virtually all consumers can enjoy

Designed to meet these needs:

Our portfolio of audio tech

Designed for longer battery life: Ultra-low power

Rich portfolio of technologies and highly-integrated SoCs

Sound quality

**Qualcomm®
aptX™ Adaptive** designed to support up to 96kHz audio resolution

aptX Voice

3-microphone **Qualcomm® cVc™** echo cancelling and noise suppression

Robust connectivity

**Qualcomm
TrueWireless™ Mirrorin designed** for a great U

aptX Adaptive

Low-latency streaming

aptX Adaptive audio designed for low latency streaming, gaming and video

Noise cancellation

**Qualcomm®
Adaptive Active
Noise Cancellation**

Smarter features

Support for integrated voice services

Choice of button or wake word activation

Introducing the
Qualcomm® QCC305x
Bluetooth Audio SoCs

- Quad-core
- Ultra-low power
- Designed for a range of earbuds
- Premium tier features

Double
the processing power*

QCC305x

Qualcomm® aptX™ Adaptive audio

aptX Voice

Support for wake word activated voice assistants

Qualcomm® cVc™ Echo Cancellation and Noise Suppression (ECNS)

Qualcomm TrueWireless™ Mirroring for enhanced UX

Qualcomm® Adaptive Active Noise Cancellation

Designed to be LE Audio ready

Ultra-low power SoCs for real-world use cases

Wafer-level CSP SoCs for small form factors

Qualcomm® QCC305x
performance uplift

QCC305x

Processing

Tri-core

Quad-core

Noise cancellation

Qualcomm® Active Noise Cancellation
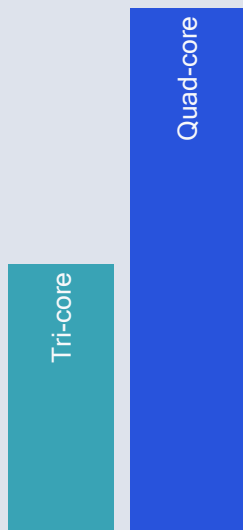
Qualcomm Adaptive Active Noise Cancellation

Bluetooth

Bluetooth 5.2

Bluetooth 5.2 and designed to be LE Audio ready

Qualcomm® aptX™ audio

aptX Adaptive

aptX Adaptive with 96kHz and aptX Voice
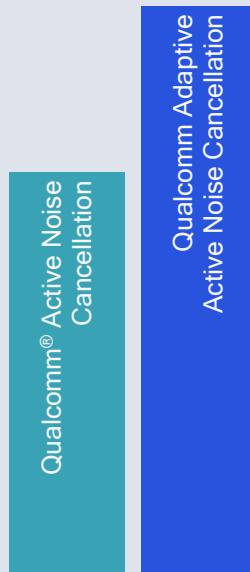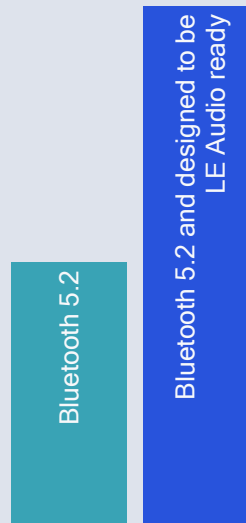
Support for digital assistants

Button activated

Wake word and button activated

Qualcomm QCC305x, Qualcomm aptX, Qualcomm Active Noise Cancellation and Qualcomm Adaptive Active Noise Cancellation are products of Qualcomm Technologies, Inc. and/or its subsidiaries.

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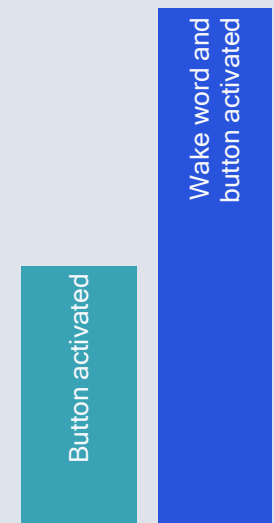
Bluetooth LE Audio
# A change is coming

Among the first with LE Audio in our end-to-end platforms

- Support for forthcoming LE Audio specification

- Work closely with the Bluetooth SIG

- Dual mode SoCs designed for critical backwards compatibility
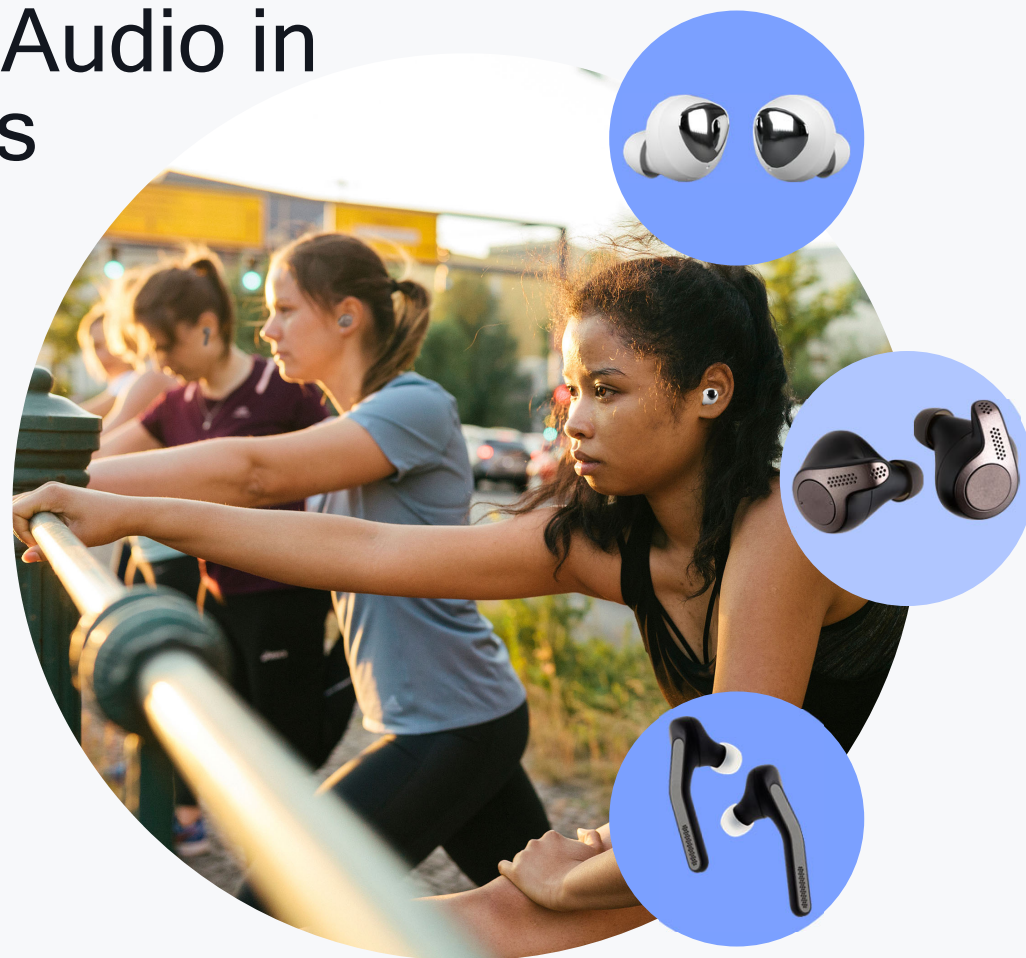
Superior end-to-end performance

- End-to-end operability from smartphone to earbuds

- Superior robustness, sound quality and latency performance

- Qualcomm® Snapdragon™ 888 mobile platform with Qualcomm® FastConnect™ 6900 system

Robustness

Sound quality

Low-latency
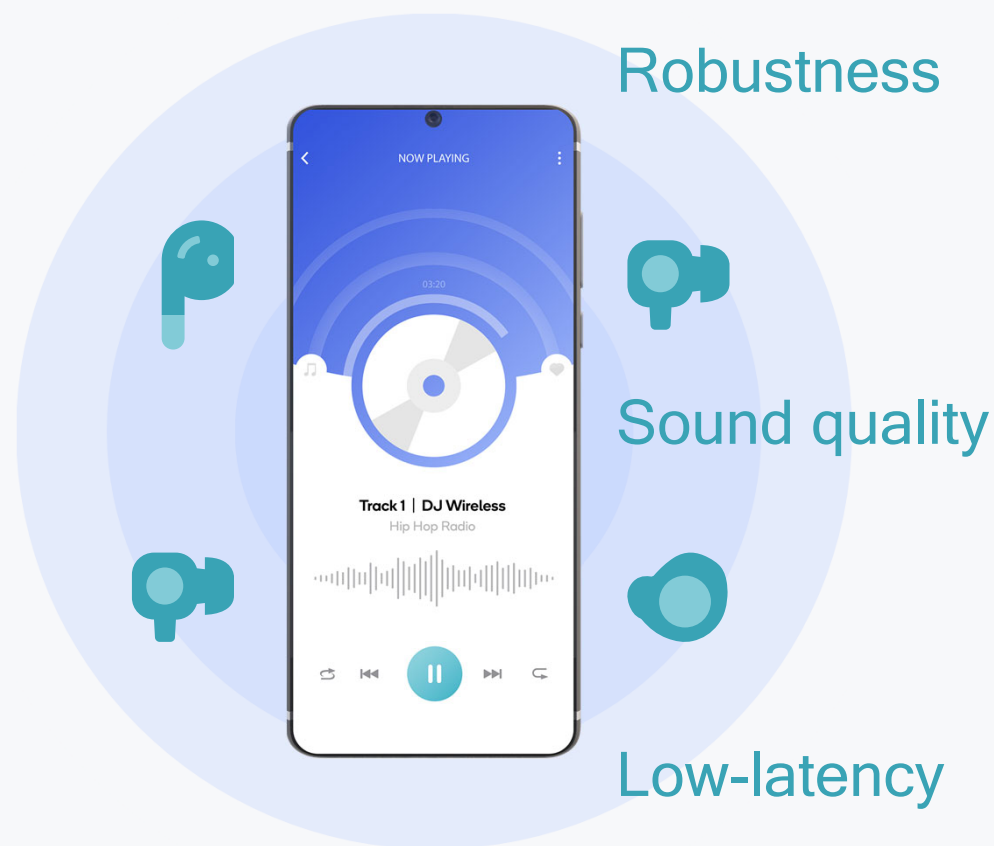
Growing in popularity

Voice assistant on the go

Audio sharing

Hearing enhancement

Mobile gaming

Noise cancellation at work/travel

QCC305x

Top use cases for virtually everyone

Listening to music

Voice calls

Watching TV/videos

Video calls

Listening to audio books/podcast

Our customers helping define the next era for truly wireless

Qualcomm

Thank you

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