



# 2022 Bluetooth® Market Update

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# Bluetooth® Market Update

- Including Bluetooth SIG and its Community
- Bluetooth Market Update 2022
  - Device Shipment Market Forecast
  - Solution Area Forecast

- Trade association established in 1998
- Oversees Bluetooth® technology and brand
- Over 38,000 member companies
- Over 4.7 billion Bluetooth end products ship each year



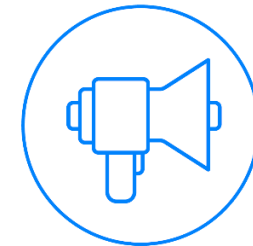
## Specification

We enhance  
Bluetooth technology



## Qualification

We drive  
Bluetooth interoperability

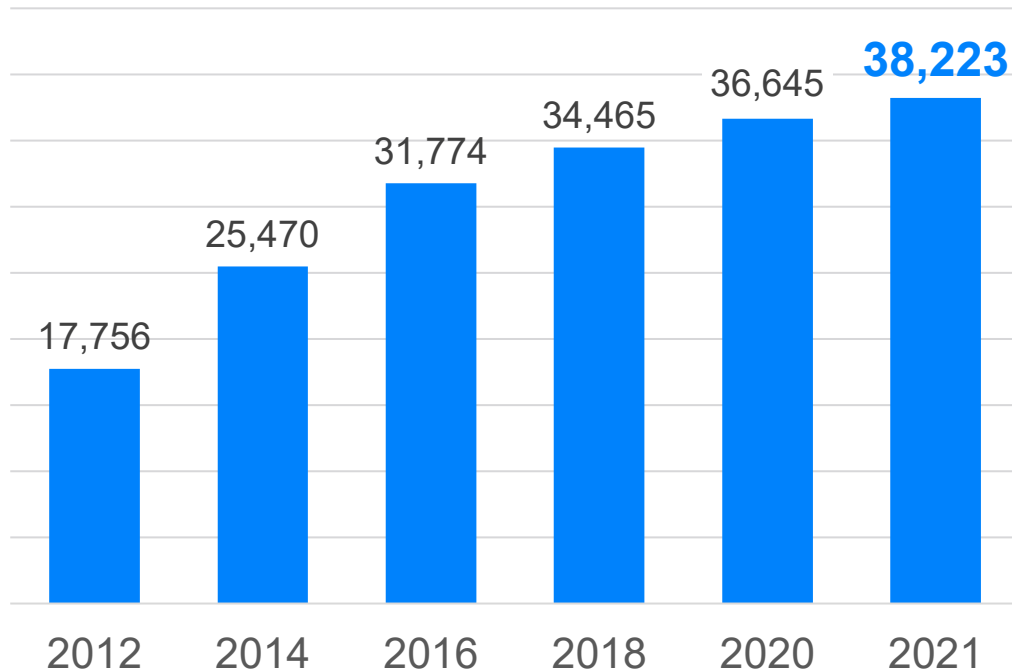


## Promotion

We grow the  
Bluetooth brand

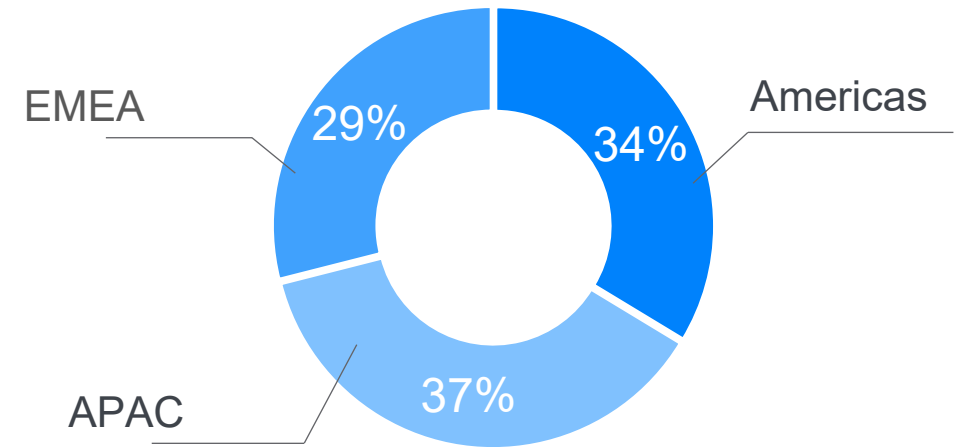
# BLUETOOTH COMMUNITY: MEMBERS

The total number of Bluetooth SIG member companies



\*Source : Bluetooth SIG Inc.

The regional distribution of Bluetooth SIG member companies



The total number of Bluetooth SIG member companies in the Greater China Region

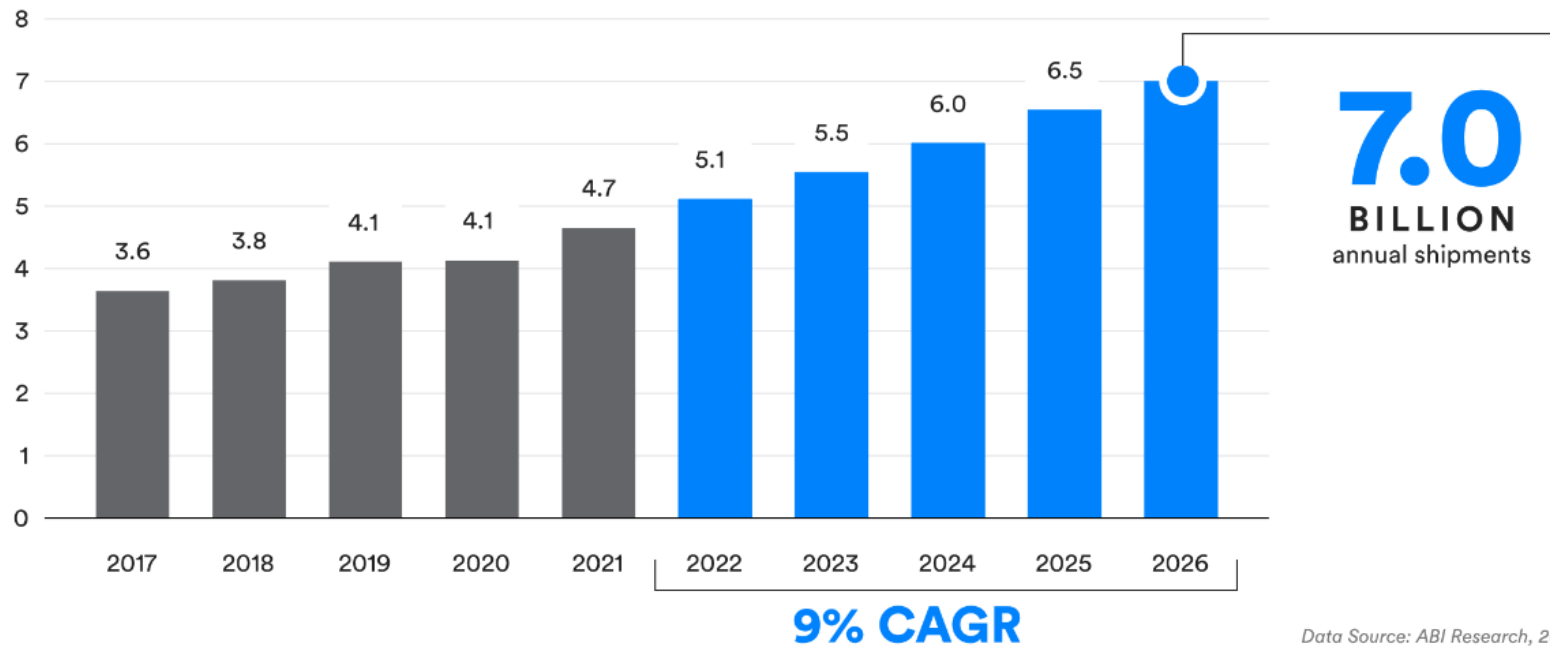
**8,081**

\*Source : Bluetooth SIG Inc.; Dec. 31, 2021

# ANNUAL BLUETOOTH DEVICE SHIPMENTS

## Total Annual Bluetooth® Device Shipments

NUMBERS IN BILLIONS



Data Source: ABI Research, 2022

Annual shipments of Bluetooth enabled devices will achieve sustainable growth

**7.0**  
Billion

For the first time, Bluetooth® annual device shipments are on track to exceed 7 billion in 2026

# BLUETOOTH SOLUTIONS



## Audio Streaming

Wireless Headsets  
Wireless Speakers  
In-Car Systems

**1.42**  
**billion**

Annual device shipments



YOY  
9%



## Data Transfer

Sports & Fitness  
PC Peripherals & Accessories  
Health & Wellness

**1.07**  
**billion**

Annual device shipments



YOY  
10%



## Location Services

Asset Tracking  
Indoor Navigation  
Digital Key  
Personal Item Finding

**250**  
**million**

Annual device shipments



YOY  
38%



## Device Network

Control Systems  
Monitoring Systems  
Automation Systems

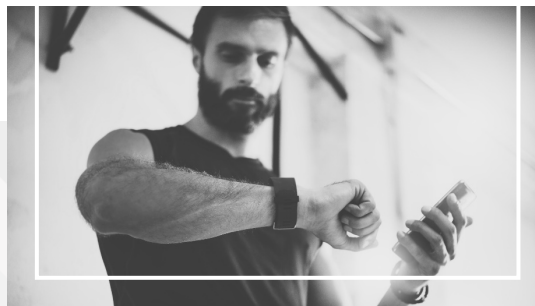
**620**  
**million**

Annual device shipments



YOY  
27%

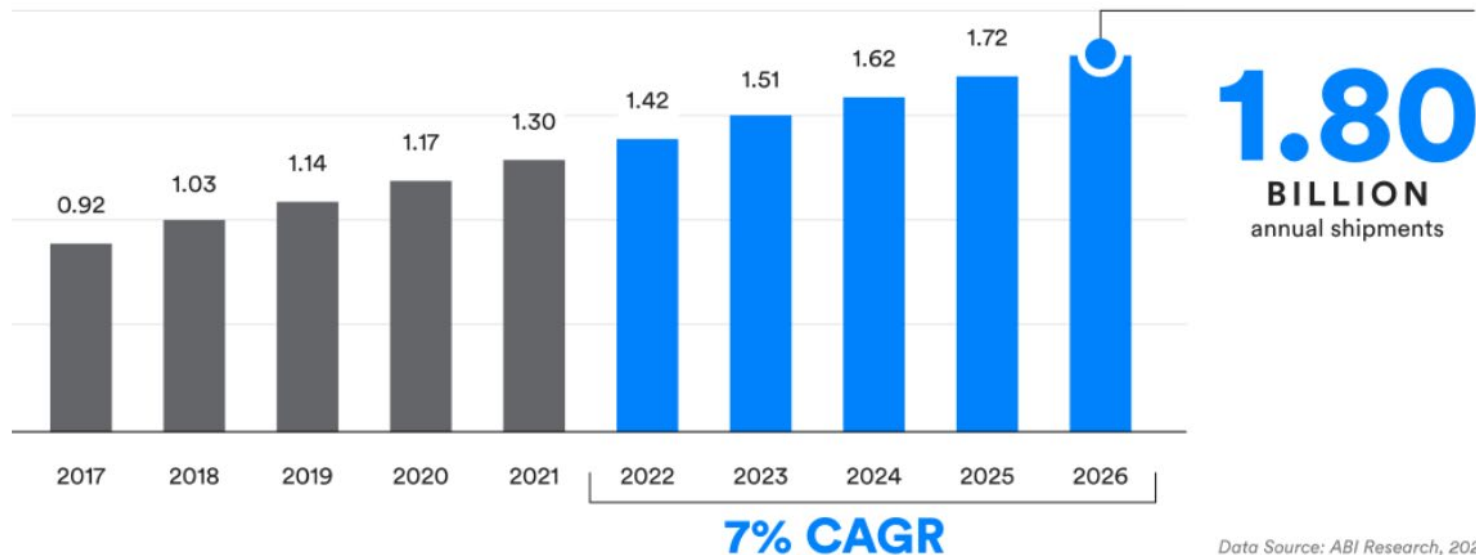
2022



# AUDIO STREAMING: DRIVERS FOR TODAY

## Annual Bluetooth® Audio Streaming Device Shipments

NUMBERS IN BILLIONS



Data Source: ABI Research, 2022

Earbuds are the leading driver of growth for headphones

**675**

Million

Bluetooth® headphones will ship in 2022

Bluetooth® technology is now in nearly all wireless speakers

**374**

Million

Bluetooth® speakers will ship in 2022

# AUDIO STREAMING: DRIVERS FOR TOMORROW

**3x**

in annual Bluetooth®  
earbud shipments by  
2026

**2.6x**

in annual Bluetooth®  
hearable shipments by  
2026

**66%**

of all annual Bluetooth®  
headset shipments will  
be earbuds by 2026



## What factors are driving for tomorrow?

- ✓ LE Audio will deliver enhanced audio performance
- ✓ LE Audio will deliver new audio peripherals
- ✓ LE Audio will deliver new audio experiences through Auracast™ broadcast audio

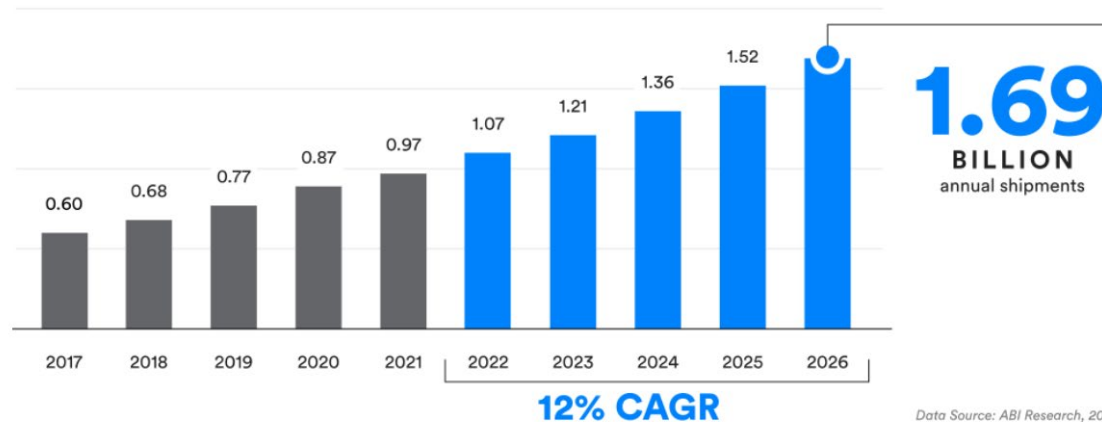


# DATA TRANSFER: DRIVERS FOR TODAY

DOWNLOAD

## Annual Bluetooth® Data Transfer Device Shipments

NUMBERS IN BILLIONS



Ratio of Bluetooth technology adoption in IOT connected devices

**35%**

of all IoT connected devices rely on Bluetooth® technology

The annual shipments of Bluetooth Data Transfer devices will continue to grow

**1.75x**

in annual Bluetooth® Data Transfer device shipments by 2026

Personal IoT devices satisfy demands for lifestyle data

**432**

Million personal Bluetooth® consumer electronics will ship in 2022

# DATA TRANSFER: DRIVERS FOR TOMORROW

**491**

Million  
Bluetooth® wearables  
will ship annually by  
2026

**100**

Million  
Bluetooth® fitness  
and wellness trackers  
will ship annually by  
2026

**210**

Million  
annual Bluetooth®  
smartwatch  
shipments by 2026



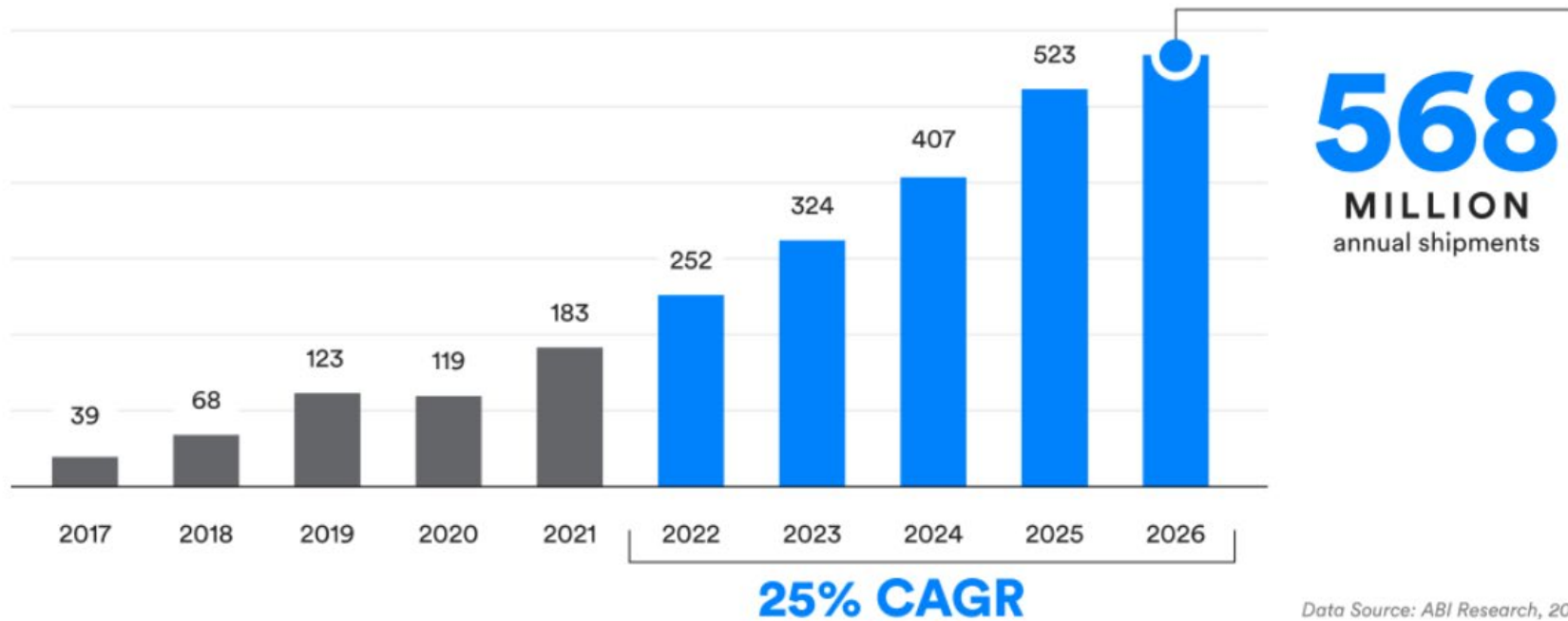
## What factors are driving for tomorrow?

- ✓ Bluetooth wearables drive the future of data transfer device growth
- ✓ Bluetooth health and wellness wearables experience strong growth
- ✓ Smartwatches continue to lead the wearables category
- ✓ Bluetooth AR/VR devices are set for significant growth



## Annual Bluetooth® Location Services Device Shipments

NUMBERS IN MILLIONS



Bluetooth® Location Services device growth will trend upward over the next five years

**25%**

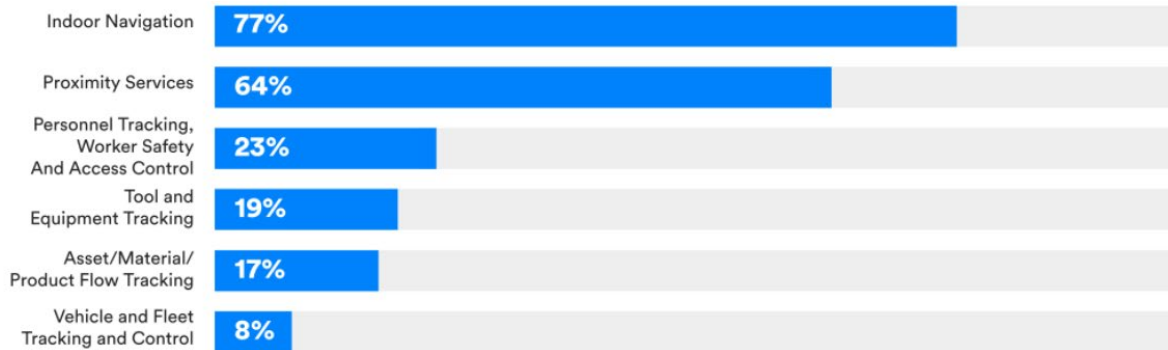
in Bluetooth® Location Services devices from 2022 through 2026

Data Source: ABI Research, 2022

# LOCATION SERVICES: DRIVERS FOR TODAY

## 2022 Bluetooth® RTLS Implementations

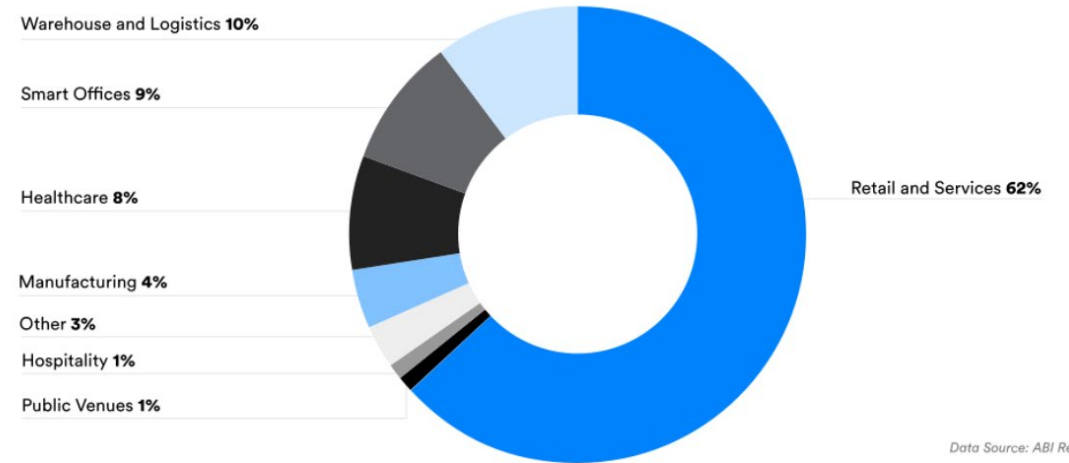
BY USE CASE



Data Source: ABI Research, 2022

## 2022 Bluetooth® RTLS Implementations

BY VERTICAL



Data Source: ABI Research, 2022

Annual shipments of Bluetooth Asset Tracking Device continue to grow

**128**

Million

Bluetooth® asset tracking devices will ship in 2022

Hospitals and healthcare facilities use Bluetooth® Location Services solutions to optimize processes

**25**

Thousand

Bluetooth® Location Services implementations in healthcare in 2022

Bluetooth® technology is playing an important role in automotive access control

**24**

Million

Bluetooth® key fobs and accessories will ship in 2022

# LOCATION SERVICES: DRIVERS FOR TOMORROW

**4x**

in annual shipments of Bluetooth® asset tracking devices over the next five years

**140 Million**

Bluetooth® personal tracking devices will ship annually by 2026

**350 Million**

Bluetooth® asset tracking devices will ship in 2026



## What factors are driving for tomorrow?

- ✓ The Bluetooth technology roadmap is driving the development of new, higher-performing solutions
- ✓ High-accuracy distance measurement will improve the performance of item finding and digital key solutions
- ✓ Increased precision will accelerate the adoption of Bluetooth asset tracking systems

**3x**

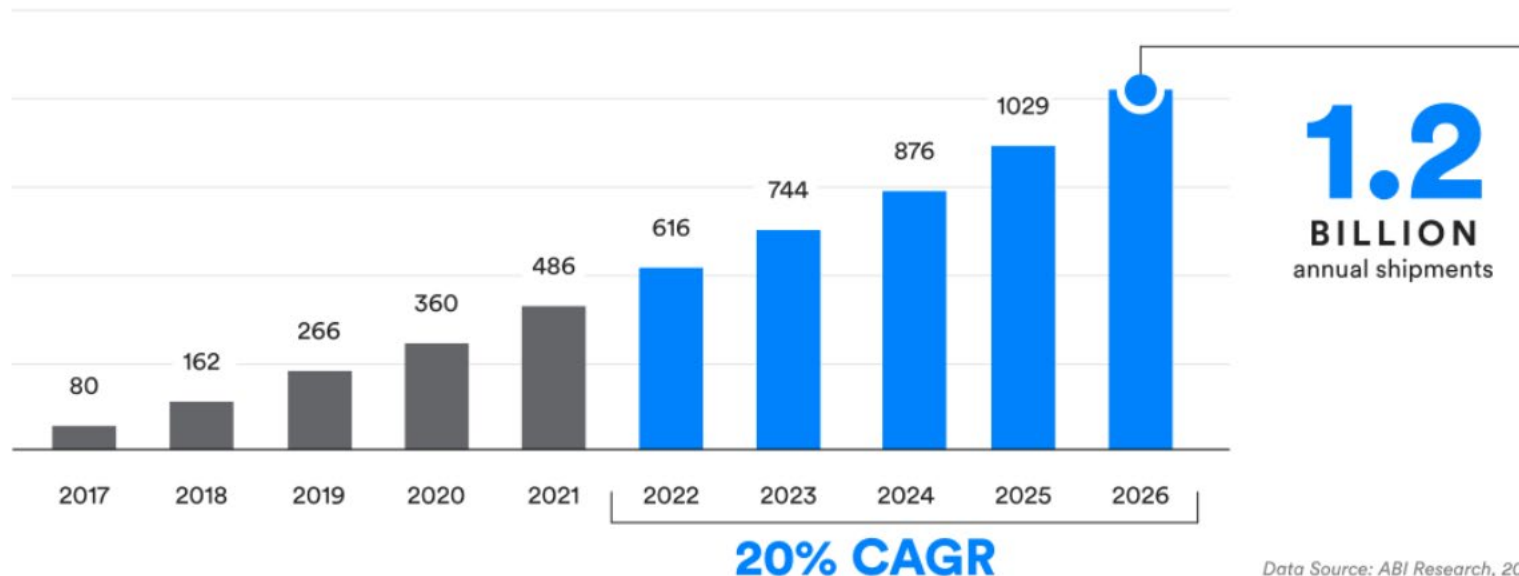
in annual shipments of Bluetooth® Location Services devices over the next five years



# DEVICE NETWORKS: DRIVERS FOR TODAY

## Annual Bluetooth® Device Networks Device Shipments

NUMBERS IN MILLIONS



Data Source: ABI Research, 2022

The network of devices is high-growth  
Bluetooth solutions in the field

# 1.2

Billion

Bluetooth® Device Network devices  
will ship annually by 2026

Annual shipments of Bluetooth Device  
Network devices continue to grow

# 2.5x

in annual Bluetooth® Device  
Network device shipments from  
2022 to 2026

# DEVICE NETWORKS: DRIVERS FOR TOMORROW

**1.1  
Billion**

annual Bluetooth®  
smart home device  
shipments in 2026

**14.2%**

in annual shipments  
of global lighting  
control systems  
from 2022 to 2029

**70%-75%**

reduction in energy  
costs achieved  
through connected  
lighting and advanced  
lighting controls



## What factors are driving for tomorrow?

- ✓ Bluetooth technology is positioned to be in all smart home devices
- ✓ Bluetooth networked lighting control is experiencing mainstream traction
- ✓ Commercial ROI of Bluetooth networked lighting control becomes more apparent
- ✓ The benefits of Bluetooth® networked lighting control go far beyond illumination



# RECENT MARKET NEWS HIGHLIGHTS

- Bluetooth markets began quickly bouncing back toward pre-pandemic levels, Bluetooth® annual device shipments are on track to exceed 7 billion in 2026
- LE Audio will enable Auracast™ broadcast audio
- Bluetooth® wearables drive the future of data transfer device growth
- High-accuracy distance measurement will improve the performance of item finding and digital key solutions
- Building Automation systems are expected to be one of the fastest growing applications for Bluetooth technology in the IoT market

# 2022 BMU Review

**Bluetooth**

## 2022 Market Update


### A LETTER FROM THE CEO

Every year, the Bluetooth SIG member community works hard to deliver innovations that improve the capabilities of Bluetooth® technology and help shape new market trends. From wireless audio and wearable devices to asset tracking and network fighting control solutions, Bluetooth SIG member companies continue to meet the needs of consumer, commercial, and industrial use cases.

Recent advancements in Bluetooth® audio, including the upcoming adoption of LE Audio, are influencing wireless audio device markets. Thanks to the hard work of everyone involved, the LE Audio specification project is nearing completion. It is, perhaps, the most complex specification project the Bluetooth SIG has ever taken on, involving hundreds of people across multiple working groups and committees. We look forward to completing the project this year and ushering in the next 20 years of audio innovation.

We are proud of what the Bluetooth member community was able to accomplish last year, and we appreciate that so many members are working tirelessly to develop innovations that create a more connected world.

It's an honor to be part of such an incredible community.



*Mark*

Mark Powell | CEO | Bluetooth SIG, Inc.

Supported by updated forecasts from ABI Research and insights from several other analyst firms, the Bluetooth Market Update is intended to help global Internet of Things (IoT) decision makers stay up to date on the role Bluetooth technology can play in technical roadmaps and markets.

Unless otherwise noted, data without a specified source are from ABI Research. Data files referenced from ABI Research include Bluetooth Data Set (M2M), Wireless Consumer, and Bluetooth Data Set (Consumer).

## Bluetooth® Total Shipments

### ANNUAL DEVICE SHIPMENTS

**For the first time, Bluetooth® annual device shipments are on track to exceed 7 billion in 2026**

With the support of a committed member community, Bluetooth® technology has met growing wireless innovation demands for more than 20 years. While 2020 proved to be a turbulent year for many global markets, by 2021, Bluetooth markets began quickly bouncing back toward pre-pandemic levels. In fact, in 2022, analysts expect to see a faster recovery from the pandemic than initially predicted. Analysts anticipate that annual shipments of Bluetooth enabled devices will see 1.5x growth, a 9 percent compound annual growth rate (CAGR), from 2021 to 2026.

#### Total Annual Bluetooth® Device Shipments

NUMBERS IN BILLIONS

Year	Shipments (Billions)
2017	3.6
2018	3.8
2019	4.1
2020	4.1
2021	4.7
2022	5.1
2023	5.5
2024	6.0
2025	6.5
2026	7.0

**7.0 BILLION** annual shipments

**9% CAGR**

Data Source: ABI Research, 2022

#### TOTAL SHIPMENTS Shipments by Radio

Bluetooth® technology supports multiple radio options that allow developers to build products that meet the unique connectivity needs of their customers.



# Introducing Auracast™



# Bluetooth audio



## Classic Audio

Audio on Bluetooth Classic

## LE Audio

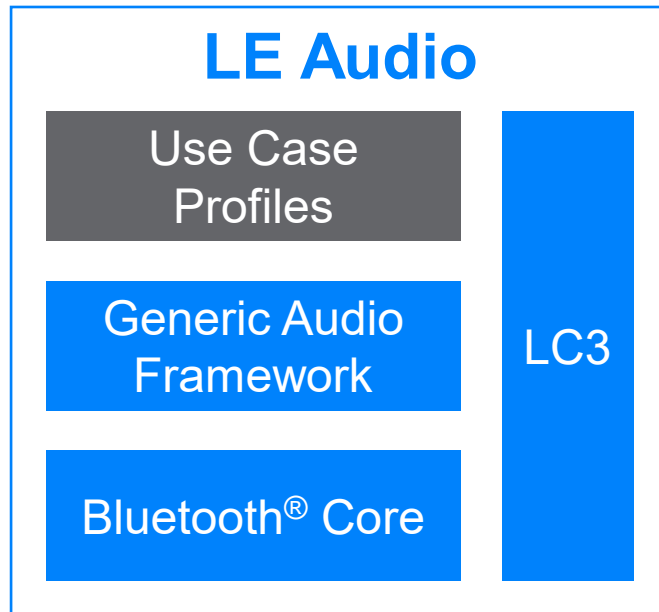
Audio on Bluetooth LE

The next generation of  
Bluetooth audio

Will enable the next 20  
years of wireless audio  
innovation

# Bluetooth® LE Audio Specification Status

Over 20 new Bluetooth Specifications



[Bluetooth LE Audio Specifications](#)

## Bluetooth® Core Enhancements

Enable audio over Bluetooth LE, including *LE Isochronous Channels*



Jan 2020

## Low Complexity Communications Codec (LC3)

A new high-quality, low-power audio codec



Sep 2020

## Generic Audio Framework (GAF)

A flexible middleware for delivering and controlling audio content, including *Multi-Stream* and *Broadcast*



Dec 2020-  
Mar 2022

## Use Case Profiles

Interoperable support for use cases & ecosystems: telephony, media, hearing aids, etc...



Expected June to  
Early August

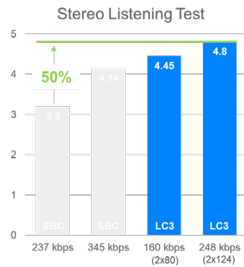
(Draft versions already available to public)

Adopted

In Progress

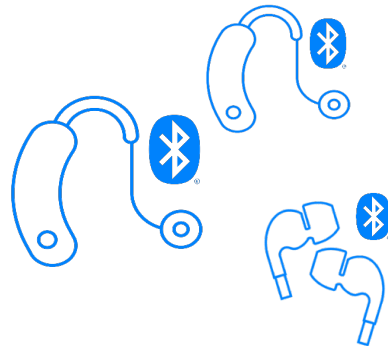
# LE Audio | The next generation of Bluetooth® audio

## New Modern Codec (LC3)



Higher Quality  
Better Performance  
Lower Power

## Multi-Stream Support



Standard for Truly  
Wireless (TWS) Stereo  
Earbuds

## Standardized Hearing Aids



Better Performance  
Lower Power  
Global Interoperability

## Broadcast Audio



Formerly Called  
"Audio Sharing"

Many compelling  
new audio  
experiences





(Formerly known as Audio Sharing)

Auracast™ broadcast audio will deliver compelling new audio experiences that enhance the way you engage with others and the world around you.



Share Your Audio



Hear Your Best



Unmute Your World

# Bluetooth LE Audio Book



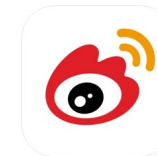
# BLUETOOTH SIG SOCIAL MEDIA ACCOUNTS

Scan and follow Bluetooth SIG's social media accounts and learn more in time!

WeChat



Weibo





# Thank you!