

# Auracast™, Bluetooth® LE Audio evolves



**What is Bluetooth  
LE Audio**



**Auracast™ use cases**



**Auracast™ with  
STM32WBA**

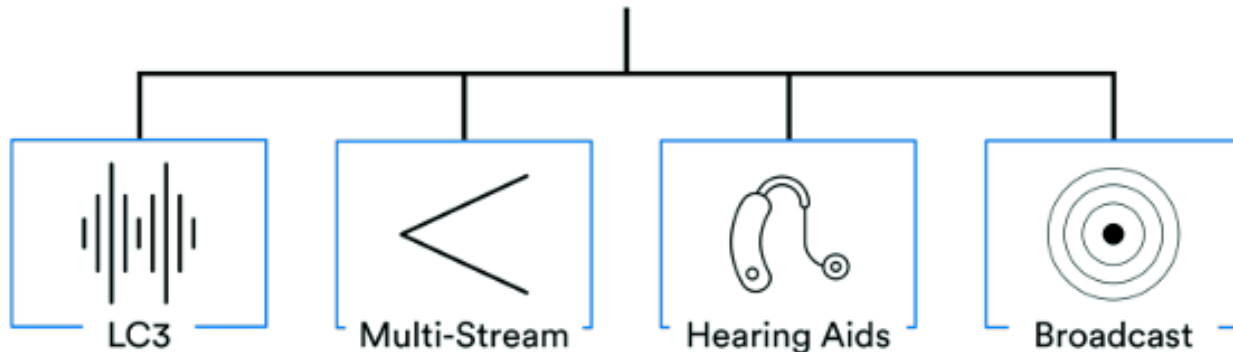


# Bluetooth LE Audio

## The next generation of Bluetooth Audio

Introduces new features that improves performance & creates new use cases

## Bluetooth LE Audio



Bluetooth 5.2 optional feature  
Improved audio quality  
Reduced power consumption

Greater Interoperability  
Development of hearing aids & TWS device  
Introduction of Auracast™ broadcast audio

# What is Bluetooth LE Audio?

Based on isochronous channels, new to Bluetooth LE audio

LC3 compression standard

True wireless stereo support (L/R) native to Bluetooth LE audio

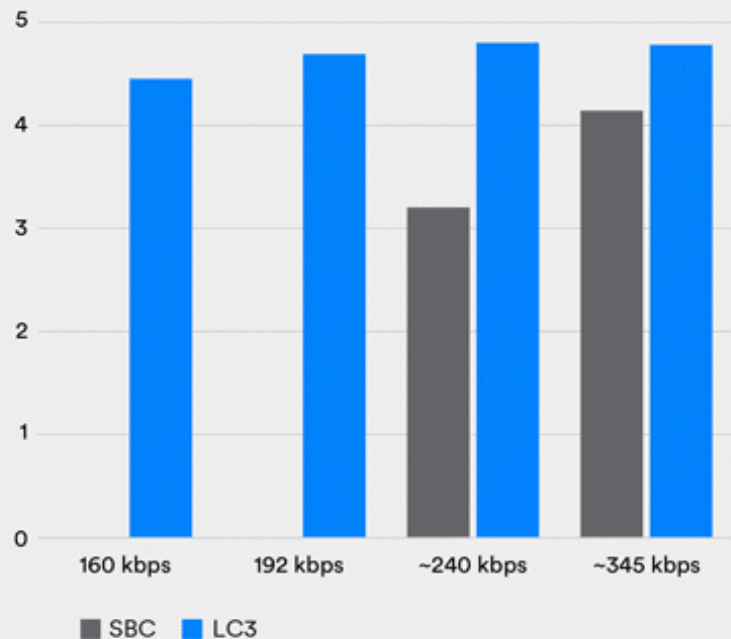
Broadcast streams with numerous consumers / sink devices

Connected streams with multiple devices

# Next generation audio compression

## Bluetooth LE Audio employs LC3

**Bluetooth Codec Comparison**  
Standard Stereo Listening Test



Low Complexity Communications Codec (LC3) is highly portable

Microcontrollers can code and decode easily with LC3

Comparing LC3 with SBC (Bluetooth Classic) listening tests show the same and better results





# New audio experiences with Auracast™



Invite others to share in your audio experience

Augmented / assistive listening in public venues

Multi-stream audio

# Unmute your world



**Silent televisions in public spaces**

**Multi-language support**

**Tour systems at museums, convention centers etc**



# Multi-stream audio



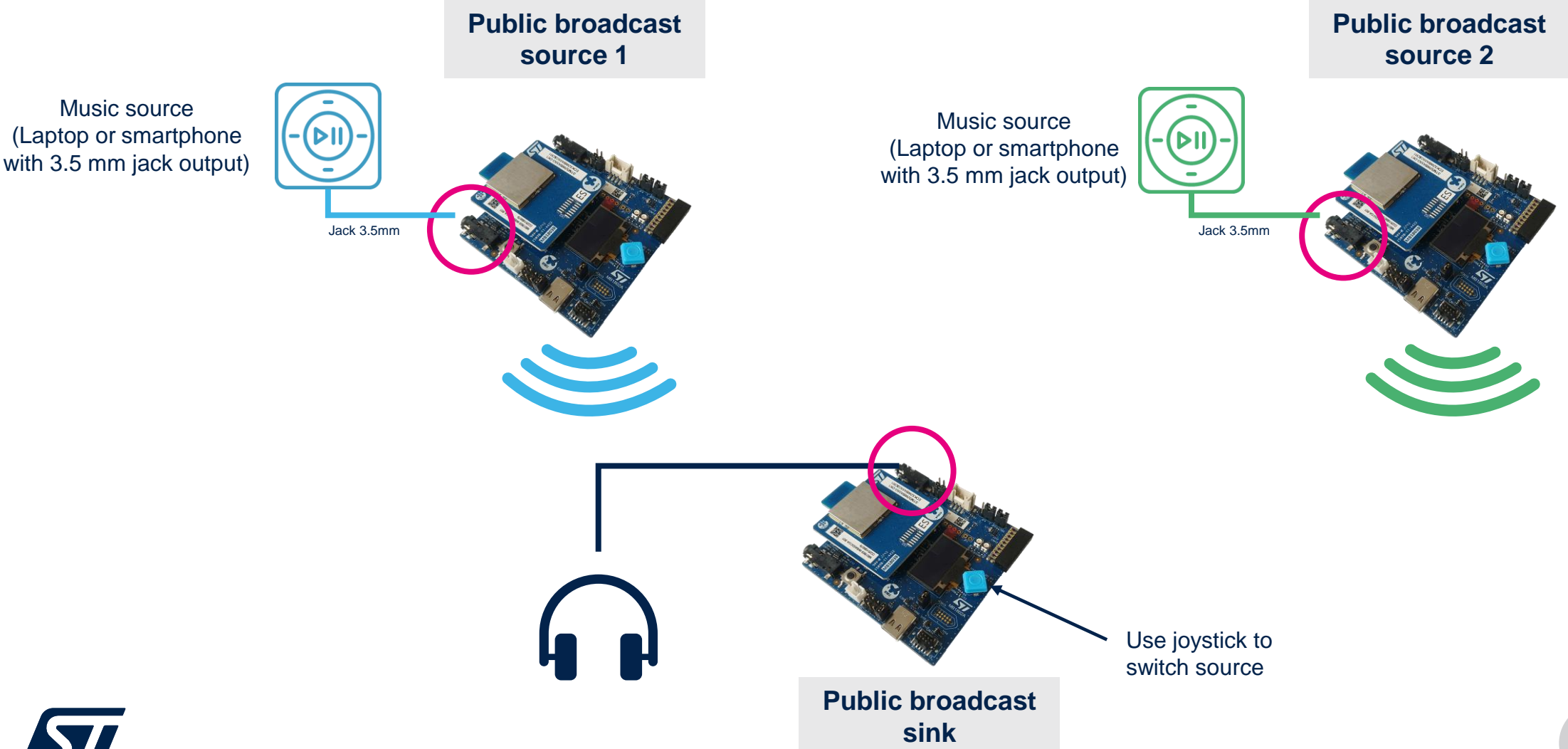
**True wireless earbuds**

**Multiple sink devices**

**Multiple audio source devices**



# Bluetooth® LE Audio / Auracast™ with STM32WBA





# STM32WBA



## Wireless

Bluetooth® Low Energy 5.4 certified  
(long range, 2 Msps, advertising extension)

## Performance

Arm® Cortex®-M33 at 100 MHz  
Efficiency

## Power efficiency

Extended battery lifetime  
Autonomous low-power mode

## Security

TrustZone®  
DPA resistant

## Integration

1 Mbyte of flash memory, 128 Kbytes RAM  
Reduced BOM

## Free ecosystem

Faster time to market  
Enhanced design journey

