

## **Cinemas, gamers and the hard of hearing could all benefit from Bluetooth 5.2**

Bluetooth will continue to be a popular and flexible way to connect devices, thanks in part to the technology being refreshed to remain relevant to component manufacturers and consumers, according to the latest report from SAR Insight & Consulting.

“Bluetooth low energy’s addition to the audio market, will prove a key driving factor to the growth of Bluetooth as a whole,” the report’s author Joe Murray said. “The improved battery life will make Bluetooth devices increasingly more desirable than wired devices.”

According to ‘Bluetooth LE Audio and LC3: Market Overview, Technology Trends and Forecast’ from SAR Insight & Consulting, Bluetooth 5.2 is on course to be widely adopted in the coming years and will address some of the key negative issues such as interference, power efficiency and latency. In doing so, it will open up new market opportunities that should help to grow different market sectors, such as hearing aids, and gaming.

“If you take the gaming sector, for example, Bluetooth has been a technology best avoided,” Joe said. “Latency is a gamer’s worst nightmare, especially in fast-paced games where any lag between command and effect can affect the outcome. If the audio slips out of sync, then it puts players at a distinct disadvantage.”

The new Low Complexity Communication Codec (LC3) is set to replace SBC in Bluetooth 5.2, and it will be capable of scaling between 345kbps to 160kbps both at a bit depth of 16. Alongside this, LC3Plus will boast a latency time of around 5ms, much quicker than SBC’s 100ms. As a result, the lingering issue of Bluetooth for gaming can finally be addressed, as the threshold for human brains to detect when audio is out of sync is as low as 30ms.

Furthermore, the audio quality still remains higher than that of SBC, even at its lowest settings.

As the Bluetooth market is already well established, LC3 is forecast to have a fast and smooth adoption, reaching over 77% of all A2DP-enabled devices by 2025. This will leave only 30% growth left before it reaches the same level as SBC.

“SBC will remain stable until 2022,” Joe said. “At this point it will begin to slowly drop off, being replaced by LC3.”

“In the long run this drop off will increase until nearly all products use LC3 exclusively. However, in order to remain compatible with older products, SBC will be present in the Bluetooth market for the next 5-10 years at least.”

These are some of the findings from ‘Bluetooth LE Audio and LC3: Market Overview, Technology Trends and Forecast’ from SAR Insight & Consulting.

**For further information, please contact:**

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**Notes to editors:** SAR Insight & Consulting provides detailed quantitative and qualitative research on established and emerging technology markets across multiple end applications, covering audio, voice, AI, UI, connectivity, sensors and more. [www.sarinsight.com](http://www.sarinsight.com)