



## NXP Brings Dolby Atmos® and DTS:X® to the Masses with its New Immersiv3D Audio Solution

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### News Highlights



The solution combines ground-breaking NXP software on its i.MX 8M Mini applications processor and will support both Dolby Atmos® and DTS:X® immersive audio technologies in future devices that integrate the i.MX 8M Mini SoC.

- Announces support for immersive audio support with Dolby Atmos® and DTS:X® on an Arm® Cortex®-A53
- Announces advanced hardware and software architecture solutions based on the NXP i.MX 8M applications processors, Immersiv3D, poised to dramatically reduce system cost, enable advanced audio pre/post processing, and accelerate time to market
- Enables development of superb audio devices with advanced features like voice control for the smart home

LAS VEGAS, Jan. 08, 2019 (GLOBE NEWSWIRE) -- NXP Semiconductors N.V. (NASDAQ: NXPI) today unveiled Immersiv3D audio solution for the smart home market, igniting a new era of audio system design and development. The solution combines ground-breaking NXP software on its [i.MX 8M Mini applications processor](#) and will support both Dolby Atmos® and DTS:X® immersive audio technologies in future devices that integrate the i.MX 8M Mini SoC. The i.MX 8M Mini also brings smart capabilities like voice control to a broader range of consumer devices including soundbars, smart speakers, and AV receivers with the option for adding additional speakers to distribute smart voice control and immersive audio throughout the home.

### Delivering the Quality of Dolby Atmos and DTS:X

Like many devices in the home, TVs and audio systems are also becoming more advanced; specifically sound — has been progressing by leaps and bounds in recent years, thanks in large part to the development of Dolby Atmos and DTS:X. Both technologies are a leap forward from surround sound and transport listeners with moving audio that fills the room and flows all around them. Listeners will feel like they're inside the action as the sounds of people, places, things, and music come alive with breathtaking realism. The new Immersiv3D audio solution was designed to enable Original Equipment Manufacturers (OEMs) to bring to market affordable consumer audio devices capable of supporting Dolby Atmos and DTS:X in their next-generation devices.

"Dolby Atmos takes your favorite entertainment to the next level with breathtaking immersive audio," said Mahesh Balakrishnan, Vice President, Enhanced Audio Experiences, Dolby Laboratories. "With Dolby Atmos supported on NXP's Immersiv3D audio solution, we are providing our OEM partners the tools to make Dolby Atmos experiences more accessible."

"The Immersiv3D solution decodes the DTS:X audio signal and re-creates the placement and movement of sound exactly as intended," said Joanna Skrdlant, General Manager, Home Audio and Solutions Licensing at Xperi, parent company of DTS. "Products enabled with DTS:X technology create multi-dimensional audio, so sound can move freely for incredible immersive audio experiences in consumer living rooms. DTS:X technology adapts to the speaker layout to best fit the individual consumer space by seamlessly transporting sound to and through specific locations within the viewing environment — in front of, behind, above and beside the audience. We're happy to work with NXP to make the DTS:X experience even more accessible to our customers."

## How NXP Immersiv3D Revolutionizes Audio Systems Development

Conventional design approaches to audio systems use Digital Signal Processors (DSPs) to deliver complex, controlled, and low-latency audio processing to enable audio and video synchronization. Traditional embedded systems have evolved over time, and today, are capable of processing the latest 3D audio formats, but audio systems need to be designed to take advantage of today's advanced processor cores. In conjunction with the NXP i.MX 8M family of processors, the innovative Immersiv3D audio solution introduces an advanced approach that features scalable audio processing integration into the System-on-Chip (SoC) Arm cores. This approach eliminates the need for expensive discrete DSPs, and also once-proprietary DSP design foundations, to embrace licensable cores.

"It's all about meeting consumer expectations," said Martyn Humphries, vice president of i.MX applications processors for consumer markets at NXP. "TVs are leading the way for innovating great home entertainment systems, from ultra HD 4K to 8K, but in parallel TVs are designed with thinner panels. Thinner TVs lack sufficient depth to add the high-quality speakers that could potentially have the biggest effect on home entertainment experiences. The Immersiv3D audio solution solves this problem by enabling 3D audio experiences in complementary home speaker systems that would be friendly on consumer wallets."

The solution delivers high-end audio features such as immersive multi-channel audio playback, natural language processing and voice capabilities to fit today's digitally savvy connected consumer.

## How NXP Immersiv3D Brings Smarter Experiences

The NXP Immersiv3D audio solution gives audio developers, designers and integrators a leap forward to add intelligence and Artificial Intelligence (AI) functionality while reducing cost. This includes development of enhancements like selective noise canceling where only certain sound elements are removed like car traffic or speech processing like changing speaker dialect or languages.

The solution introduces an easy-to-use, low-cost enablement for voice capability expansion. Audio systems built using NXP's Immersiv3D with the i.MX 8M Mini applications processor will give consumers the flexibility to add different audio speakers, regardless of brand, to stream simultaneous and synchronized audio with voice control from their systems.

## Product Availability and Demonstration

NXP will showcase its i.MX applications processor family including Immersiv3D at the NXP CES 2019 show at its booth, CP-18, in Las Vegas between January 8-11.

For more information, please contact a local NXP sales representative.

For additional press information and assets, please visit [www.nxp.com/CES/mediacenter](http://www.nxp.com/CES/mediacenter).

## About NXP Semiconductors

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A photo accompanying this announcement is available at <http://www.globenewswire.com/NewsRoom/AttachmentNg/6b87af75-e81e-404d-a9d4-a3ebc5b5fc91>

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