



# Automotive Ethernet Audio Video Bridging (AVB)

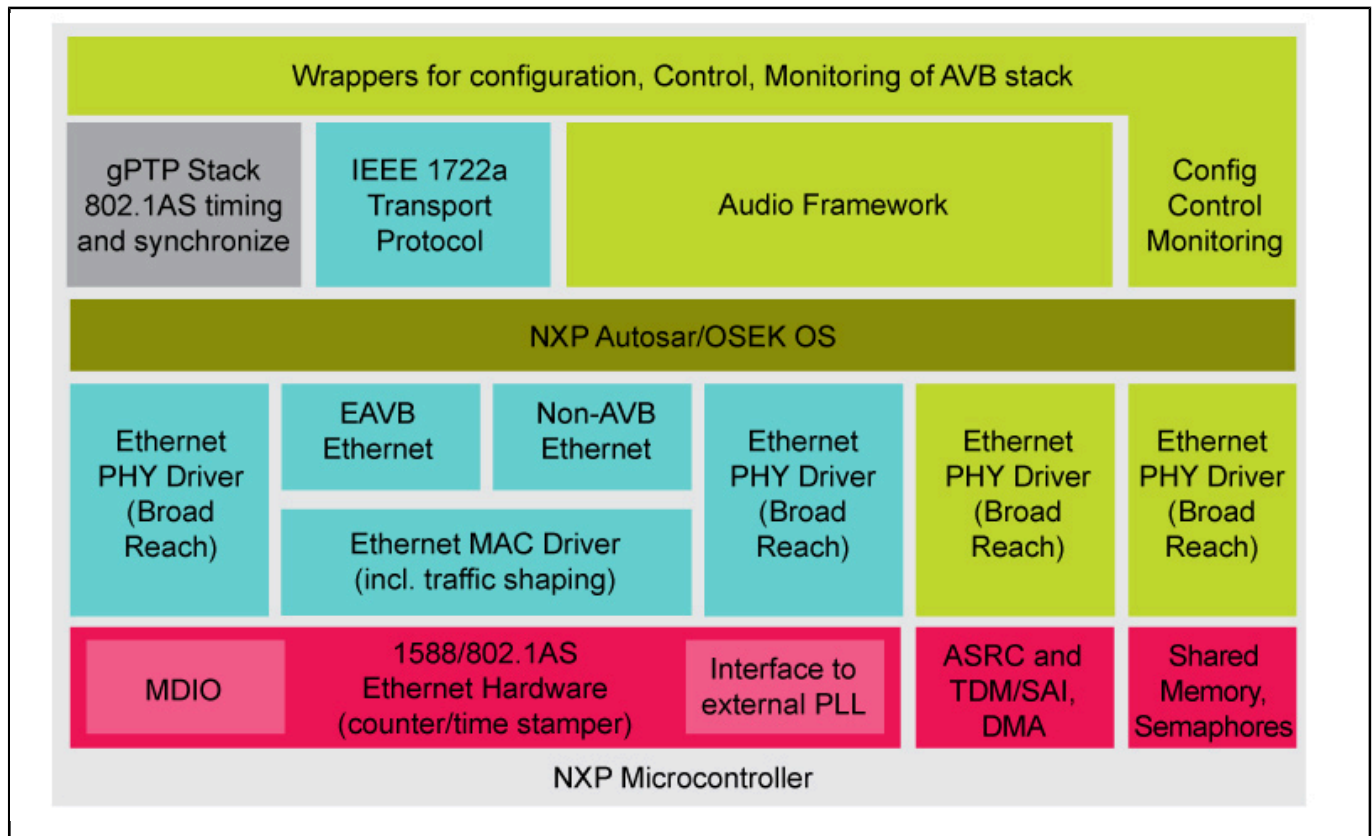
## AUTO-AUDIO-VBS

Last Updated: Dec 6, 2024

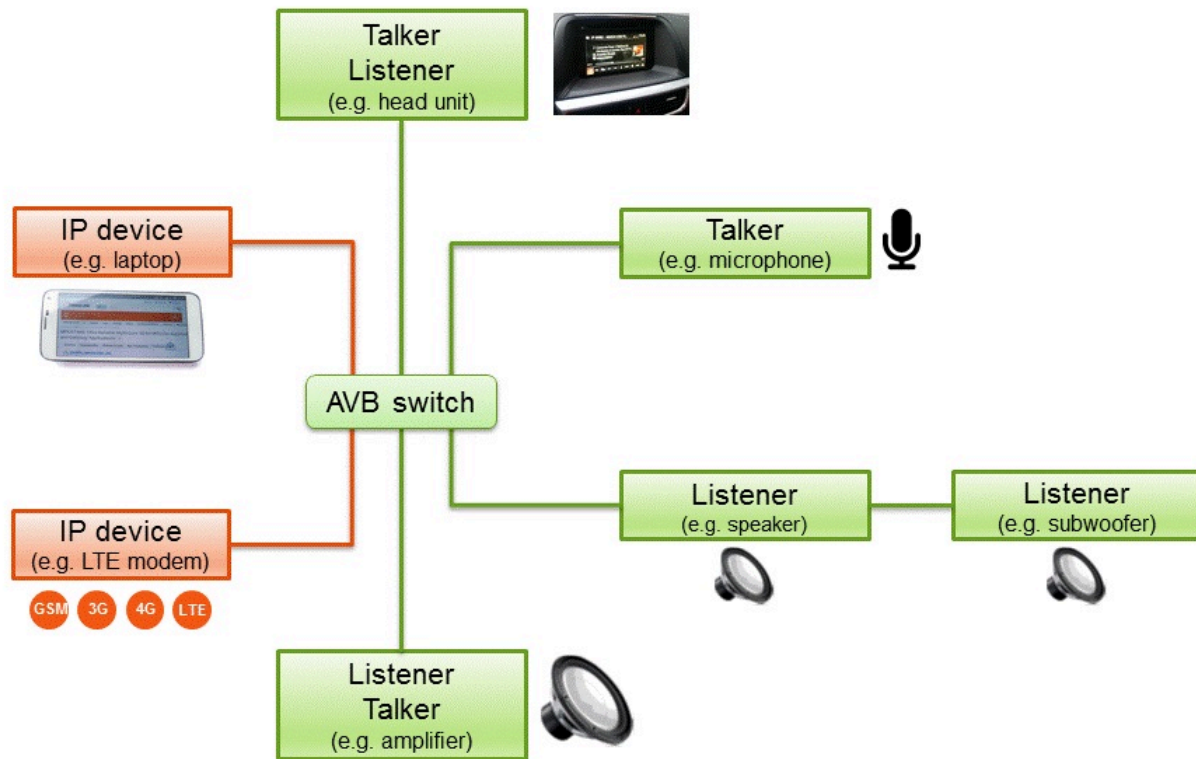
NXP Automotive audio video bridging (AVB) software provides a complex AVB solution for multi-channel audio streaming and synchronized audio playback over multiple audio end nodes. It is optimized for the NXP Power Architecture® and Arm® Processors with minimal resource usage due to a "zero-copy" approach with advanced DMA support.

The AVB stack supports single-core and multi-core designs with different partitioning options. It implements synchronous data stream playback (accurate frequency and phase) for multi-channel audio streams received via Ethernet, an external source or memory. It further features audio sample rate conversion with correctly maintained data order within the TDM, a virtual AUTOSAR® Ethernet driver, an inter-core communication module, diagnostic data output (Ethernet/UART) and extended functions like audio output muting and locking.

## Our Automotive Audio Video Bridging Software Block Diagram

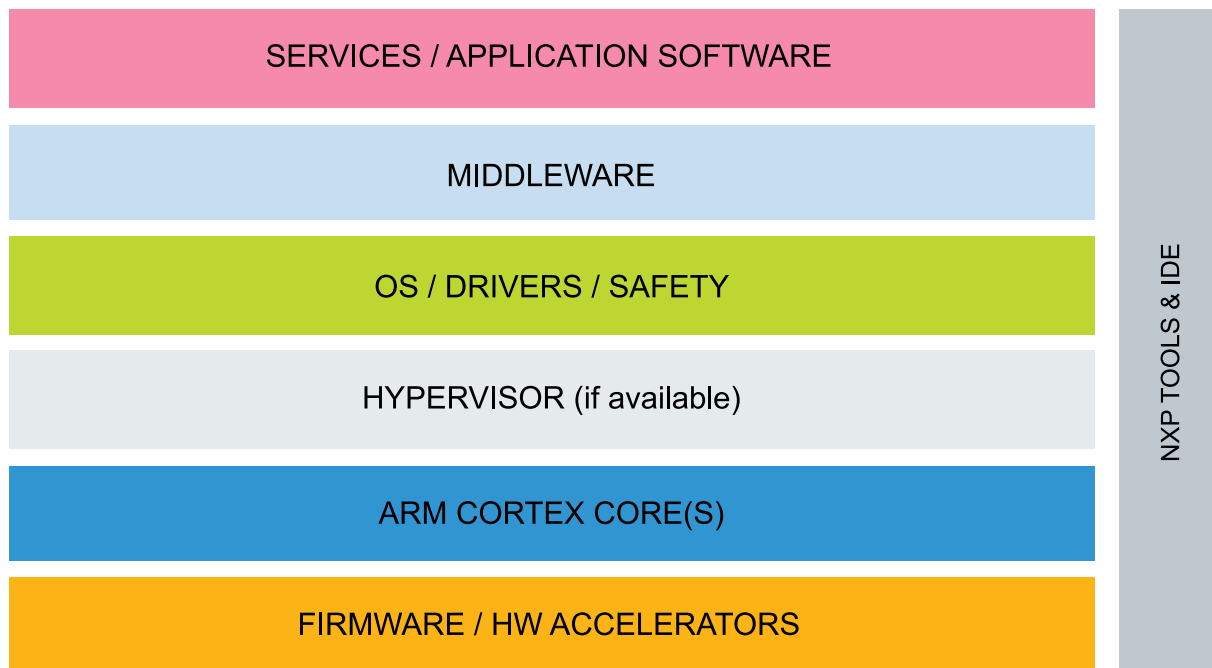


## Our Automotive Audio Video Bridging Software Block Diagram



Example of AVB Network

## Automotive General Block Diagram Block Diagram



View additional information for [Automotive Ethernet Audio Video Bridging \(AVB\)](#).

**Note:** The information on this document is subject to change without notice.

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