



Audio Video Bridging (AVB) Software from NXP®

OVERVIEW

NXP's AVB software provides a complete set of AVB protocols for use on several different NXP development boards, reducing the need for hardware changes and eliminating redevelopment costs.

For applications requiring audio, video, and other real-time content over Ethernet, NXP's AVB software provides a complete set of AVB protocols enabling transport and sink services to multimedia applications. We offer stack solutions for end-node devices (such as the display and speakers) as well as a fully featured AVB switch.

The AVB standard adds features like time-synchronized low latency streaming services and bandwidth reservation to make it possible to carry audio and video signals on a standard Ethernet line. AVB is able to accomplish this by reserving a fraction of the available Ethernet bandwidth for AVB traffic.

WHY CHOOSE AVB?

AVB offers high-quality transport services over Ethernet to time-sensitive streams: audio, video, and control information.

- ▶ Guaranteed and short latency (max. 2 ms)
- ▶ Guaranteed network resources (bandwidth, queuing)
- ▶ Precision time synchronization (gPTP)

AVB replaces complex and costly wiring with Ethernet technology.

- ▶ Ethernet is commonly deployed
- ▶ Co-exists with legacy IP data traffic



FEATURES

- ▶ All AVB components are provided (as defined by IEEE®)
- ▶ End-point implementation for IEEE 1722 AVTP, 802.1AS gPTP, 802.1Qav FQTSS, 802.1Qat SRP, 1722.1 AVDECC
- ▶ Hardware abstraction to run on several NXP platforms (i.MX, Kinetis®, LPC, etc.)
- ▶ Audio/Video talker and listener with media clock recovery
- ▶ API exposing transport, control and synchronization services
- ▶ Media application integration with ALSA and gstreamer

BUSINESS MODEL

NXP's AVB software follows a simple business engagement model. A development license that includes a block of support hours is required to get your development started, followed by a production license when you are ready to go to market. In addition, NXP offers professional support and engineering services to further assist with the development of trusted applications that are customized and optimized to the targeted application.

For more information, or to obtain your development kit, please visit www.nxp.com/avb.

AVB STACK BLOCK DIAGRAM

