Audio Video Bridging Software

AVB-SOFTWARE

Last Updated: Jun 4, 2025

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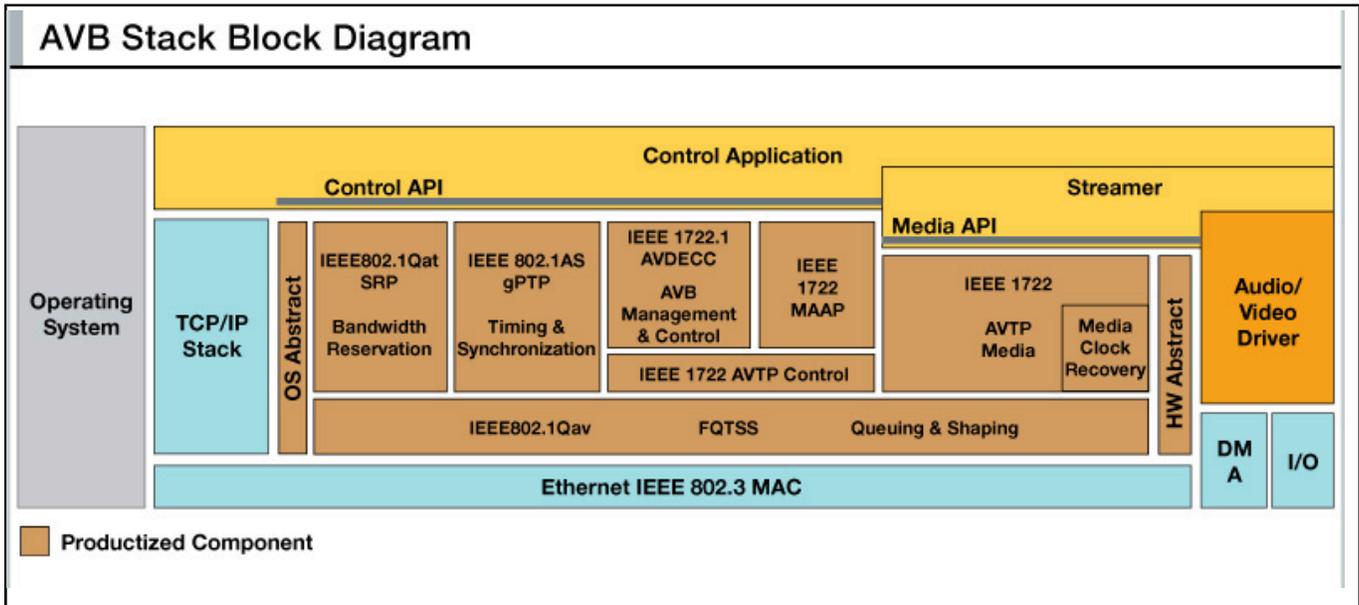
For applications requiring audio, video, and other real time content over Ethernet, NXP's AVB software provides a complete set of AVB protocols enabling transport and sink services to multimedia applications. We offer stack solutions for end-node devices (such as the display and speakers) as well as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

This software product is offered through NXP Professional Services. Please complete and submit this form and someone from the Services team will be in contact with you.

AVB/TSN software is also available some i.MX RT platforms as part of the MCUXpresso SDK. See this page for more information.

Audio Video Bridging Software Block Diagram

AVB Stack Block Diagram

	Control Application	
	Control API	**Streamer**
		Media API

Operating System | **TCP/IP Stack** | OS Abstract | IEEE802.1Qat SRP / Bandwidth Reservation | IEEE 802.1AS gPTP / Timing & Synchronization | IEEE 1722.1 AVDECC / AVB Management & Control | IEEE 1722 MAAP | IEEE 1722 / AVTP Media | Media Clock Recovery | HW Abstract | **Audio/ Video Driver**

IEEE 1722 AVTP Control

IEEE802.1Qav FQTSS Queuing & Shaping

Ethernet IEEE 802.3 MAC DMA I/O

■ **Productized Component**

View additional information for Audio Video Bridging Software.

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