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Microchip Unveils First Fully Integrated Solution for Vehicle Ethernet Audio Video Bridging (AVB)

LAN9360 AVB audio endpoint helps to reduce development time, eliminating the need for stack integration and additional software and firmware development

CHANDLER, Ariz., Feb. 09, 2021 (GLOBE NEWSWIRE) -- As connected vehicles increasingly rely on Ethernet for network connectivity, smart technology is helping developers to streamline infotainment system development and quickly adapt to manufacturers' evolving requirements. Microchip Technology Inc. **(Nasdaq: MCHP)** today announced the first hardware-based audio endpoint solution for AVB – the **LAN9360**, a single chip Ethernet controller with embedded protocols.

Microchip's LAN9360 audio endpoint controller interconnects vehicles' infotainment devices including speakers, amplifiers, microphones, navigation systems, radio tuners and smart headrests with Ethernet AVB. The LAN9360 bridges audio between Ethernet AVB and Inter-IC Sound (I²S™), Time Division Multiplexing (TDM) and Pulse Density Modulation (PDM) local audio interfaces. It completely supports audio transmission over Ethernet AVB, including generalized Precision Time Protocol gPTP, timestamping, transport protocols and content protection with High-bandwidth Digital Content Protection (HDCP). It also supports secure boot and secure remote updates over Ethernet. Unlike other Ethernet bridging networking solutions requiring System-on-Chip (SoC) microcontrollers (MCUs) plus third-party software stacks, the LAN9360 endpoint device requires no software integration, enabling designers to configure the device simply and quickly to manufacturers' unique audio and networking requirements.

Microchip's LAN9360 audio endpoint controller has been validated to industry standards for Ethernet interoperability for AVB protocols. The device is validated to the IEEE® 802.1BA-2011, IEEE 802.1AS, IEEE1722 and IEEE1733 specifications for Ethernet networks and is certified to the standards for AVB interoperability and reliability established by the Avnu Alliance consortium.

"In looking for an AVB solution for our Automotive Remote Tuners products, the LAN9360 allowed us to develop on a trusted platform quickly, without changing our current software," said Pierrick Labeau, Research & Development Manager, FIAMM Horn & Antennas - Elettra 1938 Group.

"This endpoint controller is a single smart chip for Ethernet interoperability in infotainment systems," said Matthias Kaestner, vice president, Automotive. "In today's rapid-pace design environment, this out-of-the-box device gives engineers a quick start to development and allows them to avoid months of engineering work and technical risks involved in coding or engaging third-party integrators."

The LAN9360 expands Microchip's comprehensive Ethernet product portfolio and total system solution for automotive developers. Other Microchip Ethernet devices for automotive applications include the **LAN8770 100BASE-T1 PHY**, a cost-effective, single-port physical layer transceiver compliant with the IEEE 802.3bw-2015 specification. The device provides 100 Mbps transmit and receive capability over a single Unshielded Twisted Pair (UTP) cable. In addition, the **Trust Anchor (TA100)**, a secure element from Microchip's portfolio of **CryptoAutomotive**™ security ICs for automotive security applications, provides support for code authentication, secure boot and audio content protection with High-bandwidth Digital Content Protection (HDCP).

Development Tools

A development board and Microchip's **MPLAB® Network Creator** are available for configuring the LAN9360 using an intuitive graphical user interface. MPLAB Network Creator, a free graphical configuration environment, allows developers to generate configuration files quickly and intuitively for the LAN9360 AVB audio endpoint and perform full firmware or configuration updates to the LAN9360 devices remotely over Ethernet.

Pricing and Availability

Microchip's LAN9360 endpoint device is available for volume orders in a 100-Thin Profile Fine Pitch Ball (TFBGA) package option. For pricing and additional information, contact a Microchip sales representative, authorized worldwide distributor, or visit **Microchip's website**.

Resources

High-res images available through Flickr or editorial contact (feel free to publish):

Application image: **https://www.flickr.com/photos/microchiptechnology/50874895856/**

Block diagra**m: https://www.flickr.com/photos/microchiptechnology/50874993757/**

About Microchip Technology

Microchip Technology Inc. is a leading provider of smart, connected and secure embedded control solutions. Its easy-to-use development tools and comprehensive product portfolio enable customers to create optimal designs which reduce risk while lowering total system cost and time to market. The company's solutions serve more than 120,000 customers across the industrial, automotive, consumer, aerospace and defense, communications and computing markets. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip website at **www.microchip.com**.

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