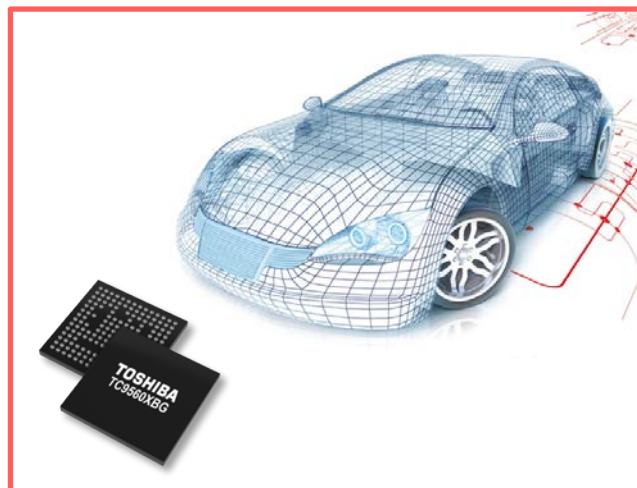


## > TC9560XBG/AXBG FOR AUTOMOTIVE

TC9560XBG is an automotive grade bridge IC that allows high-speed interface between the host SoC and Ethernet devices on the network. Connected to an application processor or other SoC host, TC9560XBG allows the host device to deliver audio, video, and data information through the 10/100/1000 Ethernet network in an automotive environment. Connection to the host is via PCIe running at 2.5/5.0Gbps, 480Mbps HSIC or TDM (Time Division Multiplex)/I2S for audio traffic. RGMII/RMII/MII interface connects to the Ethernet switch, and both AVB and legacy traffic are supported. An on-chip Cortex-M3™ processor running at 187MHz can perform system control and management. Security measures include SHA2-Hash and eFUSEs. The device is being qualified at AEC-Q100 Temperature Grade 3 for automotive environments.

## ETHERNET-AVB BRIDGE



TC9560XBG is an automotive grade bridge IC that allows high-speed interface between the host SoC and Ethernet devices on the network. Connected to an application processor or other SoC host, TC9560XBG allows the host device to deliver audio, video, and data information through the 10/100/1000 Ethernet network in an automotive environment. Connection to the host is via PCIe running at 2.5/5.0Gbps, 480Mbps HSIC or TDM (Time Division Multiplex)/I2S for audio traffic. RGMII/RMII/MII interface connects to the Ethernet switch, and both AVB and legacy traffic are supported. An on-chip Cortex-M3™ processor running at 187MHz can perform system control and management. Security measures include SHA2-Hash and eFUSEs. The device is being qualified at AEC-Q100 Temperature Grade 3 for automotive environments.

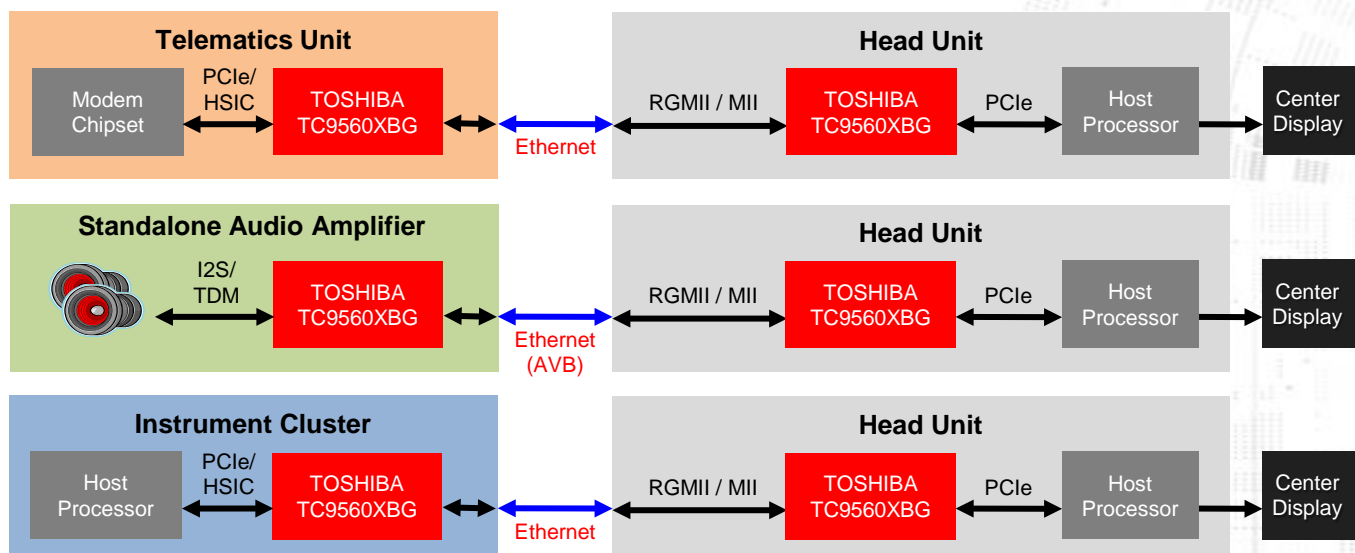
### > KEY FEATURES

- PCIe Ver. 2.0/1.0 single lane (5GT/s / 2.5GT/s)
- USB HSIC (480 Mbps)
- Ethernet (AVB support) 10/100M/1Gbps
- RGMII, RMII, MII interface
- Free programmable 187MHz Cortex-M3 CPU
- Internal 512KB SRAM
- Wake-up from LAN / low power mode
- Ethernet-AVB to I2S/TDM direct transfer
- Quad SPI (incl. Boot), I2C, SPI & UART
- Optional CAN 2 channels with ISO CAN-FD support (TC9560AXBG)
- Automotive AECQ-100 Grade 3 and TS16949
- Compact LFBGA 10 x 10mm 0.65mm ball pitch

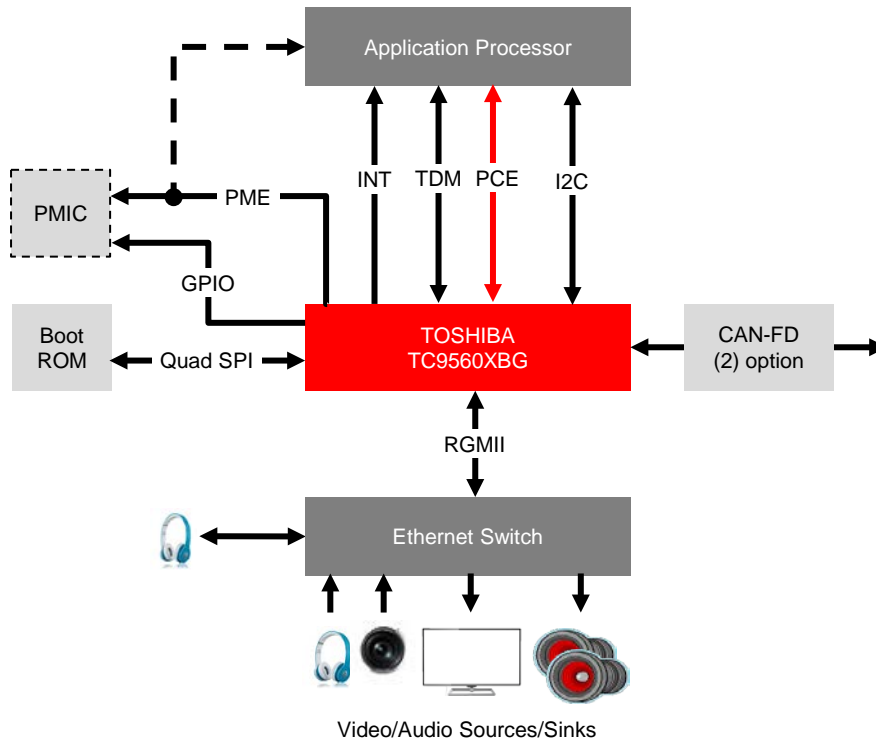
### > BENEFITS

- Suitable for high bandwidth communication
- USB HSIC for alternative communication path
- Flexible Connectivity
- Interfaces for Telematics/Modems, IVI/Headunits
- Interfaces for very flexible Phy- or switch connectivity with different voltage levels
- Programmable CPU for system control, local TCP/IP stack etc.
- Built-in SRAM for multiple usage (buffering, firmware etc.)
- Can autonomously receive messages and wake up the host
- TC9560XBG can be an audio end point without a host MCU

### > AUTOMOTIVE NETWORK CONNECTIVITY EXAMPLES



> **INFOTAINMENT / IVI SYSTEM DIAGRAM EXAMPLE**



> **TELEMATICS / LTE MODEM SYSTEM DIAGRAM EXAMPLE**

