# Audio over Ethernet solution hardware

ZCU 3.x solution board

| Role | ST automotive-grade devices |
|---|---|
| MCU for system control and processing | ▪ SR6G6C4 / SR6G6C6 Stellar SR6 G6 line, 32-bit Arm® + automotive integration MCU 4x Cortex®R52+ cores, 16 MB NVM (2x 15 MB "OTA X2") 3.8 MB RAM, with embedded virtualization, safety and security |
| Power | ▪ SPSB100G power management IC<br>▪ STPM801 HV hot swap, soft start and oring |
| eFuse for power distribution protection | ▪ VNF1248F high-side switch controller with STi2Fuse protection<br>▪ VNF9D1M5 2-channel high-side driver with STi2Fuse protection<br>▪ VNF9Q20F 4-channel high-side driver with STi2Fuse protection<br>▪ VNF9D5F 2-channel high-side driver with STi2Fuse protection |
| Drivers for switching / actuation | ▪ VN9D30Q100F 6-channel / VN9D5D20FN 4-channel HSD with 24-bit SPI interface<br>▪ VN9004J 1-channel / VND9008J 2-channel HSD with current sense analog feedback<br>▪ L99MH98 octal half-bridge pre-driver / VNH9030AQ integrated H-bridge motor driver<br>▪ L9026 configurable multi-channel relay driver 2HS + 6HS/LS / L9800 8-channel LS driver<br>▪ L99DZ200G front door device with LIN and HS-CAN (for dual H-bridge driving) |
| LVMOS for power switching | ▪ STL325N4F8AG / STL210N4LF7AG N-channel 40 V MOSFET in PowerFLAT 5x6<br>▪ STL135N8F8AG N-channel 80 V / STL105N4LF7AG 40 V MOSFET in PowerFLAT 5x6<br>▪ STL76DN4LF7AG N-channel 40 V MOSFET in PowerFLAT 5x6 |
| Interface device | ▪ L9663 PSI5 transceiver IC |
| Audio amplifier | ▪ HFDA801 4x80W digital input class-D automotive audio amplifier |

## ZCU 3.x audio extension board for audio function enhancement

| Role | ST automotive-grade devices |
|---|---|
| AMP for amplification | ▪ FDA902HP class-D digital input automotive power amplifier with load value recognition and load current monitor<br>▪ HFDA80D 4-channel digital input class-D audio amplifier with Hi-Fi audio quality, in-play diagnostics, 2 MHz switching frequency |
| Codec | For MIC input |