The S12ZVL platform, part of the S12 MagniV mixed-signal MCU product line, offers a low-cost, highly integrated solution for space-constrained automotive LIN nodes. With memory sizes from 8-128K flash, the family provides scalability for platform standardization.

The S12ZVL integrates a sophisticated S12Z core with a 12 V to 5 V voltage regulator and a LIN physical layer transceiver for automotive and industrial applications such as sensor interfaces, actuators, switch panels or ambient lighting.
S12 MagniV Mixed-Signal MCU for LIN Applications Block Diagram

Core
- S12Z 32 MHz Bus
- DBG
- BDC

High Voltage Analog
- 12 V VREG
- LIN Physical Layer
- High Voltage Input
- VSUP Sense

Memories
- Flash (ECC) 128 KB
- EEPROM (ECC) 2 KB
- SRAM (ECC) 8 KB

System
- CPMU
- IPLL
- IRC
- XOSCCLP

Analog
- 12-bit ADC
- 1x EVDD
- 3x NGPIO
- Temp Sense
- ACMP
- 8-bit DAC
- PGA

Timers
- 6 ch. TIM0
- 2 ch. TIM1
- API
- RTI
- PWM

Comm. Interfaces
- 1x LIN Phy
- 2x SCI
- 1x IIC
- 1x SPI
- 1x MSCAN

HMI
- GPIO
- KWU
- IRQ

View additional information for S12ZVL Mixed-Signal MCU for Automotive and Industrial LIN Applications.

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