GoldVIP provides a reference vehicle integration platform that accelerates S32G hardware evaluation, software development and rapid prototyping efforts.

It integrates NXP standard and reference software, along with open source and third-party software to provide an evaluation, development and rapid prototyping platform.

It includes a graphical user interface, real-time use cases for evaluation, real-time resource monitoring and secure cloud connectivity with partner integration that supports OTA updates, AUTOSAR™ environments, cloud services and intrusion detection and prevention (IDPS) security capabilities.
S32G Vehicle Integration Platform (GoldVIP) Block Diagram

**Graphical User Interface and Example Applications**
- Vehicle Services
  - AWS IoT FleetWise
  - AWS IoT Greengrass
  - Argus CAN IDPS
  - CAN Gateway
  - RTI Connext Drive® DDS™ Framework

**Vehicle Services**
- NXP System-on-Chip: S32G
- Hardware Platforms: S32G RDB / GoldBox

**Linux® BSP (Services, Cloud)**
- K3s Container Orchestration Platform
- Argus Ethernet Intrusion Detection & Prevention System (IDPS)
- Ethernet Gateway

**Linux® BSP (In-vehicle Networking, Security)**
- Machine Learning Applications
- eIQ® Auto Deep Learning Toolkit
- CAN Gateway

**Packet Forwarding Engine Firmware**
- Rapid Prototyping Environment (Python, Java)
- Ulko AUTOSAR® Adaptive Platform
- Ethernet Gateway

**Hardware Security Engine Firmware**
- Firmware Low Latency Communication Engine Firmware

**Graphical User Interface and Example Applications**
- NVIDIA® Drive®® DDS™ Framework
- Packet Forwarding Engine Firmware
- Real-Time Drivers (RTD)

**AWS IoT FleetWise**
- Rapid Prototyping Environment (Python, Java)
- Ulko AUTOSAR® Adaptive Platform
- Ethernet Gateway

**Rapid Prototyping Environment**
- In-vehicle Networking, Security
- Ulko AUTOSAR® Classic Platform
- CAN Gateway

**Linux® BSP**
- Xen Project® Type-1 Hypervisor
- Packet Forwarding Engine Firmware
- Real-Time Drivers (RTD)

**Machine Learning Applications**
- Machine Learning Applications
- eIQ® Auto Deep Learning Toolkit
- CAN Gateway

**ARGUS CAN IDPS**
- Machine Learning Applications
- eIQ® Auto Deep Learning Toolkit
- CAN Gateway

**RTI Connext Drive® DDS™ Framework**
- Machine Learning Applications
- eIQ® Auto Deep Learning Toolkit
- CAN Gateway

**NXP System-on-Chip: S32G / Hardware Platforms: S32G RDB / GoldBox**

**Automotive General Block Diagram**

**SERVICES / APPLICATION SOFTWARE**
- AWS IoT FleetWise
- AWS IoT Greengrass
- OTAmatic Client

**MIDDLEWARE**
- K3s Container Orchestration Platform
- Argus Ethernet Intrusion Detection & Prevention System (IDPS)

**OS / DRIVERS / SAFETY**
- CAN Gateway
- RTI Connext Drive® DDS™ Framework

**HYPERVISOR (if available)**
- Packet Forwarding Engine Firmware
- Ethernet Gateway

**ARM CORTEX CORE(S)**
- Rapid Prototyping Environment (Python, Java)
- Ulko AUTOSAR® Adaptive Platform

**FIRMWARE / HW ACCELERATORS**
- Firmware Low Latency Communication Engine Firmware
- Real-Time Drivers (RTD)
View additional information for S32G Vehicle Integration Platform (GoldVIP).

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