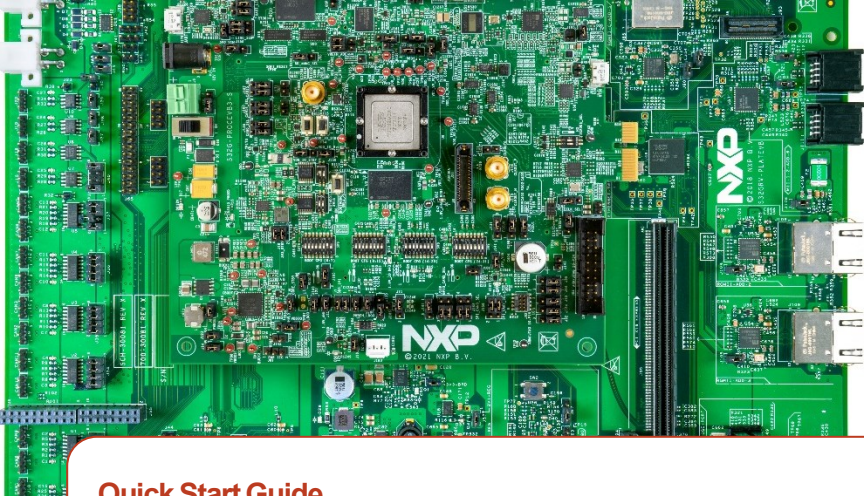




## Quick Start Guide

# S32G-VNP-EVB3

S32G is a vehicle network processor delivering high levels of real-time and applications processing, supporting CAN/LIN/FlexRay networking and Gigabit Ethernet interfaces with hardware acceleration and delivering a high level of embedded security and ASIL D functional safety capabilities.

S32G-VNP-EVB3



# GET TO KNOW THE S32G-VNP-EVB3

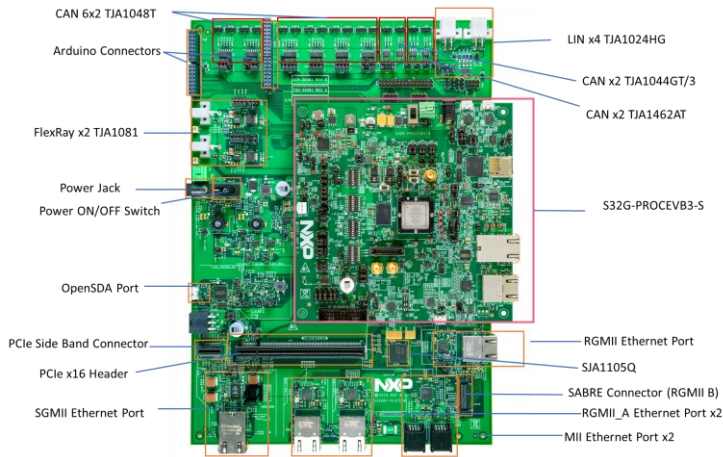


Figure 1: S32G-VNP-EVB3

## S32G-VNP-EVB3

The NXP S32G-VNP-EVB3 supports development, evaluation and demonstrations with the NXP S32G2x and S32G3x Vehicle Network Processor (VNP).

S32G targets applications such as:

- Central gateways and domain controllers
- Firmware Over-The-Air (FOTA) updates
- Secure key management, Smart antennas
- High-performance central compute nodes

# GET TO KNOW THE S32G-PROCESSOR MODULE

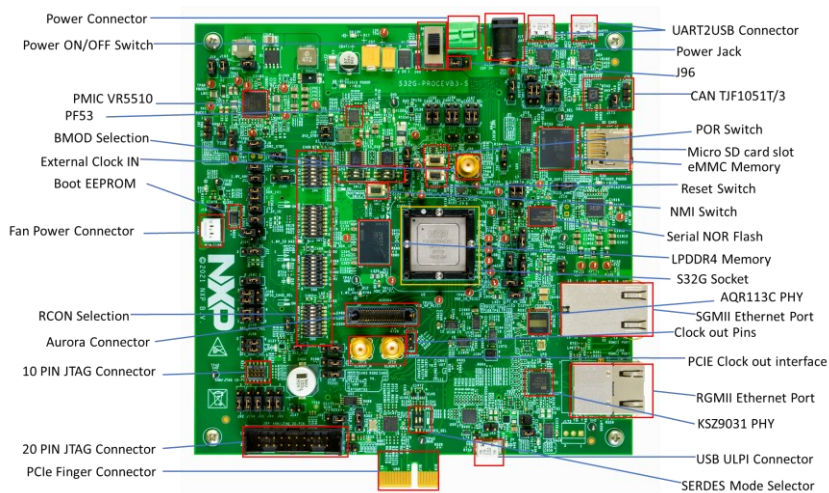
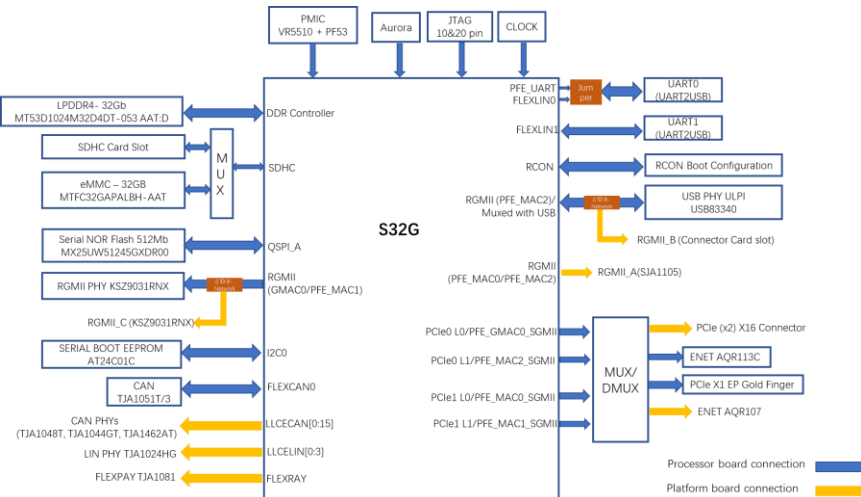


Figure 2: S32G-PROCEVB3-S Processor Module

## S32G-VNP-EVB3 Block Diagram



**Figure 3 : S32G-VNP-EVB3 Block Diagram**

# STEP-BY-STEP INSTRUCTIONS

## 1 Install S32G and Heatsink

Follow the instructions in the **S32G-PROCEVB3-S – Silicon mounting guide** to install the S32G and heat sink. For fan usage instructions refer to the S32G3-VNP-EVB User Guide

## 2 Connect the Power Supply

**When the S32G-PROCEVB3-S is stacked on the S32GRV-PLATEVB:** Jumper J96 on the S32G-PROCEVB3-S should be in position 1-2, and only the S32GRV-PLATEVB needs to be powered. Connect power supply to the 12V power jack P3 on S32GRV-PLATEVB.

**When the S32G-PROCEVB3-S is used standalone:** Jumper 96 should be in position 2-3. Connect power supply to the 12V power jack P1 on S32G-PROCEVB3-S.

## 3 Install Software

Install the following....

- ✓ [Tera Term](#) for console
- ✓ [FTDI\\_CDM](#) v2.12.28 WHQL driver for serial configuration.
- ✓ [Win32 Disk Imager](#)
- ✓ [Packet Sender](#) Application

## 4 Setup Tera Term Console

Open Tera Term on Windows PC. Select the serial port to which the micro-USB J58 of the S32G-PROCEVB3-S is connected and click OK. Go to Setup→ Serial Port and select 115200 as the baud rate.

## 5 Power ON the S32G-VNP-EVB3

Switch ON the power switch SW1 on the S32GRV-PLATEVB and power switch SW10 on the S32G-PROCEVB3-S.

## 6 Diagnostics Utility

The Diagnostics Utility is auto executed from the SD card. Console display on Tera Term shows the status of the diagnostic tests.

# Useful Documents and Projects

- DocStore
  - S32G-PROCEVB3-S – Silicon mounting guide
  - S32G-PROCEVB3-S-Rev A-Schematics-Layout
  - S32G3 Hardware Design Guide
  - S32G3 Boot Process Application Note
  - S32G3-VNP-EVB User Guide
- NXP web
  - [S32 VNP EVB Platform Board design details](#)
- Flexera
  - SW32G\_EVBDIAG\_0.8.7 Board Diagnostics

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