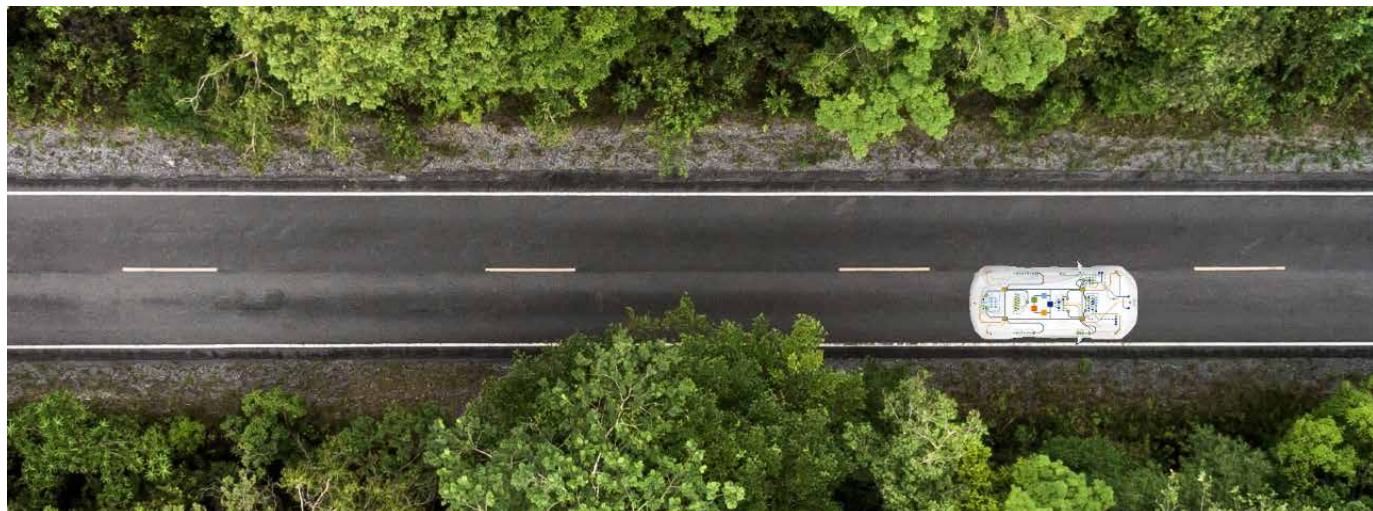


TJA1103 ASIL B COMPLIANT 100BASE-T1 ETHERNET PHY



TJA1103 is the third-generation product of NXP's successful family of 100BASE-T1 Automotive Ethernet PHYs.

TJA1103 complies with all state of the art conformance test specifications. It is perfectly suited to support the rapid expansion of Ethernet to the edge of the network or provide robust connection to domain controllers in the center of the car.

To support the safety goals at the vehicle level, the TJA1103 is designed according to ISO 26262 to meet ASIL B. Its enhanced monitoring and diagnostic features support fast event localization and swift system response.

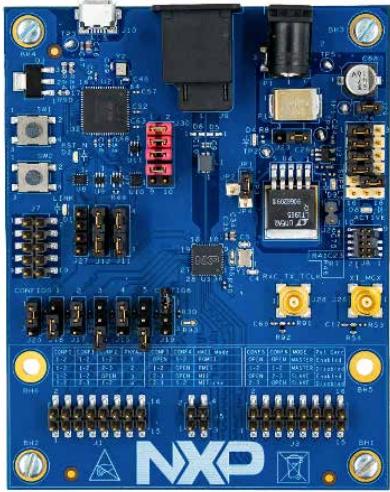
KEY FEATURES

- Functional safety ISO 26262 ASIL B compliant
- OPEN Alliance TC-1 advanced PHY features
- IEEE1588v2/802.1AS compliant time stamping
- OPEN Alliance TC-10 compliant sleep/wake up
- HVQFN36 (6 x 6 mm) with wettable flanks
- Optimized for automotive use cases
- 3.3 V single supply capability

AUTOMOTIVE TARGET APPLICATIONS

- Radar systems
- Sound system
- Vision systems and cameras
- Car radio
- Ecockpit and head unit
- Remote tuner
- TCU
- Gateway and domain controller

TJA1103EVB – EVALUATION BOARD

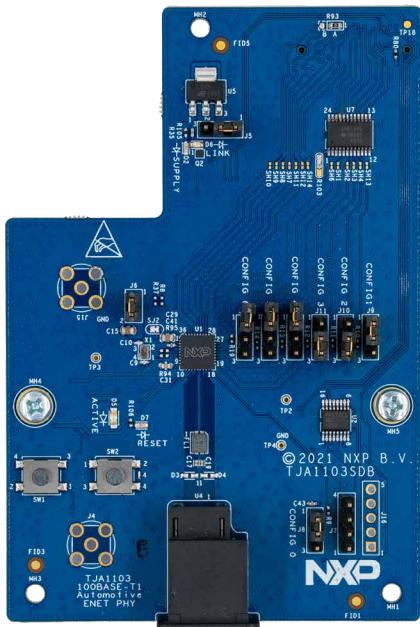


The TJA1103EVB evaluation board is a low-cost hardware development tool that supports the functional evaluation of the 100BASE-T1 Ethernet PHY TJA1103. To flexibly adapt to different application use cases, all configuration options can be selected via jumpers and all logic interfaces can be accessed via pin headers.

For users who need to evaluate the xMII datapath in an application context together with NXP processors, we recommend using the TJA1103SDB SABRE development board which is specifically designed for software engineering tasks. To enable quick application prototyping, various NXP system development boards feature the common SABRE connector; for example, our latest S32K3, S32G and i.MX 8 processors.

As ASIL B Safety Element out of Context (SEooC), the TJA1103 provides all features and documentation needed for functional safety development. Safety monitors and diagnostic functions enable the host controller to realize fast failure detection and localization, for an optimized system response.

TJA1103SDB – SABRE DEVELOPMENT BOARD



TJA1103 EXAMPLE APPLICATION

