

# Ready for the Future

## VIN|ING 2000 is an Innovative Leap Forward in ECU Access

By Dipl.-Ing. (FH) Martin Sirch, Product Manager for VCIs, Softing Automotive Electronics GmbH, Haar

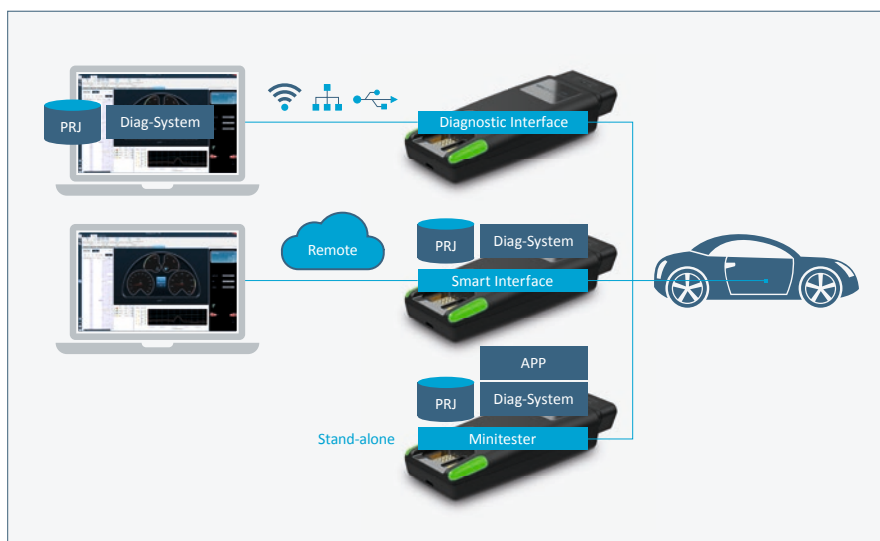
Vehicle Communication Interfaces (VCIs) are the central component when it comes to tester systems accessing the electronic control units (ECUs) that perform a wide range of control and regulation tasks in modern vehicles, including diagnostic functionality.

### New Demands Being Made on the Vehicle Communication Interface

In recent years, diagnostics has taken on more and more new tasks in this area, which come into play in the various phases of the vehicle life cycle. These include, for example, testing communication with other bus subscribers, analyzing the exchanged data and checking the ECU against its specification. The display of current measurement values and the parameterization of the ECUs with their variants are also central tasks in diagnostics. In addition, individual test sequences can be created and executed via ECU diagnostics. Accordingly, a VCI is now expected to do considerably more than “just” read and reset the error memory.

### The All-in-One Solution: VIN|ING 2000

In response to these requirements, Softing Automotive developed the multipurpose vehicle interface VIN|ING 2000, which is characterized by its compact design with an integrated diagnostic connector and comprehensive communication options. CAN/FD, K-line and Ethernet (DoIP) are supported for data exchange with the ECU; the connection to host and tester systems is possible via WLAN, Ethernet and USB. High-performance components and the modular software architecture mean it can be used with an external diagnostic computer but it can also process entire diagnostic tasks locally without a connection to a host system. VIN|ING 2000 is designed for use cases throughout the entire vehicle



VIN|ING 2000 is the ideal vehicle interface for a whole range of use case scenarios

life cycle. During vehicle engineering, it is suitable for the development and release of ECU diagnostics or programming on the test bench. In manufacturing, it offers adequate and mature mechanisms for integration into a WLAN network, extensive power management, and triggering of data exchange based on different conditions. In the case of after-sales service, VIN|ING 2000 excels thanks to its sturdy and compact design as well as the support of current vehicle interfaces in combination with old systems. Further VIN|ING 2000 use case scenarios, which will gain in significance in the future, include the integration of experts from any location via remote access and the autonomously operated recording of diagnostic and bus data during a road test.

of VIN|ING 2000. This means that pre-configured ECUs can be dispensed with in manufacturing, and the software that exactly matches the vehicle can always be loaded into the ECU. If new versions of the ECU software are available after the vehicle has been delivered, for example to close safety-relevant gaps or improve performance, the new software version can be safely installed on one or more ECUs at the same time using VIN|ING 2000. This update can even take place regardless of the time and location.

VIN|ING 2000 thus makes a new generation of vehicle interfaces available. It offers a wide range of applications and also ideally covers future requirements.

#### i Softing Automotive

With its core areas of expertise – diagnostics and testing – Softing's Automotive segment is all about key technologies in automotive electronics as well as closely related areas of the vehicle industry (e.g. in the commercial or agricultural vehicle sectors). Softing Automotive is your specialist for the entire lifecycle of electronic control units and overall systems, from engineering through manufacturing to after-sales service. Our portfolio comprises hardware and software products, customized solutions as well as on-site consulting and engineering services.

Data pre-processing and protocol handling directly in the VCI enable secured timing, enterprise authentication with certificates leads to the best possible WLAN security, and USB and LAN cables with magnetic holders are available for cable connection.

### High-Performance Flash Programming

Since ECUs today almost universally have flash memory, the support of high-performance flash programming tailored to the specific use case is an important advantage

#### Websites

**Softing Automotive**  
<https://automotive.softing.com>



**VIN|ING 2000 Diagnostic Interface**  
<https://t1p.de/uxzd>

