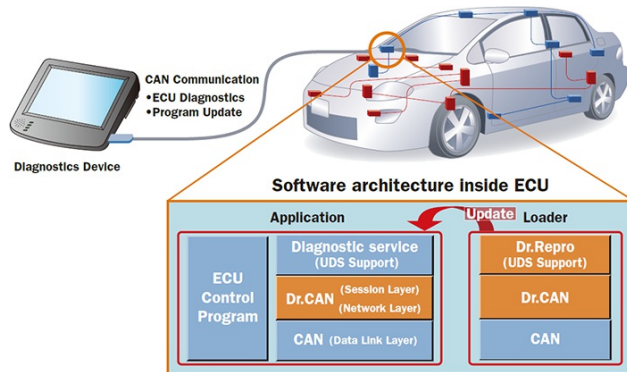


UDS SOFTWARE

For automotive diagnostics

Esol (Japan) provides the Dr.CAN diagnostic protocol stack and Dr.Repro reprogramming module for UDS, allowing ECU (electronic control unit) suppliers to develop in-vehicle diagnostic applications.



Example software architecture of an ECU (Source: Esol)

The diagnostic software solutions are compliant with UDS (unified diagnostic services, ISO 14229) and Diagnostics on CAN (ISO 15765) international standards. The company also offers software packages for implementation of functional-safety in-vehicle duties. This provides ECU suppliers with the evidence required to comply with ISO 26262 automotive functional-safety standards.

The Dr.CAN software can be used with or without an operating system. According to the manufacturer, user operation is simplified, as functions just have to be called from the ECU control program. The user does not need to have knowledge of the protocols defined in the mentioned ISO standards. Using Dr.CAN API (application programming interface), the ECU software modification efforts can be minimized, further informs the manufacturer. Using Dr.Repro, the ECU software and calibration data can be revised. The reprogramming function can

be performed after each phase of development, manufacturing, and/or market release. The company offers services and support for development of in-vehicle diagnostic and control solutions.

Esol products are used worldwide in embedded application fields ranging from automotive systems to industrial equipment, satellites, medical as well as digital consumer electronics. The 500-employee company is also engaged in standardization activities for Autosar, Autoware, and multi-core technology.

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