CAN Newsletter Online

SAE J1939

Specification updates and further developments

SAE has released an updated version of the J1939-31 network layer specification.

J1939-31 specifies the connection between two ECUs in different network segments (Photo: CAN Newsletter Online)

The SAE J1939-31 document describes the requirements and services for Network Interconnection ECUs (NIECU) that enable electronic control units (ECUs) on a network segment to intercommunicate with other ECUs on different network segments. There are specified various types of NIECUs (repeater, bridge, router, and gateway). The information in this document applies only to ECUs that are intended to provide routing services. It is not necessary for an ECU to provide any of these services, in order to be compliant with the J1939-21 application layer.

In its August meeting, the SAE J1939 committee decided to release the J1939 digital annex (AD) with content through May 2018. Also the J1939 top-level document has been updated and has been published end of August. The J1939-02 off-road machinery control and communication network document is going to be updated in cooperation with ISO 11783 series also known as Isobus. The J1939-16 automatic baud rate detection process is planned to be published soon. Other J1939 documents in revision include diagnostics (-73), functional safety (-76), and regulatory traceability informational report (-90). The J1939-81 network management needs to be harmonized with terminology used in the ISO 11783 series.

Next SAE J1939 committee and task force meetings will take place beginning of November. It is expected that the TF CAN FD and the TF physical layer will report its progress regarding the adaptation of CAN FD in J1939-22 resp. J1939-17.

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