INTERNATIONAL STANDARD

ISO 16845

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Road vehicles — Controller area network (CAN) — Conformance test plan

Véhicules routiers — Gestionnaire de réseau de communication (CAN) — Plan d'essai de conformité

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Foreword

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ISO 16845 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 3, *Electrical and electronic equipment*.

Road vehicles — Controller area network (CAN) — Conformance test plan

1 Scope

This International Standard provides the methodology and abstract test suite necessary for checking the conformance of any CAN implementation of the CAN specified in ISO 11898-1.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 9646-1:1994, *Information technology — Open Systems interconnection — Conformance testing methodology and framework — Part 1: General concepts*

ISO 11898-1:2003, *Road vehicles — Controller area network (CAN) — Part 1: Data link layer and physical signalling*

ISO 11898-2:2003, *Road vehicles — Controller area network (CAN) — Part 2: High-speed medium access unit*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
ACK delimiter
second bit of the ACK field

3.2
ACK field
last field before the EOF, used for message validation

3.3
acknowledgement error
error condition of the transmitter when it does not detect a dominant bit on the ACK slot

3.4
ACK slot
first bit of the ACK field

3.5
active error flag
first field of an active error frame

3.6
active error frame
error frame that starts with an active (dominant) error flag