



Bosch's CAN bus

Investigation of the standard

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INTRODUCTION AND BASIC CONCEPTS

- ▶ Bosch documentation [1]

MESSAGE TRANSFER AND VALIDATION

CODING AND ERROR HANDLING – 1

Overview:

- ▶ Bit stuffing → control mechanism
- ▶ Distortions etc. → error handling to achieve error tolerance
- ▶ 5 different error types (Bit, Stuff, CRC, Form, ACK)

CODING AND ERROR HANDLING – 2

- ▶ Message passing mechanism, no additional structure needed
- ▶ Errors broadcasted when detected
- ▶ Semantics important for correct transmission
- ▶ Drivers: reliability, error limitation
- ▶ Problem: new error types?

FAULT CONFINEMENT

BIT TIMING REQUIREMENTS

CAN IMPROVEMENTS

CONCLUSION

REFERENCES



Robert Bosch GmbH.
CAN Specification.

http://www.bosch-semiconductors.de/media/ubk_semiconductors/pdf_1/canliteratur/can2spec.pdf.

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