iSENTsim

Simulation Interface for the SENT* Protocol

Hardware:

Simulation of up to four **SENT sensors** *)

Transmission rate from **24,7 kBit/s** up to **64,9 kBit/s (SENT specific)**

System integration via **CAN-Bus** (up to 1 Mbit/s)

Software:

Configuration of sensor specifications via CAN interface

Optional support for **Enhanced Serial Message** format or **Short Serial Message** format

Length manipulation of the P**ause Pulse**

Up to four **Analog** to **SENT Signal** converters. (OPTIONAL)

Using of standardized **CRC checksum** in the SENT protocol

Feedback about **errors** from the iSENTsim box

Data transmission can be handled from one-to-one implementation (e.g. simulation of hall sensors) upto customer's specific requirement. All options are feasible with necessary software modifications.

Possible error injections:

Manipulation (also automatically)

- **Protocol-Layer:**
  - Manipulation of the **checksumm**
  - **Length manipulation** of Sync-, High- or Low-Pulse
  - **Changing** the Tick-Time
  - **Stopping the Rolling counter** (if it's implemented)
  - loss of one **data frame**
  - Varying the **count** of **data-nibbles**
- **Hardware-Layer:**
  - Simulation of **electrical shortcuts** (KL31, KL30, GND, etc.)
  - **Disconnection** of the signal wire

*) SAE J2716-Standard

Stand: 03.12.2019

TESTING IS OUR PASSION

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