

iPSI5sim

Simulation Interface for the PSI5* Protocol

Hardware: Simulation of up to four **PSI5 sensors** *).

Transmission rate up to **189 kBit/s (PSI5 specific)**.

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

Software: Configuration of sensor specific parameters via CAN interface.

Supported **sensor modes**: single Sensor, sensor cluster or multi-channel-sensor – **asynchronous** or **synchronous** mode.

Configurable PSI5 Interface parameters:

- Bitrate
- Bustiming
- length of Datatransmissionframe
- and many others

Analog to PSI5-protocol conversion.

Feedback about **errors** from the iPSI5sim box.

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



Possible error injections:

Manipulation (Manual and Automatic)

- **Protocol-Layer:**
 - Manipulation of the **checksum**
 - **Bit-jitter**
 - **Slot-jitter**
 - **slot length manipulation**
 - **Start-bits** manipulation
- **Hardware-Layer:**
 - Simulation of **electrical shortcircuit** (KL31, KL30, GND, etc.)
 - **Disconnection** of the signal wire

*) PSI5-Standard V2.2



■ TESTING IS OUR PASSION