TEConcept

Use IO-Link
Universal · Smart · Easy

Device Stack Extension BLOB Transfer

Overview

In 2016 the IO-Link community published a profile that sup-ports BLOB transfer and firmware updates via the IO-Link interface. BLOB stands for Binary Large OBject. While ISDU transfers are limited to 232 bytes per parameter, the size of BLOBs is limited to 4 giga byte. The size is therefore limited by accepted transmission time rather than the actual size.

BLOB can be used to transfer huge data sets from or to an IO-Link device, e.g. log files, FFT data, calibration data, etc.

This profile is fully compliant to the IO-Link V1.1.x specification. BLOB transfer uses ISDUs as transport vehicle. Thus, every standard IO-Link Master can be used for BLOB trans-fer, if the master is controlled by an appropriate software tool that implements the BLOB host.

Implementation

BLOB transfer is implemented as a Device Stack module which can be added to the TEConcept Device Stack.

Functional Description

BLOB transfer uses ISDUs as transport vehicle. Thus, every standard IO-Link Master can be used for BLOB transfer, if the master is controlled by an appropriate software tool that implements the BLOB host.

Features

- Complies to IO-Link Profile “BLOB Transfer & Firmware Update”, Version 1.2, September 2024
- Footprint: RAM: ~0.12 kB / Flash: ~3 kB
- Independent of hardware platform and development platform

Deliverables

- Source Code including sample application and test BLOB IDs for the protocol test
- User manual

License Model

- Royalty-free license / Full source code
- The BLOB module is only sold together with the IO-Link Device Stack

Additional Services

- Software design support
- Conformance tests