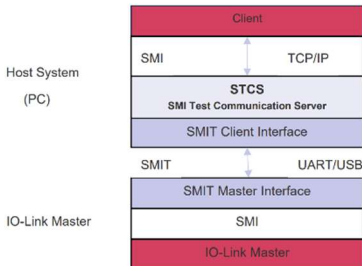




## Master Stack Extension SMIT Serial Transport Layer Library



### Overview

The SMI Transfer "SMIT" is a simple communication protocol to exchange SMI messages in an asynchronous request-response manner.

SMIT is integrated into the TEConcept STCS and can be implemented on any IO-Link Master.

SMIT is a simple communication protocol to transfer SMI services over a serial interface e.g. UART or USB with Virtual COM port functionality. It is typically used together with an SMI Test Communication Server, but its library functions can also be used directly by a PC application that is written in C-language.

### Description

The SMIT can transmit SMI requests, responses, and events. It can also catch events and message timeouts. The client-side handles message retransmission on error or timeout.

Message integrity is ensured via CRC.

Offers a lightweight alternative to the TEConcept Serial Transport Layer (TSTL).

### Features

- Transmission of SMI requests
- Reception of SMI responses and events
- Integrity check with CRC
- Message response timeout check
- Request retransmission on error
- Supports UART and USB
- ANSI compatible source code and template

### Advantages

- Simplicity
- Small code footprint on master
- Portable

### Deliverables

- STCS Executable with SMIT
- SMIT C library in source code
- Template for Master integration
- Documentation