Getting Started with Software Integration

The zForce AIR Touch Sensor can be integrated into any host system that supports either the I2C or the USB HID transport protocol. The zForce communication protocol is based on I2C- or USB HID-transport of messages that are serialized according to the zForce ASN.1 Serialization Protocol. ASN.1 is a standardized way to describe data regardless of language implementation, hardware system and operating system (ISO/IEC 8824).

Communicating without Deserializing ASN.1-encoded Messages - Use the zForce SDK

The zForce SDK is compatible with USB and Windows or Linux.

The SDK allows you to communicate with the sensor without considering encoded ASN.1-messages.

Use the SDK to create an application for communication with the sensor. The SDK contains an example program to get you going. The algorithm of the example program is described here.

Download zForce SDK from https://support.neonode.com/docs/display/Downloads/zForce+SDK+Downloads and refer to separate zForce SDK documentation.

Communicating with I2C and Arduino - Use the zForce AIR Interface Library for Arduino

The library is compatible with I2C and Arduino.

The zForce AIR interface library for Arduino is a primitive function library. Use it as a starting point for creating an application for communication with the sensor. The library contains an example program to get you going.

For more information, refer to zForce AIR interface library for Arduino.

Communicating Using a System and a Programming Language of Your Choice

Learn more about the zForce Communication Protocol and write your own application to read and write data via one of the following transport modes:

- USB Raw HID Mode
- I2C Transport

Make sure to prepare the sensor for communication, refer to Preparing the Sensor for Communication.

Neonode provides the following help to get you started:

- A Message Generator, as part of the Neonode Workbench. This tool can be used to generate serialized messages according to the zForce ASN.1 Protocol. Refer to separate Neonode Workbench documentation on https://support.neonode.com/docs/pages/viewpage.action?pageId=9374867.
- Examples of different implementations. Refer to Implementation Examples.
- The Neonode Help Center. For any questions, refer to https://helpcenter.neonode.com/hc/en-us/requests/new.

Read More

- Introduction
- Getting started with zForce AIR Touch Sensor Evaluation
- Getting Started with Software Integration
- Mechanical Integration
- Electrical Integration
- Software Integration
- Implementation Examples
- Specifications
- Legal Notice