

# ASAP2 Lib

## Function Library for Reading and Writing ASAP2 Files

### What is the ASAP2 Lib?

ASAP2 Lib is a powerful and easy-to-use function library, which you can use for reading and writing standardized ECU description files in ASAP2 format for your own applications.

All versions of the ASAP2 standard (ASAM MCD-2 MC) released by ASAM are supported for reading, including the current version 1.7.1. Both fixed parts of the ASAP2 specification and variable parts that are defined by the ASAP2 metalanguage can be read in.

The library offers a convenient C interface so that the description data in an A2L file can be accessed easily.

### Overview of Advantages

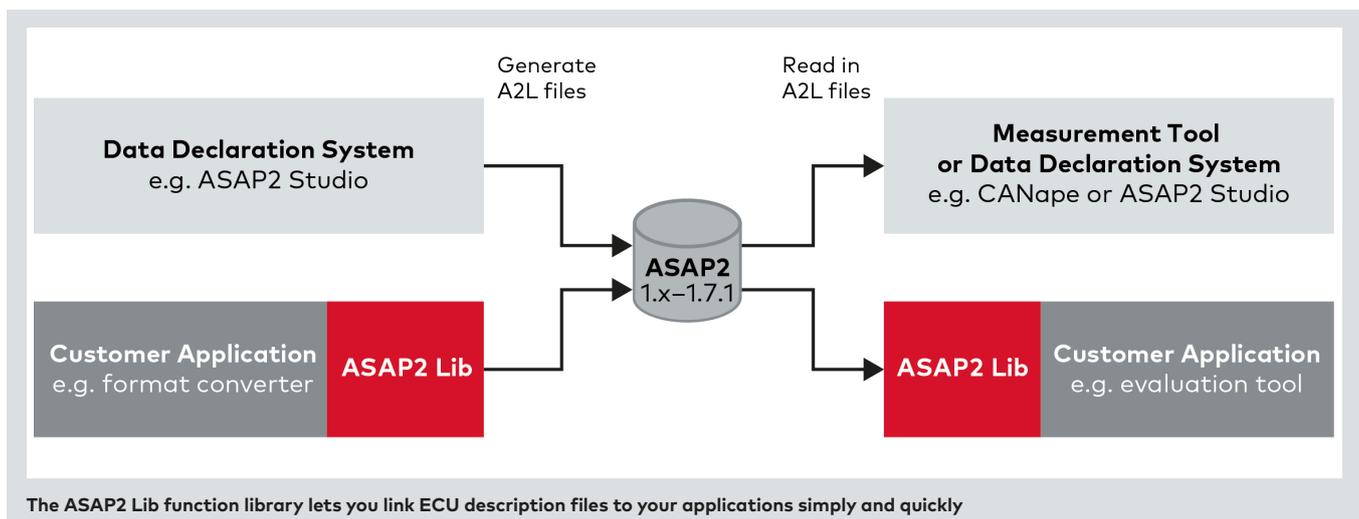
- > Easy-to-use function library for reading in and generating ASAP2 files
- > Version-independent access to all ASAP2 formats
- > Quick and memory-optimized reading in of multiple ASAP2 files
- > Convenient access to supplemental IF\_DATA information
- > Use of a tested and practice-proven standard component reduces cost and effort for training, development, testing and maintenance

### Highlights der Version 4.5

**Support for the new ASAP2 version 1.7.1:** You'll benefit from new features like the higher permissible string length (raised from 255 to 1024 characters) and the extended syntax in the formula text of dependent parameters. In addition, it's now possible to read in half-precision floating-point (Float16) signal data.

### Functions

- > Callback methods can be used to read in relevant sub-objects according to the desired information
- > Simple structural layout of the interface lets users quickly understand the available functionality and apply it intuitively
- > A sample project with documented source code helps users to learn to use the product quickly without detailed knowledge of the A2L format
- > Objects are generated "on demand" which enables efficient implementation
- > Any error or warning messages can be logged via separate callback methods
- > A generously configurable error tolerance makes it possible to read syntactically incorrect A2L files



- > All library calls are thread-safe. This now lets users reading multiple ASAP2 files in parallel.
- > The function library provides a method for each object type to output the ASAP2 objects to an A2L file

**ASAP2 Database: Contents**

An ASAP2 description file contains all information on relevant data objects in the ECU, such as characteristic values (parameters, curves, maps), real and virtual measurement variables and variant dependencies.

Each object is described by information, such as memory address, storage structure, data type, and conversion rules for converting to physical units. The objects are hierarchically assigned to function groups.

**System Requirements**

The following system requirements must be fulfilled to use the ASAP2 Lib:

- > Operating system: Windows 10/8.1/8/7
- > C++ interface: Microsoft Visual C++ Version 6.0 or higher

**More information:** [www.vector.com/asap2-lib](http://www.vector.com/asap2-lib)