

# ASAP2 Lib 1.6

## Function Library for Reading ASAP2 Files

The ASAP2 Lib is a function library for reading ASAP2 files of all released versions, including the current version 1.51.

The library has been developed for the C programming language, and can be embedded in applications.

### Features and Advantages

The ASAP2 Lib can be used in user applications for reading standardized controller descriptions in ASAP2 file format.

Many functions are available in the ASAP2 Lib to access the database objects of the ASAP2 controller description file. The library permits the reading of the fixed parts, as well as the interface-specific parts of ASAP2 files defined by the ASAP2 meta language.

### ASAP2 Database: Contents

An ASAP2 description file contains all information about relevant data objects in the ECU, e.g. characteristic values (parameters, curves, maps), real and virtual measurement values, 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.

### Functions

The API to the application program is implemented by callback functions. The application program may set up a callback function for each ASAP2 object type to be processed. If the desired object type appears in the ASAP2 file, the parser builds a C structure containing all information about the object and transfers it via the appropriate callback function to the application. The parser can be configured by a number of functions, to tolerate certain commonly made syntax errors in ASAP2-files for example.

The variable part of the ASAP2 file can be stored in BLOBs (Binary Large Objects), which are attached to the fixed part structures. For this purpose the variable part is required to be described in ASAP2 meta language. The parser will not evaluate variable parts with no corresponding description.

### Application Areas

The ASAP2 Lib can be used if a developer has the task to develop a custom application that needs to read ASAP2 files.

### System Requirements

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

- > Windows 95, 98, NT, 2000, XP
- > Borland C++ Version 5.02 or higher / Microsoft VC++ Version 6.0 or higher

### Included with Delivery

The delivery of the ASAP2 Lib contains:

- > CD-ROM with a function library (DLL) including the user manual. Part of the documentation is a description of the callback functions and the BLOBs, including an example application.

### Maintenance Contract

With the purchase of the ASAP2 Lib a maintenance contract can also be obtained. Updated versions of the ASAP2 Lib can be covered free of charge within the one year duration of the maintenance contract. An existing maintenance contract can be renewed each year.

Each revision of the ASAP2 standard leads to an update of the ASAP2 Lib by Vector. Updates will be downward compatible to previous versions of the ASAP2 standard, if the modified ASAP2 standard makes this possible.

The maintenance contract includes all the extensions of the existing data file format released by ASAM. An update to the future SGML/XML-based version of ASAP2 (Version 2.0) is not covered by this maintenance contract.