

Variable Editing Made Easy

- Variable Editor for editing ECU description files
- Stand-alone or integrated in CalDesk or the RTI Bypass Blockset
- ECU description files according to ASAM-MCD 2MC

One of the innovations in dSPACE Release 5.2 is the Variable Editor, a tool that makes it easy to create and edit electronic control unit (ECU) description files according to the ASAM-MCD 2MC standard. The Variable Editor is very versatile: It can be used as a stand-alone tool and also as an integrated component in CalDesk, the measurement and calibration software, or in the RTI Bypass Blockset.

ECU Description Files

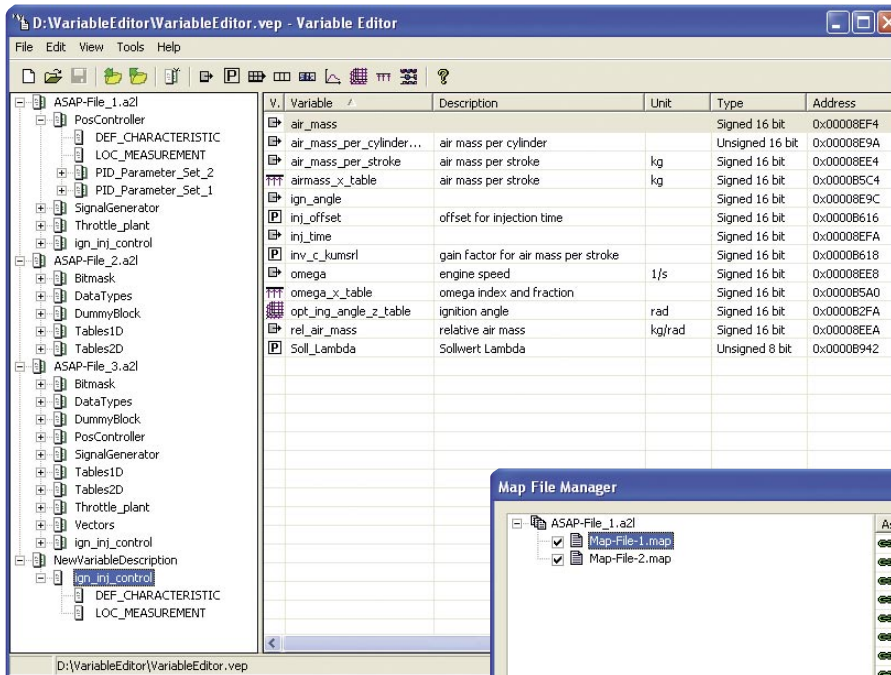
An ECU description file contains information on measurement and calibration variables. This includes the memory addresses of variables, conversion methods, memory layout and data structures in the ECU, and the communication parameters for the calibration interface. To be independent of any specific calibration

tool, an ASAM-MCD 2MC (ASAP2)-compliant ECU description file ensures the standardized exchange of ECU description data between the tools involved in the development process. ASAM-MCD 2MC is accepted as a de-facto standard by broad sections of the automotive industry.

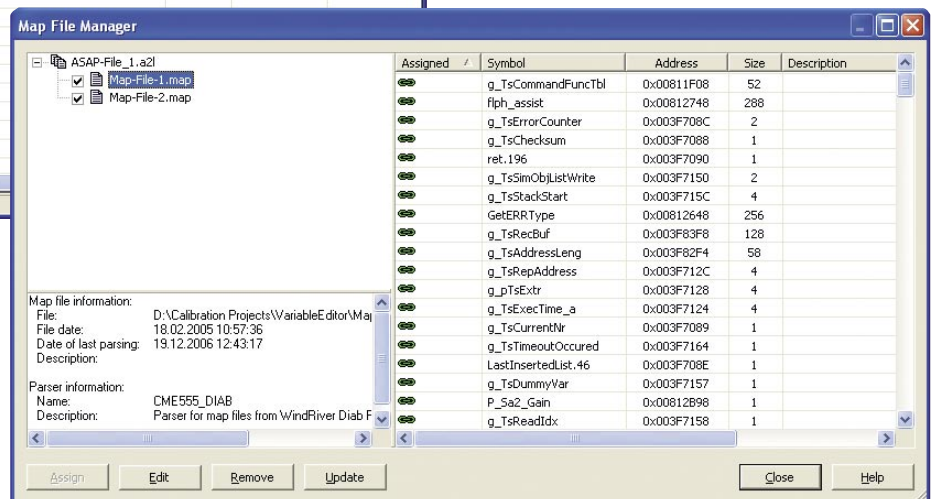
What Is the Variable Editor For?

The Variable Editor can be used to visualize and edit ECU description files, and to create completely new ones. It also lets you import any desired number of ECU description files, to copy function groups or individual variables, and to export new ECU description files. This makes it

▼ *The Map File Manager in the Variable Editor allows one or more linker map files to be assigned to an ECU description file.*



▲ *The Variable Editor, shown here with several imported ECU description files. Function groups and variables can be exchanged between files in any way required, making it possible to create tailor-made ECU description files.*



easy to bring variables together from existing description files, and to create subsets from the entire stock of variables. The integrated Map File Manager is used to assign one or more linker map files to an ECU description file and to update address information at a click. The Map File Manager also makes it quick and simple to create new ECU descriptions based on map files.

When you use the Variable Editor, you can also select variables that were just created or modified and export them, and integrate them into existing ECU description files via appropriate import options.

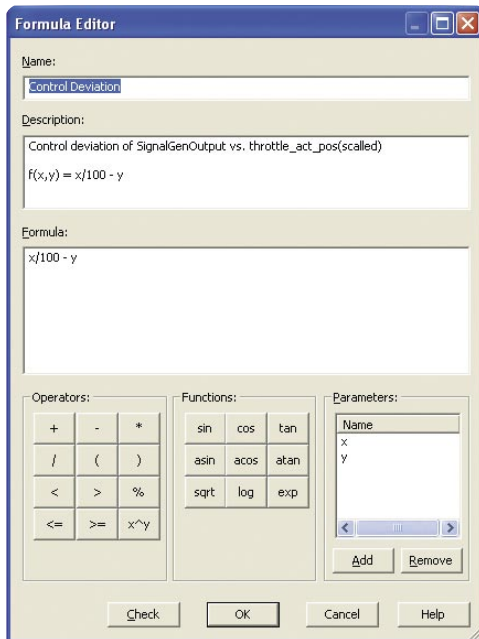
Stand-Alone, or Integrated in CalDesk or the RTI Bypass Blockset

You can use the Variable Editor as a stand-alone tool, or just as easily call it straight from the CalDesk measurement and calibration software or the RTI Bypass Blockset. It is then a fully integrated component with context-adapted menus; the available functions also adjust to the context. Variable Editor

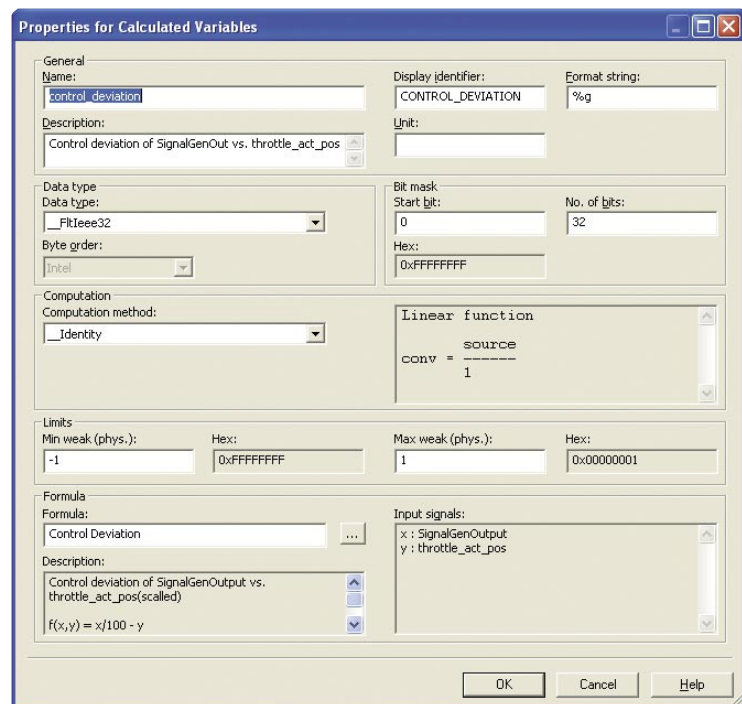
functions that are not needed with CalDesk or the RTI Bypass Blockset are automatically hidden. To access the entire functionality of the Variable Editor, you need a separate license. The functions for creating "calculated variables" can be accessed without a license.

Calculated Variables

You can use the Variable Editor to define calculated variables, as they are called. These are variables that are derived from other variables by means of definable computation formulas. A convenient Formula Editor is available for you to design the necessary calcula-



▲ The Formula Editor for defining computation methods for calculated variables.



▲ Configuration dialog for calculated variables.

tion methods. Variables defined and calculated in this way can be connected to instruments in CalDesk and recorded in measurement files just like normal variables. Calculated variables and computation formulas can be collected in a pool to make them available to other projects.

ASAM

ASAM stands for Association for Standardisation of Automation- and Measuring Systems. ASAM is a registered society under German law (ASAM e. V.). Its members are mainly German automobile manufacturers, and their suppliers and service providers, but

also companies from the rest of Europe, the USA, and Japan, with several German universities and also individual people. The goal of the society is to standardize interfaces, protocols, and data formats for automobile construction, with the main focus on electronics. For more information, visit www.asam.net.