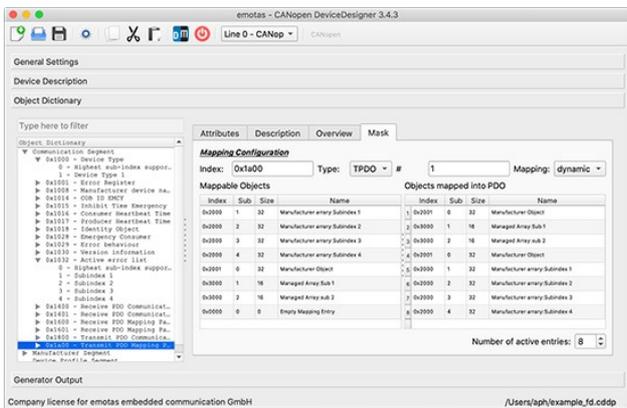# CAN *Newsletter Online*

CIA 1311 COMPLIANT

Design tool can read XDD files

With the CANopen tool by Emotas, the user can design and configure CANopen and CANopen FD devices. Now, it supports CiA 1311, the XML device description (XDD) file format.

The CANopen software tool supports the XML device description (XDD) files compliant with CiA 1311 (Source: Emotas)

Eight years ago, Emotas has released the first version of its CANopen Devicedesigner tool. Recently, the company announced the support of the XDD file format as specified in CiA 1311. This XML format is used to describe CiA 1301 (CANopen FD application layer) compliant devices. It is also suitable for host controllers with NMT manager functionality. The software tool runs under Linux, Mac OS X, and Windows.

With the GUI (graphical user interface) tool users can define object dictionaries. It can also be used to configure CANopen (CiA 301) or CANopen FD (CiA 1301) devices. For various communication parameters dedicated input masks facilitate the definition of the CiA 1301 communication services and the configuration of partially bit-coded values such as e.g. COB-ID settings. Based on this object dictionary definition, the tool generates an XDD file with attributes and properties of the implemented parameters. The tool also generates, the object dictionary as C-struct, initialization functions in C, device documentation as text or HTML, and also an EDS file in text format. The generated object dictionary is integrated into the application software as an interface to the CANopen or CANopen FD protocol stack.

The product is able to import CANopen profile files in CODB format. They include templates for all types of objects with attributes and descriptions of the parameters. Parameters can be imported into the tool, copied, and customized to individual characteristics of devices. Furthermore, EDS (CiA 306) or XDD (CiA 311) files of existing or similar devices can be imported.

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