EtherCAT Technology Group Expands Test Tool to Include CANopen Drive Profile

The EtherCAT Technology Group (ETG) is expanding the organization’s Conformance Test Tool to include the CANopen drive profile, CiA402. This step supports the consistent implementation of this profile and further facilitates the hassle-free commissioning of EtherCAT drives. The first version of the expanded test tool will be released in a few weeks.

The CANopen Profile, CiA402 is probably one the most widely used drive profiles in the world. It is not only supported by European vendors, but also increasingly in Asia and North America. The profile, as well as its mapping on EtherCAT, is standardized in IEC 61800-7. It contains three modes for cyclic-synchronous motion control. These new modes were developed in 2005 by ETG members with EtherCAT in mind. They are the basis for the corresponding ETG implementation guideline, which was published in 2007.

The test tool enhancement checks the object dictionary entries and the state machines for conformance with the standard and helps to reduce the effort customers have to spend for commissioning drives. The working group conformance within the EtherCAT Technology Group is in charge of the EtherCAT test cases as well as the test enhancement to cover this device profile.

“The commissioning of EtherCAT communication itself is very simple. The application interface, which is specified by the device profile, sometimes needs more work – in particular with drives and especially if drives from different vendors are used. With the test tools extended to drive profiles we expect a further unification of implementations and even shorter commissioning times for our customers,” says ETG board member Dr. Peter Heidrich, R&D manager drives at Baumüller.

EtherCAT sets new standards for real-time performance and topology flexibility, while meeting or undercutting traditional fieldbus cost levels.
EtherCAT features include high-precision device synchronization, cable redundancy options, and a functional safety protocol (SIL3). EtherCAT is an international standard (IEC, ISO and SEMI).

The **EtherCAT Technology Group** (ETG) is an organization in which key user companies from various industries and leading automation suppliers join forces to support, promote and advance EtherCAT Technology. With over 1000 members from 45 countries, the EtherCAT Technology Group has become the largest organization in the world that is exclusively focused on Industrial Ethernet technologies. Founded in November 2003, it is also currently the fastest growing fieldbus organization.

For further information please see [www.ethercat.org](http://www.ethercat.org)