EtherCAT approved by SEMI

SEMI (Semiconductor Equipment and Materials International) has approved EtherCAT for their applications by accepting the EtherCAT SEMI standard. The leading standards organization thus responds to the growing interest of the industry in the fastest Industrial Ethernet solution.

EtherCAT is already used in many semiconductor and flat panel display manufacturing applications. The world’s largest supplier of semiconductor manufacturing equipment, Applied Materials, was among the first EtherCAT Technology Group members back in 2003. EtherCAT was officially introduced to the industry at a SEMI congress in 2004. A year later, Samsung Electronics developed the first EtherCAT device for the ultra high resolution hybrid stage control. Many other manufacturers from this field have joined the EtherCAT Technology Group: About 100 of the now 590 member companies are particularly active in semiconductor manufacturing.

The North American SEMI Information & Control Committee accepted the EtherCAT standard, which will be published as SEMI E54.20 in October. This milestone will further accelerate the acceptance of EtherCAT within the semiconductor and flat panel display manufacturing industries.

“The superior performance, bandwidth and topology flexibility of EtherCAT allows to cover the entire range of communication requirements in semiconductor manufacturing equipment with just one technology: from process control via control computer integration to high-end Motion Control applications. Thanks to fully integrated fieldbus gateways, special devices, which may not yet be available with EtherCAT interface, can be integrated seamlessly and cost efficiently. The semiconductor industry appreciates this EtherCAT feature, since it supports simple migration. We are proud that EtherCAT has such an impact on this key industry,” comments Martin Rostan, Executive Director of the EtherCAT Technology Group.
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 the EtherCAT technology. With over 500 members, 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.

EtherCAT sets new standards for real-time performance and topology flexibility while meeting or undercutting fieldbus cost levels. EtherCAT features include high precision device synchronization, a cable redundancy option, and a functional safety protocol (SIL3).

For further information please see www.ethercat.org