

ETG Newsletter

December 2016 | #27

EtherCAT[®]
Technology Group



Power and Communication combined.

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Further Information
www.ethercat.org

EDITORIAL

Dear Members,

The launch of EtherCAT P, the official breakthrough in the automotive industry, further accelerated growth worldwide - what an exciting year for EtherCAT!

EtherCAT P has definitely been the technology highlight: the first version of the specifications and a detailed application note have been published. Everyone is now encouraged to implement this cost saving combination of power and data on the same cable.

May all of you have a relaxing holiday season with your loved ones, and a great start into another exciting EtherCAT year 2017!

Merry Christmas and with best regards on behalf of the entire ETG team,



Martin Rostan, ETG Executive Director



MEMBERSHIP

Member #4000 honored: KOCH Pac-Systeme GmbH

The EtherCAT Technology Group (ETG) has reached another membership milestone: Recently, the ETG welcomed its 4,000th member into the organization.

The official tribute to KOCH Pac-Systeme GmbH, a supplier of advanced packaging machinery equipped with EtherCAT and EtherCAT P, took place in the frame of the SPS IPC Drives 2016 trade fair in Nuremberg, Germany.

KOCH Pac-Systeme stands for the highest quality and most efficient custom packaging solutions. For over 40 years, KOCH has impressed customers at home and overseas with the quality of their products and services, their expertise and employees commitment.

www.ethercat.org/member4000

Full Press Release ([EN](#) | [DE](#) | [CN](#) | [JP](#))



Jürgen Welker, Divisional Director of Control System and Service
 KOCH PacSysteme GmbH



EtherCAT Adoption Rate: Vendors

EtherCAT is wide spread in different markets as well as countries. Please have a look at the following impressive figures (changes since last newsletter):

163 EtherCAT Drive Vendors **+ 17**

196 EtherCAT Master Vendors **+ 10**

108 EtherCAT I/O Vendors **+ 6**

Playing with figures (Vol. 3)

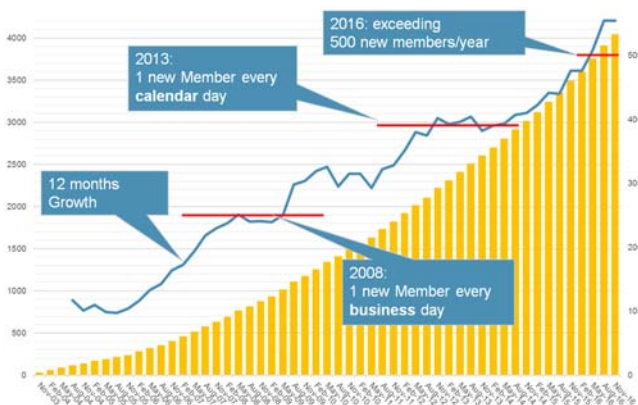
ETG has more than **4000** members from **65** countries and **6** continents. EtherCAT is implemented on **34** different OS and over **800** products are listed in the official EtherCAT Product Guide. There are **30** different Safety over EtherCAT vendors and **47** sensor/actor manufacturers. ETG has organized **40** EtherCAT Plug Fests so far. ETG booths were shown at **120** tradeshows and EtherCAT roadshows took place in more than **30** different countries and over **80** cities. Over **500** new members joined the ETG in **2016**.

Membership Development increases furthermore

During the last year the ETG has constantly grown and, as of December 2016, counts 4.075 members from 65 countries and 6 continents; ETG continues to be the world's largest fieldbus organization, and a truly global organization as well.

Looking back ETG has grown constantly: in 2008, there was 1 new member every business day, in 2013 there was 1 new member every calendar day and in 2016, ETG exceeded the number of 500 new members per year. ETG continues to be the world's largest fieldbus organization with 558 members in America (+72), 1,515 members in Asia (+260), and 1,894 members in Europe (+190).

www.ethercat.org/members



Industrial Ethernet Seminar Series worldwide extended

In 2016, ETG successfully continued its seminar series activities all over the world: China, Japan, India, UAE, Qatar, Vietnam, Indonesia, Singapore, Australia, New Zealand, Canada, France, South Africa, USA, Canada, Korea, Taiwan and Brazil.

Our EtherCAT seminars receive outstanding feedback: as a general rule over 80% of the attendees give an "excellent" rating, with another 15% "good" ratings. Participants appreciate the rich technical content and the focus on how to benefit from EtherCAT in practice, which helps them to successfully integrate the technology in their next project.

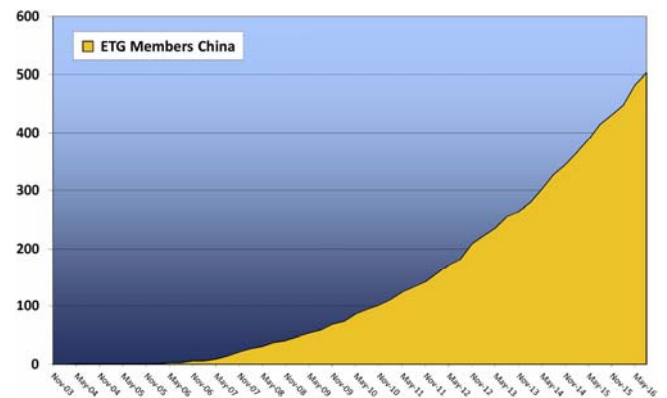
Further seminar series / roadshows are planned for 2017!
Watch out for the call for sponsors distributed via Email.

Success of EtherCAT in China continues

The EtherCAT Technology Group (ETG) reaches another milestone, breaking the 500 member level in China.

The EtherCAT Technology Group (ETG), headquartered in Nuremberg, Germany was founded in 2003 and has since grown into a global phenomenon. Today, the ETG maintains regional offices in four other countries. One such country is China where Beryl Fan, manager of the local ETG office in Beijing, and her team promote EtherCAT technology while supporting implementation in the Chinese market. In these areas, they have become wildly successful: When the ETG China Office was founded in 2007, there were fewer than 10 member companies. Now, the People's Republic of China has broken the 500 member barrier.

Press Release ([EN](#) | [DE](#) | [CN](#))



ETG @ LinkedIn, Twitter & YouTube!

Join our several social media channels to stay up-to-date and receive the latest news immediately.

We'll invite all of you to follow our official ETG accounts at the following social media channels. You will find actual news from ETG tradeshows or roadshows, announcements of upcoming events, impressions and much more there!

www.twitter.com/EtherCAT_Group

www.linkedin.com/company/ethercat-technology-group

www.youtube.com/user/EtherCATGroup



EtherCAT P: Interview with Florian Hammel



What is EtherCAT P actually?

Florian Hammel: "EtherCAT P is an addition to the EtherCAT technology on the physical layer. P stands for power and enables the user to transmit the current via two electrically isolated 24V supplies on the Ethernet cable. EtherCAT P is 100% EtherCAT – and adds the power transmission on the very same cable. Licensing is free of charge."

In brief: What are the advantages of EtherCAT P and who can benefit from it?

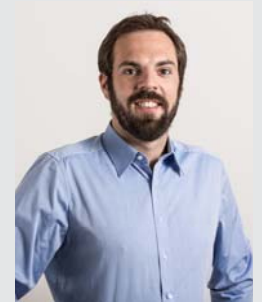
"Using EtherCAT P leads to reduced cabling and lower system costs. Potential error sources while connecting devices are reduced, too: M8 connectors specially designed for EtherCAT P make false connections practically impossible. Substantially it depends on the individual use case and the according requirements to implement this technology. EtherCAT P is especially interesting for machine parts which now can be supplied with data and power via one single cable."

Which role does ETG play in this game?

"Since our Technical Committee accepted EtherCAT P as addition to EtherCAT last April a lot has happened. All necessary documents and information to start with the implementation of EtherCAT P are available for our members and are expanded, developed, and enhanced by us continuously. When it comes to EtherCAT P our members can count on the support of our team – the same way they are used to with EtherCAT."

www.ethercat.org/EtherCATP

Florian Hammel is EtherCAT and EtherCAT P specialist, working at the ETG Headquarters and also chairs the ETG Technical Working Group Device & Network Description.



ETG publishes official EtherCAT P specification documents

As announced at the Hannover Messe 2016, we've recently published the draft version of the official EtherCAT P Technology specification, together with the extension of all corresponding documents.

In addition, a comprehensive and detailed application note has been published to further support EtherCAT implementation on the doing-level.

www.ethercat.org/EtherCATP

Press Release ([EN](#) | [DE](#) | [CN](#) | [JP](#))

EtherCAT Slave Implementation Guide includes EtherCAT P

The ETG.2200 EtherCAT Slave Implementation Guide V3.0 has been enhanced by a separate section addressing EtherCAT P implementation matters.

EtherCAT P is an enhancement of the EtherCAT technology and combines EtherCAT and power on the same 4 wires. The new section of the reference for EtherCAT Slave Implementation gives an overview of the EtherCAT P technology, including all related implementation topics and documents.

www.ethercat.org/ETG2200

Toyota Motor Corporation selects EtherCAT

Toyota Motor Corporation has selected EtherCAT as its Industrial Ethernet technology of choice and will base its new factories around the world on EtherCAT.

The global announcement was made by Morihiko Ohkura, General Manager of the Production Engineering Innovation Division at Toyota Motor Corporation during an EtherCAT Technology Group (ETG) press briefing at Hannover Messe 2016. The decision to standardize on EtherCAT also factors in the latest addition to the technology, EtherCAT P.

Press Release ([EN](#) | [DE](#) | [JP](#) | [CN](#))

Video: www.youtube.com



REVIEW

ETG Joint Booth at SPS IPC Drives 2016: Increasing Interest

Together with 58 co-exhibitors and a total of more than 400 different EtherCAT products we once again sent out a clear message at our ETG Joint Booth at SPS IPC Drives in Hall 2/338: We are the Industrial Ethernet organization exhibiting the widest variety of devices at the same time anywhere.

Looking back at a successful tradeshow with an impressive variety of EtherCAT products (incl. Drives, I/O & Gateways, Sensors & Actuators, Master Systems, Development Products & Services) directly on booth.

One of our highlights this year was definitely the publication of the EtherCAT P draft specification and corresponding application note (published by Beckhoff) to help ETG members starting their EtherCAT P implementation right now as well as honoring ETG member #4000, KOCH Pac-Systeme GmbH!

We've made more contacts than last year, which indicates that visitors are looking specifically for EtherCAT and that the interest in EtherCAT products has increased as well. Thus we want to thank all co-exhibitors cordially for their participation and personal work at our ETG Joint Booth!

With this in mind we would like to encourage all ETG members to continue their support for our marketing activities in 2017.

Fall all those who are interested in showing their products at HANNOVER MESSE 2017: Watch out for the next offer, which will be available soon and send out to all ETG members worldwide.

Facts & Figures about SPS IPC Drives: www.mesago.de

ETG Joint Booth @ HANNOVER FAIR 2017: Hall 9, D18



ETG Joint Booth 2016/2017 season co-exhibitors and supporting ETG member companies:



EtherCAT Installation Guideline

Professional installation of a communication infrastructure is based on thorough planning, precise assembly and careful commissioning. Through intelligently-designed topology features, the Industrial Ethernet system EtherCAT is a robust communication platform with comprehensive diagnostic possibilities.

With the right installation, users can fully benefit from the advantages of EtherCAT even in the most challenging environments. To support machine builders and also service experts, the EtherCAT Installation Guideline is available within the Download Section.

The EtherCAT Installation Guideline provides a concise, comprehensive overview of all aspects associated with the professional installation of EtherCAT systems. Thus, the document offers valuable guidance for machine builders and plant engineers using the technology, in English and Japanese language.

www.ethercat.org/ETG1600

Press Release ([EN](#) | [DE](#) | [CN](#))

EtherCAT Knowledge Base

The EtherCAT Knowledge Base has been extended on great scale. It comprises detailed technical descriptions, FAQs, a glossary incl. standard references around the EtherCAT technology and hands-on how-to descriptions.

Counting almost 100 major topics with many more entries, the EtherCAT Knowledge Base has become one of the references for EtherCAT learning and complements the EtherCAT specifications. It is continuously extended and updated by our experienced technology experts – also based on the questions asked by ETG members.

Feel free to check the Knowledge Base (member login required): www.ethercat.org/knowledgebase

SEMI Specifications Updated

The Common Device Profile (CDP) and Specific Device Profiles (SDP) of the ETG.5003 Semiconductor Device Profile series has been updated and released.

www.ethercat.org/ETG5003

EtherCAT Conformance Test Tool | Release of V2.0

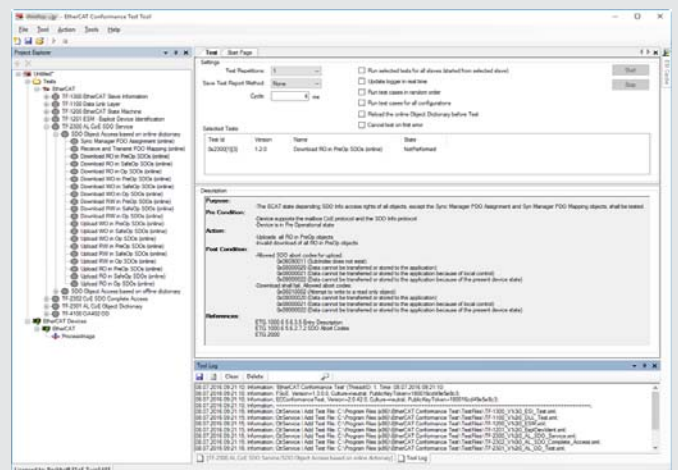
The ETG Technical Working Group Conformance has released version 2.0.42 of the EtherCAT Conformance Test Tool (CTT), which features a significantly extended test set for EtherCAT devices. Manufacturers of EtherCAT slaves especially benefit from the new version, which distinguishes itself mainly by new functionalities for device configuration and EtherCAT development. Additionally, fully automated testing of EtherCAT devices in Distributed Clocks (DC) mode is now available.

The EtherCAT Conformance Test Tool, or CTT, is the official reference tool for verifying compliant implementation of EtherCAT technology into EtherCAT slaves. The CTT enables the hundreds of EtherCAT device manufacturers to ensure reliable interoperability in the field. The first version of the CTT was released in 2008 and all subsequent updates have proven to be stable in practice. To maintain continuity, version 2.0.42 retains all functionalities and tests from the first version while adding impressive new features.

Press Release ([EN](#) | [DE](#))

Future updates with new features supporting all test efforts can be expected - version 2.0.45 is out for review within ETG.

You can download the latest version or the review version via the following product page: www.ethercat.org/cttdownload



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New Members (since last newsletter) in order of membership application

We welcome all new members and thank you for joining forces to promote and advance the EtherCAT technology.

- Longford International
- NEWTEC
- HIMA Paul Hildebrandt
- Happiest Minds Technologies
- Technische Hochschule Nürnberg Georg Simon Ohm, Fakultät Elektrotechnik
- B.Meccanica di Ballico Giuseppe
- FUJII MACHINERY
- The Japan Steel Works
- INCAA Computers
- VMI Holland
- OULAB
- Joshua 1 Systems
- EPI elettronica
- Hangzhou Zhengsheng Robot Technology
- DEKA Research & Development
- SANMEI ELECTRONICS
- The Pennsylvania State University, Center for Innovative Materials Processing Through Direct Digital Deposition (CIMP-3D)
- Beijing Sevenstar Electronics
- OPVengineering
- Emphatec
- TOSHIBA TEL
- DAIKIN INDUSTRIES, Oil Hydraulics Division
- Procon Electronics
- LDZ Technology
- ALNEA
- Avalue Technology
- Jack Sewing Machine
- Huawei Technologies Düsseldorf
- Hangzhou Zhishan Technology
- Souza Cruz
- WONDERFUL HI-TECH
- Sibotech Automation
- Hexagon Metrology
- SPINCODERS
- Fraunhofer-Institut für Windenergie und Energiesystemtechnik, (Fraunhofer IWES), Institutsteil Energiesystemtechnik
- SystemRoad
- Shenzhen Sine Electric
- Integrated Control Systems
- Printec-DS Keyboard
- Branson Ultrasonics
- MAPNA Electric & Control, Engineering & Manufacturing (MECO)
- The University of Tokyo, Graduate School of Information Science and Technology, Department of Creative Informatics Mechano-Informatics Jouhou System Kougaku (JSK) Laboratory
- Chengdu Gunt Industrial
- Nanjing Wind CNC Technology
- Portwell
- Gene Automation Technology
- Shenzhen Veichi Electric
- GENESI ELETTRONICA
- CEA LIST
- MITWELL
- Mettler-Toledo (Changzhou) Precision Instrument
- Shenzhen ICM Technology Development
- University of Seoul, College of Engineering, Department of Mechanical and Information Engineering, Real-time and Embedded Systems Laboratory (RTES)
- Wuhan Huikong Intelligent Technology
- Shanghai Ruking Electric & Technology
- Shanghai Triowin Automation Machinery
- Taiyo Cabletec
- Delft University of Technology (TU Delft), Faculty of Aerospace Engineering, Department Control and Operations, Control and Simulation
- Camera Positioning Systems
- A M Consulting
- Wuhan Endeavor Intelligent Machine
- The University of Texas at Austin, Cockrell School of Engineering, Department of Mechanical Engineering, ReNeu Robotics Lab
- Biral
- ShenZhen Ashinehero Electronic&Science
- INVAP
- GIONIX
- Iconix Technology
- Shanghai Electric Central Research Institute
- HTE Engineering Services
- Yonsei University, Department of Mechanical Engineering
- MIMOT
- Techno-Holon
- LTN Servotechnik
- Ingenieria UNO
- Ibaraki Fuji
- Chinese Academy of Sciences (CAS), Shenyang Institute of Computing Technology (SICT)
- Canon Nanotechnologies
- KRB Machinery
- RFPT
- TIANJIN RESEARCH INSTITUTE OF ELECTRIC SCIENCE
- VOLLMER WERKE Maschinenfabrik
- VIE Technologies
- B. V. Bhoomraddi College of Engineering & Technology
- ib prozessleittechnik
- Siberia-engineering
- H. Kufferath | Prüf- und Vorrichtungstechnik
- E-T-A Elektrotechnische Apparate
- National Chin-Yi University of Technology, College of Electrical Engineering & Computer Science, Department of Electrical Engineering
- STIGAL
- Aesynt
- MIGHT PRECISION MACHINERY
- WIR electronic
- Helmholtz-Zentrum Geesthacht, Zentrum für Material- und Küstenforschung
- Shanghai Foresight Robotics
- Trinity College Dublin, The University of Dublin, Faculty of Engineering, Mathematics and Science, School of Engineering, Department of Mechanical & Manufacturing Engineering
- Shanghai Jiao Tong University, School of Mechanical Engineering, Robotics Institute
- Express Logic
- Maincon
- SHINKAWA
- Chroma ATE
- Harbin Institute of Technology (HIT), School of Electrical Engineering and Automation, Institute of Automatic Testing and Control
- "ZAVOD MECHATRONNIK IZDELI"
- ATESTEO
- mz robolab
- Accuthera
- Technische Universität Berlin, Fakultät Verkehrs- und Maschinensysteme, Institut für Werkzeugmaschinen und Fabrikbetrieb, Fachgebiet Industrielle Automatisierungstechnik (IAT)
- Beijing OUR Robotics Technology
- Wuhan Maxsine Electric
- Meta Vision Systems
- ZIP Technologies
- "Inverter"
- RIVERFIELD
- Robatech
- Delft University of Technology (TU Delft), Dienst Elektronische en Mechanische Ontwikkeling (DEMO)
- YoungTek Electronics
- Lutz Medical Engineering
- Schmidiger
- Universität zu Lübeck, Institut für Medizinische Elektrotechnik
- Renesas Semiconductor Package & Test Solutions - Electronic Systems Department
- FLUKIDA
- EXTRA Products
- ExtraTech Systems
- Karlsruhe Institut für Technologie (KIT), Fakultät für Informatik, Institut für Anthropomatik und Robotik (IAR), Lehrstuhl für Hochperformante Humanoide Technologien (HT)
- Tongtai Machine & Tool
- ReWalk Robotics
- TRP Engineering College, Department of Electronics & Communication Engineering (ECE)
- Foshan Korter Automatic Precision Measurement & Control Technology
- DFI
- AXONIM
- Baumer Optronic
- M.C. Automations
- DEWETRON
- IST Ingenieurbüro für Sensortechnik (IST-Sensorik)
- AVIC AEROENGINE CONTROL SYSTEM INSTITUTE
- Shanghai MJ Intelligent System
- AAEON Technology
- Control Techniques
- Technische Universität Dresden, Fakultät Elektrotechnik und Informationstechnik, Elektrotechnisches Institut, Professur Leistungselektronik
- MASTER
- MicroContact
- MITSUBISHI HEAVY INDUSTRIES
- MECHATRONICS SYSTEMS
- GE Power & Water Distributed Power
- RUAG Defence Deutschland
- Mechatronic Engineering
- "Sodecia Global Tech & Automation Center (Sodecia GTAC)"
- Advanced Cyclotron Systems
- Sentronic International
- Professional Computer Technology
- Dynomotion
- FUKOKU TOKAI
- Four Technos
- Yamashita Systems
- "Kocaeli University, Faculty of Engineering, Department of Mechatronics Engineering"
- sb-elektronik
- Burnon International
- Egle Systems
- Excelpoint Systems (H.K.)
- Shanghai Yuanzhi Robot
- MAPLETEK ELECTROL
- Suzhou YingFu Aviation Technology (AXAviation)
- tecs
- RL Automation
- Qingdao Technological University, College of Mechanical Engineering
- Johnsons Holdings
- KAWADA ELECTRIC
- Kongsberg Maritime
- ShanDong Wanteng Electronic Technology
- J. Schmalz
- Solwit
- Stage Technologies
- Hitachi Industry & Control Solutions
- Hoeben Electronics
- LEAS (Laboratoire d'électronique Angelidis et Sarraut)
- Vectioneer
- SOHOAID
- Toshiba
- MECANUMERIC
- EFTEC Engineering
- XP Power
- Axcelis Technologies
- Manufacturing Integration Technology
- Hytec Electronics
- Beijing Strongleader Science & Technology
- MITAC Information Technology
- The University of Texas, Health Science Center at Houston, Medical School, Department of Neurosurgery, Microsurgical Robotics Laboratory (Laboratory of Daniel H. Kim, M.D., and Dongsuk Shin, Ph.D.)
- Xian Xiangxun Technology
- SETEX Schermuly textile computer
- Inventec Appliances (Shanghai)
- NetModule
- Dynamic Motion Italia
- Dukane - Intelligent Assembly Solutions
- Division
- Renesas Electronics Korea
- Industrial Software and Electronics (IS&E)
- Ricoh
- Ricoh Industry
- Redstone Aerospace
- Sony EMCS
- ACTI
- Hochschule Flensburg, Fachbereich 2: Energie und Biotechnologie
- RTC Electronics
- Monico Monitoring
- Opto 22
- GENETEC
- ZheJiang Botong Robotics Science Technology
- IP-Automatika Mérnöki és Kereskedelmi PRIMES
- Mikysek Engineering
- WU-YANG Technology
- ITBITA
- Technische Universität Berlin, Fakultät Elektrotechnik und Informatik, Institut Energie - und Automatisierungstechnik, Fachgebiet Leistungselektronik
- Simple Technology
- Yuban & Co.
- DiGiCo (UK)
- elowork
- Intel
- FASCO
- Symantec
- KONUX
- NPN
- Space Systems Finland
- Simco (Niederland)
- Synesis Società Consortile
- COMMOTECH ELECTRONICS
- JBT
- iThemba Laboratory for Accelerator Based Sciences (iThemba LABS)
- RS Schwarze Elektrotechnik, Modene
- Industrialelektronik
- Rütli Electronic
- Bimba Manufacturing
- soplar
- Axicon CNC Systems
- Promastar Technology
- Drägerwerk
- VICTRON TECHNOLOGY
- LinCon Automation Technology
- ShenZhen V&T Technologies
- Michigan Scientific
- Winsonic Electronics
- Bristol Robotics Laboratory (BRL)
- Shandong Academy of Sciences, Institute of Automation (SDIA)
- UCAM
- Toshiba Solutions
- NARA Controls
- Eindhoven University of Technology, Department of Mechanical Engineering, Dynamics and Control Group
- Creasoft
- DURUTRONIX
- Suzhou DingFu Automation Technology
- Beijing SWISA Instrument
- ELFIN Pracownia Elektroniki
- BEIJING ZHONGCHEN XIANDA
- ELECTROMECHANICAL
- Opticon
- Zetec
- Tattle
- SOFT SERVO KOREA
- Xiamen Micromatch Electronic Information Technology
- Fraunhofer Institut für Sichere Informationstechnologie (Fraunhofer SIT)
- SFA Engineering
- HETRONIK
- Ricoh Industrial Solutions
- ShinMaywa Industries
- Movetec
- di-soric
- IMAGO Technologies
- RFEL
- Nanyang Institute of Technology, College of Electronic and Electrical Engineering
- Hwa Sun (Guangdong)
- TE Connectivity Germany
- Hochschule Trier, Fachbereich Technik, Fachrichtung Elektrotechnik
- Fastbrick Robotics
- Ergotest Innovation
- Intelligent Automation Equipment (Zhuhai)
- 2D Debus & Diebold Meßsysteme
- SCALIME
- Beijing Agie Charmilles Industrial Electronics
- IAMech Technology
- NCWorks
- DATA TECNO
- Rishhi America (DBA Maruyama Chillers)
- Energy Support
- «Android technics»
- SHANGHAI INVIEW SOLUTIONS
- Infineon Technologies Americas
- Shenzhen Zhiyou Battery Integration Technology
- Hanbaek Tech
- AMI CE International
- Institute for Information Industry (III), Smart Network System Institute
- Sysmex
- Tianjin Geneuo Technology
- Bluetronics
- Esko-Graphics Kongsberg
- Rainbow Springs
- Liewenthal Electronics
- DAJO Solutions
- IOI Technology
- INS software
- BROSA
- 4PICO
- ViewMove Technologies
- Quanzhou Sangchuan Electric Equipment
- Max-Planck-Institut für biologische Kybernetik, Wahrnehmung, Kognition und Handlung
- Tem-Tech Lab.
- WFE Technology
- University of Lorraine, IUT Nancy-Brabois, Electrical & Industrial Computer Science Engineering Department (Gezi)
- Pierce Pacific Manufacturing
- SuninCNS
- Henan Mechanical and Electrical Vocational College, College of Mechanical and Electrical Engineering
- Guangzhou Xiangtian Intelligent Technology
- Institute of Physics of the Czech Academy of Sciences, ELI Beamlines Project Division
- SANEI HYTECHS VIETNAM
- Smalley King Electronics
- Sodick America
- Dorabot
- Shenzhen Sunson intelligent equipment
- SANEI HYTECHS
- Microtime Computer
- Bozhon(Suzhou) Precision Industry Technology
- STC Software & Technology Center
- ATSE
- Technische Universität München, Institut für Werkzeugmaschinen und Betriebswissenschaften (iwb)
- HELUKABEL
- Sheryang REDTECH Electric
- Meliora Scientific
- MK - SYSTEM
- Watanabe Electric Industry
- Omnicron Technical Sales
- Schnell
- Pattyn Bakery Division
- Balluff
- Teraviv
- Variable Message Signs (a trading division of Hill & Smith Ltd.)
- SHODENSHA
- SET Power Systems
- Rosenberger OSI
- ITMO University, Department of Control Systems and Industrial Robotics, Chair of Electrical Engineering and Precision Electromechanical Systems
- bebros electronic
- GRAPHIMECC
- Malema Engineering
- CHANGNAM I.N.T.
- META
- T-Platforms
- Cambridge Consultants
- Starfire Industries
- Serveltec Technologies
- NingBo Ronghe Wire & Cable
- ASEC International
- Mecatronix
- SAGINOMIYA SEISAKUSHO
- ViTrox Technologies
- DEE Dräxmaier Elektrik- und Elektronisysteme
- MC-monitoring
- Philips Medical Systems Nederland
- Schleicher Electronic Berlin
- Beijing Carale Robot Technology
- Toyo Denki Seizo (Toyo Electric Mfg.)
- Bruker Daltonics
- Power Sensors
- Expert Tooling and Automation
- "Euroekoplast"
- YES ENERGY
- Sun East Electronic Technology (Shenzhen)
- LEONI protec cable systems
- China Orient Institute of Noise & Vibration (COINV)
- Beijing SaintWise Intelligent Technology Development
- Shanghai Tongyi Automation Technology
- ISOCOMP
- QHS Engineering
- Delixi (Hangzhou) Inverter
- PHOENIX CONTACT Power Supplies
- Innovative Mechanical Engineering Technologies (IME Technologies)
- Jinan USR IOT Technology
- Zhengzhou Changhe Electronic Engineering ("Guangzhou Embedded Machine Technology (EMA)")
- Seoul National University, Department of Electrical and Computer Engineering, SNU Power Electronics Center (SPEC), Electrical Energy Conversion Lab
- SIASUN
- HAN University of Applied Sciences (Hogeschool van Arnhem en Nijmegen), Faculty of Engineering, Automotive Research
- Shenzhen Simphoenix Electric Technology
- SG Electronic Systems
- Italisvion
- SAKIWAI
- SAMICK THK
- POSCO ENGINEERING
- Tianjin Tianyuan Science&Energy Automation Control Tech.
- NIMAK
- CLEMIA
- nLIGHT
- Technische Universität München, Fakultät für Maschinenwesen, Lehrstuhl für Angewandte Mechanik
- Rutronic Elektronische Bauelemente
- MTAB Engineers
- Guangdong ELESY Electric
- TES
- HangZhou Dianzi University, School of Computer Science and Technology
- NDK Semiconductor
- Promotion Comercio e Serviço
- E.D. Electronica Dedicata
- Gasparini Industries
- BZ Robot
- ANDOR Automation
- Atlas Copco Industrial Technique
- Fives
- Shanghai Ro-intelligent System
- Shenzhen Shanlong Technology
- Université de Bretagne-Sud, ENSIBS
- Banner Engineering
- Nanjing Chenguang Group
- Micro-Controlle Spectra-Physics
- Answer Technology

New Members (since last newsletter) in order of membership application

We welcome all new members and thank you for joining forces to promote and advance the EtherCAT technology.

- Seagate Singapore International Headquarters
- Belden Deutschland (Lumberg Automation)
- Omron Oilfield & Marine
- Tri-City X-ray
- Quadrep Marketing (S)
- Thermal Dynamics
- Fujian Huafeng New Materials
- Telix Elektronik Otomasyon
- Beijing Itekon Technology
- RITZ
- Frasca International
- GTD Sistemas de Información
- DABO
- Shimwa
- Sichuan Chengbang Measurement & Control Technology
- Stichting Moving Bird (dba Project March)
- Alexan Tech.
- Rolls-Royce@NTU Corporate Lab
- Futurestar
- Cambridge Micro Engineering
- Stanford University, SLAC National Accelerator Laboratory, (a lab of U.S. Department of Energy (DOE) Office of Science operated by Stanford University)
- CSE-Automation and Robotics
- Maurizio Ferraris (dba Studio Ferraris)
- Technical University of Kosice, Faculty of Electrical Engineering and Informatics, Department of Electrical Engineering and Mechatronics
- ATENSOR Engineering and Technology Systems
- QUADRA Electronics DWC
- Headspring
- TAE Antriebstechnik
- Hangzhou Ridding Control Technology
- DAB-Embedded
- Albrecht Röders
- Molex Japan
- KIYEON INDUSTRIAL
- DEA Electron
- aizoOn Consulting
- Panasonic Industrial Devices Systems and Technology
- Maranatha Christian University, Faculty of Engineering, Department of Electrical Engineering
- Quality Firmware and Processes Solutions
- Kyosan USA
- Xi'an Aerospace Automation
- Inxobot Nanling Technology
- MAC Engineering di Andrea Giuriato & C
- DST Robot
- Gsolar Power
- University of Electronic Science and Technology of China, School of Communication & Information Engineering
- Remiü Technologies
- Kyowa Manufacturing
- Kyowa Europe
- Advanced Thermal Sciences (ATS)
- Finisar SHG
- Mindtribe Product Engineering
- FUJITSU PERIPHERALS
- Micro Design Labs
- Energy Environmental
- ES Gear
- Weightpack
- PEES Components
- SHANGHAI MAIHONG ELECTRONIC TECHNOLOGY
- SAITEK
- PowerSparks
- Techman Robot
- E-Stars Int'l Tech.
- Guangzhou Smartgiant Network Technology
- Zhejiang Zhaolong Cable
- Flow Devices and Systems
- Alpin Fiskye Sistemleri
- PARA-ENT
- Shanghai Marine Diesel Engine Research Institute
- Guilin Stars Science and Technology
- Adwen
- SCE
- Cyber Control Systems
- SafefinTrain
- TOMEN ELECTRONICS
- Amphenol Japan
- By Three projects
- Sandensha
- SPP Technologies
- Hitex (UK)
- BellChild
- driveXpert
- Biochar Now
- Varian Medical Systems
- Great River Electronics
- Shenzhen shun xin electrical and mechanical engineering equipment
- Suzhou New Spark Machine Tool
- Zhejiang Qixing Electron
- D.Electron
- KINGSTAR, a Division of IntervalZero
- ETH Zürich, Institute of Robotics and Intelligent Systems (IRIS), Agile & Dexterous Robotics Lab
- SHINTEC HOZUMI
- OPTOELECTRONICS
- ivac
- Intron Technology (China)
- Toshiba Medical Systems
- EnergoPromAutomatizaciya (EPSA)
- Iacon Analytik
- EZSERVO
- PLANET Technology
- Hochschule Coburg, Fakultät Elektrotechnik und Informatik, Studiengang Automatisierungstechnik und Robotik
- Ferran Technology
- Infineon Technologies China
- ALTER Electronica
- DAMEDICS
- ESTIC
- National Cheng Kung University, College of Electrical Engineering & Computer Science, Department of Computer Science and Information Engineering (CSIE)
- Wuxi Xinje Electric
- AcrossGate Global Structure Software
- MicroSure
- Sodick
- Zhejiang Windey
- Hunan Matrix Electronic Technology
- HIWIN
- Shenzhen Zmotion Technology
- Nozomi Networks
- Adcock Ingram
- Critical Link
- Aptronik
- Sheltronics Control Systems
- TOA Electronics, Hamatou Company
- MAC SYSTEMS
- Dental Manufacturing Unit
- Hilscher Italia
- YOUNG Lighting Technology
- Fette Compacting
- Unico Associates
- Guangdong Xi'an Jiaotong University Academy
- Bioconcept Consulting
- BRIDA Intelligent Systems
- KIMC
- Veeco Instruments
- Shanghai SLUNCHU Electromechanical Device
- TESEC
- ROBOTODS
- LEADJECK AUTOMATION
- BitfEye Digital Test Solutions
- BS2 MULTIDATA
- IBIS Computer
- Tianjin Sentinel Electronics
- Anritsu Engineering
- Xiamen Wain Electrical
- PRODUCTYS
- EA Elektro-Automatik
- J. MORITA MFG.
- «IZOVAC»
- SINOBONDER
- Motorcon
- embeddeers
- CORI
- Augtech Research
- Kwangwoon University, College of Electronics and Information Engineering, School of Robotics
- PKF «Ersted»
- Emerson Solahd (a division of Appleton GRP LLC dba Appleton Group)
- SUN ENGINEERING
- Beijing Dahao Technology
- Chiba Institute of Technology (CIT), Future Robotics Technology Center
- Hanbit Micro
- Trenz Electronic
- China Electronics Harvest Technology
- Contexa
- ICOP Technology
- MARPOSS
- Technical & Try
- CLEMESSEY
- AMESS
- Campbell Scientific
- Mini Motor
- Konsept Elektronik Otomasyon ve Yazılım
- STÓGRA Antriebstechnik
- Grabmaier Feinmechanik und Elektronik
- Toyota Motor Industries Poland
- University of Basel, Faculty of Medicine, Department of Biomedical Engineering
- Eksso Bionics
- ShenZhen Sankatec Technology
- Shanghai VolBoff Electron Science & Technology
- Aone
- Jimei University, College of Information Engineering, Department of Electronic and Information Engineering
- Ningbo Deetruer Wire Harness Technology
- TEAC
- Shanghai Jiao Tong University, School of Mechanical Engineering, National Engineering Laboratory for Automotive Electronic Control Technology
- SPI Lasers UK
- Huijbrechts Groep
- Moog India Technology Center
- Shenzhen Softwin Technology
- Kjellberg Finsterwalde Plasma und Maschinen
- Gomyk
- GRACE TECHNOLOGY LABS
- H.I.B Systemtechnik
- Cimatrix
- Christian-Albrechts-Universität zu Kiel, Technische Fakultät, Institut für Elektrotechnik und Informationstechnik (ET&IT), Lehrstuhl für Leistungselektronik
- ROTA TEKNIK MAKINA SAN. ve TIC.
- Drobak
- CorPower Ocean
- Shenzhen Huacheng Industrial Control
- DCNS
- Bird Technologies
- Octopod Technology
- Nova Fabrica
- China Software Testing Center (CSTC)
- Silicon Software
- PROTEC
- FINE
- National Taipei University of Technology (NTUT), College of Engineering and Computer Science, Department of Electrical Engineering
- PSG College of Technology, Department of Robotics & Automation Engineering
- Leibniz Universität Hannover, Fakultät für Elektrotechnik und Informatik, Institut für Regelungstechnik
- Shantou University, College of Engineering, Department of Electronic Engineering, Key Lab of Digital Signal and Image Processing of Guangdong Province
- Star Denshi
- SHENZHEN VMORE CTRL&TECH
- Saft
- Hesse
- Thyssenkrupp Marine Systems
- Autonomous Devices
- MC Tech.
- TOSHIBA DIGITAL MEDIA ENGINEERING
- Skalenet
- Bitage
- HIROSE ELECTRIC
- Sanshin Electric
- Sepro Robotique
- "Holy Spirit University of Kaslik, Faculty of Engineering"
- "The University of Texas at Dallas (UTD), Cyber Security Research and Education Institute (CSI)"
- NEW COSMOS ELECTRIC
- Cosys
- Shenzhen Vector Automation Technology
- Glidewell Laboratories
- Ruhr-Universität Bochum, Fakultät für Elektrotechnik und Informationstechnik (EI), Lehrstuhl für Eingebettete Systeme der Informationstechnik (ESIT)
- Tolomatic
- XJ Electric
- "National Taipei University, Department of Electrical Engineering"
- Tokyo Robotics
- DaitoDenso
- Victory CNC Plasma Systems
- Zenitron
- Apex Technology
- AGVS
- Shenzhen Anguan Tech
- Kaufman & Robinson
- Opsytec Dr. Gröbel
- STE Trekwerk
- Technische Hochschule Nürnberg Georg Simon Ohm, Fakultät Elektrotechnik Feinwerktechnik Informationstechnik (efi), Institut für leistungselektronische Systeme (ELSYS)
- Toyo Label
- Christ Electronic Systems
- Shell TechWorks
- Shenyang Neusoft Medical Systems
- HV Sistemasa
- Fujian Raynen Technology
- Demcon Advanced Mechatronics
- Shenyang XBANG Technology
- HB Technologies
- FCI Deutschland
- National Taipei University of Technology (NTUT), Advanced Intelligent Control Lab.
- CB7 Systems
- TACHII ELECTRIC WIRE
- Techno Service 's-Gravenpolder
- Nippon Seisen Cable
- "Massachusetts Institute of Technology (MIT), Department of Mechanical Engineering, Biomimetic Robotics Lab"
- "TEAM NEW ZEALAND AC35 CHALLENGE (dba Emirates Team New Zealand)"
- Laboratoire Bordelais de Recherche en Informatique (LaBRI)
- Guangdong Topstar Technology
- "Tallinn University of Technology (TTU), Faculty of Information Technology"
- HEXMOTO Controls
- Weigel
- Omron Adept Technologies
- Rotterdamp University, School for Engineering and Applied Science
- Serva Transport Systems
- Shenzhen Signal Electronics
- Polytec Electrical Hydraulic Control (Hangzhou)
- Tangshan Baichuan Intelligent Machine
- Evinsys
- Motiv Robotics
- Tekt Industries
- Fluid Components International
- QNI Control Systems
- NOVA FABRICA
- FUJITSU COMPONENT
- Raad Systems
- Shenzhen X-TEC Technology
- KSM-ELECTRONIC
- Kleintges Elektrogerätebau
- FRANKA EMIKA
- Mondragon Unibertsitatea, Faculty of Engineering, Signal Theory and Communications Group
- Noux & Co
- Inete (trading as Integral Electric Technology)
- Parts Supply Center
- MRSI Systems
- Nippon Pulse Motor
- Carl Zeiss SMT
- MAXCOM
- Generic Robotics
- Martinson Elektronik
- Shanghai Pepperl+Fuchs Automation Trading
- Ryoei Technica
- Hamilton Bonaduz
- RWTH Aachen University, Chair of Communication and Distributed Systems (Computer Science 4)
- Skalenet
- Zumbach Exchange
- Net One Partners
- Fusion Information Technology
- Synctech
- Ti
- Gal
- Shenzhen Sipake Electric
- Cabinplant
- Ibp Industrie Electronic
- teCoty engineering
- Imkon Endustriyel Otomasyon Sistemleri
- CELIN
- Alicat Scientific
- progress Maschinen & Automation
- Greatoo(Guangzhou) Robots and Intelligent Manufacturing
- Science and Technology Facilities Council, UK Astronomy Technology Centre (UK ATC)
- HAEWON GREEN ENERGY
- STAR SEIKI
- OMRON AUTOMATION SYSTEM (HANGZHOU)
- HUST Automation System
- Jiaying Dealour Electric Technology
- Shenzhen ProU software
- GAT Gesellschaft für Antriebstechnik
- Zenitron
- FPT Software
- MERSEN France Amiens
- Motovario
- Smart Move
- PushCorp
- Technische Universität München, Fakultät für Maschinenwesen, Professur für Sichere Eingebettete Systeme
- PHOTO ELECTRONICS
- Diana Electronic Systeme
- Anhui Liu Lian Intelligent Technology
- Anhui JieXun Optoelectronic Technology
- Chengdu InPlus Technology
- SmartDV Technologies India
- IMAL
- Shanghai Huona Electromechanical Engineering
- Acies
- HANYANG ROBOTICS
- MuTrac International
- MicroStep
- INNOVENT
- Extreme Engineering Solutions
- Tianjin Fuyun Tianyi Technology
- Shanghai Baoux Mechatronics Engineering
- Beijing JCZ Technology
- Shimafuji Electric
- Packsize Technologies
- Sead
- JIANGSU TORSUNG M&E
- ShanDong Institute Of Intelligent Robot & Applied Technology
- Fraunhofer-Institut für Optronik, Systemtechnik und Bildauswertung IOSB
- Opsens Solutions
- ETA Technology
- Intellegre
- ASAHYUKUZAI
- Eagle Tech Manufacturing
- Xiamen Kehua Hengsheng
- Shenzhen Strong Technology
- Tech-Sonic
- Satomi Seisakusho
- Shanghai Jiao Tong University, School of Mechanical Engineering, Institute of Design and Control Engineering for Heavy Equipment
- Nalux
- LumaSense Technologies
- ITmtems - Spinoff del Politecnico di Milano
- KOCH Pac-Systeme
- Taizhou Topcut-Bullmer Mechanical and Electrical Technology
- CHONGQING PULSE ROBOT CONTROL SYSTEM
- NOMURA UNISON
- Shenzhen newpower servo technology
- Veermata Jijabai Technological Institute
- Mumbai, Department of Electrical Engineering
- ACCREA Bartłomiej Stanczyk
- Diebie Engineering
- HIOKI E.E.
- I-V-G Göhringer
- Hangzhou VisionRobot Technology
- clownfish information technology
- Electronic Theatre Controls (ETC)
- Procept
- SYSWORK
- ELECDRIVE
- TECHPRO
- TEXUS
- Guangzhou Kossi Intelligent Technology
- High Q Laser
- Shenzhen Samkoon Technology
- Eidos-Robotics
- Interface Devices
- Total Solutions
- Wuxi Crauz Technology
- Winbro Group Technologies
- Advanced Mining Technology Center (AMTC)
- Manter International
- Cordova Industrial Integradores
- Technické služby BAHOZA
- TRONTEQ Electronic
- EcobotLlc
- SENTRONIC
- Liebherr-Components Biberach
- Wagner International
- STEP di Tideo Agostino
- CISA Intelligent Systems & Automation
- Data Device
- Atop Technologies
- VASKON
- Agility Robotics
- LEX Computech
- SAE IT-systems
- EAST Group
- North China University of Technology, Beijing Key Laboratory of Fieldbus and Automation
- Instytut Tele- i Radiotechniczny (ITR)
- ITOH DENKI
- Emco Dynatorq
- Lehmann Präzision
- Dynapar
- BEx-Solution
- Shanghai Rui Fast Automation Equipment
- Nidec
- Suzhou Quick Laser Technology
- Volga State University of Technology, Faculty of Information Technologies and Computer Engineering, Department of Computer Systems
- NPP VIUS

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