

EtherCAT Technology Group
Members

August 2010



**EtherCAT Technical Training Class &
Slave Implementation Workshop**
Gwangju, South Korea, October 25/26, 2010

Dear ETG Member,

we invite you to participate in the two days EtherCAT Training taking place

on **October 25, 2010 — EtherCAT Technical Trainings Class**
October 26, 2010 — Slave Implementation Workshop
in **Gwangju City, South Korea,**
at **Gwangju Technopark**

The EtherCAT training is hosted by Sunchon National University, Prof.Dr. Yong-Seon Moon and supported by Tri-TEK Corp, Key Yoo.

EtherCAT Technical Trainings Class (First Day)

The communication technology is introduced in detail on the first day: from the physical layer, the telegram structure and on-the-fly processing up to the application layer protocols for process data mapping and object configuration. On the second day you will get useful information and hands-on experience for hardware and software implementation of EtherCAT in your own device. Please find the detailed agenda on the next page.

Slave Implementation Workshop (Second Day)

The practical implementation aspects are based on the knowledge transferred on the first day and utilize the EtherCAT Evaluation Kit (EL9820 by Beckhoff) and the Slave Sample Code which comes with the kit. Participation requires the evaluation kit which should be obtained in advance.

To use the workshop time efficiently it is helpful when all participants have installed certain software on their laptops used during the workshop in advance. Detailed information will follow after registration.

Target Group

The training is intended mainly for developers. Product managers who want to improve their knowledge about the basic mechanisms of EtherCAT may want to take part on the first day and are also welcome.

Prerequisites

Requires ETG membership and the Beckhoff EL98xx EtherCAT Evaluation Kit. If ordering EL98xx kit for class, order must be placed by September 30, 2010. Please contact Ms. Olive (olive@tritek.co.kr) for orders.

Participation Fee

1,000,000 KRW plus 10% VAT for each participant.

Please sign up as soon as possible since number of participants is limited.

In case of any question, please do not hesitate to send an email to keyyoo@ethercat.org or contact ETG Office Korea at +82 (2) 2107 3240.

Best regards,
Your ETG Team

EtherCAT Technical Training Class & Slave Implementation Workshop

October 25/26, 2010

Monday, October 25th, 2010

Start of the meeting at 09:00 a.m.
End of the meeting at 05:00 p.m.

EtherCAT Technical Trainings Class

EtherCAT Basics

- Slave Structure
- Physical Layer
- Device Model
- Data Link Layer
- Frame Structure
- Addressing, Commands
- Memory, SyncManager, FMMUs
- Diagnosis

Application Layer

- State Machine
- Mailbox (Mailbox Protocols)
- Slave Information Interface (EEPROM)
- Device Profiles

Distributed Clocks

EtherCAT Slave Information (device description)

Tools (Configuration Tool, Monitor,...)

EtherCAT Master

Standard & References

Tuesday, October 26th, 2010

Start of the meeting at 09:00 a.m.
End of the meeting at 03:00 p.m.

Slave Implementation Basics

EtherCAT Slave Hardware

EtherCAT Slave Controller (ESC)

ESC Process data interfaces (PDIs):

- 8/16 bit Microcontroller Interface
- 32 bit Parallel Interface
- SPI -Interface
- PDI Timing

Slave Implementation— Tools & Code

Usage of MP Lab

Compilation and introduction of Slave Sample Code

Network traffic analysis (Wireshark)

EtherCAT Slave Information (device description)

Usage of Conformance Test Tool (CTT)

Questions and Answers

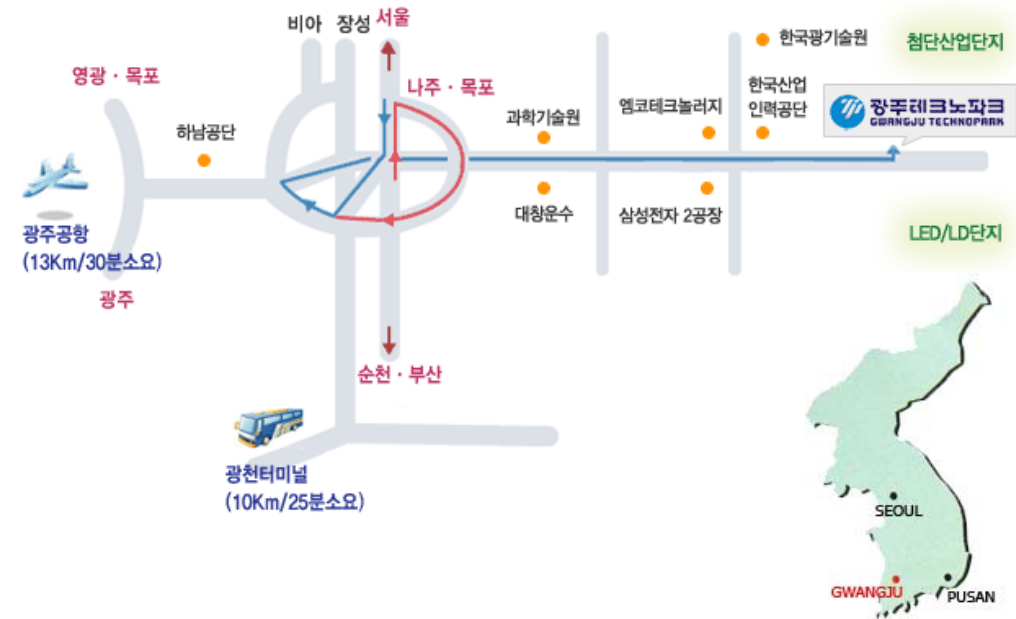
EtherCAT Technical Training Class & Slave Implementation Workshop

October 25/26, 2010

Location Map

Chumdun 3gil, Buk-gu, Gwangju, 500-706, Korea

주소 : 광주광역시 북구 첨단 3길 107 [대촌동 958-3] (광주첨단과학산업단지 내) 우 500 - 470
 TEL : 062 - 602 - 7114
 FAX : 062 - 602 - 7100 - 1



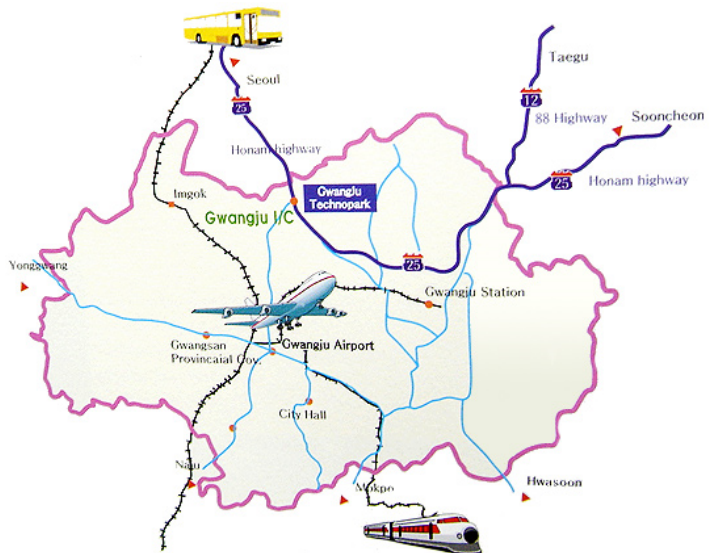
버스노선안내

- 테크노파크: [간선]첨단40, [지선]첨단94
- 한국광기술원: [간선]봉선27,첨단30,첨단40, [지선]임곡91,첨단92,첨단94
- 산업인력공단: [급행간선]첨단09, [간선]첨단30,첨단40, [지선]임곡91,첨단92,첨단94

Travel Information

http://www.gjtp.or.kr/English/sub05_2.htm

Gwangju City provides an excellent business environment with well-established infrastructure and geographical advantages. While it is situated less than 1 hour flight from Incheon International Airport, the Business and Logistics Hub of Northeast Asia, it can be reached by only 40 minutes flight from Gimpo Domestic Airport. Gwangju Technopark itself is only 15 minutes drive from Gwangju Airport and 5 minutes drive from Honam Highway.



Hotel Recommendation

Guest house in the Science and Technology Center of GJTP

EtherCAT Technical Training Class & Slave Implementation Workshop

October 25/26, 2010

Registration Form

Yes, I want to register for the
EtherCAT Technical Training Class & Slave Implementation Workshop,
Gwangju City, South Korea,
on October 25/26, 2010.

Please register as soon as possible, since the number of attendees is limited to space constraints.

Please use several copies for registering more participations. Send registration form to keyyoo@ethercat.org. In case of problems with email (e.g. spam filter issues), please fill in, print and fax to + 82 (2) 2107 3969.

Company Details

Billing Address

(if different from company address)

Company Name		
Street, Number P.O. Box		
Country Code ZIP City		
Company Phone		
Company Website		
Number of Participants (overall)		Participation Fee: 1,000,000 KRW (plus 10% VAT) for each participant

Participant Details

Participant #1

Participant #2

Name		
Position		
Direct Phone		
Fax		
E-Mail		

Remarks

Please provide your comments	
EtherCAT Evaluation Kit available	<input type="checkbox"/> Yes <input type="checkbox"/> No

Date, Signature
