翹慧事業股份有限公司
INDUSTRADE CO., LTD

Plexim PLECS Workshop Seminar Agenda

Objective: Hareware-in-the-Loop Simulation and Advanced Modeling of Power Electronic Systems

Date and Time: 2017 June 9th, Friday, From 8:30 to 16:00

Place: EC6016, 6F, Building of Electrical Engineering, National Sun Yat-sen University

Organizer: Industrade

Sponsor: Plexim & NSYSU

Speaker: Orhan Toker, Vice President, Plexim GmbH

Target Audience: Professors, Students and Engineers who associated with power electronic system research and Engineers

Invitation of Participants: 50% participants reserved for NSYSU , another 50% reserved for non-NSYSU participants

PLECS Workshop Timetable:

Time	Subject	Exercises (hand-on sessions)
08:30 ~ 09:00	Register	
09:00 ~ 10:00	**Introduction to PLECS** ✓ General use of PLECS Blockset and PLECS Standalone ✓ Instantaneous switching ✓ Variable and fixed-step operation	Modeling a switched-mode power supply
10:00 ~ 10:30	*Break*	
11:15~ 11:45	**Solver Settings** ✓ Definition of stiff and non-stiff systems ✓ Explicit and non-explicit solvers ✓ Stability domains ✓ Accuracy considerations, step size control ✓ Proper handling of discontinuities, zero-crossing detection	Exercise: Solver accuracy and settings
12:00 ~ 13:00	*Lunch*	
13:00 ~ 14:00	**Introduction to Thermal, Magnetic & Mechanic Modeling & Simulation** ✓ Switching & conduction loss descriptions ✓ Combined electrical-thermal simulation ✓ Permeance Capacitance Analogy Model	Thermal modeling modeling of a buck converter
14:30 ~ 15:00	*Break*	
15:00 ~ 16:00	**Hardware-in-the-loop simulation** RT-Box Demo	

Event assistance:
1. Workshop materials: Provided by Plexim and Industrade.
2. Licenses: PLECS licenses key provided by Plexim. Industrade will install latest software and license server during event
3. Provide assistance: Provide assist for registration, software installation and seminar room preparation
4. Participants list: Provide NSYSU participants contact list to Industrade (for event activity record purpose only)