Diamond$_X$ Digital Applications

Flexible, Cost Optimized Test Solutions

Cohu

Course Description

The Unison Digital Applications training course provides a broad base of skills within the Unison programming environment and forms a strong foundation for future applications courses. As such, the course covers DC and digital instruments. It enables attendees to work comfortably with the Unison user interface and program the typical instrument set using Unison Test Language instructions. Students must complete the online pre-course before attending this class. Login information for the online materials will be emailed after registration.

Course Outline

- Pre-course review
- Create a test program
- Unison GUI Tools
- Voltage and current instruments
- Digital Subsystem Use Model

Course Structure

- Five days, including classroom and practical exercises

Prerequisites

- Completion of the Unison Applications Pre-course prior to attending the classroom session
- Three months of test program experience

Recommended Skills

- C or C++ programming experience
- Familiarity with Unix and Linux operating systems
- English - written and spoken

Who Should Attend

- Test program development and support engineers
- Test system application engineers and technicians

Automotive

Mobility

IoT/IoV & Optoelectronics

Computing & Network

Industrial & Medical

Consumer

- **Next-gen test system for a wide range of applications**
- **Scalable high-throughput architecture**
- **Flexible configurations and solutions**
- **Small form factor**
- **Air cooled architecture and instruments**
- **Compact low power technology**

Diamond$_X$ Digital Applications

Daily Schedule

Each topic discussed will have an associated lab exercise to aid in reinforcement of understanding the training material.

Day 1
- Pre-course Review
- Test Group Objects APIs

Day 2
- Spec Mask Levels Debugging

Day 3
- Digital Programming

Day 4
- Pattern
- Debugging
- External
- Trigger

Day 5
- DSP Send and Capture

Topics Covered

This course covers the Unison user interface, including both the graphical tools and Unison Test Language instructions. Hardware discussed in the course includes:
- Core DC instruments in the VI family of instruments
- DPIN96 and GX1x digital subsystem

Course Modules

1 - Pre-Course Review

This section of the classroom content uses guided demonstrations to review the material covered in the pre-course. The purpose of this section is to refresh students' recollection and provide an opportunity for questions.

2 - Create a Test Program

This reinforces the content of the pre-course by allowing the students to build the infrastructure of a test program. A series of 10 practical exercises will build a test program using the tools described in the pre-course. Completing these exercises will reinforce an understanding of the elements of the Unison Test Language. In addition, the student will also be working with the various files used to create libraries. On completion of these exercises the student will have demonstrated the ability to work with all the tools described in the pre-course, and the use and management of the different files in a Unison test program.

3 - Unison GUI Tools

Introduction of the commonly used Unison tools to develop, test and debug a test program.

- Test Tool
- Levels Tool
- Spec Tool
- Debugging Tools

4 - Diamond Series Voltage and Current Instruments

This unit introduces the programming of DC instruments (e.g. HDVI, PMVI$_X$ and VIS16). Generic syntax statements for:

- Connect/disconnect instructions
- Force instructions
- Measure instructions
- Triggering and Measurement
- Read back Alarms

On successful completion of this module the student will be able to create a series of tests for a digital device.

- **Next-gen test system for a wide range of applications**
- **Scalable high-throughput architecture**
- **Flexible configurations and solutions**
- **Small form factor**
- **Air cooled architecture and instruments**
- **Compact low power technology**

5 - Digital Subsystem Use Model

This unit features the DPIN96 and GX1x Digital instruments. The engineer will build a digital test solution.

- Introduction to program structure
- Levels Tool
- Pattern Tool
- PatternSetup Tool
- Debugging Tools
- Micro-instructions
- Unison Test Language Exception handling instructions
- Pattern and Unison Test Language Synchronization
- SyncBus and synchronization
- DSP Send and Capture

Registration

To register, click on the register button or link.

or Register here

Please visit www.cohu.com/ate-classroom-training to get comprehensive course information. If you have any questions, please contact your local Cohu sales representative or training coordinator.

Visit our ATE Knowledge Centers

Click on the below logos to visit our video channels.

or Click here   or Click here