

Diamond10 Maintenance

Production Test of MCU and Cost-Sensitive Consumer ICs



Course Description

This course introduces the student to the system operating environment and maintenance procedures for the Diamond10 test system. This is achieved through a combination of lectures and lab exercises. Upon completion of the course, the student is able to:

- Remove and replace test head instruments
- Alter the test head configuration
- Use SMC and other related software to verify the test head instruments
- Perform preventative maintenance
- Remove and replace the system's DC power supply.

Course Outline

- Introduction and Course Overview
- Safety and ESD Concerns
- System Hardware Overview
- Systems Software Overview
- System Tour in Lab

Course Length

- One day, including classroom and practical exercises

Recommended Skills

- Familiarity with Unix and Linux Operating systems
- English - written and spoken

Prerequisites

- Six months test maintenance experience

Who Should Attend

- Test program support engineers
- Test system technical leads



Automotive



Mobility



IoT/IoV & Optoelectronics



Microcontrollers



Industrial & Medical



Consumer

- Ideal for lab development or high-volume production
- Scalable high-throughput architecture
- Flexible configurations and solutions
- Ultra-small form factor
- Air cooled architecture and instruments
- Compact low power technology

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Course Modules

1 - Classroom Lecture

- Introduction and Course Overview
- Safety and ESD Concerns
- System Hardware Overview
 - System Block Diagram
 - Backplane Assembly
 - System Wiring
 - System Power
 - Instrument Overview
- System Software Overview
 - Power Up/Down
 - Red Hat Operating System (OS) and Linux
 - System Maintenance Controller (SMC)
 - DPINg6 AC Cal and Verify
 - Other Software Utilities
- Maintenance Procedures

2 - Lab Exercises

- System Tour
- Power Up/Down and Operating System
- System Maintenance Controller (SMC)
- DPINg6 AC Cal and Verify
- syscon and version_info
- Remove and replace DPINg6
- Remove and replace 48V Power Supply

Related Courses

- Diamond Series Digital Applications
- Diamond Series Mixed Signal Applications
- Diamond Series APG Applications