ELECTRA IC
Design & Verification

DO-254
Training Course

⧗ **3 Days**

Hardware System Design Training

Objectives

- ○ Manage Hardware projects under latest DO-254 guidance
- ○ Provide an overview of mandatory activities required by Certification authorities
- ○ Understand DO-254 rationale
- ○ Reduce Cost and Risk of avionics certification
- ○ Adopt cost effective activities, check-lists and methods to meet your objectives

3 Days of intensive training

Day	Program
1	- Overview of Avionics Certification - Requirement Capture – Validation
2	- Conceptual & Detailed Design - Verification Activities
3	- Supporting processes - Advanced Consideration

Intended Audience

- Military or Avionics Hardware Project Leaders
- ASIC & FPGA Digital Design Engineers
- Hardware Design Engineers
- Quality Assurance Engineers
- All people involved in system design

Detailed Agenda

• Introduction – DO-254 Scope
- Relation with system development
- Design Assurance Level
- Verification / validation definitions
- Independence consideration
- Simple / Complex
- Board design

• Planning & Standards
- System PHAC example
- Other plans illustrated

• Design Processes
- Requirement Capture
- Conceptual & Detailed Design
- Hardware Software Interface Data
- Acceptance Test
- Production

• Verification Process
- Independence
- Cases & Procedures
- Acceptance Criteria
- Verification Results
- Robustness
- Traceability

• Supporting Processes
- Configuration Management
- Identification and Baseline
- Change and Problem management
- Process Assurance Activities
- Reviews, Audit.
- Acceptance Test
- Certification Liaison Process

• Advanced Considerations
- ReUse
- COTS / IP usage
- Service Experience
- Tool Assessment
- Tool Qualification – DO-330

• Modulation based on DAL

• Consideration for Level A&B
- New tools
- Advanced Methodologies