CertCore™ 254

Avionics DO-254/ED-80 Hardware Certification Evidence Package

CoreAVI's CertCore 254 is comprised of the certification evidence package that supports the avionics hardware certification of CoreAVI COTS-D modules. CertCore 254 includes safety certification evidence for RTCA DO-254 and EUROCAE ED-80 certifications, supporting system requirements up to Item Development Assurance Level (IDAL) A.

CertCore 254 is developed under the guidance of CoreAVI's FAA Designated Engineering Representative (DER) and delivered to customers with everything required to comply with RTCA DO-254 and EUROCAE ED-80 for the selected hardware item. Certification evidence packages are available for the following CoreAVI COTS-D products:

- COTS-D LX2160A-based 3U VPX SBC
- COTS-D AMD Embedded Radeon E9171-based 3U VPX SBC
- COTS-D AMD Embedded Radeon E9171-based XMC GPU module

FEATURES AND BENEFITS

- Designed to facilitate FAA, EASA and Transport Canada avionics safety certifications
- DO-254 / ED-80 evidence package supports systems requiring IDAL A
- Includes final FAA DER certification signoff, including release of FAA form 8110-3
- Certification Defense option for direct on-site support from CoreAVI to defend the certification evidence internally and with the certification authority.

CERTCORE 254 SAFETY CERTIFICATION PACKAGE

1. Quality Assurance Plan
2. Configuration Management Plan
3. Requirements Standards
4. Circuit Board Assembly (DO-254 DAL D per EASA CM SWCEH-001 section 7):
   - Plan for Hardware Aspects of Certification
   - Hardware Verification Plan
   - Hardware Requirements Data
   - Hardware Verification Results
   - Hardware Configuration Index
   - Hardware Accomplishment Summary
   - Top Level Drawing
   - Certification Credit Information for COTS Components (complex COTS devices)
5. PLD – DO-254 DAL A:
   - Plan for Hardware Aspects of Certification
   - Hardware Design Plan
   - Hardware Validation and Verification Plan
   - Hardware Design Standards
   - Hardware Validation and Verification Standards
   - Hardware Requirements Data
   - Hardware Design Description
   - Hardware Elemental Analysis Report
   - Hardware Verification Results
   - Hardware Configuration Index
   - Verification Configuration index
   - Hardware Accomplishment Summary
6. Application Mode Firmware (FW) – DO-178C DAL A:
   - Plan for Software Aspects of Certification
   - Software Development Plan
   - Software Design Standard
   - Software Coding Standard
   - Software Verification Plan
   - Software Test Plan
   - Software Requirements Data
   - Software Design Description
   - Software Configuration Index includes Software Life Cycle Environment Configuration Index
   - Software Accomplishment Summary
   - Software Verification Results
   - Structural Coverage Analysis Report
   - Data Control & Coupling Report
   - Trace Matrices
   - LLR to Source Code Trace Matrix
   - LLR to Test Case Trace Matrix
   - SLR CSLR HLR Trace Matrix
   - HLR SLR LLR TC Trace Matrix
   - TC HLR TPD Trace Matrix
   - TPD TC Trace Matrix
   - LLR HLR LLR Trace Matrix
   - UTC UTPD Trace Matrix
   - UTPD UTC Trace Matrix

The remaining development evidence and data is available at CoreAVI for review.