Certify and Fly Right: Preparing for DO-297 Certification

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Esterline Control Systems - AVISTA









Boeing 777



Integrated Modular Avionics (IMA)



Images courtesy of avionicszone.com and Trade India



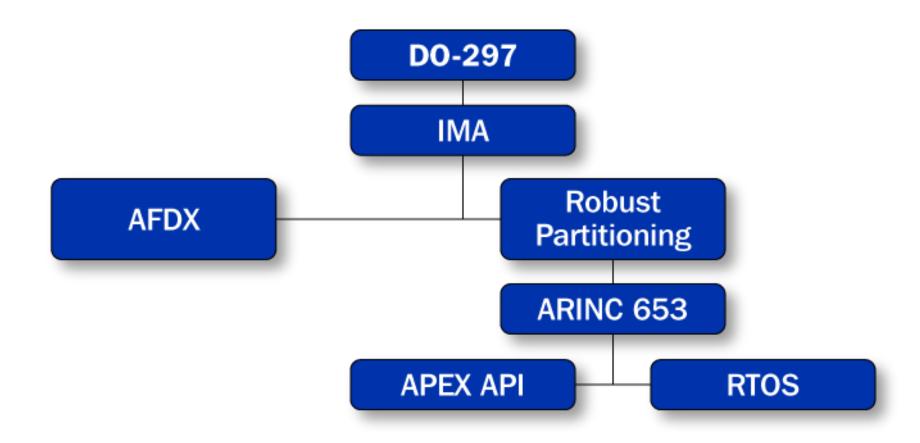








DO-297 Overview & Terminology











IMA Time Partition

```
/* Single Application */
switch(timeSlice)
  case 0:
    ReadLabels();
  case 1,3,5,7:
    MainProcess();
  case 2,4:
    SaveLog();
```

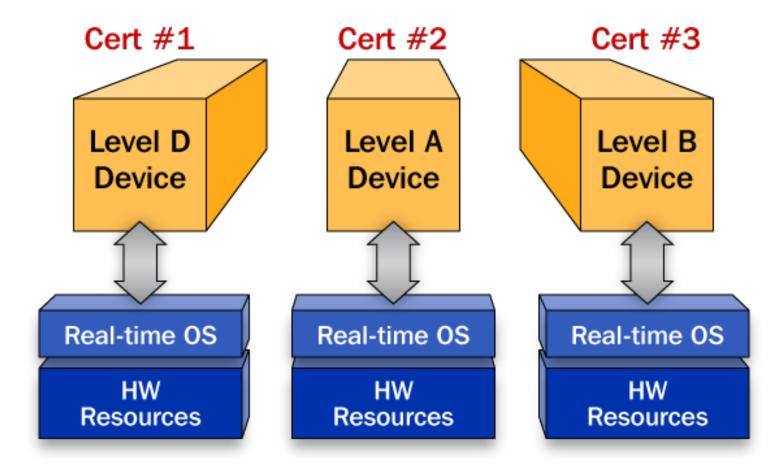
```
/* IMA System of Systems */
switch(timeSlice)
  case 0:
    Maintenance_Sys();
  case 1,3,5,7:
    Autopilot_Sys();
  case 2,4:
    CDU_Sys();
```







Application Certification Today



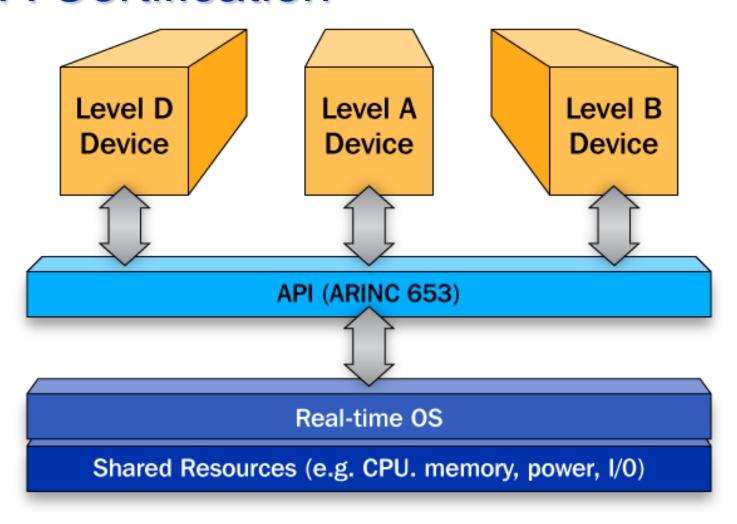








IMA Certification











IMA Advantages

- » More complex systems
- » Consolidation of low-level development
- » Lower cost & weight
- » Flexibility & modularity
- » Reuse
- » Maintenance
- » Growth

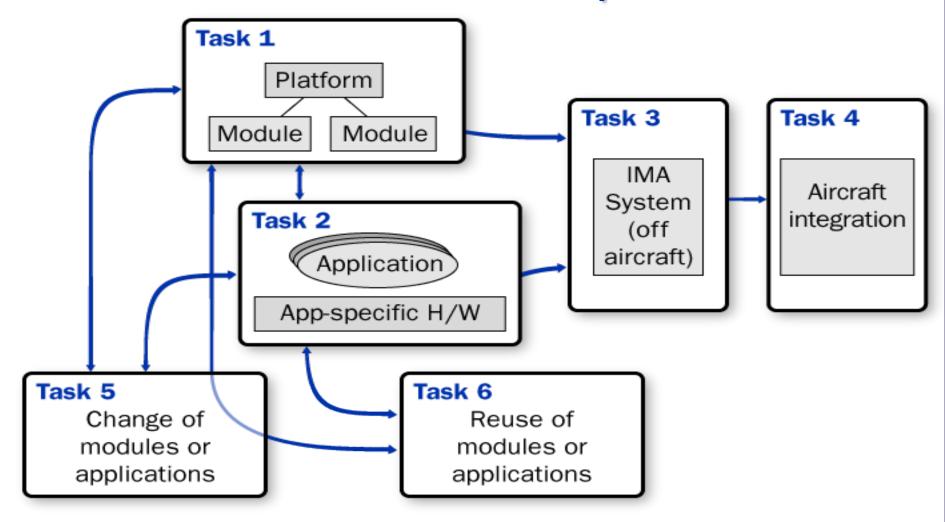








DO-297 Certification Steps











Challenges











...look for opportunities for DO-297









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