RTEMS EDISOFT LEON3 Update

The RTEMS EDISOFT LEON3 Update activity objectives were to implement the patches on the GCC compiler, due to the several issues identified on the LEON3 processor family, to produce the RTEMS binaries, to execute the qualification tests on the newly generated binaries and to update the RTEMS qualification datapackage.

The RTEMS by EDISOFT was updated to include the agreed updates to the compiler (TN-0009), the new build system for RTEMS, EDILIB and application, the additional Technical Notes (TN-0010, TN-0011, TN-0012, TN-0013 and TN-0018) and Software Problem Reports found (SPR 3379, 3380, 3381, 3382 and 3383). The requirements were updated. All tests were executed successfully, 100% of source code statement and decision coverage was achieved and RTEMS Tailored new performance information (RTEMS directives, critical sections, interrupt timing, CPU occupancy and memory usage) was collected and reported in the RTEMS Improvement Software Budget Report.