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TECHNICAL REPORT

colour inside

Process management for avionics – Highly severe stress tests for operating margins identification and robustness improvement of avionics equipment – Application guidelines

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Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this Technical Report is English.

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INTRODUCTION

In an increasingly harsh economic context (higher performance requirements, shorter development cycles, reduced cost of ownership, etc.), consideration is given to rapid equipment maturity, preferably from its entry into service (EIS).

It is with a view to remedying shortcomings that "highly severe stress" tests for margins research and robustness improvement are considered in equipment design and development methods. The main underlying principle behind this type of test strategy is as follows: rather than reasoning in terms of conformity with a specification and applying tests in line with the specification requirements, it is on the contrary attempted to push the equipment to its operating limits by applying environmental stresses or stimuli, whose levels are higher than the specification requirements.