

# TECHNICAL SPECIFICATION

**Process management for avionics – Management plan –  
Part 1: Preparation and maintenance of an electronic components management  
plan**



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**Process management for avionics – Management plan –  
Part 1: Preparation and maintenance of an electronic components management  
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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**PROCESS MANAGEMENT FOR AVIONICS –  
MANAGEMENT PLAN –****Part 1: Preparation and maintenance of an  
electronic components management plan**

## FOREWORD

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- the subject is still under technical development or where, for any other reason, there is the future but no immediate possibility of an agreement on an International Standard.

Technical specifications are subject to review within three years of publication to decide whether they can be transformed into International Standards.

IEC/TS 62239-1, which is a technical specification, has been prepared by IEC Technical Committee 107: Process management for avionics.

This edition cancels and replaces IEC/TS 62239 published in 2008. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC/TS 62239:2008:

- a) Scope – Added DO-254 for clarification
- b) Normative references – Added additional references
- c) Terms, definitions and abbreviations – Clarified some definitions
- d) 4 Technical requirements – Added clarification related to managing ECMP at subcontractor
- e) 4.2 Component selection – Clarified temperature range requirements
- f) 4.3.3 De-rating and stress analysis – Added information relative to part wear out
- g) 4.3.8 Management of lead free termination finish and soldering – Added requirement
- h) 4.3.9 Counterfeit, fraudulent and recycled component avoidance – Added requirement
- i) 4.4.5 Demonstration of component qualification – Clarified documentation required
- j) 4.4.5.3.4 Equipment manufacturer validation – Added additional requirements
- k) 4.4.7 Distributor process management approval – Added additional requirements
- l) 4.5.2. On-going component quality assurance – Changed title to clarify purpose and changed STACK 0001 reference to IEC/PAS 62686-1
- m) 4.6.5 Reporting – Added requirement to periodically report status of obsolescence program to customer
- n) 4.6.7 Semiconductor reliability and wear out – Added requirement to address semiconductor wear out
- o) Annex A: Typical Qualification Requirements – Added requirement for minimum part qualification
- p) Annex B Semiconductor reliability and wear out – Added annex B to provide information about wear out

The text of this technical specification is based on the following documents:

Enquiry draft	Report on voting
107/161/DTS	107/179/RVC

Full information on the voting for the approval of this technical specification can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all the parts in the IEC/TS 62239 series under the general title *Process management for avionics – Management plan*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- transformed into an International Standard,
- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

Withdrawn