



BSI Standards Publication

Process management for avionics — Counterfeit prevention

Part 2: Managing electronic components
from non-franchised sources

National foreword

This Published Document is the UK implementation of IEC/TS 62668-2:2016. It supersedes PD IEC/TS 62668-2:2014 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GEL/107, Process management for avionics.

A list of organizations represented on this committee can be obtained on request to its secretary.

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TECHNICAL SPECIFICATION



**Process management for avionics – Counterfeit prevention –
Part 2: Managing electronic components from non-franchised sources**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 03.100.50; 31.020; 49.060

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PROCESS MANAGEMENT FOR AVIONICS – COUNTERFEIT PREVENTION –

Part 2: Managing electronic components from non-franchised sources

FOREWORD

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- the required support cannot be obtained for the publication of an International Standard, despite repeated efforts, or
- 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 62668-2, which is a technical specification, has been prepared by IEC technical committee 107: Process management for avionics.

This second edition cancels and replaces the first edition, published in 2014. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) Updates to the risk assessment process.
- b) Updates to the test methods including reference to the SAE AS6171 test methods in development.
- c) Updates in line with IEC TS 62668-1 for definitions and references to DFARS and removal of reference to RECS.

This technical specification is to be used in conjunction with IEC TS 62239-1 and IEC TS 62668-1.

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

Enquiry draft	Report on voting
107/280/DTS	107/286/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 document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all the parts in the IEC 62668 series, published under the general title *Process management for avionics – Counterfeit prevention*, can be found on the IEC website.

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

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

The avionics industry has a responsibility to ensure that all flight equipment produced has a predicted product life which correlates to the predicted repair and service life to ensure the public is not endangered. Typically an original equipment manufacturer (OEM) calculates a mean time between failure (MTBF) and possibly a mean time to failure (MTTF) prediction. These calculations assume all components are new, or considered as “unused”, at the point of introduction into flight use and that no useful component life and/or any “unsafe” component conditions have been used. For example it is therefore essential that counterfeit, recycled and fraudulent components which have had potentially some of their “useful life” consumed and which may also be malfunctioning are not purchased for use in aerospace, defence and high performance (ADHP) industries.

PROCESS MANAGEMENT FOR AVIONICS – COUNTERFEIT PREVENTION –

Part 2: Managing electronic components from non-franchised sources

1 Scope

This part of IEC 62668, which is a technical specification, defines requirements for avoiding the use of counterfeit, recycled and fraudulent components when these components are not purchased from the original component manufacturer (OCM) or are purchased from outside of franchised distributor networks for use in the aerospace, defence and high performance (ADHP) industries. This practice is used, as derogation, only when there are no reasonable or practical alternatives.

NOTE Typically this technical specification is used in conjunction with IEC TS 62239-1 and IEC TS 62668-1, enabling ADHP industries to manage and avoid the use of counterfeit, recycled and fraudulent components in their supply chains.

Although developed for the ADHP industry, this document may be used by other high-performance and high-reliability industries, at their discretion.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC TS 62239-1, *Process management for avionics – Management plan – Part 1: Preparation and maintenance of an electronic components management plan*

IEC TS 62668-1:2016, *Process management for avionics – Counterfeit prevention – Part 1: Avoiding the use of counterfeit, fraudulent and recycled electronic components*

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1.1

aftermarket source

reseller which may or may not be under contract with the original component manufacturer (OCM) or is sometimes a component “re-manufacturer”, under contract with the OCM