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BSI Standards Publication

Process management for avionics - Electronic components for aerospace, defence and high performance (ADHP) applications

Part 2: General requirements for passive components

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National foreword

This Published Document is the UK implementation of IEC TS 62686-2:2019. It supersedes PD IEC/PAS 62686-2:2016, which is withdrawn.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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Part 2: General requirements for passive components

FOREWORD

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

IEC TS 62686-2 which is a technical specification, has been prepared by IEC technical committee 107: Process management for avionics.

This first edition cancels and replaces the first edition of IEC PAS 62686-2 published in 2016. This edition constitutes a technical revision.

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

Enquiry draft	Report on voting
107/302/DTS	107/343/RVDTS

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 62686 series, published under the general title *Process management for avionics – Electronic components for aerospace, defence and high performance (ADHP) applications*, 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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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

INTRODUCTION

This part IEC 62686 includes all the requirements of the obsolete STACK Specification S/0003 issue 2 related to passive components and contains revisions for alternative qualification test methods and additional test information for the aerosapace, defence and high performance (ADHP) industries. This document is typically used in conjunction with IEC TS 62239-1.

NOTE With the addition of alternative methods, it is possible for manufacturers to be audited by IECQ under the new IECQ automotive scheme or IECQ approved component scheme.

PROCESS MANAGEMENT FOR AVIONICS – ELECTRONIC COMPONENTS FOR AEROSPACE, DEFENCE AND HIGH PERFORMANCE (ADHP) APPLICATIONS –

Part 2: General requirements for passive components

1 Scope

This part of IEC 62686 defines the minimum requirements for general purpose "off-the-shelf" COTS (commercial off-the-shelf) passive components for aerospace, defence and high performance (ADHP) applications.

This document applies to all passive components that can be operated in ADHP applications within the manufacturers' publicly available data sheet limits in conjunction with IEC TS 62239-1. This document can be used by other high performance and high reliability industries, at their discretion.

ADHP application requirements are not necessarily fulfilled by this document alone. ADHP original equipment manufacturers (OEMs) could consider redesigning their products or conducting further testing to verify suitability in ADHP applications using their procedures for satisfying their electronic component management plan (ECMP) (see IEC TS 62239-1).

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.

JESD48, *Product discontinuance*

J-STD-609B, *Marking, symbols, and labels of leaded and lead-free terminal finished materials used in electronic assembly*

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
calendar days, pl.
continuous days, including weekends and holidays