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Process management for avionics — Aerospace qualified electronic components (AQEC)

Part 1: Integrated circuits and discrete semiconductors

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National foreword

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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 1: Integrated circuits and discrete semiconductors

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CONTENTS

FOREWORD 3
INTRODUCTION 5
1 Scope 6
2 Normative references 6
3 Terms, definitions and abbreviations 7
3.1 Terms and definitions 7
3.2 Abbreviations 9
4 Technical requirements 9
4.1 AQEC plan 9
4.2 AQEC documentation 10
4.2.1 General 10
4.2.2 AQEC data sheet 10
4.2.3 Material content 10
4.2.4 AQEC visibility 10
4.2.5 AQEC life expectancy 10
4.2.6 Device technology 11
4.2.7 SEE data 11
4.2.8 Termination finish 11
4.2.9 Third party part numbers 11
4.3 AQEC performance 12
4.3.1 Performance 12
4.3.2 Functional parameters 13
4.3.3 Known limitations 13
4.4 Quality system certification 13
4.5 Component qualification and re-qualification 13
4.6 AQEC quality assurance and reliability monitoring 13
4.7 Product change notification (PCN) 14
4.8 Last time buy (LTB) notification 14
4.9 Obsolescence management 14
4.10 Counterfeit prevention 14
4.11 User or customer guide 14
Annex A (informative) AQEC material content and construction table 15
Annex B (informative) Additional desired data 17
Bibliography 18

Table A.1 – AQEC material content and construction 15

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PROCESS MANAGEMENT FOR AVIONICS – AEROSPACE QUALIFIED ELECTRONIC COMPONENTS (AQEC) –

Part 1: Integrated circuits and discrete semiconductors

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 62564-1, which is a technical specification, has been prepared by IEC technical committee 107: Process management for avionics.

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This third edition cancels and replaces the second edition, published in 2011. This edition constitutes a technical revision.

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

a) IEC TS 62239 changed to IEC TS 62239-1, and IEC PAS 62686-1 changed to IEC TS 62686-1;
b) JESD48 changed to J-STD-048 and added to the Bibliography;
c) AEC-Q100 revision G changed to AEC-Q100:2014 in 4.5 (which is now revision H);
d) revision of AEC-Q101 removed in Bibliography;
e) J-STD-609 for “Marking and labelling” added to the Bibliography;
f) information added regarding components' life expectancy in 4.2.5.

GEIA-STD-0002-001 (June 2006), *Aerospace Qualified Electronic Component (AQEC) Requirements, Volume 1 – Integrated Circuits and Semiconductors*, has served as a basis for the elaboration of this technical specification.

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

Enquiry draft	Report on voting
107/276/DTS	107/283/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 parts in the IEC 62564 series, under the general title *Process management for avionics – Aerospace qualified electronic components (AQEC)*, 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 website 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.

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INTRODUCTION

Aerospace qualified electronic components (AQEC) plans are developed by manufacturers in order to document compliance with AQEC requirements. For AQEC designated components, the intention is to

a) provide AQEC users access to information from the AQEC manufacturers that is necessary for using commercial-off-the-shelf (COTS) products;

b) better enable AQEC users to assess whether these parts are capable of operating reliably in their applications;

c) minimize deviations from the AQEC manufacturers' COTS products;

d) have minimal impact on the AQEC manufacturers' standard operating or business procedures;

e) promote communication between the AQEC manufacturers and users.

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