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TECHNICAL SPECIFICATION

Process management for avionics – Management plan – Part 2: Preparation and maintenance of an electronic COTS assembly management plan

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PROCESS MANAGEMENT FOR AVIONICS – MANAGEMENT PLAN –

Part 2: Preparation and maintenance of an electronic COTS assembly 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 62239-2, which is a technical specification, has been prepared by IEC Technical Committee 107: Process management for avionics.

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

Enquiry draft	Report on voting
107/288/DTS	107/293/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 parts in the IEC 62239 series, published 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 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- withdrawn,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

The purpose of this document is to define the requirements for developing an electronic commercial off the shelf (COTS) assembly management plan (CAMP), hereinafter also called the plan, to assure customers that all of the electronic COTS assemblies in the equipment of the plan owner are selected and applied in controlled processes, and that the technical requirements detailed in this document are accomplished. In general the owners of an electronic COTS assembly management plan are original (electronic) equipment manufacturers (OEMs) and system integrators for the aerospace, defence and high performance (ADHP) electronics industry.

The objective is to define and document, as necessary, processes to assure the adequacy of electronic COTS assemblies selected for use in electronic systems. This document states objectives to be accomplished; it does not specify how tasks are performed, specific data collected or reports issued. Those who prepare plans in compliance with this document are encouraged to document processes that are the most effective and efficient for them in accomplishing the objectives of this document. In order to allow flexibility in implementing and updating the documented processes, plan authors are encouraged to refer to their own internal process documents instead of including detailed process documentation within their plans.

Organizations that prepare such plans are called the plan owners and may prepare a single plan, and use it for all relevant products supplied by the organization, or may prepare a separate plan for each relevant product or customer.

PROCESS MANAGEMENT FOR AVIONICS – MANAGEMENT PLAN –

Part 2: Preparation and maintenance of an electronic COTS assembly management plan

1 Scope

This part of IEC 62239, which is a technical specification, applies to the development of COTS assembly management plans (CAMPs) for the integration and management of electronic COTS assemblies (see 3.1.13 and 3.1.20) in electronic systems used in the ADHP markets where reliability is generally critical.

NOTE 1 Best practices for managing the electronic components within the electronic assemblies are described in IEC TS 62239-1 and SAE EIA-STD-4899 which describe the electronic component management program (ECMP). In cases where the electronic components can be identified and managed at the component level, ECMP can be considered as an option to manage the components.

NOTE 2 The distinction between an electronic component and an electronic assembly is provided by the definitions in Clause 3. This distinction between an electronic component and an electronic assembly is not always recognized by industry: for example, filters, contactors, power supply modules, relays, magnetic assemblies, etc., can be considered as either components or assemblies. In each application it is considered a best practice for the user of this document to clarify this distinction.

Depending on program or product line requirements and/or the technical characteristics of the electronic COTS assemblies and in agreement with the customer, the electronic COTS assembly management plans (CAMPs) could consider tailoring the requirements of this document. See Annex A.

Although developed for the avionics industry, this document can be applied 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.

There are no normative references in this document.

3 Terms, definitions and abbreviated terms

For the purposes of this document, the following terms, definitions and abbreviated terms 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