



NSAI
Standards

Irish Standard
I.S. EN 16602-60-15:2014

Space product assurance - Radiation hardness assurance - EEE components

I.S. EN 16602-60-15:2014

Incorporating amendments/corrigenda/National Annexes issued since publication:

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Space product assurance - Radiation hardness assurance - EEE components

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radiation - Composants EEE

Raumfahrtproduktsicherung - Sicherung der
Strahlungshärte für EEE-Komponenten

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Foreword

This document (EN 16602-60-15:2014) has been prepared by Technical Committee CEN/CLC/TC 5 "Space", the secretariat of which is held by DIN.

This standard (EN 16602-60-15:2014) originates from ECSS-Q-ST-60-15C.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2015, and conflicting national standards shall be withdrawn at the latest by March 2015.

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This document has been developed to cover specifically space systems and has therefore precedence over any EN covering the same scope but with a wider domain of applicability (e.g. : aerospace).

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1 Scope

This standard specifies the requirements for ensuring radiation hardness assurance (RHA) of space projects. These requirements form the basis for a RHA program that is required for all space projects in conformance to ECSS-Q-ST-60. RHA program is project specific. This standard addresses the three main radiation effects on electronic components: Total Ionizing Dose (TID), Displacement Damage or Total Non-Ionizing Dose (TNID), and Single event Effects (SEE).

Spacecraft charging effects are out of the scope of this standard.

In this standard the word “component” refers to Electrical, Electronic, and Electromechanical (EEE) components only. Other fundamental constituents of space hardware units and sub-systems such as solar cells, optical materials, adhesives, polymers, and any other material are not covered by this standard.

This standard may be tailored for the specific characteristic and constraints of a space project in conformance with ECSS-S-ST-00.

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