ABSTRACT

STANDARDS FOR ENVIRONMENTAL SPECIFICATIONS FOR
SPACEBORNE COMPUTER MODULES - IEEE 1156.4
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A set of space environmental test specifications has been defined for spaceborne computer modules and is identified in IEEE 1156.4, "Standard for Environmental Specifications for Spaceborne Computer Modules". The specifications pertain to both natural and induced environments to which spaceborne computer modules may be exposed. These conditions include, but are not limited to, thermal, mechanical, electrical and radiation stresses. The intent is to achieve uniformity and reproducibility in the test conditions for all spaceborne computer modules that may make up larger systems and facilitate the selection of modules with rated environmental performance levels compatible with specific space missions. This paper provides an overview of IEEE 1156.4 with some examples of how the requirements were determined and also provides guidance for the user in the application of the specifications.