

IEEE Standard for Metric Equipment Practice for Microcomputers— Coordination Document for Mezzanine Cards

Sponsor

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Abstract: This standard establishes the metric modular order and coordination dimensions for mezzanine cards for use on host modules.

Keywords: front panel, host module, metric, mezzanine, module

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Introduction

(This introduction is not part of IEEE Std 1301.4, IEEE Standard for a Metric Equipment Practice for Microcomputers—Coordination Document for Mezzanine Cards.)

This generic standard has been developed as a follow-on to IEEE Std 1301-1991. This standard was developed in response to the recognition of the need for a small form factor board to be applied to a host module, with the ability to support multiple functionality. Initially it was assumed that this need would be driven entirely by desktop usage. However, as this standard was developed, it became obvious that desktop applications were only part of the potential system architectures. These small form factor units, or mezzanine cards, would also see usage on other host modules, such as in industrial application of subrack plug-in units. This standard will add to the modular order, initiated by IEEE Std 1301-1991, the concept of a standardized mezzanine card with the appropriate dimensions and features defined.

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1. Overview

1.1 Scope

This generic standard may be applied in all fields of electronics where equipment and installations are required to conform to a metric modular order. This standard establishes the metric modular order for parallel mounted, interconnected electronic circuit assemblies, hereafter referred to as mezzanine cards, and may be applied in other applications. The choice of coordination dimensions for the mechanical structure lies within a homogeneous, metric, modular, three-dimensional grid as specified in IEC 917.2-1992 and referenced in IEEE Std 1301-1991.¹ Optimum conditions are thereby created for the application of computer-assisted methods throughout design and manufacturing, e.g., computer-assisted planning, development, manufacturing, testing, and installation. Due to the application-specific nature of mezzanine cards, the electrical and mechanical interconnect implementation will require definition that is beyond the scope of this document.

1.2 Purpose

This generic standard has been generated to establish a metric modular order nomenclature for mezzanine cards, thereby providing a universal document that makes a mezzanine card easier to specify and that can be used to foster and support many specific applications.

1.3 Dimensions

All dimensions in this document are in millimeters as per ISO 1000: 1992 and ISO 31-1: 1992, unless otherwise specified.

¹Information on references can be found in clause 2.