

1076.1.1™

IEEE Standard VHDL Analog and Mixed-Signal Extensions—Packages for Multiple Energy Domain Support

IEEE Computer Society

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Design Automation Standards Committee



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IEEE Standard VHDL Analog and Mixed-Signal Extensions—Packages for Multiple Energy Domain Support

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Design Automation Standards Committee
of the
IEEE Computer Society

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Abstract: This standard defines a collection of VHDL 1076.1 packages, compatible with IEEE Std 1076.1™-1999, along with recommendations for conforming use, in order to facilitate the interchange of simulation models of physical components and subsystems. The packages include the definition of standard types, subtypes, natures, and constants for modeling in multiple energy domains (electrical, fluidic, mechanical, etc.).

Keywords: interchange, modeling, model interchange, model portability, multidisciplinary, multidisciplinary modeling, packages, portability, standard packages, standard VHDL packages, VHDL, VHDL-AMS

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Introduction

This introduction is not part of IEEE Std 1076.1.1-2004, IEEE Standard VHDL Analog and Mixed-Signal Extensions—Packages for Multiple Energy Domain Support.

This set of packages provides a standard for the declaration of the most frequently used constants and types required for multiple energy domain modeling. Use of these packages with their defined types, constants and attributes is intended to provide a mechanism for writing VHDL models (compliant with IEEE Std 1076.1-1999) that are portable and interoperable with other VHDL models adhering to this standard. The standard serves a broad class of applications.

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