IEEE Standard for Military Module, Format E Form Factor

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Abstract: The mechanical design requirements for a military module, format E form factor are established. The specifications of dimensions and tolerances are intended to ensure the mechanical intermateability of military modules within associated subracks. Mechanical characteristics for military applications are also included.
Keywords: backplane, module, module interface plane, printed wiring board (PWB), 396-pin connector, 250-pin connector

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Introduction

(This introduction is not a part of IEEE Std 1101.4-1993, IEEE Standard for Military Module, Format E Form Factor.)

The IEEE Computer Society Technical Committee on Microprocessors and Microcomputers found it appropriate to form a separate IEEE standard for military and ruggedized applications based on a module with the same envelope as the Standard Hardware Acquisition and Reliability Program (SHARP) Standard Electronic Module (SEM) Format E. This standard is the result of a desire to develop a specification providing dimensions and tolerances necessary to ensure mechanical function and interchangeability.

This standard is a specification implementation and provides detailed dimensions and tolerances specific to the use of a 250-pin connector and a 396-pin connector. The specification covers dimensions of racks, modules, printed circuit boards, backplanes, and connector-related dimensions.

It is not possible to acknowledge everyone who contributed to the development of this standard; however, the following individuals deserve special mention for their contributions: Harrison Beasley for his support during the initial phase of development and his support as BASC chair at the completion of the standard. Jim Lockwood who acted as the first draft editor during the earlier stages of the working group. Technical support has been submitted by Andrew Brough, Eric Nickerson, Andrew Capobianco, Robert Fluhrer, Jim Madison, Harry Andreas, Dennis Smith, and Dean Van De Walker. Extensive technical input has been submitted by Jim Simon.

At the time this standard was completed, the 1101.4 Working Group had the following membership:

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Andrew Brough, *Editor*

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Andrew Capobianco	David Maass	Fred Sauer
Robert Fluhrer	Jim Madison	Jim Simon
Ed Jacques	Ernest Mardaga	Dennis Smith
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The following persons were on the balloting committee:

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