Email This Letter

12 May 2005

Peter J Ashenden
Ashenden Designs Pty Ltd
P.O. Box 640
Stirling SA 5152
AUSTRALIA
peter@ashenden.com.au

Re: P1076.1 - Standard VHDL Analog and Mixed-Signal Extensions

Dear Peter:

I am pleased to inform you that on 10 May 2005 the IEEE-SA Standards Board approved the above referenced project until 31 December 2009. A copy of the file can be found on our website at http://standards.ieee.org/board/nes/projects/1076-1.pdf.

Now that your project has been approved, please forward a roster of participants involved in the development of this project. This request is in accordance with the IEEE-SA Operations Manual, Clause 5.1.2i under Duties of the Sponsor which states:

"Submit annually to the IEEE Standards Department an electronic roster of individuals participating on standards projects"

For your convenience, an Excel spreadsheet for your use has been posted on our website at http://standards.ieee.org/guides/par/roster.xls. Please forward this list to me via e-mail at j.haasz@ieee.org no later than 08 August 2005.

Please visit our website, IEEE Standards Development Online (http://standards.ieee.org/resources/development/index.html), for tools, forms and training to assist you in the standards development process. Also, we strongly recommend that a copy of your draft be sent to this office for review prior to the final vote by the working group to allow for a quick review by editorial staff before sponsor balloting begins.

If you should have any further questions, please contact me at 732-562-6367 or by email at j.haasz@ieee.org.

Sincerely,

Jodi Haasz
Program Manager
International Stds Programs and Governance
Standards Activities
Phone +1 732 562 6367
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CC: alain.vachoux@xemics.ch

PAR FORM

PAR Status: Revision PAR
PAR Approval Date: 2005-05-10
PAR Signature Page on File: Yes

1. Assigned Project Number: P1076.1

2. Sponsor Date of Request: 2005-03-11

3. Type of Document: Standard for

4. Title of Document:
Draft: Standard VHDL Analog and Mixed-Signal Extensions

5. Life Cycle: Full-Use

6. Type of Project:
6a. Is this an update to an existing PAR? No

6b. The Project is a: Revision of Std 1076.1-1999

7. Working Group Information:
Name of Working Group: VHDL-AMS Working Group
Approximate Number of Expected Working Group Members:40

8. Contact information for Working Group Chair:
Name of Working Group Chair: Alain Vachoux
Telephone: +41-32-720-5825 **FAX:** +41-32-720-5770
Email: alain.vachoux@xemics.ch

9. Contact information for Co-Chair/Official Reporter, Project Editor or Document Custodian if different from the Working Group Chair:
Name of Co-Chair/Official Reporter, Project Editor or Document Custodian:
Telephone: FAX:
Email:

10. Contact information for Sponsoring Society or Standards Coordinating Committee:
Name of Sponsoring Society and Committee: Computer Society Design Automation
Name of Sponsoring Committee Chair: Peter J Ashenden
Telephone: +61883397532 **FAX:** +61883392616
Email: peter@ashenden.com.au
Name of Liaison Rep. (if different from the Sponsor Chair):
Telephone: FAX:
Email:

Name of Co-Sponsoring Society and Committee:

Name of Co-Sponsoring Committee Chair:
Telephone: FAX:
Email:
Name of Liaison Rep. (if different from the Sponsor Chair):
Telephone: FAX:
Email:

11. The Type of ballot is: Individual Sponsor Ballot
Expected Date of Submission for Initial Sponsor Ballot: September 2005

12. Projected Completion Date for Submittal to RevCom: January 2006

Target Extension Request Information for a Modified PAR whose completion date is being extended past the original four-year life of the PAR:

13. Scope of Proposed Project:

Original scope: The IEEE 1076 language has been primarily designed for the description and the simulation of digital hardware systems. As such, it provides only limited capabilities when used in analog modeling. VHDL 1076.1 aims to enhance VHDL 1076 such that it can support the description and simulation of circuits and systems that exhibit continuous behavior over time and over amplitude.

The revision will correct editorial errors and clarify aspects of the language definition in the original document, and will update the document to reflect changes in the VHDL 1076 specification.

Is the completion of this document contingent upon the completion of another document?
Yes

This document is contingent upon completion of revision of IEEE Std. 1076, which is expected to complete sponsor ballot by 30 September 2005.

14. Purpose of Proposed Project:

Original purpose: To provide a comprehensive mixed-signal description and simulation capabilities as an extension to the IEEE VHDL 1076 language.

The document is to be revised to track changes in the language that it extends.

15. Reason for the Proposed Project:

Complex electronic systems comprise a mixture of digital and analog elements. This project defines a modeling language that allows engineers to use design automation tools to analyze and verify operation of designs prior to manufacture, thus improving productivity and avoiding the cost of erroneous designs. The language is of benefit to engineers and organizations developing mixed analog and digital systems for applications including consumer devices, telecommunications, control systems and automotive systems. Design automation tools based on the current standard are provided by a number of suppliers and are in use in industry.

16. Intellectual Property:

a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR? Yes 2005-01-14
b. Is the sponsor aware of copyright permissions needed for this project? No
c. Is the sponsor aware of trademarks that apply to this project? No
d. Is the sponsor aware of possible registration activity related to this project? No

17. Are there other documents or projects with a similar scope? No

Similar Scope Project Information:

18. Is there potential for this document (in part or in whole) to be adopted by another national , regional or international organization? Yes

If yes, the following questions must be answered:

Organization Name? IEC TC93 WG2
Technical Committee
International Contact Information? Alex N Zamfirescu
ASC
644 Emerson St., Suite 10
Palo Alto, CA 94301
a.zamfirescu@ieee.org

19. Will this project result in any health, safety, or environmental guidance that affects or applies to human health or safety? No

If yes, please explain:

20. Sponsor Information

a. Is the scope of this project within the approved/scope/definition of the Sponsor's Charter? Yes
If no, please explain:
b. The Sponsor's procedures have been accepted by the IEEE-SA Standards Board Audit Committee? Yes

21. Additional Explanatory Notes: (Item Number and Explanation)

Items 13 and 14: VHDL is defined by IEEE Std 1076-2002, Standard VHDL Language Reference Manual.

The scope and purpose statements in clause 0.1 of IEEE 1076.1-1999 are an amplification upon the original scope and purpose statements in the PAR document for that standard, and are consistent with the original statements. As stated in the subclause, as IEEE 1076 is revised, 1076.1 needs also to be revised to keep both standards synchronized and to avoid inconsistencies. Other than that, the scope and purpose of the revised standard remain those of the original standard. Hence, the scope and purpose statements of the original PAR are included as the scope and purpose in items 13 and 14.

The revision of IEEE 1076.1 will correct editorial errors and clarify aspects of the language definition in the original document, and will update the document to reflect changes in the VHDL 1076 specification.