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11 August 2005

Thomas E Linnenbrink
Q-Dot Inc.
1069 Elkton Drive
Colorado Springs CO 80907
linnenbrink@qdot.com

Re: P1241 - Standard for Terminology and Test Methods for Analog-to-Digital Converters

Dear Thomas:

I am pleased to inform you that on 11 August 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/1241.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 09 November 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
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PAR FORM

PAR Status: Revision PAR

PAR Approval Date: 2005-08-11

PAR Signature Page on File: Yes

1. Assigned Project Number: P1241

2. Sponsor Date of Request: 2005-05-17

3. Type of Document: Standard for

4. Title of Document:

Draft: Standard for Terminology and Test Methods for Analog-to-Digital Converters

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 1241-2000

7. Working Group Information:

Name of Working Group: Working Group for Analog-to-Digital Converters

Approximate Number of Expected Working Group Members:15

8. Contact information for Working Group Chair:

Name of Working Group Chair: Steven J Tilden

Telephone: 520-746-7587 **FAX:** 520-746-6033

Email: tilden_steve@ti.com

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: Pasquale Daponte

Telephone: +39-082-430-5817 **FAX:** +39-082-421-866

Email: daponte@unisannio.it

10. Contact information for Sponsoring Society or Standards Coordinating Committee:

Name of Sponsoring Society and Committee: IEEE Instrumentation and Measurement Society TC10-Waveform Measurement and Analysis

Name of Sponsoring Committee Chair: Thomas E Linnenbrink

Telephone: 719-590-1112x125 **FAX:** 719-590-1125

Email: linnenbrink@qdot.com

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:** January 2009**12. Projected Completion Date for Submittal to RevCom:** December 2009**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:**

The material presented in this standard is intended to provide common terminology and test methods for the testing and evaluation of analog-to-digital converters (ADCs). This standard considers only those ADCs whose output values have discrete values at discrete times, i.e. they are quantized and sampled. In general, this quantization is assumed to be nominally uniform (the input-output transfer curve is approximately a straight line) as discussed further in clause 1.3, and the sampling is assumed to be at a nominally uniform rate. Some but not all of the test methods in this standard can be used for ADCs that are designed for non-uniform quantization. The scope is the same as the first paragraph of the scope from IEEE Std 1241-2000. The second and third paragraphs of the existing scope have been moved to the "purpose".

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

No

14. Purpose of Proposed Project:

This standard identifies ADC error sources and provides test methods with which to perform the required error measurements. The information in this standard is useful both to manufacturers and to users of ADCs in that it provides a basis for evaluating and comparing existing devices, as well as providing a template for writing specifications for the procurement of new ones. In some applications, the information provided by the tests described in this standard can be used to correct ADC errors, e.g., correction for gain and offset errors. The reader should note that this standard has many similarities to IEEE Std 1057-1994. Many of the tests and terms are nearly the same, since ADCs are a necessary part of digitizing waveform recorders. IEEE Std 1241-2000 did not have a "purpose" clause. This information is the same as paragraphs two and three of the scope clause of IEEE Std 1241-2000. Note: IEEE 1057 is presently under revision and the new edition will be referenced if approved prior to approval of this document.

15. Reason for the Proposed Project:

Errors and conflicts with other standards have become apparent since IEEE Std 1241-2000 was approved. This project will revise the standard to incorporate corrections and new information,

and to be consistent with other standards, particularly IEEE Std 1057. Language will be revised to be consistent with the definitions in related documents and to improve consistency among the documents. The stakeholders are: Commercial, Industrial, Military, and Medical, Environmental, Manufacturing, Universities, Laboratories, Telecommunications, Imaging and any other user of Analog-to-Digital Converters.

16. Intellectual Property:

- a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR?** Yes 2005-05-27
- 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? Yes

IEC TC47, SC47A, WG4 is engaged in drafting and publishing IEC 60748-4-3 for Dynamic Criteria for Analogue-Digital Converters based on IEEE-STD-1241-2000, however there exists an IEC STD on Static ADC's already. This Dynamic standard is only a part of what IEEE-STD-1241-2000 already entails.

Similar Scope Project Information:

SimSP: IEC,TC47,SC47A,WG4 SimProjNo: IEC60748-4-3 SimProjD: 24-10-2003 SimTitle: IEC60748-4-3:Integrated circuits -Part 4-3, Interface integrated circuits - Dynamic creiteria for Analogue-Digital Converters (ADC)

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 TC47 SC47A WG4

Technical

Committee

International R Allan Belcher

Contact Signal Conversion LTD

Information? 8 Bishops Grove

Sketty, Swansea SA2 8BE, UK

UNITED KINGDOM

raelcher@signalconversion.co.uk

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)