

P181

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Type of Project: Revision to IEEE Standard 181-2003

PAR Request Date: 07-Mar-2008

PAR Approval Date: 19-May-2008

PAR Expiration Date: 31-Dec-2012

Status: PAR for a Revision to an existing IEEE Standard

Project Record: P181

Root Project: 181-2003

1.1 Project Number: P181

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Title: Standard on Transitions, Pulses, and Related Waveforms

Old Title: IEEE Standard on Transitions, Pulses, and Related Waveforms

3.1 Working Group: Transitions, Pulses, and Related Waveforms Working Group (IM/WM&A/SCOPT)

Contact Information for Working Group Chair

Name: N Paulter

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Contact Information for Working Group Vice-Chair

None

3.2 Sponsoring Society and Committee: IEEE Instrumentation and Measurement Society/TC10 - Waveform Generation Measurement and Analysis (IM/WM&A)

Contact Information for Sponsor Chair

Name: Thomas Linnenbrink

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Contact Information for Standards Representative

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4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 04/2011

4.3 Projected Completion Date for Submittal to RevCom: 04/2012

5.1 Approximate number of people expected to be actively involved in the development of this project: 12

5.2 Scope: This standard defines terms pertaining to transitions, pulses, and related signals and defines procedures for estimating their parameters.

Old Scope: The scope of this revised PAR is limited to revising the title of P181. See item 18 for additional explanatory notes. The scope of the previous PAR is: 'Revise and combine IEEE standards 181-1977 and 194-1977 into a single standard which define terms pertaining to transitions, pulses and related signals and defines procedures for estimating their parameters.'

5.3 Is the completion of this standard dependent upon the completion of another standard: No

5.4 Purpose: The purpose of the standard is to unambiguously and accurately define terms pertaining to transitions, pulses, and related signals and the algorithm for their computation. This helps to communicate requirements between vendors and users, improves understanding and readability of instrument performance specifications, and provides a common ground for parameter and performance comparisons.

Old Purpose: The purpose of this revised PAR is to change the title (see Item 18). The purpose of the previous PAR is: 'IEEE Standards 181-1977 and 194-1977 have been withdrawn. Manufacturers and users of pulse generators, waveform recorders, and high-speed digital circuits require clear concise terms for effective communication.'

5.5 Need for the Project: The industries that use pulse technology are immense, vary in technologies, frequency ranges, signal types, applications, etc. Often each industry sector will use their own jargon to describe signals. This standard provides common terminology

and algorithms that can assist in reducing miscommunication within and between industry sectors and in reducing disagreements on the values of parameters used to describe instrument performance or measured data.

5.6 Stakeholders for the Standard: The stakeholders for this standard are the aerospace industry, the computing industry, data communications industry, telecommunications industry, test and measurement instrument manufacturers, the biomedical industry, automotive industry, manufacturers, scientific research organizations, other standards development organizations, and the military.

Intellectual Property

6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: No

6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

7.1 Are there other standards or projects with a similar scope?: Yes

If Yes please explain: The IEC standards listed below are verbatim copies of the now obsolete IEEE Std 194-1977 and 181-1977. (IEEE Std. 181-2003 is the result of the compilation of these two IEEE standards.) The IEC is in the end of their maintenance cycle for their standards, and we are working with them to get adoption of the IEEE Std 181-2003 as their starting document.

and answer the following

Sponsor Organization: IEC TC-85

Project/Standard Number: IEC 60469-1, -2

Project/Standard Date:

Project/Standard Title: IEC60469-1 Ed.2.0: Pulse techniques and apparatus. Part 1: Pulse terms and definitions and IEC60469-2 Ed.2.0: Pulse techniques and apparatus. Part 2: Pulse measurement analysis, general considerations

7.2 Joint Development

Is it the intent to develop this document jointly with another organization?: No

8.1 Additional Explanatory Notes (Item Number and Explanation): none made