

IEEE Waveform Generation Measurement and Analysis Technical Committee (TC10)
Approved Minutes of IEEE P181 Working Group (WG181) Meeting
28 May 2024 / 1100 to 1200 (UTC-4)

1. Call to Order, approximately 1105 (UTC-4)
2. Introductions and Roll Call
 - a. Quorum achieved (17 members attended, 28 members in WG181)
3. Presentation of IEEE SA patent policy
 - a. This information must be presented at the beginning of each meeting. Specifically, The following must be read “If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance, please respond at this time by providing relevant information to the WG Chair.” Document is available at iMeetCentral (<https://ieee-sa.imeetcentral.com/p181-wg/folder/WzlwLDE3ODA0MDcwXQ/WzlsODUzMTgyOTld/>) and was e-mailed to attendees.
4. Agenda: Gregory Kyriazis motioned to approve, no dissenting motions.
5. Meeting minutes approval (07 Mar 2024): not addressed.
6. P181 review process
 - a. Front matter (fixed text, check only for errors), Introduction, and Overview
 - i. Suggested changes were accepted.
 - b. Normative references
 - i. Suggestion to move dictionary reference to bibliography, which was accepted.
 - c. Terms and definitions
 - i. Reviewed up to and including “precision.”
 - ii. Suggested changes were accepted. However, “duty factor,” “jitter,” and “periodic (aperiodic)” require further discussion (see “Tasks” below)
 1. It was suggested to replace the current definition of duty factor with another that would allow a duty factor for a single pulse in a pulse train. It was agreed to keep the current definition but add text (another term/definition) for this specific situation.
 2. It was suggested to include additional jitter terms. It was agreed to add a reference to the IEEE Std 2414 on jitter instead of adding jitter terms.
 3. It was suggested to rewrite the definition of “periodic” so that “periodic” is not include in its definition. It was agreed that this should be done.
7. Next steps
 - a. Complete review of Clause 3.1, “Definitions.”
 - b. Review the clauses 3.2, “Symbols;” 3.3, “Deprecated Terms;” 6. Figures, Annex A, “Waveform Examples;” and Annex B, “Bibliography.”

8. Tasks
 - a. Duty factor – draft text to include definition for the case of a single pulse out of a pulse train – Bruce
 - b. Jitter – add note to include reference to IEEE Std 2414 on jitter and phase noise – Nick
 - c. Periodic (aperiodic) – rewrite so that “periodic” is not included in its definition - Nick
9. Adjourn: around 1205, no dissent.

10. Attendees

Attendee name		Affiliation
Last	First	
Cerny	Charles	USAF Research Lab, USA
Chi	Yuan	State Grid Beijing Electric Power Co, China
Chong	Ang Boon	Intel, Malaysia
Ciocan	Razvan (Secretary)	Draper Laboratories, USA
Dadkhah	Peiman	NuGrid Power, Canada
De Vito	Luca	University of Sannio, Italy
Gendai	Yuji	THine Electronics, Inc., Japan
Hudson	Bruce	Self, USA
Iadarola	Grazia	Polytechnic University of Marche, Italy
Jarosz	Patrycja	IEEE, USA
Jendzurski	John	National Institute of Standards and Technology, USA
Kyriazis	Gregory	INMETRO, Brazil
Liccardo	Annalisa	University Federico II of Naples, Italy
Milicevic	Kruno	University of Osijek, Croatia
ó hEidhin	Gearóid	GE Renewables, UK
Paulter	Nicholas (Chair)	National Institute of Standards and Technology, USA
Rapuano	Sergio	University of Sannio, Italy
Tudosa	Ioan	University of Sannio, Italy
Yoo	Han Woong	Automation and Control Institute, Austria