

# IEEE Waveform Generation Measurement and Analysis Technical Committee (TC10) Approved Minutes of IEEE P181 Working Group (WG181) Meeting 2 July 2024 / 1100 to 1200 (UTC-4)

- 1. Call to Order, approximately 1205 (UTC-4)
- 2. Introductions and Roll Call
  - a. Quorum achieved (18 members attended, 22 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 (<u>https://ieee-sa.imeetcentral.com/p181-wg/folder/WzIwLDE3ODA0MDcwXQ/WzIsODUzMTgyOTId/</u>) and was e-mailed to attendees.
- 4. Agenda: Luca De Vito motioned to approve, Ioan Tudosa seconded the motion, no dissenting motions.
- 5. Meeting minutes approval
  - a. 07 March 2024 minutes: motion for approval by Gearóid ó hEidhin, second by Charles Cerny, no dissenting motions.
  - b. 28 May 2024 minutes: motion for approval by Charles Cerny, second by Gregory Kyriazis, no dissenting motions.
- 6. Next meeting: 13 August 2024, starting at 1200 (UTC-4), duration of 90 minutes
- 7. P181 review process
  - a. Definitions
    - i. Duty factor
      - Accord to include three definitions for duty factor: current definition plus additional definitions for "pulse duty factor" and "average duty factor." Text for both definitions were accepted.
    - ii. Periodic (aperiodic)
      - 1. Accord to use IEV definition with a note that the note to the IEV definition is deleted.
    - iii. Jitter
      - 1. Accord to add note to include reference to IEEE Std 2414 on jitter and phase noise and jitter.



### b. Figures

- i. Editorial suggestions were all accepted.
- ii. Eric suggested to add figure to demonstrate glitch and jitter.

#### 8. Next steps

- a. Complete review of Clause 3.1, "Definitions," Clause 6, "Figures"
- b. Start review of Clause 3.2, "Symbols;" Clause 3.3, "Deprecated Terms;" Annex A, "Waveform Examples;" Annex B, "Bibliography."

#### 9. Tasks

- a. Nick correct text of standard per agreed-upon changes
- b. Nick correct figures
- c. Nick and Razvan Develop figure 12 to address Eric's suggestion.
- d. All Complete assignments according to initial table.
- 10. Adjourn: around 1202, no dissent.



## 11. Attendees

Attendee name		Affiliation
Last	First	
Cerny	Charles	USAF Research Lab, USA
Chong	Ang Boon	Intel, Malaysia
Ciocan	Razvan (Secretary)	Draper Laboratories, USA
Dadkhah	Pemian	NuGrid Power, Canada
De Vito	Luca	University of Sannio, Italy
Gendai	Yuji	THine Electronics, Inc., Japan
Hudson	Bruce	Self, USA
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
Mingotti	Alessandro	University of Bologna, Italy
Nied	Eric	Hubbell Power Systems, USA
ó hEidhin	Gearóid	GE Renewables, UK
Paulter	Nicholas (Chair)	National Institute of Standards and Technology, USA
Sembiring	Jhony	Medan State Polytechnic, Indonesia
Tudosa	Ioan	University of Sannio, Italy
Yoo	Han Woong	Automation and Control Institute, Austria