

IEEE Waveform Generation Measurement and Analysis Technical Committee (TC10)
Meeting Minutes
19 April 2022 / 11:00 AM –13:00 PM (UTC-4)

1. Call to Order
2. Introductions and Roll Call
 - a. Nick Paulter, TC10 chair, presided
 - b. Jerry Blair, TC10 Secretary, took minutes
3. Roberts Rules of Order Overview
4. Approval of the Agenda
 - a. Motion for agenda approval was provided and seconded. Agenda was approved unanimously.
 - b. The approved agenda is available on iMeetCentral (<https://ieee-sa.imeetcentral.com/login>).
5. Approval minutes from 18 January 2022 meeting
 - a. Motion for minutes approval was provided and seconded. Minutes were approved unanimously.
 - b. The approved minutes are available on iMeetCentral (<https://ieee-sa.imeetcentral.com/login>).
6. TC10 administrative
 - a. Comments, concerns, issues for IEEE SA tools was solicited. No response.
7. Working Groups Updates
 - a. Revision of IEE Std 181, IEEE Standard for Transitions, Pulses, and Related Waveforms
 - i. Lead: Nick Paulter
 - ii. PAR expires 2025. We will wait until the 1241 is balloted and approved before starting on the 181.
 - b. Revision of IEEE Std 1241, IEEE Standard for Terminology and Test Methods for Analog-to-Digital Converters
 - i. Lead: Nick Paulter
 - ii. Making good progress: One annex and the abbreviations/symbols remain for completion. Text is expected to be finished by the next TC-10 meeting.
 - c. Revision of IEEE Std 1658, IEEE Standard for Terminology and Test Methods of Digital-to-Analog Converter Devices
 - i. Lead: Luca DeVito
 - ii. The frequency of the meetings has increased to twice a month, and significant progress is being made. Luca expects to be completed with the draft by the summer of 2022.
 - d. Revision of IEEE Std 1696, IEEE Standard for Terminology and Test Methods for Circuit Probes
 - i. Lead: John Jendzurski
 - ii. Kickoff meeting is scheduled for May 2022.
 - e. IEEE Std 1057-2017, IEEE Standard for Digitizing Waveform Recorders
 - i. Lead: Bill Boyer
 - ii. Standard doesn't expire until 2028, so there is no need to start a revision process before 2026.

8. Future Meetings
 - a. Frequency: meet once every three months. This will be a one-hour web-based meeting unless a majority of TC10 members request a face-to-face meeting. The content of these meetings will include general information, working group updates, related activities in other Standards Development Organizations, and guest technical presentation.

9. Discussion topics
 - a. TC10 technical presentations
 - i. David Humphreys provided a technical presentation, entitled “Overview of traceability and error sources for dynamic voltage measurement.” The presentation was followed by questions and discussion.
 - ii. Kruno Miličević, John Calvin, and Allan Belcher volunteered to provide a presentation. David Humphreys volunteered to provide another presentation in the future.
 - iii. Nick has asked Kruno to present at the next TC10 quarterly meeting.

10. Adjourn
 - a. Motion to adjourn was made and seconded.
 - b. Meeting adjourned around 1300 (UTC-4).

11. Tasks
 - a. Outstanding tasks (not completed from previous lists)
 - i. WG chairs - review web pages (<https://sagroups.ieee.org/im-wma-tc10/>) for content
 - ii. Allan Belcher - send Nick information/presentation on quantum ADCs/DACs for distribution to TC10 members
 - b. New
 - i. Nick Paulter - upload draft minutes provide by Jerry Blair of 19 Apr 2022 meeting
 - ii. Kruno Miličević - provide presentation information (title, abstract, author brief) to Nick for distribution to TC10 members.

Attendee list with affiliation:

Attendee name	Affiliation
Allan Belcher	Signal Conversion, Ltd, UK
Jerome Blair	Keystone International, Inc, USA
Bill Boyer	Sandia Natl. Lab., retired, USA
John Calvin	Keysight, USA
Paolo Carbone	University of Perugia, Italy
Fritz Caspers	CERN, Switzerland
Charles Cerny	USAF Research Laboratory, USA
Razvan Ciocan	Draper, USA
Luca De Vito	University of Sannio, Italy
Yuji Gendai	THine Electronics, Japan
Juan José González de la Rosa	University of Cadiz, Spain
David Humphreys	National Physical Laboratory (NPL), UK
John Jendzurski	National Institute of Standards and Technology, USA
Gregory Kyriazis	National Institute of Metrology, Quality and Technology (INMETRO), Brazil
Kruno Miličević	University of Osijek, Croatia
Alessandro Mingotti	University of Bologna, Italy
Nicholas Paulter	National Institute of Standards and Technology, USA
Balázs Renczes	Budapest University, Hungary