

IEEE Waveform Generation Measurement and Analysis Technical Committee (TC10)
Approved Meeting Minutes
19 July 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. Approval of the Agenda
 - a. Motion for agenda approval was provided by Paolo and seconded by David. Agenda was approved unanimously.
 - b. The approved agenda is available on iMeetCentral (<https://ieee-sa.imeetcentral.com/login>).
4. Approval minutes from 19 April 2022 meeting
 - a. Motion for minutes approval was provided by Fritz and seconded by Paolo. Minutes were approved unanimously.
 - b. The approved minutes are available on iMeetCentral (<https://ieee-sa.imeetcentral.com/login>).
5. TC10 administrative
 - a. Comments, concerns, issues for IEEE SA tools was solicited. No response.
 - b. Next meeting will be 18 October 2022 starting at 1100 (UTC-4).
6. 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. Status
 1. Draft complete
 2. MEC review complete and appropriate edits made
 3. Ballot invitation sent and will close 8 July 2022
 - c. Revision of IEEE Std 1658, IEEE Standard for Terminology and Test Methods of Digital-to-Analog Converter Devices
 - i. Lead: Luca DeVito
 - ii. Status
 1. Draft complete
 2. Luca sent 1658 draft to MEC, awaiting their comments
 - d. Revision of IEEE Std 1696, IEEE Standard for Terminology and Test Methods for Circuit Probes
 - i. Lead: John Jendzurski
 - ii. Kickoff meeting occurred May 2022.

7. 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.
8. Discussion topics
 - a. TC10 technical presentations
 - i. Kruno Miličević provided a technical presentation, entitled “Digital transformation of metrology and possible technical solutions.” The presentation was followed by questions and discussion.
 - ii. John Calvin volunteered to provide a presentation at the next TC10 quarterly meeting.
9. Adjourn
 - a. Motion to adjourn was made and seconded.
 - b. Meeting adjourned around 1300 (UTC-4).
10. 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 of 19 Jul 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 |
|----------------------|---|
| Jerome Blair | Keystone International, Inc, retired, 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 |
| Michael Cracraft | Rose-Hulman Institute of Technology, USA |
| Luca De Vito | University of Sannio, Italy |
| Yuji Gendai | THine Electronics, Japan |
| 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 |
| Antonio Moschitta | University of Perugia, Italy |
| Nicholas Paulter | National Institute of Standards and Technology, USA |
| Balázs Renczes | Budapest University, Hungary |
| Han Wang Yoo | Automation and Control Institute, Austria |