

IEEE Waveform Generation Measurement and Analysis Technical Committee (TC10)
Meeting Minutes
18 July 2023 / 11:00 AM –13:00 PM (UTC-4)

1. Call to Order
2. Introductions and Roll Call
 - a. Nick Paulter, TC10 chair, presided and took minutes
3. Approval of the Agenda
 - a. Motion for agenda approval was provided by John J. and seconded by Sergio. No dissenting opinion.
 - b. The approved agenda is available on iMeetCentral (<https://ieee-sa.imeetcentral.com/tc10-general/folder/WzIwLDE0NDI3NzE4XQ>).
4. Approval of minutes from 18 April 2023 meeting
 - a. Motion for minutes approval was provided by Luca and seconded by Charles. No dissenting opinion.
 - b. The approved minutes are available on iMeetCentral (<https://ieee-sa.imeetcentral.com/tc10-general/folder/WzIwLDEzMjA3MTQwXQ>).
5. TC10 administrative
 - a. Comments, concerns, issues for IEEE SA tools was solicited.
 - i. Bill Boyer, 1057 Working Group chair, has difficulties logging into WebEx meetings. Nick mentioned that WebEx has made changes to their application, and this could be causing problems. Patrycja Juorz, IEEE SA staff, should be contacted for assistance.
 - b. Next meeting will be 17 October 2023 starting at 1100 (UTC-4).
 - c. Chair positions
 - i. Nick is seeking a co-chair for the Std 181 Working Group
 1. Luca has tentatively agreed
 - ii. Nick is seeking a chair for the Std 1241 Working Group (not mentioned during meeting)
 - iii. Nick is seeking a chair for the TC10
6. Working Groups Updates
 - a. Revision of IEE Std 181, IEEE Standard for Transitions, Pulses, and Related Waveforms
 - i. Lead: Nick Paulter
 - ii. Awaiting for publication of the IEEE P1241 before starting this activity.
 - 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. The IEEE SA Standards Board approved the revision. The IEEE SA editors will prepare the document for publication. This process requires review and approval by the Working Group.
 2. Balázs, Razvan, John J., Jerry, Charles, Sergio, Gearoid, and Nick will review the document.

- 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. The IEEE SA Standards Board approved the revision. The IEEE SA editors will prepare the document for publication. This process requires review and approval by the Working Group.
 - 2. Luca will send an e-mail inviting working group members to assist in the review.
 - d. Revision of IEEE Std 1696, IEEE Standard for Terminology and Test Methods for Circuit Probes
 - i. Lead: John Jendzurski
 - ii. The first five clauses have been reviewed. There are two more clauses to review.
7. Discussion topics
- a. New standards
 - i. Allan mentioned that the output of the current EURAMET activity, Horizon Europe, may produce results that warrant a new standard. More information will be available in the near future, no sooner than early 2024.
 - b. IEEE TC10 history – Bill Boyer
 - i. Bill has completed a draft of the history of the IEEE TC10. He will provide a copy for review to interested members.
 - ii. Charles mentioned that during his Region 1/Region 2 meeting that the IEEE history office is interested in holding a history conference. Charles will provide updates as they become available.
 - iii. Nick had contacted the IEEE history office to gather information on the original standards developed by the TC10. He was able to locate the older, superseded TC10-related standards and has posted them in our iMeetCentral repository: <https://ieeesa.imeetcentral.com/tc10-general/folder/WzIwLDE2NjE3Mjc2XQ>.
 - c. TC10 technical presentations
 - i. Allan Belcher provided a technical presentation titled “Measuring amplitude nonlinearity in beyond the state-of-the-art digitisers : part 2.” The presentation was followed by questions and discussion. Allan’s presentation has been uploaded to our iMeetCentral repository (<https://ieeesa.imeetcentral.com/tc10-general/folder/WzIwLDE0OTMwNzUwXQ/WzIsODQ4MjYzMjJd/>).
8. Adjourn
- a. Motion to adjourn was made. No dissention for this motion was given.
 - b. Meeting adjourned around 1240 (UTC-4).
9. Tasks
- a. Outstanding tasks (not completed from previous lists)
 - i. WG chairs - review web pages (<https://sagroups.ieee.org/im-wma-tc10/>) for content
 - b. New
 - i. Nick Paulter - upload agenda and draft minutes of 18 Jul 2023 meeting
 - ii. Nick Paulter – upload approved minutes of 18 Apr 2023 meeting
 - iii. Identify volunteer to provide presentation at upcoming (17 October 2023) meeting
 - iv. Nick Paulter – identify chair candidates for the 181 Working Group, the 1241 Working Group, and the TC10.

Attendee list with affiliation:

Attendee name	Affiliation
Allan Belcher	Signal Conversion, Ltd, UK
Jerry Blair	Keystone International Inc., retired, USA
Bill Boyer	Sandia Natl. Lab., retired, USA
Fritz Caspers	CERN, Switzerland
Charles Cerny	USAF Research Laboratory, USA
Luca de Vito	University of Sannio, Italy
Yuji Gendai	Thine Electronics, Japan
Grazia Iadarola	Polytechnic University of Marche, Italy
John Jendzurski	National Institute of Standards and Technology, USA
Kruno Miličević	Computer Science and IT Osijek (FERIT), Croatia; Random Red, Ltd., Croatia
Alessandro Mingotti	University of Bologna, Italy
Gearoid Oheidhin	GE Renewables, UK
Nicholas Paulter	National Institute of Standards and Technology, USA
Sergio Rapuano	University of Sannio, Italy
Balázs Renczes	Budapest University, Hungary
Ioan Tudosa	University of Sannio, Italy
Han Woong Yoo	Automation and Control Institute, Austria