CAN Newsletter Online

30 years of CiA: Celebration and feedback

On June 1 and 2, CiA and its members celebrated the 30 th birthday of CAN in Automation in a nice location in Nuremberg in the midst of the city park. The CAN Newsletter magazine reported about the celebration and CiA members answered some questions in an interview.

(Source: CiA)

The complete article is published in the September issue of the CAN Newsletter magazine 2022. This is just an excerpt.

About 60 participants from 36 member companies and nine employees from CAN in Automation (CiA) joined the event. The event was an excellent opportunity to meet CAN fellows with different expertise and backgrounds. Besides the official program, there was plenty of time for individual talks in the breaks and on the first day's get-together. Most important for old and new CiA fellows was the opportunity to exchange experiences and knowledge, refresh personal networks, and establish new relations. Many participants took away new ideas for their future CAN product developments. The attendees also appreciated the detailed technical presentations and discussions with business partners, chipmakers, and competitors.

The success of the event may lead to the fact that more CiA community meetings will be held face to face. The newly-elected CiA Business Committee already discussed establishing of an annual event with technical presentations in conjunction with the General Assembly.

Day one: focus on new CAN technologies

Holger Zeltwanger (CiA Managing Director) has opened the day with a look-back to the CiA beginnings. Since the CiA establishment on March 5, 1992 with 13 member companies, the CiA membership increased to more than 720. CiA has released more than 25 000 pages of specifications and recommendations developed in about 40 CiA technical groups. There were published more than 120 issues of the CAN Newsletter magazine, and CiA organized 17 international CAN Conferences (iCC).

The first presentation session focused on recent CAN lower-layer developments CAN XL, CAN SIC XL, and CAN FD Light. Comparing features of the three CAN generations, Dr. Arthur Mutter (Bosch) gave an insight into the improvements achieved with the development of CAN XL. The achievable bit rates were shown in a graphics comparing Classical CAN, CAN FD, and CAN XL. Magnus Hell (Infineon) showed the different CAN physical layer options going through the history of CAN transceivers and Matthias Muth (NXP) compared the capabilities of the CAN SIC and CAN SIC XL transceivers regarding possible bit rates and topology-dictated limits. A CAN SIC XL (signal improvement capability) transceiver can be used for bit rates of 10 Mbit/s and higher. The three experts are sure that CAN users are really good prepared for the future with CAN SIC and CAN SIC XL transceivers as they provide more freedom for different topologies.

Experts are sure that CAN XL brings great improvements on all areas and users are well prepared for the future with CAN SIC and CAN SIC XL transceivers (Source: CiA)

In the next presentation, Fred Rennig (ST Microelectronics) gave an insight into CAN FD Light. The development was advanced by the automotive light industry, but industrial applications can profit from the simplified CAN FD data link layer as well. The solution offers cost savings especially for industries deploying it in large piece numbers. In the second session Christian Schlegel (CS Consulting) and Uwe Koppe (Microcontrol) talked about the development and future of classic CANopen and CANopen FD.

On the General Assembly, Uwe Koppe, Christian Schlegel, and Holger Zeltwanger were re-elected as CiA Technical Director, CiA Business Director, and CiA Managing Director, respectively. Together, they group the CiA board of directors for 2022. Additionally, members of the CiA Technical Committee (TC) and the CiA Business Committee (BC) were elected. The permanent members of the TC are Bosch, emotas, Emsa, esd, and NXP. Emotas, Emsa, esd, HMS, and Vector were elected as permanent members of the BC.

Thirteen companies, which joined CiA in 1992 and are still members today were honored on the first evening of the anniversary event. These are Eckelmann, esd, G.i.N., Janz Tec, KEB, Kvaser, Moba, Moog, NXP (formerly Philips Semiconductors), Port, Selectron (today a part of Knorr-Bremse), Softing, and Vector.

Day two: applications and specifications

The second day comprised application-oriented presentations and insights to CiA specification developments. Sebastian Karrer (W&H Dentaltechnik, Austria) reported about CANopen networks connecting tools in dentist chairs. Bjørnar Wilsrød (Kongsberg

Maritime) talked about CANopen usage in vessels and ships, where long networks are needed.

hristian Schlegel (left) and Uwe Koppe (right) congratulate Holger Zeltwanger for his 30-year engagement as CiA Managing Director (Source: CiA)

The long-term CiA members (here Kvaser) were honored on the first evening of the anniversary event (Source: CiA)

The fourth session was provided by CiA employees. Yao Yao gave an overview on CiA technical groups. Thilo Schumann informed about the UML (unified modeling language) usage in CiA documents, and Reiner Zitzmann talked about the generic CAN bootloader specification. In the afternoon, the SIG CAN XL and the SIG CAN FD Light have had their regular meetings. In parallel, the newly-elected CiA Business Committee had its first meeting discussing the CiA activity plan for 2023.

CiA member interviews

The anniversary event gave the CiA team a perfect possibility to get feedback about its work, to collect ideas, and to rethink the efficiency of some services. In an interview with Olga Fischer (CiA), experts from Microcontrol (Uwe Koppe), Port (Heidrun Scheller, Dietmar Franke), esd electronics (Dirk Flege, Oliver Thimm), ehb electronics (Harm-Peter Krause), emotas (Andreas Böbel, Torsten Gedenk), ifm (Dagmar Schymonski-Dederichs, Joachim Uffelmann), and Bosch (Dr. Arthur Mutter) answered four questions giving a valuable input for CiA work improvements.

If you would like to read the full article with interview, you can download it free of charge or you download the entire magazine.