(Source: Adobe Stock)

News in this regular column came in, close to the editorial deadline. Nevertheless, they have been doublechecked on accuracy and correctness.

HMS has acquired Peak-System Technik

CiA member HMS Networks has bought the CiA member Peak-System Technik for about 69 million euros. A couple of years ago, HMS has acquired already the CiA member Ixxat. Peak-System offers both hardware and software for industrial and automotive communication solutions, especially CAN interface boards. The company is located in Darmstadt, Germany. There is also a French subsidiary with an office in Maxéville, close to Nancy, France. Peak-System employs about 50 people. In the twelve-month period ending on September, the company reported sales of about 25 million euros (50 percent of sales in Europe, 25 percent in Asia, and 25 percent in North America).

From left: Alexander Gach (Peak-System Technik, Ines Dohmann (Peak Group), Staffan Dahlström (HMS Networks), and Uwe Wilhelm (Peak Group and Peak-System Technik) (Source: HMS/Peak-System)

HMS sees several synergies between its Ixxat business unit and Peak-System, when it comes to product development and cross-selling, utilizing the sales channels of both companies. “Peak-System’s extensive product portfolio and expertise expand our existing product offering in communication solutions for advanced engineering tools, testing and control in applications within automotive, medical and transportation. We also see excellent cross-selling opportunities, both geographically and technically. Our Ixxat brand and Peak-System already offer unique sets of software and hardware tools and together, they will provide our customers with more options to solve their communications challenges” said Staffan Dahlström, CEO (chief executive officer) of HMS Networks. *hz*

CANopen drive controller

At the SPS tradeshow, Sieb & Meyer (Germany) launched its expanded SD4x product family of drive controllers. By default, these devices provide CANopen interfaces. The product family comprises SD4S, SD4B, and SD4M frequency converter series for high-speed applications, offering lower motor heating without additional sine-wave filters.

The SD4S series features a maximum output frequency of 4000 Hz for synchronous motors and 6000 Hz for asynchronous motors. Additional control functions enable optimized operation of IPM (internal permanent magnet) motors. The three-level frequency converters of series SD4M reveal their strengths in the field of turbo compressors and turbo blowers. These products benefit from the low motor heating. At a 24/7 full-load operation, they cause noticeable energy savings and short payback periods, explained the supplier. In addition, the overall system can be produced at lower costs and with a more compact construction volume because motor chokes and sine-wave filters are not necessary, explained the supplier. These products can also control IPM motors.

The SD4B drive controller series is suitable for use as a highly dynamic servo drive for rotary and linear low-voltage servomotors. It also optimizes the operation of high-speed low-voltage synchronous and asynchronous motors. In the high-speed range, these drive controllers enable sensor-based operation of motors with a superimposed synchronization function based on 24-V synchronization signals. This allows several high-speed motors to be operated in commander/responder mode with angular synchronization, which is particularly advantageous in optical applications. The speed control enables a reliable operation with high mass inertia ratios of up to 1:100 between motor and tool.

The SD4B drive controllers feature a 13-A current capability coming in an IP20-rated housing with a 25-mm width. They support an STO (safe torque off) function. Moreover, this series comes with an integrated load indicator. This function evaluates the torque-forming current of the motor and therefore can be used to replace acoustic emission sensors. *hz*

Surface-mountable M12 connector

(Source: Provertha)

At the electronica trade show in Munich (Germany), Provertha has introduced the M12 SMT connector series featuring a low installation height and a high routing flexibility. The ruggedized circular connector is available in straight and angled versions for PCB (printed circuit board) mounting. Narrow tapes allow the connectors to be accommodated on the feeder bank of the placement machine and take up little space. The IP67-rated products come unshielded or shielded with a one-piece shield clip. The pinning of M12 connectors for CAN communication is specified in CiA 106.

The connectors comply with the IEC 61076-2-101 and -109 vibration and shock load requirements. The temperature range is according to the supplier specified from -40 °C to +125 °C (without O-ring). The straight connector features an insertion height of 16 mm and can be routed in four directions on the PCB. With an adjustable insulator, the position of eight coding directions can be selected in 45° increments. The major advantage – especially with the angled cable connectors – is that the orientation of the cable outlets can be tailored to the application. Two positioning pins ensure correct identification and correct positioning of the connector during placement.

Due to the available coding (A, B, D, and X), the products can be used to connect sensors and actuators to different communication systems including CAN-based networks. They feature a symmetrical layout, an elastic connection contour, and larger SMT connections which, together with the geometry of the mounting brackets and four large-area connection pads, enable the absorption of high transverse and shear forces. Four large soldering surfaces on the mounting brackets ensure a protection against twisting, especially with angled cable connectors. According to the supplier the connectors are designed in a way that the SMT connections are not breaking off under high stress. *hz*

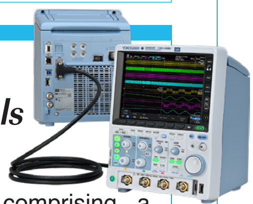
+++ Neousys (Taiwan) has launched the NRU-51V-NX16G industrial PC powered by a Nvidia Jetson processor, dedicated for autonomous vehicles and featuring a CAN CC interface. +++ Syslogic (Switzerland) showed at the SPS tradeshow an AI rugged controller powered by a Nvidia Jetson AGX Orin chip with up to six CAN FD interfaces. +++ Kvaser (Sweden) has introduced an eight channel CAN CC/CAN FD PCIe board, which is suitable for hardware-in-the-loop (HIL) test systems. +++ CSS Electronics (Denmark) has presented the MF4 decoder supporting CAN-based transport layer protocols such as ISO-TP (ISO 15765-2), J1939 TP, and NMEA 2000 TP (fast packets). +++ Renesas (Japan) has released the RX261 and RX260 micro-controllers with on-chip CAN FD controllers, addressing home appliances, building and factory automation, battery-powered two-wheelers, smart locks, etc. +++ STXI Motion (U.S.A.) has expanded its low-voltage servo drive family with the ZED 65 device featuring CANopen (CiA 402) connectivity and STO (safe torque off) functionality. +++ Infineon (Germany) has announced the Aurix TC4Dx automotive MCU family featuring an onchip CAN XL protocol controller. +++ *hz*

Free-of-charge CAN analyzing software supports Linux

Kvaser has unveiled the software tool Canking 7. Over the years, Kvaser has incorporated user feedback to enhance functionality and performance, adding CAN FD compatibility and support for various high-layer protocols such as CANopen, SAE J1939, and NMEA 2000. Martin Sventén, Kvaser's CEO, explained: "At Kvaser, we seek to accompany engineers on their CAN journey. This often starts early in development, before a project can justify the acquisition of feature-rich tools. Similarly, there's demand for straightforward analysis when a CAN system is in the field. In both situations, being able to visualize a CAN trace and take measurement snapshots is all that's needed."

The Canking 7 software features a 'drag and drop' graphical measurement setup, facilitating the setup of filtering, logging, and triggering on CAN data frames received or on payload values. The tool runs under Linux on ARM64 and x64 architectures. It offers CAN trace, statistics, send, and periodic send windows. An essential function is the recording and analyzing of CAN frames. The software logs data in formats, such as MF4, ASC, BLF, CSV, and TXT. It collects and processes CAN data frames in the background, even when the GUI (graphical user interface) is not displayed. This is useful for long-running logging scenarios, ensuring an uninterrupted workflow. The command line functionality enables users to create text-based commands to talk directly to the system. *hz*

Measuring simultaneously analog signals and CAN signals



(Source: Yokogawa)

Yokogawa (Japan) has introduced the DLM3000HD oscilloscope series comprising a 350-MHz and a 500-MHz model. The products offer 12-bit vertical resolution that is 16 times higher than that of the legacy DLM3000 series, for greater accuracy in waveform observation. Another feature of the series is the time-saving serial bus analysis auto-setup function. It automatically sets the optimal bit rate and threshold level; it can also be used with previously captured waveforms. This means that auto-setup can even be used for low-frequency signals, improving the efficiency of in-vehicle network development and evaluation work. The oscilloscopes can interpret CAN CC and CAN FD frames.

The oscilloscopes are able to store up to one billion points of acquired data, which is twice that of the legacy products. This allows users to store history data on up to 200000 captured waveforms. Furthermore, measurements can be captured with up to eight analog channels by using the dual-unit synchronous measurement (DLM-sync) function to operate two units. This allows the simultaneous measurement of both analog and logic signals to, for example, analyze numerous power-on sequences while debugging an ECU (electronic control unit). *hz*