Designed for functional safety

Crosscontrol has introduced a family of I/O products featuring CANopen and J1939 connectivity. The I/O ports are functional safe.

The first member of the functional safe I/O modules provides 32 configurable channels (Photo: Crosscontrol)

The Swedish company active in mobile machine control business since 1991 is nowadays owned by Actuant, an enterprise serving customers in more than 30 countries. In the last years, Crosscontrol was focused mainly on HMI solutions. End of last year, the company went back to its roots - the control and I/O business. The Swedish developers presented the CrossFire SX, an I/O controller with 32 ports.

All input and output channels are configurable to any type of sensor typically used in industrial vehicles and mobile equipment. On the output side, it features advanced hydraulics control drives, H-bridge for DC motors, linear actuator control and drives for LED lighting. It comes with CANopen or J1939 interface and it is freely programmable by means of Codesys, the IEC 61131-3 implementation by 3S. The product is designed for functional safety, enabling certification to SIL-2 and PL(d). The CAN interface is not yet functional safe. CANopen Safety has not been implemented and J1939 has not released a protocol extension for functional safety.

Crosscontrol has developed and produced I/O controllers since its early days. The product portfolio has always been focused on rugged devices with flexibility in sensor and actuator connectivity. The Crossfire SX is the first product out in a new line of controllers meeting the needs for general machine control functionality in a broad range of applications in construction equipment, agricultural vehicles, and utility truck. "The safety enabled controller with advanced hydraulic control features is part of an an initiative that will broaden our controller offering, so stay tuned," stated the company.

The CCpilot display series includes the 9-inch PCAP touch flat screens (Photo: Crosscontrol)

Additionally, Crosscontrol exhibited at Bauma China 2016 its CCpilot displays. "In the last years our China team has been very active in establishing new business and we have reinforced the team with more Field Application Engineering resources," explained the company on the fairground in Shanghai. There were also some extensions to the Linx software suite presented: The launched Fieldbus Access module helps system designers to set up CANopen and J1939 networks by simple configuration.

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