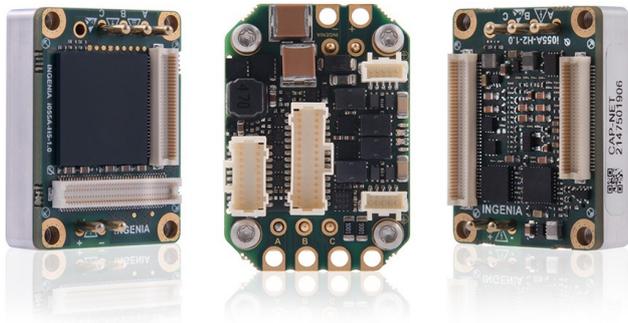


MOTION CONTROL

## Servo drive series with CANopen

Celera Motion has announced the addition of the Capitan series to their line of Ingenia servo drives. The series offers CANopen communication with a bus latency down to two cycles.



Communication options include CANopen (Source: Celera Motion)

The company explained: Communications latency is optimized to maximize system responsiveness. Standby power consumption is reduced to minimize heat generation and firmware architecture is designed to accommodate PWM (pulse width modulation) frequencies up to 200 kHz with maximum network voltage utilization, enabling low inductance motor control. Demanding multi-axis applications are supported by CANopen, Ethercat, or SPI communication protocols. CANopen and Ethercat communications come with a bus latency down to two cycles. The SPI network communication is, as mentioned, also available for CANopen/Ethercat multi-axis architectures, said the company. Command update rates are up to 20 kHz.

drives are 8-mm high and weigh 18 g and include a ready-to-use version (XCR) that enables install and system commissioning. The pluggable module versions (NET and Core) allow integration into a carrier board.

Application areas are: surgical robots, exoskeletons, gimbals, robotic joints, flat actuators, end-effectors, and haptics. The servo

### Power management

Power control and a standby power consumption down to 1,12 W combine to deliver up 99 % efficiency, said the company. Current loop runs at 50 kHz, position and velocity loops at 25 kHz. The series integrates STO (safe torque off) inputs rated to SIL-3 PLe.

“Robotics is a very competitive market, evolving rapidly, and requiring best-in-class servo drive technology. Application-focused servo drives like Capitan, where we have included features specifically required for those market segments, dramatically help engineers to accelerate their designs, be more competitive and keep the focus on their core business.” said Marc Vila, Business Director for Ingenia Servo Drives at Celera Motion.

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