MECCANICA 42

SR – Steering Robot

Brochure

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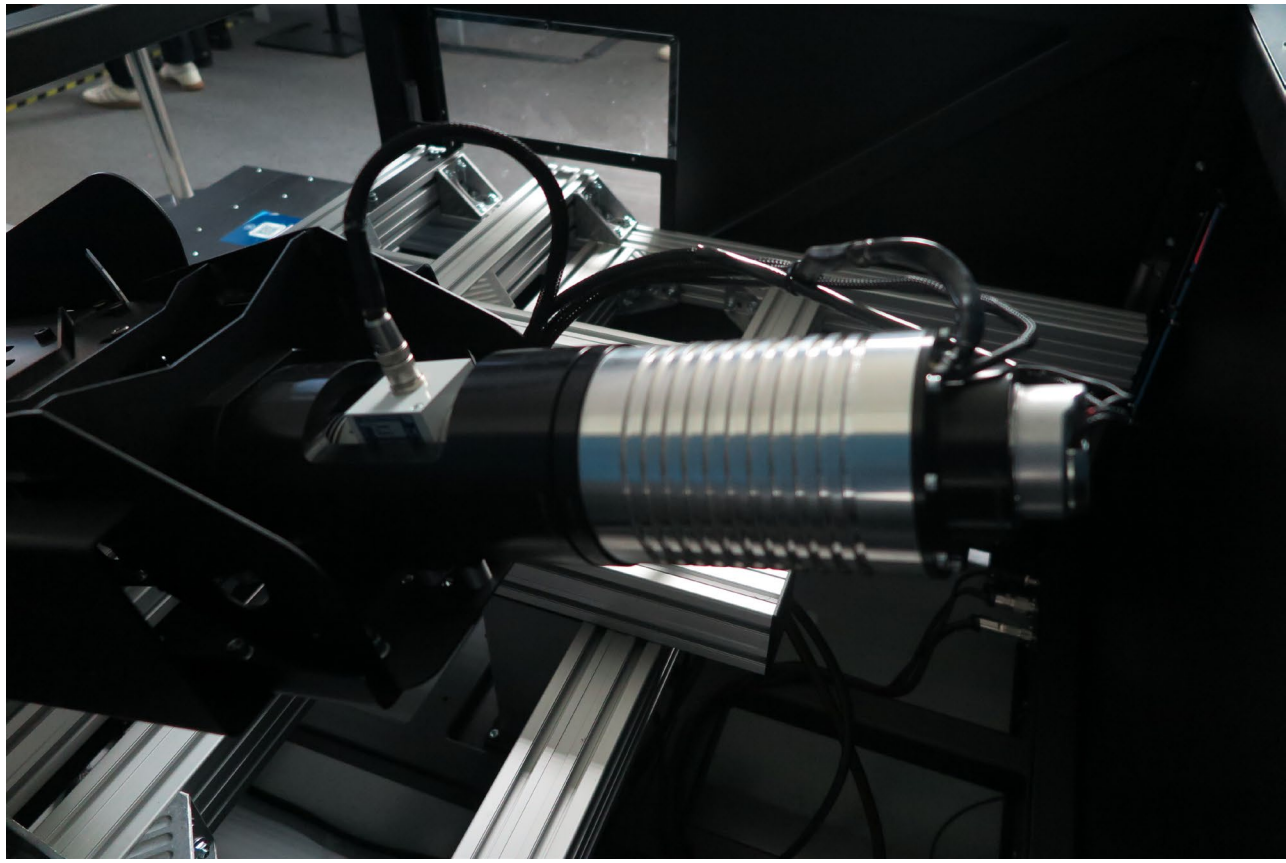
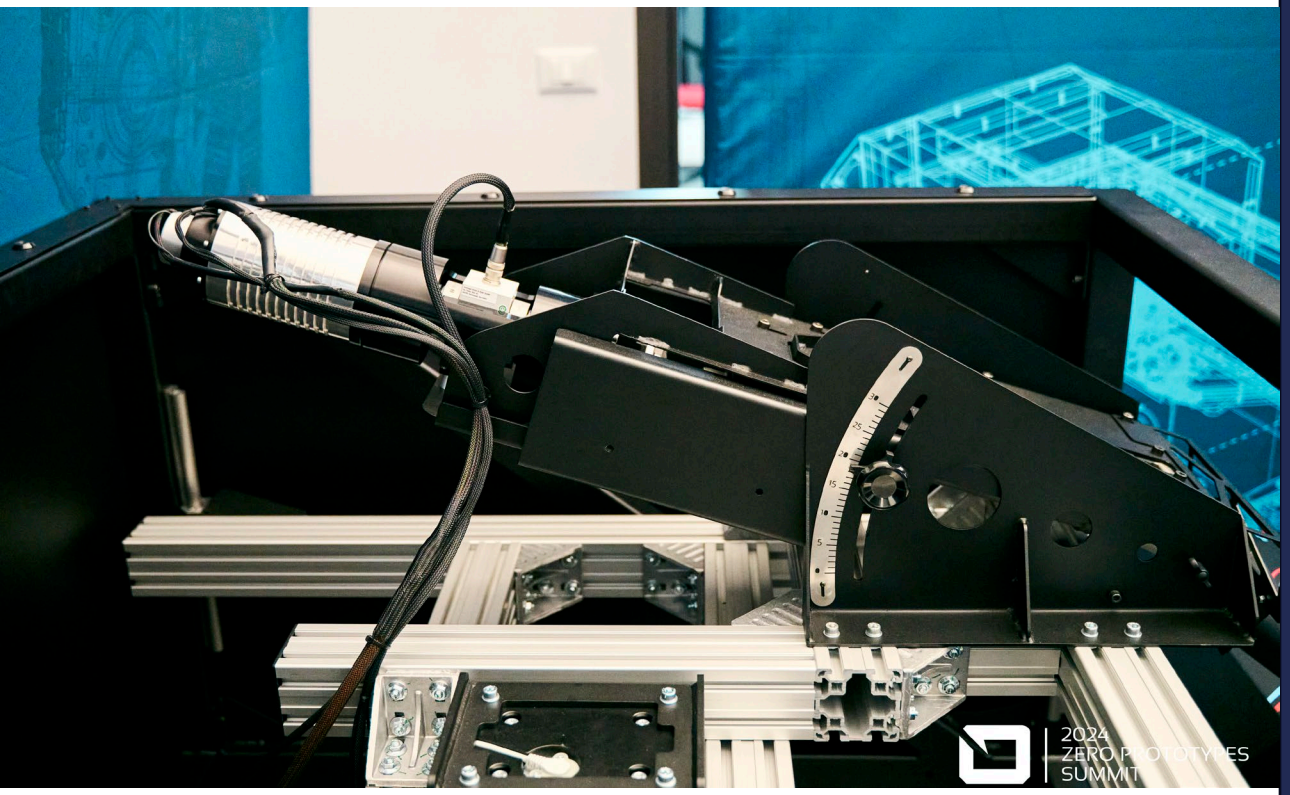
Introducing SR: your key to precision steering systems.

The Steering Robot (SR) is a high-performance direct-drive actuator for steering systems like EPSiL DuT.

SR enables both testing automation and integration with driving simulation.



What can you do with SR?



HiL System Integration

When paired with a HiL system (e.g., EPSiL) and a remotized steering feedback unit (e.g. ASF), it controls the steering rack and provides real steering feedback for DiL testing with Virtual Column control system.

Standalone Mode

Used independently, it delivers precise reproduction of steering torques during automated testing.

Autonomous Steering & ADAS

Suitable for the development of autonomous steering functions, supporting improvements in ADAS and driving automation systems.

Key performances of SR

Technical Feature	Technical Specification
Possible use cases	Model in the loop Remoted hardware in the loop
Torque on steering actuators	>62.1 Nm peak >10 Nm rms
Bandwidth of the remoted closed loop	>5 Hz
Steering actuators torque sensor accuracy	0.5% FS
Adjustable frame	optional
Communication latency	<3 ms
Safety system	Multisensor-basedSTO
Communication protocol with the real time machine	Ethercat, CAN, Flexray, other.

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