

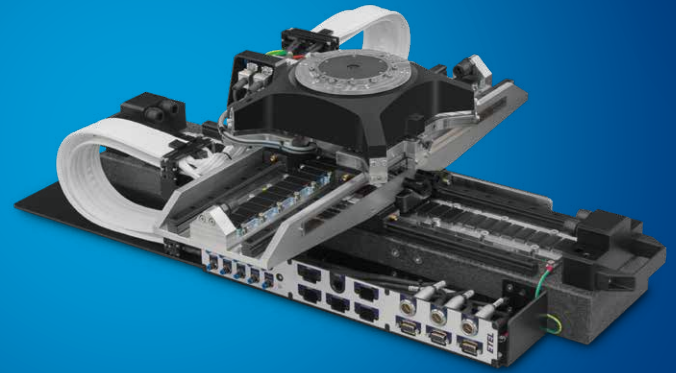


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Stacked Platforms

CHARON2

ETEL

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ETEL

CHARON2 The CHARON2 platform is built on a robust, reliable and elegantly simple stacked architecture, designed with modularity and scalability principles in mind. It starts from a standalone X axis and scales to complete motion systems of up to 7 axes. There are 9 available standards with two different electronics for a total of 18 different configurations offered as off-the-shelf products. Its compatibility with current and future modules and options allows coverage of the broadest application space and use cases.



CHARON2 X linear axis

Continuously evolving in all served markets, CHARON2 supports OEM's product lifetime extension as well as upgrade paths.

With all-conditions field proven decades of uninterrupted operations and large manufactured volumes of this architecture, CHARON2 represents the most flexible entry point for turn-key motion solutions and sets a new record in price-per-performance ratio.

This platform stems from anticipated, aligned, OEM requirements immediately fulfilled with another optimized product, reducing OEM integration costs and time-to-market efforts. The CHARON2 platform represents the broadest available offering in the market.

Its position accuracy of $\pm 1 \mu\text{m}$ level paired with excellent bidirectional repeatability and high dynamics sustains applications development in all technology and industry fields.



CHARON2 XYZ3TM stacked platform

Standard product configurations originate from this platform, for immediate integration and customized solutions, accommodating suited performance needs.

CHARON2 remains another perfect example of ETEL vertical integration, based on proprietary IP for motors, electronics and controlling know-how, and synergy with HEIDENHAIN when relating to world-class positioning accuracy feedback.

MAIN SPECIFICATIONS

	X (Bottom)	Y (Upper)	THETA
Speed	$\pm 1 \text{ m/s}$	$\pm 1 \text{ m/s}$	41.8 rad/s
Acceleration	10 m/s^2	10 m/s^2	1000 rad/s ²
Position accuracy	$\pm 1 \mu\text{m}$	$\pm 1 \mu\text{m}$	$\pm 3 \text{ arcsec}$
Position stability	$\pm 2 \text{ nm}$	$\pm 2 \text{ nm}$	$\pm 0.02 \text{ arcsec}$
Bidir. repeatability	$\pm 0.4 \mu\text{m}$	$\pm 0.4 \mu\text{m}$	$\pm 2 \text{ arcsec}$
Maximum payload	From 2 kg with the Z3TM up to 35 kg without module		

PRODUCT HIGHLIGHTS

- Total stroke: up to 650 mm x 410 mm
- Native ISO2, optional ISO1 compatibility
- Compact footprint
- Tip-Tilt correction with the Z3TM combined module
- Flexible, modular, scalable performance and field upgradeability
- Built-in vacuum supply at chuck level
- Short move and settle time

TYPICAL APPLICATIONS

- Semiconductor Manufacturing Process Control applications, such as Overlay / Critical Dimension, Thin Film, 4-point probe, Profilometry, Interferometry and many other metrology techniques
- Advanced packaging and visual inspection

CHARON2 STACKED SYSTEM

This system can also be integrated with ETEL's QuiET Active Isolation System to reach ultimate performance.

