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CHARON2
Stacked System
Innovative Motion Control

The CHARON2 platform is built on a robust, reliable and elegantly simple stacked architecture, designed with modularity and scalability principles in mind. Its compatibility with current and future modules and options allows coverage of the broadest application space and use cases. 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.

CHARON2 delivers a minimum dynamic of 1 g acceleration and of 1 m/s speed. Its position accuracy of 1 µm level paired with excellent bidirectional repeatability sustains applications development in all technology and industry fields. From this platform originates standard product configurations, for immediate integration, and customized solutions, accommodating suited performance needs.

CHARON2 stems from anticipated, aligned, OEM requirements immediately fulfilled with another optimized product, reducing OEM integration costs and time-to-market efforts.

### PERFORMANCE

<table>
<thead>
<tr>
<th></th>
<th>X (Bottom)</th>
<th>Y (Upper)</th>
<th>THETA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>±1 m/s</td>
<td>±1 m/s</td>
<td>41.8 rad/s</td>
</tr>
<tr>
<td>Acceleration</td>
<td>10 m/s²</td>
<td>10 m/s²</td>
<td>2200 rad/s²</td>
</tr>
<tr>
<td>Position accuracy</td>
<td>±1 µm</td>
<td>±1 µm</td>
<td>±3 arcsec</td>
</tr>
<tr>
<td>Position stability</td>
<td>±2 nm</td>
<td>±2 nm</td>
<td>±0.02 arcsec</td>
</tr>
<tr>
<td>Bidir. repeatability</td>
<td>±0.4 µm</td>
<td>±0.4 µm</td>
<td>±2 arcsec</td>
</tr>
<tr>
<td>Maximum payload</td>
<td></td>
<td>30 kg</td>
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### PRODUCT HIGHLIGHTS

- Total stroke: up to 650 mm x 410 mm
- Native ISO2, optional ISO1 compatibility
- Applications and use cases flexibility
- Best-in-class cost of ownership
- Modularity, scalable performance and field upgradeability
- Standard configurations available for immediate evaluation and prototyping

### 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
- Visual inspection and characterization of parts
- Microscopy and spectroscopy
- High-precision machining