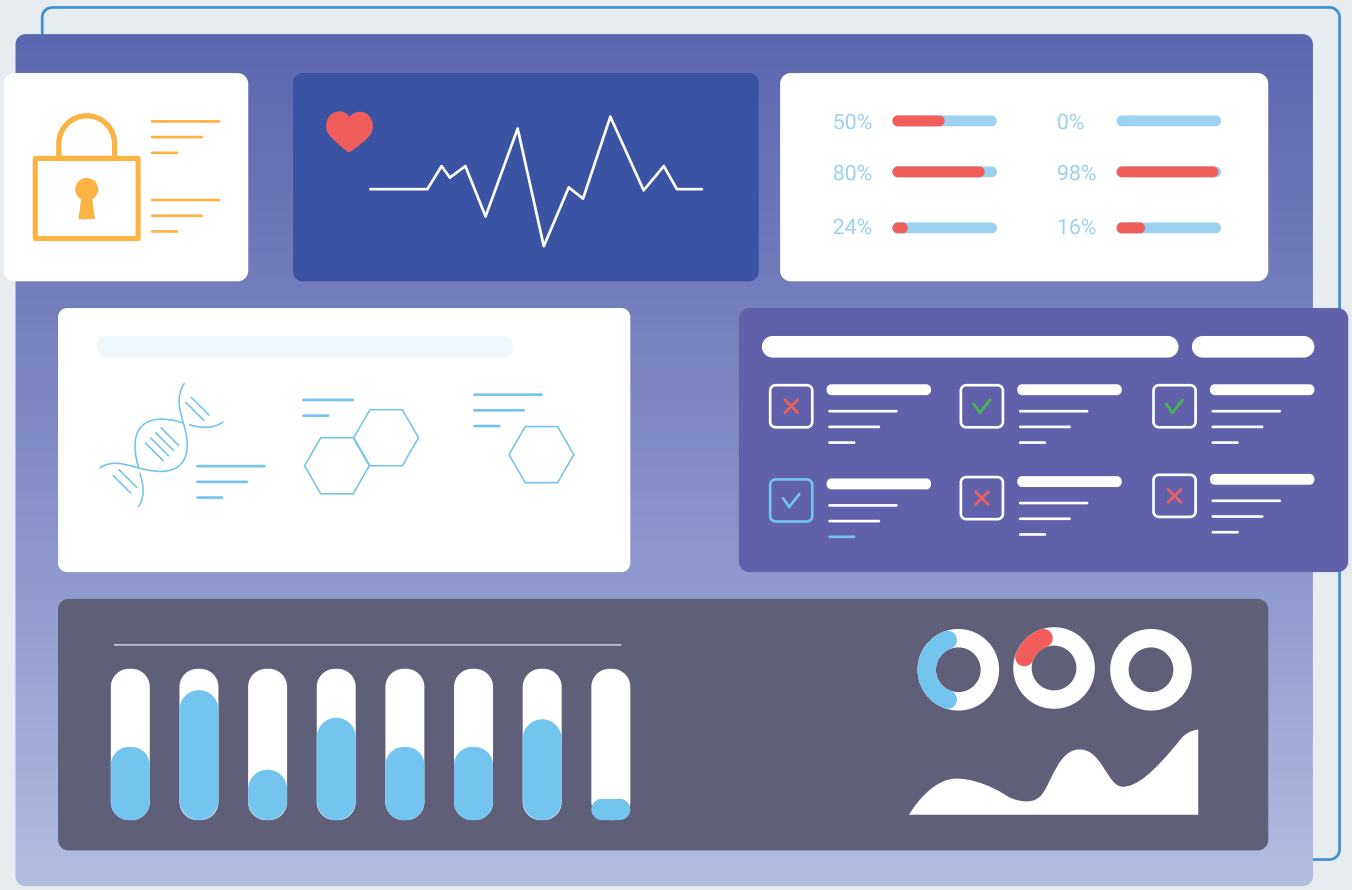
Empowering Medical Device Innovation with Tytonyx and Super Protocol's Confidential AI Solution



TYTONYX BEL Brain Electrophysiology Lab SUPER PROTOCOL | EXXACT

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Brain Electrophysiology Laboratory (BEL), a recipient of National Institute of Health grants, develops cutting-edge medical devices and AI software for epilepsy and sleep disorders diagnostics. To speedup FDA clearance, deliver products to market faster and protect their intellectual property, BEL partnered with Tytonyx and implemented a groundbreaking solution along with Exxact's hardware and Super Protocol's confidential AI cloud and marketplace.

The Challenge

BEL, recognizing the complexity of obtaining FDA clearance for AI/ML medical devices, turned to Tytonix to streamline the process and mitigate key risks:

- Potential exposure of proprietary IP during third-party audits
- Delays in commercialization due to human errors in the review process
- Extended regulatory timelines, slowing patient access to essential care

Innovative Solution:

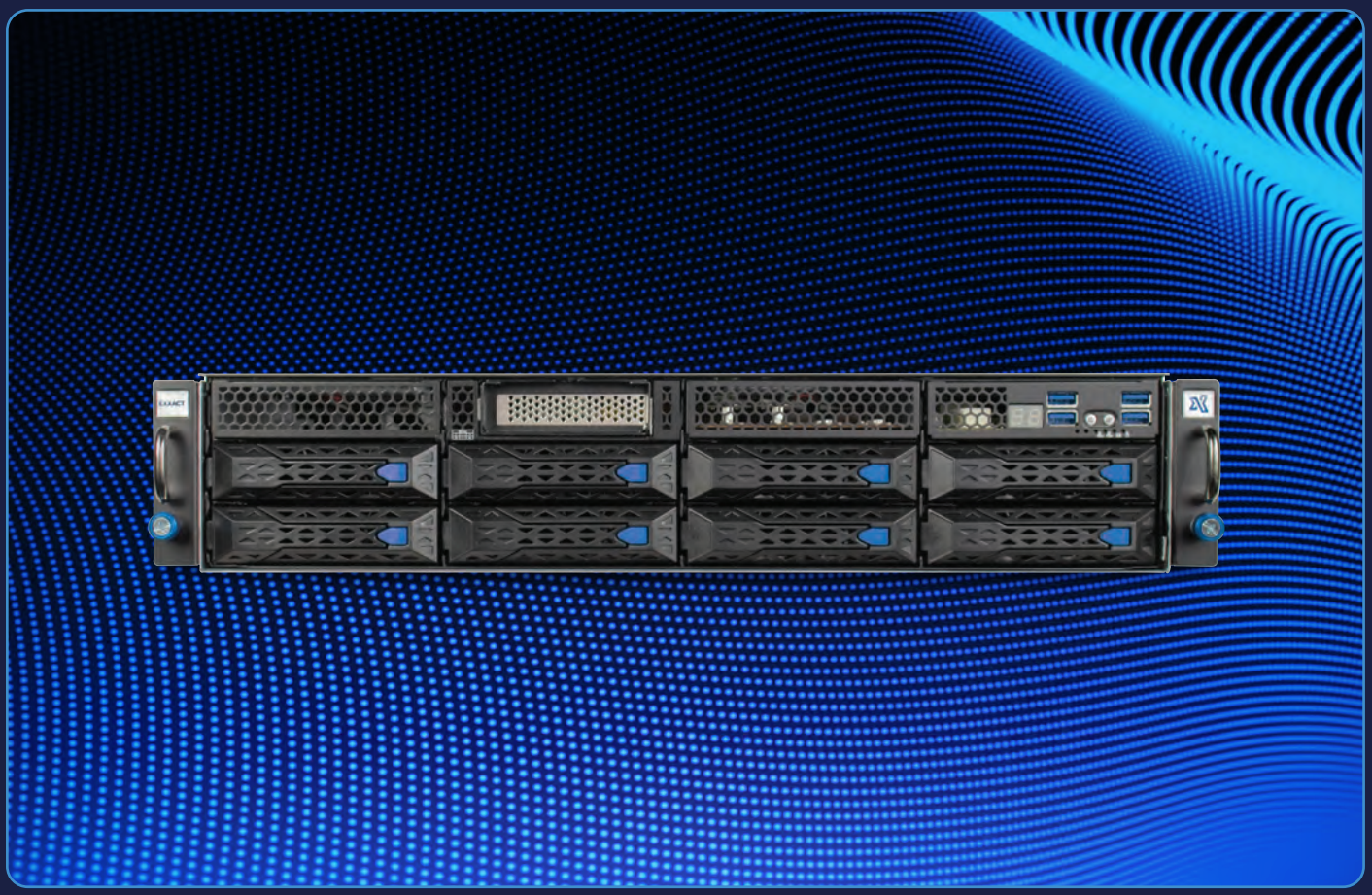
Super Protocol's Confidential AI Cloud and Marketplace

To address these challenges, Tytonyx combined its AI-powered audit solution with Super Protocol's advanced confidential AI infrastructure, powered by Exxact's hardware along with additional cloud providers. The solution utilized:

- Exxact's 2U server equipped with 5th Gen Intel Xeon Scalable CPU and NVIDIA H100 GPU
- Confidential computing capabilities using Intel TDX and NVIDIA GPU Trusted Execution Environments (TEEs)
- Confidential and Self-Sovereign AI Cloud and Marketplace, powered by the automated computing network where confidential computing resources are provided by multiple independent providers rather than a single cloud provider.

This powerful combination enabled:

- **Secure AI-Agent Audits:** Tytonyx's automated AI-agent could perform FDA compliance reviews within a protected environment, safeguarding BEL's sensitive data.
- **Enhanced Data Protection:** Super Protocol's implementation ensured that data remained protected even during processing, meeting the highest standards of confidentiality.
- **Scalable Performance:** Verifiable AI-driven automation scaled effortlessly to meet workload demands, reducing compliance review times from weeks to hours while maintaining efficiency.



Transformative Results

Tytonyx's solution, deployed on Super Protocol's confidential computing solution, powered by Exxact's hardware, led to remarkable outcomes for BEL:

- **IP Protection:** Elimination of trade secret risks, preserving BEL's competitive edge.
- **Accelerated Time-to-Market:** Compliance review times reduced from 2-4 weeks to just 1-2 hours.
- **Enhanced Patient Care:** Faster FDA clearance process is paving the way for quicker access to critical medical devices for patients.

> "Super effectively protects IP and know-how data during AI inference - a crucial tool for the Healthcare Industry, stated Roma Shusterman, CEO at Tytonyx.com, PhD Ben-Gurion University of the Negev

Scaling the Impact

As this innovative approach to FDA compliance audits gains traction, the synergy between Exxact's hardware solutions and Super Protocol's confidential AI cloud and marketplace is poised to support more medical device manufacturers. This combination offers a flexible, secure, and scalable framework for advancing medical technology while ensuring the highest standards of data protection and regulatory compliance.

By leveraging **Exxact's** expertise in high-performance computing and **Super Protocol's** confidential computing capabilities, the medical device industry can continue to innovate rapidly while maintaining the strictest levels of data security and regulatory compliance.