

Featuring
Atonarp

IP Protection for Semiconductor Manufacturing

INTRODUCTION

Atonarp is a developer of digital molecular profiling platforms and software applications for healthcare, semiconductor and other industrial markets. [Atonarp's ASTON platform](#) includes a portfolio of fast, high-sensitivity mass spectrometers with proprietary software that enable quantitative, rapid gas analysis required in complex in-situ semiconductor manufacturing processes. The product was developed using the [Variscite VAR-SOM-MX8M-PLUS](#) system-on-module.

THE PROBLEM—PROTECTING INTELLECTUAL PROPERTY AT SCALE

The ASTON platform delivers real-time, chemically specific actionable insights to maximize throughput and yield. One tool can replace multiple legacy tools. At the heart of the platform is critical artificial intelligence (AI) intellectual property. In addition to a security solution that would provide fundamental protection (secure boot & updates, failure recovery, key and certificate management, and secure storage), Atonarp needed to ensure that they could rapidly manufacture and deploy their product with reliable security. Finally, Atonarp needed to ensure that their brand and customers' trust were protected by having robust security for AI models.



Aston Plasma

THE EmSPARK™ SOLUTION

EmSPARK's secure boot process abstracts the boot, update and failure recovery process from NXP iMX8 applications processor. Atonarp used EmSPARK's opaque keys and objects, along with the EmSPARK™ Crypto Trusted Application to protect AI models while they are at rest. Finally, Atonarp implemented LUKS key enablement using EMSPARK's Crypto and Key and Certificate Management Trusted Applications. EmSPARK's CoreLockr™ API's use used to seamlessly integrate with product applications.



SOLUTION BENEFITS

With the EmSPARK™ solution, Atonarp was able to rapidly deploy secure products at scale, protect AI models on the ASTON platform, and protected their intellectual property.

SUPPORTING PLATFORMS



ATONARP

Atonarp is advancing clinical diagnostics, life science research, semiconductor, and industrial process control through digital molecular profiling. Our Aston and ATON platforms harness the power of innovative spectrometry technologies with advanced analytics to generate real-time, actionable results. Our platforms can be applied to a wide variety of applications across multiple industries. In-situ, highly sensitive molecular metrology in advanced manufacturing processes means higher throughput, improved efficiency, and reduced waste. Our quantitative, multiplex chemistry-free diagnostic tests enable disease diagnosis and monitoring at the point-of-care, which can improve outcomes and patient satisfaction at lower cost.



Sequitur Labs is developing seminal technologies to improve trust in a connected world, reducing the cost and complexity to build secure embedded and IoT devices. Sequitur's products span a range of disciplines required for trusted computing, from boot through the full device lifecycle. Sequitur's security solutions provide real business value to device makers, such as reducing BoM costs, protecting revenue by thwarting IP theft, improving product reliability and reducing liability, and improving device lifecycle management processes. To learn more about Sequitur's security platform, visit us at www.sequiturlabs.com or follow us at @SequiturLabs.

PO Box 1127 +1 425 654 2048 info@sequiturlabs.com
Issaquah, WA 98027 +44 20 3318 1171 www.sequiturlabs.com

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