

Embedded Software Solution for Radar Technology Protected by Arxan Against Counterfeiting

A hi-tech F1000 company makes high-performance radar systems for global markets. As the company purchases off-the-shelf radar hardware, it uses proprietary software to process the signals and greatly enhance the capabilities of the hardware. The end result is a unique and highly competitive product that has a higher performing system than traditional marketplace vendors.



Challenge: The company's success lies in its ability to use its IP to fabricate low-cost radar operations more efficiently than its competitors. Thus their primary concern is to protect their intellectual property (IP.) The company ships their systems both overseas and to 3rd party systems integration companies. In either case, the product is subject to customers being able to reverse engineer the software layer to discover their IP and produce a counterfeit version. Of course, this would negatively impact and destroy the business core revenue streams!



Solution: Arxan's comprehensive protection for code, keys and data made it the winning choice to serve the company's protection challenges. As a first layer, Arxan Code Protection solution was used to secure their IP against reverse engineering. The company's team particularly appreciated the fine-grained nature of Arxan Code Protection, since sections of their code are performance critical and they can tune the amount of protection and Guard invocation locations to balance performance and security.

As a second layer, the company is evaluating the use of Cryptographic Key/Data Protection solution, which provides white box cryptography capabilities including secure data decryption. By leveraging Arxan Cryptographic Key/Data Protection instead of traditional cryptographic libraries, the intermediate data files will remain protected throughout execution, further securing the company's proprietary algorithms.

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