

## SFA6900 ApplicationOnload Engine Overview

Solarflare® ApplicationOnload™ Engine is a new class of product that moves application processing into the network adapter to accelerate real-time network data application processing performance. ApplicationOnload Engine (AOE) leverages Solarflare’s proven OpenOnload® technology to create a high performance data path from host applications to the network.

The SFA6900 ApplicationOnload Engine (AOE) family is a new class of PCIe 10G Ethernet server adapter that combines the industry’s highest performing, lowest latency server adapter with a powerful FPGA acceleration engine that enables unmatched “on-the-fly” processing of network data. By processing data in hardware before it is presented to the server CPU, the SFA6900 family reduces application run-times and server CPU workloads. As a result, users can expect to see dramatic improvements in application performance. Furthermore, this new product family achieves dramatic performance improvement while maintaining full compatibility with Solarflare’s existing server adapter drivers and OpenOnload middleware.

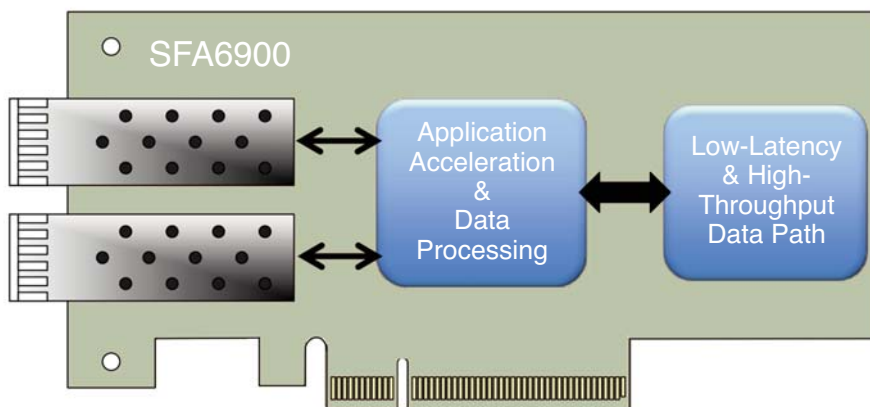
The SFA6900 family uses a system-level approach, combining software and hardware to create unique plug-and-play products that bring applications closer to the network to improve performance. The AOE architecture enables users to provision portions of code that will perform faster in hardware processing,

and portions that are more effectively processed in software on the host server. This provides users the ability to optimize their compute and network infrastructure for their specific application processing load. A wide range of applications can benefit from the SFA6900 products, including those in financial services, oil and gas exploration, Internet, network security and video processing.

### ApplicationOnload Engine Benefits

The SFA6900 family of ApplicationOnload Engines provides users a competitive advantage by combining an industry-leading 10GbE server adapter (SFN6122F) with a hardware-programmable FPGA-based application acceleration engine. This powerful combination results in a seamless, low-latency and high throughput data path to host applications. SFA6900 family’s bump-in-the-wire architecture reduces message transit time compared to alternative solutions, and leverages its tight integration with Solarflare’s OpenOnload network acceleration.

SolarflareSFA6900



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Additionally, SFA6900 products accelerate the increasing application loads of the latest multi-core processors and platforms to deliver superior performance while minimizing host CPU load.

### Customizable, Modular Applications

SFA6900 products are open platforms available with applications developed by Solarflare, as well as applications developed by customers and third-party developers. The SFA6900 product portfolio initially includes financial applications, such as A/B arbitration. Additional applications for the financial sector and other industries will be released by Solarflare and third-party developers.

Customized applications can be deployed utilizing AOE's comprehensive development environment with the SFA6900 base platform and a complete Firmware Development Kit (FDK) including:

- Hardware libraries for data path infrastructure
- Control software APIs
- Sample host code
- Robust drivers ready for host software
- Management and configuration utilities
- Documentation

For more information on AOE, please visit [www.solarflare.com](http://www.solarflare.com)

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