

Product Brief

SFN5152F

Solarflare SFN5152F Single-Port 10G Ethernet Midrange Server Adapter

The Solarflare® SFN5152F single-port 10G Ethernet SFP+ midrange server adapter offers exceptional 10GbE value for data center, enterprise, SMB, high performance computing, and cloud computing environments.

The SFN5152F is designed to address issues facing data center managers today. Equipped to handle the application loads of the latest multi-core processors, the SFN5152F also delivers unmatched power efficiency for the consolidation and deployment of high-density servers. The SFN5152F supports data networking with concurrent support of iSCSI and NAS traffic – while remaining true to the need for cost effective, power-efficient and high-performance network I/O.



LOWEST POWER

At 4 Watts, the SFN5152F consumes less than half the power of the leading competitors' products, and delivers 5-10x the efficiency of 1G Ethernet (Gbps/Watt). This not only makes a power efficient 10G network possible, it can save thousands of dollars of operating costs for a typical data center. The SFN5152F also meets the Energy Star™ requirement for power consumption.

SCALABLE, HARDWARE-ASSISTED VIRTUALIZATION

The SFN5152F is designed to optimize virtualized application performance and maximize the use of network resources. With the ability to support up to 64 virtual NICs, its performance can scale as the number of CPU cores and virtual machines increases for better performance and manageability.

LEADERSHIP APPLICATION PERFORMANCE

The SFN5152F delivers the industry's lowest-latency along with full 20 Gbps bidirectional line-rate performance. Featuring a rich set of stateless offloads, it provides efficient acceleration of the most demanding network protocol tasks.

PROVEN POWERFUL TECHNOLOGY

Based on standards-compliant, robust, power-efficient 10GbE technology shipping in OEM servers and switches today, the SFN5152F enables high performance, cost-effective solutions for next-generation applications.

SPECIFICATIONS	ADVANCED FEATURES AND BENEFITS	
Product Number SFN5152F Single-port SFP+ Standards and Compliance PCIe 2.0 5.0 GT/s IEEE 802.3ae IEEE 802.3ad IEEE 802.1Q IEEE 802.1p IEEE 802.3x RoHS Compliant Power (typical) SFN5152F: 4.0W Operating Range 0° to 55° C 0 LFM, Min. Physical Dimensions L: 16.74 cm (6.59 in) W: 6.89 cm (2.71 in) End bracket height: PCI Express standard 12 cm (4.725 in) PCI Express low-profile 7.92 cm (3.12 in)	I/O Virtualization	64 guest OS protected vNICs
	PCI Express	PCIe 2.0 @ 5.0 GT/s for full, 20 Gbps bi-directional bandwidth
	10 Gigabit Ethernet	Supports high-performance 10GbE
	SFP+ support	Supports optical & copper SFP/SFP+ modules: Direct-Attach, Fiber (10G or 1G), 1G/10G combo, 1000BASE-T SFP
	1000BASE-T SFP support	Supports 1G 1000BASE-T SFP modules
	Low latency	Cut through architecture/intelligent interrupt coalescing
	Receive side scaling (RSS)	Distributes IPv4, IPv6 loads across CPU cores; MSI-X minimizes interrupt overhead
	Hardware Offloads	LSO, LRO; IPv4/IPv6; TCP, UDP checksums, NetQueue/VMQ
	Adapter teaming / Link aggregation	LACP, MLAG for redundant links & increased bandwidth
	Jumbo frames	9000 byte MTU for performance
IP flow filtering	Hardware directs packets based on IP, TCP, UDP headers	
	Advanced Packet Filtering	256 multicast filters; 4096 VLANs/port; adaptive TCP/UDP/IP/MAC/VLAN/RSS filtering
Intel QuickData™	Uses host DMA engines to accelerate I/O	
Remote boot	Supports PXE, iSCSI, UEFI boot	
Management	ACPI v3.0, RMII, SNMP, SMBus, IPMI	
Virtualization support	VMware ESX 3.5, vSphere 4, Hyper-V, Red Hat KVM, XenServer 5.x Direct Guest Access	
OS Support	Windows Server 2003, 2008, Linux RHEL4/5/6; SLES9/10/11; Solaris 10	