

Product Brief

SFN5162F

Solarflare SFN5162F Dual-Port 10G Ethernet Midrange Server Adapter

The Solarflare® SFN5162F dual-port 10G Ethernet SFP+ midrange server adapter offers exceptional 10GbE value for data center, enterprise, SMB, high performance computing, and cloud computing environments.

The SFN5162F is designed to address issues facing data center managers today. Equipped to handle the application loads of the latest multi-core processors, the SFN5162F also delivers unmatched power efficiency for the consolidation and deployment of high-density servers. The SFN5162F 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 less than 5 Watts, the SFN5162F 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 SFN5162F also meets the Energy Star™ requirement for power consumption.

SCALABLE, HARDWARE-ASSISTED VIRTUALIZATION

The SFN5162F is designed to optimize virtualized application performance and maximize the use of network resources. With the ability to support up to 128 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 SFN5162F delivers the industry's lowest-latency along with full 40 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 SFN5162F enables high-performance, cost-effective solutions for next-generation applications.

SPECIFICATIONS	ADVANCED FEATURES AND BENEFITS	
<p>Product Number SFN5162F Dual port SFP+</p> <p>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</p> <p>Power (typical) SFN5162F: 4.9W</p> <p>Operating Range 0° to 55° C 0 LFM, Min.</p> <p>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)</p>	<p>I/O Virtualization</p> <p>PCI Express</p> <p>10 Gigabit Ethernet</p> <p>SFP+ support</p> <p>1000BASE-T SFP support</p> <p>Low latency</p> <p>Receive side scaling (RSS)</p> <p>Hardware Offloads</p> <p>Adapter teaming / Link aggregation</p> <p>Jumbo frames</p> <p>IP flow filtering</p> <p>Advanced Packet Filtering</p> <p>Intel QuickData™</p> <p>Remote boot</p> <p>Management</p> <p>Virtualization support</p> <p>OS Support</p>	<p>128 guest OS protected vNICs</p> <p>PCIe 2.0 @ 5.0 GT/s for full, 40 Gbps bi-directional bandwidth</p> <p>Supports high-performance 10GbE</p> <p>Supports optical & copper SFP/SFP+ modules: Direct-Attach, Fiber (10G or 1G), 1G/10G combo, 1000BASE-T SFP</p> <p>Supports 1G 1000BASE-T SFP modules</p> <p>Cut through architecture/intelligent interrupt coalescing</p> <p>Distributes IPv4, IPv6 loads across CPU cores; MSI-X minimizes interrupt overhead</p> <p>LSO, LRO; IPv4/IPv6; TCP, UDP checksums, NetQueue/VMQ</p> <p>LACP, MLAG for redundant links & increased bandwidth</p> <p>9000 byte MTU for performance</p> <p>Hardware directs packets based on IP, TCP, UDP headers</p> <p>256 multicast filters; 4096 VLANs/port; adaptive TCP/UDP/IP/MAC/VLAN/RSS filtering</p> <p>Uses host DMA engines to accelerate I/O</p> <p>Supports PXE, iSCSI, UEFI boot</p> <p>ACPI v3.0, RMI, SNMP, SMBus, IPMI</p> <p>VMware ESX 3.5, vSphere 4, Hyper-V, Red Hat KVM, XenServer 5.x Direct Guest Access</p> <p>Windows Server 2003, 2008, Linux RHEL4/5/6; SLES9/10/11; Solaris 10</p>