

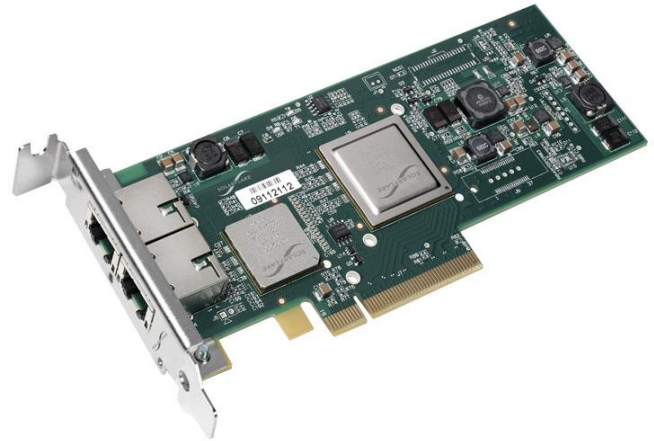
Product Brief

SFN5161T

Solarflare SFN5161T Dual-Port 10G Ethernet Midrange Server Adapter

The Solarflare® SFN5161T dual-port, triple-speed 10GBASE-T midrange server adapter offers exceptional 10GbE value for data center, enterprise, SMB, high performance computing, and cloud computing environments over installed and new UTP cabling.

With triple-speed 10GBASE-T, the SFN5161T supports asymmetric upgrades. Because 10GBASE-T auto negotiates with 1000BASE-T and 100BASE-TX, servers can be upgraded asynchronously with switches at the other end of the wire. Equipped to handle application loads of the latest multi-core processors, the SFN5161T also delivers unmatched power efficiency for the consolidation and deployment of high-density servers. The SFN5161T supports data networking with concurrent support of iSCSI and NAS traffic – while providing cost effective, power-efficient and high-performance network I/O.



CPU cores and virtual machines increases for better performance and manageability.

LOWEST POWER

At less than 13 Watts, the SFN5161T 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 SFN5161T is the only dual-port 10GBASE-T server adapter that meets the Energy Star™ requirement for power consumption.

LEADERSHIP APPLICATION PERFORMANCE

The SFN5161T has 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.

SCALABLE, HARDWARE-ASSISTED VIRTUALIZATION

The SFN5161T 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

PROVEN POWERFUL TECHNOLOGY

Based on standards-compliant, robust, power-efficient 10GbE controller and 10GBASE-T PHY technology shipping in OEM servers and switches today, the SFN5161T enables high-performance, cost-effective solutions for next-generation applications.

SPECIFICATIONS	ADVANCED FEATURES AND BENEFITS	
Product Number SFN5161T Dual port 10GBASE-T	I/O Virtualization	128 guest OS protected vNICs
	PCI Express	PCIe 2.0 @ 5.0 GT/s for full, 40 Gbps bi-directional bandwidth
Standards and Compliance PCIe 2.0 5.0 GT/s IEEE 802.3an IEEE 802.3ad IEEE 802.1Q IEEE 802.1p IEEE 802.3x RoHS Compliant	10 Gigabit Ethernet	Supports high-performance 10GbE
	Autonegotiation	10GBASE-T, 1000BASE-TX, 100BASE-T
	Cabling	Up to 100 meters on Category 6A, 37 to 55 meters on Category 6 per TIA TSB155 and IEEE 802.3an. Category 5E links supported per IEEE 802.3an Clause 55.7*
	Low power modes	Less than 6.5 W per port, Dynamic Power Scaling™
	Low latency	Cut-thru 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
Power (typical) SFN5161T: 12.9W	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
Operating Range 0° to 55° C 100 LFM, Min.	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
	End bracket height:	
PCI Express standard 12 cm (4.725 in)		
PCI Express low-profile 7.92 cm (3.12 in)		

*Contact your local Solarflare sales office for more information about Category 5E cabling support