



PCIe x8 Dual SFP Ports 10G SFP+ Ethernet Network

Adapter (Based on Intel 82599)

CY-PT02-82599-F



Product Overview ▼

The server adapter has two fully integrated 10 Gigabit Ethernet Media Access Controller (MAC) and SFP+ ports. In addition to managing the Ethernet MAC and PHY layers, the server adapter provides traffic management for passing packets. The controller offloads tasks such as TCP/UDP/IP checksums, compute tasks, and TCP segmentation to the host through hardware acceleration.

The CY-PT02-82599-F server adapters offer hardware enhancements such as intelligent queuing technology optimized for multi-core processors, and on-chip support for load balancing for higher levels of 10 Gigabit Ethernet scalability.

Intel Virtualization Technology (VT-c), including at the network level, is available to significantly improve overall system performance in virtual server environments. Intel VT-c technology includes hardware optimization features that significantly reduce I/O bottlenecks, improve throughput and reduce latency. Intel VT-c's component, Virtual Machine Device Queuing (VMDq), significantly improves performance and reduces CPU utilization by offloading data-sorting loads from the virtual machine monitor (VMM) to the network controller. Enhancements include inter-virtual machine exchange within the offload server, VM Direct Connect to VM. The CY-PT02-82599-F server adapters offer a number of hardware-optimized features, including those for I/O virtualization, and support for unified networking to transform data centers with outstanding reliability, scalability, and mobility. Allowing LAN, SAN and IPC traffic to share the

same Ethernet network provides higher performance levels for high-bandwidth applications in the evolving virtualized data center. The server adapter also supports iSCSI boot. This feature allows SAN and LAN traffic to share the existing Ethernet infrastructure without the need for a dedicated iSCSI adapter. The adapter includes advanced features that dramatically increase the speed of iSCSI traffic and support iSCSI remote booting.

Basic features ▼

Controllers	Intel 82599
Cable medium	Fiber optics
Fiber Type	10GBase-SR、10GBase-LR、10GBase-Cu
Baffle height	Full-height and half-height configurations
Power wastage (max)	8.0W
Port Type	2 unit 10G SFP+ slots
PCIe computer bus	PCI Express v2.0 (5.0GT/s) x8; compatibility x16
Port speed	10000Mbps
Power supply	PCIe supply power

Technical Parameters ▼

Ethernet Power Management	Yes
Standards-compliant	IEEE802.3ae 10 Gigabit Ethernet over fiber
	IEEE 802.3x Full Duplex and flow control
	IEEE 802.1AS
	IEEE 802.1Q VLAN
	IEEE 802.3AD
	IEEE 1588
	IEEE 802.3az - Energy Efficient Ethernet (EEE)
PXE support	Yes
iSCSI support	Yes
FCoE support	Yes
DPDK support	Yes

WoL support	Yes
VMDq support	Yes
RSS support	Yes
Giant frame support	Yes
PCI-SIG*SR-IOV support	Yes

Operating Parameters ▼

Working environment temperature	0°C to 45°C (32°F to 131°F)
Storage temperature	-40°C to 70°C (-40°F to 158°F)
Storage humidity	90% non-condensing relative humidity at 35°C
Accreditation	FCC , CE , RoHS

Packaging Details ▼

Product Size (unit: mm)	167*120*21
Package Size (unit: mm)	224*147*30
Gross weight (unit: g)	115

Operating System Support ▼

Windows 7/8/8.1/10	Windows Server 2012 / R2
Windows Server 2003 / R2	Windows Server 2016 / R2
Windows Server 2008 / R2	Windows Server 2019 / R2
Linux Stable Kernel version 2.6.x / 3.x / 4.x or	CentOS / RHEL 6.x / 7.x or update
update	
Ubuntu14.x/16.x or update	FreeBSD 9 / 10 / 11 or update
Vmware ESX/ESXi 5.x / 6.x or update	