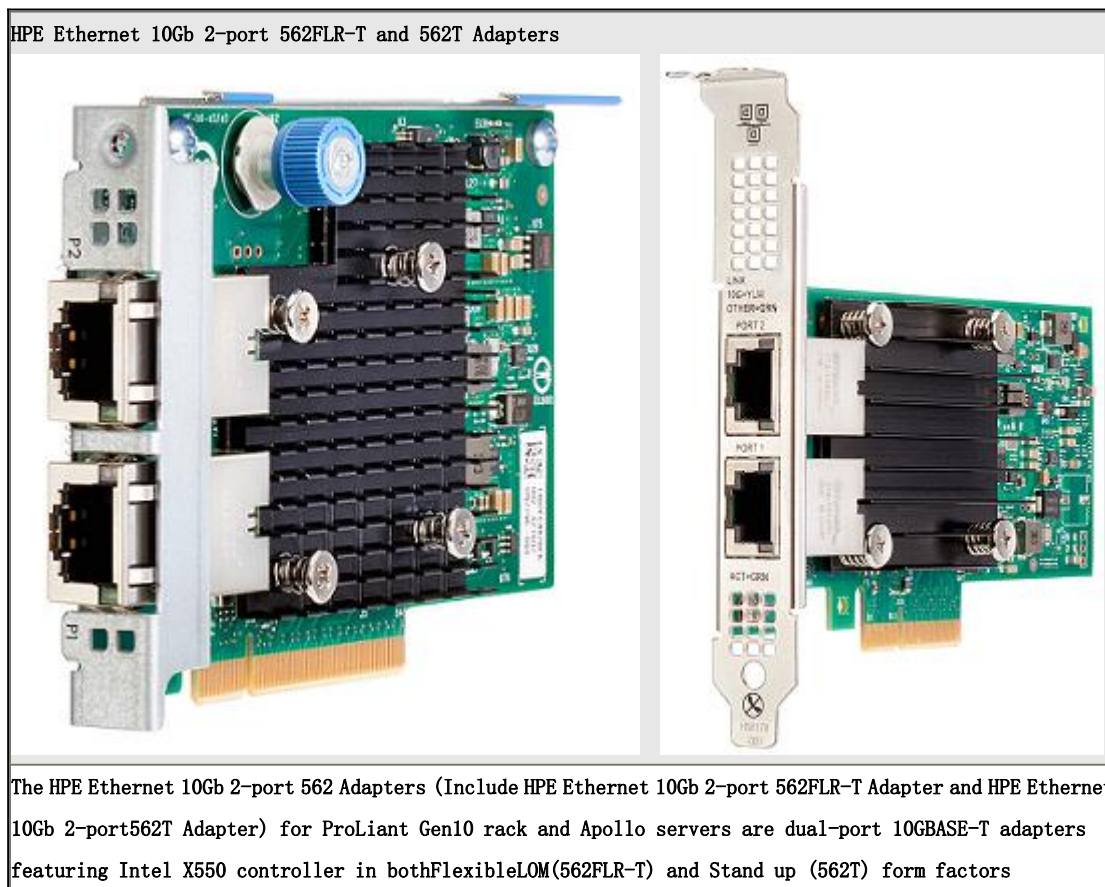


### Overview

#### HPE Ethernet 10Gb 2-port 562 Adapter

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#### 1、 Product description



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### 2、 Product features

Feature	Description
Key features	<p>Dual 10Gb ports provide up to 40 Gb/s bi-directional Ethernet bandwidth</p> <p>Jumbo Frame</p> <p>FlexibleLOM (562FLR-T) and Stand up (562T)</p> <p>HPE Sea of Sensors 3D</p> <p>Tunnel offload(NVGRE and VxLAN)</p> <p>Single-root input/output virtualization (SR-IOV)</p> <p>IPv6 acceleration</p> <p>Preboot eXecution Environment (PXE)</p> <p>Wake On Lan (WOL)- (Only 562FLR-T)</p> <p>Checksum and segmentation offload</p> <p>VMware NetQueue and Microsoft Virtual Machine Queue (VMQ)</p> <p>Precision Time Protocol (PTP)</p> <p>Data Plane Development Kit (DPDK)</p>
Throughput -Theoretical bandwidth	This adapter delivers 20 Gb/s bi-directional Ethernet transfer rate per port (40 Gb/s per adapter), providing the network performance needed to improve response times and alleviate bottlenecks
Checksum and segmentation offload	<p>Normally the TCP Checksum is computed by the protocol stack. Segmentation Offload is technique for increasing outbound throughput of high-bandwidth network connections by reducing CPU overhead</p> <p>The technique is also called TCP Segmentation Offload (TSO) when applied to TCP, or Generic Segmentation Offload (GSO)</p>
DPDK	This adapter supports DPDK with benefit for packet processing acceleration and use in NFV deployments
Form factor	This adapter series offers both FlexibleLOM and stand up
HPE Sea of sensors 3D	<p>Support for the HPE Sea of Sensors which is a collection of 32 sensors that automatically track thermal activity -heat - across the server</p> <p>When temperatures get too high, sensors can initiate fans and make other adjustments to reduce energy usage</p> <p>A significant improvement lies in the ability to apply fan speed increases only to the portion of the system that is rising in temperature, rather than all six fans in unison, which reduces the amount of energy used for cooling</p>
IPv6	IPv6 uses 128-bit addressing allowing for more devices and users on the internet. IPv4 supported 32-bit addressing
PXE	<p>Support for PXE enables automatic deployment of computing resources remotely from anywhere</p> <p>It allows a new or existing server to boot over the network and download software, including the operating system, from a management/ deployment server at</p>

Feature	Description
	<p>another location on the network</p> <p>Additionally PXE enables decentralized software distribution and remote troubleshooting and repairs</p>
Server integration	<p>This adapter is a validated, tested, and qualified solution that is optimized for HPE ProLiant servers. Hewlett-Packard Enterprise validates a wide variety of major operating systems drivers with the full suite of web-based enterprise management utilities including HPE Intelligent Provisioning and HPE Systems Insight Manager that simplify network management</p> <p>This approach provides a more robust and reliable networking solution than offerings from other vendors and provides users with a single point of contact for both their servers and their network adapters</p>
Single-Root I/O virtualization	<p>Single-Root I/O Virtualization (SR-IOV) provides a mechanism to bypass the host system hypervisor in virtual environments providing near metal performance and server efficiency</p> <p>SR-IOV provides mechanism to create multiple Virtual Functions (VFs) to share single PCIe resources</p> <p>The device is capable of SR-IOV, and requires Server BIOS support, controller firmware, and OS support</p>
Precision Time Protocol (IEEE 1588 PTP)	<p>Synchronization of system clocks throughout a network, achieving clock accuracy in the sub-microsecond range, making it suitable for measurement and control systems</p>
Tunnel offload	<p>Minimize the impact of overlay networking on host performance with tunnel offload support for VXLAN and NVGRE</p> <p>By offloading packet processing to adapters, customers can use overlay networking to increase VM migration flexibility and virtualized overlay networks with minimal impact to performance</p> <p>HPE Tunnel offloading increases I/O throughput, reduces CPU utilization, and lowers power consumption</p> <p>Tunnel offload supports VMware's VXLAN and Microsoft's NVGRE solutions</p>
VMware NetQueue and Microsoft Virtual Machine Queue (VMQ)	<p>VMware NetQueue is technology that significantly improves performance of 10 Gigabit Ethernet network adapters in virtualized environments</p> <p>Windows Hyper-V VMQ is a feature available on servers running Windows Server 2008 R2 with VMQ-enabled Ethernet adapters</p> <p>VMQ uses hardware packet filtering to deliver packet data from an external virtual machine network directly to virtual machines</p> <p>which reduces the overhead of routing packets and copying them from the management operating system to the virtual machine</p>
Wake-on-LAN (WoL)	<p>This adapter provides WoL support through the PCI Express bus. A system that supports WoL can remain available to the systems administrator during its normal downtime</p> <p>Once the machine is awakened, the systems administrator can remotely control, audit, debug, or manage the machine</p>

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### 3、 Network management

Feature	Description
Management support	This adapter ships with agents that can be managed from HPE Systems Insight Manager or other management application that support SNMP

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### 4、 Supported server list

Feature	Description
Compatibility -Supported servers	<p>HPE ProLiant DL120 Gen10 Server (562FLR-T, 562T)</p> <p>HPE ProLiant DL160 Gen10 Server (562FLR-T, 562T)</p> <p>HPE ProLiant DL180 Gen10 Server (562FLR-T, 562T)</p> <p>HPE ProLiant DL360 Gen10 Server (562FLR-T, 562T)</p> <p>HPE ProLiant DL380 Gen10 Server (562FLR-T, 562T)</p> <p>HPE ProLiant DL560 Gen10 Server (562FLR-T, 562T)</p> <p>HPE ProLiant DL580 Gen10 Server (562FLR-T, 562T)</p> <p>HPE Apollo 2000 - XL170r Gen10 Server (562FLR-T, 562T)</p> <p>HPE Apollo 2000 - XL190r Gen10 Server (562FLR-T, 562T)</p> <p>HPE Apollo 4500 - XL450 Gen10 Server (562FLR-T, 562T)</p> <p>HPE Apollo 6000 - XL230k Gen10 Server (562T)</p> <p>HPE ProLiant ML110 Gen10 Server (562T)</p> <p>HPE ProLiant ML350 Gen10 Server (562T)</p>