天下智联®

产品承认书

SPECIFICATION FOR APPROVAL

客户 Customer：_____

产品名称 Model Name： Intel I350 PCIe 4x Server 4Port Lan Card

产品编号 Model number： TXA034

日期 Date：_____

SIGNATURE:

业务 SALES	工程 ENG	制造 MFG	品质 QUALITY
APPROVED BY	CHECKED BY	CHECKED BY	TESTED BY

CUSTOMER APPROVAL:

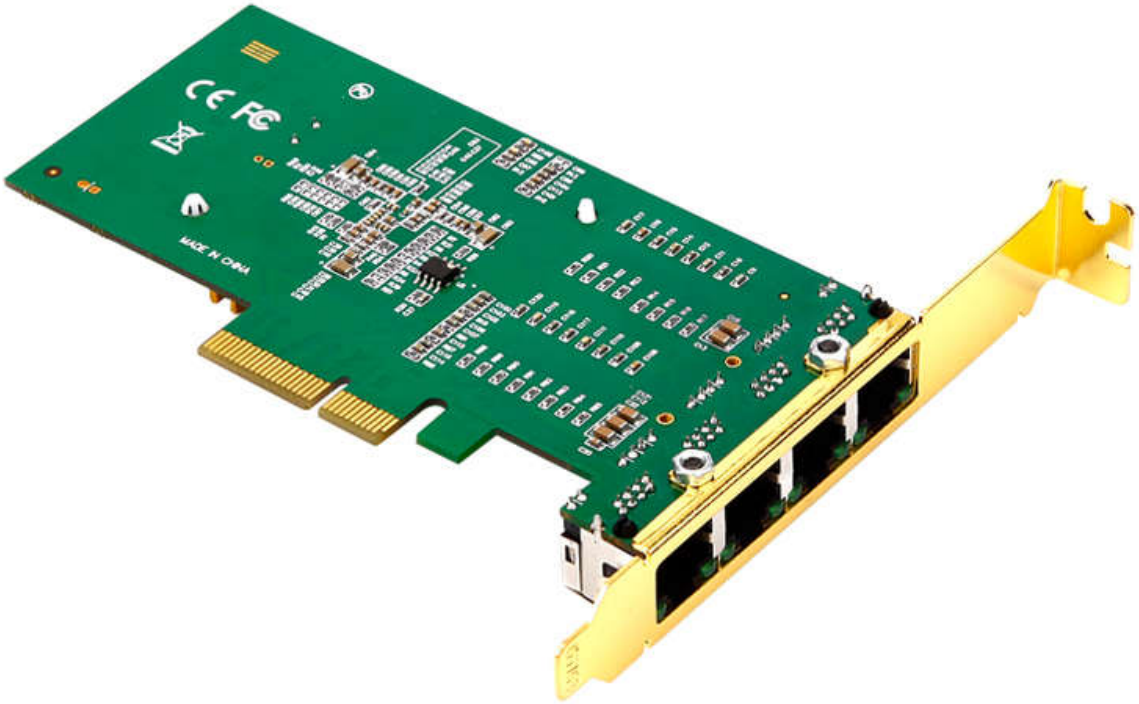
CUSTOMER APPROVAL BY	
DATE	

1、 Product Photo

Top:



Bottom:



2、 Product specification

Model number	TXA034
Chipset	Intel I350 Ethernet Controller
Port number	4*RJ45
Standard	IEEE802.3, IEEE802.3u, IEEE802.3x, IEEE802.3ab
Data rate	10/100/1000Mbps
Interface	PCI express 4x
LED Indicator	8 LED 10/100/1000Mb (Link/Act)
Dimension	130*68.5*17mm
Support OS	DOS, Novell ODI Windows XP 32-bit(64-bit),Windows Server 2003 32-bit(64-bit),Windows Vista 32-bit(64-bit),Windows 7 32-bit(64-bit) Windows 8 32-bit(64-bit),Windows 8.1 32-bit(64-bit) Windows Server 2008 32-bit(64-bit),Windows Server 2008 R2 32-bit(64-bit) Windows Server 2012,Windows Server 2012 R2 Linux 2.4 series kernel,2.6.x,3.x FreeBSD 7.x or most of FreeBSD,UnixWare / Open Unix 8 Sun Solaris x86,VMware,Xen4
Environment	Operating Temperature: 0 ℃-55 ℃
	Relative Humidity: 10%-90%(non-condensing)
	Storage Temperature: -0℃-80℃
	Relative Humidity: 5%-90%(non-condensing)
Other Functions	Halogen-free dual-port Gigabit Ethernet adapters with fiber interface options Innovative power management features including Energy Efficient Ethernet (EEE) and DMA Coalescing for increased efficiency and reduced power consumption Flexible I/O virtualization for port partitioning and quality of service (QoS) of up to 32 virtual ports Scalable iSCSI performance delivering cost-effective SAN connectivity High-performing bridgeless design supporting PCI Express* Gen 2.1 5GT/s Reliable and proven Gigabit Ethernet technology from Intel Corporation Intel® Ethernet Controller I350 With PCI Express* V2.1 (5 GT/s) Support Low-Profile and Standard height full Automatic cross-over detection function (MDI/MDI-X) IEEE 1588 protocol and 802.1AS implementation

3、 Chipset Description:

The Intel® Ethernet Controller I350 is a single, compact, low power component that supports quad port and dual port gigabit Ethernet designs. The device offers four fully-integrated gigabit Ethernet media access control (MAC), physical layer (PHY) ports and four SGMII/SerDes ports that can be connected to an external PHY. The I350 supports PCI Express* (PCIe v2.1 (2.5GT/s and 5GT/s)).

The device enables two-port or four port 1000BASE-T implementations using integrated PHY's. It can be used for server system configurations such as rack mounted or pedestal servers, in an add-on NIC or LAN on Motherboard (LOM) design. Another possible system configuration is for blade servers. Here, the I350 can support up to 4 SerDes ports as LOM or mezzanine card. It can also be used in embedded applications such as switch add-on cards and network appliances.

Features:

External Interfaces provided:

- PCIe v2.1 (2.5GT/s and 5GT/s) x4/x2/x1; called PCIe in this document.
- MDI (Copper) standard IEEE 802.3 Ethernet interface for 1000BASE-T, 100BASE-TX, and 10BASE-T applications (802.3, 802.3u, and 802.3ab)
- Serializer-Deserializer (SERDES) to support 1000BASE-SX/LX (optical fiber - IEEE802.3)
- Serializer-Deserializer (SERDES) to support 1000BASE-KX (802.3ap) and 1000BASE-BX (PICMIG 3.1) for Gigabit backplane applications
- SGMII (Serial-GMII Specification) interface for SFP (SFP MSA INF-8074i)/external PHY connections
- NC-SI (DMTF NC-SI) or SMBus for Manageability connection to BMC
- IEEE 1149.6 JTAG

Performance Enhancements:

- PCIe v2.1 TLP Process Hints (TPH)
- UDP, TCP and IP Checksum offload
- UDP and TCP Transmit Segmentation Offload (TSO)
- SCTP receive and transmit checksum offload

Virtualization ready:

- Next Generation VMDq support (8 VMs)
- Support of up to 8 VMs per port (1 queue allocated to each VM)
- PCI-SIG I/O SR-IOV support (Direct assignment)
- Queues per port: 8 TX and 8 RX queues

Power saving features:

- Advanced Configuration and Power Interface (ACPI) power management states and wake-up capability
- Advanced Power Management (APM) wake-up functionality
- Low power link-disconnect state
- PCIe v2.1 LTR
- DMA Coalescing for improved system power management
- EEE (IEEE802.3az) for reduced power consumption during low link utilization periods

IEEE802.1AS - Timing and Synchronization:

- IEEE 1588 Precision Time Protocol support
- Per-packet timestamp

Total Cost Of Ownership (TCO):

- IPMI BMC pass-thru; multi-drop NC-SI
- Internal BMC to OS and OS to BMC traffic support

Additional product details:

- 17x17 (256 Balls) or 25x25 (576 Balls) PBGA package
- Estimated power: 2.8W (max) in dual port mode and 4.2W (max) in quad port mode
- Memories have Parity or ECC protection

4、LED State

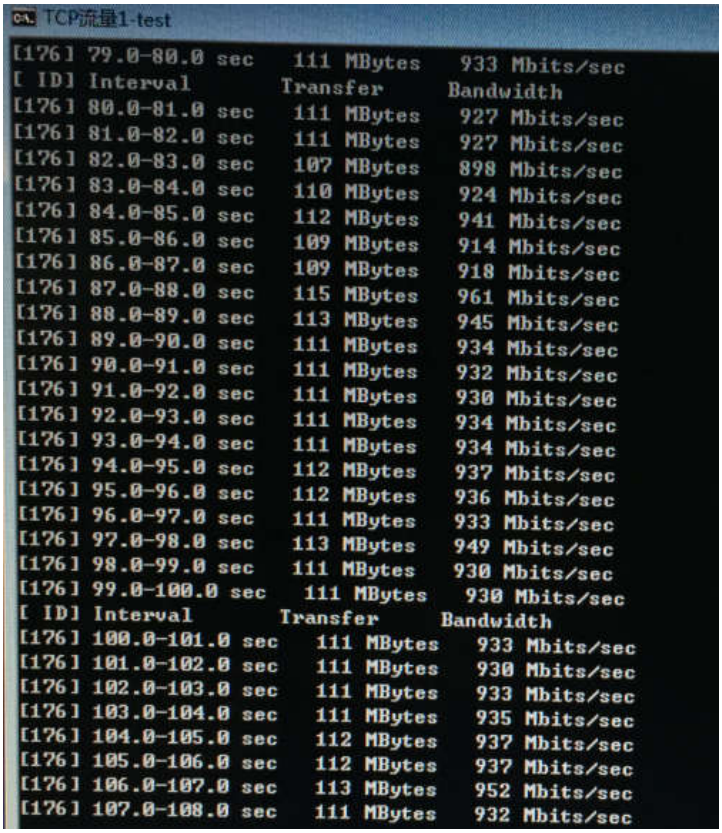
NO.	Color	10M	100M	1G
LED(ACT/Link)	Green	ON	ON	ON
LED(Link State)	Green	Twinkle	Twinkle	Twinkle

5、RD test result

5.1Compatibility test->PASS

NO.	Each Link(100MCAT5)	Internet Link	data packet (100MCAT5)
WindowsXP 32bit	PASS	PASS	PASS
Windows7 32bit	PASS	PASS	PASS
Windows7 64bit	PASS	PASS	PASS
Windows8 64bit	PASS	PASS	PASS
Windows10 64bit	PASS	PASS	PASS
Linux	PASS	PASS	PASS

5.2 Data traffic test-PASS



5.3Link Test->PASS

