SATA 6G PCIe Card

User Manual

Model: UGT-ST622

Contents:

Chapter 1: Introduction

1.1 Product Introduction

This board is a single-chip, PCI Express to two SATA Gen III 6Gb/s channels host controller that brings server-class features to the desktop.

This board enables the use of the industry's newest and fastest hard drives at 6Gb/s while providing backward compatibility to legacy SATA 1.5Gb/s or 3Gb/s drives. It uses the same cable and connectors as previous SATA generations to ease integration. Besides, PCI Express 2.0 double the bandwidth of the existing PCI Express bus for faster data throughput. It will enhance system performance for every type of computer user. Each PCI-Express 2.0 lane provides up to 500MB/s of throughput. It also backward compatible with previous generation of PCI Express 1.0 technology.

1.2 Features

- Compliant with PCI-Express Specification v2.0 and backward compatible with PCI-Express 1.x
- Compliant with Serial ATA Specification 3.0
- Supports communication speeds of 6.0Gbps, 3.0Gbps and 1.5Gbps
- Hot plug and Hot Swap
- Support Native Command Queue (NCQ)
- Support Port Multiplier
- Compatible with SATA 6G, 3G and 1.5G Hard Drives
- Supports Windows® XP/Vista/7/Server 2003/Server 2008(32/64 bit)

1.3 System Requirements

- Windows® XP/Vista/7/Server 2003/Server 2008(32/64 bit)
- PCI Express-enabled system with one available PCI Express slot

1.4 Package Contents

- 1 x SATA 6G PCIe Card
- 1 x Driver CD
- 1 x User Manual
- 2 x Internal SATA Cables

Note: Contents may vary depending on country/market.

Chapter 2: Getting Started

2.1 Hardware Description

Please Note: There are four SATA ports available on the SATA 6G PCIe Card, 2 internally SATA connectors and 2 eSATA connectors externally. Based on the image below, the respective ports have been name A through D. Ports A & B are internal SATA ports, while ports C and D are external SATA ports. By changing the jumper setting on the SATA 6G PCIe Card circuit board, you will be able to utilize two of the ports simultaneously. Please designate which ports you wish to use, by adjusting jumper setting according to the chart below. By default, Port A & B are working.
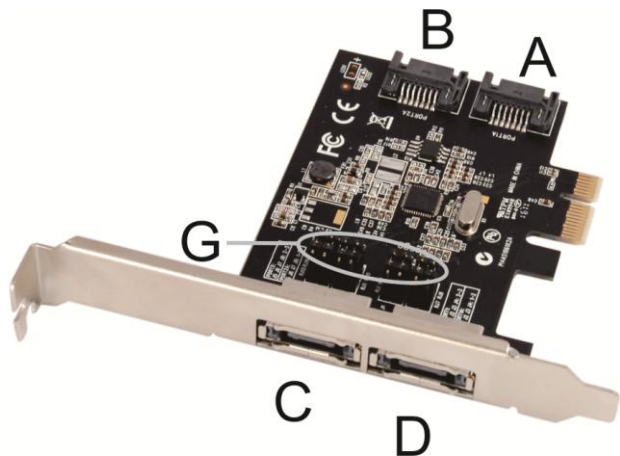
Jumper Settings(Default Mode:1-2 close)
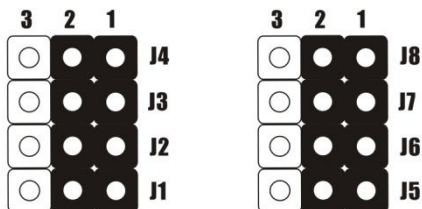
G (Jumpers Settings)		
JP	**Description**	**Active Port**
J1-J4	1-2 close	Enable SATA Connector A
	2-3 close	Enable SATA Connector D
J5-J8	1-2 close	Enable SATA Connector B
	2-3 close	Enable SATA Connector C

2.2 Hardware Installation

1. Turn off the power to your computer.
2. Unplug the power cord and remove your computer's cover.
3. Remove the slot bracket from an available PCIe slot.
4. To install the board, carefully align the card's bus connector with the selected PCIe slot on the motherboard. Push the board down firmly.
5. Attach your internal devices to the SATA 6G PCIe Card.
6. Replace the slot bracket's holding screw to secure the card.
7. Replace the computer cover and reconnect the power cord.

2.3 Driver Installation

2.3.1 Installation for Windows XP/Server 2003

2.3.1.1 For Windows XP /Server 2003 32-bit

For A New Installation

A new installation requires a floppy disk for the driver installation. To make this floppy disk, copy the contents of the "UGT-ST622\Driver\XP" folder, found on the driver CD, onto a blank floppy disk then follow the directions below.

1. Follow Microsoft's Windows installation procedure.
2. At the Windows Setup screen, press **F6** to install the driver.
3. When prompted, press **S** to specify the location of the driver.
4. Insert the floppy disk, then press **Enter**.
5. Scroll to **Asmedia 106x SATA Controller 32bit** and press **Enter** to select.
6. Press **Enter** to complete the installation of drivers.
7. Continue with the Windows OS installation.

For An Existing Installation

1. Please insert the CD driver bound with SATA 6G PCIe Card into your CD-ROM Drive.
2. At the Windows desktop, click **Start**, then **Run**.
3. Type **D:\UGT-ST622\Setup.exe**, click **OK**. (Change **D:** to match your CD-ROM drive letter)
4. Follow the on-screen instructions to complete the installation.
5. Restart Windows to complete the installation.

2.3.1.2 For Windows XP/Server 2003 64-bit

For A New Installation

A new installation requires a floppy disk for the driver installation. To make this floppy disk, copy the contents of the "UGT-ST622\Driver\XP" folder, found on the driver CD, onto a blank floppy disk then follow the directions below.

1. Follow Microsoft's Windows installation procedure.
2. At the Windows Setup screen, press **F6** to install the driver.
3. When prompted, press **S** to specify the location of the driver.

4. Insert the floppy disk, then press **Enter**.

5. Scroll to **Asmedia 106x SATA Controller 64bit** and press **Enter** to select.

6. Press **Enter** to complete the installation of drivers.

7. Continue with Windows OS installation.

For An Existing Installation

1. Please insert the CD driver bound with SATA 6G PCIe Card into your CD-ROM Drive.

2. At the Windows desktop, click **Start**, then **Run**.

3. Type **D:\UGT-ST622\Setup.exe**, click **OK**. (Change **D:** to match your CD-ROM drive letter)

4. Follow the on-screen instructions to complete the installation.

5. Restart Windows to complete the installation.

2.3.2 Installation for Windows Vista/7/Server 2008

2.3.2.1 For Windows Vista/7/Server 2008 32-bit

For A New Installation

1. Follow Microsoft's Windows installation procedure.
2. At the Windows Setup screen, press **Load Driver** to install the driver.
3. Insert the CD driver bound with SATA 6G PCIe Card into your CD-ROM Drive, please select **Asmedia 106x SATA Controller (D:\UGT-ST622\Driver\Win7\x86\asahci32.inf)**, then press **Next**. (Change **D:** to match your CD-ROM drive letter)
4. Continue with Windows OS installation.

For An Existing Installation

1. Please insert the CD driver bound with SATA 6G PCIe Card into your CD-ROM Drive.
2. At the Windows desktop, click **Start**, then **Run**.
3. Type **D:\UGT-ST622\Setup.exe**, click **OK**. (Change **D:** to match your CD-ROM drive letter)

4. Follow the on-screen instructions to complete the installation.

5. Restart Windows to complete the installation.

2.3.2.2 For Windows Vista/7 /Server 2008 64-bit

For A New Installation

1. Follow Microsoft's Windows installation procedure.

2. At the Windows Setup screen, press **Load Driver** to install the RAID driver.

3. Insert the CD driver bound with SATA 6G PCIe Card into your CD-ROM Drive, please select **Asmedia 106x SATA Controller (D:\UGT-ST622\Driver\Win7\x64\asahci64.inf)**, then press **Next**. (Change **D:** to match your CD-ROM drive letter)

4. Continue with Windows OS installation.

For An Existing Installation

1. Please insert the CD driver bound with SATA 6G PCIe Card into your CD-ROM Drive.

2. At the Windows desktop, click **Start**, then **Run**.

3. Type **D:\UGT-ST622\Setup.exe**, click **OK**. (Change **D:** to match your CD-ROM drive letter)

4. Follow the on-screen instructions to complete the installation.

5. Restart Windows to complete the installation.

2.4 Hardware Verify

2.4.1 Verifying for Windows XP/Vista/7/Server 2003/Server 2008

1. Right click **My Computer** and click **Manage**.

2. Select **Device Manager**.

3. Look for the following:

   Windows® XP/Server 2003: Double click **SCSI and RAID Controller:**

   -ASMedia 106X SATA Controller should be displayed

   Windows® Vista/7/Server 2008: Double click **IDE ATA/ATAPI Controllers:**

   - ASMedia 106X SATA Controller should be displayed